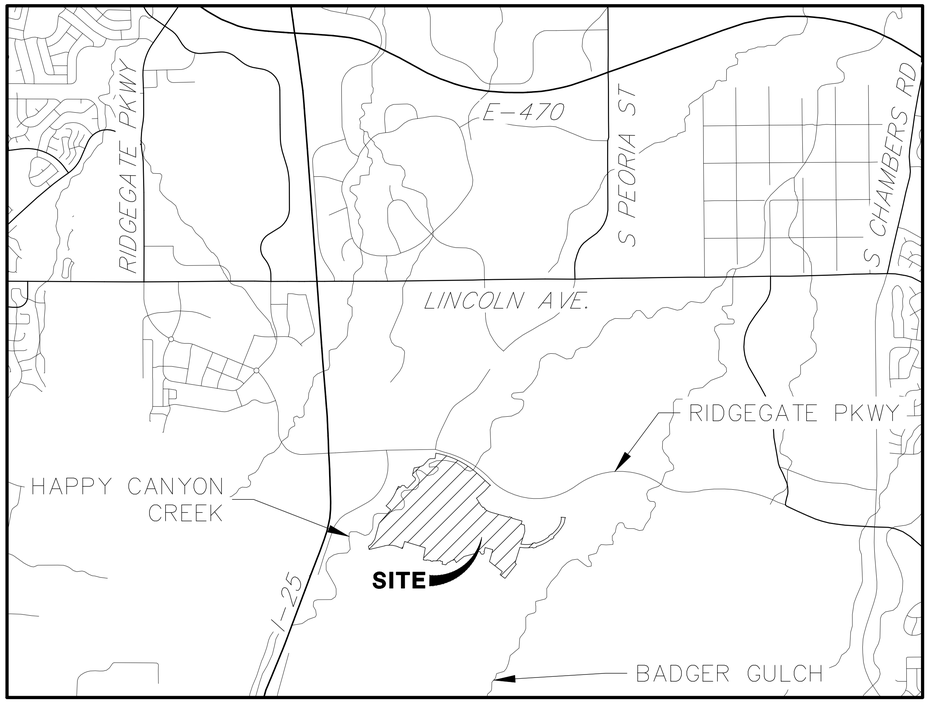
RIDGEGATE SOUTHWEST VILLAGE FILING 1

A PORTION OF THE RIDGEGATE PLANNED DEVELOPMENT DISTRICT, EAST SIDE PROPERTY
A PART OF SECTION 14, SECTION 22, SECTION 23, AND SECTION 24, TOWNSHIP 6 SOUTH, RANGE 67 WEST
OF THE 6TH P.M., CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO

CIVIL CONSTRUCTION PLANS

ABBREVIATIONS

AC	ACRE
AD	ALGEBRAIC DIFFERENCE
AH	AHEAD
ARCH	ARCHITECT
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASS'Y	ASSEMBLY
AVE	AVENUE
BB	BOX BASE
BK	BACK
BNDY	BOUNDARY
BOP	BOTTOM OF PIPE
BOV	BLOW OFF VALVE
BFV	BUTTERFLY VALVE
BLVD	BOULEVARD
BW	BOTTOM OF WALL
C&G	CURB & GUTTER
CATV	CABLE TELEVISION
CB	CATCH BASIN
CBC	CONCRETE BOX CULVERT
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION
CDS	CUL-DE-SAC
CF	CUBIC FOOT
CFS	CUBIC FEET PER SECOND
CIP	COMPLETE IN PLACE
CL	CENTER LINE
CLOMR	CONDITIONAL LETTER OF MAP REVISION
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
COCS	CITY OF COLORADO SPRINGS
CONC	CONCRETE
CR	CIRCLE
CSP	CORRUGATED STEEL PIPE
CSU	COLORADO SPRINGS UTILITIES
CT	COURT
CTRB	CONCRETE THRUST REDUCER BLOCK
CY	CUBIC YARD
DBPS	DRAINAGE BASIN PLANNING STUDY
DE	DRAINAGE EASEMENT
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DR	DRIVE
DRC	DESIGN REVIEW COMMITTEE
DU	DWELLING UNITS
DY	DAY
E	EAST
EA	EACH
EGL	ENERGY GRADE LINE
EL	ELEVATION
ELEC	ELECTRIC
EOA	EDGE OF ASPHALT
EPC	EL PASO COUNTY
ERCP	ELLIPTICAL RCP
ESMT	EASEMENT
EST	ESTIMATE
EX	EXISTING
FDP	FINAL DEVELOPMENT PLAN
FDR	FINAL DRAINAGE REPORT
FES	FLARED END SECTION
FF	FINISHED FLOOR ELEVATION
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOWLINE
FIL	FILING
FO	FIBER OPTIC CABLE
GB	GRADE BREAK
GE	GAS EASEMENT
GIS	GEOGRAPHIC INFORMATION SYSTEM
GL	GAS LINE
GPS	GLOBAL POSITIONING SYSTEM
GV	GATE VALVE
HBP	HOT BITUMINOUS PAVEMENT
HC	HANDICAP
HDC	HIGH DEFLECTION COUPLING
HDPE	HIGH DENSITY POLYETHYLENE
HGL	HYDRAULIC GRADE LINE
HMA	HOT MIX ASPHALT
HOA	HOME OWNERS ASSOCIATION
HP	HIGH POINT
HR	HOUR
I	INLET
IE	IRRIGATION EASEMENT
INT	INTERSECTION
INV	INVERT
IRR	IRRIGATION
KB	KICK (THRUST) BLOCK
LB	POUND
LE	LANDSCAPE EASEMENT
LF	LINEAR FOOT
LN	LANE
LOMR	LETTER OF MAP REVISION
LP	LOW POINT
LS	LUMP SUM
LT	LEFT
MAX	MAXIMUM
M/D	MOISTURE DENSITY
MDDP	MASTER DEVELOPMENT DRAINAGE PLAN
MH	MANHOLE
MIN	MINIMUM
MS	MOUNTABLE SIDEWALK
N	NORTH
NRCP	NON-REINFORCED CONCRETE PIPE
ODP	OFFICIAL DEVELOPMENT PLAN
OHE	OVERHEAD ELECTRIC
OHU	OVERHEAD UTILITY
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PCR	POINT OF CURB RETURN
PDP	PRELIMINARY DEVELOPMENT PLAN
PE	PROFESSIONAL ENGINEER
PI	POINT OF INTERSECTION
PKWY	PARKWAY
PL	PROPERTY LINE
PR	PROPOSED
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PV	PLUG VALVE
PVC	POLYVINYL CHLORIDE
R	RADIUS
RCBC	REINFORCED CONCRETE BOX CULVERT
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
ROW	RIGHT OF WAY
RT	RIGHT
S	SOUTH
STE	STEEL
SAN	SANITARY SEWER
SF	SQUARE FOOT
ST	STREET
STA	STATION
STM	STORM SEWER
SY	SQUARE YARD
SY-IN	SQUARE YARD INCH
TB	THRUST BLOCK
TBC	TOP BACK OF CURB
TBW	TOP BACK OF WALK
TEL	TELEPHONE
TN	TON
TOA	TOP OF ASPHALT
TOB	TOP OF BOX
TOC	TOP OF CURB OR CONCRETE
TOF	TOP OF FOUNDATION
TOP	TOP OF PIPE
TW	TOP OF WALL
TYP	TYPICAL
UDFCD	URBAN DRAINAGE AND FLOOD CONTROL DISTRICT
UE	UTILITY EASEMENT
U&DE	UTILITY & DRAINAGE EASEMENT
UGE	UNDERGROUND ELECTRIC
VCP	VITRIFIED CLAY PIPE
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
VTC	VEHICLE TRACKING CONTROL
W	WEST
WL	WATER LINE
WM	WATER MAIN
WRD	WATER RESOURCES DEPARTMENT
WS	WATER SURFACE
WSE	WATER SURFACE ELEVATION
WTR	WATER
YR	YEAR



VICINITY MAP
SCALE: 1"=2000'

SHEET INDEX

1	MASTER COVER SHEET
2	MASTER OVERALL SITE PLAN
3	MASTER OVERALL UTILITY PLAN
4–5	OVERALL LIGHTING PLAN
6–79	PHASE 1A TRUNK INFRASTRUCTURE CIVIL CONSTRUCTION PLANS
80–101	PHASE 1B TRUNK INFRASTRUCTURE CIVIL CONSTRUCTION PLANS
102–128	PHASE 1C TRUNK INFRASTRUCTURE CIVIL CONSTRUCTION PLANS
129–150	PHASE 1D TRUNK INFRASTRUCTURE CIVIL CONSTRUCTION PLANS
151–160	PLANNING AREA 13 CIVIL CONSTRUCTION PLANS
161–176	PLANNING AREA 14 CIVIL CONSTRUCTION PLANS
177–187	PLANNING AREA 15 CIVIL CONSTRUCTION PLANS
188–199	PLANNING AREA 16 CIVIL CONSTRUCTION PLANS
200–210	PLANNING AREA 17 CIVIL CONSTRUCTION PLANS
211–222	PLANNING AREA 18 CIVIL CONSTRUCTION PLANS
223–231	PLANNING AREA 19 CIVIL CONSTRUCTION PLANS
232–243	PLANNING AREA 20 CIVIL CONSTRUCTION PLANS
244–253	PLANNING AREA 21 CIVIL CONSTRUCTION PLANS
254–264	PLANNING AREA 22 CIVIL CONSTRUCTION PLANS
265–270	PLANNING AREA DETAILS
TOTAL	270

NOTICE TO CONTRACTOR:

1. BY ACCEPTING AND UTILIZING THESE PLANS, THE CONTRACTOR AGREES THAT THEY SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSON AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER AND CIVIL ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE CIVIL ENGINEER.
2. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITIES, CONDUITS OR OTHER STRUCTURES SHOWN ON THESE PLANS WAS OBTAINED BY A SEARCH OF AVAILABLE RECORDS. THE ENGINEER ASSUMES NO LIABILITY WHATSOEVER FOR THE ACCURACY OR COMPLETENESS OF SUCH DATA. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ALL UTILITY LINES, CONDUITS OR STRUCTURES WHETHER OR NOT SHOWN ON THESE PLANS AND BY ACCEPTING AND UTILIZING THESE PLANS, ASSUMES ALL RESPONSIBILITY FOR THE PROTECTION AND/OR ANY DAMAGE TO SAID FACILITIES.

811 Know what's below. Call before you dig.

APPLICANT/OWNER

SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
P~303.791.8180

CIVIL ENGINEER/SURVEYOR

JR ENGINEERING
7200 SOUTH ALTON WAY, SUITE C400
CENTENNIAL, CO
P~303.267.6220

PLANNER

SAGE DESIGN GROUP
1500 SOUTH PEARL STREET, SUITE 200
DENVER, CO 80210
P~303.470.2855

TRAFFIC ENGINEER

JR ENGINEERING
7200 SOUTH ALTON WAY, SUITE C400
CENTENNIAL, CO
P~303.267.6183

GEOTECHNICAL ENGINEER

CTL THOMPSON, INC
1971 WEST 12TH VAE.
DENVER, CO 80204
P~303.825.0777

BASIS OF BEARING

BEARING SHOWN HEREON ARE GRID BEARINGS DERIVED FROM GPS OBSERVATION BASED UPON THE COLORADO COORDINATE SYSTEM OF 1983 CENTRAL ZONE (NAD 83, 2011) REFERENCED TO THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, SIXTH PRINCIPAL MERIDIAN BEING MONUMENTED AS SHOWN HEREON, TAKEN TO BEAR NORTH 89°31'58" EAST, A DISTANCE OF 2635.13 FEET.

BENCHMARK

NGS CONTROL POINT UNBEWUST BEING A 3.5 INCH DIAMETER BRASS CAP. LOCATED ABOUT 3.2 MILES SOUTH OF INTERSTATE 25 AND COLORADO STATE HIGHWAY 470 INTERCHANGE, GO SOUTH ON INTERSTATE 25 FOR 2.9 MILES TO EXIT 191. PROCEED ON A PAVED ROAD TO THE SOUTHWEST FOR 0.2 MILES TO THE STATION ON THE LEFT. IN THE NORTHWEST CORNER OF A 24 FOOT BY 16 FOOT ROCK OUTCROP. IT IS 22.5 FEET EAST OF THE CENTERLINE OF THE PAVED ROAD, 123 FEET NORTH OF THE OUTLET OF A 3 FOOT CORRUGATED STEEL PIPE CULVERT AND APPROXIMATELY 350 FEET WEST OF THE WEST EDGE OF OIL OF SOUTHBOUND INTERSTATE 25, ELEVATION: 6125.32 (NAVD88).

SOIL PREPARATION NOTE:

SOIL PREPARATION SHALL BE PER RECOMMENDATIONS FROM THE GEOTECHNICAL REPORT PREPARED FOR THIS SITE:

GEOTECHNICAL ENGINEER: CTL THOMPSON, INC
ROJECT NUMBER: DN49,935-115-R2

THE CONTRACTOR IS TO REVIEW THIS REPORT IN FULL PRIOR TO BID. INFORMATION IN THE GEOTECHNICAL REPORT SUPERCEDES ANY CONFLICTING INFORMATION CONTAINED IN THE CONSTRUCTION PLANS AND SPECIFICATIONS.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

AARON LEE CLUTTER — COLORADO REGISTERED — 36742 — PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

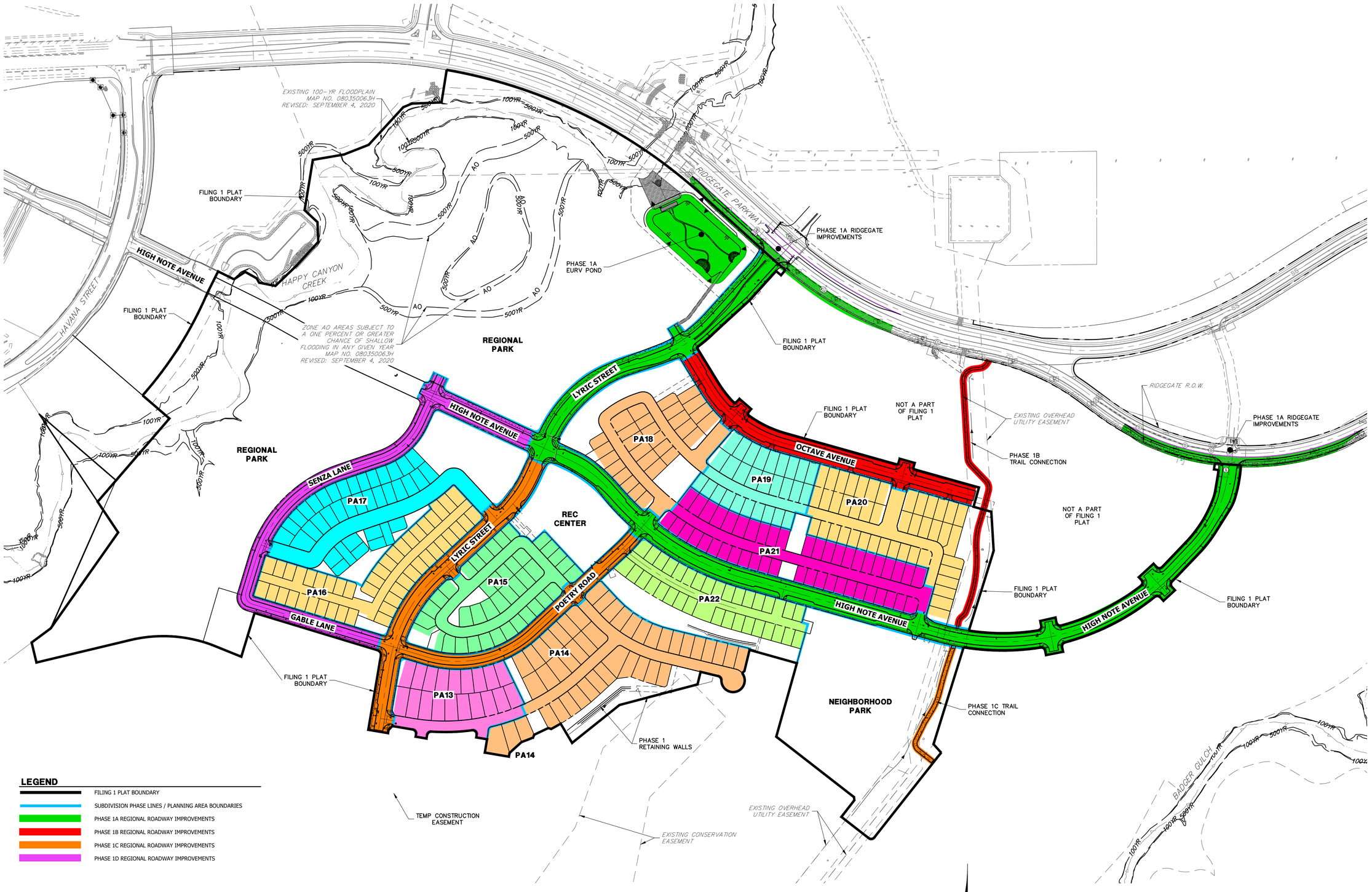
NO.	REVISION	BY	DATE

H-SCALE	1"=2000'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	N/A
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
MASTER COVER SHEET

SHEET 1 OF 270

JOB NO. 15950.01



LEGEND

- FILING 1 PLAT BOUNDARY
- SUBDIVISION PHASE LINES / PLANNING AREA BOUNDARIES
- PHASE 1A REGIONAL ROADWAY IMPROVEMENTS
- PHASE 1B REGIONAL ROADWAY IMPROVEMENTS
- PHASE 1C REGIONAL ROADWAY IMPROVEMENTS
- PHASE 1D REGIONAL ROADWAY IMPROVEMENTS

200 100 0 200 400

ORIGINAL SCALE: 1" = 200'

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=200'
V-SCALE	N/A
DATE	12/1/20
DESIGNED BY	N/A
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

MASTER OVERALL SITE PLAN

SHEET 2 OF 269

JOB NO. 15950.01

PHASE	REFERENCE SHEET
P1A REGIONAL	10–14
P1B REGIONAL	83
P1C REGIONAL	105–106
P1D REGIONAL	132
PA13	154
PA14	164
PA15	180
PA16	191
PA17	203
PA18	214
PA19	226
PA20	235
PA21	247
PA22	257

EXISTING OVERHEAD UTILITY LINES TO BE UNDERGROUNDED OR RELOCATED

EXISTING 100-YR FLOODPLAIN MAP NO. 08035006.3H REVISED: SEPTEMBER 4, 2020

ZONE AO AREAS SUBJECT TO A ONE PERCENT OR GREATER CHANCE OF SHALLOW FLOODING IN ANY GIVEN YEAR MAP NO. 08035006.3H REVISED: SEPTEMBER 4, 2020

HAPPY CANYON CREEK

HAVANA STREET

RIDGEGATE PARKWAY

HIGH NOTE AVENUE

LYRIC STREET

SENZA LANE

GABLE LANE

POETRY ROAD

OCTAVE AVENUE

BADGER GULCH

REGIONAL PARK

REC CENTER

NEIGHBORHOOD PARK

PA13 PA14 PA15 PA16 PA17 PA18 PA19 PA20 PA21 PA22

FILING 1 PLAT BOUNDARY

PHASE 1A EURV POND

POINT OF CONNECTION TO EX. 20" WATER MAIN

PHASE 1A 20" WATER MAIN

PHASE 1A 15" SANITARY SEWER

PHASE 1A 54" STORM SEWER

LYRIC STREET REGIONAL IMPROVEMENTS PHASE 1A

LYRIC STREET REGIONAL IMPROVEMENTS PHASE 1C

END HIGH NOTE AVENUE PHASE 1 ROADWAY IMPROVEMENTS

PHASE 1A RIGHT OF WAY DEDICATION AND WATER LINE, STORM SEWER, SANITARY SEWER IMPROVEMENTS

PHASE 1A 12" WATER LINE, 18" SANITARY SEWER, STORM SEWER

SOUTHWEST VILLAGE PRELIMINARY PLAN BOUNDARY

NOT A PART OF FILING 1

PHASE 1B 12" WATER LINE, 8" SANITARY SEWER, STORM SEWER

OCTAVE AVENUE REGIONAL IMPROVEMENTS PHASE 1B

EX. 100' OVERHEAD PSCO EASEMENT

RIDGEGATE R.O.W.

SUBDIVISION 8" WATER LINE, 8" SANITARY SEWER, STORM SEWER (TYP.)

POINT OF CONNECTION TO EX. 12" WATER MAIN

PHASE 1D 8" WATER LINE, 10" SANITARY SEWER, STORM SEWER

SENZA LANE REGIONAL IMPROVEMENTS PHASE 1D

SUBDIVISION 8" WATER LINE, 8" SANITARY SEWER (TYP.)

POETRY ROAD REGIONAL IMPROVEMENTS PHASE 1C

PHASE 1A 12" WATER LINE, 8" SANITARY SEWER, STORM SEWER

HIGH NOTE AVENUE REGIONAL IMPROVEMENTS PHASE 1A

PHASE 1C 12" WATER LINE, 12" SANITARY SEWER

PHASE 1C 8" WATER LINE, 8" SANITARY SEWER, STORM SEWER,

PHASE 1C 12" WATER LINE, 10" SANITARY SEWER, STORM SEWER

GABLE LANE REGIONAL IMPROVEMENTS PHASE 1D

SUBDIVISION 8" WATER LINE, 8" SANITARY SEWER, STORM SEWER (TYP.)

WATER MAIN BY OTHERS UNDER SEPARATE PLAN SET

EXISTING OVERHEAD UTILITY LINES TO REMAIN

BOUNDARY LEGEND

- FILING 1 PLAT BOUNDARY
- SUBDIVISION PHASE LINES / PLANNING AREA BOUNDARIES

UTILITY LEGEND - SUBDIVISION INFRASTRUCTURE

- SUBDIVISION WATER MAIN
- SUBDIVISION SANITARY SEWER MAIN
- SUBDIVISION STORM SEWER

UTILITY LEGEND - REGIONAL INFRASTRUCTURE PHASE 1A

- PHASE 1A REGIONAL WATER MAIN
- PHASE 1A REGIONAL SANITARY SEWER MAIN
- PHASE 1A REGIONAL STORM SEWER

UTILITY LEGEND - REGIONAL INFRASTRUCTURE PHASE 1B

- PHASE 1B REGIONAL WATER MAIN
- PHASE 1B REGIONAL SANITARY SEWER MAIN
- PHASE 1B REGIONAL STORM SEWER

UTILITY LEGEND - REGIONAL INFRASTRUCTURE PHASE 1C

- PHASE 1C REGIONAL WATER MAIN
- PHASE 1C REGIONAL SANITARY SEWER MAIN
- PHASE 1C REGIONAL STORM SEWER

UTILITY LEGEND - REGIONAL INFRASTRUCTURE PHASE 1D

- PHASE 1D REGIONAL WATER MAIN
- PHASE 1D REGIONAL SANITARY SEWER MAIN
- PHASE 1D REGIONAL STORM SEWER

200 100 0 200 400

ORIGINAL SCALE: 1" = 200'

Know what's **below.** **Call** before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

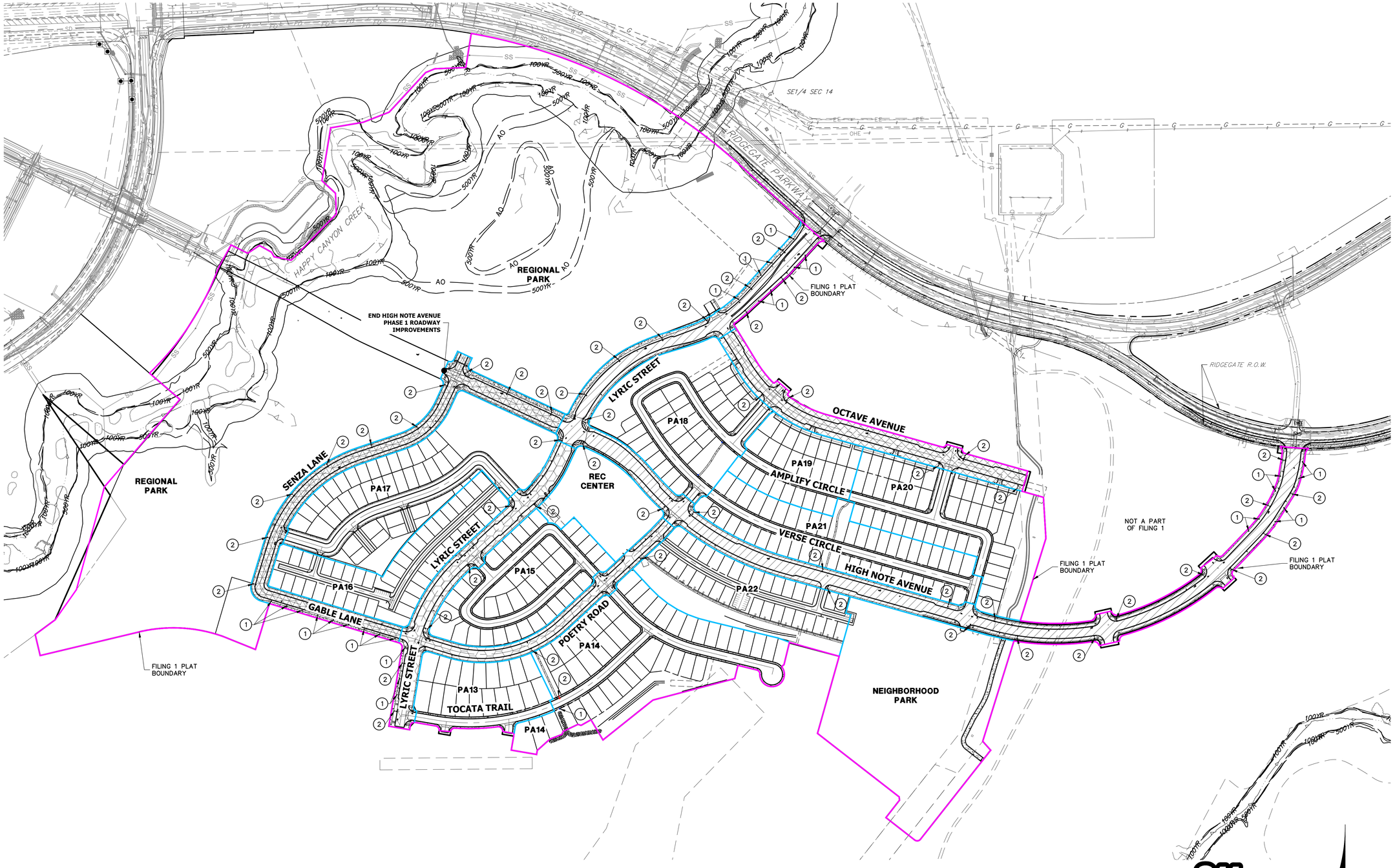
H-SCALE	1"=200'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	N/A
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

MASTER OVERALL UTILITY PLAN

SHEET 3 OF 270

JOB NO. 15950.01



LEGEND

(1) INSTALL PHILIPS GARDCO PUREFORM LED PEDESTRIAN LIGHT WITH 12' POLE HEIGHT, INCLUDING BUT NOT LIMITED TO BASE, POLE, FIXTURE, CONNECTION HARDWARE AND CONDUIT. REFER TO STREET PLAN AND PROFILE SHEETS FOR PEDESTRIAN LIGHT LOCATION AND STREET LIGHTING PLANS FOR SIZING, RUN TERMINUS, AND OTHER WIRING REQUIREMENTS.

(2) INSTALL PUREFORM P26 LED AREA MEDIUM STREET LIGHT WITH 12' POLE HEIGHT, INCLUDING BUT NOT LIMITED TO BASE, POLE, FIXTURE, CONNECTION HARDWARE AND CONDUIT. REFER TO STREET PLAN AND PROFILE SHEETS FOR STREET LIGHT LOCATION AND STREET LIGHTING PLANS FOR SIZING, RUN TERMINUS, AND OTHER WIRING REQUIREMENTS.

LEGEND

- FILING 1 PLAT BOUNDARY
- SUBDIVISION PHASE LINES / PLANNING AREA BOUNDARIES
- PHASE 1A REGIONAL ROADWAY IMPROVEMENTS
- PHASE 1B REGIONAL ROADWAY IMPROVEMENTS
- PHASE 1C REGIONAL ROADWAY IMPROVEMENTS
- PHASE 1D REGIONAL ROADWAY IMPROVEMENTS

PHASE	REFERENCE SHEET
P1A REGIONAL	10–14
P1B REGIONAL	83
P1C REGIONAL	105–106
P1D REGIONAL	132
PA13	154
PA14	164
PA15	180
PA16	191
PA17	203
PA18	214
PA19	226
PA20	235
PA21	247
PA22	257

811 Know what's below. Call before you dig.

200 100 0 200 400
ORIGINAL SCALE: 1" = 200'

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1" = 200'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	MEP
DRAWN BY	MEP
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
OVERALL LIGHTING PLAN

SHEET 4 OF 270

JOB NO. 15950.01

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

PHILIPS
GARDCO

Site & Area

PureForm

LED area, medium

Project:
Location:
Cat.No:
Type:
Qty:
Notes:

Philips Gardco PureForm LED area medium P26 features a sleek, low profile design and optimal performance. PureForm area medium is designed to achieve maximum pole spacing, with lumen output up to 28,900 lumens. Multiple distribution and shielding options are availble to achieve maximum control. A full range of control options provides additional energy savings.

Ordering guide

example: P26-64L-800-NW-G2-AR-5-120-HIS-MGY

Prefix	Number of LEDs	Drive Current	LED Color - Generation	Mounting	Distribution	Voltage
P26	48L	600	WW-G2	SF	2	UNV
P26 PureForm area medium, 26"	**48L** 48 LEDs (3 modules)	**400** 400mA, **500** 500mA, **600** 600mA, **700** 700mA	**WW-G2** Warm White 3000K, 70CRI Generation 2	**AR** Arm Mount (standard)[2]	Type 2: **2** Type 2; **2-90** Rotated left 90°; **2-270** Rotated right 270°	**120** 120V
	64L 64 LEDs (4 modules)	**600** 600mA, **700** 700mA, **800** 800mA	**NW-G2** Neutral White 4000K, 70CRI Generation 2	*The following mounting kits must be ordered separately (See accessories)*	Type 3: **3** Type 3; **3-90** Rotated left 90°; **3-270** Rotated right 270°	**208** 208V
	80L 80 LEDs (5 modules)	**700** 700mA, **800** 800mA, **900** 900mA	**CW-G2** Cool White 5000K, 70CRI Generation 2	**SF** Slip Fitter Mount[3] (fits to 2 3/8" O.D. tenon)	Type 4: **4** Type 4; **4-90** Rotated left 90°; **4-270** Rotated right 270°	**240** 240V
			WY-G2 Warm Yellow 2700K, 80 CRI Generation 2[1]	**WS** Wall mount with surface conduit rear entry permitted	Type 5: **5** Type 5; **5W** Type 5W	**277** 277V, **347** 347V, **480** 480V
			AM-G2 Direct Amber (590nm) Generation 2[1]	**RAM** Retrofit arm mount kit[2]	**AFR** Auto Front Row; **AFR-90** Auto Front Row, rotated left 90°; **AFR-270** Auto Front Row, rotated right 270°; **BLC** Back Light Control; **BLC-90** Back Light Control rotated at 90°; **BLC-270** Back Light Control rotated at 270°	**UNV** 120-277V (50/60Hz), **HVU** 347-480V (50/60Hz)

Options

Dimming controls	Motion sensing	Photo-sensing	Electrical	Luminaire	Finish
		TLRD7			
DD 0-10V External dimming (by others)[4]; **DCC** Dual Circuit Control[4,5,6]; **FAWS** Field Adjustable[4,5]; **SW** Interface module for SiteWise[4,6,7]; **LLC3** Integral wireless module with #3 lens[4,5,6,8]; **LLC4** Integral wireless module with #4 lens[4,5,6,8]; **BL** Bi-level functionary with motion sensor[4]	**IMRI3** Integral with #3 lens; **IMRI7** Integral with #7 lens; **IMRO** Pole mounted motion sensor (see accessories)	**PCB** Photocontrol Button[8,9]; **TLRD5** Twist Lock Receptacle 5 Pin[10]; **TLRD7** Twist Lock Receptacle 7 Pin[10]; **TLRPC** Twist Lock Receptacle w/Photocell[9,11]	**Fusing**: **F1** Single (120, 277, 347VAC)[9]; **F2** Double (208, 240, 480VAC)[9]; **F3** Canadian Double Pull (208, 240, 480VAC)[9,12]	Square Pole Adapter included as standard; **TB** Terminal Block[12]; **RPA** Round Pole Adapter (fits to 3"- 3.9" O.D. pole)[13]; **HIS** Internal Housing Side Shield[14]	**Textured**: **BK** Black; **WH** White; **BZ** Bronze; **DGY** Dark Gray; **MGY** Medium Gray
DynaDimmer: Automatic Profile Dimming; **CS50** Security 50% Dimming, 7 hours[4,8]; **CM50** Median 50% Dimming, 8 hours[4,8]; **CE50** Economy 50% Dimming, 9 hours[4,8]; **DA50** All Night 50% Dimming[4,8]; **CS30** Security 30% Dimming, 7 hours[4,8]; **CM30** Median 30% Dimming, 8 hours[4,8]; **CE30** Economy 30% Dimming, 9 hours[4,8]; **DA30** All Night 30% Dimming[4,8]			**Pole Mount Fusing**: **FP1** Single (120, 277, 347VAC)[9]; **FP2** Double (208, 240, 480VAC)[9]; **FP3** Canadian Double Pull (208, 240, 480VAC)[9]; **Surge Protection** (10kA standard): **SP2** Increased 20kA		**Customer specified**: **RAL** Specify optional color or RAL (ex: RAL7024); **CC** Custom color (Must supply color chip for required factory quote)

1. Extended lead times apply. Contact factory for details.
2. Mounts to a 4" round pole with adapter included for square poles.
3. Limited to a maximum of 45 degrees aiming above horizontal.
4. Not available with other control options.
5. Not available with motion sensor.
6. Not available with photocontrol.
7. Available only in 120 or 277V.
8. Not available in 347 or 480V
9. Must specify input voltage.
10. Dimming will not be connected to NEMA receptacle if ordering with other control options.
11. Not available in 480V.
12. Not available with DCC.
13. Not available with SF and WS. RPAs provided with black finish standard.
14. HIS not available with Type 5, 5W, and BLC optics.

P26 PureForm LED area medium

PureForm P26 Accessories (ordered separately, field installed)

Controls Accessories

Pole Mount Motion Sensor
MS-A-120V[15] 120V Input
MS-A-277V[15] 277V Input

Wireless systems Remote mount module
LLCR3-(F)[15] #3 lens
LLCR4-(F)[15] #4 lens

Central Remote Motion Response (used connected to SiteWise main panel)
MS2-A-FVR-3
MS2-A-FVR-7

Shielding Accessories

House Side shield
Standard orientation:
HIS-48-H[14] Internal House Side Shield for 48 LEDs (3 modules)
HIS-64-H[14] Internal House Side Shield for 64 LEDs (4 modules)
HIS-80-H[14] Internal House Side Shield for 80 LEDs (5 modules)
At 90 or 270 orientation:
HIS-48-V[14] Internal House Side Shield for 48 LEDs (3 modules)
HIS-64-V[14] Internal House Side Shield for 64 LEDs (4 modules)
HIS-80-V[14] Internal House Side Shield for 80 LEDs (5 modules)

Mounting Accessories

PureForm PTF2 (pole top fitter fits 23/8-21/2" OD x 4" depth tenon)
PTF2-P26-1-90-(F) 1 luminaire at 90°
PTF2-P26-2-90-(F) 2 luminaires at 90°
PTF2-P26-2-180-(F) 2 luminaires at 180°
PTF2-P26-3-90-(F) 3 luminaires at 90°
PTF2-P26-4-90-(F) 4 luminaires at 90°
PTF2-P26-3-120-(F) 3 luminaires at 120°

PureForm PTF3 (pole top fitter fits 3-31/2" OD x 6" depth tenon)
PTF3-P26-1-90-(F) 1 luminaire at 90°
PTF3-P26-2-90-(F) 2 luminaires at 90°
PTF3-P26-2-180-(F) 2 luminaires at 180°
PTF3-P26-3-90-(F) 3 luminaires at 90°
PTF3-P26-4-90-(F) 4 luminaires at 90°
PTF3-P26-3-120-(F) 3 luminaires at 120°

PureForm PTF4 (pole top fitter fits 31/2-4" OD x 6" depth tenon)
PTF4-P26-1-90-(F) 1 luminaire at 90°
PTF4-P26-2-90-(F) 2 luminaires at 90°
PTF4-P26-2-180-(F) 2 luminaires at 180°
PTF4-P26-3-90-(F) 3 luminaires at 90°
PTF4-P26-4-90-(F) 4 luminaires at 90°
PTF4-P26-3-120-(F) 3 luminaires at 120°

P26-SF-G2-(F) Slip Fitter Mount (fits to 2 3/8" O.D. tenon)
P26-RAM-G2-(F) Retrofit Arm mount kit
P26-WS-G2-(F) Wall mount with surface conduit rear entry permitted
P26-BD-G2 Bird deterrent

(F) = Specify finish

14. HIS not available with Type 5, 5W, and BLC optics.
15. DD option required

P26 PureForm LED area medium

LED Wattage and Lumen Values

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type 2 Lumen Output	Type 2 BUG Rating	Type 2 Efficacy (LPW)	Type 3 Lumen Output	Type 3 BUG Rating	Type 3 Efficacy (LPW)	Type 4 Lumen Output	Type 4 BUG Rating	Type 4 Efficacy (LPW)
P26-48L-400-NW-G2-x	48	400	4000	60	8798	B2-U0-G2	146	8509	B2-U0-G2	142	8827	B2-U0-G2	147
P26-48L-500-NW-G2-x	48	500	4000	74	10755	B2-U0-G2	145	10401	B2-U0-G2	140	10789	B2-U0-G2	145
P26-48L-600-NW-G2-x	48	600	4000	89	12574	B3-U0-G2	141	12160	B2-U0-G2	137	12614	B2-U0-G3	142
P26-48L-700-NW-G2-x	48	700	4000	101	14305	B3-U0-G3	142	13834	B2-U0-G3	137	14351	B2-U0-G3	142
P26-64L-600-NW-G2-x	64	600	4000	114	16617	B3-U0-G3	145	16069	B2-U0-G3	141	16670	B3-U0-G3	146
P26-64L-700-NW-G2-x	64	700	4000	133	18806	B3-U0-G3	142	18186	B3-U0-G3	137	18866	B3-U0-G4	142
P26-64L-800-NW-G2-x	64	800	4000	153	21078	B3-U0-G3	138	20383	B3-U0-G4	134	21145	B3-U0-G4	139
P26-80L-700-NW-G2-x	80	700	4000	169	23764	B3-U0-G3	141	22981	B3-U0-G4	136	23840	B3-U0-G4	141
P26-80L-800-NW-G2-x	80	800	4000	192	26067	B3-U0-G3	136	25208	B3-U0-G4	132	26150	B3-U0-G4	137
P26-80L-900-NW-G2-x	80	900	4000	219	27986	B3-U0-G3	128	27064	B3-U0-G4	123	28076	B3-U0-G4	128

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type 5 Lumen Output	Type 5 BUG Rating	Type 5 Efficacy (LPW)	Type 5W Lumen Output	Type 5W BUG Rating	Type 5W Efficacy (LPW)	Type AFR Lumen Output	Type AFR BUG Rating	Type AFR Efficacy (LPW)	Type BLC Lumen Output	Type BLC BUG Rating	Type BLC Efficacy (LPW)
P26-48L-400-NW-G2-x	48	400	4000	60	9068	B3-U0-G2	151	9114	B4-U0-G2	152	9006	B2-U0-G1	150	6735	B0-U0-G2	112
P26-48L-500-NW-G2-x	48	500	4000	74	11083	B4-U0-G2	149	11141	B4-U0-G2	150	11009	B3-U0-G2	148	8233	B1-U0-G2	111
P26-48L-600-NW-G2-x	48	600	4000	89	12954	B4-U0-G2	146	13025	B4-U0-G2	146	12871	B3-U0-G2	145	9626	B1-U0-G2	108
P26-48L-700-NW-G2-x	48	700	4000	101	14736	B4-U0-G2	146	14819	B4-U0-G2	147	14643	B3-U0-G2	145	10951	B1-U0-G2	108
P26-64L-600-NW-G2-x	64	600	4000	114	17116	B4-U0-G2	150	17214	B5-U0-G3	151	17009	B3-U0-G2	149	12721	B1-U0-G2	111
P26-64L-700-NW-G2-x	64	700	4000	133	19369	B5-U0-G3	146	19481	B5-U0-G3	147	19249	B3-U0-G2	145	14396	B1-U0-G3	108
P26-64L-800-NW-G2-x	64	800	4000	153	21708	B5-U0-G3	142	21834	B5-U0-G3	143	21575	B3-U0-G2	141	16136	B1-U0-G3	106
P26-80L-700-NW-G2-x	80	700	4000	169	24474	B5-U0-G3	145	24617	B5-U0-G4	146	24325	B3-U0-G2	144	18192	B1-U0-G3	108
P26-80L-800-NW-G2-x	80	800	4000	192	26880	B5-U0-G3	140	27003	B5-U0-G4	141	26682	B3-U0-G3	139	19955	B1-U0-G3	104
P26-80L-900-NW-G2-x	80	900	4000	219	28872	B5-U0-G3	132	28991	B5-U0-G4	132	28647	B4-U0-G3	131	21425	B1-U0-G4	98

Values from photometric tests performed in accordance with IESNA LM-79 and are representative of the configurations shown. Actual performance may vary due to installation and environmental variables, LED and driver tolerances, and field measurement considerations. It is highly recommended to confirm performance with a photometric layout.

NOTE: Some data may be scaled based on tests of similar (but not identical) luminaires. Contact factory for configurations not shown.

Predicted Lumen Depreciation Data

Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions. L_{70} is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11. Published L_{70} hours limited to 6 times actual LED test hours

Ambient Temperature °C	Driver mA	Calculated L_{70} Hours	L_{70} per TM-21	Lumen Maintenance % at 60,000 hrs
25°C	up to 900 mA	>100,000 hours	>60,000 hours	>88%

P26 PureForm LED area medium

Specifications

Housing

Two-piece sealed enclosure with main part of the housing designed as the structural and heat sink frame enclosed by cover to give its unique form. It also includes integral arm and separate, self-retained hinged, one-piece die cast door frame. All die-cast parts made of low copper die cast aluminum alloy for a high resistance to corrosion. The sleek profile with optimized surface area allows housing to provide excellent convection heat transfer with minimum use of heat fins, giving the freedom to have a clean minimalist aesthetic design. Luminaire housing rated to IP66, tested in accordance to Section 9 of IEC 60598-1.

Vibration resistance

Luminaire is tested and rated 3G over 100,000 cycles conforming to standards set forth by ANSI C136.31-2010. Testing includes vibration in three axes, all performed on the same luminaire.

Light engine

Light engine comprises of a module of 16-LED aluminum metal clad board fully sealed with optics offered in multiples of 3, 4 and 5 modules or 48, 64 and 80 LEDs. Module is RoHS compliant. Color temperatures: 3000K +/- 125K, 4000K, 5000K +/- 200K. Minimum CRI of 70. Also available in 2700K and Amber (590nm) with extended lead times. Contact factory for details. LED light engine is rated IP66 in accordance to Section 9 of IEC 60598-1.

Energy saving benefits

System efficacy up to 150 lms/W with significant energy savings over Pulse Start Metal Halide luminaires. Optional control options provide added energy savings during unoccupied periods.

Optical systems

Type 2, 3, 4, 5, 5W, and AFR distributions available. Internal Shield option mounts to LED optics and is available with Type 2, 3, 4, and AFR distributions including a dedicated BLC optic to provide the best backlight control possible for those stringent requirements around property lines. Types 2, 3, 4, AFR, and BLC when specified and used as rotated, are factory set only. Performance tested per LM-79 and TM-15 (IESNA) certifying its photometric performance. Luminaire designed with 0% uplight (U0 per IESNA TM-15).

Mounting

Standard luminaire arm mounts to 4" O.D. round poles. Can also be used with 5" O.D. poles. Square pole adapter included with every luminaire. Round Pole Adapter (RPA) required for 3-3.9" poles. PureForm features a retrofit arm kit. When specified with the retrofit arm (RAM) option, PureForm seamlessly simplifies site conversions to LED by eliminating the need for additional pole drilling on most existing poles. RAM will be boxed separately. Also optional are slipfitter and wall mounting accessories.

Control options

0-10V dimming (DD): Access to 0-10V dimming leads supplied through back of luminaire (for secondary dimming controls by others). Cannot be used with other control options.

Dual Circuit Control (DCC): Luminaire equipped with the ability to have two separate circuits controlling drivers and light engines independently. Permits separate switching of separate modules controlled by use of two sets of leads, one for each circuit. Not recommended to be used with other control options, motion response, or photocells.

SiteWise (SW): SiteWise system includes a controller fully integrated in the luminaire that enables the luminaires to communicate with a dimming signal transmitter cabinet located on site using Philips patented central dimming technology. A locally accessible mobile app allows users to access the system and set functionalities such as ON/OFF, dimming levels and scheduling. SiteWise is available with motion response options in order to bring the light back to 100% when motion is detected. Cannot be used with other control options or photocell options. Additional functionalities are available such as communication with indoor lighting and connection to BMS systems. Complete information on the control system can be found on the SiteWise website at philips.com/sitewise.

Field Adjustable Wattage Selector (FAWS): Luminaire equipped with the ability to manually adjust the wattage in the field to reduce total luminaire lumen output and light levels. Comes pre-set to the highest position at the lumen output selected. Use chart below to estimate reduction in lumen output desired. Cannot be used with other control options or motion response.

FAWS Position	Percent of Typical Lumen Output
1	25%
2	50%
3	55%
4	65%
5	75%
6	80%
7	85%
8	90%
9	95%
10	100%

Note: Typical value accuracy +/- 5%

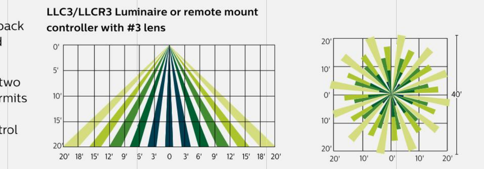
Automatic Profile Dimming (CS/CM/CE/CA): Standard dimming profile of 30% or 50% provide flexibility towards energy savings goals while optimizing light levels during specific dark hours. When used in combination with not programmed motion response it overrides the controller's schedule when motion is detected. After 5 minutes with no motion, it will return to the automatic diming profile schedule. Automatic dimming profile scheduled with the following settings:

- **CS50/CS30:** Security for 7 hours night duration (Ex., 11 PM - 6 AM)
- **CM50/CM30:** Median for 8 hours night duration (Ex., 10 PM - 6 AM)
- **CE50/CE30:** Economy for 9 hours night duration (Ex., 9 PM - 6 AM)
- **CA50/CA30:** for all night (during all dark hours)

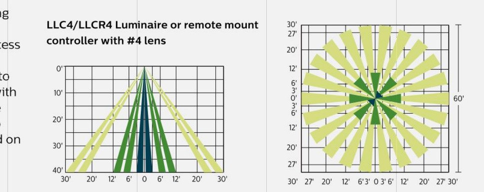
Cannot be used with other control options.

Wireless system (LLC): Optional wireless controller integral to luminaire ready to be connected to a Limelight system (sold by others). The system allows you to wirelessly manage the entire site, independent lighting groups or individual luminaires while on-site or remotely. Based on a high-density mesh network with an easy to use web-based portal, you can conveniently access, monitor and manage your lighting network remotely. Wireless controls can be combined with site and area, pedestrian, and parking garage luminaires as well, for a completely connected outdoor solution. Equipped with motion response with #3 lens (LLC3) for 8-25' mounting heights or #4 lens (LLC4) for 25- 40' mounting heights. Also available with remote pod accessory where pod is mounted separate from luminaire to pole or wall.

LLC3/LLCR3 Luminaire or remote mount controller with #3 lens



LLC4/LLCR4 Luminaire or remote mount controller with #4 lens



PHILIPS
GARDCO

Site & Area

PureForm

LED post top with comfort optics

Project:
Location:
Cat.No:
Type:
Qty:
Notes:

Philips Gardco PureForm LED post top features a sleek, low profile design. Comfort optics are designed to enhance visual comfort by reducing glare. Type 1, 2, 3, and 5 optical distributions are available with lumen output up to 9000 lumens. A full range of control options provides additional energy savings. Optional integral emergency battery backup is available for path-of-egress illumination.

Ordering guide

example: PPT-140L-450-NW-G2-T3-1-UNV-DGY

Prefix	Number of LEDs	Drive Current	LED Color - Generation	Mounting	Distribution	Emergency	Voltage
PPT	140L	650	WW-G2	T3	5		UNV
PPT PureForm post top, comfort optics	**140L** 140 LEDs	**450** 450mA; **650** 650mA; **1150** 1150mA[1]; **1675** 1675mA[1]; **2100** 2100mA[1,2]	**WW-G2** Warm White 3000K, 70CRI Generation 2; **NW-G2** Neutral White 4000K, 70CRI Generation 2; **CW-G2** Cool White 5000K, 70CRI Generation 2; **WY-G2** Warm Yellow 2700K, 80 CRI Generation 2[3]; **AM-G2** Direct Amber (590nm) Generation 2[3]	**T3** Mounts to a 3" x 4" Tenon (standard); **T2** Mounts to a 2-3/8" x 4" Tenon (must be ordered and shipped as a separate accessory)	**1** Comfort Type 1; **2** Comfort Type 2; **3** Comfort Type 3; **5** Comfort Type 5	Leave blank for no battery; **EBPC** Emergency battery pack cold weather[2,4,5,6,7]; **EBP** Emergency battery pack[1,4,5,7]	**120** 120V; **208** 208V; **240** 240V; **277** 277V; **347** 347V; **480** 480V; **UNV** 120-277V (50/60Hz); **HVU** 347-480V (50/60Hz)

Options

Dimming controls	Motion sensing	Photo-sensing	Electrical	Finish
DD 0-10V External dimming (by others)[4]; **FAWS** Field Adjustable[4,5]; **SW** Interface module for SiteWise[4,6,8]; **LLC3** Integral wireless module with #3 lens[4,5,6,7]; **BL** Bi-level functionary with motion sensor[4]	**IMRI3** Integral with #3 lens	**PCB** Photocontrol Button[7,9]; **TLRD5** Twist Lock Receptacle 5 Pin[10]; **TLRD7** Twist Lock Receptacle 7 Pin[10]; **TLRPC** Twist Lock Receptacle w/Photocell[9,11]	**Fusing**: **F1** Single (120, 277, 347VAC)[9]; **F2** Double (208, 240, 480VAC)[9]; **F3** Canadian Double Pull (208, 240, 480VAC)[9]	**Textured**: **BK** Black; **WH** White; **BZ** Bronze; **DGY** Dark Gray; **MGY** Medium Gray
DynaDimmer: Automatic Profile Dimming[4,7]; **CS50** Security 50% Dimming, 7 hours; **CM50** Median 50% Dimming, 8 hours; **CE50** Economy 50% Dimming, 9 hours; **DA50** All Night 50% Dimming; **CS30** Security 30% Dimming, 7 hours; **CM30** Median 30% Dimming, 8 hours; **CE30** Economy 30% Dimming, 9 hours; **DA30** All Night 30% Dimming			**Surge Protection** (10kA standard): **SP2** Increased 20kA	**Customer specified**: **RAL** Specify optional color or RAL (ex: RAL7024); **CC** Custom color (Must supply color chip for required factory quote)

1. 1150, 1675, and 2100mA not available with emergency battery backup (EBP).
2. 2100mA not available with emergency battery backup cold weather (EBPC).
3. Extended lead times apply. Contact factory for details.
4. Not available with other control options.
5. Not available with motion sensor.
6. Not available with photocontrol.
7. Not available in 347 or 480V.
8. Available only in 120 or 277V.
9. Must specify input voltage.
10. Dimming will not be connected to NEMA receptacle if ordering with other control options.
11. Not available in 480V

PPT PureForm LED post top

with comfort optics

PureForm Accessories (order separately)

PPT-T2
Post top tenon adapter for 2 3/8" x 4"

LED Wattage and Lumen Values

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type 1 Lumen Output	Type 1 BUG Rating	Type 1 Efficacy (LPW)	Type 2 Lumen Output	Type 2 BUG Rating	Type 2 Efficacy (LPW)	Type 3 Lumen Output	Type 3 BUG Rating	Type 3 Efficacy (LPW)	Type 5 Lumen Output	Type 5 BUG Rating	Type 5 Efficacy (LPW)
PPT-140L-450-NW-G2-x-UNV	140	450	4000	22	1971	B1-U0-G1	88	1951	B1-U0-G1	87	2421	B1-U0-G1	109	2254	B1-U0-G1	101
PPT-140L-650-NW-G2-x-UNV	140	650	4000	30	2636	B1-U0-G1	87	2609	B1-U0-G1	86	3237	B1-U0-G1	106	3014	B2-U0-G1	99
PPT-140L-1150-NW-G2-x-UNV	140	1150	4000	52	4736	B2-U0-G2	91	4686	B2-U0-G2	90	5816	B2-U0-G2	111	5415	B3-U0-G2	104
PPT-140L-1675-NW-G2-x-UNV	140	1675	4000	75	6574	B3-U0-G3	87	6506	B2-U0-G2	86	8074	B2-U0-G3	106	7517	B3-U0-G2	99
PPT-140L-2100-NW-G2-x-UNV	140	2100	4000	96	7871	B3-U0-G3	82	7789	B3-U0-G3	81	9011	B3-U0-G3	94	8999	B3-U0-G2	94

Values from photometric tests performed in accordance with IESNA LM-79 and are representative of the configurations shown. Actual performance may vary due to installation and environmental variables, LED and driver tolerances, and field measurement considerations. It is highly recommended to confirm performance with a photometric layout.

NOTE: Some data may be scaled based on tests of similar (but not identical) luminaires. Contact factory for configurations not shown.

LED Wattage and lumen values (Emergency Mode)

Ordering Code	LED Qty	LED Current (mA)	Color Temp.	Temp. Range (°C)	Avg. System Watts Normal Mode	Avg. System Watts Emergency Mode	Type 1 Normal Mode	Type 1 Emergency Mode	Type 2 Normal Mode	Type 2 Emergency Mode	Type 3 Normal Mode	Type 3 Emergency Mode	Type 5 Normal Mode	Type 5 Emergency Mode
PPT-140L-450-NW-G2-x-EBP-UNV	140	450	4000	0 to 40	22	10	1971	1526	1951	1510	2421	1747	2254	1744
PPT-140L-650-NW-G2-x-EBP-UNV	140	650	4000	0 to 40	30	10	2636	1526	2609	1510	3237	1747	3014	1744
PPT-140L-450-NW-G2-x-EBPC-UNV	140	450	4000	-20 to 40	22	18	1971	2178	1951	2155	2421	2493	2254	2490
PPT-140L-650-NW-G2-x-EBPC-UNV	140	650	4000	-20 to 40	30	18	2636	2178	2609	2155	3237	2493	3014	2490
PPT-140L-1150-NW-G2-x-EBPC-UNV	140	1150	4000	-20 to 40	52	18	4736	2178	4686	2155	5816	2493	5415	2490
PPT-140L-1675-NW-G2-x-EBPC-UNV	140	1675	4000	-20 to 40	75	18	6574	2178	6506	2155	8074	2493	7517	2490

Predicted Lumen Depreciation Data

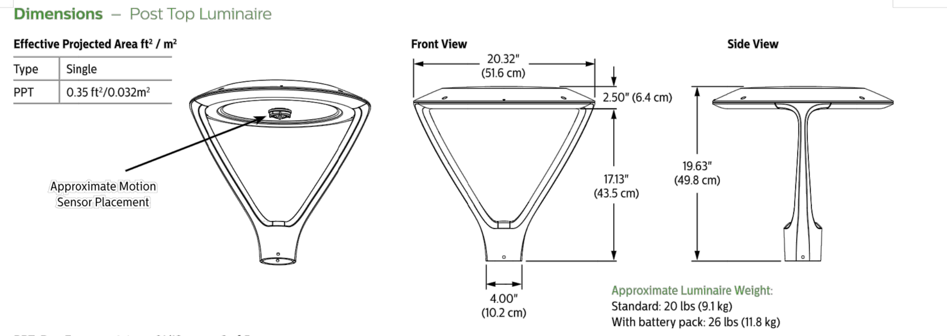
Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions. L_{70} is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11. Published L_{70} hours limited to 6 times actual LED test hours

Ambient Temperature °C	Driver mA	Calculated L_{70} Hours	L_{70} per TM-21	Lumen Maintenance % at 60,000 hrs
25°C	up to 2100mA	>100,000 hours	>60,000 hours	>84%

Dimensions – Post Top Luminaire

Effective Projected Area ft² / m²

Type	Single
PPT	0.35 ft²/0.032m²



Approximate Luminaire Weight:
Standard: 20 lbs (9.1 kg)
With battery pack: 26 lbs (11.8 kg)

PPT PureForm LED post top

with comfort optics

Specifications

Housing

Two-piece sealed enclosure with main part of the housing designed as the structural and heat sink frame, enclosed by cover to give its unique form. It also includes yoke arm with arm covers. All die-cast parts are made of low-copper, die-cast aluminum alloy for a high resistance to corrosion. The sleek profile with optimized surface area allows housing to provide excellent convection heat transfer with minimum use of heat fins, giving the freedom to have a clean minimalist aesthetic design. Luminaire housing rated to IP66, tested in accordance to Section 9 of IEC 60598-1.

Vibration resistance

Luminaire is tested and rated 3G over 100,000 cycles conforming to standards set forth by ANSI C136.31-2010. Testing includes vibration to 3G acceleration in three axes, all performed on the same luminaire.

Light engine

Light guide technology provides low-glare, uniform illumination. Composed of 140 LEDs strategically positioned on the edge of the optical plate. Light engine luminous opening size optimized to best achieve a balance between lumen output and optical performance with the need to provide visual comfort. Light engine frame ensures contact with housing to provide heat conduction and sealing against the elements. Light engine is RoHS compliant. . Standard color temperatures: 3000K +/- 130K, 4000K+/- 130K, 5000K +/- 225K. Minimum CRI of 70. Also available in 2700K and Amber (>590nm) with extended lead times. Contact factory for details.

Energy saving benefits

System efficacy up to 111 lms/W with significant energy savings over Pulse Start Metal Halide luminaires. Optional control options provide added energy savings during unoccupied periods.

Optical systems

The advanced LED comfort optical system provides Types 1, 2, 3, and 5. Composed of high performance UV-stabilized optical grade lens with molded micro-optics to achieve desired distribution optimized to get a exceptional lighting uniformity. Performance tested per LM-79 and TM-15 (IESNA) certifying its photometric performance. Luminaire designed with 0% uplight (U0 per IESNA TM-15).

Mounting

PureForm Post Top mounts standard to a 3" x 4" Tenon, but can also be mounted to a 2-3/8" x 4" Tenon if a separate sleeve is ordered as an accessory.

Control options

0-10V dimming (DD): Access to 0-10V dimming leads supplied through the yoke of the luminaire (for secondary dimming controls by others). Cannot be used with other control options.

SiteWise (SW): SiteWise system includes a controller fully integrated in the luminaire that enables the luminaires to communicate with a dimming signal transmitter cabinet located on site using Philips patented central dimming technology. A locally accessible mobile app allows users to access the system and set functionalities such as ON/OFF, dimming levels and scheduling. SiteWise is available with motion response options in order to bring the light back to 100% when motion is detected. Cannot be used with other control options or photocell options. Additional functionalities are available such as communication with indoor lighting and connection to BMS systems. Complete information on the control system can be found on the SiteWise website at philips.com/sitewise.

Field Adjustable Wattage Selector (FAWS): Luminaire equipped with the ability to manually adjust the wattage in the field to reduce total luminaire lumen output and light levels. Comes pre-set to the highest position at the lumen output selected. Use chart below to estimate reduction in lumen output desired. Cannot be used with other control options or motion response.

FAWS Position	Percent of Typical Lumen Output
1	25%
2	50%
3	55%
4	65%
5	75%
6	80%
7	85%
8	90%
9	95%
10	100%

Note: Typical value accuracy +/- 5%

Automatic Profile Dimming (CS/CM/CE/CA): Standard dimming profile of 30% or 50% provide flexibility towards energy savings goals while optimizing light levels during specific dark hours. When used in combination with not programmed motion response it overrides the controller's schedule when motion is detected. After 5 minutes with no motion, it will return to the automatic diming profile schedule. Automatic dimming profile scheduled with the following settings:

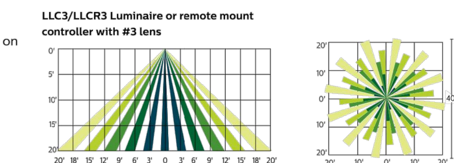
- **CS50/CS30:** Security for 7 hours night duration (Ex., 11 PM - 6 AM)
- **CM50/CM30:** Median for 8 hours night duration (Ex., 10 PM - 6 AM)
- **CE50/CE30:** Economy for 9 hours night duration (Ex., 9 PM - 6 AM)
- **CA50/CA30:** for all night (during all dark hours)

Cannot be used with other control options.

Emergency Battery Backup (EBP/EBPC): Emergency battery packs included integral to the luminaire, allowing for a consistent look between emergency and non-emergency luminaires. EBP is suitable for use in ambient temperature conditions from 0°C (-32°F) to 40°C (100°F) available on 450mA and 650mA only. EBPC cold weather rated down to -20°C (-4°F) available on all wattage except the 2100mA configuration. Both systems are designed to have a secondary driver with relay to immediately detect AC power loss to power luminaire for a minimum of 90 minutes from the time power is lost. Available with 120-277V, or 'UNV' only.

Wireless system (LLC): Optional wireless controller integral to luminaire ready to be connected to a Limelight system (sold by others). The system allows you to wirelessly manage the entire site, independent lighting groups or individual luminaires while on-site or remotely. Based on a high-density mesh network with an easy to use web-based portal, you can conveniently access, monitor and manage your lighting network remotely. Wireless controls can be combined with site and area, pedestrian, and parking garage luminaires as well, for a completely connected outdoor solution. Equipped with motion response with #3 lens (LLC3) for 8-25' mounting heights. Also available with remote pod accessory where pod is mounted separate from luminaire to pole or wall.

LLC3/LLCR3 Luminaire or remote mount controller with #3 lens



PPT PureForm LED post top

with comfort optics

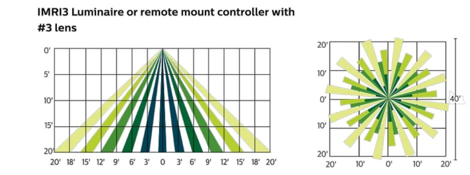
Motion response options

Bi-Level Infrared Motion Response (BL-IMRI3): Motion Response module is mounted integral to luminaire factory pre-programmed to 50% dimming when not ordered with other control options. P50-IMRI is set/operates in the following fashion: The motion sensor is set to a constant 50%. When motion is detected by the PIR sensor, the luminaire returns to full power/light output. Dimming on low is factory set to 50% with 5 minutes default in "full power" prior to dimming back to low. When no motion is detected for 5 minutes, the motion response system reduces the wattage by 50%, to 50% of the normal constant wattage reducing the light level. Other dimming settings can be provided if different dimming levels are required. This can also be done with FSIR-100 Wireless Remote Programming Tool (contact Technical Support for details).

Infrared Motion Response with Other Controls (SW-IMRI3): When used in combination with other controls (Automatic Dimming Profile and SiteWise), motion response device will simply override controller's schedule with the added benefits of a combined dimming profile and sensor detection. In this configuration, the motion response device cannot be re-programmed with FSIR-100 Wireless Remote Programming Tool. The profile can only be re-programmed via the controller.

Infrared Motion Response Lenses (IMRI3): Infrared Motion Response Integral module is available lens #3 (IMRI3), which is designed for mounting heights up to 20' with a 40' diameter coverage area. See chart for approximate detection patterns:

IMRI3 Luminaire or remote mount controller with #3 lens



Electrical

Twist-Lock Receptacle (TLRD5/TLRD7/ TLRPC): Twist Lock Receptacle with 5 pins enabling dimming or with 7 pins with additional functionality (by others) can be used with a twistlock photoelectric cell or a shorting cap. Dimming Receptacle Type B (5-pin) and Type D-24 (7-pin) in accordance to ANSI C136.41. Can be used with Philips or third-party control system. Receptacle located on top of luminaire housing. When specifying receptacle with twistlock photoelectric cell, voltage must be specified.

Driver: Driver efficiency (>90% standard). 120-480V available (restrictions apply). Open/short circuit protection. Optional 0-10V dimming to 10% power. RoHS compliant.

Button Photocontrol (PCB): Button style design for internal luminaires mounting applications. The photocontrol is constructed of a high impact UV stabilized polycarbonate housing. Rated voltage of 120V or 208-277V with a load rating of 1000 VA. The photocell will turn on with 1-4Fc of ambient light.

Surge protection (SP1/SP2): Each luminaire is provided as standard with surge protector tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/5kA waveforms for Line Ground, Line Neutral and Neutral Ground, and in accordance with U.S. DOE (Department of Energy) MSSLC (Municipal Solid-State Street Lighting Consortium) Model Specification for LED Roadway Luminaires Appendix D Electrical Immunity High Test Level 10kV / 5kA. Optional 20kV is available for additional protection.

Listings

UL/cUL wet location listed to the UL 1598 standard, suitable for use in ambient temperatures from -40° to 40°C (-40° to 104°F). Most PureForm PPT comfort configurations are qualified under Standard DesignLights Consortium® category. Consult DLC Qualified Products list for more details.

Finish

Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. The surface treatment achieves a minimum of 1000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard. Standard colors include bronze (BZ), black (BK), white (WH), dark gray (DGY), and medium gray (MGY). Consult factory for specs on optional or custom colors.

Warranty

PureForm luminaires feature a 5-year limited warranty.
See philips.com/warranties for complete details and exclusions.

© 2017 Philips Lighting Holding B.V. All rights reserved. Philips reserves the right to make changes in specifications and/or to discontinue any product at any time without notice or obligation and will not be liable for any consequences resulting from the use of this publication.
philips.com/luminaires

PHILIPS

Philips Lighting North America Corporation
200 Franklin Square Drive, Somerset, NJ 08873
Tel. 855-486-2216

Philips Lighting Canada Ltd.
281 Hillmount Rd, Markham, ON, Canada L6C 2S3
Tel. 800-668-9008

811 Know what's **below.** **Call** before you dig.

ENGINEER'S STATEMENT
PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E. — DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

COLORADO REGISTERED PROFESSIONAL ENGINEER AARON LEE CLUTTER 36742

No.	REVISION	BY	DATE

H-SCALE	N/A
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	MEP
DRAWN BY	MEP
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

OVERALL LIGHTING PLAN

SHEET 5 OF 270

JOB NO. 15950.01

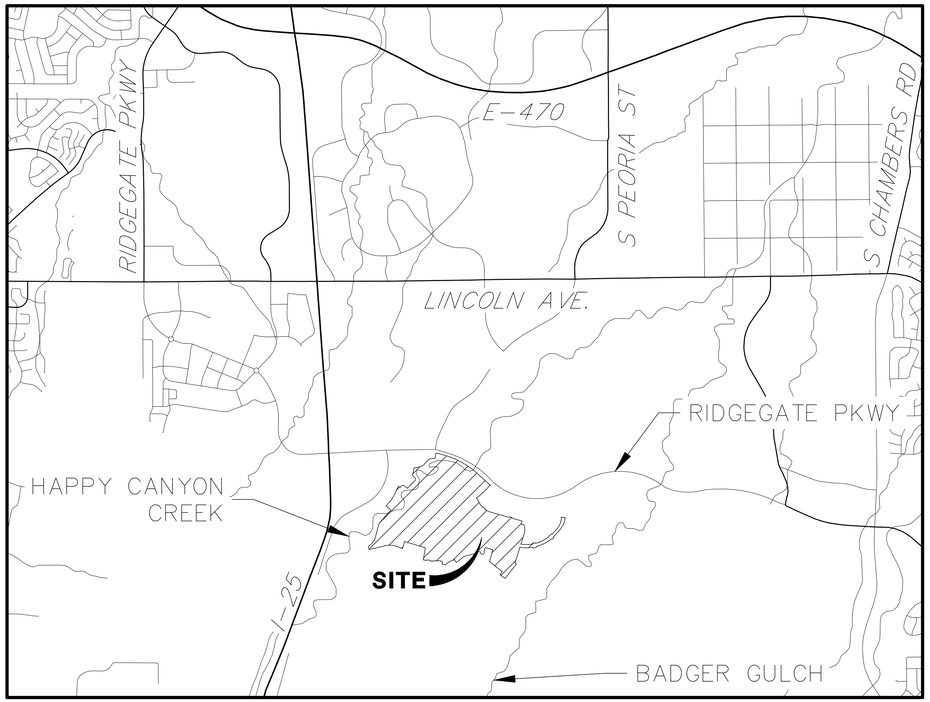
RIDGEGATE SOUTHWEST VILLAGE FILING 1 - REGIONAL INFRASTRUCTURE PHASE 1A

A PORTION OF THE RIDGEGATE PLANNED DEVELOPMENT DISTRICT, EAST SIDE PROPERTY
A PART OF SECTION 14, SECTION 22, SECTION 23, AND SECTION 24, TOWNSHIP 6 SOUTH, RANGE 67 WEST
OF THE 6TH P.M., CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO

STREET AND DRAINAGE CONSTRUCTION PLANS

ABBREVIATIONS

AC	ACRE
AD	ALGEBRAIC DIFFERENCE
AH	AHEAD
ARCH	ARCHITECT
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASSY	ASSEMBLY
AVE	AVENUE
BB	BOX BASE
BK	BACK
BNDY	BOUNDARY
BOP	BOTTOM OF PIPE
BOV	BLOW OFF VALVE
BFV	BUTTERFLY VALVE
BLVD	BOULEVARD
BW	BOTTOM OF WALL
C&G	CURB & GUTTER
CATV	CABLE TELEVISION
CB	CATCH BASIN
CBC	CONCRETE BOX CULVERT
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION
CDS	CUL-DE-SAC
CF	CUBIC FOOT
CFS	CUBIC FEET PER SECOND
CIP	COMPLETE IN PLACE
CL	CENTER LINE
CLOMR	CONDITIONAL LETTER OF MAP REVISION
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
COCS	CITY OF COLORADO SPRINGS
CONC	CONCRETE
CR	CIRCLE
CSP	CORRUGATED STEEL PIPE
CSU	COLORADO SPRINGS UTILITIES
CT	COURT
CTRB	CONCRETE THRUST REDUCER BLOCK
CY	CUBIC YARD
DBPS	DRAINAGE BASIN PLANNING STUDY
DE	DRAINAGE EASEMENT
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DR	DRIVE
DRC	DESIGN REVIEW COMMITTEE
DU	DWELLING UNITS
DY	DAY
E	EAST
EA	EACH
EGL	ENERGY GRADE LINE
EL	ELEVATION
ELEC	ELECTRIC
EOA	EDGE OF ASPHALT
EPC	EL PASO COUNTY
ERCP	ELLIPTICAL RCP
ESMT	EASEMENT
EST	ESTIMATE
EX	EXISTING
FDP	FINAL DEVELOPMENT PLAN
FDR	FINAL DRAINAGE REPORT
FES	FLARED END SECTION
FF	FINISHED FLOOR ELEVATION
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOWLINE
FIL	FILING
FO	FIBER OPTIC CABLE
GB	GRADE BREAK
GE	GAS EASEMENT
GIS	GEOGRAPHIC INFORMATION SYSTEM
GL	GAS LINE
GPS	GLOBAL POSITIONING SYSTEM
GV	GATE VALVE
HBP	HOT BITUMINOUS PAVEMENT
HC	HANDICAP
HDC	HIGH DEFLECTION COUPLING
HDPE	HIGH DENSITY POLYETHYLENE
HGL	HYDRAULIC GRADE LINE
HMA	HOT MIX ASPHALT
HOA	HOME OWNERS ASSOCIATION
HP	HIGH POINT
HR	HOUR
I	INLET
IE	IRRIGATION EASEMENT
INT	INTERSECTION
INV	INVERT
IRR	IRRIGATION
KB	KICK (THRUST) BLOCK
LB	POUND
LE	LANDSCAPE EASEMENT
LF	LINEAR FOOT
LN	LANE
LOMR	LETTER OF MAP REVISION
LP	LOW POINT
LS	LUMP SUM
LT	LEFT
MAX	MAXIMUM
M/D	MOISTURE DENSITY
MDDP	MASTER DEVELOPMENT DRAINAGE PLAN
MH	MANHOLE
MIN	MINIMUM
MS	MOUNTABLE SIDEWALK
N	NORTH
NRCP	NON-REINFORCED CONCRETE PIPE
ODP	OFFICIAL DEVELOPMENT PLAN
OHE	OVERHEAD ELECTRIC
OHU	OVERHEAD UTILITY
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PCR	POINT OF CURB RETURN
PDP	PRELIMINARY DEVELOPMENT PLAN
PE	PROFESSIONAL ENGINEER
PI	POINT OF INTERSECTION
PKWY	PARKWAY
PL	PROPERTY LINE
PR	PROPOSED
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PV	PLUG VALVE
PVC	POLYVINYL CHLORIDE
R	RADIUS
RCBC	REINFORCED CONCRETE BOX CULVERT
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
ROW	RIGHT OF WAY
RT	RIGHT
S	SOUTH
STE	STEEL
SAN	SANITARY SEWER
SF	SQUARE FOOT
ST	STREET
STA	STATION
STM	STORM SEWER
SY	SQUARE YARD
SY-IN	SQUARE YARD INCH
TB	THRUST BLOCK
TBC	TOP BACK OF CURB
TBW	TOP BACK OF WALK
TEL	TELEPHONE
TN	TON
TOA	TOP OF ASPHALT
TOB	TOP OF BOX
TOC	TOP OF CURB OR CONCRETE
TOF	TOP OF FOUNDATION
TOP	TOP OF PIPE
TW	TOP OF WALL
TYP	TYPICAL
UDFCD	URBAN DRAINAGE AND FLOOD CONTROL DISTRICT
UE	UTILITY EASEMENT
U&DE	UTILITY & DRAINAGE EASEMENT
UGE	UNDERGROUND ELECTRIC
VCP	VITRIFIED CLAY PIPE
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
VTC	VEHICLE TRACKING CONTROL
W	WEST
WL	WATER LINE
WM	WATER MAIN
WRD	WATER RESOURCES DEPARTMENT
WS	WATER SURFACE
WSE	WATER SURFACE ELEVATION
WTR	WATER
YR	YEAR



VICINITY MAP
SCALE: 1"=2000'

SHEET INDEX

6	COVER SHEET – REGIONAL PHASE 1A
7	GENERAL NOTES–PHASE 1A
8	LEGEND–PHASE 1A
9	OVERALL UTILITY PLAN –RIDGEGATE PARKWAY
10–14	OVERALL SITE AND UTILITY PLAN–PHASE 1A
15–16	ROADWAY TYPICAL SECTIONS–PHASE 1A
17–19	HORIZONTAL CONTROL PLAN–RIDGEGATE PARKWAY
20	DEMOLITION PLAN –RIDGEGATE PARKWAY
21–29	ROADWAY PLAN & PROFILES–PHASE 1A
30–31	CURB RETURN PROFILES–PHASE 1A
32–37	CURB RAMP DETAILS–PHASE 1A
38–44	SIGNAGE & STRIPING PLAN–PHASE 1A
45–48	TRAFFIC CONTROL PLAN–RIDGEGATE PARKWAY
49–52	TRAFFIC SIGNAL PLAN–PHASE 1A
53–55	CROSS SECTIONS–RIDGEGATE PARKWAY
56–64	STORM PLAN & PROFILE–PHASE 1A
65–70	STORM SEWER & ROADWAY DETAILS–PHASE 1A
71–73	POND A–PHASE 1A
75–76	POND A FOREBAY–PHASE 1A
77–79	POND A OUTLET STRUCTURE–PHASE 1A
TOTAL	6–79

NOTICE TO CONTRACTOR:

1. BY ACCEPTING AND UTILIZING THESE PLANS, THE CONTRACTOR AGREES THAT THEY SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSON AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER AND CIVIL ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE CIVIL ENGINEER.
2. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITIES, CONDUITS OR OTHER STRUCTURES SHOWN ON THESE PLANS WAS OBTAINED BY A SEARCH OF AVAILABLE RECORDS. THE ENGINEER ASSUMES NO LIABILITY WHATSOEVER FOR THE ACCURACY OR COMPLETENESS OF SUCH DATA. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ALL UTILITY LINES, CONDUITS OR STRUCTURES WHETHER OR NOT SHOWN ON THESE PLANS AND BY ACCEPTING AND UTILIZING THESE PLANS, ASSUMES ALL RESPONSIBILITY FOR THE PROTECTION AND/OR ANY DAMAGE TO SAID FACILITIES.

811 Know what's below. Call before you dig.

APPLICANT/OWNER

SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
P~303.791.8180

CIVIL ENGINEER/SURVEYOR

JR ENGINEERING
7200 SOUTH ALTON WAY, SUITE C400
CENTENNIAL, CO
P~303.267.6220

PLANNER

SAGE DESIGN GROUP
1500 SOUTH PEARL STREET, SUITE 200
DENVER, CO 80210
P~303.470.2855

TRAFFIC ENGINEER

JR ENGINEERING
7200 SOUTH ALTON WAY, SUITE C400
CENTENNIAL, CO
P~303.267.6183

GEOTECHNICAL ENGINEER

CTL THOMPSON, INC
1971 WEST 12TH VAE.
DENVER, CO 80204
P~303.825.0777

SOIL PREPARATION NOTE:

SOIL PREPARATION SHALL BE PER RECOMMENDATIONS FROM THE GEOTECHNICAL REPORT PREPARED FOR THIS SITE:

GEOTECHNICAL ENGINEER: CTL THOMPSON, INC
ROJECT NUMBER: DN49,935-115-R2

THE CONTRACTOR IS TO REVIEW THIS REPORT IN FULL PRIOR TO BID. INFORMATION IN THE GEOTECHNICAL REPORT SUPERCEDES ANY CONFLICTING INFORMATION CONTAINED IN THE CONSTRUCTION PLANS AND SPECIFICATIONS.

BASIS OF BEARING

BEARING SHOWN HEREON ARE GRID BEARINGS DERIVED FROM GPS OBSERVATION BASED UPON THE COLORADO COORDINATE SYSTEM OF 1983 CENTRAL ZONE (NAD 83, 2011) REFERENCED TO THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, SIXTH PRINCIPAL MERIDIAN BEING MONUMENTED AS SHOWN HEREON, TAKEN TO BEAR NORTH 89°31'58" EAST, A DISTANCE OF 2635.13 FEET.

BENCHMARK

NGS CONTROL POINT UNBEWUST BEING A 3.5 INCH DIAMETER BRASS CAP. LOCATED ABOUT 3.2 MILES SOUTH OF INTERSTATE 25 AND COLORADO STATE HIGHWAY 470 INTERCHANGE, GO SOUTH ON INTERSTATE 25 FOR 2.9 MILES TO EXIT 191. PROCEED ON A PAVED ROAD TO THE SOUTHWEST FOR 0.2 MILES TO THE STATION ON THE LEFT. IN THE NORTHWEST CORNER OF A 24 FOOT BY 16 FOOT ROCK OUTCROP. IT IS 22.5 FEET EAST OF THE CENTERLINE OF THE PAVED ROAD, 123 FEET NORTH OF THE OUTLET OF A 3 FOOT CORRUGATED STEEL PIPE CULVERT AND APPROXIMATELY 350 FEET WEST OF THE WEST EDGE OF OIL OF SOUTHBOUND INTERSTATE 25, ELEVATION: 6125.32 (NAVD88).

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=2000'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	N/A
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

COVER SHEET – REGIONAL PHASE 1A

SHEET 6 OF 270

JOB NO. 15950.01

GENERAL PROJECT NOTES:

1. ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION OF IMPROVEMENTS SHALL MEET OR EXCEED THE GOVERNING CITY, COUNTY, AND/OR STATE AND APPLICABLE UTILITY DISTRICT STANDARDS AND SPECIFICATIONS, AND APPLICABLE STATE AND FEDERAL REGULATIONS. WHERE THERE IS A CONFLICT BETWEEN THESE PLANS AND ANY APPLICABLE STANDARDS, THE HIGHER QUALITY STANDARD SHALL APPLY. ALL WORK SHALL BE INSPECTED AND APPROVED BY THE CITY AND APPLICABLE UTILITY DISTRICT(S).

2. THE SITE CONSTRUCTION PLANS LISTED WITHIN THIS PLAN SET ARE NOT FOR CONSTRUCTION UNLESS APPROVED BY THE APPROPRIATE GOVERNING JURISDICTION. THE CONTRACTOR SHALL CONFIRM SAID APPROVAL PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL KEEP ONE (1) SIGNED COPY OF THE APPROVED SET OF PLANS, APPROPRIATE SPECIFICATIONS AND STANDARDS, AND APPROVED PERMITS ONSITE AT ALL TIMES.

3. NO REVISIONS SHALL BE MADE TO THESE PLANS WITHOUT THE APPROVAL OF THE CITY, COUNTY, STATE OR LOCAL DISTRICT AND THE ENGINEER OF RECORD.

4. ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARDS, UNLESS SPECIFICALLY STATED OTHERWISE.

5. THE CONTRACTOR IS RESPONSIBLE FOR ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS SHOWN ON THESE DRAWINGS OR DESIGNATED TO BE PROVIDED, INSTALLED, CONSTRUCTED, REMOVED, OR RELOCATED UNLESS SPECIFICALLY NOTED OTHERWISE.

6. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND LICENSES FOR WORK INCLUDING, BUT NOT LIMITED TO DEMOLITION, STREET CUTS, UTILITY INTERFERENCES, TRAFFIC CONTROL, GRADING, AND UTILITY FROM ALL APPLICABLE AGENCIES; AND FOR COMPLYING WITH ALL PROVISIONS INCLUDED THEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL OTHER APPLICABLE PERMITS NOT SPECIFICALLY REQUIRED BY THE AUTHORITY HAVING JURISDICTION.

7. THE CONTRACTOR SHALL UTILITY STAKE PROJECT AT LEAST 2 WORKING DAYS PRIOR TO BEGINNING EXCAVATION OR GRADING, TO HAVE ALL REGISTERED UTILITY LOCATIONS MARKED. OTHER UNREGISTERED UTILITY ENTITIES (I.E. DITCH COMPANY) ARE TO BE LOCATED BY CONTACTING THE RESPECTIVE REPRESENTATIVE.

8. THE CONTRACTOR IS RESPONSIBLE FOR FIELD LOCATING AND VERIFYING ELEVATIONS OF ALL EXISTING SEWER MAINS, WATER MAINS, CURBS, GUTTERS, AND OTHER UTILITIES AT THE POINTS OF CONNECTION SHOWN ON THE PLANS, AND AT ANY UTILITY CROSSINGS PRIOR TO INSTALLING ANY OF THE NEW IMPROVEMENTS. IF A CONFLICT EXISTS AND/OR A DESIGN MODIFICATION IS REQUIRED, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO MODIFY THE DESIGN. DESIGN MODIFICATION(S) MUST BE APPROVED BY THE APPROPRIATE AUTHORITY PRIOR TO BEGINNING CONSTRUCTION.

9. ANY DISRUPTION OF UTILITY SERVICE THAT IS REQUIRED TO ADJUST, EXTEND, RELOCATE OR OTHERWISE REARRANGE ANY UTILITY WITHIN THE PROJECT AREA SHALL BE COORDINATED IN ADVANCE WITH THE AFFECTED UTILITY ENTITY.

10. RIM ELEVATIONS SHOWN ARE APPROXIMATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS. THE CONTRACTOR SHALL USE PRECAST CONCRETE ADJUSTMENT RINGS, GROUT, AND STEEL SHIMS TO ADJUST THE MANHOLE FRAMES TO FINAL GRADE IN CONFORMANCE WITH THE CITY OR UTILITY COMPANY/DISTRICT STANDARD SPECIFICATIONS. ALL FRAMES SHALL BE ADJUSTED TO FINAL GRADE PRIOR TO THE FINAL LIFT OF ASPHALT.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF PROJECT SAFETY INCLUDING, BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.

12. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN, IN ACCORDANCE WITH THE M.U.T.C.D. TO THE APPROPRIATE RIGHT-OF-WAY AUTHORITY (CITY, COUNTY, OR STATE) FOR APPROVAL, PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN, OR AFFECTING, THE RIGHT-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED BY THE CONSTRUCTION ACTIVITIES. ALL WORK WITHIN THE RIGHT OF WAY SHALL BE DONE IN ACCORDANCE WITH THE GOVERNING AUTHORITY'S STANDARDS AND SPECIFICATIONS.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANING AND RESTORATION OF ANY EXISTING IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO STREET PAVEMENT, FENCES, SOD, LANDSCAPING, SPRINKLER SYSTEMS, AND UTILITIES DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL LOCATION AND CONDITION.

14. INCLUDED IN THESE PLANS IS THE DEMOLITION AND DISPOSAL OF ALL EXISTING UTILITIES, SITE IMPROVEMENTS, STRUCTURES, AND SITE FURNISHINGS NEEDED FOR CONSTRUCTION OF THE IMPROVEMENTS SHOWN HEREON. ALL QUESTIONS IN REGARD TO DEMOLITION SHALL BE SUBMITTED TO THE OWNER IN WRITING PRIOR TO BID.

15. ALL DEMOLITION, REMOVAL, DISPOSAL, AND ABANDONMENT OF UTILITIES, STRUCTURES, SITE IMPROVEMENTS, AND SITE FURNISHINGS SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL STANDARDS AND SPECIFICATIONS, AND PERMIT REQUIREMENTS.

16. ALL DISTURBED SOIL, ON- OR OFF-SITE AND RELATED TO WORK AT THIS PROJECT SITE, IS REQUIRED TO BE PROTECTED FROM WIND AND STORM WATER EROSION. TO MITIGATE EROSION, THE CONTRACTOR SHALL USE STANDARD EROSION CONTROL TECHNIQUES DESCRIBED IN THE GESC PLAN SET AND GESC REPORT FOR THIS PROJECT.

17. ALL STRUCTURAL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY GROUND-DISTURBING ACTIVITY. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED IN GOOD REPAIR BY THE CONTRACTOR UNTIL SUCH TIME AS THE ENTIRE DISTURBED AREA IS STABILIZED WITH HARD SURFACE OR PERMANENT LANDSCAPING. THE CONTRACTOR IS RESPONSIBLE FOR REFERRING TO ANY EROSION AND SEDIMENT CONTROL, STORMWATER MANAGEMENT, STORMWATER POLLUTION PREVENTION, OR SIMILAR PLAN AND/OR NARRATIVE AND ASSOCIATED PERMITS INCLUDING, BUT NOT LIMITED TO GRADING PERMITS, AND COMPLYING WITH THE REQUIREMENTS THEREIN.

18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK, INSPECTIONS, AND CERTIFICATIONS AS REQUIRED BY THE CITY, STATE OR LOCAL DISTRICTS. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST ASSOCIATED WITH THE INSPECTION AND CERTIFICATION UNLESS OTHERWISE ARRANGED WITH THE OWNER/DEVELOPER. THE CONTRACTOR SHALL COORDINATE ALL CERTIFICATIONS, AND PROVIDE FIELD SURVEYED AS-BUILT INFORMATION FOR REVIEW BY THE OWNER/DEVELOPER AND/OR ENGINEER AS EARLY AS POSSIBLE IN THE CONSTRUCTION SCHEDULE TO AVOID POTENTIAL DELAYS.

19. CONTRACTOR IS RESPONSIBLE FOR AS-BUILT DRAWINGS, TESTS, REPORTS, AND/OR ANY OTHER CERTIFICATES OR INFORMATION AS REQUIRED FOR ACCEPTANCE OF WORK FROM CITY, UTILITY DISTRICTS, OR ANY OTHER GOVERNING AGENCY, OR TO THE OWNER/DEVELOPER AS REQUIRED BY AND IN ACCORDANCE WITH THE GOVERNING AUTHORITY OR OWNER/DEVELOPER'S CRITERIA. CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING AS-BUILT INFORMATION AN A SET OF RECORD DRAWINGS KEPT AT THE CONSTRUCTION SITE AND AVAILABLE TO THE GOVERNING CITY, COUNTY, AND/OR STATE AND UTILITY DISTRICT INSPECTOR AT ALL TIMES. THE CONTRACTOR SHALL CONFIRM ANY REQUIREMENTS AS EARLY AS POSSIBLE IN THE CONSTRUCTION SCHEDULE TO ACCOUNT FOR PREPARATION AND REVIEW OF THE INFORMATION TO AVOID POTENTIAL DELAYS.

20. IF, DURING THE CONSTRUCTION PROCESS, CONDITIONS ARE ENCOUNTERED BY THE CONTRACTOR, HIS SUBCONTRACTORS, OR OTHER AFFECTED PARTIES, WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE OWNER/DEVELOPER AND THE ENGINEER IMMEDIATELY.

21. DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. IF PERTINENT DIMENSIONS ARE NOT SHOWN, CONTACT THE CONSULTING ENGINEER FOR CLARIFICATION AND ANNOTATE THE DIMENSION ON THE AS-BUILT RECORD DRAWING.

22. BENCHMARK VERIFICATION: THE CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS AND THE PROPOSED ELEVATIONS IN THIS CONSTRUCTION PLAN SET AGAINST THE PROJECT BENCHMARK, IDENTIFIED HEREIN, PRIOR TO COMMENCING WORK.

ROADWAY NOTES

1. GUTTERS SHALL BE AT LEAST 6" THICK.
2. ALL CURBS SHALL USE THE CATCH SECTION UNLESS OTHERWISE NOTED.
3. ALL COMBINATION CURB, GUTTER AND SIDEWALKS TO BE 6" THICK (MIN.). SIDEWALKS WITH VERTICAL CURB AND GUTTER TO BE 6" THICK (MIN.).
4. NON-LANDSCAPED MEDIAN ISLANDS SHALL BE COVERED WITH AN ACCEPTABLE IMPERMEABLE SURFACE.
5. IF ANY SECTION OF A DETACHED SIDEWALK IS TO BE PLACED OUTSIDE OF THE ROAD RIGHT-OF-WAY, THEN A SIDEWALK EASEMENT SHALL BE REQUIRED TO MAINTAIN PUBLIC USE.
6. PLACEMENT, MOISTURE AND DENSITY CONTROL FOR SUBGRADE, SUBBASE, AND SURFACING MATERIALS SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS OF CHAPTER 8 OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.

CITY OF LONE TREE GENERAL NOTES

1. THE CITY OF LONE TREE ENGINEER'S SIGNATURE AFFIXED TO THIS DOCUMENT INDICATES THE ENGINEERING DIVISION HAS REVIEWED THE DOCUMENT AND FOUND IT IN GENERAL CONFORMANCE WITH THE CITY OF LONE TREE SUBDIVISION RESOLUTION OR APPROVED VARIANCES TO THOSE REGULATIONS. THE CITY OF LONE TREE ENGINEER, THROUGH ACCEPTANCE OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY, OTHER THAN STATED ABOVE, FOR THE COMPLETENESS AND/OR ACCURACY OF THESE DOCUMENTS. THE OWNER AND ENGINEER UNDERSTAND THAT THE RESPONSIBILITY FOR THE ENGINEERING ADEQUACY OF THE FACILITIES DEPICTED IN THIS DOCUMENT LIES SOLELY WITH THE REGISTERED PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE IS AFFIXED TO THIS DOCUMENT.
2. ALL ROADWAY CONSTRUCTION SHALL CONFORM TO CURRENT DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
3. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE CITY OF LONE TREE ENGINEERING DIVISION. THE CITY RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS STANDARDS AND SPECIFICATIONS.
4. THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS, INSPECTION SECTION, (303) 662-8112, A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO STARTING CONSTRUCTION, AND/OR BEFORE RESTARTING CONSTRUCTION AFTER A SHUTDOWN OF MORE THAN 10 DAYS.
5. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ACTUAL CONSTRUCTION. FOR INFORMATION, CONTACT: UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT (800) 922-1987 OR 811
6. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY (SIGNED BY BOTH DESIGN ENGINEER AND CITY OF LONE TREE) OF THE CONSTRUCTION PLANS AND GESC REPORT AND PLAN, AND ONE (1) COPY OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS AT THE JOB SITE AT ALL TIMES.
7. ALL PROPOSED STREET CUTS TO EXISTING PAVEMENTS FOR UTILITIES, STORM SEWER, OR OTHER PURPOSES ARE LISTED AND REFERENCED BELOW:

   RIDGEGATE PARKWAY

8. A ROW/CONSTRUCTION PERMIT MUST BE OBTAINED BEFORE ANY WORK WITHIN EXISTING OR PROPOSED PUBLIC ROW. THE PERMIT APPLICATION MUST BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR REVIEW/PROCESSING A MINIMUM OF 7 DAYS PRIOR TO UPDATED 2-3-09 REQUESTED START FOR THE WORK IN THE ROW.
9. A PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR ACCEPTANCE WITH THE PERMIT APPLICATION. AN EXCAVATION OR PUBLIC IMPROVEMENTS CONSTRUCTION PERMIT WILL NOT BE ISSUED WITHOUT AN APPROVED TRAFFIC CONTROL PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION.
10. THE CONSTRUCTION PLANS SHALL BE CONSIDERED VALID FOR TWO (2) YEARS FROM THE DATE OF CITY OF LONE TREE ACCEPTANCE/APPROVAL IF APPLICABLE CONSTRUCTION PERMITS HAVE NOT BEEN OBTAINED, AND CONSTRUCTION STARTED WITHIN THAT TIME, THESE PLANS SHALL BE VOID AND WILL BE SUBJECT TO RE-REVIEW AND RE-ACCEPTANCE BY THE CITY OF LONE TREE.
11. CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE ENGINEER INSPECTOR WHEN WORKING OUTSIDE OF THE PUBLIC RIGHT-OF-WAY ON ANY FACILITY WHICH WILL BE CONVEYED TO THE CITY, URBAN DRAINAGE AND FLOOD CONTROL DISTRICT, OR OTHER SPECIAL DISTRICT FOR MAINTENANCE (STORM SEWER, ENERGY DISSIPATERS, DETENTION OUTLET STRUCTURES, OR OTHER DRAINAGE INFRASTRUCTURES). FAILURE TO NOTIFY ENGINEERING INSPECTOR TO ALLOW THEM TO INSPECT THE CONSTRUCTION MAY RESULT IN NON-ACCEPTANCE OF THE FACILITIES/INFRASTRUCTURE BY CITY AND/OR URBAN DRAINAGE.

CITY OF LONE TREE SIGNAGE & STRIPING NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MOST RECENT VERSION OF THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE "COLORADO SUPPLEMENTAL MUTCD" AND THE DOUGLAS COUNTY "ROAD AND CONSTRUCTION STANDARDS MANUAL". FURTHER SPECIFICATIONS AND ILLUSTRATIONS ARE LOCATED IN THE COLORADO DIVISION OF HIGHWAYS "M AND S STANDARDS".
2. DELINEATION OF ROADWAYS SHALL BE AS SPECIFIED IN THE COLORADO "M AND S MANUAL".
3. SPECIAL CARE SHALL BE TAKEN IN SIGN LOCATION TO ENSURE AN UNOBSTRUCTED VIEW OF EACH SIGN. STREET NAME SIGNS SHALL BE MOUNTED SO THAT THEY CAN BE SEEN FROM ALL DIRECTIONS OF TRAVEL.
4. INSTALLATION OF SIGNS SHALL CONFORM TO THE MUTCD MOUNTING HEIGHT REQUIREMENTS, INCLUDING A 7-FOOT MINIMUM HEIGHT FROM THE BOTTOM OF THE LOWEST SIGN PANEL TO THE TOP GRADE OF SIDEWALK.
5. ALL NEWLY INSTALLED TRAFFIC SIGNS SHALL MEET THE MINIMUM RETRO-REFLECTIVITY AND ILLUMINATION STANDARDS AS SET FORTH BY THE MUTCD (LATEST EDITION). THESE MINIMUM REQUIREMENTS SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
6. DIAMOND GRADE MATERIAL SHALL BE USED ON ALL STOP SIGNS.
7. THE CONTRACTOR INSTALLING SIGNS IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND UTILITIES. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.
8. FOLLOWING INSTALLATION, THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS DEPARTMENT, 303-662-8112, A FIELD INSPECTION OF LOCATION AND INSTALLATION OF ALL SIGNS SHALL BE PERFORMED BY PUBLIC WORKS. ALL DISCREPANCIES IDENTIFIED DURING THE FIELD INSPECTION MUST BE CORRECTED BEFORE THE TWO-YEAR WARRANTY PERIOD WILL BEGIN.
9. SIGNAGE AND STRIPING HAS BEEN DETERMINED BY INFORMATION AVAILABLE AT THE TIME OF REVIEW.
   PRIOR TO INITIATION OF THE WARRANTY PERIOD, LONE TREE RESERVES THE RIGHT TO REQUIRE MODIFICATIONS TO EXISTING OR INSTALLATION OF ADDITIONAL SIGNAGE AND/OR STRIPING IF THEY DETERMINE THAT AN UNFORESEEN CONDITION WARRANTS SUCH MODIFICATION ACCORDING TO THE MUTCD OR THE CDOT M AND S STANDARDS. ALL SIGNAGE AND STRIPING SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
10. FINAL STRIPING AND CROSSWALK LAYOUT TO BE APPROVED BY THE CITY OF LONE TREE PRIOR TO INSTALLATION. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.
11. CROSSWALKS SHALL:
    BE CONSTRUCTED USING 125 MIL PREFORMED THERMOPLASTIC.
    LINE UP WITH THE HANDICAP RAMPS AT BOTH ENDS.
    BE CENTERED ON LANE LINES SO AS TO BE STRADDLED BY VEHICLES.
12. ALL PAVEMENT MARKINGS SHALL BE AS FOLLOWS:
    FOR CONCRETE SURFACE: METHYL METHACRYLATE OR EPOXY PAINT.
    FOR ASPHALT SURFACE: PAINT, 90 MIL PREFORMED THERMOPLASTIC, INLAID
    MARKING TAPE, METHYL METHACRYLATE, OR EPOXY PAINT.
    TURN ARROWS AND ONLYS: 125 MIL PREFORMED THERMOPLASTIC.
13. ALL PAVEMENT MARKING SHALL BE PRECEDED BY THE APPROPRIATE SURFACE PREPARATION.
14. ANY SIGNAGE AND/OR OTHER TRAFFIC CONTROL DEVICES REMOVED SHALL BE RETURNED TO THE CITY OF LONE TREE.
15. TYPE III LIGHTED BARRICADES SHALL BE SET AT ENDS OF ROADWAYS, SEPARATING FINISHED AND UNFINISHED CONSTRUCTION AREAS AND WILL BE MAINTAINED BY THE CONTRACTOR/DEVELOPER.

NOTE: ALSO SEE CITY OF LONE TREE "STREET SIGN DETAILS"FOR ADDITIONAL INTERSECTION STREET SIGNAGE REQUIREMENTS.

STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON-GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.

DRAINAGE STRUCTURE NOTES

1. CONCRETE WORK SHALL CONFORM TO ACI 301, ACI 350.
2. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM-615, GRADE 60.
3. ALL EXPOSED CONCRETE SHALL HAVE A CDOT CLASS 2 OR 5 FINISH.
4. ALL EXPOSED CONCRETE CORNERS SHALL HAVE ¾"CHAMFERS.
5. DETAILING, FABRICATION, AND PLACING OF REBAR SHALL BE IN ACCORDANCE WITH ACI 315.
6. CONSTRUCTION TOLERANCES SHALL BE IN ACCORDANCE WITH ACI 347.
7. ALL MANHOLES SHALL BE SLAB BASE UNLESS SPECIFIED OTHERWISE. MANHOLE SHALL BE FABRICATED IN ACCORDANCE WITH CDOT STANDARD M-604-20.
8. COORDINATES FOR MANHOLES AND AREA INLETS ARE SHOWN AT THE CENTER OF THE STRUCTURE. COORDINATES FOR MOUNTABLE CURB INLETS ARE SHOWN ALONG THE FLOWLINE AT CENTER OF THE STRUCTURE.
9. ALL TYPE C AND D INLETS SHALL HAVE CLOSE MESH GRATES UNLESS SPECIFIED OTHERWISE.
10. LENGTH OF FABRICATED BAR GRATING PANELS IS LENGTH OF BEARING BARS, WIDTH REFERS TO DIMENSION PERPENDICULAR TO BEARING BARS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PANEL DIMENSIONS GIVEN PRIOR TO FABRICATION.

DRAINAGE GENERAL NOTES

1. PROJECT FACILITIES ARE TO BE LOCATED BASED ON THE SURVEY COORDINATES, ELEVATIONS, DIMENSIONS, AND/OR GEOMETRIC DESIGN DATA PROVIDED ON THE DRAWINGS.
2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES AND FOR SATISFYING ALL APPLICABLE OSHA, FEDERAL, STATE, AND LOCAL REGULATIONS. TEMPORARY EXCAVATIONS SHALL PROVIDE, AT MINIMUM, THE TRENCH DIMENSIONS AND CLEARANCES SHOWN OR SPECIFIED. TEMPORARY CONSTRUCTION SLOPES SHALL BE SLOPED, SHORED, SHEETED, AND/OR BRACED IN ACCORDANCE WITH STABILITY REQUIREMENTS AND APPLICABLE REGULATIONS, AND SHALL BE NO STEEPER THAN THE SLOPES SHOWN OR SPECIFIED WITHOUT THE APPROVAL OF THE ENGINEER. ANY SUCH APPROVALS BY THE ENGINEER WILL NOT RELIEVE THE CONTRACTOR FROM SOLE RESPONSIBILITY FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES.
3. EXISTING FACILITIES NOT INDICATED TO BE REMOVED SHALL BE PROTECTED IN PLACE OR REMOVED AND REPLACED IN KIND, AS APPROVED BY ENGINEER.
4. THE WORK WILL TAKE PLACE IN AND AROUND DRAINAGE SWALES AND THE HAPPY CANYON CREEK, SUBJECT TO PERIODIC FLOODING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF SURFACE AND SUBSURFACE WATER DURING THE COURSE OF THE WORK. ANY DAMAGE TO THE WORK RESULTING FROM SURFACE FLOWS, BASE FLOWS, OR FLOOD FLOWS INCLUDING BUOYANCY FORCES ON PIPELINES AND OTHER FACILITIES SHALL BE CORRECTED BY THE CONTRACTOR AT THE CONTRACTOR'S SOLE COST. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND SATISFYING THE REQUIREMENTS OF ANY APPLICABLE PERMITS PERTAINING TO WATER AND EROSION CONTROL.
5. CONTACT THE ENGINEER FOR CLARIFICATIONS OF ANY ABBREVIATIONS SHOWN ON THE DRAWINGS.
6. THE SITE WHERE THE WORK IS TO BE PERFORMED SHALL BE OVERLOT GRADED. TOPSOIL SHALL BE SPREAD IN OPEN SPACE AREAS TO A DEPTH OF APPROXIMATELY 6-INCHES. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED, AND SOME AREAS COVERED WITH EROSION CONTROL BLANKETS, UNLESS OTHERWISE DIRECTED IN THE PLANS OR BY THE ENGINEER. CARE SHALL BE TAKEN TO AVOID DISTURBING ANY OPEN SPACE AREAS EXCEPT THE MINIMUM NECESSARY TO PERFORM THE WORK. TOPSOIL IN ANY WORK AREAS OR ACCESS ROADS WITHIN THE OPEN SPACE SHALL BE STRIPPED AND STOCKPILED PRIOR TO THE WORK, PROTECTED FROM MIXING WITH ANY OTHER MATERIALS DURING THE WORK, AND REPLACED TO A LOOSE DEPTH OF 7- TO 8- INCHES (FINAL DEPTH AFTER SETTLEMENT SHALL BE 6- INCHES MINIMUM) AS THE WORK IS BEING COMPLETED. WHERE BLANKETS EXIST, THE MINIMUM AREA OF BLANKET TO ALLOW WORK TO PROGRESS SHALL BE REMOVED AND THEN THE REMOVED OR NEW BLANKET REPLACED AFTER UNDERLYING WORK IS COMPLETE (EXCEPT NO TEMPORARY BLANKET NEEDS TO BE REPLACED OVER ROCK OR COIR BLANKET SHOWN IN THE PLANS). JUST PRIOR TO REPLACEMENT OF TOPSOIL AFTER UNDERLYING WORK IS COMPLETE AND APPROVED, THE UNDERLYING SUBGRADE IN OPEN SPACE AREAS SHALL BE LOOSENED BY TILLING TO A DEPTH OF 12- INCHES UNTIL CLODS ARE NO LARGER THAN 3 INCHES, AND APPROVED BY THE ENGINEER. THIS NOTE ALSO APPLIES TO AREAS WHERE COIR MAT IS TO BE INSTALLED.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ANY COMPLETED WORK FROM DISTURBANCE OR DAMAGE DURING THE COURSE OF THE WORK. IF REQUESTED BY THE CONTRACTOR AND APPROVED BY THE OWNER, SIGNIFICANT COMPLETED SECTIONS OF THE WORK MAY BE ACCEPTED AS FINAL PRIOR TO THE COMPLETION OF THE ENTIRE PROJECT. ANY SUCH EARLY ACCEPTANCE WILL NEED TO BE IN WRITING BY THE ENGINEER AND OWNER AND THOSE PORTIONS OF THE WORK SHALL BE PROTECTED BY THE CONTRACTOR AGAINST VEHICLES RUNNING OVER THE AREA BY ENCIRCLING THE WORK WITH FLAGGING OR FENCING OR BY OTHER MEANS AGREED TO BY THE OWNER AND MAINTAINED BY THE CONTRACTOR UNTIL THE END OF THE PROJECT.
8. ALL FINE GRADING REQUIRED TO CONSTRUCT DRAINAGE IMPROVEMENTS AND PROVIDE FINISHED GRADES ADJACENT TO IMPROVEMENTS SHALL BE DONE BY THE DRAINAGE CONTRACTOR AND SHALL BE CONSIDERED PART OF THE WORK, AND NOT PAID FOR SEPARATELY.

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LTD

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

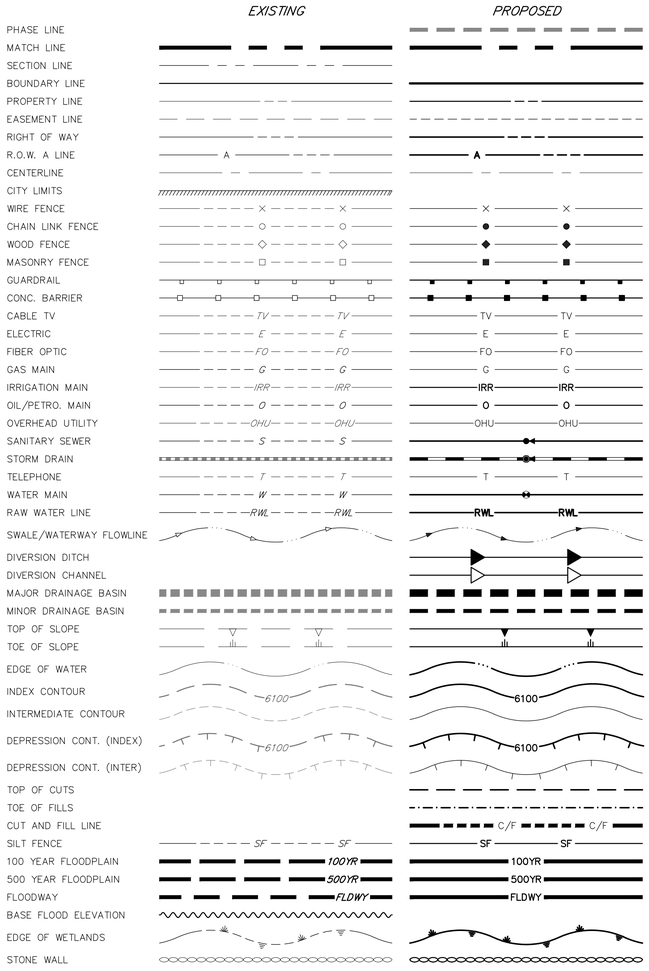
H-SCALE	N/A
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
GENERAL NOTES-PHASE 1A

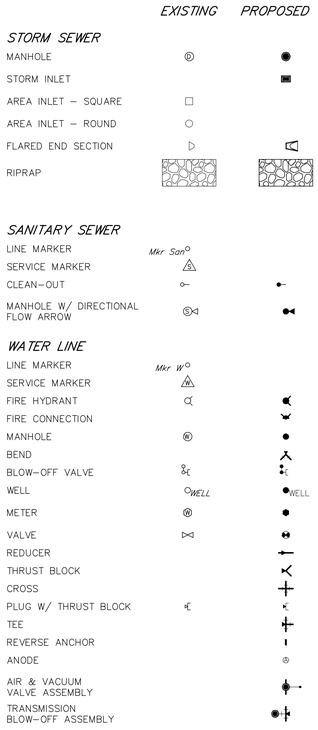
SHEET 7 OF 270

JOB NO. 15950.01

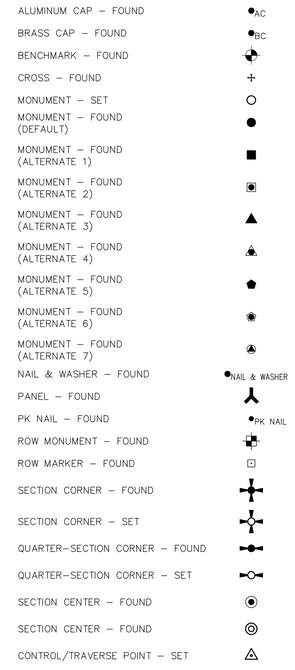
LAYER LINETYPE LEGEND



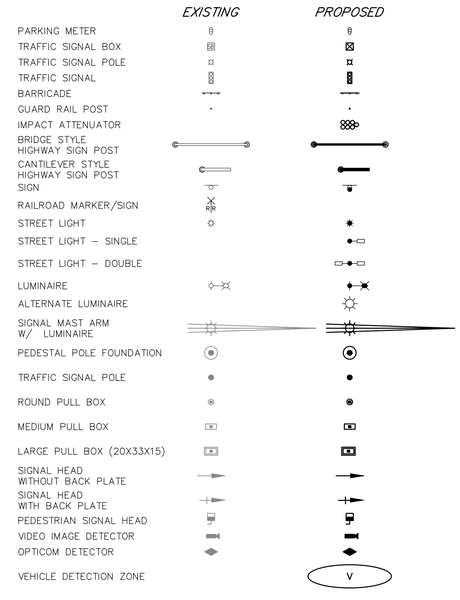
UTILITIES LEGEND



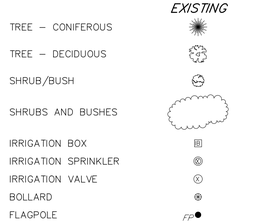
MONUMENTATION LEGEND



TRAFFIC LEGEND



LANDSCAPE LEGEND



811 Know what's **below.** **Call** before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

No.	REVISION	BY	DATE

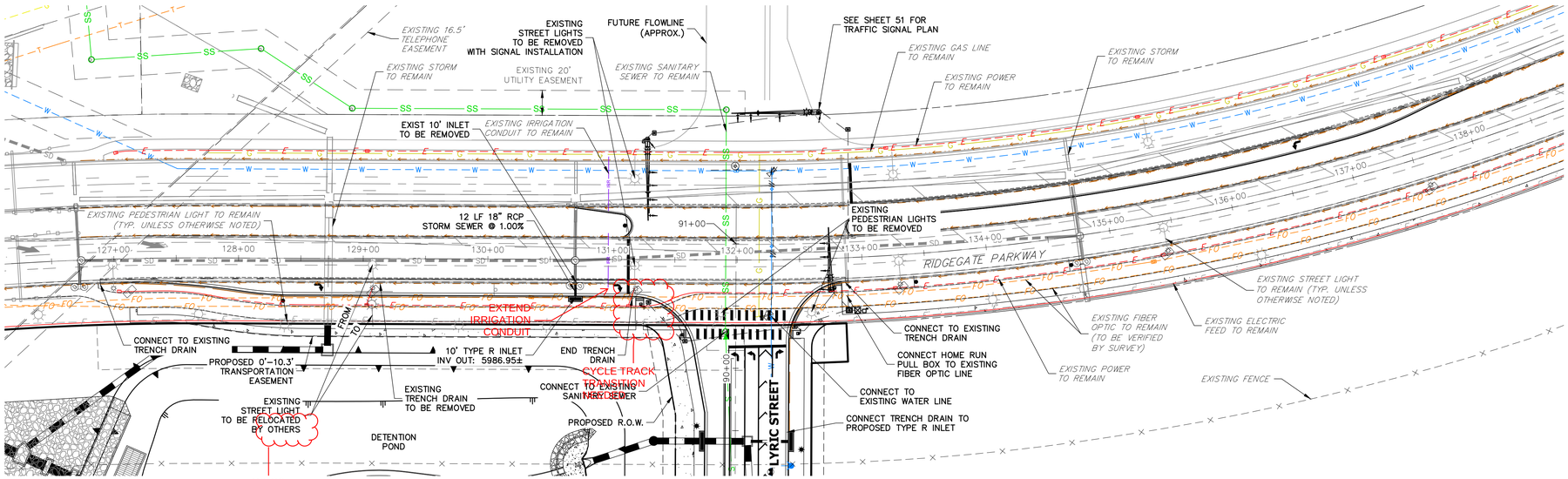
H–SCALE	N/A
V–SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

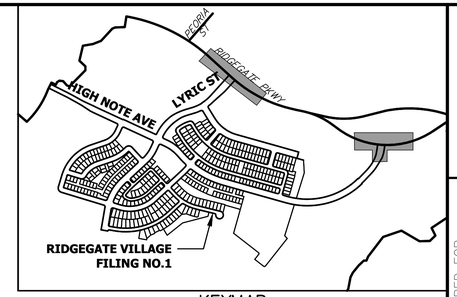
RIDGEGATE SOUTHWEST VILLAGE FILING 1

LEGEND–PHASE 1A

SHEET 8 OF 270

JOB NO. 15950.01





KEYMAP
SCALE: 1"=1000'

NOTES

1. ALL STATIONING IS ROADWAY CENTERLINE UNLESS OTHERWISE NOTED.
2. CONTRACTOR SHALL VERIFY THE LOCATION, SIZE, AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
3. SITE UTILITY CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ALL SITE UTILITIES THAT ARE PROPOSED AS SHOWN ON THE PLANS, EXCEPT WHERE OTHERWISE NOTED.

CAUTION - NOTICE TO CONTRACTOR

THE LOCATIONS OF EXISTING ABOVE GROUND AND UNDERGROUND UTILITIES ARE BASED ON THE RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF THE UTILITIES. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL ABOVE GROUND AND UNDERGROUND UTILITIES.

50 25 0 50 100
ORIGINAL SCALE: 1" = 50'

811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS CONSTRUCTION PLANS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

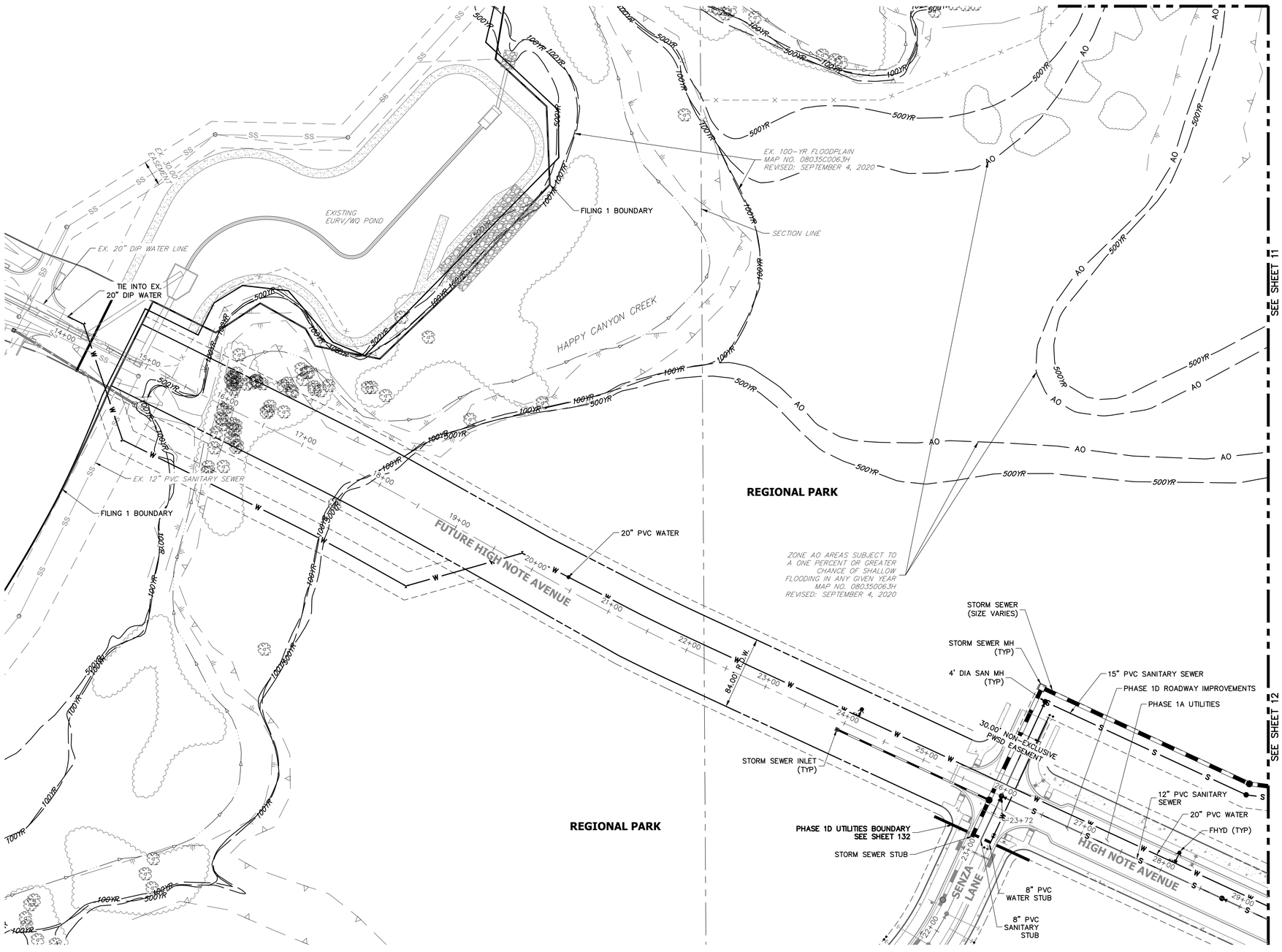
H-SCALE	1"=50'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	CWC
DRAWN BY	CWC
CHECKED BY	

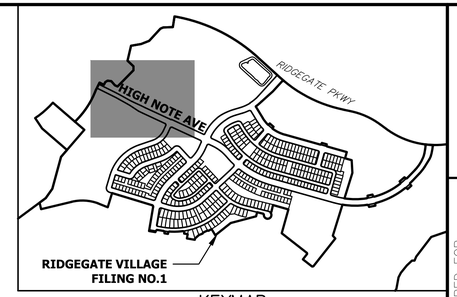
RIDGEGATE SOUTHWEST VILLAGE FILING 1

OVERALL UTILITY PLAN – RIDGEGATE PARKWAY

SHEET 9 OF 270

JOB NO. 15950.01





KEYMAP
SCALE:1"=1000'

60 30 0 60 120
ORIGINAL SCALE: 1" = 60'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

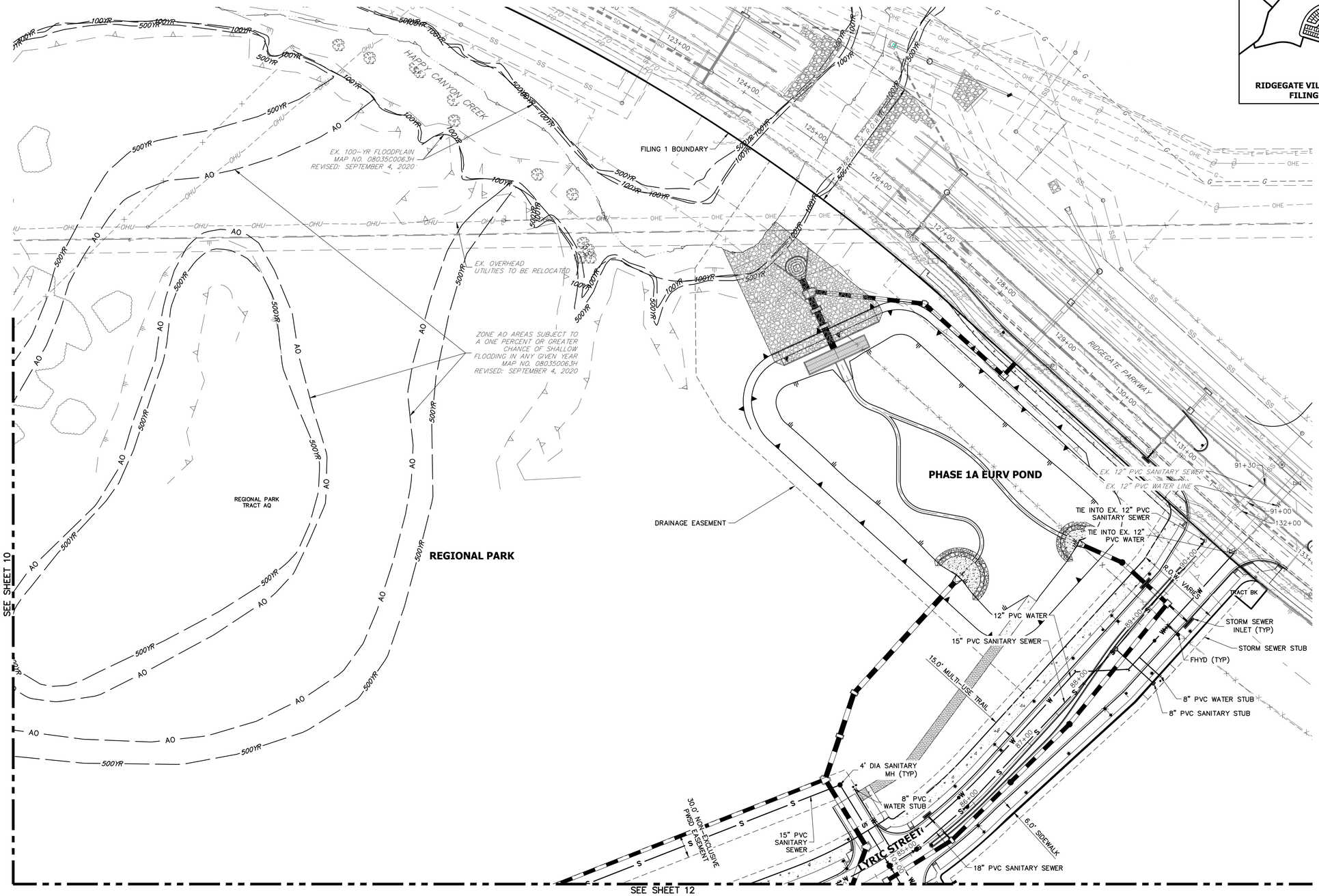
H-SCALE	1"=60'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	N/A
DRAWN BY	SDL
CHECKED BY	

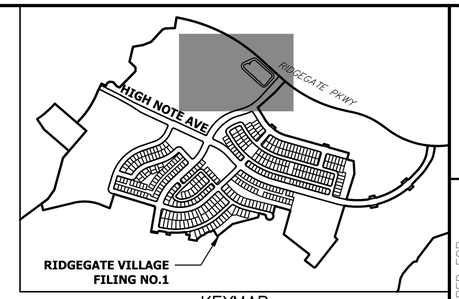
RIDGEGATE SOUTHWEST VILLAGE FILING 1

OVERALL SITE AND UTILITY PLAN-PHASE 1A

SHEET 10 OF 270

JOB NO. 15950.01





KEYMAP
SCALE: 1"=1000'

60 30 0 60 120
ORIGINAL SCALE: 1" = 60'

Know what's below.
Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

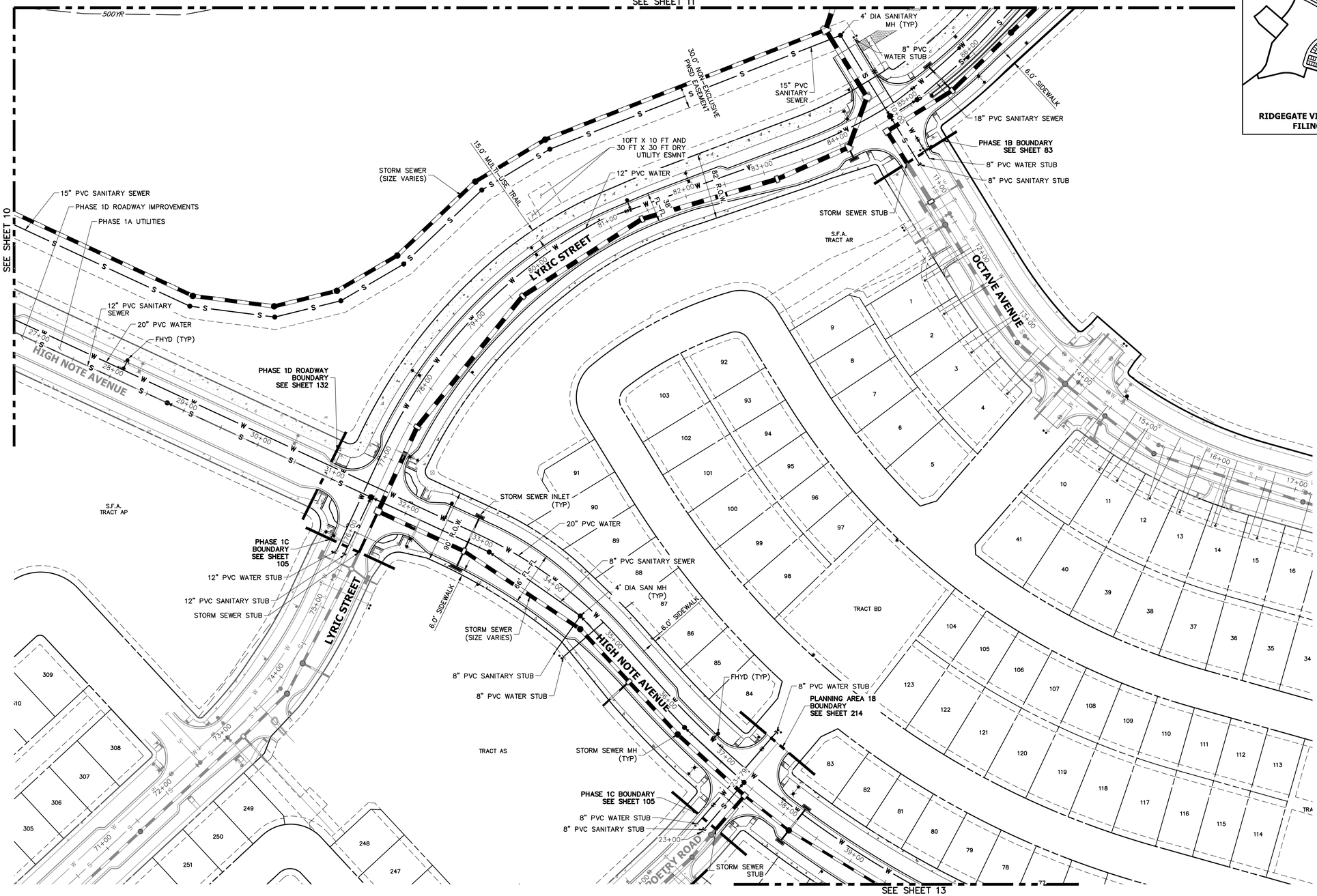
H-SCALE	1"=60'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	N/A
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

OVERALL SITE AND UTILITY PLAN-PHASE 1A

SHEET 11 OF 270

JOB NO. 15950.01



60 30 0 60 120

ORIGINAL SCALE: 1" = 60'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

AARON LEE CLUTTER 36742 REGISTERED PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

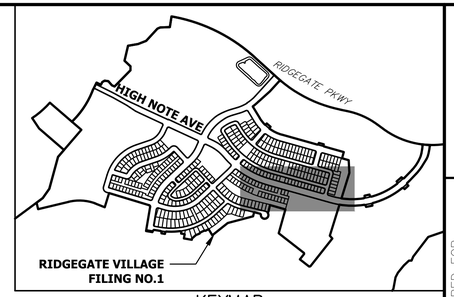
H-SCALE	1"=60'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	N/A
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

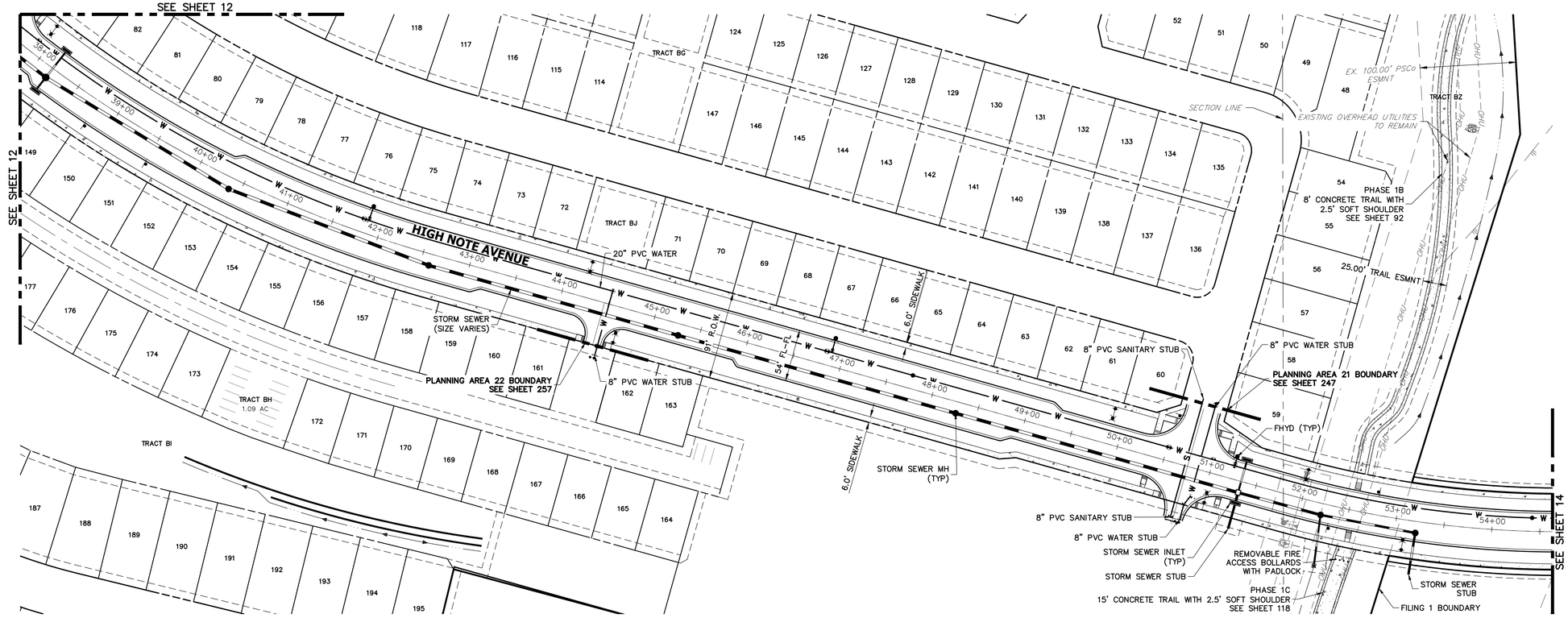
OVERALL SITE AND UTILITY PLAN-PHASE 1A

SHEET 12 OF 270

JOB NO. 15950.01



KEYMAP
SCALE:1"=1000'



60 30 0 60 120
ORIGINAL SCALE: 1" = 60'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

DATE

AARON LEE CLUTTER
36742
REGISTERED
PROFESSIONAL ENGINEER
COLORADO

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

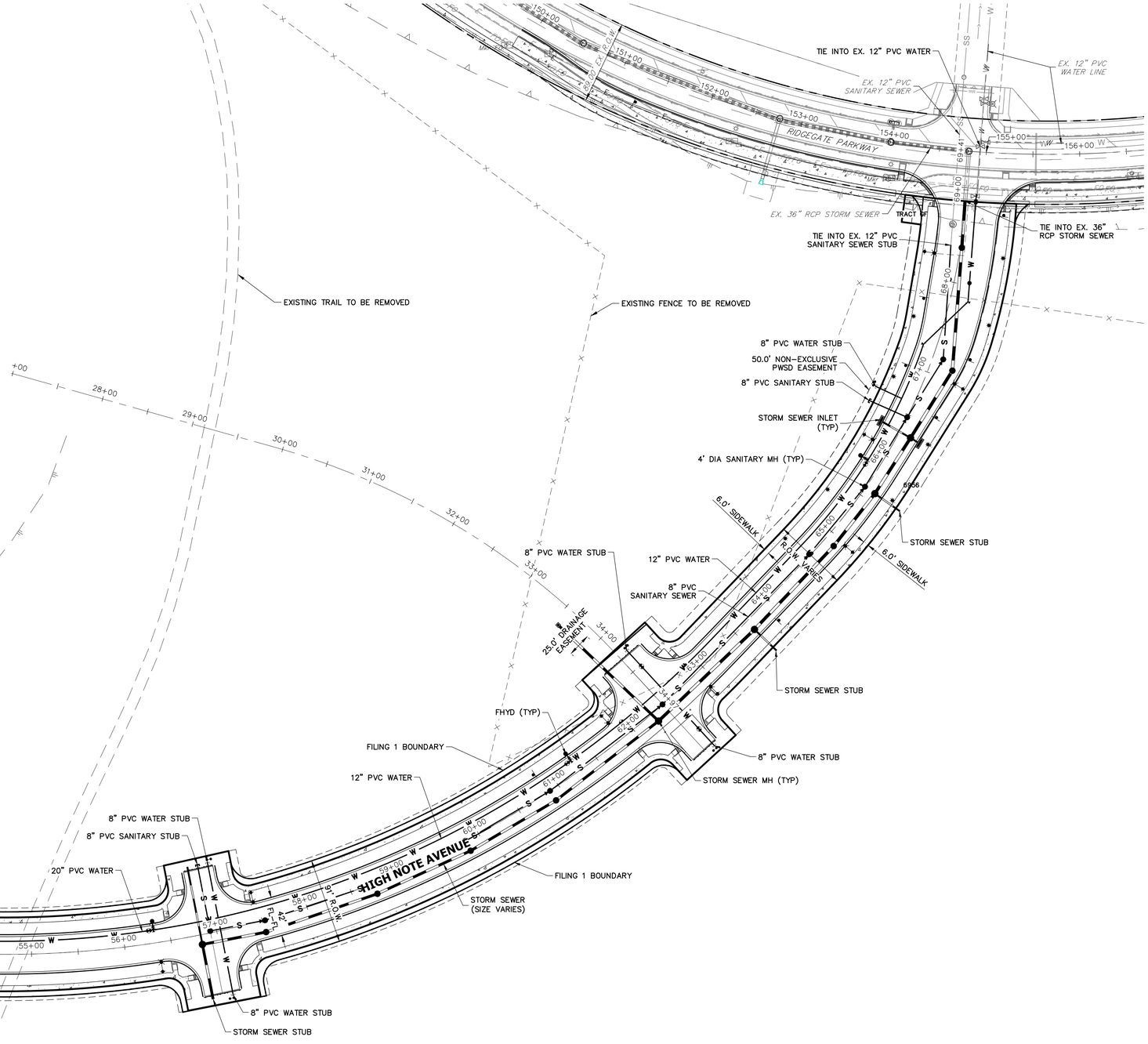
H-SCALE	1"=60'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	N/A
DRAWN BY	SDL
CHECKED BY	

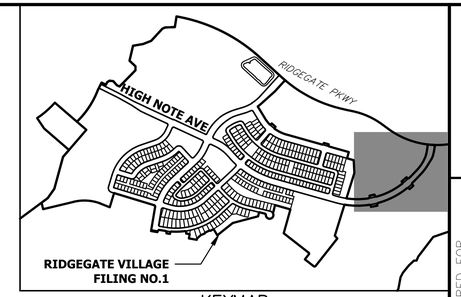
RIDGEGATE SOUTHWEST VILLAGE FILING 1

OVERALL SITE AND UTILITY PLAN–PHASE 1A

SHEET 13 OF 270

JOB NO. 15950.01





KEYMAP
SCALE:1"=1000'

60 30 0 60 120
ORIGINAL SCALE: 1" = 60'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

LONGMONT, COLORADO
AARON LEE CLUTTER
36742
PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

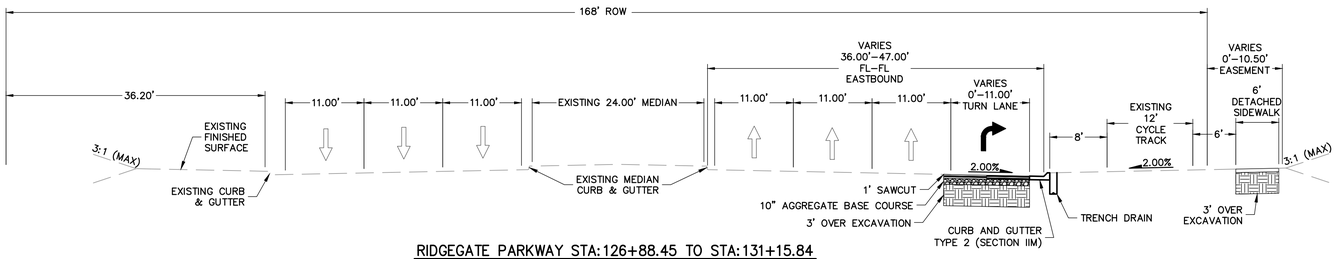
H-SCALE	1"=60'	DESIGNED BY	N/A
V-SCALE	N/A	DRAWN BY	SDL
DATE	2/12/21	CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

OVERALL SITE AND UTILITY PLAN-PHASE 1A

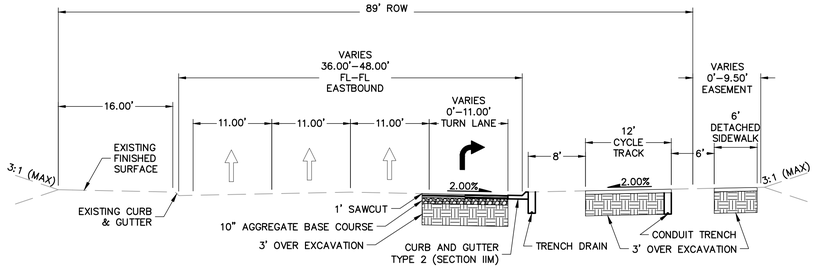
SHEET 14 OF 270

JOB NO. 15950.01



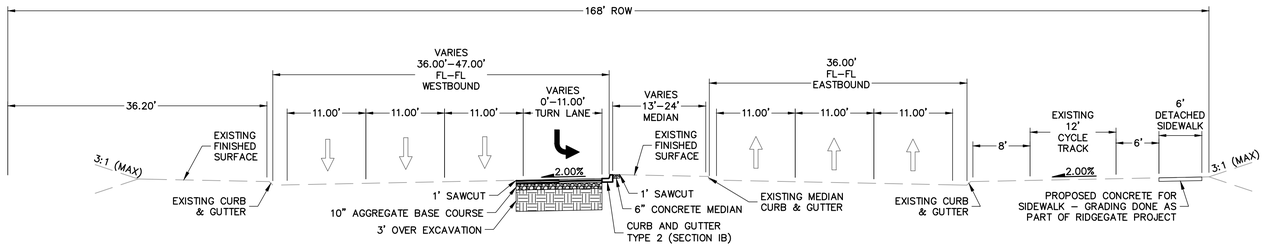
RIDGEGATE PARKWAY STA:126+88.45 TO STA:131+15.84

RIDGEGATE & LYRIC STREET INTERSECTION



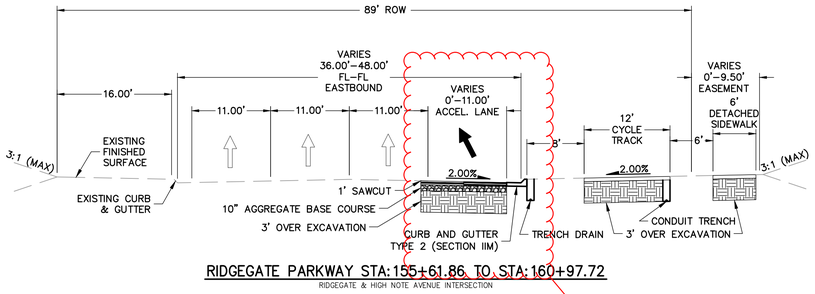
RIDGEGATE PARKWAY STA:149+86.27 TO STA:154+09.90

RIDGEGATE & HIGH NOTE AVENUE INTERSECTION



RIDGEGATE PARKWAY STA:132+87.60 TO STA:138+39.90

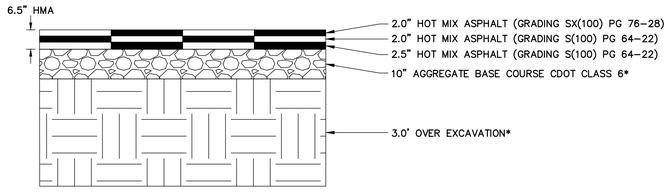
RIDGEGATE & LYRIC STREET INTERSECTION



RIDGEGATE PARKWAY STA:155+61.86 TO STA:160+97.72

RIDGEGATE & HIGH NOTE AVENUE INTERSECTION

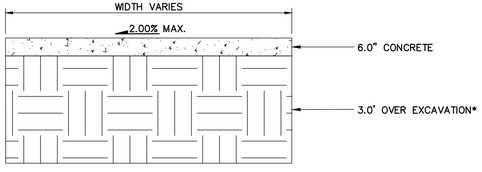
DO WE WANT AN ACCEL LANE?



RIDGEGATE PARKWAY
TYPICAL PAVEMENT SECTION

SCALE: 1"=2'

*PROPERLY MOISTURE CONDITIONED AND COMPACTED PAVEMENT SECTIONS PER GEOTECHNICAL EVALUATION RIDGEGATE EAST INFRASTRUCTURE IMPROVEMENTS RIDGEGATE PARKWAY WIDENING PAVEMENTS PREPARED BY GROUND ENGINEERING CONSULTANTS MAY 30, 2018



RIDGEGATE PARKWAY
SIDEWALK/CYCLE TRACK TYPICAL PAVEMENT SECTION

SCALE: 1"=2'

*PAVEMENT SECTIONS PER GEOTECHNICAL EVALUATION RIDGEGATE EAST INFRASTRUCTURE IMPROVEMENTS RIDGEGATE PARKWAY WIDENING PAVEMENTS PREPARED BY GROUND ENGINEERING CONSULTANTS MAY 30, 2018

PROPOSED CURB AND GUTTER TABLE

EASTBOUND			
STATION	NORTH	STATION	SOUTH
		126+88.45 TO 131+15.84	CURB AND GUTTER TYPE 2 (IIM, CATCH)
		149+86.27 TO 154+09.90	CURB AND GUTTER TYPE 2 (IIM, CATCH)
		155+61.86 TO 160+97.72	CURB AND GUTTER TYPE 2 (IIM, CATCH)
131+04.84 TO 131+16.36	CURB AND GUTTER TYPE 2 (IB, SPILL)		
132+87.60 TO 132+95.54	CURB AND GUTTER TYPE 2 (IB, SPILL)		
WESTBOUND			
STATION	NORTH	STATION	SOUTH
		130+62.94 TO 131+16.36	CURB AND GUTTER TYPE 2 (IB, SPILL)
		132+87.60 TO 138+39.90	CURB AND GUTTER TYPE 2 (IB, SPILL)

NOTE:

ALL OVER–EXCAVATION AND SUBGRADE PREPARATION IS TO BE IN ACCORDANCE WITH THE GEOTECHNICAL RECOMMENDATIONS. CONTRACTOR SHALL COORDINATE WITH THE GOETECHNICAL ENGINEER AND OWNER TO VERIFY OVER–EXCAVATION REQUIREMENTS PRIOR TO BID.

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

AARON LEE CLUTTER 36742 REGISTERED PROFESSIONAL ENGINEER COLORADO

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

No.	REVISION	BY	DATE

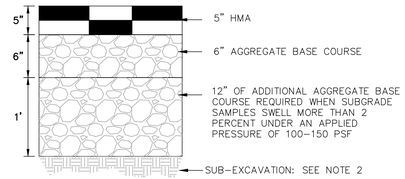
H–SCALE	VARIES	DESIGNED BY	CRB
V–SCALE	N/A	DRAWN BY	CRB
DATE	2/12/21	CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

ROADWAY TYPICAL SECTIONS–PHASE 1A

SHEET 15 OF 270

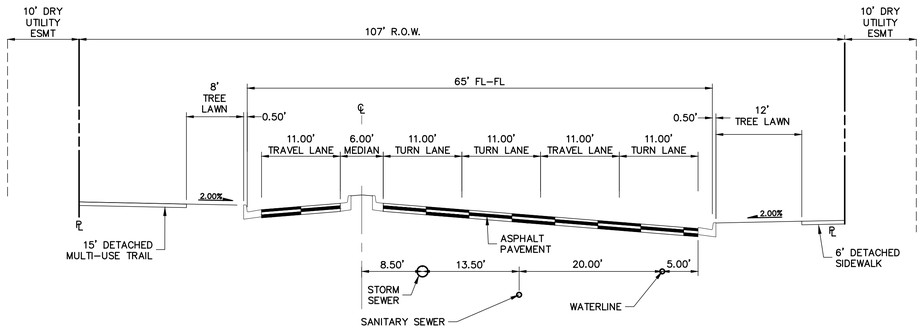
JOB NO. 15950.01



MINIMUM RESIDENTIAL COLLECTOR PAVEMENT SECTION

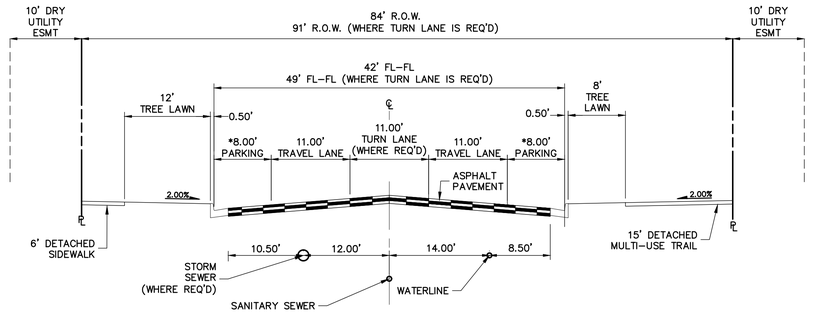
N.T.S.

NOTES:
1. MINIMUM PAVEMENT SECTIONS FOR BUDGETING PURPOSES ARE PRESENTED HEREON. SUBGRADE INVESTIGATION AND PAVEMENT DESIGNS ARE TO BE COMPLETED BY THE GEOTECHNICAL ENGINEER AFTER OVERLOT GRADING.
2. ADDITIONAL SUB-EXCAVATION (3 TO 5 FEET) MAY BE MERITED.
3. ASPHALT, BASE COURSE DEPTH, AND SUBGRADE PRAPARTATION IS TO BE IN ACCORDANCE WITH GEOTECHNICAL RECOMMENDATIONS.



LYRIC STREET STA: 84+70.79 TO 91+30

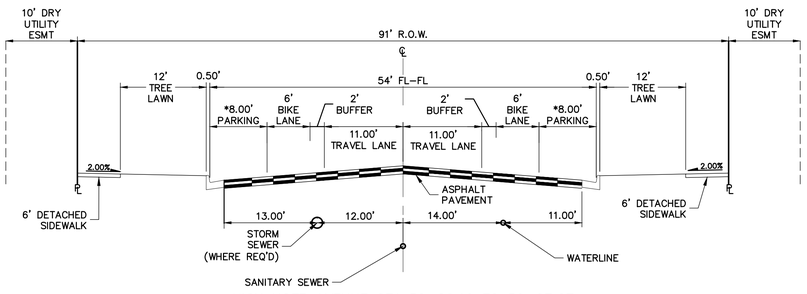
TYPE V - COLLECTOR AT WEST RIDGEGATE INTERSECTION



LYRIC STREET STA: 75+80.14 TO 84+70.79

TYPE IV - TYPICAL RESIDENTIAL COLLECTOR WITH 15' MULTI-USE TRAIL

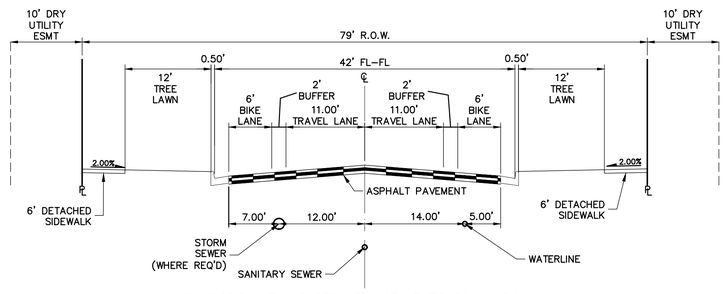
*PARKING WHERE APPLICABLE



HIGH NOTE AVENUE STA: 30+86.10 TO 50+07.67

TYPE I - TYPICAL 91-FOOT R.O.W. RESIDENTIAL COLLECTOR WITH BIKE LANES AND PARKING ON BOTH SIDES (PUBLIC)

*PARKING WHERE APPLICABLE



HIGH NOTE AVENUE STA: 50+07.67 TO 69+41.50

TYPE II - TYPICAL 79-FOOT R.O.W. RESIDENTIAL COLLECTOR WITH NO PARKING (PUBLIC)

811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

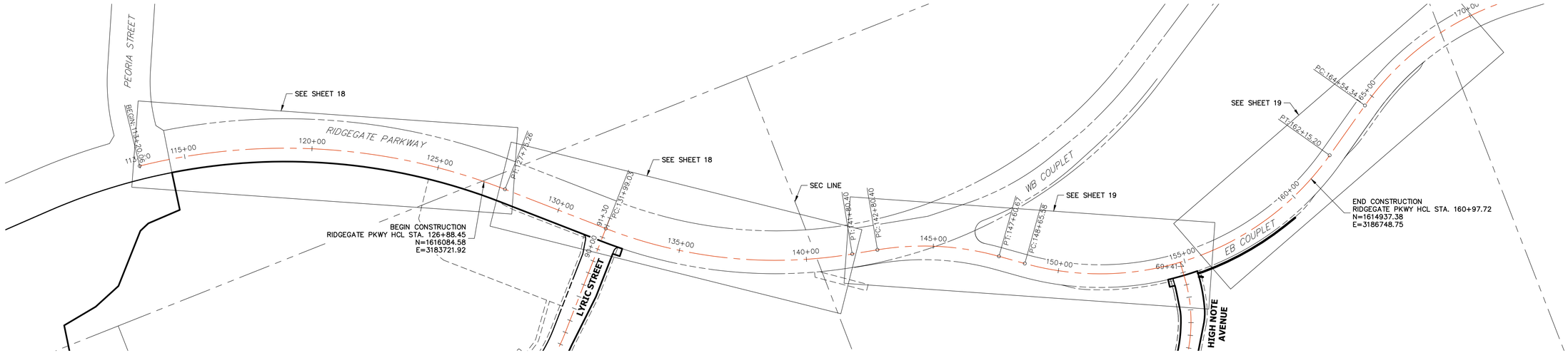
H-SCALE	1"=10'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	JGS
DRAWN BY	CGM
CHECKED BY	

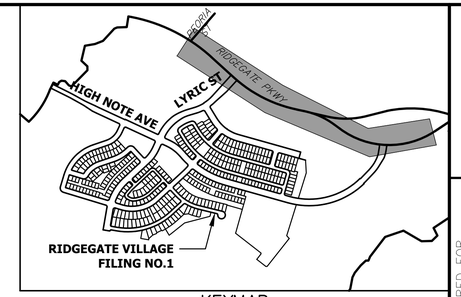
RIDGEGATE SOUTHWEST VILLAGE FILING 1

ROADWAY TYPICAL SECTIONS-PHASE 1A

SHEET 16 OF 270

JOB NO. 15950.01





KEYMAP
SCALE: 1"=1000'

200 100 0 200 400
ORIGINAL SCALE: 1" = 200'

Know what's **below.**
Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

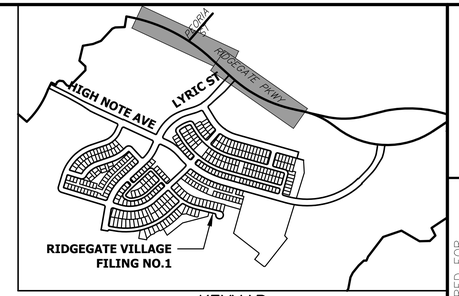
H-SCALE	1"=50'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	CWC
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

HORIZONTAL CONTROL PLAN–RIDGEGATE PARKWAY

SHEET 17 OF 270

JOB NO. 15950.01



KEYMAP
SCALE: 1"=1000'

PEORIA STREET

RIDGEGATE PARKWAY

EXISTING
168.00 ROW

BEGIN: 113+20.66
113+00
115+00
120+00
125+00

Δ=35°12'09"
R=2368.50'
L=1455.20'

P.T.: 127+75.26

SEE BELOW
MATCH STA. 127+75

BEGIN CONSTRUCTION
RIDGEGATE PKWY HCL STA. 126+88.45
N=1616084.58
E=3183721.92

SEE ABOVE
MATCH STA. 127+75

P.T.: 127+75.26

S47°46'48"E
423.77'

130+00

91+30
P.C.: 131+99.03

90+00

LYRIC STREET

RIDGEGATE PARKWAY

EXISTING
168.00 ROW

135+00

Δ=30°42'02"
R=1831.50'
L=981.37'

140+00

P.T.: 141+80.40

SEE SHEET 19
MATCH STA. 141+80

SEC LINE

50 25 0 50 100
ORIGINAL SCALE: 1" = 50'

811
Know what's **below.**
Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

DATE

STATE OF COLORADO
AARON LEE CLUTTER
36742
REGISTERED
PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

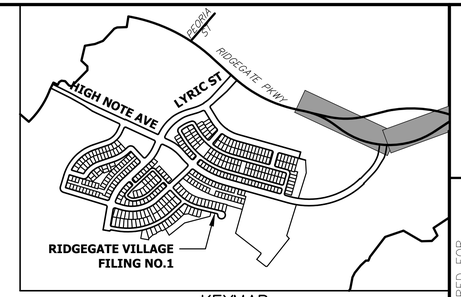
H-SCALE	1" = 50'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	CWC
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

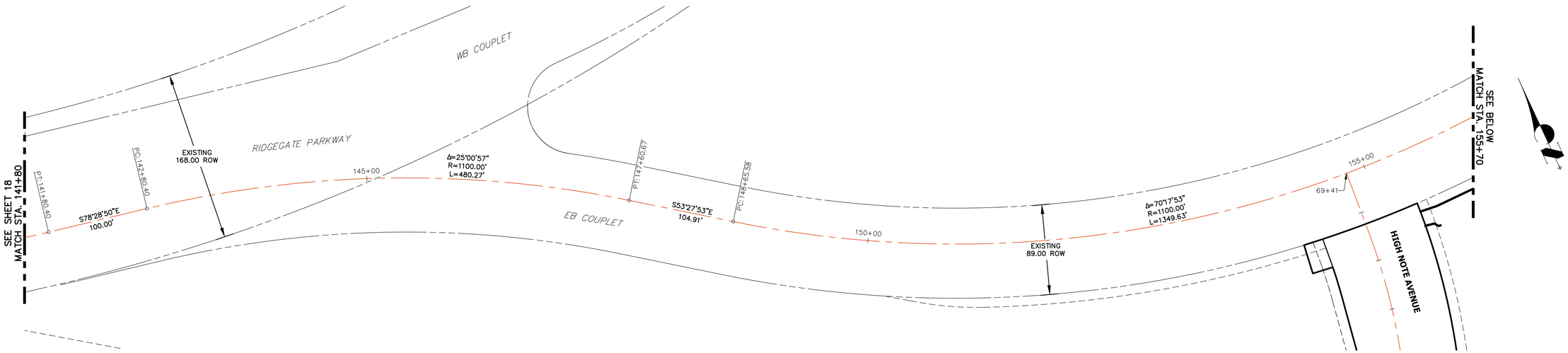
HORIZONTAL CONTROL PLAN–RIDGEGATE PARKWAY

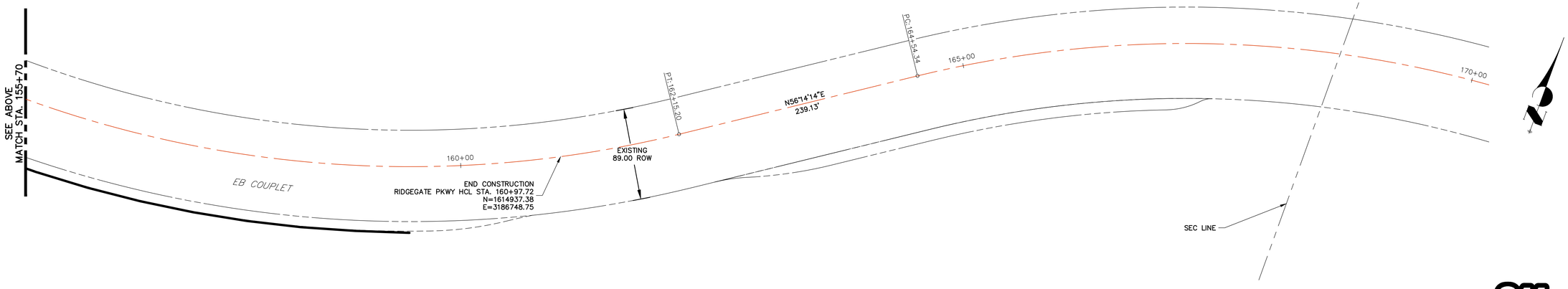
SHEET 18 OF 270

JOB NO. 15950.01



KEYMAP
SCALE: 1"=1000'





50 25 0 50 100
ORIGINAL SCALE: 1" = 50'

811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

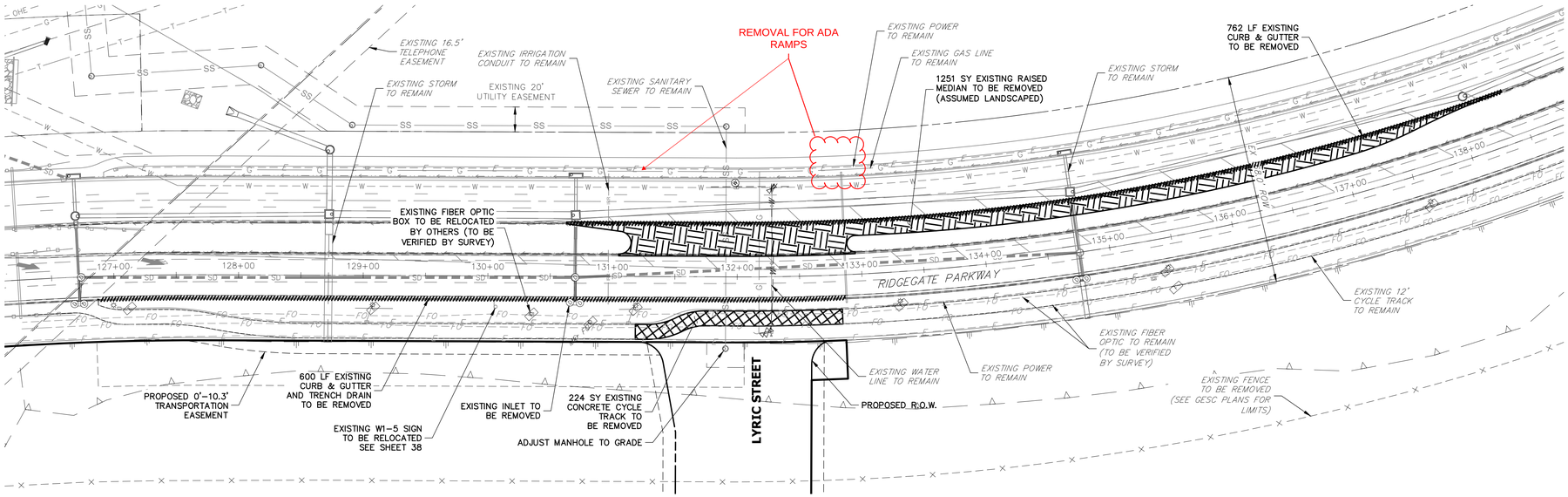
H-SCALE	1"=50'	DESIGNED BY	CWC
V-SCALE	N/A	DRAWN BY	SDL
DATE	2/12/21	CHECKED BY	

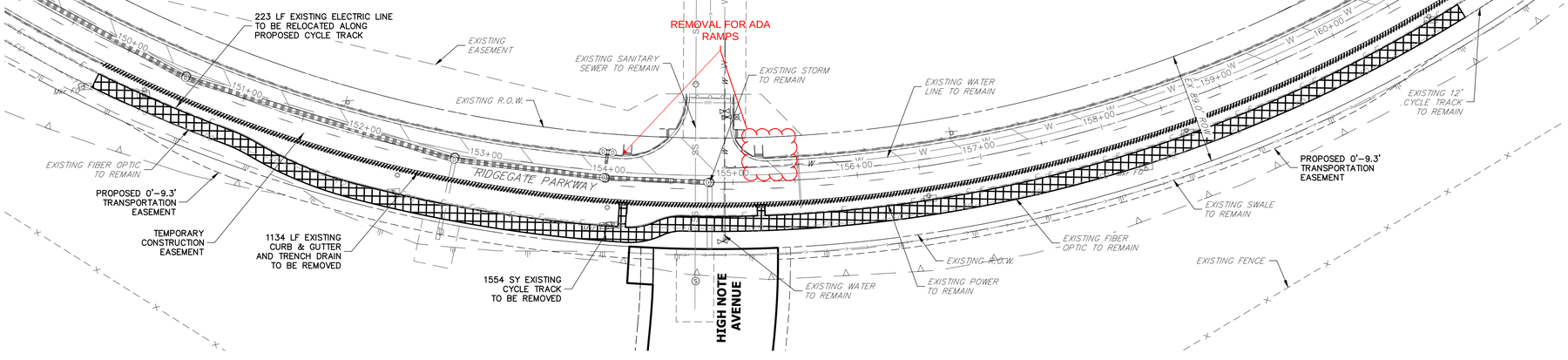
RIDGEGATE SOUTHWEST VILLAGE FILING 1

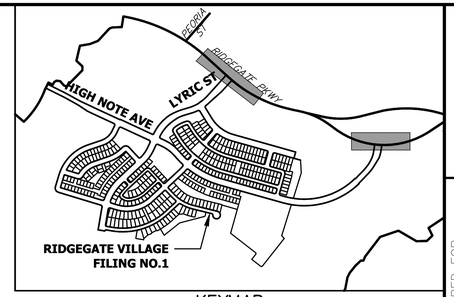
HORIZONTAL CONTROL PLAN–RIDGEGATE PARKWAY

SHEET 19 OF 270

JOB NO. 15950.01







KEYMAP
SCALE: 1"=1000'

DEMOLITION LEGEND

- CURB & GUTTER REMOVAL
- CONCRETE REMOVAL
- MEDIAN REMOVAL (ASSUMED LANDSCAPED)

DEMOLITION NOTES:

1. NOT ALL REMOVALS WARRANTED FOR SITE CONSTRUCTION MAY BE SHOWN ON THIS PLAN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY ALL REMOVALS AND/OR RELOCATIONS REQUIRED FOR THE PROJECT CONSTRUCTION. ALL QUESTIONS REGARDING DEMOLITION SHALL BE SUBMITTED TO THE OWNER IN WRITING PRIOR TO BID.
2. ALL DEMOLITION, REMOVAL, DISPOSAL AND ABANDONMENT OF UTILITIES, STRUCTURES, SITE IMPROVEMENTS, AND SITE FURNISHINGS SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REQUIREMENTS.
3. ALL EXISTING LANDSCAPING AND IRRIGATION SYSTEMS WITHIN THE PROJECT LIMITS SHALL BE RESET AND REPAIRED TO EXISTING CONDITIONS OR BETTER.
4. CONTRACTOR SHALL VERIFY ALL UTILITY MAIN AND LATERAL LOCATIONS AND EXISTING SITE CONDITIONS PRIOR TO PROCEEDING WITH DEMOLITION. ANY SITE CONDITIONS THAT ARE NOT AS SHOWN ON THE DEMOLITION PLAN SHALL BE REPORTED TO THE OWNER PRIOR TO BID.
5. CONTRACTOR SHALL REMOVE OR RELOCATE EXISTING UTILITIES PER UTILITY COMPANY REQUIREMENTS. CONTRACTOR SHALL COORDINATE ANY REQUIRED REMOVALS, DISCONNECTIONS, AND/OR RELOCATIONS WITH THE APPROPRIATE UTILITY COMPANY PRIOR TO DEMOLITION.
6. CONTRACTOR SHALL PROVIDE ALL NECESSARY TRAFFIC CONTROL (SIGNS, BARRICADES, FLAGMEN, LIGHTS, ETC.) IN ACCORDANCE WITH THE MUTCD, CURRENT EDITION AND THE GOVERNING JURISDICTION'S STANDARDS AND SPECIFICATIONS AS REQUIRED FOR THE WORK.
7. CONTRACTOR SHALL DISPOSE OF AND TRANSPORT DEBRIS TO AREA(S) OBTAINED BY CONTRACTOR. CONTRACTOR SHALL NOT STORE OR BURN MATERIALS ON SITE. CONTRACTOR SHALL HANDLE AND DISPOSE OF ALL DEBRIS IN ACCORDANCE WITH ALL LOCAL STATE AND FEDERAL REGULATIONS. DISPOSAL SHALL BE TRANSPORTED TO AN APPROVED LANDFILL OR OTHER APPROVED FACILITY.
8. CONTRACTOR SHALL OBTAIN ALL PERMITS AND LICENSES REQUIRED FOR DEMOLITION OF WORK SHOWN.
9. CONTRACTOR SHALL PROTECT ALL SURVEY MONUMENTATION AND BENCHMARK(S). CONTRACTOR SHALL HAVE A LICENSED SURVEYOR REPLACE ANY DAMAGED OR DISTURBED MONUMENTATION AT THE CONTRACTOR'S COST.
10. CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES, FEATURES, IMPROVEMENTS, AND UTILITIES (OVERHEAD OR UNDERGROUND) AT ALL TIMES DURING DEMOLITION AND CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR ALL RESULTANT COSTS DUE TO SUCH DAMAGES.
11. SEE SHEET 9 FOR UTILITY RELOCATIONS.

CAUTION - NOTICE TO CONTRACTOR

THE LOCATIONS OF EXISTING ABOVE GROUND AND UNDERGROUND UTILITIES ARE BASED ON THE RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF THE UTILITIES. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL ABOVE GROUND AND UNDERGROUND UTILITIES.

50 25 0 50 100
ORIGINAL SCALE: 1" = 50'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS CONSTRUCTION PLANS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

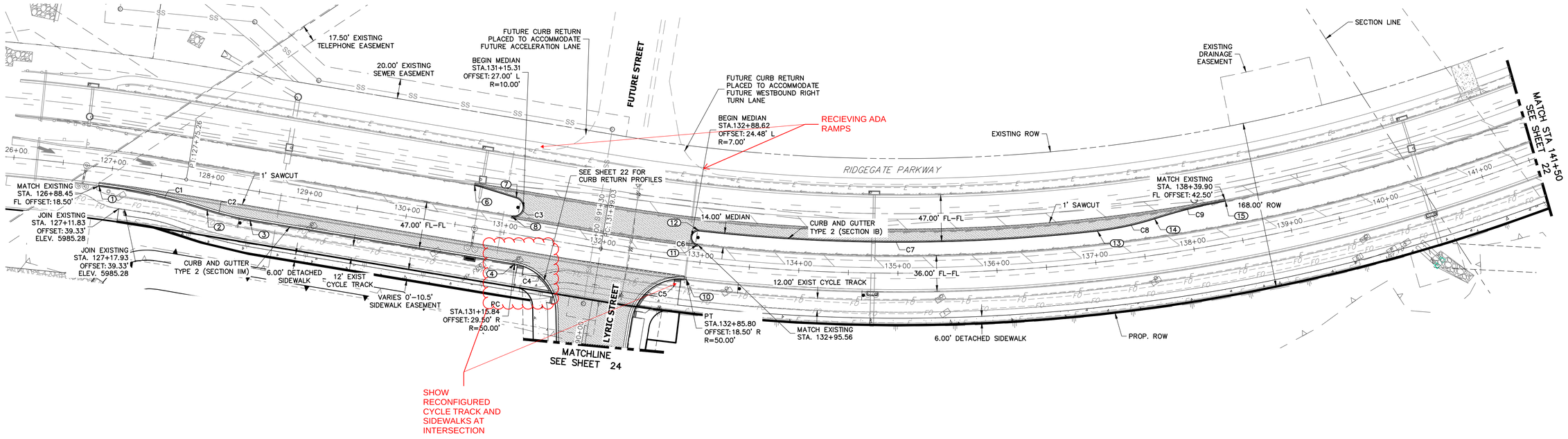
H-SCALE	1"=50'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	CRB
DRAWN BY	CWC
CHECKED BY	

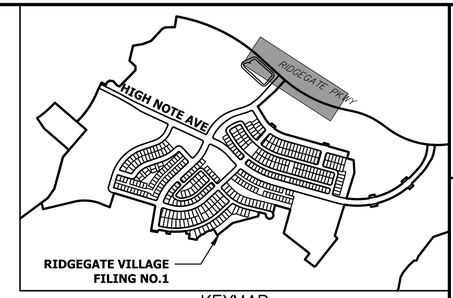
RIDGEGATE SOUTHWEST VILLAGE FILING 1

DEMOLITION PLAN —RIDGEGATE PARKWAY

SHEET 20 OF 270

JOB NO. 15950.01





KEYMAP
SCALE: 1"=1000'

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
1	126+88.48	18.50' (RT)	RIDGEGATE PARKWAY	5984.38		MATCH EX C&G
2	128+00.97	26.21' (RT)	RIDGEGATE PARKWAY	5985.76		PRC
3	128+45.27	29.50' (RT)	RIDGEGATE PARKWAY	5986.41		PT
4	131+15.84	29.50' (RT)	RIDGEGATE PARKWAY	5990.95		PCR
6	130+62.94	42.50' (LT)	RIDGEGATE PARKWAY	5991.44		MATCH EX C&G
7	131+06.67	36.52' (LT)	RIDGEGATE PARKWAY	5991.88		PC
8	131+04.84	17.50' (LT)	RIDGEGATE PARKWAY	5991.96		MATCH EX C&G
10	132+88.23	18.49' (RT)	RIDGEGATE PARKWAY	5994.45		MATCH EX C&G
11	132+95.56	17.49' (LT)	RIDGEGATE PARKWAY	5995.70		MATCH EX C&G
12	132+95.54	31.50' (LT)	RIDGEGATE PARKWAY	5995.92		PT
13	137+05.01	31.50' (LT)	RIDGEGATE PARKWAY	6004.93		PCC
14	137+64.94	36.38' (LT)	RIDGEGATE PARKWAY	6006.82		PRC
15	138+39.90	42.50' (LT)	RIDGEGATE PARKWAY	6008.72		MATCH EX C&G
16	149+86.27	18.50' (RT)	RIDGEGATE PARKWAY	6044.46		MATCH EX C&G
17	150+48.70	23.89' (RT)	RIDGEGATE PARKWAY	6045.60		PRC

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C1	10°42'34"	600.00'	112.15'
C2	8°29'36"	300.00'	44.47'
C3	90°00'00"	10.00'	15.71'
C4	79°38'34"	50.00'	69.50'
C5	87°12'34"	50.00'	76.10'
C6	177°20'55"	7.00'	21.67'
C7	12°48'06"	1800.02'	402.18'
C8	11°20'13"	300.00'	59.36'
C9	7°01'58"	600.00'	73.65'

LEGEND

ASPHALT

CONCRETE

50 25 0 50 100
ORIGINAL SCALE: 1" = 50'

Know what's **below.** **Call** before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

STATE OF COLORADO — AARON LEE CLUTTER — REGISTERED PROFESSIONAL ENGINEER — 36742

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

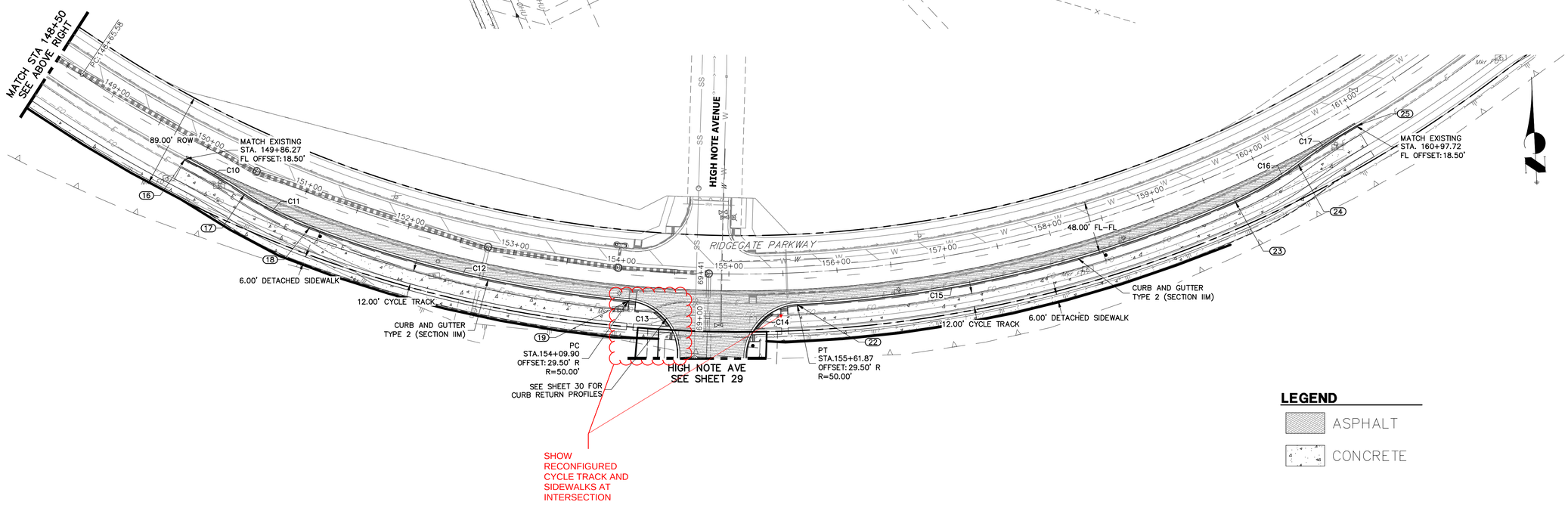
J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

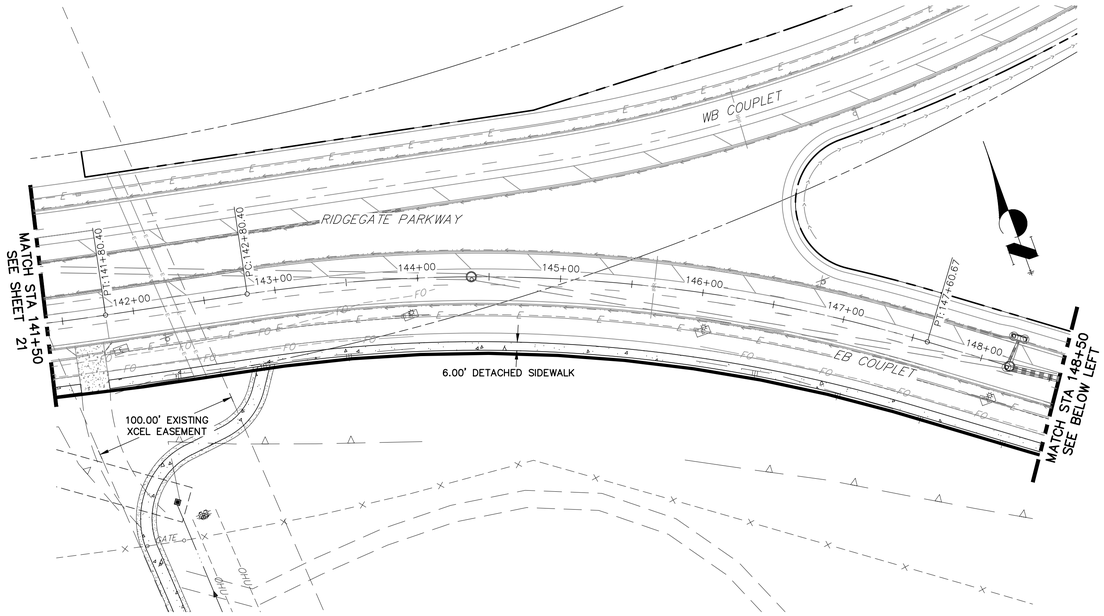
No.	REVISION	BY	DATE

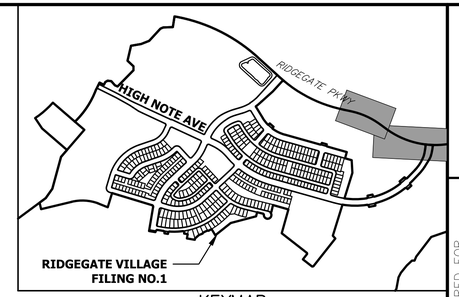
H-SCALE	1"=50'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	CWC
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
ROADWAY PLAN-PHASE 1A

SHEET 21 OF 270
JOB NO. 15950.01







KEYMAP
SCALE: 1"=1000'

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
18	151+14.50	29.50' (RT)	RIDGEGATE PARKWAY	6046.81		PCC
19	154+09.90	29.50' (RT)	RIDGEGATE PARKWAY	6047.30		PCR
22	155+61.87	29.50' (RT)	RIDGEGATE PARKWAY	6045.96		PCR
23	159+69.11	29.50' (RT)	RIDGEGATE PARKWAY	6041.80		PCC
24	160+34.91	23.89' (RT)	RIDGEGATE PARKWAY	6040.68		PRC
25	160+97.72	18.50' (RT)	RIDGEGATE PARKWAY	6040.23		MATCH EX C&G

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C10	6°06'01"	600.00'	63.88'
C11	12°56'34"	300.00'	67.77'
C12	14°27'26"	1129.50'	285.00'
C13	87°43'19"	50.00'	76.55'
C14	84°45'05"	50.00'	73.96'
C15	21°12'01"	1129.50'	417.93'
C16	12°56'32"	300.00'	67.77'
C17	6°08'16"	600.00'	64.28'

LEGEND

ASPHALT

CONCRETE

50 25 0 50 100
ORIGINAL SCALE: 1" = 50'

Know what's **below.**
Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

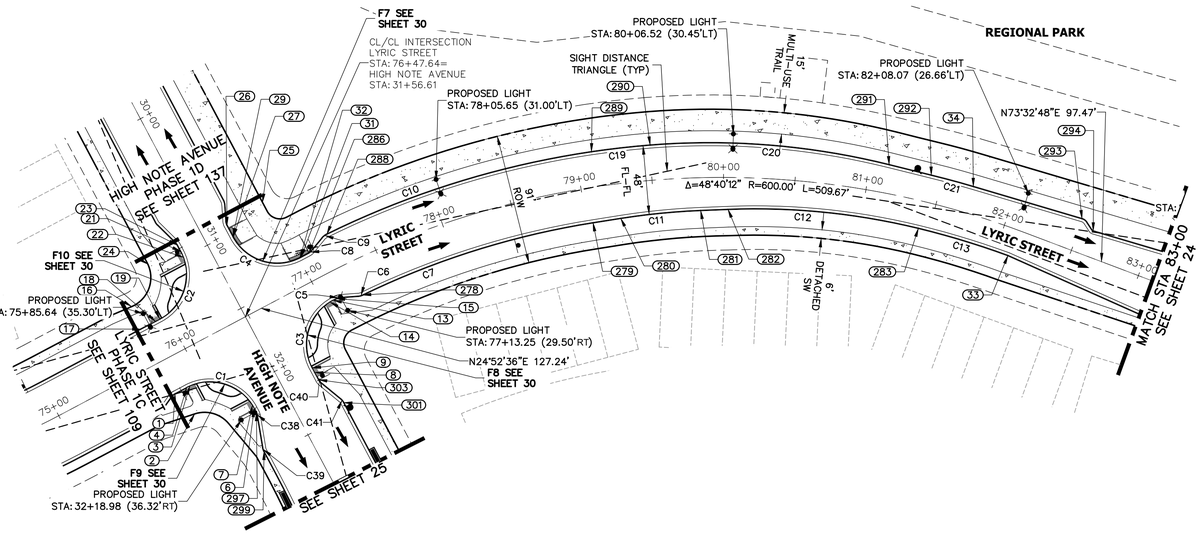
NO.	REVISION	BY	DATE

H-SCALE	1"=50'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	CWC
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
ROADWAY PLAN–PHASE 1A

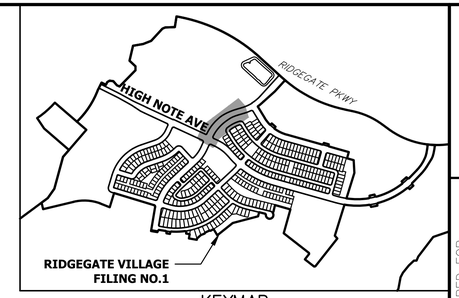
SHEET 22 OF 270

JOB NO. 15950.01



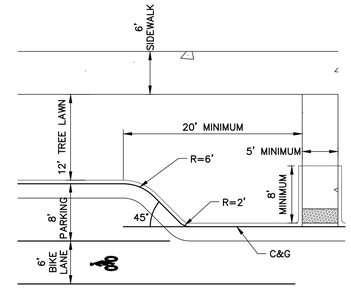
ROADWAY NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE COVER SHEET FOR BENCHMARK.
4. SEE SHEET 8 FOR LEGEND.
5. SEE SHEET 16 FOR TYPICAL STREET SECTIONS.
6. SEE SHEET 30-31 FOR CURB RETURN PROFILES.
7. SEE SHEETS 32-37 FOR CURB RAMP DETAILS.
8. SEE SHEETS 40-44 FOR SIGNAGE AND STRIPING.
9. ALL CURB RADII ARE 35' UNLESS OTHERWISE NOTED.
10. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.



KEYMAP
SCALE: 1"=1000'

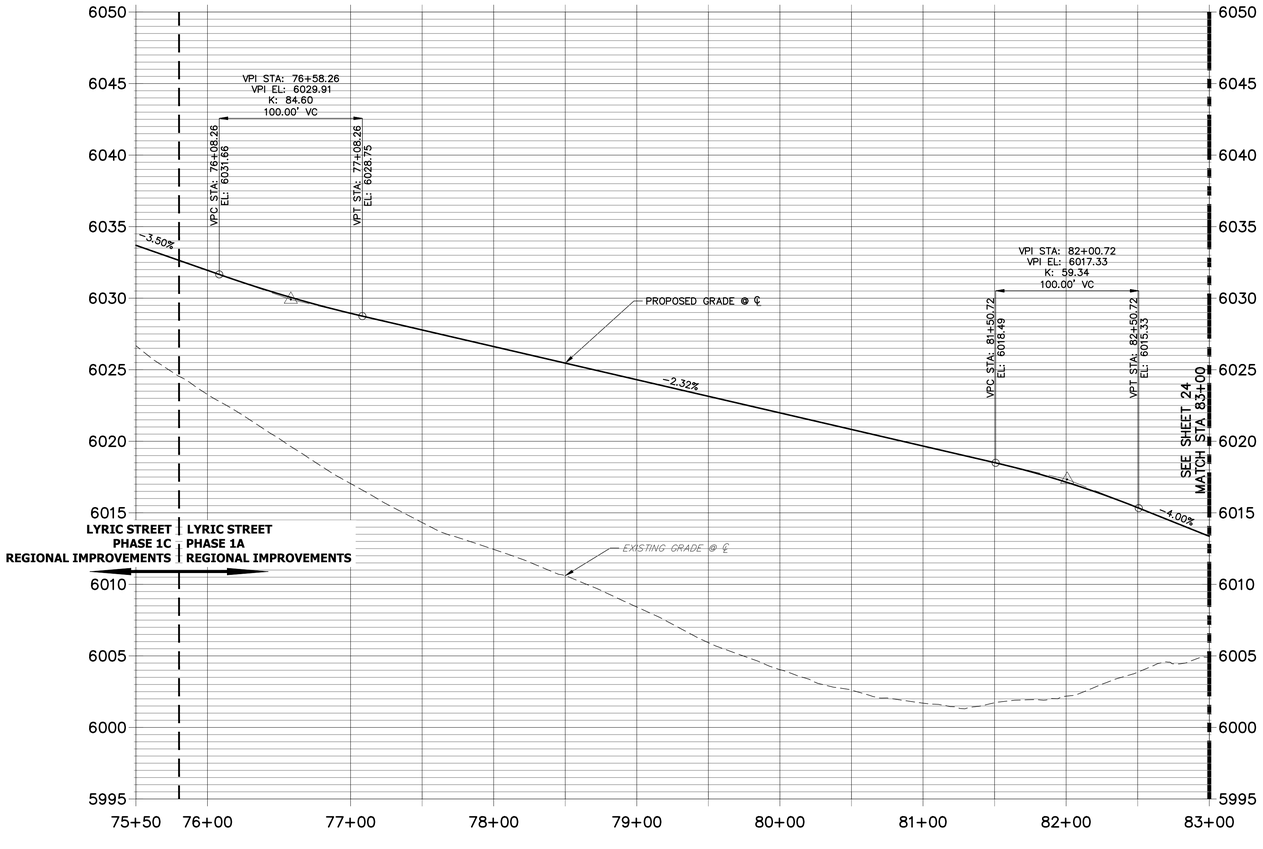
POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
1	75+79.07	24.50' (RT)	LYRIC STREET	6032.01		BEGIN C&G
2	75+84.53	43.37' (RT)	LYRIC STREET	6032.69		BEGIN DETACHED SW
3	75+90.58	24.59' (RT)	LYRIC STREET	6031.83		HC RAMP MID PT
4	75+88.14	24.50' (RT)	LYRIC STREET	6031.69		PCR
6	32+16.11	24.50' (RT)	HIGH NOTE AVENUE	6029.90		PCR
7	32+13.60	24.59' (RT)	HIGH NOTE AVENUE	6030.17		HC RAMP MID PT
8	32+13.61	24.50' (LT)	HIGH NOTE AVENUE	6028.46		HC RAMP MID PT
9	32+10.11	24.50' (LT)	HIGH NOTE AVENUE	6028.51		PCR
13	77+07.22	18.50' (RT)	LYRIC STREET	6028.10		PCR
14	77+04.73	18.58' (RT)	LYRIC STREET	6028.17		HC RAMP MID PT
15	77+09.75	18.50' (RT)	LYRIC STREET	6028.05		PC
16	75+80.78	43.50' (LT)	LYRIC STREET	6032.78		BEGIN DETACHED SW
17	75+79.07	26.50' (LT)	LYRIC STREET	6032.01		BEGIN C&G
18	75+90.64	26.50' (LT)	LYRIC STREET	6031.61		HC RAMP MID PT
19	75+94.14	26.50' (LT)	LYRIC STREET	6031.48		PCR
21	30+95.11	18.50' (RT)	HIGH NOTE AVENUE	6029.57		PCR
22	30+99.63	18.79' (RT)	HIGH NOTE AVENUE	6029.70		HC RAMP MID PT
23	30+90.15	18.50' (RT)	HIGH NOTE AVENUE	6029.40		BEGIN C&G
24	30+92.25	43.00' (RT)	HIGH NOTE AVENUE	6030.45		BEGIN DETACHED SW
25	30+91.61	48.00' (LT)	HIGH NOTE AVENUE	6029.26		BEGIN DETACHED SW
26	30+94.28	18.50' (LT)	HIGH NOTE AVENUE	6028.25		BEGIN C&G
27	31+03.38	18.50' (LT)	HIGH NOTE AVENUE	6028.56		HC RAMP MID PT
29	31+03.13	18.50' (LT)	HIGH NOTE AVENUE	6028.56		PCR
31	77+01.41	18.48' (LT)	LYRIC STREET	6028.24		PCR
32	77+00.61	18.48' (LT)	LYRIC STREET	6028.27		HC RAMP MID PT
33	82+09.61	19.00' (RT)	LYRIC STREET	6016.17		PT
34	81+71.55	19.00' (LT)	LYRIC STREET	6017.31		PT
278	77+27.88	24.50' (RT)	LYRIC STREET	6027.63		PT
279	79+04.62	24.50' (RT)	LYRIC STREET	6023.53		PT
280	79+25.01	24.17' (RT)	LYRIC STREET	6023.06		PC
281	79+83.42	22.80' (RT)	LYRIC STREET	6021.70		PT
282	80+03.27	22.21' (RT)	LYRIC STREET	6021.25		PC
283	81+42.03	19.00' (RT)	LYRIC STREET	6018.03		PC
286	77+07.59	18.50' (LT)	LYRIC STREET	6028.10		PC
288	77+24.17	24.50' (LT)	LYRIC STREET	6027.71		PT
289	79+10.98	24.50' (LT)	LYRIC STREET	6023.38		PC
290	79+50.64	24.50' (LT)	LYRIC STREET	6022.46		PT
291	81+12.68	19.91' (LT)	LYRIC STREET	6018.72		PT
292	81+42.07	19.01' (LT)	LYRIC STREET	6018.06		PC
293	82+49.12	23.16' (LT)	LYRIC STREET	6014.74		PC
294	82+59.51	17.91' (LT)	LYRIC STREET	6014.31		PT
297	32+19.18	24.50' (RT)	HIGH NOTE AVENUE	6029.85		PC
299	32+45.79	32.50' (RT)	HIGH NOTE AVENUE	6029.51		PT
301	32+41.77	32.50' (LT)	HIGH NOTE AVENUE	6028.13		PT
303	32+19.41	24.50' (LT)	HIGH NOTE AVENUE	6028.38		PC



BULB OUT DETAIL

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C1	90°00'00"	35.00'	54.98'
C2	90°00'00"	35.00'	54.98'
C3	90°05'12"	35.00'	55.03'
C4	90°27'13"	35.00'	55.25'
C5	23°31'19"	8.00'	3.28'
C6	21°46'49"	8.00'	3.04'
C7	16°52'38"	575.50'	169.52'
C8	22°43'54"	6.00'	2.38'
C9	24°18'53"	10.00'	4.24'
C10	17°50'19"	624.50'	194.43'
C11	6°41'21"	481.00'	56.16'
C12	15°58'53"	481.00'	134.16'
C13	6°27'15"	581.00'	65.45'
C19	3°47'14"	624.50'	41.28'
C20	18°34'56"	519.00'	168.32'
C21	2°49'09"	619.00'	30.46'
C38	18°25'34"	8.00'	2.57'
C39	18°25'34"	8.00'	2.57'
C40	22°39'59"	8.00'	3.16'
C41	22°39'59"	8.00'	3.16'

LYRIC STREET PROFILE
STA 75+50.00 TO 83+00.00



Know what's below. Call before you dig.

50 25 0 50 100

HORIZONTAL ORIGINAL SCALE: 1" = 50'
VERTICAL ORIGINAL SCALE: 1" = 5'

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

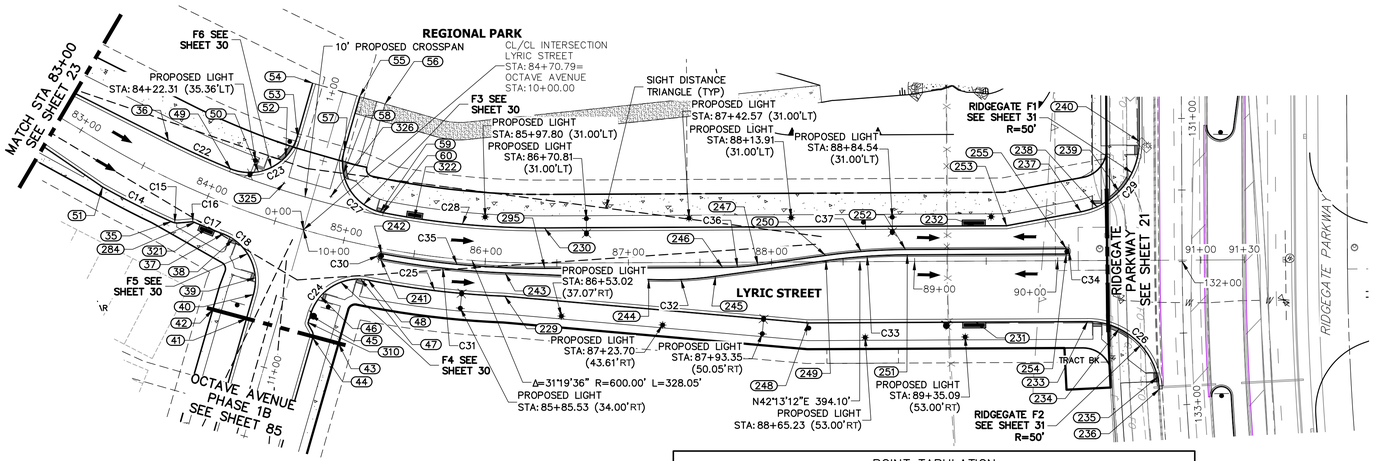
H-SCALE 1"=50'
V-SCALE 1"=5'
DATE 2/12/21
DESIGNED BY RDO
DRAWN BY SDL
CHECKED BY

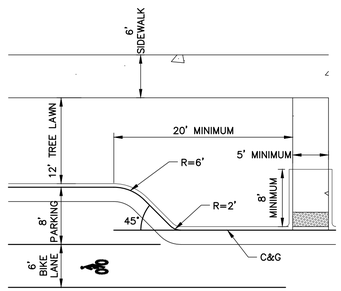
RIDGEGATE SOUTHWEST VILLAGE FILING 1

ROADWAY PLAN & PROFILES-PHASE 1A

SHEET 23 OF 270

JOB NO. 15950.01

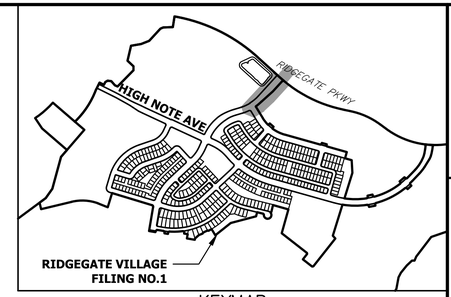




BULB OUT DETAIL

ROADWAY NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE COVER SHEET FOR BENCHMARK.
4. SEE SHEET 8 FOR LEGEND.
5. SEE SHEET 16 FOR TYPICAL STREET SECTIONS.
6. SEE SHEET 30–31 FOR CURB RETURN PROFILES.
7. SEE SHEETS 32–37 FOR CURB RAMP DETAILS.
8. SEE SHEETS 40–44 FOR SIGNAGE AND STRIPING.
9. ALL CURB RADII ARE 35' UNLESS OTHERWISE NOTED.
10. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.



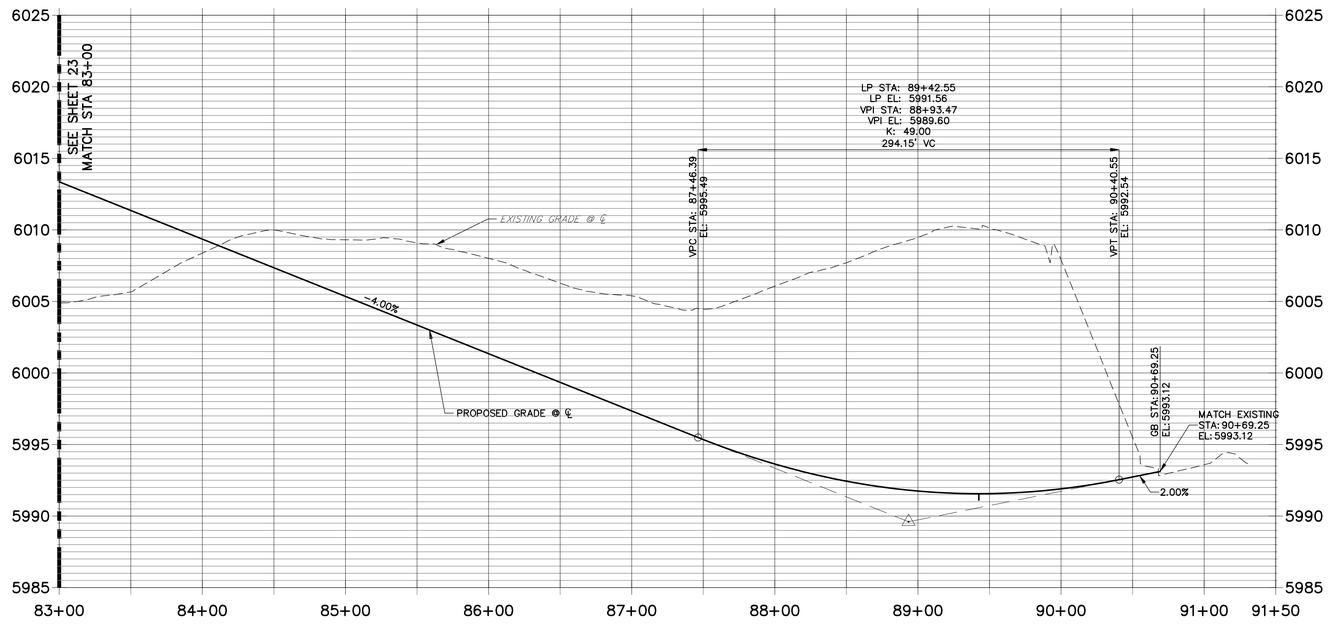
KEYMAP
SCALE: 1"=1000'

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
246	87+65.71	3.50' (RT)	LYRIC STREET	5994.72		PC
247	87+90.47	1.82' (RT)	LYRIC STREET	5993.91		PT
248	88+25.68	42.50' (RT)	LYRIC STREET	5992.32		PI
249	88+38.06	0.64' (LT)	LYRIC STREET	5992.73		PC
250	88+37.71	4.63' (LT)	LYRIC STREET	5992.67		PC
251	88+94.88	4.50' (LT)	LYRIC STREET	5991.95		PT
252	88+93.52	8.50' (LT)	LYRIC STREET	5991.53		PT
253	89+64.39	24.50' (LT)	LYRIC STREET	5990.40		PI
254	90+06.01	4.50' (LT)	LYRIC STREET	6006.35		PT
255	90+06.00	8.50' (LT)	LYRIC STREET	6006.29		PT
284	83+98.70	20.50' (RT)	LYRIC STREET	6008.74		PT
295	86+41.50	3.50' (RT)	LYRIC STREET	5999.61		PT
310	10+61.41	21.00' (LT)	OCTAVE AVENUE	6004.51		PC
321	84+07.89	20.50' (RT)	LYRIC STREET	6008.37		INLET
322	85+46.24	24.50' (LT)	LYRIC STREET	6002.84		INLET
325	84+47.75	27.11' (LT)	LYRIC STREET	6007.75		FL–FL INTERCEPT
326	84+83.37	27.42' (LT)	LYRIC STREET	6006.39		FL–FL INTERCEPT

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C14	4°56'11"	626.50'	53.98'
C15	29°15'28"	10.00'	5.11'
C16	27°51'57"	6.00'	2.92'
C17	1°59'02"	620.50'	21.48'
C18	85°05'57"	35.00'	51.98'
C22	4°44'25"	576.50'	47.69'
C23	96°02'32"	35.00'	58.67'
C24	85°07'18"	35.00'	52.00'
C25	8°50'51"	623.51'	96.28'
C27	94°59'19"	35.00'	58.03'
C28	11°18'46"	575.50'	113.63'
C29	19°44'12"	50.00'	17.22'
C30	173°00'48"	2.00'	6.05'
C31	8°17'08"	607.50'	87.85'
C32	10°38'35"	252.00'	46.81'
C33	7°46'28"	420.00'	56.99'
C34	181°21'15"	2.00'	6.33'
C35	10°52'38"	603.50'	114.57'
C36	7°46'25"	183.00'	24.83'
C37	7°33'57"	424.00'	55.99'

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
35	83+84.12	26.50' (RT)	LYRIC STREET	6009.32		PC
36	83+57.88	23.50' (LT)	LYRIC STREET	6010.37		PC
37	84+19.47	20.50' (RT)	LYRIC STREET	6008.23		PCR
38	84+27.04	21.44' (RT)	LYRIC STREET	6007.87		HC RAMP MID PT
39	10+41.54	22.97' (RT)	OCTAVE AVENUE	6006.68		HC RAMP MID PT
40	10+53.10	21.00' (RT)	OCTAVE AVENUE	6006.16		PCR
41	10+70.73	21.00' (RT)	OCTAVE AVENUE	6005.90		END C&G
42	10+71.13	45.50' (RT)	OCTAVE AVENUE	6006.88		END DETACHED SW
43	10+69.63	45.50' (LT)	OCTAVE AVENUE	6005.28		END DETACHED SW
44	10+70.73	27.00' (LT)	OCTAVE AVENUE	6004.41		END C&G
45	10+56.06	21.00' (LT)	OCTAVE AVENUE	6004.59		PCR
46	10+41.53	24.19' (LT)	OCTAVE AVENUE	6004.77		HC RAMP MID PT
47	85+16.98	23.89' (RT)	LYRIC STREET	6004.13		HC RAMP MID PT
48	85+21.88	23.50' (RT)	LYRIC STREET	6003.89		PCR
49	84+07.52	23.50' (LT)	LYRIC STREET	6008.39		PCR
50	84+27.30	28.69' (LT)	LYRIC STREET	6008.29		HC RAMP MID PT
51	83+32.43	26.50' (RT)	LYRIC STREET	6011.43		PC
52	0+45.36	25.95' (LT)	PARK ENTRANCE 2	6007.86		HC RAMP MID PT
53	0+61.51	22.00' (LT)	PARK ENTRANCE 2	6007.60		PCR
54	1+00.23	22.00' (LT)	PARK ENTRANCE 2	6008.51		END C&G
55	1+00.23	12.00' (RT)	PARK ENTRANCE 2	6008.71		END C&G
56	1+00.23	30.50' (RT)	PARK ENTRANCE 2	6009.57		END DETACHED SW
57	0+61.55	12.00' (RT)	PARK ENTRANCE 2	6006.94		PCR
58	0+45.36	15.97' (RT)	PARK ENTRANCE 2	6006.39		HC RAMP MID PT
59	85+20.90	24.56' (LT)	LYRIC STREET	6004.10		HC RAMP MID PT
60	85+23.03	24.50' (LT)	LYRIC STREET	6003.76		PCR
229	86+14.53	23.50' (RT)	LYRIC STREET	6000.11		PT
230	86+41.50	24.50' (LT)	LYRIC STREET	5999.02		PT
231	89+42.55	42.50' (RT)	LYRIC STREET	5990.59		LOW PT/ INLET
232	89+42.55	24.50' (LT)	LYRIC STREET	5990.29		LOW PT/ INLET
233	90+20.68	42.50' (RT)	LYRIC STREET	5992.53		PCR
234	90+42.80	47.66' (RT)	LYRIC STREET	5994.68		HC RAMP MID PT
235	132+79.80	19.25' (RT)	RIDGEGATE PARKWAY	5994.79		HC RAMP MID PT
236	132+88.23	18.50' (RT)	RIDGEGATE PARKWAY	5994.45		PCR
237	90+16.42	34.01' (LT)	LYRIC STREET	6003.06		PCR
238	90+27.64	37.46' (LT)	LYRIC STREET	6000.45		HC RAMP MID PT
239	90+43.12	48.18' (LT)	LYRIC STREET	5996.30		HC RAMP MID PT
240	131+15.84	29.50' (RT)	RIDGEGATE PARKWAY	5992.36		PCR
241	85+27.54	7.50' (RT)	LYRIC STREET	6004.07		PC
242	85+27.59	3.50' (RT)	LYRIC STREET	6004.16		PC
243	86+14.30	7.50' (RT)	LYRIC STREET	6000.60		PT
244	87+14.16	11.90' (RT)	LYRIC STREET	5996.57		PC
245	87+60.86	9.90' (RT)	LYRIC STREET	5994.80		PT

LYRIC STREET PROFILE (1)
STA 83+00.00 TO 91+50.00



Know what's below. Call before you dig.

50 25 0 50 100

HORIZONTAL ORIGINAL SCALE: 1" = 50'
VERTICAL ORIGINAL SCALE: 1" = 5'

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON L. CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE PLANS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	REVISION

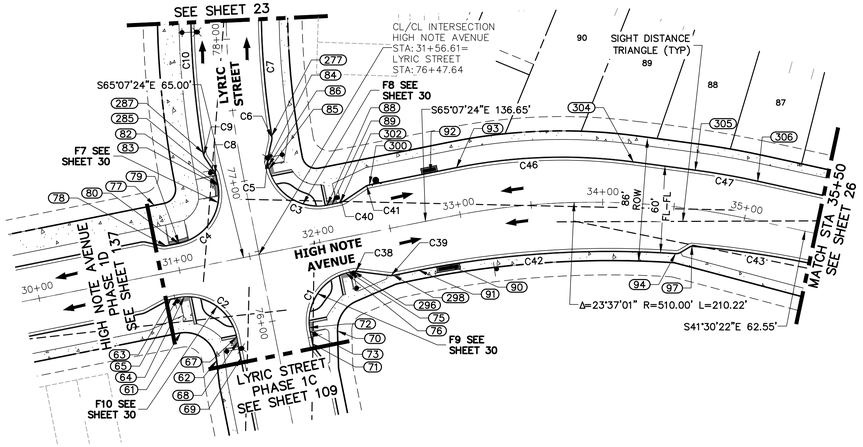
H-SCALE	1"=50'
V-SCALE	1"=5'
DATE	2/12/21
DESIGNED BY	RDO
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

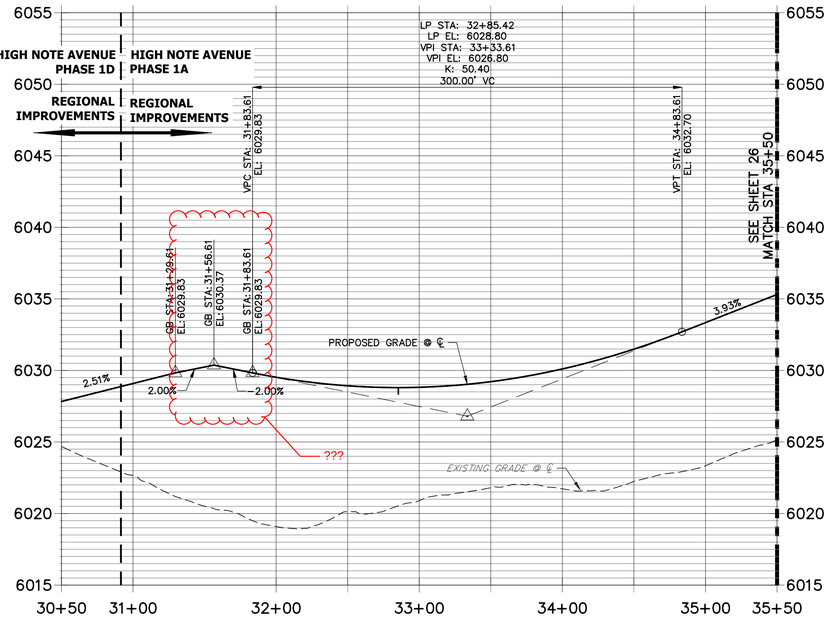
ROADWAY PLAN & PROFILES–PHASE 1A

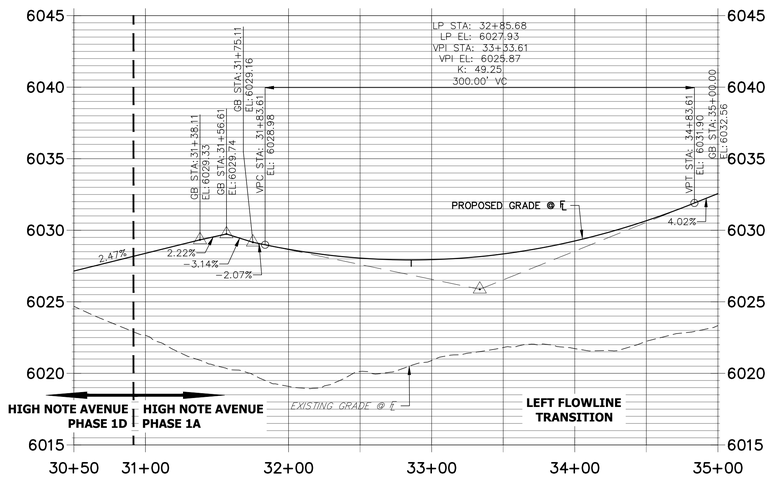
SHEET 24 OF 270

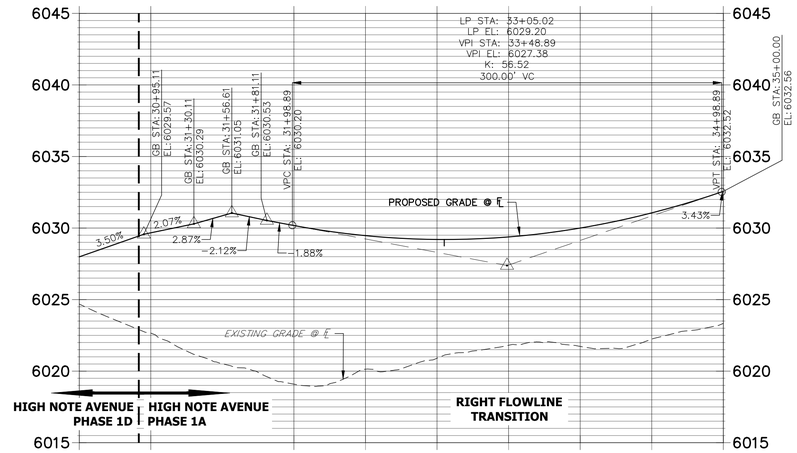
JOB NO. 15950.01

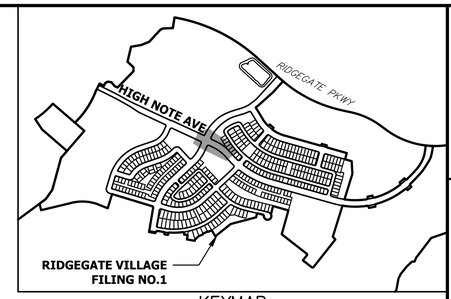


HIGH NOTE AVENUE PROFILE
STA 30+50.00 TO 35+50.00

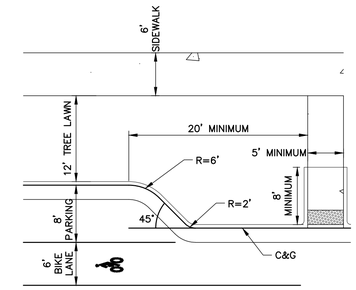








KEYMAP
SCALE: 1"=1000'



BULB OUT DETAIL

ROADWAY NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE COVER SHEET FOR BENCHMARK.
4. SEE SHEET 8 FOR LEGEND.
5. SEE SHEET 16 FOR TYPICAL STREET SECTIONS.
6. SEE SHEET 30–31 FOR CURB RETURN PROFILES.
7. SEE SHEETS 32–37 FOR CURB RAMP DETAILS.
8. SEE SHEETS 40–44 FOR SIGNAGE AND STRIPING.
9. ALL CURB RADII ARE 35' UNLESS OTHERWISE NOTED.
10. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C1	90°00'00"	35.00'	54.98'
C2	90°00'00"	35.00'	54.98'
C3	90°05'12"	35.00'	55.03'
C4	90°27'13"	35.00'	55.25'
C5	23°31'19"	8.00'	3.28'
C6	21°46'49"	8.00'	3.04'
C7	16°52'38"	575.50'	169.52'
C8	22°43'54"	6.00'	2.38'
C9	24°18'53"	10.00'	4.24'
C10	17°50'19"	624.50'	194.43'
C38	18°25'34"	8.00'	2.57'
C39	18°25'34"	8.00'	2.57'
C40	22°39'59"	8.00'	3.16'
C41	22°39'59"	8.00'	3.16'
C42	15°07'25"	684.00'	180.55'
C43	7°34'41"	690.00'	91.26'
C46	18°52'56"	377.00'	124.24'
C47	4°44'05"	537.00'	44.38'

50 25 0 50 100
HORIZONTAL
ORIGINAL SCALE: 1" = 50'
VERTICAL
ORIGINAL SCALE: 1" = 5'

Know what's below.
Call before you dig.

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
61	30+92.25	43.00' (RT)	HIGH NOTE AVENUE	6030.45		BEGIN DETACHED SW
62	75+80.78	43.50' (LT)	LYRIC STREET	6032.78		BEGIN DETACHED SW
63	30+90.15	18.50' (RT)	HIGH NOTE AVENUE	6029.40		BEGIN C&G
64	30+99.63	18.79' (RT)	HIGH NOTE AVENUE	6029.70		HC RAMP MID PT
65	30+95.11	18.50' (RT)	HIGH NOTE AVENUE	6029.57		PCR
67	75+94.14	26.50' (LT)	LYRIC STREET	6031.48		PCR
68	75+90.64	26.50' (LT)	LYRIC STREET	6031.61		HC RAMP MID PT
69	75+79.07	26.50' (LT)	LYRIC STREET	6032.01		BEGIN C&G
70	75+84.53	43.37' (RT)	LYRIC STREET	6032.69		BEGIN DETACHED SW
71	75+79.07	24.50' (RT)	LYRIC STREET	6032.01		BEGIN C&G
72	75+90.58	24.59' (RT)	LYRIC STREET	6031.83		HC RAMP MID PT
73	75+88.14	24.50' (RT)	LYRIC STREET	6031.69		PCR
75	32+16.11	24.50' (RT)	HIGH NOTE AVENUE	6029.90		PCR
76	32+13.60	24.59' (RT)	HIGH NOTE AVENUE	6030.17		HC RAMP MID PT

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
77	30+91.61	48.00' (LT)	HIGH NOTE AVENUE	6029.26		BEGIN DETACHED SW
78	30+94.28	18.50' (LT)	HIGH NOTE AVENUE	6028.25		BEGIN C&G
79	31+03.38	18.50' (LT)	HIGH NOTE AVENUE	6028.56		HC RAMP MID PT
80	31+03.13	18.50' (LT)	HIGH NOTE AVENUE	6028.56		PCR
82	77+01.41	18.48' (LT)	LYRIC STREET	6028.24		PCR
83	77+00.61	18.48' (LT)	LYRIC STREET	6028.27		HC RAMP MID PT
84	77+09.75	18.50' (RT)	LYRIC STREET	6028.05		PC
85	77+04.73	18.58' (RT)	LYRIC STREET	6028.17		HC RAMP MID PT
86	77+07.22	18.50' (RT)	LYRIC STREET	6028.10		PCR
88	32+10.11	24.50' (LT)	HIGH NOTE AVENUE	6028.51		PCR
89	32+13.61	24.50' (LT)	HIGH NOTE AVENUE	6028.46		HC RAMP MID PT
90	32+85.27	32.84' (RT)	HIGH NOTE AVENUE	6029.24		LOW PT/ INLET
91	32+63.82	32.50' (RT)	HIGH NOTE AVENUE	6029.35		PC
92	32+85.27	32.50' (LT)	HIGH NOTE AVENUE	6027.93		LOW PT/ INLET

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
93	33+03.16	32.60' (LT)	HIGH NOTE AVENUE	6027.96		PC
94	34+55.07	32.35' (RT)	HIGH NOTE AVENUE	6031.27		PC
97	34+66.33	25.74' (RT)	HIGH NOTE AVENUE	6031.51		PT
277	77+27.88	24.50' (RT)	LYRIC STREET	6027.63		PT
285	77+07.59	18.50' (LT)	LYRIC STREET	6028.10		PC
287	77+24.17	24.50' (LT)	LYRIC STREET	6027.71		PT
296	32+19.18	24.50' (RT)	HIGH NOTE AVENUE	6029.85		PC
298	32+45.79	32.50' (RT)	HIGH NOTE AVENUE	6029.51		PT
300	32+41.77	32.50' (LT)	HIGH NOTE AVENUE	6028.13		PT
302	32+19.41	24.50' (LT)	HIGH NOTE AVENUE	6028.38		PC
304	34+20.02	28.77' (LT)	HIGH NOTE AVENUE	6029.79		PT
305	34+61.34	27.00' (LT)	HIGH NOTE AVENUE	6031.06		PC
306	35+03.48	27.00' (LT)	HIGH NOTE AVENUE	6032.81		PT

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

STATE OF COLORADO · REGISTERED · AARON L. CLUTTER · 36742 · PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE

No. REVISION

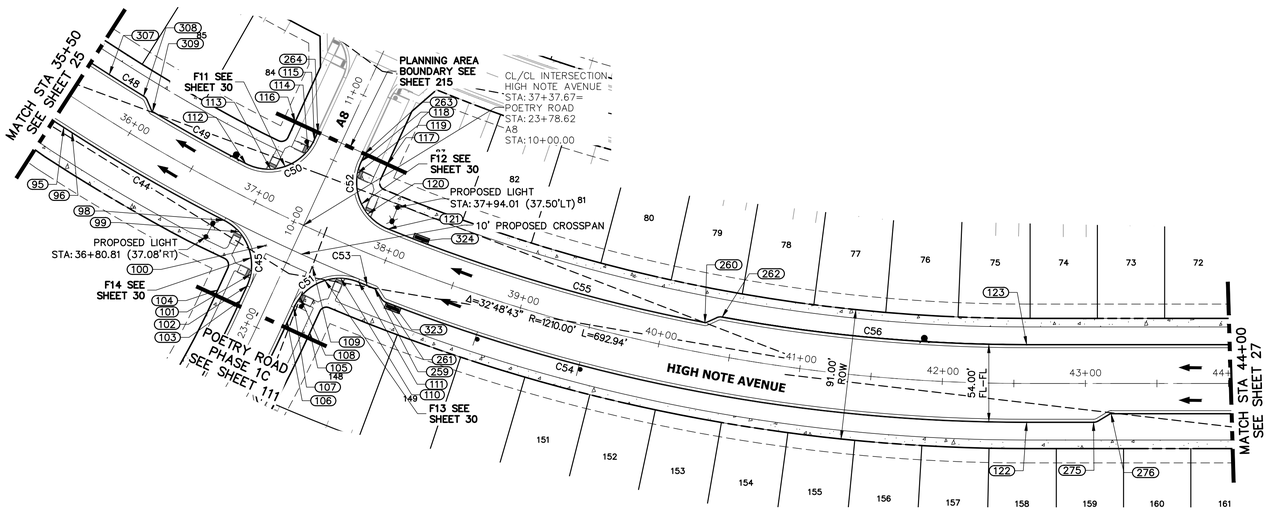
H-SCALE	1"=50'
V-SCALE	1"=5'
DATE	2/12/21
DESIGNED BY	RDO
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

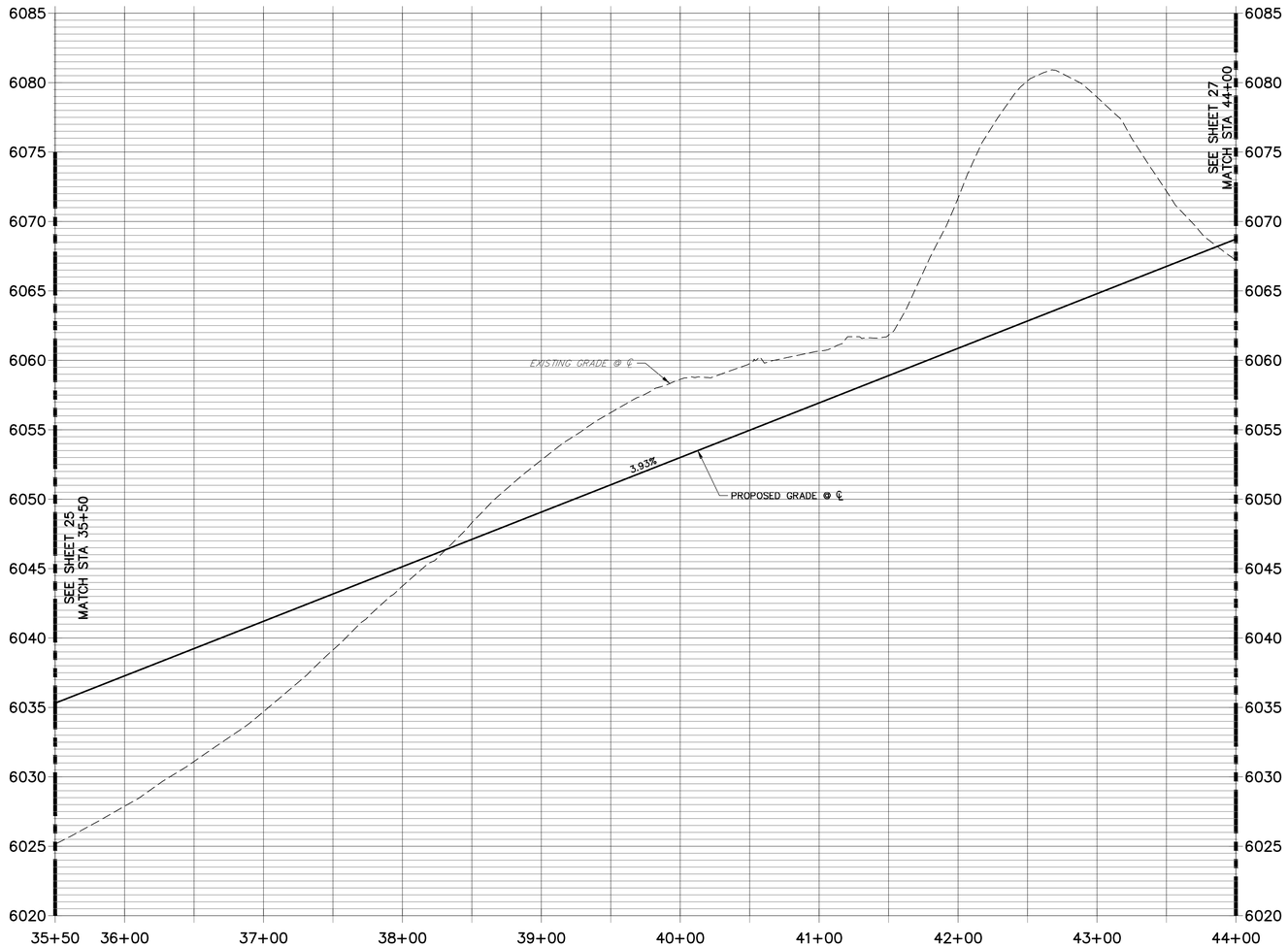
ROADWAY PLAN & PROFILES–PHASE 1A

SHEET 25 OF 270

JOB NO. 15950.01

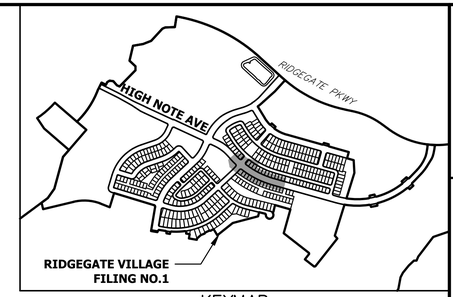


HIGH NOTE AVENUE PROFILE (1)
STA 35+50.00 TO 44+00.00



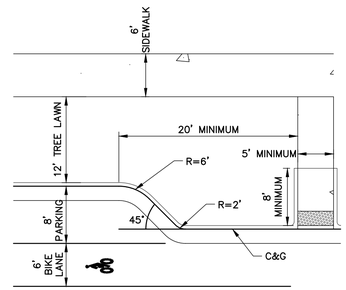
ROADWAY NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE COVER SHEET FOR BENCHMARK.
4. SEE SHEET 8 FOR LEGEND.
5. SEE SHEET 16 FOR TYPICAL STREET SECTIONS.
6. SEE SHEET 30-31 FOR CURB RETURN PROFILES.
7. SEE SHEETS 32-37 FOR CURB RAMP DETAILS.
8. SEE SHEETS 40-44 FOR SIGNAGE AND STRIPING.
9. ALL CURB RADII ARE 35' UNLESS OTHERWISE NOTED.
10. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.



KEYMAP
SCALE: 1"=1000'

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
95	35+59.23	21.00' (RT)	HIGH NOTE AVENUE	6035.01		PT
96	35+66.04	21.00' (RT)	HIGH NOTE AVENUE	6035.27		PC
98	36+86.95	21.00' (RT)	HIGH NOTE AVENUE	6040.44		PCR
99	36+99.62	23.54' (RT)	HIGH NOTE AVENUE	6040.90		HC RAMP MID PT
100	37+20.00	24.00' (RT)	HIGH NOTE AVENUE	6041.61		FL-FL INTERCEPT
101	23+32.26	19.07' (LT)	POETRY ROAD	6042.10		HC RAMP MID PT
102	23+23.68	18.00' (LT)	POETRY ROAD	6041.83		PCR
103	23+12.44	18.00' (LT)	POETRY ROAD	6042.09		BEGIN C&G
104	23+12.44	35.50' (LT)	POETRY ROAD	6042.92		BEGIN DETACHED SW
105	23+12.45	35.50' (RT)	POETRY ROAD	6044.29		BEGIN DETACHED SW
106	23+12.45	18.00' (RT)	POETRY ROAD	6043.45		BEGIN C&G
107	23+23.77	18.00' (RT)	POETRY ROAD	6043.32		PCR
108	23+31.81	18.94' (RT)	POETRY ROAD	6043.59		HC RAMP MID PT
109	37+55.30	24.00' (RT)	HIGH NOTE AVENUE	6043.01		FL-FL INTERCEPT
110	37+75.96	23.40' (RT)	HIGH NOTE AVENUE	6043.76		HC RAMP MID PT
111	37+88.29	21.00' (RT)	HIGH NOTE AVENUE	6044.42		PCR
112	36+82.12	21.00' (LT)	HIGH NOTE AVENUE	6040.27		PCR
113	36+99.71	25.40' (LT)	HIGH NOTE AVENUE	6040.78		HC RAMP MID PT
114	10+48.71	19.04' (LT)	A8	6041.04		HC RAMP MID PT
115	10+57.17	18.00' (LT)	A8	6040.97		PCR
116	10+63.18	35.50' (LT)	A8	6041.21		END DETACHED SW
117	10+63.18	35.50' (RT)	A8	6041.21		END DETACHED SW
118	10+57.27	18.00' (RT)	A8	6041.12		PCR
119	10+48.71	19.06' (RT)	A8	6041.57		HC RAMP MID PT
120	37+75.88	25.32' (LT)	HIGH NOTE AVENUE	6043.44		HC RAMP MID PT
121	37+93.31	21.00' (LT)	HIGH NOTE AVENUE	6044.33		PCR
122	42+58.98	26.99' (RT)	HIGH NOTE AVENUE	6062.52		PT
123	42+58.97	27.01' (LT)	HIGH NOTE AVENUE	6062.52		PT
259	38+00.17	21.00' (RT)	HIGH NOTE AVENUE	6044.48		PC
260	40+28.78	21.00' (LT)	HIGH NOTE AVENUE	6053.47		PC
261	38+10.68	27.00' (RT)	HIGH NOTE AVENUE	6044.90		PT
262	40+40.02	27.00' (LT)	HIGH NOTE AVENUE	6053.91		PT
263	10+63.27	18.00' (RT)	A8	6040.36		END C&G
264	10+63.18	18.00' (LT)	A8	6040.37		END C&G
275	43+05.71	27.00' (RT)	HIGH NOTE AVENUE	6064.36		PC
276	43+17.93	21.00' (RT)	HIGH NOTE AVENUE	6064.84		PT
307	35+66.04	27.00' (LT)	HIGH NOTE AVENUE	6035.27		PC
308	35+94.98	27.00' (LT)	HIGH NOTE AVENUE	6036.41		PC
309	36+06.23	21.00' (LT)	HIGH NOTE AVENUE	6036.85		PT
323	38+16.60	27.00' (RT)	HIGH NOTE AVENUE	6045.13		INLET
324	38+17.95	21.00' (LT)	HIGH NOTE AVENUE	6045.18		INLET



BULB OUT DETAIL

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C44	5°43'32"	1231.00'	123.01'
C45	87°38'44"	35.00'	53.54'
C48	1°22'15"	1183.00'	28.30'
C49	3°35'37"	1189.00'	74.58'
C50	92°35'00"	35.00'	56.56'
C51	87°33'21"	35.00'	53.48'
C52	92°40'53"	35.00'	56.62'
C53	0°33'45"	1231.00'	12.08'
C54	21°13'39"	1237.00'	458.29'
C55	11°09'00"	1189.00'	231.38'
C56	10°22'04"	1183.00'	214.06'

50 25 0 50 100

HORIZONTAL
ORIGINAL SCALE: 1" = 50'
VERTICAL
ORIGINAL SCALE: 1" = 5'

811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

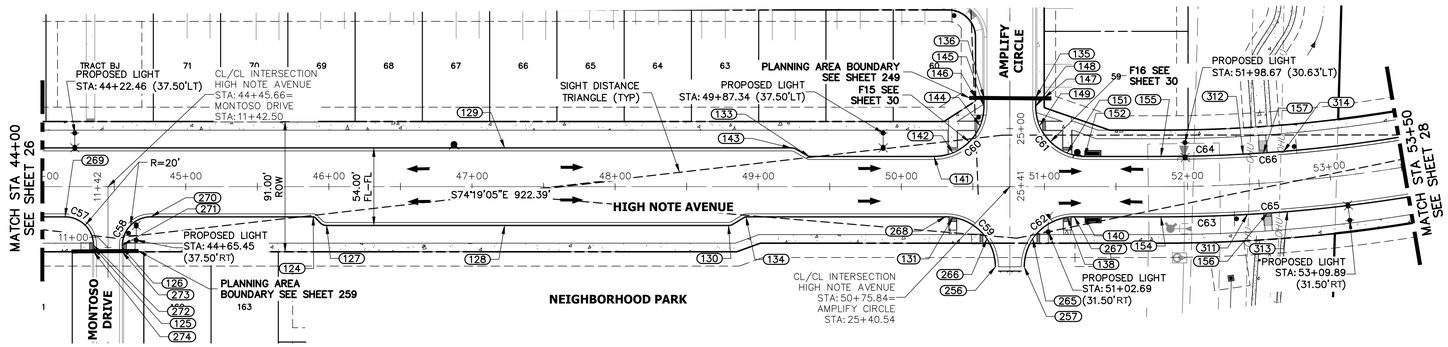
H-SCALE	1"=50'	DESIGNED BY	RDO
V-SCALE	1"=5'	DRAWN BY	SDL
DATE	2/12/21	CHECKED BY	

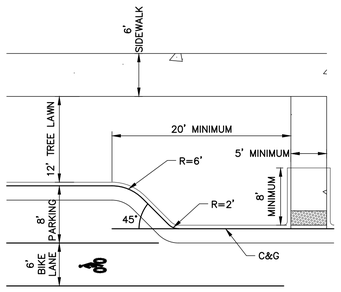
RIDGEGATE SOUTHWEST VILLAGE FILING 1

ROADWAY PLAN & PROFILES-PHASE 1A

SHEET 26 OF 270

JOB NO. 15950.01



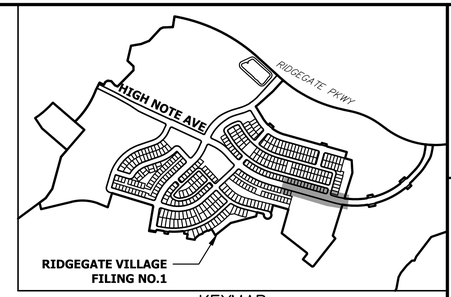


BULB OUT DETAIL

ROADWAY NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE COVER SHEET FOR BENCHMARK.
4. SEE SHEET 8 FOR LEGEND.
5. SEE SHEET 16 FOR TYPICAL STREET SECTIONS.
6. SEE SHEET 30–31 FOR CURB RETURN PROFILES.
7. SEE SHEETS 32–37 FOR CURB RAMP DETAILS.
8. SEE SHEETS 40–44 FOR SIGNAGE AND STRIPING.
9. ALL CURB RADII ARE 35' UNLESS OTHERWISE NOTED.
10. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.

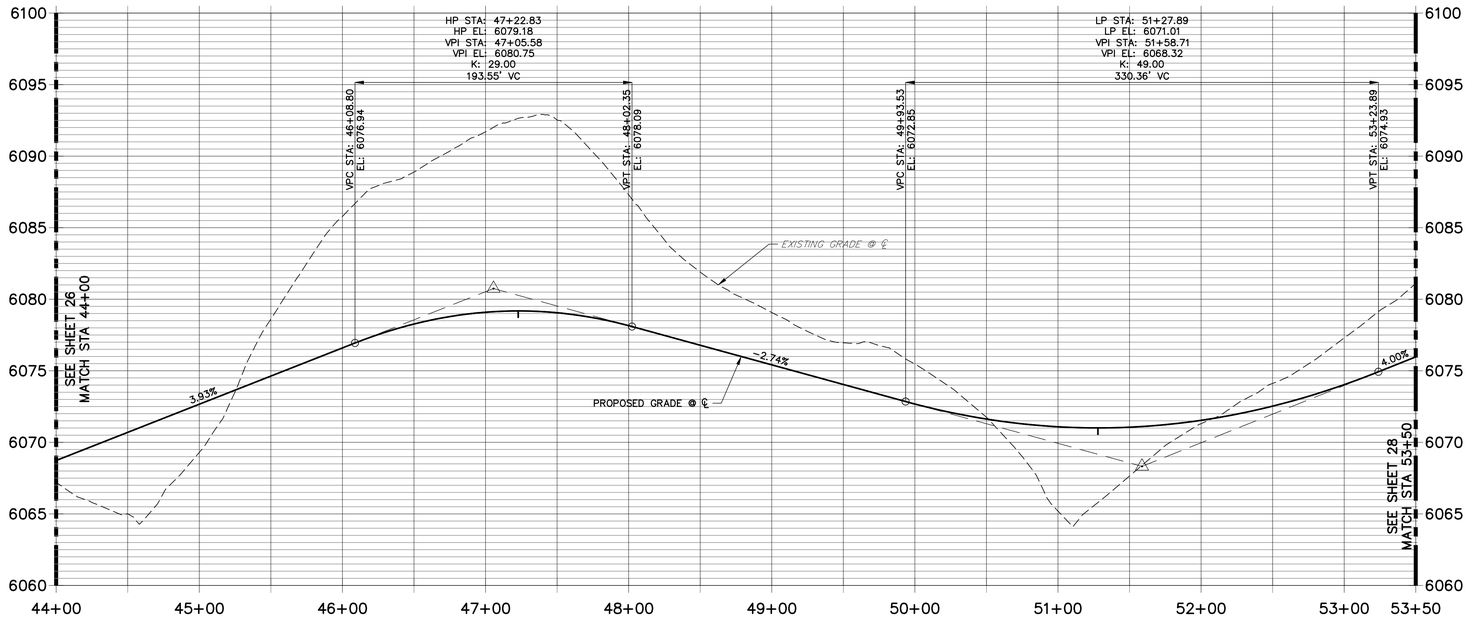
CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C57	89°59'59"	20.00'	31.42'
C58	90°00'00"	20.00'	31.42'
C59	90°00'00"	35.00'	54.98'
C60	90°00'01"	35.00'	54.98'
C61	90°00'00"	35.00'	54.98'
C62	90°00'00"	35.00'	54.98'
C63	3°12'33"	1081.00'	60.55'
C64	3°10'13"	1039.00'	57.49'
C65	1°28'55"	1081.00'	27.96'
C66	1°34'17"	1032.02'	28.30'



KEYMAP
SCALE: 1"=1000'

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
124	11+21.50	143.41' (RT)	MONTOSO DRIVE	6075.50		PC
125	11+00.00	10.00' (LT)	MONTOSO DRIVE	6070.05		HC RAMP MID PT
126	11+00.03	10.00' (RT)	MONTOSO DRIVE	6070.83		HC RAMP MID PT
127	11+15.50	152.72' (RT)	MONTOSO DRIVE	6075.87		PT
128	47+22.83	27.00' (RT)	HIGH NOTE AVENUE	6078.52		HIGH PT
129	47+22.83	27.00' (LT)	HIGH NOTE AVENUE	6078.52		HIGH PT
130	48+79.23	27.00' (RT)	HIGH NOTE AVENUE	6075.32		PC
131	50+35.98	21.38' (RT)	HIGH NOTE AVENUE	6071.58		HC RAMP MID PT
133	49+35.80	21.00' (LT)	HIGH NOTE AVENUE	6073.77		PT
134	48+91.45	21.00' (RT)	HIGH NOTE AVENUE	6074.98		PT
135	24+78.54	18.00' (LT)	AMPLIFY CIRCLE	6069.16		BEGIN C&G
136	24+78.54	18.00' (RT)	AMPLIFY CIRCLE	6069.38		BEGIN C&G
138	51+15.91	21.35' (RT)	HIGH NOTE AVENUE	6070.74		HC RAMP MID PT
140	51+27.89	21.00' (RT)	HIGH NOTE AVENUE	6070.88		LOW PT/ INLET
141	50+22.84	21.00' (LT)	HIGH NOTE AVENUE	6071.83		PCR
142	50+36.03	23.58' (LT)	HIGH NOTE AVENUE	6071.61		HC RAMP MID PT
143	49+23.12	27.00' (LT)	HIGH NOTE AVENUE	6074.12		PC
144	24+98.09	20.73' (RT)	AMPLIFY CIRCLE	6070.25		HC RAMP MID PT
145	24+84.54	18.00' (RT)	AMPLIFY CIRCLE	6069.65		PCR
146	24+78.54	23.92' (RT)	AMPLIFY CIRCLE	6069.81		BEGIN DETACHED SW
147	24+78.54	23.92' (LT)	AMPLIFY CIRCLE	6069.59		BEGIN DETACHED SW
148	24+84.54	18.00' (LT)	AMPLIFY CIRCLE	6069.39		PCR
149	24+98.09	20.73' (LT)	AMPLIFY CIRCLE	6069.97		HC RAMP MID PT
151	51+15.86	23.50' (LT)	HIGH NOTE AVENUE	6070.80		HC RAMP MID PT
152	51+28.21	21.01' (LT)	HIGH NOTE AVENUE	6070.91		LOW PT/ INLET
154	51+81.37	21.00' (RT)	HIGH NOTE AVENUE	6070.75		PC
155	51+81.37	21.00' (LT)	HIGH NOTE AVENUE	6070.75		PC
156	52+54.45	21.00' (RT)	HIGH NOTE AVENUE	6072.28		HC RAMP MID PT
157	52+54.45	21.00' (LT)	HIGH NOTE AVENUE	6072.11		HC RAMP MID PT
256	50+65.84	56.00' (RT)	HIGH NOTE AVENUE	6075.25		PCR
257	50+85.84	56.00' (RT)	HIGH NOTE AVENUE	6074.98		PCR
265	50+91.85	36.39' (RT)	HIGH NOTE AVENUE	6072.71		HC RAMP MID PT
266	50+59.84	36.39' (RT)	HIGH NOTE AVENUE	6073.09		HC RAMP MID PT
267	51+20.84	21.00' (RT)	HIGH NOTE AVENUE	6070.71		PCR
268	50+30.84	21.00' (RT)	HIGH NOTE AVENUE	6071.66		PCR
269	44+15.66	21.00' (RT)	HIGH NOTE AVENUE	6068.68		PCR
270	44+75.66	21.00' (RT)	HIGH NOTE AVENUE	6071.04		PCR
271	11+01.50	10.00' (RT)	MONTOSO DRIVE	6070.80		PCR
272	11+01.50	10.00' (LT)	MONTOSO DRIVE	6070.02		PCR
273	10+97.00	10.00' (RT)	MONTOSO DRIVE	6071.20		BEGIN C&G
274	10+97.00	10.00' (LT)	MONTOSO DRIVE	6070.12		BEGIN C&G
311	52+40.74	21.00' (RT)	HIGH NOTE AVENUE	6072.06		PC
312	52+40.02	21.00' (LT)	HIGH NOTE AVENUE	6071.77		PC
313	52+68.16	21.00' (RT)	HIGH NOTE AVENUE	6072.72		PC
314	52+68.89	21.00' (LT)	HIGH NOTE AVENUE	6072.51		PC

HIGH NOTE AVENUE PROFILE (2)
STA 44+00.00 TO 53+50.00



50 25 0 50 100
HORIZONTAL
ORIGINAL SCALE: 1" = 50'
VERTICAL
ORIGINAL SCALE: 1" = 5'

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

Know what's below. Call before you dig.

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

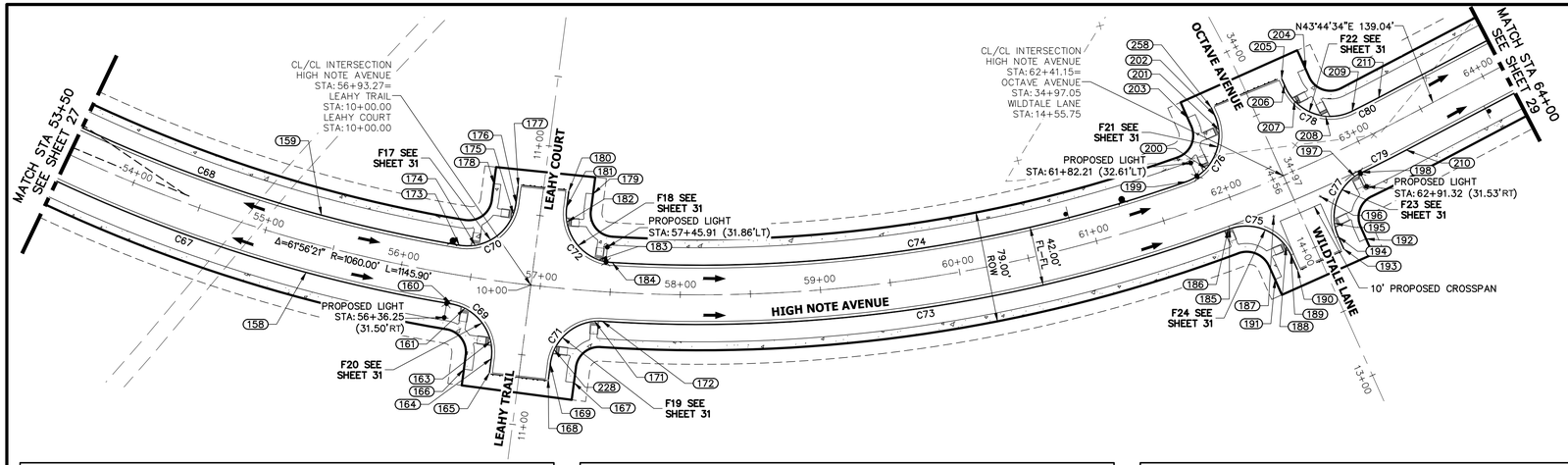
H-SCALE	1"=50'	DESIGNED BY	RDO
V-SCALE	1"=5'	DRAWN BY	SDL
DATE	2/12/21	CHECKED BY	

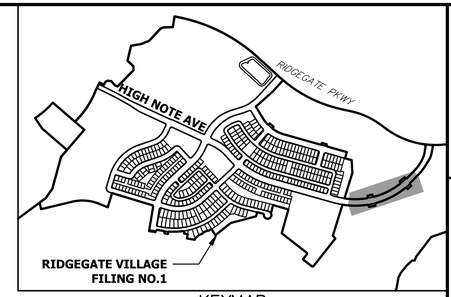
RIDGEGATE SOUTHWEST VILLAGE FILING 1

ROADWAY PLAN & PROFILES–PHASE 1A

SHEET 27 OF 270

JOB NO. 15950.01





KEYMAP
SCALE: 1"=1000'

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
158	55+35.69	21.00' (RT)	HIGH NOTE AVENUE	6080.10		HIGH PT
159	55+35.69	21.00' (LT)	HIGH NOTE AVENUE	6080.10		HIGH PT
160	56+39.18	21.00' (RT)	HIGH NOTE AVENUE	6079.01		PCR
161	56+49.40	22.64' (RT)	HIGH NOTE AVENUE	6078.51		HC RAMP MID PT
163	10+43.45	23.14' (RT)	LEAHY TRAIL	6076.71		HC RAMP MID PT
164	10+55.49	21.00' (RT)	LEAHY TRAIL	6076.44		PCR
165	10+65.53	21.00' (RT)	LEAHY TRAIL	6076.21		END C&G
166	10+65.53	39.50' (RT)	LEAHY TRAIL	6076.80		END DETACHED SW
167	10+64.84	39.50' (LT)	LEAHY TRAIL	6076.54		END DETACHED SW
168	10+64.84	21.00' (LT)	LEAHY TRAIL	6076.18		END C&G
169	10+53.71	21.00' (LT)	LEAHY TRAIL	6076.20		PCR

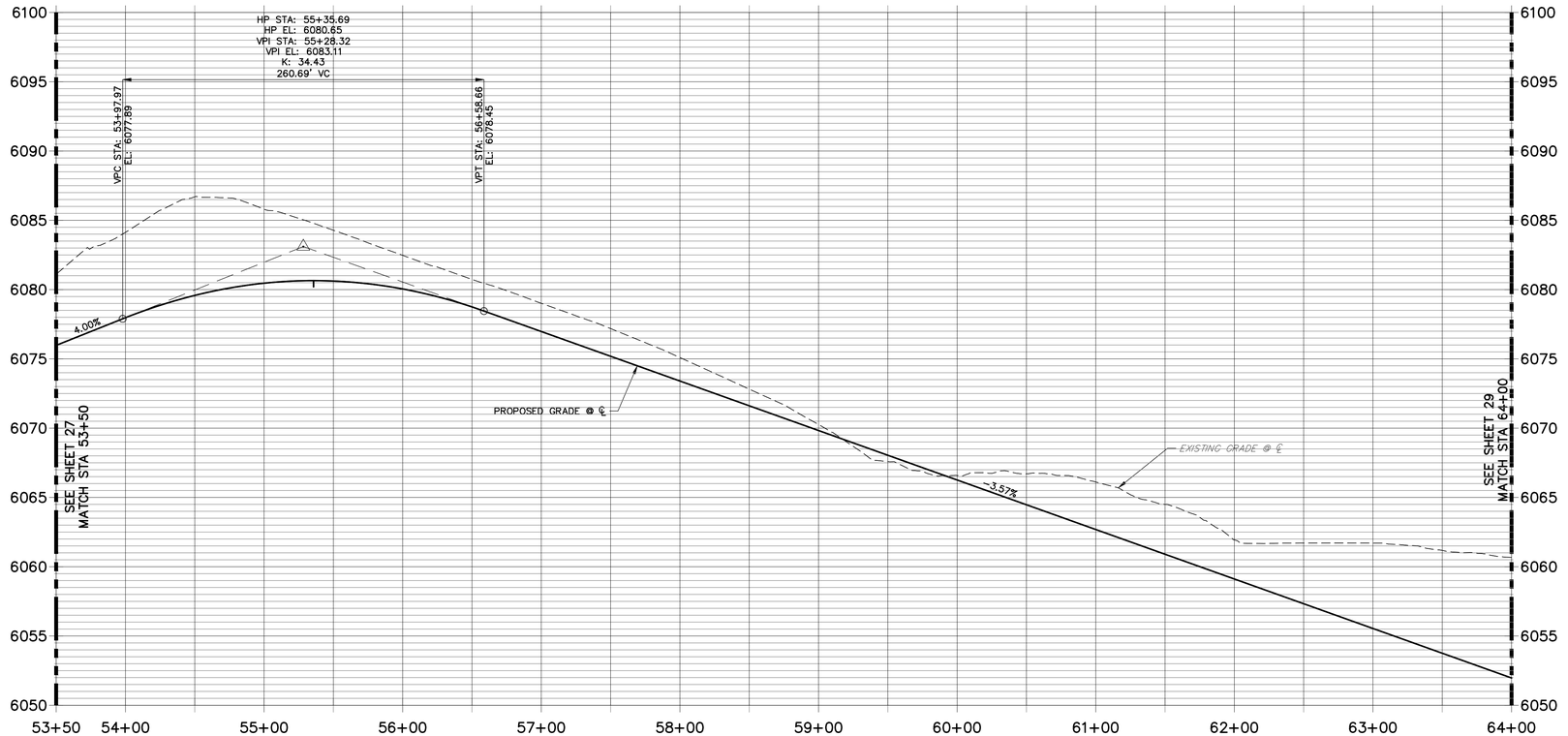
POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
171	57+40.38	21.42' (RT)	HIGH NOTE AVENUE	6075.37		HC RAMP MID PT
172	57+45.62	21.00' (RT)	HIGH NOTE AVENUE	6075.23		PCR
173	56+38.29	21.00' (LT)	HIGH NOTE AVENUE	6078.72		PCR
174	56+49.72	22.77' (LT)	HIGH NOTE AVENUE	6078.50		HC RAMP MID PT
175	10+48.46	18.93' (LT)	LEAHY COURT	6077.50		HC RAMP MID PT
176	10+56.48	18.00' (LT)	LEAHY COURT	6077.54		PCR
177	10+68.66	18.00' (LT)	LEAHY COURT	6077.53		END C&G
178	10+68.15	35.50' (LT)	LEAHY COURT	6077.81		END DETACHED SW
179	10+70.20	35.50' (RT)	LEAHY COURT	6076.67		END DETACHED SW
180	10+69.70	18.00' (RT)	LEAHY COURT	6076.95		END C&G
181	10+58.34	18.00' (RT)	LEAHY COURT	6076.96		PCR

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
182	10+47.93	19.59' (RT)	LEAHY COURT	6076.87		HC RAMP MID PT
183	57+40.33	22.33' (LT)	HIGH NOTE AVENUE	6075.39		HC RAMP MID PT
184	57+50.27	21.00' (LT)	HIGH NOTE AVENUE	6075.06		PCR
185	61+92.02	21.00' (RT)	HIGH NOTE AVENUE	6059.09		PCR
186	61+91.00	21.00' (RT)	HIGH NOTE AVENUE	6059.12		HC RAMP MID PT
187	62+23.94	24.00' (RT)	HIGH NOTE AVENUE	6057.91		FL-FL INTERCEPT
188	14+08.79	18.69' (LT)	WILDTALE LANE	6058.13		HC RAMP MID PT
189	14+01.86	18.00' (LT)	WILDTALE LANE	6058.18		PCR
190	13+90.63	18.00' (LT)	WILDTALE LANE	6058.43		BEGIN C&G
191	13+90.63	35.50' (LT)	WILDTALE LANE	6059.23		BEGIN DETACHED SW
192	13+90.63	35.50' (RT)	WILDTALE LANE	6059.23		BEGIN DETACHED SW

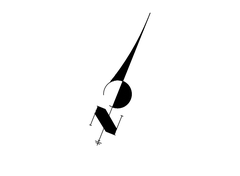
POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
193	13+90.63	18.00' (RT)	WILDTALE LANE	6058.43		BEGIN C&G
194	14+00.14	18.00' (RT)	WILDTALE LANE	6058.01		PCR
195	14+09.97	19.41' (RT)	WILDTALE LANE	6057.59		HC RAMP MID PT
196	62+59.15	24.00' (RT)	HIGH NOTE AVENUE	6056.82		FL-FL INTERCEPT
197	62+86.88	21.47' (RT)	HIGH NOTE AVENUE	6055.71		HC RAMP MID PT
198	62+92.40	21.00' (RT)	HIGH NOTE AVENUE	6055.49		PCR
199	61+74.59	21.00' (LT)	HIGH NOTE AVENUE	6059.82		PCR
200	61+91.55	25.03' (LT)	HIGH NOTE AVENUE	6059.18		HC RAMP MID PT
201	34+48.49	28.60' (RT)	OCTAVE AVENUE	6057.96		HC RAMP MID PT
202	34+38.01	27.00' (RT)	OCTAVE AVENUE	6057.26		PCR
203	34+31.40	45.50' (RT)	OCTAVE AVENUE	6057.74		BEGIN DETACHED SW

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
204	34+34.14	45.50' (LT)	OCTAVE AVENUE	6056.18		BEGIN DETACHED SW
205	34+33.62	27.00' (LT)	OCTAVE AVENUE	6055.46		BEGIN C&G
206	34+38.17	27.04' (LT)	OCTAVE AVENUE	6055.68		PCR
207	34+51.86	28.96' (LT)	OCTAVE AVENUE	6056.07		HC RAMP MID PT
208	62+86.58	26.15' (LT)	HIGH NOTE AVENUE	6055.77		HC RAMP MID PT
209	63+05.59	21.00' (LT)	HIGH NOTE AVENUE	6054.71		PCR
210	63+27.27	21.00' (RT)	HIGH NOTE AVENUE	6053.90		PT
211	63+27.27	21.00' (LT)	HIGH NOTE AVENUE	6053.90		PT
228	10+43.45	22.54' (LT)	LEAHY TRAIL	6076.12		HC RAMP MID PT
258	34+32.01	27.00' (RT)	OCTAVE AVENUE	6056.90		BEGIN C&G

HIGH NOTE AVENUE PROFILE (3)
STA 53+50.00 TO 64+00.00



CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C67	20°03'18"	1081.00'	378.38'
C68	19°58'00"	1039.00'	362.08'
C69	88°01'51"	35.00'	53.78'
C70	92°01'03"	35.00'	56.21'
C71	86°12'57"	35.00'	52.67'
C72	94°02'08"	35.00'	57.44'
C73	24°07'45"	1081.00'	455.24'
C74	22°55'31"	1039.00'	415.73'
C75	85°45'14"	35.00'	52.39'
C76	94°34'30"	35.00'	57.77'
C77	88°12'25"	35.00'	53.88'
C78	95°54'51"	35.00'	58.59'
C79	1°53'04"	1081.00'	35.56'
C80	1°10'19"	1039.00'	21.25'



ROADWAY NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE COVER SHEET FOR BENCHMARK.
4. SEE SHEET 8 FOR LEGEND.
5. SEE SHEET 16 FOR TYPICAL STREET SECTIONS.
6. SEE SHEET 30-31 FOR CURB RETURN PROFILES.
7. SEE SHEETS 32-37 FOR CURB RAMP DETAILS.
8. SEE SHEETS 40-44 FOR SIGNAGE AND STRIPING.
9. ALL CURB RADII ARE 35' UNLESS OTHERWISE NOTED.
10. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.

811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. — DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

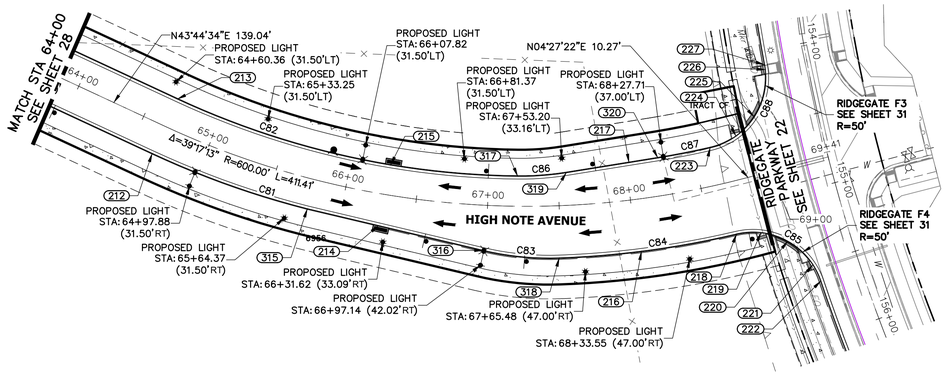
H-SCALE	1"=50'
V-SCALE	1"=5'
DATE	2/12/21
DESIGNED BY	RDO
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

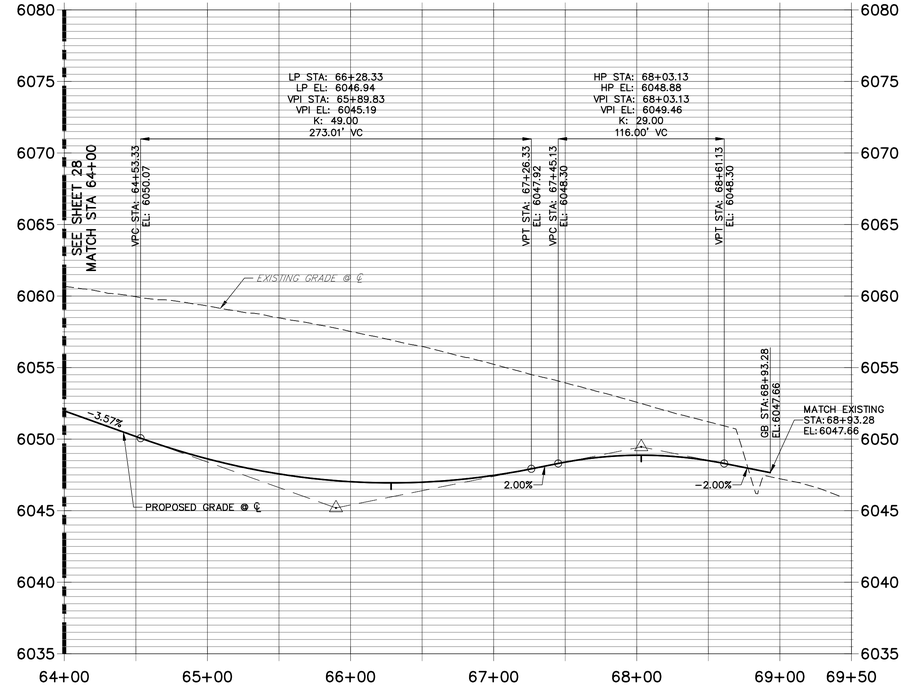
ROADWAY PLAN & PROFILES-PHASE 1A

SHEET 28 OF 270

JOB NO. 15950.01

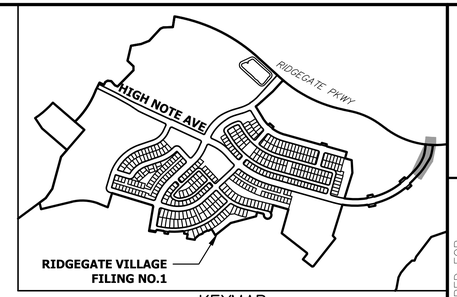


HIGH NOTE AVENUE PROFILE (4)
STA 64+00.00 TO 69+50.00



ROADWAY NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE COVER SHEET FOR BENCHMARK.
4. SEE SHEET 8 FOR LEGEND.
5. SEE SHEET 16 FOR TYPICAL STREET SECTIONS.
6. SEE SHEET 30-31 FOR CURB RETURN PROFILES.
7. SEE SHEETS 32-37 FOR CURB RAMP DETAILS.
8. SEE SHEETS 40-44 FOR SIGNAGE AND STRIPING.
9. ALL CURB RADII ARE 35' UNLESS OTHERWISE NOTED.
10. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.



KEYMAP
SCALE: 1"=1000'

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
212	64+66.31	21.00' (RT)	HIGH NOTE AVENUE	6048.96		PC
213	64+66.31	21.00' (LT)	HIGH NOTE AVENUE	6048.96		PC
214	66+26.89	22.22' (RT)	HIGH NOTE AVENUE	6046.29		LOW PT/ INLET
215	66+28.26	21.00' (LT)	HIGH NOTE AVENUE	6046.28		LOW PT/ INLET
216	68+03.13	36.50' (RT)	HIGH NOTE AVENUE	6048.21		HIGH PT
217	68+02.22	26.15' (LT)	HIGH NOTE AVENUE	6048.22		HIGH PT
218	68+66.75	36.50' (RT)	HIGH NOTE AVENUE	6047.40		PCR
219	68+82.88	39.63' (RT)	HIGH NOTE AVENUE	6046.07		HC RAMP MID PT
220	68+99.53	50.07' (RT)	HIGH NOTE AVENUE	6046.78		HC RAMP MID PT
221	155+49.94	31.15' (RT)	RIDGEGATE PARKWAY	6046.06		HC RAMP MID PT
222	155+62.09	29.50' (RT)	RIDGEGATE PARKWAY	6046.01		PCR
223	68+62.55	26.50' (LT)	HIGH NOTE AVENUE	6047.61		PCR
224	68+82.68	30.09' (LT)	HIGH NOTE AVENUE	6047.09		HC RAMP MID PT
225	68+98.42	39.94' (LT)	HIGH NOTE AVENUE	6047.62		HC RAMP MID PT
226	154+13.23	29.62' (RT)	RIDGEGATE PARKWAY	6047.64		HC RAMP MID PT
227	154+09.90	29.50' (RT)	RIDGEGATE PARKWAY	6047.71		PCR
315	65+77.67	21.00' (RT)	HIGH NOTE AVENUE	6046.54		PT
316	66+98.35	31.58' (RT)	HIGH NOTE AVENUE	6046.83		PC
317	67+20.77	21.00' (LT)	HIGH NOTE AVENUE	6047.15		PC
318	67+48.74	36.50' (RT)	HIGH NOTE AVENUE	6047.70		PC
319	67+56.08	22.90' (LT)	HIGH NOTE AVENUE	6047.88		PC
320	68+23.59	26.50' (LT)	HIGH NOTE AVENUE	6048.14		PC

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C81	10°38'02"	621.00'	115.26'
C82	24°17'55"	579.00'	245.55'
C83	15°21'33"	200.00'	53.61'
C84	11°16'09"	636.50'	125.19'
C85	19°28'12"	50.00'	16.99'
C86	9°46'23"	200.00'	34.11'
C87	3°43'15"	573.49'	37.24'
C88	87°43'19"	50.00'	76.55'

50 25 0 50 100
HORIZONTAL
ORIGINAL SCALE: 1" = 50'
VERTICAL
ORIGINAL SCALE: 1" = 5'

Know what's **below.**
Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=50'
V-SCALE	1"=5'
DATE	2/12/21
DESIGNED BY	RDO
DRAWN BY	SDL
CHECKED BY	

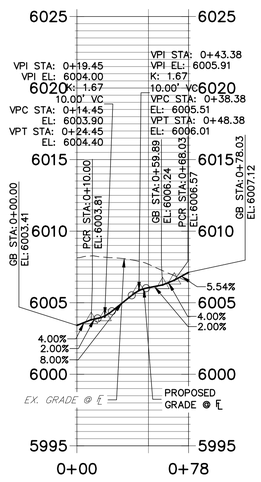
RIDGEGATE SOUTHWEST
VILLAGE FILING 1

ROADWAY PLAN & PROFILES-PHASE 1A

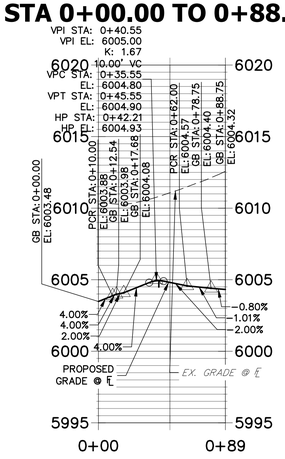
SHEET 29 OF 270

JOB NO. 15950.01

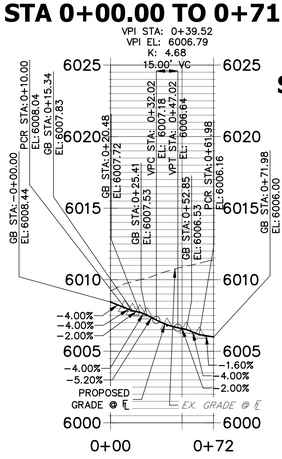
F3 PROFILE
STA 0+00.00 TO 0+78.03



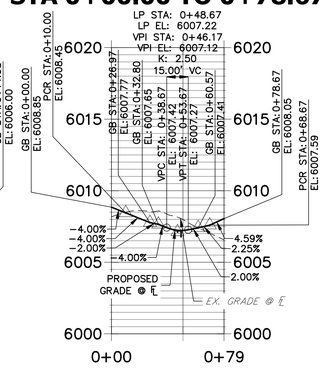
F4 PROFILE
STA 0+00.00 TO 0+88.75



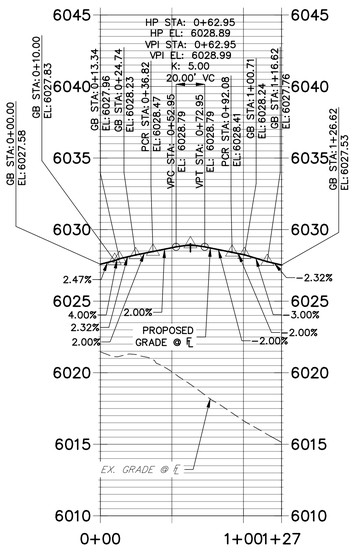
F5 PROFILE
STA 0+00.00 TO 0+71.98



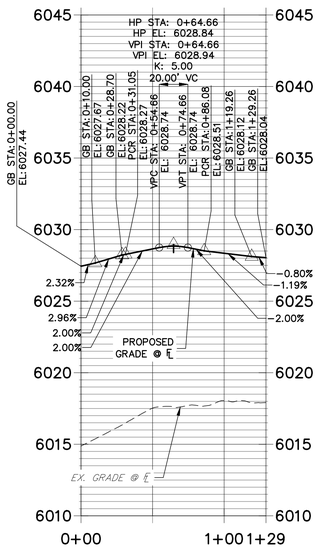
F6 PROFILE
STA 0+00.00 TO 0+78.67



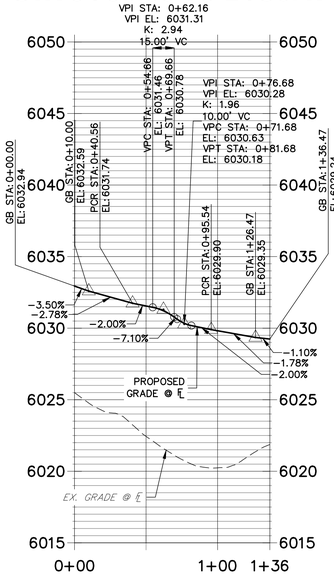
F7 PROFILE
STA 0+00.00 TO 1+26.62



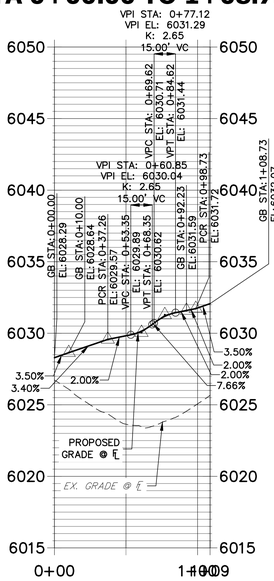
F8 PROFILE
STA 0+00.00 TO 1+29.26



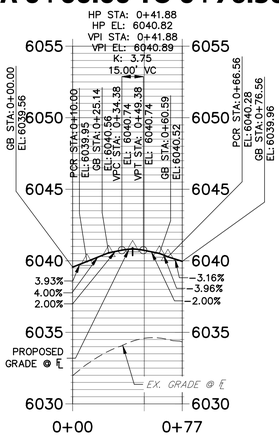
F9 PROFILE
STA 0+00.00 TO 1+36.47



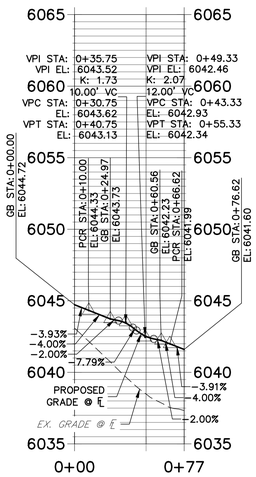
F10 PROFILE
STA 0+00.00 TO 1+08.73



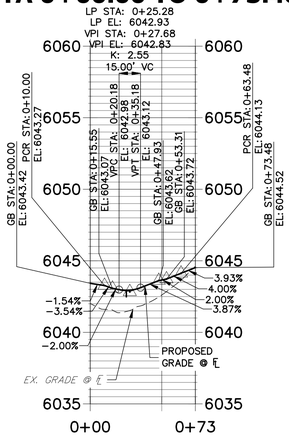
F11 PROFILE
STA 0+00.00 TO 0+76.56



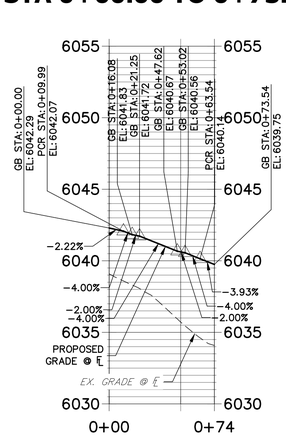
F12 PROFILE
STA 0+00.00 TO 0+76.62



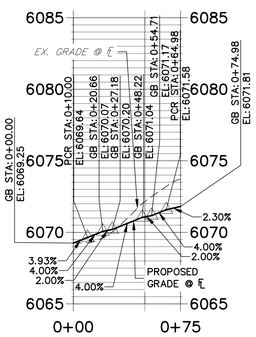
F13 PROFILE
STA 0+00.00 TO 0+73.48



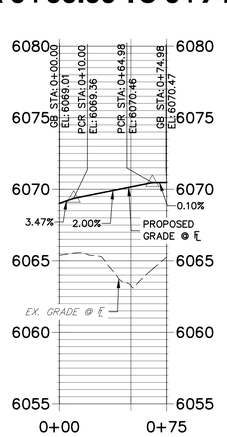
F14 PROFILE
STA 0+00.00 TO 0+73.54



F15 PROFILE
STA 0+00.00 TO 0+74.98



F16 PROFILE
STA 0+00.00 TO 0+74.98



811 Know what's below. Call before you dig.

50 25 0 50 100

HORIZONTAL
ORIGINAL SCALE: 1" = 50'
VERTICAL
ORIGINAL SCALE: 1" = 5'

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=50'	DESIGNED BY	RDO
V-SCALE	1"=5'	DRAWN BY	SDL
DATE	2/12/21	CHECKED BY	

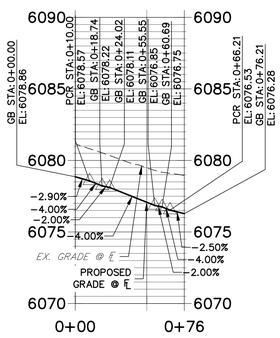
RIDGEGATE SOUTHWEST VILLAGE FILING 1

CURB RETURN PROFILES–PHASE 1A

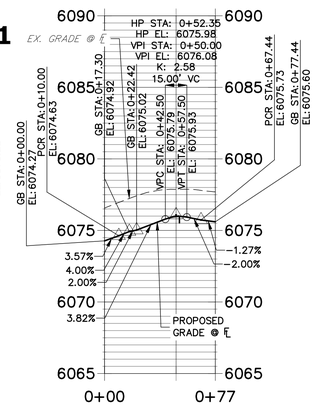
SHEET 30 OF 270

JOB NO. 15950.01

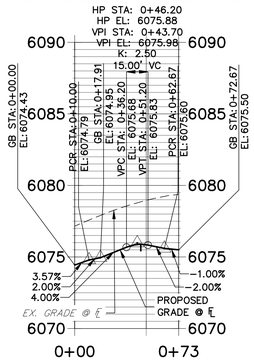
F17 PROFILE
STA 0+00.00 TO 0+76.21



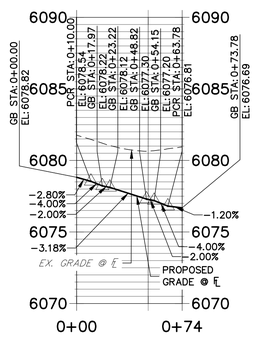
F18 PROFILE
STA 0+00.00 TO 0+77.44



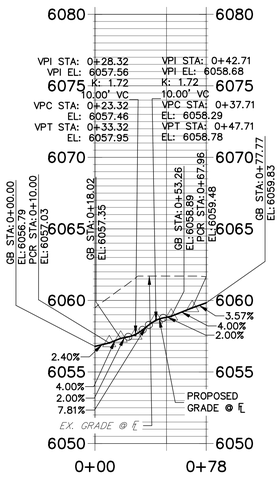
F19 PROFILE
STA 0+00.00 TO 0+72.67



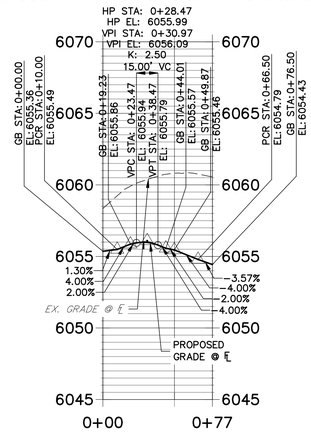
F20 PROFILE
STA 0+00.00 TO 0+73.78



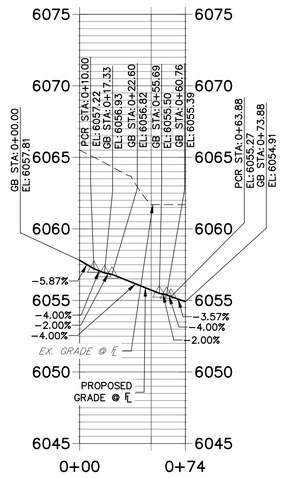
F21 PROFILE
STA 0+00.00 TO 0+77.77



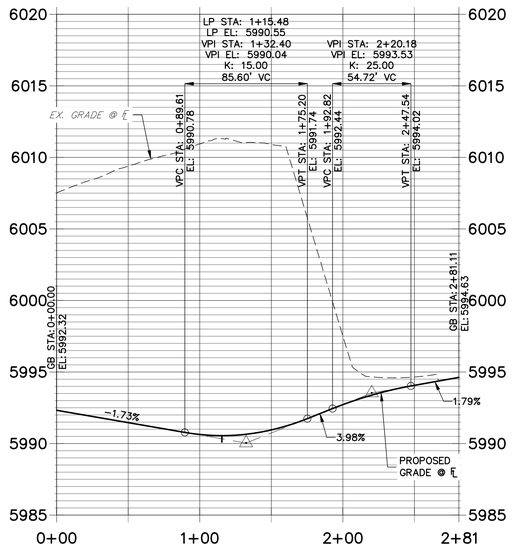
F22 PROFILE
STA 0+00.00 TO 0+76.50



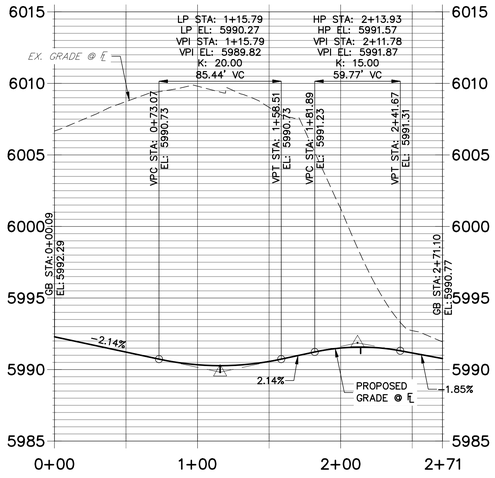
F23 PROFILE
STA 0+00.00 TO 0+73.88



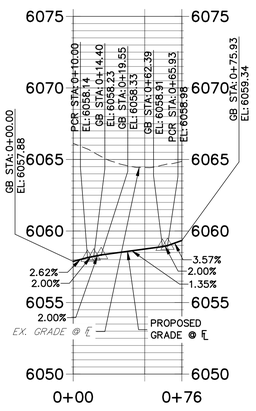
RIDGEGATE F2 PROFILE
STA 0+00.00 TO 2+81.11



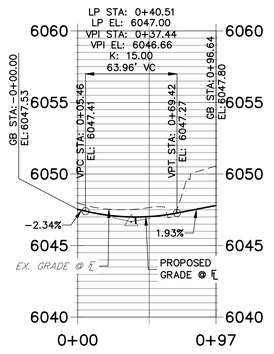
RIDGEGATE F1 PROFILE
STA 0+00.00 TO 2+71.10



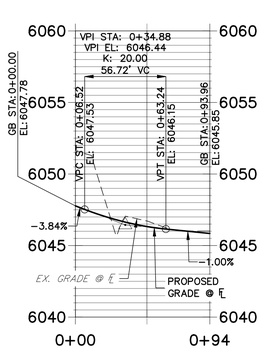
F24 PROFILE
STA 0+00.00 TO 0+75.93



RIDGEGATE F3 PROFILE
STA 0+00.00 TO 0+96.64



RIDGEGATE F4 PROFILE
STA 0+00.00 TO 0+93.96



Know what's below. Call before you dig.

50 25 0 50 100

HORIZONTAL
ORIGINAL SCALE: 1" = 50'
VERTICAL
ORIGINAL SCALE: 1" = 5'

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

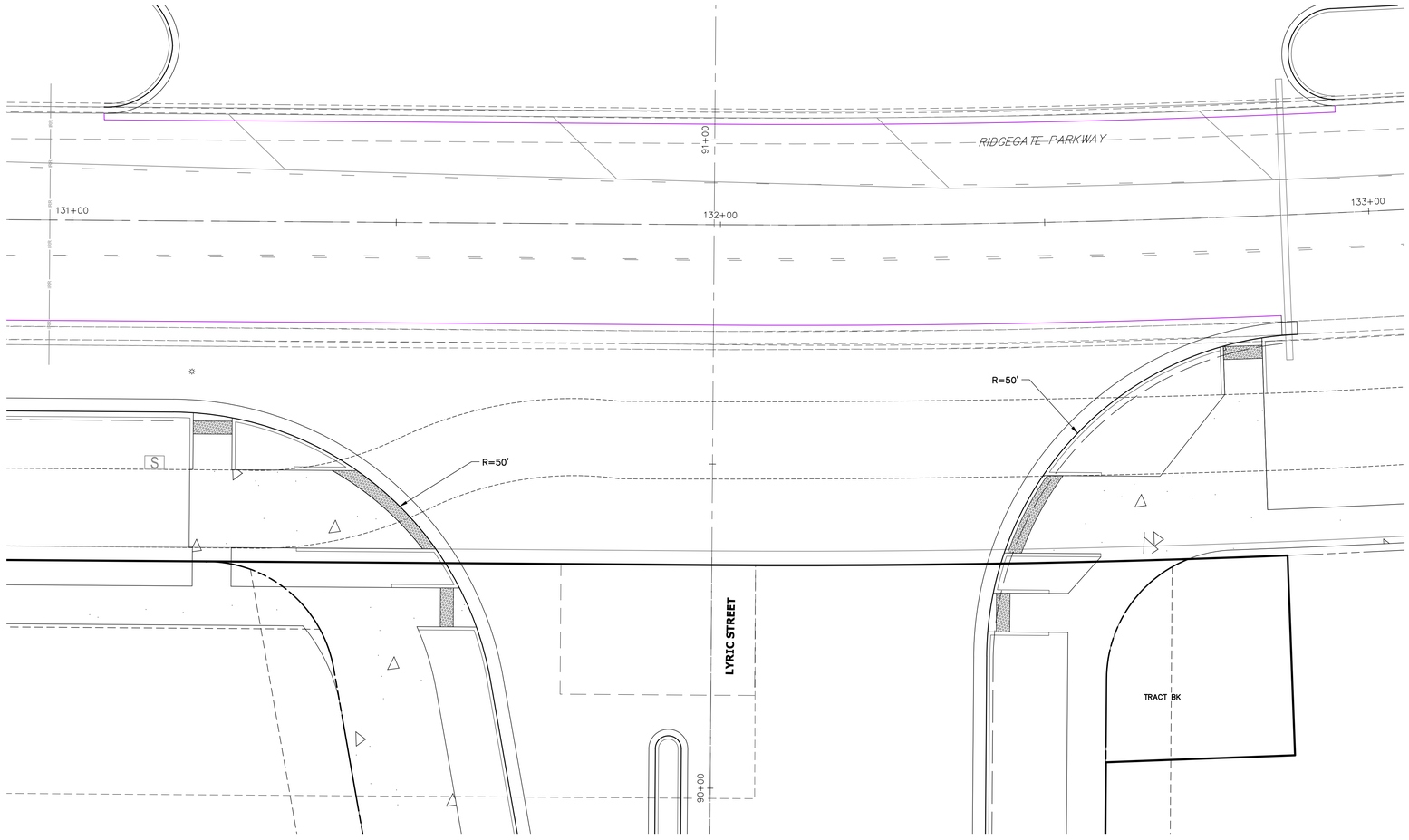
H-SCALE	1"=50'
V-SCALE	1"=5'
DATE	2/12/21
DESIGNED BY	RDO
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST
VILLAGE FILING 1

CURB RETURN
PROFILES-PHASE 1A

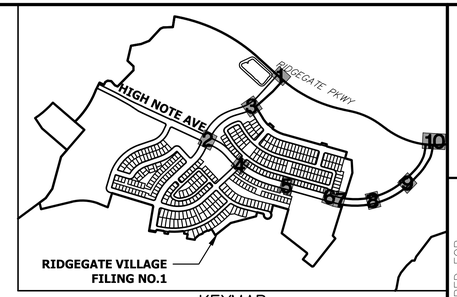
SHEET 31 OF 270

JOB NO. 15950.01

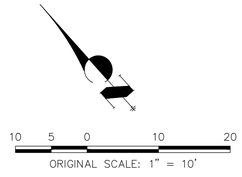


AREA 1

DETAILS WILL CHANGE BASED ON CYCLE TRACK RECONFIGURATION



KEYMAP
SCALE: 1"=1000'



CURB RAMP DETAIL NOTES

1. SEE SHEET 30–31 FOR CURB RETURN PROFILES.
2. ALL CURB RAMP RADII ARE 35' UNLESS OTHERWISE NOTED.
3. SEE DETAILS FOR CURB RAMPS ON SHEETS 65–70.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

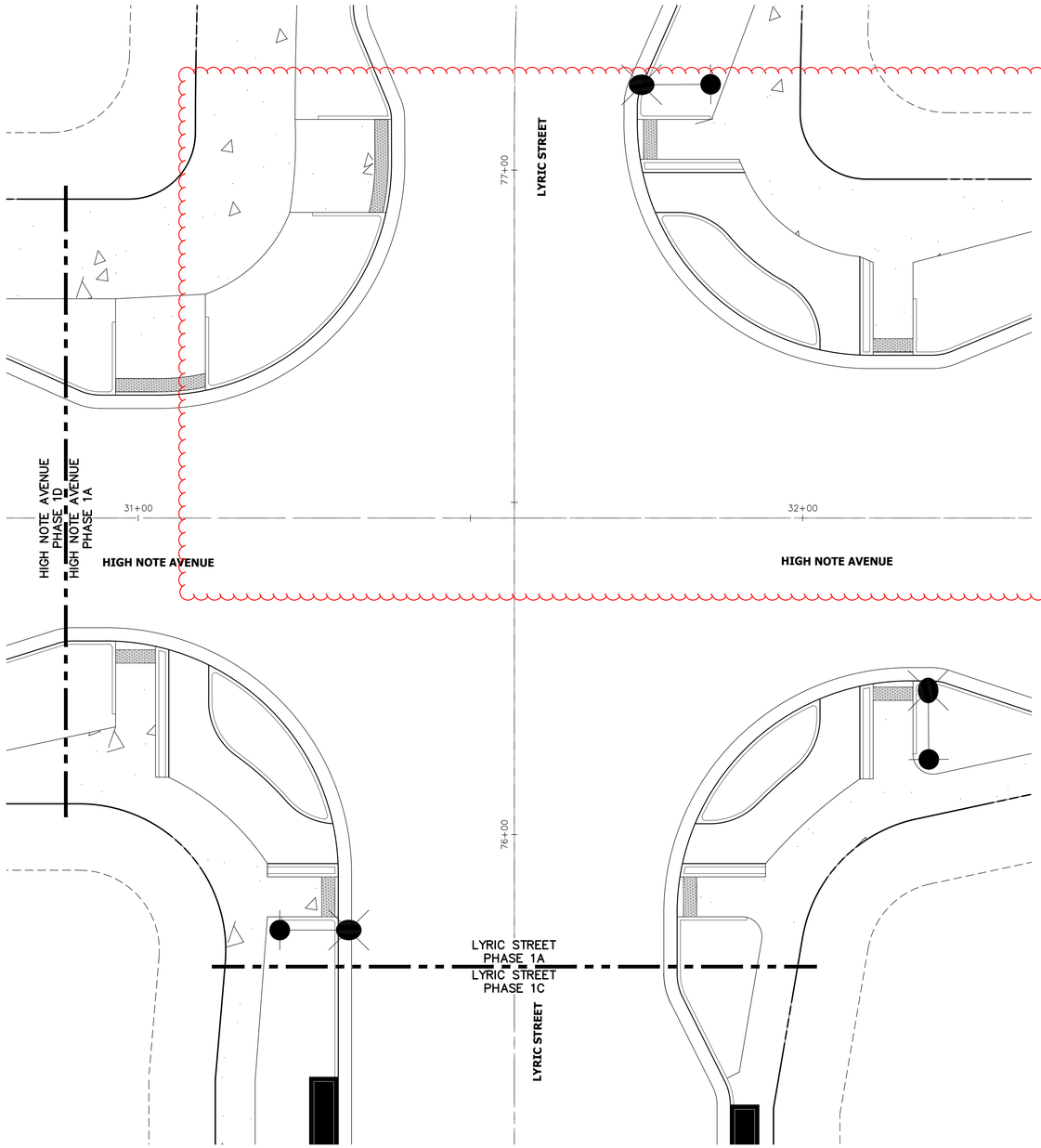
H-SCALE	1"=10'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	RDO
DRAWN BY	SDL
CHECKED BY	

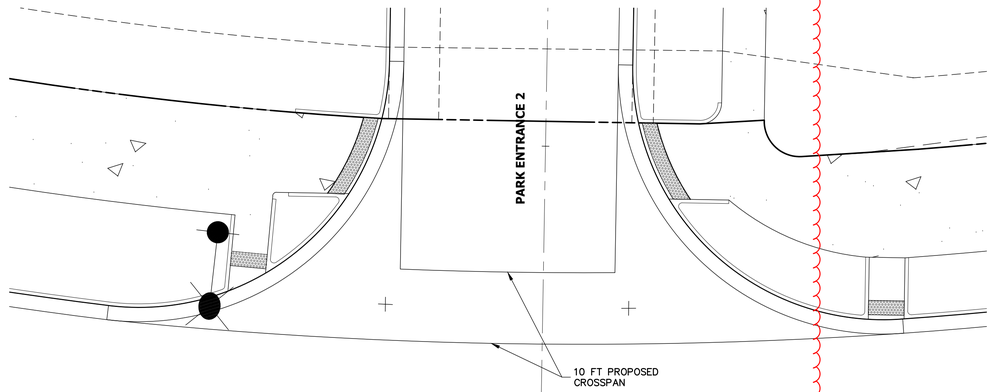
RIDGEGATE SOUTHWEST VILLAGE FILING 1

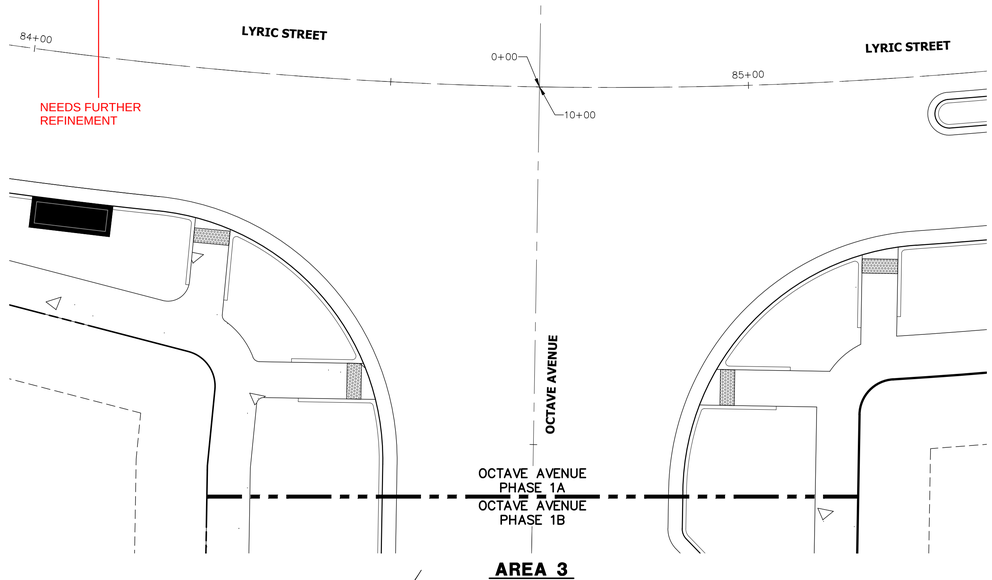
CURB RAMP DETAILS–PHASE 1A

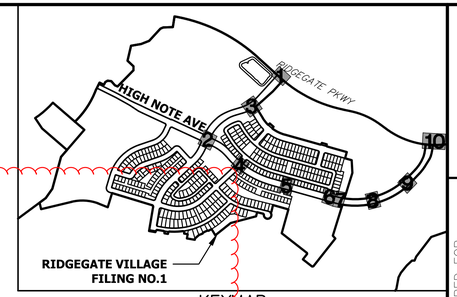
SHEET 32 OF 270

JOB NO. 15950.01









KEYMAP
SCALE: 1"=1000'

10 5 0 10 20
ORIGINAL SCALE: 1" = 10'

CURB RAMP DETAIL NOTES

1. SEE SHEET 30–31 FOR CURB RETURN PROFILES.
2. ALL CURB RAMP RADII ARE 35' UNLESS OTHERWISE NOTED.
3. SEE DETAILS FOR CURB RAMPS ON SHEETS 65–70.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO P.E. REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

No.	REVISION	BY	DATE

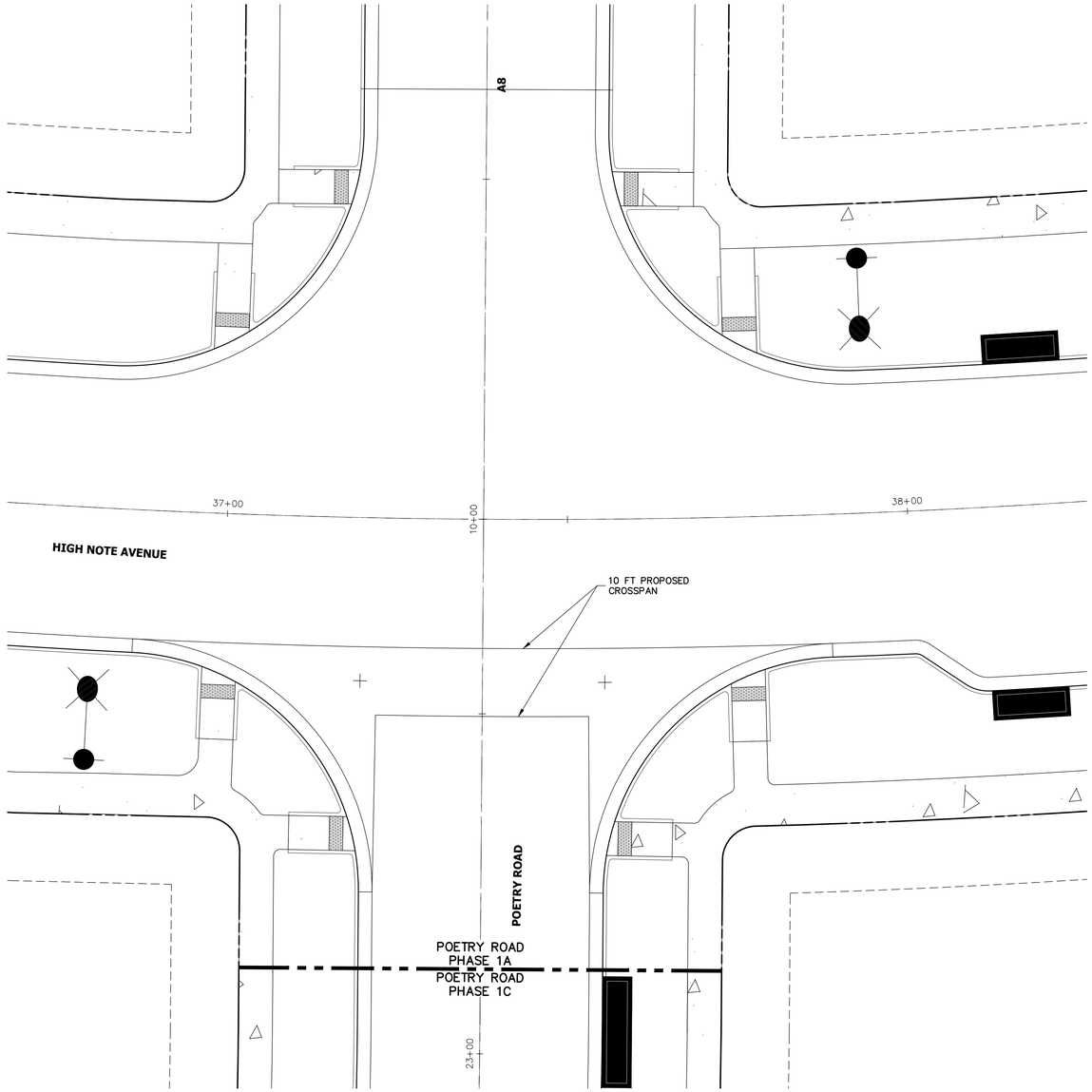
H–SCALE	1"=10'	DESIGNED BY	RDO
V–SCALE	N/A	DRAWN BY	SDL
DATE	2/12/21	CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

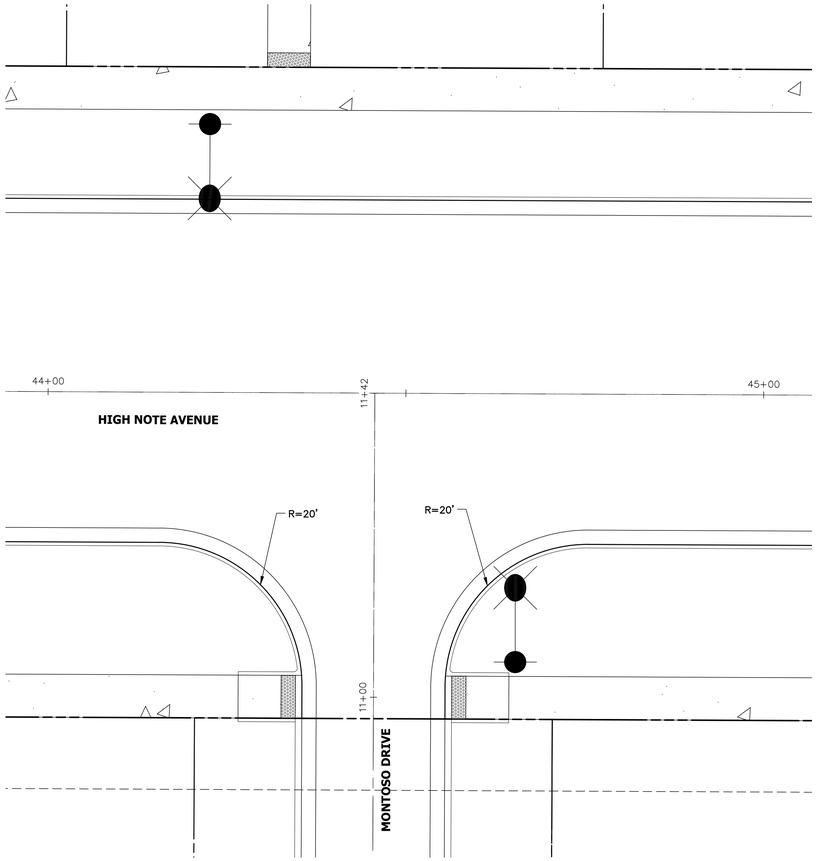
CURB RAMP DETAILS–PHASE 1A

SHEET 33 OF 270

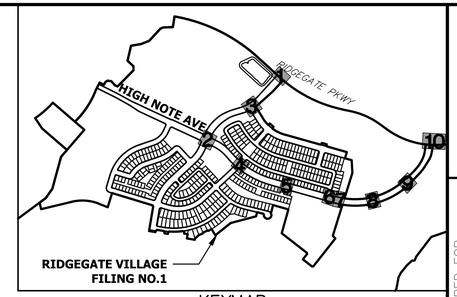
JOB NO. 15950.01



AREA 4



AREA 5



KEYMAP
SCALE: 1"=1000'

10 5 0 10 20
ORIGINAL SCALE: 1" = 10'

CURB RAMP DETAIL NOTES

1. SEE SHEET 30–31 FOR CURB RETURN PROFILES.
2. ALL CURB RAMP RADII ARE 35' UNLESS OTHERWISE NOTED.
3. SEE DETAILS FOR CURB RAMPS ON SHEETS 65–70.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

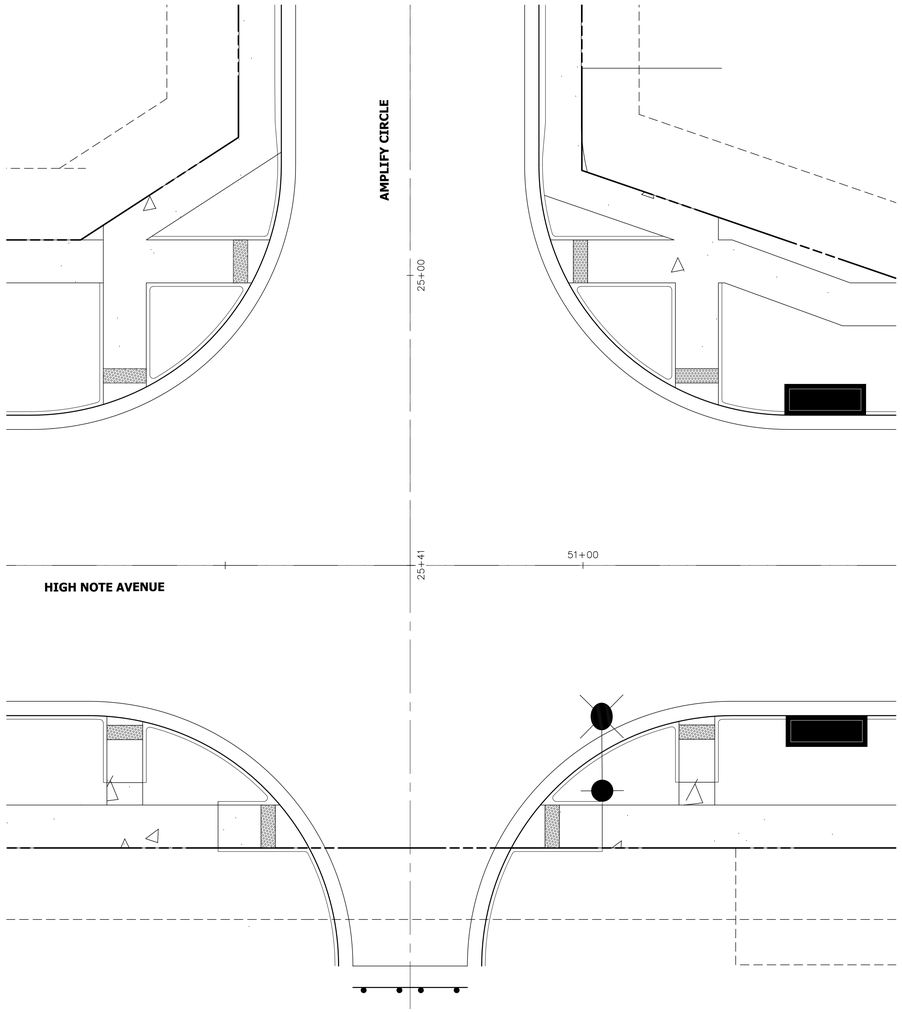
H-SCALE	1"=10'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	RDO
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

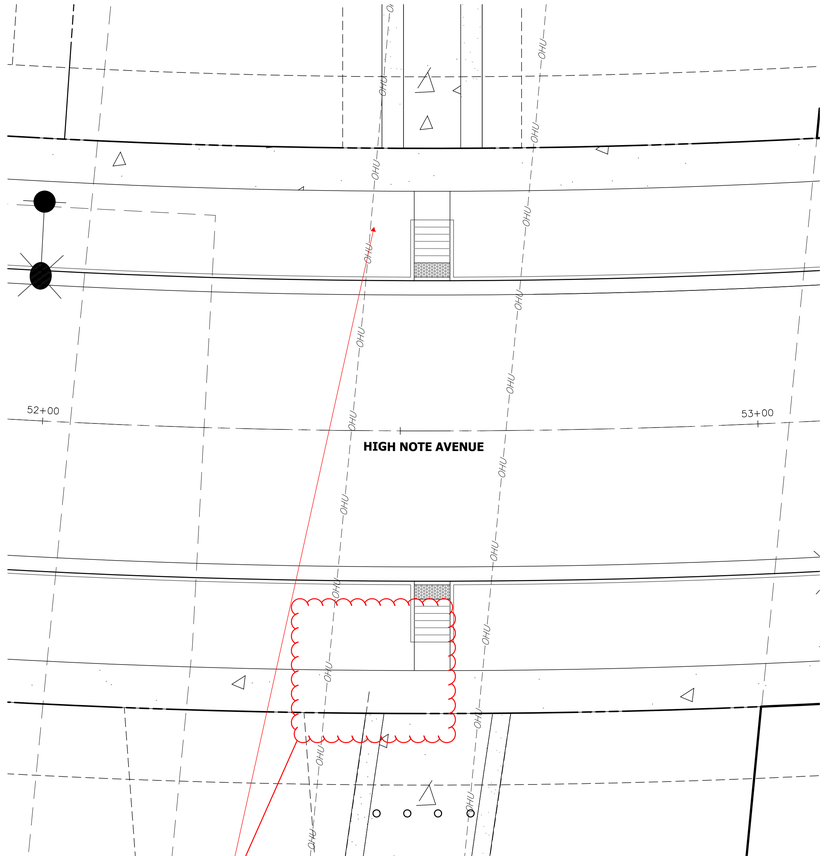
CURB RAMP DETAILS–PHASE 1A

SHEET 34 OF 270

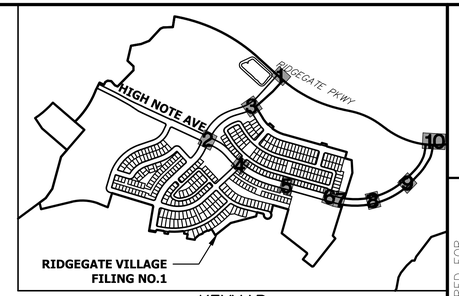
JOB NO. 15950.01



AREA 6



AREA 7



KEYMAP
SCALE: 1"=1000'

CURB RAMP DETAIL NOTES

1. SEE SHEET 30–31 FOR CURB RETURN PROFILES.
2. ALL CURB RAMP RADII ARE 35' UNLESS OTHERWISE NOTED.
3. SEE DETAILS FOR CURB RAMPS ON SHEETS 65–70.

10 5 0 10 20
ORIGINAL SCALE: 1" = 10'

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

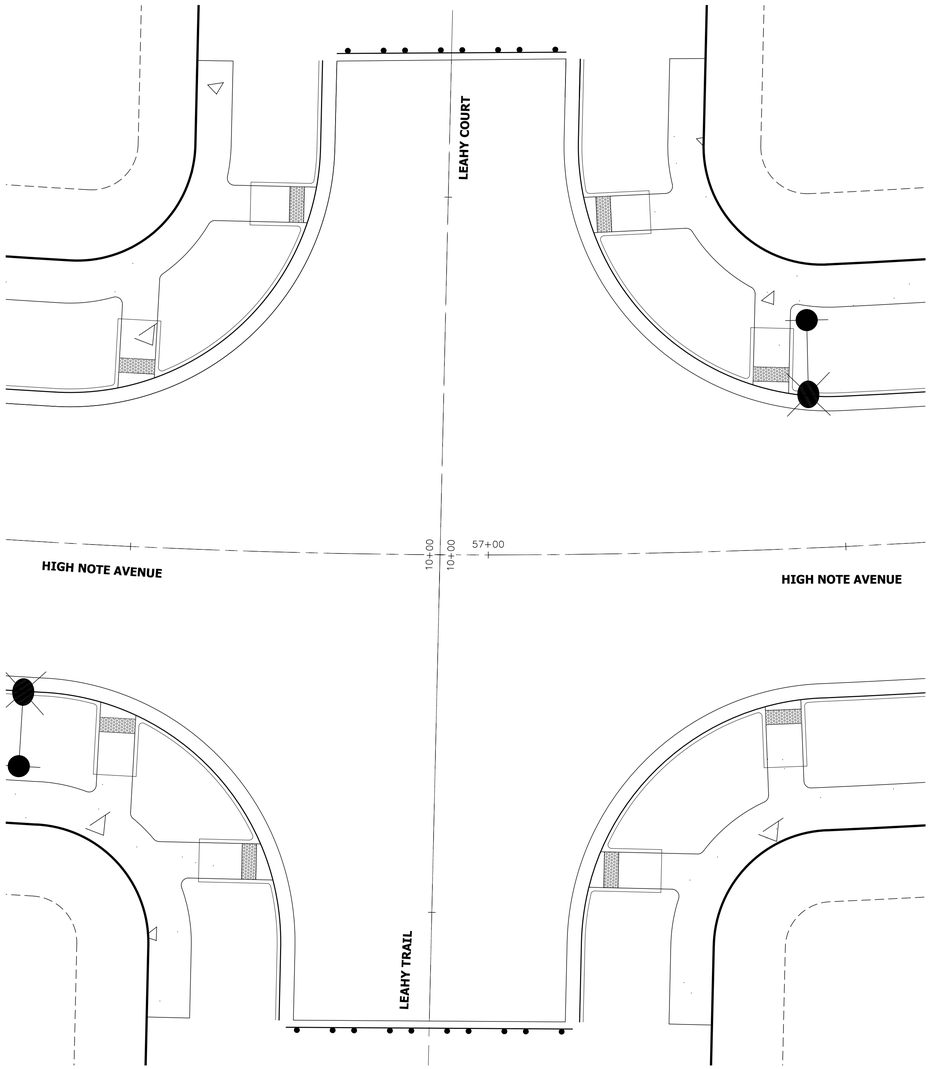
H-SCALE	1"=10'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	RDO
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

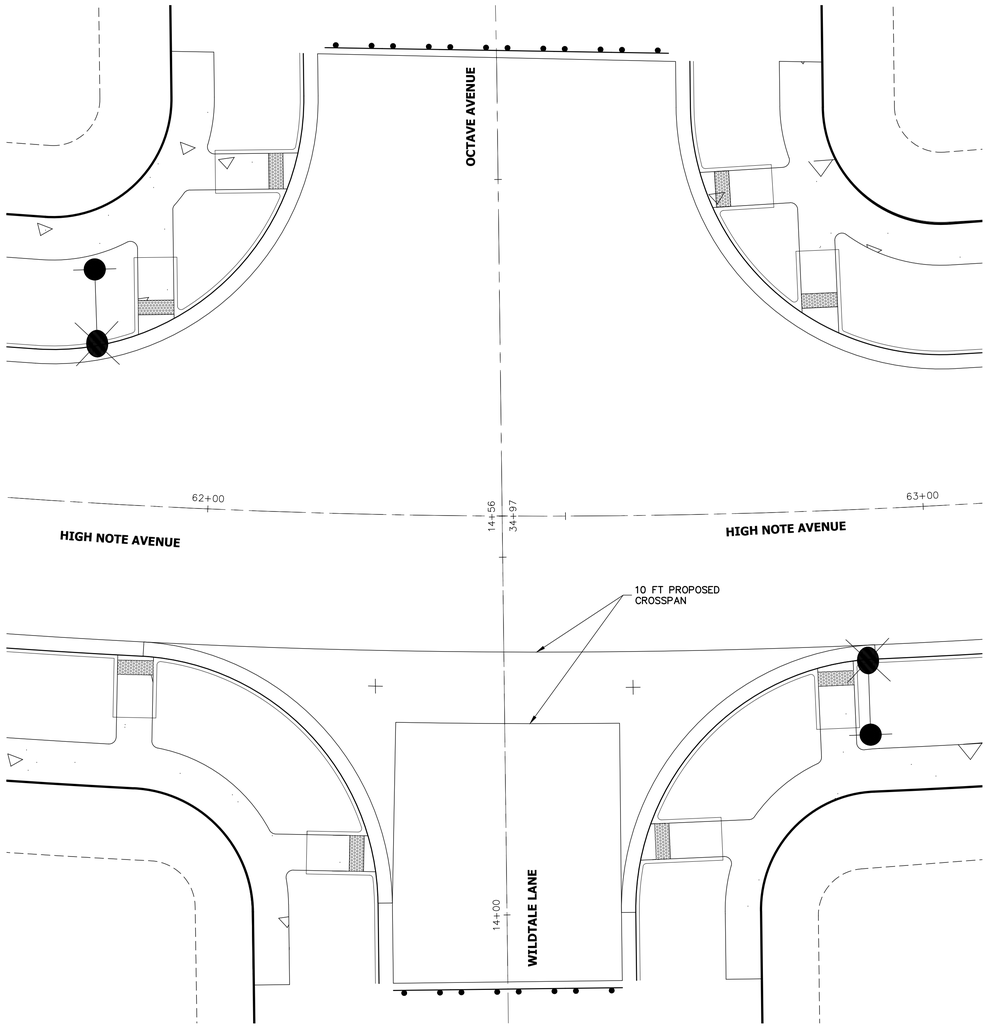
CURB RAMP DETAILS–PHASE 1A

SHEET 35 OF 270

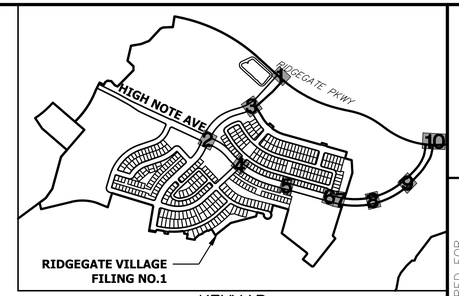
JOB NO. 15950.01



AREA 8



AREA 9



KEYMAP
SCALE: 1"=1000'

10 5 0 10 20
ORIGINAL SCALE: 1" = 10'

CURB RAMP DETAIL NOTES

1. SEE SHEET 30–31 FOR CURB RETURN PROFILES.
2. ALL CURB RAMP RADII ARE 35' UNLESS OTHERWISE NOTED.
3. SEE DETAILS FOR CURB RAMPS ON SHEETS 65–70.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

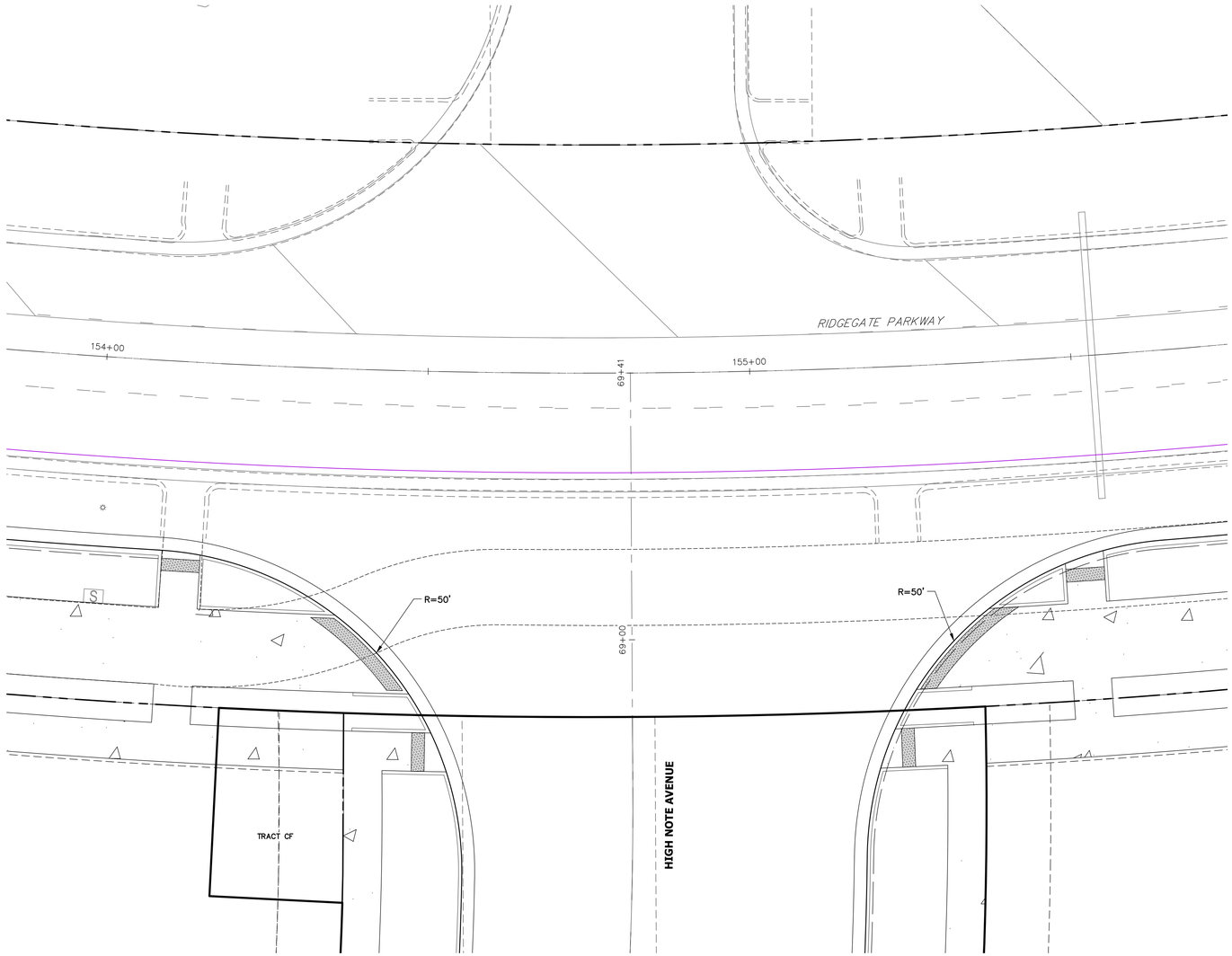
H-SCALE	1"=10'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	RDO
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

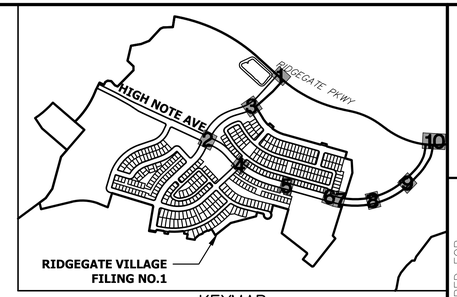
CURB RAMP DETAILS-PHASE 1A

SHEET 36 OF 270

JOB NO. 15950.01



AREA 10



KEYMAP
SCALE: 1"=1000'

CURB RAMP DETAIL NOTES

1. SEE SHEET 30–31 FOR CURB RETURN PROFILES.
2. ALL CURB RAMP RADII ARE 35' UNLESS OTHERWISE NOTED.
3. SEE DETAILS FOR CURB RAMPS ON SHEETS 65–70.

10 5 0 10 20
ORIGINAL SCALE: 1" = 10'

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

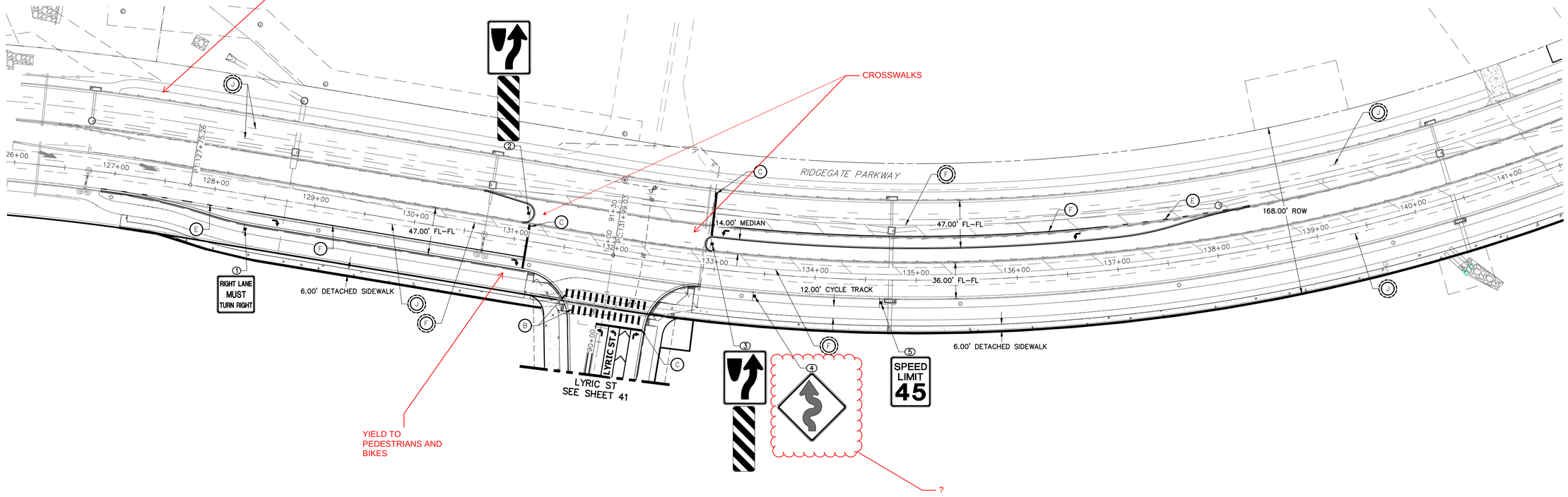
H-SCALE	1"=10'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	RDO
DRAWN BY	SDL
CHECKED BY	

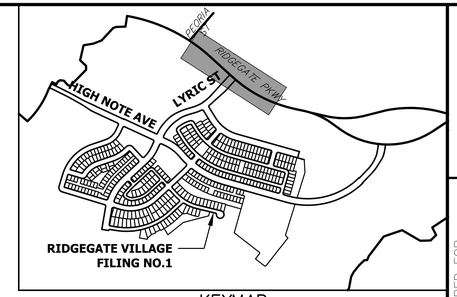
RIDGEGATE SOUTHWEST VILLAGE FILING 1

CURB RAMP DETAILS–PHASE 1A

SHEET 37 OF 270

JOB NO. 15950.01





KEYMAP
SCALE: 1"=1000'

SIGN TABULATION					
POINT NUMBER	STATION	OFFSET	ALIGNMENT	DESCRIPTION	NOTES
1	128+35.78	34.19' (RT	RIDGEGATE PARKWAY	36"X36" R3–7R	
2	131+09.81	27.28' (LT)	RIDGEGATE PARKWAY	24"X30" R4–7 12"X36" OM–3L	
3	132+95.27	24.59' (LT)	RIDGEGATE PARKWAY	24"X30" R4–7 12"X36" OM–3L	
4	133+41.89	22.57' (RT	RIDGEGATE PARKWAY	36"X36" W1–5L	
5	134+65.67	22.60' (RT	RIDGEGATE PARKWAY	24"X30" R2–1	

LEGEND

- PROPOSED SIGN
- EXISTING SIGN
- (XX) PROPOSED STRIPE
- (XX) EXISTING STRIPE

(A) BIKE LANE LINE – 6" WIDE, SOLID WHITE
(B) CROSSWALK – 2'X8' SOLID WHITE, 4' GAP CENTERED IN LANE
(C) STOP BAR – 2' SOLID WHITE
(D) YIELD LINE – 16"X24" SOLID WHITE TRIANGLES, 6' GAP CENTERED IN LANE
(E) DROP LANE – 8" WIDE X 3' LONG, 12' GAP, WHITE
(F) CHANNELIZING LINE – 8" WIDE, SOLID WHITE
(G) DOUBLE YELLOW LINE – 5" WIDE, 3" GAP, SOLID
(H) YELLOW EDGE LINE – 5" WIDE, SOLID
(I) DIAGONAL MEDIAN LINE – 4" WIDE, SOLID YELLOW
(J) LANE LINE – 5" WIDE X 10' LONG, 30' GAP, WHITE

SIGNAGE AND STRIPING NOTES

1. ALL SIGNAGE AND STRIPING SHALL BE PLACED IN ACCORDANCE WITH THE MUTCD.
2. SIGNS SHALL BE MOUNTED PER DOUGLAS COUNTY DETAIL SS–8.
3. EXISTING STRIPING SHALL BE REMOVED BY WATER JETTING ONLY UNLESS THE EXISTING ROADWAY IS BEING MILLED AND OVERLAID.
4. CONTRACTOR SHALL CONFIRM EXISTING STRIPING AND MAKE MODIFICATIONS TO NEW STRIPING AS NEEDED.
5. SYMBOLS SHALL BE PREFORMED PLASTIC TYPE 1.

50 25 0 50 100
ORIGINAL SCALE: 1" = 50'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

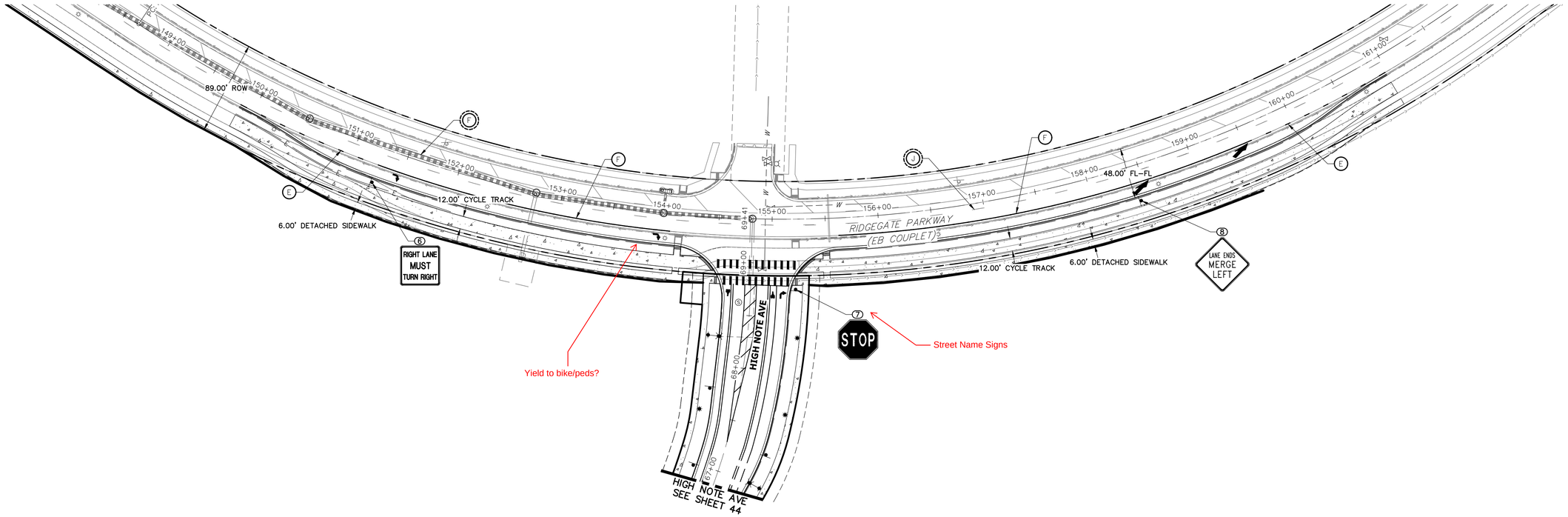
J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

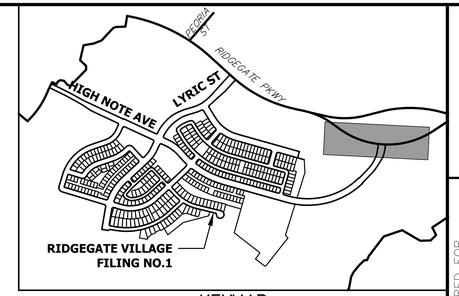
No.	REVISION	BY	DATE

H–SCALE	1"=50'
V–SCALE	N/A
DATE	2/12/21
DESIGNED BY	CWC
DRAWN BY	CRB
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
SIGNAGE AND STRIPING PLAN

SHEET 38 OF 270
JOB NO. 15950.01





KEYMAP
SCALE: 1"=1000'

SIGN TABULATION					
POINT NUMBER	STATION	OFFSET	ALIGNMENT	DESCRIPTION	NOTES
6	151+26.03	33.92' (RT	RIDGEGATE PARKWAY	36"X36" R3-7R	
7	155+21.47	66.34' (RT	RIDGEGATE PARKWAY	36"X36" R1-1	
8	158+43.29	33.84' (RT	RIDGEGATE PARKWAY	36"X36" W9-2L	

LEGEND

- PROPOSED SIGN
- EXISTING SIGN
- (XX) PROPOSED STRIPE
- (XX) EXISTING STRIPE

(A) BIKE LANE LINE – 6" WIDE, SOLID WHITE
(B) CROSSWALK – 2'X8' SOLID WHITE, 4' GAP CENTERED IN LANE
(C) STOP BAR – 2' SOLID WHITE
(D) YIELD LINE – 16"X24" SOLID WHITE TRIANGLES, 6' GAP CENTERED IN LANE
(E) DROP LANE – 8" WIDE X 3' LONG, 12' GAP, WHITE
(F) CHANNELIZING LINE – 8" WIDE, SOLID WHITE
(G) DOUBLE YELLOW LINE – 5" WIDE, 3" GAP, SOLID
(H) YELLOW EDGE LINE – 5" WIDE, SOLID
(I) DIAGONAL MEDIAN LINE – 4" WIDE, SOLID YELLOW
(J) LANE LINE – 5" WIDE X 10' LONG, 30' GAP, WHITE

SIGNAGE AND STRIPING NOTES

1. ALL SIGNAGE AND STRIPING SHALL BE PLACED IN ACCORDANCE WITH THE MUTCD.
2. SIGNS SHALL BE MOUNTED PER DOUGLAS COUNTY DETAIL SS-8.
3. EXISTING STRIPING SHALL BE REMOVED BY WATER JETTING ONLY UNLESS THE EXISTING ROADWAY IS BEING MILLED AND OVERLAID.
4. CONTRACTOR SHALL CONFIRM EXISTING STRIPING AND MAKE MODIFICATIONS TO NEW STRIPING AS NEEDED.
5. SYMBOLS SHALL BE PREFORMED PLASTIC TYPE 1.

N

50 25 0 50 100
ORIGINAL SCALE: 1" = 50'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

AARON LEE CLUTTER 36742 REGISTERED PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=50'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	CWC
DRAWN BY	CRB
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

SIGNAGE AND STRIPING PLAN

SHEET 39 OF 270

JOB NO. 15950.01

LEGEND

- PROPOSED SIGN
- EXISTING SIGN
- (XX) PROPOSED STRIPE
- (XX) EXISTING STRIPE

(A) BIKE LANE LINE – 6" WIDE, SOLID WHITE

(B) CROSSWALK – 2'X8' SOLID WHITE, 4' GAP CENTERED IN LANE

(C) STOP BAR – 2' SOLID WHITE

(D) YIELD LINE – 16"X24" SOLID WHITE TRIANGLES, 6' GAP CENTERED IN LANE

(E) DROP LANE – 8" WIDE X 3' LONG, 12' GAP, WHITE

(F) CHANNELIZING LINE – 8" WIDE, SOLID WHITE

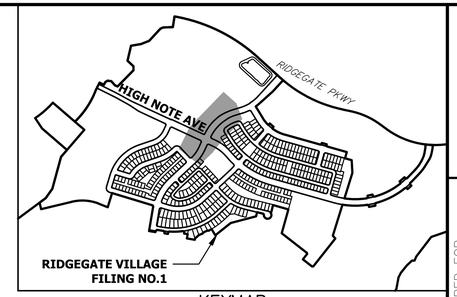
(G) DOUBLE YELLOW LINE – 5" WIDE, 3" GAP, SOLID

(H) YELLOW EDGE LINE – 5" WIDE, SOLID

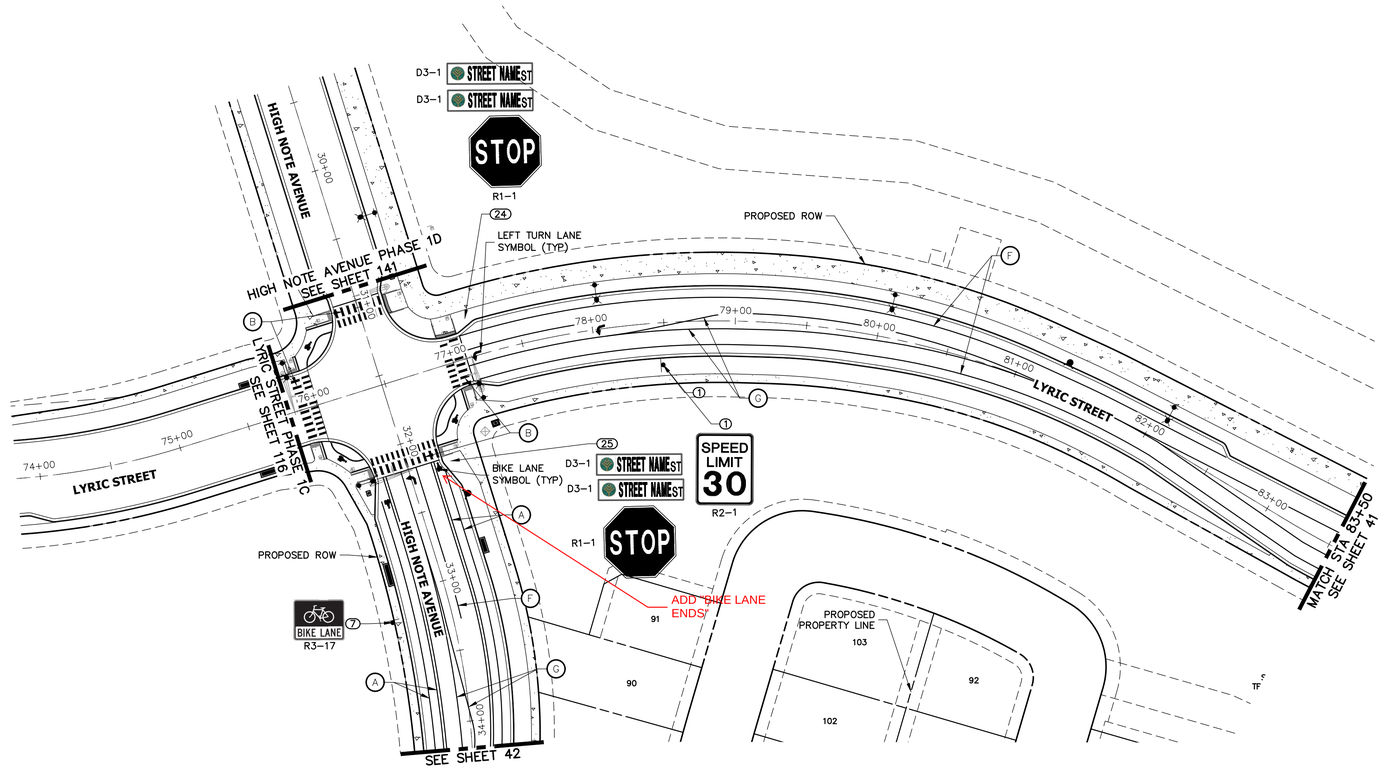
(I) DIAGONAL MEDIAN LINE – 4" WIDE, SOLID YELLOW

(J) LANE LINE – 5" WIDE X 10' LONG, 30' GAP, WHITE

SIGN TABULATION				
SIGN NUMBER	STATION	OFFSET	ALIGNMENT	DESCRIPTION
1	78+47.62	29.45' (RT)	LYRIC STREET	R2-1
7	33+19.65	41.69' (RT)	HIGH NOTE AVENUE	R3-17
24	77+16.37	27.21' (LT)	LYRIC STREET	R2-1
25	76+77.84	65.08' (RT)	LYRIC STREET	R2-1



KEYMAP
SCALE: 1"=1000'



NOTES

1. SEE SHEET 7 FOR SIGNAGE AND STRIPING NOTES.
2. SEE SHEET 8 FOR LINETYPE AND LAYER LEGEND.

50 25 0 50 100
ORIGINAL SCALE: 1" = 50'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

STATE OF COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=50'	DESIGNED BY	RDO
V-SCALE	N/A	DRAWN BY	SDL
DATE	2/12/21	CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

SIGNAGE & STRIPING PLAN–PHASE 1A

SHEET 40 OF 270

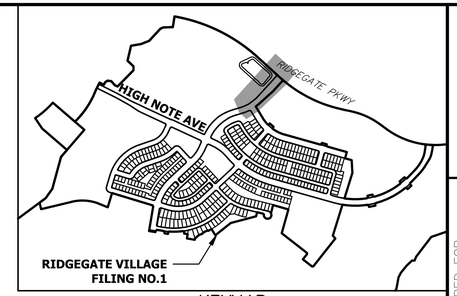
JOB NO. 15950.01

LEGEND

- PROPOSED SIGN
- EXISTING SIGN
- (XX) PROPOSED STRIPE
- (XX) EXISTING STRIPE

- (A) BIKE LANE LINE – 6" WIDE, SOLID WHITE
- (B) CROSSWALK – 2'X8' SOLID WHITE, 4' GAP CENTERED IN LANE
- (C) STOP BAR – 2' SOLID WHITE
- (D) YIELD LINE – 16"X24" SOLID WHITE TRIANGLES, 6' GAP CENTERED IN LANE
- (E) DROP LANE – 8" WIDE X 3' LONG, 12' GAP, WHITE
- (F) CHANNELIZING LINE – 8" WIDE, SOLID WHITE
- (G) DOUBLE YELLOW LINE – 5" WIDE, 3" GAP, SOLID
- (H) YELLOW EDGE LINE – 5" WIDE, SOLID
- (I) DIAGONAL MEDIAN LINE – 4" WIDE, SOLID YELLOW
- (J) LANE LINE – 5" WIDE X 10' LONG, 30' GAP, WHITE

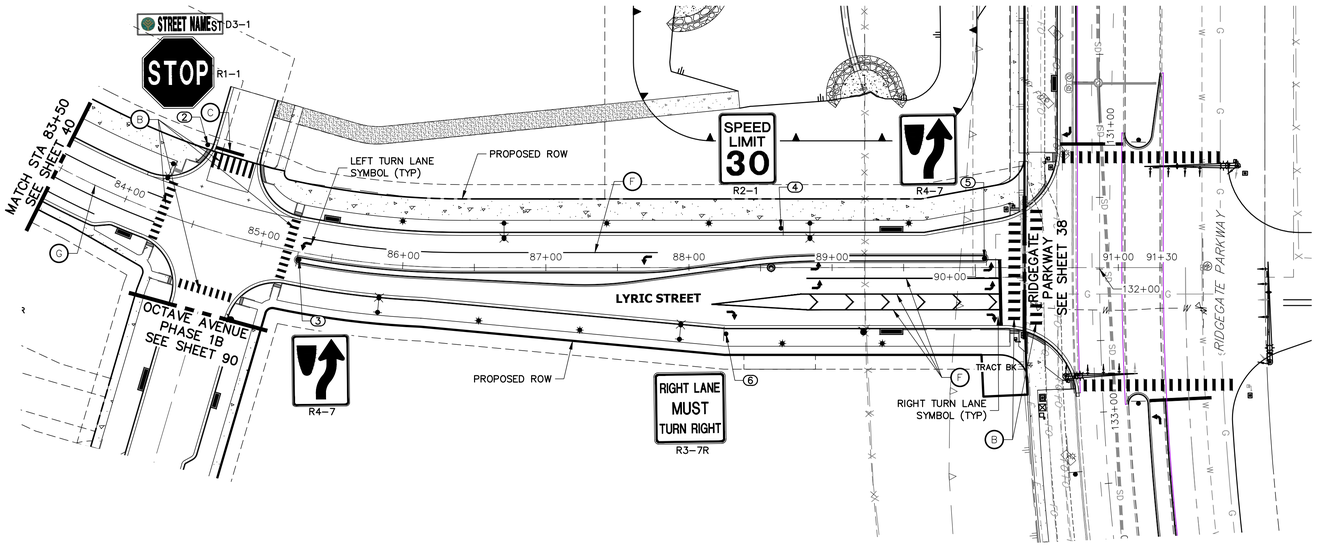
SIGN TABULATION				
SIGN NUMBER	STATION	OFFSET	ALIGNMENT	DESCRIPTION
2	84+41.84	55.94' (LT)	LYRIC STREET	R1–1 D3–1
3	85+27.91	5.26' (RT)	LYRIC STREET	R4–7
4	88+64.34	27.50' (LT)	LYRIC STREET	R2–1
5	90+06.33	6.39' (LT)	LYRIC STREET	R4–7
6	88+25.89	46.30' (RT)	LYRIC STREET	R3–7R



KEYMAP
SCALE: 1"=1000'

NOTES

1. SEE SHEET 7 FOR SIGNAGE AND STRIPING NOTES.
2. SEE SHEET 8 FOR LINETYPE AND LAYER LEGEND.



50 25 0 50 100
ORIGINAL SCALE: 1" = 50'

811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=50'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	RDO
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

SIGNAGE & STRIPING PLAN–PHASE 1A

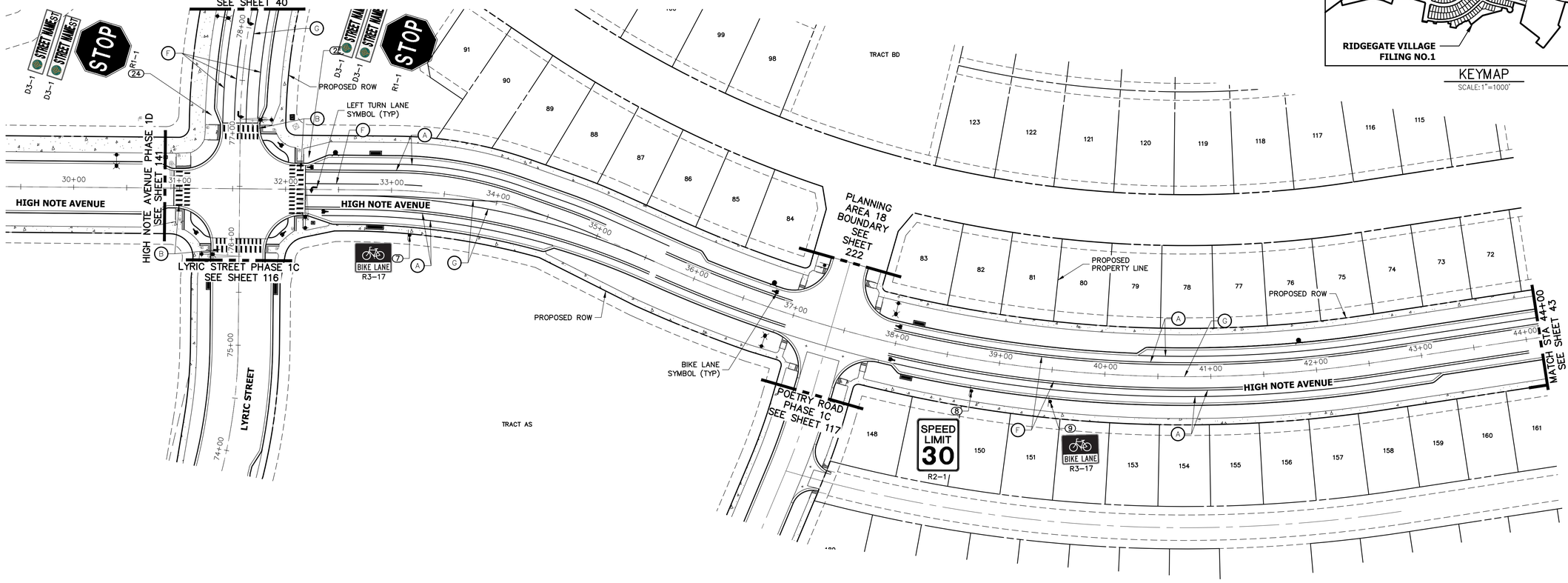
SHEET 41 OF 270

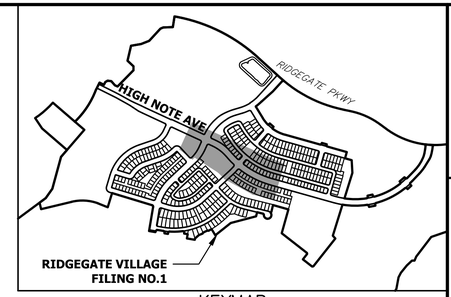
JOB NO. 15950.01

LEGEND

- PROPOSED SIGN
- EXISTING SIGN
- (XX) PROPOSED STRIPE
- (XX) EXISTING STRIPE

- (A) BIKE LANE LINE – 6" WIDE, SOLID WHITE
- (B) CROSSWALK – 2'X8' SOLID WHITE, 4' GAP CENTERED IN LANE
- (C) STOP BAR – 2' SOLID WHITE
- (D) YIELD LINE – 16"X24" SOLID WHITE TRIANGLES, 6' GAP CENTERED IN LANE
- (E) DROP LANE – 8" WIDE X 3' LONG, 12' GAP, WHITE
- (F) CHANNELIZING LINE – 8" WIDE, SOLID WHITE
- (G) DOUBLE YELLOW LINE – 5" WIDE, 3" GAP, SOLID
- (H) YELLOW EDGE LINE – 5" WIDE, SOLID
- (I) DIAGONAL MEDIAN LINE – 4" WIDE, SOLID YELLOW
- (J) LANE LINE – 5" WIDE X 10' LONG, 30' GAP, WHITE





KEYMAP
SCALE:1"=1000'

NOTES

1. SEE SHEET 7 FOR SIGNAGE AND STRIPING NOTES.
2. SEE SHEET 8 FOR LINETYPE AND LAYER LEGEND.

SIGN TABULATION				
SIGN NUMBER	STATION	OFFSET	ALIGNMENT	DESCRIPTION
7	33+19.65	41.69' (RT)	HIGH NOTE AVENUE	R3-17
8	38+78.08	30.00' (RT)	HIGH NOTE AVENUE	R2-1
9	39+51.24	30.00' (RT)	HIGH NOTE AVENUE	R3-17

50 25 0 50 100
ORIGINAL SCALE: 1" = 50'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=50'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	RDO
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

SIGNAGE & STRIPING PLAN-PHASE 1A

SHEET 42 OF 270

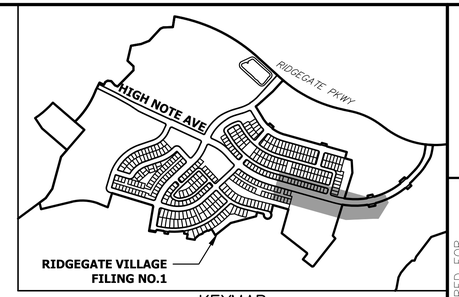
JOB NO. 15950.01

LEGEND

- PROPOSED SIGN
- EXISTING SIGN
- (XX) PROPOSED STRIPE
- (XX) EXISTING STRIPE

(A) BIKE LANE LINE – 6" WIDE, SOLID WHITE
(B) CROSSWALK – 2'X8' SOLID WHITE, 4' GAP CENTERED IN LANE
(C) STOP BAR – 2' SOLID WHITE
(D) YIELD LINE – 16"X24" SOLID WHITE TRIANGLES, 6' GAP CENTERED IN LANE
(E) DROP LANE – 8" WIDE X 3' LONG, 12' GAP, WHITE
(F) CHANNELIZING LINE – 8" WIDE, SOLID WHITE
(G) DOUBLE YELLOW LINE – 5" WIDE, 3" GAP, SOLID
(H) YELLOW EDGE LINE – 5" WIDE, SOLID
(I) DIAGONAL MEDIAN LINE – 4" WIDE, SOLID YELLOW
(J) LANE LINE – 5" WIDE X 10' LONG, 30' GAP, WHITE

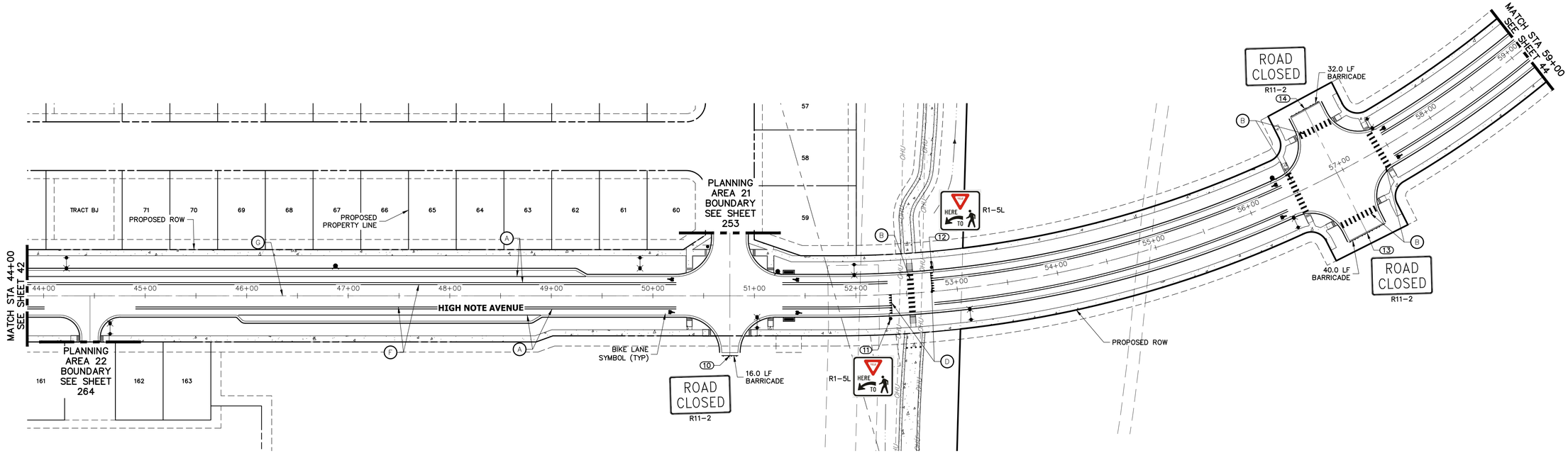
SIGN TABULATION				
SIGN NUMBER	STATION	OFFSET	ALIGNMENT	DESCRIPTION
10	50+75.84	59.00' (RT)	HIGH NOTE AVENUE	R11–2
11	52+33.04	24.03' (RT)	HIGH NOTE AVENUE	R1–5L
12	52+76.77	23.84' (LT)	HIGH NOTE AVENUE	R1–5L
13	56+92.25	66.18' (RT)	HIGH NOTE AVENUE	R11–2
14	56+94.73	70.17' (LT)	HIGH NOTE AVENUE	R11–2



KEYMAP
SCALE: 1"=1000'

NOTES

1. SEE SHEET 7 FOR SIGNAGE AND STRIPING NOTES.
2. SEE SHEET 8 FOR LINETYPE AND LAYER LEGEND.



50 25 0 50 100
ORIGINAL SCALE: 1" = 50'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=50'	DESIGNED BY	RDO
V-SCALE	N/A	DRAWN BY	SDL
DATE	2/12/21	CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

SIGNAGE & STRIPING PLAN–PHASE 1A

SHEET 43 OF 270

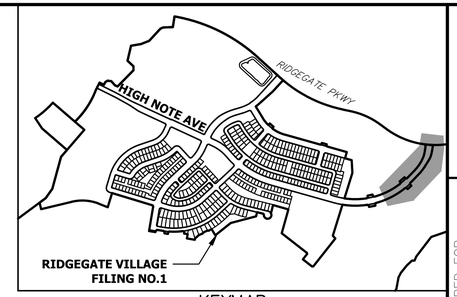
JOB NO. 15950.01

LEGEND

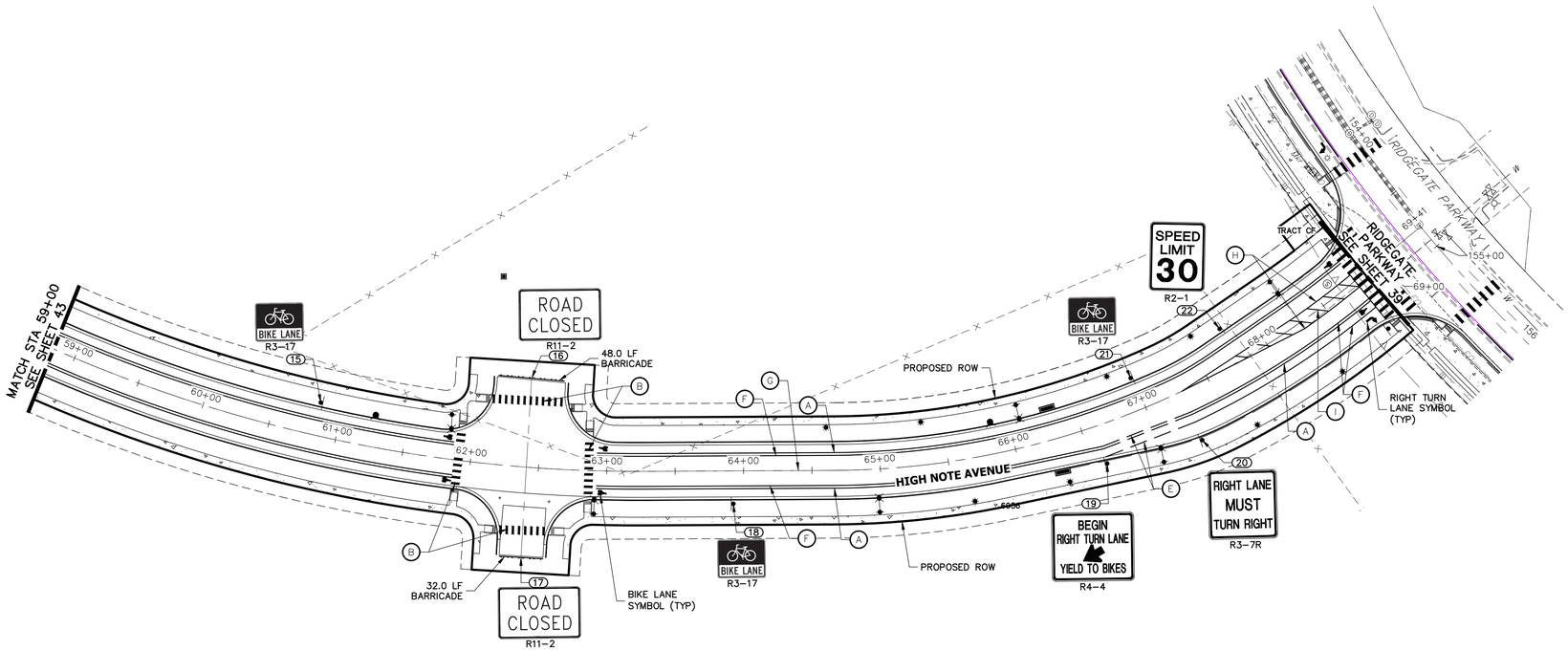
- PROPOSED SIGN
- EXISTING SIGN
- (XX) PROPOSED STRIPE
- (XX) EXISTING STRIPE

- (A) BIKE LANE LINE – 6" WIDE, SOLID WHITE
- (B) CROSSWALK – 2'X8' SOLID WHITE, 4' GAP CENTERED IN LANE
- (C) STOP BAR – 2' SOLID WHITE
- (D) YIELD LINE – 16"X24" SOLID WHITE TRIANGLES, 6' GAP CENTERED IN LANE
- (E) DROP LANE – 8" WIDE X 3' LONG, 12' GAP, WHITE
- (F) CHANNELIZING LINE – 8" WIDE, SOLID WHITE
- (G) DOUBLE YELLOW LINE – 5" WIDE, 3" GAP, SOLID
- (H) YELLOW EDGE LINE – 5" WIDE, SOLID
- (I) DIAGONAL MEDIAN LINE – 4" WIDE, SOLID YELLOW
- (J) LANE LINE – 5" WIDE X 10' LONG, 30' GAP, WHITE

SIGN TABULATION				
SIGN NUMBER	STATION	OFFSET	ALIGNMENT	DESCRIPTION
15	60+83.61	24.20' (LT)	HIGH NOTE AVENUE	R3-17
16	62+40.00	65.08' (LT)	HIGH NOTE AVENUE	R11-2
17	62+42.21	66.11' (RT)	HIGH NOTE AVENUE	R11-2
18	63+92.37	24.00' (RT)	HIGH NOTE AVENUE	R3-17
19	66+60.07	28.45' (RT)	HIGH NOTE AVENUE	R4-4
20	67+27.15	38.61' (RT)	HIGH NOTE AVENUE	R3-7R
21	66+97.96	23.98' (LT)	HIGH NOTE AVENUE	R3-17
22	67+75.59	27.71' (LT)	HIGH NOTE AVENUE	R2-1



KEYMAP
SCALE: 1"=1000'



NOTES

1. SEE SHEET 7 FOR SIGNAGE AND STRIPING NOTES.
2. SEE SHEET 8 FOR LINETYPE AND LAYER LEGEND.

50 25 0 50 100
ORIGINAL SCALE: 1" = 50'

Know what's **below.** **Call** before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

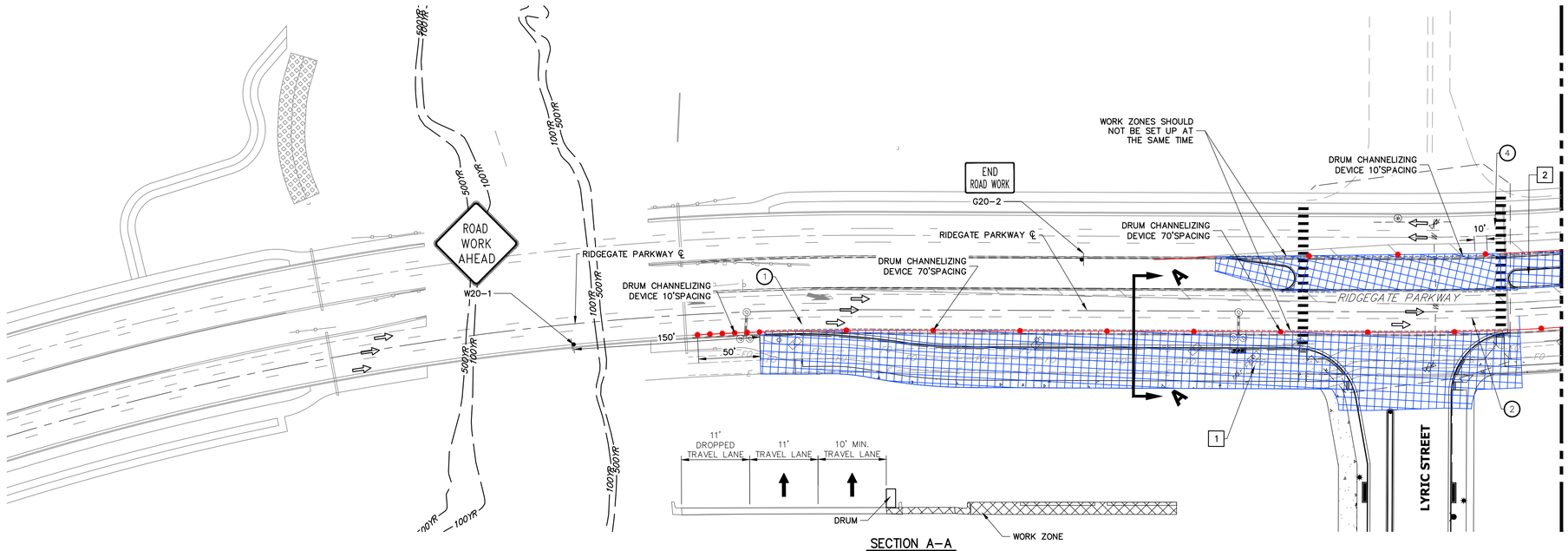
H-SCALE	1"=50'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	RDO
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

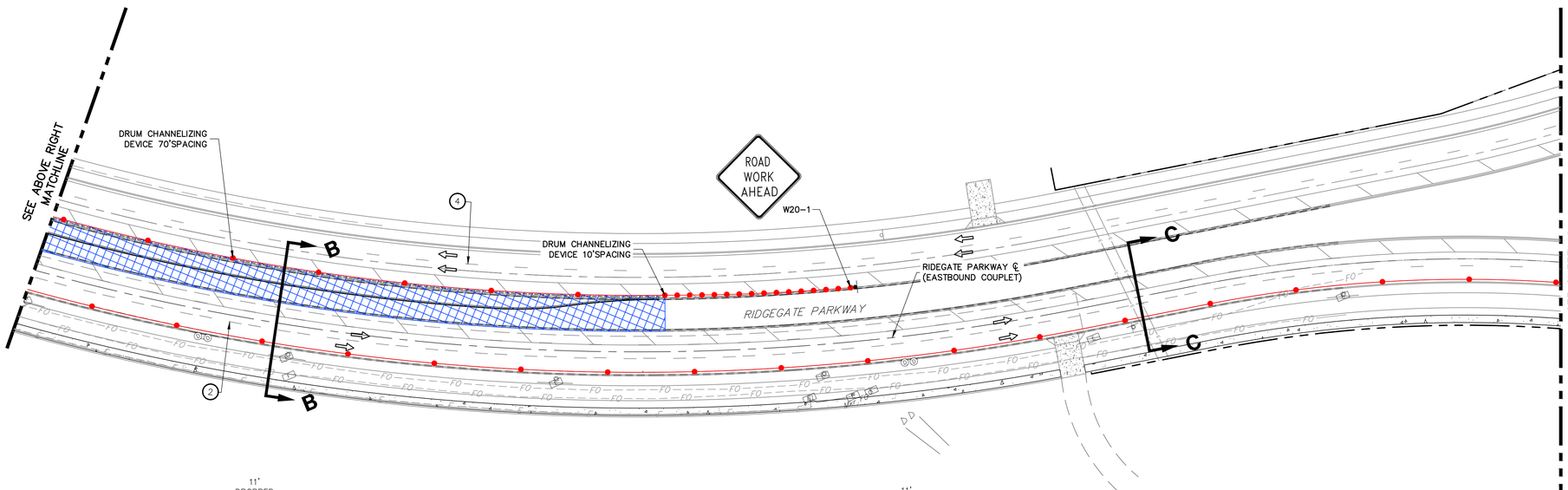
SIGNAGE & STRIPING PLAN-PHASE 1A

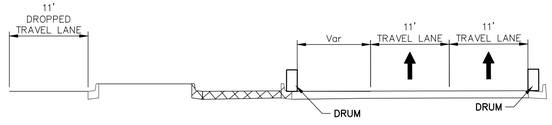
SHEET 44 OF 270

JOB NO. 15950.01

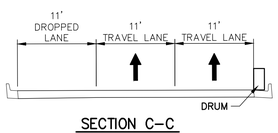


SECTION A–A

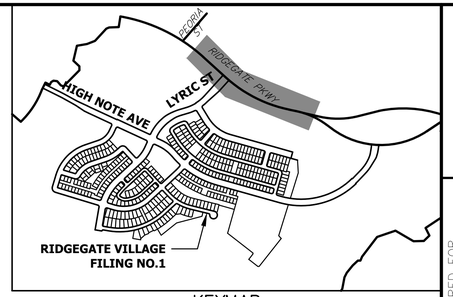




SECTION B–B



SECTION C–C



KEYMAP
SCALE: 1"=1000'

STAGE 1

CONSTRUCTION STAGING NOTES (STAGE 1)

1 CONSTRUCT CURB, GUTTER, SIDWALK, CYCLE TRACK AND GRADING FOR NEW PAVEMENT INCLUDING 3–FOOT DEEP OVEREXCAVATION.

2 CONSTRUCT RAISED MEDIAN MODIFICATIONS AND REMOVE A PORTION OF EXISTING RAISED MEDIAN TO ACCOMMODATE INTERSECTION MOVEMENTS.

TRAFFIC HANDLING NOTES

1. MAINTAIN THREE LANES ON EASTBOUND RIDGEGATE PARKWAY.
2. MAINTAIN TWO LANES ON EASTBOUND RIDGEGATE PARKWAY.
3. MAINTAIN ONE LANE ON EASTBOUND RIDGEGATE PARKWAY.
4. MAINTAIN TWO LANES ON WESTBOUND RIDGEGATE PARKWAY.

LEGEND

- TEMPORARY SIGN
- CHANNELIZING DRUM
- TRAFFIC FLOW DIRECTION
- WORK ZONE

50 25 0 50 100
ORIGINAL SCALE: 1" = 50'

Know what's **below.** **Call** before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

DATE

AARON LEE CLUTTER, REGISTERED PROFESSIONAL ENGINEER, 36742

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

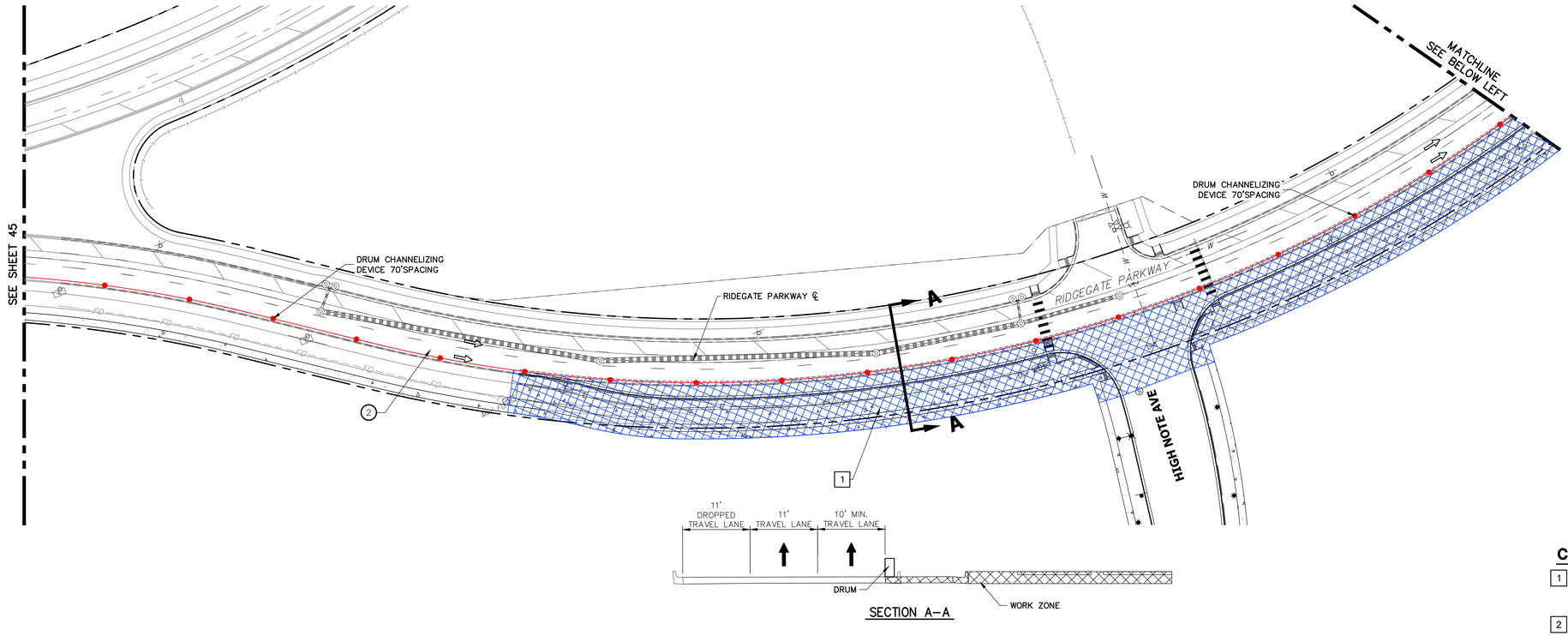
H–SCALE	1"=50'
V–SCALE	N/A
DATE	2/12/21
DESIGNED BY	TIM
DRAWN BY	CRB
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

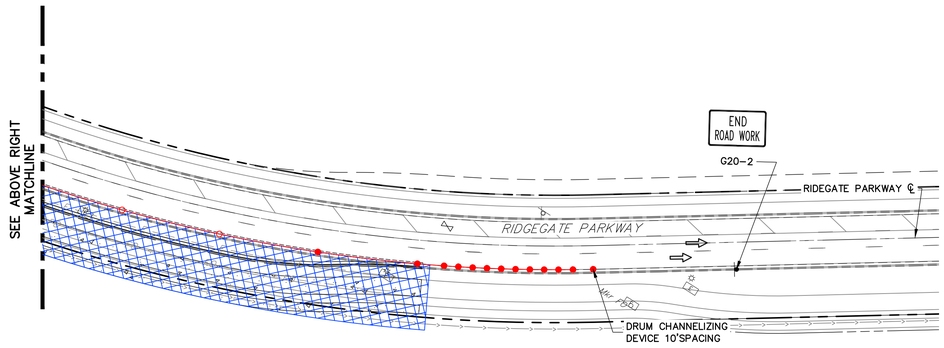
TRAFFIC CONTROL PLAN–RIDGEGATE PARKWAY

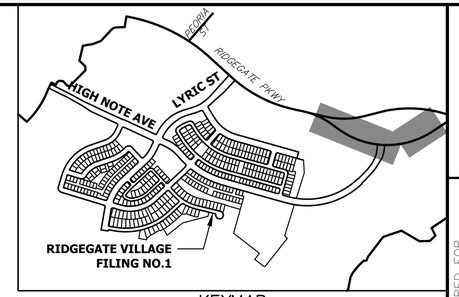
SHEET 45 OF 270

JOB NO. 15950.01



SECTION A–A





KEYMAP
SCALE:1"=1000'

STAGE 1

CONSTRUCTION STAGING NOTES (STAGE 1)

1. CONSTRUCT CURB, GUTTER, SIDWALK, CYCLE TRACK AND GRADING FOR NEW PAVEMENT INCLUDING 3–FOOT DEEP OVEREXCAVATION.
2. CONSTRUCT RAISED MEDIAN MODIFICATIONS AND REMOVE A PORTION OF EXISTING RAISED MEDIAN TO ACCOMMODATE INTERSECTION MOVEMENTS.

TRAFFIC HANDLING NOTES

1. MAINTAIN THREE LANES ON EASTBOUND RIDGEGATE PARKWAY.
2. MAINTAIN TWO LANES ON EASTBOUND RIDGEGATE PARKWAY.
3. MAINTAIN ONE LANE ON EASTBOUND RIDGEGATE PARKWAY.
4. MAINTAIN TWO LANES ON WESTBOUND RIDGEGATE PARKWAY.

LEGEND

- TEMPORARY SIGN
- CHANNELIZING DRUM
- TRAFFIC FLOW DIRECTION
- WORK ZONE

50 25 0 50 100
ORIGINAL SCALE: 1" = 50'

811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

No.	REVISION	BY	DATE

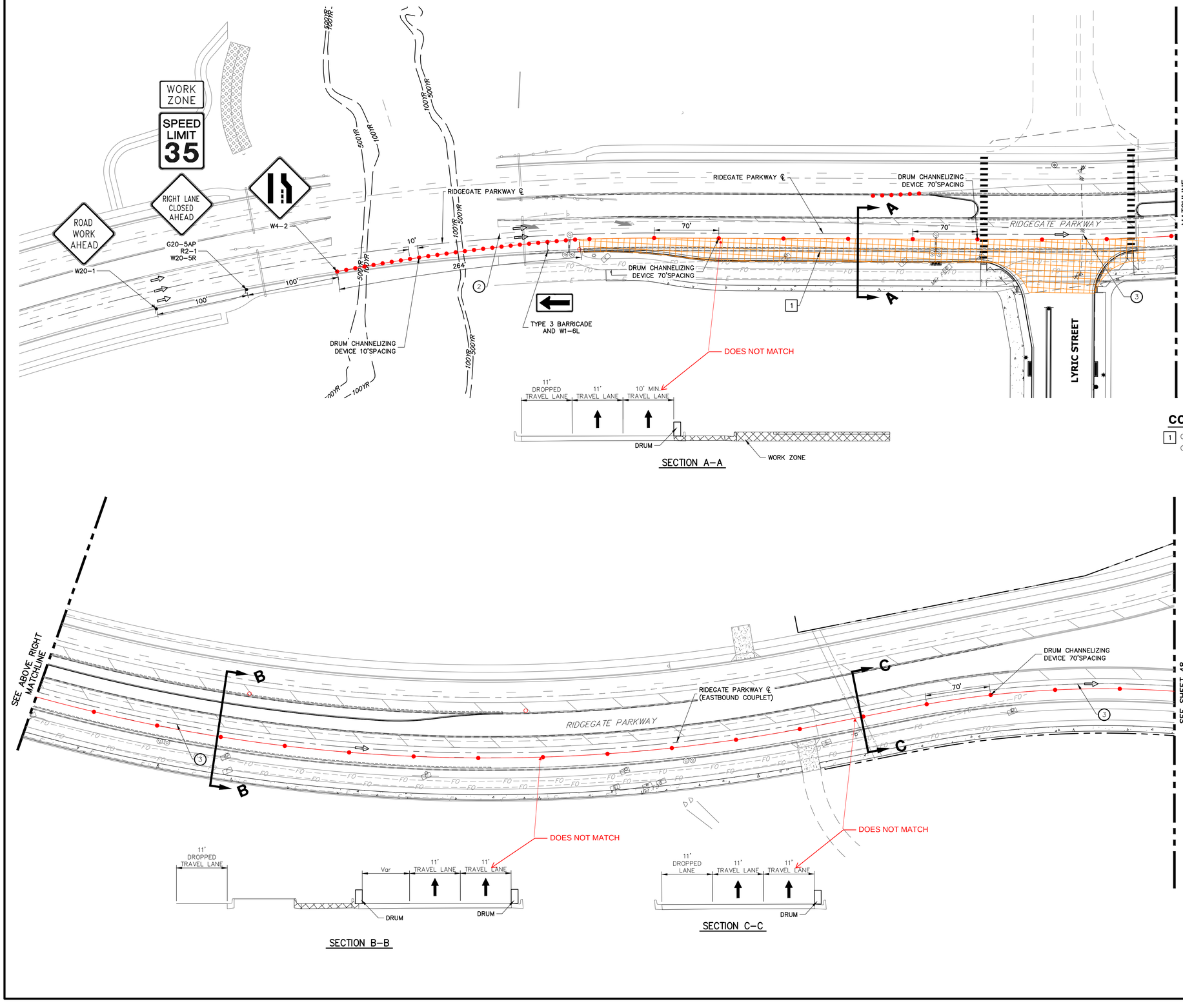
H–SCALE	1"=50'	DESIGNED BY	TIM
V–SCALE	N/A	DRAWN BY	CRB
DATE	2/12/21	CHECKED BY	

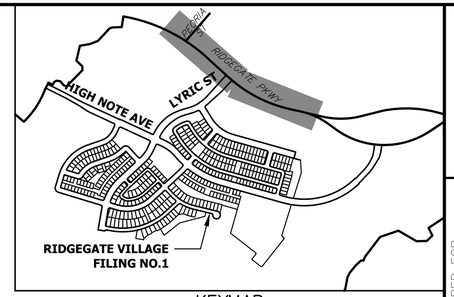
RIDGEGATE SOUTHWEST VILLAGE FILING 1

TRAFFIC CONTROL PLAN–RIDGEGATE PARKWAY

SHEET 46 OF 270

JOB NO. 15950.01





KEYMAP
SCALE: 1"=1000'

STAGE 2

CONSTRUCTION STAGING NOTES (STAGE 2)

1. COMPLETE CONSTRUCTION OF GRADING AND PAVEMENT AND CONSTRUCTION TIE INS TO EXISTING PAVEMENT.

TRAFFIC HANDLING NOTES

1. MAINTAIN THREE LANES ON EASTBOUND RIDGEGATE PARKWAY.
2. MAINTAIN TWO LANES ON EASTBOUND RIDGEGATE PARKWAY.
3. MAINTAIN ONE LANE ON EASTBOUND RIDGEGATE PARKWAY.
4. MAINTAIN TWO LANES ON WESTBOUND RIDGEGATE PARKWAY.

LEGEND

- TEMPORARY SIGN
- CHANNELIZING DRUM
- TRAFFIC FLOW DIRECTION
- WORK ZONE

50 25 0 50 100
ORIGINAL SCALE: 1" = 50'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

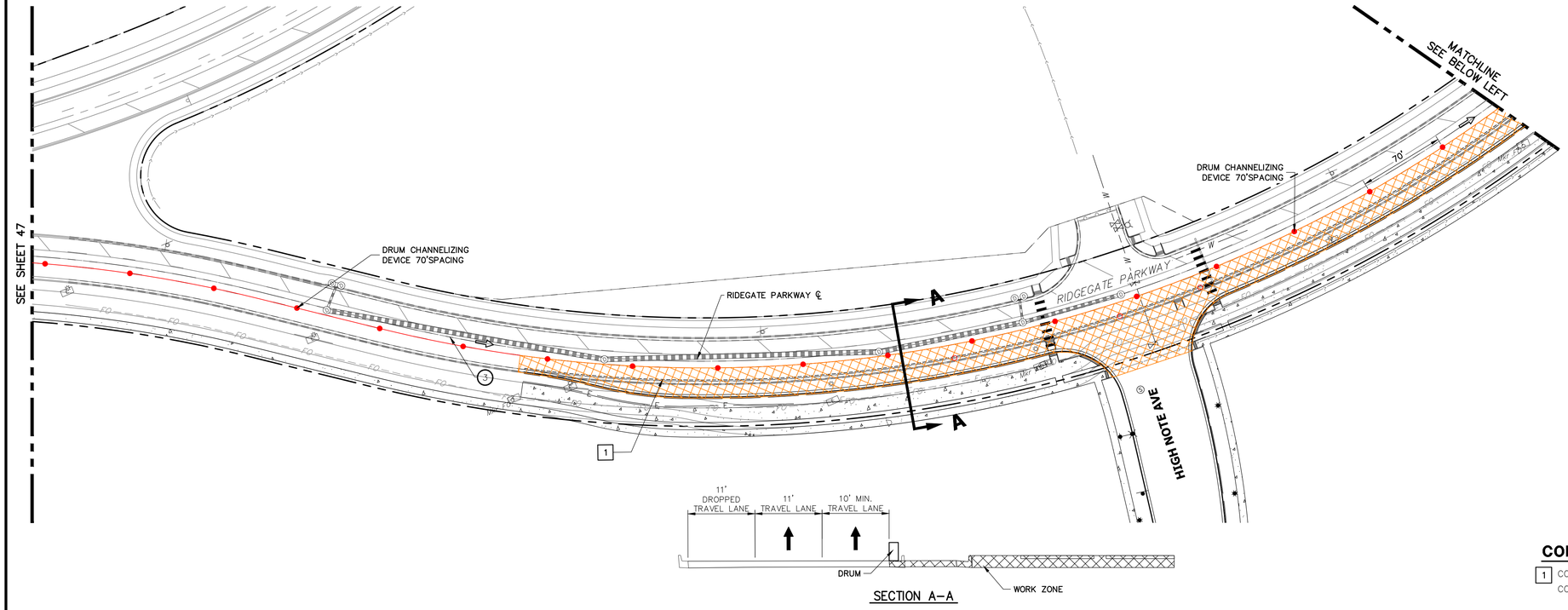
H-SCALE	1"=50'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	TIM
DRAWN BY	CRB
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

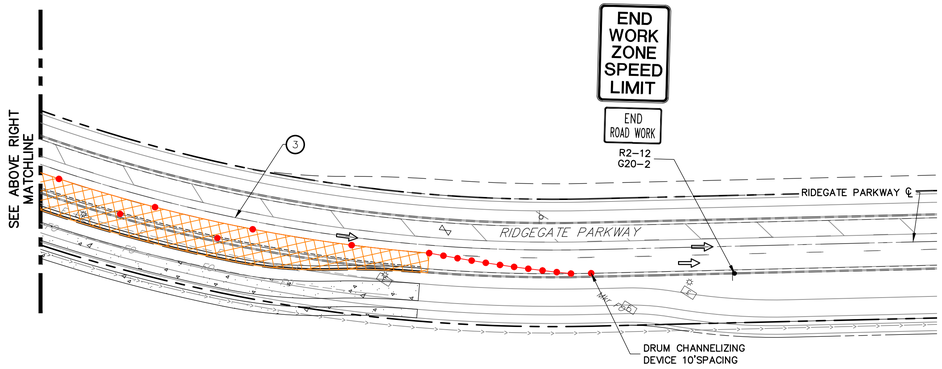
TRAFFIC CONTROL PLAN-RIDGEGATE PARKWAY

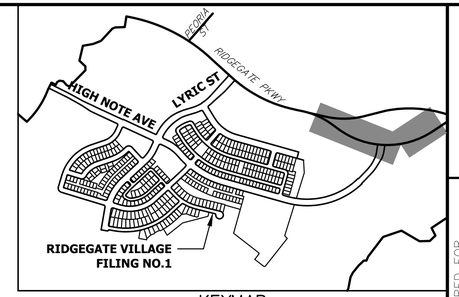
SHEET 47 OF 270

JOB NO. 15950.01



SECTION A–A





KEYMAP
SCALE:1"=1000'

STAGE 2

CONSTRUCTION STAGING NOTES (STAGE 2)

1 COMPLETE CONSTRUCTION OF GRADING AND PAVEMENT AND CONSTRUCTION TIE INS TO EXISTING PAVEMENT.

TRAFFIC HANDLING NOTES

1. MAINTAIN THREE LANES ON EASTBOUND RIDGEGATE PARKWAY.
2. MAINTAIN TWO LANES ON EASTBOUND RIDGEGATE PARKWAY.
3. MAINTAIN ONE LANE ON EASTBOUND RIDGEGATE PARKWAY.
4. MAINTAIN TWO LANES ON WESTBOUND RIDGEGATE PARKWAY.

LEGEND

- TEMPORARY SIGN
- CHANNELIZING DRUM
- TRAFFIC FLOW DIRECTION
- WORK ZONE

50 25 0 50 100
ORIGINAL SCALE: 1" = 50'

Know what's **below.** **Call** before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO P.E. REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=50'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	TIM
DRAWN BY	CRB
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

TRAFFIC CONTROL PLAN–RIDGEGATE PARKWAY

SHEET 48 OF 270

JOB NO. 15950.01

TRAFFIC SIGNAL - GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF LONE TREE AND DOUGLAS COUNTY SPECIFICATIONS, "STATE DEPARTMENT OF TRANSPORTATION – STATE OF COLORADO – STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2017". THE LATEST EDITION OF THE MUTCD, AND THE PROJECT DRAWINGS AND SPECIFICATIONS INCLUDED HEREIN. SINCE THE CITY WILL MAINTAIN THE TRAFFIC CONTROL DEVICES ON PUBLIC RIGHTS–OF–WAY, ALL TRAFFIC CONTROL DEVICES SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH CITY OF LONE TREE STANDARDS.

2. THE BID QUANTITIES OF THE PROJECT ARE THE RESULT OF A CAREFUL QUANTITY TAKEOFF. THE CONTRACTOR SHALL, HOWEVER, SATISFY HIMSELF AS TO THE ACCURACY OF ALL QUANTITIES AND BRING ANY DISCREPANCIES TO THE ATTENTION OF THE CITY, IN WRITING, AT THE EARLIEST OPPORTUNITY.

3. THE PHYSICAL FEATURES WITHIN THE LIMITS OF THE PROJECT HAVE BEEN SHOWN BASED ON THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL FEATURES, INCLUDING ALL UNDERGROUND AND ABOVE GROUND UTILITIES, PRIOR TO BEGINNING ANY WORK. SEE "CDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", SUBSECTION 105.11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD LOCATING AND VERIFYING ALL UTILITY INFORMATION. FOR UTILITY CONSTRUCTION COORDINATION, THE CONTRACTOR SHALL CONTACT THE UTILITY NOTIFICATION CENTER FOR COLORADO AT 1–800–922–1987, 303–232–1991, or 811.

4. ALL SIGNAL CABLE IS CONTINUOUS FROM CONNECTIONS MADE IN THE HANDHOLE COMPARTMENT OF THE SIGNAL POLE BASE TO THE TERMINAL COMPARTMENT IN THE CONTROLLER CABINET. SPLICING SHALL NOT BE PERMITTED UNLESS SPECIFICALLY APPROVED BY THE CITY OF LONE TREE.

5. BICYCLE DETECTION SHALL BE SMARTSENSOR MATRIX. — OK>???

6. ANY WIRING SHALL BE CONSIDERED INCIDENTAL TO THE INSTALLATION COST.

7. ALL ITEM LOCATIONS ARE APPROXIMATE AND ARE TO BE FIELD LOCATED BY THE CONTRACTOR (APPROVED BY THE CITY OF LONE TREE), INCLUDING BUT NOT LIMITED TO CAISSONS, SIGNAL HEADS, PULL BOXES AND CONTROLLER CABINET.

8. UPON COMPLETION OF WORK, CONTRACTOR SHALL SUPPLY RECORD DRAWINGS, CORRECTED PLANS AND ANY OTHER ADDITIONAL DATA REQUIRED BY THE CITY OF LONE TREE.

9. CONSTRUCTION SHALL NOT BEGIN UNTIL GESC, ELECTRICAL AND CONSTRUCTION PERMITS HAVE BEEN ISSUED. IF A CITY OF LONE TREE ENGINEERING INSPECTOR IS NOT AVAILABLE AFTER PROPER NOTICE OF CONSTRUCTION ACTIVITY HAS BEEN PROVIDED, THE PERMITTED MAY COMMENCE WORK IN THE INSPECTOR'S ABSENCE. HOWEVER, THE CITY RESERVES THE RIGHT NOT TO ACCEPT THE IMPROVEMENT IF SUBSEQUENT TESTING REVEALS AN IMPROPER INSTALLATION.

10. THE CITY OF LONE TREE RESERVES THE RIGHT TO REQUIRE ADDITIONAL SIGNAGE IF THEY DETERMINE THAT AN UNFORESEEN CONDITION WARRANTS SUCH SIGNAGE ACCORDING TO THE MUTCD OR CDOT M & S STANDARDS.

SIGNAL EQUIPMENT

1. EACH VEHICLE SIGNAL HEAD ON MAST ARMS SHALL HAVE A LOUVERED ALUMINUM BACKPLATE BLACK IN COLOR. — RETRO REFLECTIVE YELLOW?

2. ALL POLES SHALL BE INSTALLED A MINIMUM OF 3 FEET FROM THE EDGE OF THE POLE TO THE FACE OF CURB.

3. SEE CITY OF LONE TREE STANDARD SIGNAL DETAILS FOR CONSTRUCTION/INSTALLATION DETAILS NOT SHOWN ON THESE PLANS.

4. ALL ELECTRICAL SYSTEMS SHALL BE PROPERLY GROUNDED WITH GROUND WIRE IN ACCORDANCE WITH THE SPECIFICATIONS. A GROUND ROD SHALL BE INSTALLED FOR EACH POLE AND CONTROLLER CABINET FOUNDATION.

5. MAST ARMS AND POLES SHALL BE SEMI–GLOSS BLACK IN COLOR.

6. CONTRACTOR SHALL INSTALL CITY–PROVIDED DELINEATORS ON ALL PULL BOXES INCIDENTAL TO THE WORK.

7. RESET STREET NAME SIGNS SHALL BE INSTALLED USING ASTRO–BRAC OR SKY–BRACKET MOUNTING BRACKETS. CONTRACTOR SHALL USE FLAT AND LOCKING WASHERS WHEN MOUNTING ANY SIGNS OVERHEAD.

8. THE TRAFFIC SIGNAL CONTROLLER SHALL INCLUDE AN UNINTERRUPTED POWER SOURCE (MEYERS POWERBACK 2000 E).

9. THE CONTRACTOR IS REQUIRED TO PROVIDE 20 DAYS OF CONTINUOUS SATISFACTORY SIGNAL OPERATION PRIOR TO THE START OF THE ONE YEAR WARRANTY.

10. WHEN DIRECTED BY THE CITY, ALL SIGNAL MAST ARMS, POLES AND/OR EQUIPMENT SHALL BE DELIVERED TO THE LONE TREE PUBLIC WORKS FACILITY LOCATED AT 10151 FIRST STREET, LONE TREE COLORADO, 80134. THE TRAFFIC SIGNAL MAST ARM IDENTIFIED AS "FUTURE" ON SHEET TS–04 SHALL NOT BE INSTALLED AS PART OF THIS PROJECT, BUT SHALL REMAIN AT THE LONE TREE PUBLIC WORKS FACILITY. THIS MAST ARM SHALL BE PAID FOR AS TRAFFIC SIGNAL MAST ARM (FUTURE 50'ARM) (FURNISH ONLY).

11. MAST ARM NO.1 FOR THE SOUTHEAST CORNER OF THE RIDGEGATE PARKWAY/HAVANA STREET INTERSECTION IS AN EXTENSION THAT SHALL BE ADDED TO THE EXISTING MAST ARM. COORDINATE WITH THE CITY OF LONE TREE (STEVE FLETCHER, 303–386–2198) TO OBTAIN THE MAST ARM FROM THE CITY OF LONE TREE PUBLIC WORKS FACILITY LOCATED AT 10151 FIRST STREET, LONE TREE COLORADO, 80134. OBTAINING THE MAST ARM AND ITS INSTALLATION SHALL BE PAID FOR AS TRAFFIC SIGNAL MAST ARM STEEL (INSTALL ONLY).

12. THE PEORIA STREET CONTROLLER AND CABINET SHALL BE DELIVERED TO THE CITY OF LONE TREE PUBLIC WORKS FACILITY LOCATED AT 10151 FIRST STREET, LONE TREE COLORADO, 80134, A MINIMUM OF TEN (10) WORKING DAYS PRIOR TO INSTALLATION DATE FOR PROGRAMMING AND TESTING. COORDINATE WITH THE CITY OF LONE TREE FIELD MANAGER (STEVE FLETCHER, 303–386–2198). THE CONTRACTOR IS RESPONSIBLE FOR DELIVERING TO AND PICKING UP FROM CITY OF LONE TREE PUBLIC WORKS FACILITY. ANY MALFUNCTIONS OR PROBLEMS WITH THE PROGRAMMING AND TESTING WILL BE REPORTED TO THE CONTRACTOR FOR IMMEDIATE REPAIR. THE TIME LOSS WILL BE EXCLUDED FROM THE TESTING PERIOD.

13. TRAFFIC SIGNAL CONTROLLER PROGRAMMING AT THE RIDGEGATE PARKWAY/HAVANA STREET INTERSECTION SHALL NOT CHANGE. NEW TRAFFIC SIGNAL CONTROLLER PROGRAMMING AT THE RIDGEGATE PARKWAY/PEORIA STREET INTERSECTION SHALL MATCH EXISTING PROGRAMMING.

14. THE PLANS DETAIL MAST ARMS THAT ARE APPROXIMATELY 5' LONGER THAN REQUIRED. THIS INCREASE IS TO ALLOW FLEXIBILITY IN THE FOUNDATION PLACEMENT. THE CONTRACTOR, AT THE DIRECTION OF LONE TREE, SHALL ANTICIPATE CUTTING THIS "EXTRA" MAST ARM LENGTH. THE "CUT" END SHALL HAVE 2 COATS OF COLD–GALVANIZING SPRAY PAINT APPLIED BEFORE INSTALLATION OF THE MAST ARM END CAP.

15. THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE AT 303–662–8112 48 HOURS PRIOR TO MAST ARM INSTALLATION AND MODIFICATIONS SO STAFF CAN BE PRESENT DURING THE INSTALLATION.

16. FIBER OPTIC TERMINATION PANEL SHALL BE MODULAR AND RUGGED IN DESIGN, HAVE 24 UPC–SC TYPE CONNECTORS, AND BE FACTORY TERMINATED TO A 24 STRAND SINGLE MODE PIGTAIL LATERAL FIBER OPTIC CABLE. THE LATERAL FIBER OPTIC CABLE SHALL BE OF SIGNIFICANT LENGTH TO CONNECT FROM SIGNAL CONTROLLER CABINET TO THE SPLICE LOCATION WITH REQUIRE COILS IN CABINET AND PULL BOXES. MATERIALS AND WORK DESCRIBED SHALL BE PAID FOR AS FIBER OPTIC CABLE (SINGLE MODE) (24 FIBER).

17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING THE FOLLOWING ITEMS TO THE CITY OF LONE TREE AND DOUGLAS COUNTY FOR APPROVAL:
- FIBER OPTIC CABLE INSTALLATION PHASING PLAN
- FIBER OPTIC CABLE CUTOVER PLAN
- ESTIMATED COMMUNICATION OUTAGE TIME. MAX ALLOWABLE OUTAGE TIME: FRIDAY 6 PM TO SUNDAY 6PM.

18. ALL HAND HOLE SPLICES SHALL BE BUCHANAN TYPE USING THE PRES–SURE–TOOL #C–24 CRIMPING TOOL.

19. ALL SIGNAL POLES SHALL BE EQUIPPED WITH POLE EXTENSIONS AND LUMINAIRE DAVITS.

20. THE CITY OF LONE TREE REQUIRES SCHEMATICS ON ALL ELECTRONIC EQUIPMENT.

21. CONTRACTOR SHALL USE FLAT AND LOCKING WASHERS WHEN MOUNTING ANY SIGNS OVERHEAD.

22. ADA TYPE PEDESTRIAN PUSH BUTTONS SHALL BE USED.

CIRCUIT SCHEDULE NOTES

1. WHENEVER MULTIPLE CABLES FEED EQUIPMENT ON A SINGLE POLE EACH CABLE SHALL CONTAIN A NEUTRAL WIRE.

2. THE SIGNAL SYSTEM SHALL BE WIRED FOR AN 8–PHASE OPERATION.

CONDUITS

1. ALL CONDUITS SHALL HAVE A PULL ROPE AND LOCATE WIRE LEFT IN THEM WHEN CONSTRUCTION IS COMPLETED.

2. CONDUITS SHALL BE A MINIMUM OF 30 INCHES BELOW FINISHED GRADE.

OPERATIONS

1. 3M OPTICOM PRIORITY CONTROL SYSTEM AND CABLE SHALL BE PROVIDED.

COLOR CODING

1. ALL CONDUCTORS SHALL BE COLOR–CODED AND PERMANENTLY TAGGED PER THE FOLLOWING SCHEDULE: KEY–PHASE: COLOR OF SIGNAL LOAD CONDUCTOR, "CODE" (ON TAG AT EACH END OF CONDUCTOR).

1. NORTHBOUND LEFT TURN: RED/WHITE, "X–NBLT"
2. NORTHBOUND: RED, "X–NB"
3. SOUTHBOUND: LEFT TURN: GREEN/WHITE "X–SBLT"
4. SOUTHBOUND: GREEN, "X–SB"
5. EASTBOUND LEFT TURN: ORANGE/WHITE, "X–EBLT"
6. EASTBOUND: ORANGE, "X–EB"
7. WESTBOUND LEFT TURN: BLUE/WHITE, "X–WBLT"
8. WESTBOUND: BLUE, "X–WB"
9. PEDESTRIAN: YELLOW, "X–PED"

X=PHASE NUMBER

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H–SCALE	N/A
V–SCALE	N/A
DATE	2/12/21
DESIGNED BY	CRB
DRAWN BY	CRB
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

TRAFFIC SIGNAL PLAN–PHASE 1A

SHEET 49 OF 270

JOB NO. 15950.01

TABULATION OF TRAFFIC SIGNAL ITEMS

LONE TREE ITEM NO.	ITEM DESCRIPTION	UNITS	HAVANA STEET	PEORIA STREET	INTERCONNECT	TOTAL	COMMENTS
1	REMOVAL OF FIBER OPTIC CABLE	LF			14040	14040	
2	REMOVAL OF PULL BOX	EACH			11	11	
3	REMOVAL OF TRAFFIC SIGNAL EQUIPMENT	LS	0.5	0.5		1	
4	RESET LUMINAIRE	EACH		1		1	NORTHWEST CORNER
5	RESET SIGN PANEL	EACH	6	2		8	
6	RESET TRAFFIC SIGNAL HEAD	EACH	2	3		5	
7	RESET PEDESTRIAN PUSH BUTTON	EACH	2			2	RESET PEDESTRIAN CROSSING EQUIPMENT FROM WEST
8	RESET PEDESTRIAN SIGNAL HEAD	EACH	2			2	SIDE TO EAST SIDE OF INTERSECTION
9	RESET FIRE PREEMPTION UNIT AND TIMER	EACH	1	1		2	
10	RESET INTERSECTION DETECTION SYSTEM (CAMERA)	EACH	1	1		2	INCLUDES RESETTING OF DETECTION ZONES
11	PVC CONDUIT (2" – TRENCHED)	LF	40	340	2015	2395	
12	PVC CONDUIT (2" – BORED)	LF		705	185	890	
13	PVC CONDUIT (3" – TRENCHED)	LF		130		130	
14	PVC (3" – BORED)	LF		470		470	
15	PULL BOX (TYPE IS)	EACH		4		4	17"X30"X12"D MIN.
16	PULL BOX (TYPE IF2)	EACH			14	14	17"X30"X24"D MIN.
17	PULL BOX (TYPE VAULT)	EACH			4	4	30"X48"X18"D MIN.
18	WIRING	LS	0.5	0.5		1	
19	LUMINAIRE (LED)	EACH		1		1	400 WATT HPS EQUIVALENT
20	FIRE PREEMPTION UNIT AND TIMER	EACH		1		1	
21	SIGN PANEL (CLASS I)	SF		15		15	
22	PEDESTRIAN SIGNAL FACE (16) (COUNTDOWN)	EACH		4		4	
23	TRAFFIC SIGNAL FACE (12–12–12)	EACH	3	2		5	LED TYPE; INCLUDES BACKPLATES
24	TRAFFIC SIGNAL FACE (12–12–12–12)	EACH		2		2	LED TYPE; INCLUDES BACKPLATES
25	PEDESTRIAN PUSH BUTTON	EACH		4		4	ADA TYPE; INCLUDES PUSH BUTTON SIGNS
26	PEDESTRIAN PUSH BUTTON POLE	EACH		2		2	
27	MICROWAVE VEHICLE RADAR DETECTOR	EACH	2			2	BICYCLE DETECTION – SMARTSENSOR MATRIX
28	TRAFFIC SIGNAL CONTROLLER AND CABINET	EACH		1		1	INCLUDES RESETTING OF ETHERNET SWITCH
29	TRAFFIC SIGNAL–LIGHT POLE STEEL (FUTURE 50' MAST ARM)	EACH		1		1	MA–3 STRAIGHT ARM TYPE; INCLUDES DRILLED CAISSON
30	TRAFFIC SIGNAL–LIGHT POLE STEEL (1–55' MAST ARM)	EACH		1		1	MA–2 STRAIGHT ARM TYPE; INCLUDES DRILLED CAISSON
31	TRAFFIC SIGNAL MAST ARM STEEL (60 FOOT)	EACH		1		1	
32	TRAFFIC SIGNAL MAST ARM (FUTURE 50' MAST) (FURNISH ONLY)	EACH		1		1	SEE GENERAL NOTE #10
33	TRAFFIC SIGNAL MAST ARM STEEL (INSTALL ONLY)	EACH	1			1	SEE GENERAL NOTE #11
34	TRAFFIC SIGNAL (TEMPORARY)	LS		1		1	
35	FIBER OPTIC CABLE (SINGLE MODE) (24 FIBER)	LF			465	465	INCLUDES 50' COILS IN INTERMEDIATE PULL BOXES AND
36	FIBER OPTIC CABLE (S MODE) (72 S)	LF			14325	14325	100' COILS AT SPLICE POINTS

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

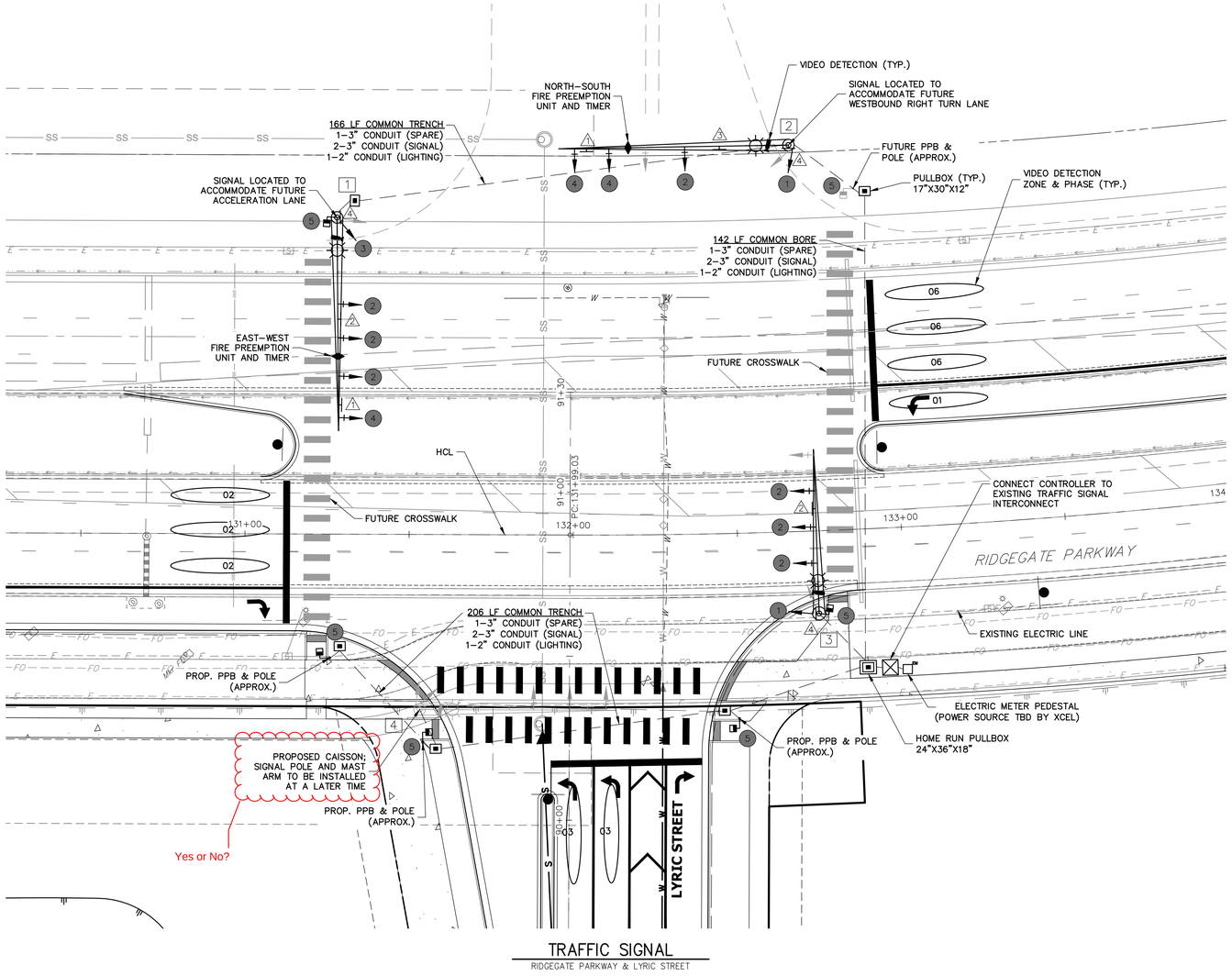
H-SCALE	N/A
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	CRB
DRAWN BY	CRB
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

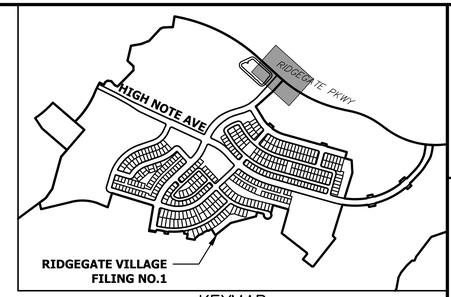
TRAFFIC SIGNAL PLAN–PHASE 1A

SHEET 50 OF 270

JOB NO. 15950.01

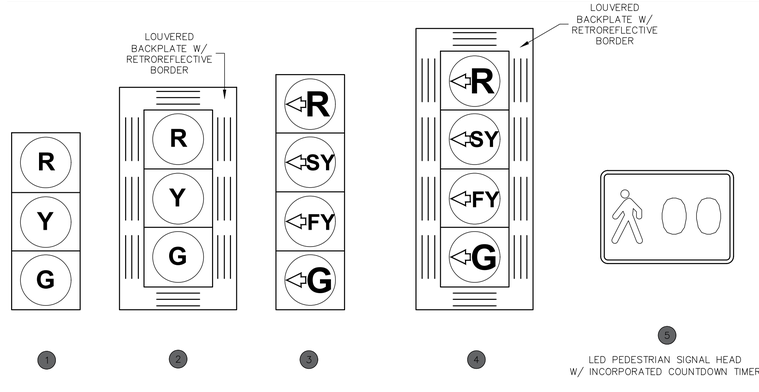


TRAFFIC SIGNAL
RIDGEGATE PARKWAY & LYRIC STREET



KEYMAP
SCALE:1"=1000'

TRAFFIC SIGNAL HEADS



- ALL VEHICLE SIGNAL HEADS SHALL BE POLYCARBONATE WITH 12–INCH SECTIONS AND TUNNEL VISORS
- ALL VEHICLE AND PEDESTRIAN SIGNAL HEADS SHALL BE BLACK IN COLOR
- ALL RED, YELLOW AND GREEN "BALL AND ARROW" VEHICLE INDICATIONS AND ALL PEDESTRIAN SYMBOL INDICATIONS SHALL BE APPROVED LED TYPE

SIGNAL POLE SCHEDULE

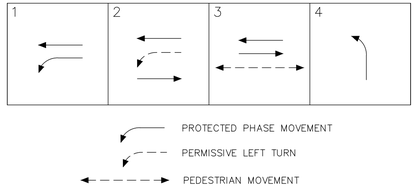
POLE NUMBER	LOCATION	NORTHING	EASTING	M.A. LENGTH	BASE DIA/DEPTH	NOTES
1	N CAISSON	1615862.08	3184113.12	65'	48"/20.5'	
2	E CAISSON	1615786.44	3184230.08	70'	48"/20.5'	
3	S CAISSON	1615674.11	3184141.53	50'	42"/16.5'	
4	W CAISSON	1615733.79	3184031.47	60'	42"/16.5'	FUTURE

LEGEND

- TRAFFIC SIGNAL MAST ARM W/ LUMINAIRE
- TRAFFIC SIGNAL POLE & FOUNDATION
- PEDESTAL POLE FOUNDATION
- TRAFFIC SIGNAL CABINET
- SIGNAL POLE PULLBOX (17"X30"X12")
- HOME RUN PULLBOX (24"X36"X18")
- ELECTRICAL CONDUIT
- E — XCEL ELECTRIC LINE
- SIGNAL HEAD WITHOUT BACK PLATE
- SIGNAL HEAD W/ BACK PLATE
- PEDESTRIAN SIGNAL HEAD W/ PUSH BUTTON & SIGN
- VEHICLE DETECTION CAMERA
- OPTICOM DETECTOR

TRAFFIC SIGNS

SIGNAL PHASING DIAGRAM



NOTE

1. SEE SHEET 49 FOR TRAFFIC SIGNAL NOTES.

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

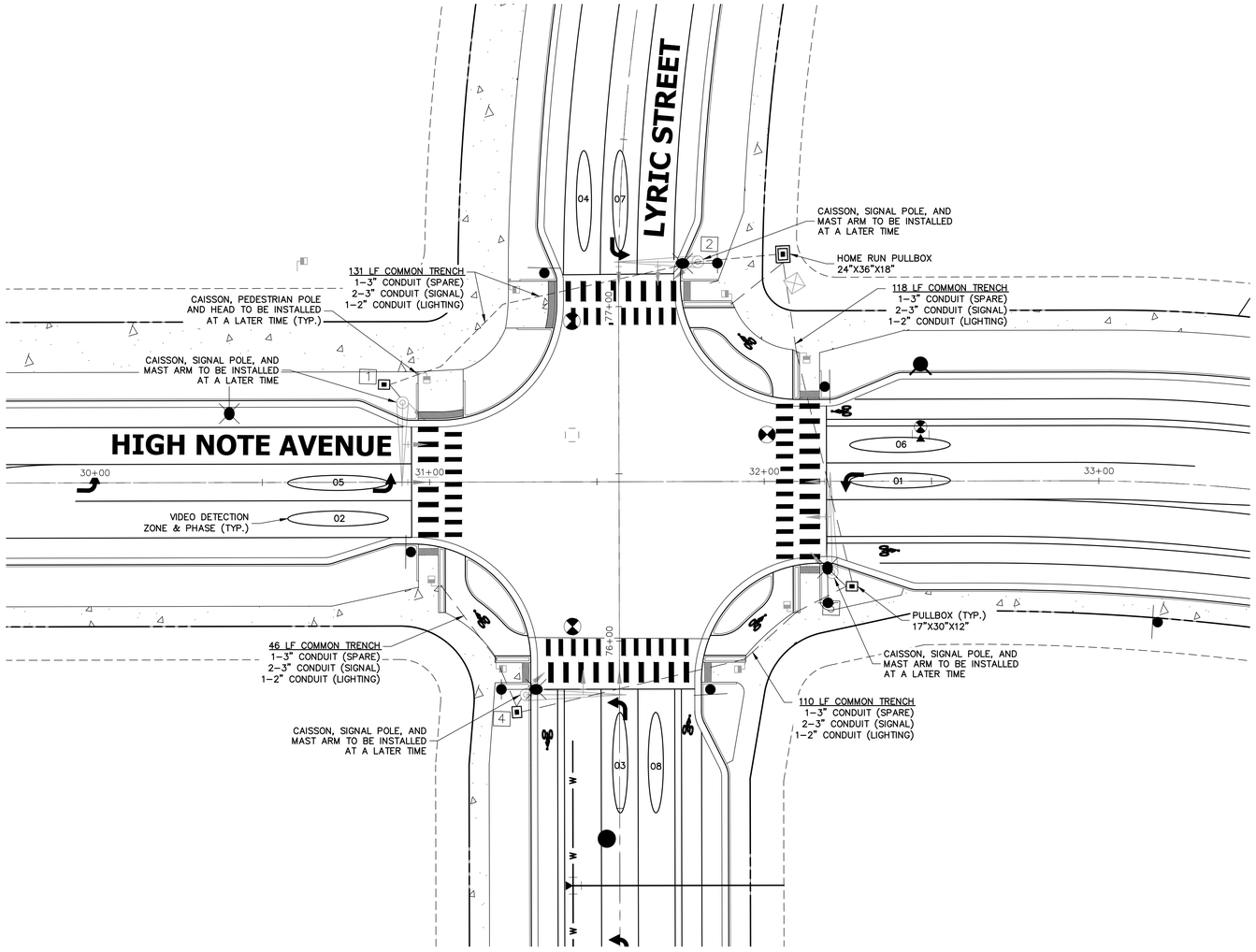
J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H–SCALE	1"=20'	DESIGNED BY	CRB	
V–SCALE	N/A	DRAWN BY	CRB	
DATE	2/12/21	CHECKED BY		

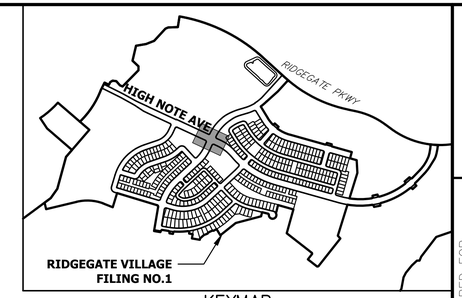
RIDGEGATE SOUTHWEST VILLAGE FILING 1
TRAFFIC SIGNAL PLAN–PHASE 1A

SHEET 51 OF 270
JOB NO. 15950.01



TRAFFIC SIGNAL

LYRIC STREET & HIGH NOTE AVENUE



KEYMAP

SCALE: 1"=1000'

SIGNAL POLE SCHEDULE

POLE NUMBER	LOCATION	NORTHING	EASTING	M.A. LENGTH	BASE DIA/DEPTH	NOTES
1	NW CAISSON	1614892.62	3182989.58	35'	36"/10'	FUTURE
2	NE CAISSON	1614883.71	3183090.38	35'	36"/10'	FUTURE
3	SE CAISSON	1614781.75	3183079.62	35'	36"/10'	FUTURE
4	SW CAISSON	1614792.12	3182979.73	35'	36"/10'	FUTURE

LEGEND

- TRAFFIC SIGNAL MAST ARM W/ LUMINAIRE
- TRAFFIC SIGNAL POLE & FOUNDATION
- PEDESTAL POLE FOUNDATION
- TRAFFIC SIGNAL CABINET
- SIGNAL POLE PULLBOX (17"X30"X12")
- HOME RUN PULLBOX (24"X36"X18")
- ELECTRICAL CONDUIT
- E — XCEL ELECTRIC LINE
- SIGNAL HEAD WITHOUT BACK PLATE
- SIGNAL HEAD W/ BACK PLATE
- PEDESTRIAN SIGNAL HEAD W/ PUSH BUTTON & SIGN
- VEHICLE DETECTION CAMERA
- OPTICOM DETECTOR

NOTE

1. SEE SHEET 49 FOR TRAFFIC SIGNAL NOTES.

20 10 0 20 40

ORIGINAL SCALE: 1" = 20'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

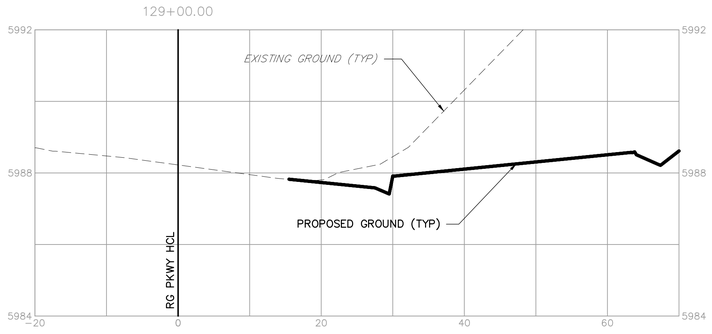
H-SCALE	1"=20'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	CRB
DRAWN BY	CRB
CHECKED BY	

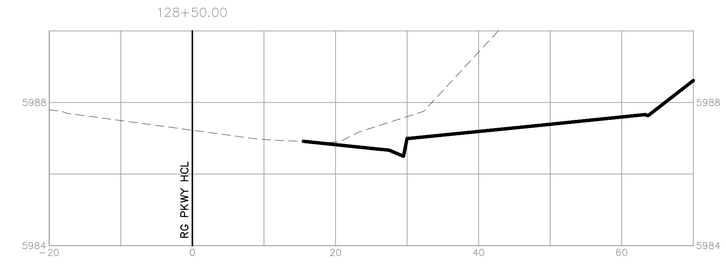
RIDGEGATE SOUTHWEST VILLAGE FILING 1

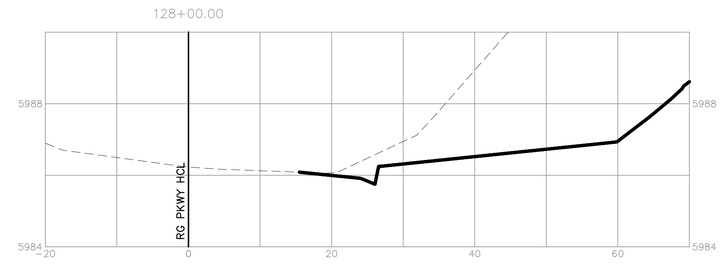
TRAFFIC SIGNAL PLAN-PHASE 1A

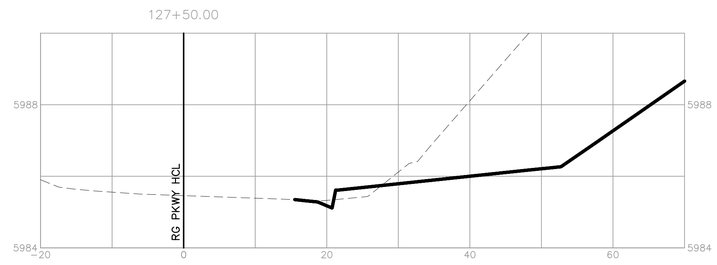
SHEET 52 OF 270

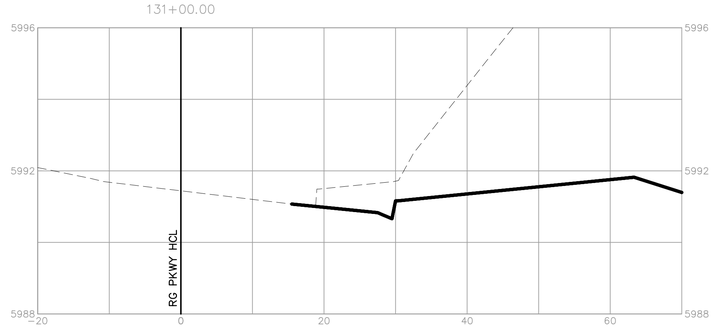
JOB NO. 15950.01

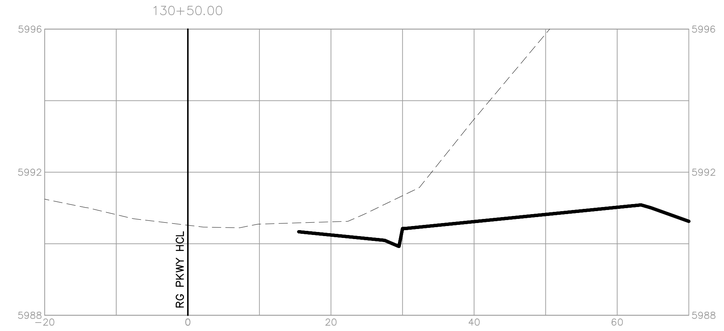


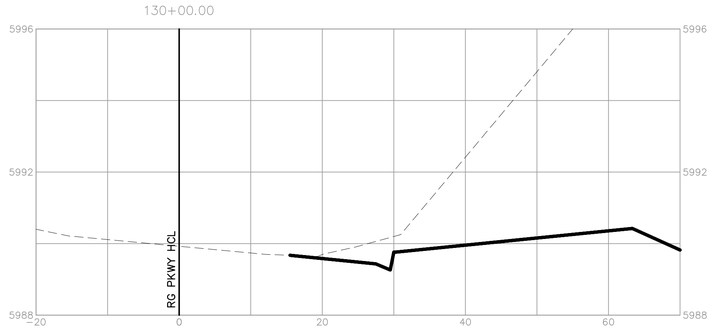


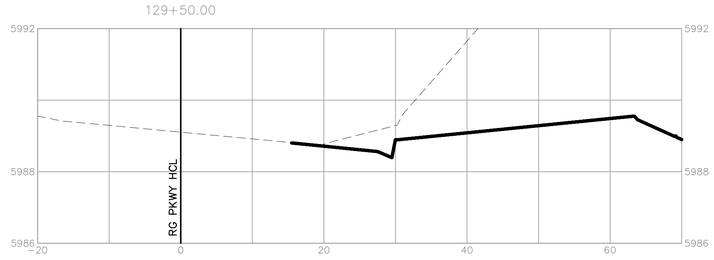


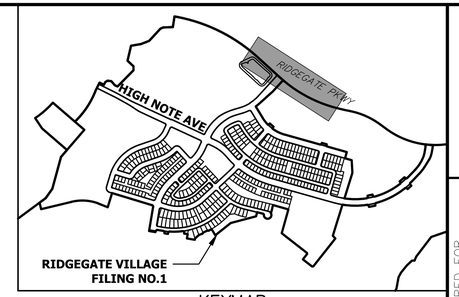












KEYMAP
SCALE: 1"=1000'

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=50'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	CWC
DRAWN BY	SDL
CHECKED BY	

50 25 0 50 100
ORIGINAL SCALE: 1" = 50'

Know what's below. Call before you dig.

RIDGEGATE SOUTHWEST VILLAGE FILING 1

CROSS SECTIONS-RIDGEGATE PARKWAY

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

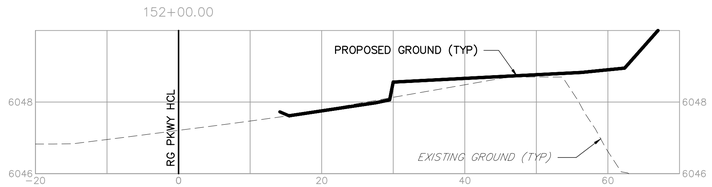
AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

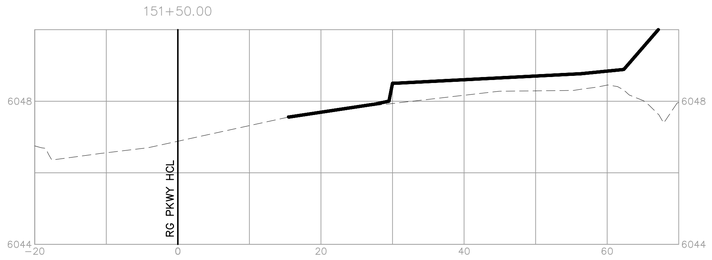
DATE

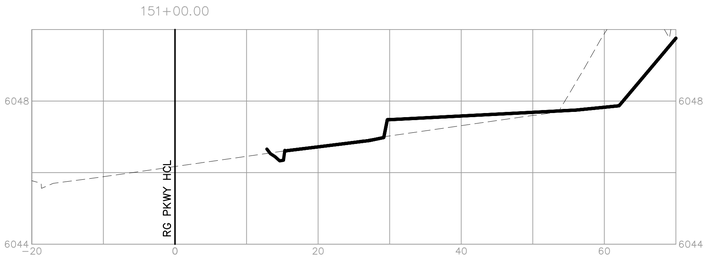
COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

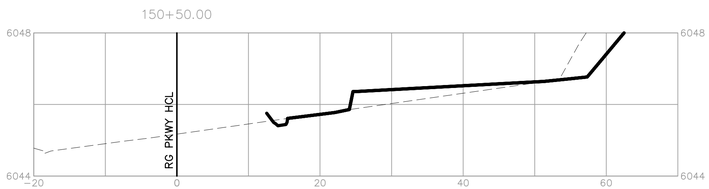
SHEET 53 OF 270

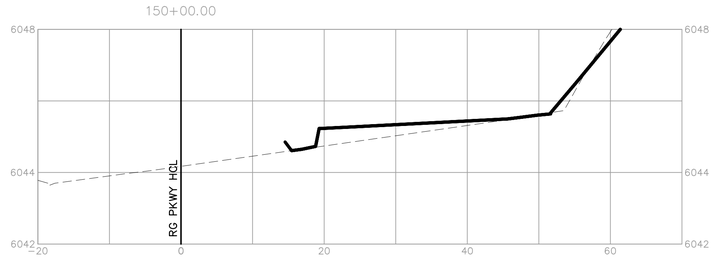
JOB NO. 15950.01

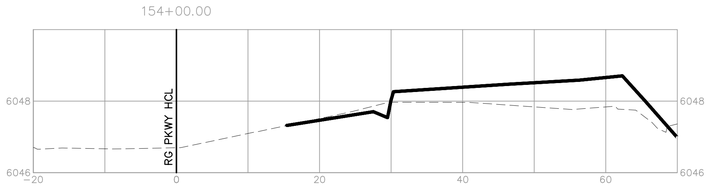


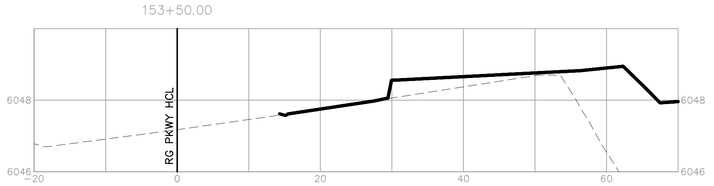


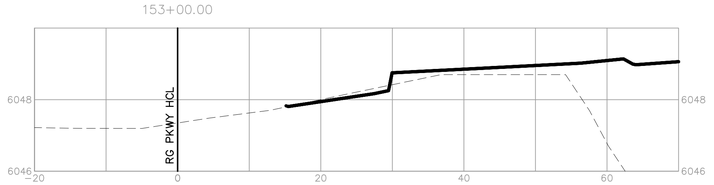


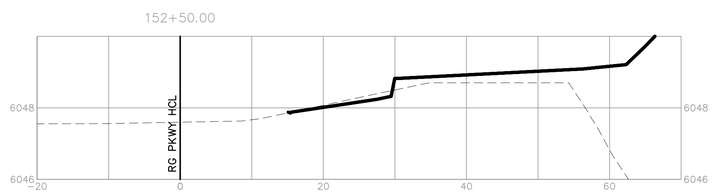


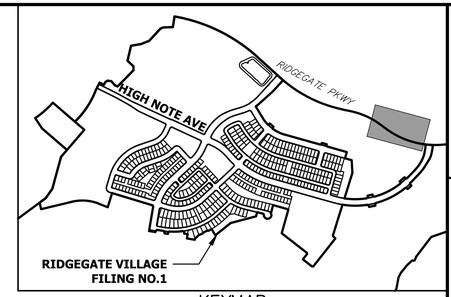












KEYMAP
SCALE: 1"=1000'

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=50'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	CWC
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
CROSS SECTIONS-RIDGEGATE PARKWAY

50 25 0 50 100
ORIGINAL SCALE: 1" = 50'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

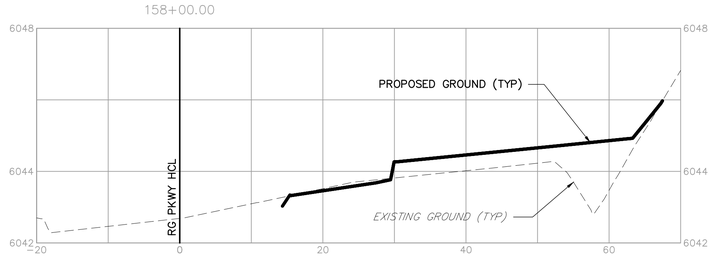
PREPARED UNDER MY SUPERVISION

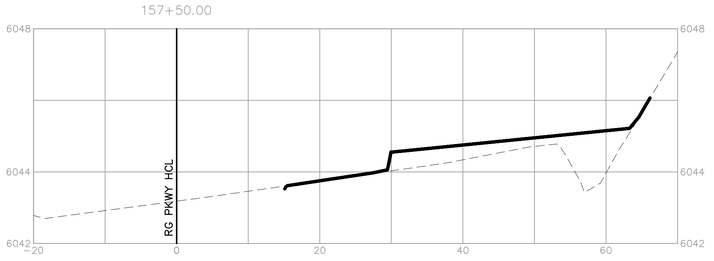
COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

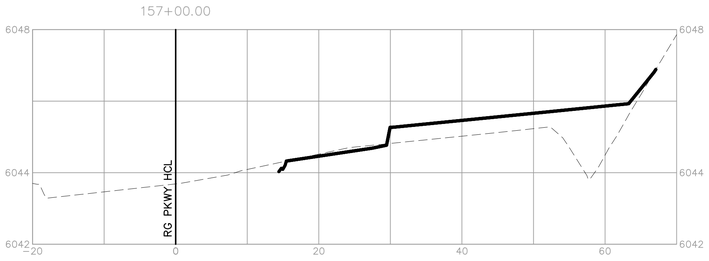
AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

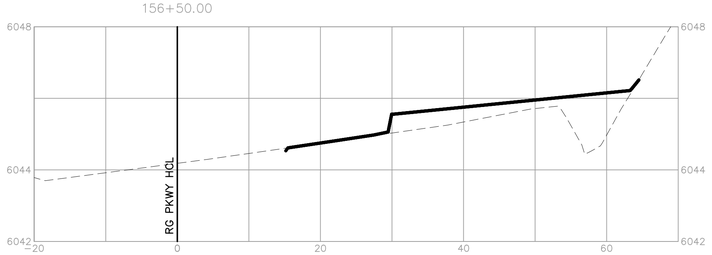
SHEET 54 OF 270

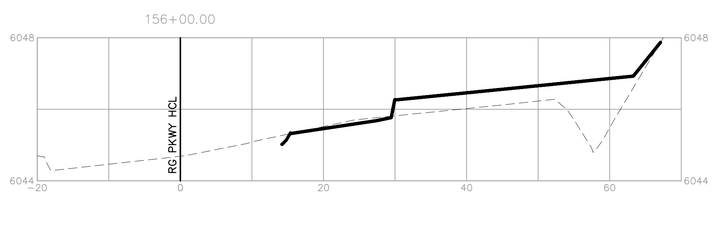
JOB NO. 15950.01

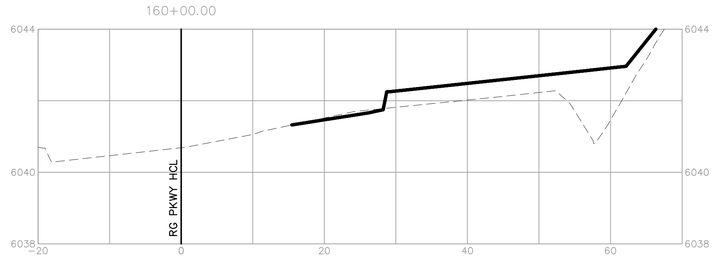


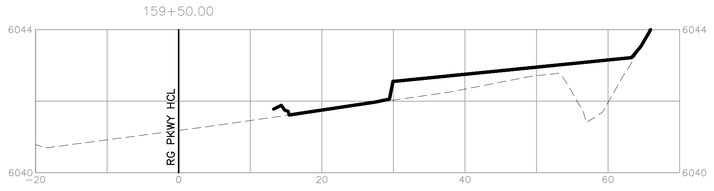


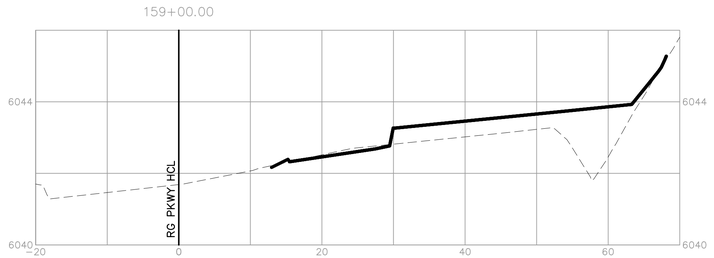


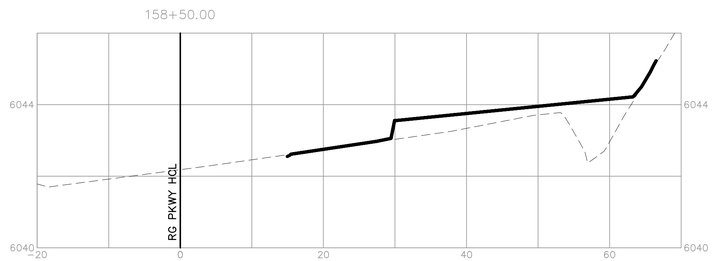


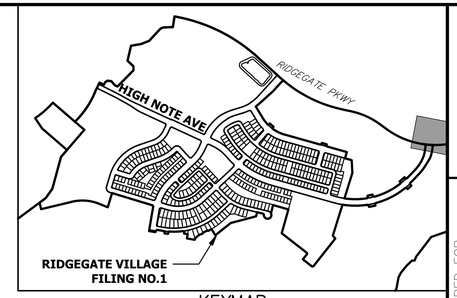












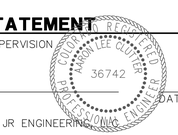
KEYMAP
SCALE: 1"=1000'

ORIGINAL SCALE: 1" = 50'

811 Know what's **below.** **Call** before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION



AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE

No.	REVISION

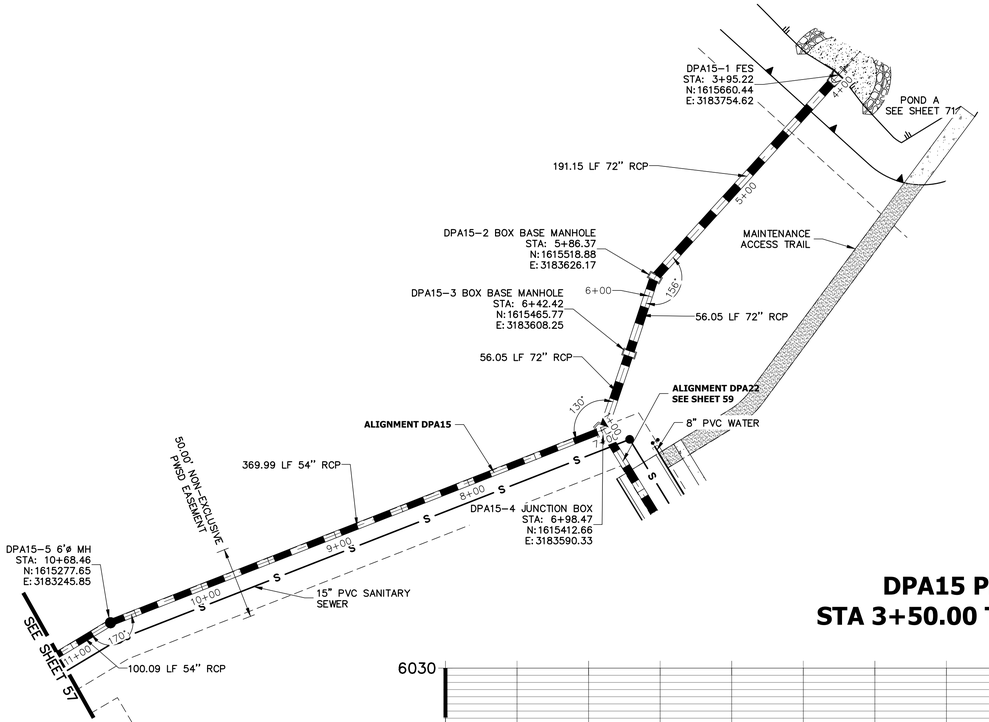
H-SCALE	1"=50'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	CWC
DRAWN BY	SDL
CHECKED BY	

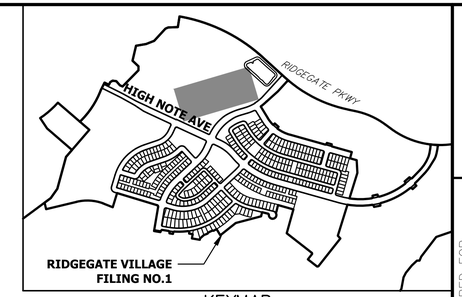
RIDGEGATE SOUTHWEST VILLAGE FILING 1

CROSS SECTIONS-RIDGEGATE PARKWAY

SHEET 55 OF 270

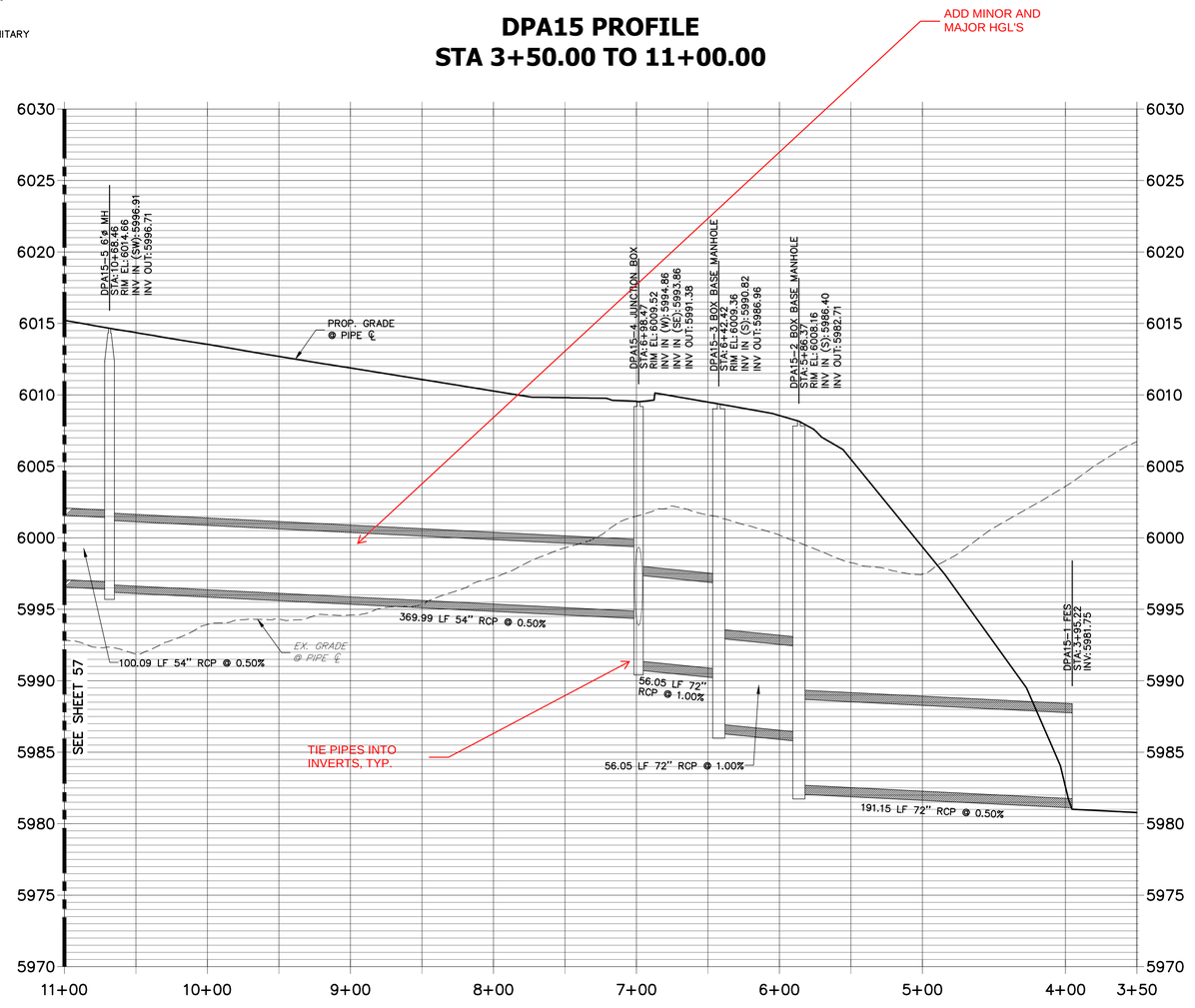
JOB NO. 15950.01





KEYMAP
SCALE: 1"=1000'

DPA15 PROFILE
STA 3+50.00 TO 11+00.00



STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON-GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.

50 25 0 50 100

HORIZONTAL
ORIGINAL SCALE: 1" = 50'
VERTICAL
ORIGINAL SCALE: 1" = 5'

811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

AARON LEE CLUTTER — COLORADO — 36742 — REGISTERED PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

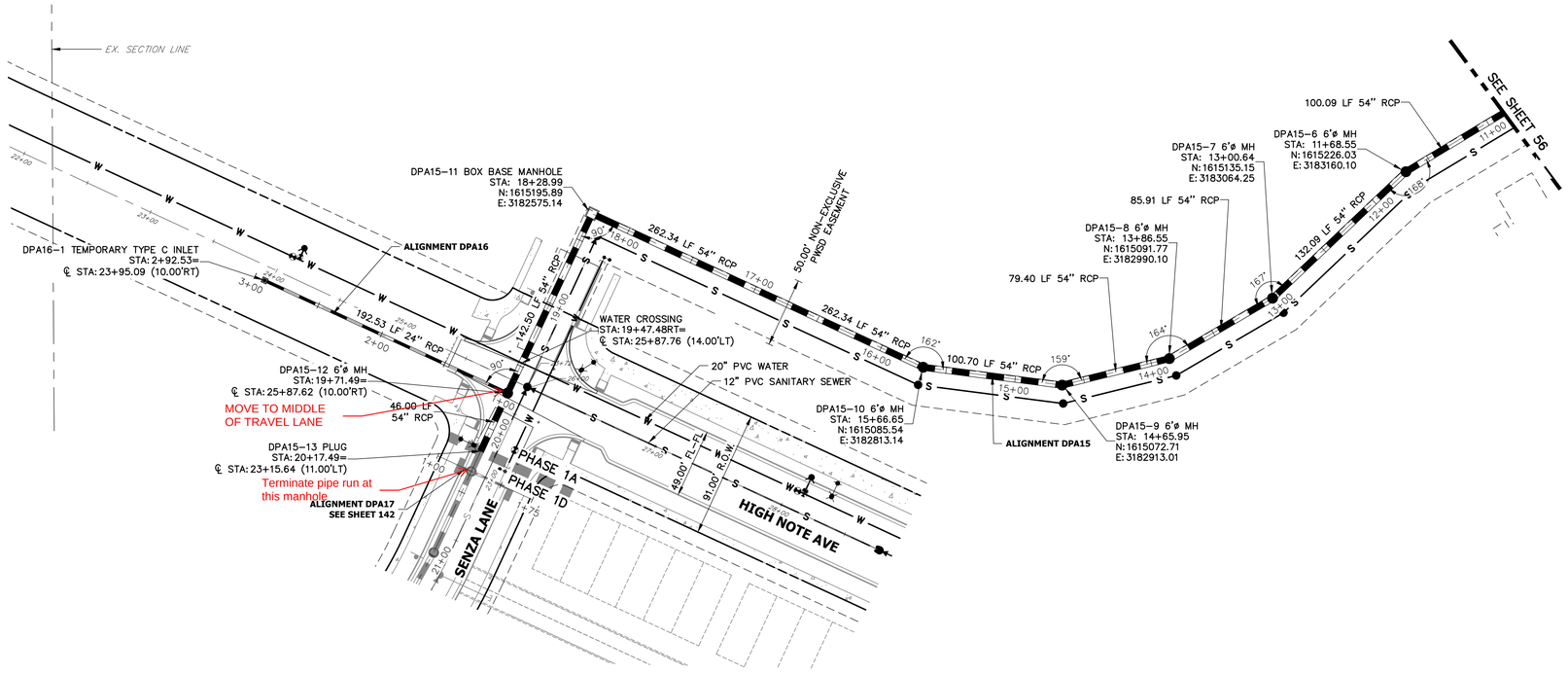
H-SCALE	1"=50'	DESIGNED BY	CGM
V-SCALE	1"=5'	DRAWN BY	CGM
DATE	2/12/21	CHECKED BY	

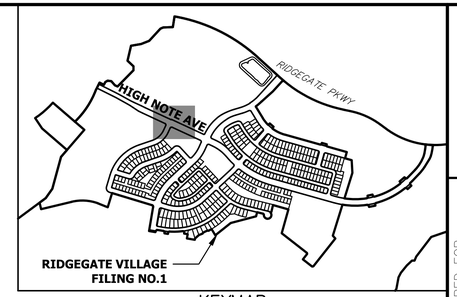
RIDGEGATE SOUTHWEST VILLAGE FILING 1

STORM PLAN & PROFILE–PHASE 1A

SHEET 56 OF 270

JOB NO. 15950.01



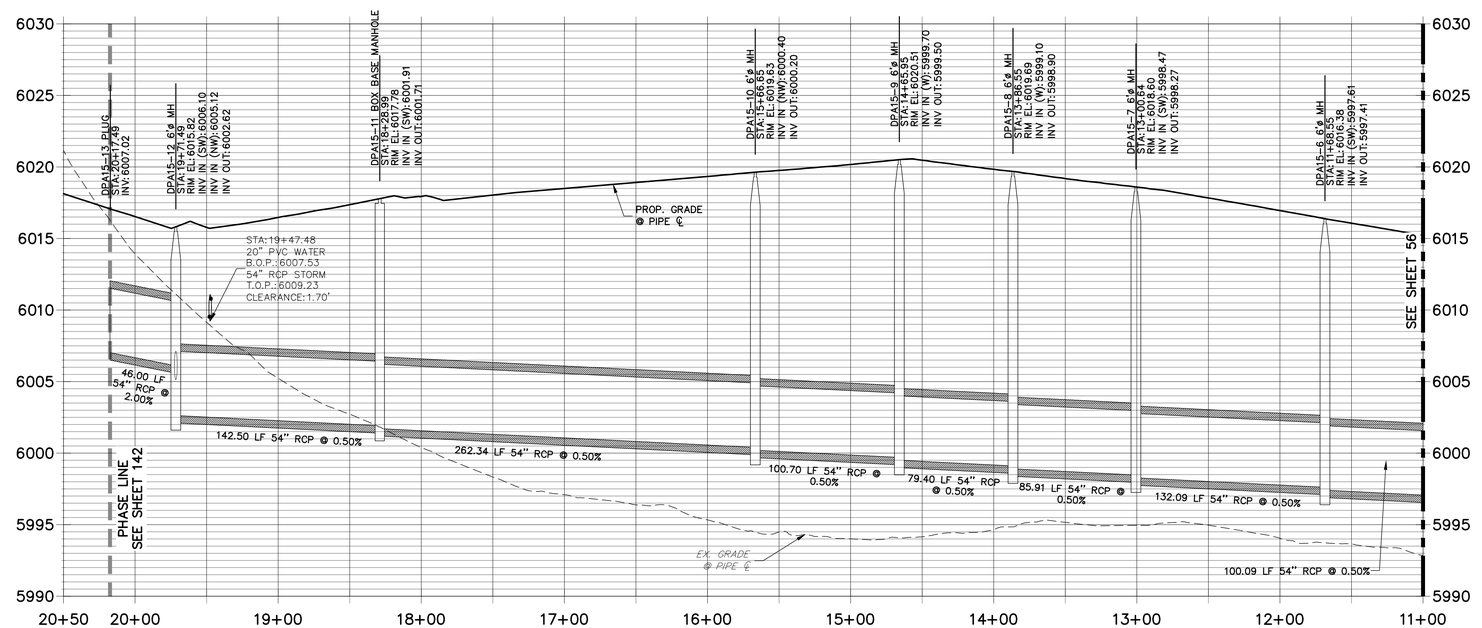


KEYMAP
SCALE: 1"=1000'

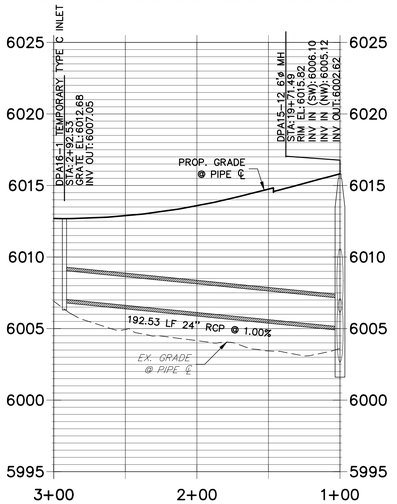
STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON-GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.

DPA15 PROFILE (CONT.)
STA 11+00.00 TO 20+50.00



DPA16 PROFILE
STA 1+00.00 TO 3+00.00



50 25 0 50 100
HORIZONTAL
ORIGINAL SCALE: 1" = 50'
VERTICAL
ORIGINAL SCALE: 1" = 5'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

No.	REVISION	BY	DATE

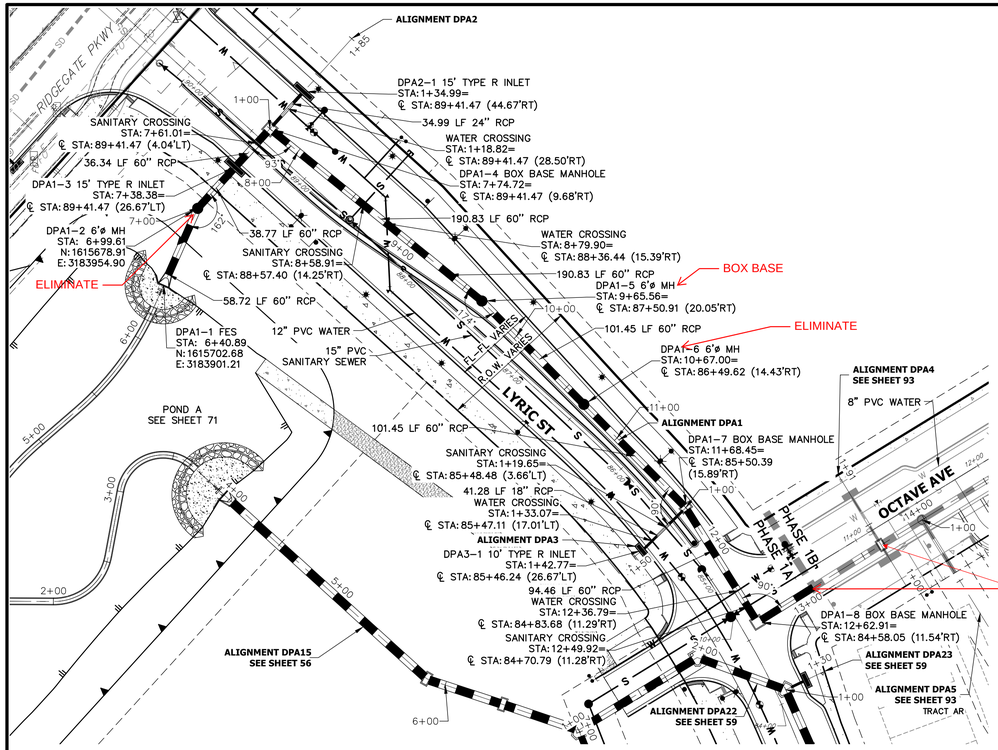
H-SCALE	1"=50'	DESIGNED BY	CGM
V-SCALE	1"=5'	DRAWN BY	CGM
DATE	2/12/21	CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

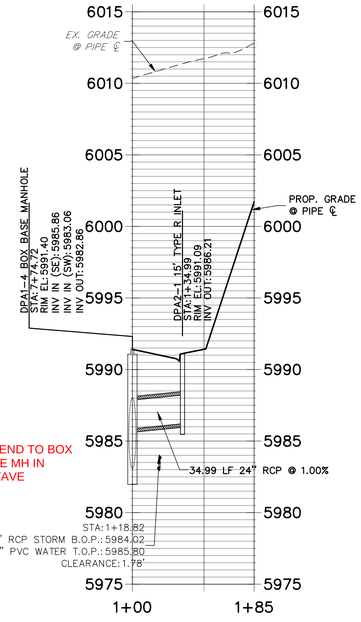
STORM PLAN & PROFILE-PHASE 1A

SHEET 57 OF 270

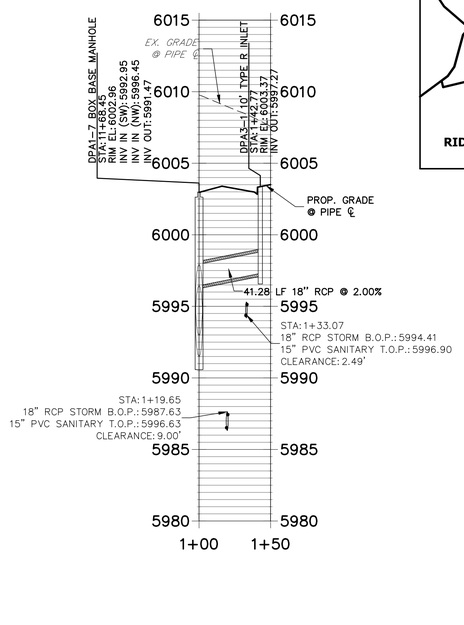
JOB NO. 15950.01

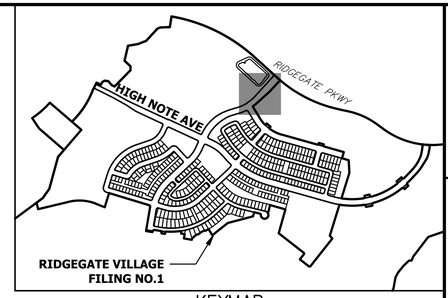


DPA2 PROFILE
STA 1+00.00 TO 1+85.00



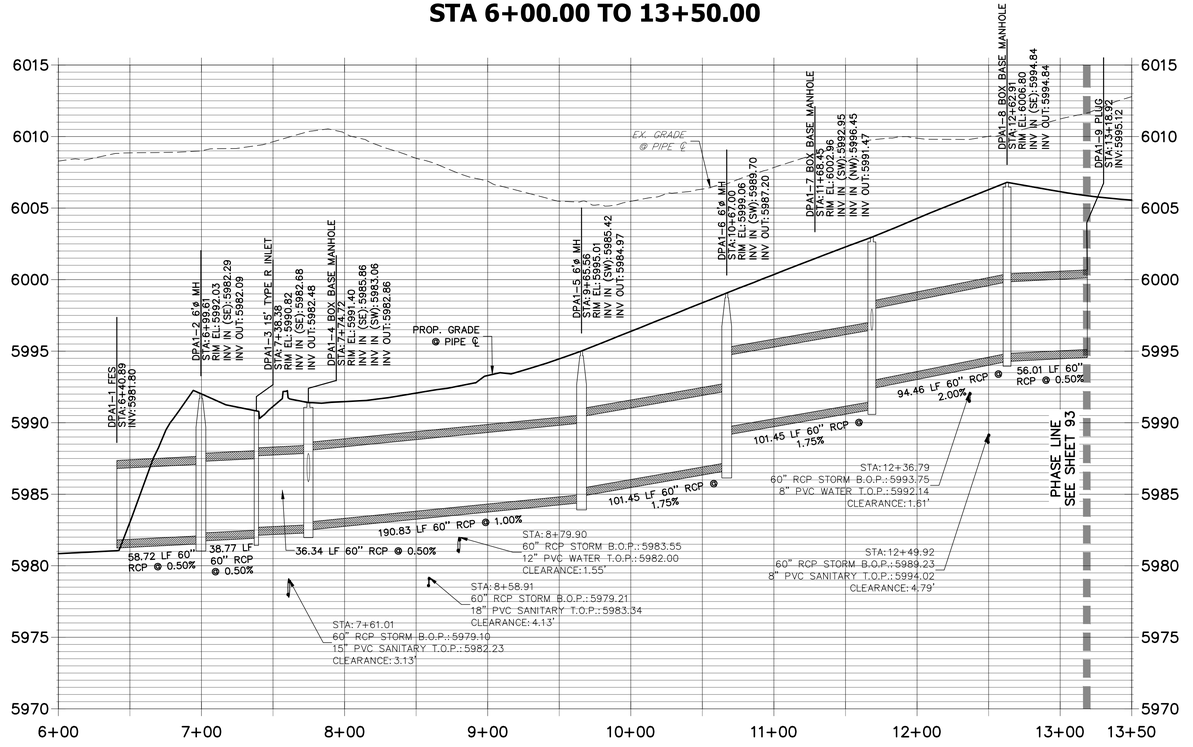
DPA3 PROFILE
STA 1+00.00 TO 1+50.00





KEYMAP
SCALE:1"=1000'

DPA1 PROFILE
STA 6+00.00 TO 13+50.00



STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON–GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.

50 25 0 50 100
HORIZONTAL
ORIGINAL SCALE: 1" = 50'
VERTICAL
ORIGINAL SCALE: 1" = 5'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

DATE

UNTIL SUCH TIME AS THESE PLANS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

No.	REVISION	BY	DATE

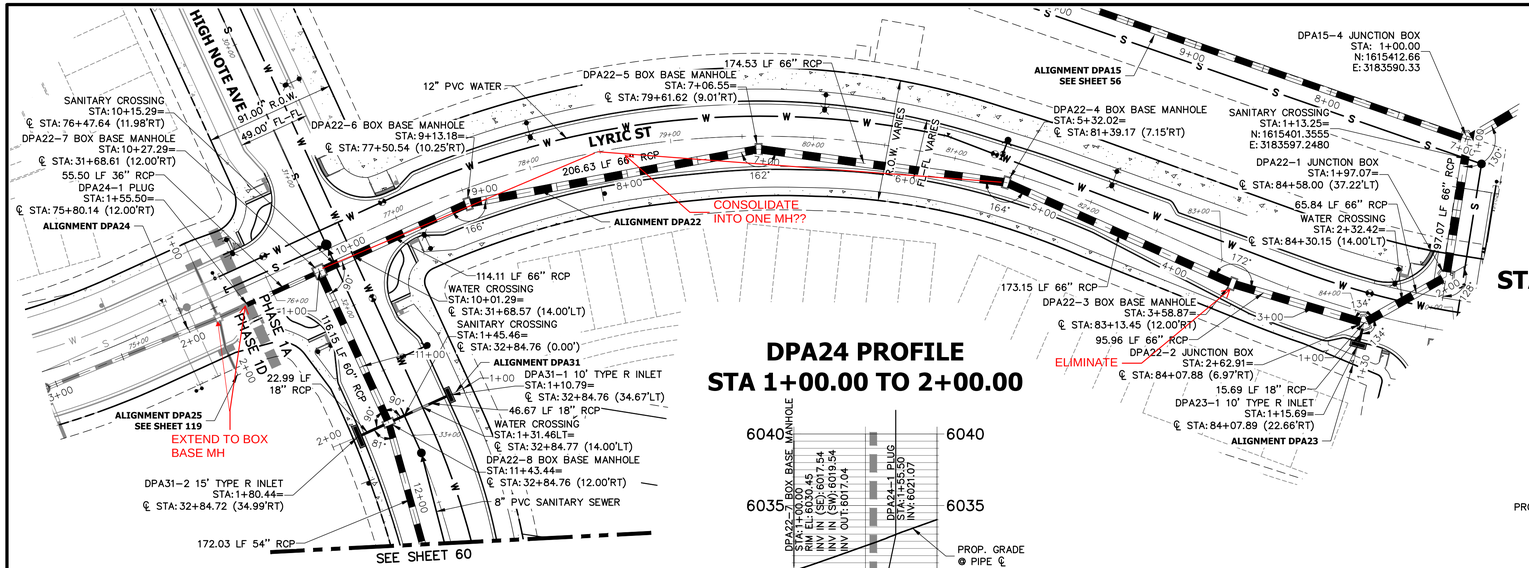
H–SCALE	1"=50'	DESIGNED BY	CGM
V–SCALE	1"=5'	DRAWN BY	CGM
DATE	2/12/21	CHECKED BY	

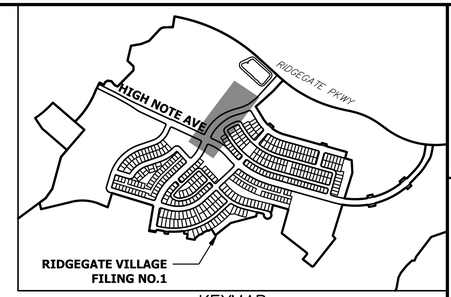
RIDGEGATE SOUTHWEST VILLAGE FILING 1

STORM PLAN & PROFILE–PHASE 1A

SHEET 58 OF 270

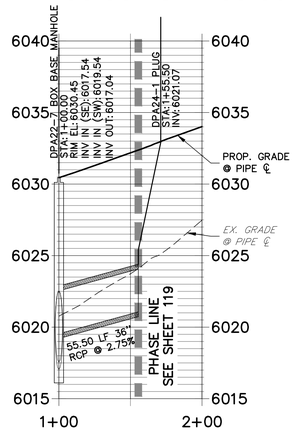
JOB NO. 15950.01



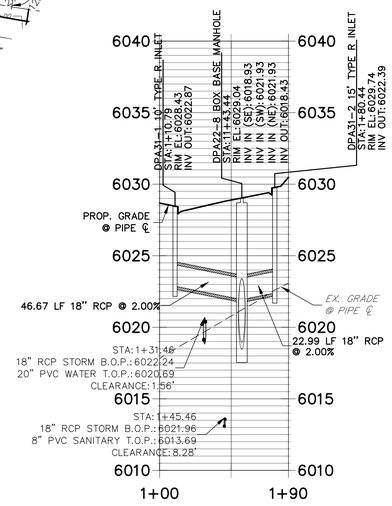


KEYMAP
SCALE:1"=1000'

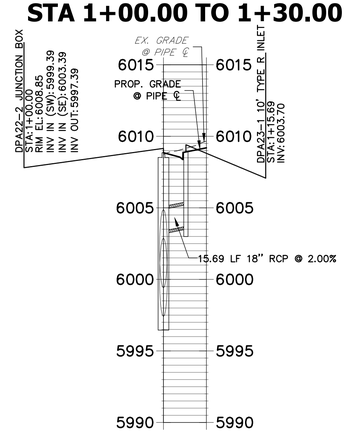
DPA24 PROFILE
STA 1+00.00 TO 2+00.00



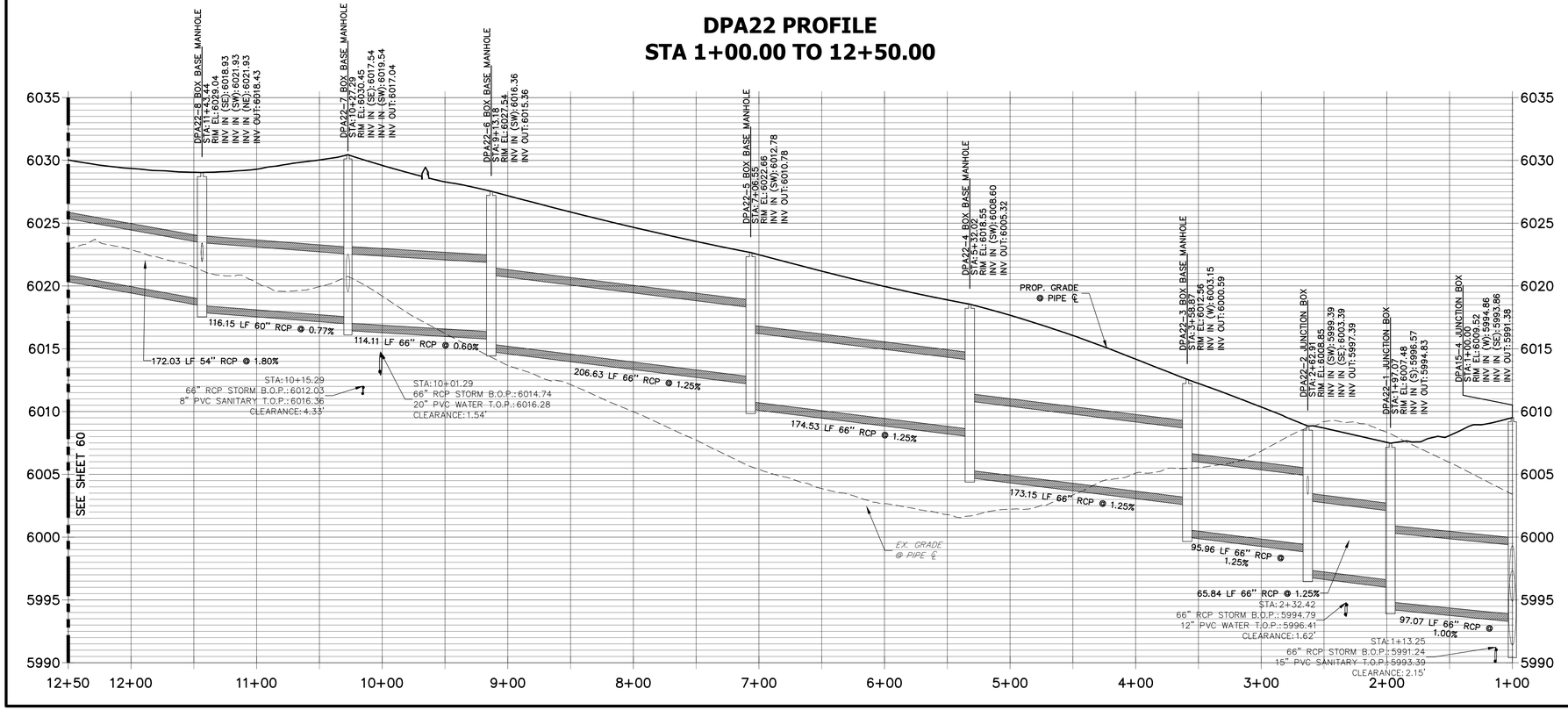
DPA31 PROFILE
STA 1+00.00 TO 1+90.00



DPA23 PROFILE
STA 1+00.00 TO 1+30.00



DPA22 PROFILE
STA 1+00.00 TO 12+50.00



STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON-GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.

50 25 0 50 100

HORIZONTAL
ORIGINAL SCALE: 1" = 50'
VERTICAL
ORIGINAL SCALE: 1" = 5'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE PLANS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

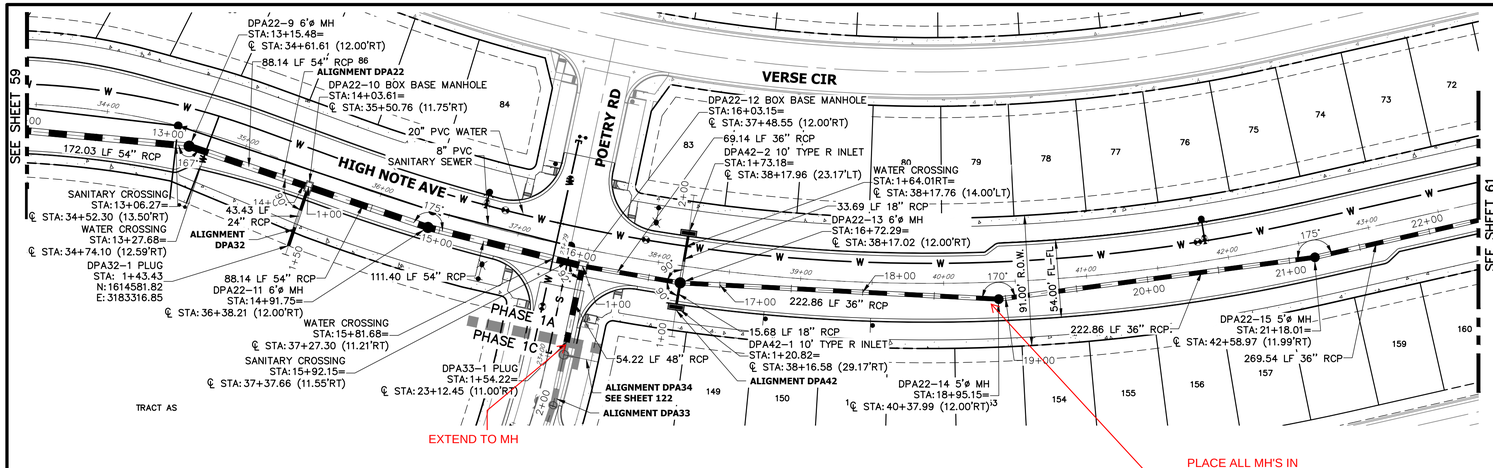
No.	REVISION	BY	DATE

H-SCALE 1"=50'
V-SCALE 1"=5'
DATE 2/12/21
DESIGNED BY CGM
DRAWN BY CGM
CHECKED BY

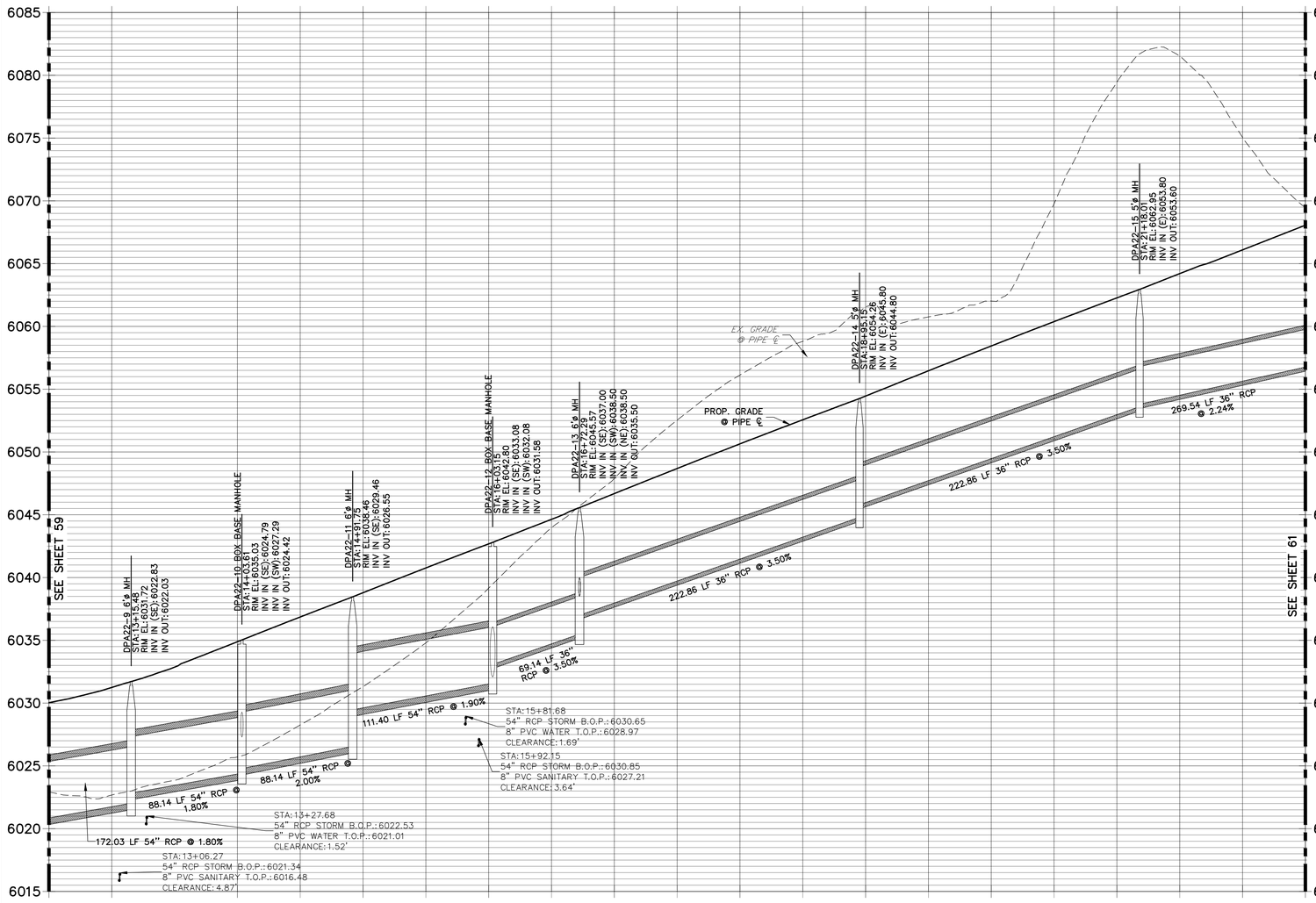
RIDGEGATE SOUTHWEST VILLAGE FILING 1

STORM PLAN & PROFILE-PHASE 1A

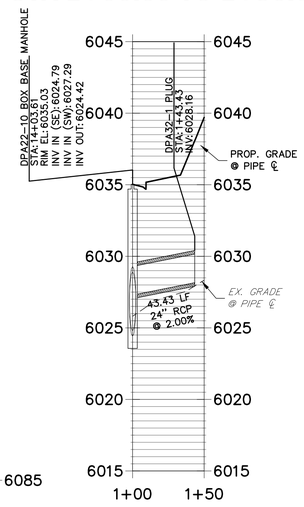
SHEET 59 OF 270
JOB NO. 15950.01

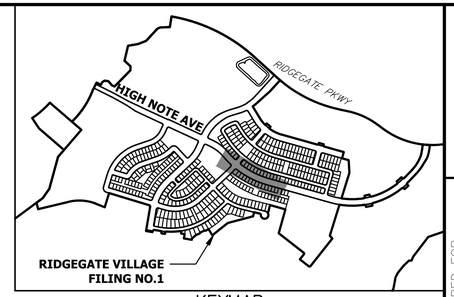


DPA22 PROFILE (CONT.)
STA 12+50.00 TO 22+50.00



DPA32 PROFILE
STA 1+00.00 TO 1+50.00



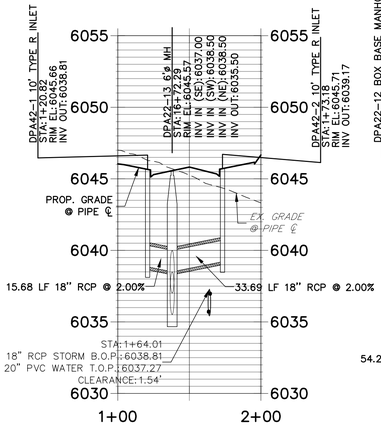


KEYMAP
SCALE:1"=1000'

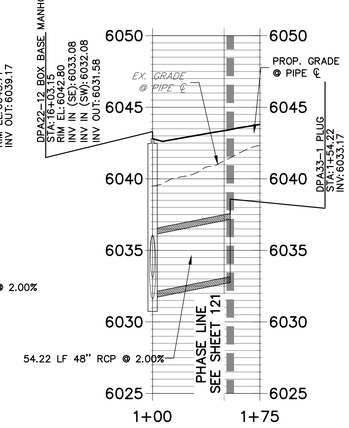
STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON-GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.

DPA42 PROFILE
STA 1+00.00 TO 2+00.00



DPA33 PROFILE
STA 1+00.00 TO 1+75.00



Know what's below. Call before you dig.

50 25 0 50 100

HORIZONTAL
ORIGINAL SCALE: 1" = 50'
VERTICAL
ORIGINAL SCALE: 1" = 5'

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED P.E. AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

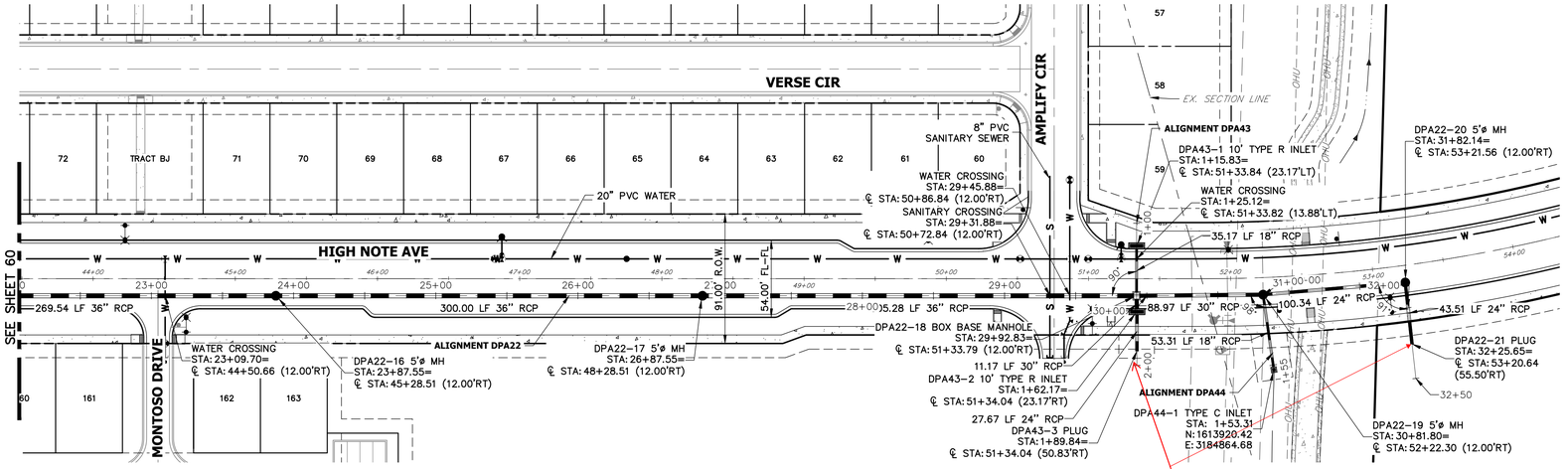
H-SCALE	1"=50'	DESIGNED BY	CGM
V-SCALE	1"=5'	DRAWN BY	CGM
DATE	2/12/21	CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

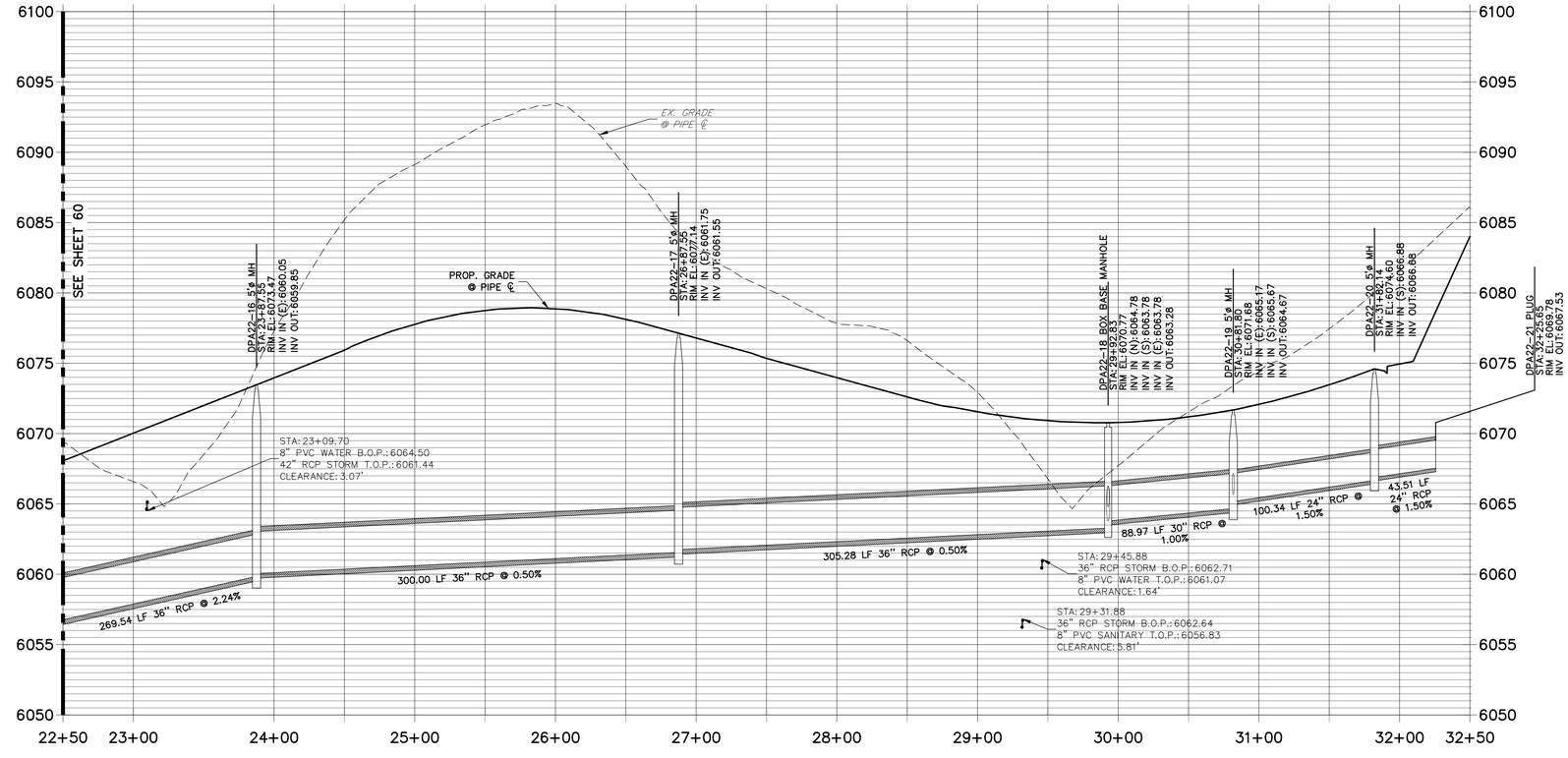
STORM PLAN & PROFILE-PHASE 1A

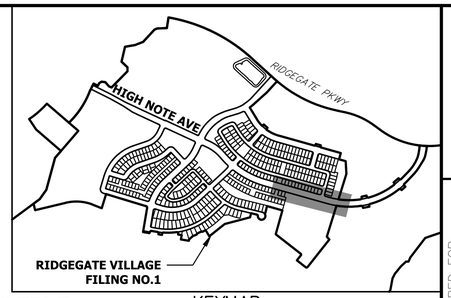
SHEET 60 OF 270

JOB NO. 15950.01



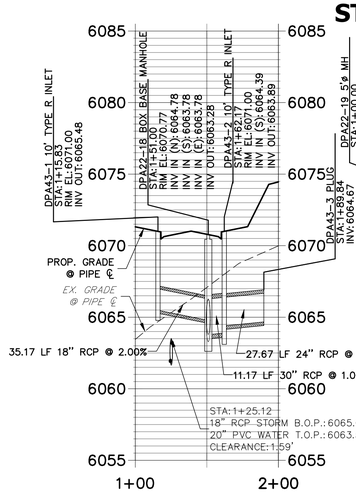
DPA22 PROFILE (CONT.)
STA 22+50.00 TO 32+50.00



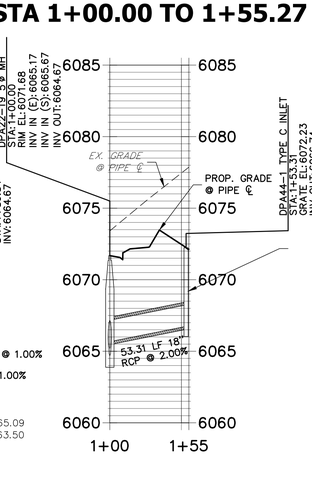


KEYMAP
SCALE: 1"=1000'

DPA43 PROFILE
STA 1+00.00 TO 2+00.00



DPA44 PROFILE
STA 1+00.00 TO 1+55.27



STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON–GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.

50 25 0 50 100
HORIZONTAL
ORIGINAL SCALE: 1" = 50'
VERTICAL
ORIGINAL SCALE: 1" = 5'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

No.	REVISION	BY	DATE

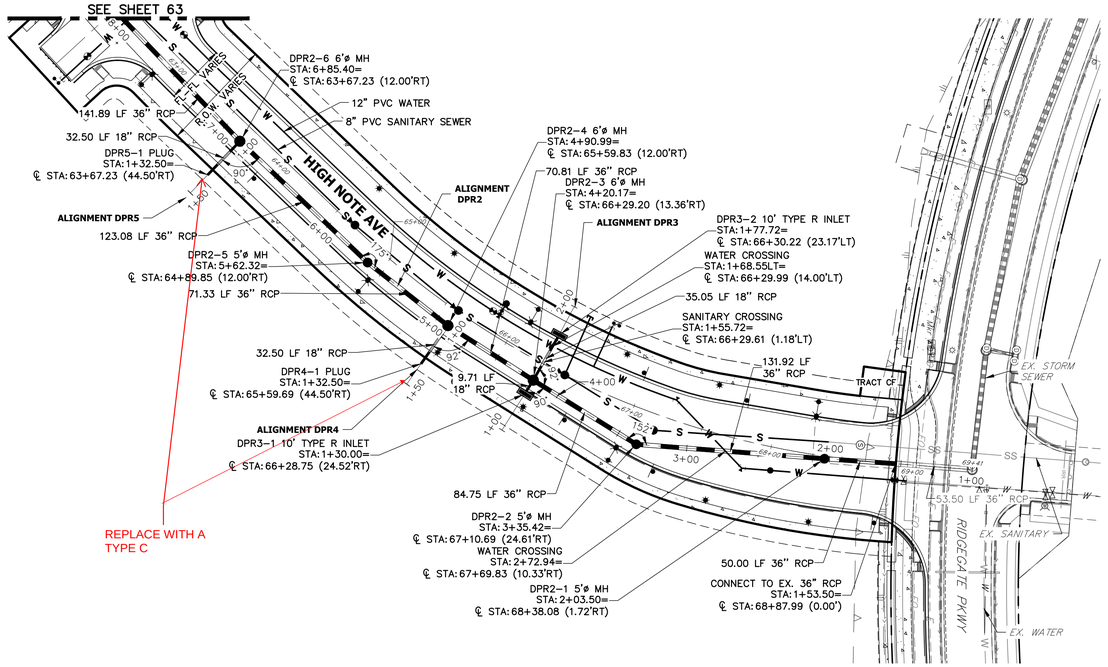
H–SCALE	1"=50'	DESIGNED BY	CGM
V–SCALE	1"=5'	DRAWN BY	CGM
DATE	2/12/21	CHECKED BY	

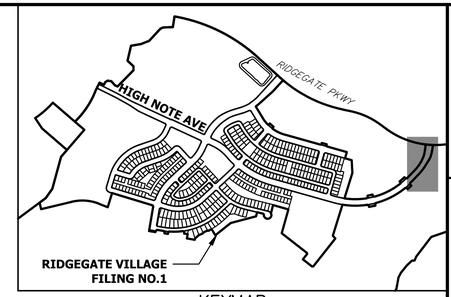
RIDGEGATE SOUTHWEST VILLAGE FILING 1

STORM PLAN & PROFILE–PHASE 1A

SHEET 61 OF 270

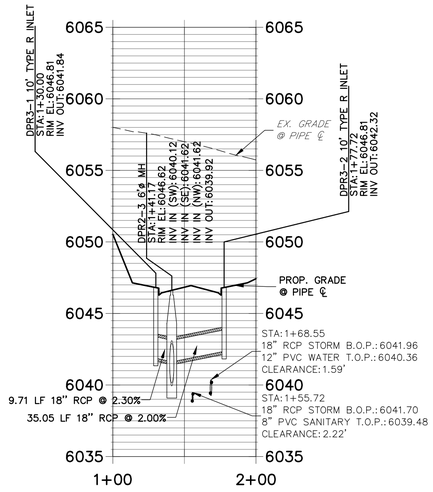
JOB NO. 15950.01



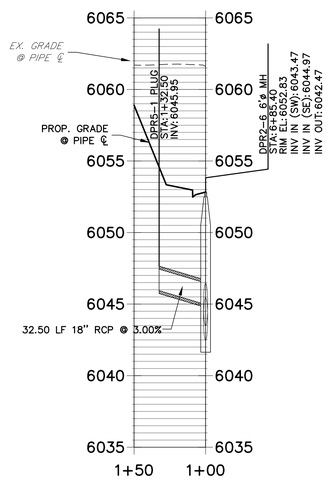


KEYMAP
SCALE: 1"=1000'

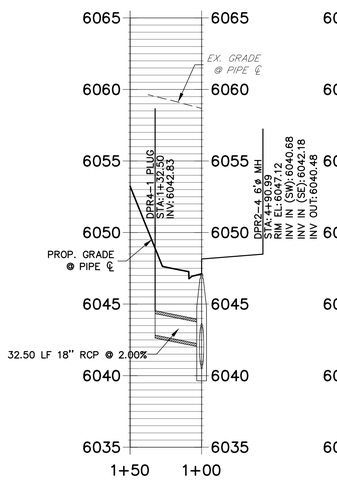
DPR3 PROFILE
STA 1+00.00 TO 2+00.00



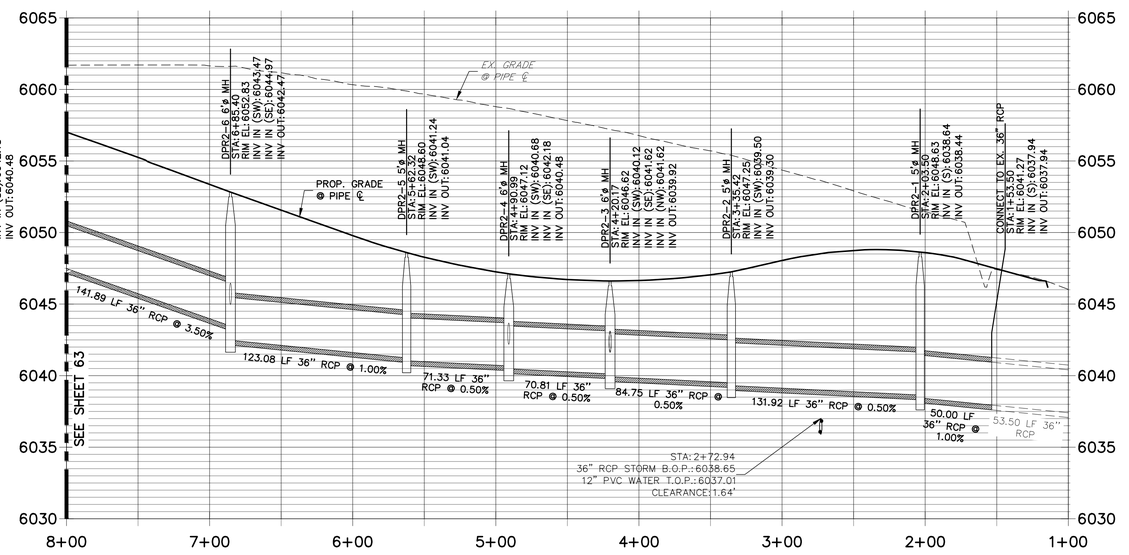
DPR5 PROFILE
STA 1+00.00 TO 1+50.00



DPR4 PROFILE
STA 1+00.00 TO 1+50.00



DPR2 PROFILE
STA 1+00.00 TO 8+00.00



STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON-GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.

50 25 0 50 100
HORIZONTAL
ORIGINAL SCALE: 1" = 50'
VERTICAL
ORIGINAL SCALE: 1" = 5'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

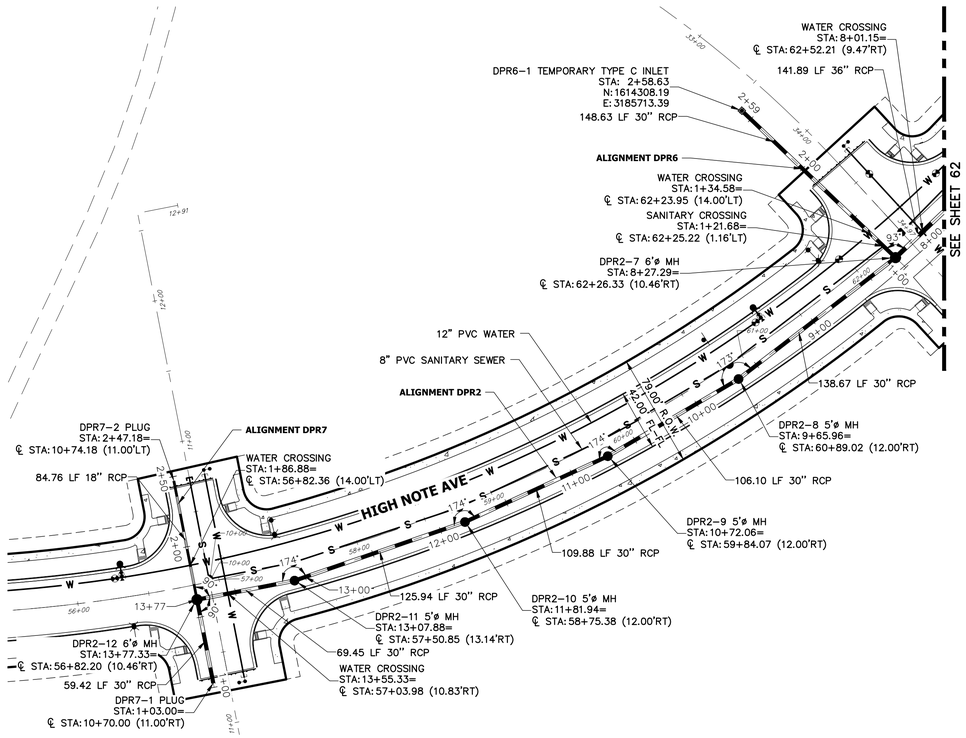
No.	REVISION	BY	DATE

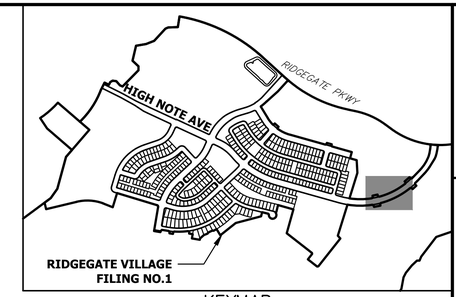
H-SCALE 1"=50'
V-SCALE 1"=5'
DATE 2/12/21
DESIGNED BY CGM
DRAWN BY CGM
CHECKED BY

RIDGEGATE SOUTHWEST VILLAGE FILING 1

STORM PLAN & PROFILE-PHASE 1A

SHEET 62 OF 270
JOB NO. 15950.01





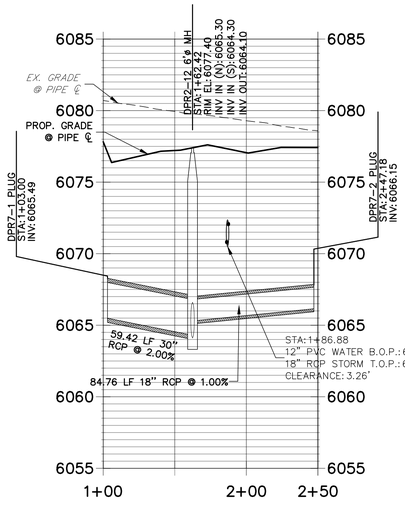
KEYMAP
SCALE: 1"=1000'

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

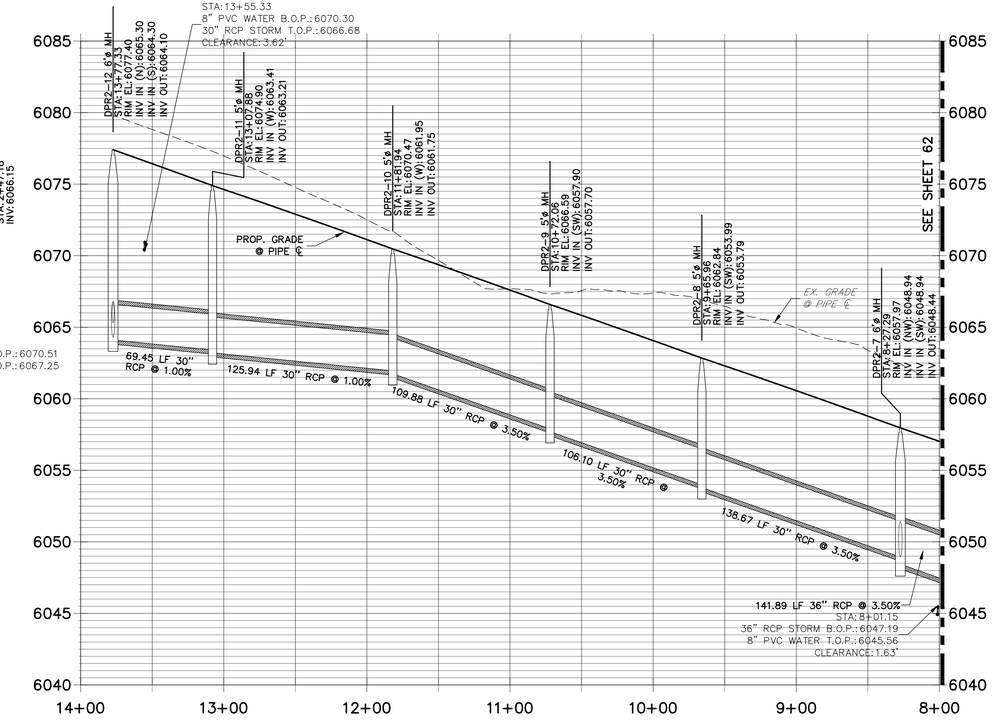
PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

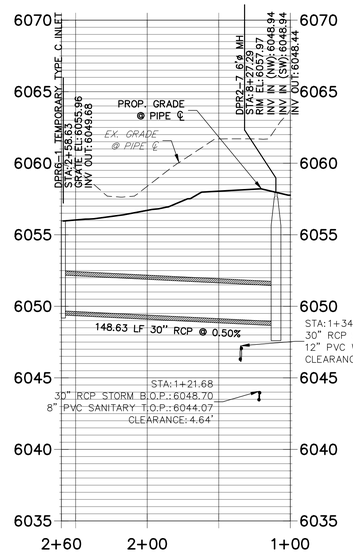
DPR7 PROFILE
STA 1+00.00 TO 2+50.00



DPR2 PROFILE (CONT.)
STA 8+00.00 TO 14+00.00



DPR6 PROFILE
STA 1+00.00 TO 2+60.00



STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON-GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.

50 25 0 50 100
HORIZONTAL
ORIGINAL SCALE: 1" = 50'
VERTICAL
ORIGINAL SCALE: 1" = 5'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

AARON LEE CLUTTER 36742 REGISTERED PROFESSIONAL ENGINEER

No.	REVISION	BY	DATE

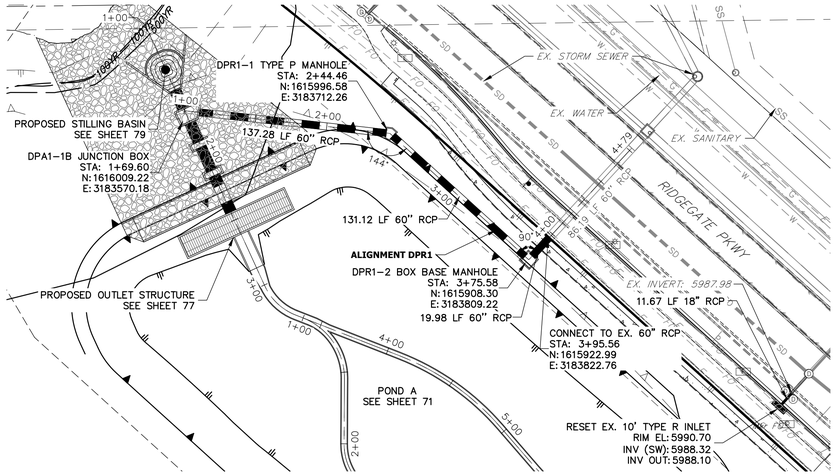
H-SCALE	1"=50'	DESIGNED BY	CGM
V-SCALE	1"=5'	DRAWN BY	CGM
DATE	2/12/21	CHECKED BY	

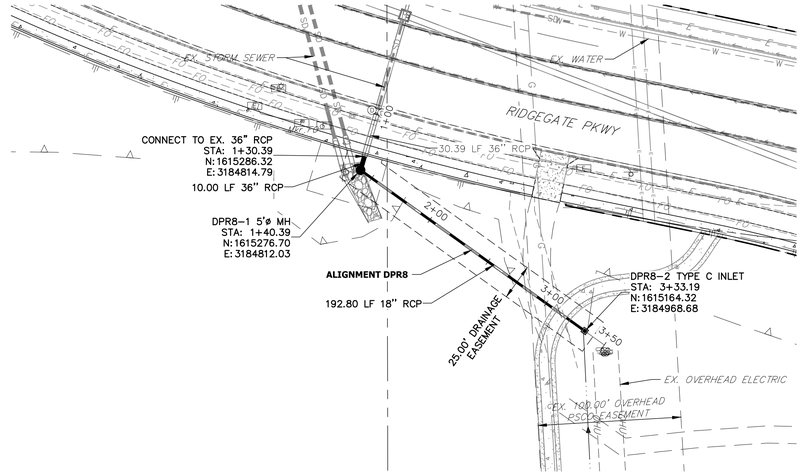
RIDGEGATE SOUTHWEST VILLAGE FILING 1

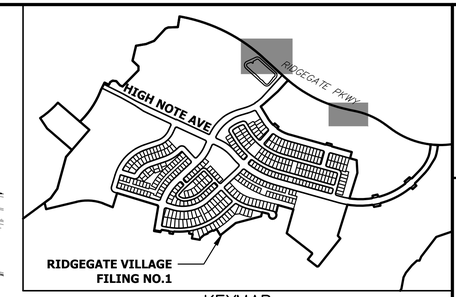
STORM PLAN & PROFILE-PHASE 1A

SHEET 63 OF 270

JOB NO. 15950.01

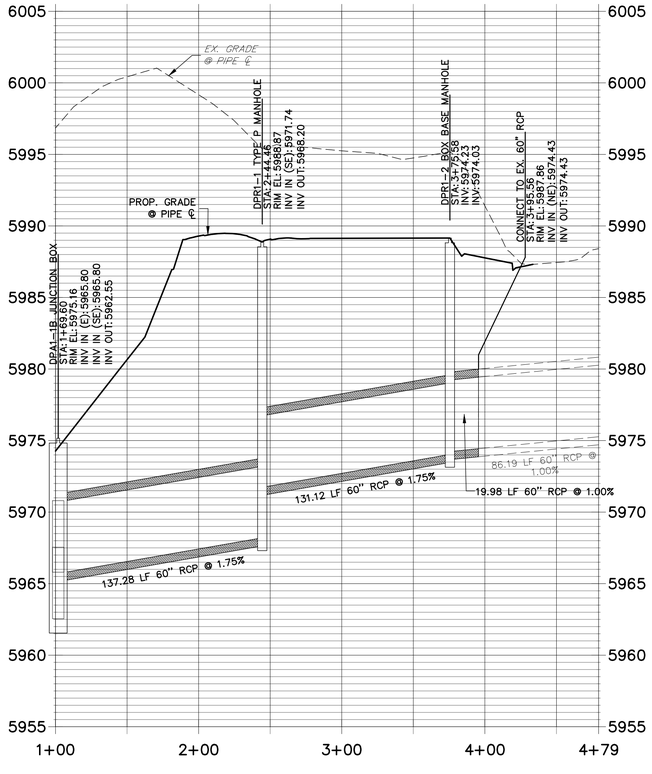




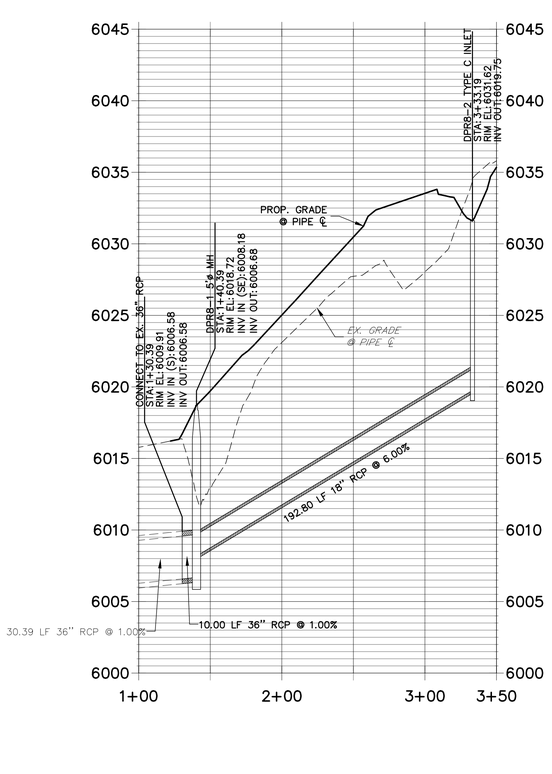


KEYMAP
SCALE:1"=1000'

DPR1 PROFILE
STA 1+00.00 TO 4+79.49



DPR8 PROFILE
STA 1+00.00 TO 3+50.00



STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON-GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.

50 25 0 50 100

HORIZONTAL
ORIGINAL SCALE: 1" = 50'
VERTICAL
ORIGINAL SCALE: 1" = 5'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE

No.	REVISION	BY

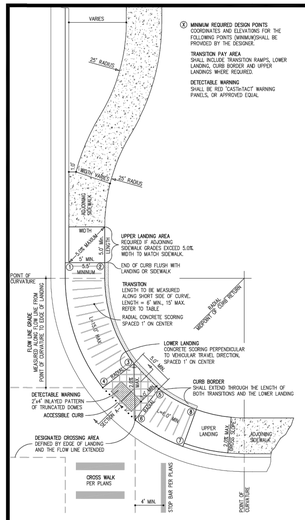
H-SCALE	1"=50'
V-SCALE	1"=5'
DATE	2/12/21
DESIGNED BY	CGM
DRAWN BY	CGM
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

STORM PLAN & PROFILE-PHASE 1A

SHEET 64 OF 270

JOB NO. 15950.01



Ⓐ MINIMUM REQUIRED DESIGN POINTS COORDINATES AND ELEVATIONS FOR THE FOLLOWING POINTS SHALL/MAY/SHALL BE PROVIDED BY THE DESIGNER.

TRANSITION FLAT AREA - INCLUDES TRANSITION RAMPS, LOWER LANDING, CURB BORDER AND UPPER LANDINGS WHERE REQUIRED.

DETECTABLE WARNING SHALL BE RED "CAST-IN-FACT" WARNING PAVERS, OR APPROVED EQUAL

NOTES

SLOPED TRANSITIONS SHALL COMPLY WITH ALL APPLICABLE RULES AND GUIDELINES OF THE AMERICANS WITH DISABILITIES ACT.

SLOPED TRANSITIONS SHALL BE CONSISTENT WITH THE CURRENT PUBLICATION OF FEDERAL GUIDELINES FOR ACCESSIBLE RIGHTS OF WAY.

LONGITUDINAL SLOPES WITHIN THE TRANSITION SHALL NOT EXCEED 1:12 (8.33%).

CROSS SLOPES, OR SLOPES PERPENDICULAR TO THE DIRECTION OF TRAVEL SHALL NOT EXCEED 1:50 (2.0%)

THE LOWER LANDING AREA IS A REQUIRED ELEMENT.

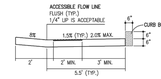
SLOPED TRANSITIONS ARE A REQUIRED ELEMENT AND SHALL:
- A. NOT EXCEED 1:12 (8.3%) LONGITUDINAL SLOPE ALONG THE SHORTEST SIDE UNLESS TRANSITION LENGTH EXCEEDS 15.0'
- B. NOT EXCEED 1:50 (2.0%) SLOPE PERPENDICULAR TO THE TRAVELED DIRECTION.
- C. NOT EXCEED 15.0' IN LENGTH AS MEASURED ALONG THE SHORTEST SIDE. MAXIMUM LONGITUDINAL SLOPE SHALL BE ADJUSTED TO ACCOMODATE THE LENGTH.
- D. NOT BE LESS THAN 6.0' IN LENGTH.

THE UPPER LANDING AREA IS REQUIRED IF:
- A. THE ADJOINING SIDEWALK HAS A LONGITUDINAL GRADE (DIRECTION OF TRAVEL) IN EXCESS OF 5.0% (1:20). SAID LANDING SHALL NOT EXCEED A 1-20 (5.0%) SLOPE IN ANY DIRECTION.
- B. A CHANGE IN DIRECTION IS REQUIRED TO ENTER OF EXIT THE SLOPED TRANSITION. SAID LANDING SHALL NOT EXCEED 1:50 (2.0%) SLOPE IN ANY DIRECTION.

LANDINGS AND SLOPED TRANSITIONS SHALL MATCH THE WIDTH OF THE ADJOINING SIDEWALK, 3.0' MINIMUM.

ALL TOOLED JOINTS WITHIN THE SLOPED TRANSITIONS SHALL RUN PERPENDICULAR TO THE DIRECTION OF TRAVEL.

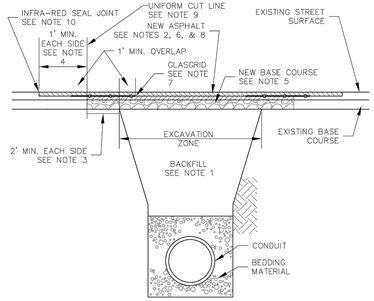
ALL TOOLED JOINTS WITHIN THE LOWER LANDING AREA SHALL RUN PARALLEL TO AND/OR PERPENDICULAR TO THE DIRECTION OF VEHICULAR TRAVEL WITHIN THE TRAVELED WAY.



SECTION A-A

TOOLED JOINT

CITY OF LONE TREE Department of Public Works	CURB TRANSITION	
	SCALE: NTS	DETAIL 1
	DATE: 3/05	



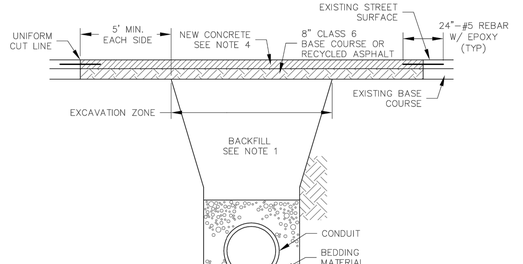
TYPICAL TRENCH SECTION

ROADWAY CLASSIFICATION	MIN. PAVEMENT PATCH THICKNESS
ARTERIAL	9 IN.
COLLECTOR	7 IN.
LOCAL	5 IN.

NOTES:

1. ALL PUBLIC STREET CUTS SHALL BE BACKFILLED WITH CLSM UNLESS THE TRENCH IS WIDE ENOUGH FOR A FULL-SIZED, SELF-PROPELLED COMPACTOR TO DRIVE THROUGH.
2. PAVEMENT PATCH THICKNESS SHALL NOT BE LESS THAN THE EXISTING SECTION.
3. SAW CUT AND REMOVE PAVEMENT AND BASE A MINIMUM OF 2' BACK FROM EXCAVATION ZONE OR LIMITS OF UNDISTURBED SUB-BASE, WHICHEVER IS GREATER.
4. ROTOMILL ASPHALT (2" DEPTH MINIMUM) A MINIMUM OF 1' BEYOND THE FULL DEPTH SAW CUT AND REMOVAL.
5. INSTALL 8 INCHES OF CDOT CLASS 6 ROAD BASE OR RECYCLED ASPHALT, COMPACTED IN PLACE TO MINIMUM 95% MODIFIED PROCTOR MAXIMUM DENSITY (ASTM D 1557).
6. INSTALL AND PROPERLY COMPACT REQUIRED DEPTH OF BASE COURSE ASPHALTIC CONCRETE (CDOT GRADING S).
7. INSTALL REINFORCEMENT MAT (TENSAR GLASGRID 8511, OR APPROVED EQUAL) PER MANUFACTURERS RECOMMENDATIONS. (MINIMUM 5 FOOT WIDTH)
8. INSTALL AND PROPERLY COMPACT ASPHALTIC CONCRETE TOP COURSE (CDOT GRADING SX).
9. ALL CUTS TO BE SQUARED OFF PRIOR TO RESTORATION. SAW CUT OR ROTOMILL.
10. THE JOINT BETWEEN THE NEW TOP COURSE ASPHALT AND THE EXISTING ASPHALT SHALL BE SEALED USING INFRARED JOINTING PROCESS.
11. ARTERIAL STREETS AND MAJOR COLLECTORS MUST BE PATCHED THE SAME DAY THE CUT OCCURS, UNLESS OTHERWISE AUTHORIZED BY THE ENGINEERING/PUBLIC WORKS DEPARTMENT.
12. ANY PAVEMENT MARKING (LANE LINES, TURN ARROWS, ETC.) DAMAGED BY THE STREET CUT AND REPAIR OPERATIONS SHALL BE REPLACED IN CONFORMANCE WITH CITY SIGNAGE AND STRIPING STANDARDS, AS DIRECTED BY THE ENGINEERING/PUBLIC WORKS DEPARTMENT.

CITY OF LONE TREE PUBLIC WORKS	ASPHALT PAVEMENT PATCHBACK	DETAIL NUMBER 1
DATE: 9/24/13	BY: GAW	DRAWING NO.: ST-01



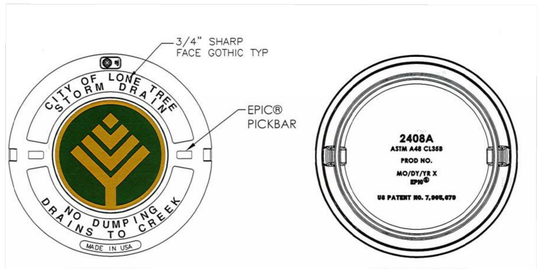
TYPICAL TRENCH SECTION

ROADWAY CLASSIFICATION	MIN. PAVEMENT PATCH THICKNESS
ARTERIAL	9 IN.
COLLECTOR	7 IN.
LOCAL	5 IN.

NOTES:

1. ALL PUBLIC STREET CUTS SHALL BE BACKFILLED WITH CLSM UNLESS THE TRENCH IS WIDE ENOUGH FOR A FULL-SIZED, SELF-PROPELLED COMPACTOR TO DRIVE THROUGH.
2. PAVEMENT PATCH THICKNESS SHALL NOT BE LESS THAN THE EXISTING SECTION.
3. SAW CUT AND REMOVE PAVEMENT AND BASE 5' BACK FROM EXCAVATION ZONE.
4. 8" OF COMPACTED CDOT CLASS 6 ROAD BASE OR RECYCLED ASPHALT SHALL BE INSTALLED PRIOR TO PAVING.
5. CONCRETE STREET PAVEMENT TO BE MINIMUM 7 SACK MIX, 5000 PSI AT 28 DAYS.
6. ALL CUTS TO BE SQUARED OFF PRIOR TO RESTORATION. SAW CUT OR ROTOMILL FULL DEPTH.
7. CONCRETE PATCHES SHALL BE DOWELED INTO EXISTING CONCERTE WITH 24"-#5 REBAR AT 18" O.C. AROUND THE PERIMETER OF THE PATCH.
8. ARTERIAL STREETS AND MAJOR COLLECTORS MUST BE PATCHED THE SAME DAY THE CUT OCCURS, UNLESS APPROVED BY THE ENGINEERING DEPARTMENT.

CITY OF LONE TREE PUBLIC WORKS	CONCRETE PAVEMENT PATCHBACK	DETAIL NUMBER 2
DATE: 12/9/11	BY: GAW	DRAWING NO.: ST-02



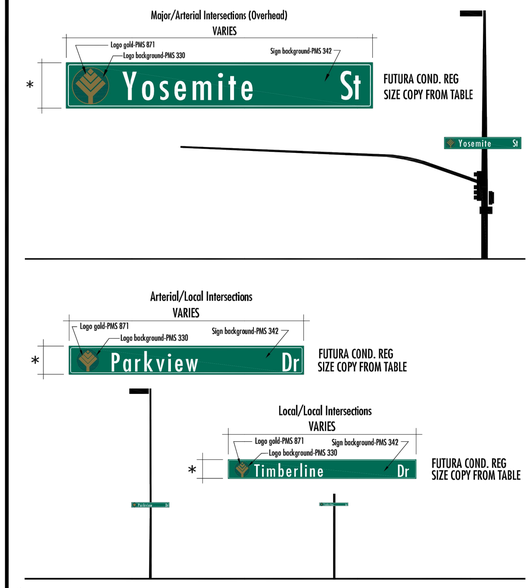
COVER FACE

COVER BOTTOM

SECTION

Design Features
- -Materials
  Gray Iron (CL35B)
- -Load Rating
  Heavy Duty
- -Open Area
  n/a
- -Coating
  Undipped
- -√ Designates Machined Surface

CITY OF LONE TREE PUBLIC WORKS	MANHOLE LID COVER	DETAIL NUMBER MH-1
DATE: 06/05/2020	BY: J. KRELL	DRAWING NO.:



* NOTE: SIGN HEIGHT SHALL BE 4" GREATER THAN RECOMMENDED MINIMUM UPPER-CASE LETTER HEIGHT PER TABLE, SHEET 3. CITY LOGO DIAMETER SHALL EQUAL UPPER-CASE LETTER HEIGHT.

CITY OF LONE TREE PUBLIC WORKS	INTERSECTION STREET NAME SIGNAGE	SHEET 1 OF 3
DATE: 08/28/13	BY: GRW	DRAWING NO.: SN-01

INTERSECTION STREET NAME SIGNAGE NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MOST RECENT VERSION OF THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE "COLORADO SUPPLEMENTAL MUTCD" AND THE DOUGLAS COUNTY "ROAD AND CONSTRUCTION STANDARDS MANUAL". FURTHER SPECIFICATIONS AND ILLUSTRATIONS ARE LOCATED IN THE COLORADO DIVISION OF HIGHWAYS "M AND S STANDARDS".
2. DELINEATION OF ROADWAYS SHALL BE AS SPECIFIED IN THE COLORADO "M AND S MANUAL".
3. STREET NAME SIGNS SHALL BE MOUNTED SO THAT THEY CAN BE SEEN FROM ALL DIRECTIONS OF TRAVEL.
4. INSTALLATION OF SIGNS SHALL CONFORM TO THE MUTCD MOUNTING HEIGHT REQUIREMENTS, INCLUDING A 7-FOOT MINIMUM HEIGHT FROM THE BOTTOM OF THE LOWEST SIGN PANEL TO THE TOP GRADE OF SIDEWALK.
5. ALL NEWLY INSTALLED TRAFFIC SIGNS SHALL MEET THE MINIMUM RETRO-REFLECTIVITY AND ILLUMINATION STANDARDS AS SET FORTH BY THE MUTCD (LATEST EDITION). THESE MINIMUM REQUIREMENTS SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
6. NON ILLUMINATED SIGNS SHALL BE USED AT MAJOR/MAJOR AND MAJOR/ARTERIAL INTERSECTIONS. THEY SHALL BE MOUNTED TO THE SIGNAL POLE WITH ASTRO-BRACS ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
7. THE CONTRACTOR INSTALLING SIGNS IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND UTILITIES. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.
8. FOLLOWING INSTALLATION, THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS DEPARTMENT, 303-662-8112. A FIELD INSPECTION OF LOCATION AND INSTALLATION OF ALL SIGNS SHALL BE PERFORMED BY PUBLIC WORKS. ALL DISCREPANCIES IDENTIFIED DURING THE FIELD INSPECTION MUST BE CORRECTED BEFORE THE TWO-YEAR WARRANTY PERIOD WILL BEGIN.
9. SIGNAGE AND STRIPING HAS BEEN DETERMINED BY INFORMATION AVAILABLE AT THE TIME OF REVIEW. PRIOR TO INITIATION OF THE WARRANTY PERIOD, LONE TREE RESERVES THE RIGHT TO REQUIRE MODIFICATIONS TO EXISTING OR INSTALLATION OF ADDITIONAL SIGNAGE AND/OR STRIPING IF THEY DETERMINE THAT AN UNFORESEEN CONDITION WARRANTS SUCH MODIFICATION ACCORDING TO THE MUTCD OR THE CDOT M AND S STANDARDS. ALL SIGNAGE AND STRIPING SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
10. ANY INTERSECTION STREET NAME SIGNAGE REMOVED SHALL BE RETURNED TO THE CITY OF LONE TREE.

CITY OF LONE TREE PUBLIC WORKS	INTERSECTION STREET NAME SIGNAGE	SHEET 2 OF 3
DATE: 04/19/12	BY: GRW	DRAWING NO.: SN-02

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS LONE TREE DEVELOPMENT ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

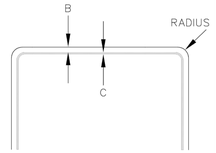
H-SCALE	N/A
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
STORM SEWER & ROADWAY DETAILS-PHASE 1A

SHEET 65 OF 270

JOB NO. 15950.01

STANDARD SIGN BORDER SPECIFICATIONS



SIGN SIZE	BORDER WIDTHS (INCH)			RADIUS (INCH)
	A	B	C	
< 12"	N/A	.375	.375	1
≥ 12"	N/A	.375	.438	1.5

MINIMUM LETTER HEIGHTS ON STREET NAME SIGNS

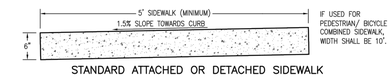
(MUTCD 2009 EDITION–TABLE 2D–2)

TYPE OF MOUNTING	TYPE OF STREET OR HIGHWAY	SPEED LIMIT	RECOMMENDED MINIMUM LETTER HEIGHT **	
			INITIAL UPPER–CASE	LOWER–CASE
OVERHEAD	ALL TYPES	ALL SPEED LIMITS	12 INCHES	9 INCHES
POST–MOUNTED	MULTI–LANE	MORE THAN 40 MPH	8 INCHES	6 INCHES
POST–MOUNTED	MULTI–LANE	40 MPH OR LESS	6 INCHES	4.5INCHES
POST–MOUNTED	2–LANE	ALL SPEED LIMITS	6 INCHES*	4.5 INCHES*

*ON LOCAL 2–LANE STREETS W/SPEED LIMITS OF 25 MPH OR LESS, 4" INITIAL UPPER–CASE LETTERS WITH 3" LOWER CASE LETTERS MAY BE USED.

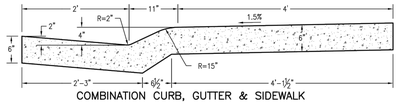
** SUPPLEMENTARY LETTERING (E.G. ST., DR., LN., & NUMBERING) SHALL BE A MINIMUM OF ½ THE APPLICABLE RECOMMENDED MINIMUM LETTER HEIGHT PER ABOVE TABLE

CITY OF LONE TREE PUBLIC WORKS	INTERSECTION STREET NAME SIGNAGE	SHEET
DATE: 04/19/12	BY: GRW	DRAWING NO.: SN–03	3 OF 3

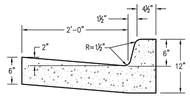


IF USED FOR PEDESTRIAN/ BICYCLE COMBINED SIDEWALK, WIDTH SHALL BE 10'.

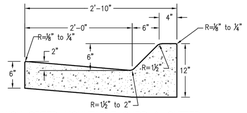
STANDARD ATTACHED OR DETACHED SIDEWALK



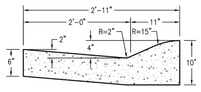
COMBINATION CURB, GUTTER & SIDEWALK



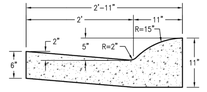
VERTICAL CURB & GUTTER



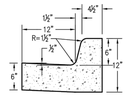
HIGH SPEED MOUNTABLE CURB & GUTTER
(DESIGN SPEED OF 45 M.P.H. OR HIGHER)



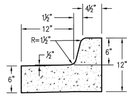
URBAN LOCAL MOUNTABLE CURB & GUTTER



RURAL LOCAL MOUNTABLE CURB & GUTTER



MEDIAN CURB & GUTTER (CATCH)



MEDIAN CURB & GUTTER (SPILL)

NOTES:
1. IF A SIDEWALK IS PLACED BEHIND THE CURB BUT IS NOT PLACED MONOLITHICALLY, EXPANSION JOINT MATERIAL AND A SILICONE BASE SEALER MUST BE APPLIED BETWEEN THE SIDEWALK AND THE CURB.
2. SEE DRAWING NUMBER SP.23a and SP.23b FOR TRENCH DRAIN.
3. SEE DRAWING NUMBER SP.31 AND SP.32 FOR CONCRETE JOINTS.

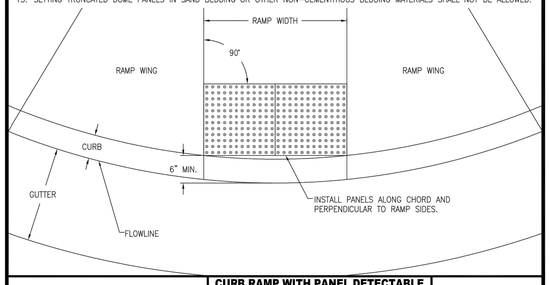
CURB & GUTTERS AND SIDEWALKS	Issued: 05/2013
DOUGLAS COUNTY COLORADO	Revised: 09/2017
	Drawing No. SP.17

Panel Installation Notes:

1. DETECTABLE WARNING PANELS, 24" X 24" OR 24" X 30" IN SIZE, SHALL BE PREFABRICATED REDDISH WITH TRUNCATED DOMES AND COMPLY WITH ADA REQUIREMENTS. ONLY FULL PANELS SHALL BE USED TO OBTAIN SPECIFIC RAMP THROAT WIDTH, (I.E. TWO 24" PANELS FOR A 4' RAMP, TWO 30" PANELS FOR A 5' RAMP, ETC.)
2. PRIOR TO START OF WORK, CONTRACTOR SHALL SUBMIT, TO DOUGLAS COUNTY FOR APPROVAL, A SAMPLE PANEL AND DOCUMENTATION FROM THE MANUFACTURER. PANEL SURFACE SHALL HAVE A MINIMUM OF 70% LIGHT REFLECTIVITY CONTRAST WITH THE ADJOINING SURFACE. PANELS SHALL ONLY BE SELECTED FROM THE APPROVED PRODUCT LIST BELOW:

PRODUCT NAME	MANUFACTURER	PRODUCER SUPPLIER CODE
CAST–DWD	Pioneer Detectable, LLC	GEN130004
Cast–In–Place Tactile	ADA Solutions, Inc.	GEN100123
DURALAST	EJ USA, Inc.	GEN130020
Detectable Warning Paving Slab	StoneBilt Concepts	GEN100341
TekWay Dome–Tiles	StrongGo LLC	GEN100343
Tuftile Cast Iron Tile/Radius–Wedge (CIP)	Tuftile, Inc.	GEN150088

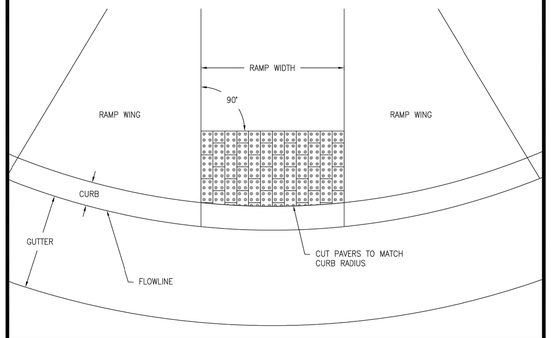
3. PANELS SHALL BE PLACED AS SHOWN, WITH DOME PATTERN IN A SQUARE GRID AND ALIGNED IN THE DIRECTION OF TRAVEL. A STEEL TEMPLATE SHALL BE USED TO ENSURE PROPER ALIGNMENT AND UNIFORM GRADE.
4. REMOVE THE PROPER AMOUNT OF CONCRETE WITHIN THE TEMPLATE FOR AN ACCURATE INSTALLATION. ONCE TO THE PROPER DEPTH, FLOAT THE AREA TO RECEIVE THE PANELS UNTIL A SMOOTH PASTE HAS DEVELOPED.
5. WET THE BACK SIDE OF EACH PANEL AND TROWEL SOME CONCRETE PASTE OR APPROVED BONDING AGENT OVER THE WET SURFACE FOR BETTER ADHERENCE.
6. SET THE FIRST PANEL ON THE FRESHLY PREPARED SURFACE. DO NOT PRESS DOWN HARD ON THE PANEL, BUT PREFERABLY TWIST FROM SIDE TO SIDE. SET PANEL WITH RUBBER MALLET TO PROPER DEPTH SO THAT THE BASE OF THE TRUNCATED DOME IS AT THE SAME ELEVATION AS THE ADJOINING RAMP SURFACE.
7. SET SUCCESSIVE PANELS WITH A TIGHT BUTT JOINT AGAINST THE PREVIOUSLY SET PANEL. PROVIDE A ⅛" GAP BETWEEN PANELS.
8. FLOAT FRESH CONCRETE AROUND PANELS. FINISH AND BROOM SURROUNDING CONCRETE AS SPECIFIED. CLEAN ANY CONCRETE OFF PANELS WITH A SPONGE.
9. PROVIDE 1" DEEP TOOL JOINTS AT CORNERS OF DETECTABLE WARNING AREA, AND TOOL AROUND PANELS WITH ¼" RADIUS EDGER.
10. WHEN CUT PANELS ARE REQUIRED, CUT SECTIONS SHALL NOT SIGNIFICANTLY IMPACT OVERALL TRUNCATED DOMES PATTERN AND CUT DOMES SHALL BE BEVELED AT A 45–DEGREE ANGLE TO CREATE A SMOOTH TRANSITION.
11. ANY PANELS THAT ARE DAMAGED DURING TRANSPORT OR INSTALLATION WILL BE REJECTED AND SHALL NOT BE INSTALLED.
12. CLEAN OUT ¼" JOINT(S) BETWEEN PANELS AND SEAL WITH EPOXY.
13. SETTING TRUNCATED DOME PANELS IN SAND BEDDING OR OTHER NON–CEMENTITIOUS BEDDING MATERIALS SHALL NOT BE ALLOWED.



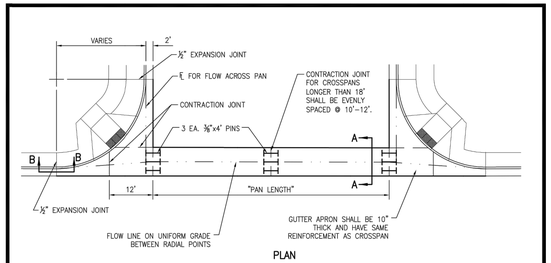
CURB RAMP WITH PANEL DETECTABLE WARNING AREA INSTALLATION	Issued: 05/2013
DOUGLAS COUNTY COLORADO	Revised: 09/2017
	Drawing No. SP.18b

Paver Installation Notes:

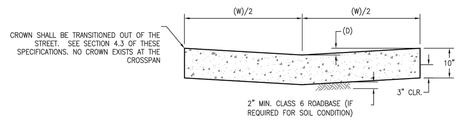
1. DETECTABLE WARNING PAVERS SHALL BE PREFABRICATED REDDISH INTEGRALLY COLORED TRUNCATED DOMES SURFACED CONCRETE OR MASONRY PAVERS. PAVERS SHALL MEET THE REQUIREMENTS OF ASTM C 902 OR ASTM C 936 AND COMPLY WITH ADA REQUIREMENTS.
2. PRIOR TO START OF WORK, CONTRACTOR SHALL SUBMIT, TO DOUGLAS COUNTY FOR APPROVAL, A SAMPLE PAVER AND DOCUMENTATION FROM THE MANUFACTURER. PAVERS SURFACE SHALL HAVE A MINIMUM OF 70% LIGHT REFLECTIVITY CONTRAST WITH THE ADJOINING SURFACE.
3. WELL FOR PAVERS SHALL BE ACCURATELY BLOCKED OUT TO ENSURE PROPER DEPTH, ALIGNMENT, AND UNIFORM GRADE. ONLY FULL WIDTH PAVERS SHALL BE USED TO OBTAIN SPECIFIED RAMP THROAT WIDTH.
4. PAVERS SHALL BE PLACED IN THE RUNNING PATTERN SHOWN, DOMES PLACED IN A SQUARE GRID AND ALIGNED IN THE DIRECTION OF TRAVEL. PAVERS SHALL BE INSTALLED SO THAT THE BASES OF THE TRUNCATED DOMES ARE AT THE SAME ELEVATION AS THE ADJOINING RAMP SURFACE.
5. SAND FOR BEDDING MATERIAL SHALL CONFORM TO ASTM C 33. SAND TO BE PLACED BETWEEN JOINTS SHALL CONFORM TO ASTM C 144.
6. BEDDING SAND SHALL BE SCREED TO THE APPROPRIATE DEPTH PRIOR TO THE PAVERS INSTALLATION. A PLATE VIBRATOR SHALL BE USED TO EMBED THE PAVERS INTO THE SAND. ANY PAVERS THAT ARE DAMAGED DURING TRANSPORTATION OR INSTALLATION WILL BE REJECTED AND SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
7. WHEN CUT PAVERS ARE REQUIRED, CUT SECTIONS SHALL NOT SIGNIFICANTLY IMPACT OVERALL TRUNCATED DOMES PATTERN AND CUT DOMES SHALL BE BEVELED AT A 45–DEGREE ANGLE TO CREATE A SMOOTH TRANSITION.
8. JOINT SPACING SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, BUT SHALL NOT BE MORE THAN ⅜". JOINTS SHALL BE FILLED COMPLETELY WITH SAND. EXCESS SAND SHALL BE REMOVED BY SWEEPING.



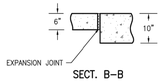
CURB RAMP WITH PAVER DETECTABLE WARNING AREA INSTALLATION	Issued: 05/2013
DOUGLAS COUNTY COLORADO	Revised: 09/2017
	Drawing No. SP.18c



PLAN



SECTION A–A
FIBERMESH MIXED AT 1½ LBS. / C.Y. CONCRETE.

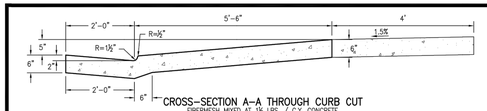


SECT. B–B

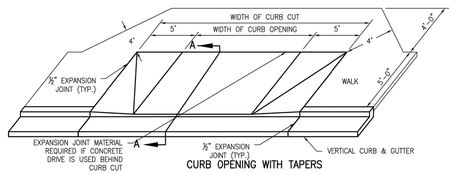
WIDTH (W)	DEPTH (D)	THICKNESS (T)
8'	2"	10"
10'	2½"	10"

NOTE: LOCAL STREET INTERSECTIONS REQUIRE AN 8' CROSSPAN. COLLECTOR STREET INTERSECTIONS REQUIRE AN 10' CROSSPAN. CROSSPANS ARE NOT ALLOWED AT ANY ARTERIAL STREET INTERSECTIONS.

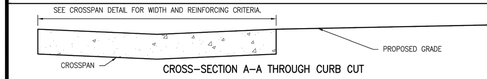
CROSSPAN	Issued: 05/2013
DOUGLAS COUNTY COLORADO	Revised: 09/2017
	Drawing No. SP.21



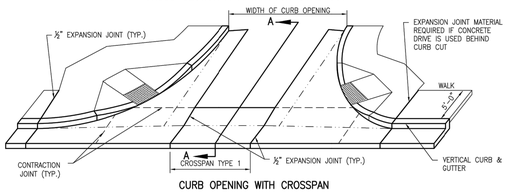
CROSS–SECTION A–A THROUGH CURB CUT
FIBERMESH MIXED AT 1½ LBS. / C.Y. CONCRETE.



CURB OPENING WITH TAPERS



CROSS–SECTION A–A THROUGH CURB CUT



CURB OPENING WITH CROSSPAN

NOTES:
1. BACK OF CURB CUT EXTENDS TO BACK OF WALK OR BACK OF BICYCLE PATH. IF NO WALK IS PRESENT, EXTEND BACK OF CURB CUT TO 5'–6" BEHIND FLOWLINE OR TO R.O.W. LINE, WHICHEVER IS GREATER.
2. COUNTY SHALL APPROVE LOCATION OF CURB CUT BEFORE CONSTRUCTION.
3. CURB OPENINGS OF 30' OR MORE MUST BE CONSTRUCTED WITH A MINIMUM 20' RADIUS CURB RETURN.
4. DESIGN ENGINEER MUST DEMONSTRATE THAT STREET DRAINGE STAYS WITHIN THE STREET RIGHT–OF–WAY.

CURB OPENING	Issued: 05/2013
DOUGLAS COUNTY COLORADO	Revised: 09/2017
	Drawing No. SP.22

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H–SCALE	N/A
V–SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

COLORADO REGISTERED AARON L. CLUTTER 36742 PROFESSIONAL ENGINEER

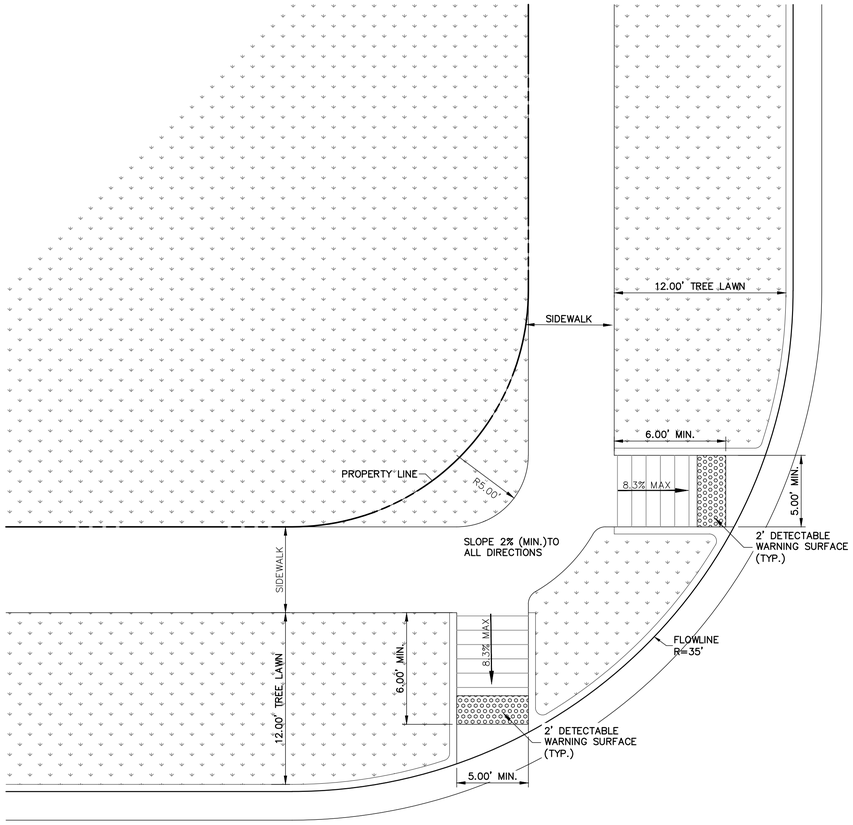
AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

DATE

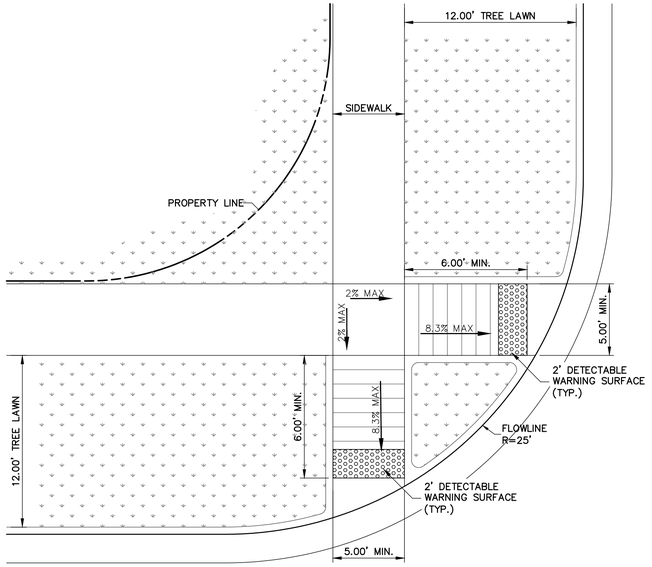
RIDGEGATE SOUTHWEST VILLAGE FILING 1
STORM SEWER & ROADWAY DETAILS–PHASE 1A

SHEET 66 OF 270

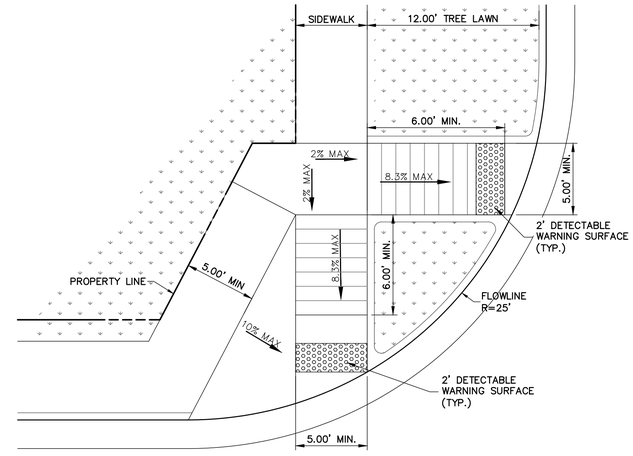
JOB NO. 15950.01



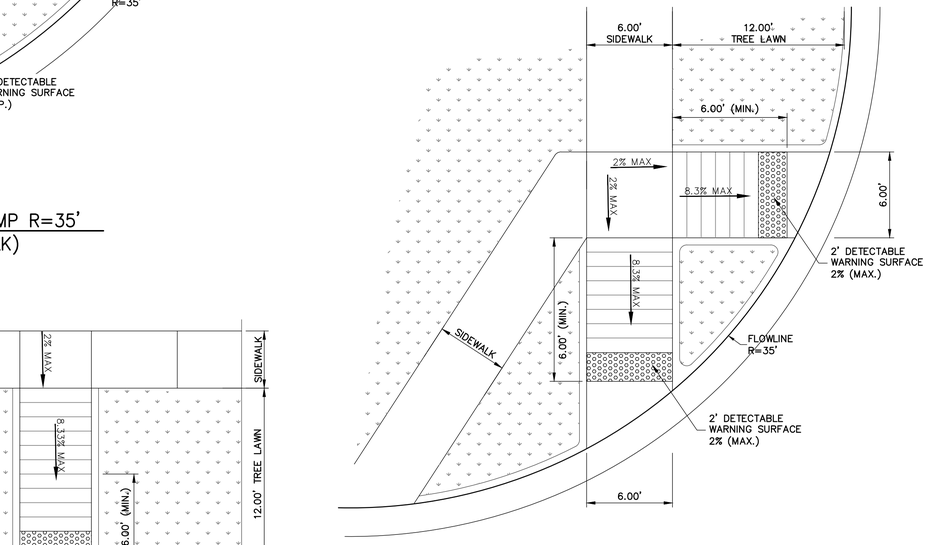
RESIDENTIAL CURB RAMP R=35'
(DETACHED WALK)



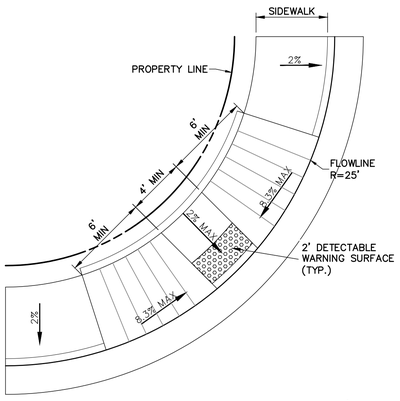
RESIDENTIAL CURB RAMP R=25'
(DETACHED WALK)



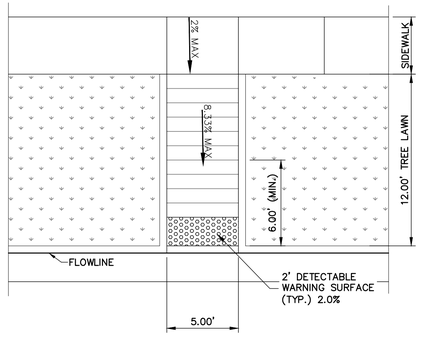
RESIDENTIAL CURB RAMP R=25'
(ATTACHED AND DETACHED WALK)



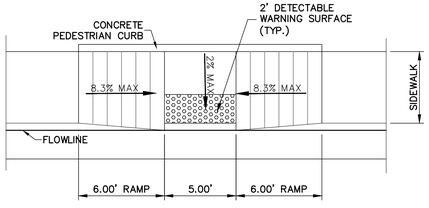
RESIDENTIAL CURB RAMP R=35'
(ATTACHED AND DETACHED WALK)



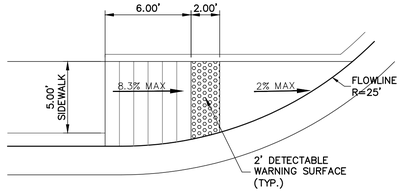
RESIDENTIAL CURB RAMP R=25'
(ATTACHED WALK)



RESIDENTIAL CURB RAMP MID-BLOCK
(DETACHED WALK)



RESIDENTIAL CURB RAMP MID-BLOCK
(ATTACHED WALK)



DIRECTIONAL RAMP R=25'
(ATTACHED WALK)

GENERAL NOTES

1. THE DETECTABLE WARNINGS SHALL BE INSTALLED AT SIDEWALK TO STREET TRANSITIONS. THEY SHALL HAVE A TRUNCATED DOME SURFACE. THE DOMES SHALL BE IN A SQUARE GRID PATTERN AND ALIGNED WITH PEDESTRIAN TRAFFIC.
2. ALL DETECTABLE WARNING SURFACES SHALL START A MINIMUM OF 6 INCHES FROM THE FLOWLINE OF THE CURB. MAXIMUM DISTANCE FROM FLOWLINE TO DETECTABLE WARNING SURFACE VARIES.
3. THE RAMP SLOPE AND DETECTABLE WARNING SURFACE SHALL BE 8.3% OR FLATTER.
4. DRAINAGE STRUCTURES, TRAFFIC SIGNAL EQUIPMENT, OR OTHER OBSTRUCTIONS SHALL NOT BE INSTALLED IN THE CURB RAMP OR TURNING SPACE AREAS.
5. CURB RAMPS (EXCLUDING FLARED SIDES OR BLENDED TRANSITIONS) SHALL BE WHOLLY CONTAINED WITHIN THE WIDTH OF THE CROSSWALK AND/OR THE PEDESTRIAN STREET CROSSING THEY SERVE.
6. ALL CURB RAMP JOINTS AND GRADE BREAKS SHALL BE FLUSH (0"±⅛ "). THE JOINT BETWEEN THE ROADWAY SURFACE AND GUTTER PAN SHALL BE FLUSH.
7. TO AVOID CHASING GRADE INDEFINITELY WHEN TRAVERSING THE HEIGHT OF CURB, THE RAMP LENGTH SHALL NOT EXCEED 15 FEET. ADJUST THE RAMP SLOPE AS NEEDED TO PROVIDE ACCESS TO THE MAXIMUM EXTENT TECHNICALLY FEASIBLE.
8. THE CHANGE IN GRADE AT THE BOTTOM OF CURB RAMP AND ADJOINING ROAD SURFACE SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 13.33%. THE COUNTER SLOPE OF THE GUTTER OR ROAD AT THE FOOT OF THE CURB RAMP, TURNING SPACE, OR BLENDED TRANSITION SHALL NOT EXCEED 5.0%.
9. FLARED SIDE SLOPES MAY EXCEED 10% ONLY WHERE THEY ABUT A NON-WALKABLE SURFACE OR THE ADJACENT CIRCULATION PATH IS BLOCKED.
10. THE STANDARD TURNING SPACE IS 4 FEET BY 4 FEET WHERE THE TURNING SPACE IS CONSTRAINED, THE TURNING SPACE SHALL BE 4 FEET MINIMUM BY 5 FEET MINIMUM. THE 5 FOOT DIMENSION SHALL BE PROVIDED IN THE DIRECTION OF THE RAMP RUN.

Know what's **below.**
Call before you dig.

ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

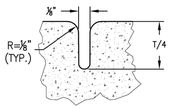
No.	REVISION	BY	DATE

H-SCALE	N/A
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

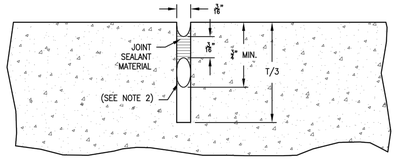
RIDGEGATE SOUTHWEST VILLAGE FILING 1
STORM SEWER & ROADWAY DETAILS-PHASE 1A

SHEET 67 OF 270

JOB NO. 15950.01

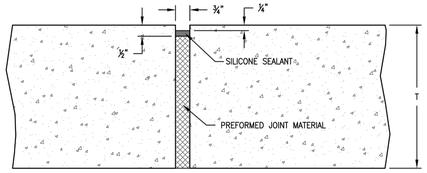


CONTRACTION OR WEAKEN PLANE JOINT
N.T.S.



NOTE: WASH & BLOW OUT WITH FORCED AIR UNTIL DRY BEFORE APPLYING SEALANT MATERIAL.

SAWED JOINT
N.T.S.

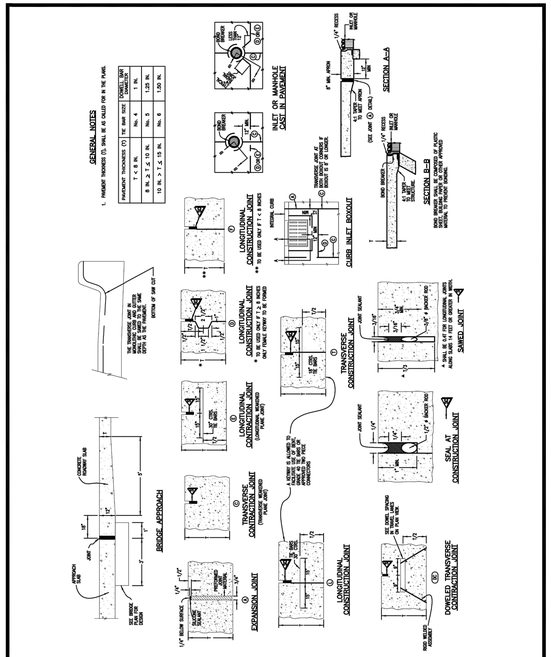


EXPANSION JOINT
N.T.S.

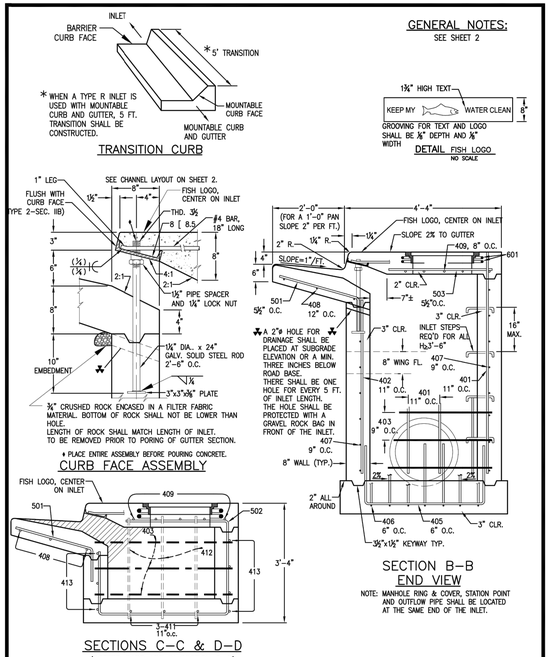
NOTES:

1. JOINT SEALANT MATERIAL MUST MEET ASTM 3406.
2. ¾" DIA. BACKER ROD.

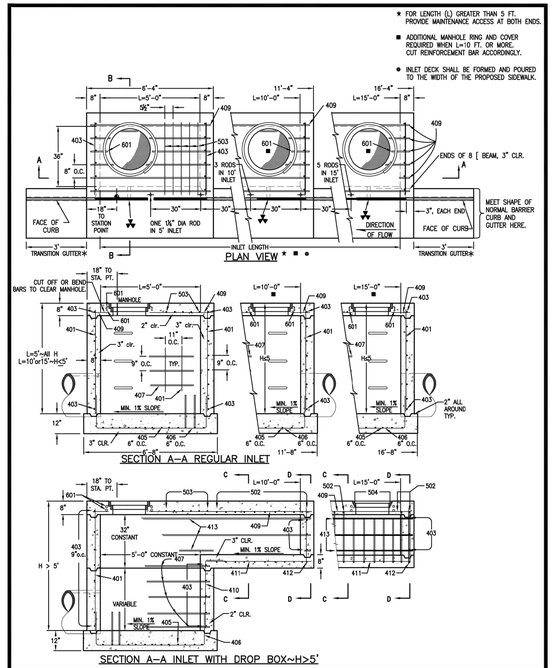
REFERENCE:	CONCRETE JOINTS	Issued: 05/2013
	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. SP.31



REFERENCE:	CONCRETE JOINTS	Issued: 05/2013
CDOT M & S STANDARDS M-412-1	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. SP.32



REFERENCE:	CURB INLET - TYPE R (5', 10' OR 15' IN LENGTH)	Issued: 05/2013
CDOT M & S STANDARDS M-604-12	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. SP.34a



REFERENCE:	CURB INLET - TYPE R (5', 10' OR 15' IN LENGTH)	Issued: 05/2013
CDOT M & S STANDARDS M-604-12	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. SP.34b

MARK	BAR # OR SIZE	O.C. SPACING	TYPE	ALL INLETS L = 5 FT. NO. REQ'D.	ALL INLETS L = 5 FT. LENGTH	INLETS: H ≤ 5 FT. L = 10 FT. NO. REQ'D.	INLETS: H ≤ 5 FT. L = 10 FT. LENGTH	INLETS: H ≤ 5 FT. L = 15 FT. NO. REQ'D.	INLETS: H ≤ 5 FT. L = 15 FT. LENGTH	INLETS: H > 5 FT. L = 10 FT. NO. REQ'D.	INLETS: H > 5 FT. L = 10 FT. LENGTH	INLETS: H > 5 FT. L = 15 FT. NO. REQ'D.	INLETS: H > 5 FT. L = 15 FT. LENGTH
401	4	11"	II	15	*	21	*	26	*	11	*	11	*
402	4	11"	II	7	*	13	*	18	*	7	*	7	*
403	4	9"	II	*	4'-0"	*	4'-0"	*	4'-0"	*	4'-0"	*	4'-0"
405	4	6"	VI	11	6'-10"	21	6'-10"	31	6'-10"	11	6'-10"	11	6'-10
406	4	6"	VIII	7	6'-10"	7	13'-10"	7	18'-10"	7	8'-10"	7	8'-10"
407	4	9"	II	*	5'-10"	*	10'-10"	*	15'-10"	*	5'-10"	*	5'-10"
408	4	12"	II	3	6'-10"	3	11'-10"	3	16'-0"	3	11'-10"	3	16'-0"
409	4	8"	II	6	5'-10"	8	10'-10"	6	15'-10"	6	10'-10"	6	15'-10"
410	4	11"	VII							3	*	3	*
411	4	11"	II							3	5'-2"	3	10'-2"
412	4	11"	II							3	2'-9"	3	2'-9"
413	4	9"	II							7	10'-10"	7	15'-10"
501	5	5½"	IV	11	3'-4"	22	3'-4"	33	3'-4"	22	3'-4"	33	3'-4"
502	5	5½"	III							11	11'-5"	17	11'-5"
503	5	5½"	II	5	3'-6"	16	3'-6"	27	3'-6"	6	3'-6"	6	3'-6"
504	5	5½"	IX									5	8'-4"
601	6	2½"	V	2	8'-10"	2	8'-10"	2	8'-10"	2	8'-10"	4	8'-10"
■8(8.5				1	5'-10"	1	10'-10"	1	15'-10"	1	10'-10"	1	15'-10"
				2 BARS, 1 ROD	——	# BARS, 3 RODS	——	# BARS, 5 RODS	——	# BARS, 3 RODS	——	# BARS, 5 RODS	——

* VARIABLE, REFER TO TABLE TWO.
■ INCLUDE #4, 18 IN. BARS (SEE CHANNEL LAYOUT).

REGULAR INLETS | DROP BOX INLETS

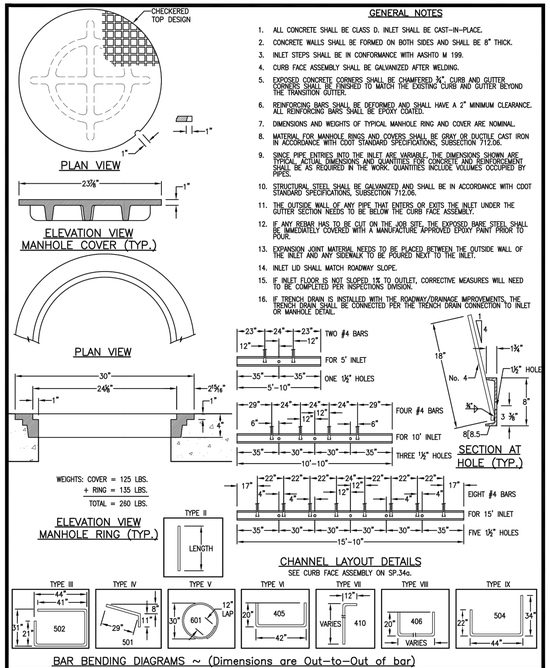
TABLE ONE ~ BAR LIST FOR CURB INLETS, TYPE "R"

'H'	LENGTH 401	402	410	NO. REQ'D. REGULAR 403	407	NO. REQ'D. DROP BOX 403	407	L=5' CONC. CU. YDS.	L=5' STEEL LBS.	L=10' CONC. CU. YDS.	L=10' STEEL LBS.	L=15' CONC. CU. YDS.	L=15' STEEL LBS.
3'-0"	2'-8"	1'-8"		10	7			3.2	285	5.3	497	7.4	706
3'-6"	3'-2"	2'-2"		10	7			3.4	305	5.7	528	7.9	747
4'-0"	3'-8"	2'-8"		12	9			3.7	326	6.0	559	8.4	786
4'-6"	4'-2"	3'-2"		12	9			3.9	334	6.4	571	8.8	803
5'-0"	4'-8"	3'-8"		14	11			4.1	354	6.7	602	9.3	844
5'-6"	5'-2"	4'-2"	3'-5"	16	13	15	6	4.4	375	6.0	607	7.4	850
6'-0"	5'-8"	4'-8"	3'-11"	16	13	16	6	4.6	382	6.2	616	7.6	860
6'-6"	6'-2"	5'-2"	4'-5"	18	15	18	8	4.8	402	6.4	637	7.8	880
7'-0"	6'-8"	5'-8"	4'-11"	20	17	19	10	5.0	423	6.6	654	8.0	897
7'-6"	7'-2"	6'-2"	5'-5"	20	17	20	10	5.3	430	6.9	664	8.3	907
8'-0"	7'-8"	6'-8"	5'-11"	22	19	22	12	5.5	451	7.1	684	8.5	927
8'-6"	8'-2"	7'-2"	6'-5"	24	21	23	14	5.7	471	7.3	702	8.7	944
9'-0"	8'-8"	7'-8"	6'-11"	24	21	24	14	6.0	479	7.6	711	9.0	954
9'-6"	9'-2"	8'-2"	7'-5"	26	23	26	16	6.2	499	7.8	732	9.2	974
10'-0"	9'-8"	8'-8"	7'-11"	28	25	27	18	6.4	520	8.0	749	9.4	992
10'-6"	10'-2"	9'-2"	8'-5"	28	25	28	18	6.7	527	8.3	759	9.7	1001
11'-0"	10'-8"	9'-8"	8'-11"	30	27	30	20	6.9	547	8.5	779	9.9	1022

NOTES: FOR L=5 FT., L=10 FT., AND L=15 FT.
REGULAR INLETS: TOTAL QUANTITIES NEEDED ARE OUTSIDE THE HEAVY BLACK LINE.
DROP BOX INLETS: TOTAL QUANTITIES NEEDED ARE INSIDE THE HEAVY BLACK LINE.
STEEL WEIGHTS DO NOT INCLUDE STRUCTURAL STEEL CHANNEL.

TABLE TWO ~ BARS AND QUANTITIES VARIABLE WITH "H"

REFERENCE:	CURB INLET - TYPE R (5', 10' OR 15' IN LENGTH)	Issued: 05/2013
CDOT M & S STANDARDS M-604-12	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. SP.34c



REFERENCE:	CURB INLET - TYPE R (5', 10' OR 15' IN LENGTH)	Issued: 05/2013
CDOT M & S STANDARDS M-604-12	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. SP.34d

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

COLORADO REGISTERED PROFESSIONAL ENGINEER — AARON LEE CLUTTER — 36742

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING — DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

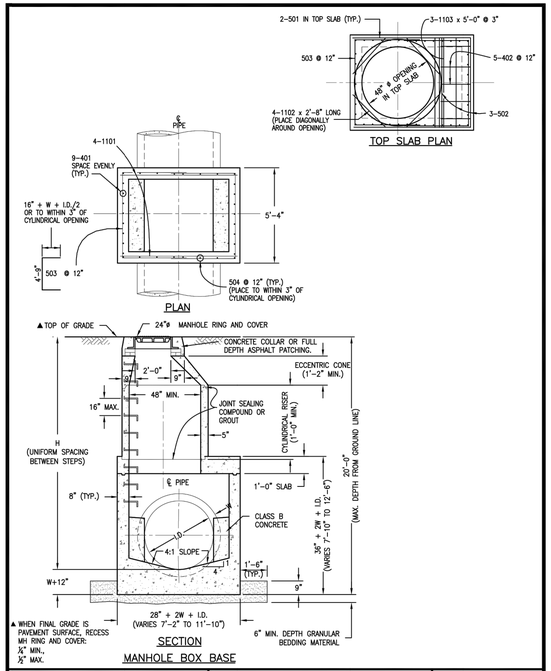
No.	REVISION	DATE	BY

RIDGEGATE SOUTHWEST VILLAGE FILING 1
STORM SEWER & ROADWAY DETAILS–PHASE 1A

H-SCALE	V-SCALE	DESIGNED BY	DRAWN BY	CHECKED BY
N/A	N/A	2/12/21	GVT	GVT

SHEET 68 OF 270

JOB NO. 15950.01



REFERENCE: CDOT M & S STANDARDS M-604-20

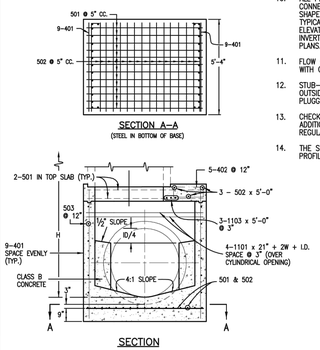
MANHOLES

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.43a**

GENERAL NOTES

1. SINCE ALL PIPE ENTRIES INTO THE BASE ARE VARIABLE, THE DIMENSIONS SHOWN ARE TYPICAL. ACTUAL DIMENSIONS AND QUANTITIES FOR CONCRETE AND REINFORCEMENT SHALL BE AS REQUIRED IN THE WORK.
2. THE PRECAST FLAT TOP MAY BE USED ON ANY MANHOLE. THE ECCENTRIC CONE MAY BE USED WHEN THE MANHOLE "H" HEIGHT IS AT LEAST 8'.
3. THE MH RING (FRAME) SHALL BE SET ON CONCRETE GRADE RINGS. THE FRAME SHALL BE SURROUNDED WITH A CONCRETE COLLAR IN UNPAVED AREA AND CONCRETE PAVEMENT, OR FULL DEPTH ASPHALT IN ASPHALT PAVEMENT. SEE DETAILS ON SHEETS 2 AND 3.
4. DESIGN OF BOX BASE IS BASED ON STRAIGHT RUNS OF CONDUIT OR CHANGE IN DIRECTION OF LESS THAN 45°. SPECIAL DESIGN IS REQUIRED FOR 45° OR GREATER.
5. PRECAST MANHOLES AND REINFORCEMENT SHALL CONFORM TO ASTM C 478 (AASHTO M 199).
6. CAST-IN-PLACE MANHOLES SHALL BE CLASS D CONCRETE.
7. STEPS SHALL BE REQUIRED WHEN THE MANHOLE DEPTH EXCEEDS 3'-6" AND SHALL BE IN ACCORDANCE WITH AASHTO M 199.
8. ALL REINFORCING STEEL SHALL HAVE A MINIMUM YIELD STRENGTH OF 60,000 PSI. VERTICAL STEEL SHALL BE PLACED AT L. OF WALL. ALL BARS SHALL HAVE A 2" MINIMUM CLEARANCE. ALL REINFORCING BARS SHALL BE EPOXY COATED.
9. IF ANY REBAR HAS TO BE CUT ON THE JOB SITE, THE EXPOSED BARE STEEL SHALL BE IMMEDIATELY COVERED WITH A MANUFACTURE APPROVED EPOXY PAINT PRIOR TO POUR.
10. ALL PIPE ENTRIES INTO THE BASE OF MANHOLE SHALL BE CONNECTED BY OPEN CHANNELIZATION ADJUSTED FOR PIPE SIZE, SHAPE, SLOPE, AND DIRECTION OF FLOW. DETAILS SHOWN ARE TYPICAL FOR INSTALLATIONS WITH ALL INVERTS OF SAME RELATIVE ELEVATION. FOR EXCESSIVE ELEVATION DIFFERENCE BETWEEN INVERTS, SPECIAL BASE/CHANNEL DETAILS WILL BE SHOWN ON THE PLANS.
11. FLOW CHANNELS AND INVERTS SHALL BE FORMED BY SHAPING WITH CLASS B CONCRETE.
12. STUB-OUTS SHALL EXTEND A MINIMUM OF 1 PIPE SECTION BEYOND OUTSIDE WALL SURFACE OF MANHOLE AND BE SATISFACTORILY PLUGGED.
13. CHECK WITH THE LOCAL GOVERNMENT AUTHORITY FOR ANY ADDITIONAL SANITARY SEWER SPECIFICATIONS, DETAILS, OR REGULATIONS.
14. THE SLOPE OF THE MANHOLE COVER SHALL MATCH THE ROADWAY PROFILE AND CROSS SLOPE.

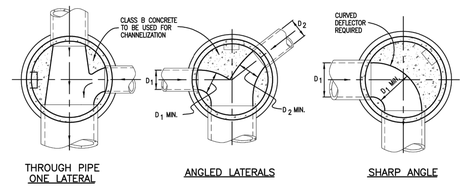


REFERENCE: CDOT M & S STANDARDS M-604-20

MANHOLES

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.43b**



TYPICAL CHANNELIZATION DETAILS

QUANTITIES FOR CONCRETE MANHOLE BOX BASE

MARK	SIZE	TYPE	WT. #/FT.	BARS	I.D. 60"	66"	72"	84"	96"	FORMULAS
401	4	I	0.668	NO. REQ'D.	18	18	18	18	18	401
				LENGTH	8'-8"	9'-3"	9'-10"	11'-0"	12'-2"	BAR LENGTH = 32"+2W+I.D.
				WEIGHT #	104.2	111.2	118.2	132.3	146.3	
402	4	III	0.668	NO. REQ'D.	5	5	5	5	5	402
				LENGTH	6'-0"	6'-7"	7'-2"	8'-4"	9'-6"	BAR LENGTH = I.D. + 2W
				WEIGHT #	20.0	22.0	23.9	27.8	31.7	
501	5	I	1.043	NO. REQ'D.	17	17	17	17	17	501
				LENGTH	8'-0"	8'-7"	9'-2"	10'-4"	11'-6"	BAR LENGTH = 24" + I.D. + 2W
				WEIGHT #	141.8	152.2	162.5	183.2	203.9	
502	5	I	1.043	NO. REQ'D.	23	25	26	29	32	502
				LENGTH	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	NUMBER BARS REQ'D. = $3+\left(\frac{24+I.D.+2W}{@\ 5"}+1\right)$
				WEIGHT #	119.9	130.4	135.6	151.2	166.9	
503	5	II	1.043	NO. REQ'D.	16	18	18	20	24	503
				LENGTH	13'-5"	14'-0"	14'-7"	15'-9"	16'-11	NUMBER BARS REQ'D. = $2\left(\frac{13+I.D.+2W}{@\ 12"}+1\right)$
				WEIGHT #	223.9	262.8	273.8	328.5	423.5	BAR LENGTH = 4'-9"+2(16"+W+I.D./2)
504	5	I	1.043	NO. REQ'D.	14	14	16	18	20	504
				LENGTH	8'-8"	9'-3"	9'-10"	11'-0"	12'-2"	NUMBER BARS REQ'D. = $2\left(\frac{2W+I.D.-4}{@\ 12"}+1\right)$
				WEIGHT #	126.6	135.1	164.1	206.5	253.8	BAR LENGTH = 32"+2W+I.D.
1101	11	I	5.313	NO. REQ'D.	4	4	4	4	4	1101
				LENGTH	7'-9"	8'-4"	8'-11"	10'-1"	11'-3"	BAR LENGTH = 21" + I.D. + 2W
				WEIGHT #	164.7	177.1	189.5	214.3	239.1	
1102	11	I	5.313	NO. REQ'D.	4	4	4	4	4	BENDING
				LENGTH	2'-8"	2'-8"	2'-8"	2'-8"	2'-8"	TYPE I: STRAIGHT
				WEIGHT #	56.7	56.7	56.7	56.7	56.7	TYPE II: 4'-9"
1103	11	I	5.313	NO. REQ'D.	3	3	3	3	3	TYPE III: 12" 12" 7" I.D.+2W-38"
				LENGTH	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	
				WEIGHT #	79.7	79.7	79.7	79.7	79.7	
REINFORCING STEEL TOTAL #					1,037.5	1,127.2	1,204.0	1,380.2	1,601.6	
CONCRETE – CUBIC YARDS – TOTAL					6.6	7.3	8.0	9.5	11.1	

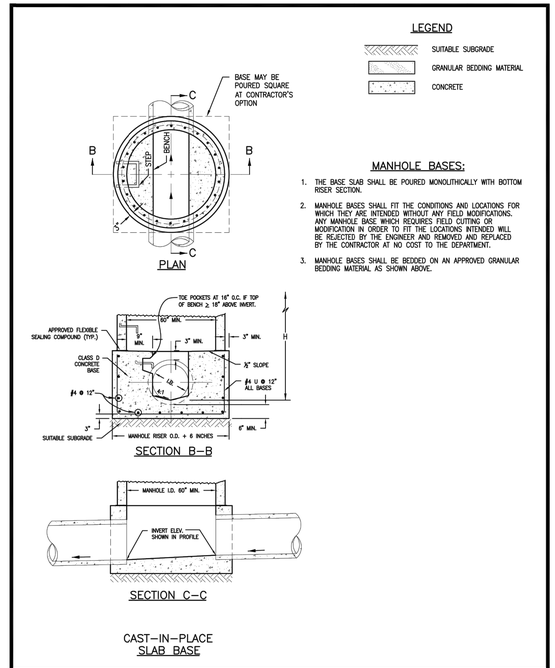
NOTE: QUANTITIES ARE BASED ON SAME SIZE PIPE ENTRANCE TO AND EXIT FROM, BASE AND A 4 FT. MANHOLE ENTRANCE INTO TOP SLAB OF BASE.

REFERENCE: CDOT M & S STANDARDS M-604-20

MANHOLES

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.43c**



MANHOLE BASES:

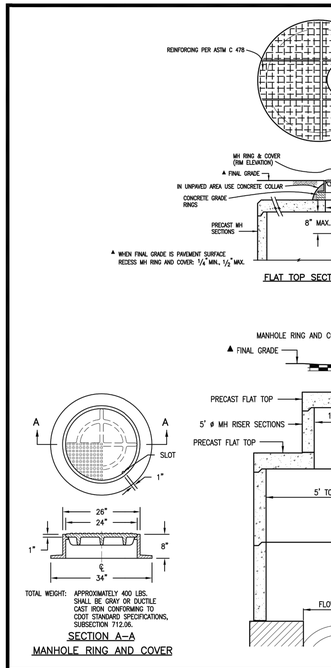
1. THE BASE SLAB SHALL BE POURED MONOLITHICALLY WITH BOTTOM RISER SECTION.
2. MANHOLE BASES SHALL FIT THE CONDITIONS AND LOCATIONS FOR WHICH THEY ARE INTENDED WITHOUT ANY FIELD MODIFICATIONS. ANY MANHOLE BASE WHICH REQUIRES FIELD CUTTING OR MODIFICATION IN ORDER TO FIT THE LOCATIONS INTENDED WILL BE REJECTED BY THE ENGINEER AND REMOVED AND REPLACED BY THE CONTRACTOR AT NO COST TO THE DEPARTMENT.
3. MANHOLE BASES SHALL BE BEDDED ON AN APPROVED GRANULAR BEDDING MATERIAL AS SHOWN ABOVE.

REFERENCE: CDOT M & S STANDARDS M-604-20

MANHOLES

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.43d**



REFERENCE: CDOT M & S STANDARDS M-604-20

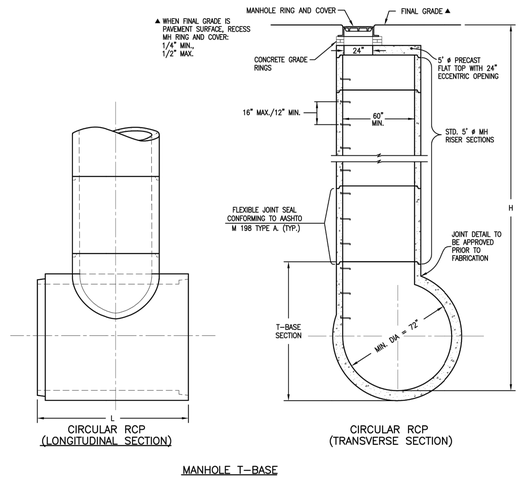
MANHOLES

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.43e**

T–BASE MANHOLES:

1. THE T–BASE SECTION SHALL BE SHOP–FABRICATED FOR DELIVERY TO THE CONSTRUCTION SITE AS A COMPLETE UNIT.
2. THESE DETAILS SHALL ONLY BE CONSTRUED TO SHOW CONCEPTUAL AND STANDARD DIMENSIONAL REQUIREMENTS FOR TYPE T–BASE MANHOLES. THE CONTRACTOR SHALL FURNISH DETAILED SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION. THE DETAILS SHOWN HEREIN APPLY ONLY TO 72–INCH DIAMETER PIPE AND LARGER.
3. EXCEPT FOR CLASS OF PIPE, SPECIFICATIONS TO BE MET FOR THE MANHOLE SHALL BE THE SAME AS THOSE REQUIRED FOR THE ADJOINING PIPE CULVERT OR SEWER.
4. THE T–BASE SECTION SHALL MAINTAIN ITS INTERNAL SHAPE AND FLOW AREA WITH ANY GROUTING, ETC. APPLIED SO AS TO NOT DISTURB THE NORMAL FLOW OR REDUCE THE AREA.



MANHOLE T–BASE

REFERENCE: CDOT M & S STANDARDS M-604-20

MANHOLES

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.43f**

Know what's **below.** **Call** before you dig.

ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

DATE

UNTIL SUCH TIME AS THESE PLANS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

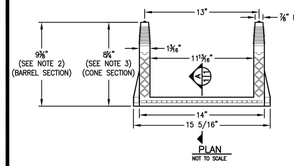
H–SCALE	N/A
V–SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGECATE SOUTHWEST VILLAGE FILING 1

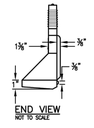
STORM SEWER & ROADWAY DETAILS–PHASE 1A

SHEET 69 OF 270

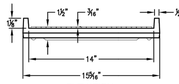
JOB NO. 15950.01



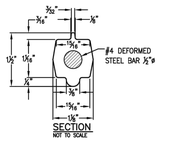
PLAN
NOT TO SCALE



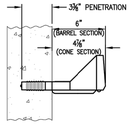
END VIEW
NOT TO SCALE



ELEVATION
NOT TO SCALE



SECTION
NOT TO SCALE

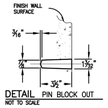


DETAIL
NOT TO SCALE

POLYPROPYLENE REINFORCED PLASTIC STEP

GENERAL NOTES

1. ASTM SPECIFICATIONS:
   A. ASTM C-478
   B. ASTM A-615 GRADE 60 (STEEL REBAR).
   C. ASTM 2146-69, TYPE III, GRADE 16906 (POLYPROPYLENE).
2. STEPS INSTALLED IN MANHOLE BARREL SECTIONS OR VERTICAL WALLS OF STRUCTURES SHALL HAVE A 9⅝" LEG AND SHALL PROJECT FROM THE WALL 6".
3. STEPS INSTALLED IN MANHOLE CONE SECTIONS SHALL HAVE AN 8⅝" LEG AND SHALL PROJECT FROM THE WALL 4⅝".
4. ALL STEPS SHALL HAVE A PENETRATION DEPTH INTO THE WALL OF 3⅜".
5. STEPS SHALL BE INSTALLED BY THE "PRESS-FIT" METHOD UTILIZING A SPECIALLY TAPERED PIN TO FORM THE INSERT HOLE AS SHOWN, FOLLOWING MANUFACTURER'S RECOMMENDED PROCEDURE AND SHALL NOT BE GROUTED IN PLACE.
6. INSTALLED STEPS SHALL BE CAPABLE OF WITHSTANDING A PULL OUT FORCE OF 2500 LB. PER LEG FOR A MINIMUM PERIOD OF TWO MINUTES.
7. PINS MUST BE SMOOTH AND CONTINUOUSLY TAPERED. DIMENSIONS OF THE PIN AND THE INSERTED PORTION OF THE MANHOLE STEP ARE TYPICAL ONLY. DOUGLAS COUNTY INSTALLATIONS REQUIRE A MATCHED COMBINATION OF A TAPERED INSERT PIN AND MANHOLE STEP, AS RECOMMENDED OR REQUIRED BY SPECIFIC MANUFACTURER OF THE STEP TO BE USED.
8. THIS STEP CAN ALSO BE USED IN TOE POCKET INSTALLATIONS PROVIDED 5" TOE CLEARANCE IS ALLOWED.



DETAIL PIN BLOCK OUT
NOT TO SCALE

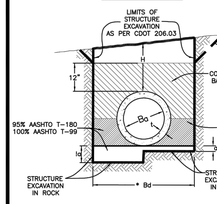
REFERENCE:
CITY AND COUNTY OF DENVER
DRAWING NUMBER S-750

MANHOLE AND INLET STEPS

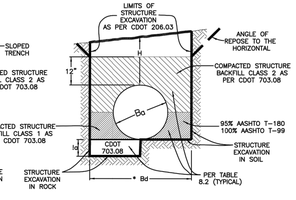
DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.45**

RIGID PIPE



FLEXIBLE PIPE



MAXIMUM HEIGHT OF FILL OVER TOP OF PIPE IN FEET

REINFORCED CONCRETE

Ba in.	Min. Bd in.	D.I. INCH CRACK D-LOAD		
		1350	2000	3000
	**	PIPE CLASS		
		II	IV	V
18	35	19	28	43
24	42	18	28	42
30	50	18	28	42
36	59	18	27	41
42	66	18	27	41
48	78	18	27	41
54	89	17	26	40
60	98	17	26	40
66	108	17	26	40
72	117	17	26	40
78	125	17	26	40
84	135	17	26	40
90	154	17	26	40
96	163	17	26	40
108	173	17	26	40
120	191	17	26	40
132	208	17	26	40
144	224	17	26	40

** Based on Bd=1.33(Ba+2t). Wall thickness can vary between manufacturers.

STEEL - 2 2/3" x 1/2" CORRUGATIONS

Ba in.	Bd ft.	H ABOVE TOP OF PIPE IN FEET					
		1-15	16-20	21-25	26-30	31-35	36-40
		THICKNESS IN INCHES					
18-48	4-7	.064	.064	.064	.064	.064	.064
54	7.50	.079	.079	.079	.079	.079	.079
60	8.00	.079	.079	.079	.079	.109	.109
66	8.50	.079	.079	.109	.109	.138	.138
72	9.00	.079	.109	.109	.138	.168	.168
78	9.50	.109	.138	.138	.168		
84	10.00	.109	.138	.168			

LEGEND

H = Height of fill over top of pipe
Ba = Inside diameter (I.D.) of pipe
* Bd = Trench Width
t = Wall thickness of pipe
CLSM = Controlled Low Strength Material
c = Loose granular bedding, as follows:
  c=3" for Flexible Culverts in Soil.
  c=6" for Culvert in Soil.
  c=12" for Culvert in Rock.

* TRENCH WIDTH:
RCP: Bd = Min. of 1.33(Ba+2t), or (Ba+2)+12"
(Per AASHTO Section 17)
CSP: Bd = Min. of Ba+4 (Per AASHTO Section 12)

1. Bedding material for SOIL shall be Structural Backfill Class 1 or 2.
1. Bedding material for ROCK shall be Structural Backfill Class 1.

GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS APPLICABLE TO THE PROJECT.
2. ALL TRENCH INSTALLATIONS SHALL BE IN ACCORDANCE WITH OSHA AND COLORADO DEPARTMENT OF TRANSPORTATION REGULATIONS.
3. THE USE OF NON-REINFORCED CONCRETE PIPE WILL NOT BE ALLOWED IN DOUGLAS COUNTY.

RCP DESIGN CRITERIA

Safety Factor = Per ASTM C76
Soil Weight = 120 lb. per cu. ft.
Bedding = Type 2

CSP DESIGN CRITERIA

3"x1" CORRUGATIONS: 60 TO 84 Pipe shall be .064" thick (16 gauge) to H=40 ft.

Soil Weight = 120 lb. per cu. ft.
Safety Factor for Seam Strength = 2.00
Buckling Stress Level = 1/2 Yield Strength
Load Factor (Backfill) = 95% Standard Density, AASHTO-T 99 (K=0.86)

ALL UTILITY REPAIRS MUST BE BACKFILLED WITH CLSM. SEE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS MANUAL FOR SPECIFIC DETAILS.

NOTE: All trenching shall comply with all State, Federal and O.S.H.A. safety requirements. It will be the responsibility of the Contractor to meet all safety requirements.

TO BE USED IN OPEN FIELDS OR PRIOR TO PAVING ROADS

PIPE INSTALLATION IN TRENCH

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.46a**

NOTES:

1. This trench backfill detail specifies requirements in addition to those specified in the latest edition of the Colorado Department of Transportation's Standard Specifications for Road and Bridge Construction.
2. A construction traffic control plan shall be submitted to and approved by Douglas County prior to issuance of construction permits in the County right-of-way.
3. Trench shall be braced or shored as necessary for the safety of the workers and protection of other utilities or structures in accordance with applicable local, state and federal safety regulations.
4. The trench width shall be confined to those minimum dimensions, which will permit proper installation and acceptable pipe loading, as established by current local, state and federal Safety regulations.
5. Backfill compaction requirements: Minimum density will be determined in accordance with AASHTO T 99 or T 180 as defined by CDOT Standard Specifications Section 203.07 and CDOT 703.03. Except for CLSM.
6. Full depth asphalt can be used as an alternative to base course.
7. Pavement edges shall be saw-cut. Edges shall be tack coated prior to patching.
8. All storm sewers shall be constructed so that a minimum cover is maintained to withstand AASHTO HS-20 loading on the pipe. The minimum cover to withstand live loading depends upon the pipe size, type and class, and soil bedding condition, but shall be not less than 1-foot at any point along the pipe. Other factors that affect the depth of the pipe are hydraulic grade line elevations, inlet depths, adjacent utilities or utility crossings, including water and sewer services lines along residential streets, and connections to existing storm sewer systems. The roadway subgrade, which supports the pavement section is typically plowed to a certain depth, moisture treated and compacted prior to the placement of the sub-base, base course, and surfacing. There are also instances where the subgrade material must be excavated and replaced or treated to a certain depth to mitigate swelling soils. These efforts can impact the storm sewer system if it has not been designed with adequate depth. The design engineer shall use the best information available, including pavement design or soils reports (if available) to ensure that storm sewer pipes have adequate depth.
9. Changes in design criteria will require compensating change in pipe design.
10. When pipe sewer is to be extended or replaced with pipe of different material, the connections shall conform to the detail shown on plans or be approved through Douglas County Engineering.
11. When two or more conduits are laid side-by-side, they shall be placed so that they are ½ outside diameter, or ½ outside span, or 3' apart, whichever is less. However, if end sections are used, the minimum spacing shall be 1' between the outside edge of end sections.
12. TRENCH INSTALLATION (per OSHA Standards):
    a. Trenches over 5 feet in depth shall be either shored or the trench walls shall be sloped no steeper than 3:1 to the angle of repose. If sloped, the bottom of the slope shall be a minimum of 1 foot above the top of the pipe.
    b. Shoring will be required when the bottom of the slope is more than 3 feet above the bottom of the trench.
    c. All sheeting or shoring to be removed.
13. CLSM may be used in place of Structural Backfill.
14. CLSM shall not exceed a strength over 1000 p.s.i.

REFERENCE: Douglas County Drainage Manual and Colorado Department of Transportation "M" Standards.

TO BE USED IN OPEN FIELDS OR PRIOR TO PAVING ROADS

PIPE INSTALLATION IN TRENCH NOTES

DOUGLAS COUNTY COLORADO

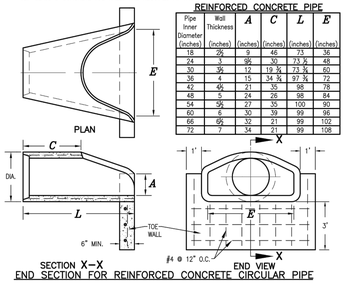
Issued: 05/2013
Revised:
Drawing No. **SP.46b**

GENERAL NOTES

1. DIMENSIONS OF END SECTIONS MAY VARY SLIGHTLY FROM THOSE SHOWN ON THE TABLES DUE TO DIFFERENT MANUFACTURER'S VARIATIONS.
2. CONCRETE END SECTIONS ARE TO BE FURNISHED WITH TONGUE OR GROOVE AS REQUIRED.
3. DESIGN LENGTH OF CULVERT OR SIDE DRAIN IS BASED ON LENGTH OF END SECTION SHOWN IN TABLE. ANY ADDITIONAL PIPE REQUIRED TO PROVIDE THE DESIGN LENGTH SHALL BE FURNISHED BY AND AT THE EXPENSE OF THE CONTRACTOR.
4. INSIDE CONFIGURATION AND JOINT OF CONCRETE END SECTION END PIPE SHALL MATCH.
5. END SECTIONS FOR CMP ARCH CULVERT SHALL MATCH THE DIMENSIONS OF THE CULVERT SHOWN ON THE PLANS.
6. GALVANIZED TOE PLATE AS SHOWN, WILL BE REQUIRED ON END SECTIONS FOR CORRUGATED STEEL PIPE AND SHALL BE THE SAME THICKNESS AS END SECTIONS. TOE PLATE SHALL BE FIELD-BOLTED TO END SECTION WITH ⅜" GALVANIZED BOLTS, NUTS AND WASHERS.
7. GALVANIZED STEEL SHALL BE IN CONFORMANCE WITH AASHTO M 111, M 218 OR M 232.
8. FOR TYPE SD END SECTIONS, BARS SHALL BE FABRICATED FROM NPS-3 GALVANIZED STEEL SCHEDULE 40 PIPE WHICH SHALL BE IN CONFORMANCE WITH ASTM A 53.
9. FOR A TYPE SD END SECTION, THE INSTALLATION OF ALTERNATIVE 1 OR ALTERNATIVE 2 END SECTION SHALL BE THE CONTRACTOR'S OPTION.
10. CONCRETE PIPE JOINT FASTENERS SHALL BE INSTALLED AT THE FLARED END SECTION AND LAST TWO PIPE JOINTS OF ALL RCP OUTFALLS.
11. CONNECTIONS OF METAL END SECTIONS TO PLASTIC PIPE SHALL BE APPROVED BY THE ENGINEER.
12. CLASS D CONCRETE TOE WALLS ARE REQUIRED AT THE ENDS OF ALL FLARED END SECTIONS.

REINFORCED CONCRETE PIPE

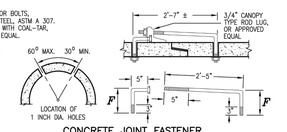
Pipe Inner Diameter (inches)	Wall Thickness (inches)	A (inches)	C (inches)	L (inches)	E (inches)
18	2⅝	9	46	73	36
24	3	9⅝	30	73 ⅞	48
30	3⅝	12	19 ⅜	73 ⅞	60
36	4	15	34 ⅜	97 ⅞	72
42	4⅝	21	35	98	78
48	5	24	26	98	84
54	5⅝	27	35	100	90
60	6	30	39	99	96
66	6⅝	32	21	99	102
72	7	34	21	99	108



END SECTION FOR REINFORCED CONCRETE CIRCULAR PIPE

3/4 INCH GALVANIZED ANCHOR BOLTS, NUTS AND WASHERS, MILD STEEL, ASTM A 307. ROD LUG SHALL BE COATED WITH COAL-TAR, EPOXY PAINT OR APPROVED EQUAL.

PIPE DIAMETER (inches)	F
18 – 30	5
36 – 42	6
48 – 60	7
72 – 84	9



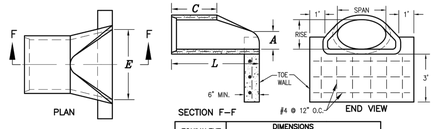
CONCRETE JOINT FASTENER (TWO PER JOINT)

REFERENCE:
CDOT M & S STANDARDS
M-603-10

CONCRETE OR METAL END SECTIONS

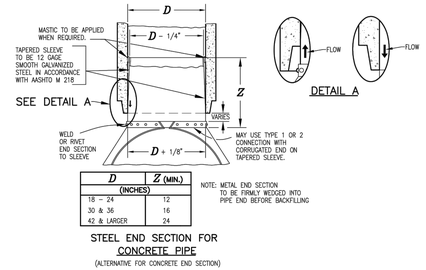
DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised: 09/2017
Drawing No. **SP.52a**



EQUIVALENT CIRCULAR DIA.	NOMINAL SPAN x RISE	DIMENSIONS A	C	L	E
		(inches)			
24	30 x 19	9	33	72	48
30	38 x 24	10	18	72	60
36	45 x 29	12	24	84	72
42	53 x 34	16	36	96	78
48	60 x 38	21	36	96	84
54	68 x 43	26	36	96	90
60	76 x 48	30	36	96	96

END SECTION FOR REINFORCED CONCRETE ELLIPTICAL PIPE



D	Z (MIN.)
(INCHES)	
18 - 24	12
30 & 36	16
42 & LARGER	24

NOTE: METAL END SECTION TO BE FIRMLY WEDGED INTO PIPE END BEFORE BACKFILLING

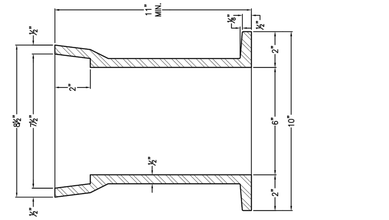
STEEL END SECTION FOR CONCRETE PIPE
(ALTERNATIVE FOR CONCRETE END SECTION)

REFERENCE:
CDOT M & S STANDARDS
M-603-10

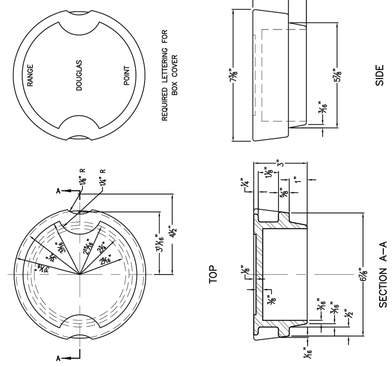
CONCRETE OR METAL END SECTIONS

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised: 09/2017
Drawing No. **SP.52b**



NOTES
LETTERS SHALL BE NOT LESS THAN ⅝" HIGH & RAISED ¼" ABOVE SURFACE.
ALL FILLETS & ROUNDS RADII = ⅜".



RANGE BOX

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.54**

Know what's **below.**
Call before you dig.

ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

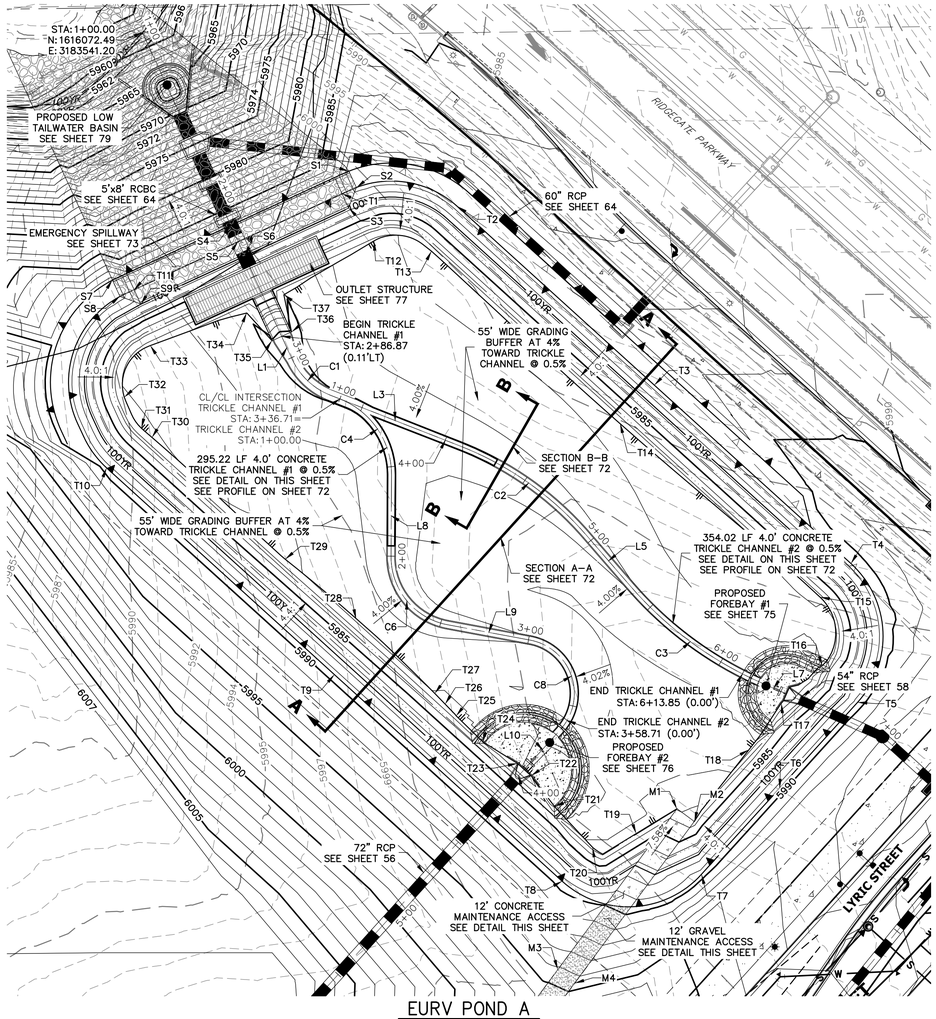
J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE N/A
V-SCALE N/A
DATE 2/12/21
DESIGNED BY GVT
DRAWN BY GVT
CHECKED BY

RIDGEGATE SOUTHWEST VILLAGE FILING 1
STORM SEWER & ROADWAY DETAILS-PHASE 1A

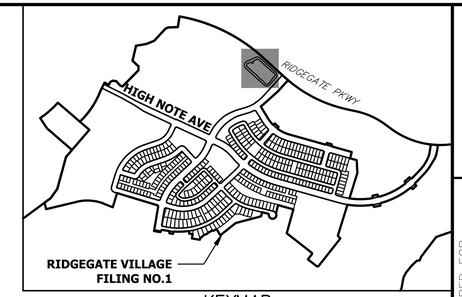
SHEET 70 OF 270
JOB NO. 15950.01



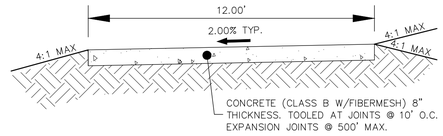
EURV POND A

GRADING POINT TABLE			
ID NUMBER	NORTHING/EASTING	DESCRIPTION	ELEVATION
M1	N: 1615638.52 E: 3183840.04	MAINTENANCE	5983.33
M2	N: 1615631.39 E: 3183849.68	MAINTENANCE	5983.57
M3	N: 1615548.71 E: 3183773.50	MAINTENANCE	5994.15
M4	N: 1615541.00 E: 3183782.79	MAINTENANCE	5994.45
S1	N: 1615994.93 E: 3183656.61	SPILLWAY	5989.50
S2	N: 1615985.85 E: 3183660.80	SPILLWAY	5989.50
S3	N: 1615974.34 E: 3183656.46	SPILLWAY	5987.31
S4	N: 1615964.63 E: 3183590.60	SPILLWAY	5987.31
S5	N: 1615955.54 E: 3183594.77	SPILLWAY	5987.31
S6	N: 1615947.58 E: 3183598.42	SPILLWAY	5987.31
S7	N: 1615934.04 E: 3183524.46	SPILLWAY	5989.50
S8	N: 1615924.94 E: 3183528.64	SPILLWAY	5989.50
S9	N: 1615920.74 E: 3183540.22	SPILLWAY	5987.31
T1	N: 1615982.30 E: 3183652.80	TOP	5987.31
T2	N: 1615975.18 E: 3183717.32	TOP	5989.50
T3	N: 1615875.43 E: 3183827.25	TOP	5989.50
T4	N: 1615775.68 E: 3183937.18	TOP	5989.50
T5	N: 1615697.99 E: 3183940.95	TOP	5989.50
T6	N: 1615649.85 E: 3183897.27	TOP	5989.50
T7	N: 1615601.71 E: 3183853.59	TOP	5989.50
T8	N: 1615597.94 E: 3183775.90	TOP	5989.50
T9	N: 1615713.45 E: 3183648.60	TOP	5989.50
T10	N: 1615828.97 E: 3183521.30	TOP	5989.50
T11	N: 1615928.70 E: 3183536.56	TOP	5987.31
T12	N: 1615955.89 E: 3183670.47	TOE	5981.65
T13	N: 1615950.18 E: 3183702.87	TOE	5982.45
T14	N: 1615853.86 E: 3183808.13	TOE	5982.30
T15	N: 1615756.77 E: 3183920.02	TOE	5983.12
T16	N: 1615718.58 E: 3183921.27	TOE	5983.76
T17	N: 1615697.35 E: 3183898.19	TOE	5981.07

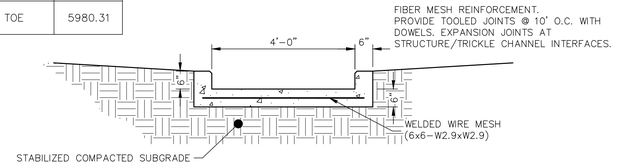
GRADING POINT TABLE			
ID NUMBER	NORTHING/EASTING	DESCRIPTION	ELEVATION
T18	N: 1615671.42 E: 3183880.16	TOE	5982.71
T19	N: 1615624.70 E: 3183817.34	TOE	5983.29
T20	N: 1615616.77 E: 3183792.99	TOE	5983.14
T21	N: 1615639.98 E: 3183771.41	TOE	5981.75
T22	N: 1615657.02 E: 3183758.39	TOE	5981.85
T23	N: 1615663.87 E: 3183750.92	TOE	5981.80
T24	N: 1615675.90 E: 3183731.51	TOE	5982.41
T25	N: 1615690.52 E: 3183716.51	TOE	5982.34
T26	N: 1615697.11 E: 3183710.32	TOE	5982.16
T27	N: 1615703.05 E: 3183704.55	TOE	5982.03
T28	N: 1615744.75 E: 3183660.76	TOE	5981.66
T29	N: 1615778.06 E: 3183620.95	TOE	5982.18
T30	N: 1615846.21 E: 3183546.44	TOE	5982.08
T31	N: 1615851.37 E: 3183540.48	TOE	5982.13
T32	N: 1615868.73 E: 3183531.02	TOE	5982.06
T33	N: 1615897.40 E: 3183545.48	TOE	5981.46
T34	N: 1615915.69 E: 3183599.55	TOE	5980.38
T35	N: 1615900.12 E: 3183613.67	TOE	5979.78
T36	N: 1615905.15 E: 3183624.57	TOE	5979.78
T37	N: 1615925.89 E: 3183620.25	TOE	5980.31



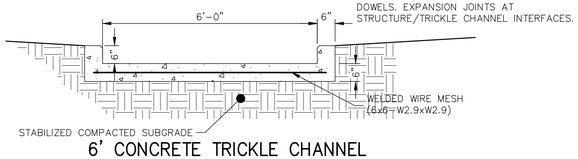
KEYMAP
SCALE: 1"=1000'



CONCRETE MAINTENANCE ACCESS ROAD
TYPICAL SECTION
N.T.S.



4' CONCRETE TRICKLE CHANNEL
TYPICAL SECTION #1
SCALE: 1"=2'



6' CONCRETE TRICKLE CHANNEL
TYPICAL SECTION #2
SCALE: 1"=2'

WHERE IS THIS NEEDED?

LINE TABLE		
LINE	BEARING	DISTANCE
L1	S24°09'40"E	13.86'
L3	S68°36'41"E	77.89'
L5	S40°52'41"E	37.80'
L7	S66°07'05"E	15.86'

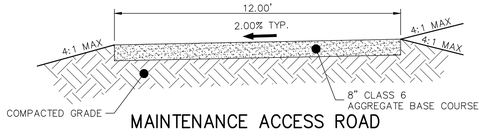
CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C1	43°59'59"	39.38'	30.24'
C2	27°44'00"	180.48'	87.36'
C3	25°14'23"	206.58'	91.00'

TRICKLE CHANNEL #1

LINE TABLE		
LINE	BEARING	DISTANCE
L8	S00°19'26"W	45.50'
L9	S79°26'39"E	46.97'
L10	S42°13'12"W	30.01'

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C4	68°56'07"	45.43'	54.66'
C6	79°46'05"	38.61'	53.76'
C8	121°39'52"	30.29'	64.32'

TRICKLE CHANNEL #2



MAINTENANCE ACCESS ROAD
TYPICAL SECTION
N.T.S.

Stage - Storage Description	Stage [ft]	Area [ft²]	Area [acres]	Volume [ft³]	Volume [ac-ft]	Total Outflow [cfs]
5978.50	0.50	200	0.005	100	0.002	0.15
5979.00	1.00	200	0.005	200	0.005	0.21
5979.50	1.50	1,005	0.023	501	0.012	0.26
5980.00	2.00	1,811	0.042	1,205	0.028	0.40
5980.50	2.50	8,653	0.199	3,821	0.088	0.52
5981.00	3.00	15,495	0.356	9,858	0.226	0.60
5981.50	3.50	32,621	0.749	21,887	0.502	0.68
5982.00	4.00	49,747	1.142	42,479	0.975	0.88
5982.50	4.50	59,513	1.366	69,794	1.602	1.01
5983.00	5.00	69,280	1.590	101,992	2.341	1.11
5983.39 (WQCV)	5.39	71,837	1.649	129,510	2.973	1.19
5983.50	5.50	72,558	1.666	137,452	3.155	1.24
5984.00	6.00	75,836	1.741	174,550	4.007	1.62
5984.50	6.50	78,108	1.793	213,037	4.891	1.84
5985.00	7.00	80,381	1.845	252,659	5.800	2.02
5985.50	7.50	82,703	1.899	293,430	6.736	2.18
5986.00	8.00	85,026	1.952	335,362	7.699	2.32
5986.19 (EURV)	8.19	85,928	1.973	351,603	8.072	2.38
5986.50	8.50	87,399	2.006	378,469	8.688	73.17
5987.00	9.00	89,772	2.061	422,761	9.705	301.24
5987.27 (100-Year)	9.27	91,080	2.091	447,176	10.266	462.46
5987.50	9.50	92,195	2.117	468,253	10.750	559.41

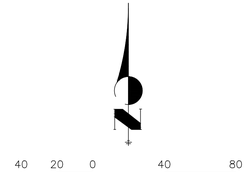
EURV POND A STAGE STORAGE TABLE

BENCHMARK

NGS CONTROL POINT UNBEWUST BEING A 3.5 INCH DIAMETER BRASS CAP. LOCATED ABOUT 3.2 MILES SOUTH OF INTERSTATE 25 AND COLORADO STATE HIGHWAY 470 INTERCHANGE, GO SOUTH ON INTERSTATE 25 FOR 2.9 MILES TO EXIT 191. PROCEED ON A PAVED ROAD TO THE SOUTHWEST FOR 0.2 MILES TO THE STATION ON THE LEFT. IN THE NORTHWEST CORNER OF A 24 FOOT BY 16 FOOT ROCK OUTCROP. IT IS 22.5 FEET EAST OF THE CENTERLINE OF THE PAVED ROAD, 123 FEET NORTH OF THE OUTLET OF A 3 FOOT CORRUGATED STEEL PIPE CULVERT AND APPROXIMATELY 350 FEET WEST OF THE WEST EDGE OF OIL OF SOUTHBOUND INTERSTATE 25, ELEVATION: 6125.32 (NAVD88).

BASIS OF BEARING

BEARING SHOWN HEREON ARE GRID BEARINGS DERIVED FROM GPS OBSERVATION BASED UPON THE COLORADO COORDINATE SYSTEM OF 1983 CENTRAL ZONE (NAD 83, 2011) REFERENCED TO THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, SIXTH PRINCIPAL MERIDIAN BEING MONUMENTED AS SHOWN HEREON, TAKEN TO BEAR NORTH 89°31'58" EAST, A DISTANCE OF 2635.13 FEET.



Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E. — DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

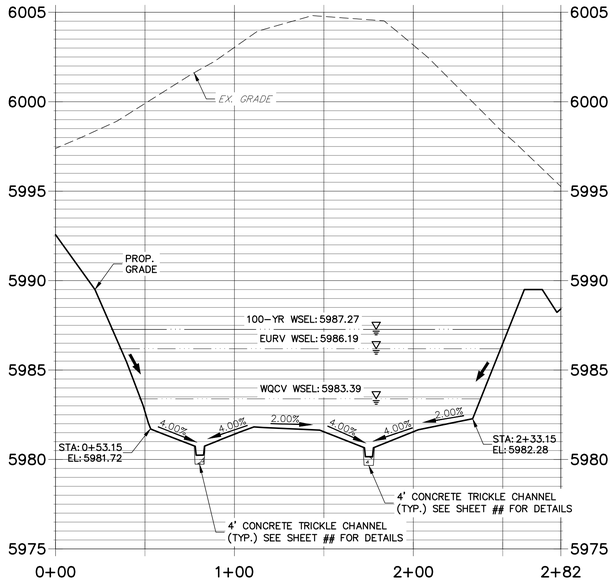
No.	REVISION	BY	DATE

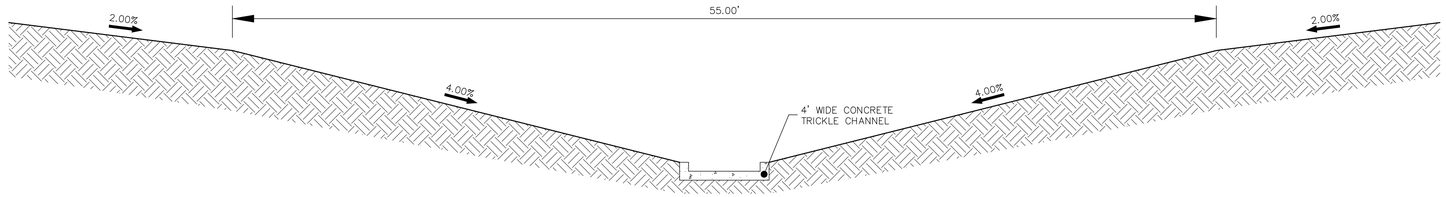
H-SCALE	1"=40'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	CGM
DRAWN BY	CCM
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
POND A–PHASE 1A

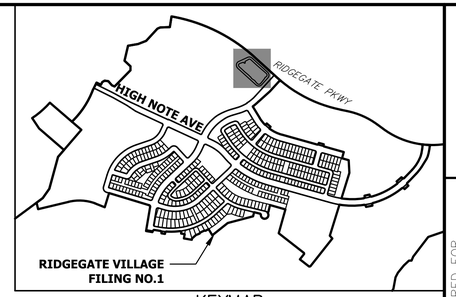
SHEET 71 OF 270
JOB NO. 15950.01

EURV POND A - SECTION A-A PROFILE
STA 0+00.00 TO 2+82.47



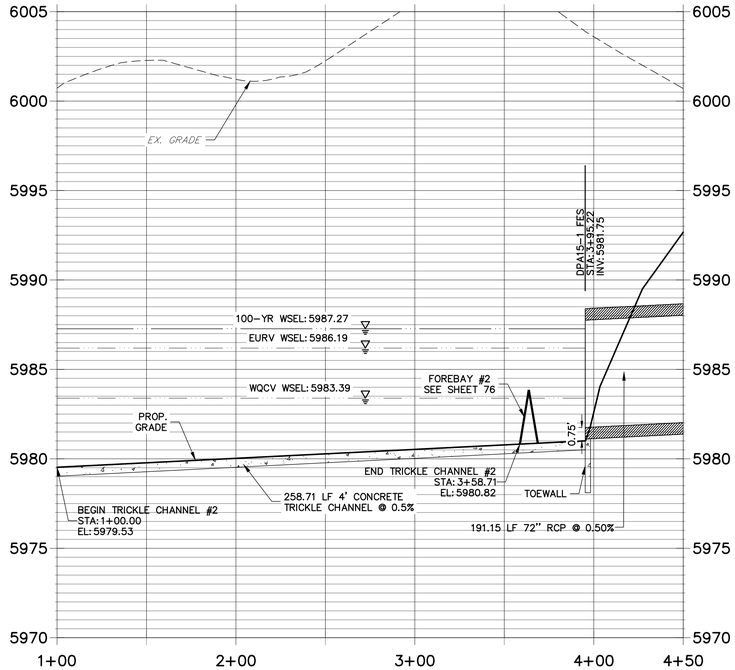


SECTION B–B
POND GRADING BUFFER
N.T.S.

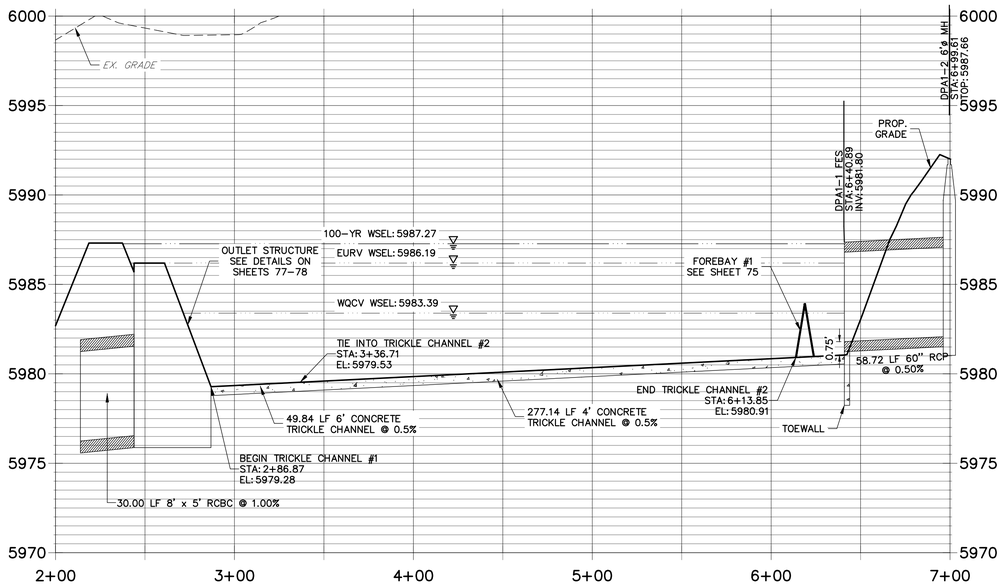


KEYMAP
SCALE: 1"=1000'

TRICKLE CHANNEL #2 PROFILE
STA 1+00.00 TO 4+50.00



TRICKLE CHANNEL #1 PROFILE
STA 2+00.00 TO 7+00.00



BENCHMARK

NGS CONTROL POINT UNBEWUST BEING A 3.5 INCH DIAMETER BRASS CAP. LOCATED ABOUT 3.2 MILES SOUTH OF INTERSTATE 25 AND COLORADO STATE HIGHWAY 470 INTERCHANGE, GO SOUTH ON INTERSTATE 25 FOR 2.9 MILES TO EXIT 191. PROCEED ON A PAVED ROAD TO THE SOUTHWEST FOR 0.2 MILES TO THE STATION ON THE LEFT. IN THE NORTHWEST CORNER OF A 24 FOOT BY 16 FOOT ROCK OUTCROP. IT IS 22.5 FEET EAST OF THE CENTERLINE OF THE PAVED ROAD, 123 FEET NORTH OF THE OUTLET OF A 3 FOOT CORRUGATED STEEL PIPE CULVERT AND APPROXIMATELY 350 FEET WEST OF THE WEST EDGE OF OIL OF SOUTHBOUND INTERSTATE 25, ELEVATION: 6125.32 (NAVD88).

HORIZONTAL
ORIGINAL SCALE: 1" = 40'
VERTICAL
ORIGINAL SCALE: 1" = 4'

Know what's below.
Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

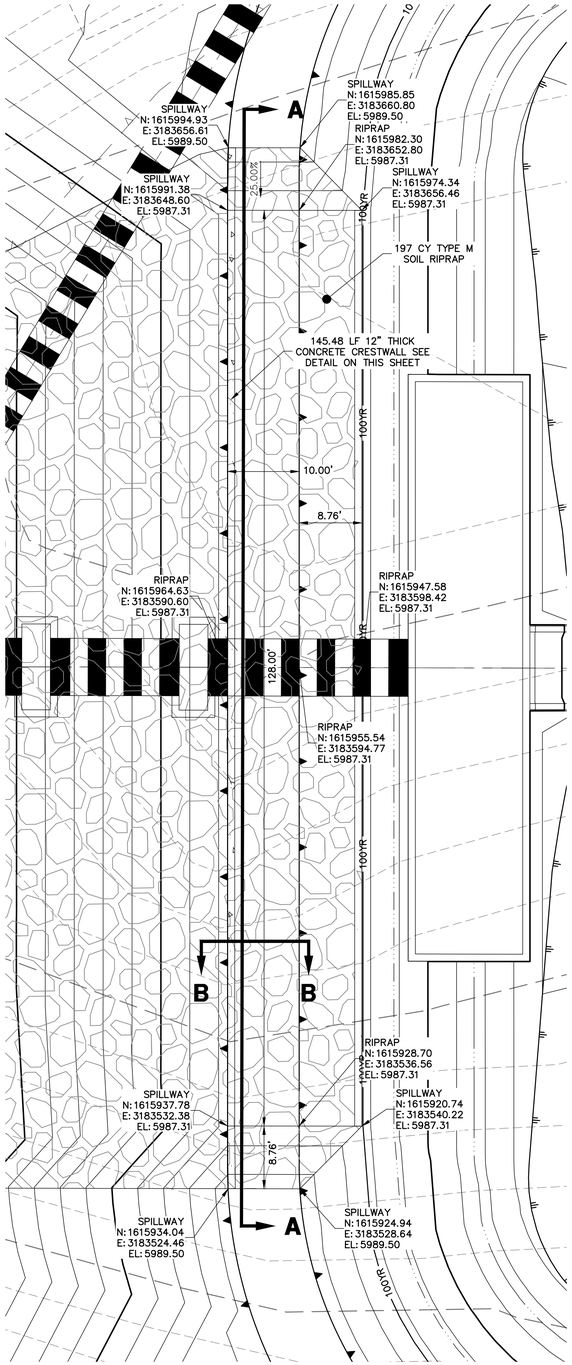
H-SCALE	1"=40'
V-SCALE	1"=4'
DATE	2/12/21
DESIGNED BY	CGM
DRAWN BY	KAK
CHECKED BY	

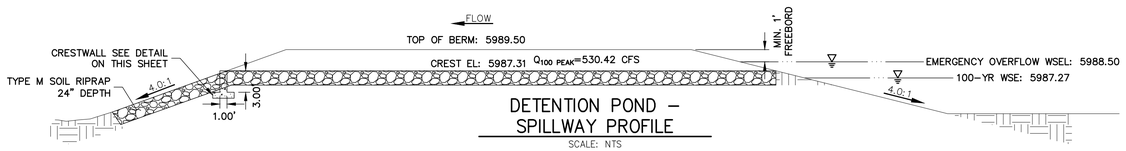
RIDGEGATE SOUTHWEST VILLAGE FILING 1

POND A–PHASE 1A

SHEET 72 OF 270

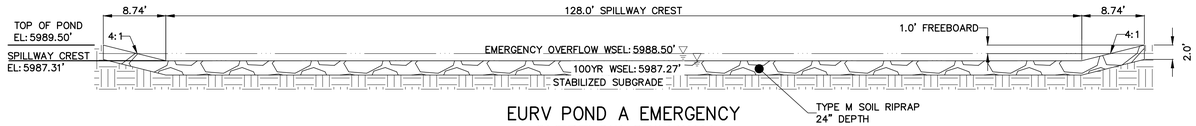
JOB NO. 15950.01





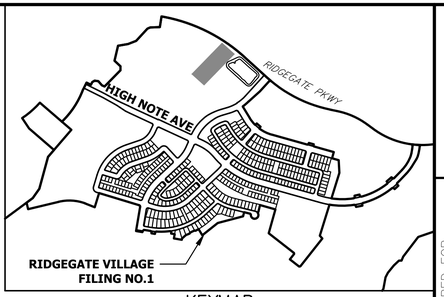
DETENTION POND – SPILLWAY PROFILE

SCALE: NTS



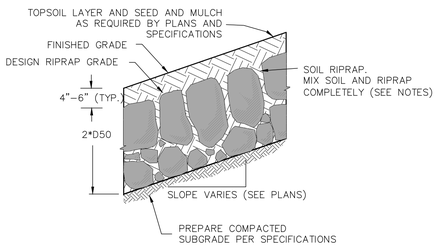
EURV POND A EMERGENCY OVERFLOW SPILLWAY SECTION A–A

SCALE: 1"=10'



KEYMAP

SCALE: 1"=1000'



SOIL RIPRAP EMBANKMENT PROTECTION WITH BEDDING TYP. SECTION

N.T.S.

TYPE M RIPRAP

INTERMEDIATE ROCK DIMENSION (IN.)	PERCENT PASSING (%)
21	70–100
18	50–70
12	35–50
4	2–10

*TYPE M RIPRAP D_{50}=12".
D_{50} = MEAN PARTICLE SIZE (INTERMEDIATE DIMENSION) BY WEIGHT.

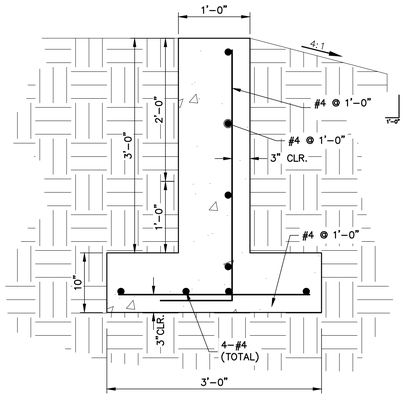
TYPE H RIPRAP

INTERMEDIATE ROCK DIMENSION (IN.)	PERCENT PASSING (%)
30	70–100
24	50–70
18	35–50
6	2–10

*TYPE H RIPRAP D_{50}=18".
D_{50} = MEAN PARTICLE SIZE (INTERMEDIATE DIMENSION) BY WEIGHT.

RIPRAP NOTES:

1. SOIL RIPRAP DETAILS ARE APPLICABLE TO SLOPED AREAS. REFER TO THE SITE PLAN ACTUAL LOCATION AND LIMITS.
2. MIX UNIFORMLY 65% RIPRAP BY VOLUME WITH 35% OF APPROVED SOIL BY VOLUME PRIOR TO PLACEMENT.
3. PLACE STONE–SOIL MIX TO RESULT IN SECURELY INTERLOCKED ROCK AT THE DESIGN THICKNESS AND GRADE. COMPACT AND LEVEL TO ELIMINATE ALL VOIDS AND ROCKS PROJECTING ABOVE DESIGN RIPRAP TOP GRADE.
4. CRIMP OR TACKIFY MULCH OR USE APPROVED HYDROMULCH AS CALLED FOR IN THE PLANS AND SPECIFICATIONS.
5. ROCK SHALL BE HARD, DURABLE, ANGULAR IN SHAPE, AND FREE FROM CRACKS, OVERBURDEN, SHALE, AND ORGANIC MATTER.
6. NEITHER BREADTH NOR THICKNESS OF A SINGLE STONE SHOULD BE LESS THAN ONE–THIRD ITS LENGTH, AND ROUNDED STONE SHOULD BE AVOIDED.
7. THE ROCK SHOULD SUSTAIN A LOSS OF NOT MORE THAN 40% AFTER 500 REVOLUTIONS IN AN ABRASION TEST (LOS ANGELES MACHINE ASTM C–535–69) AND SHOULD SUSTAIN A LOSS OF NOT MORE THAN 10% AFTER 12 CYCLES OF FREEZING AND THAWING (AASHTO TEST 103 FOR LEDGE ROCK PROCEDURE A).
8. ROCK HAVING A MINIMUM SPECIFIC GRAVITY OF 2.65 IS PREFERRED; HOWEVER, IN NO CASE SHOULD ROCK HAVE A SPECIFIC GRAVITY LESS THAN 2.50.



CONCRETE CREST WALL DETAIL SECTION B–B

SCALE: 1"=1'

40 20 0 40

HORIZONTAL ORIGINAL SCALE: 1" = 40'

VERTICAL ORIGINAL SCALE: 1" = 4'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

NO.	REVISION	BY	DATE

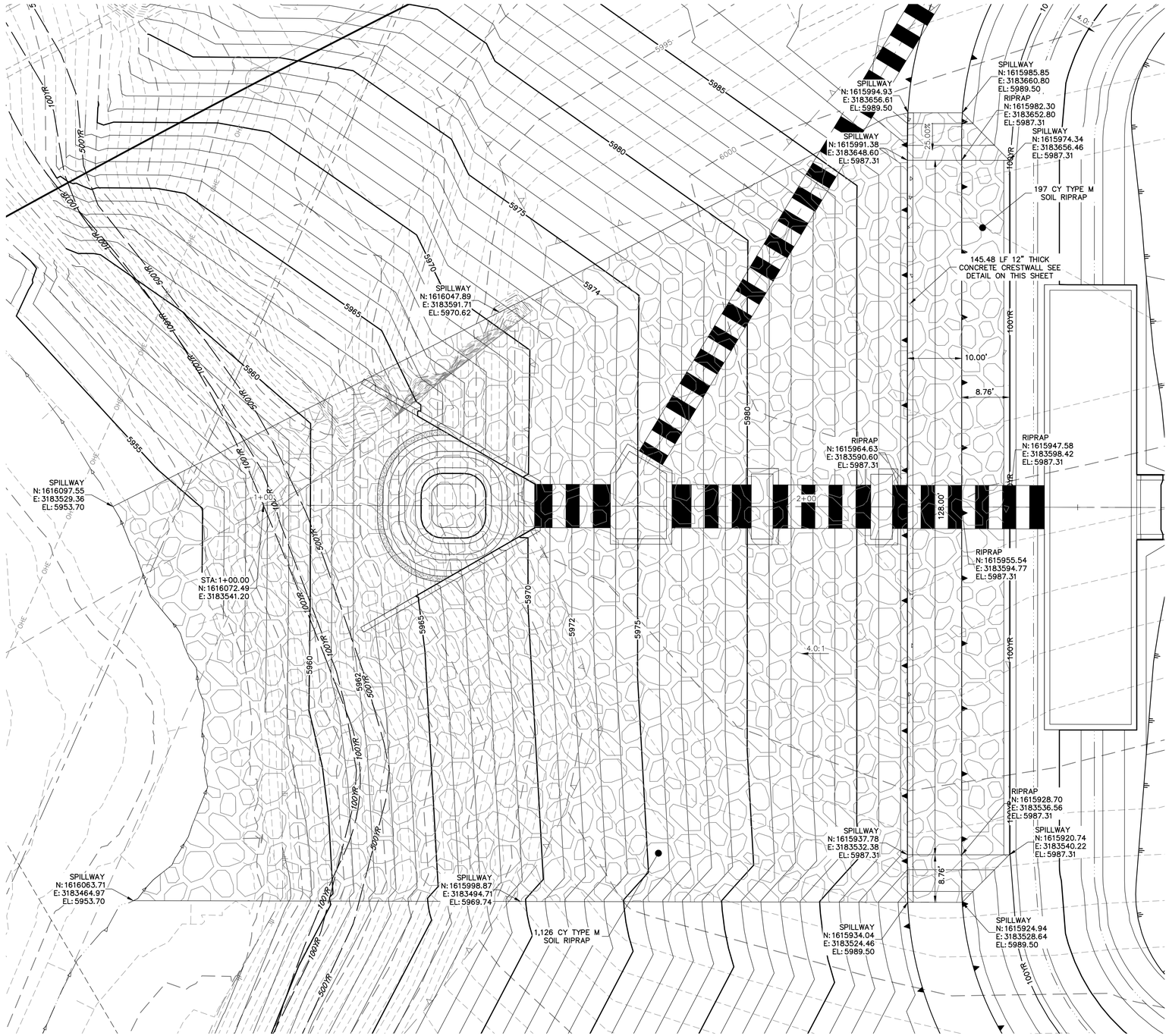
H-SCALE	1" = 40'
V-SCALE	1" = 4'
DATE	2/12/21
DESIGNED BY	CGM
DRAWN BY	KAK
CHECKED BY	

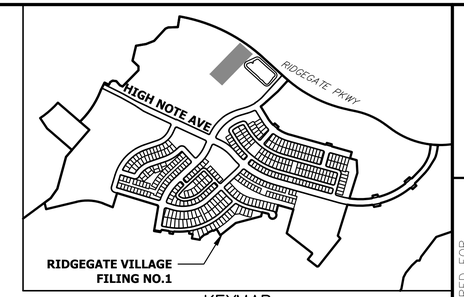
RIDGEGATE SOUTHWEST VILLAGE FILING 1

POND A–PHASE 1A

SHEET 73 OF 270

JOB NO. 15950.01





KEYMAP
SCALE: 1"=1000'

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1" = 40'
V-SCALE	1" = 4'
DATE	2/12/21
DESIGNED BY	CGM
DRAWN BY	KAK
CHECKED BY	

40 20 0 40
HORIZONTAL
ORIGINAL SCALE: 1" = 40'
VERTICAL
ORIGINAL SCALE: 1" = 4'

Know what's below.
Call before you dig.

RIDGEGATE SOUTHWEST VILLAGE FILING 1
POND A-PHASE 1A

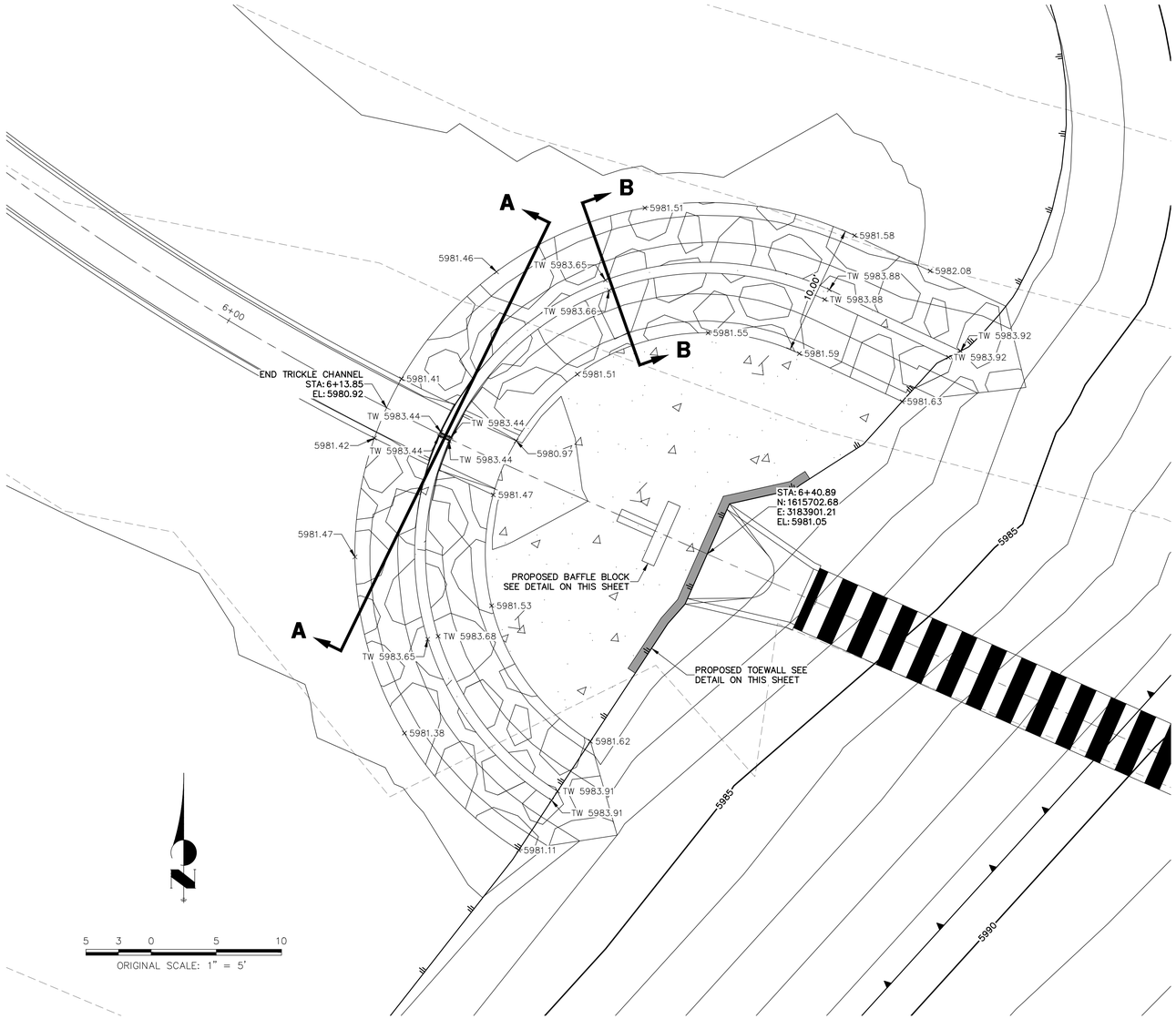
ENGINEER'S STATEMENT
PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

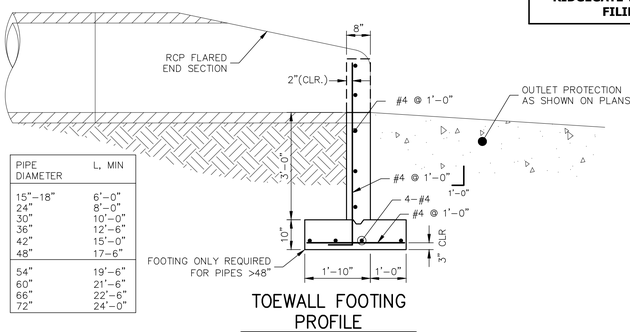
COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

SHEET 74 OF 270
JOB NO. 15950.01



DETENTION POND DESIGN – FOREBAY #1 PLAN

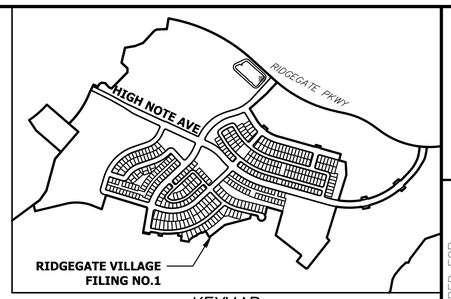
SCALE: 1"=5'



PIPE DIAMETER	L, MIN
15"–18"	6'–0"
24"	8'–0"
30"	10'–0"
36"	12'–6"
42"	15'–0"
48"	17–6"
54"	19'–6"
60"	21'–6"
66"	22'–6"
72"	24'–0"

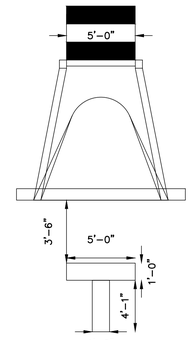
TOEWALL FOOTING PROFILE

N.T.S.



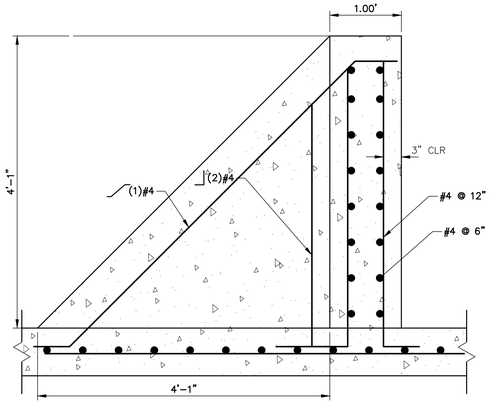
KEYMAP

SCALE:1"=1000'



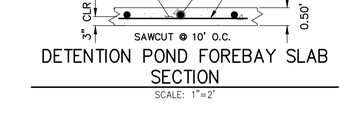
BAFFLE BLOCK PLAN

SCALE: N.T.S.



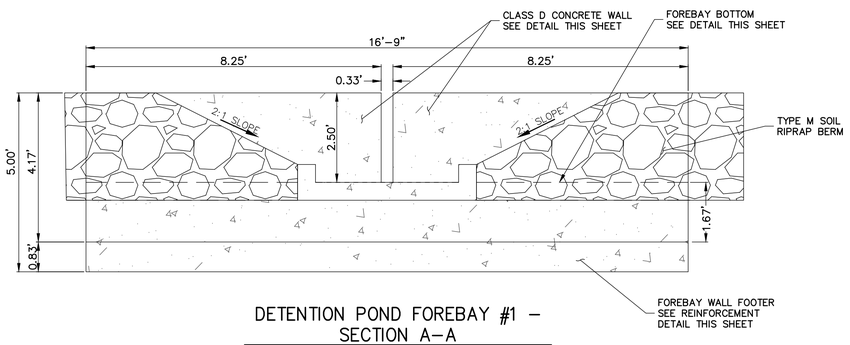
FOREBAY #1 BAFFLE SECTION

SCALE: 1" = 1'



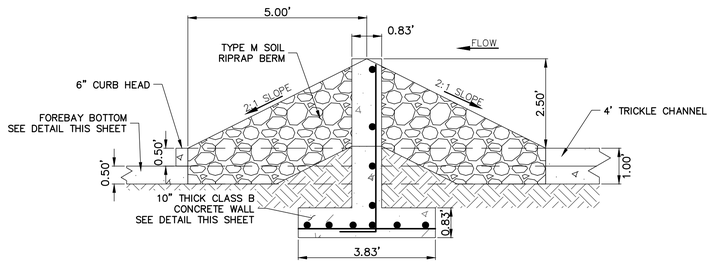
DETENTION POND FOREBAY SLAB SECTION

SCALE: 1"=2'



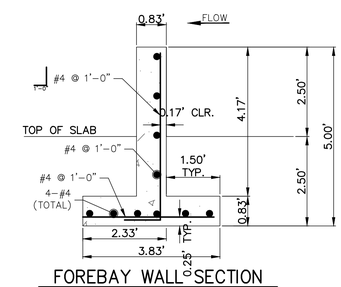
DETENTION POND FOREBAY #1 – SECTION A–A

SCALE: 1"=2'



DETENTION POND FOREBAY SECTION B–B

SCALE: 1"=2'



FOREBAY WALL SECTION

SCALE: 1"=2'

Know what's below.
Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

STATE OF COLORADO
REGISTERED
AARON LEE CLUTTER
36742
PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

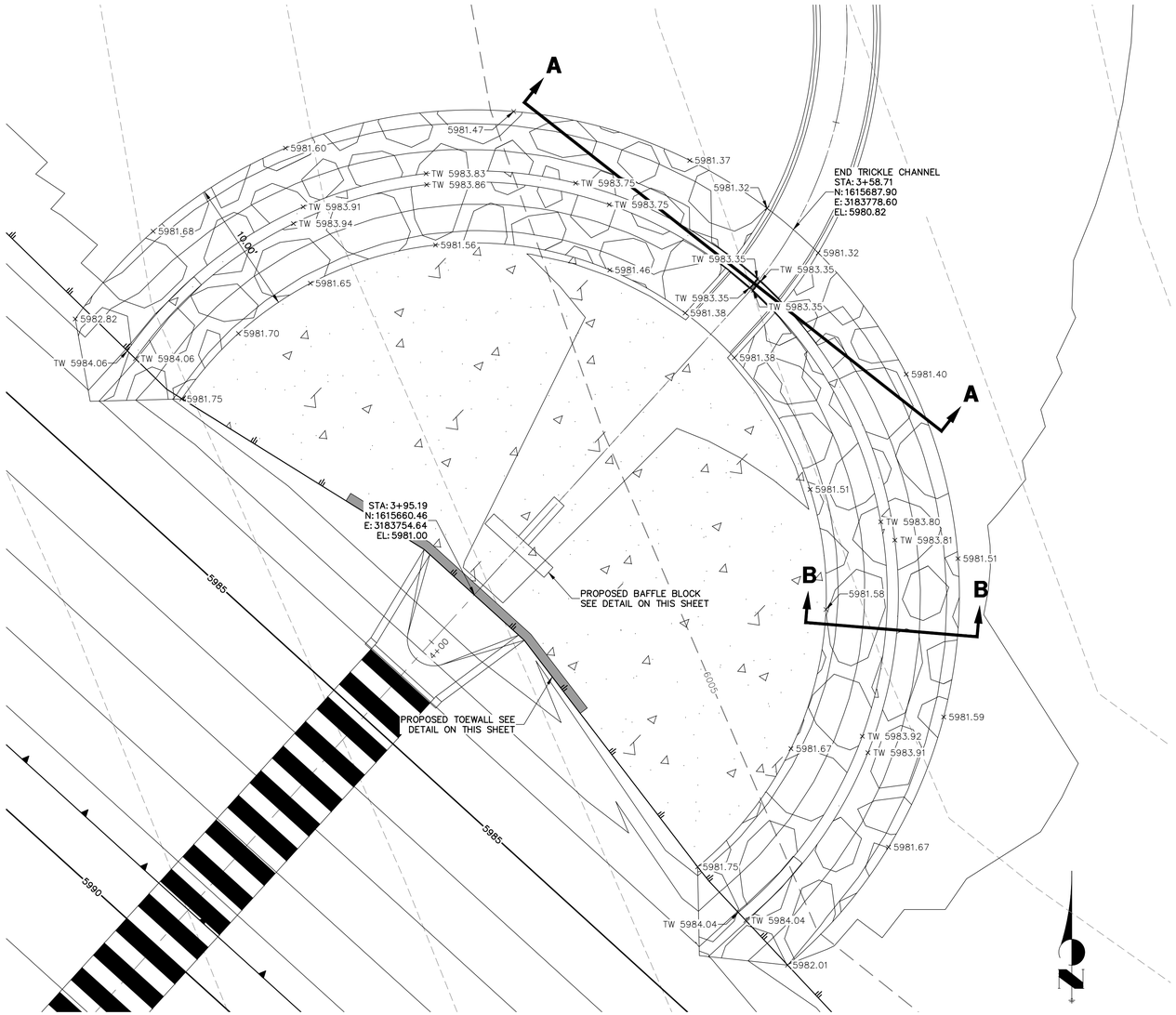
No.	REVISION	BY	DATE

H-SCALE	VARIES
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	CGM
DRAWN BY	KAK
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
POND A FOREBAY–PHASE 1A

SHEET 75 OF 270

JOB NO. 15950.01

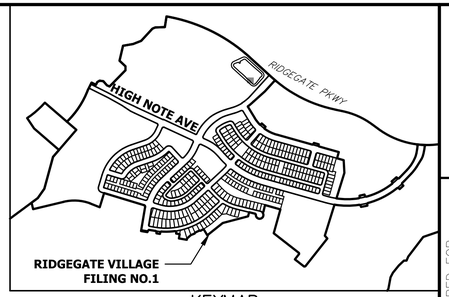


DETENTION POND DESIGN – FOREBAY #2 PLAN

SCALE: 1"=5'

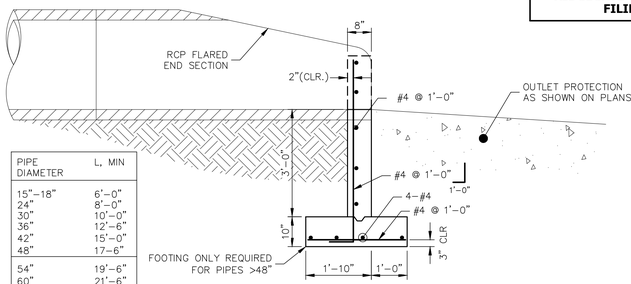
5 3 0 5 10

ORIGINAL SCALE: 1" = 5'



KEYMAP

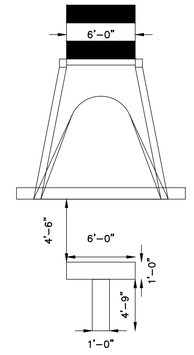
SCALE:1"=1000'



PIPE DIAMETER	L, MIN
15"–18"	6'–0"
24"	8'–0"
30"	10'–0"
36"	12'–6"
42"	15'–0"
48"	17–6"
54"	19'–6"
60"	21'–6"
66"	22'–6"
72"	24'–0"

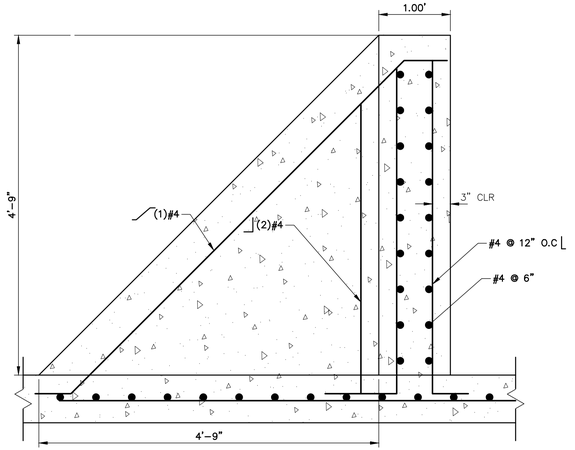
TOEWALL FOOTING PROFILE

N.T.S.



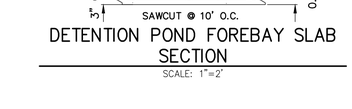
BAFFLE BLOCK PLAN

SCALE: N.T.S.



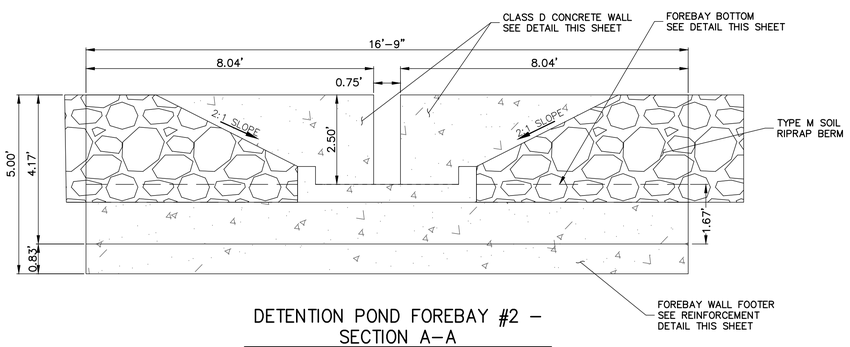
FOREBAY #2 BAFFLE SECTION

SCALE: 1" = 1'



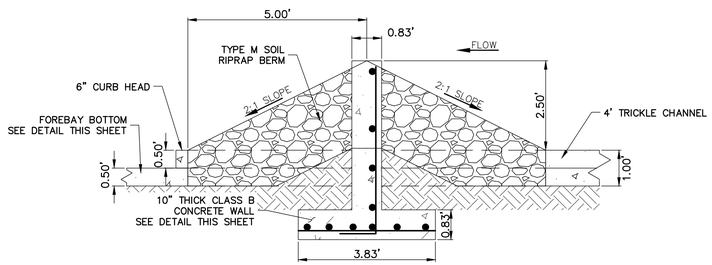
DETENTION POND FOREBAY SLAB SECTION

SCALE: 1"=2'



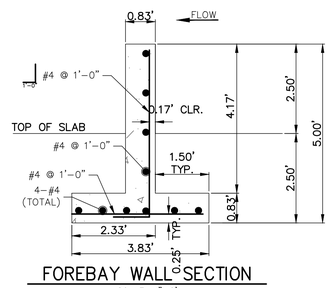
DETENTION POND FOREBAY #2 – SECTION A–A

SCALE: 1"=2'



DETENTION POND FOREBAY SECTION B–B

SCALE: 1"=2'



FOREBAY WALL SECTION

SCALE: 1"=2'

Know what's below.
Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

REGISTERED PROFESSIONAL ENGINEER
AARON LEE CLUTTER
36742
PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

NO.	REVISION	BY	DATE

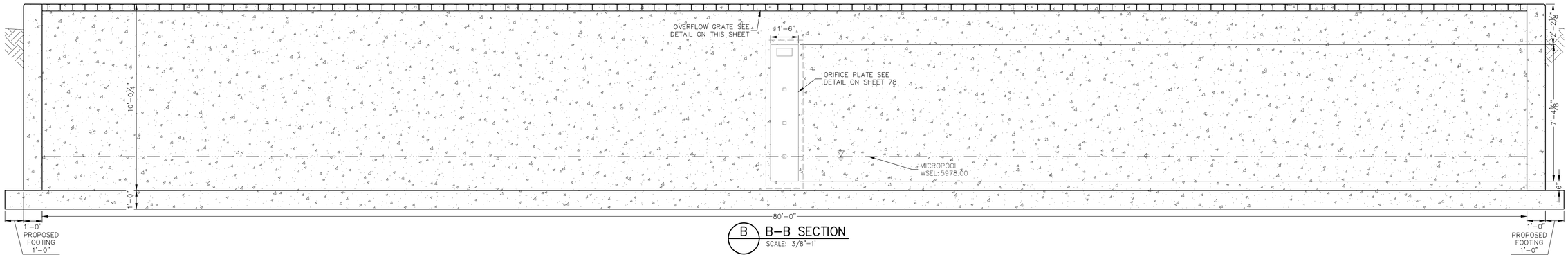
H-SCALE	VARIES		
V-SCALE	N/A		
DATE	2/12/21		
DESIGNED BY	CGM		
DRAWN BY	KAK		
CHECKED BY			

RIDGEGATE SOUTHWEST VILLAGE FILING 1

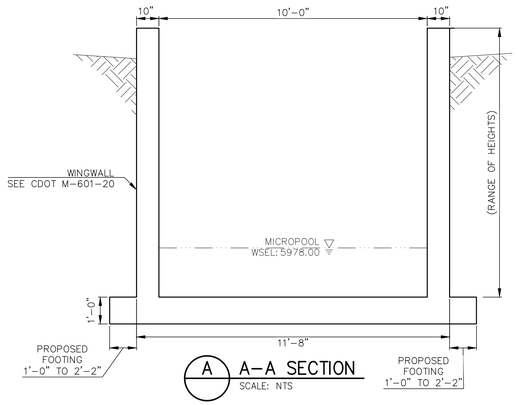
POND A FOREBAY–PHASE 1A

SHEET 76 OF 270

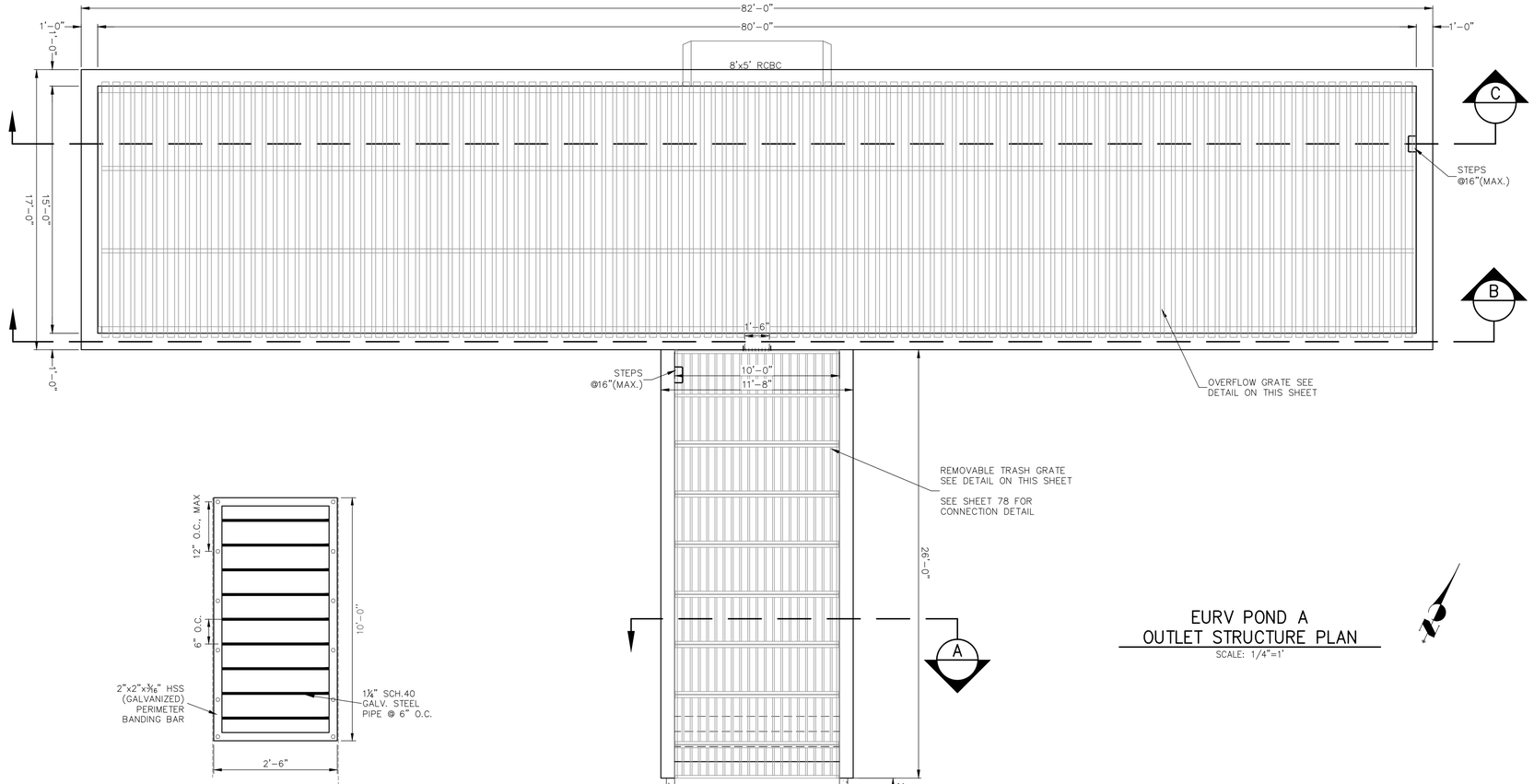
JOB NO. 15950.01



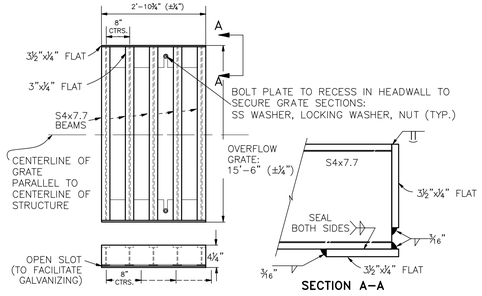
B B–B SECTION
SCALE: 3/8"=1'



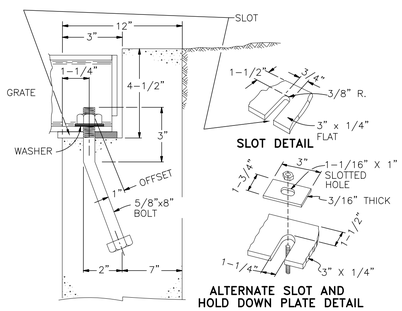
A A–A SECTION
SCALE: NTS



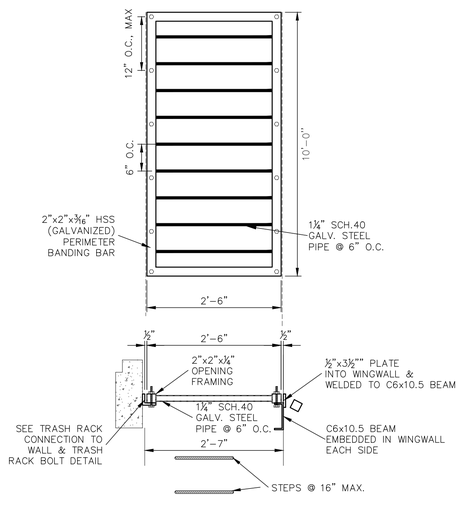
EURV POND A
OUTLET STRUCTURE PLAN
SCALE: 1/4"=1'



OVERFLOW GRATE DETAILS
N.T.S.



OVERFLOW GRATE INSTALLATION DETAIL
N.T.S.



REMOVABLE TRASH GRATE DETAIL
N.T.S.

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

Know what's below. Call before you dig.

ENGINEER'S STATEMENT
PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

BY	DATE

No.	REVISION

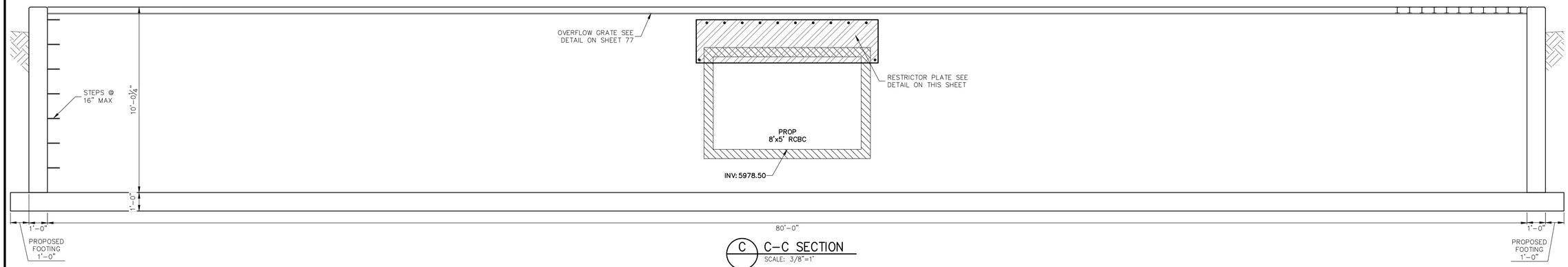
H-SCALE	VARIES
V-SCALE	3/8" =1'
DATE	2/12/21
DESIGNED BY	CGM
DRAWN BY	KAK
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

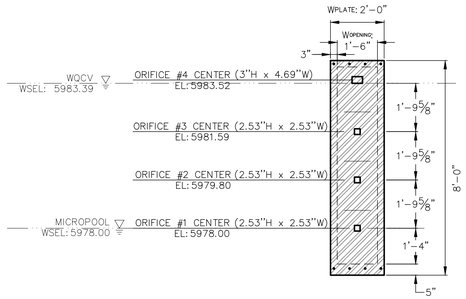
POND A OUTLET STRUCTURE–PHASE 1A

SHEET 77 OF 270

JOB NO. 15950.01

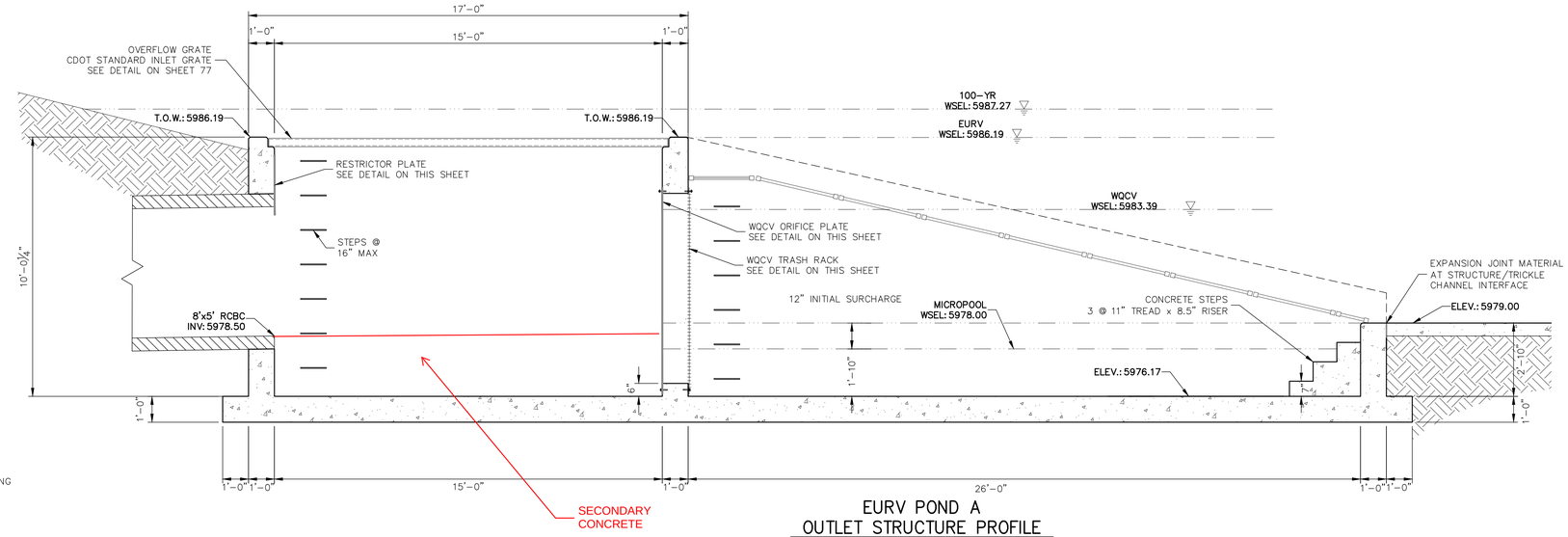


C C-C SECTION
SCALE: 3/8"=1'

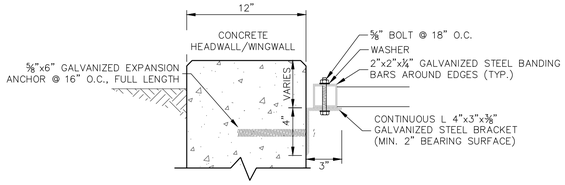


3/8" THICK ORIFICE PLATE, GALVANIZED STEEL WITH THREE 2.53"x2.53" AND ONE 3"x4.69" RECTANGULAR ORIFICES. BOLT PLATE TO CONCRETE @ 12" O.C. MAX. PROVIDE GASKET BETWEEN PLATE AND CONCRETE

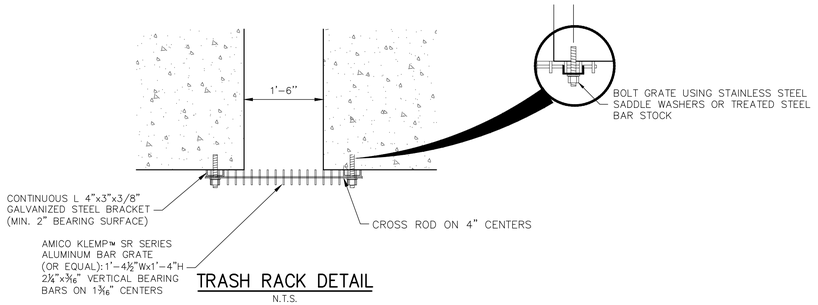
ORIFICE PLATE DETAIL
SCALE: 3/8"=1'



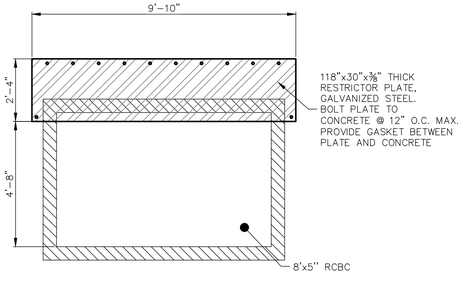
EURV POND A
OUTLET STRUCTURE PROFILE
SCALE: 3/8"=1'



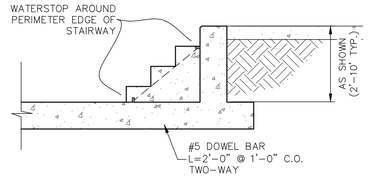
TRASH GRATE CONNECTION TO WALLS
N.T.S.



TRASH RACK DETAIL
N.T.S.



RESTRICTOR PLATE DETAIL
SCALE: 3/8"=1'



CONCRETE STEP DETAIL
SCALE: 3/8"=1'

Know what's **below.**
Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

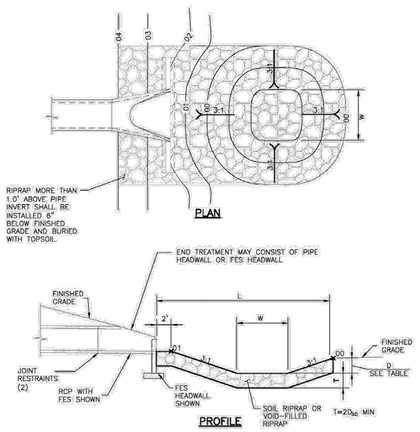
H-SCALE	3/8"=1'
V-SCALE	3/8"=1'
DATE	2/12/21
DESIGNED BY	CGM
DRAWN BY	KAK
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

POND A OUTLET STRUCTURE–PHASE 1A

SHEET 78 OF 270

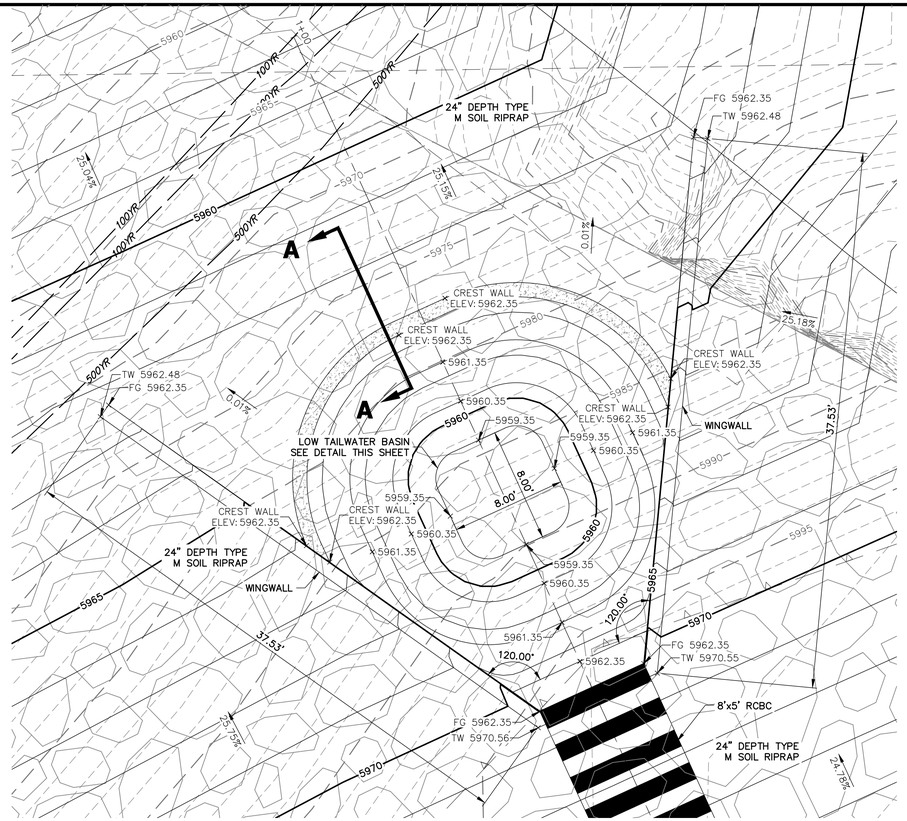
JOB NO. 15950.01



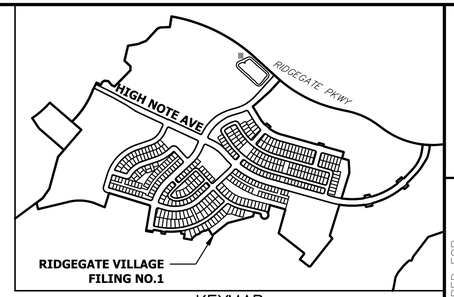
PIPE SIZE OR BOX HEIGHT	D	W*	L
18" – 24"	1'–0"	4'	15'
30" – 36"	1'–6"	6'	20'
42" – 48"	2'–0"	7'	24'
54" – 60"	2'–6"	8'	28'
66" – 72"	3'–0"	9'	32'

* IF OUTLET PIPE IS A BOX CULVERT WITH A WIDTH GREATER THAN W, THEN W = CULVERT WIDTH

Figure 9-37. Low tailwater riprap basin



DETENTION POND DESIGN – OUTFALL PLAN
SCALE: 1"=5'



KEYMAP
SCALE: 1"=1000'

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=5'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	CGM
DRAWN BY	KAK
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

POND A OUTLET STRUCTURE–PHASE 1A

SHEET 79 OF 270

JOB NO. 15950.01

GENERAL NOTES

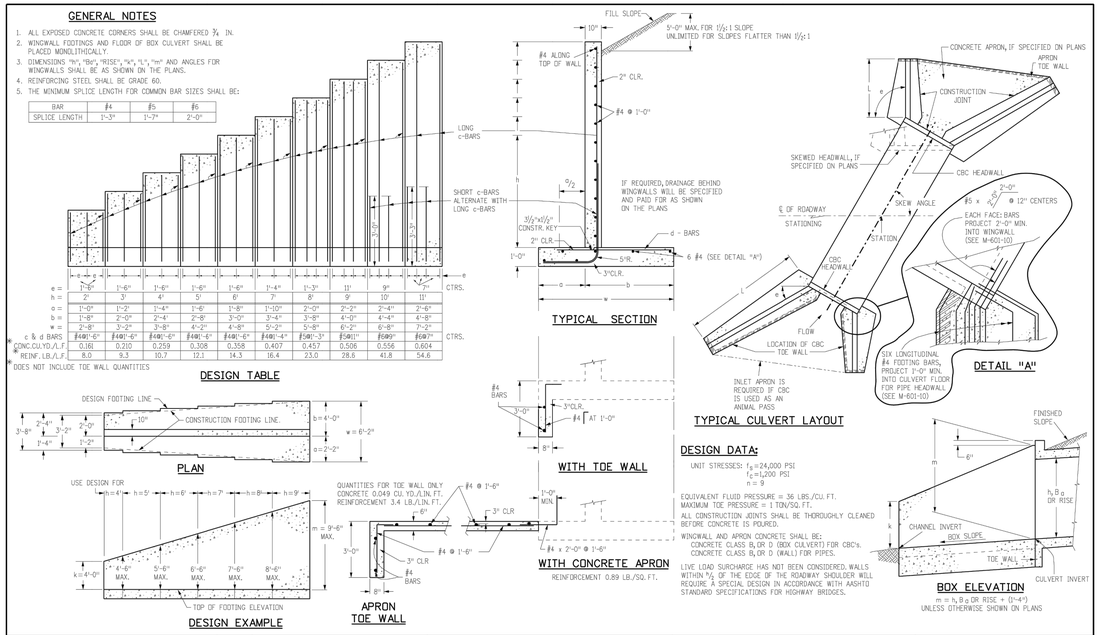
1. ALL EXPOSED CONCRETE CORNERS SHALL BE CHAMFERED ¾ IN.
2. WINGWALL FOOTINGS AND FLOOR OF BOX CULVERT SHALL BE PLACED MONOLITHICALLY.
3. DIMENSIONS "h", "de", "RISE", "e", "L", "m" AND ANGLES FOR WINGWALLS SHALL BE AS SHOWN ON THE PLANS.
4. REINFORCING STEEL SHALL BE GRADE 60.
5. THE MINIMUM SPLICE LENGTH FOR COMMON BAR SIZES SHALL BE:

BAR	#4	#5	#6
SPLICE LENGTH	1'–3"	1'–7"	2'–0"

e =	1'–6"	1'–6"	1'–6"	1'–6"	1'–6"	1'–4"	1'–3"	11"	9"	7"	CTRS.
h =	6'	5'	4'	5'	6'	7'	8'	9'	10'	11'	
o =	1'–0"	1'–2"	1'–4"	1'–6"	1'–8"	1'–10"	2'–0"	2'–2"	2'–4"	2'–6"	
b =	1'–8"	2'–0"	2'–4"	2'–8"	3'–0"	3'–4"	3'–8"	4'–0"	4'–4"	4'–8"	
w =	2'–8"	3'–2"	3'–8"	4'–2"	4'–8"	5'–2"	5'–8"	6'–2"	6'–8"	7'–2"	
c & d BARS	#4@1'–6"	#4@1'–6"	#4@1'–6"	#4@1'–6"	#4@1'–6"	#4@1'–4"	#5@1'–3"	#5@1'"	#5@9"	#6@7"	CTRS.
CONC.CU.YD./L.F.	0.161	0.210	0.259	0.308	0.358	0.407	0.457	0.506	0.556	0.604	
REINF. LB./L.F.	8.0	9.3	10.7	12.1	14.3	16.4	23.0	28.6	41.8	54.6	

* DOES NOT INCLUDE TOE WALL QUANTITIES

DESIGN TABLE



DESIGN DATA:

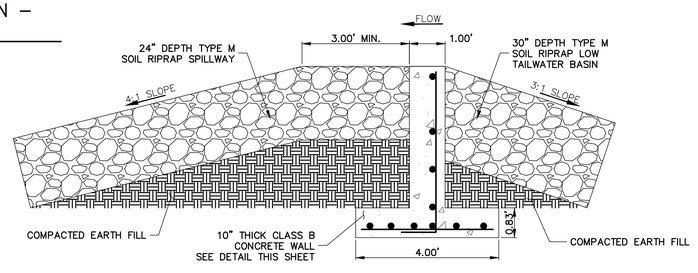
UNIT STRESSES: f_s=24,000 PSI
f_c=1,200 PSI
n = 9

EQUIVALENT FLUID PRESSURE = 36 LBS./CU. FT.
MAXIMUM TOE PRESSURE = 1 TON/SQ. FT.

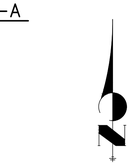
ALL CONSTRUCTION JOINTS SHALL BE THOROUGHLY CLEANED BEFORE CONCRETE IS POURED.

WINGWALL AND APRON CONCRETE SHALL BE:
CONCRETE CLASS B, OR D (BOX CULVERT) FOR CBC's.
CONCRETE CLASS B, OR D (WALL) FOR PIPES.

LIVE LOAD SURCHARGE HAS NOT BEEN CONSIDERED. WALLS WITHIN ½ OF THE EDGE OF THE ROADWAY SHOULDER WILL REQUIRE A SPECIAL DESIGN IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.



CREST WALL SECTION A–A
SCALE: 1"=2'



5 3 0 5 10
ORIGINAL SCALE: 1" = 5'

Know what's below. Call before you dig.

Computer File Information		Sheet Revisions	
Creation Date: 07/04/12 Initials: DD		Date:	Comments
Last Modification Date: 07/04/12 Initials: LTA	REV.		
Full Path: www.coloradodot.info/business/designsupport	REV.		
Drawing File Name: 601020010.dgn	REV.		
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English	REV.		

Colorado Department of Transportation
4201 East Arkansas Avenue
Denver, Colorado 80222
Phone: (303) 757-9083
Fax: (303) 757-9820
Project Development Branch DD/LTA

WINGWALLS FOR PIPE OR BOX CULVERTS
Issued By: Project Development Branch July 4, 2012

STANDARD PLAN NO.
M-601-20
Sheet No. 1 of 1

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

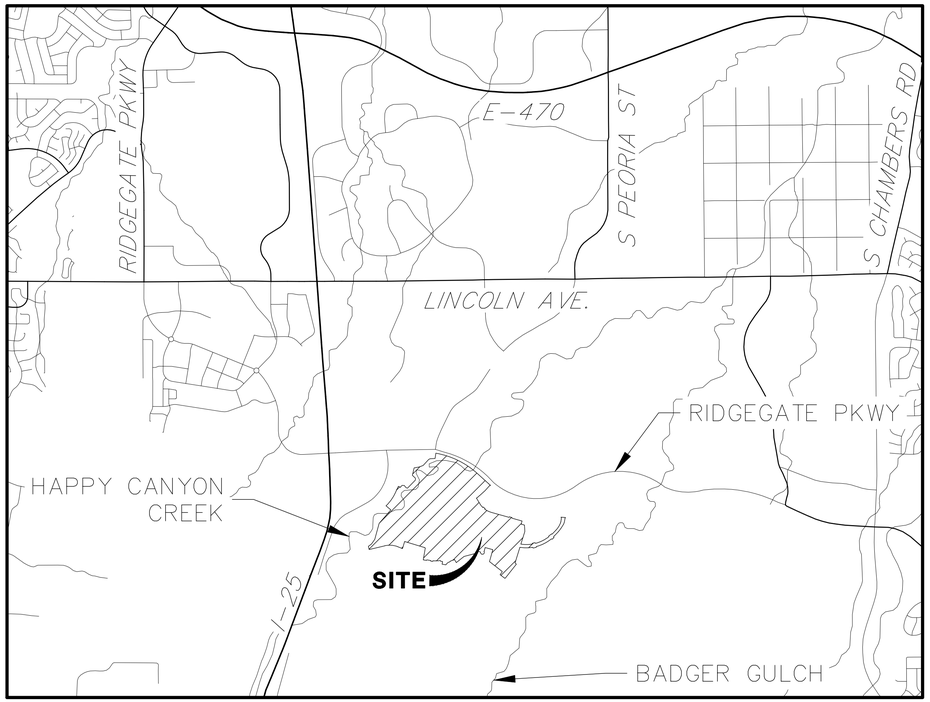
RIDGEGATE SOUTHWEST VILLAGE FILING 1 - REGIONAL INFRASTRUCTURE PHASE 1B

A PORTION OF THE RIDGEGATE PLANNED DEVELOPMENT DISTRICT, EAST SIDE PROPERTY
A PART OF SECTION 14, SECTION 22, SECTION 23, AND SECTION 24, TOWNSHIP 6 SOUTH, RANGE 67 WEST
OF THE 6TH P.M., CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO

STREET AND DRAINAGE CONSTRUCTION PLANS

ABBREVIATIONS

AC	ACRE
AD	ALGEBRAIC DIFFERENCE
AH	AHEAD
ARCH	ARCHITECT
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASSY	ASSEMBLY
AVE	AVENUE
BB	BOX BASE
BK	BACK
BNDY	BOUNDARY
BOP	BOTTOM OF PIPE
BOV	BLOW OFF VALVE
BFV	BUTTERFLY VALVE
BLVD	BOULEVARD
BW	BOTTOM OF WALL
C&G	CURB & GUTTER
CATV	CABLE TELEVISION
CB	CATCH BASIN
CBC	CONCRETE BOX CULVERT
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION
CDS	CUL-DE-SAC
CF	CUBIC FOOT
CFS	CUBIC FEET PER SECOND
CIP	COMPLETE IN PLACE
CL	CENTER LINE
CLOMR	CONDITIONAL LETTER OF MAP REVISION
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
COCS	CITY OF COLORADO SPRINGS
CONC	CONCRETE
CR	CIRCLE
CSP	CORRUGATED STEEL PIPE
CSU	COLORADO SPRINGS UTILITIES
CT	COURT
CTRB	CONCRETE THRUST REDUCER BLOCK
CY	CUBIC YARD
DBPS	DRAINAGE BASIN PLANNING STUDY
DE	DRAINAGE EASEMENT
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DR	DRIVE
DRC	DESIGN REVIEW COMMITTEE
DU	DWELLING UNITS
DY	DAY
E	EAST
EA	EACH
EGL	ENERGY GRADE LINE
EL	ELEVATION
ELEC	ELECTRIC
EOA	EDGE OF ASPHALT
EPC	EL PASO COUNTY
ERCP	ELLIPTICAL RCP
ESMT	EASEMENT
EST	ESTIMATE
EX	EXISTING
FDP	FINAL DEVELOPMENT PLAN
FDR	FINAL DRAINAGE REPORT
FES	FLARED END SECTION
FF	FINISHED FLOOR ELEVATION
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOWLINE
FIL	FILING
FO	FIBER OPTIC CABLE
GB	GRADE BREAK
GE	GAS EASEMENT
GIS	GEOGRAPHIC INFORMATION SYSTEM
GL	GAS LINE
GPS	GLOBAL POSITIONING SYSTEM
GV	GATE VALVE
HBP	HOT BITUMINOUS PAVEMENT
HC	HANDICAP
HDC	HIGH DEFLECTION COUPLING
HDPE	HIGH DENSITY POLYETHYLENE
HGL	HYDRAULIC GRADE LINE
HMA	HOT MIX ASPHALT
HOA	HOME OWNERS ASSOCIATION
HP	HIGH POINT
HR	HOUR
I	INLET
IE	IRRIGATION EASEMENT
INT	INTERSECTION
INV	INVERT
IRR	IRRIGATION
KB	KICK (THRUST) BLOCK
LB	POUND
LE	LANDSCAPE EASEMENT
LF	LINEAR FOOT
LN	LANE
LOMR	LETTER OF MAP REVISION
LP	LOW POINT
LS	LUMP SUM
LT	LEFT
MAX	MAXIMUM
M/D	MOISTURE DENSITY
MDDP	MASTER DEVELOPMENT DRAINAGE PLAN
MH	MANHOLE
MIN	MINIMUM
MS	MOUNTABLE SIDEWALK
N	NORTH
NRCP	NON-REINFORCED CONCRETE PIPE
ODP	OFFICIAL DEVELOPMENT PLAN
OHE	OVERHEAD ELECTRIC
OHU	OVERHEAD UTILITY
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PCR	POINT OF CURB RETURN
PDP	PRELIMINARY DEVELOPMENT PLAN
PE	PROFESSIONAL ENGINEER
PI	POINT OF INTERSECTION
PKWY	PARKWAY
PL	PROPERTY LINE
PR	PROPOSED
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PV	PLUG VALVE
PVC	POLYVINYL CHLORIDE
R	RADIUS
RCBC	REINFORCED CONCRETE BOX CULVERT
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
ROW	RIGHT OF WAY
RT	RIGHT
S	SOUTH
STE	STEEL
SAN	SANITARY SEWER
SF	SQUARE FOOT
ST	STREET
STA	STATION
STM	STORM SEWER
SY	SQUARE YARD
SY-IN	SQUARE YARD INCH
TB	THRUST BLOCK
TBC	TOP BACK OF CURB
TBW	TOP BACK OF WALK
TEL	TELEPHONE
TN	TON
TOA	TOP OF ASPHALT
TOB	TOP OF BOX
TOC	TOP OF CURB OR CONCRETE
TOF	TOP OF FOUNDATION
TOP	TOP OF PIPE
TW	TOP OF WALL
TYP	TYPICAL
UDFCD	URBAN DRAINAGE AND FLOOD CONTROL DISTRICT
UE	UTILITY EASEMENT
U&DE	UTILITY & DRAINAGE EASEMENT
UGE	UNDERGROUND ELECTRIC
VCP	VITRIFIED CLAY PIPE
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
VTC	VEHICLE TRACKING CONTROL
W	WEST
WL	WATER LINE
WM	WATER MAIN
WRD	WATER RESOURCES DEPARTMENT
WS	WATER SURFACE
WSE	WATER SURFACE ELEVATION
WTR	WATER
YR	YEAR



VICINITY MAP
SCALE: 1"=2000'

SHEET INDEX

80	COVER SHEET – REGIONAL PHASE 1B
81	GENERAL NOTES–PHASE 1B
82	LEGEND–PHASE 1B
83	OVERALL SITE AND UTILITY PLAN–PHASE 1B
84	ROADWAY SECTIONS–PHASE 1B
85–87	ROADWAY PLAN & PROFILES–PHASE 1B
88	CURB RETURN PROFILES–PHASE 1B
89	CURB RAMP DETAILS–PHASE 1B
90–91	SIGNAGE & STRIPING PLAN–PHASE 1B
92	TRAIL IMPROVEMENTS PLANS–PHASE 1B
93–95	STORM PLAN & PROFILE–PHASE 1B
96–101	STORM SEWER & ROADWAY DETAILS–PHASE 1B

TOTAL 80–101

NOTICE TO CONTRACTOR:

1. BY ACCEPTING AND UTILIZING THESE PLANS, THE CONTRACTOR AGREES THAT THEY SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSON AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER AND CIVIL ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE CIVIL ENGINEER.
2. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITIES, CONDUITS OR OTHER STRUCTURES SHOWN ON THESE PLANS WAS OBTAINED BY A SEARCH OF AVAILABLE RECORDS. THE ENGINEER ASSUMES NO LIABILITY WHATSOEVER FOR THE ACCURACY OR COMPLETENESS OF SUCH DATA. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ALL UTILITY LINES, CONDUITS OR STRUCTURES WHETHER OR NOT SHOWN ON THESE PLANS AND BY ACCEPTING AND UTILIZING THESE PLANS, ASSUMES ALL RESPONSIBILITY FOR THE PROTECTION AND/OR ANY DAMAGE TO SAID FACILITIES.

811 Know what's below. Call before you dig.

APPLICANT/OWNER

SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
P~303.791.8180

CIVIL ENGINEER/SURVEYOR

JR ENGINEERING
7200 SOUTH ALTON WAY, SUITE C400
CENTENNIAL, CO
P~303.267.6220

PLANNER

SAGE DESIGN GROUP
1500 SOUTH PEARL STREET, SUITE 200
DENVER, CO 80210
P~303.470.2855

TRAFFIC ENGINEER

JR ENGINEERING
7200 SOUTH ALTON WAY, SUITE C400
CENTENNIAL, CO
P~303.267.6183

GEOTECHNICAL ENGINEER

CTL THOMPSON, INC
1971 WEST 12TH VAE.
DENVER, CO 80204
P~303.825.0777

SOIL PREPARATION NOTE:

SOIL PREPARATION SHALL BE PER RECOMMENDATIONS FROM THE GEOTECHNICAL REPORT PREPARED FOR THIS SITE:

GEOTECHNICAL ENGINEER: CTL THOMPSON, INC
ROJECT NUMBER: DN49,935-115-R2

THE CONTRACTOR IS TO REVIEW THIS REPORT IN FULL PRIOR TO BID. INFORMATION IN THE GEOTECHNICAL REPORT SUPERCEDES ANY CONFLICTING INFORMATION CONTAINED IN THE CONSTRUCTION PLANS AND SPECIFICATIONS.

BASIS OF BEARING

BEARING SHOWN HEREON ARE GRID BEARINGS DERIVED FROM GPS OBSERVATION BASED UPON THE COLORADO COORDINATE SYSTEM OF 1983 CENTRAL ZONE (NAD 83, 2011) REFERENCED TO THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, SIXTH PRINCIPAL MERIDIAN BEING MONUMENTED AS SHOWN HEREON, TAKEN TO BEAR NORTH 89°31'58" EAST, A DISTANCE OF 2635.13 FEET.

BENCHMARK

NGS CONTROL POINT UNBEWUST BEING A 3.5 INCH DIAMETER BRASS CAP. LOCATED ABOUT 3.2 MILES SOUTH OF INTERSTATE 25 AND COLORADO STATE HIGHWAY 470 INTERCHANGE, GO SOUTH ON INTERSTATE 25 FOR 2.9 MILES TO EXIT 191. PROCEED ON A PAVED ROAD TO THE SOUTHWEST FOR 0.2 MILES TO THE STATION ON THE LEFT. IN THE NORTHWEST CORNER OF A 24 FOOT BY 16 FOOT ROCK OUTCROP. IT IS 22.5 FEET EAST OF THE CENTERLINE OF THE PAVED ROAD, 123 FEET NORTH OF THE OUTLET OF A 3 FOOT CORRUGATED STEEL PIPE CULVERT AND APPROXIMATELY 350 FEET WEST OF THE WEST EDGE OF OIL OF SOUTHBOUND INTERSTATE 25, ELEVATION: 6125.32 (NAVD88).

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=2000'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	N/A
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

COVER SHEET – REGIONAL PHASE 1B

SHEET 80 OF 270

JOB NO. 15950.01

GENERAL PROJECT NOTES:

1. ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION OF IMPROVEMENTS SHALL MEET OR EXCEED THE GOVERNING CITY, COUNTY, AND/OR STATE AND APPLICABLE UTILITY DISTRICT STANDARDS AND SPECIFICATIONS, AND APPLICABLE STATE AND FEDERAL REGULATIONS. WHERE THERE IS A CONFLICT BETWEEN THESE PLANS AND ANY APPLICABLE STANDARDS, THE HIGHER QUALITY STANDARD SHALL APPLY. ALL WORK SHALL BE INSPECTED AND APPROVED BY THE CITY AND APPLICABLE UTILITY DISTRICT(S).

2. THE SITE CONSTRUCTION PLANS LISTED WITHIN THIS PLAN SET ARE NOT FOR CONSTRUCTION UNLESS APPROVED BY THE APPROPRIATE GOVERNING JURISDICTION. THE CONTRACTOR SHALL CONFIRM SAID APPROVAL PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL KEEP ONE (1) SIGNED COPY OF THE APPROVED SET OF PLANS, APPROPRIATE SPECIFICATIONS AND STANDARDS, AND APPROVED PERMITS ONSITE AT ALL TIMES.

3. NO REVISIONS SHALL BE MADE TO THESE PLANS WITHOUT THE APPROVAL OF THE CITY, COUNTY, STATE OR LOCAL DISTRICT AND THE ENGINEER OF RECORD.

4. ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARDS, UNLESS SPECIFICALLY STATED OTHERWISE.

5. THE CONTRACTOR IS RESPONSIBLE FOR ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS SHOWN ON THESE DRAWINGS OR DESIGNATED TO BE PROVIDED, INSTALLED, CONSTRUCTED, REMOVED, OR RELOCATED UNLESS SPECIFICALLY NOTED OTHERWISE.

6. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND LICENSES FOR WORK INCLUDING, BUT NOT LIMITED TO DEMOLITION, STREET CUTS, UTILITY INTERFERENCES, TRAFFIC CONTROL, GRADING, AND UTILITY FROM ALL APPLICABLE AGENCIES; AND FOR COMPLYING WITH ALL PROVISIONS INCLUDED THEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL OTHER APPLICABLE PERMITS NOT SPECIFICALLY REQUIRED BY THE AUTHORITY HAVING JURISDICTION.

7. THE CONTRACTOR SHALL UTILITY STAKE PROJECT AT LEAST 2 WORKING DAYS PRIOR TO BEGINNING EXCAVATION OR GRADING, TO HAVE ALL REGISTERED UTILITY LOCATIONS MARKED. OTHER UNREGISTERED UTILITY ENTITIES (I.E. DITCH COMPANY) ARE TO BE LOCATED BY CONTACTING THE RESPECTIVE REPRESENTATIVE.

8. THE CONTRACTOR IS RESPONSIBLE FOR FIELD LOCATING AND VERIFYING ELEVATIONS OF ALL EXISTING SEWER MAINS, WATER MAINS, CURBS, GUTTERS, AND OTHER UTILITIES AT THE POINTS OF CONNECTION SHOWN ON THE PLANS, AND AT ANY UTILITY CROSSINGS PRIOR TO INSTALLING ANY OF THE NEW IMPROVEMENTS. IF A CONFLICT EXISTS AND/OR A DESIGN MODIFICATION IS REQUIRED, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO MODIFY THE DESIGN. DESIGN MODIFICATION(S) MUST BE APPROVED BY THE APPROPRIATE AUTHORITY PRIOR TO BEGINNING CONSTRUCTION.

9. ANY DISRUPTION OF UTILITY SERVICE THAT IS REQUIRED TO ADJUST, EXTEND, RELOCATE OR OTHERWISE REARRANGE ANY UTILITY WITHIN THE PROJECT AREA SHALL BE COORDINATED IN ADVANCE WITH THE AFFECTED UTILITY ENTITY.

10. RIM ELEVATIONS SHOWN ARE APPROXIMATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS. THE CONTRACTOR SHALL USE PRECAST CONCRETE ADJUSTMENT RINGS, GROUT, AND STEEL SHIMS TO ADJUST THE MANHOLE FRAMES TO FINAL GRADE IN CONFORMANCE WITH THE CITY OR UTILITY COMPANY/DISTRICT STANDARD SPECIFICATIONS. ALL FRAMES SHALL BE ADJUSTED TO FINAL GRADE PRIOR TO THE FINAL LIFT OF ASPHALT.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF PROJECT SAFETY INCLUDING, BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.

12. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN, IN ACCORDANCE WITH THE M.U.T.C.D. TO THE APPROPRIATE RIGHT-OF-WAY AUTHORITY (CITY, COUNTY, OR STATE) FOR APPROVAL, PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN, OR AFFECTING, THE RIGHT-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED BY THE CONSTRUCTION ACTIVITIES. ALL WORK WITHIN THE RIGHT OF WAY SHALL BE DONE IN ACCORDANCE WITH THE GOVERNING AUTHORITY'S STANDARDS AND SPECIFICATIONS.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANING AND RESTORATION OF ANY EXISTING IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO STREET PAVEMENT, FENCES, SOD, LANDSCAPING, SPRINKLER SYSTEMS, AND UTILITIES DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL LOCATION AND CONDITION.

14. INCLUDED IN THESE PLANS IS THE DEMOLITION AND DISPOSAL OF ALL EXISTING UTILITIES, SITE IMPROVEMENTS, STRUCTURES, AND SITE FURNISHINGS NEEDED FOR CONSTRUCTION OF THE IMPROVEMENTS SHOWN HEREON. ALL QUESTIONS IN REGARD TO DEMOLITION SHALL BE SUBMITTED TO THE OWNER IN WRITING PRIOR TO BID.

15. ALL DEMOLITION, REMOVAL, DISPOSAL, AND ABANDONMENT OF UTILITIES, STRUCTURES, SITE IMPROVEMENTS, AND SITE FURNISHINGS SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL STANDARDS AND SPECIFICATIONS, AND PERMIT REQUIREMENTS.

16. ALL DISTURBED SOIL, ON- OR OFF-SITE AND RELATED TO WORK AT THIS PROJECT SITE, IS REQUIRED TO BE PROTECTED FROM WIND AND STORM WATER EROSION. TO MITIGATE EROSION, THE CONTRACTOR SHALL USE STANDARD EROSION CONTROL TECHNIQUES DESCRIBED IN THE GESC PLAN SET AND GESC REPORT FOR THIS PROJECT.

17. ALL STRUCTURAL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY GROUND-DISTURBING ACTIVITY. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED IN GOOD REPAIR BY THE CONTRACTOR UNTIL SUCH TIME AS THE ENTIRE DISTURBED AREA IS STABILIZED WITH HARD SURFACE OR PERMANENT LANDSCAPING. THE CONTRACTOR IS RESPONSIBLE FOR REFERRING TO ANY EROSION AND SEDIMENT CONTROL, STORMWATER MANAGEMENT, STORMWATER POLLUTION PREVENTION, OR SIMILAR PLAN AND/OR NARRATIVE AND ASSOCIATED PERMITS INCLUDING, BUT NOT LIMITED TO GRADING PERMITS, AND COMPLYING WITH THE REQUIREMENTS THEREIN.

18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK, INSPECTIONS, AND CERTIFICATIONS AS REQUIRED BY THE CITY, STATE OR LOCAL DISTRICTS. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST ASSOCIATED WITH THE INSPECTION AND CERTIFICATION UNLESS OTHERWISE ARRANGED WITH THE OWNER/DEVELOPER. THE CONTRACTOR SHALL COORDINATE ALL CERTIFICATIONS, AND PROVIDE FIELD SURVEYED AS-BUILT INFORMATION FOR REVIEW BY THE OWNER/DEVELOPER AND/OR ENGINEER AS EARLY AS POSSIBLE IN THE CONSTRUCTION SCHEDULE TO AVOID POTENTIAL DELAYS.

19. CONTRACTOR IS RESPONSIBLE FOR AS-BUILT DRAWINGS, TESTS, REPORTS, AND/OR ANY OTHER CERTIFICATES OR INFORMATION AS REQUIRED FOR ACCEPTANCE OF WORK FROM CITY, UTILITY DISTRICTS, OR ANY OTHER GOVERNING AGENCY, OR TO THE OWNER/DEVELOPER AS REQUIRED BY AND IN ACCORDANCE WITH THE GOVERNING AUTHORITY OR OWNER/DEVELOPER'S CRITERIA. CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING AS-BUILT INFORMATION AN A SET OF RECORD DRAWINGS KEPT AT THE CONSTRUCTION SITE AND AVAILABLE TO THE GOVERNING CITY, COUNTY, AND/OR STATE AND UTILITY DISTRICT INSPECTOR AT ALL TIMES. THE CONTRACTOR SHALL CONFIRM ANY REQUIREMENTS AS EARLY AS POSSIBLE IN THE CONSTRUCTION SCHEDULE TO ACCOUNT FOR PREPARATION AND REVIEW OF THE INFORMATION TO AVOID POTENTIAL DELAYS.

20. IF, DURING THE CONSTRUCTION PROCESS, CONDITIONS ARE ENCOUNTERED BY THE CONTRACTOR, HIS SUBCONTRACTORS, OR OTHER AFFECTED PARTIES, WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE OWNER/DEVELOPER AND THE ENGINEER IMMEDIATELY.

21. DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. IF PERTINENT DIMENSIONS ARE NOT SHOWN, CONTACT THE CONSULTING ENGINEER FOR CLARIFICATION AND ANNOTATE THE DIMENSION ON THE AS-BUILT RECORD DRAWING.

22. BENCHMARK VERIFICATION: THE CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS AND THE PROPOSED ELEVATIONS IN THIS CONSTRUCTION PLAN SET AGAINST THE PROJECT BENCHMARK, IDENTIFIED HEREIN, PRIOR TO COMMENCING WORK.

ROADWAY NOTES

1. GUTTERS SHALL BE AT LEAST 6" THICK.
2. ALL CURBS SHALL USE THE CATCH SECTION UNLESS OTHERWISE NOTED.
3. ALL COMBINATION CURB, GUTTER AND SIDEWALKS TO BE 6" THICK (MIN.). SIDEWALKS WITH VERTICAL CURB AND GUTTER TO BE 6" THICK (MIN.).
4. NON-LANDSCAPED MEDIAN ISLANDS SHALL BE COVERED WITH AN ACCEPTABLE IMPERMEABLE SURFACE.
5. IF ANY SECTION OF A DETACHED SIDEWALK IS TO BE PLACED OUTSIDE OF THE ROAD RIGHT-OF-WAY, THEN A SIDEWALK EASEMENT SHALL BE REQUIRED TO MAINTAIN PUBLIC USE.
6. PLACEMENT, MOISTURE AND DENSITY CONTROL FOR SUBGRADE, SUBBASE, AND SURFACING MATERIALS SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS OF CHAPTER 8 OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.

CITY OF LONE TREE GENERAL NOTES

1. THE CITY OF LONE TREE ENGINEER'S SIGNATURE AFFIXED TO THIS DOCUMENT INDICATES THE ENGINEERING DIVISION HAS REVIEWED THE DOCUMENT AND FOUND IT IN GENERAL CONFORMANCE WITH THE CITY OF LONE TREE SUBDIVISION RESOLUTION OR APPROVED VARIANCES TO THOSE REGULATIONS. THE CITY OF LONE TREE ENGINEER, THROUGH ACCEPTANCE OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY, OTHER THAN STATED ABOVE, FOR THE COMPLETENESS AND/OR ACCURACY OF THESE DOCUMENTS. THE OWNER AND ENGINEER UNDERSTAND THAT THE RESPONSIBILITY FOR THE ENGINEERING ADEQUACY OF THE FACILITIES DEPICTED IN THIS DOCUMENT LIES SOLELY WITH THE REGISTERED PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE IS AFFIXED TO THIS DOCUMENT.
2. ALL ROADWAY CONSTRUCTION SHALL CONFORM TO CURRENT DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
3. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE CITY OF LONE TREE ENGINEERING DIVISION. THE CITY RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS STANDARDS AND SPECIFICATIONS.
4. THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS, INSPECTION SECTION, (303) 662-8112, A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO STARTING CONSTRUCTION, AND/OR BEFORE RESTARTING CONSTRUCTION AFTER A SHUTDOWN OF MORE THAN 10 DAYS.
5. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ACTUAL CONSTRUCTION. FOR INFORMATION, CONTACT: UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT (800) 922-1987 OR 811
6. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY (SIGNED BY BOTH DESIGN ENGINEER AND CITY OF LONE TREE) OF THE CONSTRUCTION PLANS AND GESC REPORT AND PLAN, AND ONE (1) COPY OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS AT THE JOB SITE AT ALL TIMES.
7. ALL PROPOSED STREET CUTS TO EXISTING PAVEMENTS FOR UTILITIES, STORM SEWER, OR OTHER PURPOSES ARE LISTED AND REFERENCED BELOW:

   RIDGEGATE PARKWAY

8. A ROW/CONSTRUCTION PERMIT MUST BE OBTAINED BEFORE ANY WORK WITHIN EXISTING OR PROPOSED PUBLIC ROW. THE PERMIT APPLICATION MUST BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR REVIEW/PROCESSING A MINIMUM OF 7 DAYS PRIOR TO UPDATED 2-3-09 REQUESTED START FOR THE WORK IN THE ROW.
9. A PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR ACCEPTANCE WITH THE PERMIT APPLICATION. AN EXCAVATION OR PUBLIC IMPROVEMENTS CONSTRUCTION PERMIT WILL NOT BE ISSUED WITHOUT AN APPROVED TRAFFIC CONTROL PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION.
10. THE CONSTRUCTION PLANS SHALL BE CONSIDERED VALID FOR TWO (2) YEARS FROM THE DATE OF CITY OF LONE TREE ACCEPTANCE/APPROVAL IF APPLICABLE CONSTRUCTION PERMITS HAVE NOT BEEN OBTAINED, AND CONSTRUCTION STARTED WITHIN THAT TIME, THESE PLANS SHALL BE VOID AND WILL BE SUBJECT TO RE-REVIEW AND RE-ACCEPTANCE BY THE CITY OF LONE TREE.
11. CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE ENGINEER INSPECTOR WHEN WORKING OUTSIDE OF THE PUBLIC RIGHT-OF-WAY ON ANY FACILITY WHICH WILL BE CONVEYED TO THE CITY, URBAN DRAINAGE AND FLOOD CONTROL DISTRICT, OR OTHER SPECIAL DISTRICT FOR MAINTENANCE (STORM SEWER, ENERGY DISSIPATERS, DETENTION OUTLET STRUCTURES, OR OTHER DRAINAGE INFRASTRUCTURES). FAILURE TO NOTIFY ENGINEERING INSPECTOR TO ALLOW THEM TO INSPECT THE CONSTRUCTION MAY RESULT IN NON-ACCEPTANCE OF THE FACILITIES/INFRASTRUCTURE BY CITY AND/OR URBAN DRAINAGE.

CITY OF LONE TREE SIGNAGE & STRIPING NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MOST RECENT VERSION OF THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE "COLORADO SUPPLEMENTAL MUTCD" AND THE DOUGLAS COUNTY "ROAD AND CONSTRUCTION STANDARDS MANUAL". FURTHER SPECIFICATIONS AND ILLUSTRATIONS ARE LOCATED IN THE COLORADO DIVISION OF HIGHWAYS "M AND S STANDARDS".
2. DELINEATION OF ROADWAYS SHALL BE AS SPECIFIED IN THE COLORADO "M AND S MANUAL".
3. SPECIAL CARE SHALL BE TAKEN IN SIGN LOCATION TO ENSURE AN UNOBSTRUCTED VIEW OF EACH SIGN. STREET NAME SIGNS SHALL BE MOUNTED SO THAT THEY CAN BE SEEN FROM ALL DIRECTIONS OF TRAVEL.
4. INSTALLATION OF SIGNS SHALL CONFORM TO THE MUTCD MOUNTING HEIGHT REQUIREMENTS, INCLUDING A 7-FOOT MINIMUM HEIGHT FROM THE BOTTOM OF THE LOWEST SIGN PANEL TO THE TOP GRADE OF SIDEWALK.
5. ALL NEWLY INSTALLED TRAFFIC SIGNS SHALL MEET THE MINIMUM RETRO-REFLECTIVITY AND ILLUMINATION STANDARDS AS SET FORTH BY THE MUTCD (LATEST EDITION). THESE MINIMUM REQUIREMENTS SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
6. DIAMOND GRADE MATERIAL SHALL BE USED ON ALL STOP SIGNS.
7. THE CONTRACTOR INSTALLING SIGNS IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND UTILITIES. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.
8. FOLLOWING INSTALLATION, THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS DEPARTMENT, 303-662-8112. A FIELD INSPECTION OF LOCATION AND INSTALLATION OF ALL SIGNS SHALL BE PERFORMED BY PUBLIC WORKS. ALL DISCREPANCIES IDENTIFIED DURING THE FIELD INSPECTION MUST BE CORRECTED BEFORE THE TWO-YEAR WARRANTY PERIOD WILL BEGIN.
9. SIGNAGE AND STRIPING HAS BEEN DETERMINED BY INFORMATION AVAILABLE AT THE TIME OF REVIEW.
   PRIOR TO INITIATION OF THE WARRANTY PERIOD, LONE TREE RESERVES THE RIGHT TO REQUIRE MODIFICATIONS TO EXISTING OR INSTALLATION OF ADDITIONAL SIGNAGE AND/OR STRIPING IF THEY DETERMINE THAT AN UNFORESEEN CONDITION WARRANTS SUCH MODIFICATION ACCORDING TO THE MUTCD OR THE CDOT M AND S STANDARDS. ALL SIGNAGE AND STRIPING SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
10. FINAL STRIPING AND CROSSWALK LAYOUT TO BE APPROVED BY THE CITY OF LONE TREE PRIOR TO INSTALLATION. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.
11. CROSSWALKS SHALL:
    BE CONSTRUCTED USING 125 MIL PREFORMED THERMOPLASTIC.
    LINE UP WITH THE HANDICAP RAMPS AT BOTH ENDS.
    BE CENTERED ON LANE LINES SO AS TO BE STRADDLED BY VEHICLES.
12. ALL PAVEMENT MARKINGS SHALL BE AS FOLLOWS:
    FOR CONCRETE SURFACE: METHYL METHACRYLATE OR EPOXY PAINT.
    FOR ASPHALT SURFACE: PAINT, 90 MIL PREFORMED THERMOPLASTIC, INLAID MARKING TAPE, METHYL METHACRYLATE, OR EPOXY PAINT.
    TURN ARROWS AND ONLYS: 125 MIL PREFORMED THERMOPLASTIC.
13. ALL PAVEMENT MARKING SHALL BE PRECEDED BY THE APPROPRIATE SURFACE PREPARATION.
14. ANY SIGNAGE AND/OR OTHER TRAFFIC CONTROL DEVICES REMOVED SHALL BE RETURNED TO THE CITY OF LONE TREE.
15. TYPE III LIGHTED BARRICADES SHALL BE SET AT ENDS OF ROADWAYS, SEPARATING FINISHED AND UNFINISHED CONSTRUCTION AREAS AND WILL BE MAINTAINED BY THE CONTRACTOR/DEVELOPER.

NOTE: ALSO SEE CITY OF LONE TREE "STREET SIGN DETAILS"FOR ADDITIONAL INTERSECTION STREET SIGNAGE REQUIREMENTS.

STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON-GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.

DRAINAGE STRUCTURE NOTES

1. CONCRETE WORK SHALL CONFORM TO ACI 301, ACI 350.
2. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM-615, GRADE 60.
3. ALL EXPOSED CONCRETE SHALL HAVE A CDOT CLASS 2 OR 5 FINISH.
4. ALL EXPOSED CONCRETE CORNERS SHALL HAVE ¾"CHAMFERS.
5. DETAILING, FABRICATION, AND PLACING OF REBAR SHALL BE IN ACCORDANCE WITH ACI 315.
6. CONSTRUCTION TOLERANCES SHALL BE IN ACCORDANCE WITH ACI 347.
7. ALL MANHOLES SHALL BE SLAB BASE UNLESS SPECIFIED OTHERWISE. MANHOLE SHALL BE FABRICATED IN ACCORDANCE WITH CDOT STANDARD M-604-20.
8. COORDINATES FOR MANHOLES AND AREA INLETS ARE SHOWN AT THE CENTER OF THE STRUCTURE. COORDINATES FOR MOUNTABLE CURB INLETS ARE SHOWN ALONG THE FLOWLINE AT CENTER OF THE STRUCTURE.
9. ALL TYPE C AND D INLETS SHALL HAVE CLOSE MESH GRATES UNLESS SPECIFIED OTHERWISE.
10. LENGTH OF FABRICATED BAR GRATING PANELS IS LENGTH OF BEARING BARS, WIDTH REFERS TO DIMENSION PERPENDICULAR TO BEARING BARS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PANEL DIMENSIONS GIVEN PRIOR TO FABRICATION.

DRAINAGE GENERAL NOTES

1. PROJECT FACILITIES ARE TO BE LOCATED BASED ON THE SURVEY COORDINATES, ELEVATIONS, DIMENSIONS, AND/OR GEOMETRIC DESIGN DATA PROVIDED ON THE DRAWINGS.
2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES AND FOR SATISFYING ALL APPLICABLE OSHA, FEDERAL, STATE, AND LOCAL REGULATIONS. TEMPORARY EXCAVATIONS SHALL PROVIDE, AT MINIMUM, THE TRENCH DIMENSIONS AND CLEARANCES SHOWN OR SPECIFIED. TEMPORARY CONSTRUCTION SLOPES SHALL BE SLOPED, SHORED, SHEETED, AND/OR BRACED IN ACCORDANCE WITH STABILITY REQUIREMENTS AND APPLICABLE REGULATIONS, AND SHALL BE NO STEEPER THAN THE SLOPES SHOWN OR SPECIFIED WITHOUT THE APPROVAL OF THE ENGINEER. ANY SUCH APPROVALS BY THE ENGINEER WILL NOT RELIEVE THE CONTRACTOR FROM SOLE RESPONSIBILITY FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES.
3. EXISTING FACILITIES NOT INDICATED TO BE REMOVED SHALL BE PROTECTED IN PLACE OR REMOVED AND REPLACED IN KIND, AS APPROVED BY ENGINEER.
4. THE WORK WILL TAKE PLACE IN AND AROUND DRAINAGE SWALES AND THE HAPPY CANYON CREEK, SUBJECT TO PERIODIC FLOODING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF SURFACE AND SUBSURFACE WATER DURING THE COURSE OF THE WORK. ANY DAMAGE TO THE WORK RESULTING FROM SURFACE FLOWS, BASE FLOWS, OR FLOOD FLOWS INCLUDING BUOYANCY FORCES ON PIPELINES AND OTHER FACILITIES SHALL BE CORRECTED BY THE CONTRACTOR AT THE CONTRACTOR'S SOLE COST. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND SATISFYING THE REQUIREMENTS OF ANY APPLICABLE PERMITS PERTAINING TO WATER AND EROSION CONTROL.
5. CONTACT THE ENGINEER FOR CLARIFICATIONS OF ANY ABBREVIATIONS SHOWN ON THE DRAWINGS.
6. THE SITE WHERE THE WORK IS TO BE PERFORMED SHALL BE OVERLOT GRADED. TOPSOIL SHALL BE SPREAD IN OPEN SPACE AREAS TO A DEPTH OF APPROXIMATELY 6-INCHES. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED, AND SOME AREAS COVERED WITH EROSION CONTROL BLANKETS, UNLESS OTHERWISE DIRECTED IN THE PLANS OR BY THE ENGINEER. CARE SHALL BE TAKEN TO AVOID DISTURBING ANY OPEN SPACE AREAS EXCEPT THE MINIMUM NECESSARY TO PERFORM THE WORK. TOPSOIL IN ANY WORK AREAS OR ACCESS ROADS WITHIN THE OPEN SPACE SHALL BE STRIPPED AND STOCKPILED PRIOR TO THE WORK, PROTECTED FROM MIXING WITH ANY OTHER MATERIALS DURING THE WORK, AND REPLACED TO A LOOSE DEPTH OF 7- TO 8- INCHES (FINAL DEPTH AFTER SETTLEMENT SHALL BE 6- INCHES MINIMUM) AS THE WORK IS BEING COMPLETED. WHERE BLANKETS EXIST, THE MINIMUM AREA OF BLANKET TO ALLOW WORK TO PROGRESS SHALL BE REMOVED AND THEN THE REMOVED OR NEW BLANKET REPLACED AFTER UNDERLYING WORK IS COMPLETE (EXCEPT NO TEMPORARY BLANKET NEEDS TO BE REPLACED OVER ROCK OR COIR BLANKET SHOWN IN THE PLANS). JUST PRIOR TO REPLACEMENT OF TOPSOIL AFTER UNDERLYING WORK IS COMPLETE AND APPROVED, THE UNDERLYING SUBGRADE IN OPEN SPACE AREAS SHALL BE LOOSENED BY TILLING TO A DEPTH OF 12- INCHES UNTIL CLODS ARE NO LARGER THAN 3 INCHES, AND APPROVED BY THE ENGINEER. THIS NOTE ALSO APPLIES TO AREAS WHERE COIR MAT IS TO BE INSTALLED.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ANY COMPLETED WORK FROM DISTURBANCE OR DAMAGE DURING THE COURSE OF THE WORK. IF REQUESTED BY THE CONTRACTOR AND APPROVED BY THE OWNER, SIGNIFICANT COMPLETED SECTIONS OF THE WORK MAY BE ACCEPTED AS FINAL PRIOR TO THE COMPLETION OF THE ENTIRE PROJECT. ANY SUCH EARLY ACCEPTANCE WILL NEED TO BE IN WRITING BY THE ENGINEER AND OWNER AND THOSE PORTIONS OF THE WORK SHALL BE PROTECTED BY THE CONTRACTOR AGAINST VEHICLES RUNNING OVER THE AREA BY ENCIRCLING THE WORK WITH FLAGGING OR FENCING OR BY OTHER MEANS AGREED TO BY THE OWNER AND MAINTAINED BY THE CONTRACTOR UNTIL THE END OF THE PROJECT.
8. ALL FINE GRADING REQUIRED TO CONSTRUCT DRAINAGE IMPROVEMENTS AND PROVIDE FINISHED GRADES ADJACENT TO IMPROVEMENTS SHALL BE DONE BY THE DRAINAGE CONTRACTOR AND SHALL BE CONSIDERED PART OF THE WORK, AND NOT PAID FOR SEPARATELY.

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

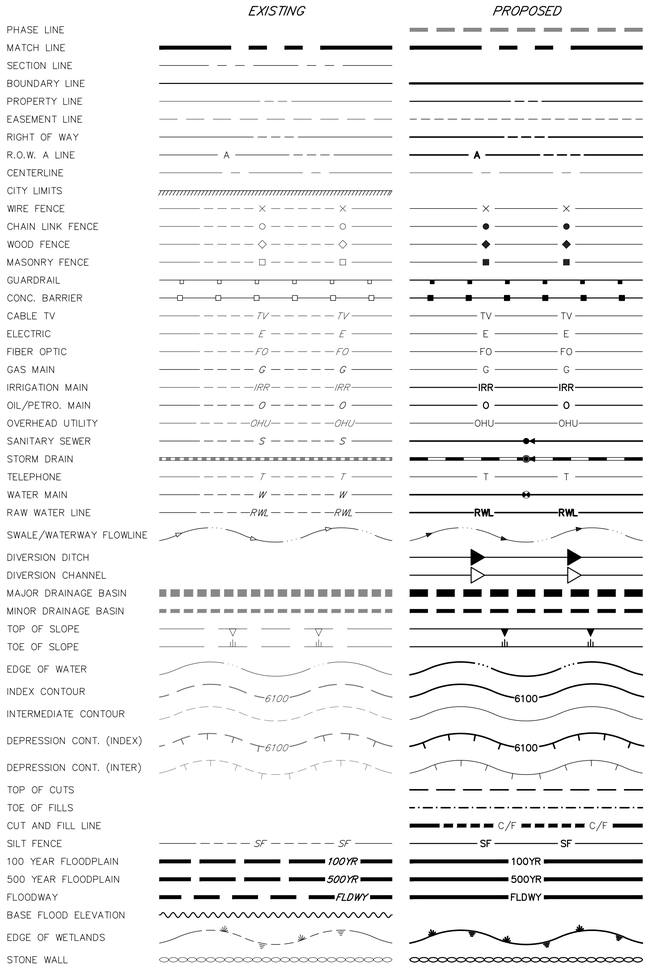
H-SCALE	N/A
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
GENERAL NOTES-PHASE 1B

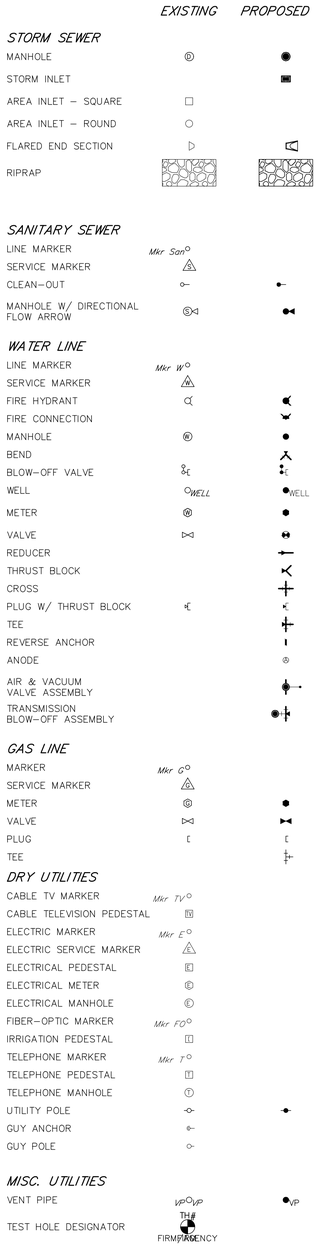
SHEET 81 OF 270

JOB NO. 15950.01

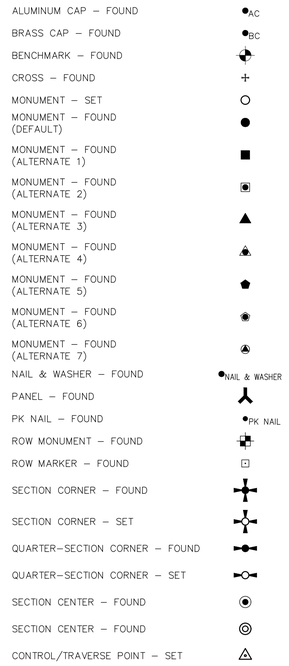
LAYER LINETYPE LEGEND



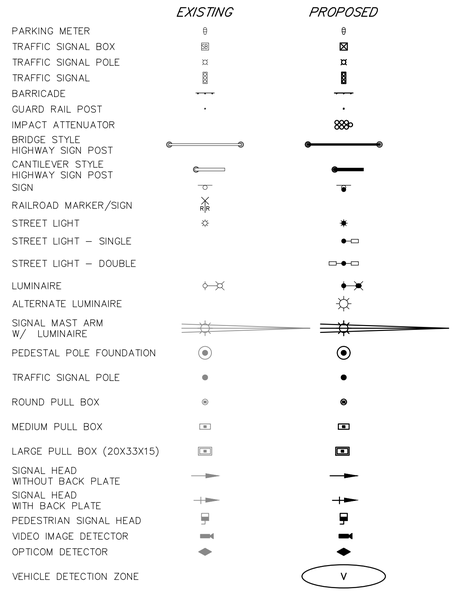
UTILITIES LEGEND



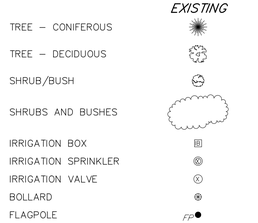
MONUMENTATION LEGEND



TRAFFIC LEGEND



LANDSCAPE LEGEND



811 Know what's **below.** **Call** before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

No.	REVISION	BY	DATE

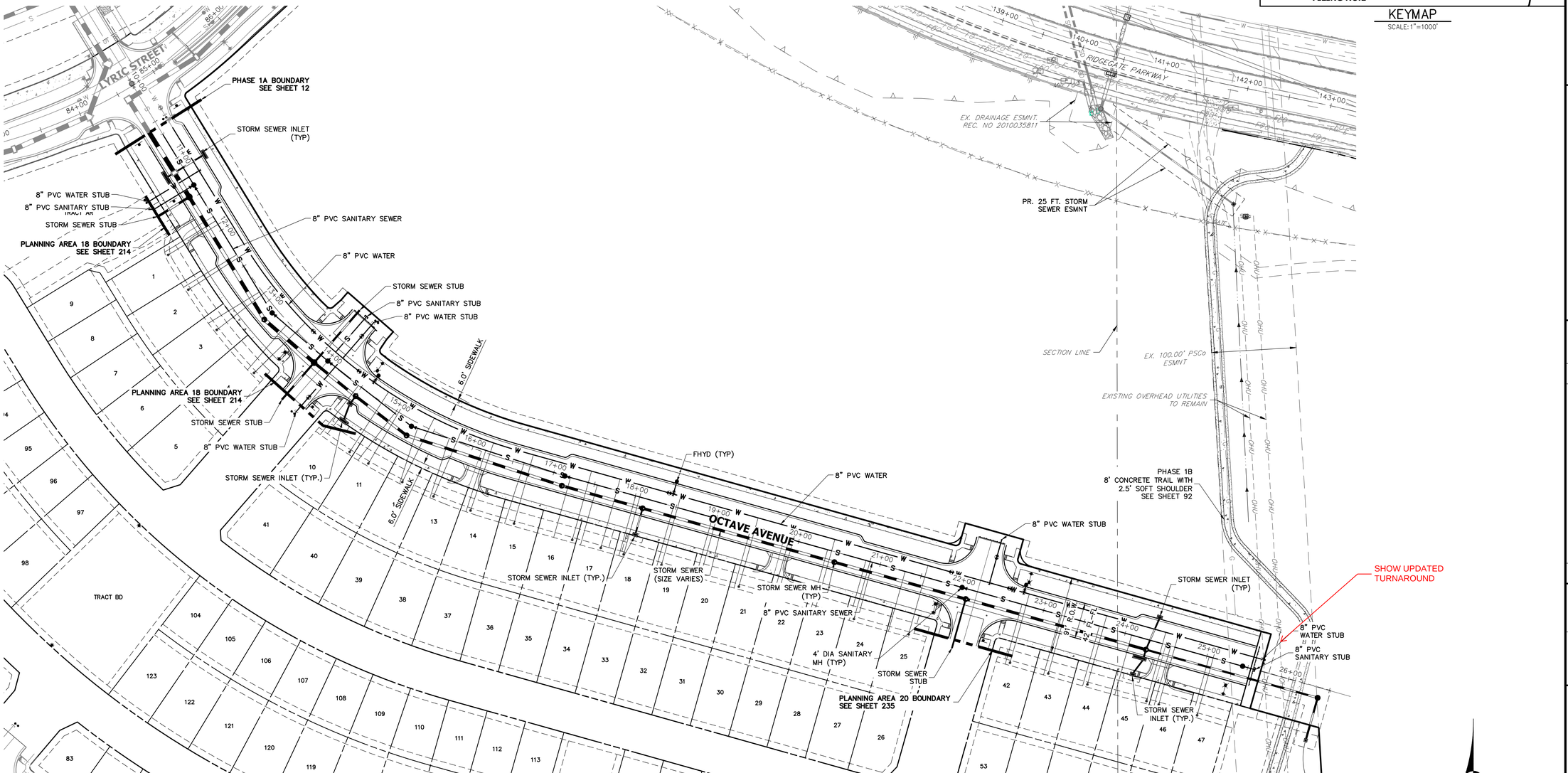
H–SCALE	N/A
V–SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

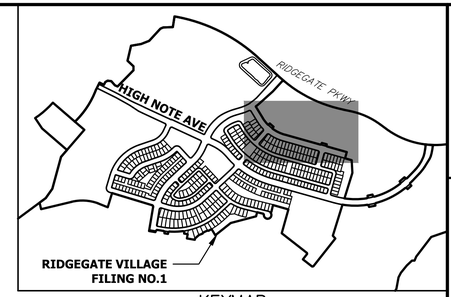
RIDGEGATE SOUTHWEST VILLAGE FILING 1

LEGEND–PHASE 1B

SHEET 82 OF 270

JOB NO. 15950.01





KEYMAP
SCALE:1"=1000'

60 30 0 60 120
ORIGINAL SCALE: 1" = 60'

Know what's below.
Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

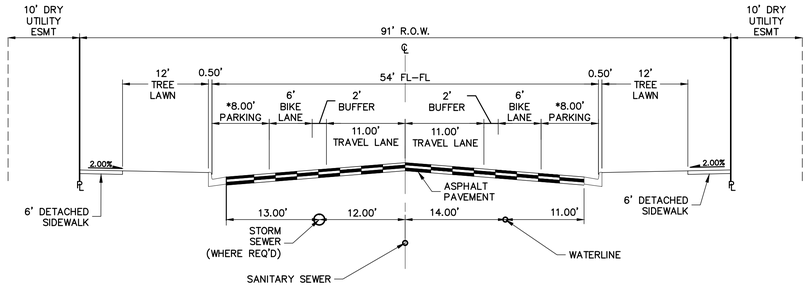
H-SCALE	1"=60'	DESIGNED BY	N/A
V-SCALE	N/A	DRAWN BY	SDL
DATE	2/12/21	CHECKED BY	

RIDGEGATE SOUTHWEST
VILLAGE FILING 1

OVERALL SITE AND UTILITY
PLAN-PHASE 1B

SHEET 83 OF 270

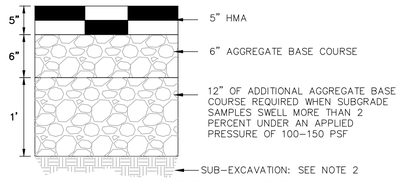
JOB NO. 15950.01



OCTAVE AVENUE STA:10+00 TO 25+53.74

TYPE I – TYPICAL 91-FOOT R.O.W. RESIDENTIAL COLLECTOR WITH BIKE LANES AND PARKING ON BOTH SIDES (PUBLIC)

*PARKING WHERE APPLICABLE



MINIMUM RESIDENTIAL COLLECTOR PAVEMENT SECTION

N.T.S.

NOTES:
1. MINIMUM PAVEMENT SECTIONS FOR BUDGETING PURPOSES ARE PRESENTED HEREON. SUBGRADE INVESTIGATION AND PAVEMENT DESIGNS ARE TO BE COMPLETED BY THE GEOTECHNICAL ENGINEER AFTER OVERLOT GRADING.
2. ADDITIONAL SUB-EXCAVATION (3 TO 5 FEET) MAY BE MERITED.
3. ASPHALT, BASE COURSE DEPTH, AND SUBGRADE PRAPARTATION IS TO BE IN ACCORDANCE WITH GEOTECHNICAL RECOMMENDATIONS.

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

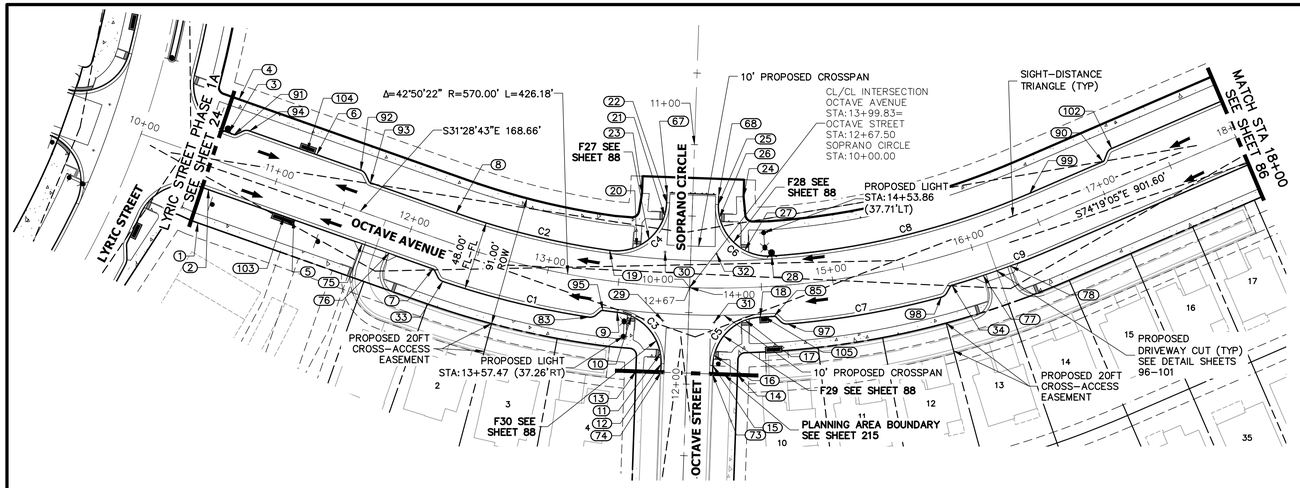
H-SCALE	1"=10'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	JGS
DRAWN BY	CGM
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

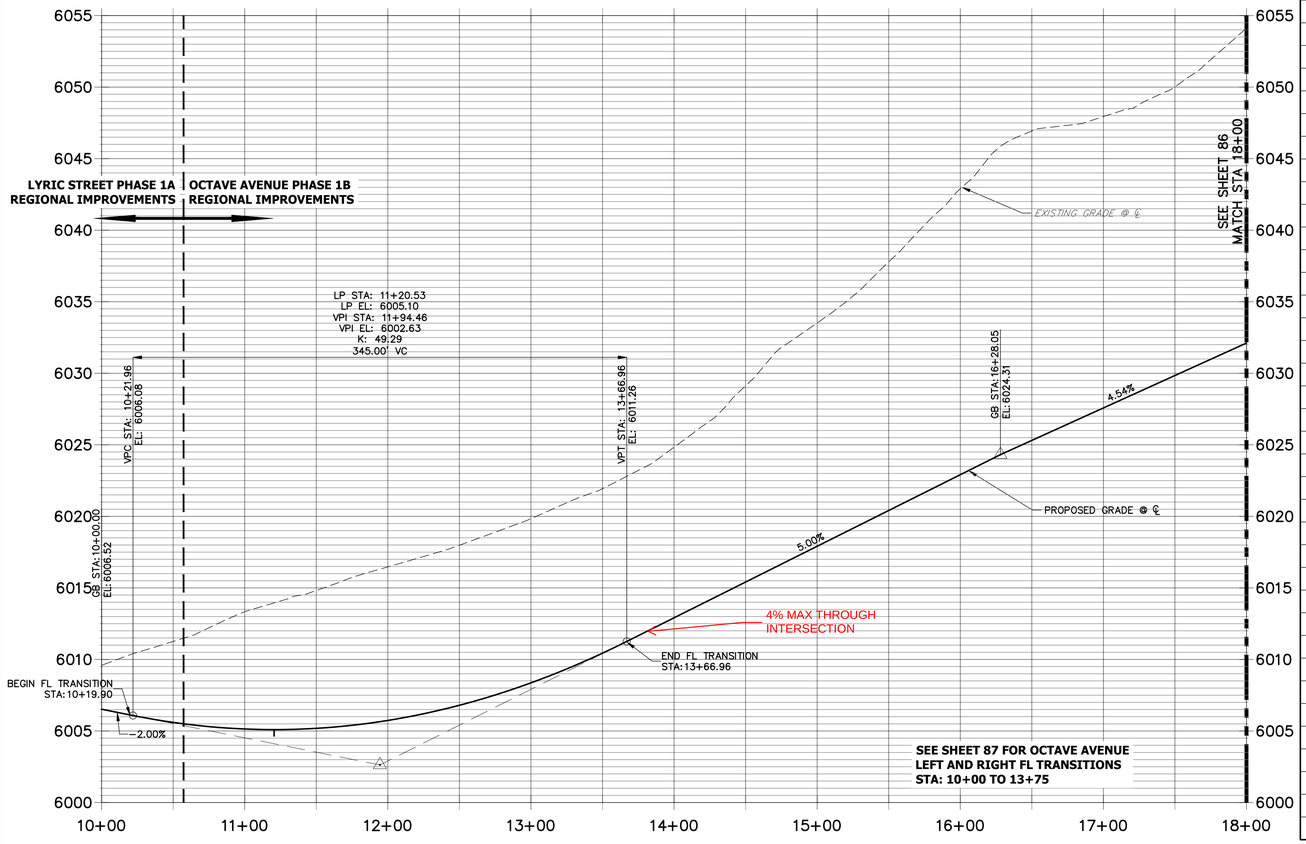
ROADWAY SECTIONS-PHASE 1B

SHEET 84 OF 270

JOB NO. 15950.01



OCTAVE AVENUE PROFILE
STA 10+00.00 TO 18+00.00

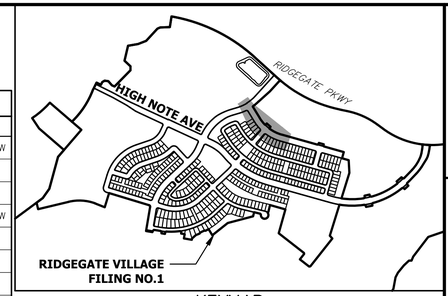


ROADWAY NOTES

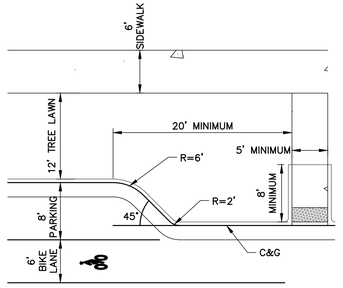
1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE COVER SHEET FOR BENCHMARK.
4. SEE SHEET 82 FOR LEGEND.
5. SEE SHEET 84 FOR TYPICAL STREET SECTIONS.
6. SEE SHEET 88 FOR CURB RETURN PROFILES.
7. SEE SHEET 89 FOR CURB RAMP DETAILS.
8. SEE SHEETS 90-91 FOR SIGNAGE AND STRIPING.
9. ALL CURB RADII ARE 35' UNLESS OTHERWISE NOTED.
10. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.

POINT TABULATION

POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
1	10+58.05	45.50' (RT)	OCTAVE AVENUE	6007.06		BEGIN DETACHED SW
2	10+57.29	21.00' (RT)	OCTAVE AVENUE	6006.09		BEGIN C&G
3	10+57.29	21.00' (LT)	OCTAVE AVENUE	6004.56		BEGIN C&G
4	10+56.54	45.50' (LT)	OCTAVE AVENUE	6005.55		BEGIN DETACHED SW
5	11+20.48	21.00' (RT)	OCTAVE AVENUE	6005.51		LOW PT
6	11+20.48	27.00' (LT)	OCTAVE AVENUE	6004.18		LOW PT
7	12+23.72	21.00' (RT)	OCTAVE AVENUE	6006.23		PC
8	12+25.95	21.00' (LT)	OCTAVE AVENUE	6005.41		PC
9	13+51.51	21.00' (RT)	OCTAVE AVENUE	6010.00		PCR
10	13+61.38	22.63' (RT)	OCTAVE AVENUE	6010.73		HC RAMP MID PT
11	12+20.79	18.72' (LT)	OCTAVE STREET	6012.07		HC RAMP MID PT
12	12+13.75	18.00' (LT)	OCTAVE STREET	6012.23		PCR
13	12+07.73	35.50' (LT)	OCTAVE STREET	6013.14		BEGIN DETACHED SW
14	12+07.73	35.50' (RT)	OCTAVE STREET	6014.77		BEGIN DETACHED SW
15	12+13.75	18.00' (RT)	OCTAVE STREET	6013.99		PCR
16	12+20.79	18.72' (RT)	OCTAVE STREET	6013.94		HC RAMP MID PT
17	14+37.96	22.73' (RT)	OCTAVE AVENUE	6014.42		HC RAMP MID PT
18	14+48.15	21.00' (RT)	OCTAVE AVENUE	6014.65		PCR
19	13+40.95	21.00' (LT)	OCTAVE AVENUE	6009.39		PCR
20	13+60.11	25.85' (LT)	OCTAVE AVENUE	6010.66		HC RAMP MID PT
21	10+49.59	19.22' (LT)	SOPRANO CIRCLE	6011.77		HC RAMP MID PT
22	10+58.74	18.00' (LT)	SOPRANO CIRCLE	6011.94		PCR
23	10+64.67	35.51' (LT)	SOPRANO CIRCLE	6012.94		END DETACHED SW
24	10+64.77	35.50' (RT)	SOPRANO CIRCLE	6014.57		END DETACHED SW
25	10+58.74	18.00' (RT)	SOPRANO CIRCLE	6013.66		PCR
26	10+49.59	19.22' (RT)	SOPRANO CIRCLE	6013.68		HC RAMP MID PT
27	14+39.22	26.03' (LT)	OCTAVE AVENUE	6014.59		HC RAMP MID PT
28	14+58.71	21.00' (LT)	OCTAVE AVENUE	6015.18		PCR
29	13+82.55	24.00' (RT)	OCTAVE AVENUE	6011.63		FL-FL INTERCEPT
30	13+81.03	24.00' (LT)	OCTAVE AVENUE	6011.53		FL-FL INTERCEPT
31	14+17.10	24.00' (RT)	OCTAVE AVENUE	6013.39		FL-FL INTERCEPT
32	14+18.62	24.00' (LT)	OCTAVE AVENUE	6013.41		FL-FL INTERCEPT
33	12+32.80	27.00' (RT)	OCTAVE AVENUE	6006.39		PT
34	15+79.37	21.00' (RT)	OCTAVE AVENUE	6021.21		PT
67	10+64.73	18.00' (LT)	SOPRANO CIRCLE	6012.10		END C&G
68	10+64.61	18.00' (RT)	SOPRANO CIRCLE	6013.73		END C&G
73	12+07.72	18.00' (RT)	OCTAVE STREET	6013.94		BEGIN C&G
74	12+07.73	18.00' (LT)	OCTAVE STREET	6012.30		BEGIN C&G
75	11+71.11	21.00' (RT)	OCTAVE AVENUE	6005.61		BEGIN DWY CUT
76	11+91.11	21.00' (RT)	OCTAVE AVENUE	6005.79		END DWY CUT
77	16+01.49	21.00' (RT)	OCTAVE AVENUE	6022.39		BEGIN DWY CUT
78	16+20.78	21.00' (RT)	OCTAVE AVENUE	6023.36		END DWY CUT
83	13+33.27	27.00' (RT)	OCTAVE AVENUE	6009.27		PC
85	14+57.53	21.00' (RT)	OCTAVE AVENUE	6015.12		PC
90	17+07.95	21.00' (LT)	OCTAVE AVENUE	6027.27		PC
91	10+61.41	21.00' (LT)	OCTAVE AVENUE	6004.51		PC
92	11+53.19	27.00' (LT)	OCTAVE AVENUE	6004.31		PC
93	11+62.51	21.00' (LT)	OCTAVE AVENUE	6004.39		PT
94	10+70.73	27.00' (LT)	OCTAVE AVENUE	6004.41		PT
95	13+41.82	21.00' (RT)	OCTAVE AVENUE	6009.61		PT
97	14+66.08	27.00' (RT)	OCTAVE AVENUE	6015.55		PT
98	15+70.36	27.00' (RT)	OCTAVE AVENUE	6020.76		PC
99	16+52.13	21.00' (LT)	OCTAVE AVENUE	6024.74		PT
102	17+17.26	27.00' (LT)	OCTAVE AVENUE	6027.69		PT
103	11+13.31	21.00' (RT)	OCTAVE AVENUE	6005.55		INLET
104	11+13.31	27.00' (LT)	OCTAVE AVENUE	6004.19		INLET
105	14+50.71	21.00' (RT)	OCTAVE AVENUE	6014.78		INLET

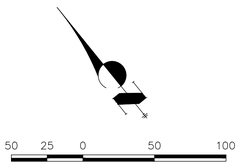


KEYMAP
SCALE:1"=1000'



BULB OUT DETAIL

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C1	10°05'55"	597.00'	105.22'
C2	11°33'35"	549.00'	110.76'
C3	85°08'36"	35.00'	52.01'
C4	95°55'06"	35.00'	58.59'
C5	85°08'36"	35.00'	52.01'
C6	95°55'06"	35.00'	58.59'
C7	10°28'57"	597.00'	109.22'
C8	19°26'34"	549.00'	186.30'
C9	7°18'51"	591.00'	75.45'



HORIZONTAL
ORIGINAL SCALE: 1" = 50'
VERTICAL
ORIGINAL SCALE: 1" = 5'

811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

AARON LEE CLUTTER, REGISTERED 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE PLANS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE 1"=50' | V-SCALE 1"=5' | DATE 2/12/21 | DESIGNED BY RDO | DRAWN BY SDL | CHECKED BY

RIDGEGATE SOUTHWEST
VILLAGE FILING 1

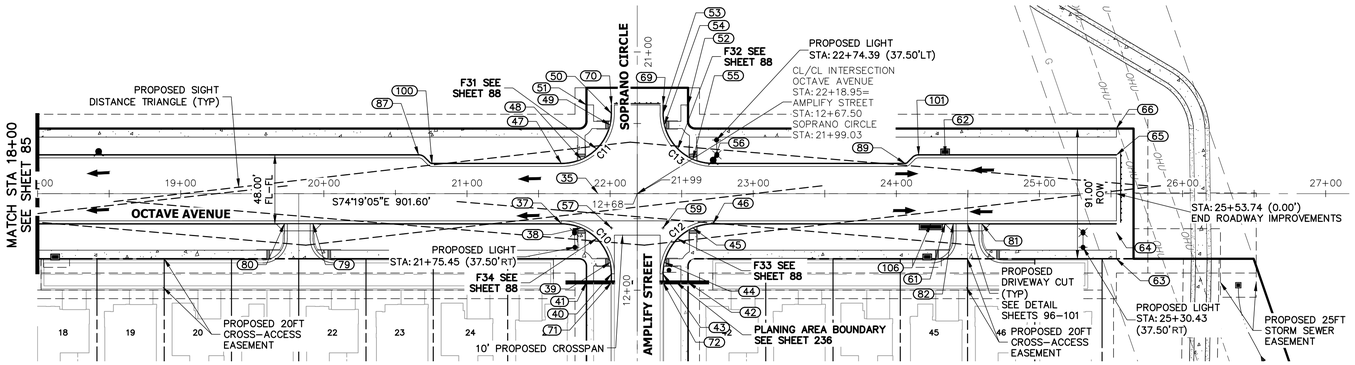
ROADWAY PLAN & PROFILES-PHASE 1B

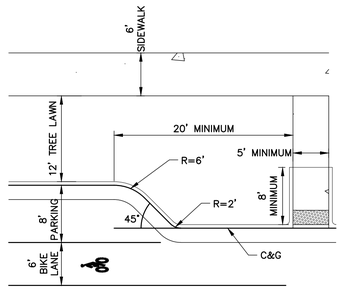
SHEET 85 OF 270

JOB NO. 15950.01

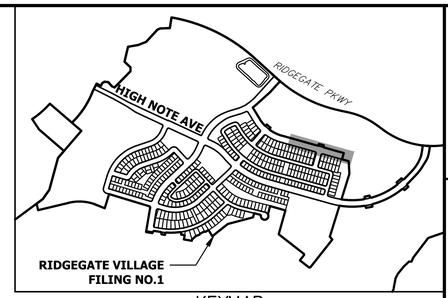
ROADWAY NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE COVER SHEET FOR BENCHMARK.
4. SEE SHEET 82 FOR LEGEND.
5. SEE SHEET 84 FOR TYPICAL STREET SECTIONS.
6. SEE SHEET 88 FOR CURB RETURN PROFILES.
7. SEE SHEET 89 FOR CURB RAMP DETAILS.
8. SEE SHEETS 90–91 FOR SIGNAGE AND STRIPING.
9. ALL CURB RADII ARE 35' UNLESS OTHERWISE NOTED.
10. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.



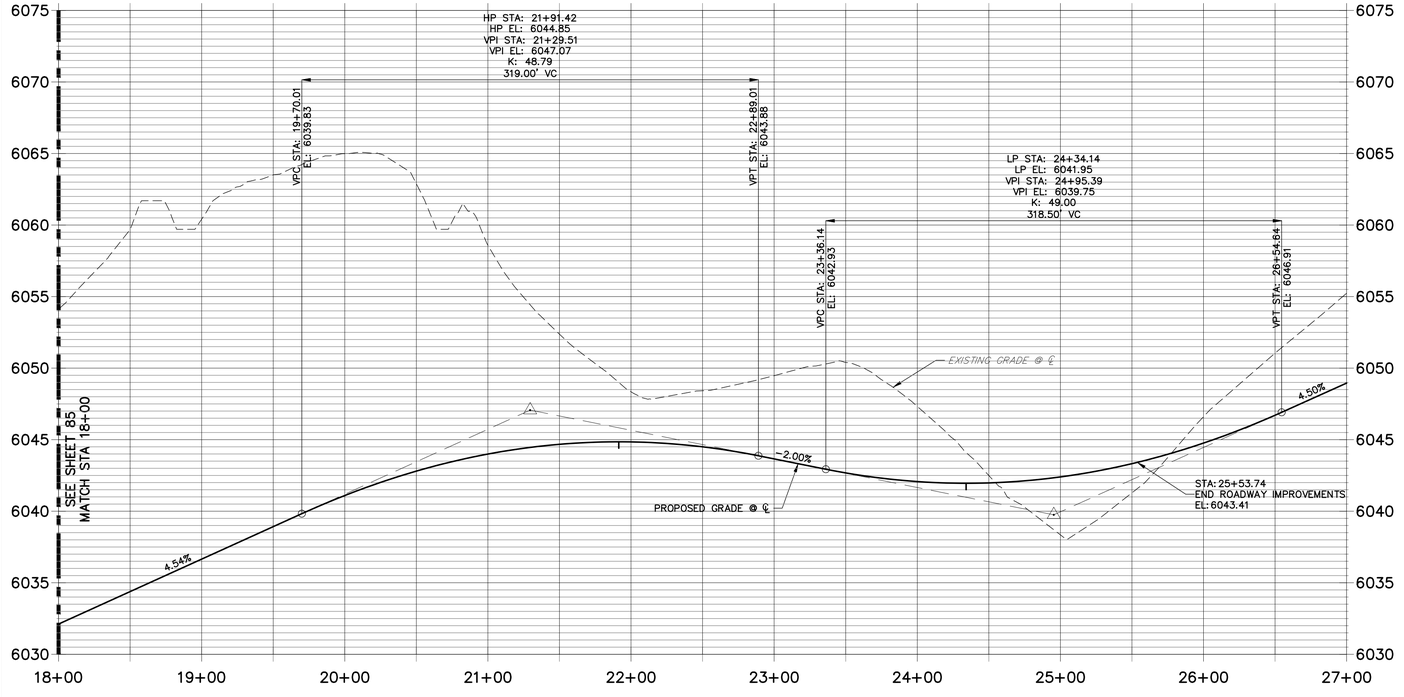


BULB OUT DETAIL



KEYMAP
SCALE: 1"=1000'

OCTAVE AVENUE PROFILE (1)
STA 18+00.00 TO 27+00.00



POINT TABULATION

POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
35	21+91.50	0.00' ()	OCTAVE AVENUE	6044.85		HIGH PT
37	21+65.95	21.00' (RT)	OCTAVE AVENUE	6044.12		PCR
38	21+79.99	23.94' (RT)	OCTAVE AVENUE	6044.48		HC RAMP MID PT
39	12+19.52	18.93' (LT)	AMPLIFY STREET	6045.08		HC RAMP MID PT
40	12+11.50	18.00' (LT)	AMPLIFY STREET	6044.87		PCR
41	12+05.50	35.50' (LT)	AMPLIFY STREET	6045.78		BEGIN DETACHED SW
42	12+05.50	35.50' (RT)	AMPLIFY STREET	6046.01		BEGIN DETACHED SW
43	12+11.50	18.00' (RT)	AMPLIFY STREET	6045.46		PCR
44	12+19.52	18.93' (RT)	AMPLIFY STREET	6045.16		HC RAMP MID PT
45	22+57.91	23.94' (RT)	OCTAVE AVENUE	6044.09		HC RAMP MID PT
46	22+71.95	21.00' (RT)	OCTAVE AVENUE	6043.52		PCR
47	21+65.95	21.00' (LT)	OCTAVE AVENUE	6044.12		PCR
48	21+79.99	23.94' (LT)	OCTAVE AVENUE	6044.26		HC RAMP MID PT
49	21+51.06	18.93' (RT)	SOPRANO CIRCLE	6043.69		HC RAMP MID PT
50	21+43.03	18.00' (RT)	SOPRANO CIRCLE	6043.01		PCR
51	21+37.03	35.50' (RT)	SOPRANO CIRCLE	6043.66		END DETACHED SW
52	21+37.03	35.50' (LT)	SOPRANO CIRCLE	6043.56		END DETACHED SW
53	21+43.03	18.00' (LT)	SOPRANO CIRCLE	6042.92		PCR
54	21+51.06	18.93' (LT)	SOPRANO CIRCLE	6043.57		HC RAMP MID PT
55	22+57.81	23.98' (LT)	OCTAVE AVENUE	6044.09		HC RAMP MID PT
56	22+71.95	21.00' (LT)	OCTAVE AVENUE	6043.52		PCR
57	22+00.95	24.00' (RT)	OCTAVE AVENUE	6044.44		FL–FL INTERCEPT
59	22+36.95	24.00' (RT)	OCTAVE AVENUE	6044.30		FL–FL INTERCEPT
61	24+34.08	21.00' (RT)	OCTAVE AVENUE	6041.29		LOW PT
62	24+34.14	27.00' (LT)	OCTAVE AVENUE	6041.29		LOW PT/ INLET
63	25+53.74	45.50' (RT)	OCTAVE AVENUE	6043.73		END DETACHED SW
64	25+53.74	27.00' (RT)	OCTAVE AVENUE	6043.36		END C&G
65	25+53.74	27.00' (LT)	OCTAVE AVENUE	6042.75		END C&G
66	25+53.74	45.50' (LT)	OCTAVE AVENUE	6043.61		END DETACHED SW
69	21+37.03	18.00' (LT)	SOPRANO CIRCLE	6042.72		BEGIN C&G
70	21+37.03	18.00' (RT)	SOPRANO CIRCLE	6042.79		BEGIN C&G
71	12+05.50	18.00' (LT)	AMPLIFY STREET	6044.94		BEGIN C&G
72	12+05.50	18.00' (RT)	AMPLIFY STREET	6045.17		BEGIN C&G
79	19+92.43	21.00' (RT)	OCTAVE AVENUE	6040.11		END DWY CUT
80	19+72.43	21.00' (RT)	OCTAVE AVENUE	6039.27		BEGIN DWY CUT
81	24+59.74	21.00' (RT)	OCTAVE AVENUE	6041.37		END DWY CUT
82	24+39.74	21.00' (RT)	OCTAVE AVENUE	6041.30		BEGIN DWY CUT
87	20+66.23	27.00' (LT)	OCTAVE AVENUE	6042.58		PC
89	24+06.25	21.00' (LT)	OCTAVE AVENUE	6041.37		PC
100	20+75.54	21.00' (LT)	OCTAVE AVENUE	6042.81		PT
101	24+15.56	27.00' (LT)	OCTAVE AVENUE	6041.32		PT
106	24+24.07	21.00' (RT)	OCTAVE AVENUE	6041.30		INLET

CURVE TABLE

CURVE	DELTA	RADIUS	LENGTH
C10	90°00'00"	35.00'	54.98'
C11	90°00'00"	35.00'	54.98'
C12	89°59'55"	35.00'	54.98'
C13	90°00'00"	35.00'	54.98'

50 25 0 50 100

HORIZONTAL
ORIGINAL SCALE: 1" = 50'
VERTICAL
ORIGINAL SCALE: 1" = 5'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO P.E. REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

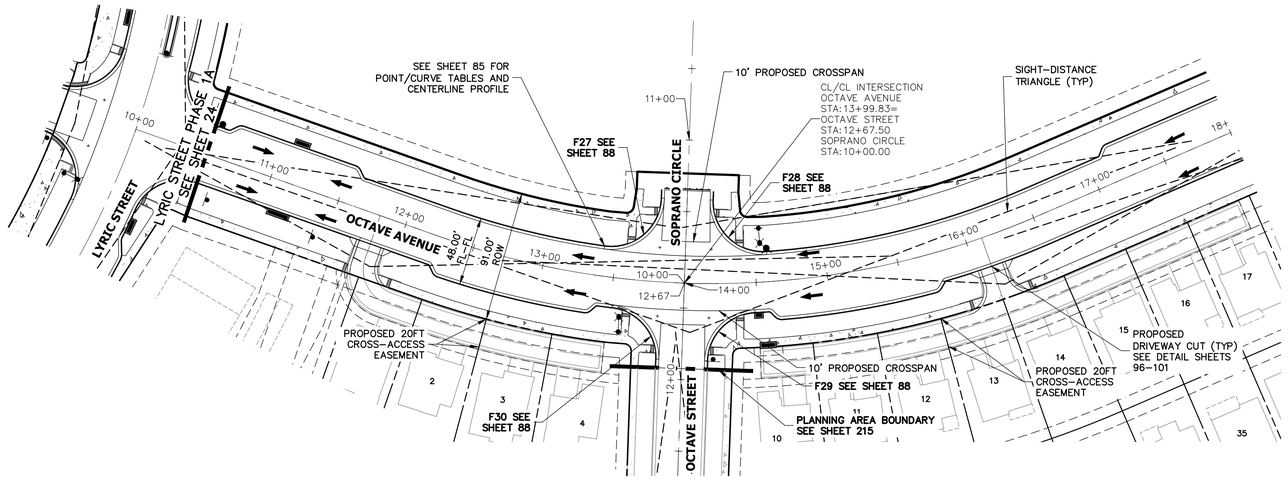
H-SCALE	1"=50'
V-SCALE	1"=5'
DATE	2/12/21
DESIGNED BY	RDO
DRAWN BY	SDL
CHECKED BY	

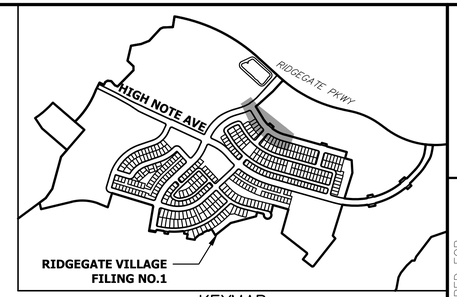
RIDGEGATE SOUTHWEST VILLAGE FILING 1

ROADWAY PLAN & PROFILES–PHASE 1B

SHEET 86 OF 270

JOB NO. 15950.01

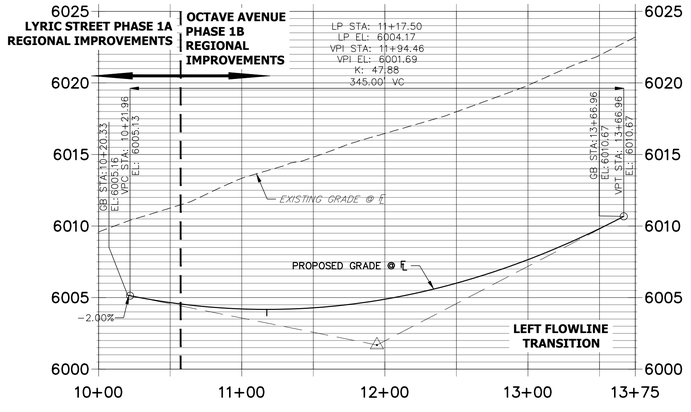


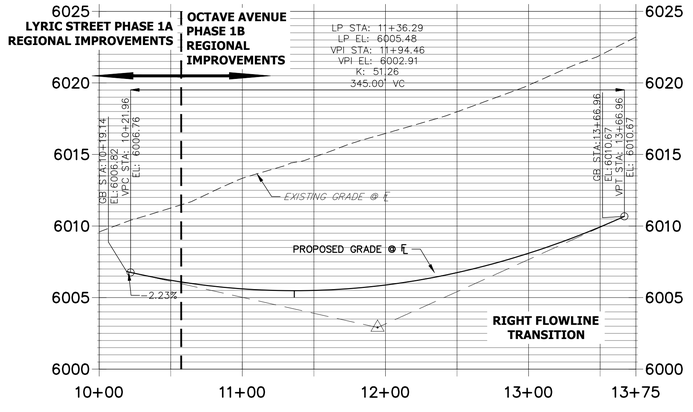


KEYMAP
SCALE:1"=1000'

ROADWAY NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE COVER SHEET FOR BENCHMARK.
4. SEE SHEET 82 FOR LEGEND.
5. SEE SHEET 84 FOR TYPICAL STREET SECTIONS.
6. SEE SHEET 88 FOR CURB RETURN PROFILES.
7. SEE SHEET 89 FOR CURB RAMP DETAILS.
8. SEE SHEETS 90-91 FOR SIGNAGE AND STRIPING.
9. ALL CURB RADII ARE 35' UNLESS OTHERWISE NOTED.
10. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.





50 25 0 50 100

HORIZONTAL
ORIGINAL SCALE: 1" = 50'
VERTICAL
ORIGINAL SCALE: 1" = 5'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=50'
V-SCALE	1"=5'
DATE	2/12/21
DESIGNED BY	RDO
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

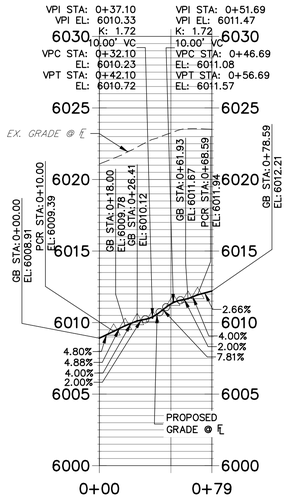
ROADWAY PLAN & PROFILES-PHASE 1B

SHEET 87 OF 270

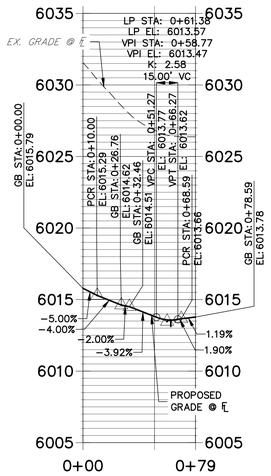
JOB NO. 15950.01

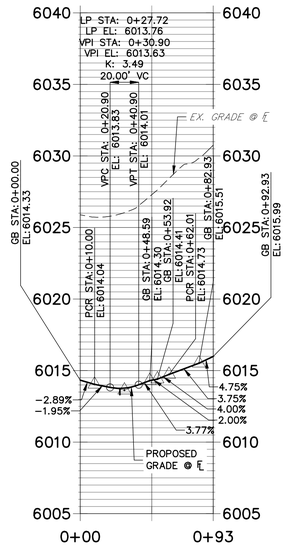
F29 PROFILE
STA 0+00.00 TO 0+92.93

F27 PROFILE
STA 0+00.00 TO 0+78.59

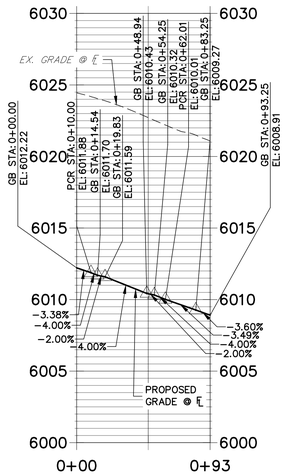


F28 PROFILE
STA 0+00.00 TO 0+78.59

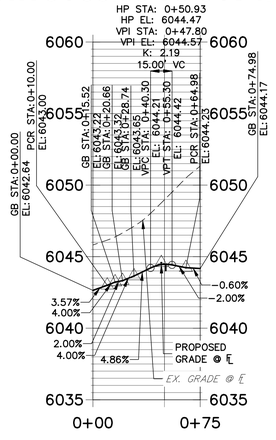




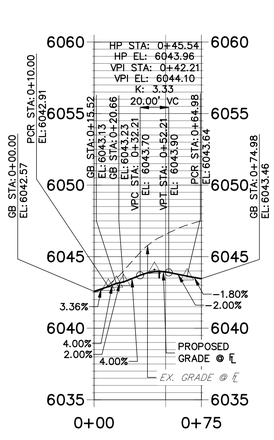
F30 PROFILE
STA 0+00.00 TO 0+93.25



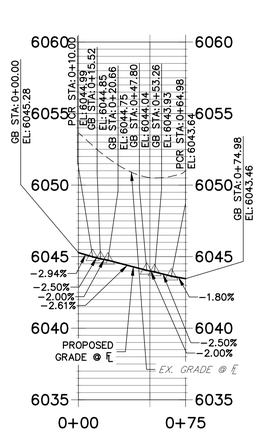
F31 PROFILE
STA 0+00.00 TO 0+74.98



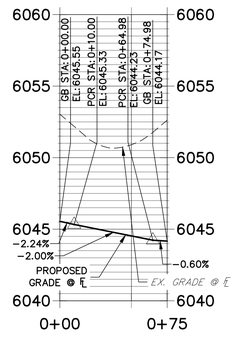
F32 PROFILE
STA 0+00.00 TO 0+74.98



F33 PROFILE
STA 0+00.00 TO 0+74.98



F34 PROFILE
STA 0+00.00 TO 0+74.98



UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=50'
V-SCALE	1"=5'
DATE	2/12/21
DESIGNED BY	RDO
DRAWN BY	SDL
CHECKED BY	

Know what's **below.**
Call before you dig.

50 25 0 50 100

HORIZONTAL
ORIGINAL SCALE: 1" = 50'
VERTICAL
ORIGINAL SCALE: 1" = 5'

RIDGEGATE SOUTHWEST
VILLAGE FILING 1

CURB RETURN
PROFILES–PHASE 1B

ENGINEER'S STATEMENT

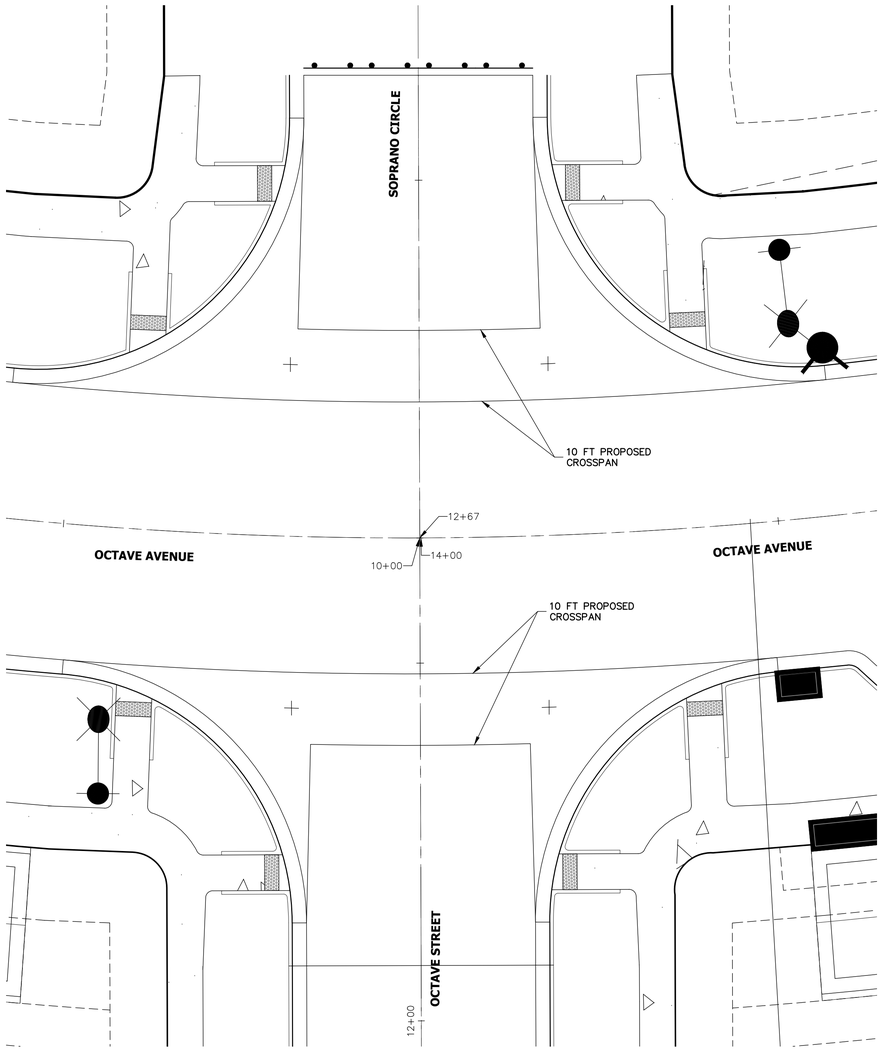
PREPARED UNDER MY SUPERVISION

COLORADO P.E. REGISTERED
AARON LEE CLUTTER
36742
PROFESSIONAL ENGINEER

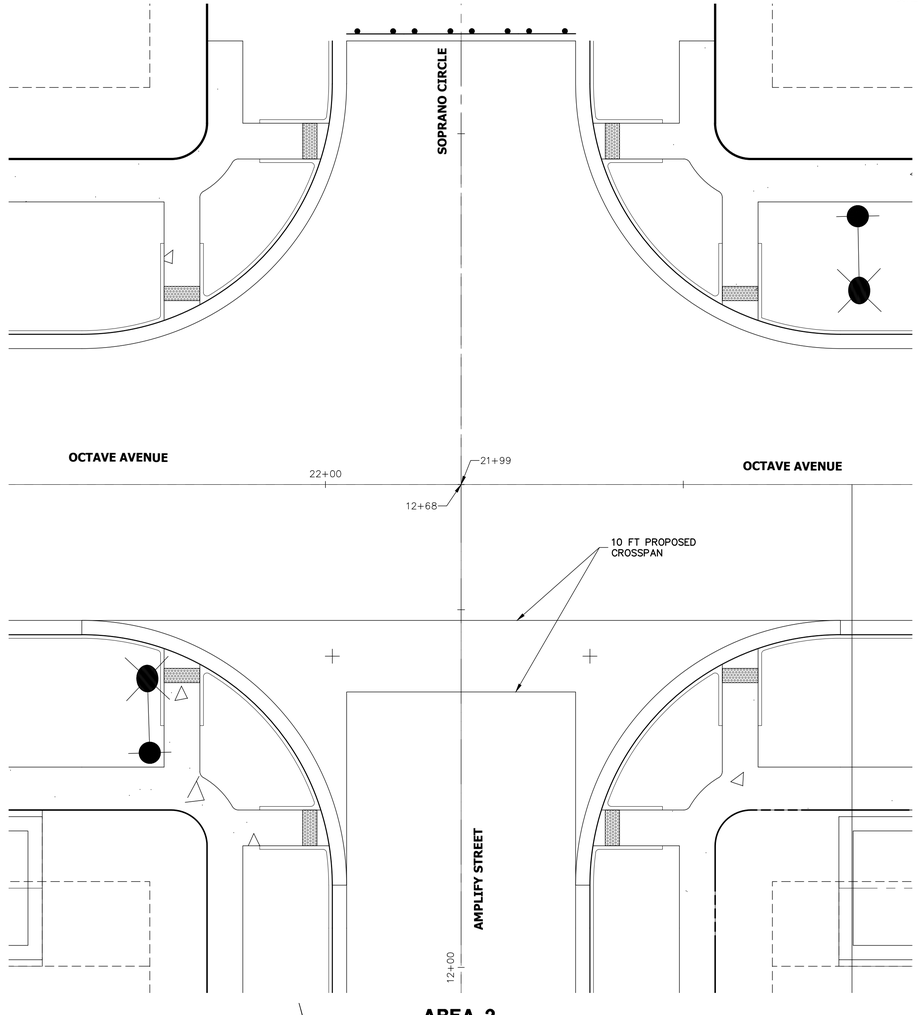
AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

SHEET 88 OF 270

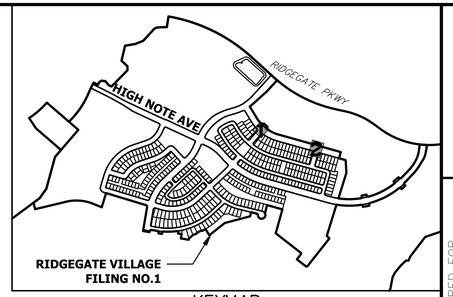
JOB NO. 15950.01



AREA 1



AREA 2



KEYMAP
SCALE: 1"=1000'

10 5 0 10 20
ORIGINAL SCALE: 1" = 10'

CURB RAMP DETAIL NOTES

1. SEE SHEET 88 FOR CURB RETURN PROFILES.
2. ALL CURB RAMP RADII ARE 35' UNLESS OTHERWISE NOTED.
3. SEE DETAILS FOR CURB RAMPS ON SHEETS 96-101.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

DATE

COLORADO REGISTERED PROFESSIONAL ENGINEER AARON LEE CLUTTER 36742

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=10'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	RDO
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

CURB RAMP DETAILS-PHASE 1B

SHEET 89 OF 270

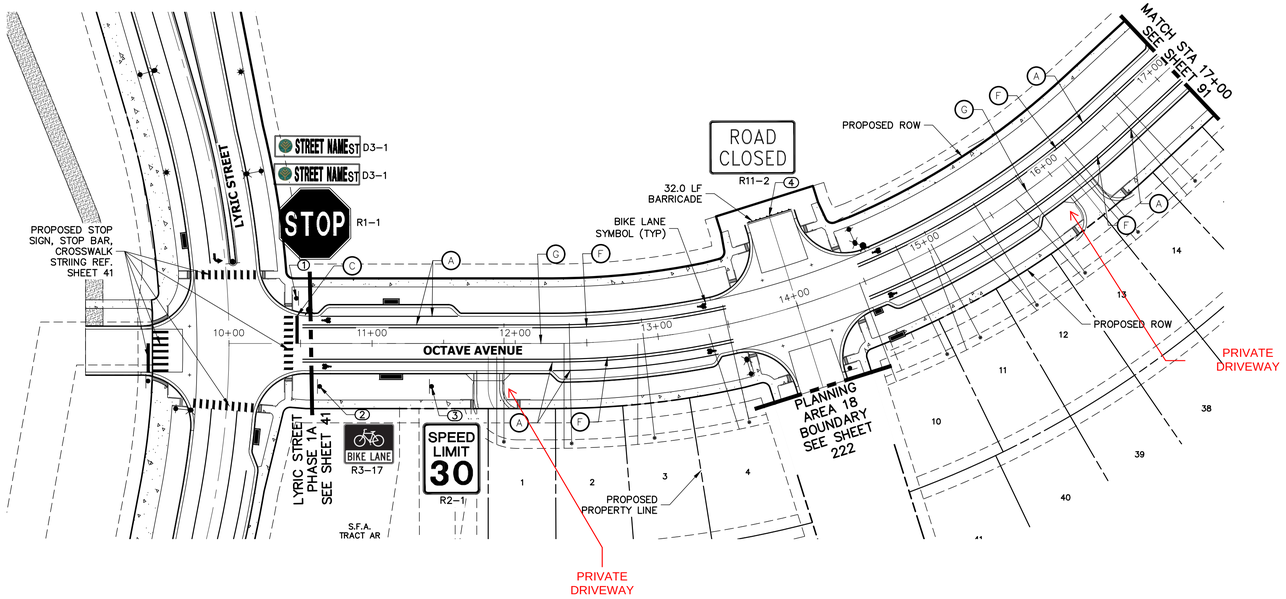
JOB NO. 15950.01

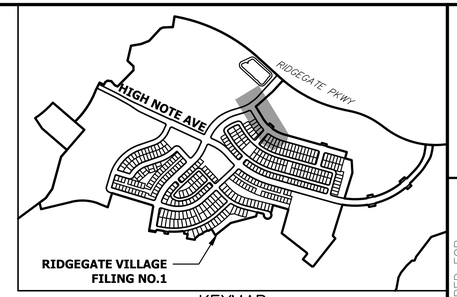
LEGEND

- PROPOSED SIGN
- EXISTING SIGN
- (XX) PROPOSED STRIPE
- (XX) EXISTING STRIPE

- (A) BIKE LANE LINE – 6" WIDE, SOLID WHITE
- (B) CROSSWALK – 2'X8' SOLID WHITE, 4' GAP CENTERED IN LANE
- (C) STOP BAR – 2' SOLID WHITE
- (D) YIELD LINE – 16"X24" SOLID WHITE TRIANGLES, 6' GAP CENTERED IN LANE
- (E) DROP LANE – 8" WIDE X 3' LONG, 12' GAP, WHITE
- (F) CHANNELIZING LINE – 8" WIDE, SOLID WHITE
- (G) DOUBLE YELLOW LINE – 5" WIDE, 3" GAP, SOLID
- (H) YELLOW EDGE LINE – 5" WIDE, SOLID
- (I) DIAGONAL MEDIAN LINE – 4" WIDE, SOLID YELLOW
- (J) LANE LINE – 5" WIDE X 10' LONG, 30' GAP, WHITE

SIGN TABULATION				
SIGN NUMBER	STATION	OFFSET	ALIGNMENT	DESCRIPTION
1	10+47.07	31.56' (LT)	OCTAVE AVENUE	R1-1 D3-1 X2
2	10+63.33	30.00' (RT)	OCTAVE AVENUE	R3-17
3	11+41.53	30.00' (RT)	OCTAVE AVENUE	R2-1
4	13+99.83	65.67' (LT)	OCTAVE AVENUE	R11-2





KEYMAP
SCALE:1"=1000'

NOTES

1. SEE SHEET 81 FOR SIGNAGE AND STRIPING NOTES.
2. SEE SHEET 82 FOR LINETYPE AND LAYER LEGEND.

50 25 0 50 100
ORIGINAL SCALE: 1" = 50'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=50'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	RDO
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

SIGNAGE & STRIPING PLAN-PHASE 1B

SHEET 90 OF 270

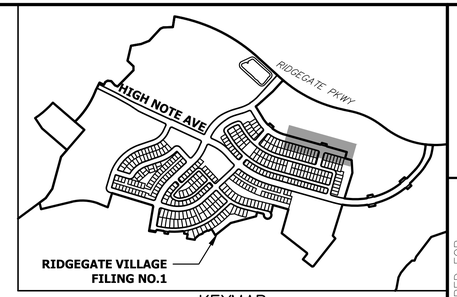
JOB NO. 15950.01

LEGEND

- PROPOSED SIGN
- EXISTING SIGN
- (XX) PROPOSED STRIPE
- (XX) EXISTING STRIPE

- (A) BIKE LANE LINE – 6" WIDE, SOLID WHITE
- (B) CROSSWALK – 2'X8' SOLID WHITE, 4' GAP CENTERED IN LANE
- (C) STOP BAR – 2' SOLID WHITE
- (D) YIELD LINE – 16"X24" SOLID WHITE TRIANGLES, 6' GAP CENTERED IN LANE
- (E) DROP LANE – 8" WIDE X 3' LONG, 12' GAP, WHITE
- (F) CHANNELIZING LINE – 8" WIDE, SOLID WHITE
- (G) DOUBLE YELLOW LINE – 5" WIDE, 3" GAP, SOLID
- (H) YELLOW EDGE LINE – 5" WIDE, SOLID
- (I) DIAGONAL MEDIAN LINE – 4" WIDE, SOLID YELLOW
- (J) LANE LINE – 5" WIDE X 10' LONG, 30' GAP, WHITE

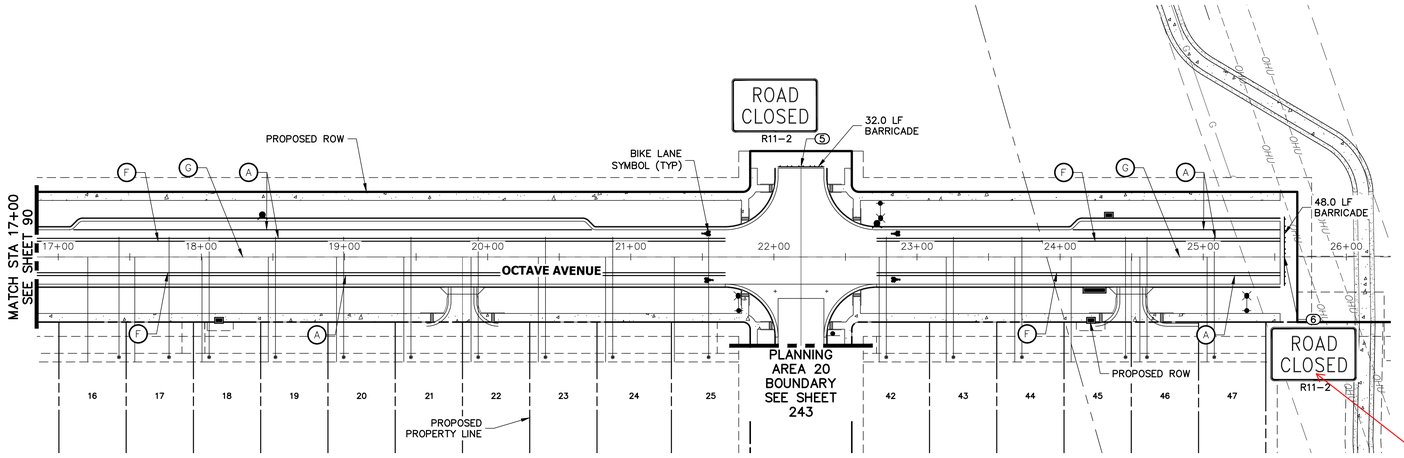
SIGN TABULATION				
SIGN NUMBER	STATION	OFFSET	ALIGNMENT	DESCRIPTION
5	22+18.95	62.99' (LT)	OCTAVE AVENUE	R11-2
6	25+56.74	0.00' ()	OCTAVE AVENUE	R11-2



KEYMAP
SCALE: 1"=1000'

NOTES

1. SEE SHEET 81 FOR SIGNAGE AND STRIPING NOTES.
2. SEE SHEET 82 FOR LINETYPE AND LAYER LEGEND.



CHANGE TO "ROAD TO BE EXTENDED IN FUTURE"

50 25 0 50 100
ORIGINAL SCALE: 1" = 50'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

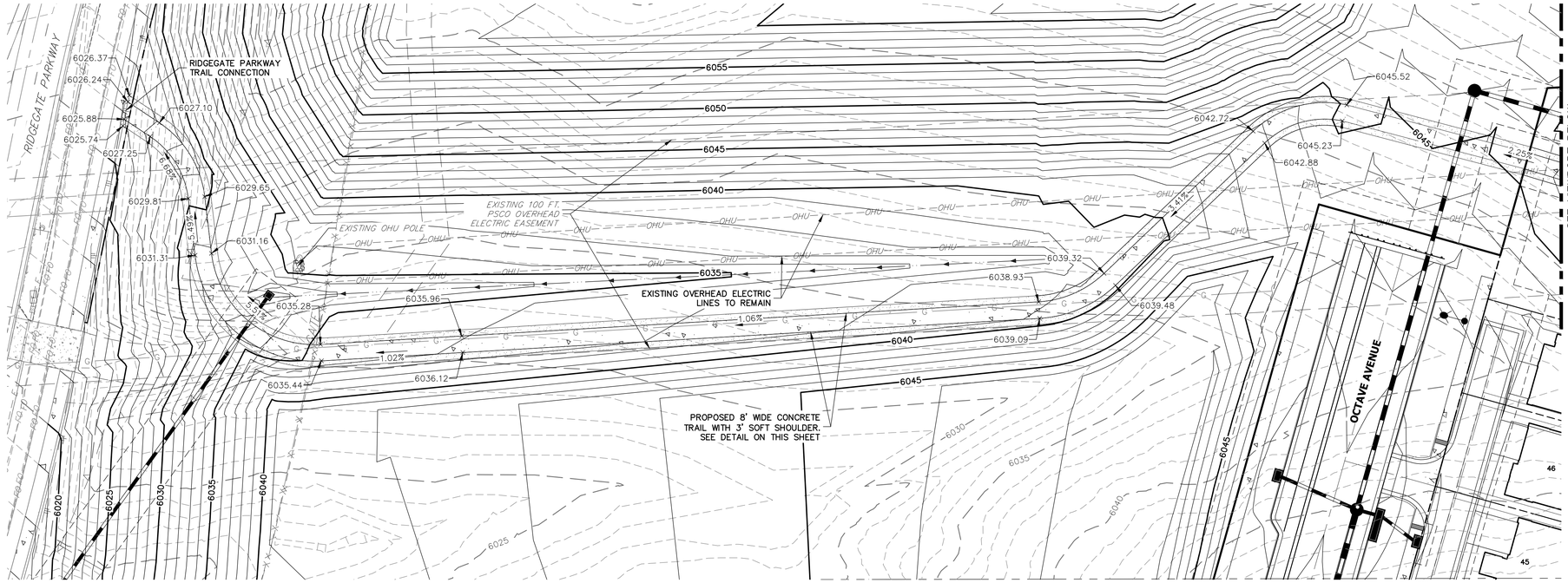
H-SCALE	1"=50'		
V-SCALE	N/A		
DATE	2/12/21		
DESIGNED BY	RDO		
DRAWN BY	SDL		
CHECKED BY			

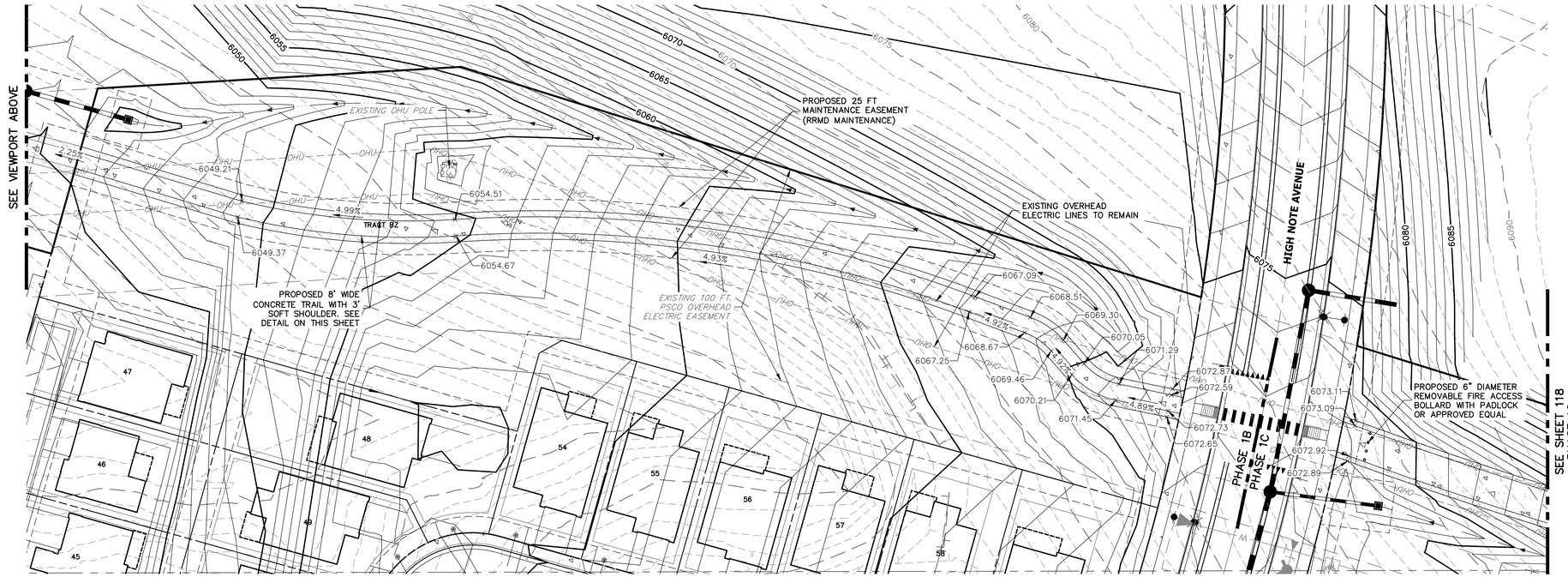
RIDGEGATE SOUTHWEST VILLAGE FILING 1

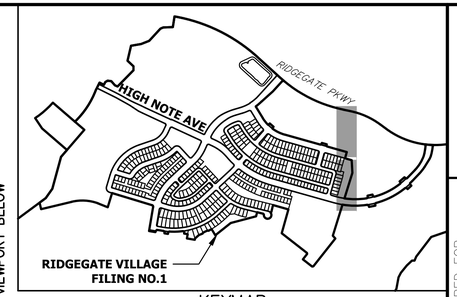
SIGNAGE & STRIPING PLAN-PHASE 1B

SHEET 91 OF 270

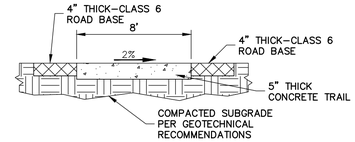
JOB NO. 15950.01







KEYMAP
SCALE:1"=1000'



8-FOOT WIDE CONCRETE TRAIL WITH 3-FOOT SOFT SURFACE SHOULDER
NTS

30 15 0 30 60
ORIGINAL SCALE: 1" = 30'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

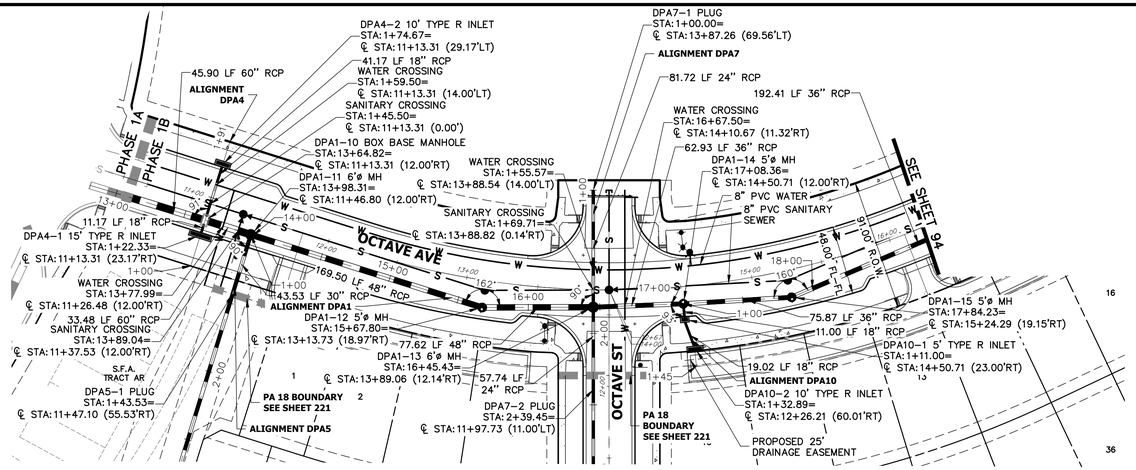
H-SCALE	1"=30'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	JGS
DRAWN BY	MEP
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

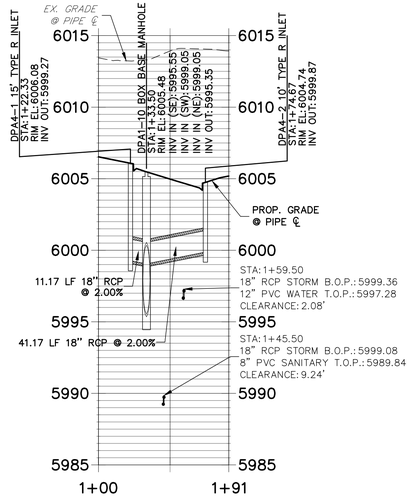
TRAIL IMPROVEMENTS PLANS-PHASE 1B

SHEET 92 OF 270

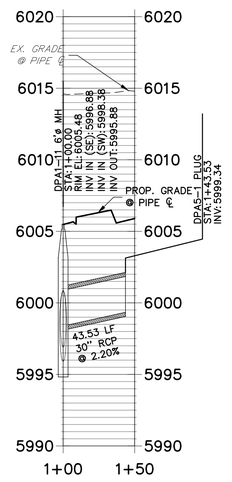
JOB NO. 15950.01



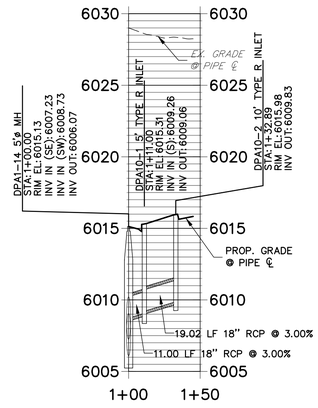
DPA4 PROFILE
STA 1+00.00 TO 1+91.00



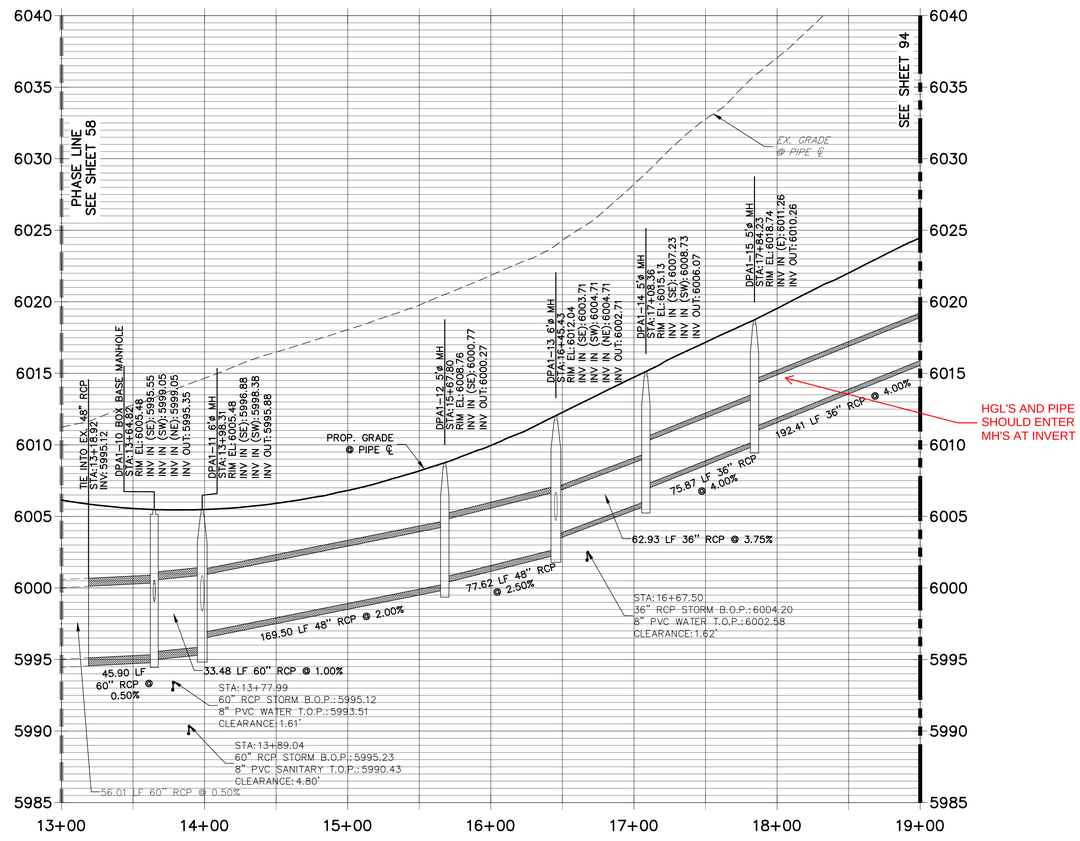
DPA5 PROFILE
STA 1+00.00 TO 1+50.00



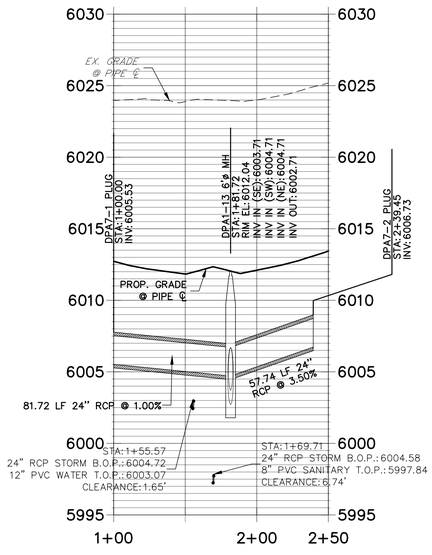
DPA10 PROFILE
STA 1+00.00 TO 1+50.00

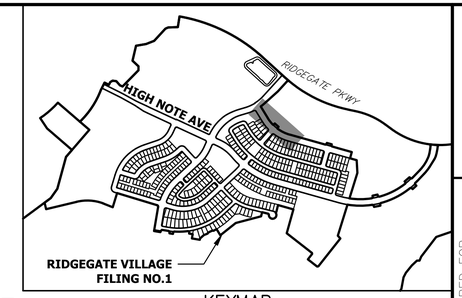


DPA1 PROFILE
STA 13+00.00 TO 19+00.00



DPA7 PROFILE
STA 1+00.00 TO 2+50.00

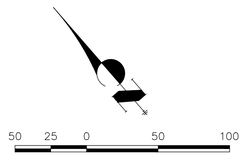




KEYMAP
SCALE:1"=1000'

STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON–GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.



HORIZONTAL
ORIGINAL SCALE: 1" = 50'
VERTICAL
ORIGINAL SCALE: 1" = 5'

Know what's below.
Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

No.	REVISION	BY	DATE

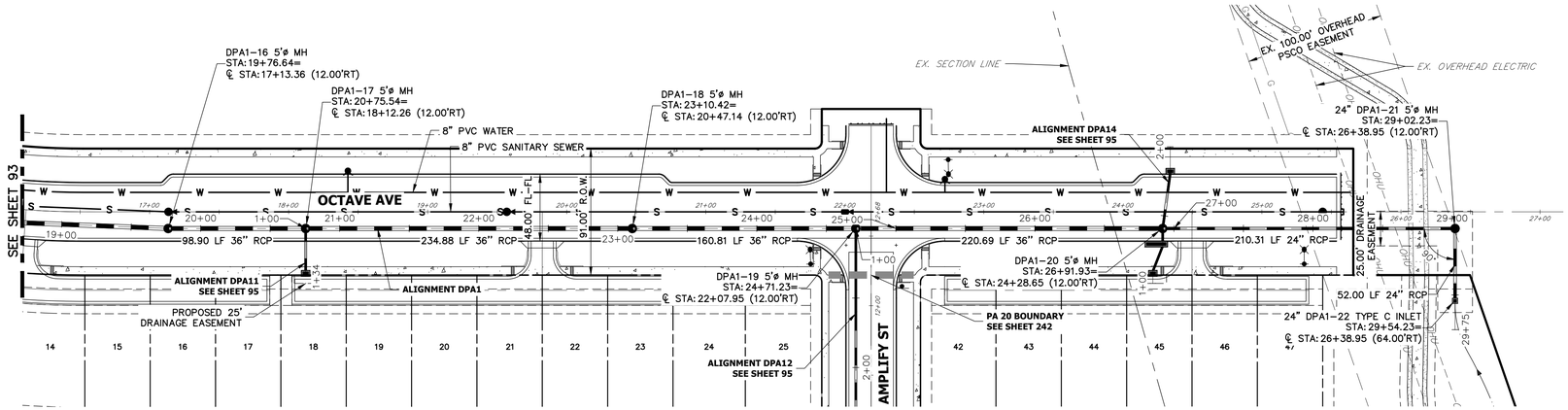
H–SCALE	1"=50'
V–SCALE	1"=5'
DATE	2/12/21
DESIGNED BY	CGM
DRAWN BY	CGM
CHECKED BY	

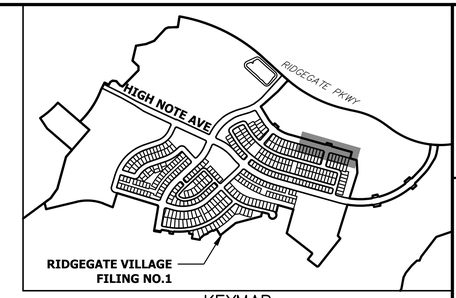
RIDGEGATE SOUTHWEST VILLAGE FILING 1

STORM PLAN & PROFILE–PHASE 1B

SHEET 93 OF 270

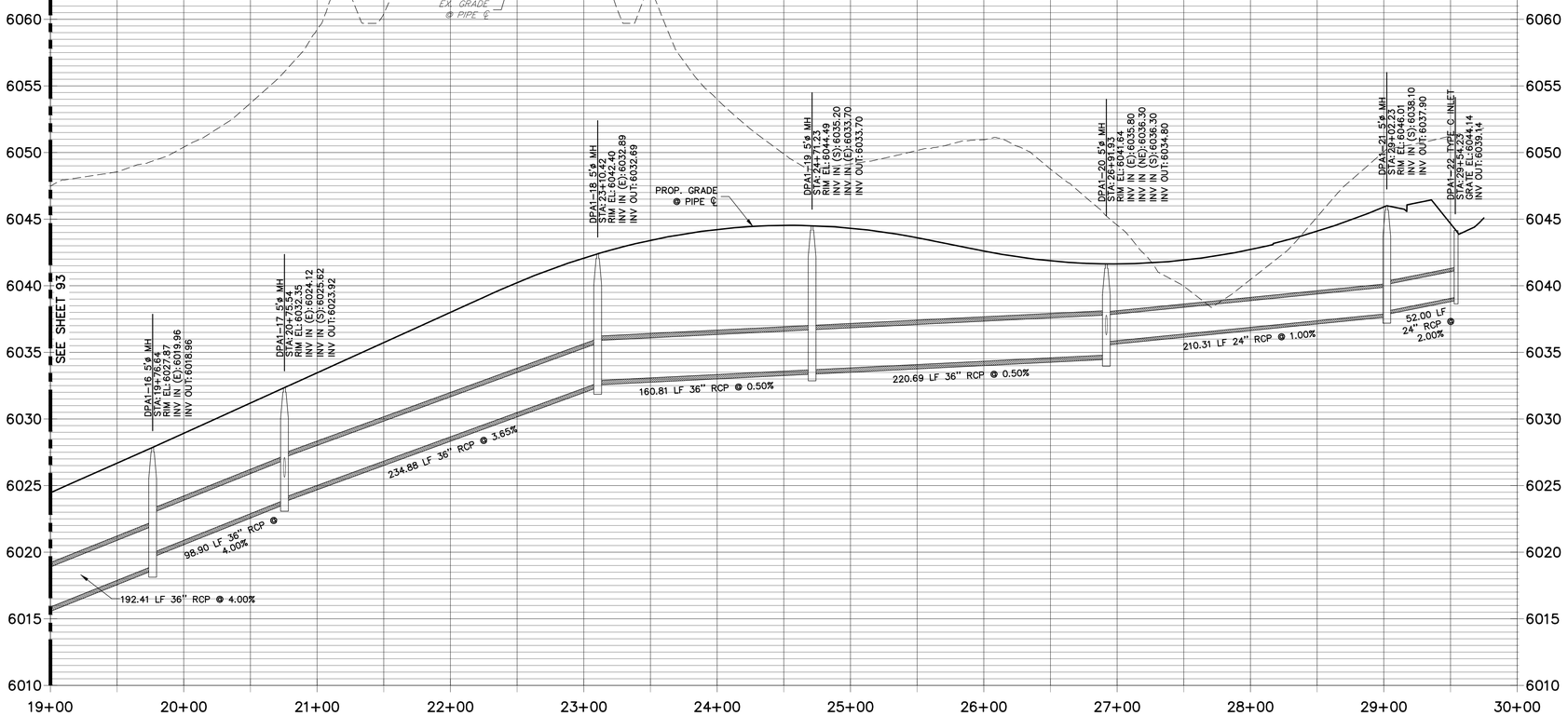
JOB NO. 15950.01





KEYMAP
SCALE: 1"=1000'

DPA1 PROFILE (CONT.)
STA 19+00.00 TO 30+00.00



STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON–GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.

50 25 0 50 100
HORIZONTAL
ORIGINAL SCALE: 1" = 50'
VERTICAL
ORIGINAL SCALE: 1" = 5'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

No.	REVISION	BY	DATE

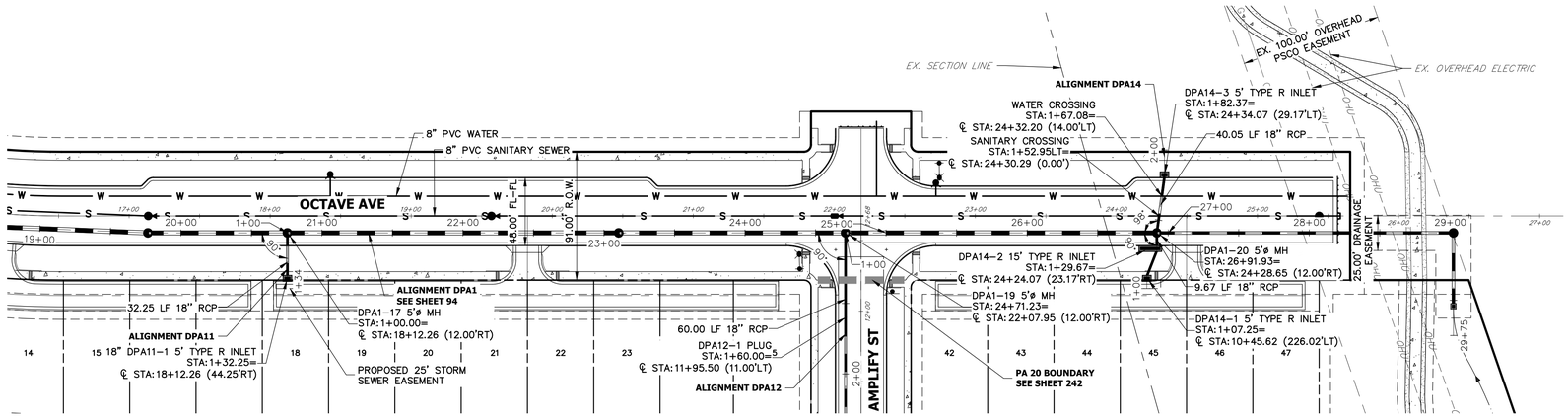
H–SCALE	1" = 50'	DESIGNED BY	CGM
V–SCALE	1" = 5'	DRAWN BY	CGM
DATE	2/12/21	CHECKED BY	

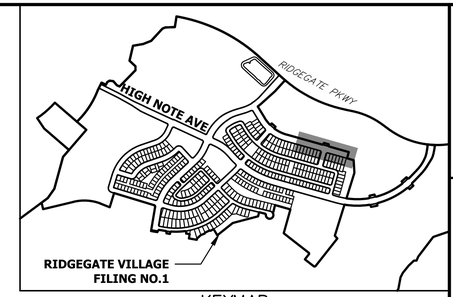
RIDGEGATE SOUTHWEST VILLAGE FILING 1

STORM PLAN & PROFILE–PHASE 1B

SHEET 94 OF 270

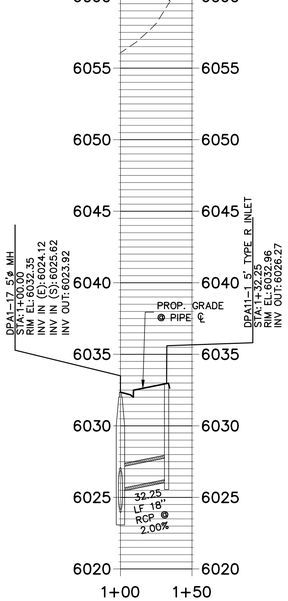
JOB NO. 15950.01



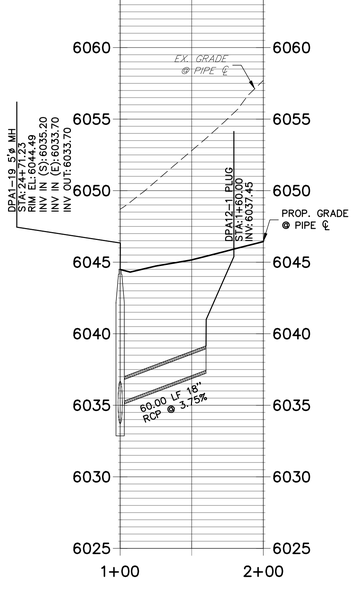


KEYMAP
SCALE: 1"=1000'

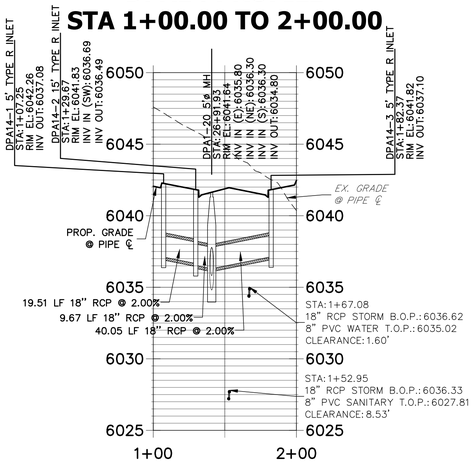
DPA11 PROFILE
STA 1+00.00 TO 1+50.00



DPA12 PROFILE
STA 1+00.00 TO 2+00.00



DPA14 PROFILE
STA 1+00.00 TO 2+00.00



STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON-GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.

50 25 0 50 100

HORIZONTAL
ORIGINAL SCALE: 1" = 50'
VERTICAL
ORIGINAL SCALE: 1" = 5'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

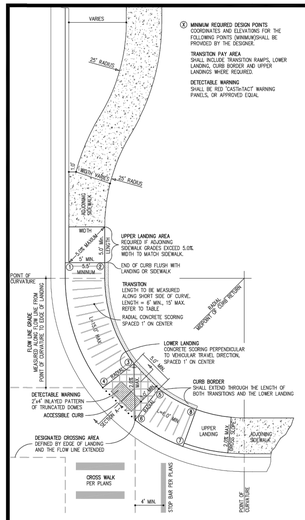
H-SCALE	1"=50'	DESIGNED BY	CGM
V-SCALE	1"=5'	DRAWN BY	CGM
DATE	2/12/21	CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

STORM PLAN & PROFILE-PHASE 1B

SHEET 95 OF 270

JOB NO. 15950.01



Ⓧ MINIMUM REQUIRED DESIGN POINTS
COORDINATES AND ELEVATIONS FOR THE FOLLOWING POINTS SHALL BE PROVIDED BY THE DESIGNER.

TRANSITION FAY AREA
INCLUDES TRANSITION RAMPS, LOWER LANDING, CURB BORDER AND UPPER LANDINGS WHERE REQUIRED.

DETECTABLE WARNING
SHALL BE RED "CAST-IN-FACT" WARNING PAVERS, OR APPROVED EQUAL

NOTES

SLOPED TRANSITIONS SHALL COMPLY WITH ALL APPLICABLE RULES AND GUIDELINES OF THE AMERICANS WITH DISABILITIES ACT.

SLOPED TRANSITIONS SHALL BE CONSISTENT WITH THE CURRENT PUBLICATION OF FEDERAL GUIDELINES FOR ACCESSIBLE RIGHTS OF WAY.

LONGITUDINAL SLOPES WITHIN THE TRANSITION SHALL NOT EXCEED 1:12 (8.33%).

CROSS SLOPES, OR SLOPES PERPENDICULAR TO THE DIRECTION OF TRAVEL SHALL NOT EXCEED 1:50 (2.0%)

THE LOWER LANDING AREA IS A REQUIRED ELEMENT.

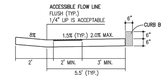
SLOPED TRANSITIONS ARE A REQUIRED ELEMENT AND SHALL:
- A. NOT EXCEED 1:12 (8.3%) LONGITUDINAL SLOPE ALONG THE SHORTEST SIDE UNLESS TRANSITION LENGTH EXCEEDS 15.0'
- B. NOT EXCEED 1:50 (2.0%) SLOPE PERPENDICULAR TO THE TRAVELED DIRECTION.
- C. NOT EXCEED 15.0' IN LENGTH AS MEASURED ALONG THE SHORTEST SIDE. MAXIMUM LONGITUDINAL SLOPE SHALL BE ADJUSTED TO ACCOMODATE THE LENGTH.
- D. NOT BE LESS THAN 6.0' IN LENGTH.

THE UPPER LANDING AREA IS REQUIRED IF:
- A. THE ADJOINING SIDEWALK HAS A LONGITUDINAL GRADE (DIRECTION OF TRAVEL) IN EXCESS OF 5.0% (1:20). SAID LANDING SHALL NOT EXCEED A 1-20 (5.0%) SLOPE IN ANY DIRECTION.
- B. A CHANGE IN DIRECTION IS REQUIRED TO ENTER OF EXIT THE SLOPED TRANSITION. SAID LANDING SHALL NOT EXCEED 1:50 (2.0%) SLOPE IN ANY DIRECTION.

LANDINGS AND SLOPED TRANSITIONS SHALL MATCH THE WIDTH OF THE ADJOINING SIDEWALK, 3.0' MINIMUM.

ALL TOOLED JOINTS WITHIN THE SLOPED TRANSITIONS SHALL RUN PERPENDICULAR TO THE DIRECTION OF TRAVEL.

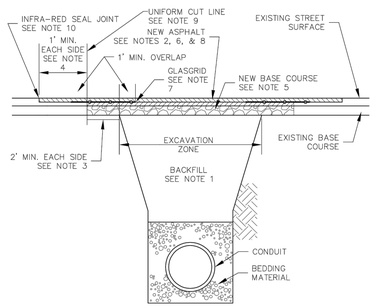
ALL TOOLED JOINTS WITHIN THE LOWER LANDING AREA SHALL RUN PARALLEL TO AND/OR PERPENDICULAR TO THE DIRECTION OF VEHICULAR TRAVEL WITHIN THE TRAVELED WAY.



SECTION A-A

TOOLED JOINT

	CITY OF LONE TREE Department of Public Works	CURB TRANSITION
		SCALE: NTS
		DATE: 3/05
		DETAIL 1



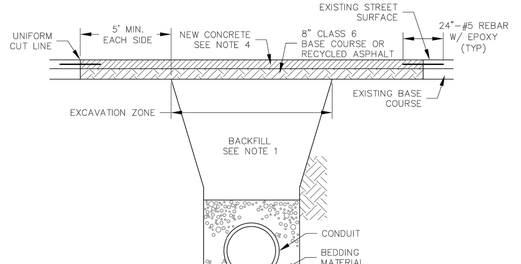
TYPICAL TRENCH SECTION

ROADWAY CLASSIFICATION	MIN. PAVEMENT PATCH THICKNESS
ARTERIAL	9 IN.
COLLECTOR	7 IN.
LOCAL	5 IN.

NOTES:

1. ALL PUBLIC STREET CUTS SHALL BE BACKFILLED WITH CLSM UNLESS THE TRENCH IS WIDE ENOUGH FOR A FULL-SIZED, SELF-PROPELLED COMPACTOR TO DRIVE THROUGH.
2. PAVEMENT PATCH THICKNESS SHALL NOT BE LESS THAN THE EXISTING SECTION.
3. SAW CUT AND REMOVE PAVEMENT AND BASE A MINIMUM OF 2' BACK FROM EXCAVATION ZONE OR LIMITS OF UNDISTURBED SUB-BASE, WHICHEVER IS GREATER.
4. ROTOMILL ASPHALT (2" DEPTH MINIMUM) A MINIMUM OF 1' BEYOND THE FULL DEPTH SAW CUT AND REMOVAL.
5. INSTALL 8 INCHES OF CDOT CLASS 6 ROAD BASE OR RECYCLED ASPHALT, COMPACTED IN PLACE TO MINIMUM 95% MODIFIED PROCTOR MAXIMUM DENSITY (ASTM D 1557).
6. INSTALL AND PROPERLY COMPACT REQUIRED DEPTH OF BASE COURSE ASPHALTIC CONCRETE (CDOT GRADING S).
7. INSTALL REINFORCEMENT MAT (TENSAR GLASGRID 8511, OR APPROVED EQUAL) PER MANUFACTURERS RECOMMENDATIONS. (MINIMUM 5 FOOT WIDTH)
8. INSTALL AND PROPERLY COMPACT ASPHALTIC CONCRETE TOP COURSE (CDOT GRADING SX).
9. ALL CUTS TO BE SQUARED OFF PRIOR TO RESTORATION. SAW CUT OR ROTOMILL.
10. THE JOINT BETWEEN THE NEW TOP COURSE ASPHALT AND THE EXISTING ASPHALT SHALL BE SEALED USING INFRARED JOINTING PROCESS.
11. ARTERIAL STREETS AND MAJOR COLLECTORS MUST BE PATCHED THE SAME DAY THE CUT OCCURS, UNLESS OTHERWISE AUTHORIZED BY THE ENGINEERING/PUBLIC WORKS DEPARTMENT.
12. ANY PAVEMENT MARKING (LANE LINES, TURN ARROWS, ETC.) DAMAGED BY THE STREET CUT AND REPAIR OPERATIONS SHALL BE REPLACED IN CONFORMANCE WITH CITY SIGNAGE AND STRIPING STANDARDS, AS DIRECTED BY THE ENGINEERING/PUBLIC WORKS DEPARTMENT.

CITY OF LONE TREE PUBLIC WORKS	ASPHALT PAVEMENT PATCHBACK	DETAIL NUMBER 1
DATE: 9/24/13 BY: GAW	DRAWING NO.: ST-01	



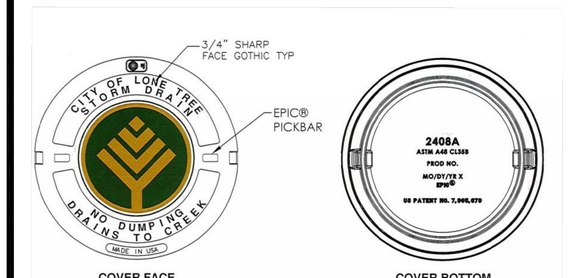
TYPICAL TRENCH SECTION

ROADWAY CLASSIFICATION	MIN. PAVEMENT PATCH THICKNESS
ARTERIAL	9 IN.
COLLECTOR	7 IN.
LOCAL	5 IN.

NOTES:

1. ALL PUBLIC STREET CUTS SHALL BE BACKFILLED WITH CLSM UNLESS THE TRENCH IS WIDE ENOUGH FOR A FULL-SIZED, SELF-PROPELLED COMPACTOR TO DRIVE THROUGH.
2. PAVEMENT PATCH THICKNESS SHALL NOT BE LESS THAN THE EXISTING SECTION.
3. SAW CUT AND REMOVE PAVEMENT AND BASE 5' BACK FROM EXCAVATION ZONE.
4. 8" OF COMPACTED CDOT CLASS 6 ROAD BASE OR RECYCLED ASPHALT SHALL BE INSTALLED PRIOR TO PAVING.
5. CONCRETE STREET PAVEMENT TO BE MINIMUM 7 SACK MIX, 5000 PSI AT 28 DAYS.
6. ALL CUTS TO BE SQUARED OFF PRIOR TO RESTORATION. SAW CUT OR ROTOMILL FULL DEPTH.
7. CONCRETE PATCHES SHALL BE DOWELED INTO EXISTING CONCERTE WITH 24"-#5 REBAR AT 18" O.C. AROUND THE PERIMETER OF THE PATCH.
8. ARTERIAL STREETS AND MAJOR COLLECTORS MUST BE PATCHED THE SAME DAY THE CUT OCCURS, UNLESS APPROVED BY THE ENGINEERING DEPARTMENT.

CITY OF LONE TREE PUBLIC WORKS	CONCRETE PAVEMENT PATCHBACK	DETAIL NUMBER 2
DATE: 12/9/11 BY: GAW	DRAWING NO.: ST-02	



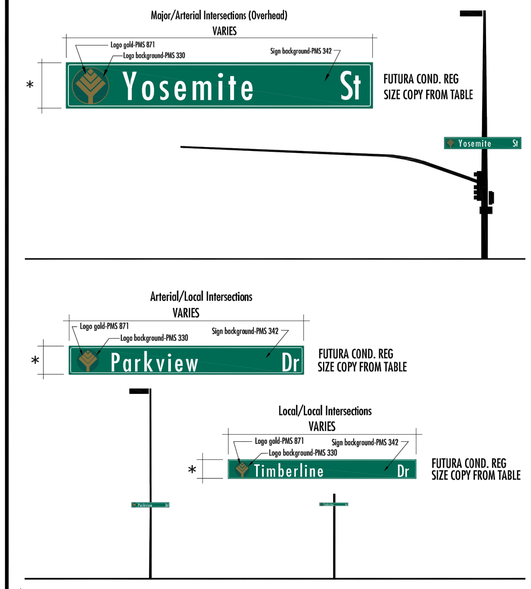
COVER FACE

COVER BOTTOM

SECTION

Design Features
-Materials
Gray Iron (CL35B)
-Load Rating
Heavy Duty
-Open Area
n/a
-Coating
Undipped
-√ Designates Machined Surface

CITY OF LONE TREE PUBLIC WORKS	MANHOLE LID COVER	DETAIL NUMBER MH-1
DATE: 06/05/2020	BY: J. KRELL	DRAWING NO.:



* NOTE: SIGN HEIGHT SHALL BE 4" GREATER THAN RECOMMENDED MINIMUM UPPER-CASE LETTER HEIGHT PER TABLE, SHEET 3. CITY LOGO DIAMETER SHALL EQUAL UPPER-CASE LETTER HEIGHT.

CITY OF LONE TREE PUBLIC WORKS	INTERSECTION STREET NAME SIGNAGE	SHEET 1 OF 3
DATE: 08/28/13 BY: GRW	DRAWING NO.: SN-01	

INTERSECTION STREET NAME SIGNAGE NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MOST RECENT VERSION OF THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE "COLORADO SUPPLEMENTAL MUTCD" AND THE DOUGLAS COUNTY "ROAD AND CONSTRUCTION STANDARDS MANUAL". FURTHER SPECIFICATIONS AND ILLUSTRATIONS ARE LOCATED IN THE COLORADO DIVISION OF HIGHWAYS "M AND S STANDARDS".
2. DELINEATION OF ROADWAYS SHALL BE AS SPECIFIED IN THE COLORADO "M AND S MANUAL".
3. STREET NAME SIGNS SHALL BE MOUNTED SO THAT THEY CAN BE SEEN FROM ALL DIRECTIONS OF TRAVEL.
4. INSTALLATION OF SIGNS SHALL CONFORM TO THE MUTCD MOUNTING HEIGHT REQUIREMENTS, INCLUDING A 7-FOOT MINIMUM HEIGHT FROM THE BOTTOM OF THE LOWEST SIGN PANEL TO THE TOP GRADE OF SIDEWALK.
5. ALL NEWLY INSTALLED TRAFFIC SIGNS SHALL MEET THE MINIMUM RETRO-REFLECTIVITY AND ILLUMINATION STANDARDS AS SET FORTH BY THE MUTCD (LATEST EDITION). THESE MINIMUM REQUIREMENTS SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
6. NON ILLUMINATED SIGNS SHALL BE USED AT MAJOR/MAJOR AND MAJOR/ARTERIAL INTERSECTIONS. THEY SHALL BE MOUNTED TO THE SIGNAL POLE WITH ASTRO-BRACS ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
7. THE CONTRACTOR INSTALLING SIGNS IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND UTILITIES. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.
8. FOLLOWING INSTALLATION, THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS DEPARTMENT, 303-662-8112. A FIELD INSPECTION OF LOCATION AND INSTALLATION OF ALL SIGNS SHALL BE PERFORMED BY PUBLIC WORKS. ALL DISCREPANCIES IDENTIFIED DURING THE FIELD INSPECTION MUST BE CORRECTED BEFORE THE TWO-YEAR WARRANTY PERIOD WILL BEGIN.
9. SIGNAGE AND STRIPING HAS BEEN DETERMINED BY INFORMATION AVAILABLE AT THE TIME OF REVIEW. PRIOR TO INITIATION OF THE WARRANTY PERIOD, LONE TREE RESERVES THE RIGHT TO REQUIRE MODIFICATIONS TO EXISTING OR INSTALLATION OF ADDITIONAL SIGNAGE AND/OR STRIPING IF THEY DETERMINE THAT AN UNFORESEEN CONDITION WARRANTS SUCH MODIFICATION ACCORDING TO THE MUTCD OR THE CDOT M AND S STANDARDS. ALL SIGNAGE AND STRIPING SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
10. ANY INTERSECTION STREET NAME SIGNAGE REMOVED SHALL BE RETURNED TO THE CITY OF LONE TREE.

CITY OF LONE TREE PUBLIC WORKS	INTERSECTION STREET NAME SIGNAGE	SHEET 2 OF 3
DATE: 04/19/12 BY: GRW	DRAWING NO.: SN-02	

811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS LONE TREE PUBLIC WORKS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

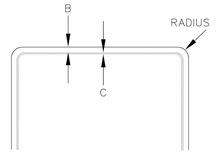
No.	REVISION	BY	DATE

H-SCALE N/A
V-SCALE N/A
DATE 2/12/21
DESIGNED BY GVT
DRAWN BY GVT
CHECKED BY

RIDGEGATE SOUTHWEST VILLAGE FILING 1
STORM SEWER & ROADWAY DETAILS-PHASE 1B

SHEET 96 OF 270
JOB NO. 15950.01

STANDARD SIGN BORDER SPECIFICATIONS



SIGN SIZE	BORDER WIDTHS (INCH)			RADIUS (INCH)
	A	B	C	
< 12"	N/A	.375	.375	1
≥ 12"	N/A	.375	.438	1.5

MINIMUM LETTER HEIGHTS ON STREET NAME SIGNS

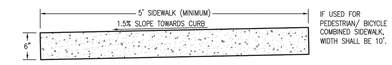
(MUTCD 2009 EDITION–TABLE 2D–2)

TYPE OF MOUNTING	TYPE OF STREET OR HIGHWAY	SPEED LIMIT	RECOMMENDED MINIMUM LETTER HEIGHT **	
			INITIAL UPPER–CASE	LOWER–CASE
OVERHEAD	ALL TYPES	ALL SPEED LIMITS	12 INCHES	9 INCHES
POST–MOUNTED	MULTI–LANE	MORE THAN 40 MPH	8 INCHES	6 INCHES
POST–MOUNTED	MULTI–LANE	40 MPH OR LESS	6 INCHES	4.5INCHES
POST–MOUNTED	2–LANE	ALL SPEED LIMITS	6 INCHES*	4.5 INCHES*

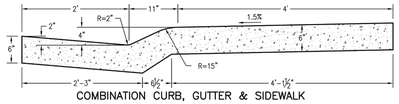
*ON LOCAL 2–LANE STREETS W/SPEED LIMITS OF 25 MPH OR LESS, 4" INITIAL UPPER–CASE LETTERS WITH 3" LOWER CASE LETTERS MAY BE USED.

** SUPPLEMENTARY LETTERING (E.G. ST., DR., LN., & NUMBERING) SHALL BE A MINIMUM OF ½ THE APPLICABLE RECOMMENDED MINIMUM LETTER HEIGHT PER ABOVE TABLE

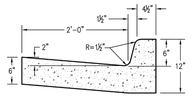
CITY OF LONE TREE PUBLIC WORKS	INTERSECTION STREET NAME SIGNAGE	SHEET
DATE: 04/19/12	BY: GRW	DRAWING NO.: SN–03	3 OF 3



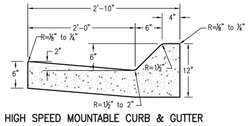
STANDARD ATTACHED OR DETACHED SIDEWALK



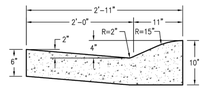
COMBINATION CURB, GUTTER & SIDEWALK



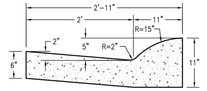
VERTICAL CURB & GUTTER



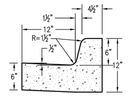
HIGH SPEED MOUNTABLE CURB & GUTTER
(DESIGN SPEED OF 45 M.P.H. OR HIGHER)



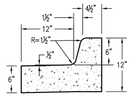
URBAN LOCAL MOUNTABLE CURB & GUTTER



RURAL LOCAL MOUNTABLE CURB & GUTTER



MEDIAN CURB & GUTTER (CATCH)



MEDIAN CURB & GUTTER (SPILL)

NOTES:
1. IF A SIDEWALK IS PLACED BEHIND THE CURB BUT IS NOT PLACED MONOLITHICALLY, EXPANSION JOINT MATERIAL AND A SILICONE BASE SEALER MUST BE APPLIED BETWEEN THE SIDEWALK AND THE CURB.
2. SEE DRAWING NUMBER SP.23a and SP.23b FOR TRENCH DRAIN.
3. SEE DRAWING NUMBER SP.31 AND SP.32 FOR CONCRETE JOINTS.

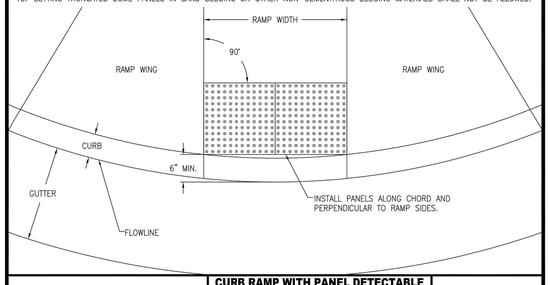
CURB & GUTTERS AND SIDEWALKS	Issued: 05/2013
DOUGLAS COUNTY COLORADO	Revised: 09/2017
	Drawing No. SP.17

Panel Installation Notes:

1. DETECTABLE WARNING PANELS, 24" X 24" OR 24" X 30" IN SIZE, SHALL BE PREFABRICATED REDDISH WITH TRUNCATED DOMES AND COMPLY WITH ADA REQUIREMENTS. ONLY FULL PANELS SHALL BE USED TO OBTAIN SPECIFIC RAMP THROAT WIDTH, (I.E. TWO 24" PANELS FOR A 4' RAMP, TWO 30" PANELS FOR A 5' RAMP, ETC.)
2. PRIOR TO START OF WORK, CONTRACTOR SHALL SUBMIT, TO DOUGLAS COUNTY FOR APPROVAL, A SAMPLE PANEL AND DOCUMENTATION FROM THE MANUFACTURER. PANEL SURFACE SHALL HAVE A MINIMUM OF 70% LIGHT REFLECTIVITY CONTRAST WITH THE ADJOINING SURFACE. PANELS SHALL ONLY BE SELECTED FROM THE APPROVED PRODUCT LIST BELOW:

PRODUCT NAME	MANUFACTURER	PRODUCER SUPPLIER CODE
CAST–DWD	Pioneer Detectable, LLC	GEN130004
Cast–In–Place Tactile	ADA Solutions, Inc.	GEN100123
DURALAST	EJ USA, Inc.	GEN130020
Detectable Warning Paving Slab	StoneBilt Concepts	GEN100341
TekWay Dome–Tiles	StrongGo LLC	GEN100343
Tuftile Cast Iron Tile/Radius–Wedge (CIP)	Tuftile, Inc.	GEN150088

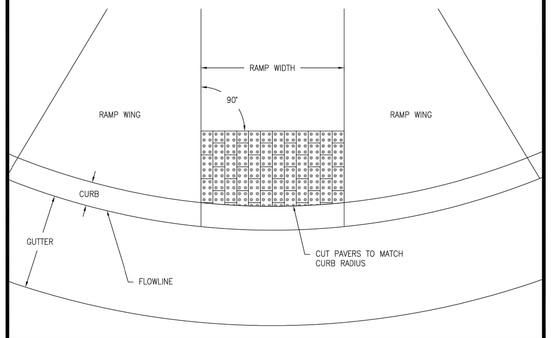
3. PANELS SHALL BE PLACED AS SHOWN, WITH DOME PATTERN IN A SQUARE GRID AND ALIGNED IN THE DIRECTION OF TRAVEL. A STEEL TEMPLATE SHALL BE USED TO ENSURE PROPER ALIGNMENT AND UNIFORM GRADE.
4. REMOVE THE PROPER AMOUNT OF CONCRETE WITHIN THE TEMPLATE FOR AN ACCURATE INSTALLATION. ONCE TO THE PROPER DEPTH, FLOAT THE AREA TO RECEIVE THE PANELS UNTIL A SMOOTH PASTE HAS DEVELOPED.
5. WET THE BACK SIDE OF EACH PANEL AND TROWEL SOME CONCRETE PASTE OR APPROVED BONDING AGENT OVER THE WET SURFACE FOR BETTER ADHERENCE.
6. SET THE FIRST PANEL ON THE FRESHLY PREPARED SURFACE. DO NOT PRESS DOWN HARD ON THE PANEL, BUT PREFERABLY TWIST FROM SIDE TO SIDE. SET PANEL WITH RUBBER MALLET TO PROPER DEPTH SO THAT THE BASE OF THE TRUNCATED DOME IS AT THE SAME ELEVATION AS THE ADJOINING RAMP SURFACE.
7. SET SUCCESSIVE PANELS WITH A TIGHT BUTT JOINT AGAINST THE PREVIOUSLY SET PANEL. PROVIDE A ⅛" GAP BETWEEN PANELS.
8. FLOAT FRESH CONCRETE AROUND PANELS. FINISH AND BROOM SURROUNDING CONCRETE AS SPECIFIED. CLEAN ANY CONCRETE OFF PANELS WITH A SPONGE.
9. PROVIDE 1" DEEP TOOL JOINTS AT CORNERS OF DETECTABLE WARNING AREA, AND TOOL AROUND PANELS WITH ⅜" RADIUS EDGER.
10. WHEN CUT PANELS ARE REQUIRED, CUT SECTIONS SHALL NOT SIGNIFICANTLY IMPACT OVERALL TRUNCATED DOMES PATTERN AND CUT DOMES SHALL BE BEVELED AT A 45–DEGREE ANGLE TO CREATE A SMOOTH TRANSITION.
11. ANY PANELS THAT ARE DAMAGED DURING TRANSPORT OR INSTALLATION WILL BE REJECTED AND SHALL NOT BE INSTALLED.
12. CLEAN OUT ⅜" JOINT(S) BETWEEN PANELS AND SEAL WITH EPOXY.
13. SETTING TRUNCATED DOME PANELS IN SAND BEDDING OR OTHER NON–CEMENTITIOUS BEDDING MATERIALS SHALL NOT BE ALLOWED.



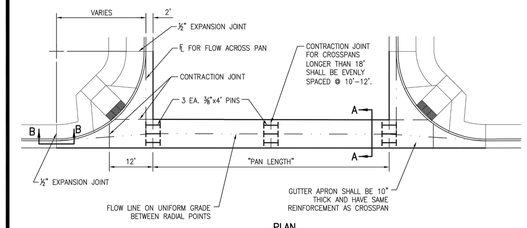
CURB RAMP WITH PANEL DETECTABLE WARNING AREA INSTALLATION	Issued: 05/2013
DOUGLAS COUNTY COLORADO	Revised: 09/2017
	Drawing No. SP.18b

Paver Installation Notes:

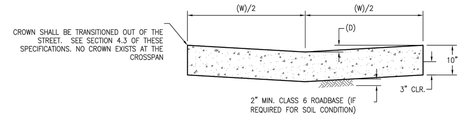
1. DETECTABLE WARNING PAVERS SHALL BE PREFABRICATED REDDISH INTEGRALLY COLORED TRUNCATED DOMES SURFACED CONCRETE OR MASONRY PAVERS. PAVERS SHALL MEET THE REQUIREMENTS OF ASTM C 902 OR ASTM C 936 AND COMPLY WITH ADA REQUIREMENTS.
2. PRIOR TO START OF WORK, CONTRACTOR SHALL SUBMIT, TO DOUGLAS COUNTY FOR APPROVAL, A SAMPLE PAVER AND DOCUMENTATION FROM THE MANUFACTURER. PAVERS SURFACE SHALL HAVE A MINIMUM OF 70% LIGHT REFLECTIVITY CONTRAST WITH THE ADJOINING SURFACE.
3. WELL FOR PAVERS SHALL BE ACCURATELY BLOCKED OUT TO ENSURE PROPER DEPTH, ALIGNMENT, AND UNIFORM GRADE. ONLY FULL WIDTH PAVERS SHALL BE USED TO OBTAIN SPECIFIED RAMP THROAT WIDTH.
4. PAVERS SHALL BE PLACED IN THE RUNNING PATTERN SHOWN, DOMES PLACED IN A SQUARE GRID AND ALIGNED IN THE DIRECTION OF TRAVEL. PAVERS SHALL BE INSTALLED SO THAT THE BASES OF THE TRUNCATED DOMES ARE AT THE SAME ELEVATION AS THE ADJOINING RAMP SURFACE.
5. SAND FOR BEDDING MATERIAL SHALL CONFORM TO ASTM C 33. SAND TO BE PLACED BETWEEN JOINTS SHALL CONFORM TO ASTM C 144.
6. BEDDING SAND SHALL BE SCREED TO THE APPROPRIATE DEPTH PRIOR TO THE PAVERS INSTALLATION. A PLATE VIBRATOR SHALL BE USED TO EMBED THE PAVERS INTO THE SAND. ANY PAVERS THAT ARE DAMAGED DURING TRANSPORTATION OR INSTALLATION WILL BE REJECTED AND SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
7. WHEN CUT PAVERS ARE REQUIRED, CUT SECTIONS SHALL NOT SIGNIFICANTLY IMPACT OVERALL TRUNCATED DOMES PATTERN AND CUT DOMES SHALL BE BEVELED AT A 45–DEGREE ANGLE TO CREATE A SMOOTH TRANSITION.
8. JOINT SPACING SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, BUT SHALL NOT BE MORE THAN ⅜". JOINTS SHALL BE FILLED COMPLETELY WITH SAND. EXCESS SAND SHALL BE REMOVED BY SWEEPING.



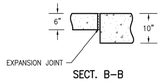
CURB RAMP WITH PAVER DETECTABLE WARNING AREA INSTALLATION	Issued: 05/2013
DOUGLAS COUNTY COLORADO	Revised: 09/2017
	Drawing No. SP.18c



PLAN



SECTION A–A
FIBERMESH MIXED AT 1½ LBS. / C.Y. CONCRETE.

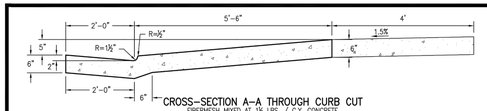


SECT. B–B

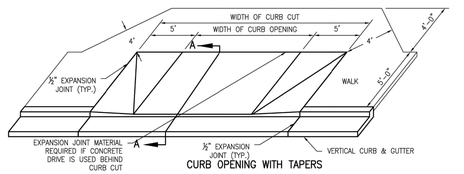
WIDTH (W)	DEPTH (D)	THICKNESS (T)
8'	2"	10"
10'	2½"	10"

NOTE: LOCAL STREET INTERSECTIONS REQUIRE AN 8" CROSSPAN. COLLECTOR STREET INTERSECTIONS REQUIRE AN 10" CROSSPAN. CROSSPANS ARE NOT ALLOWED AT ANY ARTERIAL STREET INTERSECTIONS.

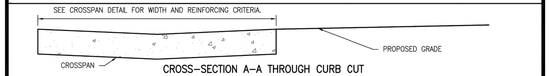
CROSSPAN	Issued: 05/2013
DOUGLAS COUNTY COLORADO	Revised: 09/2017
	Drawing No. SP.21



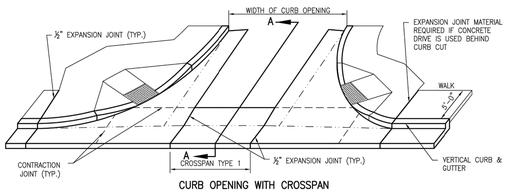
CROSS–SECTION A–A THROUGH CURB CUT
FIBERMESH MIXED AT 1½ LBS. / C.Y. CONCRETE.



CURB OPENING WITH TAPERS



CROSS–SECTION A–A THROUGH CURB CUT



CURB OPENING WITH CROSSPAN

NOTES:
1. BACK OF CURB CUT EXTENDS TO BACK OF WALK OR BACK OF BICYCLE PATH. IF NO WALK IS PRESENT, EXTEND BACK OF CURB CUT TO 5'–6" BEHIND FLOWLINE OR TO R.O.W. LINE, WHICHEVER IS GREATER.
2. COUNTY SHALL APPROVE LOCATION OF CURB CUT BEFORE CONSTRUCTION.
3. CURB OPENINGS OF 30' OR MORE MUST BE CONSTRUCTED WITH A MINIMUM 20' RADIUS CURB RETURN.
4. DESIGN ENGINEER MUST DEMONSTRATE THAT STREET DRAINGE STAYS WITHIN THE STREET RIGHT–OF–WAY.

CURB OPENING	Issued: 05/2013
DOUGLAS COUNTY COLORADO	Revised: 09/2017
	Drawing No. SP.22

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H–SCALE	N/A
V–SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

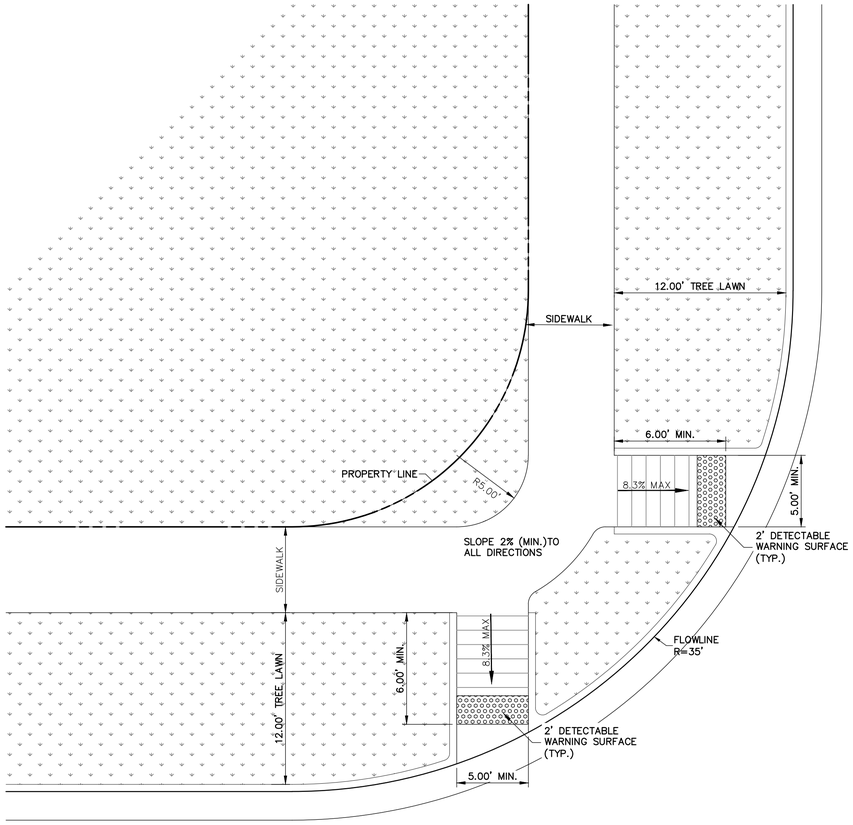
COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

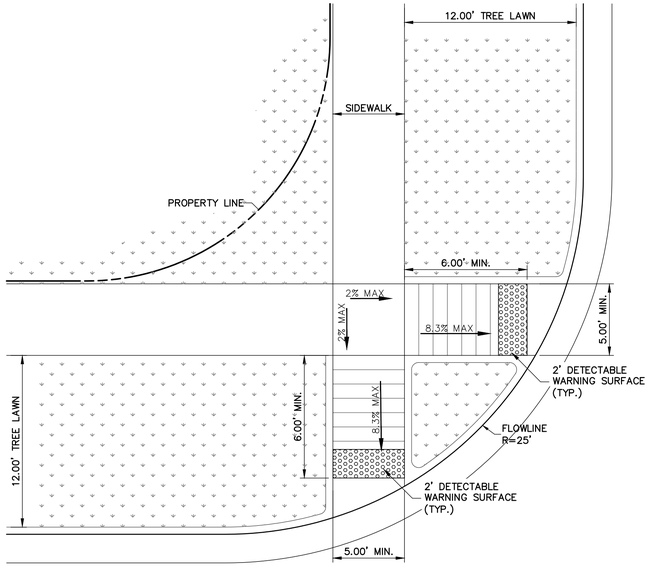
RIDGEGATE SOUTHWEST VILLAGE FILING 1
STORM SEWER & ROADWAY DETAILS–PHASE 1B

SHEET 97 OF 270

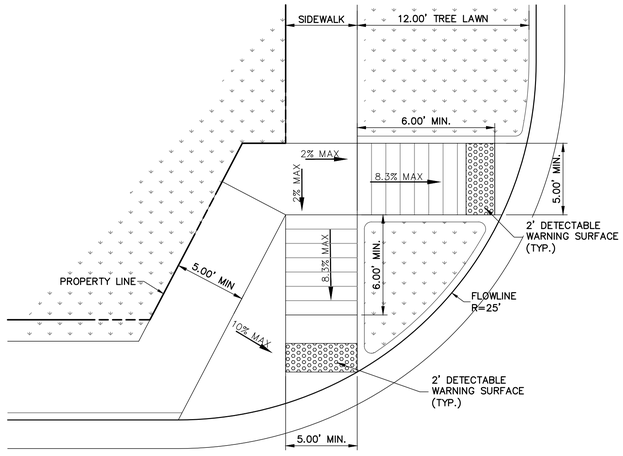
JOB NO. 15950.01



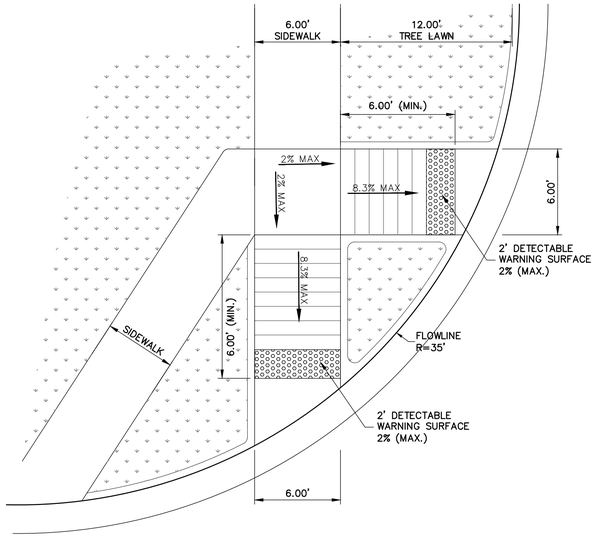
RESIDENTIAL CURB RAMP R=35'
(DETACHED WALK)



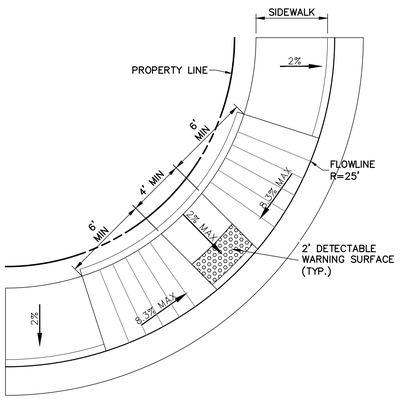
RESIDENTIAL CURB RAMP R=25'
(DETACHED WALK)



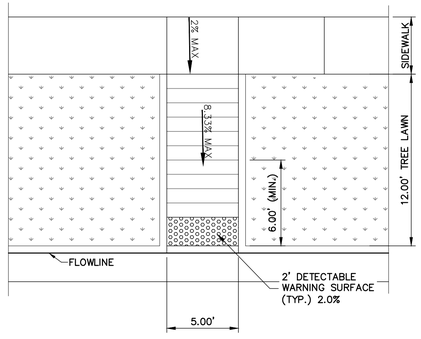
RESIDENTIAL CURB RAMP R=25'
(ATTACHED AND DETACHED WALK)



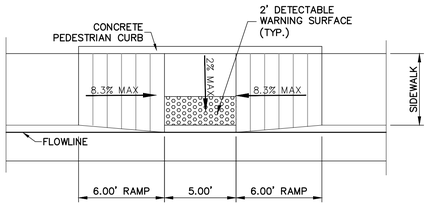
RESIDENTIAL CURB RAMP R=35'
(ATTACHED AND DETACHED WALK)



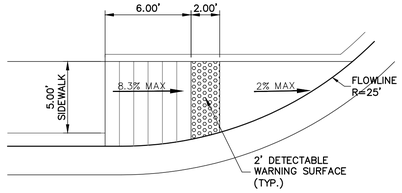
RESIDENTIAL CURB RAMP R=25'
(ATTACHED WALK)



RESIDENTIAL CURB RAMP MID-BLOCK
(DETACHED WALK)



RESIDENTIAL CURB RAMP MID-BLOCK
(ATTACHED WALK)



DIRECTIONAL RAMP R=25'
(ATTACHED WALK)

GENERAL NOTES

1. THE DETECTABLE WARNINGS SHALL BE INSTALLED AT SIDEWALK TO STREET TRANSITIONS. THEY SHALL HAVE A TRUNCATED DOME SURFACE. THE DOMES SHALL BE IN A SQUARE GRID PATTERN AND ALIGNED WITH PEDESTRIAN TRAFFIC.
2. ALL DETECTABLE WARNING SURFACES SHALL START A MINIMUM OF 6 INCHES FROM THE FLOWLINE OF THE CURB. MAXIMUM DISTANCE FROM FLOWLINE TO DETECTABLE WARNING SURFACE VARIES.
3. THE RAMP SLOPE AND DETECTABLE WARNING SURFACE SHALL BE 8.3% OR FLATTER.
4. DRAINAGE STRUCTURES, TRAFFIC SIGNAL EQUIPMENT, OR OTHER OBSTRUCTIONS SHALL NOT BE INSTALLED IN THE CURB RAMP OR TURNING SPACE AREAS.
5. CURB RAMPS (EXCLUDING FLARED SIDES OR BLENDED TRANSITIONS) SHALL BE WHOLLY CONTAINED WITHIN THE WIDTH OF THE CROSSWALK AND/OR THE PEDESTRIAN STREET CROSSING THEY SERVE.
6. ALL CURB RAMP JOINTS AND GRADE BREAKS SHALL BE FLUSH (0"±⅛ "). THE JOINT BETWEEN THE ROADWAY SURFACE AND GUTTER PAN SHALL BE FLUSH.
7. TO AVOID CHASING GRADE INDEFINITELY WHEN TRAVERSING THE HEIGHT OF CURB, THE RAMP LENGTH SHALL NOT EXCEED 15 FEET. ADJUST THE RAMP SLOPE AS NEEDED TO PROVIDE ACCESS TO THE MAXIMUM EXTENT TECHNICALLY FEASIBLE.
8. THE CHANGE IN GRADE AT THE BOTTOM OF CURB RAMP AND ADJOINING ROAD SURFACE SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 13.33%. THE COUNTER SLOPE OF THE GUTTER OR ROAD AT THE FOOT OF THE CURB RAMP, TURNING SPACE, OR BLENDED TRANSITION SHALL NOT EXCEED 5.0%.
9. FLARED SIDE SLOPES MAY EXCEED 10% ONLY WHERE THEY ABUT A NON-WALKABLE SURFACE OR THE ADJACENT CIRCULATION PATH IS BLOCKED.
10. THE STANDARD TURNING SPACE IS 4 FEET BY 4 FEET WHERE THE TURNING SPACE IS CONSTRAINED, THE TURNING SPACE SHALL BE 4 FEET MINIMUM BY 5 FEET MINIMUM. THE 5 FOOT DIMENSION SHALL BE PROVIDED IN THE DIRECTION OF THE RAMP RUN.

Know what's **below.**
Call before you dig.

ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

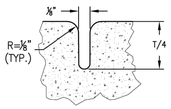
J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

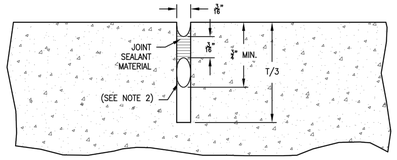
H-SCALE	N/A
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
STORM SEWER & ROADWAY DETAILS-PHASE 1B

SHEET 98 OF 270
JOB NO. 15950.01

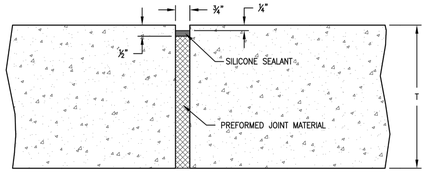


CONTRACTION OR WEAKEN PLANE JOINT
N.T.S.



NOTE: WASH & BLOW OUT WITH FORCED AIR UNTIL DRY BEFORE APPLYING SEALANT MATERIAL.

SAWED JOINT
N.T.S.



EXPANSION JOINT
N.T.S.

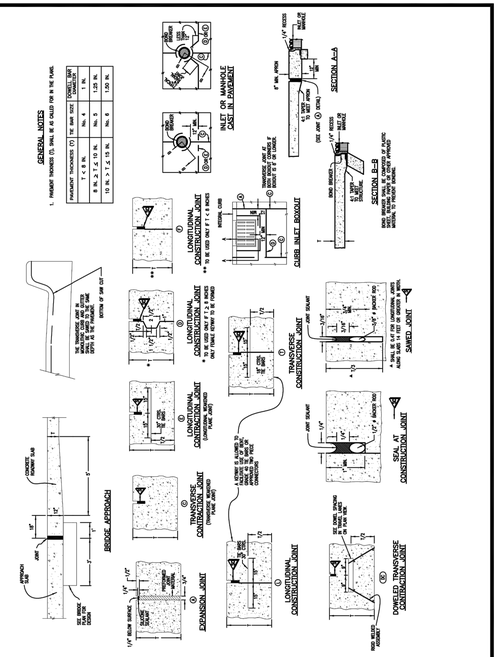
NOTES:

1. JOINT SEALANT MATERIAL MUST MEET ASTM 3406.
2. ¾" DIA. BACKER ROD.

CONCRETE JOINTS

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.31**

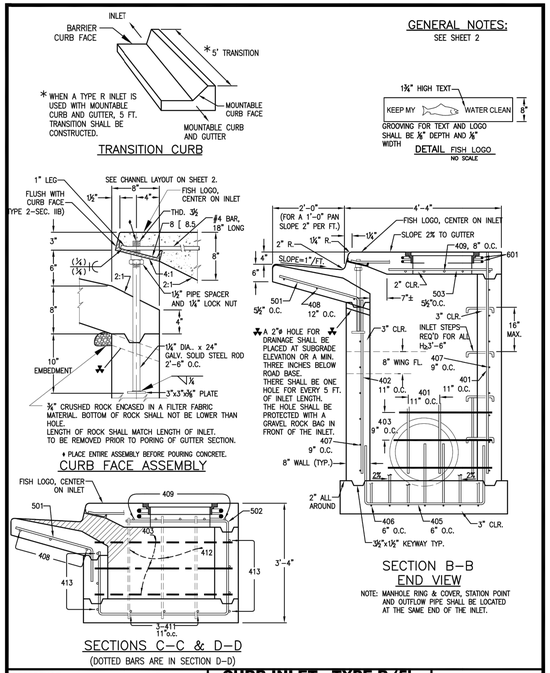


REFERENCE:
CDOT M & S STANDARDS
M-412-1

CONCRETE JOINTS

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.32**

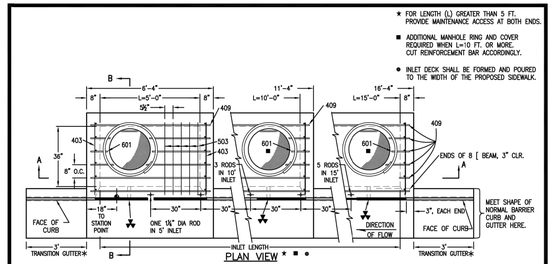


REFERENCE:
CDOT M & S STANDARDS
M-604-12

CURB INLET - TYPE R (5', 10' OR 15' IN LENGTH)

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.34a**



REFERENCE:
CDOT M & S STANDARDS
M-604-12

CURB INLET - TYPE R (5', 10' OR 15' IN LENGTH)

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.34b**

MARK	BAR # OR SIZE	O.C. SPACING	TYPE	ALL INLETS L = 5 FT. NO. REQ'D.	ALL INLETS L = 5 FT. LENGTH	INLETS: H ≤ 5 FT. L = 10 FT. NO. REQ'D.	INLETS: H ≤ 5 FT. L = 10 FT. LENGTH	INLETS: H ≤ 5 FT. L = 15 FT. NO. REQ'D.	INLETS: H ≤ 5 FT. L = 15 FT. LENGTH	INLETS: H > 5 FT. L = 10 FT. NO. REQ'D.	INLETS: H > 5 FT. L = 10 FT. LENGTH	INLETS: H > 5 FT. L = 15 FT. NO. REQ'D.	INLETS: H > 5 FT. L = 15 FT. LENGTH
401	4	11"	II	15	★	21	★	26	★	11	★	11	★
402	4	11"	II	7	★	13	★	18	★	7	★	7	★
403	4	9"	II	★	4'-0"	★	4'-0"	★	4'-0"	★	4'-0"	★	4'-0"
405	4	6"	VI	11	6'-10"	21	6'-10"	31	6'-10"	11	6'-10"	11	6'-10
406	4	6"	VIII	7	6'-10"	7	13'-10"	7	18'-10"	7	8'-10"	7	8'-10"
407	4	9"	II	★	5'-10"	★	10'-10"	★	15'-10"	★	5'-10"	★	5'-10"
408	4	12"	II	3	6'-10"	3	11'-10"	3	16'-0"	3	11'-10"	3	16'-0"
409	4	8"	II	6	5'-10"	8	10'-10"	6	15'-10"	6	10'-10"	6	15'-10"
410	4	11"	VII							3	★	3	★
411	4	11"	II							3	5'-2"	3	10'-2"
412	4	11"	II							3	2'-9"	3	2'-9"
413	4	9"	II							7	10'-10"	7	15'-10"
501	5	5½"	IV	11	3'-4"	22	3'-4"	33	3'-4"	22	3'-4"	33	3'-4"
502	5	5½"	III							11	11'-5"	17	11'-5"
503	5	5½"	II	5	3'-6"	16	3'-6"	27	3'-6"	6	3'-6"	6	3'-6"
504	5	5½"	IX									5	8'-4"
601	6	2½"	V	2	8'-10"	2	8'-10"	2	8'-10"	2	8'-10"	4	8'-10"
■8(8.5				1	5'-10"	1	10'-10"	1	15'-10"	1	10'-10"	1	15'-10"
				2 BARS, 1 ROD	—	★ BARS, 3 RODS	—	■ BARS, 5 RODS	—	★ BARS, 3 RODS	—	■ BARS, 5 RODS	—

* VARIABLE, REFER TO TABLE TWO.
■ INCLUDE #4, 18 IN. BARS (SEE CHANNEL LAYOUT).

REGULAR INLETS | DROP BOX INLETS

TABLE ONE ~ BAR LIST FOR CURB INLETS, TYPE "R"

'H'	LENGTH 401	402	410	NO. REQ'D. REGULAR 403	407	NO. REQ'D. DROP BOX 403	407	L=5' CONC. CU. YDS.	L=5' STEEL LBS.	L=10' CONC. CU. YDS.	L=10' STEEL LBS.	L=15' CONC. CU. YDS.	L=15' STEEL LBS.
3'-0"	2'-8"	1'-8"		10	7			3.2	285	5.3	497	7.4	706
3'-6"	3'-2"	2'-2"		10	7			3.4	305	5.7	528	7.9	747
4'-0"	3'-8"	2'-8"		12	9			3.7	326	6.0	559	8.4	786
4'-6"	4'-2"	3'-2"		12	9			3.9	334	6.4	571	8.8	803
5'-0"	4'-8"	3'-8"		14	11			4.1	354	6.7	602	9.3	844
5'-6"	5'-2"	4'-2"	3'-5"	16	13	15	6	4.4	375	6.0	607	7.4	850
6'-0"	5'-8"	4'-8"	3'-11"	16	13	16	6	4.6	382	6.2	616	7.6	860
6'-6"	6'-2"	5'-2"	4'-5"	16	15	16	8	4.8	402	6.4	637	7.8	880
7'-0"	6'-8"	5'-8"	4'-11"	20	17	19	10	5.0	423	6.6	654	8.0	897
7'-6"	7'-2"	6'-2"	5'-5"	20	17	20	10	5.3	430	6.9	664	8.3	907
8'-0"	7'-8"	6'-8"	5'-11"	22	19	22	12	5.5	451	7.1	684	8.5	927
8'-6"	8'-2"	7'-2"	6'-5"	24	21	23	14	5.7	471	7.3	702	8.7	944
9'-0"	8'-8"	7'-8"	6'-11"	24	21	24	14	6.0	479	7.6	711	9.0	954
9'-6"	9'-2"	8'-2"	7'-5"	26	23	26	16	6.2	499	7.8	732	9.2	974
10'-0"	9'-8"	8'-8"	7'-11"	28	25	27	18	6.4	520	8.0	749	9.4	992
10'-6"	10'-2"	9'-2"	8'-5"	28	25	28	18	6.7	527	8.3	759	9.7	1001
11'-0"	10'-8"	9'-8"	8'-11"	30	27	30	20	6.9	547	8.5	779	9.9	1022

NOTES: FOR L=5 FT., L=10 FT., AND L=15 FT.
REGULAR INLETS: TOTAL QUANTITIES NEEDED ARE OUTSIDE THE HEAVY BLACK LINE.
DROP BOX INLETS: TOTAL QUANTITIES NEEDED ARE INSIDE THE HEAVY BLACK LINE.

STEEL WEIGHTS DO NOT INCLUDE STRUCTURAL STEEL CHANNEL.

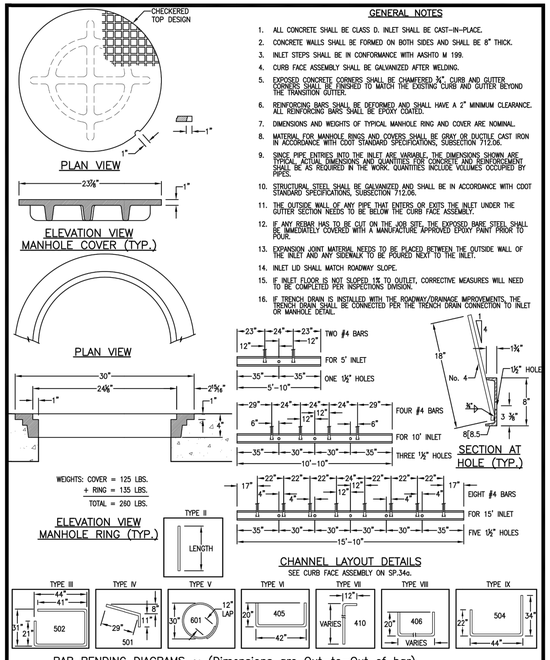
TABLE TWO ~ BARS AND QUANTITIES VARIABLE WITH "H"

REFERENCE:
CDOT M & S STANDARDS
M-604-12

CURB INLET - TYPE R (5', 10' OR 15' IN LENGTH)

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.34c**



REFERENCE:
CDOT M & S STANDARDS
M-604-12

CURB INLET - TYPE R (5', 10' OR 15' IN LENGTH)

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.34d**

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	DATE	BY

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

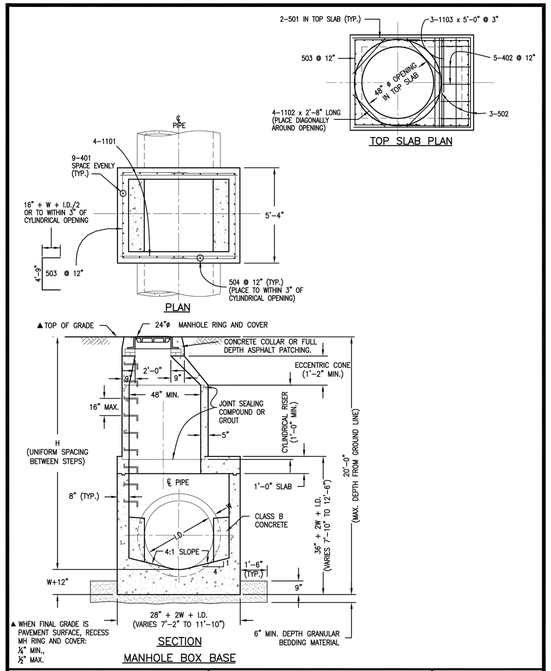
AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

COLORADO REGISTERED PROFESSIONAL ENGINEER 36742 — DATE

H-SCALE	N/A
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
STORM SEWER & ROADWAY DETAILS–PHASE 1B

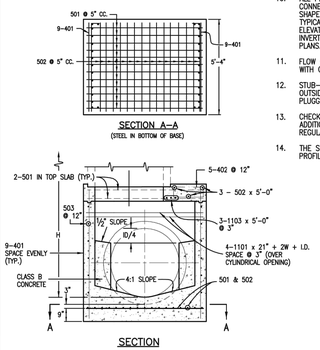
SHEET 99 OF 270
JOB NO. 15950.01



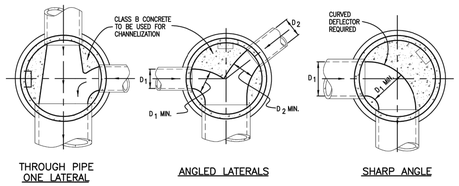
REFERENCE:	MANHOLES	Issued: 05/2013
CDOT M & S STANDARDS M-604-20	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. SP.43a

GENERAL NOTES

1. SINCE ALL PIPE ENTRIES INTO THE BASE ARE VARIABLE, THE DIMENSIONS SHOWN ARE TYPICAL. ACTUAL DIMENSIONS AND QUANTITIES FOR CONCRETE AND REINFORCEMENT SHALL BE AS REQUIRED IN THE WORK.
2. THE PRECAST FLAT TOP MAY BE USED ON ANY MANHOLE. THE ECCENTRIC CONE MAY BE USED WHEN THE MANHOLE "H" HEIGHT IS AT LEAST 8'.
3. THE MH RING (FRAME) SHALL BE SET ON CONCRETE GRADE RINGS. THE FRAME SHALL BE SURROUNDED WITH A CONCRETE COLLAR IN UNPAVED AREA AND CONCRETE PAVEMENT, OR FULL DEPTH ASPHALT IN ASPHALT PAVEMENT. SEE DETAILS ON SHEETS 2 AND 3.
4. DESIGN OF BOX BASE IS BASED ON STRAIGHT RUNS OF CONDUIT OR CHANGE IN DIRECTION OF LESS THAN 45°. SPECIAL DESIGN IS REQUIRED FOR 45° OR GREATER.
5. PRECAST MANHOLES AND REINFORCEMENT SHALL CONFORM TO ASTM C 478 (AASHTO M 199).
6. CAST-IN-PLACE MANHOLES SHALL BE CLASS D CONCRETE.
7. STEPS SHALL BE REQUIRED WHEN THE MANHOLE DEPTH EXCEEDS 3'-6" AND SHALL BE IN ACCORDANCE WITH AASHTO M 199.
8. ALL REINFORCING STEEL SHALL HAVE A MINIMUM YIELD STRENGTH OF 60,000 PSI. VERTICAL STEEL SHALL BE PLACED AT L. OF WALL. ALL BARS SHALL HAVE A 2" MINIMUM CLEARANCE. ALL REINFORCING BARS SHALL BE EPOXY COATED.
9. IF ANY REBAR HAS TO BE CUT ON THE JOB SITE, THE EXPOSED BARE STEEL SHALL BE IMMEDIATELY COVERED WITH A MANUFACTURE APPROVED EPOXY PAINT PRIOR TO POUR.
10. ALL PIPE ENTRIES INTO THE BASE OF MANHOLE SHALL BE CONNECTED BY OPEN CHANNELIZATION ADJUSTED FOR PIPE SIZE, SHAPE, SLOPE, AND DIRECTION OF FLOW. DETAILS SHOWN ARE TYPICAL FOR INSTALLATIONS WITH ALL INVERTS OF SAME RELATIVE ELEVATION. FOR EXCESSIVE ELEVATION DIFFERENCE BETWEEN INVERTS, SPECIAL BASE/CHANNEL DETAILS WILL BE SHOWN ON THE PLANS.
11. FLOW CHANNELS AND INVERTS SHALL BE FORMED BY SHAPING WITH CLASS B CONCRETE.
12. STUB-OUTS SHALL EXTEND A MINIMUM OF 1 PIPE SECTION BEYOND OUTSIDE WALL SURFACE OF MANHOLE AND BE SATISFACTORILY PLUGGED.
13. CHECK WITH THE LOCAL GOVERNMENT AUTHORITY FOR ANY ADDITIONAL SANITARY SEWER SPECIFICATIONS, DETAILS, OR REGULATIONS.
14. THE SLOPE OF THE MANHOLE COVER SHALL MATCH THE ROADWAY PROFILE AND CROSS SLOPE.



REFERENCE:	MANHOLES	Issued: 05/2013
CDOT M & S STANDARDS M-604-20	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. SP.43b



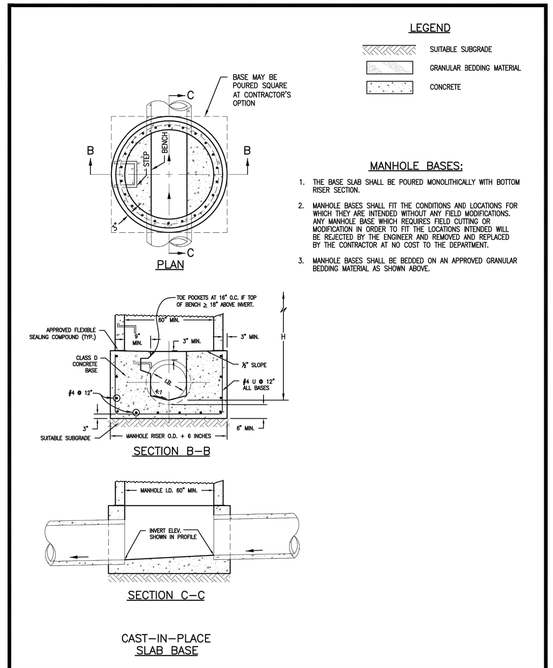
TYPICAL CHANNELIZATION DETAILS

QUANTITIES FOR CONCRETE MANHOLE BOX BASE

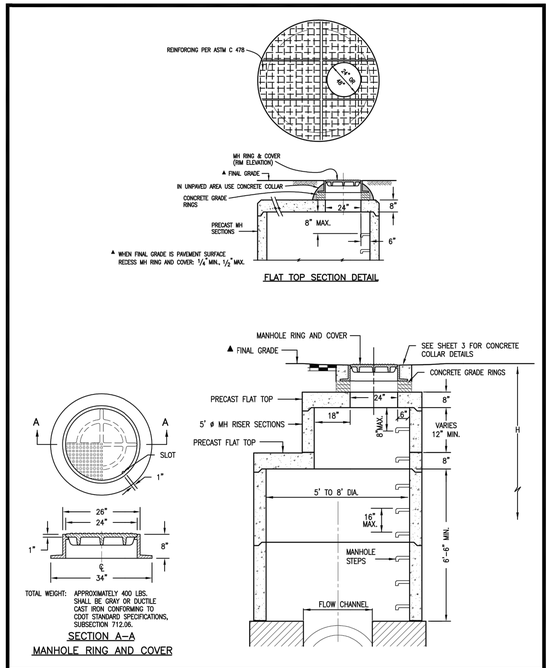
MARK	SIZE	TYPE	WT. #/FT.	BARS	I.D. 60"	66"	72"	84"	96"	FORMULAS
401	4	I	0.668	NO. REQ'D.	18	18	18	18	18	401
				LENGTH	8'-8"	9'-3"	9'-10"	11'-0"	12'-2"	BAR LENGTH = 32"+2W+I.D.
				WEIGHT #	104.2	111.2	118.2	132.3	146.3	
402	4	III	0.668	NO. REQ'D.	5	5	5	5	5	402
				LENGTH	6'-0"	6'-7"	7'-2"	8'-4"	9'-6"	BAR LENGTH = I.D. + 2W
				WEIGHT #	20.0	22.0	23.9	27.8	31.7	
501	5	I	1.043	NO. REQ'D.	17	17	17	17	17	501
				LENGTH	8'-0"	8'-7"	9'-2"	10'-4"	11'-6"	BAR LENGTH = 24" + I.D. + 2W
				WEIGHT #	141.8	152.2	162.5	183.2	203.9	
502	5	I	1.043	NO. REQ'D.	23	25	26	29	32	502
				LENGTH	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	NUMBER BARS REQ'D. = $3+\left(\frac{24+I.D.+2W}{@\ 5"}+1\right)$
				WEIGHT #	119.9	130.4	135.6	151.2	166.9	
503	5	II	1.043	NO. REQ'D.	16	18	18	20	24	503
				LENGTH	13'-5"	14'-0"	14'-7"	15'-9"	16'-11	NUMBER BARS REQ'D. = $2\left(\frac{13+I.D.+2W}{@\ 12"}+1\right)$
				WEIGHT #	223.9	262.8	273.8	328.5	423.5	BAR LENGTH = 4'-9"+2(16"+W+I.D./2)
504	5	I	1.043	NO. REQ'D.	14	14	16	18	20	504
				LENGTH	8'-8"	9'-3"	9'-10"	11'-0"	12'-2"	NUMBER BARS REQ'D. = $2\left(\frac{2W+I.D.-4}{@\ 12"}+1\right)$
				WEIGHT #	126.6	135.1	164.1	206.5	253.8	BAR LENGTH = 32"+2W+I.D.
1101	11	I	5.313	NO. REQ'D.	4	4	4	4	4	1101
				LENGTH	7'-9"	8'-4"	8'-11"	10'-1"	11'-3"	BAR LENGTH = 21" + I.D. + 2W
				WEIGHT #	164.7	177.1	189.5	214.3	239.1	
1102	11	I	5.313	NO. REQ'D.	4	4	4	4	4	BENDING
				LENGTH	2'-8"	2'-8"	2'-8"	2'-8"	2'-8"	TYPE I STRAIGHT
				WEIGHT #	56.7	56.7	56.7	56.7	56.7	TYPE II 4'-9" 16"+W+I.D./2
1103	11	I	5.313	NO. REQ'D.	3	3	3	3	3	TYPE III 12" 12" 7" I.D.+2W-38"
				LENGTH	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	
				WEIGHT #	79.7	79.7	79.7	79.7	79.7	
REINFORCING STEEL TOTAL #					1,037.5	1,127.2	1,204.0	1,380.2	1,601.6	
CONCRETE – CUBIC YARDS – TOTAL					6.6	7.3	8.0	9.5	11.1	

NOTE: QUANTITIES ARE BASED ON SAME SIZE PIPE ENTRANCE TO AND EXIT FROM, BASE AND A 4 FT. MANHOLE ENTRANCE INTO TOP SLAB OF BASE.

REFERENCE:	MANHOLES	Issued: 05/2013
CDOT M & S STANDARDS M-604-20	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. SP.43c



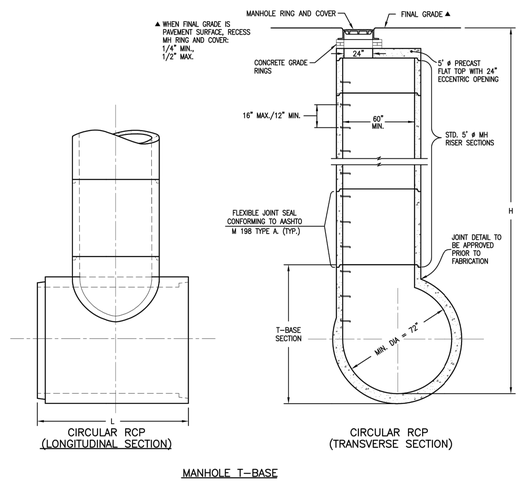
REFERENCE:	MANHOLES	Issued: 05/2013
CDOT M & S STANDARDS M-604-20	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. SP.43d



REFERENCE:	MANHOLES	Issued: 05/2013
CDOT M & S STANDARDS M-604-20	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. SP.43e

T–BASE MANHOLES:

1. THE T–BASE SECTION SHALL BE SHOP–FABRICATED FOR DELIVERY TO THE CONSTRUCTION SITE AS A COMPLETE UNIT.
2. THESE DETAILS SHALL ONLY BE CONSTRUED TO SHOW CONCEPTUAL AND STANDARD DIMENSIONAL REQUIREMENTS FOR TYPE T–BASE MANHOLES. THE CONTRACTOR SHALL FURNISH DETAILED SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION. THE DETAILS SHOWN HEREIN APPLY ONLY TO 72–INCH DIAMETER PIPE AND LARGER.
3. EXCEPT FOR CLASS OF PIPE, SPECIFICATIONS TO BE MET FOR THE MANHOLE SHALL BE THE SAME AS THOSE REQUIRED FOR THE ADJOINING PIPE CULVERT OR SEWER.
4. THE T–BASE SECTION SHALL MAINTAIN ITS INTERNAL SHAPE AND FLOW AREA WITH ANY GROUTING, ETC. APPLIED SO AS TO NOT DISTURB THE NORMAL FLOW OR REDUCE THE AREA.



MANHOLE T–BASE

REFERENCE:	MANHOLES	Issued: 05/2013
CDOT M & S STANDARDS M-604-20	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. SP.43f

UNTIL SUCH TIME AS THESE PLANS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H–SCALE	N/A
V–SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

Know what's **below.**
Call before you dig.

ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

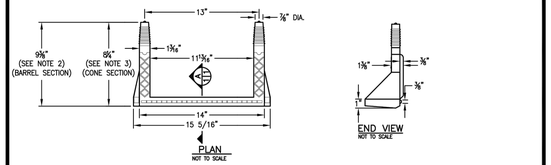
COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

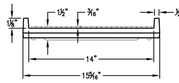
DATE

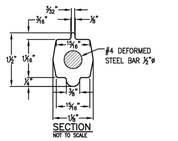
RIDGECATE SOUTHWEST VILLAGE FILING 1
STORM SEWER & ROADWAY DETAILS–PHASE 1B

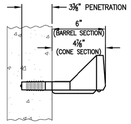
SHEET 100 OF 270

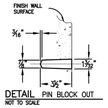
JOB NO. 15950.01











POLYPROPYLENE REINFORCED PLASTIC STEP

GENERAL NOTES

1. ASTM SPECIFICATIONS:
   A. ASTM C-478
   B. ASTM A-615 GRADE 60 (STEEL REBAR).
   C. ASTM 2146-69, TYPE III, GRADE 16906 (POLYPROPYLENE).
2. STEPS INSTALLED IN MANHOLE BARREL SECTIONS OR VERTICAL WALLS OF STRUCTURES SHALL HAVE A 9⅝" LEG AND SHALL PROJECT FROM THE WALL 6".
3. STEPS INSTALLED IN MANHOLE CONE SECTIONS SHALL HAVE AN 8⅛" LEG AND SHALL PROJECT FROM THE WALL 4⅝".
4. ALL STEPS SHALL HAVE A PENETRATION DEPTH INTO THE WALL OF 3⅜".
5. STEPS SHALL BE INSTALLED BY THE "PRESS-FIT" METHOD UTILIZING A SPECIALLY TAPERED PIN TO FORM THE INSERT HOLE AS SHOWN, FOLLOWING MANUFACTURER'S RECOMMENDED PROCEDURE AND SHALL NOT BE GROUTED IN PLACE.
6. INSTALLED STEPS SHALL BE CAPABLE OF WITHSTANDING A PULL OUT FORCE OF 2500 LB. PER LEG FOR A MINIMUM PERIOD OF TWO MINUTES.
7. PINS MUST BE SMOOTH AND CONTINUOUSLY TAPERED. DIMENSIONS OF THE PIN AND THE INSERTED PORTION OF THE MANHOLE STEP ARE TYPICAL ONLY. DOUGLAS COUNTY INSTALLATIONS REQUIRE A MATCHED COMBINATION OF A TAPERED INSERT PIN AND MANHOLE STEP, AS RECOMMENDED OR REQUIRED BY SPECIFIC MANUFACTURER OF THE STEP TO BE USED.
8. THIS STEP CAN ALSO BE USED IN TOE POCKET INSTALLATIONS PROVIDED 5" TOE CLEARANCE IS ALLOWED.

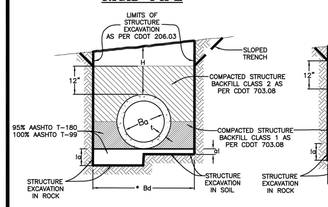
REFERENCE:
CITY AND COUNTY OF DENVER
DRAWING NUMBER S-750

MANHOLE AND INLET STEPS

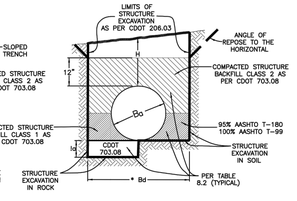
DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.45**

RIGID PIPE



FLEXIBLE PIPE



MAXIMUM HEIGHT OF FILL OVER TOP OF PIPE IN FEET

REINFORCED CONCRETE

Ba in.	Min. Bd in.	CLI INCH CRACK D-LOAD 1350	2000	3000
	**	PIPE CLASS III	V	V
18	35	19	28	43
24	42	18	28	42
30	50	18	28	42
36	59	18	27	41
42	68	18	27	41
48	78	18	27	41
54	89	17	26	40
60	98	17	26	40
66	108	17	26	40
72	117	17	26	40
78	125	17	26	40
84	135	17	26	40
90	154	17	26	40
96	163	17	26	40
108	173	17	26	40
120	191	17	26	40
132	208	17	26	40
144	224	17	26	40

** Based on Bd=1.33(Ba+2t). Wall thickness can vary between manufacturers.

STEEL - 2 2/3" x 1/2" CORRUGATIONS

Ba in.	Bd ft.	H ABOVE TOP OF PIPE IN FEET 1-15	16-20	21-25	26-30	31-35	36-40
		THICKNESS IN INCHES					
18-48	4-7	.064	.064	.064	.064	.064	.064
54	7.50	.079	.079	.079	.079	.079	.079
60	8.00	.079	.079	.079	.079	.109	.109
66	8.50	.079	.079	.109	.109	.138	.138
72	9.00	.079	.109	.109	.138	.168	.168
78	9.50	.109	.138	.138	.168		
84	10.00	.109	.138	.168			

LEGEND

H = Height of fill over top of pipe
Ba = Inside diameter (I.D.) of pipe
* Bd = Trench Width
t = Wall thickness of pipe
CLSM = Controlled Low Strength Material
c = Loose granular bedding, as follows:
  c=3" for Flexible Culverts in Soil.
  c=6" for Culvert in Soil.
  c=12" for Culvert in Rock.

* TRENCH WIDTH:
RCP: Bd = Ba. of 1.33(Ba+2t), or (Ba+2)+12" (Per AASHTO Section 17)
CSP: Bd = Ba. of Ba+4 (Per AASHTO Section 12)

1. Bedding material for SOIL shall be Structural Backfill Class 1 or 2.
2. Bedding material for ROCK shall be Structural Backfill Class 1.

GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS APPLICABLE TO THE PROJECT.
2. ALL TRENCH INSTALLATIONS SHALL BE IN ACCORDANCE WITH OSHA AND COLORADO DEPARTMENT OF TRANSPORTATION REGULATIONS.
3. THE USE OF NON-REINFORCED CONCRETE PIPE WILL NOT BE ALLOWED IN DOUGLAS COUNTY.

RCP DESIGN CRITERIA

Safety Factor = Per ASTM C76
Soil Weight = 120 lb. per cu. ft.
Bedding = Type 2

ALL UTILITY REPAIRS MUST BE BACKFILLED WITH CLSM. SEE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS MANUAL FOR SPECIFIC DETAILS.

CSP DESIGN CRITERIA

3"x1" CORRUGATIONS: 60 TO 84 Pipe shall be .064" thick (16 gauge) to H=40 ft.

Soil Weight = 120 lb. per cu. ft.
Safety Factor for Seam Strength = 2.00
Buckling Stress Level = 1/2 Yield Strength
Load Factor (Backfill) = 95% Standard Density, AASHTO-T 99 (K=0.86)

NOTE: All trenching shall comply with all State, Federal and O.S.H.A. safety requirements. It will be the responsibility of the Contractor to meet all safety requirements.

TO BE USED IN OPEN FIELDS OR PRIOR TO PAVING ROADS

PIPE INSTALLATION IN TRENCH

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.46a**

NOTES:

1. This trench backfill detail specifies requirements in addition to those specified in the latest edition of the Colorado Department of Transportation's Standard Specifications for Road and Bridge Construction.
2. A construction traffic control plan shall be submitted to and approved by Douglas County prior to issuance of construction permits in the County right-of-way.
3. Trench shall be braced or shored as necessary for the safety of the workers and protection of other utilities or structures in accordance with applicable local, state and federal safety regulations.
4. The trench width shall be confined to those minimum dimensions, which will permit proper installation and acceptable pipe loading, as established by current local, state and federal Safety regulations.
5. Backfill compaction requirements: Minimum density will be determined in accordance with AASHTO T 99 or T 180 as defined by CDOT Standard Specifications Section 203.07 and CDOT 703.03. Except for CLSM.
6. Full depth asphalt can be used as an alternative to base course.
7. Pavement edges shall be saw-cut. Edges shall be tack coated prior to patching.
8. All storm sewers shall be constructed so that a minimum cover is maintained to withstand AASHTO HS-20 loading on the pipe. The minimum cover to withstand live loading depends upon the pipe size, type and class, and soil bedding condition, but shall be not less than 1-foot at any point along the pipe. Other factors that affect the depth of the pipe are hydraulic grade line elevations, inlet depths, adjacent utilities or utility crossings, including water and sewer services lines along residential streets, and connections to existing storm sewer systems. The roadway subgrade, which supports the pavement section is typically plowed to a certain depth, moisture treated and compacted prior to the placement of the sub-base, base course, and surfacing. There are also instances where the subgrade material must be excavated and replaced or treated to a certain depth to mitigate swelling soils. These efforts can impact the storm sewer system if it has not been designed with adequate depth. The design engineer shall use the best information available, including pavement design or soils reports (if available) to ensure that storm sewer pipes have adequate depth.
9. Changes in design criteria will require compensating change in pipe design.
10. When pipe sewer is to be extended or replaced with pipe of different material, the connections shall conform to the detail shown on plans or be approved through Douglas County Engineering.
11. When two or more conduits are laid side-by-side, they shall be placed so that they are ½ outside diameter, or ½ outside span, or 3' apart, whichever is less. However, if end sections are used, the minimum spacing shall be 1' between the outside edge of end sections.
12. TRENCH INSTALLATION (per OSHA Standards):
    a. Trenches over 5 feet in depth shall be either shored or the trench walls shall be sloped no steeper than 3:1 to the angle of repose. If sloped, the bottom of the slope shall be a minimum of 1 foot above the top of the pipe.
    b. Shoring will be required when the bottom of the slope is more than 3 feet above the bottom of the trench.
    c. All sheeting or shoring to be removed.
13. CLSM may be used in place of Structural Backfill.
14. CLSM shall not exceed a strength over 1000 p.s.i.

REFERENCE: Douglas County Drainage Manual and Colorado Department of Transportation "M" Standards.

TO BE USED IN OPEN FIELDS OR PRIOR TO PAVING ROADS

PIPE INSTALLATION IN TRENCH NOTES

DOUGLAS COUNTY COLORADO

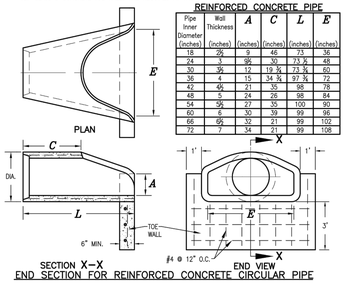
Issued: 05/2013
Revised:
Drawing No. **SP.46b**

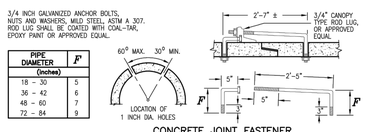
GENERAL NOTES

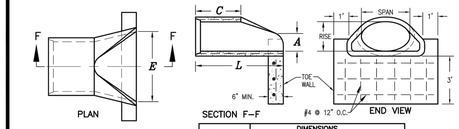
1. DIMENSIONS OF END SECTIONS MAY VARY SLIGHTLY FROM THOSE SHOWN ON THE TABLES DUE TO DIFFERENT MANUFACTURER'S VARIATIONS.
2. CONCRETE END SECTIONS ARE TO BE FURNISHED WITH TONGUE OR GROOVE AS REQUIRED.
3. DESIGN LENGTH OF CULVERT OR SIDE DRAIN IS BASED ON LENGTH OF END SECTION SHOWN IN TABLE. ANY ADDITIONAL PIPE REQUIRED TO PROVIDE THE DESIGN LENGTH SHALL BE FURNISHED BY AND AT THE EXPENSE OF THE CONTRACTOR.
4. INSIDE CONFIGURATION AND JOINT OF CONCRETE END SECTION END PIPE SHALL MATCH.
5. END SECTIONS FOR CMP ARCH CULVERT SHALL MATCH THE DIMENSIONS OF THE CULVERT SHOWN ON THE PLANS.
6. GALVANIZED TOE PLATE AS SHOWN, WILL BE REQUIRED ON END SECTIONS FOR CORRUGATED STEEL PIPE AND SHALL BE THE SAME THICKNESS AS END SECTIONS. TOE PLATE SHALL BE FIELD-BOLTED TO END SECTION WITH ⅜" GALVANIZED BOLTS, NUTS AND WASHERS.
7. GALVANIZED STEEL SHALL BE IN CONFORMANCE WITH AASHTO M 111, M 218 OR M 232.
8. FOR TYPE SD END SECTIONS, BARS SHALL BE FABRICATED FROM NPS-3 GALVANIZED STEEL SCHEDULE 40 PIPE WHICH SHALL BE IN CONFORMANCE WITH ASTM A 53.
9. FOR A TYPE SD END SECTION, THE INSTALLATION OF ALTERNATIVE 1 OR ALTERNATIVE 2 END SECTION SHALL BE THE CONTRACTOR'S OPTION.
10. CONCRETE PIPE JOINT FASTENERS SHALL BE INSTALLED AT THE FLARED END SECTION AND LAST TWO PIPE JOINTS OF ALL RCP OUTFALLS.
11. CONNECTIONS OF METAL END SECTIONS TO PLASTIC PIPE SHALL BE APPROVED BY THE ENGINEER.
12. CLASS D CONCRETE TOE WALLS ARE REQUIRED AT THE ENDS OF ALL FLARED END SECTIONS.

REINFORCED CONCRETE PIPE

Pipe Inner Diameter (inches)	Wall Thickness (inches)	A (inches)	C (inches)	L (inches)	E (inches)
18	2⅝	9	46	73	36
24	3	9½	30	73 ⅞	48
30	3⅝	12	19 ⅜	73 ⅞	60
36	4	15	34 ⅜	97 ⅛	72
42	4⅝	21	35	98	78
48	5	24	26	98	84
54	5⅝	27	35	100	90
60	6	30	39	99	96
66	6⅝	32	21	99	102
72	7	34	21	99	108

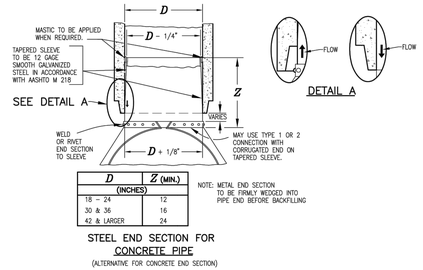






EQUIVALENT CIRCULAR DIA.	NOMINAL SPAN x RISE	DIMENSIONS A	C	L	E
		(inches)			
24	30 x 19	9	33	72	48
30	38 x 24	10	18	72	60
36	45 x 29	12	24	84	72
42	53 x 34	16	36	96	78
48	60 x 38	21	36	96	84
54	68 x 43	26	36	96	90
60	76 x 48	30	36	96	96

END SECTION FOR REINFORCED CONCRETE ELLIPTICAL PIPE



D (INCHES)	Z (MIN.)
18 - 24	12
30 & 36	16
42 & LARGER	24

NOTE: METAL END SECTION TO BE FIRMLY WEDGED INTO PIPE END BEFORE BACKFILLING

STEEL END SECTION FOR CONCRETE PIPE
(ALTERNATIVE FOR CONCRETE END SECTION)

REFERENCE:
CDOT M & S STANDARDS
M-603-10

CONCRETE OR METAL END SECTIONS

DOUGLAS COUNTY COLORADO

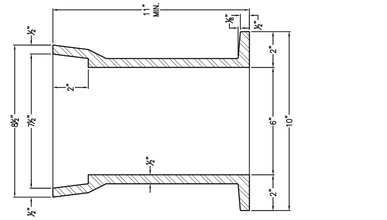
Issued: 05/2013
Revised: 09/2017
Drawing No. **SP.52a**

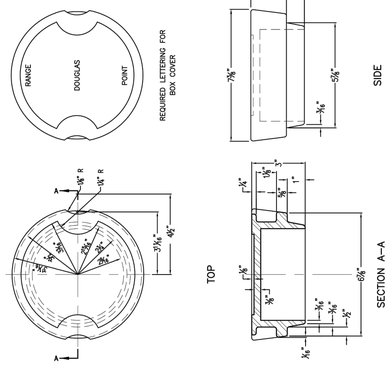
REFERENCE:
CDOT M & S STANDARDS
M-603-10

CONCRETE OR METAL END SECTIONS

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised: 09/2017
Drawing No. **SP.52b**




RANGE
DOUGLAS
POINT
REQUIRED LETTERING FOR
BOX COVER
SIDE
TOP
SECTION A-A
A
A
¼" R
½" R
45°
45°
45°
45°
45°
45°
45°
45°
5⅞"
4⅝"
¼"
⅝"
1"
⅝"
⅜"
⅜"
⅜

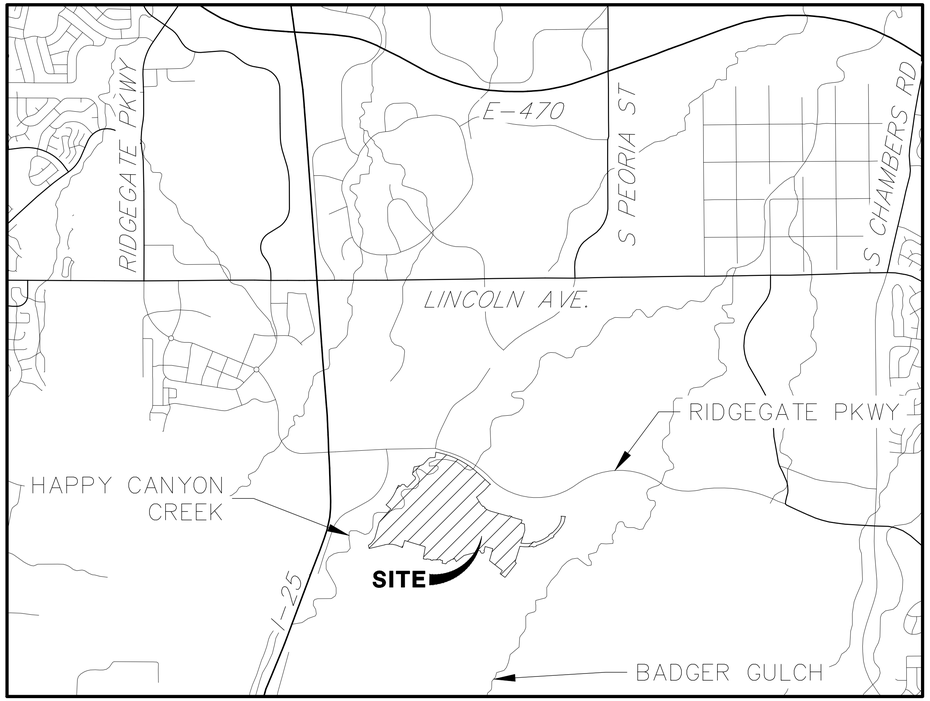
RIDGEGATE SOUTHWEST VILLAGE FILING 1 - REGIONAL INFRASTRUCTURE PHASE 1C

A PORTION OF THE RIDGEGATE PLANNED DEVELOPMENT DISTRICT, EAST SIDE PROPERTY
A PART OF SECTION 14, SECTION 22, SECTION 23, AND SECTION 24, TOWNSHIP 6 SOUTH, RANGE 67 WEST
OF THE 6TH P.M., CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO

STREET AND DRAINAGE CONSTRUCTION PLANS

ABBREVIATIONS

AC	ACRE
AD	ALGEBRAIC DIFFERENCE
AH	AHEAD
ARCH	ARCHITECT
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASSY	ASSEMBLY
AV	AVENUE
BB	BOX BASE
BK	BACK
BNDY	BOUNDARY
BOP	BOTTOM OF PIPE
BOV	BLOW OFF VALVE
BFV	BUTTERFLY VALVE
BLVD	BOULEVARD
BW	BOTTOM OF WALL
C&G	CURB & GUTTER
CATV	CABLE TELEVISION
CB	CATCH BASIN
CBC	CONCRETE BOX CULVERT
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION
CDS	CUL-DE-SAC
CF	CUBIC FOOT
CFS	CUBIC FEET PER SECOND
CIP	COMPLETE IN PLACE
CL	CENTER LINE
CLOMR	CONDITIONAL LETTER OF MAP REVISION
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
COCS	CITY OF COLORADO SPRINGS
CONC	CONCRETE
CR	CIRCLE
CSP	CORRUGATED STEEL PIPE
CSU	COLORADO SPRINGS UTILITIES
CT	COURT
CTRB	CONCRETE THRUST REDUCER BLOCK
CY	CUBIC YARD
DBPS	DRAINAGE BASIN PLANNING STUDY
DE	DRAINAGE EASEMENT
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DR	DRIVE
DRC	DESIGN REVIEW COMMITTEE
DU	DWELLING UNITS
DY	DAY
E	EAST
EA	EACH
EGL	ENERGY GRADE LINE
EL	ELEVATION
ELEC	ELECTRIC
EOA	EDGE OF ASPHALT
EPC	EL PASO COUNTY
ERCP	ELLIPTICAL RCP
ESMT	EASEMENT
EST	ESTIMATE
EX	EXISTING
FDP	FINAL DEVELOPMENT PLAN
FDR	FINAL DRAINAGE REPORT
FES	FLARED END SECTION
FF	FINISHED FLOOR ELEVATION
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOWLINE
FIL	FILING
FO	FIBER OPTIC CABLE
GB	GRADE BREAK
GE	GAS EASEMENT
GIS	GEOGRAPHIC INFORMATION SYSTEM
GL	GAS LINE
GPS	GLOBAL POSITIONING SYSTEM
GV	GATE VALVE
HBP	HOT BITUMINOUS PAVEMENT
HC	HANDICAP
HDC	HIGH DEFLECTION COUPLING
HDPE	HIGH DENSITY POLYETHYLENE
HGL	HYDRAULIC GRADE LINE
HMA	HOT MIX ASPHALT
HOA	HOME OWNERS ASSOCIATION
HP	HIGH POINT
HR	HOUR
I	INLET
IE	IRRIGATION EASEMENT
INT	INTERSECTION
INV	INVERT
IRR	IRRIGATION
KB	KICK (THRUST) BLOCK
LB	POUND
LE	LANDSCAPE EASEMENT
LF	LINEAR FOOT
LN	LANE
LOMR	LETTER OF MAP REVISION
LP	LOW POINT
LS	LUMP SUM
LT	LEFT
MAX	MAXIMUM
M/D	MOISTURE DENSITY
MDDP	MASTER DEVELOPMENT DRAINAGE PLAN
MH	MANHOLE
MIN	MINIMUM
MS	MOUNTABLE SIDEWALK
N	NORTH
NRCP	NON-REINFORCED CONCRETE PIPE
ODP	OFFICIAL DEVELOPMENT PLAN
OHE	OVERHEAD ELECTRIC
OHU	OVERHEAD UTILITY
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PCR	POINT OF CURB RETURN
PDP	PRELIMINARY DEVELOPMENT PLAN
PE	PROFESSIONAL ENGINEER
PI	POINT OF INTERSECTION
PKWY	PARKWAY
PL	PROPERTY LINE
PR	PROPOSED
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PV	PLUG VALVE
PVC	POLYVINYL CHLORIDE
R	RADIUS
RCBC	REINFORCED CONCRETE BOX CULVERT
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
ROW	RIGHT OF WAY
RT	RIGHT
S	SOUTH
STE	STEEL
SAN	SANITARY SEWER
SF	SQUARE FOOT
ST	STREET
STA	STATION
STM	STORM SEWER
SY	SQUARE YARD
SY-IN	SQUARE YARD INCH
TB	THRUST BLOCK
TBC	TOP BACK OF CURB
TBW	TOP BACK OF WALK
TEL	TELEPHONE
TN	TON
TOA	TOP OF ASPHALT
TOB	TOP OF BOX
TOC	TOP OF CURB OR CONCRETE
TOF	TOP OF FOUNDATION
TOP	TOP OF PIPE
TW	TOP OF WALL
TYP	TYPICAL
UDFCD	URBAN DRAINAGE AND FLOOD CONTROL DISTRICT
UE	UTILITY EASEMENT
U&DE	UTILITY & DRAINAGE EASEMENT
UGE	UNDERGROUND ELECTRIC
VCP	VITRIFIED CLAY PIPE
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
VTC	VEHICLE TRACKING CONTROL
W	WEST
WL	WATER LINE
WM	WATER MAIN
WRD	WATER RESOURCES DEPARTMENT
WS	WATER SURFACE
WSE	WATER SURFACE ELEVATION
WTR	WATER
YR	YEAR



VICINITY MAP
SCALE: 1"=2000'

SHEET INDEX

102	COVER SHEET – REGIONAL PHASE 1C
103	GENERAL NOTES–PHASE 1C
104	LEGEND–PHASE 1C
105–106	OVERALL SITE AND UTILITY PLAN–PHASE 1C
107	ROADWAY SECTIONS–PHASE 1C
108–111	ROADWAY PLAN & PROFILES–PHASE 1C
112	CURB RETURN PROFILES–PHASE 1C
113–114	CURB RAMP DETAILS–PHASE 1C
115–117	SIGNAGE & STRIPING PLAN–PHASE 1C
118	TRAIL IMPROVEMENT PLANS–PHASE 1C
119–120	STORM PLAN & PROFILE–PHASE 1C
123–128	STORM SEWER & ROADWAY DETAILS–PHASE 1C

TOTAL 102–128

NOTICE TO CONTRACTOR:

1. BY ACCEPTING AND UTILIZING THESE PLANS, THE CONTRACTOR AGREES THAT THEY SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSON AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER AND CIVIL ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE CIVIL ENGINEER.
2. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITIES, CONDUITS OR OTHER STRUCTURES SHOWN ON THESE PLANS WAS OBTAINED BY A SEARCH OF AVAILABLE RECORDS. THE ENGINEER ASSUMES NO LIABILITY WHATSOEVER FOR THE ACCURACY OR COMPLETENESS OF SUCH DATA. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ALL UTILITY LINES, CONDUITS OR STRUCTURES WHETHER OR NOT SHOWN ON THESE PLANS AND BY ACCEPTING AND UTILIZING THESE PLANS, ASSUMES ALL RESPONSIBILITY FOR THE PROTECTION AND/OR ANY DAMAGE TO SAID FACILITIES.

811 Know what's below. Call before you dig.

APPLICANT/OWNER

SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
P~303.791.8180

CIVIL ENGINEER/SURVEYOR

JR ENGINEERING
7200 SOUTH ALTON WAY, SUITE C400
CENTENNIAL, CO
P~303.267.6220

PLANNER

SAGE DESIGN GROUP
1500 SOUTH PEARL STREET, SUITE 200
DENVER, CO 80210
P~303.470.2855

TRAFFIC ENGINEER

JR ENGINEERING
7200 SOUTH ALTON WAY, SUITE C400
CENTENNIAL, CO
P~303.267.6183

GEOTECHNICAL ENGINEER

CTL THOMPSON, INC
1971 WEST 12TH VAE.
DENVER, CO 80204
P~303.825.0777

SOIL PREPARATION NOTE:

SOIL PREPARATION SHALL BE PER RECOMMENDATIONS FROM THE GEOTECHNICAL REPORT PREPARED FOR THIS SITE:

GEOTECHNICAL ENGINEER: CTL THOMPSON, INC
ROJECT NUMBER: DN49,935-115-R2

THE CONTRACTOR IS TO REVIEW THIS REPORT IN FULL PRIOR TO BID. INFORMATION IN THE GEOTECHNICAL REPORT SUPERCEDES ANY CONFLICTING INFORMATION CONTAINED IN THE CONSTRUCTION PLANS AND SPECIFICATIONS.

BASIS OF BEARING

BEARING SHOWN HEREON ARE GRID BEARINGS DERIVED FROM GPS OBSERVATION BASED UPON THE COLORADO COORDINATE SYSTEM OF 1983 CENTRAL ZONE (NAD 83, 2011) REFERENCED TO THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, SIXTH PRINCIPAL MERIDIAN BEING MONUMENTED AS SHOWN HEREON, TAKEN TO BEAR NORTH 89°31'58" EAST, A DISTANCE OF 2635.13 FEET.

BENCHMARK

NGS CONTROL POINT UNBEWUST BEING A 3.5 INCH DIAMETER BRASS CAP, LOCATED ABOUT 3.2 MILES SOUTH OF INTERSTATE 25 AND COLORADO STATE HIGHWAY 470 INTERCHANGE, GO SOUTH ON INTERSTATE 25 FOR 2.9 MILES TO EXIT 191. PROCEED ON A PAVED ROAD TO THE SOUTHWEST FOR 0.2 MILES TO THE STATION ON THE LEFT. IN THE NORTHWEST CORNER OF A 24 FOOT BY 16 FOOT ROCK OUTCROP. IT IS 22.5 FEET EAST OF THE CENTERLINE OF THE PAVED ROAD, 123 FEET NORTH OF THE OUTLET OF A 3 FOOT CORRUGATED STEEL PIPE CULVERT AND APPROXIMATELY 350 FEET WEST OF THE WEST EDGE OF OIL OF SOUTHBOUND INTERSTATE 25, ELEVATION: 6125.32 (NAVD88).

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE 1"=2000'
V-SCALE N/A
DATE 2/12/21
DESIGNED BY N/A
DRAWN BY SDL
CHECKED BY

RIDGEGATE SOUTHWEST VILLAGE FILING 1

COVER SHEET – REGIONAL PHASE 1C

SHEET 102 OF 270

JOB NO. 15950.01

GENERAL PROJECT NOTES:

1. ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION OF IMPROVEMENTS SHALL MEET OR EXCEED THE GOVERNING CITY, COUNTY, AND/OR STATE AND APPLICABLE UTILITY DISTRICT STANDARDS AND SPECIFICATIONS, AND APPLICABLE STATE AND FEDERAL REGULATIONS. WHERE THERE IS A CONFLICT BETWEEN THESE PLANS AND ANY APPLICABLE STANDARDS, THE HIGHER QUALITY STANDARD SHALL APPLY. ALL WORK SHALL BE INSPECTED AND APPROVED BY THE CITY AND APPLICABLE UTILITY DISTRICT(S).

2. THE SITE CONSTRUCTION PLANS LISTED WITHIN THIS PLAN SET ARE NOT FOR CONSTRUCTION UNLESS APPROVED BY THE APPROPRIATE GOVERNING JURISDICTION. THE CONTRACTOR SHALL CONFIRM SAID APPROVAL PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL KEEP ONE (1) SIGNED COPY OF THE APPROVED SET OF PLANS, APPROPRIATE SPECIFICATIONS AND STANDARDS, AND APPROVED PERMITS ONSITE AT ALL TIMES.

3. NO REVISIONS SHALL BE MADE TO THESE PLANS WITHOUT THE APPROVAL OF THE CITY, COUNTY, STATE OR LOCAL DISTRICT AND THE ENGINEER OF RECORD.

4. ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARDS, UNLESS SPECIFICALLY STATED OTHERWISE.

5. THE CONTRACTOR IS RESPONSIBLE FOR ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS SHOWN ON THESE DRAWINGS OR DESIGNATED TO BE PROVIDED, INSTALLED, CONSTRUCTED, REMOVED, OR RELOCATED UNLESS SPECIFICALLY NOTED OTHERWISE.

6. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND LICENSES FOR WORK INCLUDING, BUT NOT LIMITED TO DEMOLITION, STREET CUTS, UTILITY INTERFERENCES, TRAFFIC CONTROL, GRADING, AND UTILITY FROM ALL APPLICABLE AGENCIES; AND FOR COMPLYING WITH ALL PROVISIONS INCLUDED THEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL OTHER APPLICABLE PERMITS NOT SPECIFICALLY REQUIRED BY THE AUTHORITY HAVING JURISDICTION.

7. THE CONTRACTOR SHALL UTILITY STAKE PROJECT AT LEAST 2 WORKING DAYS PRIOR TO BEGINNING EXCAVATION OR GRADING, TO HAVE ALL REGISTERED UTILITY LOCATIONS MARKED. OTHER UNREGISTERED UTILITY ENTITIES (I.E. DITCH COMPANY) ARE TO BE LOCATED BY CONTACTING THE RESPECTIVE REPRESENTATIVE.

8. THE CONTRACTOR IS RESPONSIBLE FOR FIELD LOCATING AND VERIFYING ELEVATIONS OF ALL EXISTING SEWER MAINS, WATER MAINS, CURBS, GUTTERS, AND OTHER UTILITIES AT THE POINTS OF CONNECTION SHOWN ON THE PLANS, AND AT ANY UTILITY CROSSINGS PRIOR TO INSTALLING ANY OF THE NEW IMPROVEMENTS. IF A CONFLICT EXISTS AND/OR A DESIGN MODIFICATION IS REQUIRED, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO MODIFY THE DESIGN. DESIGN MODIFICATION(S) MUST BE APPROVED BY THE APPROPRIATE AUTHORITY PRIOR TO BEGINNING CONSTRUCTION.

9. ANY DISRUPTION OF UTILITY SERVICE THAT IS REQUIRED TO ADJUST, EXTEND, RELOCATE OR OTHERWISE REARRANGE ANY UTILITY WITHIN THE PROJECT AREA SHALL BE COORDINATED IN ADVANCE WITH THE AFFECTED UTILITY ENTITY.

10. RIM ELEVATIONS SHOWN ARE APPROXIMATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS. THE CONTRACTOR SHALL USE PRECAST CONCRETE ADJUSTMENT RINGS, GROUT, AND STEEL SHIMS TO ADJUST THE MANHOLE FRAMES TO FINAL GRADE IN CONFORMANCE WITH THE CITY OR UTILITY COMPANY/DISTRICT STANDARD SPECIFICATIONS. ALL FRAMES SHALL BE ADJUSTED TO FINAL GRADE PRIOR TO THE FINAL LIFT OF ASPHALT.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF PROJECT SAFETY INCLUDING, BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.

12. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN, IN ACCORDANCE WITH THE M.U.T.C.D. TO THE APPROPRIATE RIGHT-OF-WAY AUTHORITY (CITY, COUNTY, OR STATE) FOR APPROVAL, PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN, OR AFFECTING, THE RIGHT-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED BY THE CONSTRUCTION ACTIVITIES. ALL WORK WITHIN THE RIGHT OF WAY SHALL BE DONE IN ACCORDANCE WITH THE GOVERNING AUTHORITY'S STANDARDS AND SPECIFICATIONS.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANING AND RESTORATION OF ANY EXISTING IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO STREET PAVEMENT, FENCES, SOD, LANDSCAPING, SPRINKLER SYSTEMS, AND UTILITIES DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL LOCATION AND CONDITION.

14. INCLUDED IN THESE PLANS IS THE DEMOLITION AND DISPOSAL OF ALL EXISTING UTILITIES, SITE IMPROVEMENTS, STRUCTURES, AND SITE FURNISHINGS NEEDED FOR CONSTRUCTION OF THE IMPROVEMENTS SHOWN HEREON. ALL QUESTIONS IN REGARD TO DEMOLITION SHALL BE SUBMITTED TO THE OWNER IN WRITING PRIOR TO BID.

15. ALL DEMOLITION, REMOVAL, DISPOSAL, AND ABANDONMENT OF UTILITIES, STRUCTURES, SITE IMPROVEMENTS, AND SITE FURNISHINGS SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL STANDARDS AND SPECIFICATIONS, AND PERMIT REQUIREMENTS.

16. ALL DISTURBED SOIL, ON- OR OFF-SITE AND RELATED TO WORK AT THIS PROJECT SITE, IS REQUIRED TO BE PROTECTED FROM WIND AND STORM WATER EROSION. TO MITIGATE EROSION, THE CONTRACTOR SHALL USE STANDARD EROSION CONTROL TECHNIQUES DESCRIBED IN THE GESC PLAN SET AND GESC REPORT FOR THIS PROJECT.

17. ALL STRUCTURAL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY GROUND-DISTURBING ACTIVITY. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED IN GOOD REPAIR BY THE CONTRACTOR UNTIL SUCH TIME AS THE ENTIRE DISTURBED AREA IS STABILIZED WITH HARD SURFACE OR PERMANENT LANDSCAPING. THE CONTRACTOR IS RESPONSIBLE FOR REFERRING TO ANY EROSION AND SEDIMENT CONTROL, STORMWATER MANAGEMENT, STORMWATER POLLUTION PREVENTION, OR SIMILAR PLAN AND/OR NARRATIVE AND ASSOCIATED PERMITS INCLUDING, BUT NOT LIMITED TO GRADING PERMITS, AND COMPLYING WITH THE REQUIREMENTS THEREIN.

18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK, INSPECTIONS, AND CERTIFICATIONS AS REQUIRED BY THE CITY, STATE OR LOCAL DISTRICTS. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST ASSOCIATED WITH THE INSPECTION AND CERTIFICATION UNLESS OTHERWISE ARRANGED WITH THE OWNER/DEVELOPER. THE CONTRACTOR SHALL COORDINATE ALL CERTIFICATIONS, AND PROVIDE FIELD SURVEYED AS-BUILT INFORMATION FOR REVIEW BY THE OWNER/DEVELOPER AND/OR ENGINEER AS EARLY AS POSSIBLE IN THE CONSTRUCTION SCHEDULE TO AVOID POTENTIAL DELAYS.

19. CONTRACTOR IS RESPONSIBLE FOR AS-BUILT DRAWINGS, TESTS, REPORTS, AND/OR ANY OTHER CERTIFICATES OR INFORMATION AS REQUIRED FOR ACCEPTANCE OF WORK FROM CITY, UTILITY DISTRICTS, OR ANY OTHER GOVERNING AGENCY, OR TO THE OWNER/DEVELOPER AS REQUIRED BY AND IN ACCORDANCE WITH THE GOVERNING AUTHORITY OR OWNER/DEVELOPER'S CRITERIA. CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING AS-BUILT INFORMATION AN A SET OF RECORD DRAWINGS KEPT AT THE CONSTRUCTION SITE AND AVAILABLE TO THE GOVERNING CITY, COUNTY, AND/OR STATE AND UTILITY DISTRICT INSPECTOR AT ALL TIMES. THE CONTRACTOR SHALL CONFIRM ANY REQUIREMENTS AS EARLY AS POSSIBLE IN THE CONSTRUCTION SCHEDULE TO ACCOUNT FOR PREPARATION AND REVIEW OF THE INFORMATION TO AVOID POTENTIAL DELAYS.

20. IF, DURING THE CONSTRUCTION PROCESS, CONDITIONS ARE ENCOUNTERED BY THE CONTRACTOR, HIS SUBCONTRACTORS, OR OTHER AFFECTED PARTIES, WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE OWNER/DEVELOPER AND THE ENGINEER IMMEDIATELY.

21. DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. IF PERTINENT DIMENSIONS ARE NOT SHOWN, CONTACT THE CONSULTING ENGINEER FOR CLARIFICATION AND ANNOTATE THE DIMENSION ON THE AS-BUILT RECORD DRAWING.

22. BENCHMARK VERIFICATION: THE CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS AND THE PROPOSED ELEVATIONS IN THIS CONSTRUCTION PLAN SET AGAINST THE PROJECT BENCHMARK, IDENTIFIED HEREIN, PRIOR TO COMMENCING WORK.

ROADWAY NOTES

1. GUTTERS SHALL BE AT LEAST 6" THICK.
2. ALL CURBS SHALL USE THE CATCH SECTION UNLESS OTHERWISE NOTED.
3. ALL COMBINATION CURB, GUTTER AND SIDEWALKS TO BE 6" THICK (MIN.). SIDEWALKS WITH VERTICAL CURB AND GUTTER TO BE 6" THICK (MIN.).
4. NON-LANDSCAPED MEDIAN ISLANDS SHALL BE COVERED WITH AN ACCEPTABLE IMPERMEABLE SURFACE.
5. IF ANY SECTION OF A DETACHED SIDEWALK IS TO BE PLACED OUTSIDE OF THE ROAD RIGHT-OF-WAY, THEN A SIDEWALK EASEMENT SHALL BE REQUIRED TO MAINTAIN PUBLIC USE.
6. PLACEMENT, MOISTURE AND DENSITY CONTROL FOR SUBGRADE, SUBBASE, AND SURFACING MATERIALS SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS OF CHAPTER 8 OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.

CITY OF LONE TREE GENERAL NOTES

1. THE CITY OF LONE TREE ENGINEER'S SIGNATURE AFFIXED TO THIS DOCUMENT INDICATES THE ENGINEERING DIVISION HAS REVIEWED THE DOCUMENT AND FOUND IT IN GENERAL CONFORMANCE WITH THE CITY OF LONE TREE SUBDIVISION RESOLUTION OR APPROVED VARIANCES TO THOSE REGULATIONS. THE CITY OF LONE TREE ENGINEER, THROUGH ACCEPTANCE OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY, OTHER THAN STATED ABOVE, FOR THE COMPLETENESS AND/OR ACCURACY OF THESE DOCUMENTS. THE OWNER AND ENGINEER UNDERSTAND THAT THE RESPONSIBILITY FOR THE ENGINEERING ADEQUACY OF THE FACILITIES DEPICTED IN THIS DOCUMENT LIES SOLELY WITH THE REGISTERED PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE IS AFFIXED TO THIS DOCUMENT.
2. ALL ROADWAY CONSTRUCTION SHALL CONFORM TO CURRENT DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
3. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE CITY OF LONE TREE ENGINEERING DIVISION. THE CITY RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS STANDARDS AND SPECIFICATIONS.
4. THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS, INSPECTION SECTION, (303) 662-8112, A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO STARTING CONSTRUCTION, AND/OR BEFORE RESTARTING CONSTRUCTION AFTER A SHUTDOWN OF MORE THAN 10 DAYS.
5. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ACTUAL CONSTRUCTION. FOR INFORMATION, CONTACT: UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT (800) 922-1987 OR 811
6. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY (SIGNED BY BOTH DESIGN ENGINEER AND CITY OF LONE TREE) OF THE CONSTRUCTION PLANS AND GESC REPORT AND PLAN, AND ONE (1) COPY OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS AT THE JOB SITE AT ALL TIMES.
7. ALL PROPOSED STREET CUTS TO EXISTING PAVEMENTS FOR UTILITIES, STORM SEWER, OR OTHER PURPOSES ARE LISTED AND REFERENCED BELOW:

   RIDGEGATE PARKWAY

8. A ROW/CONSTRUCTION PERMIT MUST BE OBTAINED BEFORE ANY WORK WITHIN EXISTING OR PROPOSED PUBLIC ROW. THE PERMIT APPLICATION MUST BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR REVIEW/PROCESSING A MINIMUM OF 7 DAYS PRIOR TO UPDATED 2-3-09 REQUESTED START FOR THE WORK IN THE ROW.
9. A PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR ACCEPTANCE WITH THE PERMIT APPLICATION. AN EXCAVATION OR PUBLIC IMPROVEMENTS CONSTRUCTION PERMIT WILL NOT BE ISSUED WITHOUT AN APPROVED TRAFFIC CONTROL PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION.
10. THE CONSTRUCTION PLANS SHALL BE CONSIDERED VALID FOR TWO (2) YEARS FROM THE DATE OF CITY OF LONE TREE ACCEPTANCE/APPROVAL IF APPLICABLE CONSTRUCTION PERMITS HAVE NOT BEEN OBTAINED, AND CONSTRUCTION STARTED WITHIN THAT TIME, THESE PLANS SHALL BE VOID AND WILL BE SUBJECT TO RE-REVIEW AND RE-ACCEPTANCE BY THE CITY OF LONE TREE.
11. CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE ENGINEER INSPECTOR WHEN WORKING OUTSIDE OF THE PUBLIC RIGHT-OF-WAY ON ANY FACILITY WHICH WILL BE CONVEYED TO THE CITY, URBAN DRAINAGE AND FLOOD CONTROL DISTRICT, OR OTHER SPECIAL DISTRICT FOR MAINTENANCE (STORM SEWER, ENERGY DISSIPATERS, DETENTION OUTLET STRUCTURES, OR OTHER DRAINAGE INFRASTRUCTURES). FAILURE TO NOTIFY ENGINEERING INSPECTOR TO ALLOW THEM TO INSPECT THE CONSTRUCTION MAY RESULT IN NON-ACCEPTANCE OF THE FACILITIES/INFRASTRUCTURE BY CITY AND/OR URBAN DRAINAGE.

CITY OF LONE TREE SIGNAGE & STRIPING NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MOST RECENT VERSION OF THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE "COLORADO SUPPLEMENTAL MUTCD" AND THE DOUGLAS COUNTY "ROAD AND CONSTRUCTION STANDARDS MANUAL". FURTHER SPECIFICATIONS AND ILLUSTRATIONS ARE LOCATED IN THE COLORADO DIVISION OF HIGHWAYS "M AND S STANDARDS".
2. DELINEATION OF ROADWAYS SHALL BE AS SPECIFIED IN THE COLORADO "M AND S MANUAL".
3. SPECIAL CARE SHALL BE TAKEN IN SIGN LOCATION TO ENSURE AN UNOBSTRUCTED VIEW OF EACH SIGN. STREET NAME SIGNS SHALL BE MOUNTED SO THAT THEY CAN BE SEEN FROM ALL DIRECTIONS OF TRAVEL.
4. INSTALLATION OF SIGNS SHALL CONFORM TO THE MUTCD MOUNTING HEIGHT REQUIREMENTS, INCLUDING A 7-FOOT MINIMUM HEIGHT FROM THE BOTTOM OF THE LOWEST SIGN PANEL TO THE TOP GRADE OF SIDEWALK.
5. ALL NEWLY INSTALLED TRAFFIC SIGNS SHALL MEET THE MINIMUM RETRO-REFLECTIVITY AND ILLUMINATION STANDARDS AS SET FORTH BY THE MUTCD (LATEST EDITION). THESE MINIMUM REQUIREMENTS SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
6. DIAMOND GRADE MATERIAL SHALL BE USED ON ALL STOP SIGNS.
7. THE CONTRACTOR INSTALLING SIGNS IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND UTILITIES. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.
8. FOLLOWING INSTALLATION, THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS DEPARTMENT, 303-662-8112. A FIELD INSPECTION OF LOCATION AND INSTALLATION OF ALL SIGNS SHALL BE PERFORMED BY PUBLIC WORKS. ALL DISCREPANCIES IDENTIFIED DURING THE FIELD INSPECTION MUST BE CORRECTED BEFORE THE TWO-YEAR WARRANTY PERIOD WILL BEGIN.
9. SIGNAGE AND STRIPING HAS BEEN DETERMINED BY INFORMATION AVAILABLE AT THE TIME OF REVIEW.
   PRIOR TO INITIATION OF THE WARRANTY PERIOD, LONE TREE RESERVES THE RIGHT TO REQUIRE MODIFICATIONS TO EXISTING OR INSTALLATION OF ADDITIONAL SIGNAGE AND/OR STRIPING IF THEY DETERMINE THAT AN UNFORESEEN CONDITION WARRANTS SUCH MODIFICATION ACCORDING TO THE MUTCD OR THE CDOT M AND S STANDARDS. ALL SIGNAGE AND STRIPING SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
10. FINAL STRIPING AND CROSSWALK LAYOUT TO BE APPROVED BY THE CITY OF LONE TREE PRIOR TO INSTALLATION. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.
11. CROSSWALKS SHALL:
    BE CONSTRUCTED USING 125 MIL PREFORMED THERMOPLASTIC.
    LINE UP WITH THE HANDICAP RAMPS AT BOTH ENDS.
    BE CENTERED ON LANE LINES SO AS TO BE STRADDLED BY VEHICLES.
12. ALL PAVEMENT MARKINGS SHALL BE AS FOLLOWS:
    FOR CONCRETE SURFACE: METHYL METHACRYLATE OR EPOXY PAINT.
    FOR ASPHALT SURFACE: PAINT, 90 MIL PREFORMED THERMOPLASTIC, INLAID MARKING TAPE, METHYL METHACRYLATE, OR EPOXY PAINT.
    TURN ARROWS AND ONLYS: 125 MIL PREFORMED THERMOPLASTIC.
13. ALL PAVEMENT MARKING SHALL BE PRECEDED BY THE APPROPRIATE SURFACE PREPARATION.
14. ANY SIGNAGE AND/OR OTHER TRAFFIC CONTROL DEVICES REMOVED SHALL BE RETURNED TO THE CITY OF LONE TREE.
15. TYPE III LIGHTED BARRICADES SHALL BE SET AT ENDS OF ROADWAYS, SEPARATING FINISHED AND UNFINISHED CONSTRUCTION AREAS AND WILL BE MAINTAINED BY THE CONTRACTOR/DEVELOPER.

NOTE: ALSO SEE CITY OF LONE TREE "STREET SIGN DETAILS"FOR ADDITIONAL INTERSECTION STREET SIGNAGE REQUIREMENTS.

STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON-GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.

DRAINAGE STRUCTURE NOTES

1. CONCRETE WORK SHALL CONFORM TO ACI 301, ACI 350.
2. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM-615, GRADE 60.
3. ALL EXPOSED CONCRETE SHALL HAVE A CDOT CLASS 2 OR 5 FINISH.
4. ALL EXPOSED CONCRETE CORNERS SHALL HAVE ¾"CHAMFERS.
5. DETAILING, FABRICATION, AND PLACING OF REBAR SHALL BE IN ACCORDANCE WITH ACI 315.
6. CONSTRUCTION TOLERANCES SHALL BE IN ACCORDANCE WITH ACI 347.
7. ALL MANHOLES SHALL BE SLAB BASE UNLESS SPECIFIED OTHERWISE. MANHOLE SHALL BE FABRICATED IN ACCORDANCE WITH CDOT STANDARD M-604-20.
8. COORDINATES FOR MANHOLES AND AREA INLETS ARE SHOWN AT THE CENTER OF THE STRUCTURE. COORDINATES FOR MOUNTABLE CURB INLETS ARE SHOWN ALONG THE FLOWLINE AT CENTER OF THE STRUCTURE.
9. ALL TYPE C AND D INLETS SHALL HAVE CLOSE MESH GRATES UNLESS SPECIFIED OTHERWISE.
10. LENGTH OF FABRICATED BAR GRATING PANELS IS LENGTH OF BEARING BARS, WIDTH REFERS TO DIMENSION PERPENDICULAR TO BEARING BARS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PANEL DIMENSIONS GIVEN PRIOR TO FABRICATION.

DRAINAGE GENERAL NOTES

1. PROJECT FACILITIES ARE TO BE LOCATED BASED ON THE SURVEY COORDINATES, ELEVATIONS, DIMENSIONS, AND/OR GEOMETRIC DESIGN DATA PROVIDED ON THE DRAWINGS.
2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES AND FOR SATISFYING ALL APPLICABLE OSHA, FEDERAL, STATE, AND LOCAL REGULATIONS. TEMPORARY EXCAVATIONS SHALL PROVIDE, AT MINIMUM, THE TRENCH DIMENSIONS AND CLEARANCES SHOWN OR SPECIFIED. TEMPORARY CONSTRUCTION SLOPES SHALL BE SLOPED, SHORED, SHEETED, AND/OR BRACED IN ACCORDANCE WITH STABILITY REQUIREMENTS AND APPLICABLE REGULATIONS, AND SHALL BE NO STEEPER THAN THE SLOPES SHOWN OR SPECIFIED WITHOUT THE APPROVAL OF THE ENGINEER. ANY SUCH APPROVALS BY THE ENGINEER WILL NOT RELIEVE THE CONTRACTOR FROM SOLE RESPONSIBILITY FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES.
3. EXISTING FACILITIES NOT INDICATED TO BE REMOVED SHALL BE PROTECTED IN PLACE OR REMOVED AND REPLACED IN KIND, AS APPROVED BY ENGINEER.
4. THE WORK WILL TAKE PLACE IN AND AROUND DRAINAGE SWALES AND THE HAPPY CANYON CREEK, SUBJECT TO PERIODIC FLOODING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF SURFACE AND SUBSURFACE WATER DURING THE COURSE OF THE WORK. ANY DAMAGE TO THE WORK RESULTING FROM SURFACE FLOWS, BASE FLOWS, OR FLOOD FLOWS INCLUDING BUOYANCY FORCES ON PIPELINES AND OTHER FACILITIES SHALL BE CORRECTED BY THE CONTRACTOR AT THE CONTRACTOR'S SOLE COST. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND SATISFYING THE REQUIREMENTS OF ANY APPLICABLE PERMITS PERTAINING TO WATER AND EROSION CONTROL.
5. CONTACT THE ENGINEER FOR CLARIFICATIONS OF ANY ABBREVIATIONS SHOWN ON THE DRAWINGS.
6. THE SITE WHERE THE WORK IS TO BE PERFORMED SHALL BE OVERLOT GRADED. TOPSOIL SHALL BE SPREAD IN OPEN SPACE AREAS TO A DEPTH OF APPROXIMATELY 6-INCHES. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED, AND SOME AREAS COVERED WITH EROSION CONTROL BLANKETS, UNLESS OTHERWISE DIRECTED IN THE PLANS OR BY THE ENGINEER. CARE SHALL BE TAKEN TO AVOID DISTURBING ANY OPEN SPACE AREAS EXCEPT THE MINIMUM NECESSARY TO PERFORM THE WORK. TOPSOIL IN ANY WORK AREAS OR ACCESS ROADS WITHIN THE OPEN SPACE SHALL BE STRIPPED AND STOCKPILED PRIOR TO THE WORK, PROTECTED FROM MIXING WITH ANY OTHER MATERIALS DURING THE WORK, AND REPLACED TO A LOOSE DEPTH OF 7- TO 8- INCHES (FINAL DEPTH AFTER SETTLEMENT SHALL BE 6- INCHES MINIMUM) AS THE WORK IS BEING COMPLETED. WHERE BLANKETS EXIST, THE MINIMUM AREA OF BLANKET TO ALLOW WORK TO PROGRESS SHALL BE REMOVED AND THEN THE REMOVED OR NEW BLANKET REPLACED AFTER UNDERLYING WORK IS COMPLETE (EXCEPT NO TEMPORARY BLANKET NEEDS TO BE REPLACED OVER ROCK OR COIR BLANKET SHOWN IN THE PLANS). JUST PRIOR TO REPLACEMENT OF TOPSOIL AFTER UNDERLYING WORK IS COMPLETE AND APPROVED, THE UNDERLYING SUBGRADE IN OPEN SPACE AREAS SHALL BE LOOSENED BY TILLING TO A DEPTH OF 12- INCHES UNTIL CLODS ARE NO LARGER THAN 3 INCHES, AND APPROVED BY THE ENGINEER. THIS NOTE ALSO APPLIES TO AREAS WHERE COIR MAT IS TO BE INSTALLED.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ANY COMPLETED WORK FROM DISTURBANCE OR DAMAGE DURING THE COURSE OF THE WORK. IF REQUESTED BY THE CONTRACTOR AND APPROVED BY THE OWNER, SIGNIFICANT COMPLETED SECTIONS OF THE WORK MAY BE ACCEPTED AS FINAL PRIOR TO THE COMPLETION OF THE ENTIRE PROJECT. ANY SUCH EARLY ACCEPTANCE WILL NEED TO BE IN WRITING BY THE ENGINEER AND OWNER AND THOSE PORTIONS OF THE WORK SHALL BE PROTECTED BY THE CONTRACTOR AGAINST VEHICLES RUNNING OVER THE AREA BY ENCIRCLING THE WORK WITH FLAGGING OR FENCING OR BY OTHER MEANS AGREED TO BY THE OWNER AND MAINTAINED BY THE CONTRACTOR UNTIL THE END OF THE PROJECT.
8. ALL FINE GRADING REQUIRED TO CONSTRUCT DRAINAGE IMPROVEMENTS AND PROVIDE FINISHED GRADES ADJACENT TO IMPROVEMENTS SHALL BE DONE BY THE DRAINAGE CONTRACTOR AND SHALL BE CONSIDERED PART OF THE WORK, AND NOT PAID FOR SEPARATELY.

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

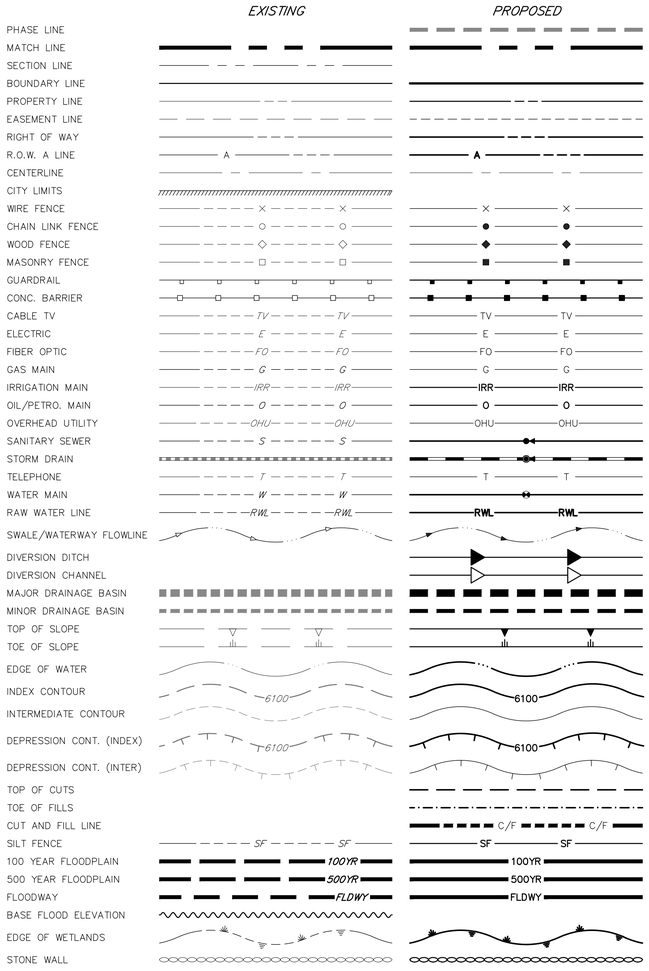
H-SCALE	N/A
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
GENERAL NOTES-PHASE 1C

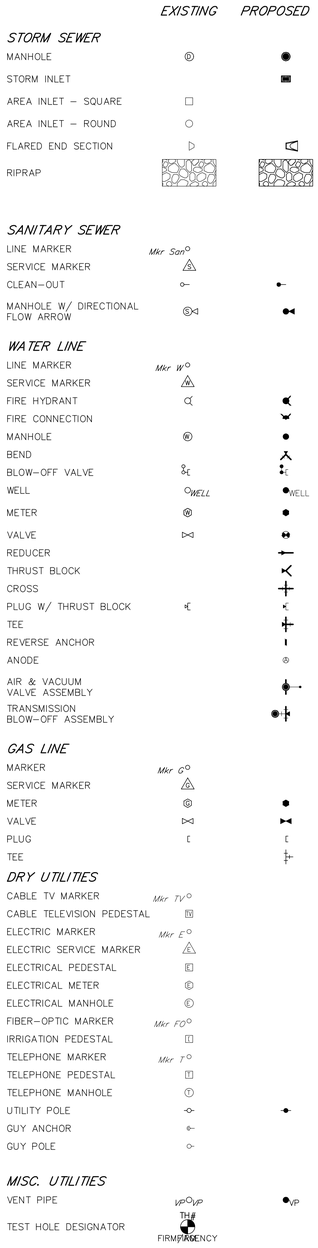
SHEET 103 OF 270

JOB NO. 15950.01

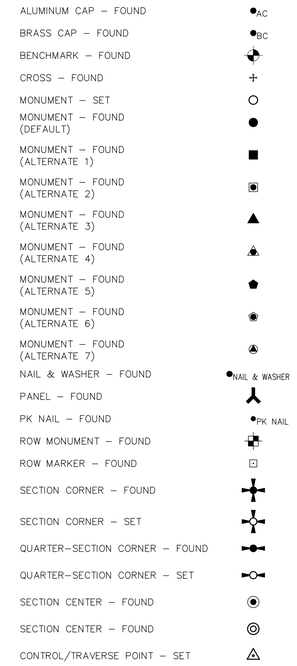
LAYER LINETYPE LEGEND



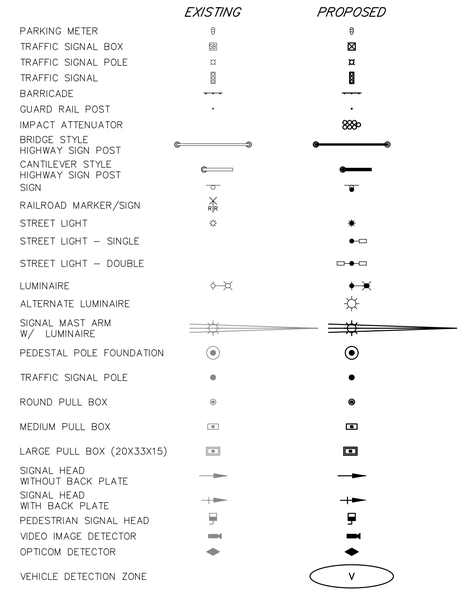
UTILITIES LEGEND



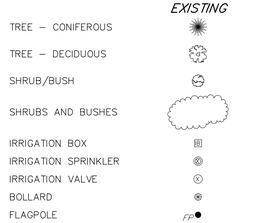
MONUMENTATION LEGEND



TRAFFIC LEGEND



LANDSCAPE LEGEND



811 Know what's **below.** **Call** before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

No.	REVISION	BY	DATE

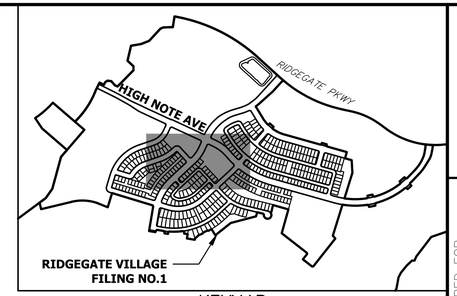
H–SCALE	N/A
V–SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

LEGEND–PHASE 1C

SHEET 104 OF 270

JOB NO. 15950.01



KEYMAP
SCALE:1"=1000'

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=60'	DESIGNED BY	N/A
V-SCALE	N/A	DRAWN BY	SDL
DATE	2/12/21	CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

OVERALL SITE AND UTILITY PLAN-PHASE 1C

SHEET 105 OF 270

JOB NO. 15950.01

SENZA LANE
LYRIC STREETS
HIGH NOTE AVENUE
POETRY ROAD
POETRY ROAD
S.F.A. TRACT AP
TRACT AK
TRACT AM
TRACT AN
TRACT AO
TRACT AS
TRACT AW
TRACT BD
STORM SEWER INLET (TYP)
12" PVC SANITARY SEWER
SIGHT DISTANCE ESMNT
12" PVC WATER
8" PVC WATER STUB
8" PVC SANITARY STUB
STORM SEWER (SIZE VARIES)
STORM SEWER STUB
25 FT. DRAINAGE ESMNT
30 FT. PWSD ESMNT
GATE VALVE
6.0' SIDEWALK
5.0' SIDEWALK
91' R.O.W.
PLANNING AREA 17 BOUNDARY SEE SHEET 203
PLANNING AREA 15 BOUNDARY SEE SHEET 180
PHASE 1A BOUNDARY SEE SHEET 12
PLANNING AREA 22 BOUNDARY SEE SHEET 257
PLANNING AREA 14 BOUNDARY SEE SHEET 164
SEE SHEET 106

60 30 0 60 120
ORIGINAL SCALE: 1" = 60'

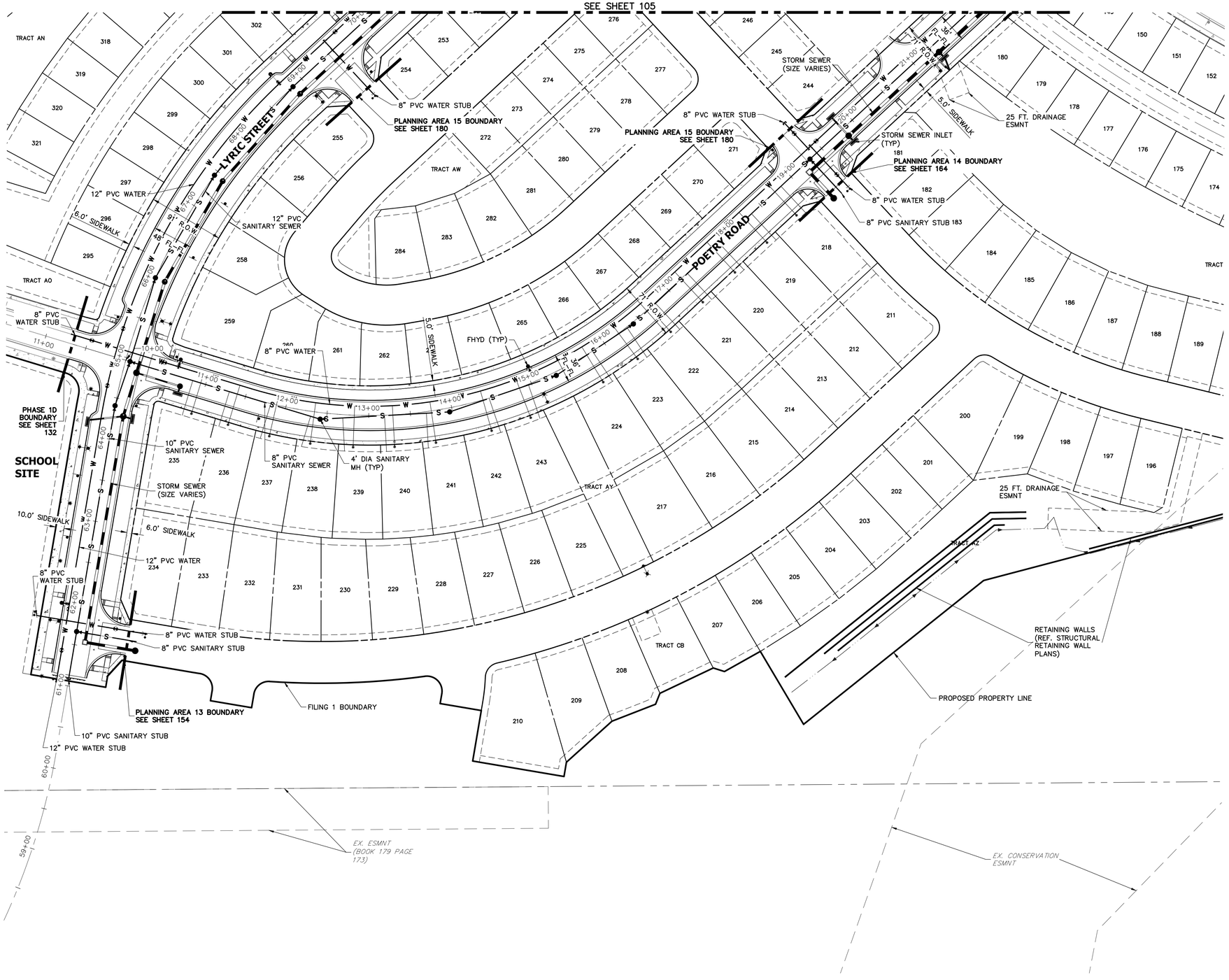
811 Know what's below. Call before you dig.

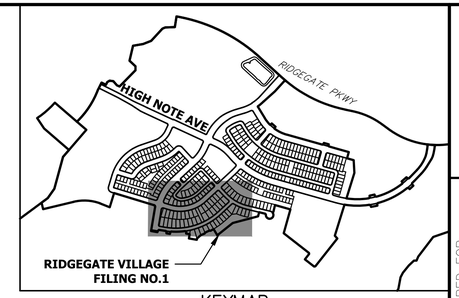
ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE





KEYMAP
SCALE:1"=1000'

60 30 0 60 120
ORIGINAL SCALE: 1" = 60'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

AARON LEE CLUTTER 36742 REGISTERED PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS UTILITY PLANS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

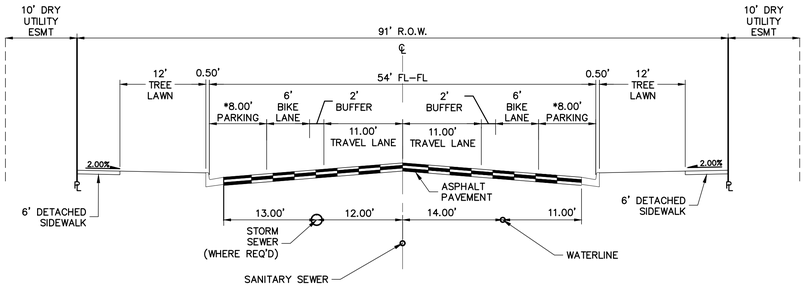
H-SCALE	1"=60'	DESIGNED BY	N/A
V-SCALE	N/A	DRAWN BY	SDL
DATE	2/12/21	CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

OVERALL SITE AND UTILITY PLAN-PHASE 1C

SHEET 106 OF 270

JOB NO. 15950.01

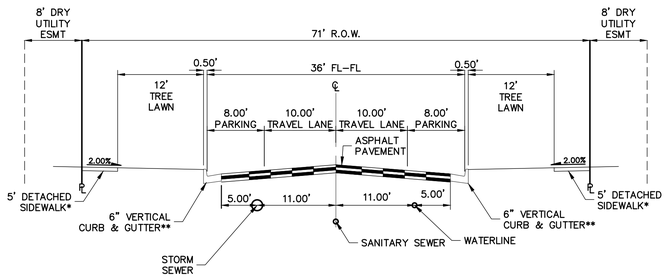


LYRIC STREET STA:61+12.95 TO 75+80.14

TYPE I – TYPICAL 91-FOOT R.O.W. RESIDENTIAL COLLECTOR WITH BIKE LANES AND PARKING ON BOTH SIDES (PUBLIC)

*PARKING WHERE APPLICABLE

**10 FOOT SIDEWALK TO BE INSTALLED ADJACENT TO THE SCHOOL SITE AND WHERE DEPICTED ON THE PLANS.

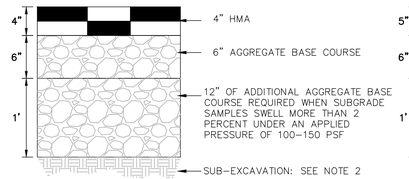


POETRY ROAD STA:10+00 TO 23+78.61

TYPE I – TYPICAL 71-FOOT R.O.W. RESIDENTIAL LOCAL STREET WITH DETACHED SIDEWALK (PUBLIC)

*10 FOOT SIDEWALK TO BE INSTALLED ADJACENT TO THE SCHOOL SITE AND WHERE DEPICTED ON THE PLANS.

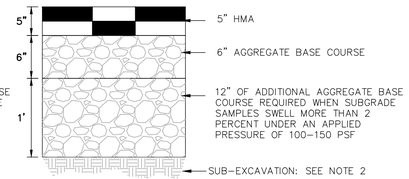
**CURB IS TO BE MOUNTABLE WHERE ADJACENT TO RESIDENTIAL LOTS



MINIMUM RESIDENTIAL LOCAL PAVEMENT SECTION

N.T.S.

NOTES:
1. MINIMUM PAVEMENT SECTIONS FOR BUDGETING PURPOSES ARE PRESENTED HEREON. SUBGRADE INVESTIGATION AND PAVEMENT DESIGNS ARE TO BE COMPLETED BY THE GEOTECHNICAL ENGINEER AFTER OVERLOT GRADING.
2. ADDITIONAL SUB-EXCAVATION (3 TO 5 FEET) MAY BE MERITED.
3. ASPHALT, BASE COURSE DEPTH, AND SUBGRADE PRAPARTATION IS TO BE IN ACCORDANCE WITH GEOTECHNICAL RECOMMENDATIONS.



MINIMUM RESIDENTIAL COLLECTOR PAVEMENT SECTION

N.T.S.

NOTES:
1. MINIMUM PAVEMENT SECTIONS FOR BUDGETING PURPOSES ARE PRESENTED HEREON. SUBGRADE INVESTIGATION AND PAVEMENT DESIGNS ARE TO BE COMPLETED BY THE GEOTECHNICAL ENGINEER AFTER OVERLOT GRADING.
2. ADDITIONAL SUB-EXCAVATION (3 TO 5 FEET) MAY BE MERITED.
3. ASPHALT, BASE COURSE DEPTH, AND SUBGRADE PRAPARTATION IS TO BE IN ACCORDANCE WITH GEOTECHNICAL RECOMMENDATIONS.

Know what's **below.**
Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

AARON LEE CLUTTER, REGISTERED PROFESSIONAL ENGINEER, 36742

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

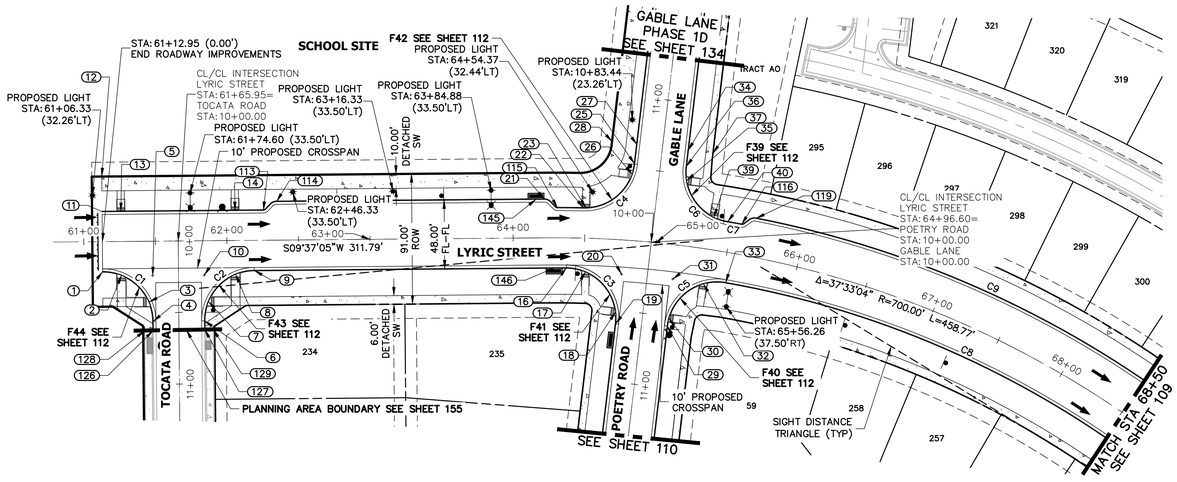
H-SCALE	1" = 10'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	JOS
DRAWN BY	CGM
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

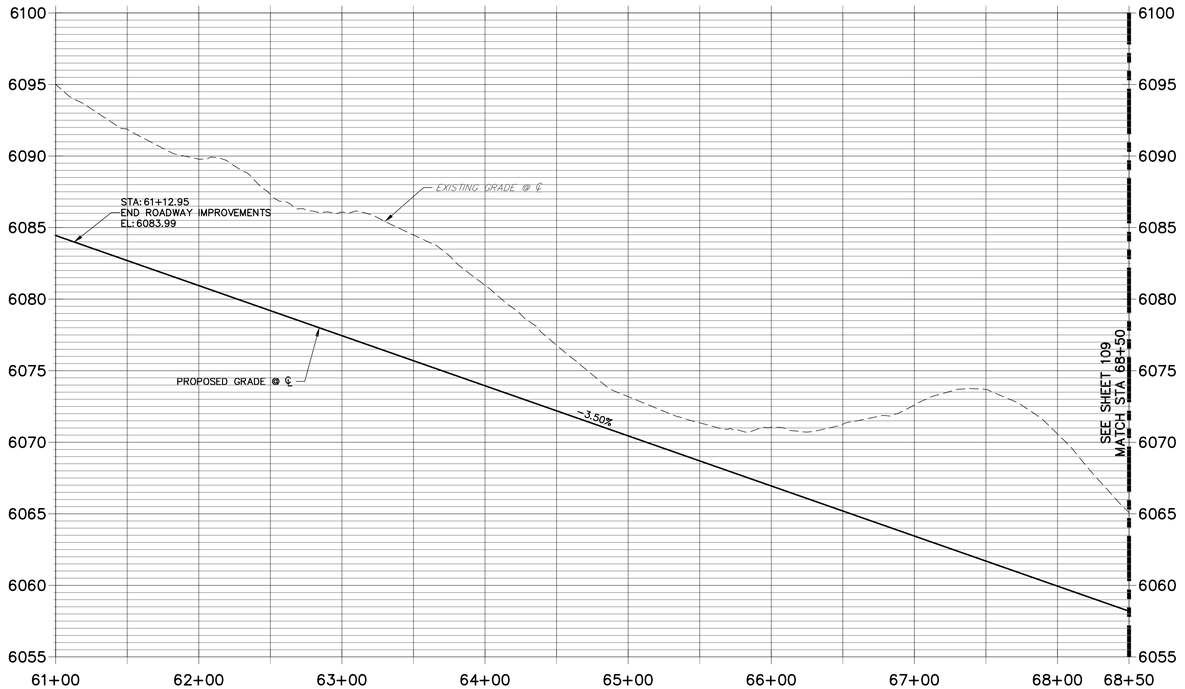
ROADWAY SECTIONS-PHASE 1C

SHEET 107 OF 270

JOB NO. 15950.01

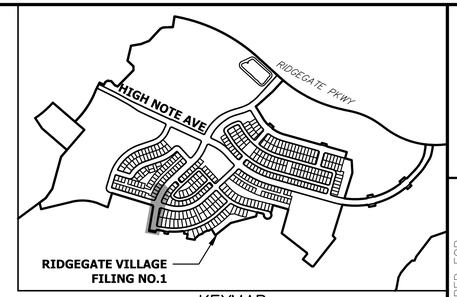


LYRIC STREET PROFILE
STA 61+00.00 TO 68+50.00



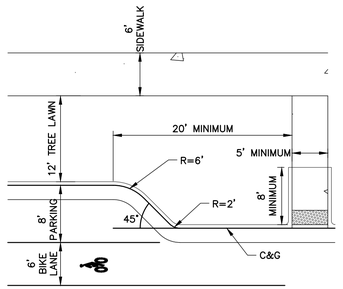
ROADWAY NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE COVER SHEET FOR BENCHMARK.
4. SEE SHEET 104 FOR LEGEND.
5. SEE SHEET 107 FOR TYPICAL STREET SECTIONS.
6. SEE SHEET 112 FOR CURB RETURN PROFILES.
7. SEE SHEETS 113–114 FOR CURB RAMP DETAILS.
8. SEE SHEETS 115–117 FOR SIGNAGE AND STRIPING.
9. ALL CURB RADII ARE 35' UNLESS OTHERWISE NOTED.
10. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.



KEYMAP
SCALE:1"=1000'

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
1	61+12.95	21.00' (RT)	LYRIC STREET	6083.47		PCR
2	61+26.14	23.58' (RT)	LYRIC STREET	6083.24		HC RAMP MID PT
3	10+42.44	20.73' (RT)	TOCATA ROAD	6082.90		HC RAMP MID PT
4	10+56.00	18.00' (RT)	TOCATA ROAD	6083.04		PCR
5	61+47.95	24.00' (RT)	LYRIC STREET	6082.38		FL–FL INTERCEPT
6	10+56.00	18.00' (LT)	TOCATA ROAD	6082.34		PCR
7	10+42.44	20.73' (LT)	TOCATA ROAD	6081.75		HC RAMP MID PT
8	62+05.77	23.58' (RT)	LYRIC STREET	6080.42		HC RAMP MID PT
9	62+18.95	21.00' (RT)	LYRIC STREET	6079.62		PCR
10	61+83.95	24.00' (RT)	LYRIC STREET	6081.19		FL–FL INTERCEPT
11	61+12.95	21.00' (LT)	LYRIC STREET	6083.34		BEGIN C&G
12	61+12.95	45.50' (LT)	LYRIC STREET	6084.13		BEGIN DETACHED SW
13	61+26.08	21.00' (LT)	LYRIC STREET	6082.87		HC RAMP MID PT
14	62+05.83	21.00' (LT)	LYRIC STREET	6080.07		HC RAMP MID PT
16	64+37.40	21.00' (RT)	LYRIC STREET	6071.97		PCR
17	64+51.21	23.51' (RT)	LYRIC STREET	6071.79		HC RAMP MID PT
18	10+51.32	18.99' (RT)	POETRY ROAD	6071.57		HC RAMP MID PT
19	10+59.58	18.00' (RT)	POETRY ROAD	6071.36		PCR
20	64+77.36	24.00' (RT)	LYRIC STREET	6070.83		FL–FL INTERCEPT
21	64+21.91	27.00' (LT)	LYRIC STREET	6072.51		PC
22	64+48.67	21.00' (LT)	LYRIC STREET	6071.81		PCR
23	64+50.28	21.04' (LT)	LYRIC STREET	6071.68		HC RAMP MID PT
25	10+52.98	18.00' (LT)	GABLE LANE	6069.87		PCR
26	10+45.53	18.80' (LT)	GABLE LANE	6070.09		HC RAMP MID PT
27	10+66.61	18.00' (LT)	GABLE LANE	6069.42		BEGIN C&G
28	10+66.61	35.50' (LT)	GABLE LANE	6070.26		END DETACHED SW
29	10+56.83	18.00' (LT)	POETRY ROAD	6070.33		PCR
30	10+51.32	18.44' (LT)	POETRY ROAD	6070.18		HC RAMP MID PT
31	65+14.65	24.00' (RT)	LYRIC STREET	6069.55		FL–FL INTERCEPT
32	65+36.98	24.33' (RT)	LYRIC STREET	6068.91		HC RAMP MID PT
33	65+52.79	21.00' (RT)	LYRIC STREET	6067.93		PCR
34	10+66.61	18.00' (RT)	GABLE LANE	6068.56		BEGIN C&G
35	10+45.53	19.40' (RT)	GABLE LANE	6068.97		HC RAMP MID PT
36	10+55.32	18.00' (RT)	GABLE LANE	6068.82		PCR
37	10+66.61	35.50' (RT)	GABLE LANE	6069.40		END DETACHED SW
39	65+37.17	22.55' (LT)	LYRIC STREET	6068.88		HC RAMP MID PT
40	65+46.93	21.00' (LT)	LYRIC STREET	6068.14		PCR
113	62+25.67	21.00' (LT)	LYRIC STREET	6079.38		PC
114	62+34.99	27.00' (LT)	LYRIC STREET	6079.05		PT
115	64+30.93	21.00' (LT)	LYRIC STREET	6072.20		PT
116	65+56.62	21.00' (LT)	LYRIC STREET	6067.80		PC
119	65+65.45	27.00' (LT)	LYRIC STREET	6067.49		PT
126	10+62.42	18.00' (RT)	TOCATA ROAD	6083.06		END C&G
127	10+62.00	18.00' (LT)	TOCATA ROAD	6082.22		END C&G
128	10+62.49	23.92' (RT)	TOCATA ROAD	6083.49		END ATTACHED SW
129	10+61.93	23.92' (LT)	TOCATA ROAD	6082.61		END ATTACHED SW
145	64+16.25	27.00' (LT)	LYRIC STREET	6072.71		INLET
146	64+28.60	21.00' (RT)	LYRIC STREET	6072.28		INLET



BULB OUT DETAIL

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C1	90°00'00"	35.00'	54.98'
C2	90°00'00"	35.00'	54.98'
C3	96°12'35"	35.00'	58.77'
C4	84°42'47"	35.00'	51.75'
C5	93°14'05"	35.00'	56.95'
C6	87°14'41"	35.00'	53.29'
C7	0°47'37"	721.00'	9.99'
C8	27°04'13"	679.00'	320.80'
C9	25°39'47"	727.00'	325.63'

811
Know what's **below.**
Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

AARON LEE CLUTTER 36742 REGISTERED PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS CONSTRUCTION PLANS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

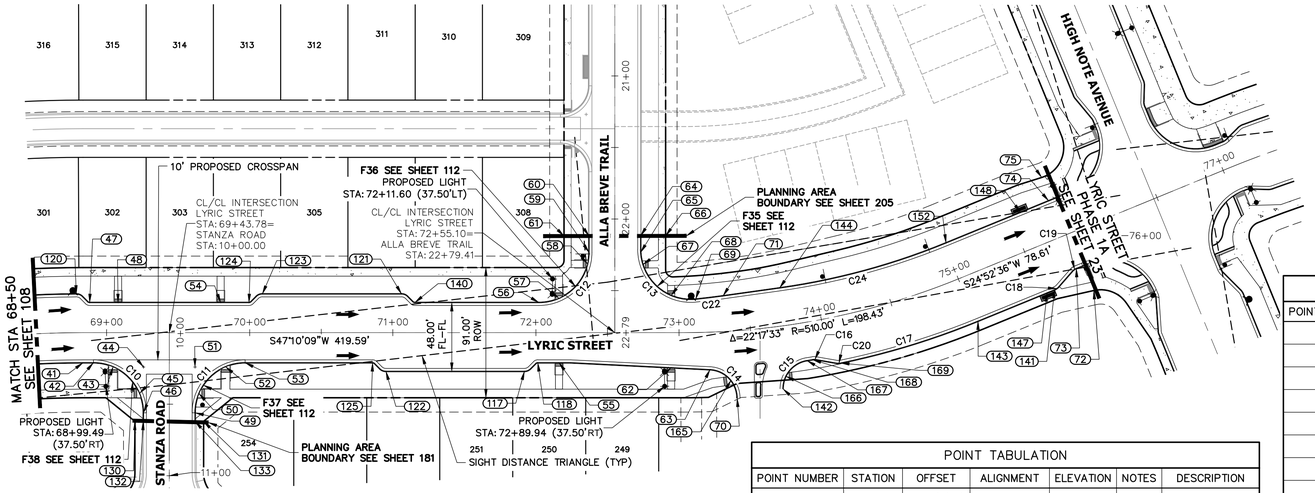
H-SCALE	1"=50'
V-SCALE	1"=5'
DATE	2/12/21
DESIGNED BY	RDO
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

ROADWAY PLAN & PROFILES–PHASE 1C

SHEET 108 OF 270

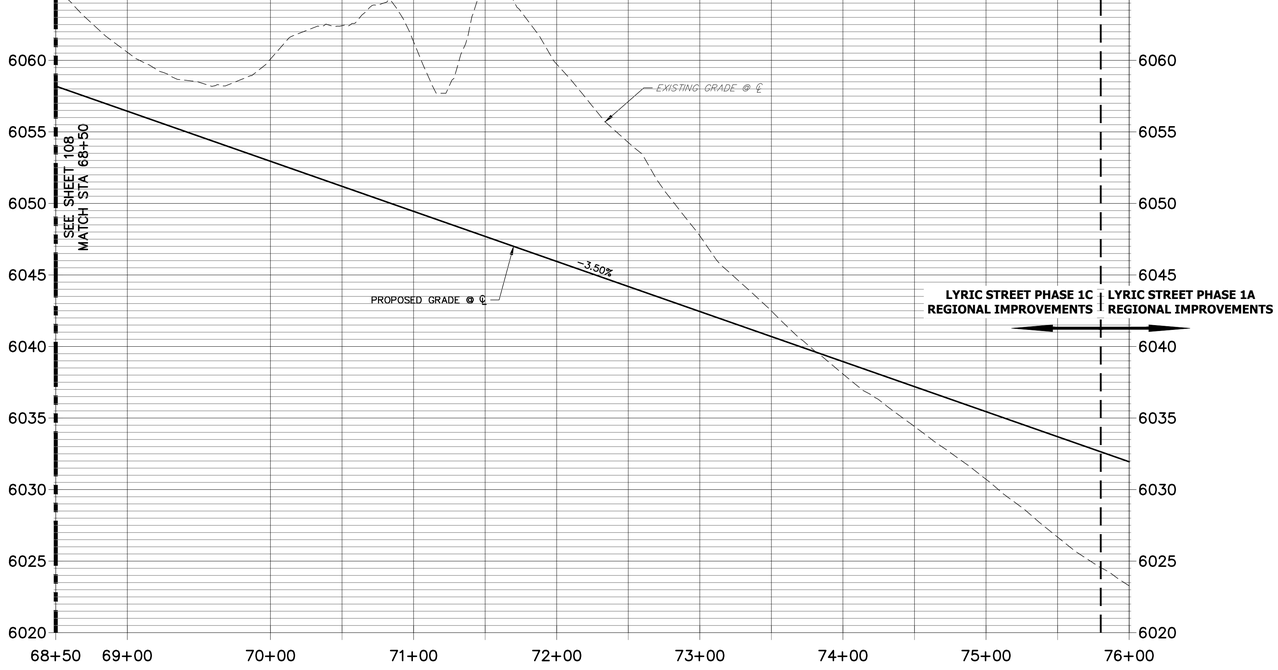
JOB NO. 15950.01



POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
167	73+85.48	26.50' (RT)	LYRIC STREET	6039.02		PCR
168	73+89.17	26.50' (RT)	LYRIC STREET	6038.89		PC
169	74+07.07	32.50' (RT)	LYRIC STREET	6038.34		PT

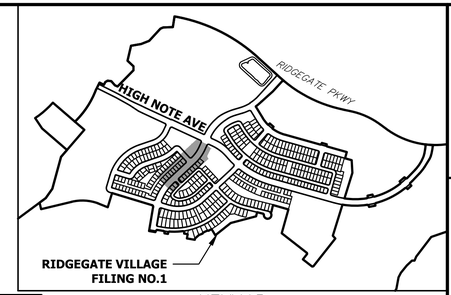
POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
144	73+74.17	26.50' (LT)	LYRIC STREET	6039.71		PC
147	75+53.67	32.50' (RT)	LYRIC STREET	6032.90		INLET
148	75+57.85	26.50' (LT)	LYRIC STREET	6032.75		INLET
152	75+01.53	26.50' (LT)	LYRIC STREET	6034.73		PT
165	73+34.18	34.37' (RT)	LYRIC STREET	6041.17		HC RAMP MID PT
166	73+70.21	35.18' (RT)	LYRIC STREET	6039.87		HC RAMP MID PT

LYRIC STREET PROFILE (1)
STA 68+50.00 TO 76+00.00



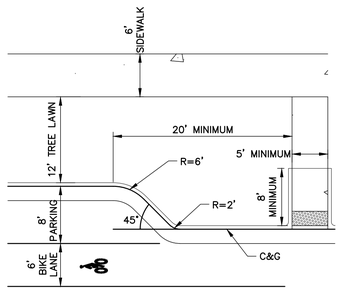
ROADWAY NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE COVER SHEET FOR BENCHMARK.
4. SEE SHEET 104 FOR LEGEND.
5. SEE SHEET 107 FOR TYPICAL STREET SECTIONS.
6. SEE SHEET 112 FOR CURB RETURN PROFILES.
7. SEE SHEETS 113–114 FOR CURB RAMP DETAILS.
8. SEE SHEETS 115–117 FOR SIGNAGE AND STRIPING.
9. ALL CURB RADII ARE 35' UNLESS OTHERWISE NOTED.
10. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.



KEYMAP
SCALE: 1"=1000'

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
41	68+83.51	21.00' (RT)	LYRIC STREET	6056.36		PT
42	68+90.78	21.00' (RT)	LYRIC STREET	6056.10		PCR
43	69+04.55	23.82' (RT)	LYRIC STREET	6055.93		HC RAMP MID PT
44	69+25.78	24.00' (RT)	LYRIC STREET	6055.19		FL–FL INTERCEPT
45	10+42.44	20.73' (RT)	STANZA ROAD	6055.87		HC RAMP MID PT
46	10+56.00	18.00' (RT)	STANZA ROAD	6056.00		PCR
47	68+88.14	21.00' (LT)	LYRIC STREET	6056.19		PT
48	69+07.99	21.00' (LT)	LYRIC STREET	6055.50		HC RAMP MID PT
49	10+56.00	18.00' (LT)	STANZA ROAD	6054.87		PCR
50	10+42.44	20.73' (LT)	STANZA ROAD	6054.38		HC RAMP MID PT
51	69+61.78	24.00' (RT)	LYRIC STREET	6053.93		FL–FL INTERCEPT
52	69+83.09	23.79' (RT)	LYRIC STREET	6053.26		HC RAMP MID PT
53	69+96.78	21.00' (RT)	LYRIC STREET	6052.39		PCR
54	69+79.65	21.00' (LT)	LYRIC STREET	6052.99		HC RAMP MID PT
55	72+16.10	21.00' (RT)	LYRIC STREET	6044.72		HC RAMP MID PT
56	72+02.10	21.00' (LT)	LYRIC STREET	6045.21		PCR
57	72+16.14	23.94' (LT)	LYRIC STREET	6045.09		HC RAMP MID PT
58	22+31.43	18.93' (RT)	ALLA BREVE TRAIL	6043.54		HC RAMP MID PT
59	22+23.41	18.00' (RT)	ALLA BREVE TRAIL	6043.33		PCR
60	22+11.88	18.00' (RT)	ALLA BREVE TRAIL	6043.10		BEGIN C&G
61	22+11.91	35.50' (RT)	ALLA BREVE TRAIL	6042.97		BEGIN DETACHED SW
62	72+94.44	24.48' (RT)	LYRIC STREET	6042.53		HC RAMP MID PT
63	73+20.70	26.15' (RT)	LYRIC STREET	6041.58		PCR
64	22+11.83	18.00' (LT)	ALLA BREVE TRAIL	6042.19		BEGIN C&G
65	22+23.41	18.00' (LT)	ALLA BREVE TRAIL	6042.34		PCR
66	22+11.80	35.50' (LT)	ALLA BREVE TRAIL	6043.03		BEGIN DETACHED SW
67	22+31.78	19.63' (LT)	ALLA BREVE TRAIL	6042.85		HC RAMP MID PT
68	72+94.46	25.94' (LT)	LYRIC STREET	6042.31		HC RAMP MID PT
69	73+11.97	23.27' (LT)	LYRIC STREET	6041.89		PCR
70	73+37.46	47.07' (RT)	LYRIC STREET	6040.68		PCR
71	73+32.16	24.86' (LT)	LYRIC STREET	6041.20		PT
72	75+84.53	43.37' (RT)	LYRIC STREET	6032.69		MATCH EX DETACHED SW
73	75+79.07	24.50' (RT)	LYRIC STREET	6032.01		MATCH EX C&G
74	75+79.07	26.50' (LT)	LYRIC STREET	6032.01		MATCH EX C&G
75	75+80.78	43.50' (LT)	LYRIC STREET	6032.78		MATCH EX DETACHED SW
117	71+91.95	27.00' (RT)	LYRIC STREET	6045.56		PC
118	72+01.26	21.00' (RT)	LYRIC STREET	6045.23		PT
120	68+78.98	27.00' (LT)	LYRIC STREET	6056.51		PC
121	71+06.07	27.00' (LT)	LYRIC STREET	6048.57		PC
122	70+95.18	27.00' (RT)	LYRIC STREET	6048.95		PT
123	70+08.81	27.00' (LT)	LYRIC STREET	6051.97		PT
124	69+99.50	21.00' (LT)	LYRIC STREET	6052.30		PC
125	70+85.87	21.00' (RT)	LYRIC STREET	6049.27		PC
130	10+62.00	23.92' (RT)	STANZA ROAD	6056.57		END ATTACHED SW
131	10+62.00	23.92' (LT)	STANZA ROAD	6055.12		END ATTACHED SW
132	10+62.00	18.00' (RT)	STANZA ROAD	6056.14		END C&G
133	10+62.00	18.00' (LT)	STANZA ROAD	6054.69		END C&G
140	71+15.38	21.00' (LT)	LYRIC STREET	6048.24		PT
141	75+59.33	32.50' (RT)	LYRIC STREET	6032.70		PC
142	73+67.29	43.64' (RT)	LYRIC STREET	6040.33		PCR
143	75+01.53	32.50' (RT)	LYRIC STREET	6034.73		PT



BULB OUT DETAIL

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C10	90°00'00"	35.00'	54.98'
C11	90°00'00"	35.00'	54.98'
C12	90°00'00"	35.00'	54.98'
C13	95°40'28"	35.00'	58.44'
C14	87°09'30"	20.00'	30.42'
C15	80°44'42"	20.00'	28.19'
C16	19°30'03"	8.00'	2.72'
C17	10°36'42"	542.50'	100.48'
C18	26°38'26"	8.00'	3.72'
C19	26°38'26"	8.00'	3.72'
C20	21°30'38"	8.00'	3.00'
C22	2°18'34"	479.00'	19.31'
C24	14°18'31"	483.50'	120.75'

50 25 0 50 100
HORIZONTAL
ORIGINAL SCALE: 1" = 50'
VERTICAL
ORIGINAL SCALE: 1" = 5'

Know what's below.
Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON LEE CLUTTER REGISTERED PROFESSIONAL ENGINEER 36742

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS CONSTRUCTION PLANS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

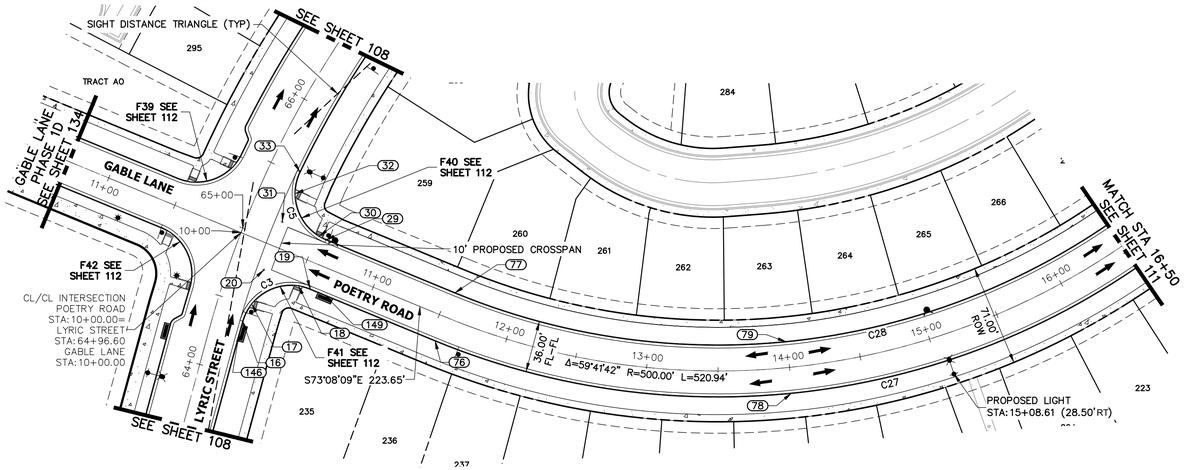
H-SCALE 1"=50'
V-SCALE 1"=5'
DATE 2/12/21
DESIGNED BY RDO
DRAWN BY SDL
CHECKED BY

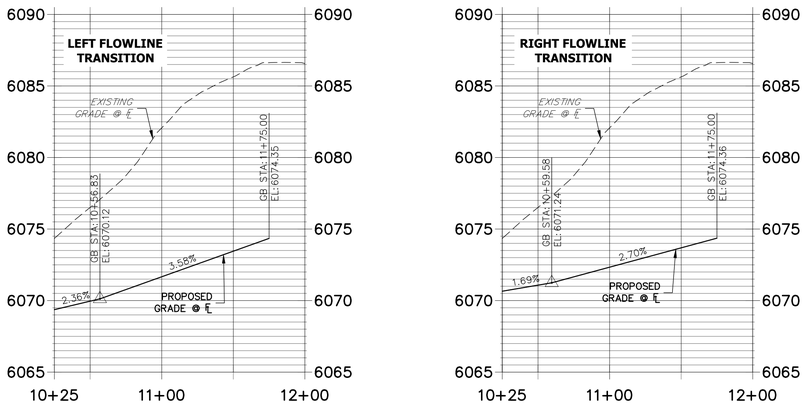
RIDGEGATE SOUTHWEST VILLAGE FILING 1

ROADWAY PLAN & PROFILES–PHASE 1C

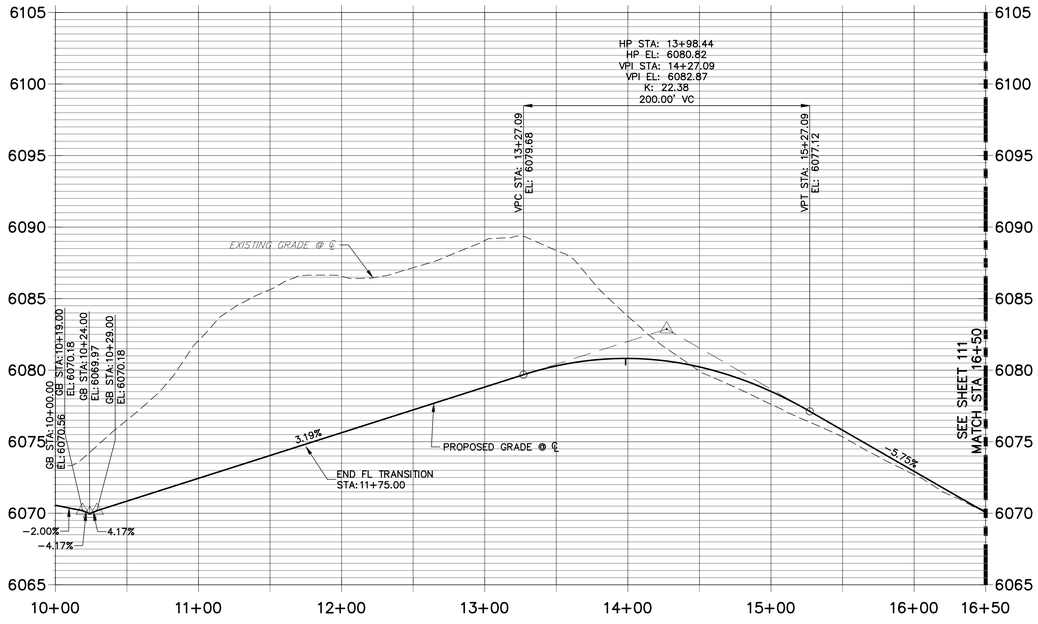
SHEET 109 OF 270

JOB NO. 15950.01



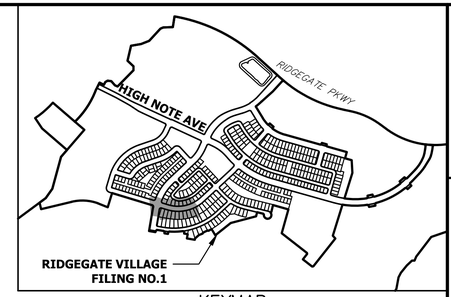


POETRY ROAD PROFILE
STA 10+00.00 TO 16+50.00



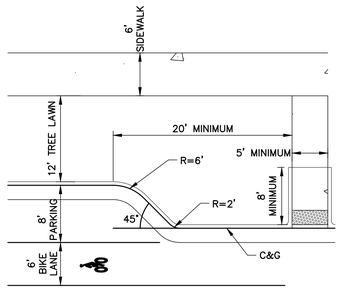
ROADWAY NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE COVER SHEET FOR BENCHMARK.
4. SEE SHEET 104 FOR LEGEND.
5. SEE SHEET 107 FOR TYPICAL STREET SECTIONS.
6. SEE SHEET 112 FOR CURB RETURN PROFILES.
7. SEE SHEETS 113–114 FOR CURB RAMP DETAILS.
8. SEE SHEETS 115–117 FOR SIGNAGE AND STRIPING.
9. ALL CURB RADII ARE 35' UNLESS OTHERWISE NOTED.
10. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.



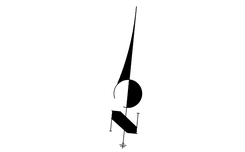
KEYMAP
SCALE:1"=1000'

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
16	64+37.40	21.00' (RT)	LYRIC STREET	6071.97		PCR
17	64+51.21	23.51' (RT)	LYRIC STREET	6071.79		HC RAMP MID PT
18	10+51.32	18.99' (RT)	POETRY ROAD	6071.57		HC RAMP MID PT
19	10+59.58	18.00' (RT)	POETRY ROAD	6071.36		PCR
20	64+77.36	24.00' (RT)	LYRIC STREET	6070.83		FL–FL INTERCEPT
29	10+56.83	18.00' (LT)	POETRY ROAD	6070.33		PCR
30	10+51.32	18.44' (LT)	POETRY ROAD	6070.18		HC RAMP MID PT
31	65+14.65	24.00' (RT)	LYRIC STREET	6069.55		FL–FL INTERCEPT
32	65+36.98	24.33' (RT)	LYRIC STREET	6068.91		HC RAMP MID PT
33	65+52.79	21.00' (RT)	LYRIC STREET	6067.93		PCR
76	11+54.13	18.00' (RT)	POETRY ROAD	6073.80		PC
77	11+54.13	18.00' (LT)	POETRY ROAD	6073.60		PC
78	13+99.58	18.00' (RT)	POETRY ROAD	6080.34		HIGH PT
79	13+99.58	18.00' (LT)	POETRY ROAD	6080.33		HIGH PT
146	64+28.60	21.00' (RT)	LYRIC STREET	6072.28		INLET
149	10+71.28	18.00' (RT)	POETRY ROAD	6071.56		INLET



BULB OUT DETAIL

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C3	96°12'35"	35.00'	58.77'
C5	93°14'05"	35.00'	56.95'
C27	59°41'42"	518.00'	539.69'
C28	59°41'42"	482.00'	502.18'



Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

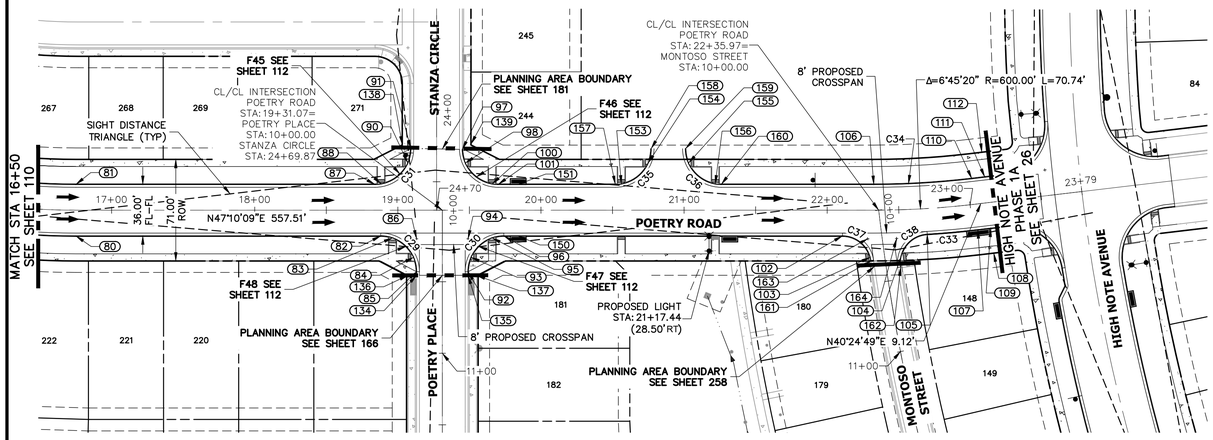
H-SCALE	1"=50'	DESIGNED BY	RDO
V-SCALE	1"=5'	DRAWN BY	SDL
DATE	2/12/21	CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

ROADWAY PLAN & PROFILES–PHASE 1C

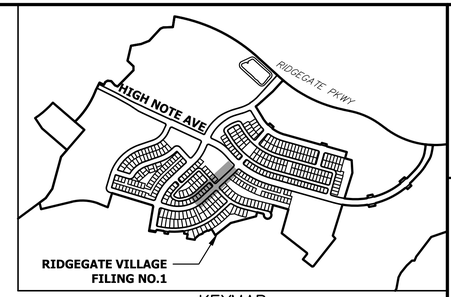
SHEET 110 OF 270

JOB NO. 15950.01



POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
153	20+56.18	18.35' (LT)	POETRY ROAD	6051.69		HC RAMP MID PT
154	20+74.88	32.94' (LT)	POETRY ROAD	6051.27		HC RAMP MID PT
155	21+03.10	32.94' (LT)	POETRY ROAD	6050.20		HC RAMP MID PT
156	21+21.80	18.35' (LT)	POETRY ROAD	6049.20		HC RAMP MID PT
157	20+51.99	18.00' (LT)	POETRY ROAD	6051.35		PCR
158	20+76.99	43.00' (LT)	POETRY ROAD	6050.43		PCR
159	21+00.99	43.00' (LT)	POETRY ROAD	6049.86		PCR
160	21+25.99	18.00' (LT)	POETRY ROAD	6048.55		PCR
161	10+34.42	10.00' (RT)	MONTOSO STREET	6045.70		PCR
162	10+41.62	10.00' (LT)	MONTOSO STREET	6044.96		PCR
163	22+28.37	20.00' (RT)	POETRY ROAD	6045.40		FL-FL INTERCEPT
164	22+48.01	19.99' (RT)	POETRY ROAD	6044.88		FL-FL INTERCEPT

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
80	16+75.07	18.00' (RT)	POETRY ROAD	6068.13		PT
81	16+75.07	18.00' (LT)	POETRY ROAD	6068.13		PT
82	18+88.07	18.00' (RT)	POETRY ROAD	6057.57		PCR
83	19+96.28	19.39' (RT)	POETRY ROAD	6057.58		HC RAMP MID PT
84	10+32.94	20.11' (RT)	POETRY PLACE	6057.34		HC RAMP MID PT
85	10+43.00	18.00' (RT)	POETRY PLACE	6057.24		PCR
86	19+13.07	20.00' (RT)	POETRY ROAD	6056.90		FL-FL INTERCEPT
87	18+84.07	18.00' (LT)	POETRY ROAD	6057.72		PCR
88	18+88.25	18.35' (LT)	POETRY ROAD	6058.06		HC RAMP MID PT
90	24+36.93	20.11' (RT)	STANZA CIRCLE	6056.81		HC RAMP MID PT
91	24+26.82	18.00' (RT)	STANZA CIRCLE	6056.36		PCR
92	10+43.00	18.00' (LT)	POETRY PLACE	6055.66		PCR
93	10+32.94	20.11' (LT)	POETRY PLACE	6055.79		HC RAMP MID PT
94	19+49.07	20.00' (RT)	POETRY ROAD	6055.48		FL-FL INTERCEPT
95	19+65.86	19.39' (RT)	POETRY ROAD	6055.04		HC RAMP MID PT
96	19+74.07	18.00' (RT)	POETRY ROAD	6054.31		PCR
97	24+27.44	18.01' (LT)	STANZA CIRCLE	6055.06		PCR
98	24+36.93	20.11' (LT)	STANZA CIRCLE	6055.27		HC RAMP MID PT
100	19+65.88	18.35' (LT)	POETRY ROAD	6055.02		HC RAMP MID PT
101	19+70.07	18.00' (LT)	POETRY ROAD	6054.90		PCR
102	22+10.65	18.00' (RT)	POETRY ROAD	6045.65		PCR
103	10+31.81	10.13' (RT)	MONTOSO STREET	6045.65		HC RAMP MID PT
104	10+34.55	11.24' (LT)	MONTOSO STREET	6045.08		HC RAMP MID PT
105	22+68.83	17.98' (RT)	POETRY ROAD	6044.18		PCR
106	22+32.58	18.00' (LT)	POETRY ROAD	6044.43		PC
107	23+03.33	17.96' (RT)	POETRY ROAD	6043.59		PT INLET
108	23+12.47	35.50' (RT)	POETRY ROAD	6044.29		MATCH EX DETACHED SW
109	23+12.45	18.00' (RT)	POETRY ROAD	6043.45		MATCH EX C&G
110	23+03.31	18.04' (LT)	POETRY ROAD	6042.40		PT
111	23+12.44	18.00' (LT)	POETRY ROAD	6042.09		MATCH EX C&G
112	23+12.44	35.50' (LT)	POETRY ROAD	6042.92		MATCH EX DETACHED SW
134	10+45.55	18.00' (RT)	POETRY PLACE	6057.31		END C&G
135	10+45.55	18.00' (LT)	POETRY PLACE	6055.76		END C&G
136	10+45.55	23.92' (RT)	POETRY PLACE	6057.74		END ATTACHED SW
137	10+45.55	23.92' (LT)	POETRY PLACE	6056.19		END ATTACHED SW
138	24+24.25	23.92' (RT)	STANZA CIRCLE	6056.71		BEGIN ATTACHED SW
139	24+23.74	24.00' (LT)	STANZA CIRCLE	6055.45		BEGIN ATTACHED SW
150	19+84.07	18.00' (RT)	POETRY ROAD	6053.93		INLET
151	19+84.07	18.00' (LT)	POETRY ROAD	6053.93		INLET



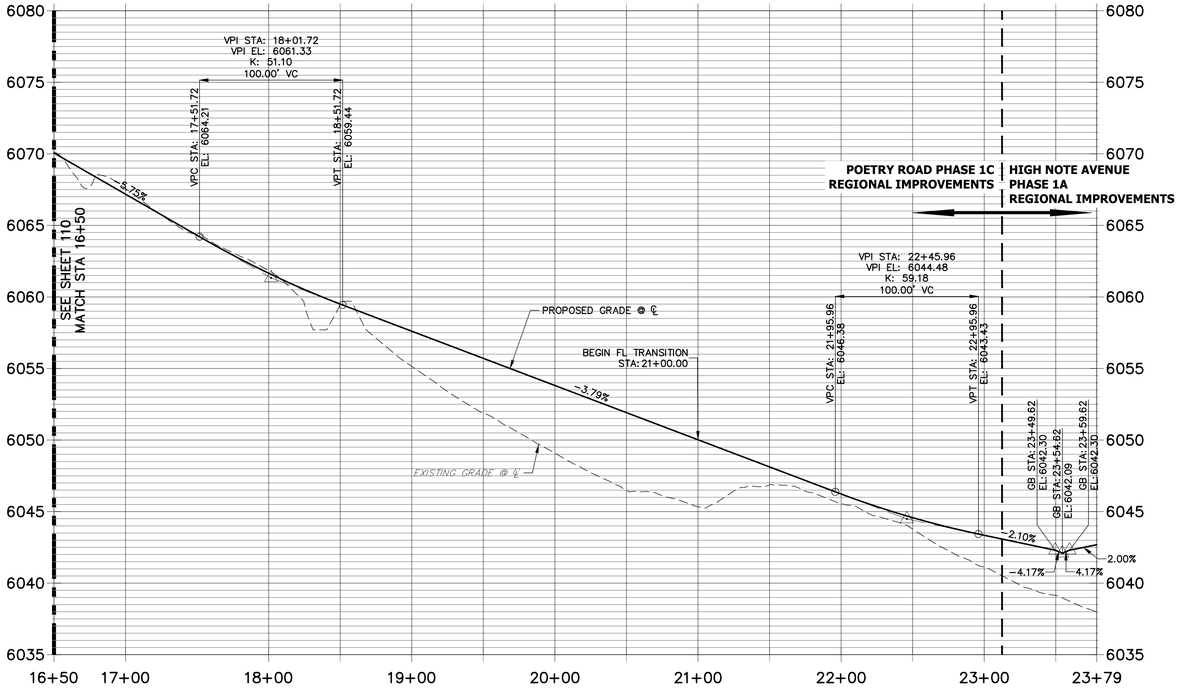
KEYMAP
SCALE:1"=1000'

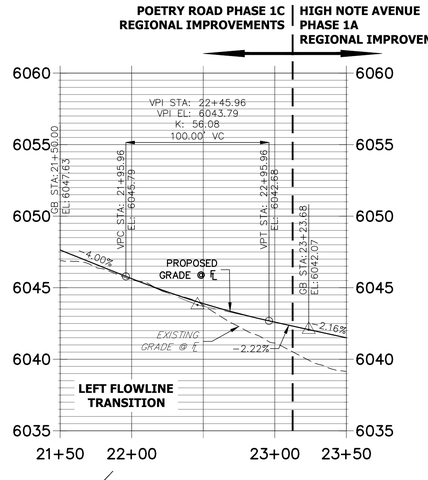
ROADWAY NOTES

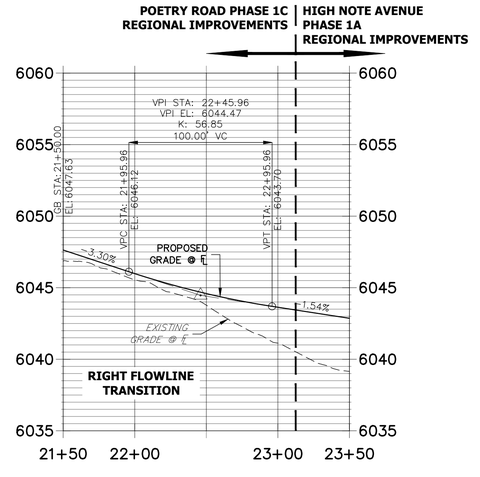
1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE COVER SHEET FOR BENCHMARK.
4. SEE SHEET 104 FOR LEGEND.
5. SEE SHEET 107 FOR TYPICAL STREET SECTIONS.
6. SEE SHEET 112 FOR CURB RETURN PROFILES.
7. SEE SHEETS 113–114 FOR CURB RAMP DETAILS.
8. SEE SHEETS 115–117 FOR SIGNAGE AND STRIPING.
9. ALL CURB RADII ARE 35' UNLESS OTHERWISE NOTED.
10. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C29	90°00'00"	25.00'	39.27'
C30	90°00'00"	25.00'	39.27'
C31	90°06'05"	25.00'	39.31'
C33	3°17'41"	618.00'	35.54'
C34	6°45'20"	582.00'	68.62'
C35	90°00'00"	25.00'	39.27'
C36	90°00'00"	25.00'	39.27'
C37	82°56'19"	20.00'	28.94'
C38	94°56'18"	20.00'	33.14'

POETRY ROAD PROFILE (1)
STA 16+50.00 TO 23+78.62







HORIZONTAL
ORIGINAL SCALE: 1" = 50'
VERTICAL
ORIGINAL SCALE: 1" = 5'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS CONSTRUCTION PLANS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE 1"=50'
V-SCALE 1"=5'
DATE 2/12/21
DESIGNED BY RDO
DRAWN BY SDL
CHECKED BY

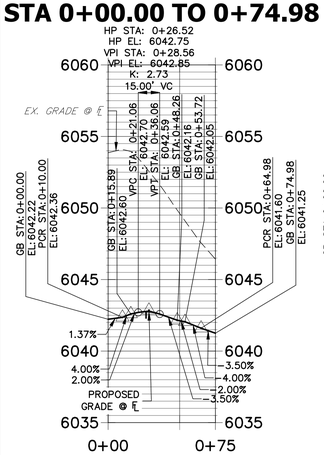
RIDGEGATE SOUTHWEST VILLAGE FILING 1

ROADWAY PLAN & PROFILES–PHASE 1C

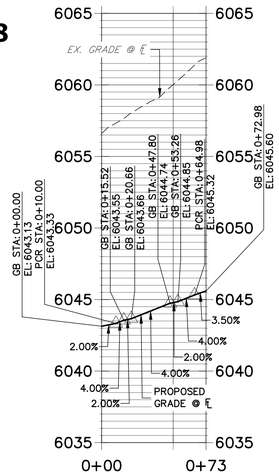
SHEET 111 OF 270

JOB NO. 15950.01

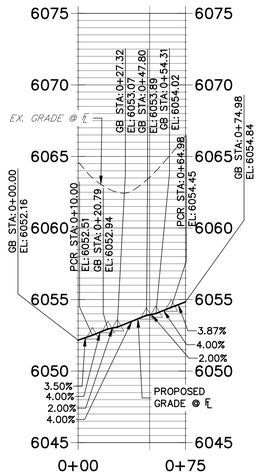
F35 PROFILE
STA 0+00.00 TO 0+74.98



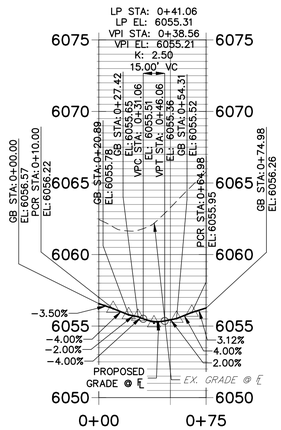
F36 PROFILE
STA 0+00.00 TO 0+72.98



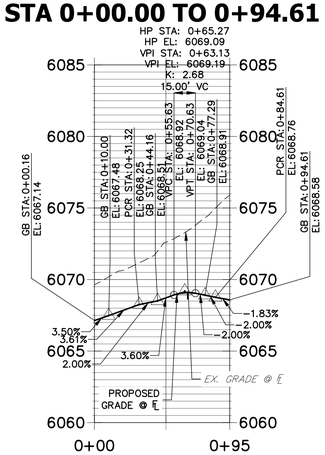
F37 PROFILE
STA 0+00.00 TO 0+74.98



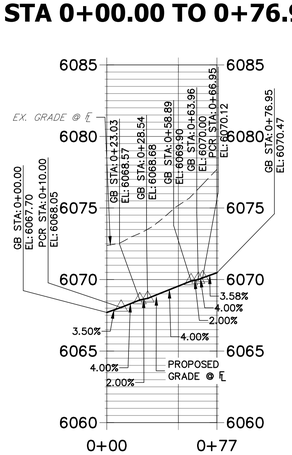
F38 PROFILE
STA 0+00.00 TO 0+74.98



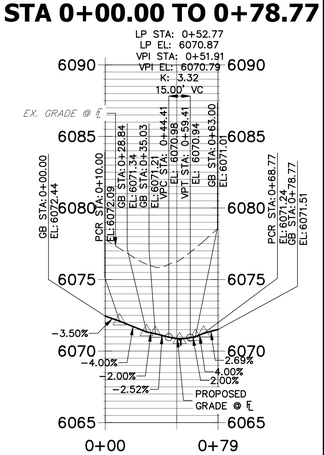
F39 PROFILE
STA 0+00.00 TO 0+94.61



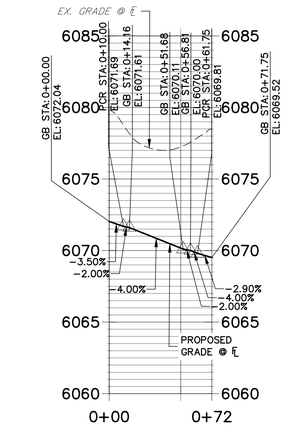
F40 PROFILE
STA 0+00.00 TO 0+76.95



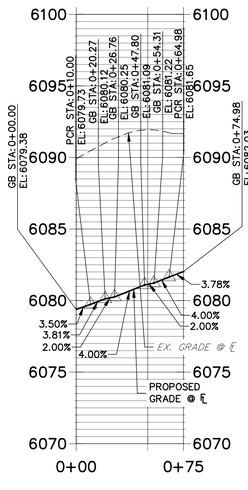
F41 PROFILE
STA 0+00.00 TO 0+78.77



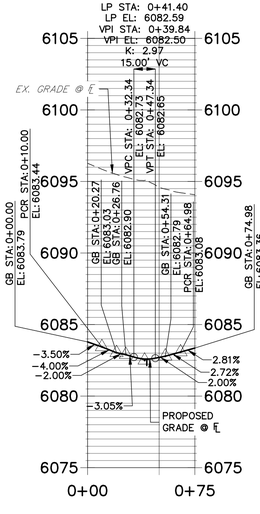
F42 PROFILE
STA 0+00.00 TO 0+71.75



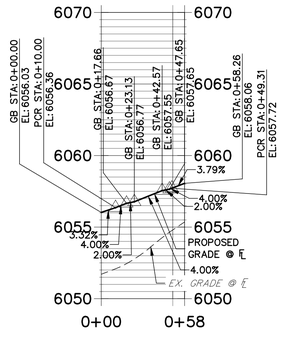
F43 PROFILE
STA 0+00.00 TO 0+74.98



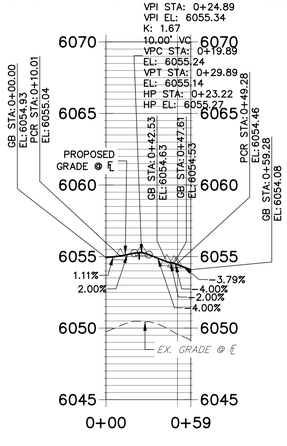
F44 PROFILE
STA 0+00.00 TO 0+74.98



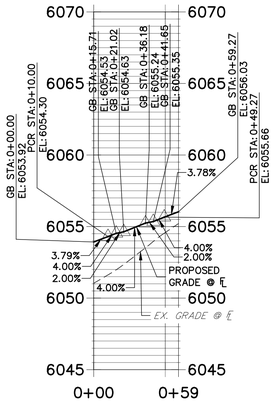
F45 PROFILE
STA 0+00.00 TO 0+58.26



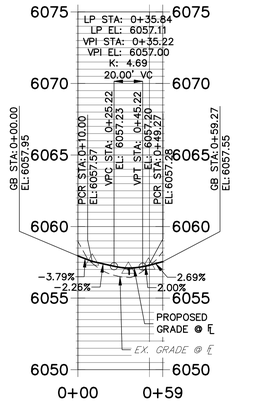
F46 PROFILE
STA 0+00.00 TO 0+59.28



F47 PROFILE
STA 0+00.00 TO 0+59.27



F48 PROFILE
STA 0+00.00 TO 0+59.27



50 25 0 50 100

HORIZONTAL
ORIGINAL SCALE: 1" = 50'

VERTICAL
ORIGINAL SCALE: 1" = 5'

811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	REVISION

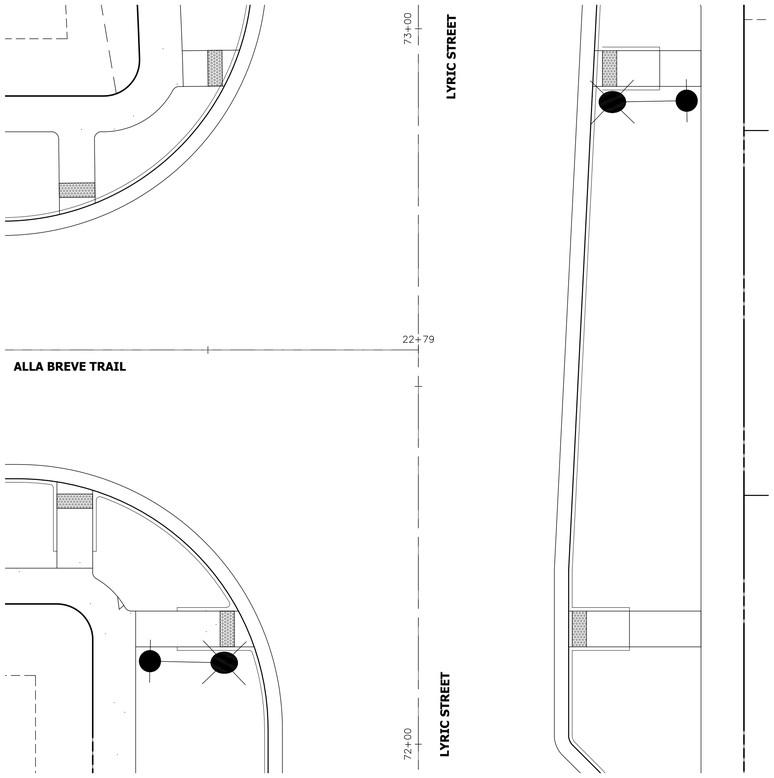
H-SCALE	1"=50'
V-SCALE	1"=5'
DATE	2/12/21
DESIGNED BY	RDO
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

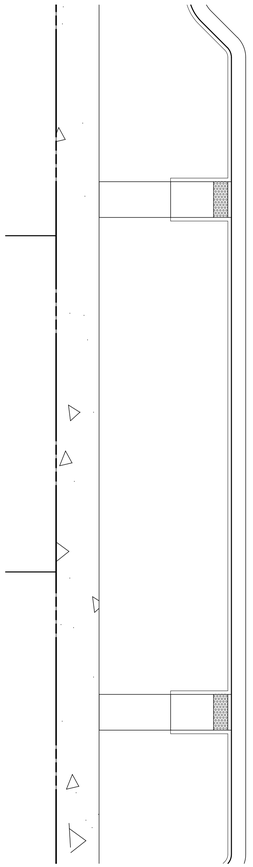
CURB RETURN PROFILES–PHASE 1C

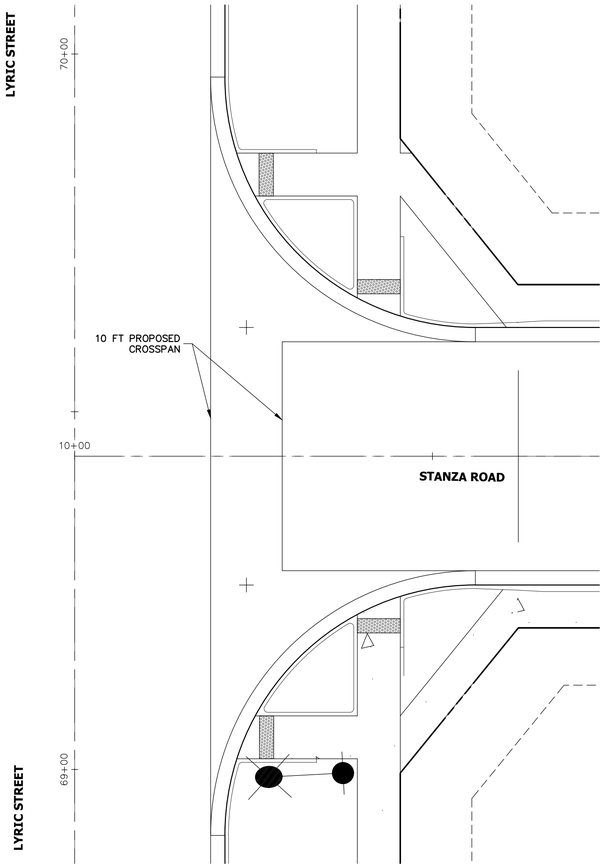
SHEET 112 OF 270

JOB NO. 15950.01

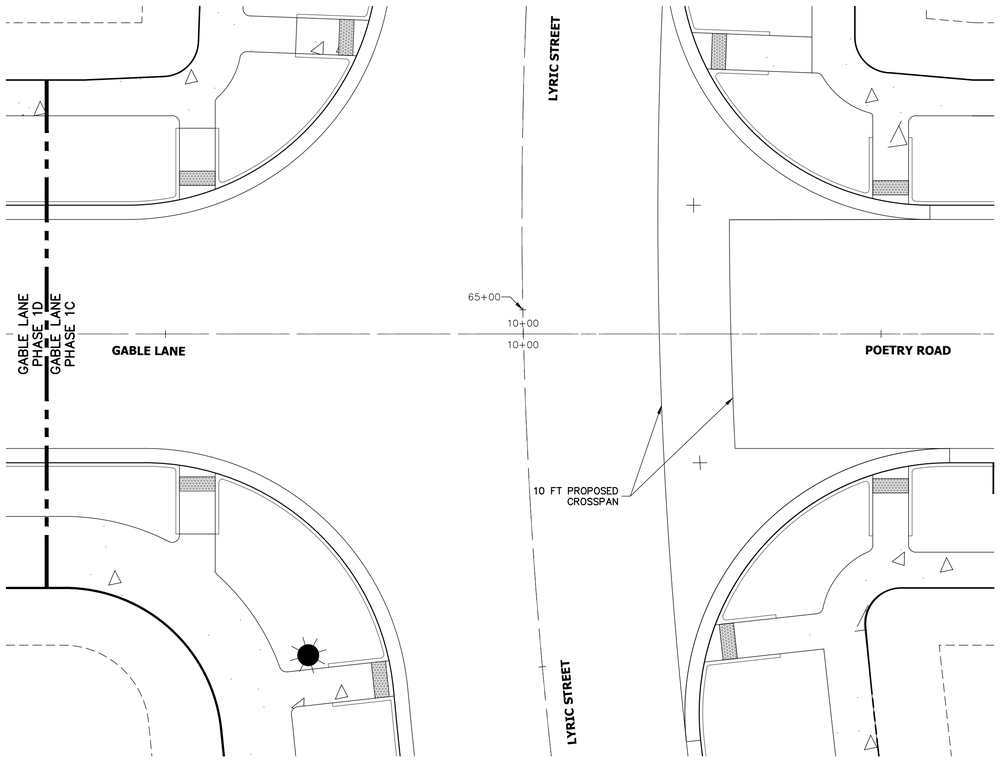


AREA 1





AREA 2



AREA 3

CURB RAMP DETAIL NOTES

1. SEE SHEET 112 FOR CURB RETURN PROFILES.
2. ALL CURB RAMP RADII ARE 35' UNLESS OTHERWISE NOTED.
3. SEE DETAILS FOR CURB RAMPS ON SHEETS 123–128.

10 5 0 10 20
ORIGINAL SCALE: 1" = 10'

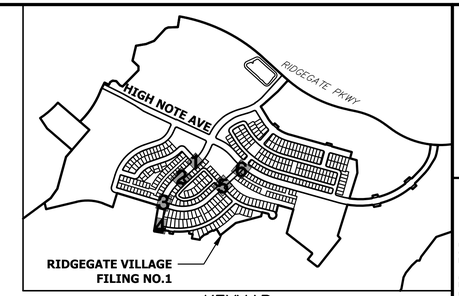
ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

DATE



KEYMAP
SCALE:1"=1000'

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

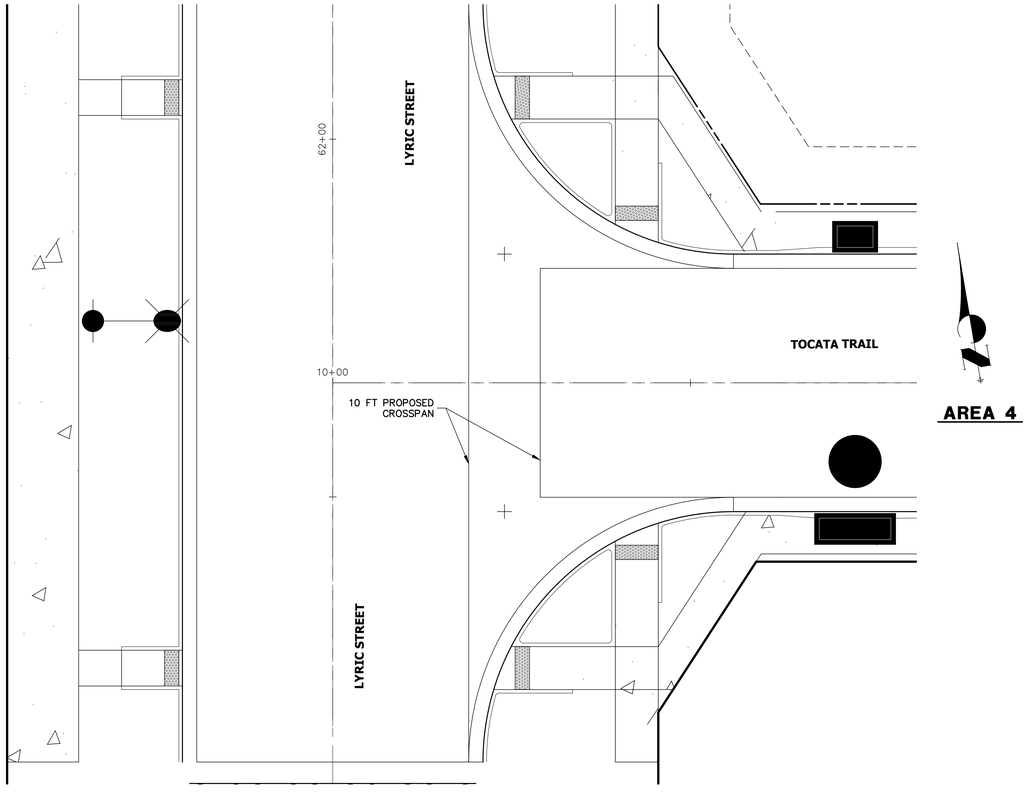
No.	REVISION	BY	DATE

H-SCALE	1"=10'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	RDO
DRAWN BY	SDL
CHECKED BY	

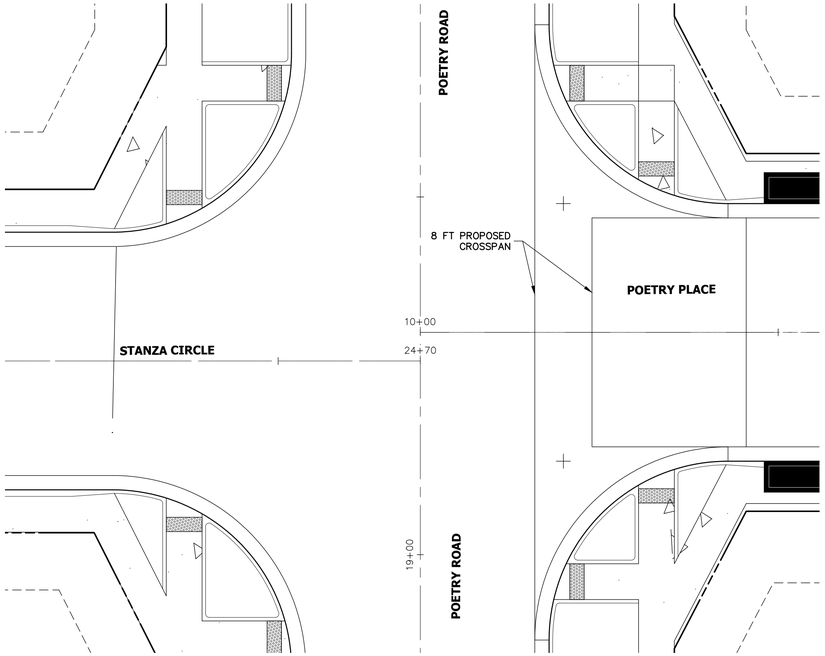
RIDGEGATE SOUTHWEST VILLAGE FILING 1
CURB RAMP DETAILS-PHASE 1C

SHEET 113 OF 270

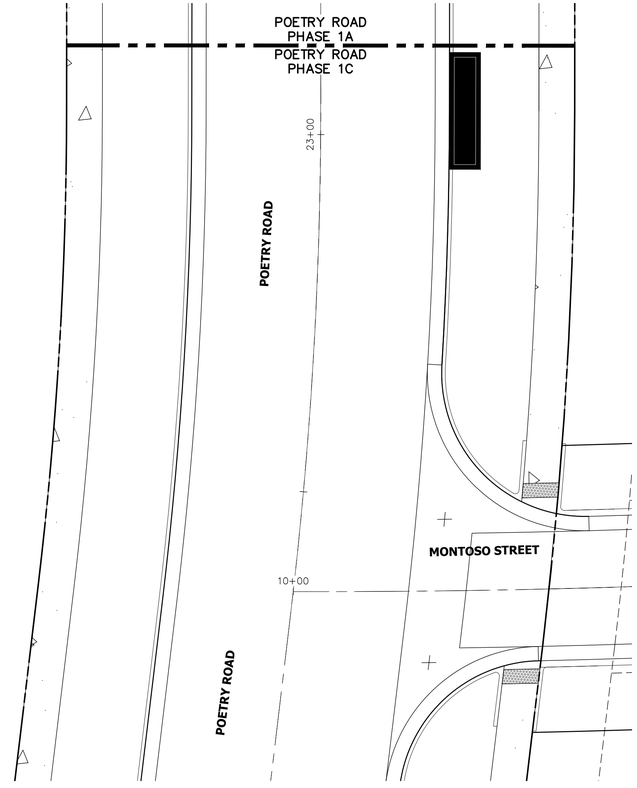
JOB NO. 15950.01



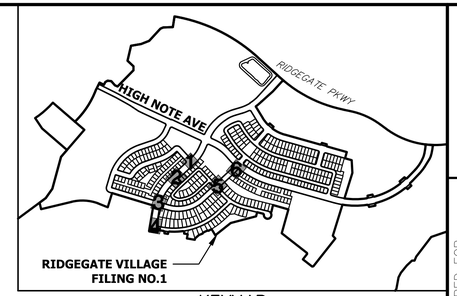
AREA 4



AREA 5



AREA 6



KEYMAP
SCALE: 1"=1000'

10 5 0 10 20
ORIGINAL SCALE: 1" = 10'

CURB RAMP DETAIL NOTES

1. SEE SHEET 112 FOR CURB RETURN PROFILES.
2. ALL CURB RAMP RADII ARE 35' UNLESS OTHERWISE NOTED.
3. SEE DETAILS FOR CURB RAMPS ON SHEETS 123–128.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=10'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	RDO
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

CURB RAMP DETAILS–PHASE 1C

SHEET 114 OF 270

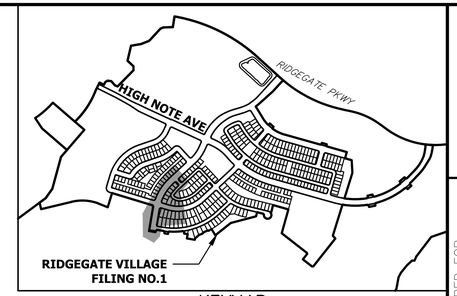
JOB NO. 15950.01

LEGEND

- PROPOSED SIGN
- EXISTING SIGN
- (XX) PROPOSED STRIPE
- (XX) EXISTING STRIPE

- (A) BIKE LANE LINE – 6" WIDE, SOLID WHITE
- (B) CROSSWALK – 2'X8' SOLID WHITE, 4' GAP CENTERED IN LANE
- (C) STOP BAR – 2' SOLID WHITE
- (D) YIELD LINE – 16"X24" SOLID WHITE TRIANGLES, 6' GAP CENTERED IN LANE
- (E) DROP LANE – 8" WIDE X 3' LONG, 12' GAP, WHITE
- (F) CHANNELIZING LINE – 8" WIDE, SOLID WHITE
- (G) DOUBLE YELLOW LINE – 5" WIDE, 3" GAP, SOLID
- (H) YELLOW EDGE LINE – 5" WIDE, SOLID
- (I) DIAGONAL MEDIAN LINE – 4" WIDE, SOLID YELLOW
- (J) LANE LINE – 5" WIDE X 10' LONG, 30' GAP, WHITE

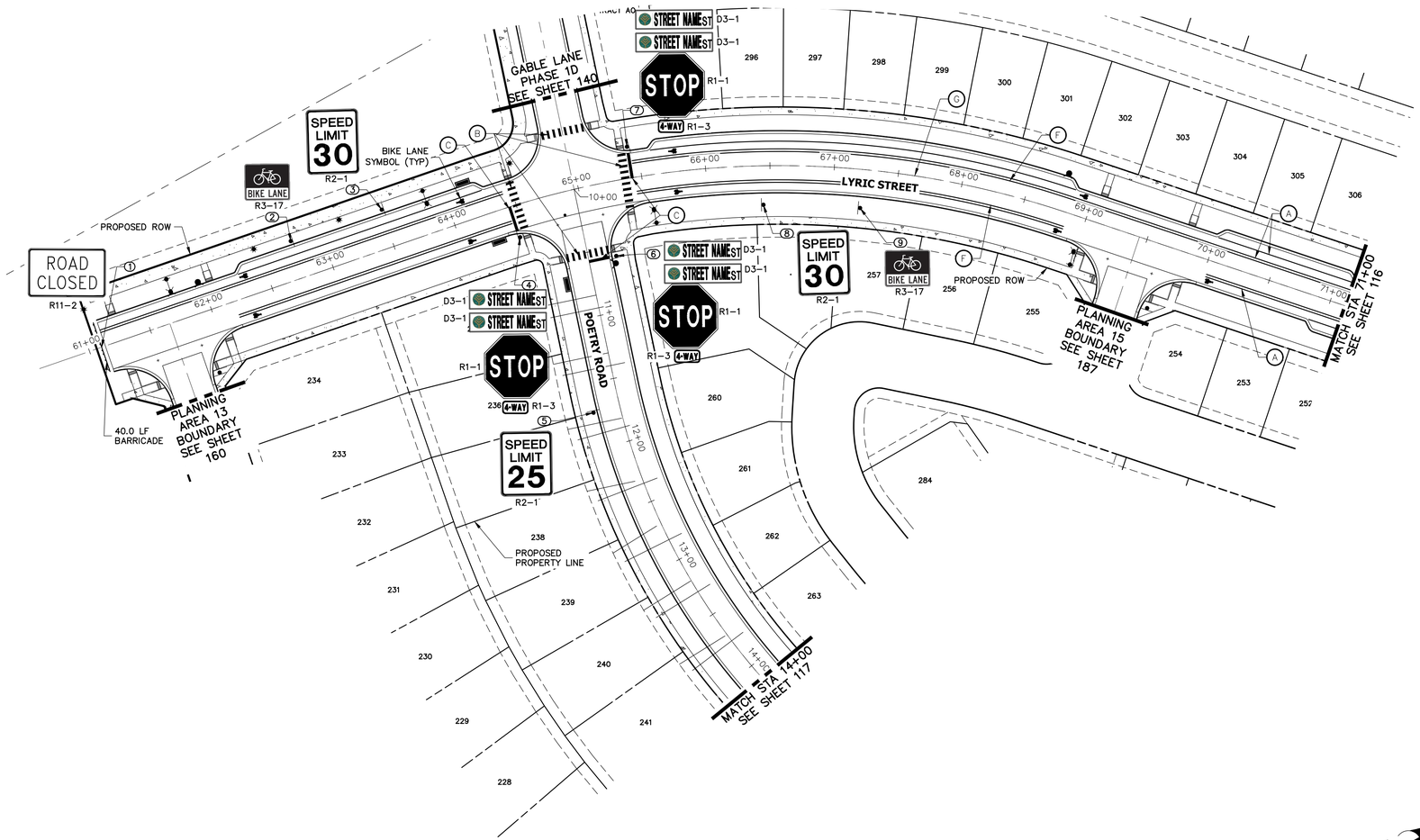
SIGN TABULATION				
SIGN NUMBER	STATION	OFFSET	ALIGNMENT	DESCRIPTION
1	61+09.96	0.17' (RT)	LYRIC STREET	R11–2
2	62+75.54	30.00' (LT)	LYRIC STREET	R3–17
3	63+50.24	30.00' (LT)	LYRIC STREET	R2–1
4	64+45.50	24.92' (RT)	LYRIC STREET	R1–1 R1–3 D3–1 X2
5	64+63.77	171.73' (RT)	LYRIC STREET	R2–1
6	10+57.34	21.49' (LT)	POETRY ROAD	R1–1 R1–3 D3–1 X2
7	65+42.52	24.34' (LT)	LYRIC STREET	R1–1 R1–3 D3–1 X2
8	66+44.37	30.29' (RT)	LYRIC STREET	R2–1
9	67+22.81	30.00' (RT)	LYRIC STREET	R3–17



KEYMAP
SCALE:1"=1000'

NOTES

1. SEE SHEET 103 FOR SIGNAGE AND STRIPING NOTES.
2. SEE SHEET 104 FOR LINETYPE AND LAYER LEGEND.



50 25 0 50 100
ORIGINAL SCALE: 1" = 50'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

AARON LEE CLUTTER — 36742 — REGISTERED PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H–SCALE	1"=50'
V–SCALE	N/A
DATE	2/12/21
DESIGNED BY	RDO
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

SIGNAGE & STRIPING PLAN–PHASE 1C

SHEET 115 OF 270

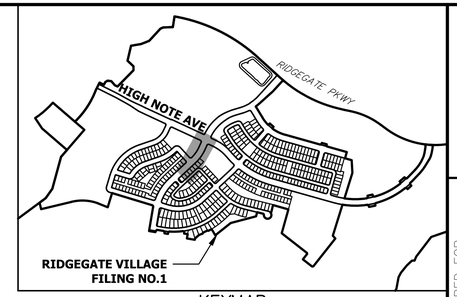
JOB NO. 15950.01

LEGEND

- PROPOSED SIGN
- EXISTING SIGN
- (XX) PROPOSED STRIPE
- (XX) EXISTING STRIPE

- (A) BIKE LANE LINE – 6" WIDE, SOLID WHITE
- (B) CROSSWALK – 2'X8' SOLID WHITE, 4' GAP CENTERED IN LANE
- (C) STOP BAR – 2' SOLID WHITE
- (D) YIELD LINE – 16"X24" SOLID WHITE TRIANGLES, 6' GAP CENTERED IN LANE
- (E) DROP LANE – 8" WIDE X 3' LONG, 12' GAP, WHITE
- (F) CHANNELIZING LINE – 8" WIDE, SOLID WHITE
- (G) DOUBLE YELLOW LINE – 5" WIDE, 3" GAP, SOLID
- (H) YELLOW EDGE LINE – 5" WIDE, SOLID
- (I) DIAGONAL MEDIAN LINE – 4" WIDE, SOLID YELLOW
- (J) LANE LINE – 5" WIDE X 10' LONG, 30' GAP, WHITE

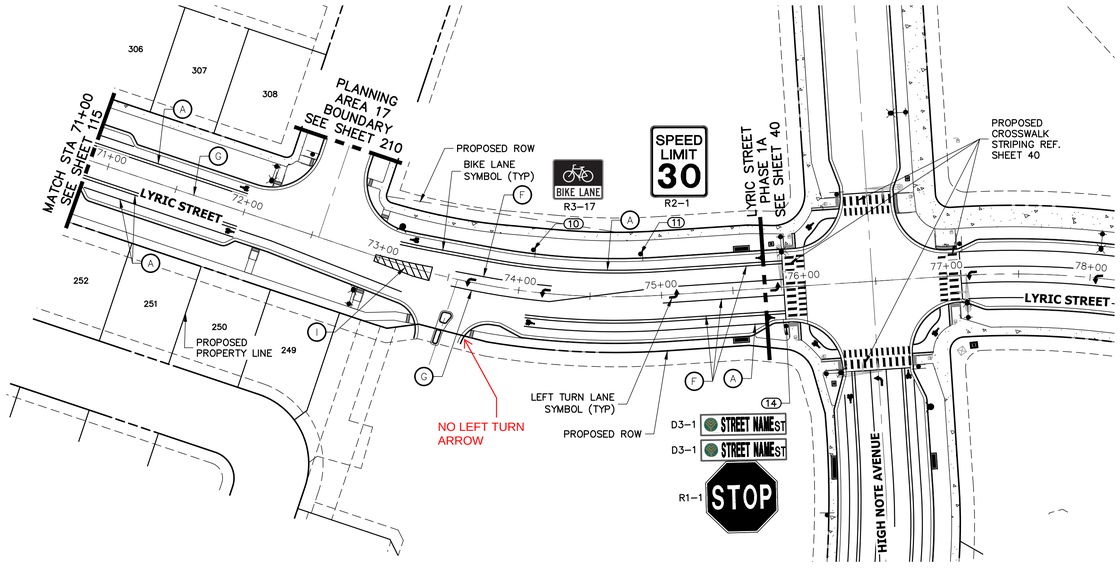
SIGN TABULATION				
SIGN NUMBER	STATION	OFFSET	ALIGNMENT	DESCRIPTION
10	74+06.81	29.28' (LT)	LYRIC STREET	R3-17
11	74+86.37	29.50' (LT)	LYRIC STREET	R2-1
14	75+85.60	27.26' (RT)	LYRIC STREET	R1-1, D3-1



KEYMAP
SCALE: 1"=1000'

NOTES

1. SEE SHEET 103 FOR SIGNAGE AND STRIPING NOTES.
2. SEE SHEET 104 FOR LINETYPE AND LAYER LEGEND.



50 25 0 50 100
ORIGINAL SCALE: 1" = 50'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

STATE OF COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=50'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	RDO
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

SIGNAGE & STRIPING PLAN-PHASE 1C

SHEET 116 OF 270

JOB NO. 15950.01

LEGEND

- PROPOSED SIGN
- EXISTING SIGN
- (XX) PROPOSED STRIPE
- (XX) EXISTING STRIPE

(A) BIKE LANE LINE – 6" WIDE, SOLID WHITE

(B) CROSSWALK – 2'X8' SOLID WHITE, 4' GAP CENTERED IN LANE

(C) STOP BAR – 2' SOLID WHITE

(D) YIELD LINE – 16"X24" SOLID WHITE TRIANGLES, 6' GAP CENTERED IN LANE

(E) DROP LANE – 8" WIDE X 3' LONG, 12' GAP, WHITE

(F) CHANNELIZING LINE – 8" WIDE, SOLID WHITE

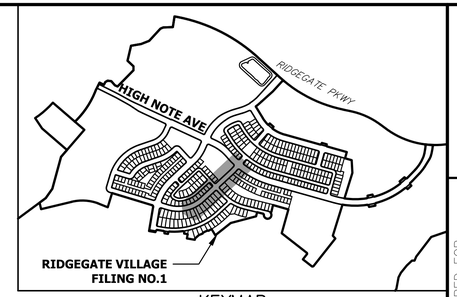
(G) DOUBLE YELLOW LINE – 5" WIDE, 3" GAP, SOLID

(H) YELLOW EDGE LINE – 5" WIDE, SOLID

(I) DIAGONAL MEDIAN LINE – 4" WIDE, SOLID YELLOW

(J) LANE LINE – 5" WIDE X 10' LONG, 30' GAP, WHITE

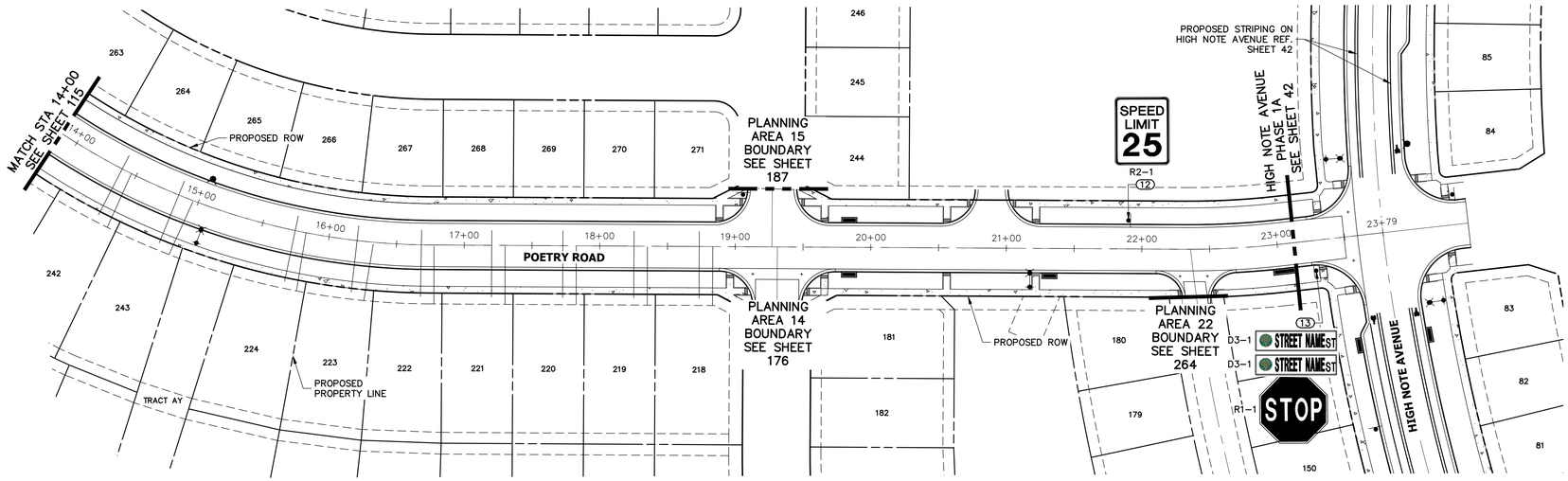
SIGN TABULATION				
SIGN NUMBER	STATION	OFFSET	ALIGNMENT	DESCRIPTION
12	21+90.05	21.00' (LT)	POETRY ROAD	R2-1
13	23+26.51	22.31' (RT)	POETRY ROAD	R1-1 D3-1 X2



KEYMAP
SCALE: 1"=1000'

NOTES

1. SEE SHEET 103 FOR SIGNAGE AND STRIPING NOTES.
2. SEE SHEET 104 FOR LINETYPE AND LAYER LEGEND.



50 25 0 50 100
ORIGINAL SCALE: 1" = 50'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

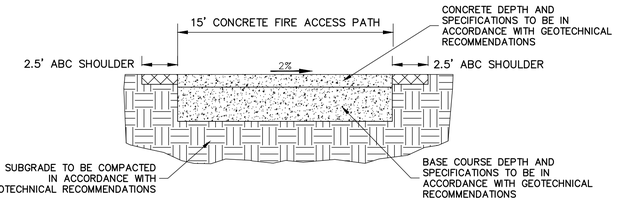
H-SCALE	1"=50'	DESIGNED BY	RDO
V-SCALE	N/A	DRAWN BY	SDL
DATE	2/12/21	CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

SIGNAGE & STRIPING PLAN–PHASE 1C

SHEET 117 OF 270

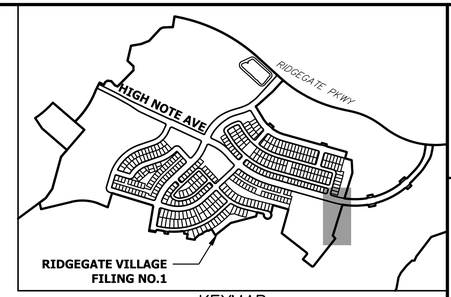
JOB NO. 15950.01



15–FOOT WIDE CONCRETE FIRE ACCESS PATH WITH 2.5' SOFT SHOULDER

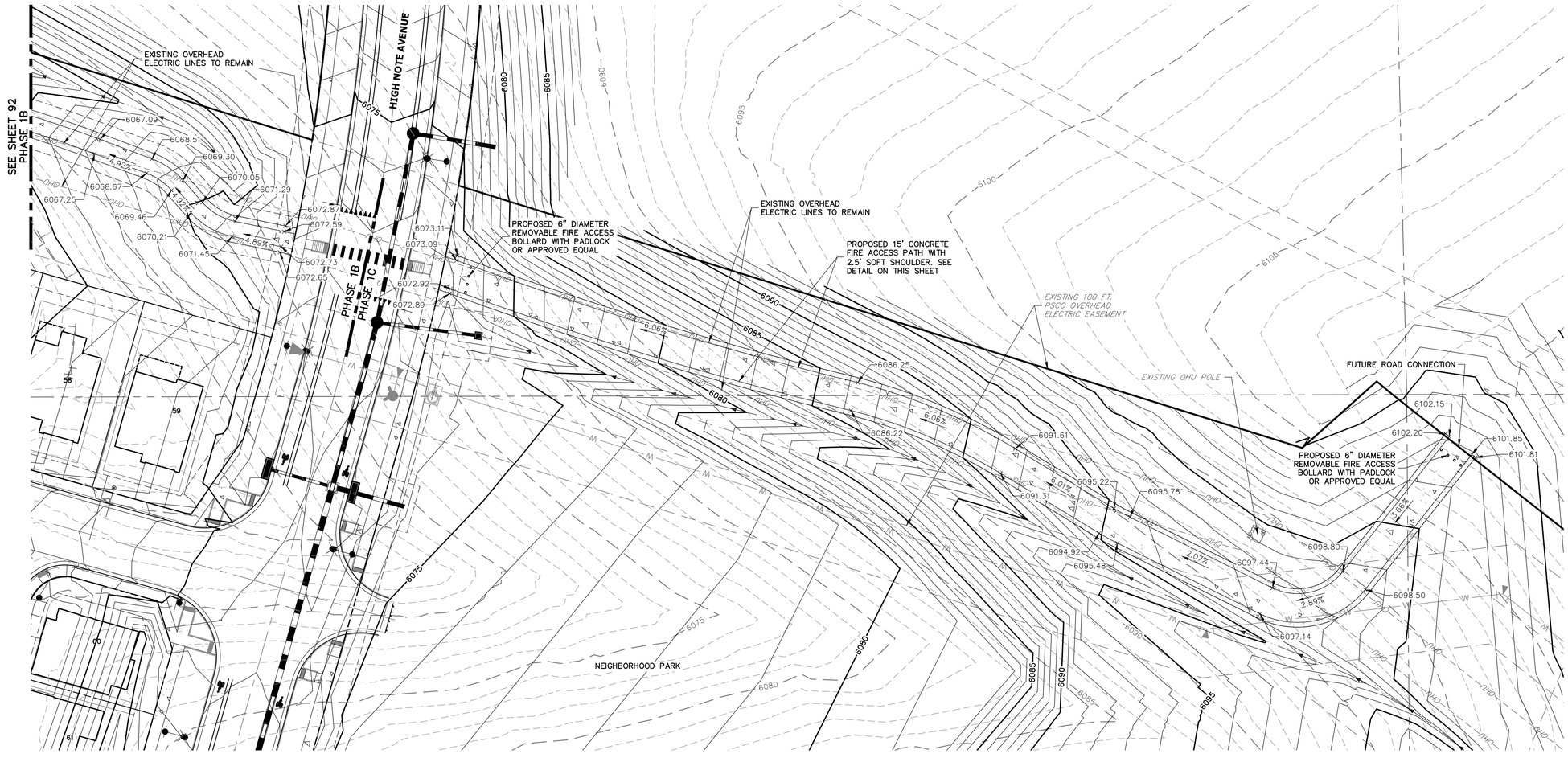
NTS

NOTE: FIRE ACCESS PATH TO SUPOORT AN 80,000 LB FIRE APPARATUS.



KEYMAP

SCALE:1"=1000'



30 15 0 30 60

ORIGINAL SCALE: 1" = 30'

Know what's **below.** **Call** before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

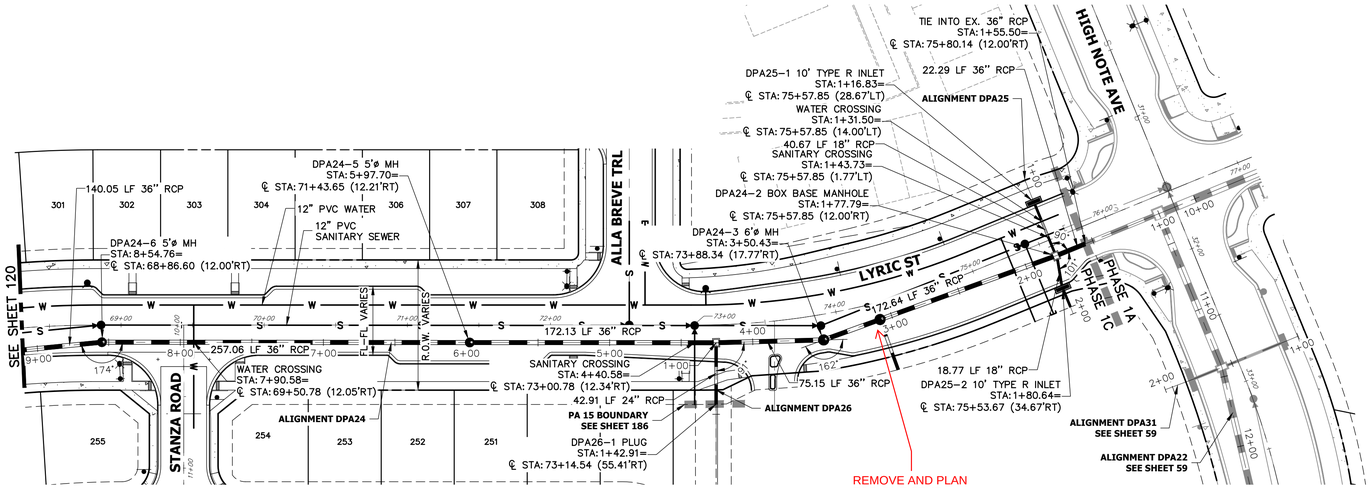
H-SCALE	1"=30'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	SDL
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

TRAIL IMPROVEMENT PLANS–PHASE 1C

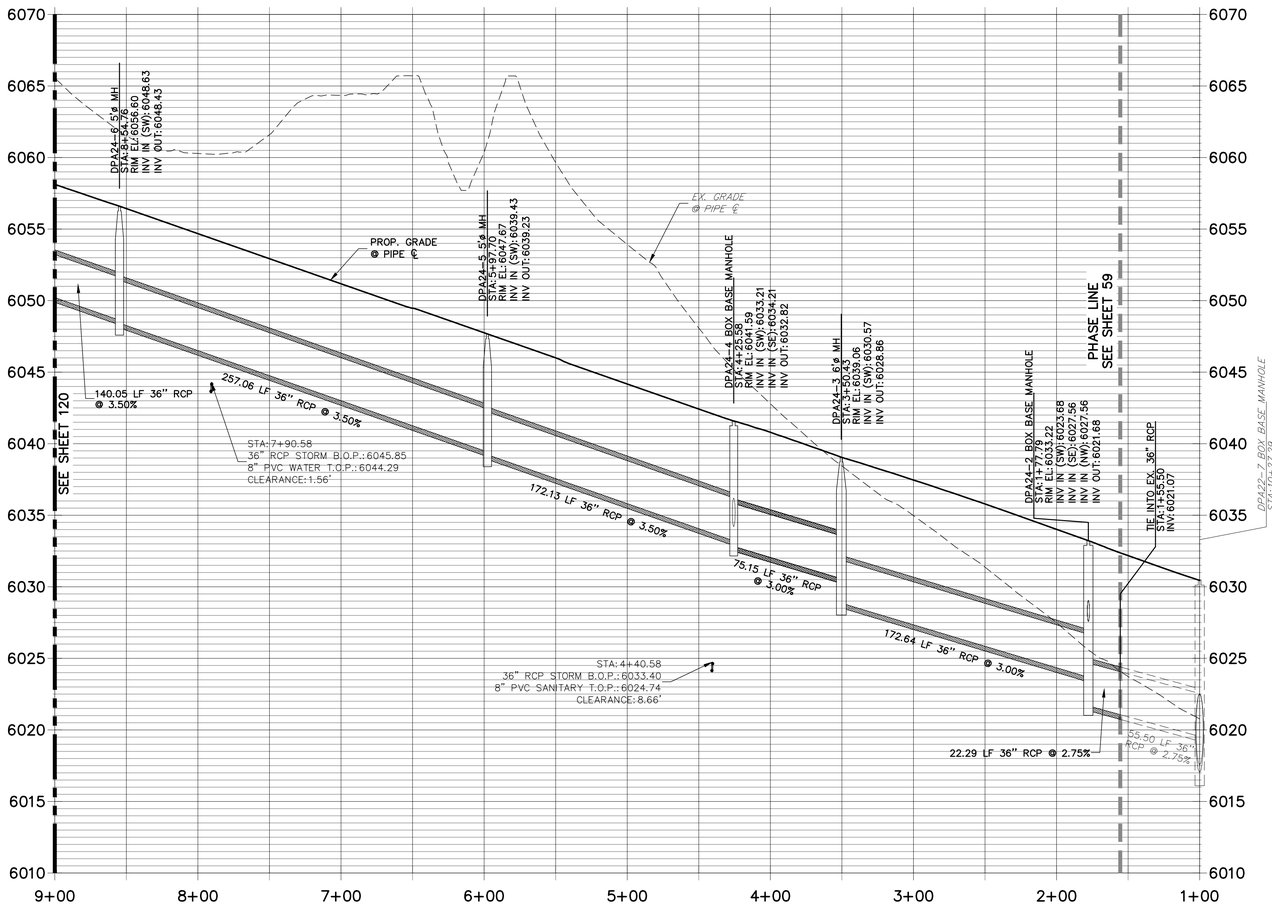
SHEET 118 OF 270

JOB NO. 15950.01

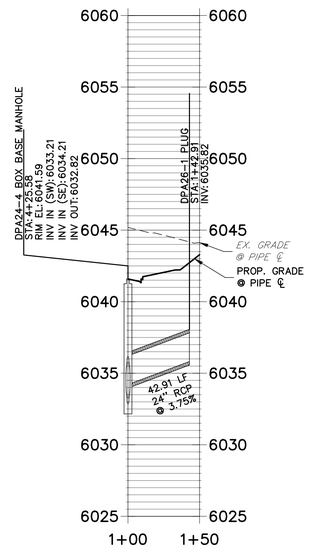


REMOVE AND PLAN FOR ONE STUB FROM THE ADJACENT SITE AT THE TYPE R AT THE INTERSECTION

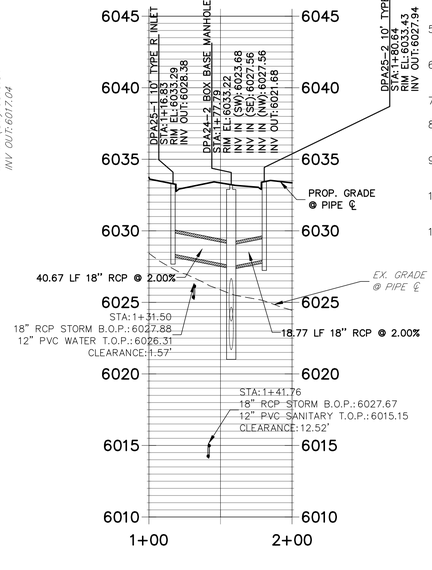
DPA24 PROFILE
STA 1+00.00 TO 9+00.00



DPA26 PROFILE
STA 1+00.00 TO 1+50.00



DPA25 PROFILE
STA 1+00.00 TO 2+00.00



STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON–GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.

50 25 0 50 100

HORIZONTAL
ORIGINAL SCALE: 1" = 50'
VERTICAL
ORIGINAL SCALE: 1" = 5'

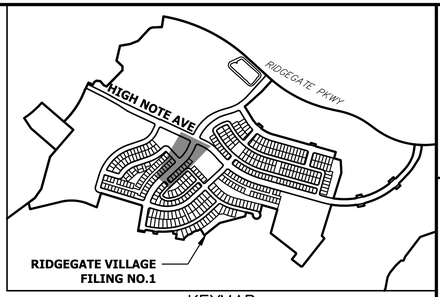
Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE



KEYMAP
SCALE: 1"=1000'

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

No.	REVISION	BY	DATE

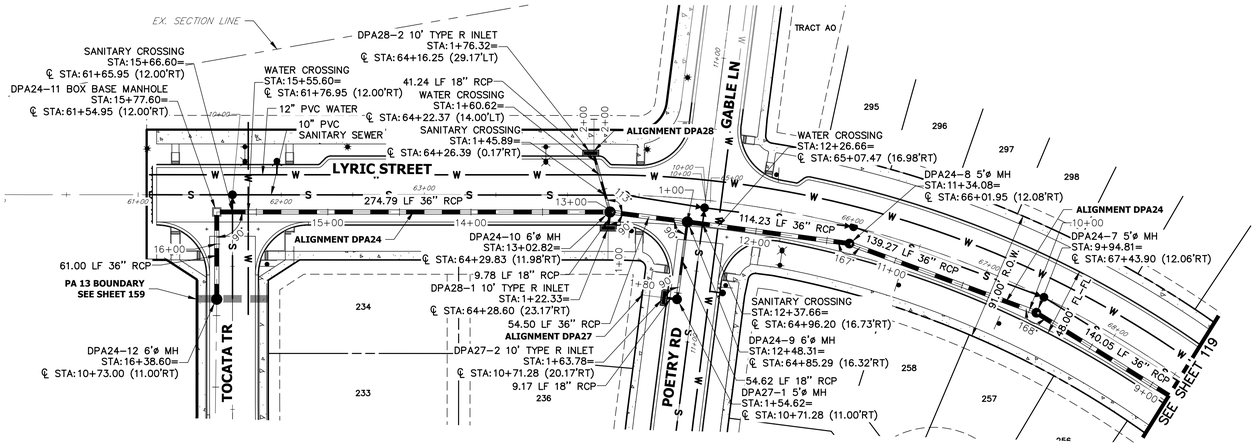
H–SCALE	1" = 50'
V–SCALE	1" = 5'
DATE	2/12/21
DESIGNED BY	CGM
DRAWN BY	CGM
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

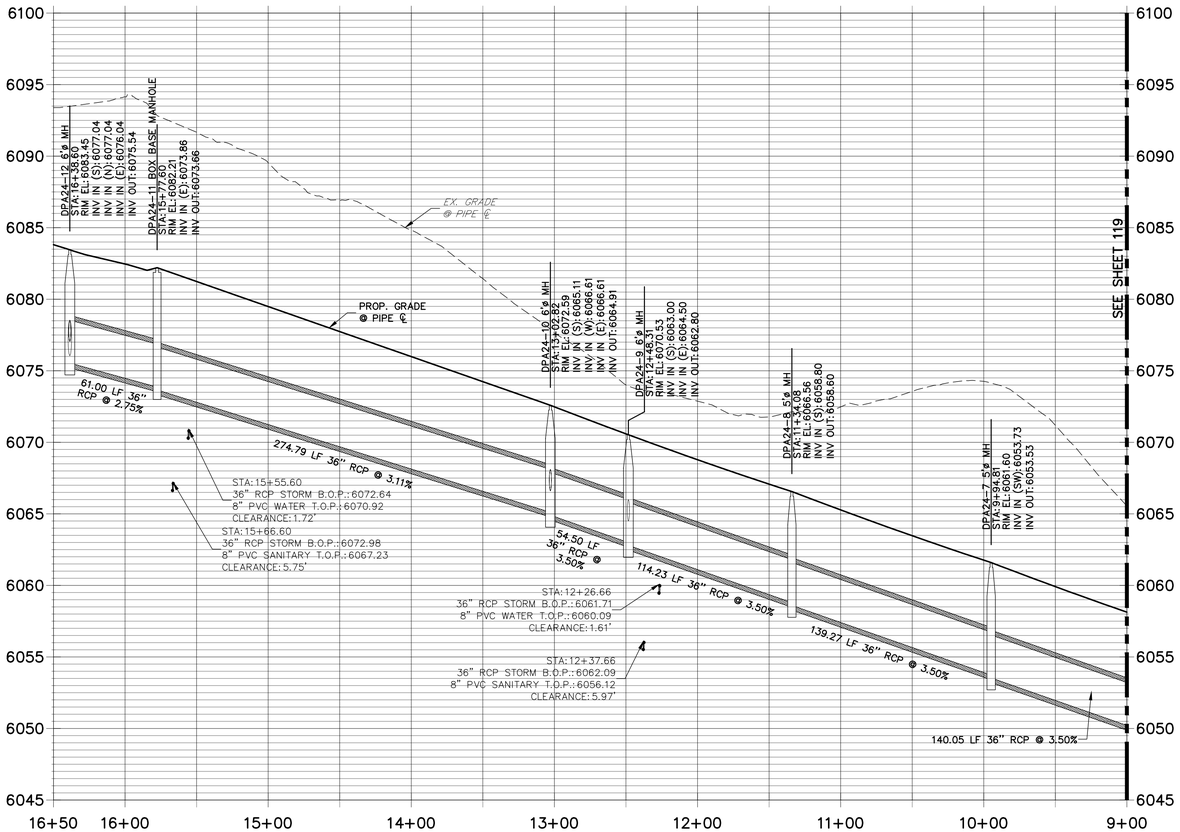
STORM PLAN & PROFILE–PHASE 1C

SHEET 119 OF 270

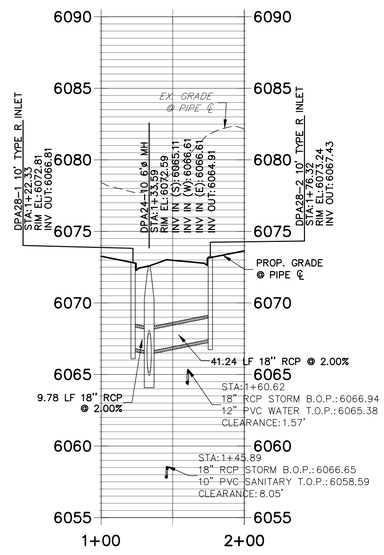
JOB NO. 15950.01



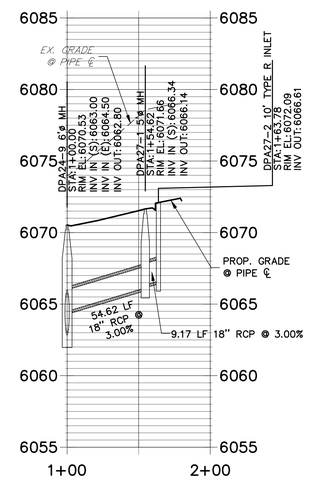
DPA24 PROFILE (CONT.)
STA 9+00.00 TO 16+50.00

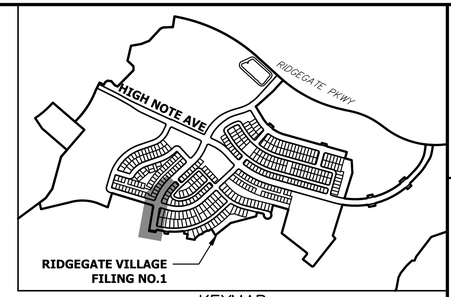


DPA28 PROFILE
STA 1+00.00 TO 2+00.00



DPA27 PROFILE
STA 1+00.00 TO 2+00.00





KEYMAP
SCALE:1"=1000'

STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON–GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.

50 25 0 50 100

HORIZONTAL
ORIGINAL SCALE: 1" = 50'
VERTICAL
ORIGINAL SCALE: 1" = 5'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

No.	REVISION	BY	DATE

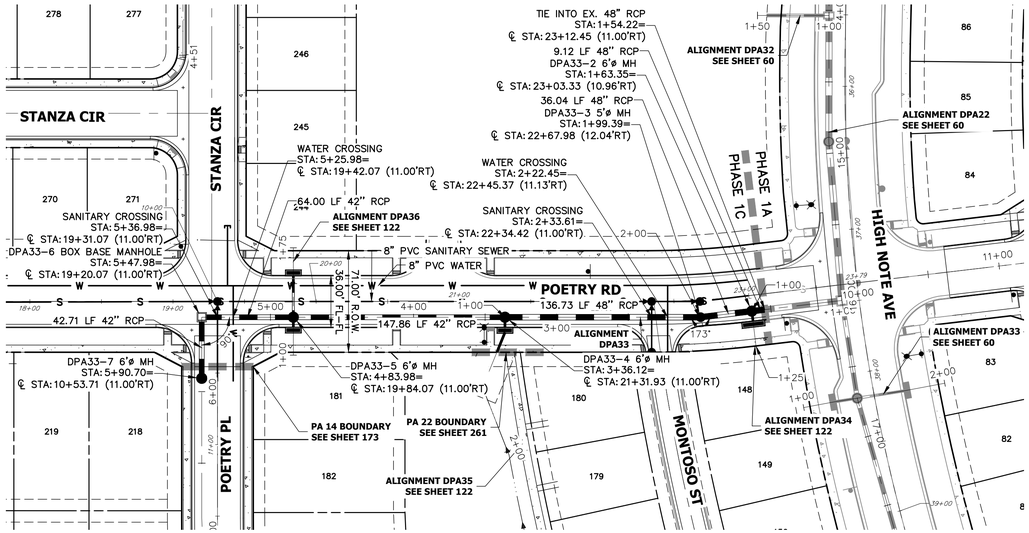
H–SCALE	1"=50'	DESIGNED BY	CGM
V–SCALE	1"=5'	DRAWN BY	CGM
DATE	2/12/21	CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

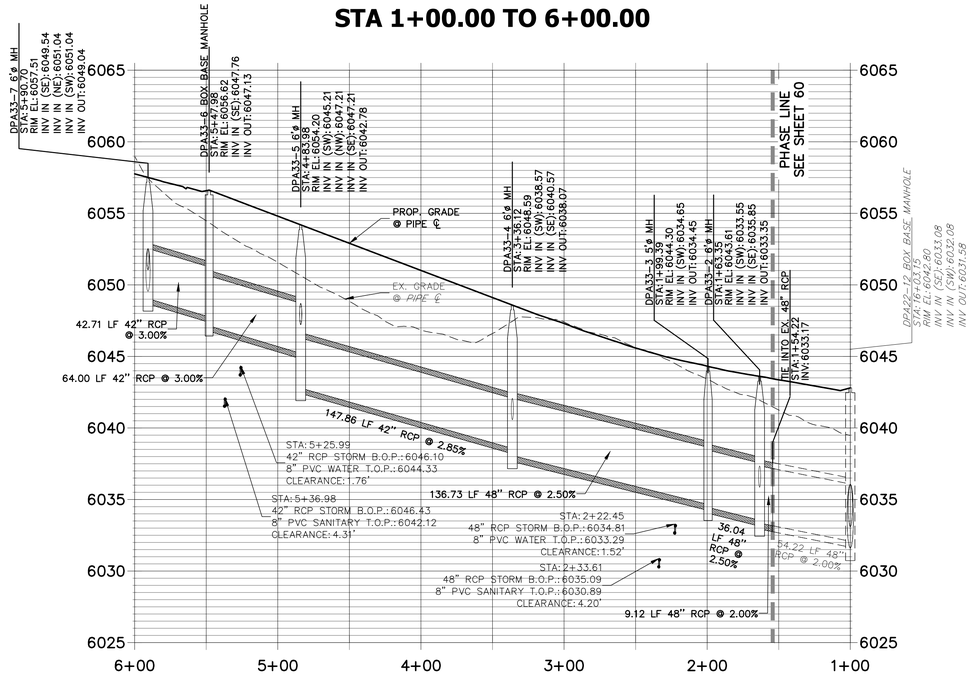
STORM PLAN & PROFILE–PHASE 1C

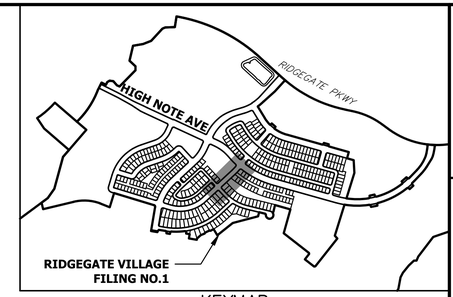
SHEET 120 OF 270

JOB NO. 15950.01



DPA33 PROFILE
STA 1+00.00 TO 6+00.00

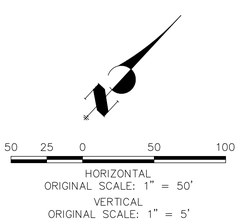




KEYMAP
SCALE: 1"=1000'

STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON-GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.



811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

AARON LEE CLUTTER 36742 REGISTERED PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

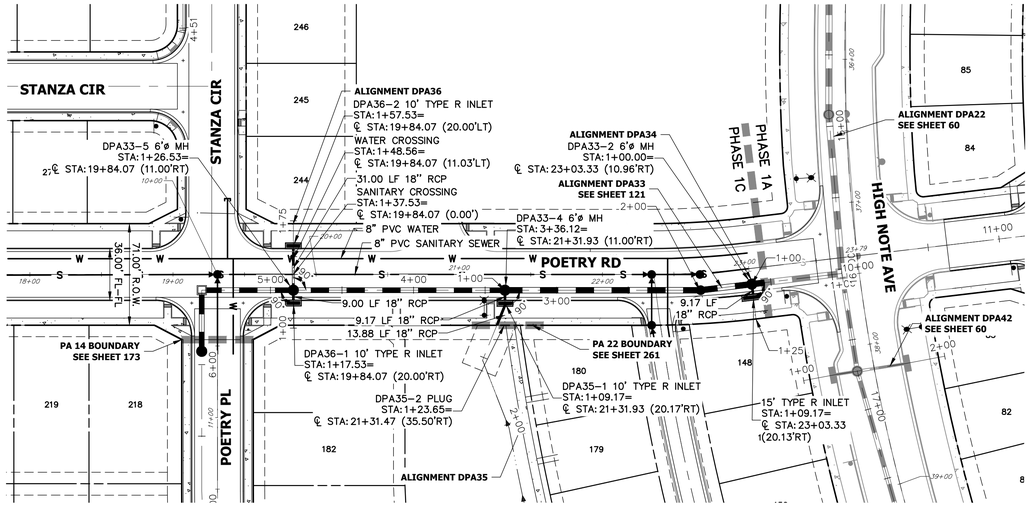
H-SCALE	1"=50'	DESIGNED BY	CGM
V-SCALE	1"=5'	DRAWN BY	CGM
DATE	2/12/21	CHECKED BY	

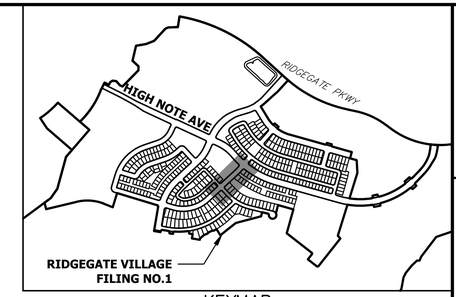
RIDGEGATE SOUTHWEST VILLAGE FILING 1

STORM PLAN & PROFILE-PHASE 1C

SHEET 121 OF 270

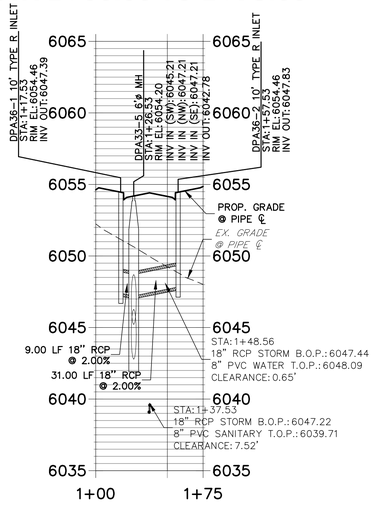
JOB NO. 15950.01



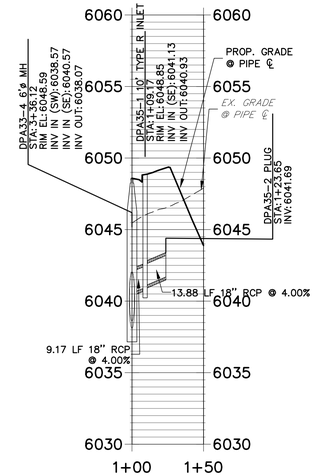


KEYMAP
SCALE: 1"=1000'

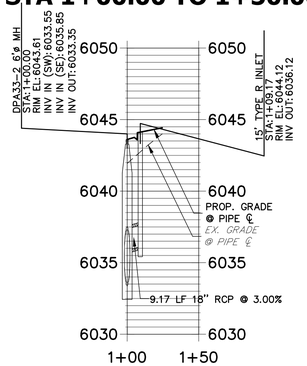
DPA36 PROFILE
STA 1+00.00 TO 1+75.00



DPA35 PROFILE
STA 1+00.00 TO 1+50.00



DPA34 PROFILE
STA 1+00.00 TO 1+50.00



STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON–GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

No.	REVISION	BY	DATE

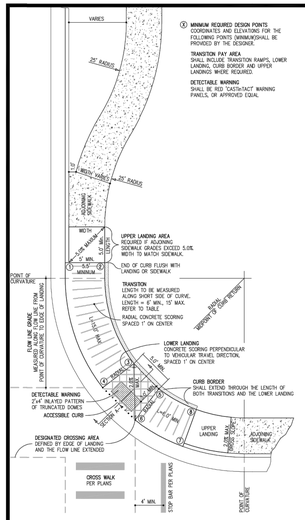
H–SCALE	1"=50'
V–SCALE	1"=5'
DATE	2/12/21
DESIGNED BY	CGM
DRAWN BY	CGM
CHECKED BY	

RIDGEGATE SOUTHWEST
VILLAGE FILING 1

STORM PLAN & PROFILE–PHASE 1C

SHEET 122 OF 270

JOB NO. 15950.01



① MINIMUM REQUIRED DESIGN POINTS COORDINATES AND ELEVATIONS FOR THE FOLLOWING POINTS SHALL/SHOULD BE PROVIDED BY THE DESIGNER.

TRANSITION PAY AREA INCLUDES CURB TRANSITION RAMPS, LOWER LANDING, CURB BORDER AND UPPER LANDINGS WHERE REQUIRED.

DETECTABLE WARNING SHALL BE RED "DASTA/ACT WARNING PAVERS, OR APPROVED EQUAL

NOTES

SLOPED TRANSITIONS SHALL COMPLY WITH ALL APPLICABLE RULES AND GUIDELINES OF THE AMERICANS WITH DISABILITIES ACT.

SLOPED TRANSITIONS SHALL BE CONSISTENT WITH THE CURRENT PUBLICATION OF FEDERAL GUIDELINES FOR ACCESSIBLE RIGHTS OF WAY.

LONGITUDINAL SLOPES WITHIN THE TRANSITION SHALL NOT EXCEED 1:12 (8.33%).

CROSS SLOPES, OR SLOPES PERPENDICULAR TO THE DIRECTION OF TRAVEL SHALL NOT EXCEED 1:50 (2.0%)

THE LOWER LANDING AREA IS A REQUIRED ELEMENT.

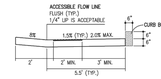
SLOPED TRANSITIONS ARE A REQUIRED ELEMENT AND SHALL:
- A. NOT EXCEED 1:12 (8.3%) LONGITUDINAL SLOPE ALONG THE SHORTEST SIDE UNLESS TRANSITION LENGTH EXCEEDS 15.0'
- B. NOT EXCEED 1:50 (2.0%) SLOPE PERPENDICULAR TO THE TRAVELED DIRECTION.
- C. NOT EXCEED 15.0' IN LENGTH AS MEASURED ALONG THE SHORTEST SIDE. MAXIMUM LONGITUDINAL SLOPE SHALL BE ADJUSTED TO ACCOMODATE THE LENGTH.
- D. NOT BE LESS THAN 6.0' IN LENGTH.

THE UPPER LANDING AREA IS REQUIRED IF:
- A. THE ADJOINING SIDEWALK HAS A LONGITUDINAL GRADE (DIRECTION OF TRAVEL) IN EXCESS OF 5.0% (5.0S). SAID LANDING SHALL NOT EXCEED A 1-20 (5.0S) SLOPE IN ANY DIRECTION.
- B. A CHANGE IN DIRECTION IS REQUIRED TO ENTER OF EXIT THE SLOPED TRANSITION. SAID LANDING SHALL NOT EXCEED 1:50 (2.0%) SLOPE IN ANY DIRECTION.

LANDINGS AND SLOPED TRANSITIONS SHALL MATCH THE WIDTH OF THE ADJOINING SIDEWALK, 3.0' MINIMUM.

ALL TOOLED JOINTS WITHIN THE SLOPED TRANSITIONS SHALL RUN PERPENDICULAR TO THE DIRECTION OF TRAVEL.

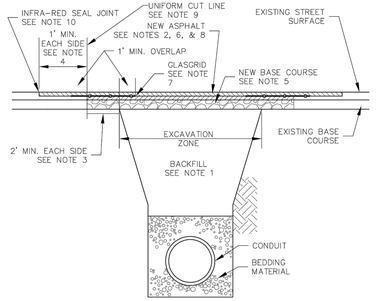
ALL TOOLED JOINTS WITHIN THE LOWER LANDING AREA SHALL RUN PARALLEL TO AND/OR PERPENDICULAR TO THE DIRECTION OF VEHICULAR TRAVEL WITHIN THE TRAVELED WAY.



SECTION A-A

TOOLED JOINT

CITY OF LONE TREE Department of Public Works	CURB TRANSITION	
	SCALE: NTS	DETAIL 1
	DATE: 3/05	



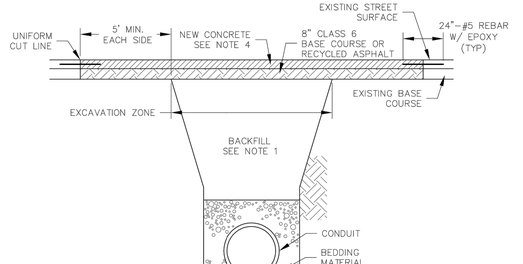
TYPICAL TRENCH SECTION

ROADWAY CLASSIFICATION	MIN. PAVEMENT PATCH THICKNESS
ARTERIAL	9 IN.
COLLECTOR	7 IN.
LOCAL	5 IN.

NOTES:

1. ALL PUBLIC STREET CUTS SHALL BE BACKFILLED WITH CLSM UNLESS THE TRENCH IS WIDE ENOUGH FOR A FULL-SIZED, SELF-PROPELLED COMPACTOR TO DRIVE THROUGH.
2. PAVEMENT PATCH THICKNESS SHALL NOT BE LESS THAN THE EXISTING SECTION.
3. SAW CUT AND REMOVE PAVEMENT AND BASE A MINIMUM OF 2' BACK FROM EXCAVATION ZONE OR LIMITS OF UNDISTURBED SUB-BASE, WHICHEVER IS GREATER.
4. ROTOMILL ASPHALT (2" DEPTH MINIMUM) A MINIMUM OF 1' BEYOND THE FULL DEPTH SAW CUT AND REMOVAL.
5. INSTALL 8 INCHES OF CDOT CLASS 6 ROAD BASE OR RECYCLED ASPHALT, COMPACTED IN PLACE TO MINIMUM 95% MODIFIED PROCTOR MAXIMUM DENSITY (ASTM D 1557).
6. INSTALL AND PROPERLY COMPACT REQUIRED DEPTH OF BASE COURSE ASPHALTIC CONCRETE (CDOT GRADING S).
7. INSTALL REINFORCEMENT MAT (TENSAR GLASGRID 8511, OR APPROVED EQUAL) PER MANUFACTURERS RECOMMENDATIONS. (MINIMUM 5 FOOT WIDTH)
8. INSTALL AND PROPERLY COMPACT ASPHALTIC CONCRETE TOP COURSE (CDOT GRADING SX).
9. ALL CUTS TO BE SQUARED OFF PRIOR TO RESTORATION. SAW CUT OR ROTOMILL.
10. THE JOINT BETWEEN THE NEW TOP COURSE ASPHALT AND THE EXISTING ASPHALT SHALL BE SEALED USING INFRARED JOINTING PROCESS.
11. ARTERIAL STREETS AND MAJOR COLLECTORS MUST BE PATCHED THE SAME DAY THE CUT OCCURS, UNLESS OTHERWISE AUTHORIZED BY THE ENGINEERING/PUBLIC WORKS DEPARTMENT.
12. ANY PAVEMENT MARKING (LANE LINES, TURN ARROWS, ETC.) DAMAGED BY THE STREET CUT AND REPAIR OPERATIONS SHALL BE REPLACED IN CONFORMANCE WITH CITY SIGNAGE AND STRIPING STANDARDS, AS DIRECTED BY THE ENGINEERING/PUBLIC WORKS DEPARTMENT.

CITY OF LONE TREE PUBLIC WORKS	ASPHALT PAVEMENT PATCHBACK	DETAIL NUMBER 1
DATE: 9/24/13 BY: GAW	DRAWING NO.: ST-01	



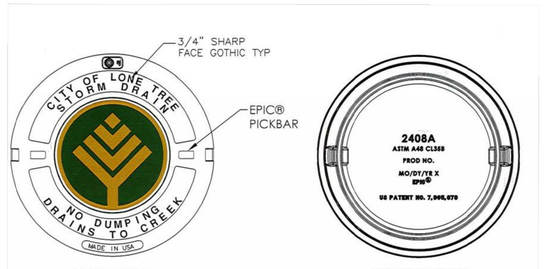
TYPICAL TRENCH SECTION

ROADWAY CLASSIFICATION	MIN. PAVEMENT PATCH THICKNESS
ARTERIAL	9 IN.
COLLECTOR	7 IN.
LOCAL	5 IN.

NOTES:

1. ALL PUBLIC STREET CUTS SHALL BE BACKFILLED WITH CLSM UNLESS THE TRENCH IS WIDE ENOUGH FOR A FULL-SIZED, SELF-PROPELLED COMPACTOR TO DRIVE THROUGH.
2. PAVEMENT PATCH THICKNESS SHALL NOT BE LESS THAN THE EXISTING SECTION.
3. SAW CUT AND REMOVE PAVEMENT AND BASE 5' BACK FROM EXCAVATION ZONE.
4. 8" OF COMPACTED CDOT CLASS 6 ROAD BASE OR RECYCLED ASPHALT SHALL BE INSTALLED PRIOR TO PAVING.
5. CONCRETE STREET PAVEMENT TO BE MINIMUM 7 SACK MIX, 5000 PSI AT 28 DAYS.
6. ALL CUTS TO BE SQUARED OFF PRIOR TO RESTORATION. SAW CUT OR ROTOMILL FULL DEPTH.
7. CONCRETE PATCHES SHALL BE DOWELED INTO EXISTING CONCERTE WITH 24"-#5 REBAR AT 18" O.C. AROUND THE PERIMETER OF THE PATCH.
8. ARTERIAL STREETS AND MAJOR COLLECTORS MUST BE PATCHED THE SAME DAY THE CUT OCCURS, UNLESS APPROVED BY THE ENGINEERING DEPARTMENT.

CITY OF LONE TREE PUBLIC WORKS	CONCRETE PAVEMENT PATCHBACK	DETAIL NUMBER 2
DATE: 12/9/11 BY: GAW	DRAWING NO.: ST-02	



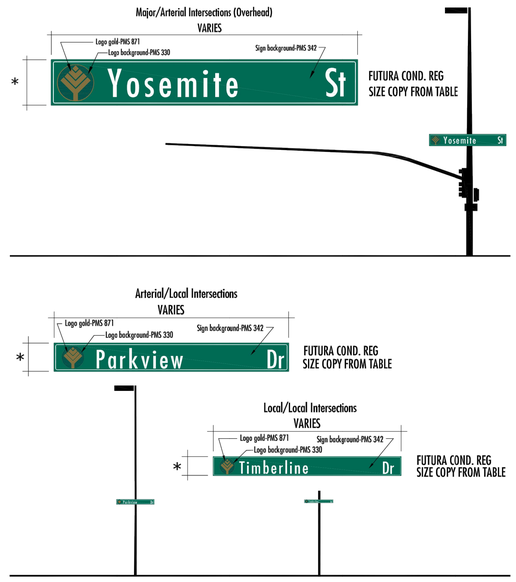
COVER FACE

COVER BOTTOM

SECTION

Design Features
- -Materials
  Gray Iron (CL35B)
- -Load Rating
  Heavy Duty
- -Open Area
  n/a
- -Coating
  Undipped
- -√ Designates Machined Surface

CITY OF LONE TREE PUBLIC WORKS	MANHOLE LID COVER	DETAIL NUMBER MH-1
DATE: 06/05/2020 BY: J. KRELL	DRAWING NO.:	



* NOTE: SIGN HEIGHT SHALL BE 4" GREATER THAN RECOMMENDED MINIMUM UPPER-CASE LETTER HEIGHT PER TABLE, SHEET 3. CITY LOGO DIAMETER SHALL EQUAL UPPER-CASE LETTER HEIGHT.

CITY OF LONE TREE PUBLIC WORKS	INTERSECTION STREET NAME SIGNAGE	SHEET 1 OF 3
DATE: 08/28/13 BY: GRW	DRAWING NO.: SN-01	

INTERSECTION STREET NAME SIGNAGE NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MOST RECENT VERSION OF THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE "COLORADO SUPPLEMENTAL MUTCD" AND THE DOUGLAS COUNTY "ROAD AND CONSTRUCTION STANDARDS MANUAL". FURTHER SPECIFICATIONS AND ILLUSTRATIONS ARE LOCATED IN THE COLORADO DIVISION OF HIGHWAYS "M AND S STANDARDS".
2. DELINEATION OF ROADWAYS SHALL BE AS SPECIFIED IN THE COLORADO "M AND S MANUAL".
3. STREET NAME SIGNS SHALL BE MOUNTED SO THAT THEY CAN BE SEEN FROM ALL DIRECTIONS OF TRAVEL.
4. INSTALLATION OF SIGNS SHALL CONFORM TO THE MUTCD MOUNTING HEIGHT REQUIREMENTS, INCLUDING A 7-FOOT MINIMUM HEIGHT FROM THE BOTTOM OF THE LOWEST SIGN PANEL TO THE TOP GRADE OF SIDEWALK.
5. ALL NEWLY INSTALLED TRAFFIC SIGNS SHALL MEET THE MINIMUM RETRO-REFLECTIVITY AND ILLUMINATION STANDARDS AS SET FORTH BY THE MUTCD (LATEST EDITION). THESE MINIMUM REQUIREMENTS SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
6. NON ILLUMINATED SIGNS SHALL BE USED AT MAJOR/MAJOR AND MAJOR/ARTERIAL INTERSECTIONS. THEY SHALL BE MOUNTED TO THE SIGNAL POLE WITH ASTRO-BRACS ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
7. THE CONTRACTOR INSTALLING SIGNS IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND UTILITIES. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.
8. FOLLOWING INSTALLATION, THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS DEPARTMENT, 303-662-8112. A FIELD INSPECTION OF LOCATION AND INSTALLATION OF ALL SIGNS SHALL BE PERFORMED BY PUBLIC WORKS. ALL DISCREPANCIES IDENTIFIED DURING THE FIELD INSPECTION MUST BE CORRECTED BEFORE THE TWO-YEAR WARRANTY PERIOD WILL BEGIN.
9. SIGNAGE AND STRIPING HAS BEEN DETERMINED BY INFORMATION AVAILABLE AT THE TIME OF REVIEW. PRIOR TO INITIATION OF THE WARRANTY PERIOD, LONE TREE RESERVES THE RIGHT TO REQUIRE MODIFICATIONS TO EXISTING OR INSTALLATION OF ADDITIONAL SIGNAGE AND/OR STRIPING IF THEY DETERMINE THAT AN UNFORESEEN CONDITION WARRANTS SUCH MODIFICATION ACCORDING TO THE MUTCD OR THE CDOT M AND S STANDARDS. ALL SIGNAGE AND STRIPING SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
10. ANY INTERSECTION STREET NAME SIGNAGE REMOVED SHALL BE RETURNED TO THE CITY OF LONE TREE.

CITY OF LONE TREE PUBLIC WORKS	INTERSECTION STREET NAME SIGNAGE	SHEET 2 OF 3
DATE: 04/19/12 BY: GRW	DRAWING NO.: SN-02	

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

DATE

UNTIL SUCH TIME AS LOCAL JURISDICTIONS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

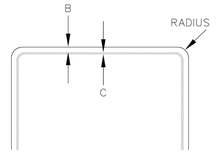
H-SCALE	N/A
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
STORM SEWER & ROADWAY DETAILS-PHASE 1C

SHEET 123 OF 270

JOB NO. 15950.01

STANDARD SIGN BORDER SPECIFICATIONS



SIGN SIZE	BORDER WIDTHS (INCH)			RADIUS (INCH)
	A	B	C	
< 12"	N/A	.375	.375	1
≥ 12"	N/A	.375	.438	1.5

MINIMUM LETTER HEIGHTS ON STREET NAME SIGNS

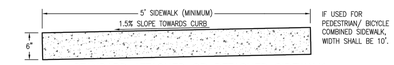
(MUTCD 2009 EDITION–TABLE 2D–2)

TYPE OF MOUNTING	TYPE OF STREET OR HIGHWAY	SPEED LIMIT	RECOMMENDED MINIMUM LETTER HEIGHT **	
			INITIAL UPPER–CASE	LOWER–CASE
OVERHEAD	ALL TYPES	ALL SPEED LIMITS	12 INCHES	9 INCHES
POST–MOUNTED	MULTI–LANE	MORE THAN 40 MPH	8 INCHES	6 INCHES
POST–MOUNTED	MULTI–LANE	40 MPH OR LESS	6 INCHES	4.5INCHES
POST–MOUNTED	2–LANE	ALL SPEED LIMITS	6 INCHES*	4.5 INCHES*

*ON LOCAL 2–LANE STREETS W/SPEED LIMITS OF 25 MPH OR LESS, 4" INITIAL UPPER–CASE LETTERS WITH 3" LOWER CASE LETTERS MAY BE USED.

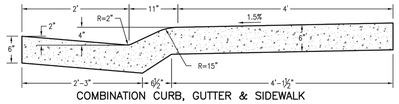
** SUPPLEMENTARY LETTERING (E.G. ST., DR., LN., & NUMBERING) SHALL BE A MINIMUM OF ½ THE APPLICABLE RECOMMENDED MINIMUM LETTER HEIGHT PER ABOVE TABLE

CITY OF LONE TREE PUBLIC WORKS	INTERSECTION STREET NAME SIGNAGE	SHEET
DATE: 04/19/12	BY: GRW	DRAWING NO.: SN–03	3 OF 3

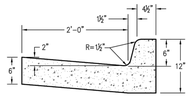


IF USED FOR PEDESTRIAN/ BICYCLE COMBINED SIDEWALK, WIDTH SHALL BE 10'.

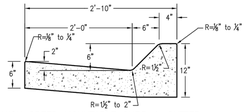
STANDARD ATTACHED OR DETACHED SIDEWALK



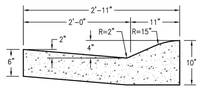
COMBINATION CURB, GUTTER & SIDEWALK



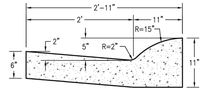
VERTICAL CURB & GUTTER



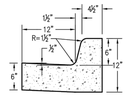
HIGH SPEED MOUNTABLE CURB & GUTTER
(DESIGN SPEED OF 45 M.P.H. OR HIGHER)



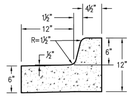
URBAN LOCAL MOUNTABLE CURB & GUTTER



RURAL LOCAL MOUNTABLE CURB & GUTTER



MEDIAN CURB & GUTTER (CATCH)



MEDIAN CURB & GUTTER (SPILL)

NOTES:
1. IF A SIDEWALK IS PLACED BEHIND THE CURB BUT IS NOT PLACED MONOLITHICALLY, EXPANSION JOINT MATERIAL AND A SILICONE BASE SEALER MUST BE APPLIED BETWEEN THE SIDEWALK AND THE CURB.
2. SEE DRAWING NUMBER SP.23a and SP.23b FOR TRENCH DRAIN.
3. SEE DRAWING NUMBER SP.31 AND SP.32 FOR CONCRETE JOINTS.

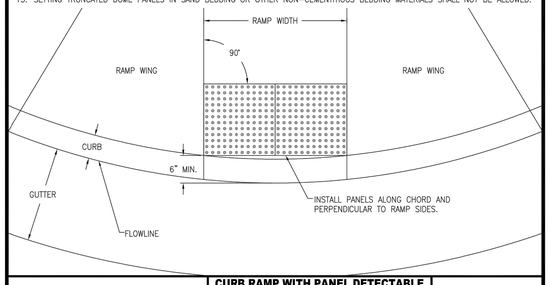
CURB & GUTTERS AND SIDEWALKS	Issued: 05/2013
DOUGLAS COUNTY COLORADO	Revised: 09/2017
	Drawing No. SP.17

Panel Installation Notes:

1. DETECTABLE WARNING PANELS, 24" X 24" OR 24" X 30" IN SIZE, SHALL BE PREFABRICATED REDDISH WITH TRUNCATED DOMES AND COMPLY WITH ADA REQUIREMENTS. ONLY FULL PANELS SHALL BE USED TO OBTAIN SPECIFIC RAMP THROAT WIDTH, (I.E. TWO 24" PANELS FOR A 4' RAMP, TWO 30" PANELS FOR A 5' RAMP, ETC.)
2. PRIOR TO START OF WORK, CONTRACTOR SHALL SUBMIT, TO DOUGLAS COUNTY FOR APPROVAL, A SAMPLE PANEL AND DOCUMENTATION FROM THE MANUFACTURER. PANEL SURFACE SHALL HAVE A MINIMUM OF 70% LIGHT REFLECTIVITY CONTRAST WITH THE ADJOINING SURFACE. PANELS SHALL ONLY BE SELECTED FROM THE APPROVED PRODUCT LIST BELOW:

PRODUCT NAME	MANUFACTURER	PRODUCER SUPPLIER CODE
CAST–DWD	Pioneer Detectable, LLC	GEN130004
Cast–In–Place Tactile	ADA Solutions, Inc.	GEN100123
DURALAST	EJ USA, Inc.	GEN130020
Detectable Warning Paving Slab	StoneBilt Concepts	GEN100341
TekWay Dome–Tiles	StrongGo LLC	GEN100343
Tuftile Cast Iron Tile/Radius–Wedge (CIP)	Tuftile, Inc.	GEN150088

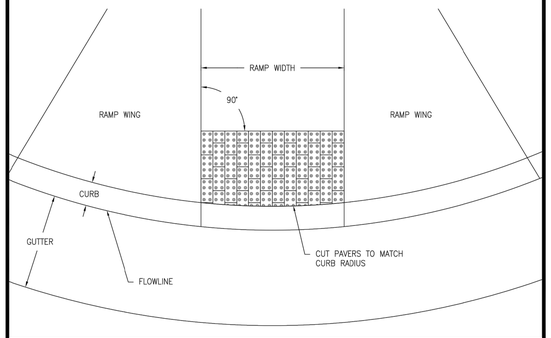
3. PANELS SHALL BE PLACED AS SHOWN, WITH DOME PATTERN IN A SQUARE GRID AND ALIGNED IN THE DIRECTION OF TRAVEL. A STEEL TEMPLATE SHALL BE USED TO ENSURE PROPER ALIGNMENT AND UNIFORM GRADE.
4. REMOVE THE PROPER AMOUNT OF CONCRETE WITHIN THE TEMPLATE FOR AN ACCURATE INSTALLATION. ONCE TO THE PROPER DEPTH, FLOAT THE AREA TO RECEIVE THE PANELS UNTIL A SMOOTH PASTE HAS DEVELOPED.
5. WET THE BACK SIDE OF EACH PANEL AND TROWEL SOME CONCRETE PASTE OR APPROVED BONDING AGENT OVER THE WET SURFACE FOR BETTER ADHERENCE.
6. SET THE FIRST PANEL ON THE FRESHLY PREPARED SURFACE. DO NOT PRESS DOWN HARD ON THE PANEL, BUT PREFERABLY TWIST FROM SIDE TO SIDE. SET PANEL WITH RUBBER MALLET TO PROPER DEPTH SO THAT THE BASE OF THE TRUNCATED DOME IS AT THE SAME ELEVATION AS THE ADJOINING RAMP SURFACE.
7. SET SUCCESSIVE PANELS WITH A TIGHT BUTT JOINT AGAINST THE PREVIOUSLY SET PANEL. PROVIDE A ⅛" GAP BETWEEN PANELS.
8. FLOAT FRESH CONCRETE AROUND PANELS. FINISH AND BROOM SURROUNDING CONCRETE AS SPECIFIED. CLEAN ANY CONCRETE OFF PANELS WITH A SPONGE.
9. PROVIDE 1" DEEP TOOL JOINTS AT CORNERS OF DETECTABLE WARNING AREA, AND TOOL AROUND PANELS WITH ⅜" RADIUS EDGER.
10. WHEN CUT PANELS ARE REQUIRED, CUT SECTIONS SHALL NOT SIGNIFICANTLY IMPACT OVERALL TRUNCATED DOMES PATTERN AND CUT DOMES SHALL BE BEVELED AT A 45–DEGREE ANGLE TO CREATE A SMOOTH TRANSITION.
11. ANY PANELS THAT ARE DAMAGED DURING TRANSPORT OR INSTALLATION WILL BE REJECTED AND SHALL NOT BE INSTALLED.
12. CLEAN OUT ⅜" JOINT(S) BETWEEN PANELS AND SEAL WITH EPOXY.
13. SETTING TRUNCATED DOME PANELS IN SAND BEDDING OR OTHER NON–CEMENTITIOUS BEDDING MATERIALS SHALL NOT BE ALLOWED.



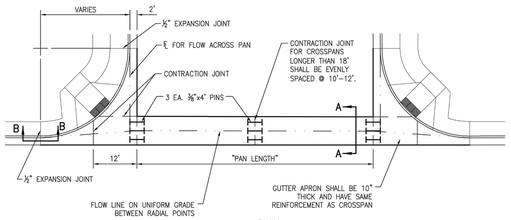
CURB RAMP WITH PANEL DETECTABLE WARNING AREA INSTALLATION	Issued: 05/2013
DOUGLAS COUNTY COLORADO	Revised: 09/2017
	Drawing No. SP.18b

Paver Installation Notes:

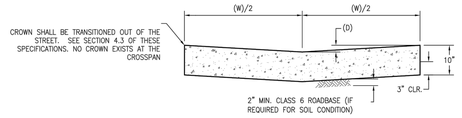
1. DETECTABLE WARNING PAVERS SHALL BE PREFABRICATED REDDISH INTEGRALLY COLORED TRUNCATED DOMES SURFACED CONCRETE OR MASONRY PAVERS. PAVERS SHALL MEET THE REQUIREMENTS OF ASTM C 902 OR ASTM C 936 AND COMPLY WITH ADA REQUIREMENTS.
2. PRIOR TO START OF WORK, CONTRACTOR SHALL SUBMIT, TO DOUGLAS COUNTY FOR APPROVAL, A SAMPLE PAVER AND DOCUMENTATION FROM THE MANUFACTURER. PAVERS SURFACE SHALL HAVE A MINIMUM OF 70% LIGHT REFLECTIVITY CONTRAST WITH THE ADJOINING SURFACE.
3. WELL FOR PAVERS SHALL BE ACCURATELY BLOCKED OUT TO ENSURE PROPER DEPTH, ALIGNMENT, AND UNIFORM GRADE. ONLY FULL WIDTH PAVERS SHALL BE USED TO OBTAIN SPECIFIED RAMP THROAT WIDTH.
4. PAVERS SHALL BE PLACED IN THE RUNNING PATTERN SHOWN, DOMES PLACED IN A SQUARE GRID AND ALIGNED IN THE DIRECTION OF TRAVEL. PAVERS SHALL BE INSTALLED SO THAT THE BASES OF THE TRUNCATED DOMES ARE AT THE SAME ELEVATION AS THE ADJOINING RAMP SURFACE.
5. SAND FOR BEDDING MATERIAL SHALL CONFORM TO ASTM C 33. SAND TO BE PLACED BETWEEN JOINTS SHALL CONFORM TO ASTM C 144.
6. BEDDING SAND SHALL BE SCREED TO THE APPROPRIATE DEPTH PRIOR TO THE PAVERS INSTALLATION. A PLATE VIBRATOR SHALL BE USED TO EMBED THE PAVERS INTO THE SAND. ANY PAVERS THAT ARE DAMAGED DURING TRANSPORTATION OR INSTALLATION WILL BE REJECTED AND SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
7. WHEN CUT PAVERS ARE REQUIRED, CUT SECTIONS SHALL NOT SIGNIFICANTLY IMPACT OVERALL TRUNCATED DOMES PATTERN AND CUT DOMES SHALL BE BEVELED AT A 45–DEGREE ANGLE TO CREATE A SMOOTH TRANSITION.
8. JOINT SPACING SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, BUT SHALL NOT BE MORE THAN ⅜". JOINTS SHALL BE FILLED COMPLETELY WITH SAND. EXCESS SAND SHALL BE REMOVED BY SWEEPING.



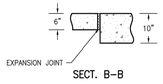
CURB RAMP WITH PAVER DETECTABLE WARNING AREA INSTALLATION	Issued: 05/2013
DOUGLAS COUNTY COLORADO	Revised: 09/2017
	Drawing No. SP.18c



PLAN



SECTION A–A
FIBERMESH MIXED AT 1½ LBS. / C.Y. CONCRETE.

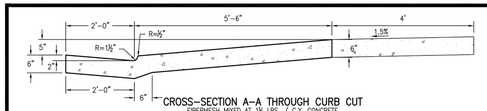


SECT. B–B

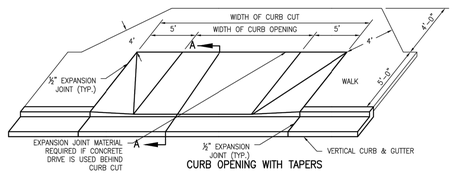
WIDTH (W)	DEPTH (D)	THICKNESS (T)
8'	2"	10"
10'	2½"	10"

NOTE: LOCAL STREET INTERSECTIONS REQUIRE AN 8' CROSSPAN. COLLECTOR STREET INTERSECTIONS REQUIRE AN 10' CROSSPAN. CROSSPANS ARE NOT ALLOWED AT ANY ARTERIAL STREET INTERSECTIONS.

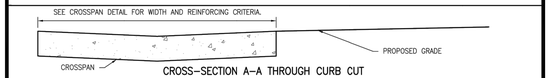
CROSSPAN	Issued: 05/2013
DOUGLAS COUNTY COLORADO	Revised: 09/2017
	Drawing No. SP.21



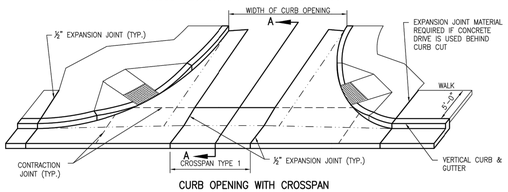
CROSS–SECTION A–A THROUGH CURB CUT
FIBERMESH MIXED AT 1½ LBS. / C.Y. CONCRETE.



CURB OPENING WITH TAPERS



CROSS–SECTION A–A THROUGH CURB CUT



CURB OPENING WITH CROSSPAN

NOTES:
1. BACK OF CURB CUT EXTENDS TO BACK OF WALK OR BACK OF BICYCLE PATH. IF NO WALK IS PRESENT, EXTEND BACK OF CURB CUT TO 5'–6" BEHIND FLOWLINE OR TO R.O.W. LINE, WHICHEVER IS GREATER.
2. COUNTY SHALL APPROVE LOCATION OF CURB CUT BEFORE CONSTRUCTION.
3. CURB OPENINGS OF 30' OR MORE MUST BE CONSTRUCTED WITH A MINIMUM 20' RADIUS CURB RETURN.
4. DESIGN ENGINEER MUST DEMONSTRATE THAT STREET DRAINGE STAYS WITHIN THE STREET RIGHT–OF–WAY.

CURB OPENING	Issued: 05/2013
DOUGLAS COUNTY COLORADO	Revised: 09/2017
	Drawing No. SP.22

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H–SCALE	N/A
V–SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

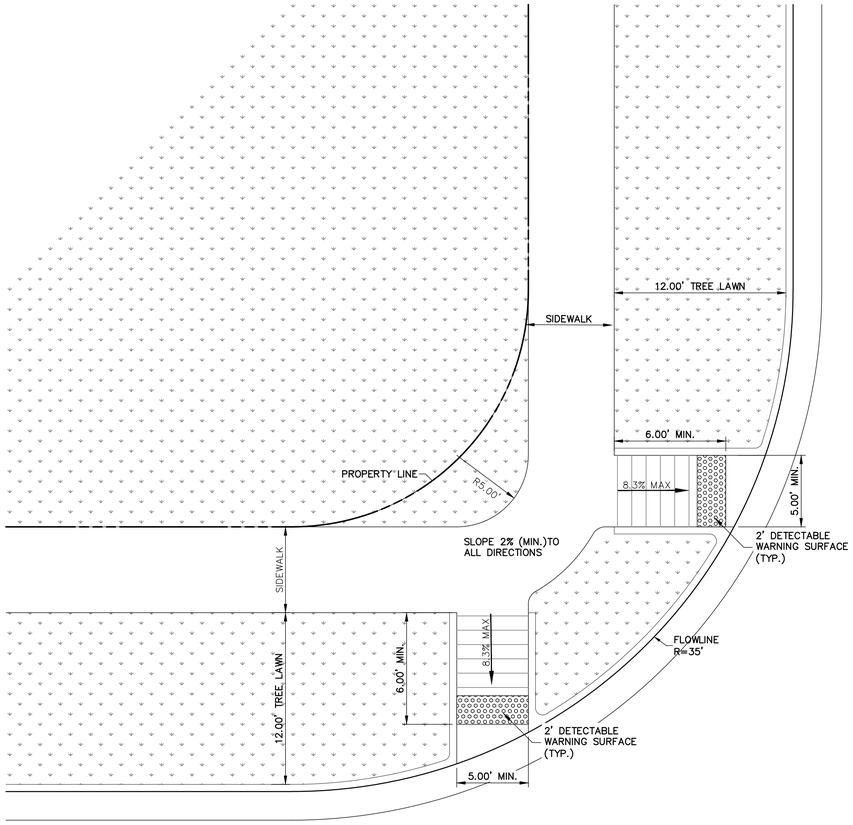
COLORADO — AARON LEE CLUTTER — 36742 — PROFESSIONAL ENGINEER

DATE

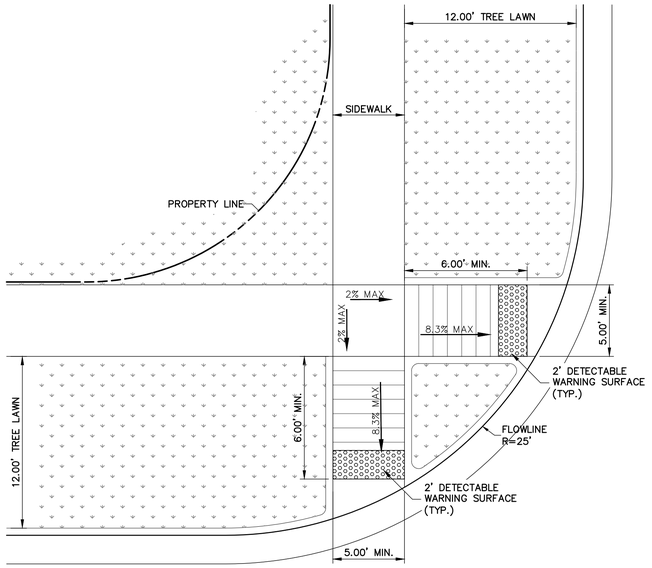
RIDGEGATE SOUTHWEST VILLAGE FILING 1
STORM SEWER & ROADWAY DETAILS–PHASE 1C

SHEET 124 OF 270

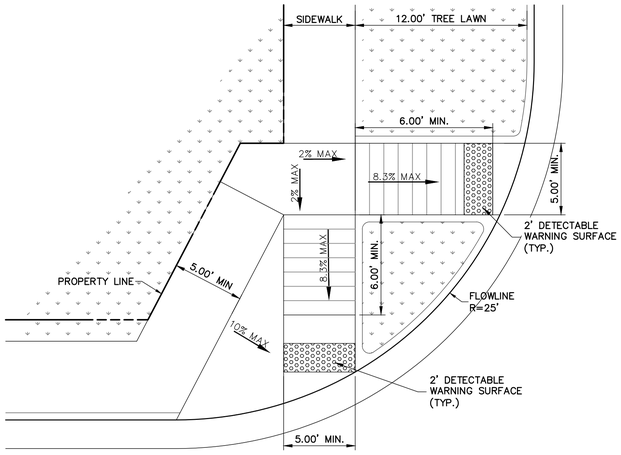
JOB NO. 15950.01



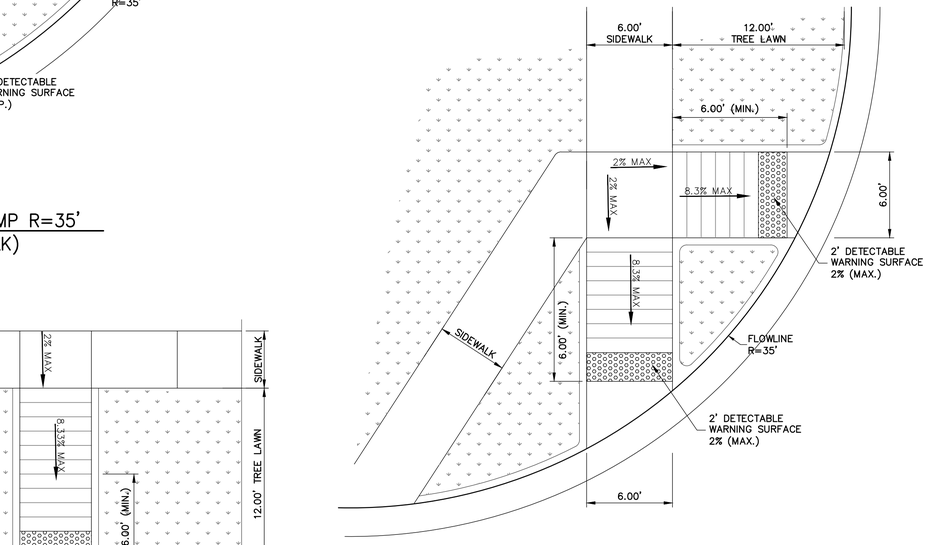
RESIDENTIAL CURB RAMP R=35'
(DETACHED WALK)



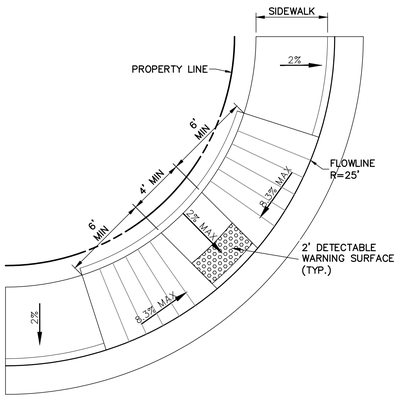
RESIDENTIAL CURB RAMP R=25'
(DETACHED WALK)



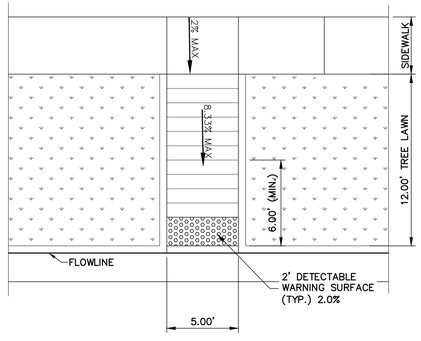
RESIDENTIAL CURB RAMP R=25'
(ATTACHED AND DETACHED WALK)



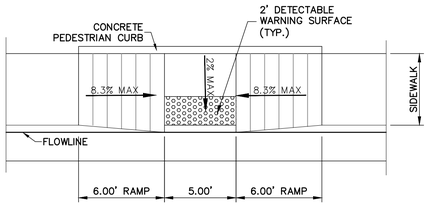
RESIDENTIAL CURB RAMP R=35'
(ATTACHED AND DETACHED WALK)



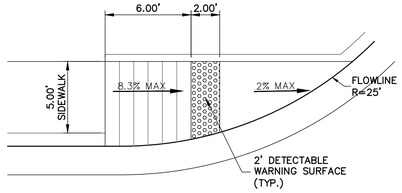
RESIDENTIAL CURB RAMP R=25'
(ATTACHED WALK)



RESIDENTIAL CURB RAMP MID-BLOCK
(DETACHED WALK)



RESIDENTIAL CURB RAMP MID-BLOCK
(ATTACHED WALK)



DIRECTIONAL RAMP R=25'
(ATTACHED WALK)

GENERAL NOTES

1. THE DETECTABLE WARNINGS SHALL BE INSTALLED AT SIDEWALK TO STREET TRANSITIONS. THEY SHALL HAVE A TRUNCATED DOME SURFACE. THE DOMES SHALL BE IN A SQUARE GRID PATTERN AND ALIGNED WITH PEDESTRIAN TRAFFIC.
2. ALL DETECTABLE WARNING SURFACES SHALL START A MINIMUM OF 6 INCHES FROM THE FLOWLINE OF THE CURB. MAXIMUM DISTANCE FROM FLOWLINE TO DETECTABLE WARNING SURFACE VARIES.
3. THE RAMP SLOPE AND DETECTABLE WARNING SURFACE SHALL BE 8.3% OR FLATTER.
4. DRAINAGE STRUCTURES, TRAFFIC SIGNAL EQUIPMENT, OR OTHER OBSTRUCTIONS SHALL NOT BE INSTALLED IN THE CURB RAMP OR TURNING SPACE AREAS.
5. CURB RAMPS (EXCLUDING FLARED SIDES OR BLENDED TRANSITIONS) SHALL BE WHOLLY CONTAINED WITHIN THE WIDTH OF THE CROSSWALK AND/OR THE PEDESTRIAN STREET CROSSING THEY SERVE.
6. ALL CURB RAMP JOINTS AND GRADE BREAKS SHALL BE FLUSH (0"±⅛ "). THE JOINT BETWEEN THE ROADWAY SURFACE AND GUTTER PAN SHALL BE FLUSH.
7. TO AVOID CHASING GRADE INDEFINITELY WHEN TRAVERSING THE HEIGHT OF CURB, THE RAMP LENGTH SHALL NOT EXCEED 15 FEET. ADJUST THE RAMP SLOPE AS NEEDED TO PROVIDE ACCESS TO THE MAXIMUM EXTENT TECHNICALLY FEASIBLE.
8. THE CHANGE IN GRADE AT THE BOTTOM OF CURB RAMP AND ADJOINING ROAD SURFACE SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 13.33%. THE COUNTER SLOPE OF THE GUTTER OR ROAD AT THE FOOT OF THE CURB RAMP, TURNING SPACE, OR BLENDED TRANSITION SHALL NOT EXCEED 5.0%.
9. FLARED SIDE SLOPES MAY EXCEED 10% ONLY WHERE THEY ABUT A NON-WALKABLE SURFACE OR THE ADJACENT CIRCULATION PATH IS BLOCKED.
10. THE STANDARD TURNING SPACE IS 4 FEET BY 4 FEET WHERE THE TURNING SPACE IS CONSTRAINED, THE TURNING SPACE SHALL BE 4 FEET MINIMUM BY 5 FEET MINIMUM. THE 5 FOOT DIMENSION SHALL BE PROVIDED IN THE DIRECTION OF THE RAMP RUN.

Know what's **below.**
Call before you dig.

ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

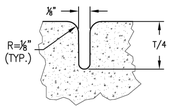
No.	REVISION	BY	DATE

H-SCALE	N/A
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

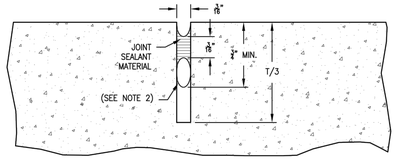
RIDGEGATE SOUTHWEST VILLAGE FILING 1
STORM SEWER & ROADWAY DETAILS-PHASE 1C

SHEET 125 OF 270

JOB NO. 15950.01

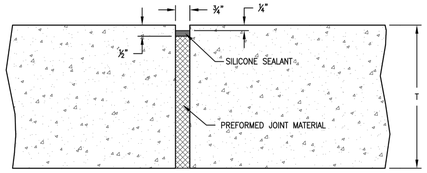


CONTRACTION OR WEAKEN PLANE JOINT
N.T.S.



NOTE: WASH & BLOW OUT WITH FORCED AIR UNTIL DRY BEFORE APPLYING SEALANT MATERIAL.

SAWED JOINT
N.T.S.



EXPANSION JOINT
N.T.S.

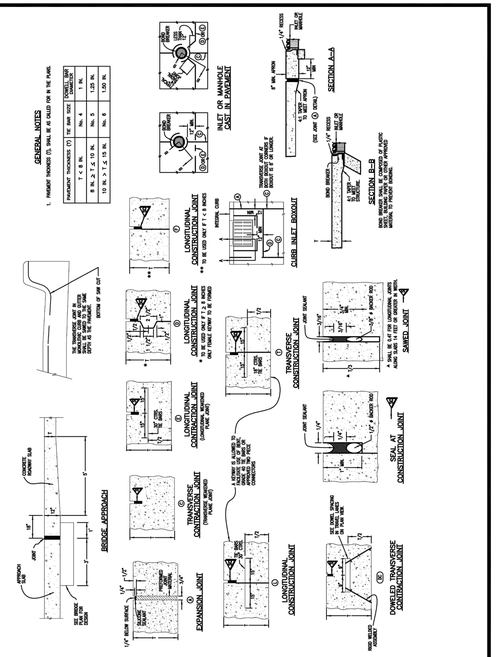
NOTES:

1. JOINT SEALANT MATERIAL MUST MEET ASTM 3406.
2. ¾" DIA. BACKER ROD.

CONCRETE JOINTS

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.31**

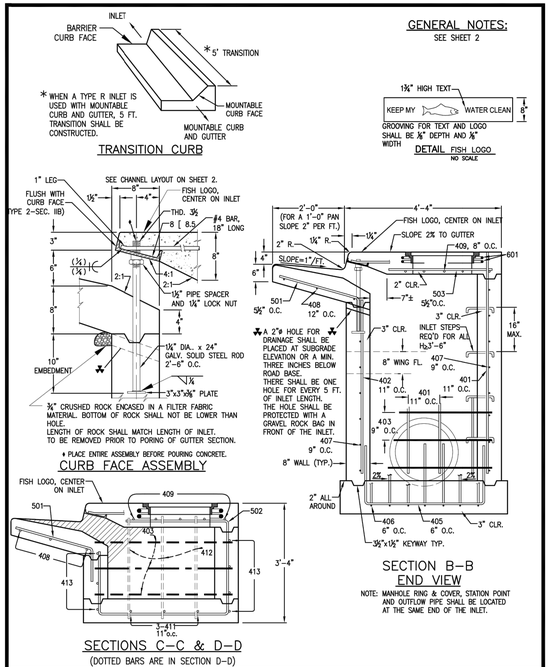


CONCRETE JOINTS

REFERENCE: CDOT M & S STANDARDS M-412-1

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.32**

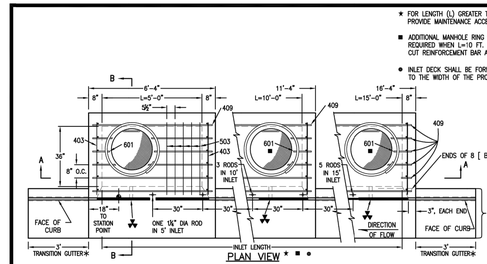


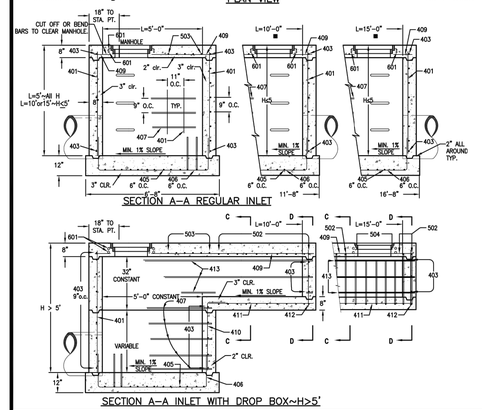
REFERENCE: CDOT M & S STANDARDS M-604-12

CURB INLET - TYPE R (5', 10' OR 15' IN LENGTH)

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.34a**





REFERENCE: CDOT M & S STANDARDS M-604-12

CURB INLET - TYPE R (5', 10' OR 15' IN LENGTH)

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.34b**

MARK	BAR # OR SIZE	O.C. SPACING	TYPE	ALL INLETS L = 5 FT. NO. REQ'D.	ALL INLETS L = 5 FT. LENGTH	INLETS: H ≤ 5 FT. L = 10 FT. NO. REQ'D.	INLETS: H ≤ 5 FT. L = 10 FT. LENGTH	INLETS: H ≤ 5 FT. L = 15 FT. NO. REQ'D.	INLETS: H ≤ 5 FT. L = 15 FT. LENGTH	INLETS: H > 5 FT. L = 10 FT. NO. REQ'D.	INLETS: H > 5 FT. L = 10 FT. LENGTH	INLETS: H > 5 FT. L = 15 FT. NO. REQ'D.	INLETS: H > 5 FT. L = 15 FT. LENGTH
401	4	11"	II	15	★	21	★	26	★	11	★	11	★
402	4	11"	II	7	★	13	★	18	★	7	★	7	★
403	4	9"	II	★	4'-0"	★	4'-0"	★	4'-0"	★	4'-0"	★	4'-0"
405	4	6"	VI	11	6'-10"	21	6'-10"	31	6'-10"	11	6'-10"	11	6'-10
406	4	6"	VIII	7	6'-10"	7	13'-10"	7	18'-10"	7	8'-10"	7	8'-10"
407	4	9"	II	★	5'-10"	★	10'-10"	★	15'-10"	★	5'-10"	★	5'-10"
408	4	12"	II	3	6'-10"	3	11'-10"	3	16'-0"	3	11'-10"	3	16'-0"
409	4	8"	II	6	5'-10"	8	10'-10"	6	15'-10"	6	10'-10"	6	15'-10"
410	4	11"	VII							3	★	3	★
411	4	11"	II							3	5'-2"	3	10'-2"
412	4	11"	II							3	2'-9"	3	2'-9"
413	4	9"	II							7	10'-10"	7	15'-10"
501	5	5½"	IV	11	3'-4"	22	3'-4"	33	3'-4"	22	3'-4"	33	3'-4"
502	5	5½"	III							11	11'-5"	17	11'-5"
503	5	5½"	II	5	3'-6"	16	3'-6"	27	3'-6"	6	3'-6"	6	3'-6"
504	5	5½"	IX									5	8'-4"
601	6	2½"	V	2	8'-10"	2	8'-10"	2	8'-10"	2	8'-10"	4	8'-10"
■8[8.5				1	5'-10"	1	10'-10"	1	15'-10"	1	10'-10"	1	15'-10"
				2 BARS, 1 ROD	——	4 BARS, 3 RODS	——	6 BARS, 5 RODS	——	4 BARS, 3 RODS	——	6 BARS, 5 RODS	——

* VARIABLE, REFER TO TABLE TWO.
■ INCLUDE #4, 18 IN. BARS (SEE CHANNEL LAYOUT).

REGULAR INLETS | DROP BOX INLETS

TABLE ONE ~ BAR LIST FOR CURB INLETS, TYPE "R"

'H'	LENGTH 401	402	410	NO. REQ'D. REGULAR 403	407	NO. REQ'D. DROP BOX 403	407	L=5' CONC. CU. YDS.	L=5' STEEL LBS.	L=10' CONC. CU. YDS.	L=10' STEEL LBS.	L=15' CONC. CU. YDS.	L=15' STEEL LBS.
3'-0"	2'-8"	1'-8"		10	7			3.2	285	5.3	497	7.4	706
3'-6"	3'-2"	2'-2"		10	7			3.4	305	5.7	528	7.9	747
4'-0"	3'-8"	2'-8"		12	9			3.7	326	6.0	559	8.4	786
4'-6"	4'-2"	3'-2"		12	9			3.9	334	6.4	571	8.8	803
5'-0"	4'-8"	3'-8"		14	11			4.1	354	6.7	602	9.3	844
5'-6"	5'-2"	4'-2"	3'-5"	16	13	15	6	4.4	375	6.0	607	7.4	850
6'-0"	5'-8"	4'-8"	3'-11"	16	13	16	6	4.6	382	6.2	616	7.6	860
6'-6"	6'-2"	5'-2"	4'-5"	16	15	16	8	4.8	402	6.4	637	7.8	880
7'-0"	6'-8"	5'-8"	4'-11"	20	17	19	10	5.0	423	6.6	654	8.0	897
7'-6"	7'-2"	6'-2"	5'-5"	20	17	20	10	5.3	430	6.9	664	8.3	907
8'-0"	7'-8"	6'-8"	5'-11"	22	19	22	12	5.5	451	7.1	684	8.5	927
8'-6"	8'-2"	7'-2"	6'-5"	24	21	23	14	5.7	471	7.3	702	8.7	944
9'-0"	8'-8"	7'-8"	6'-11"	24	21	24	14	6.0	479	7.6	711	9.0	954
9'-6"	9'-2"	8'-2"	7'-5"	26	23	26	16	6.2	499	7.8	732	9.2	974
10'-0"	9'-8"	8'-8"	7'-11"	28	25	27	18	6.4	520	8.0	749	9.4	992
10'-6"	10'-2"	9'-2"	8'-5"	28	25	28	18	6.7	527	8.3	759	9.7	1001
11'-0"	10'-8"	9'-8"	8'-11"	30	27	30	20	6.9	547	8.5	779	9.9	1022

NOTES: FOR L=5 FT., L=10 FT., AND L=15 FT.
REGULAR INLETS: TOTAL QUANTITIES NEEDED ARE OUTSIDE THE HEAVY BLACK LINE.
DROP BOX INLETS: TOTAL QUANTITIES NEEDED ARE INSIDE THE HEAVY BLACK LINE.
STEEL WEIGHTS DO NOT INCLUDE STRUCTURAL STEEL CHANNEL.

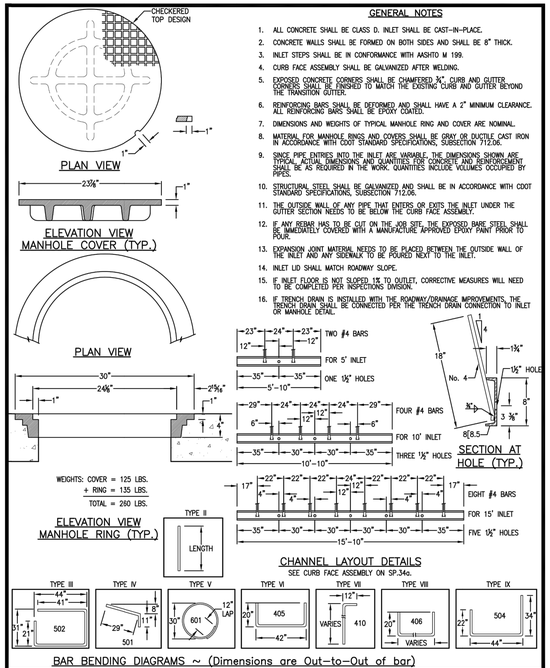
TABLE TWO ~ BARS AND QUANTITIES VARIABLE WITH "H"

REFERENCE: CDOT M & S STANDARDS M-604-12

CURB INLET - TYPE R (5', 10' OR 15' IN LENGTH)

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.34c**



REFERENCE: CDOT M & S STANDARDS M-604-12

CURB INLET - TYPE R (5', 10' OR 15' IN LENGTH)

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.34d**

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

COLORADO REGISTERED 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

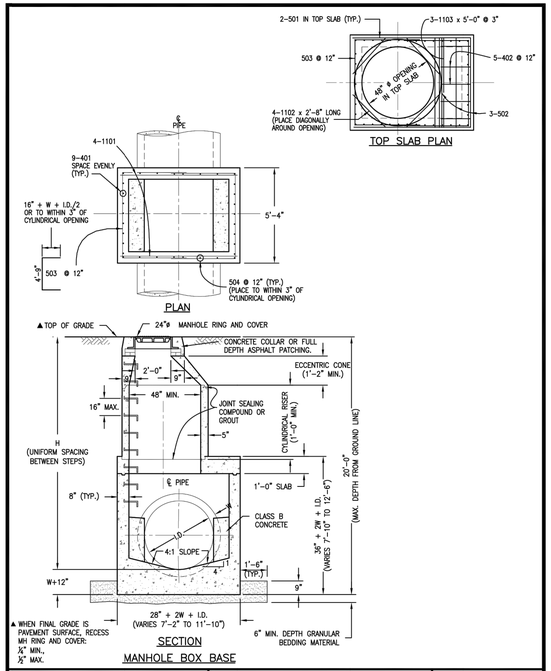
J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	DATE	BY

H-SCALE N/A
V-SCALE N/A
DATE 2/12/21
DESIGNED BY GVT
DRAWN BY GVT
CHECKED BY

RIDGEGATE SOUTHWEST VILLAGE FILING 1
STORM SEWER & ROADWAY DETAILS-PHASE 1C

SHEET 126 OF 270
JOB NO. 15950.01



REFERENCE: CDOT M & S STANDARDS M-604-20

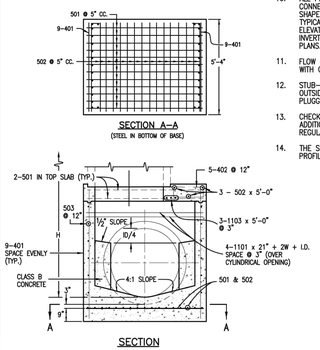
MANHOLES

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.43a**

GENERAL NOTES

1. SINCE ALL PIPE ENTRIES INTO THE BASE ARE VARIABLE, THE DIMENSIONS SHOWN ARE TYPICAL. ACTUAL DIMENSIONS AND QUANTITIES FOR CONCRETE AND REINFORCEMENT SHALL BE AS REQUIRED IN THE WORK.
2. THE PRECAST FLAT TOP MAY BE USED ON ANY MANHOLE. THE ECCENTRIC CONE MAY BE USED WHEN THE MANHOLE "H" HEIGHT IS AT LEAST 8'.
3. THE MH RING (FRAME) SHALL BE SET ON CONCRETE GRADE RINGS. THE FRAME SHALL BE SURROUNDED WITH A CONCRETE COLLAR IN UNPAVED AREA AND CONCRETE PAVEMENT, OR FULL DEPTH ASPHALT IN ASPHALT PAVEMENT. SEE DETAILS ON SHEETS 2 AND 3.
4. DESIGN OF BOX BASE IS BASED ON STRAIGHT RUNS OF CONDUIT OR CHANGE IN DIRECTION OF LESS THAN 45°. SPECIAL DESIGN IS REQUIRED FOR 45° OR GREATER.
5. PRECAST MANHOLES AND REINFORCEMENT SHALL CONFORM TO ASTM C 478 (AASHTO M 199).
6. CAST-IN-PLACE MANHOLES SHALL BE CLASS D CONCRETE.
7. STEPS SHALL BE REQUIRED WHEN THE MANHOLE DEPTH EXCEEDS 3'-6" AND SHALL BE IN ACCORDANCE WITH AASHTO M 199.
8. ALL REINFORCING STEEL SHALL HAVE A MINIMUM YIELD STRENGTH OF 60,000 PSI. VERTICAL STEEL SHALL BE PLACED AT L. OF WALL. ALL BARS SHALL HAVE A 2" MINIMUM CLEARANCE. ALL REINFORCING BARS SHALL BE EPOXY COATED.
9. IF ANY REBAR HAS TO BE CUT ON THE JOB SITE, THE EXPOSED BARE STEEL SHALL BE IMMEDIATELY COVERED WITH A MANUFACTURE APPROVED EPOXY PAINT PRIOR TO POUR.
10. ALL PIPE ENTRIES INTO THE BASE OF MANHOLE SHALL BE CONNECTED BY OPEN CHANNELIZATION ADJUSTED FOR PIPE SIZE, SHAPE, SLOPE, AND DIRECTION OF FLOW. DETAILS SHOWN ARE TYPICAL FOR INSTALLATIONS WITH ALL INVERTS OF SAME RELATIVE ELEVATION. FOR EXCESSIVE ELEVATION DIFFERENCE BETWEEN INVERTS, SPECIAL BASE/CHANNEL DETAILS WILL BE SHOWN ON THE PLANS.
11. FLOW CHANNELS AND INVERTS SHALL BE FORMED BY SHAPING WITH CLASS B CONCRETE.
12. STUB-OUTS SHALL EXTEND A MINIMUM OF 1 PIPE SECTION BEYOND OUTSIDE WALL SURFACE OF MANHOLE AND BE SATISFACTORILY PLUGGED.
13. CHECK WITH THE LOCAL GOVERNMENT AUTHORITY FOR ANY ADDITIONAL SANITARY SEWER SPECIFICATIONS, DETAILS, OR REGULATIONS.
14. THE SLOPE OF THE MANHOLE COVER SHALL MATCH THE ROADWAY PROFILE AND CROSS SLOPE.

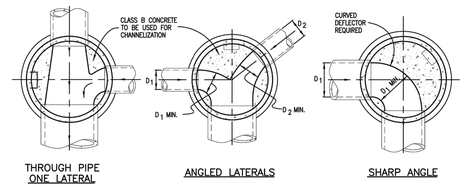


REFERENCE: CDOT M & S STANDARDS M-604-20

MANHOLES

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.43b**



TYPICAL CHANNELIZATION DETAILS

QUANTITIES FOR CONCRETE MANHOLE BOX BASE

MARK	SIZE	TYPE	WT. #/FT.	BARS	I.D. 60"	66"	72"	84"	96"	FORMULAS
401	4	I	0.668	NO. REQ'D.	18	18	18	18	18	401
				LENGTH	8'-8"	9'-3"	9'-10"	11'-0"	12'-2"	BAR LENGTH = 32"+2W+I.D.
				WEIGHT #	104.2	111.2	118.2	132.3	146.3	
402	4	III	0.668	NO. REQ'D.	5	5	5	5	5	402
				LENGTH	6'-0"	6'-7"	7'-2"	8'-4"	9'-6"	BAR LENGTH = I.D. + 2W
				WEIGHT #	20.0	22.0	23.9	27.8	31.7	
501	5	I	1.043	NO. REQ'D.	17	17	17	17	17	501
				LENGTH	8'-0"	8'-7"	9'-2"	10'-4"	11'-6"	BAR LENGTH = 24" + I.D. + 2W
				WEIGHT #	141.8	152.2	162.5	183.2	203.9	
502	5	I	1.043	NO. REQ'D.	23	25	26	29	32	502
				LENGTH	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	NUMBER BARS REQ'D. = $3+\left(\frac{24+I.D.+2W}{@\ 5"}+1\right)$
				WEIGHT #	119.9	130.4	135.6	151.2	166.9	
503	5	II	1.043	NO. REQ'D.	16	18	18	20	24	503
				LENGTH	13'-5"	14'-0"	14'-7"	15'-9"	16'-11	NUMBER BARS REQ'D. = $2\left(\frac{13+I.D.+2W}{@\ 12"}+1\right)$
				WEIGHT #	223.9	262.8	273.8	328.5	423.5	BAR LENGTH = 4'-9"+2(16"+W+I.D./2)
504	5	I	1.043	NO. REQ'D.	14	14	16	18	20	504
				LENGTH	8'-8"	9'-3"	9'-10"	11'-0"	12'-2"	NUMBER BARS REQ'D. = $2\left(\frac{2W+I.D.-4}{@\ 12"}+1\right)$
				WEIGHT #	126.6	135.1	164.1	206.5	253.8	BAR LENGTH = 32"+2W+I.D.
1101	11	I	5.313	NO. REQ'D.	4	4	4	4	4	1101
				LENGTH	7'-9"	8'-4"	8'-11"	10'-1"	11'-3"	BAR LENGTH = 21" + I.D. + 2W
				WEIGHT #	164.7	177.1	189.5	214.3	239.1	
1102	11	I	5.313	NO. REQ'D.	4	4	4	4	4	BENDING
				LENGTH	2'-8"	2'-8"	2'-8"	2'-8"	2'-8"	TYPE I STRAIGHT
				WEIGHT #	56.7	56.7	56.7	56.7	56.7	TYPE II 4'-9" 16"+W+I.D./2
1103	11	I	5.313	NO. REQ'D.	3	3	3	3	3	TYPE III 12" 12" 7" I.D.+2W-38"
				LENGTH	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	
				WEIGHT #	79.7	79.7	79.7	79.7	79.7	
REINFORCING STEEL TOTAL #					1,037.5	1,127.2	1,204.0	1,380.2	1,601.6	
CONCRETE – CUBIC YARDS – TOTAL					6.6	7.3	8.0	9.5	11.1	

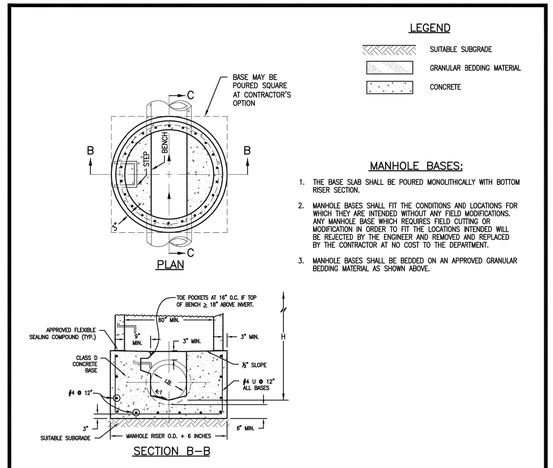
NOTE: QUANTITIES ARE BASED ON SAME SIZE PIPE ENTRANCE TO AND EXIT FROM, BASE AND A 4 FT. MANHOLE ENTRANCE INTO TOP SLAB OF BASE.

REFERENCE: CDOT M & S STANDARDS M-604-20

MANHOLES

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.43c**

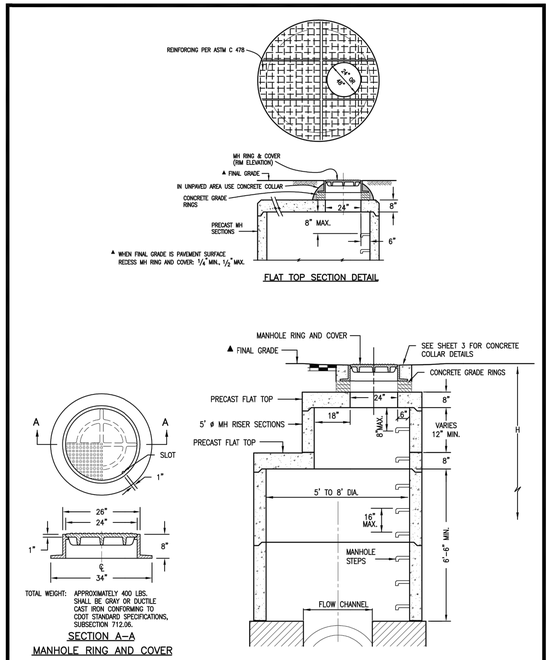


REFERENCE: CDOT M & S STANDARDS M-604-20

MANHOLES

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.43d**



REFERENCE: CDOT M & S STANDARDS M-604-20

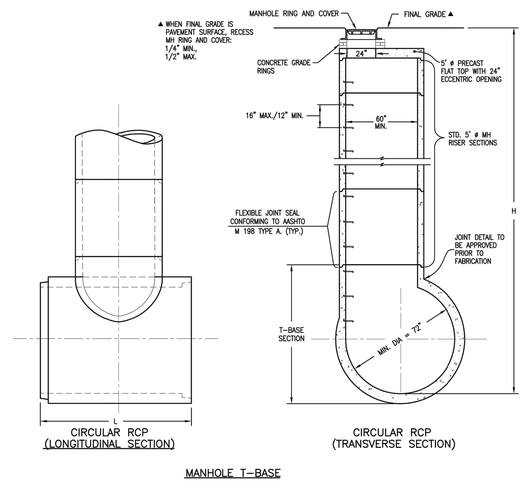
MANHOLES

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.43e**

T–BASE MANHOLES:

1. THE T–BASE SECTION SHALL BE SHOP–FABRICATED FOR DELIVERY TO THE CONSTRUCTION SITE AS A COMPLETE UNIT.
2. THESE DETAILS SHALL ONLY BE CONSTRUED TO SHOW CONCEPTUAL AND STANDARD DIMENSIONAL REQUIREMENTS FOR TYPE T–BASE MANHOLES. THE CONTRACTOR SHALL FURNISH DETAILED SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION. THE DETAILS SHOWN HEREIN APPLY ONLY TO 72–INCH DIAMETER PIPE AND LARGER.
3. EXCEPT FOR CLASS OF PIPE, SPECIFICATIONS TO BE MET FOR THE MANHOLE SHALL BE THE SAME AS THOSE REQUIRED FOR THE ADJOINING PIPE CULVERT OR SEWER.
4. THE T–BASE SECTION SHALL MAINTAIN ITS INTERNAL SHAPE AND FLOW AREA WITH ANY GROUTING, ETC. APPLIED SO AS TO NOT DISTURB THE NORMAL FLOW OR REDUCE THE AREA.



MANHOLE T–BASE

REFERENCE: CDOT M & S STANDARDS M-604-20

MANHOLES

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.43f**

UNTIL SUCH TIME AS THESE PLANS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H–SCALE	N/A
V–SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

Know what's **below.** **Call** before you dig.

ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

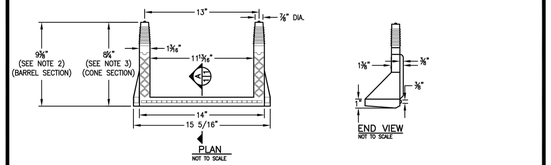
COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING DATE

RIDGEGATE SOUTHWEST VILLAGE FILING 1
STORM SEWER & ROADWAY DETAILS–PHASE 1C

SHEET 127 OF 270

JOB NO. 15950.01



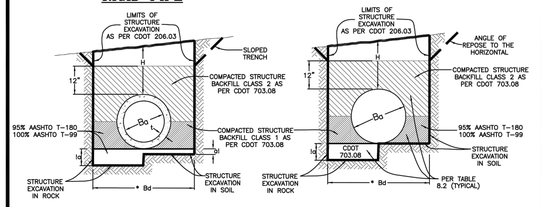
POLYPROPYLENE REINFORCED PLASTIC STEP

GENERAL NOTES

1. ASTM SPECIFICATIONS:
   A. ASTM C-478
   B. ASTM A-615 GRADE 60 (STEEL REBAR).
   C. ASTM 2146-69, TYPE III, GRADE 16906 (POLYPROPYLENE).
2. STEPS INSTALLED IN MANHOLE BARREL SECTIONS OR VERTICAL WALLS OF STRUCTURES SHALL HAVE A 9⅝" LEG AND SHALL PROJECT FROM THE WALL 6".
3. STEPS INSTALLED IN MANHOLE CONE SECTIONS SHALL HAVE AN 8⅝" LEG AND SHALL PROJECT FROM THE WALL 4⅝".
4. ALL STEPS SHALL HAVE A PENETRATION DEPTH INTO THE WALL OF 3⅜".
5. STEPS SHALL BE INSTALLED BY THE "PRESS-FIT" METHOD UTILIZING A SPECIALLY TAPERED PIN TO FORM THE INSERT HOLE AS SHOWN, FOLLOWING MANUFACTURER'S RECOMMENDED PROCEDURE AND SHALL NOT BE GROUTED IN PLACE.
6. INSTALLED STEPS SHALL BE CAPABLE OF WITHSTANDING A PULL OUT FORCE OF 2500 LB. PER LEG FOR A MINIMUM PERIOD OF TWO MINUTES.
7. PINS MUST BE SMOOTH AND CONTINUOUSLY TAPERED. DIMENSIONS OF THE PIN AND THE INSERTED PORTION OF THE MANHOLE STEP ARE TYPICAL ONLY. DOUGLAS COUNTY INSTALLATIONS REQUIRE A MATCHED COMBINATION OF A TAPERED INSERT PIN AND MANHOLE STEP, AS RECOMMENDED OR REQUIRED BY SPECIFIC MANUFACTURER OF THE STEP TO BE USED.
8. THIS STEP CAN ALSO BE USED IN TOE POCKET INSTALLATIONS PROVIDED 5" TOE CLEARANCE IS ALLOWED.

REFERENCE:	MANHOLE AND INLET STEPS	Issued: 05/2013
CITY AND COUNTY OF DENVER DRAWING NUMBER S-750	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. SP.45

RIGID PIPE



FLEXIBLE PIPE

MAXIMUM HEIGHT OF FILL OVER TOP OF PIPE IN FEET

REINFORCED CONCRETE

Ba in.	Min. Bd in.	D.I. INCH CRACK D-LOAD		
		1350	2000	3000
	**	PIPE CLASS		
		III	IV	V
18	35	19	28	43
24	42	18	28	42
30	50	18	28	42
36	59	18	27	41
42	66	18	27	41
48	78	18	27	41
54	89	17	26	40
60	98	17	26	40
66	108	17	26	40
72	117	17	26	40
78	125	17	26	40
84	135	17	26	40
90	154	17	26	40
96	163	17	26	40
108	173	17	26	40
120	191	17	26	40
132	208	17	26	40
144	224	17	26	40

** Based on Bd=1.33(Ba+2t). Wall thickness can vary between manufacturers.

STEEL - 2 2/3" x 1/2" CORRUGATIONS

Ba in.	Bd ft.	H ABOVE TOP OF PIPE IN FEET					
		1-15	16-20	21-25	26-30	31-35	36-40
		THICKNESS IN INCHES					
18-48	4-7	.064	.064	.064	.064	.064	.064
54	7.50	.079	.079	.079	.079	.079	.079
60	8.00	.079	.079	.079	.079	.109	.109
66	8.50	.079	.079	.109	.109	.138	.138
72	9.00	.079	.109	.109	.138	.168	.168
78	9.50	.109	.138	.138	.168		
84	10.00	.109	.138	.168			

LEGEND

H = Height of fill over top of pipe
Ba = Inside diameter (I.D.) of pipe
* Bd = Trench Width
t = Wall thickness of pipe
CLSM = Controlled Low Strength Material
c = Loose granular bedding, as follows:
  c=3" for Flexible Culverts in Soil.
  c=6" for Culvert in Soil.
  c=12" for Culvert in Rock.

* TRENCH WIDTH:
RCP: Bd = Min. of 1.33(Ba+2t), or (Ba+2)+12" (Per AASHTO Section 17)
CSP: Bd = Min. of Ba+4 (Per AASHTO Section 12)

1. Bedding material for SOIL shall be Structural Backfill Class 1 or 2.
2. Bedding material for ROCK shall be Structural Backfill Class 1.

GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS APPLICABLE TO THE PROJECT.
2. ALL TRENCH INSTALLATIONS SHALL BE IN ACCORDANCE WITH OSHA AND COLORADO DEPARTMENT OF TRANSPORTATION REGULATIONS.
3. THE USE OF NON-REINFORCED CONCRETE PIPE WILL NOT BE ALLOWED IN DOUGLAS COUNTY.

RCP DESIGN CRITERIA

Safety Factor = Per ASTM C76
Soil Weight = 120 lb. per cu. ft.
Bedding = Type 2

CSP DESIGN CRITERIA

3"x1" CORRUGATIONS: 60 TO 84 Pipe shall be .064" thick (16 gauge) to H=40 ft.

Soil Weight = 120 lb. per cu. ft.
Safety Factor for Seam Strength = 2.00
Buckling Stress Level = 1/2 Yield Strength
Load Factor (Backfill) = 95% Standard Density, AASHTO-T 99 (K=0.86)

ALL UTILITY REPAIRS MUST BE BACKFILLED WITH CLSM. SEE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS MANUAL FOR SPECIFIC DETAILS.

NOTE: All trenching shall comply with all State, Federal and O.S.H.A. safety requirements. It will be the responsibility of the Contractor to meet all safety requirements.

TO BE USED IN OPEN FIELDS OR PRIOR TO PAVING ROADS

	PIPE INSTALLATION IN TRENCH	Issued: 05/2013
	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. SP.46a

NOTES:

1. This trench backfill detail specifies requirements in addition to those specified in the latest edition of the Colorado Department of Transportation's Standard Specifications for Road and Bridge Construction.
2. A construction traffic control plan shall be submitted to and approved by Douglas County prior to issuance of construction permits in the County right-of-way.
3. Trench shall be braced or shored as necessary for the safety of the workers and protection of other utilities or structures in accordance with applicable local, state and federal safety regulations.
4. The trench width shall be confined to those minimum dimensions, which will permit proper installation and acceptable pipe loading, as established by current local, state and federal Safety regulations.
5. Backfill compaction requirements: Minimum density will be determined in accordance with AASHTO T 99 or T 180 as defined by CDOT Standard Specifications Section 203.07 and CDOT 703.03. Except for CLSM.
6. Full depth asphalt can be used as an alternative to base course.
7. Pavement edges shall be saw-cut. Edges shall be tack coated prior to patching.
8. All storm sewers shall be constructed so that a minimum cover is maintained to withstand AASHTO HS-20 loading on the pipe. The minimum cover to withstand live loading depends upon the pipe size, type and class, and soil bedding condition, but shall be not less than 1-foot at any point along the pipe. Other factors that affect the depth of the pipe are hydraulic grade line elevations, inlet depths, adjacent utilities or utility crossings, including water and sewer services lines along residential streets, and connections to existing storm sewer systems. The roadway subgrade, which supports the pavement section is typically plowed to a certain depth, moisture treated and compacted prior to the placement of the sub-base, base course, and surfacing. There are also instances where the subgrade material must be excavated and replaced or treated to a certain depth to mitigate swelling soils. These efforts can impact the storm sewer system if it has not been designed with adequate depth. The design engineer shall use the best information available, including pavement design or soils reports (if available) to ensure that storm sewer pipes have adequate depth.
9. Changes in design criteria will require compensating change in pipe design.
10. When pipe sewer is to be extended or replaced with pipe of different material, the connections shall conform to the detail shown on plans or be approved through Douglas County Engineering.
11. When two or more conduits are laid side-by-side, they shall be placed so that they are ½ outside diameter, or ½ outside span, or 3' apart, whichever is less. However, if end sections are used, the minimum spacing shall be 1' between the outside edge of end sections.
12. TRENCH INSTALLATION (per OSHA Standards):
    a. Trenches over 5 feet in depth shall be either shored or the trench walls shall be sloped no steeper than 3:1 to the angle of repose. If sloped, the bottom of the slope shall be a minimum of 1 foot above the top of the pipe.
    b. Shoring will be required when the bottom of the slope is more than 3 feet above the bottom of the trench.
    c. All sheeting or shoring to be removed.
13. CLSM may be used in place of Structural Backfill.
14. CLSM shall not exceed a strength over 1000 p.s.i.

REFERENCE: Douglas County Drainage Manual and Colorado Department of Transportation "M" Standards.

TO BE USED IN OPEN FIELDS OR PRIOR TO PAVING ROADS

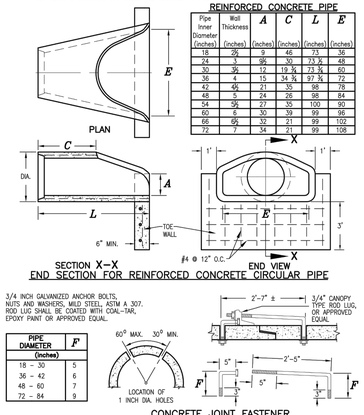
	PIPE INSTALLATION IN TRENCH NOTES	Issued: 05/2013
	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. SP.46b

GENERAL NOTES

1. DIMENSIONS OF END SECTIONS MAY VARY SLIGHTLY FROM THOSE SHOWN ON THE TABLES DUE TO DIFFERENT MANUFACTURER'S VARIATIONS.
2. CONCRETE END SECTIONS ARE TO BE FURNISHED WITH TONGUE OR GROOVE AS REQUIRED.
3. DESIGN LENGTH OF CULVERT OR SIDE DRAIN IS BASED ON LENGTH OF END SECTION SHOWN IN TABLE. ANY ADDITIONAL PIPE REQUIRED TO PROVIDE THE DESIGN LENGTH SHALL BE FURNISHED BY AND AT THE EXPENSE OF THE CONTRACTOR.
4. INSIDE CONFIGURATION AND JOINT OF CONCRETE END SECTION END PIPE SHALL MATCH.
5. END SECTIONS FOR CMP ARCH CULVERT SHALL MATCH THE DIMENSIONS OF THE CULVERT SHOWN ON THE PLANS.
6. GALVANIZED TOE PLATE AS SHOWN, WILL BE REQUIRED ON END SECTIONS FOR CORRUGATED STEEL PIPE AND SHALL BE THE SAME THICKNESS AS END SECTIONS. TOE PLATE SHALL BE FIELD-BOLTED TO END SECTION WITH ⅜" GALVANIZED BOLTS, NUTS AND WASHERS.
7. GALVANIZED STEEL SHALL BE IN CONFORMANCE WITH AASHTO M 111, M 218 OR M 232.
8. FOR TYPE SD END SECTIONS, BARS SHALL BE FABRICATED FROM NPS-3 GALVANIZED STEEL SCHEDULE 40 PIPE WHICH SHALL BE IN CONFORMANCE WITH ASTM A 53.
9. FOR A TYPE SD END SECTION, THE INSTALLATION OF ALTERNATIVE 1 OR ALTERNATIVE 2 END SECTION SHALL BE THE CONTRACTOR'S OPTION.
10. CONCRETE PIPE JOINT FASTENERS SHALL BE INSTALLED AT THE FLARED END SECTION AND LAST TWO PIPE JOINTS OF ALL RCP OUTFALLS.
11. CONNECTIONS OF METAL END SECTIONS TO PLASTIC PIPE SHALL BE APPROVED BY THE ENGINEER.
12. CLASS D CONCRETE TOE WALLS ARE REQUIRED AT THE ENDS OF ALL FLARED END SECTIONS.

REINFORCED CONCRETE PIPE

Pipe Inner Diameter (inches)	Wall Thickness (inches)	A (inches)	C (inches)	L (inches)	E (inches)
18	2⅝	9	46	73	36
24	3	9⅝	30	73 ⅞	48
30	3⅝	12	19 ⅜	73 ⅞	60
36	4	15	34 ⅜	97 ⅞	72
42	4⅝	21	35	98	78
48	5	24	26	98	84
54	5⅝	27	35	100	90
60	6	30	39	99	96
66	6⅝	32	21	99	102
72	7	34	21	99	108

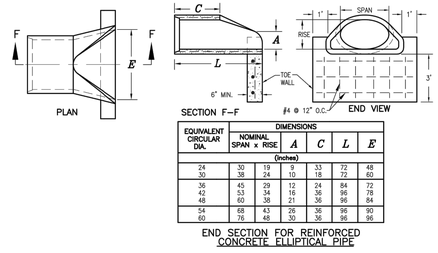


3/4 INCH GALVANIZED ANCHOR BOLTS, NUTS AND WASHERS, MILD STEEL, ASTM A 307. ROD LUG SHALL BE COATED WITH COAL-TAR, EPOXY PAINT OR APPROVED EQUAL.

PIPE DIAMETER (inches)	F
18 – 30	5
36 – 42	6
48 – 60	7
72 – 84	9

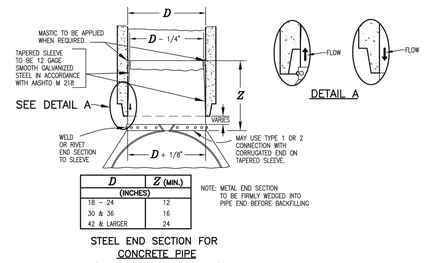
CONCRETE JOINT FASTENER (TWO PER JOINT)

REFERENCE:	CONCRETE OR METAL END SECTIONS	Issued: 05/2013
CDOT M & S STANDARDS M-603-10	DOUGLAS COUNTY COLORADO	Revised: 09/2017
		Drawing No. SP.52a



EQUIVALENT CIRCULAR DIA.	NOMINAL SPAN x RISE	DIMENSIONS A	C	L	E
		(inches)			
24	30 x 19	9	33	72	48
30	38 x 24	10	18	72	60
36	45 x 29	12	24	84	72
42	53 x 34	16	36	96	78
48	60 x 38	21	36	96	84
54	68 x 43	26	36	96	90
60	76 x 48	30	36	96	96

END SECTION FOR REINFORCED CONCRETE ELLIPTICAL PIPE

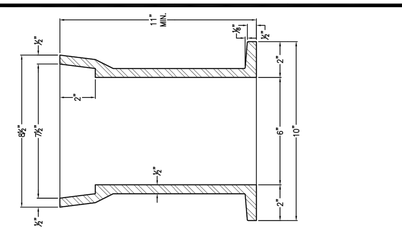


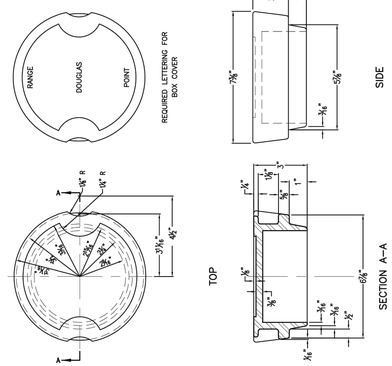
D	Z (MIN.)
(INCHES)	
18 - 24	12
30 & 36	16
42 & LARGER	24

NOTE: METAL END SECTION TO BE FIRMLY WEDGED INTO PIPE END BEFORE BACKFILLING

STEEL END SECTION FOR CONCRETE PIPE
(ALTERNATIVE FOR CONCRETE END SECTION)

REFERENCE:	CONCRETE OR METAL END SECTIONS	Issued: 05/2013
CDOT M & S STANDARDS M-603-10	DOUGLAS COUNTY COLORADO	Revised: 09/2017
		Drawing No. SP.52b





	RANGE BOX	Issued: 05/2013
	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. SP.54

811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	N/A
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
STORM SEWER & ROADWAY DETAILS-PHASE 1C

SHEET 128 OF 270

JOB NO. 15950.01

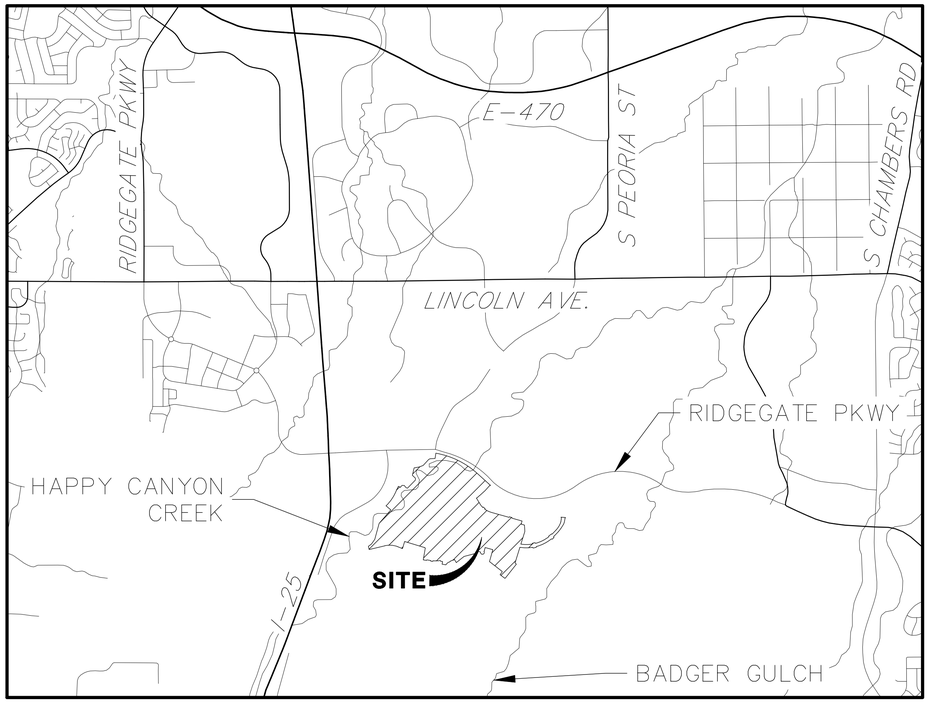
RIDGEGATE SOUTHWEST VILLAGE FILING 1 - REGIONAL INFRASTRUCTURE PHASE 1D

A PORTION OF THE RIDGEGATE PLANNED DEVELOPMENT DISTRICT, EAST SIDE PROPERTY
A PART OF SECTION 14, SECTION 22, SECTION 23, AND SECTION 24, TOWNSHIP 6 SOUTH, RANGE 67 WEST
OF THE 6TH P.M., CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO

STREET AND DRAINAGE CONSTRUCTION PLANS

ABBREVIATIONS

AC	ACRE
AD	ALGEBRAIC DIFFERENCE
AH	AHEAD
ARCH	ARCHITECT
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASSY	ASSEMBLY
AVE	AVENUE
BB	BOX BASE
BK	BACK
BNDY	BOUNDARY
BOP	BOTTOM OF PIPE
BOV	BLOW OFF VALVE
BFV	BUTTERFLY VALVE
BLVD	BOULEVARD
BW	BOTTOM OF WALL
C&G	CURB & GUTTER
CATV	CABLE TELEVISION
CB	CATCH BASIN
CBC	CONCRETE BOX CULVERT
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION
CDS	CUL-DE-SAC
CF	CUBIC FOOT
CFS	CUBIC FEET PER SECOND
CIP	COMPLETE IN PLACE
CL	CENTER LINE
CLOMR	CONDITIONAL LETTER OF MAP REVISION
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
COCS	CITY OF COLORADO SPRINGS
CONC	CONCRETE
CR	CIRCLE
CSP	CORRUGATED STEEL PIPE
CSU	COLORADO SPRINGS UTILITIES
CT	COURT
CTRB	CONCRETE THRUST REDUCER BLOCK
CY	CUBIC YARD
DBPS	DRAINAGE BASIN PLANNING STUDY
DE	DRAINAGE EASEMENT
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DR	DRIVE
DRC	DESIGN REVIEW COMMITTEE
DU	DWELLING UNITS
DY	DAY
E	EAST
EA	EACH
EGL	ENERGY GRADE LINE
EL	ELEVATION
ELEC	ELECTRIC
EOA	EDGE OF ASPHALT
EPC	EL PASO COUNTY
ERCP	ELLIPTICAL RCP
ESMT	EASEMENT
EST	ESTIMATE
EX	EXISTING
FDP	FINAL DEVELOPMENT PLAN
FDR	FINAL DRAINAGE REPORT
FES	FLARED END SECTION
FF	FINISHED FLOOR ELEVATION
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOWLINE
FIL	FILING
FO	FIBER OPTIC CABLE
GB	GRADE BREAK
GE	GAS EASEMENT
GIS	GEOGRAPHIC INFORMATION SYSTEM
GL	GAS LINE
GPS	GLOBAL POSITIONING SYSTEM
GV	GATE VALVE
HBP	HOT BITUMINOUS PAVEMENT
HC	HANDICAP
HDC	HIGH DEFLECTION COUPLING
HDPE	HIGH DENSITY POLYETHYLENE
HGL	HYDRAULIC GRADE LINE
HMA	HOT MIX ASPHALT
HOA	HOME OWNERS ASSOCIATION
HP	HIGH POINT
HR	HOUR
I	INLET
IE	IRRIGATION EASEMENT
INT	INTERSECTION
INV	INVERT
IRR	IRRIGATION
KB	KICK (THRUST) BLOCK
LB	POUND
LE	LANDSCAPE EASEMENT
LF	LINEAR FOOT
LN	LANE
LOMR	LETTER OF MAP REVISION
LP	LOW POINT
LS	LUMP SUM
LT	LEFT
MAX	MAXIMUM
M/D	MOISTURE DENSITY
MDDP	MASTER DEVELOPMENT DRAINAGE PLAN
MH	MANHOLE
MIN	MINIMUM
MS	MOUNTABLE SIDEWALK
N	NORTH
NRCP	NON-REINFORCED CONCRETE PIPE
ODP	OFFICIAL DEVELOPMENT PLAN
OHE	OVERHEAD ELECTRIC
OHU	OVERHEAD UTILITY
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PCR	POINT OF CURB RETURN
PDP	PRELIMINARY DEVELOPMENT PLAN
PE	PROFESSIONAL ENGINEER
PI	POINT OF INTERSECTION
PKWY	PARKWAY
PL	PROPERTY LINE
PR	PROPOSED
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PV	PLUG VALVE
PVC	POLYVINYL CHLORIDE
R	RADIUS
RCBC	REINFORCED CONCRETE BOX CULVERT
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
ROW	RIGHT OF WAY
RT	RIGHT
S	SOUTH
STE	STEEL
SAN	SANITARY SEWER
SF	SQUARE FOOT
ST	STREET
STA	STATION
STM	STORM SEWER
SY	SQUARE YARD
SY-IN	SQUARE YARD INCH
TB	THRUST BLOCK
TBC	TOP BACK OF CURB
TBW	TOP BACK OF WALK
TEL	TELEPHONE
TN	TON
TOA	TOP OF ASPHALT
TOB	TOP OF BOX
TOC	TOP OF CURB OR CONCRETE
TOF	TOP OF FOUNDATION
TOP	TOP OF PIPE
TW	TOP OF WALL
TYP	TYPICAL
UDFCD	URBAN DRAINAGE AND FLOOD CONTROL DISTRICT
UE	UTILITY EASEMENT
U&DE	UTILITY & DRAINAGE EASEMENT
UGE	UNDERGROUND ELECTRIC
VCP	VITRIFIED CLAY PIPE
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
VTC	VEHICLE TRACKING CONTROL
W	WEST
WL	WATER LINE
WM	WATER MAIN
WRD	WATER RESOURCES DEPARTMENT
WS	WATER SURFACE
WSE	WATER SURFACE ELEVATION
WTR	WATER
YR	YEAR



VICINITY MAP
SCALE: 1"=2000'

SHEET INDEX

129	COVER SHEET-REGIONAL PHASE 1D
130	GENERAL NOTES-PHASE 1D
131	LEGEND-PHASE 1D
132	OVERALL SITE AND UTILITY PLAN-PHASE 1D
133	ROADWAY SECTIONS-PHASE 1D
134-137	ROADWAY PLAN & PROFILES-PHASE 1D
138	CURB RETURN PROFILES-PHASE 1D
139	CURB RAMP DETAILS-PHASE 1D
140-141	SIGNAGE & STRIPING PLAN-PHASE 1D
142-144	STORM PLAN & PROFILE-PHASE 1D
145-150	STORM SEWER & ROADWAY DETAILS-PHASE 1D

TOTAL 129-150

NOTICE TO CONTRACTOR:

1. BY ACCEPTING AND UTILIZING THESE PLANS, THE CONTRACTOR AGREES THAT THEY SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSON AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER AND CIVIL ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE CIVIL ENGINEER.
2. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITIES, CONDUITS OR OTHER STRUCTURES SHOWN ON THESE PLANS WAS OBTAINED BY A SEARCH OF AVAILABLE RECORDS. THE ENGINEER ASSUMES NO LIABILITY WHATSOEVER FOR THE ACCURACY OR COMPLETENESS OF SUCH DATA. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ALL UTILITY LINES, CONDUITS OR STRUCTURES WHETHER OR NOT SHOWN ON THESE PLANS AND BY ACCEPTING AND UTILIZING THESE PLANS, ASSUMES ALL RESPONSIBILITY FOR THE PROTECTION AND/OR ANY DAMAGE TO SAID FACILITIES.

Know what's below. Call before you dig.

APPLICANT/OWNER

SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
P~303.791.8180

CIVIL ENGINEER/SURVEYOR

JR ENGINEERING
7200 SOUTH ALTON WAY, SUITE C400
CENTENNIAL, CO
P~303.267.6220

PLANNER

SAGE DESIGN GROUP
1500 SOUTH PEARL STREET, SUITE 200
DENVER, CO 80210
P~303.470.2855

TRAFFIC ENGINEER

JR ENGINEERING
7200 SOUTH ALTON WAY, SUITE C400
CENTENNIAL, CO
P~303.267.6183

GEOTECHNICAL ENGINEER

CTL THOMPSON, INC
1971 WEST 12TH VAE.
DENVER, CO 80204
P~303.825.0777

SOIL PREPARATION NOTE:

SOIL PREPARATION SHALL BE PER RECOMMENDATIONS FROM THE GEOTECHNICAL REPORT PREPARED FOR THIS SITE:

GEOTECHNICAL ENGINEER: CTL THOMPSON, INC
ROJECT NUMBER: DN49,935-115-R2

THE CONTRACTOR IS TO REVIEW THIS REPORT IN FULL PRIOR TO BID. INFORMATION IN THE GEOTECHNICAL REPORT SUPERCEDES ANY CONFLICTING INFORMATION CONTAINED IN THE CONSTRUCTION PLANS AND SPECIFICATIONS.

BASIS OF BEARING

BEARING SHOWN HEREON ARE GRID BEARINGS DERIVED FROM GPS OBSERVATION BASED UPON THE COLORADO COORDINATE SYSTEM OF 1983 CENTRAL ZONE (NAD 83, 2011) REFERENCED TO THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, SIXTH PRINCIPAL MERIDIAN BEING MONUMENTED AS SHOWN HEREON, TAKEN TO BEAR NORTH 89°31'58" EAST, A DISTANCE OF 2635.13 FEET.

BENCHMARK

NGS CONTROL POINT UNBEWUST BEING A 3.5 INCH DIAMETER BRASS CAP. LOCATED ABOUT 3.2 MILES SOUTH OF INTERSTATE 25 AND COLORADO STATE HIGHWAY 470 INTERCHANGE, GO SOUTH ON INTERSTATE 25 FOR 2.9 MILES TO EXIT 191. PROCEED ON A PAVED ROAD TO THE SOUTHWEST FOR 0.2 MILES TO THE STATION ON THE LEFT. IN THE NORTHWEST CORNER OF A 24 FOOT BY 16 FOOT ROCK OUTCROP. IT IS 22.5 FEET EAST OF THE CENTERLINE OF THE PAVED ROAD, 123 FEET NORTH OF THE OUTLET OF A 3 FOOT CORRUGATED STEEL PIPE CULVERT AND APPROXIMATELY 350 FEET WEST OF THE WEST EDGE OF OIL OF SOUTHBOUND INTERSTATE 25, ELEVATION: 6125.32 (NAVD88).

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1" = 2000'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	N/A
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
COVER SHEET-REGIONAL PHASE 1D

SHEET 129 OF 270

JOB NO. 15950.01

GENERAL PROJECT NOTES:

1. ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION OF IMPROVEMENTS SHALL MEET OR EXCEED THE GOVERNING CITY, COUNTY, AND/OR STATE AND APPLICABLE UTILITY DISTRICT STANDARDS AND SPECIFICATIONS, AND APPLICABLE STATE AND FEDERAL REGULATIONS. WHERE THERE IS A CONFLICT BETWEEN THESE PLANS AND ANY APPLICABLE STANDARDS, THE HIGHER QUALITY STANDARD SHALL APPLY. ALL WORK SHALL BE INSPECTED AND APPROVED BY THE CITY AND APPLICABLE UTILITY DISTRICT(S).

2. THE SITE CONSTRUCTION PLANS LISTED WITHIN THIS PLAN SET ARE NOT FOR CONSTRUCTION UNLESS APPROVED BY THE APPROPRIATE GOVERNING JURISDICTION. THE CONTRACTOR SHALL CONFIRM SAID APPROVAL PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL KEEP ONE (1) SIGNED COPY OF THE APPROVED SET OF PLANS, APPROPRIATE SPECIFICATIONS AND STANDARDS, AND APPROVED PERMITS ONSITE AT ALL TIMES.

3. NO REVISIONS SHALL BE MADE TO THESE PLANS WITHOUT THE APPROVAL OF THE CITY, COUNTY, STATE OR LOCAL DISTRICT AND THE ENGINEER OF RECORD.

4. ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARDS, UNLESS SPECIFICALLY STATED OTHERWISE.

5. THE CONTRACTOR IS RESPONSIBLE FOR ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS SHOWN ON THESE DRAWINGS OR DESIGNATED TO BE PROVIDED, INSTALLED, CONSTRUCTED, REMOVED, OR RELOCATED UNLESS SPECIFICALLY NOTED OTHERWISE.

6. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND LICENSES FOR WORK INCLUDING, BUT NOT LIMITED TO DEMOLITION, STREET CUTS, UTILITY INTERFERENCES, TRAFFIC CONTROL, GRADING, AND UTILITY FROM ALL APPLICABLE AGENCIES; AND FOR COMPLYING WITH ALL PROVISIONS INCLUDED THEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL OTHER APPLICABLE PERMITS NOT SPECIFICALLY REQUIRED BY THE AUTHORITY HAVING JURISDICTION.

7. THE CONTRACTOR SHALL UTILITY STAKE PROJECT AT LEAST 2 WORKING DAYS PRIOR TO BEGINNING EXCAVATION OR GRADING, TO HAVE ALL REGISTERED UTILITY LOCATIONS MARKED. OTHER UNREGISTERED UTILITY ENTITIES (I.E. DITCH COMPANY) ARE TO BE LOCATED BY CONTACTING THE RESPECTIVE REPRESENTATIVE.

8. THE CONTRACTOR IS RESPONSIBLE FOR FIELD LOCATING AND VERIFYING ELEVATIONS OF ALL EXISTING SEWER MAINS, WATER MAINS, CURBS, GUTTERS, AND OTHER UTILITIES AT THE POINTS OF CONNECTION SHOWN ON THE PLANS, AND AT ANY UTILITY CROSSINGS PRIOR TO INSTALLING ANY OF THE NEW IMPROVEMENTS. IF A CONFLICT EXISTS AND/OR A DESIGN MODIFICATION IS REQUIRED, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO MODIFY THE DESIGN. DESIGN MODIFICATION(S) MUST BE APPROVED BY THE APPROPRIATE AUTHORITY PRIOR TO BEGINNING CONSTRUCTION.

9. ANY DISRUPTION OF UTILITY SERVICE THAT IS REQUIRED TO ADJUST, EXTEND, RELOCATE OR OTHERWISE REARRANGE ANY UTILITY WITHIN THE PROJECT AREA SHALL BE COORDINATED IN ADVANCE WITH THE AFFECTED UTILITY ENTITY.

10. RIM ELEVATIONS SHOWN ARE APPROXIMATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS. THE CONTRACTOR SHALL USE PRECAST CONCRETE ADJUSTMENT RINGS, GROUT, AND STEEL SHIMS TO ADJUST THE MANHOLE FRAMES TO FINAL GRADE IN CONFORMANCE WITH THE CITY OR UTILITY COMPANY/DISTRICT STANDARD SPECIFICATIONS. ALL FRAMES SHALL BE ADJUSTED TO FINAL GRADE PRIOR TO THE FINAL LIFT OF ASPHALT.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF PROJECT SAFETY INCLUDING, BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.

12. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN, IN ACCORDANCE WITH THE M.U.T.C.D. TO THE APPROPRIATE RIGHT-OF-WAY AUTHORITY (CITY, COUNTY, OR STATE) FOR APPROVAL, PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN, OR AFFECTING, THE RIGHT-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED BY THE CONSTRUCTION ACTIVITIES. ALL WORK WITHIN THE RIGHT OF WAY SHALL BE DONE IN ACCORDANCE WITH THE GOVERNING AUTHORITY'S STANDARDS AND SPECIFICATIONS.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANING AND RESTORATION OF ANY EXISTING IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO STREET PAVEMENT, FENCES, SOD, LANDSCAPING, SPRINKLER SYSTEMS, AND UTILITIES DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL LOCATION AND CONDITION.

14. INCLUDED IN THESE PLANS IS THE DEMOLITION AND DISPOSAL OF ALL EXISTING UTILITIES, SITE IMPROVEMENTS, STRUCTURES, AND SITE FURNISHINGS NEEDED FOR CONSTRUCTION OF THE IMPROVEMENTS SHOWN HEREON. ALL QUESTIONS IN REGARD TO DEMOLITION SHALL BE SUBMITTED TO THE OWNER IN WRITING PRIOR TO BID.

15. ALL DEMOLITION, REMOVAL, DISPOSAL, AND ABANDONMENT OF UTILITIES, STRUCTURES, SITE IMPROVEMENTS, AND SITE FURNISHINGS SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL STANDARDS AND SPECIFICATIONS, AND PERMIT REQUIREMENTS.

16. ALL DISTURBED SOIL, ON- OR OFF-SITE AND RELATED TO WORK AT THIS PROJECT SITE, IS REQUIRED TO BE PROTECTED FROM WIND AND STORM WATER EROSION. TO MITIGATE EROSION, THE CONTRACTOR SHALL USE STANDARD EROSION CONTROL TECHNIQUES DESCRIBED IN THE GESC PLAN SET AND GESC REPORT FOR THIS PROJECT.

17. ALL STRUCTURAL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY GROUND-DISTURBING ACTIVITY. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED IN GOOD REPAIR BY THE CONTRACTOR UNTIL SUCH TIME AS THE ENTIRE DISTURBED AREA IS STABILIZED WITH HARD SURFACE OR PERMANENT LANDSCAPING. THE CONTRACTOR IS RESPONSIBLE FOR REFERRING TO ANY EROSION AND SEDIMENT CONTROL, STORMWATER MANAGEMENT, STORMWATER POLLUTION PREVENTION, OR SIMILAR PLAN AND/OR NARRATIVE AND ASSOCIATED PERMITS INCLUDING, BUT NOT LIMITED TO GRADING PERMITS, AND COMPLYING WITH THE REQUIREMENTS THEREIN.

18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK, INSPECTIONS, AND CERTIFICATIONS AS REQUIRED BY THE CITY, STATE OR LOCAL DISTRICTS. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST ASSOCIATED WITH THE INSPECTION AND CERTIFICATION UNLESS OTHERWISE ARRANGED WITH THE OWNER/DEVELOPER. THE CONTRACTOR SHALL COORDINATE ALL CERTIFICATIONS, AND PROVIDE FIELD SURVEYED AS-BUILT INFORMATION FOR REVIEW BY THE OWNER/DEVELOPER AND/OR ENGINEER AS EARLY AS POSSIBLE IN THE CONSTRUCTION SCHEDULE TO AVOID POTENTIAL DELAYS.

19. CONTRACTOR IS RESPONSIBLE FOR AS-BUILT DRAWINGS, TESTS, REPORTS, AND/OR ANY OTHER CERTIFICATES OR INFORMATION AS REQUIRED FOR ACCEPTANCE OF WORK FROM CITY, UTILITY DISTRICTS, OR ANY OTHER GOVERNING AGENCY, OR TO THE OWNER/DEVELOPER AS REQUIRED BY AND IN ACCORDANCE WITH THE GOVERNING AUTHORITY OR OWNER/DEVELOPER'S CRITERIA. CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING AS-BUILT INFORMATION AN A SET OF RECORD DRAWINGS KEPT AT THE CONSTRUCTION SITE AND AVAILABLE TO THE GOVERNING CITY, COUNTY, AND/OR STATE AND UTILITY DISTRICT INSPECTOR AT ALL TIMES. THE CONTRACTOR SHALL CONFIRM ANY REQUIREMENTS AS EARLY AS POSSIBLE IN THE CONSTRUCTION SCHEDULE TO ACCOUNT FOR PREPARATION AND REVIEW OF THE INFORMATION TO AVOID POTENTIAL DELAYS.

20. IF, DURING THE CONSTRUCTION PROCESS, CONDITIONS ARE ENCOUNTERED BY THE CONTRACTOR, HIS SUBCONTRACTORS, OR OTHER AFFECTED PARTIES, WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE OWNER/DEVELOPER AND THE ENGINEER IMMEDIATELY.

21. DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. IF PERTINENT DIMENSIONS ARE NOT SHOWN, CONTACT THE CONSULTING ENGINEER FOR CLARIFICATION AND ANNOTATE THE DIMENSION ON THE AS-BUILT RECORD DRAWING.

22. BENCHMARK VERIFICATION: THE CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS AND THE PROPOSED ELEVATIONS IN THIS CONSTRUCTION PLAN SET AGAINST THE PROJECT BENCHMARK, IDENTIFIED HEREIN, PRIOR TO COMMENCING WORK.

ROADWAY NOTES

1. GUTTERS SHALL BE AT LEAST 6" THICK.
2. ALL CURBS SHALL USE THE CATCH SECTION UNLESS OTHERWISE NOTED.
3. ALL COMBINATION CURB, GUTTER AND SIDEWALKS TO BE 6" THICK (MIN.). SIDEWALKS WITH VERTICAL CURB AND GUTTER TO BE 6" THICK (MIN.).
4. NON-LANDSCAPED MEDIAN ISLANDS SHALL BE COVERED WITH AN ACCEPTABLE IMPERMEABLE SURFACE.
5. IF ANY SECTION OF A DETACHED SIDEWALK IS TO BE PLACED OUTSIDE OF THE ROAD RIGHT-OF-WAY, THEN A SIDEWALK EASEMENT SHALL BE REQUIRED TO MAINTAIN PUBLIC USE.
6. PLACEMENT, MOISTURE AND DENSITY CONTROL FOR SUBGRADE, SUBBASE, AND SURFACING MATERIALS SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS OF CHAPTER 8 OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.

CITY OF LONE TREE GENERAL NOTES

1. THE CITY OF LONE TREE ENGINEER'S SIGNATURE AFFIXED TO THIS DOCUMENT INDICATES THE ENGINEERING DIVISION HAS REVIEWED THE DOCUMENT AND FOUND IT IN GENERAL CONFORMANCE WITH THE CITY OF LONE TREE SUBDIVISION RESOLUTION OR APPROVED VARIANCES TO THOSE REGULATIONS. THE CITY OF LONE TREE ENGINEER, THROUGH ACCEPTANCE OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY, OTHER THAN STATED ABOVE, FOR THE COMPLETENESS AND/OR ACCURACY OF THESE DOCUMENTS. THE OWNER AND ENGINEER UNDERSTAND THAT THE RESPONSIBILITY FOR THE ENGINEERING ADEQUACY OF THE FACILITIES DEPICTED IN THIS DOCUMENT LIES SOLELY WITH THE REGISTERED PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE IS AFFIXED TO THIS DOCUMENT.
2. ALL ROADWAY CONSTRUCTION SHALL CONFORM TO CURRENT DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
3. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE CITY OF LONE TREE ENGINEERING DIVISION. THE CITY RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS STANDARDS AND SPECIFICATIONS.
4. THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS, INSPECTION SECTION, (303) 662-8112, A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO STARTING CONSTRUCTION, AND/OR BEFORE RESTARTING CONSTRUCTION AFTER A SHUTDOWN OF MORE THAN 10 DAYS.
5. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ACTUAL CONSTRUCTION. FOR INFORMATION, CONTACT: UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT (800) 922-1987 OR 811
6. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY (SIGNED BY BOTH DESIGN ENGINEER AND CITY OF LONE TREE) OF THE CONSTRUCTION PLANS AND GESC REPORT AND PLAN, AND ONE (1) COPY OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS AT THE JOB SITE AT ALL TIMES.
7. ALL PROPOSED STREET CUTS TO EXISTING PAVEMENTS FOR UTILITIES, STORM SEWER, OR OTHER PURPOSES ARE LISTED AND REFERENCED BELOW:

   RIDGEGATE PARKWAY

8. A ROW/CONSTRUCTION PERMIT MUST BE OBTAINED BEFORE ANY WORK WITHIN EXISTING OR PROPOSED PUBLIC ROW. THE PERMIT APPLICATION MUST BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR REVIEW/PROCESSING A MINIMUM OF 7 DAYS PRIOR TO UPDATED 2-3-09 REQUESTED START FOR THE WORK IN THE ROW.
9. A PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR ACCEPTANCE WITH THE PERMIT APPLICATION. AN EXCAVATION OR PUBLIC IMPROVEMENTS CONSTRUCTION PERMIT WILL NOT BE ISSUED WITHOUT AN APPROVED TRAFFIC CONTROL PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION.
10. THE CONSTRUCTION PLANS SHALL BE CONSIDERED VALID FOR TWO (2) YEARS FROM THE DATE OF CITY OF LONE TREE ACCEPTANCE/APPROVAL IF APPLICABLE CONSTRUCTION PERMITS HAVE NOT BEEN OBTAINED, AND CONSTRUCTION STARTED WITHIN THAT TIME, THESE PLANS SHALL BE VOID AND WILL BE SUBJECT TO RE-REVIEW AND RE-ACCEPTANCE BY THE CITY OF LONE TREE.
11. CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE ENGINEER INSPECTOR WHEN WORKING OUTSIDE OF THE PUBLIC RIGHT-OF-WAY ON ANY FACILITY WHICH WILL BE CONVEYED TO THE CITY, URBAN DRAINAGE AND FLOOD CONTROL DISTRICT, OR OTHER SPECIAL DISTRICT FOR MAINTENANCE (STORM SEWER, ENERGY DISSIPATERS, DETENTION OUTLET STRUCTURES, OR OTHER DRAINAGE INFRASTRUCTURES). FAILURE TO NOTIFY ENGINEERING INSPECTOR TO ALLOW THEM TO INSPECT THE CONSTRUCTION MAY RESULT IN NON-ACCEPTANCE OF THE FACILITIES/INFRASTRUCTURE BY CITY AND/OR URBAN DRAINAGE.

CITY OF LONE TREE SIGNAGE & STRIPING NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MOST RECENT VERSION OF THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE "COLORADO SUPPLEMENTAL MUTCD" AND THE DOUGLAS COUNTY "ROAD AND CONSTRUCTION STANDARDS MANUAL". FURTHER SPECIFICATIONS AND ILLUSTRATIONS ARE LOCATED IN THE COLORADO DIVISION OF HIGHWAYS "M AND S STANDARDS".
2. DELINEATION OF ROADWAYS SHALL BE AS SPECIFIED IN THE COLORADO "M AND S MANUAL".
3. SPECIAL CARE SHALL BE TAKEN IN SIGN LOCATION TO ENSURE AN UNOBSTRUCTED VIEW OF EACH SIGN. STREET NAME SIGNS SHALL BE MOUNTED SO THAT THEY CAN BE SEEN FROM ALL DIRECTIONS OF TRAVEL.
4. INSTALLATION OF SIGNS SHALL CONFORM TO THE MUTCD MOUNTING HEIGHT REQUIREMENTS, INCLUDING A 7-FOOT MINIMUM HEIGHT FROM THE BOTTOM OF THE LOWEST SIGN PANEL TO THE TOP GRADE OF SIDEWALK.
5. ALL NEWLY INSTALLED TRAFFIC SIGNS SHALL MEET THE MINIMUM RETRO-REFLECTIVITY AND ILLUMINATION STANDARDS AS SET FORTH BY THE MUTCD (LATEST EDITION). THESE MINIMUM REQUIREMENTS SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
6. DIAMOND GRADE MATERIAL SHALL BE USED ON ALL STOP SIGNS.
7. THE CONTRACTOR INSTALLING SIGNS IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND UTILITIES. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.
8. FOLLOWING INSTALLATION, THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS DEPARTMENT, 303-662-8112, A FIELD INSPECTION OF LOCATION AND INSTALLATION OF ALL SIGNS SHALL BE PERFORMED BY PUBLIC WORKS. ALL DISCREPANCIES IDENTIFIED DURING THE FIELD INSPECTION MUST BE CORRECTED BEFORE THE TWO-YEAR WARRANTY PERIOD WILL BEGIN.
9. SIGNAGE AND STRIPING HAS BEEN DETERMINED BY INFORMATION AVAILABLE AT THE TIME OF REVIEW.
   PRIOR TO INITIATION OF THE WARRANTY PERIOD, LONE TREE RESERVES THE RIGHT TO REQUIRE MODIFICATIONS TO EXISTING OR INSTALLATION OF ADDITIONAL SIGNAGE AND/OR STRIPING IF THEY DETERMINE THAT AN UNFORESEEN CONDITION WARRANTS SUCH MODIFICATION ACCORDING TO THE MUTCD OR THE CDOT M AND S STANDARDS. ALL SIGNAGE AND STRIPING SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
10. FINAL STRIPING AND CROSSWALK LAYOUT TO BE APPROVED BY THE CITY OF LONE TREE PRIOR TO INSTALLATION. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.
11. CROSSWALKS SHALL:
    BE CONSTRUCTED USING 125 MIL PREFORMED THERMOPLASTIC.
    LINE UP WITH THE HANDICAP RAMPS AT BOTH ENDS.
    BE CENTERED ON LANE LINES SO AS TO BE STRADDLED BY VEHICLES.
12. ALL PAVEMENT MARKINGS SHALL BE AS FOLLOWS:
    FOR CONCRETE SURFACE: METHYL METHACRYLATE OR EPOXY PAINT.
    FOR ASPHALT SURFACE: PAINT, 90 MIL PREFORMED THERMOPLASTIC, INLAID MARKING TAPE, METHYL METHACRYLATE, OR EPOXY PAINT.
    TURN ARROWS AND ONLYS: 125 MIL PREFORMED THERMOPLASTIC.
13. ALL PAVEMENT MARKING SHALL BE PRECEDED BY THE APPROPRIATE SURFACE PREPARATION.
14. ANY SIGNAGE AND/OR OTHER TRAFFIC CONTROL DEVICES REMOVED SHALL BE RETURNED TO THE CITY OF LONE TREE.
15. TYPE III LIGHTED BARRICADES SHALL BE SET AT ENDS OF ROADWAYS, SEPARATING FINISHED AND UNFINISHED CONSTRUCTION AREAS AND WILL BE MAINTAINED BY THE CONTRACTOR/DEVELOPER.

NOTE: ALSO SEE CITY OF LONE TREE "STREET SIGN DETAILS"FOR ADDITIONAL INTERSECTION STREET SIGNAGE REQUIREMENTS.

STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON-GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.

DRAINAGE STRUCTURE NOTES

1. CONCRETE WORK SHALL CONFORM TO ACI 301, ACI 350.
2. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM-615, GRADE 60.
3. ALL EXPOSED CONCRETE SHALL HAVE A CDOT CLASS 2 OR 5 FINISH.
4. ALL EXPOSED CONCRETE CORNERS SHALL HAVE ¾"CHAMFERS.
5. DETAILING, FABRICATION, AND PLACING OF REBAR SHALL BE IN ACCORDANCE WITH ACI 315.
6. CONSTRUCTION TOLERANCES SHALL BE IN ACCORDANCE WITH ACI 347.
7. ALL MANHOLES SHALL BE SLAB BASE UNLESS SPECIFIED OTHERWISE. MANHOLE SHALL BE FABRICATED IN ACCORDANCE WITH CDOT STANDARD M-604-20.
8. COORDINATES FOR MANHOLES AND AREA INLETS ARE SHOWN AT THE CENTER OF THE STRUCTURE. COORDINATES FOR MOUNTABLE CURB INLETS ARE SHOWN ALONG THE FLOWLINE AT CENTER OF THE STRUCTURE.
9. ALL TYPE C AND D INLETS SHALL HAVE CLOSE MESH GRATES UNLESS SPECIFIED OTHERWISE.
10. LENGTH OF FABRICATED BAR GRATING PANELS IS LENGTH OF BEARING BARS, WIDTH REFERS TO DIMENSION PERPENDICULAR TO BEARING BARS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PANEL DIMENSIONS GIVEN PRIOR TO FABRICATION.

DRAINAGE GENERAL NOTES

1. PROJECT FACILITIES ARE TO BE LOCATED BASED ON THE SURVEY COORDINATES, ELEVATIONS, DIMENSIONS, AND/OR GEOMETRIC DESIGN DATA PROVIDED ON THE DRAWINGS.
2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES AND FOR SATISFYING ALL APPLICABLE OSHA, FEDERAL, STATE, AND LOCAL REGULATIONS. TEMPORARY EXCAVATIONS SHALL PROVIDE, AT MINIMUM, THE TRENCH DIMENSIONS AND CLEARANCES SHOWN OR SPECIFIED. TEMPORARY CONSTRUCTION SLOPES SHALL BE SLOPED, SHORED, SHEETED, AND/OR BRACED IN ACCORDANCE WITH STABILITY REQUIREMENTS AND APPLICABLE REGULATIONS, AND SHALL BE NO STEEPER THAN THE SLOPES SHOWN OR SPECIFIED WITHOUT THE APPROVAL OF THE ENGINEER. ANY SUCH APPROVALS BY THE ENGINEER WILL NOT RELIEVE THE CONTRACTOR FROM SOLE RESPONSIBILITY FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES.
3. EXISTING FACILITIES NOT INDICATED TO BE REMOVED SHALL BE PROTECTED IN PLACE OR REMOVED AND REPLACED IN KIND, AS APPROVED BY ENGINEER.
4. THE WORK WILL TAKE PLACE IN AND AROUND DRAINAGE SWALES AND THE HAPPY CANYON CREEK, SUBJECT TO PERIODIC FLOODING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF SURFACE AND SUBSURFACE WATER DURING THE COURSE OF THE WORK. ANY DAMAGE TO THE WORK RESULTING FROM SURFACE FLOWS, BASE FLOWS, OR FLOOD FLOWS INCLUDING BUOYANCY FORCES ON PIPELINES AND OTHER FACILITIES SHALL BE CORRECTED BY THE CONTRACTOR AT THE CONTRACTOR'S SOLE COST. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND SATISFYING THE REQUIREMENTS OF ANY APPLICABLE PERMITS PERTAINING TO WATER AND EROSION CONTROL.
5. CONTACT THE ENGINEER FOR CLARIFICATIONS OF ANY ABBREVIATIONS SHOWN ON THE DRAWINGS.
6. THE SITE WHERE THE WORK IS TO BE PERFORMED SHALL BE OVERLOT GRADED. TOPSOIL SHALL BE SPREAD IN OPEN SPACE AREAS TO A DEPTH OF APPROXIMATELY 6-INCHES. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED, AND SOME AREAS COVERED WITH EROSION CONTROL BLANKETS, UNLESS OTHERWISE DIRECTED IN THE PLANS OR BY THE ENGINEER. CARE SHALL BE TAKEN TO AVOID DISTURBING ANY OPEN SPACE AREAS EXCEPT THE MINIMUM NECESSARY TO PERFORM THE WORK. TOPSOIL IN ANY WORK AREAS OR ACCESS ROADS WITHIN THE OPEN SPACE SHALL BE STRIPPED AND STOCKPILED PRIOR TO THE WORK, PROTECTED FROM MIXING WITH ANY OTHER MATERIALS DURING THE WORK, AND REPLACED TO A LOOSE DEPTH OF 7- TO 8- INCHES (FINAL DEPTH AFTER SETTLEMENT SHALL BE 6- INCHES MINIMUM) AS THE WORK IS BEING COMPLETED. WHERE BLANKETS EXIST, THE MINIMUM AREA OF BLANKET TO ALLOW WORK TO PROGRESS SHALL BE REMOVED AND THEN THE REMOVED OR NEW BLANKET REPLACED AFTER UNDERLYING WORK IS COMPLETE (EXCEPT NO TEMPORARY BLANKET NEEDS TO BE REPLACED OVER ROCK OR COIR BLANKET SHOWN IN THE PLANS). JUST PRIOR TO REPLACEMENT OF TOPSOIL AFTER UNDERLYING WORK IS COMPLETE AND APPROVED, THE UNDERLYING SUBGRADE IN OPEN SPACE AREAS SHALL BE LOOSENED BY TILLING TO A DEPTH OF 12- INCHES UNTIL CLODS ARE NO LARGER THAN 3 INCHES, AND APPROVED BY THE ENGINEER. THIS NOTE ALSO APPLIES TO AREAS WHERE COIR MAT IS TO BE INSTALLED.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ANY COMPLETED WORK FROM DISTURBANCE OR DAMAGE DURING THE COURSE OF THE WORK. IF REQUESTED BY THE CONTRACTOR AND APPROVED BY THE OWNER, SIGNIFICANT COMPLETED SECTIONS OF THE WORK MAY BE ACCEPTED AS FINAL PRIOR TO THE COMPLETION OF THE ENTIRE PROJECT. ANY SUCH EARLY ACCEPTANCE WILL NEED TO BE IN WRITING BY THE ENGINEER AND OWNER AND THOSE PORTIONS OF THE WORK SHALL BE PROTECTED BY THE CONTRACTOR AGAINST VEHICLES RUNNING OVER THE AREA BY ENCIRCLING THE WORK WITH FLAGGING OR FENCING OR BY OTHER MEANS AGREED TO BY THE OWNER AND MAINTAINED BY THE CONTRACTOR UNTIL THE END OF THE PROJECT.
8. ALL FINE GRADING REQUIRED TO CONSTRUCT DRAINAGE IMPROVEMENTS AND PROVIDE FINISHED GRADES ADJACENT TO IMPROVEMENTS SHALL BE DONE BY THE DRAINAGE CONTRACTOR AND SHALL BE CONSIDERED PART OF THE WORK, AND NOT PAID FOR SEPARATELY.

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

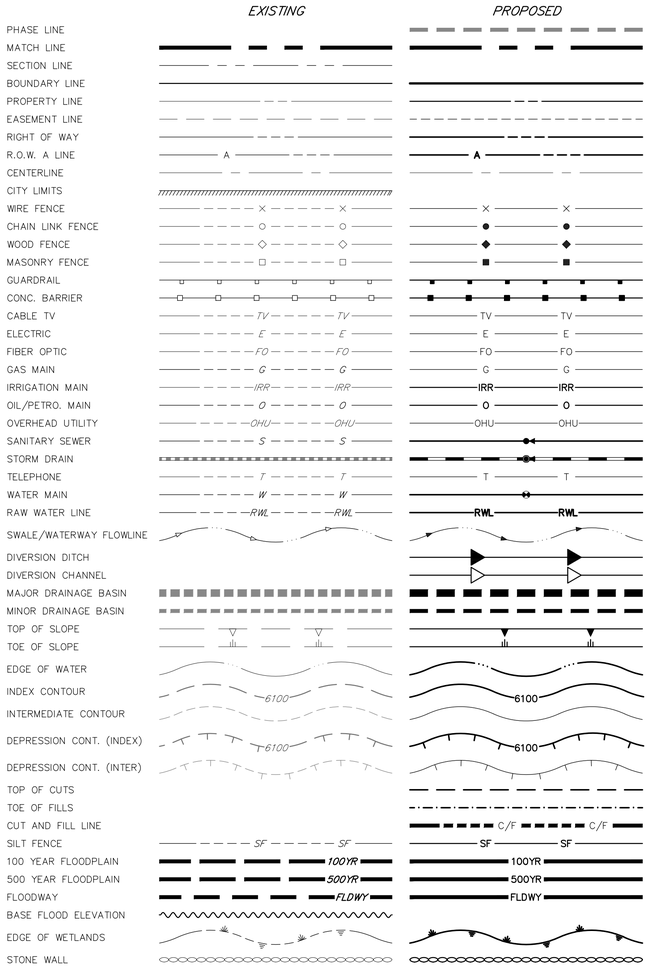
H-SCALE	N/A
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
GENERAL NOTES-PHASE 1D

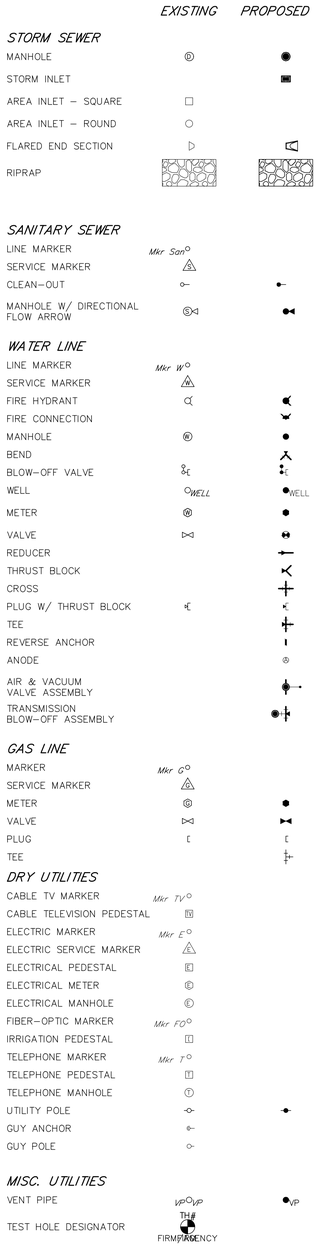
SHEET 130 OF 270

JOB NO. 15950.01

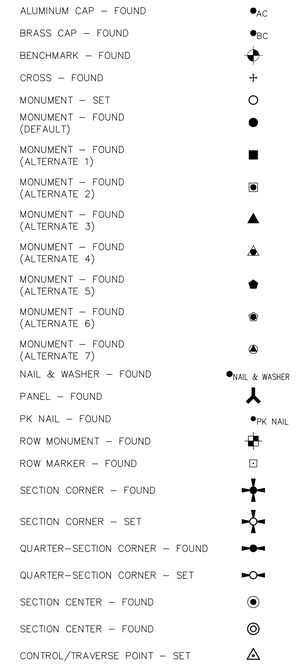
LAYER LINETYPE LEGEND



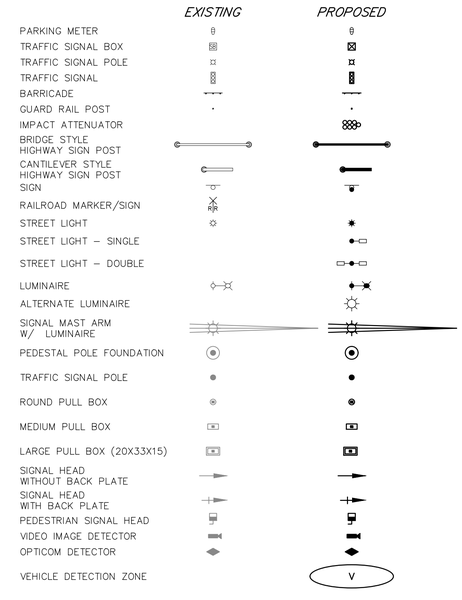
UTILITIES LEGEND



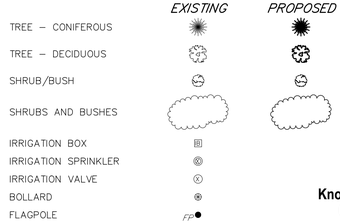
MONUMENTATION LEGEND



TRAFFIC LEGEND



LANDSCAPE LEGEND



811 Know what's **below.** **Call** before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

No.	REVISION	BY	DATE

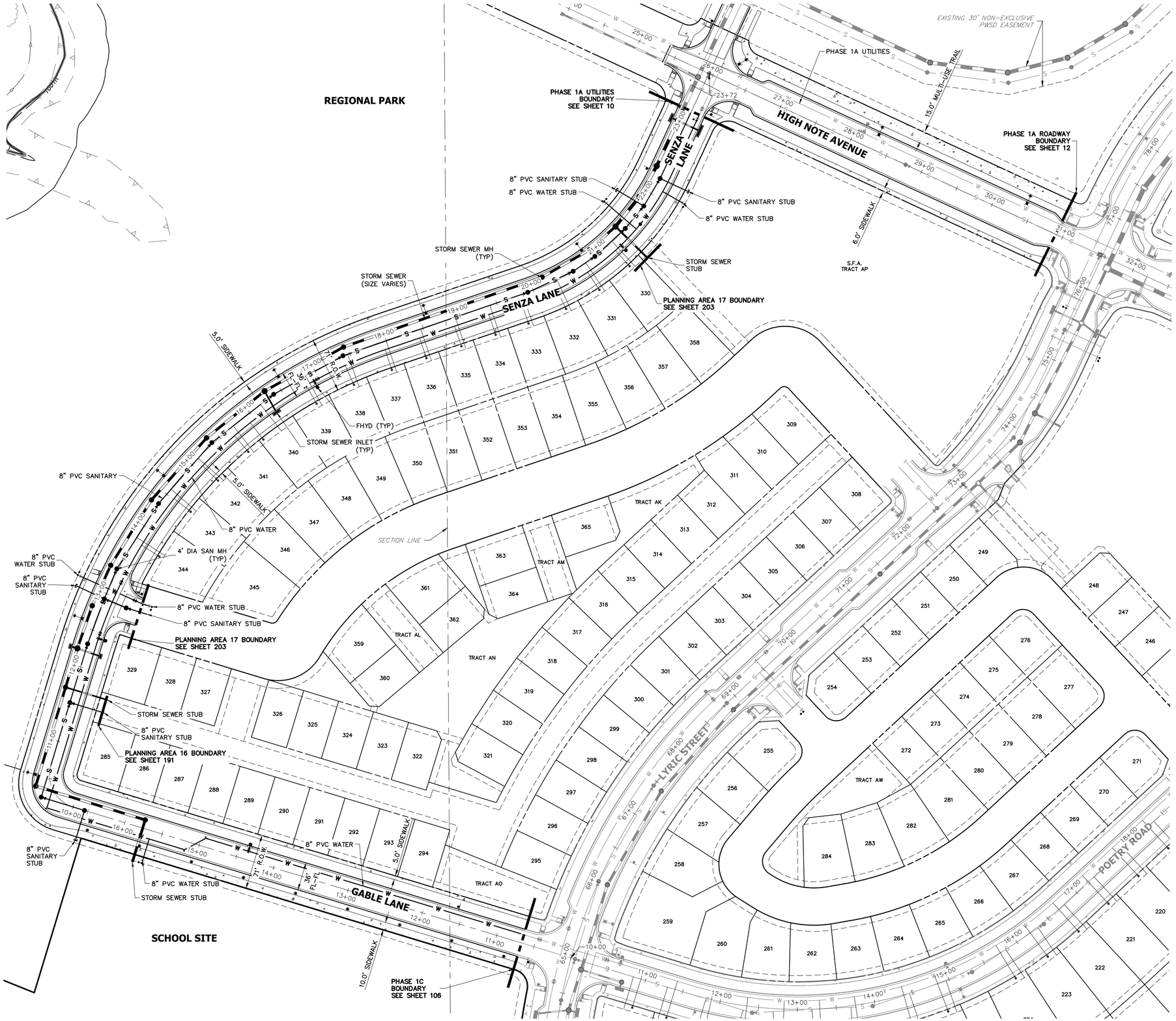
H–SCALE	N/A
V–SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

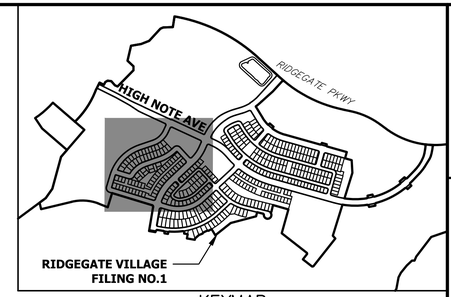
RIDGEGATE SOUTHWEST VILLAGE FILING 1

LEGEND–PHASE 1D

SHEET 131 OF 270

JOB NO. 15950.01





KEYMAP
SCALE:1"=1000'

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE

No.	REVISION

Know what's below. Call before you dig.

H-SCALE	1"=60'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	N/A
DRAWN BY	SDL
CHECKED BY	

60 30 0 60 120
ORIGINAL SCALE: 1" = 60'

RIDGEGATE SOUTHWEST VILLAGE FILING 1
OVERALL SITE AND UTILITY PLAN–PHASE 1D

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

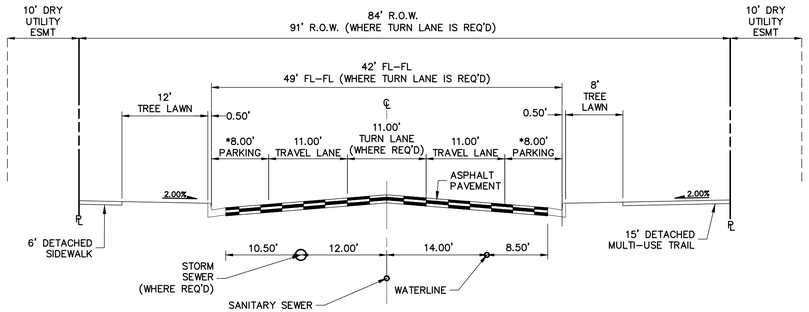
COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

DATE

SHEET 132 OF 270

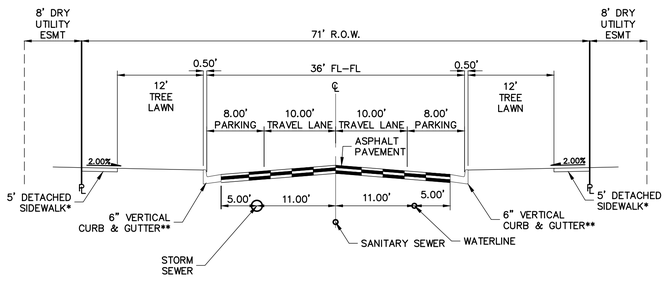
JOB NO. 15950.01



HIGH NOTE AVENUE STA: 25+41.11 TO 30+86.10

TYPE IV - TYPICAL RESIDENTIAL COLLECTOR WITH 15' MULTI-USE TRAIL

*PARKING WHERE APPLICABLE

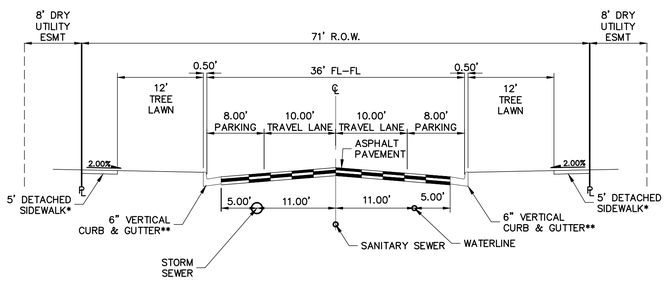


SENZA LANE STA:10+00 TO 23+71.64

TYPE I - TYPICAL 71-FOOT R.O.W. RESIDENTIAL LOCAL STREET WITH DETACHED SIDEWALK (PUBLIC)

*10 FOOT SIDEWALK TO BE INSTALLED ADJACENT TO THE SCHOOL SITE AND WHERE DEPICTED ON THE PLANS.

**CURB IS TO BE MOUNTABLE WHERE ADJACENT TO RESIDENTIAL LOTS

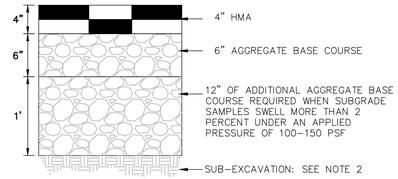


GABLE LANE STA:10+00 TO 16+69.58

TYPE I - TYPICAL 71-FOOT R.O.W. RESIDENTIAL LOCAL STREET WITH DETACHED SIDEWALK (PUBLIC)

*10 FOOT SIDEWALK TO BE INSTALLED ADJACENT TO THE SCHOOL SITE AND WHERE DEPICTED ON THE PLANS.

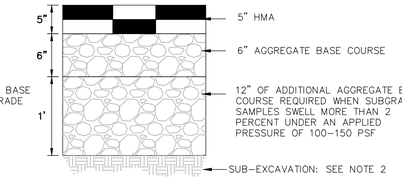
**CURB IS TO BE MOUNTABLE WHERE ADJACENT TO RESIDENTIAL LOTS



MINIMUM RESIDENTIAL LOCAL PAVEMENT SECTION

N.T.S.

NOTES:
1. MINIMUM PAVEMENT SECTIONS FOR BUDGETING PURPOSES ARE PRESENTED HEREON. SUBGRADE INVESTIGATION AND PAVEMENT DESIGNS ARE TO BE COMPLETED BY THE GEOTECHNICAL ENGINEER AFTER OVERLOT GRADING.
2. ADDITIONAL SUB-EXCAVATION (3 TO 5 FEET) MAY BE MERITED.
3. ASPHALT, BASE COURSE DEPTH, AND SUBGRADE PRAPARTATION IS TO BE IN ACCORDANCE WITH GEOTECHNICAL RECOMMENDATIONS.



MINIMUM RESIDENTIAL COLLECTOR PAVEMENT SECTION

N.T.S.

NOTES:
1. MINIMUM PAVEMENT SECTIONS FOR BUDGETING PURPOSES ARE PRESENTED HEREON. SUBGRADE INVESTIGATION AND PAVEMENT DESIGNS ARE TO BE COMPLETED BY THE GEOTECHNICAL ENGINEER AFTER OVERLOT GRADING.
2. ADDITIONAL SUB-EXCAVATION (3 TO 5 FEET) MAY BE MERITED.
3. ASPHALT, BASE COURSE DEPTH, AND SUBGRADE PRAPARTATION IS TO BE IN ACCORDANCE WITH GEOTECHNICAL RECOMMENDATIONS.

Know what's **below.**
Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

AARON LEE CLUTTER, 36742, REGISTERED PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

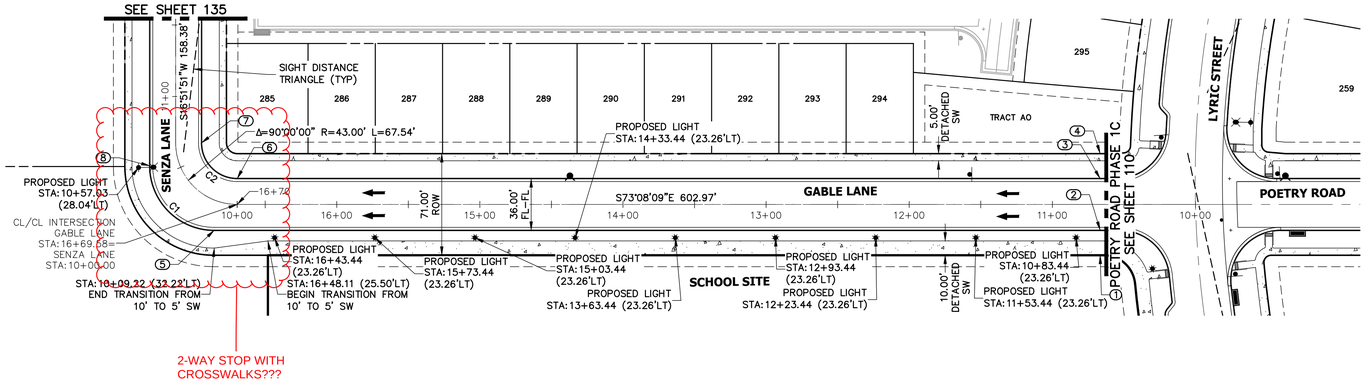
No.	REVISION	BY	DATE

H-SCALE	1"=10'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	JGS
DRAWN BY	SDL
CHECKED BY	

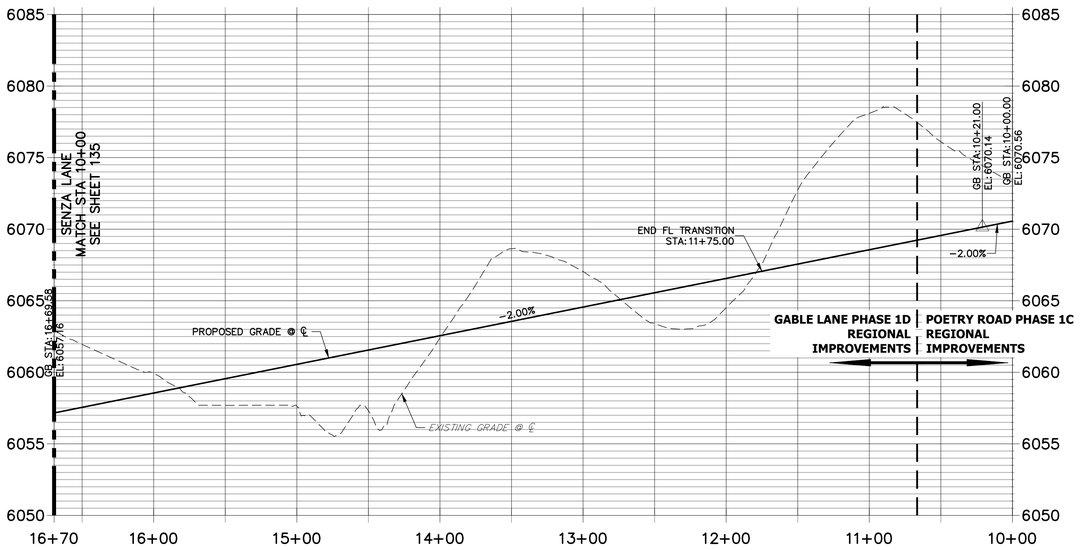
RIDGEGATE SOUTHWEST VILLAGE FILING 1
ROADWAY SECTIONS-PHASE 1D

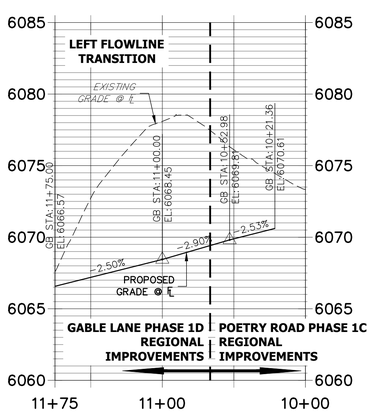
SHEET 133 OF 270

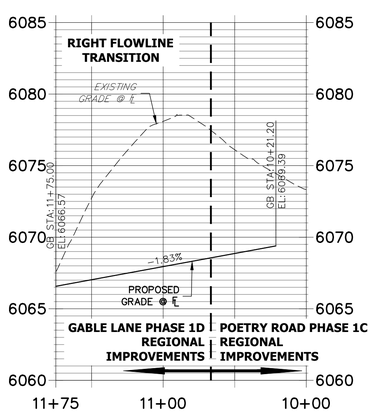
JOB NO. 15950.01



GABLE LANE PROFILE
STA 10+00.00 TO 16+69.58

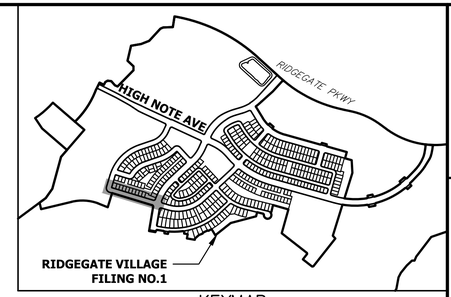






ROADWAY NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE COVER SHEET FOR BENCHMARK.
4. SEE SHEET 131 FOR LEGEND.
5. SEE SHEET 133 FOR TYPICAL STREET SECTIONS.
6. SEE SHEET 138 FOR CURB RETURN PROFILES.
7. SEE SHEET 139 FOR CURB RAMP DETAILS.
8. SEE SHEETS 140-141 FOR SIGNAGE AND STRIPING.
9. ALL CURB RADII ARE 35' UNLESS OTHERWISE NOTED.
10. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.



KEYMAP
SCALE: 1"=1000'

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
1	10+66.61	35.50' (LT)	GABLE LANE	6070.26		BEGIN DETACHED SW
2	10+66.61	18.00' (LT)	GABLE LANE	6069.42		BEGIN C&G
3	10+66.61	18.00' (RT)	GABLE LANE	6068.56		BEGIN C&G
4	10+66.61	35.50' (RT)	GABLE LANE	6069.40		BEGIN DETACHED SW
5	10+11.03	20.06' (LT)	SENZA LANE	6056.46		PC
6	10+00.00	18.00' (RT)	SENZA LANE	6056.67		PC
7	10+67.54	18.00' (RT)	SENZA LANE	6055.32		PT
8	10+56.51	20.06' (LT)	SENZA LANE	6055.53		PT

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C1	90°00'00"	45.00'	70.69'
C2	90°00'00"	25.00'	39.27'

50 25 0 50 100
HORIZONTAL ORIGINAL SCALE: 1" = 50'
VERTICAL ORIGINAL SCALE: 1" = 5'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT
PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE PLANS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

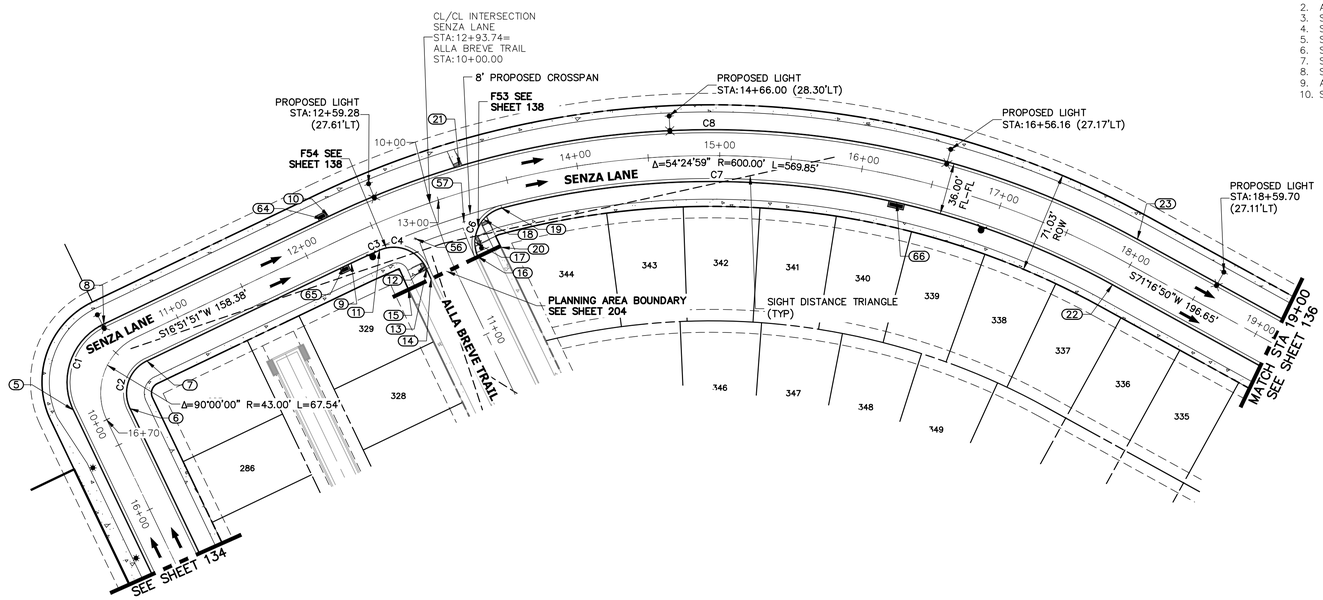
H-SCALE	1"=50'	DESIGNED BY	RDO
V-SCALE	1"=5'	DRAWN BY	SDL
DATE	2/12/21	CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

ROADWAY PLAN & PROFILES-PHASE 1D

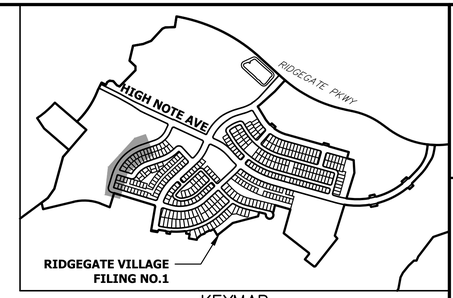
SHEET 134 OF 270

JOB NO. 15950.01



ROADWAY NOTES

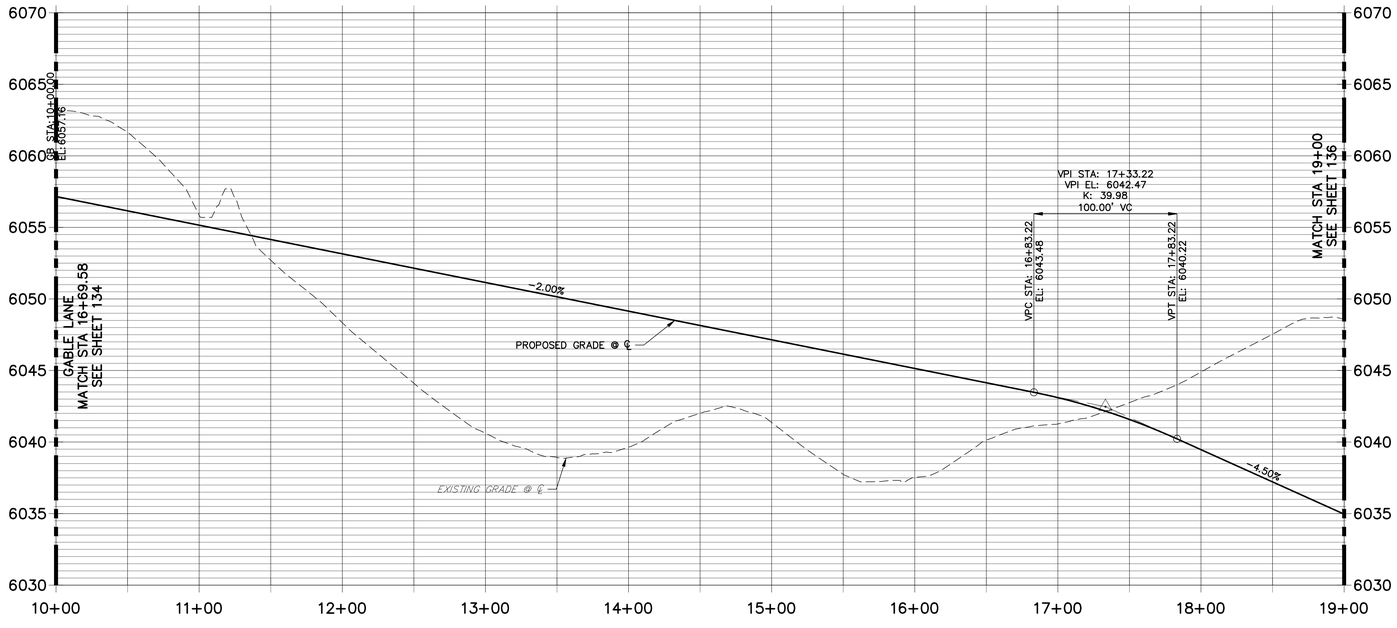
1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE COVER SHEET FOR BENCHMARK.
4. SEE SHEET 131 FOR LEGEND.
5. SEE SHEET 133 FOR TYPICAL STREET SECTIONS.
6. SEE SHEET 138 FOR CURB RETURN PROFILES.
7. SEE SHEET 139 FOR CURB RAMP DETAILS.
8. SEE SHEETS 140-141 FOR SIGNAGE AND STRIPING.
9. ALL CURB RADII ARE 35' UNLESS OTHERWISE NOTED.
10. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.



KEYMAP
SCALE: 1"=1000'

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
5	10+11.03	20.06' (LT)	SENZA LANE	6056.46		PC
6	10+00.00	18.00' (RT)	SENZA LANE	6056.67		PC
7	10+67.54	18.00' (RT)	SENZA LANE	6055.32		PT
8	10+56.51	20.06' (LT)	SENZA LANE	6055.53		PT
9	12+25.93	18.00' (RT)	SENZA LANE	6052.15		PC
10	12+25.93	18.00' (LT)	SENZA LANE	6052.15		PC
11	12+48.36	18.00' (RT)	SENZA LANE	6051.96		PCR
12	10+39.44	18.11' (RT)	ALLA BREVE TRAIL	6051.92		HC RAMP MID PT
13	10+41.51	18.00' (RT)	ALLA BREVE TRAIL	6051.48		PCR
14	10+48.41	18.00' (RT)	ALLA BREVE TRAIL	6051.78		END C&G
15	10+48.44	35.50' (RT)	ALLA BREVE TRAIL	6052.52		END DETACHED SW
16	10+48.35	18.00' (LT)	ALLA BREVE TRAIL	6051.33		PCR
17	10+37.17	20.29' (LT)	ALLA BREVE TRAIL	6051.39		HC RAMP MID PT
18	13+26.68	22.29' (RT)	SENZA LANE	6050.79		HC RAMP MID PT
19	13+41.48	18.00' (RT)	SENZA LANE	6049.84		PCR
20	10+49.68	35.50' (LT)	ALLA BREVE TRAIL	6052.21		END DETACHED SW
21	13+20.70	18.00' (LT)	SENZA LANE	6050.56		HC RAMP MID PT
22	17+95.77	18.00' (RT)	SENZA LANE	6039.17		PT
23	17+95.77	18.00' (LT)	SENZA LANE	6039.17		PT
56	12+75.32	20.00' (RT)	SENZA LANE	6051.38		FL-FL INTERCEPT
57	13+12.57	20.00' (RT)	SENZA LANE	6050.75		FL-FL INTERCEPT
64	12+21.54	18.00' (LT)	SENZA LANE	6052.24		INLET
65	12+20.32	18.00' (RT)	SENZA LANE	6052.26		INLET
66	16+28.85	18.00' (RT)	SENZA LANE	6044.08		INLET

SENZA LANE PROFILE
STA 10+00.00 TO 19+00.00



CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C1	90°00'00"	45.00'	70.69'
C2	90°00'00"	25.00'	39.27'
C3	2°08'32"	582.00'	21.76'
C4	90°11'57"	25.00'	39.36'
C6	98°09'56"	25.04'	42.90'
C7	43°22'51"	582.00'	440.66'
C8	54°24'59"	618.00'	586.94'

50 25 0 50 100
HORIZONTAL
ORIGINAL SCALE: 1" = 50'
VERTICAL
ORIGINAL SCALE: 1" = 5'

Know what's below.
Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

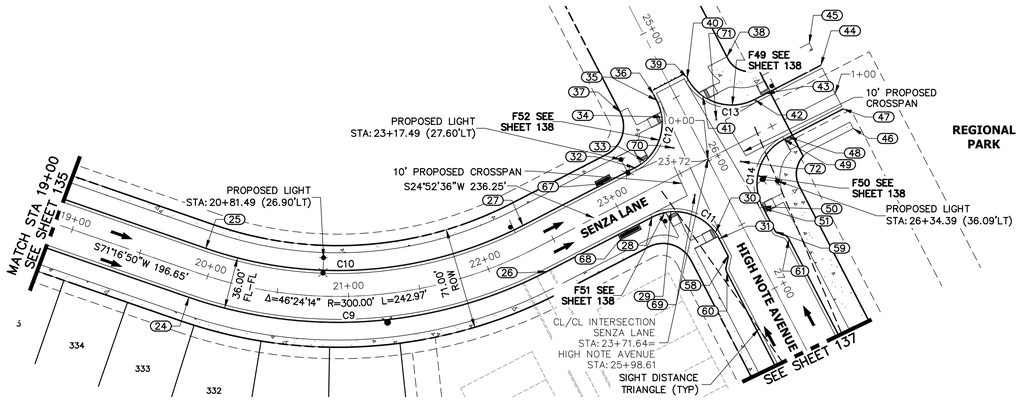
H-SCALE 1"=50'
V-SCALE 1"=5'
DATE 2/12/21
DESIGNED BY RDO
DRAWN BY SDL
CHECKED BY

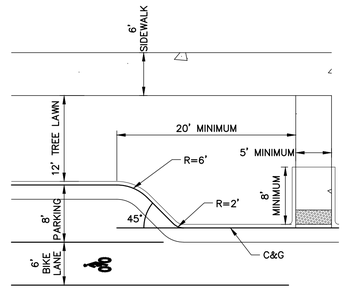
RIDGEGATE SOUTHWEST VILLAGE FILING 1

ROADWAY PLAN & PROFILES-PHASE 1D

SHEET 135 OF 270

JOB NO. 15950.01

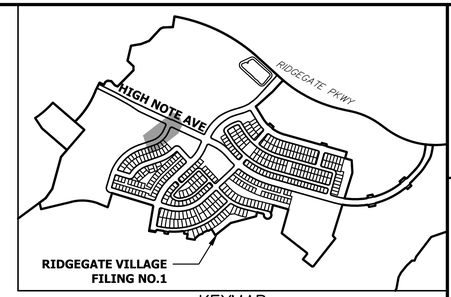




BULB OUT DETAIL

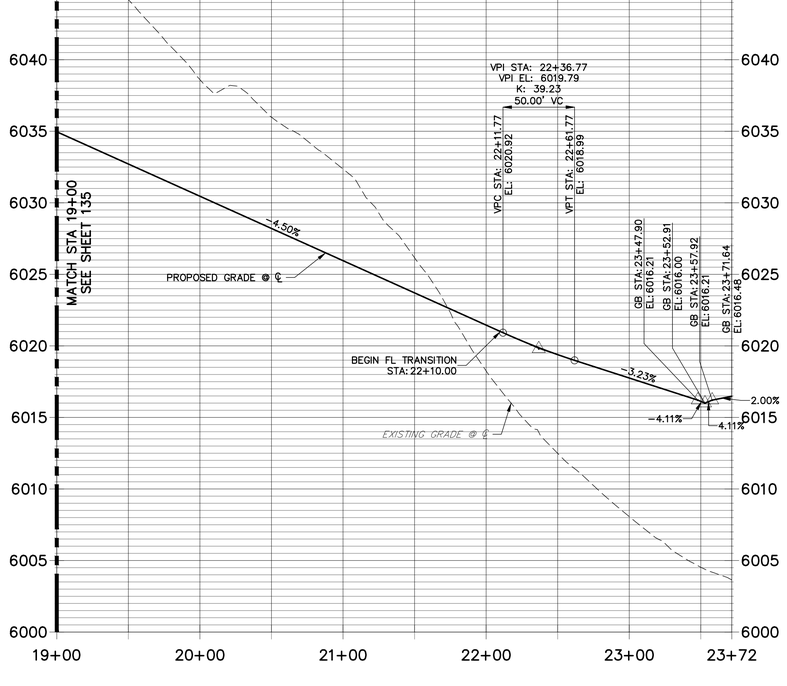
ROADWAY NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE COVER SHEET FOR BENCHMARK.
4. SEE SHEET 131 FOR LEGEND.
5. SEE SHEET 133 FOR TYPICAL STREET SECTIONS.
6. SEE SHEET 138 FOR CURB RETURN PROFILES.
7. SEE SHEET 139 FOR CURB RAMP DETAILS.
8. SEE SHEETS 140–141 FOR SIGNAGE AND STRIPING.
9. ALL CURB RADII ARE 35' UNLESS OTHERWISE NOTED.
10. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.

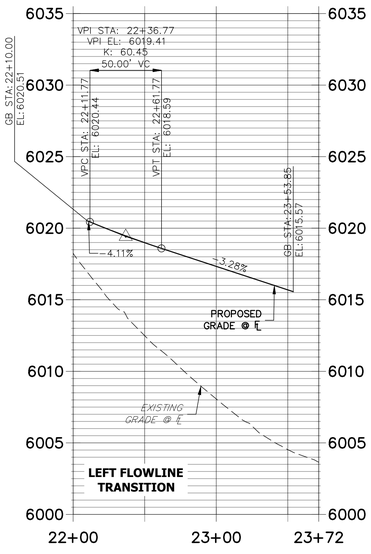


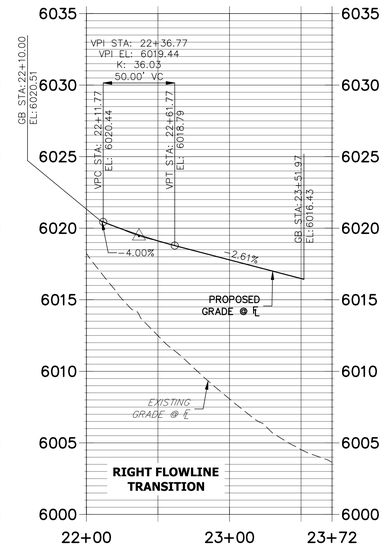
KEYMAP
SCALE: 1" = 1000'

SENZA LANE PROFILE (1)
STA 19+00.00 TO 23+71.64

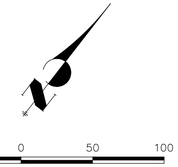


POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
24	19+92.42	18.00' (RT)	SENZA LANE	6030.31		PC
25	19+92.42	18.00' (LT)	SENZA LANE	6030.31		PC
26	22+35.39	18.00' (RT)	SENZA LANE	6019.58		PT
27	22+35.39	18.00' (LT)	SENZA LANE	6019.52		PT
28	23+18.14	18.00' (RT)	SENZA LANE	6017.32		PCR
29	23+31.70	20.73' (RT)	SENZA LANE	6017.10		HC RAMP MID PT
30	26+46.59	18.86' (RT)	HIGH NOTE AVENUE	6017.28		HC RAMP MID PT
31	26+51.61	18.50' (RT)	HIGH NOTE AVENUE	6017.14		PCR
32	23+23.64	18.00' (LT)	SENZA LANE	6016.62		PCR
33	23+31.67	18.93' (LT)	SENZA LANE	6016.37		HC RAMP MID PT
34	25+57.66	15.14' (RT)	HIGH NOTE AVENUE	6015.05		HC RAMP MID PT
35	25+45.61	13.00' (RT)	HIGH NOTE AVENUE	6014.48		PCR
36	25+41.11	13.00' (RT)	HIGH NOTE AVENUE	6014.37		BEGIN C&G
37	25+41.11	39.50' (RT)	HIGH NOTE AVENUE	6015.39		BEGIN DETACHED SW
38	25+41.11	44.50' (LT)	HIGH NOTE AVENUE	6015.21		BEGIN DETACHED SW
39	25+41.11	13.00' (LT)	HIGH NOTE AVENUE	6014.77		BEGIN C&G
40	25+41.61	13.00' (LT)	HIGH NOTE AVENUE	6014.38		PCR
41	25+57.68	16.91' (LT)	HIGH NOTE AVENUE	6015.16		HC RAMP MID PT
42	0+48.00	22.00' (LT)	PARK ENTRANCE 1	6015.81		PCR
43	0+57.00	22.00' (LT)	PARK ENTRANCE 1	6015.92		HC RAMP MID PT
44	1+00.00	22.00' (LT)	PARK ENTRANCE 1	6016.77		END C&G
45	1+00.00	39.50' (LT)	PARK ENTRANCE 1	6017.61		END DETACHED SW
46	1+00.00	27.50' (RT)	PARK ENTRANCE 1	6017.77		END DETACHED SW
47	1+00.00	12.00' (RT)	PARK ENTRANCE 1	6016.97		END C&G
48	0+57.00	12.00' (RT)	PARK ENTRANCE 1	6016.60		HC RAMP MID PT
49	0+53.50	12.00' (RT)	PARK ENTRANCE 1	6016.57		PCR
50	26+45.61	18.50' (LT)	HIGH NOTE AVENUE	6017.21		PCR
51	26+46.61	18.50' (LT)	HIGH NOTE AVENUE	6017.27		HC RAMP MID PT
58	26+64.95	18.50' (RT)	HIGH NOTE AVENUE	6017.48		PC
59	26+64.95	18.50' (LT)	HIGH NOTE AVENUE	6017.48		PC
60	26+75.14	24.50' (RT)	HIGH NOTE AVENUE	6017.74		PT
61	26+74.27	24.50' (LT)	HIGH NOTE AVENUE	6017.71		PT
67	22+99.64	18.00' (LT)	SENZA LANE	6017.35		INLET
68	22+99.64	18.00' (RT)	SENZA LANE	6017.80		INLET
69	23+51.97	18.00' (RT)	SENZA LANE	6016.57		FL–FL INTERCEPT
70	23+53.85	18.00' (LT)	SENZA LANE	6015.69		FL–FL INTERCEPT
71	25+76.61	17.82' (LT)	HIGH NOTE AVENUE	6015.49		FL–FL INTERCEPT
72	26+10.61	19.64' (LT)	HIGH NOTE AVENUE	6016.38		FL–FL INTERCEPT





CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C9	46°24'14"	318.00'	257.55'
C10	46°24'14"	282.00'	228.39'
C11	90°00'00"	35.00'	54.98'
C12	90°00'00"	35.00'	54.98'
C13	90°00'00"	35.00'	54.98'
C14	90°00'00"	35.00'	54.98'



HORIZONTAL
ORIGINAL SCALE: 1" = 50'
VERTICAL
ORIGINAL SCALE: 1" = 5'

Know what's **below.**
Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

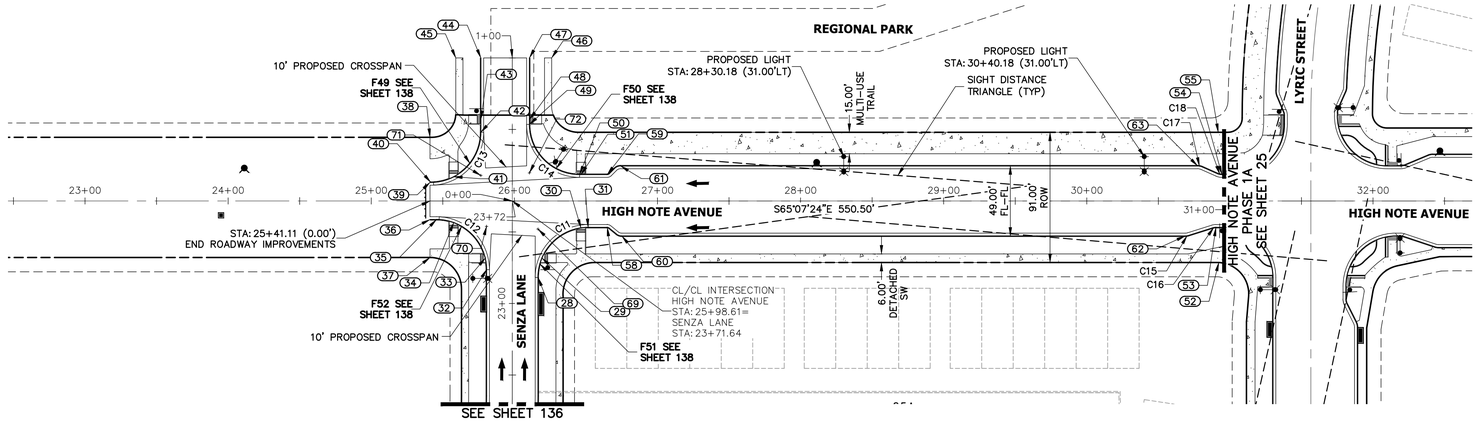
H-SCALE 1" = 50'
V-SCALE 1" = 5'
DATE 2/12/21
DESIGNED BY RDO
DRAWN BY SDL
CHECKED BY

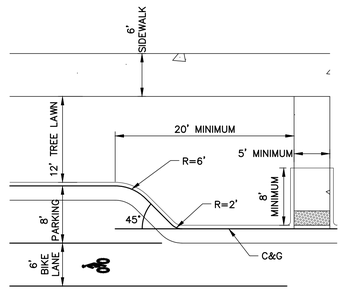
RIDGEGATE SOUTHWEST VILLAGE FILING 1

ROADWAY PLAN & PROFILES–PHASE 1D

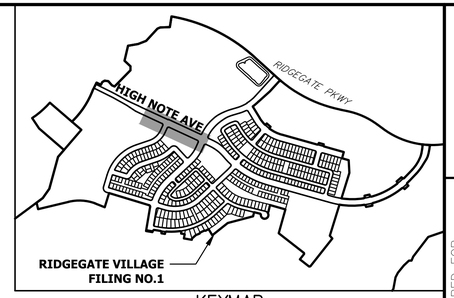
SHEET 136 OF 270

JOB NO. 15950.01



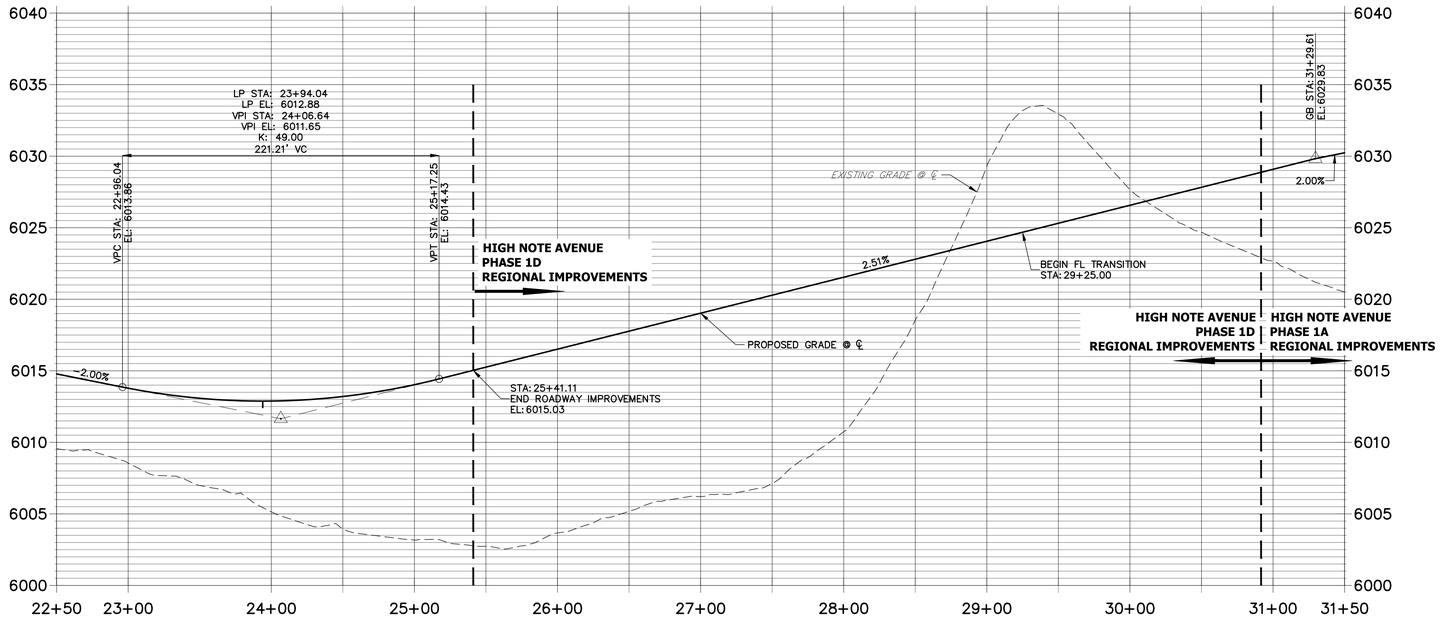


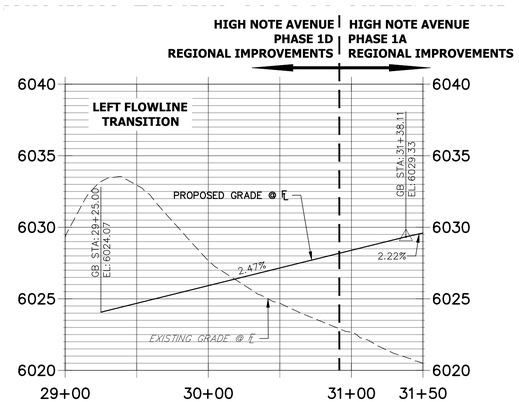
BULB OUT DETAIL

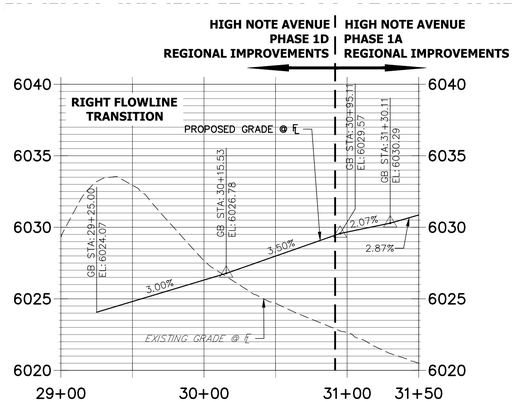


KEYMAP
SCALE: 1"=1000'

HIGH NOTE AVENUE PROFILE STA 22+50.00 TO 31+50.00







POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
28	23+18.14	18.00' (RT)	SENZA LANE	6017.32		PCR
29	23+31.70	20.73' (RT)	SENZA LANE	6017.10		HC RAMP MID PT
30	26+46.59	18.86' (RT)	HIGH NOTE AVENUE	6017.28		HC RAMP MID PT
31	26+51.61	18.50' (RT)	HIGH NOTE AVENUE	6017.14		PCR
32	23+23.64	18.00' (LT)	SENZA LANE	6016.62		PCR
33	23+31.67	18.93' (LT)	SENZA LANE	6016.37		HC RAMP MID PT
34	25+57.66	15.14' (RT)	HIGH NOTE AVENUE	6015.05		HC RAMP MID PT
35	25+45.61	13.00' (RT)	HIGH NOTE AVENUE	6014.48		PCR
36	25+41.11	13.00' (RT)	HIGH NOTE AVENUE	6014.37		BEGIN C&G
37	25+41.11	39.50' (RT)	HIGH NOTE AVENUE	6015.39		BEGIN DETACHED SW
38	25+41.11	44.50' (LT)	HIGH NOTE AVENUE	6015.21		BEGIN DETACHED SW
39	25+41.11	13.00' (LT)	HIGH NOTE AVENUE	6014.77		BEGIN C&G
40	25+41.61	13.00' (LT)	HIGH NOTE AVENUE	6014.38		PCR
41	25+57.68	16.91' (LT)	HIGH NOTE AVENUE	6015.16		HC RAMP MID PT
42	0+48.00	22.00' (LT)	PARK ENTRANCE 1	6015.81		PCR
43	0+57.00	22.00' (LT)	PARK ENTRANCE 1	6015.92		HC RAMP MID PT
44	1+00.00	22.00' (LT)	PARK ENTRANCE 1	6016.77		END C&G
45	1+00.00	39.50' (LT)	PARK ENTRANCE 1	6017.61		END DETACHED SW
46	1+00.00	27.50' (RT)	PARK ENTRANCE 1	6017.77		END DETACHED SW
47	1+00.00	12.00' (RT)	PARK ENTRANCE 1	6016.97		END C&G
48	0+57.00	12.00' (RT)	PARK ENTRANCE 1	6016.60		HC RAMP MID PT
49	0+53.50	12.00' (RT)	PARK ENTRANCE 1	6016.57		PCR
50	26+45.61	18.50' (LT)	HIGH NOTE AVENUE	6017.21		PCR
51	26+46.61	18.50' (LT)	HIGH NOTE AVENUE	6017.27		HC RAMP MID PT
52	30+92.25	43.00' (RT)	HIGH NOTE AVENUE	6030.45		MATCH EX DETACHED SW
53	30+90.24	18.50' (RT)	HIGH NOTE AVENUE	6029.40		MATCH EX C&G
54	30+94.39	18.50' (LT)	HIGH NOTE AVENUE	6028.25		MATCH EX C&G
55	30+91.90	48.00' (LT)	HIGH NOTE AVENUE	6029.27		MATCH EX DETACHED SW
58	26+64.95	18.50' (RT)	HIGH NOTE AVENUE	6017.48		PC
59	26+64.95	18.50' (LT)	HIGH NOTE AVENUE	6017.48		PC
60	26+75.14	24.50' (RT)	HIGH NOTE AVENUE	6017.74		PT
61	26+74.27	24.50' (LT)	HIGH NOTE AVENUE	6017.71		PT
62	30+68.74	24.50' (RT)	HIGH NOTE AVENUE	6028.65		PC
63	30+77.48	24.50' (LT)	HIGH NOTE AVENUE	6027.84		PC
69	23+51.97	18.00' (RT)	SENZA LANE	6016.57		FL-FL INTERCEPT
70	23+53.85	18.00' (LT)	SENZA LANE	6015.69		FL-FL INTERCEPT
71	25+76.61	17.82' (LT)	HIGH NOTE AVENUE	6015.49		FL-FL INTERCEPT
72	26+10.61	19.64' (LT)	HIGH NOTE AVENUE	6016.38		FL-FL INTERCEPT

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C11	90°00'00"	35.00'	54.98'
C12	90°00'00"	35.00'	54.98'
C13	90°00'00"	35.00'	54.98'
C14	90°00'00"	35.00'	54.98'
C15	17°29'40"	8.00'	2.44'
C16	17°29'40"	8.00'	2.44'
C17	23°56'17"	8.00'	3.34'
C18	23°56'17"	8.00'	3.34'

ROADWAY NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE COVER SHEET FOR BENCHMARK.
4. SEE SHEET 131 FOR LEGEND.
5. SEE SHEET 133 FOR TYPICAL STREET SECTIONS.
6. SEE SHEET 138 FOR CURB RETURN PROFILES.
7. SEE SHEET 139 FOR CURB RAMP DETAILS.
8. SEE SHEETS 140-141 FOR SIGNAGE AND STRIPING.
9. ALL CURB RADII ARE 35' UNLESS OTHERWISE NOTED.
10. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.

50 25 0 50 100

HORIZONTAL
ORIGINAL SCALE: 1" = 50'
VERTICAL
ORIGINAL SCALE: 1" = 5'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE 1"=50' | V-SCALE 1"=5' | DATE 2/12/21 | DESIGNED BY RDO | DRAWN BY SDL | CHECKED BY

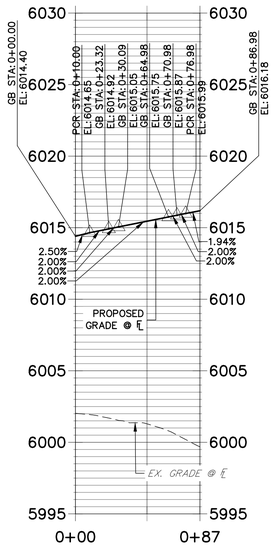
RIDGEGATE SOUTHWEST VILLAGE FILING 1

ROADWAY PLAN & PROFILES-PHASE 1D

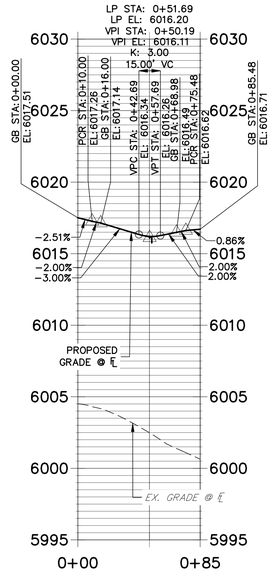
SHEET 137 OF 270

JOB NO. 15950.01

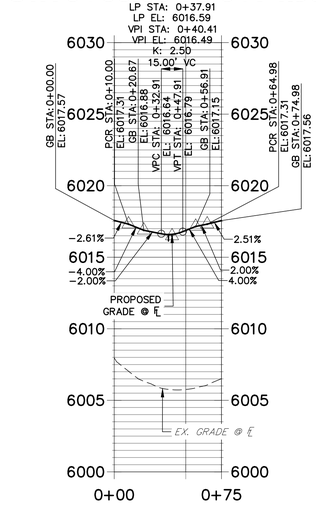
F49 PROFILE
STA 0+00.00 TO 0+86.98



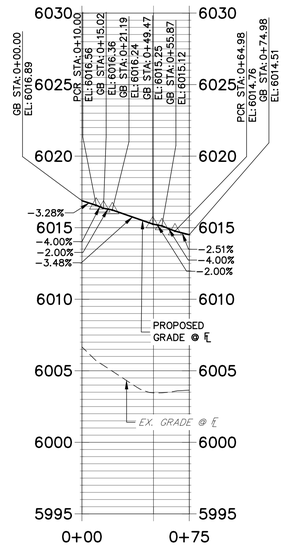
F50 PROFILE
STA 0+00.00 TO 0+85.48



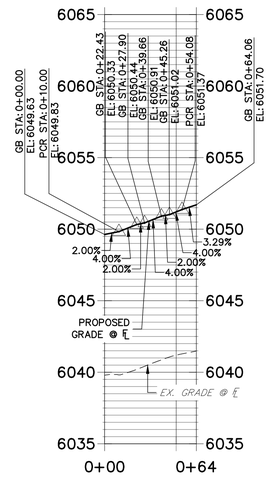
F51 PROFILE
STA 0+00.00 TO 0+74.98



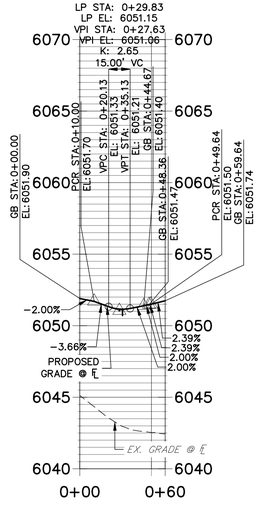
F52 PROFILE
STA 0+00.00 TO 0+74.98



F53 PROFILE
STA 0+00.00 TO 0+64.06



F54 PROFILE
STA 0+00.00 TO 0+59.64



Know what's **below.**
Call before you dig.

50 25 0 50 100

HORIZONTAL
ORIGINAL SCALE: 1" = 50'

VERTICAL
ORIGINAL SCALE: 1" = 5'

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

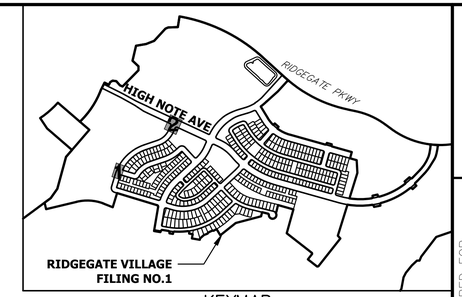
H-SCALE	1"=50'
V-SCALE	1"=5'
DATE	2/12/21
DESIGNED BY	RDO
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

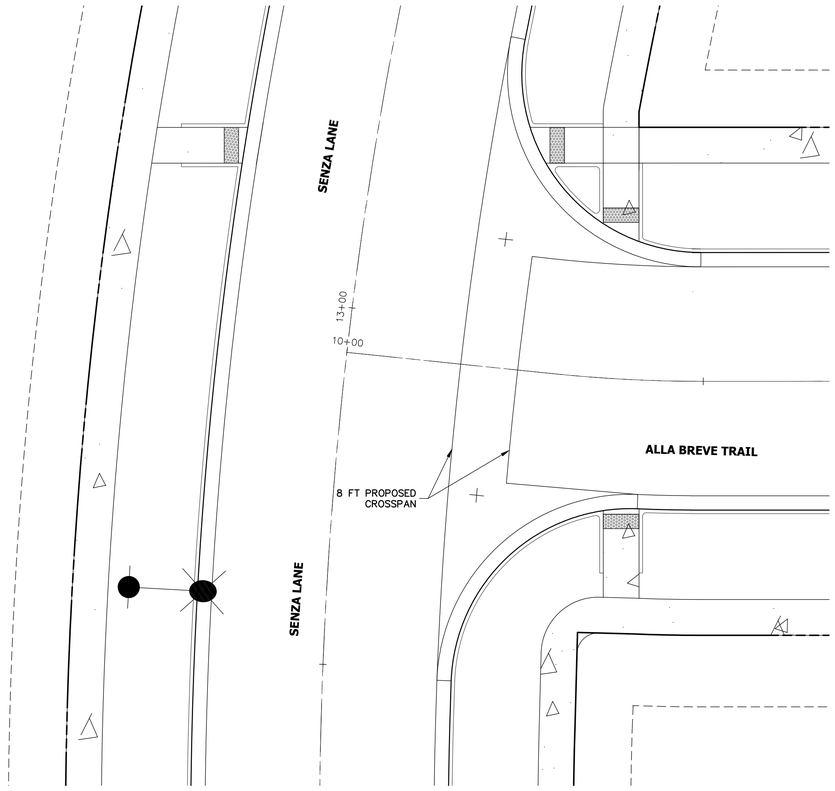
CURB RETURN PROFILES-PHASE 1D

SHEET 138 OF 270

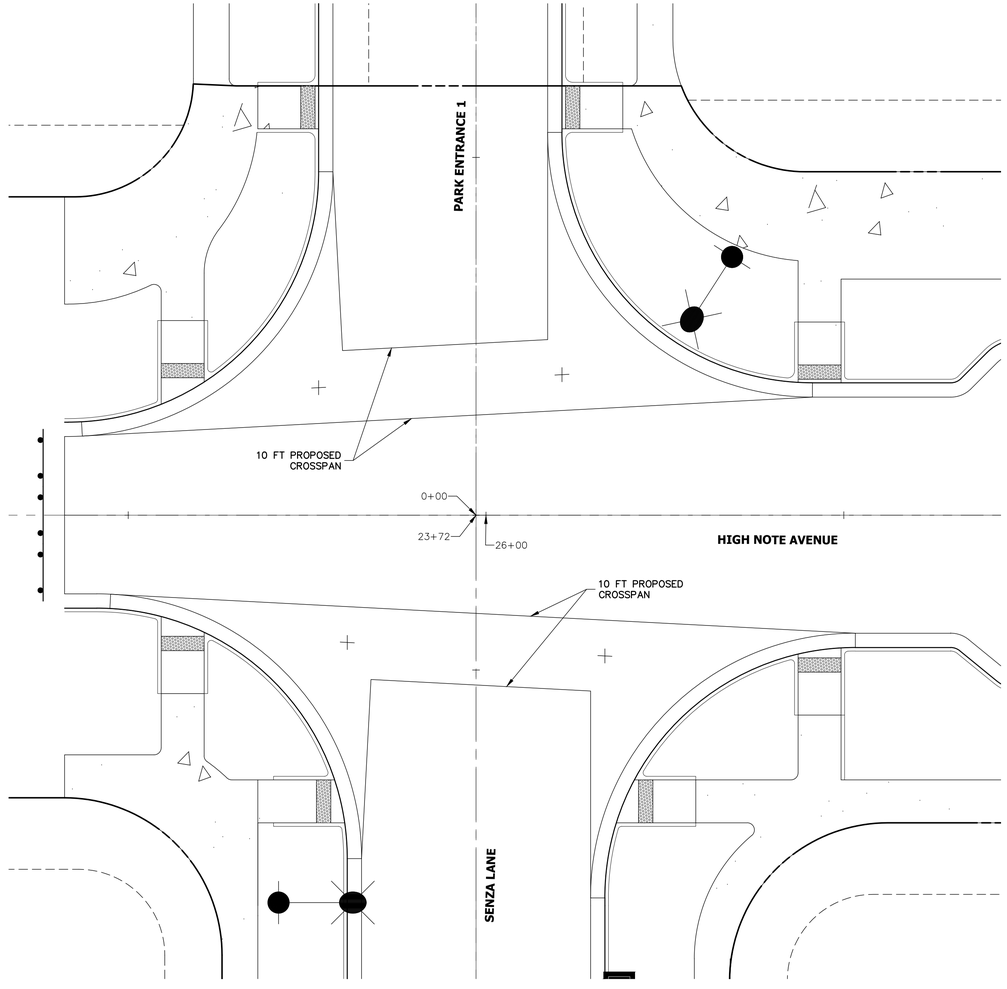
JOB NO. 15950.01



KEYMAP
SCALE: 1"=1000'



AREA 1



AREA 2

10 5 0 10 20
ORIGINAL SCALE: 1" = 10'

CURB RAMP DETAIL NOTES

1. SEE SHEET 138 FOR CURB RETURN PROFILES.
2. ALL CURB RAMP RADII ARE 35' UNLESS OTHERWISE NOTED.
3. SEE DETAILS FOR CURB RAMPS ON SHEETS 145–150.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=10'	DESIGNED BY	RDO
V-SCALE	N/A	DRAWN BY	SDL
DATE	2/12/21	CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
CURB RAMP DETAILS-PHASE 1D

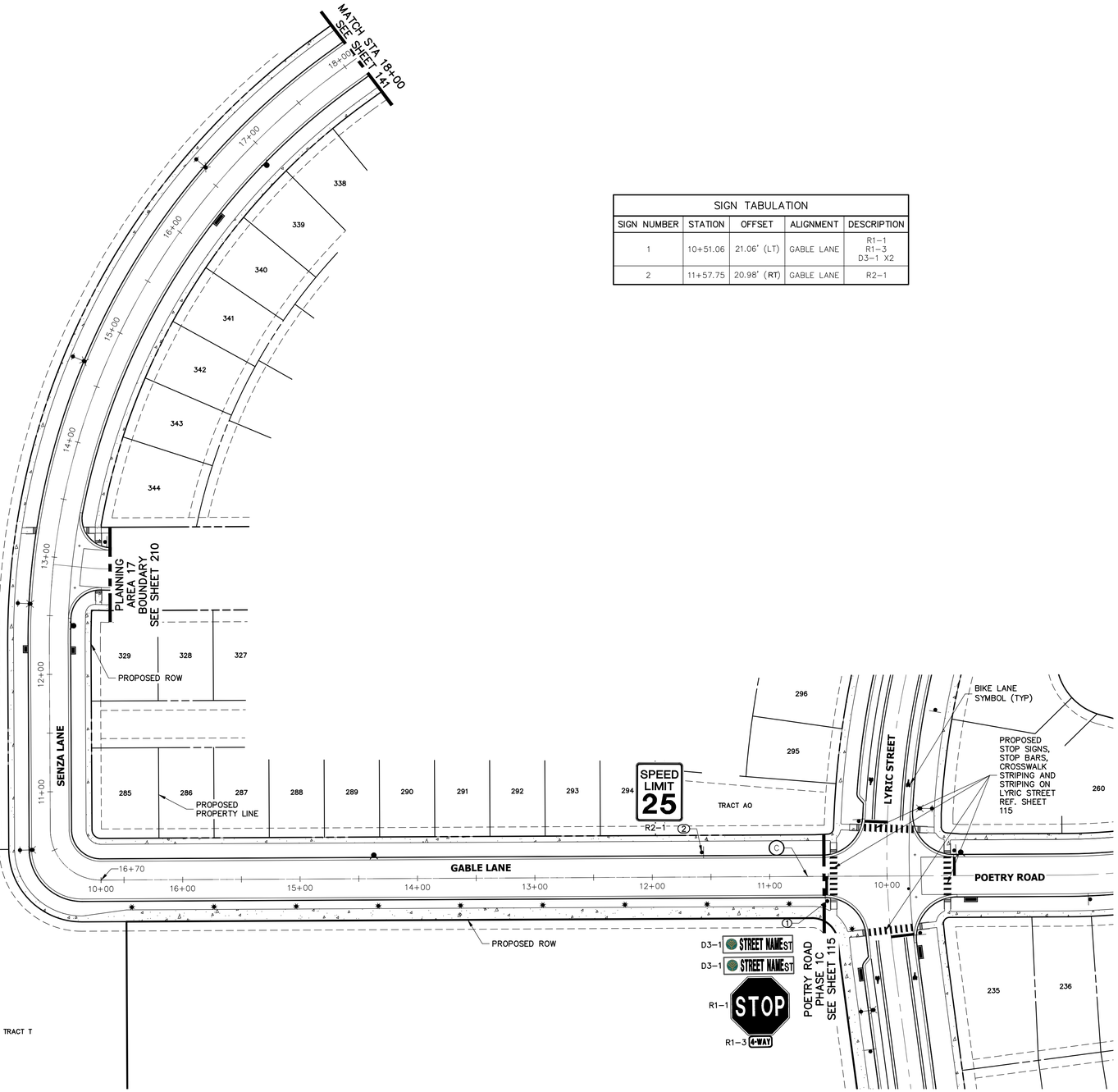
SHEET 139 OF 270

JOB NO. 15950.01

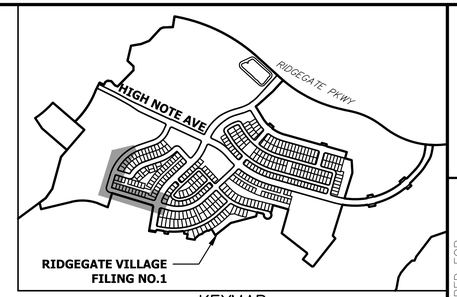
LEGEND

- PROPOSED SIGN
- EXISTING SIGN
- (XX) PROPOSED STRIPE
- (XX) EXISTING STRIPE

- (A) BIKE LANE LINE – 6" WIDE, SOLID WHITE
- (B) CROSSWALK – 2'X8' SOLID WHITE, 4' GAP CENTERED IN LANE
- (C) STOP BAR – 2' SOLID WHITE
- (D) YIELD LINE – 16"X24" SOLID WHITE TRIANGLES, 6' GAP CENTERED IN LANE
- (E) DROP LANE – 8" WIDE X 3' LONG, 12' GAP, WHITE
- (F) CHANNELIZING LINE – 8" WIDE, SOLID WHITE
- (G) DOUBLE YELLOW LINE – 5" WIDE, 3" GAP, SOLID
- (H) YELLOW EDGE LINE – 5" WIDE, SOLID
- (I) DIAGONAL MEDIAN LINE – 4" WIDE, SOLID YELLOW
- (J) LANE LINE – 5" WIDE X 10' LONG, 30' GAP, WHITE



SIGN TABULATION				
SIGN NUMBER	STATION	OFFSET	ALIGNMENT	DESCRIPTION
1	10+51.06	21.06' (LT)	GABLE LANE	R1-1 R1-3 D3-1 X2
2	11+57.75	20.98' (RT)	GABLE LANE	R2-1



KEYMAP
SCALE: 1"=1000'

NOTES

1. SEE SHEET 130 FOR SIGNAGE AND STRIPING NOTES.
2. SEE SHEET 131 FOR LINETYPE AND LAYER LEGEND.

50 25 0 50 100
ORIGINAL SCALE: 1" = 50'

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1" = 50'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	RDO
DRAWN BY	SDL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

SIGNAGE & STRIPING PLAN-PHASE 1D

SHEET 140 OF 270

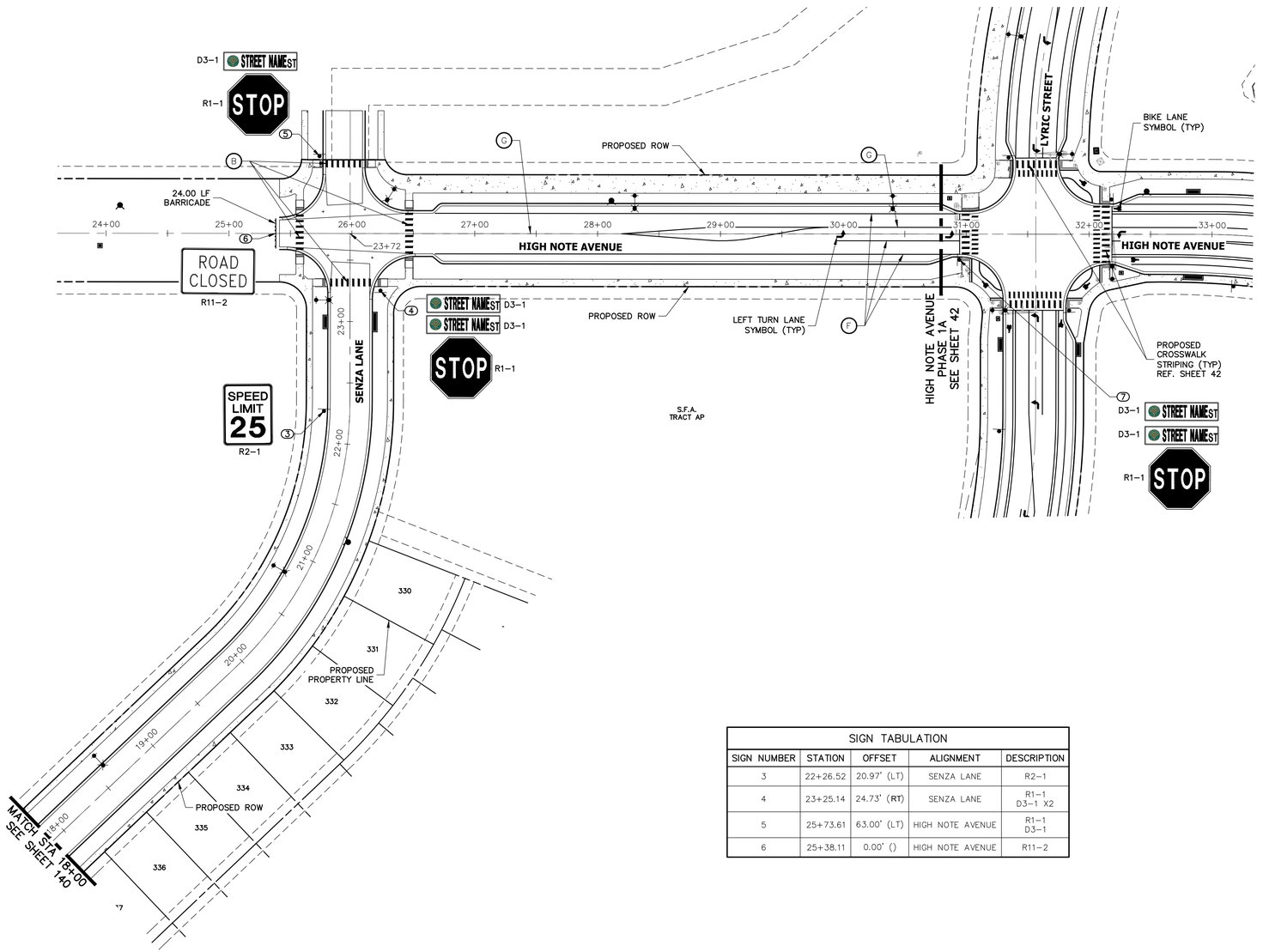
JOB NO. 15950.01

811 Know what's below. Call before you dig.

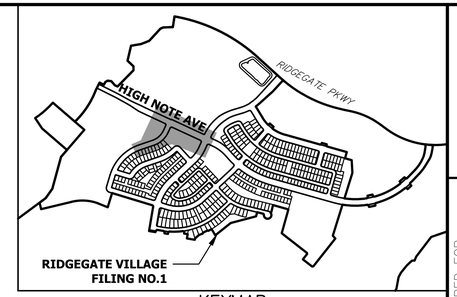
LEGEND

- PROPOSED SIGN
- EXISTING SIGN
- (XX) PROPOSED STRIPE
- (XX) EXISTING STRIPE

- (A) BIKE LANE LINE – 6" WIDE, SOLID WHITE
- (B) CROSSWALK – 2'X8' SOLID WHITE, 4' GAP CENTERED IN LANE
- (C) STOP BAR – 2' SOLID WHITE
- (D) YIELD LINE – 16"X24" SOLID WHITE TRIANGLES, 6' GAP CENTERED IN LANE
- (E) DROP LANE – 8" WIDE X 3' LONG, 12' GAP, WHITE
- (F) CHANNELIZING LINE – 8" WIDE, SOLID WHITE
- (G) DOUBLE YELLOW LINE – 5" WIDE, 3" GAP, SOLID
- (H) YELLOW EDGE LINE – 5" WIDE, SOLID
- (I) DIAGONAL MEDIAN LINE – 4" WIDE, SOLID YELLOW
- (J) LANE LINE – 5" WIDE X 10' LONG, 30' GAP, WHITE



SIGN TABULATION				
SIGN NUMBER	STATION	OFFSET	ALIGNMENT	DESCRIPTION
3	22+26.52	20.97' (LT)	SENZA LANE	R2–1
4	23+25.14	24.73' (RT)	SENZA LANE	R1–1 D3–1 X2
5	25+73.61	63.00' (LT)	HIGH NOTE AVENUE	R1–1 D3–1
6	25+38.11	0.00' ()	HIGH NOTE AVENUE	R11–2



KEYMAP
SCALE: 1"=1000'

NOTES

1. SEE SHEET 130 FOR SIGNAGE AND STRIPING NOTES.
2. SEE SHEET 131 FOR LINETYPE AND LAYER LEGEND.

50 25 0 50 100
ORIGINAL SCALE: 1" = 50'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

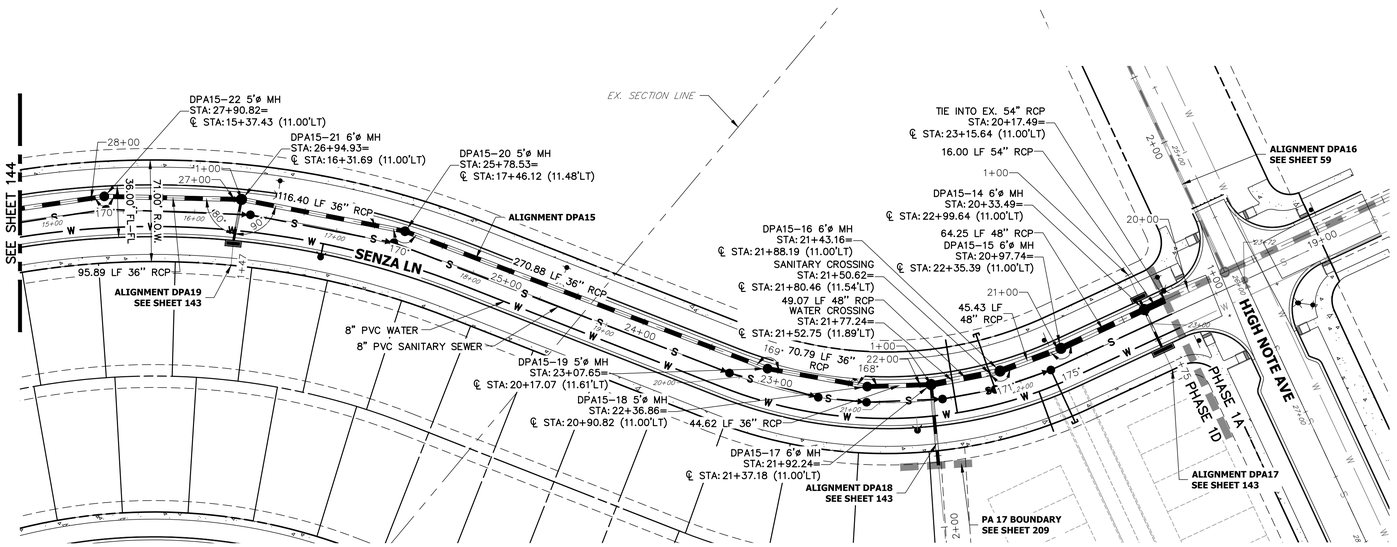
H-SCALE	1"=50'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	RDO
DRAWN BY	SDL
CHECKED BY	

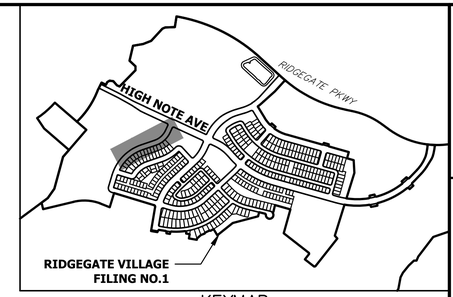
RIDGEGATE SOUTHWEST VILLAGE FILING 1

SIGNAGE & STRIPING PLAN–PHASE 1D

SHEET 141 OF 270

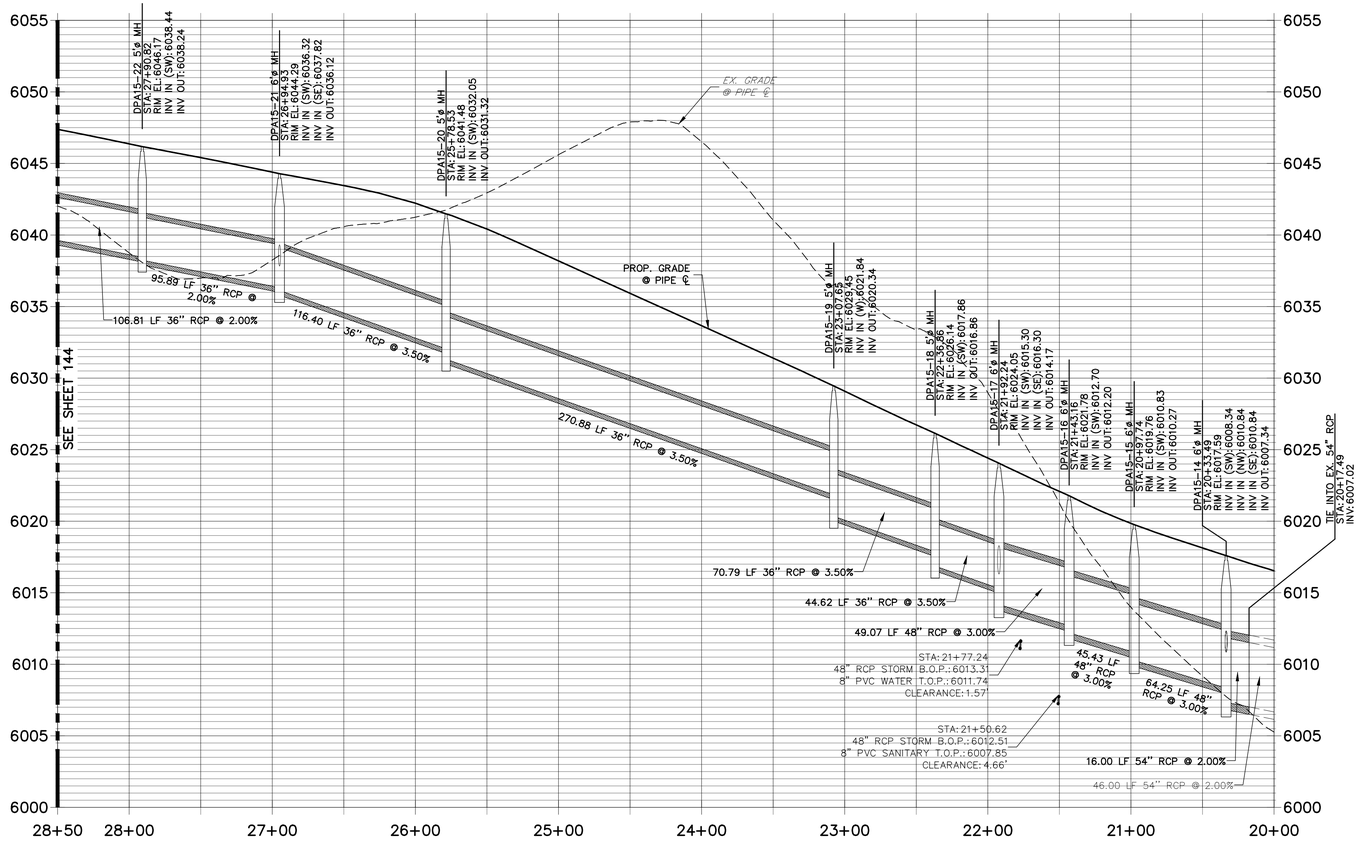
JOB NO. 15950.01





KEYMAP
SCALE: 1"=1000'

DPA15 PROFILE
STA 20+00.00 TO 28+50.00



STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON-GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.

50 25 0 50 100

HORIZONTAL
ORIGINAL SCALE: 1" = 50'
VERTICAL
ORIGINAL SCALE: 1" = 5'

811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

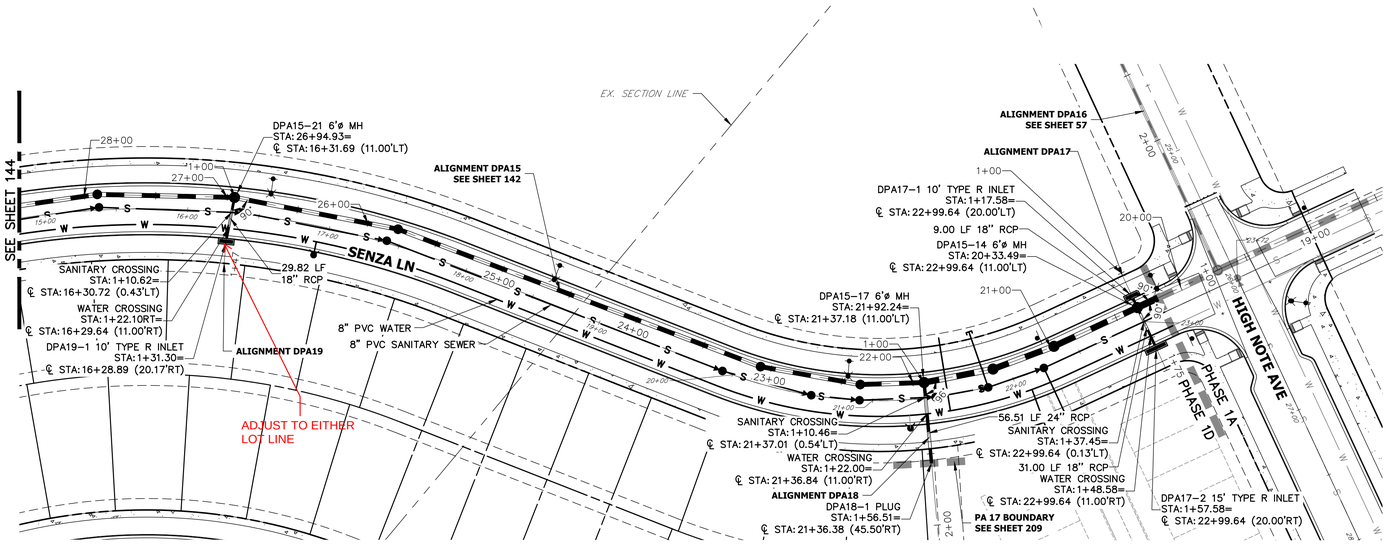
H-SCALE	1"=50'
V-SCALE	1"=5'
DATE	2/12/21
DESIGNED BY	CGM
DRAWN BY	CGM
CHECKED BY	

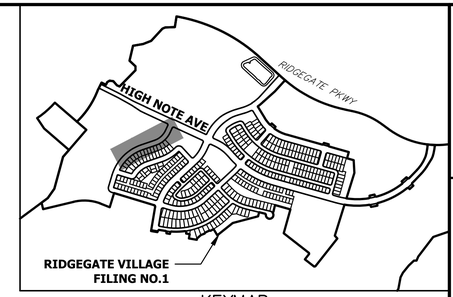
RIDGEGATE SOUTHWEST VILLAGE FILING 1

STORM PLAN & PROFILE-PHASE 1D

SHEET 142 OF 270

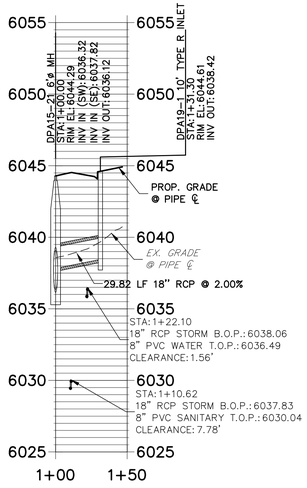
JOB NO. 15950.01



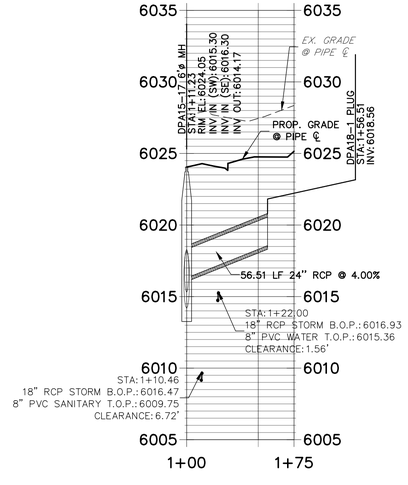


KEYMAP
SCALE: 1"=1000'

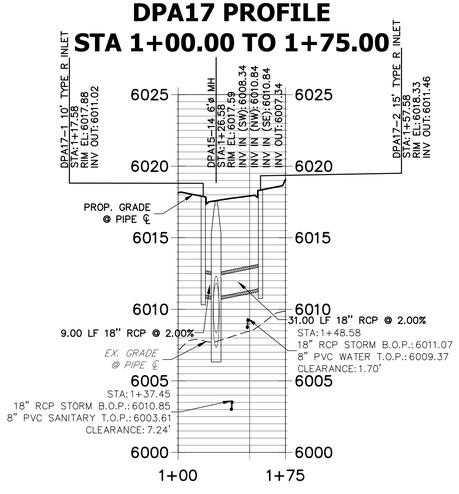
DPA19 PROFILE
STA 1+00.00 TO 1+50.00



DPA18 PROFILE
STA 1+00.00 TO 1+75.00



DPA17 PROFILE
STA 1+00.00 TO 1+75.00



STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON–GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.

50 25 0 50 100

HORIZONTAL
ORIGINAL SCALE: 1" = 50'

VERTICAL
ORIGINAL SCALE: 1" = 5'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

DATE

AARON LEE CLUTTER 36742 REGISTERED PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

No.	REVISION	BY	DATE

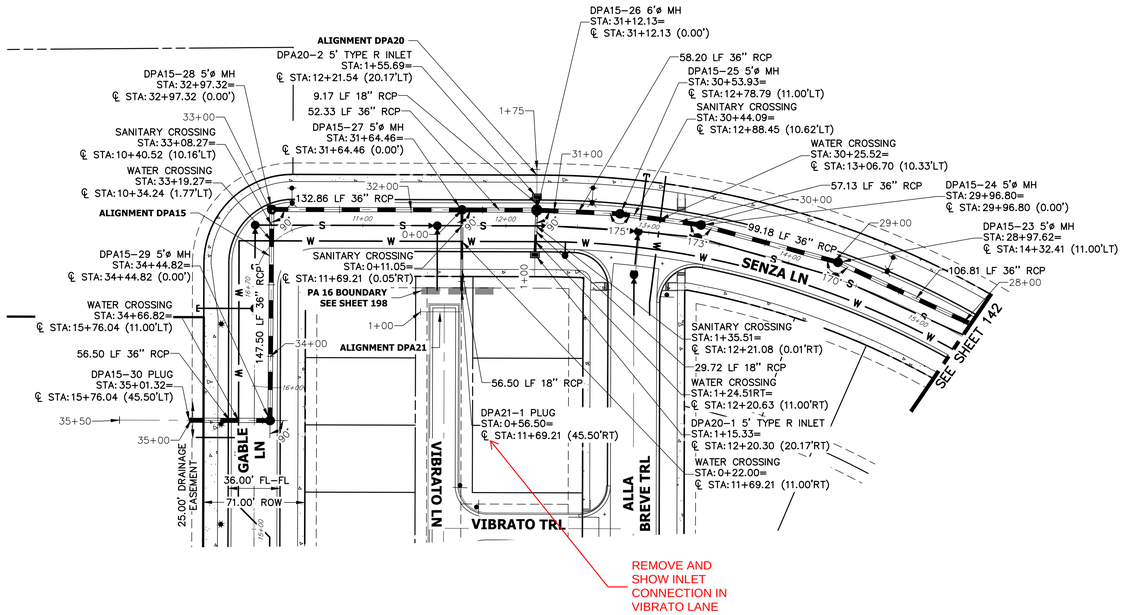
H–SCALE	1"=50'	DESIGNED BY	CGM
V–SCALE	1"=5'	DRAWN BY	CGM
DATE	2/12/21	CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

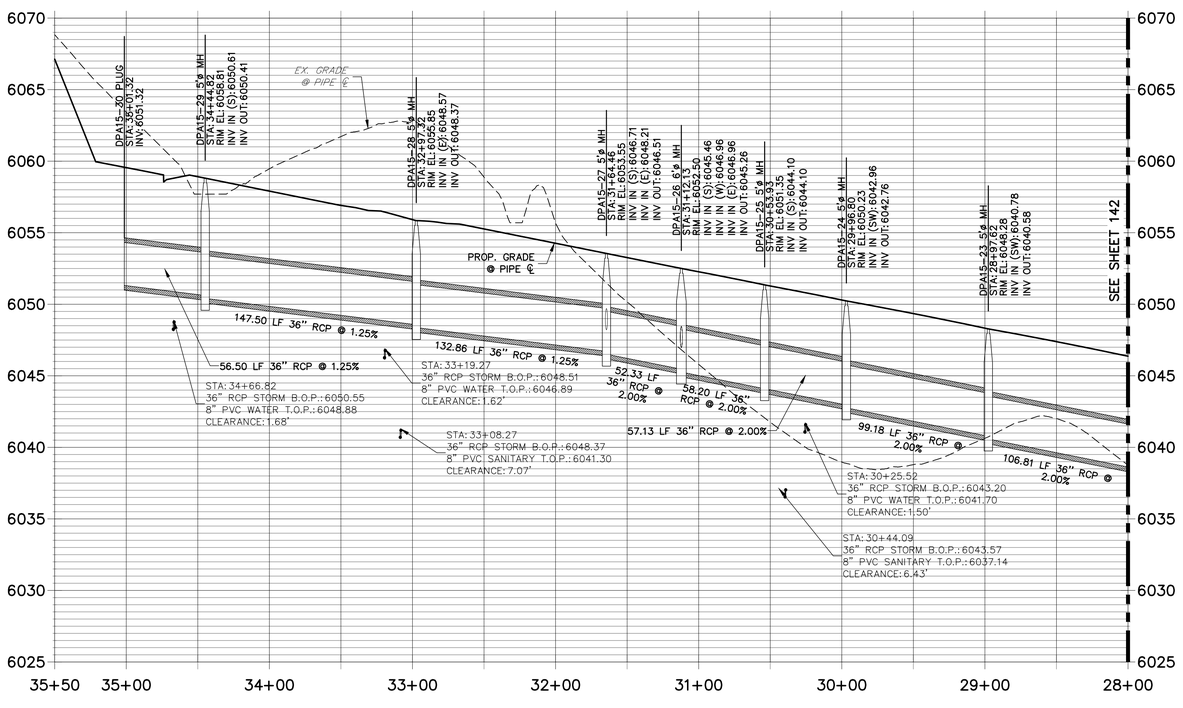
STORM PLAN & PROFILE–PHASE 1D

SHEET 143 OF 270

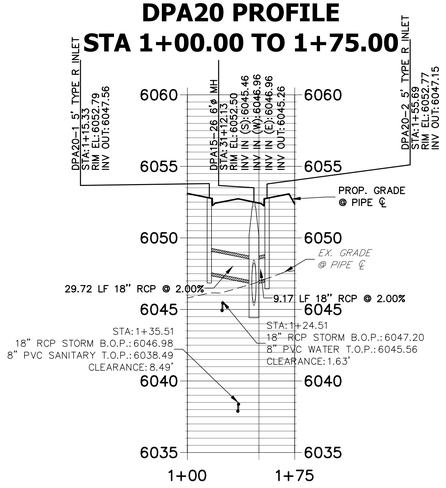
JOB NO. 15950.01



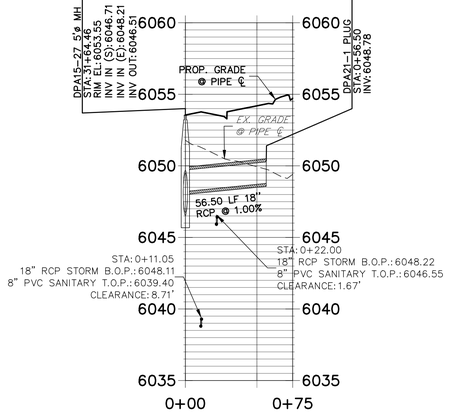
DPA15 PROFILE (CONT.)
STA 28+00.00 TO 35+50.00



DPA20 PROFILE
STA 1+00.00 TO 1+75.00



DPA21 PROFILE
STA 0+00.00 TO 0+75.00



STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON–GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.

50 25 0 50 100

HORIZONTAL
ORIGINAL SCALE: 1" = 50'
VERTICAL
ORIGINAL SCALE: 1" = 5'

811 Know what's below. Call before you dig.

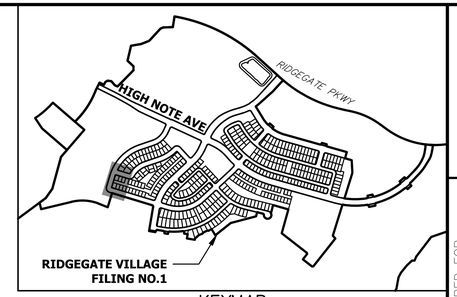
ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE



KEYMAP
SCALE: 1"=1000'

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

No.	REVISION	BY	DATE

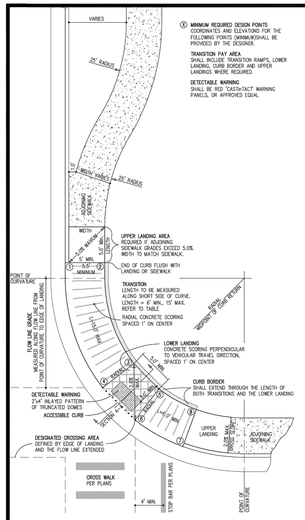
H–SCALE	1"=50'
V–SCALE	1"=5'
DATE	2/12/21
DESIGNED BY	CGM
DRAWN BY	CGM
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

STORM PLAN & PROFILE–PHASE 1D

SHEET 144 OF 270

JOB NO. 15950.01



① MINIMUM REQUIRED DESIGN POINTS COORDINATES AND ELEVATIONS FOR THE FOLLOWING POINTS SHALL/SHOULD BE PROVIDED BY THE DESIGNER.

TRANSITION FAY AREA INCLUDES THE TRANSITION RAMPS, LOWER LANDING, CURB BORDER AND UPPER LANDINGS WHERE REQUIRED.

DETECTABLE WARNING SHALL BE RED "DASTA-TACT WARNING PAVERS, OR APPROVED EQUAL

NOTES

SLOPED TRANSITIONS SHALL COMPLY WITH ALL APPLICABLE RULES AND GUIDELINES OF THE AMERICANS WITH DISABILITIES ACT.

SLOPED TRANSITIONS SHALL BE CONSISTENT WITH THE CURRENT PUBLICATION OF FEDERAL GUIDELINES FOR ACCESSIBLE RIGHTS OF WAY.

LONGITUDINAL SLOPES WITHIN THE TRANSITION SHALL NOT EXCEED 1:12 (8.33%).

CROSS SLOPES, OR SLOPES PERPENDICULAR TO THE DIRECTION OF TRAVEL SHALL NOT EXCEED 1:50 (2.0%)

THE LOWER LANDING AREA IS A REQUIRED ELEMENT.

SLOPED TRANSITIONS ARE A REQUIRED ELEMENT AND SHALL:

A. NOT EXCEED 1:12 (8.3%) LONGITUDINAL SLOPE ALONG THE SHORTEST SIDE UNLESS TRANSITION LENGTH EXCEEDS 15.0'
B. NOT EXCEED 1:50 (2.0%) SLOPE PERPENDICULAR TO THE TRAVELED DIRECTION.
C. NOT EXCEED 15.0' IN LENGTH AS MEASURED ALONG THE SHORTEST SIDE. MAXIMUM LONGITUDINAL SLOPE SHALL BE ADJUSTED TO ACCOMODATE THE LENGTH.
D. NOT BE LESS THAN 6.0' IN LENGTH.

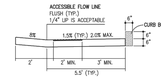
THE UPPER LANDING AREA IS REQUIRED IF:

A. THE ADJOINING SIDEWALK HAS A LONGITUDINAL GRADE (DIRECTION OF TRAVEL) IN EXCESS OF 5.0% (5.0S). SAID LANDING SHALL NOT EXCEED A 1-20 (5.0S) SLOPE IN ANY DIRECTION.
B. A CHANGE IN DIRECTION IS REQUIRED TO ENTER OF EXIT THE SLOPED TRANSITION. SAID LANDING SHALL NOT EXCEED 1:50 (2.0%) SLOPE IN ANY DIRECTION.

LANDINGS AND SLOPED TRANSITIONS SHALL MATCH THE WIDTH OF THE ADJOINING SIDEWALK, 3.0' MINIMUM.

ALL TOOLED JOINTS WITHIN THE SLOPED TRANSITIONS SHALL RUN PERPENDICULAR TO THE DIRECTION OF TRAVEL.

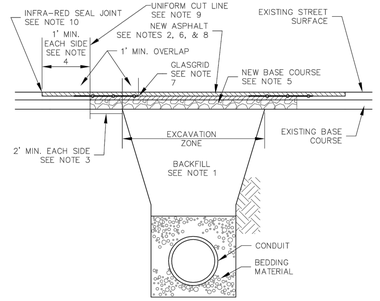
ALL TOOLED JOINTS WITHIN THE LOWER LANDING AREA SHALL RUN PARALLEL TO AND/OR PERPENDICULAR TO THE DIRECTION OF VEHICULAR TRAVEL WITHIN THE TRAVELED WAY.



SECTION A-A

TOOLED JOINT

CITY OF LONE TREE Department of Public Works	CURB TRANSITION	
	SCALE: NTS	DETAIL 1
	DATE: 3/05	



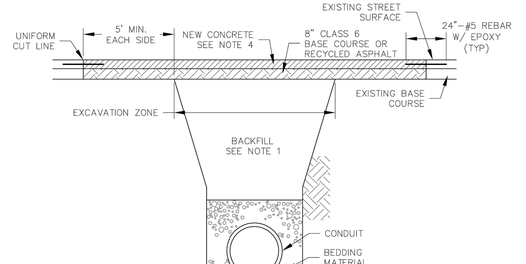
TYPICAL TRENCH SECTION

ROADWAY CLASSIFICATION	MIN. PAVEMENT PATCH THICKNESS
ARTERIAL	9 IN.
COLLECTOR	7 IN.
LOCAL	5 IN.

NOTES:

1. ALL PUBLIC STREET CUTS SHALL BE BACKFILLED WITH CLSM UNLESS THE TRENCH IS WIDE ENOUGH FOR A FULL-SIZED, SELF-PROPELLED COMPACTOR TO DRIVE THROUGH.
2. PAVEMENT PATCH THICKNESS SHALL NOT BE LESS THAN THE EXISTING SECTION.
3. SAW CUT AND REMOVE PAVEMENT AND BASE A MINIMUM OF 2' BACK FROM EXCAVATION ZONE OR LIMITS OF UNDISTURBED SUB-BASE, WHICHEVER IS GREATER.
4. ROTOMILL ASPHALT (2" DEPTH MINIMUM) A MINIMUM OF 1' BEYOND THE FULL DEPTH SAW CUT AND REMOVAL.
5. INSTALL 8 INCHES OF CDOT CLASS 6 ROAD BASE OR RECYCLED ASPHALT, COMPACTED IN PLACE TO MINIMUM 95% MODIFIED PROCTOR MAXIMUM DENSITY (ASTM D 1557).
6. INSTALL AND PROPERLY COMPACT REQUIRED DEPTH OF BASE COURSE ASPHALTIC CONCRETE (CDOT GRADING S).
7. INSTALL REINFORCEMENT MAT (TENSAR GLASGRID 8511, OR APPROVED EQUAL) PER MANUFACTURERS RECOMMENDATIONS. (MINIMUM 5 FOOT WIDTH)
8. INSTALL AND PROPERLY COMPACT ASPHALTIC CONCRETE TOP COURSE (CDOT GRADING SX).
9. ALL CUTS TO BE SQUARED OFF PRIOR TO RESTORATION. SAW CUT OR ROTOMILL.
10. THE JOINT BETWEEN THE NEW TOP COURSE ASPHALT AND THE EXISTING ASPHALT SHALL BE SEALED USING INFRARED JOINTING PROCESS.
11. ARTERIAL STREETS AND MAJOR COLLECTORS MUST BE PATCHED THE SAME DAY THE CUT OCCURS, UNLESS OTHERWISE AUTHORIZED BY THE ENGINEERING/PUBLIC WORKS DEPARTMENT.
12. ANY PAVEMENT MARKING (LANE LINES, TURN ARROWS, ETC.) DAMAGED BY THE STREET CUT AND REPAIR OPERATIONS SHALL BE REPLACED IN CONFORMANCE WITH CITY SIGNAGE AND STRIPING STANDARDS, AS DIRECTED BY THE ENGINEERING/PUBLIC WORKS DEPARTMENT.

CITY OF LONE TREE PUBLIC WORKS		ASPHALT PAVEMENT PATCHBACK	DETAIL NUMBER 1
DATE: 9/24/13	BY: GAW	DRAWING NO.: ST-01	



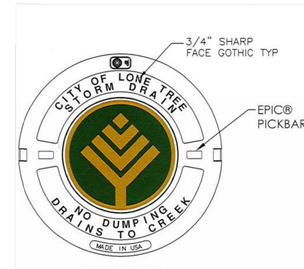
TYPICAL TRENCH SECTION

ROADWAY CLASSIFICATION	MIN. PAVEMENT PATCH THICKNESS
ARTERIAL	9 IN.
COLLECTOR	7 IN.
LOCAL	5 IN.

NOTES:

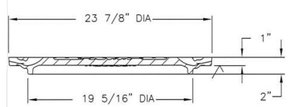
1. ALL PUBLIC STREET CUTS SHALL BE BACKFILLED WITH CLSM UNLESS THE TRENCH IS WIDE ENOUGH FOR A FULL-SIZED, SELF-PROPELLED COMPACTOR TO DRIVE THROUGH.
2. PAVEMENT PATCH THICKNESS SHALL NOT BE LESS THAN THE EXISTING SECTION.
3. SAW CUT AND REMOVE PAVEMENT AND BASE 5' BACK FROM EXCAVATION ZONE.
4. 8" OF COMPACTED CDOT CLASS 6 ROAD BASE OR RECYCLED ASPHALT SHALL BE INSTALLED PRIOR TO PAVING.
5. CONCRETE STREET PAVEMENT TO BE MINIMUM 7 SACK MIX, 5000 PSI AT 28 DAYS.
6. ALL CUTS TO BE SQUARED OFF PRIOR TO RESTORATION. SAW CUT OR ROTOMILL FULL DEPTH.
7. CONCRETE PATCHES SHALL BE DOWELED INTO EXISTING CONCERTE WITH 24"-#5 REBAR AT 18" O.C. AROUND THE PERIMETER OF THE PATCH.
8. ARTERIAL STREETS AND MAJOR COLLECTORS MUST BE PATCHED THE SAME DAY THE CUT OCCURS, UNLESS APPROVED BY THE ENGINEERING DEPARTMENT.

CITY OF LONE TREE PUBLIC WORKS		CONCRETE PAVEMENT PATCHBACK	DETAIL NUMBER 2
DATE: 12/9/11	BY: GAW	DRAWING NO.: ST-02	



COVER FACE

COVER BOTTOM

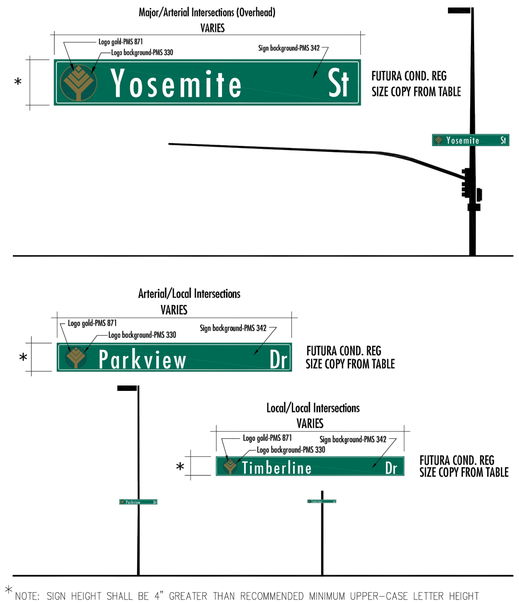


SECTION

Design Features

-Materials
Gray Iron (CL35B)
-Load Rating
Heavy Duty
-Open Area
n/a
-Coating
Undipped
-√ Designates Machined Surface

CITY OF LONE TREE PUBLIC WORKS		MANHOLE LID COVER	DETAIL NUMBER MH-1
DATE: 06/05/2020	BY: J. KRELL	DRAWING NO.:	



* NOTE: SIGN HEIGHT SHALL BE 4" GREATER THAN RECOMMENDED MINIMUM UPPER-CASE LETTER HEIGHT PER TABLE, SHEET 3. CITY LOGO DIAMETER SHALL EQUAL UPPER-CASE LETTER HEIGHT.

CITY OF LONE TREE PUBLIC WORKS		INTERSECTION STREET NAME SIGNAGE	SHEET 1 OF 3
DATE: 08/28/13	BY: GRW	DRAWING NO.: SN-01	

INTERSECTION STREET NAME SIGNAGE NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MOST RECENT VERSION OF THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE "COLORADO SUPPLEMENTAL MUTCD" AND THE DOUGLAS COUNTY "ROAD AND CONSTRUCTION STANDARDS MANUAL". FURTHER SPECIFICATIONS AND ILLUSTRATIONS ARE LOCATED IN THE COLORADO DIVISION OF HIGHWAYS "M AND S STANDARDS".
2. DELINEATION OF ROADWAYS SHALL BE AS SPECIFIED IN THE COLORADO "M AND S MANUAL".
3. STREET NAME SIGNS SHALL BE MOUNTED SO THAT THEY CAN BE SEEN FROM ALL DIRECTIONS OF TRAVEL.
4. INSTALLATION OF SIGNS SHALL CONFORM TO THE MUTCD MOUNTING HEIGHT REQUIREMENTS, INCLUDING A 7-FOOT MINIMUM HEIGHT FROM THE BOTTOM OF THE LOWEST SIGN PANEL TO THE TOP GRADE OF SIDEWALK.
5. ALL NEWLY INSTALLED TRAFFIC SIGNS SHALL MEET THE MINIMUM RETRO-REFLECTIVITY AND ILLUMINATION STANDARDS AS SET FORTH BY THE MUTCD (LATEST EDITION). THESE MINIMUM REQUIREMENTS SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
6. NON ILLUMINATED SIGNS SHALL BE USED AT MAJOR/MAJOR AND MAJOR/ARTERIAL INTERSECTIONS. THEY SHALL BE MOUNTED TO THE SIGNAL POLE WITH ASTRO-BRACS ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
7. THE CONTRACTOR INSTALLING SIGNS IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND UTILITIES. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.
8. FOLLOWING INSTALLATION, THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS DEPARTMENT, 303-662-8112. A FIELD INSPECTION OF LOCATION AND INSTALLATION OF ALL SIGNS SHALL BE PERFORMED BY PUBLIC WORKS. ALL DISCREPANCIES IDENTIFIED DURING THE FIELD INSPECTION MUST BE CORRECTED BEFORE THE TWO-YEAR WARRANTY PERIOD WILL BEGIN.
9. SIGNAGE AND STRIPING HAS BEEN DETERMINED BY INFORMATION AVAILABLE AT THE TIME OF REVIEW. PRIOR TO INITIATION OF THE WARRANTY PERIOD, LONE TREE RESERVES THE RIGHT TO REQUIRE MODIFICATIONS TO EXISTING OR INSTALLATION OF ADDITIONAL SIGNAGE AND/OR STRIPING IF THEY DETERMINE THAT AN UNFORESEEN CONDITION WARRANTS SUCH MODIFICATION ACCORDING TO THE MUTCD OR THE CDOT M AND S STANDARDS. ALL SIGNAGE AND STRIPING SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
10. ANY INTERSECTION STREET NAME SIGNAGE REMOVED SHALL BE RETURNED TO THE CITY OF LONE TREE.

CITY OF LONE TREE PUBLIC WORKS		INTERSECTION STREET NAME SIGNAGE	SHEET 2 OF 3
DATE: 04/19/12	BY: GRW	DRAWING NO.: SN-02	

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

COLORADO P.E. 36742 AARON LEE CLUTTER PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS LONE TREE PUBLIC WORKS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

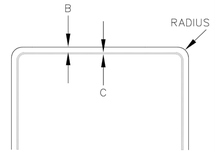
H-SCALE	N/A
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
STORM SEWER & ROADWAY DETAILS-PHASE 1D

SHEET 145 OF 270

JOB NO. 15950.01

STANDARD SIGN BORDER SPECIFICATIONS



SIGN SIZE	BORDER WIDTHS (INCH)			RADIUS (INCH)
	A	B	C	
< 12"	N/A	.375	.375	1
≥ 12"	N/A	.375	.438	1.5

MINIMUM LETTER HEIGHTS ON STREET NAME SIGNS

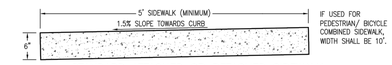
(MUTCD 2009 EDITION–TABLE 2D–2)

TYPE OF MOUNTING	TYPE OF STREET OR HIGHWAY	SPEED LIMIT	RECOMMENDED MINIMUM LETTER HEIGHT **	
			INITIAL UPPER–CASE	LOWER–CASE
OVERHEAD	ALL TYPES	ALL SPEED LIMITS	12 INCHES	9 INCHES
POST–MOUNTED	MULTI–LANE	MORE THAN 40 MPH	8 INCHES	6 INCHES
POST–MOUNTED	MULTI–LANE	40 MPH OR LESS	6 INCHES	4.5INCHES
POST–MOUNTED	2–LANE	ALL SPEED LIMITS	6 INCHES*	4.5 INCHES*

*ON LOCAL 2–LANE STREETS W/SPEED LIMITS OF 25 MPH OR LESS, 4" INITIAL UPPER–CASE LETTERS WITH 3" LOWER CASE LETTERS MAY BE USED.

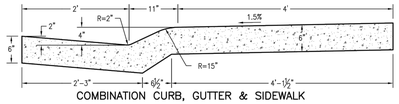
** SUPPLEMENTARY LETTERING (E.G. ST., DR., LN., & NUMBERING) SHALL BE A MINIMUM OF ½ THE APPLICABLE RECOMMENDED MINIMUM LETTER HEIGHT PER ABOVE TABLE

CITY OF LONE TREE PUBLIC WORKS	INTERSECTION STREET NAME SIGNAGE	SHEET
DATE: 04/19/12	BY: GRW	DRAWING NO.: SN–03	3 OF 3

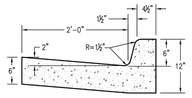


IF USED FOR PEDESTRIAN/ BICYCLE COMBINED SIDEWALK, WIDTH SHALL BE 10'.

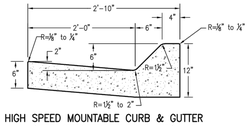
STANDARD ATTACHED OR DETACHED SIDEWALK



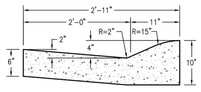
COMBINATION CURB, GUTTER & SIDEWALK



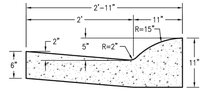
VERTICAL CURB & GUTTER



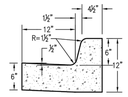
HIGH SPEED MOUNTABLE CURB & GUTTER
(DESIGN SPEED OF 45 M.P.H. OR HIGHER)



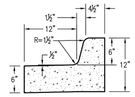
URBAN LOCAL MOUNTABLE CURB & GUTTER



RURAL LOCAL MOUNTABLE CURB & GUTTER



MEDIAN CURB & GUTTER (CATCH)



MEDIAN CURB & GUTTER (SPILL)

NOTES:
1. IF A SIDEWALK IS PLACED BEHIND THE CURB BUT IS NOT PLACED MONOLITHICALLY, EXPANSION JOINT MATERIAL AND A SILICONE BASE SEALER MUST BE APPLIED BETWEEN THE SIDEWALK AND THE CURB.
2. SEE DRAWING NUMBER SP.23a and SP.23b FOR TRENCH DRAIN.
3. SEE DRAWING NUMBER SP.31 AND SP.32 FOR CONCRETE JOINTS.

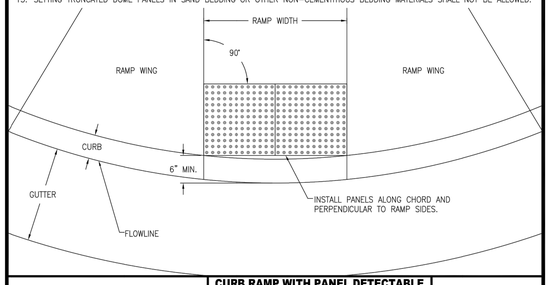
CURB & GUTTERS AND SIDEWALKS	Issued: 05/2013
DOUGLAS COUNTY COLORADO	Revised: 09/2017
	Drawing No. SP.17

Panel Installation Notes:

1. DETECTABLE WARNING PANELS, 24" X 24" OR 24" X 30" IN SIZE, SHALL BE PREFABRICATED REDDISH WITH TRUNCATED DOMES AND COMPLY WITH ADA REQUIREMENTS. ONLY FULL PANELS SHALL BE USED TO OBTAIN SPECIFIC RAMP THROAT WIDTH, (I.E. TWO 24" PANELS FOR A 4' RAMP, TWO 30" PANELS FOR A 5' RAMP, ETC.)
2. PRIOR TO START OF WORK, CONTRACTOR SHALL SUBMIT, TO DOUGLAS COUNTY FOR APPROVAL, A SAMPLE PANEL AND DOCUMENTATION FROM THE MANUFACTURER. PANEL SURFACE SHALL HAVE A MINIMUM OF 70% LIGHT REFLECTIVITY CONTRAST WITH THE ADJOINING SURFACE. PANELS SHALL ONLY BE SELECTED FROM THE APPROVED PRODUCT LIST BELOW:

PRODUCT NAME	MANUFACTURER	PRODUCER SUPPLIER CODE
CAST–DWD	Pioneer Detectable, LLC	GEN130004
Cast–In–Place Tactile	ADA Solutions, Inc.	GEN100123
DURALAST	EJ USA, Inc.	GEN130020
Detectable Warning Paving Slab	StoneBilt Concepts	GEN100341
TekWay Dome–Tiles	StrongGo LLC	GEN100343
Tuftile Cast Iron Tile/Radius–Wedge (CIP)	Tuftile, Inc.	GEN150088

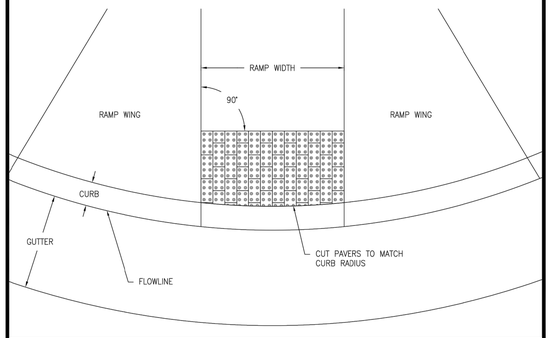
3. PANELS SHALL BE PLACED AS SHOWN, WITH DOME PATTERN IN A SQUARE GRID AND ALIGNED IN THE DIRECTION OF TRAVEL. A STEEL TEMPLATE SHALL BE USED TO ENSURE PROPER ALIGNMENT AND UNIFORM GRADE.
4. REMOVE THE PROPER AMOUNT OF CONCRETE WITHIN THE TEMPLATE FOR AN ACCURATE INSTALLATION. ONCE TO THE PROPER DEPTH, FLOAT THE AREA TO RECEIVE THE PANELS UNTIL A SMOOTH PASTE HAS DEVELOPED.
5. WET THE BACK SIDE OF EACH PANEL AND TROWEL SOME CONCRETE PASTE OR APPROVED BONDING AGENT OVER THE WET SURFACE FOR BETTER ADHERENCE.
6. SET THE FIRST PANEL ON THE FRESHLY PREPARED SURFACE. DO NOT PRESS DOWN HARD ON THE PANEL, BUT PREFERABLY TWIST FROM SIDE TO SIDE. SET PANEL WITH RUBBER MALLET TO PROPER DEPTH SO THAT THE BASE OF THE TRUNCATED DOME IS AT THE SAME ELEVATION AS THE ADJOINING RAMP SURFACE.
7. SET SUCCESSIVE PANELS WITH A TIGHT BUTT JOINT AGAINST THE PREVIOUSLY SET PANEL. PROVIDE A ⅛" GAP BETWEEN PANELS.
8. FLOAT FRESH CONCRETE AROUND PANELS. FINISH AND BROOM SURROUNDING CONCRETE AS SPECIFIED. CLEAN ANY CONCRETE OFF PANELS WITH A SPONGE.
9. PROVIDE 1" DEEP TOOL JOINTS AT CORNERS OF DETECTABLE WARNING AREA, AND TOOL AROUND PANELS WITH ⅜" RADIUS EDGER.
10. WHEN CUT PANELS ARE REQUIRED, CUT SECTIONS SHALL NOT SIGNIFICANTLY IMPACT OVERALL TRUNCATED DOMES PATTERN AND CUT DOMES SHALL BE BEVELED AT A 45–DEGREE ANGLE TO CREATE A SMOOTH TRANSITION.
11. ANY PANELS THAT ARE DAMAGED DURING TRANSPORT OR INSTALLATION WILL BE REJECTED AND SHALL NOT BE INSTALLED.
12. CLEAN OUT ⅜" JOINT(S) BETWEEN PANELS AND SEAL WITH EPOXY.
13. SETTING TRUNCATED DOME PANELS IN SAND BEDDING OR OTHER NON–CEMENTITIOUS BEDDING MATERIALS SHALL NOT BE ALLOWED.



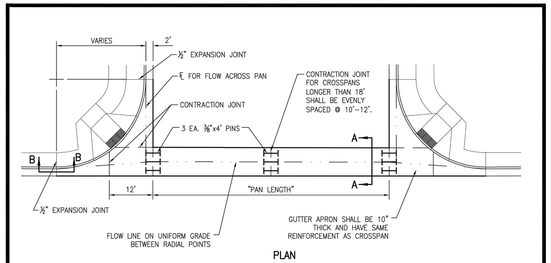
CURB RAMP WITH PANEL DETECTABLE WARNING AREA INSTALLATION	Issued: 05/2013
DOUGLAS COUNTY COLORADO	Revised: 09/2017
	Drawing No. SP.18b

Paver Installation Notes:

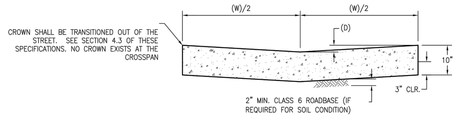
1. DETECTABLE WARNING PAVERS SHALL BE PREFABRICATED REDDISH INTEGRALLY COLORED TRUNCATED DOMES SURFACED CONCRETE OR MASONRY PAVERS. PAVERS SHALL MEET THE REQUIREMENTS OF ASTM C 902 OR ASTM C 936 AND COMPLY WITH ADA REQUIREMENTS.
2. PRIOR TO START OF WORK, CONTRACTOR SHALL SUBMIT, TO DOUGLAS COUNTY FOR APPROVAL, A SAMPLE PAVER AND DOCUMENTATION FROM THE MANUFACTURER. PAVERS SURFACE SHALL HAVE A MINIMUM OF 70% LIGHT REFLECTIVITY CONTRAST WITH THE ADJOINING SURFACE.
3. WELL FOR PAVERS SHALL BE ACCURATELY BLOCKED OUT TO ENSURE PROPER DEPTH, ALIGNMENT, AND UNIFORM GRADE. ONLY FULL WIDTH PAVERS SHALL BE USED TO OBTAIN SPECIFIED RAMP THROAT WIDTH.
4. PAVERS SHALL BE PLACED IN THE RUNNING PATTERN SHOWN, DOMES PLACED IN A SQUARE GRID AND ALIGNED IN THE DIRECTION OF TRAVEL. PAVERS SHALL BE INSTALLED SO THAT THE BASES OF THE TRUNCATED DOMES ARE AT THE SAME ELEVATION AS THE ADJOINING RAMP SURFACE.
5. SAND FOR BEDDING MATERIAL SHALL CONFORM TO ASTM C 33. SAND TO BE PLACED BETWEEN JOINTS SHALL CONFORM TO ASTM C 144.
6. BEDDING SAND SHALL BE SCREED TO THE APPROPRIATE DEPTH PRIOR TO THE PAVERS INSTALLATION. A PLATE VIBRATOR SHALL BE USED TO EMBED THE PAVERS INTO THE SAND. ANY PAVERS THAT ARE DAMAGED DURING TRANSPORTATION OR INSTALLATION WILL BE REJECTED AND SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
7. WHEN CUT PAVERS ARE REQUIRED, CUT SECTIONS SHALL NOT SIGNIFICANTLY IMPACT OVERALL TRUNCATED DOMES PATTERN AND CUT DOMES SHALL BE BEVELED AT A 45–DEGREE ANGLE TO CREATE A SMOOTH TRANSITION.
8. JOINT SPACING SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, BUT SHALL NOT BE MORE THAN ⅜". JOINTS SHALL BE FILLED COMPLETELY WITH SAND. EXCESS SAND SHALL BE REMOVED BY SWEEPING.



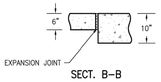
CURB RAMP WITH PAVER DETECTABLE WARNING AREA INSTALLATION	Issued: 05/2013
DOUGLAS COUNTY COLORADO	Revised: 09/2017
	Drawing No. SP.18c



PLAN



SECTION A–A
FIBERMESH MIXED AT 1½ LBS. / C.Y. CONCRETE.

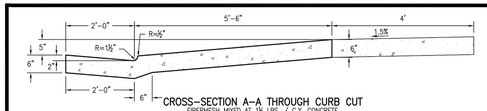


SECT. B–B

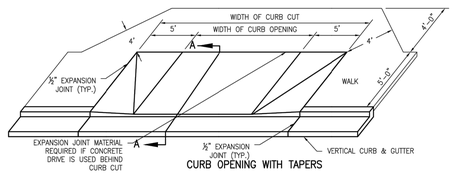
WIDTH (W)	DEPTH (D)	THICKNESS (T)
8'	2"	10"
10'	2½"	10"

NOTE: LOCAL STREET INTERSECTIONS REQUIRE AN 8' CROSSPAN. COLLECTOR STREET INTERSECTIONS REQUIRE AN 10' CROSSPAN. CROSSPANS ARE NOT ALLOWED AT ANY ARTERIAL STREET INTERSECTIONS.

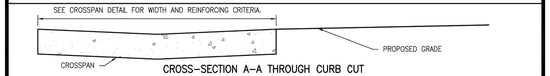
CROSSPAN	Issued: 05/2013
DOUGLAS COUNTY COLORADO	Revised: 09/2017
	Drawing No. SP.21



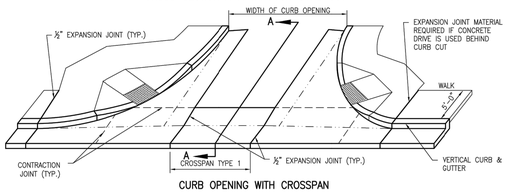
CROSS–SECTION A–A THROUGH CURB CUT
FIBERMESH MIXED AT 1½ LBS. / C.Y. CONCRETE.



CURB OPENING WITH TAPERS



CROSS–SECTION A–A THROUGH CURB CUT



CURB OPENING WITH CROSSPAN

NOTES:
1. BACK OF CURB CUT EXTENDS TO BACK OF WALK OR BACK OF BICYCLE PATH. IF NO WALK IS PRESENT, EXTEND BACK OF CURB CUT TO 5'–6" BEHIND FLOWLINE OR TO R.O.W. LINE, WHICHEVER IS GREATER.
2. COUNTY SHALL APPROVE LOCATION OF CURB CUT BEFORE CONSTRUCTION.
3. CURB OPENINGS OF 30' OR MORE MUST BE CONSTRUCTED WITH A MINIMUM 20' RADIUS CURB RETURN.
4. DESIGN ENGINEER MUST DEMONSTRATE THAT STREET DRAINGE STAYS WITHIN THE STREET RIGHT–OF–WAY.

CURB OPENING	Issued: 05/2013
DOUGLAS COUNTY COLORADO	Revised: 09/2017
	Drawing No. SP.22

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H–SCALE	N/A
V–SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

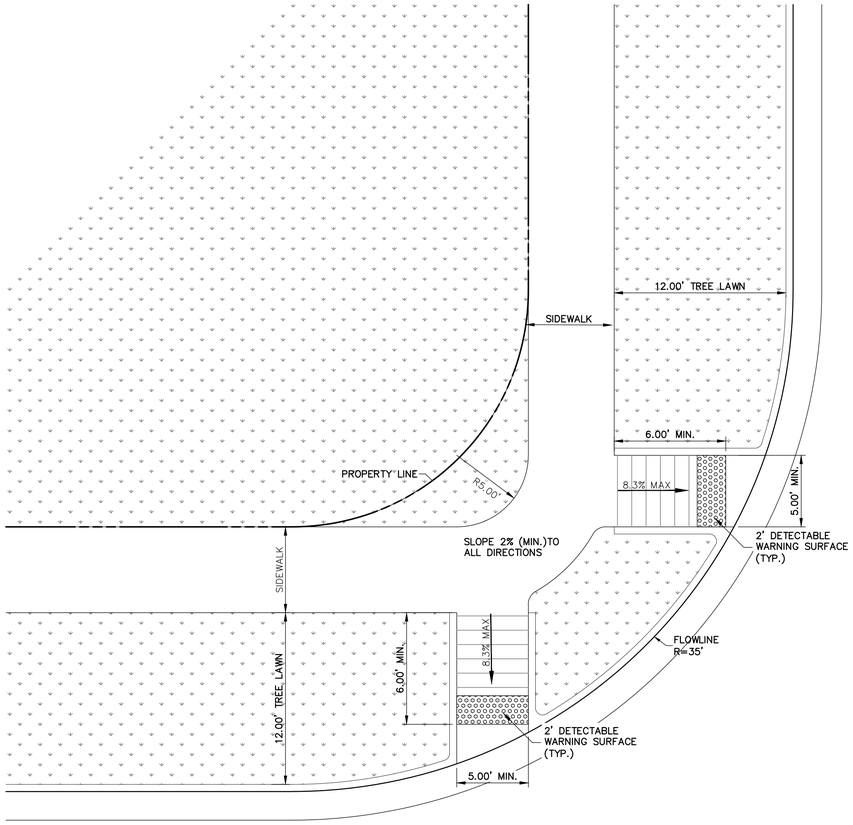
COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

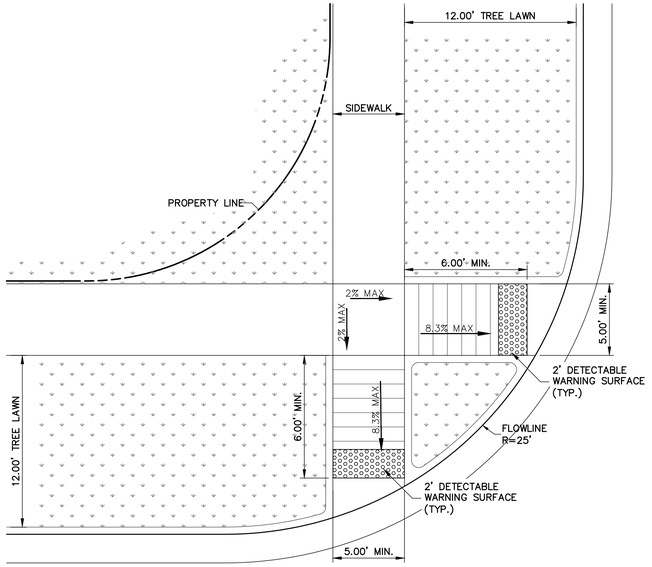
RIDGEGATE SOUTHWEST VILLAGE FILING 1
STORM SEWER & ROADWAY DETAILS–PHASE 1D

SHEET 146 OF 270

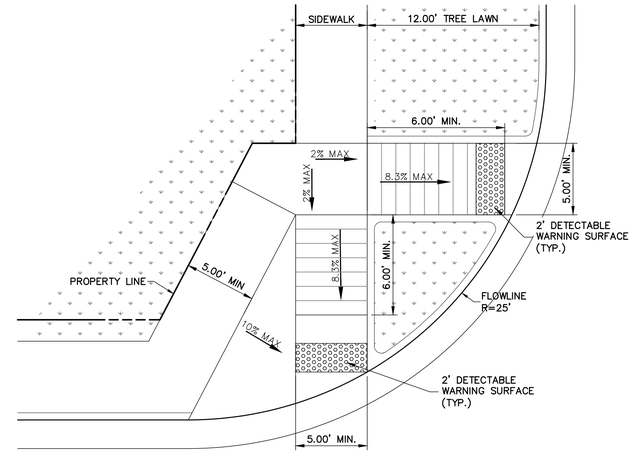
JOB NO. 15950.01



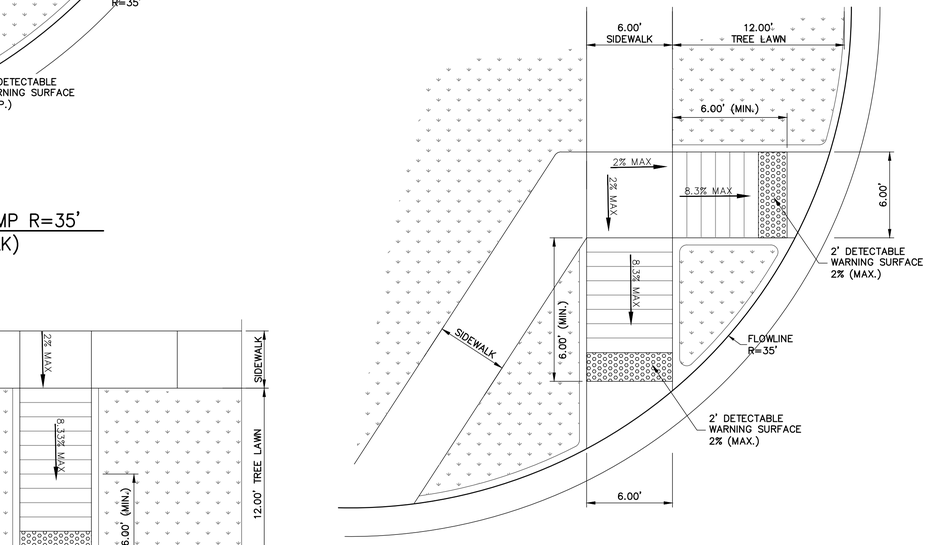
RESIDENTIAL CURB RAMP R=35'
(DETACHED WALK)



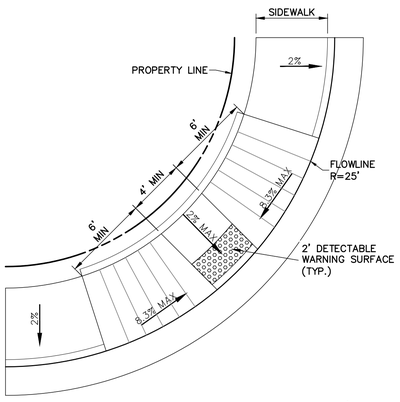
RESIDENTIAL CURB RAMP R=25'
(DETACHED WALK)



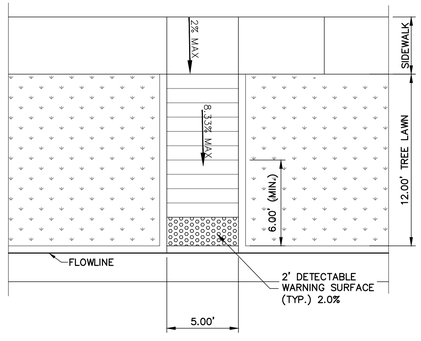
RESIDENTIAL CURB RAMP R=25'
(ATTACHED AND DETACHED WALK)



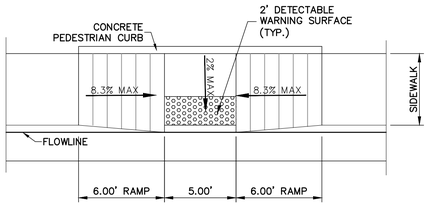
RESIDENTIAL CURB RAMP R=35'
(ATTACHED AND DETACHED WALK)



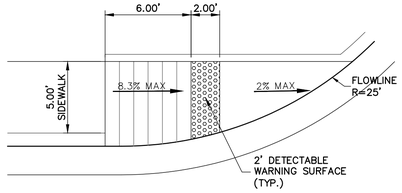
RESIDENTIAL CURB RAMP R=25'
(ATTACHED WALK)



RESIDENTIAL CURB RAMP MID-BLOCK
(DETACHED WALK)



RESIDENTIAL CURB RAMP MID-BLOCK
(ATTACHED WALK)



DIRECTIONAL RAMP R=25'
(ATTACHED WALK)

GENERAL NOTES

1. THE DETECTABLE WARNINGS SHALL BE INSTALLED AT SIDEWALK TO STREET TRANSITIONS. THEY SHALL HAVE A TRUNCATED DOME SURFACE. THE DOMES SHALL BE IN A SQUARE GRID PATTERN AND ALIGNED WITH PEDESTRIAN TRAFFIC.
2. ALL DETECTABLE WARNING SURFACES SHALL START A MINIMUM OF 6 INCHES FROM THE FLOWLINE OF THE CURB. MAXIMUM DISTANCE FROM FLOWLINE TO DETECTABLE WARNING SURFACE VARIES.
3. THE RAMP SLOPE AND DETECTABLE WARNING SURFACE SHALL BE 8.3% OR FLATTER.
4. DRAINAGE STRUCTURES, TRAFFIC SIGNAL EQUIPMENT, OR OTHER OBSTRUCTIONS SHALL NOT BE INSTALLED IN THE CURB RAMP OR TURNING SPACE AREAS.
5. CURB RAMPS (EXCLUDING FLARED SIDES OR BLENDED TRANSITIONS) SHALL BE WHOLLY CONTAINED WITHIN THE WIDTH OF THE CROSSWALK AND/OR THE PEDESTRIAN STREET CROSSING THEY SERVE.
6. ALL CURB RAMP JOINTS AND GRADE BREAKS SHALL BE FLUSH (0"±⅛ "). THE JOINT BETWEEN THE ROADWAY SURFACE AND GUTTER PAN SHALL BE FLUSH.
7. TO AVOID CHASING GRADE INDEFINITELY WHEN TRAVERSING THE HEIGHT OF CURB, THE RAMP LENGTH SHALL NOT EXCEED 15 FEET. ADJUST THE RAMP SLOPE AS NEEDED TO PROVIDE ACCESS TO THE MAXIMUM EXTENT TECHNICALLY FEASIBLE.
8. THE CHANGE IN GRADE AT THE BOTTOM OF CURB RAMP AND ADJOINING ROAD SURFACE SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 13.33%. THE COUNTER SLOPE OF THE GUTTER OR ROAD AT THE FOOT OF THE CURB RAMP, TURNING SPACE, OR BLENDED TRANSITION SHALL NOT EXCEED 5.0%.
9. FLARED SIDE SLOPES MAY EXCEED 10% ONLY WHERE THEY ABUT A NON-WALKABLE SURFACE OR THE ADJACENT CIRCULATION PATH IS BLOCKED.
10. THE STANDARD TURNING SPACE IS 4 FEET BY 4 FEET WHERE THE TURNING SPACE IS CONSTRAINED, THE TURNING SPACE SHALL BE 4 FEET MINIMUM BY 5 FEET MINIMUM. THE 5 FOOT DIMENSION SHALL BE PROVIDED IN THE DIRECTION OF THE RAMP RUN.

Know what's **below.**
Call before you dig.

ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

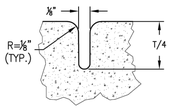
No.	REVISION	BY	DATE

H-SCALE	N/A
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

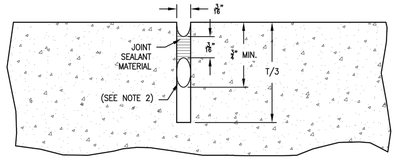
RIDGEGATE SOUTHWEST VILLAGE FILING 1
STORM SEWER & ROADWAY DETAILS-PHASE 1D

SHEET 147 OF 270

JOB NO. 15950.01

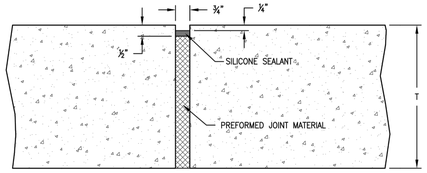


CONTRACTION OR WEAKEN PLANE JOINT
N.T.S.



NOTE: WASH & BLOW OUT WITH FORCED AIR UNTIL DRY BEFORE APPLYING SEALANT MATERIAL.

SAWED JOINT
N.T.S.

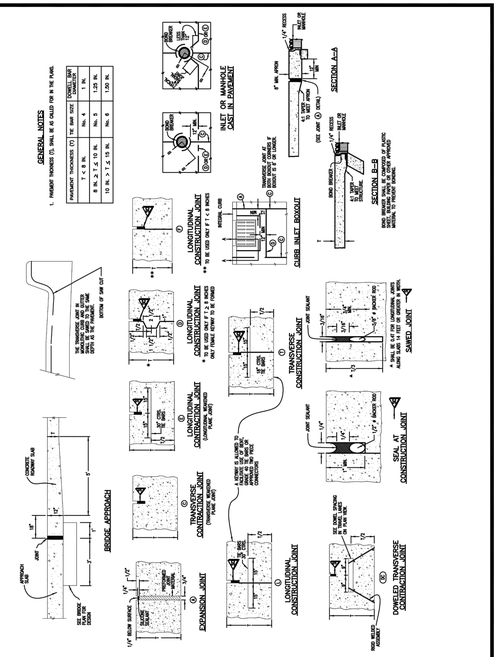


EXPANSION JOINT
N.T.S.

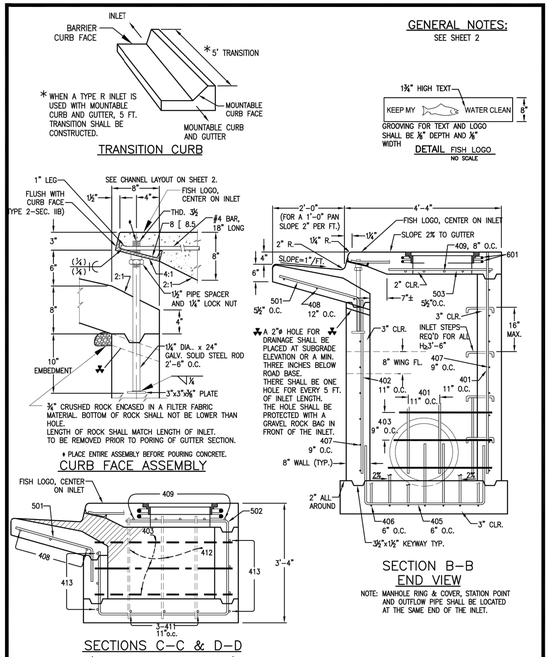
NOTES:

1. JOINT SEALANT MATERIAL MUST MEET ASTM 3406.
2. ¾" DIA. BACKER ROD.

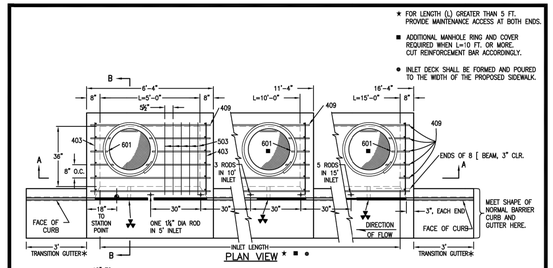
CONCRETE JOINTS	Issued: 05/2013
DOUGLAS COUNTY COLORADO	Revised:
	Drawing No. SP.31

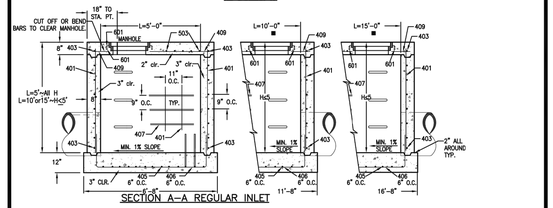


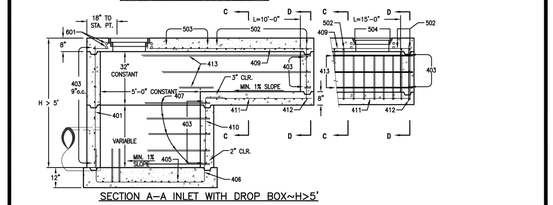
REFERENCE:	CONCRETE JOINTS	Issued: 05/2013
CDOT M & S STANDARDS M-412-1	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. SP.32



REFERENCE:	CURB INLET - TYPE R (5', 10' OR 15' IN LENGTH)	Issued: 05/2013
CDOT M & S STANDARDS M-604-12	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. SP.34a







REFERENCE:	CURB INLET - TYPE R (5', 10' OR 15' IN LENGTH)	Issued: 05/2013
CDOT M & S STANDARDS M-604-12	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. SP.34b

MARK	BAR # OR SIZE	O.C. SPACING	TYPE	ALL INLETS L = 5 FT. NO. REQ'D.	ALL INLETS L = 5 FT. LENGTH	INLETS: H ≤ 5 FT. L = 10 FT. NO. REQ'D.	INLETS: H ≤ 5 FT. L = 10 FT. LENGTH	INLETS: H ≤ 5 FT. L = 15 FT. NO. REQ'D.	INLETS: H ≤ 5 FT. L = 15 FT. LENGTH	INLETS: H > 5 FT. L = 10 FT. NO. REQ'D.	INLETS: H > 5 FT. L = 10 FT. LENGTH	INLETS: H > 5 FT. L = 15 FT. NO. REQ'D.	INLETS: H > 5 FT. L = 15 FT. LENGTH
401	4	11"	II	15	★	21	★	26	★	11	★	11	★
402	4	11"	II	7	★	13	★	18	★	7	★	7	★
403	4	9"	II	★	4'-0"	★	4'-0"	★	4'-0"	★	4'-0"	★	4'-0"
405	4	6"	VI	11	6'-10"	21	6'-10"	31	6'-10"	11	6'-10"	11	6'-10
406	4	6"	VIII	7	6'-10"	7	13'-10"	7	18'-10"	7	8'-10"	7	8'-10"
407	4	9"	II	★	5'-10"	★	10'-10"	★	15'-10"	★	5'-10"	★	5'-10"
408	4	12"	II	3	6'-10"	3	11'-10"	3	16'-0	3	11'-10"	3	16'-0
409	4	8"	II	6	5'-10"	8	10'-10"	6	15'-10"	6	10'-10"	6	15'-10"
410	4	11"	VII							3	★	3	★
411	4	11"	II							3	5'-2"	3	10'-2"
412	4	11"	II							3	2'-9"	3	2'-9"
413	4	9"	II							7	10'-10"	7	15'-10"
501	5	5½"	IV	11	3'-4"	22	3'-4"	33	3'-4"	22	3'-4"	33	3'-4"
502	5	5½"	III							11	11'-5"	17	11'-5"
503	5	5½"	II	5	3'-6"	16	3'-6"	27	3'-6"	6	3'-6"	6	3'-6"
504	5	5½"	IX									5	8'-4"
601	6	2½"	V	2	8'-10"	2	8'-10"	2	8'-10"	2	8'-10"	4	8'-10"
■8(8.5				1	5'-10"	1	10'-10"	1	15'-10"	1	10'-10"	1	15'-10"
				2 BARS, 1 RODS	——	★ BARS, 3 RODS	——	■ BARS, 5 RODS	——	★ BARS, 3 RODS	——	■ BARS, 5 RODS	——

* VARIABLE, REFER TO TABLE TWO.
■ INCLUDE #4, 18 IN. BARS (SEE CHANNEL LAYOUT).

REGULAR INLETS | DROP BOX INLETS

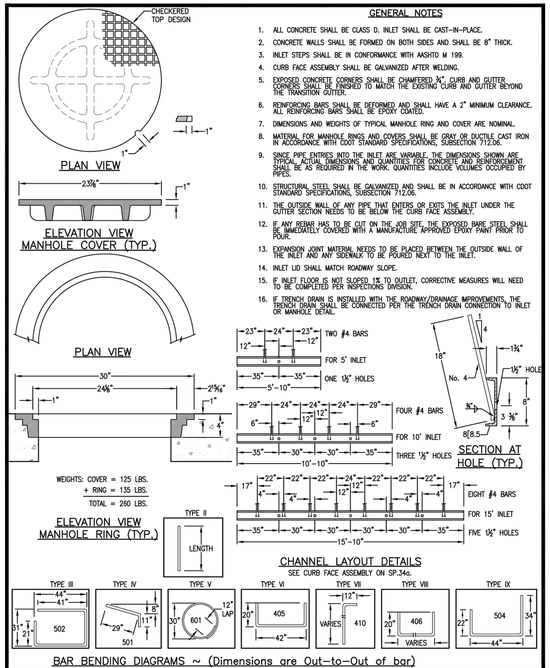
TABLE ONE ~ BAR LIST FOR CURB INLETS, TYPE "R"

'H'	LENGTH 401	402	410	NO. REQ'D. REGULAR 403	407	NO. REQ'D. DROP BOX 403	407	L=5' CONC. CU. YDS.	L=5' STEEL LBS.	L=10' CONC. CU. YDS.	L=10' STEEL LBS.	L=15' CONC. CU. YDS.	L=15' STEEL LBS.
3'-0"	2'-8"	1'-8"		10	7			3.2	285	5.3	497	7.4	706
3'-6"	3'-2"	2'-2"		10	7			3.4	305	5.7	528	7.9	747
4'-0"	3'-8"	2'-8"		12	9			3.7	326	6.0	559	8.4	786
4'-6"	4'-2"	3'-2"		12	9			3.9	334	6.4	571	8.8	803
5'-0"	4'-8"	3'-8"		14	11			4.1	354	6.7	602	9.3	844
5'-6"	5'-2"	4'-2"	3'-5"	16	13	15	6	4.4	375	6.0	607	7.4	850
6'-0"	5'-8"	4'-8"	3'-11"	16	13	16	6	4.6	382	6.2	616	7.6	860
6'-6"	6'-2"	5'-2"	4'-5"	16	15	16	8	4.8	402	6.4	637	7.8	880
7'-0"	6'-8"	5'-8"	4'-11"	20	17	19	10	5.0	423	6.6	654	8.0	897
7'-6"	7'-2"	6'-2"	5'-5"	20	17	20	10	5.3	430	6.9	664	8.3	907
8'-0"	7'-8"	6'-8"	5'-11"	22	19	22	12	5.5	451	7.1	684	8.5	927
8'-6"	8'-2"	7'-2"	6'-5"	24	21	23	14	5.7	471	7.3	702	8.7	944
9'-0"	8'-8"	7'-8"	6'-11"	24	21	24	14	6.0	479	7.6	711	9.0	954
9'-6"	9'-2"	8'-2"	7'-5"	26	23	26	16	6.2	499	7.8	732	9.2	974
10'-0"	9'-8"	8'-8"	7'-11"	28	25	27	18	6.4	520	8.0	749	9.4	992
10'-6"	10'-2"	9'-2"	8'-5"	28	25	28	18	6.7	527	8.3	759	9.7	1001
11'-0"	10'-8"	9'-8"	8'-11"	30	27	30	20	6.9	547	8.5	779	9.9	1022

NOTES: FOR L=5 FT., L=10 FT., AND L=15 FT.
REGULAR INLETS: TOTAL QUANTITIES NEEDED ARE OUTSIDE THE HEAVY BLACK LINE.
DROP BOX INLETS: TOTAL QUANTITIES NEEDED ARE INSIDE THE HEAVY BLACK LINE.
STEEL WEIGHTS DO NOT INCLUDE STRUCTURAL STEEL CHANNEL.

TABLE TWO ~ BARS AND QUANTITIES VARIABLE WITH "H"

REFERENCE:	CURB INLET - TYPE R (5', 10' OR 15' IN LENGTH)	Issued: 05/2013
CDOT M & S STANDARDS M-604-12	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. SP.34c



REFERENCE:	CURB INLET - TYPE R (5', 10' OR 15' IN LENGTH)	Issued: 05/2013
CDOT M & S STANDARDS M-604-12	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. SP.34d

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

COLORADO REGISTERED PROFESSIONAL ENGINEER — AARON LEE CLUTTER — 36742

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING — DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

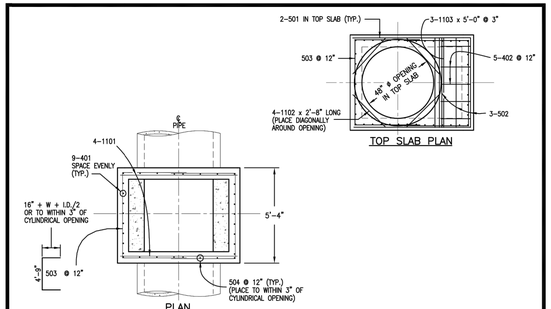
No.	REVISION	DATE	BY

H-SCALE	N/A	DESIGNED BY	GVT
V-SCALE	N/A	DRAWN BY	GVT
DATE	2/12/21	CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
STORM SEWER & ROADWAY DETAILS-PHASE 1D

SHEET 148 OF 270

JOB NO. 15950.01



REFERENCE: CDOT M & S STANDARDS M-604-20

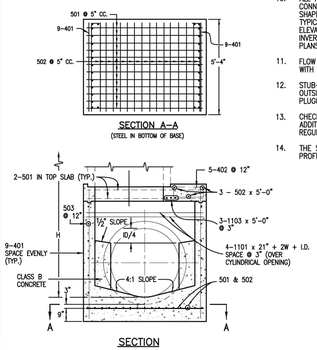
MANHOLES

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.43a**

GENERAL NOTES

1. SINCE ALL PIPE ENTRIES INTO THE BASE ARE VARIABLE, THE DIMENSIONS SHOWN ARE TYPICAL. ACTUAL DIMENSIONS AND QUANTITIES FOR CONCRETE AND REINFORCEMENT SHALL BE AS REQUIRED IN THE WORK.
2. THE PRECAST FLAT TOP MAY BE USED ON ANY MANHOLE. THE ECCENTRIC CONE MAY BE USED WHEN THE MANHOLE "H" HEIGHT IS AT LEAST 8'.
3. THE MH RING (FRAME) SHALL BE SET ON CONCRETE GRADE RINGS. THE FRAME SHALL BE SURROUNDED WITH A CONCRETE COLLAR IN UNPAVED AREA AND CONCRETE PAVEMENT, OR FULL DEPTH ASPHALT IN ASPHALT PAVEMENT. SEE DETAILS ON SHEETS 2 AND 3.
4. DESIGN OF BOX BASE IS BASED ON STRAIGHT RUNS OF CONDUIT OR CHANGE IN DIRECTION OF LESS THAN 45°. SPECIAL DESIGN IS REQUIRED FOR 45° OR GREATER.
5. PRECAST MANHOLES AND REINFORCEMENT SHALL CONFORM TO ASTM C 478 (AASHTO M 199).
6. CAST-IN-PLACE MANHOLES SHALL BE CLASS D CONCRETE.
7. STEPS SHALL BE REQUIRED WHEN THE MANHOLE DEPTH EXCEEDS 3'-6" AND SHALL BE IN ACCORDANCE WITH AASHTO M 199.
8. ALL REINFORCING STEEL SHALL HAVE A MINIMUM YIELD STRENGTH OF 60,000 PSI. VERTICAL STEEL SHALL BE PLACED AT L. OF WALL. ALL BARS SHALL HAVE A 2" MINIMUM CLEARANCE. ALL REINFORCING BARS SHALL BE EPOXY COATED.
9. IF ANY REBAR HAS TO BE CUT ON THE JOB SITE, THE EXPOSED BARE STEEL SHALL BE IMMEDIATELY COVERED WITH A MANUFACTURE APPROVED EPOXY PAINT PRIOR TO POUR.
10. ALL PIPE ENTRIES INTO THE BASE OF MANHOLE SHALL BE CONNECTED BY OPEN CHANNELIZATION ADJUSTED FOR PIPE SIZE, SHAPE, SLOPE, AND DIRECTION OF FLOW. DETAILS SHOWN ARE TYPICAL FOR INSTALLATIONS WITH ALL INVERTS OF SAME RELATIVE ELEVATION. FOR EXCESSIVE ELEVATION DIFFERENCE BETWEEN INVERTS, SPECIAL BASE/CHANNEL DETAILS WILL BE SHOWN ON THE PLANS.
11. FLOW CHANNELS AND INVERTS SHALL BE FORMED BY SHAPING WITH CLASS B CONCRETE.
12. STUB-OUTS SHALL EXTEND A MINIMUM OF 1 PIPE SECTION BEYOND OUTSIDE WALL SURFACE OF MANHOLE AND BE SATISFACTORILY PLUGGED.
13. CHECK WITH THE LOCAL GOVERNMENT AUTHORITY FOR ANY ADDITIONAL SANITARY SEWER SPECIFICATIONS, DETAILS, OR REGULATIONS.
14. THE SLOPE OF THE MANHOLE COVER SHALL MATCH THE ROADWAY PROFILE AND CROSS SLOPE.

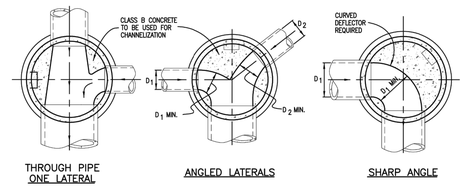


REFERENCE: CDOT M & S STANDARDS M-604-20

MANHOLES

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.43b**



TYPICAL CHANNELIZATION DETAILS

QUANTITIES FOR CONCRETE MANHOLE BOX BASE

MARK	SIZE	TYPE	WT. #/FT.	BARS	I.D. 60"	66"	72"	84"	96"	FORMULAS
401	4	I	0.668	NO. REQ'D.	18	18	18	18	18	401
				LENGTH	8'-8"	9'-3"	9'-10"	11'-0"	12'-2"	BAR LENGTH = 32"+2W+I.D.
				WEIGHT #	104.2	111.2	118.2	132.3	146.3	
402	4	III	0.668	NO. REQ'D.	5	5	5	5	5	402
				LENGTH	6'-0"	6'-7"	7'-2"	8'-4"	9'-6"	BAR LENGTH = I.D. + 2W
				WEIGHT #	20.0	22.0	23.9	27.8	31.7	
501	5	I	1.043	NO. REQ'D.	17	17	17	17	17	501
				LENGTH	8'-0"	8'-7"	9'-2"	10'-4"	11'-6"	BAR LENGTH = 24" + I.D. + 2W
				WEIGHT #	141.8	152.2	162.5	183.2	203.9	
502	5	I	1.043	NO. REQ'D.	23	25	26	29	32	502
				LENGTH	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	NUMBER BARS REQ'D. = $3+\left(\frac{24+I.D.+2W}{@\ 5"}+1\right)$
				WEIGHT #	119.9	130.4	135.6	151.2	166.9	
503	5	II	1.043	NO. REQ'D.	16	18	18	20	24	503
				LENGTH	13'-5"	14'-0"	14'-7"	15'-9"	16'-11	NUMBER BARS REQ'D. = $2\left(\frac{13+I.D.+2W}{@\ 12"}+1\right)$
				WEIGHT #	223.9	262.8	273.8	328.5	423.5	BAR LENGTH = 4'-9"+2(16"+W+I.D./2)
504	5	I	1.043	NO. REQ'D.	14	14	16	18	20	504
				LENGTH	8'-8"	9'-3"	9'-10"	11'-0"	12'-2"	NUMBER BARS REQ'D. = $2\left(\frac{2W+I.D.-4}{@\ 12"}+1\right)$
				WEIGHT #	126.6	135.1	164.1	206.5	253.8	BAR LENGTH = 32"+2W+I.D.
1101	11	I	5.313	NO. REQ'D.	4	4	4	4	4	1101
				LENGTH	7'-9"	8'-4"	8'-11"	10'-1"	11'-3"	BAR LENGTH = 21" + I.D. + 2W
				WEIGHT #	164.7	177.1	189.5	214.3	239.1	
1102	11	I	5.313	NO. REQ'D.	4	4	4	4	4	BENDING
				LENGTH	2'-8"	2'-8"	2'-8"	2'-8"	2'-8"	TYPE I STRAIGHT
				WEIGHT #	56.7	56.7	56.7	56.7	56.7	TYPE II 4'-9" 16"+W+I.D./2
1103	11	I	5.313	NO. REQ'D.	3	3	3	3	3	TYPE III 12" 12" 7" I.D.+2W-38"
				LENGTH	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	
				WEIGHT #	79.7	79.7	79.7	79.7	79.7	
REINFORCING STEEL TOTAL #					1,037.5	1,127.2	1,204.0	1,380.2	1,601.6	
CONCRETE – CUBIC YARDS – TOTAL					6.6	7.3	8.0	9.5	11.1	

NOTE: QUANTITIES ARE BASED ON SAME SIZE PIPE ENTRANCE TO AND EXIT FROM, BASE AND A 4 FT. MANHOLE ENTRANCE INTO TOP SLAB OF BASE.

REFERENCE: CDOT M & S STANDARDS M-604-20

MANHOLES

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.43c**

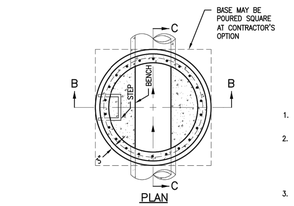
UNTIL SUCH TIME AS THESE PLANS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	N/A
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

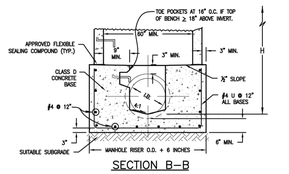


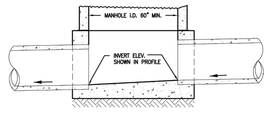
LEGEND

SUITABLE SUBGRADE
GRANULAR BEDDING MATERIAL
CONCRETE

MANHOLE BASES:

1. THE BASE SLAB SHALL BE POURED MONOLITHICALLY WITH BOTTOM RISER SECTION.
2. MANHOLE BASES SHALL FIT THE CONDITIONS AND LOCATIONS FOR WHICH THEY ARE INTENDED WITHOUT ANY FIELD MODIFICATIONS. ANY MANHOLE BASE WHICH REQUIRES FIELD CUTTING OR MODIFICATION IN ORDER TO FIT THE LOCATIONS INTENDED WILL BE REJECTED BY THE ENGINEER AND REMOVED AND REPLACED BY THE CONTRACTOR AT NO COST TO THE DEPARTMENT.
3. MANHOLE BASES SHALL BE BEDDED ON AN APPROVED GRANULAR BEDDING MATERIAL AS SHOWN ABOVE.





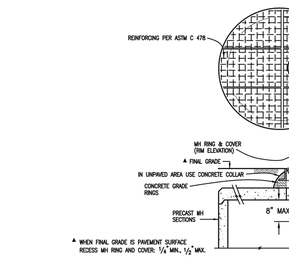
CAST-IN-PLACE SLAB BASE

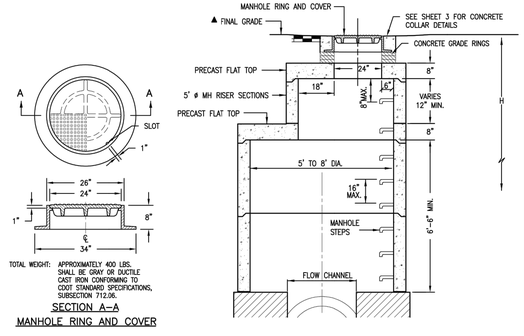
REFERENCE: CDOT M & S STANDARDS M-604-20

MANHOLES

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.43d**





REFERENCE: CDOT M & S STANDARDS M-604-20

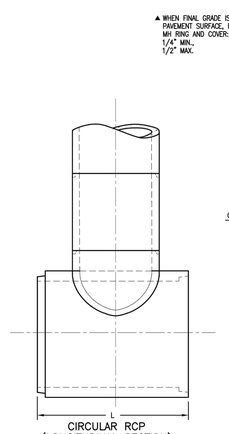
MANHOLES

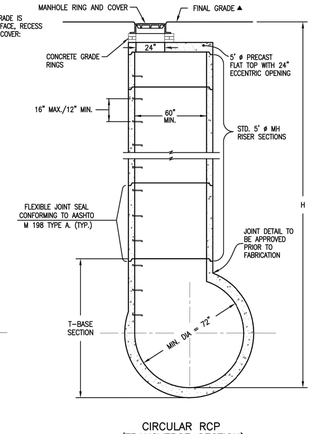
DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.43e**

T–BASE MANHOLES:

1. THE T–BASE SECTION SHALL BE SHOP–FABRICATED FOR DELIVERY TO THE CONSTRUCTION SITE AS A COMPLETE UNIT.
2. THESE DETAILS SHALL ONLY BE CONSTRUED TO SHOW CONCEPTUAL AND STANDARD DIMENSIONAL REQUIREMENTS FOR TYPE T–BASE MANHOLES. THE CONTRACTOR SHALL FURNISH DETAILED SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION. THE DETAILS SHOWN HEREIN APPLY ONLY TO 72–INCH DIAMETER PIPE AND LARGER.
3. EXCEPT FOR CLASS OF PIPE, SPECIFICATIONS TO BE MET FOR THE MANHOLE SHALL BE THE SAME AS THOSE REQUIRED FOR THE ADJOINING PIPE CULVERT OR SEWER.
4. THE T–BASE SECTION SHALL MAINTAIN ITS INTERNAL SHAPE AND FLOW AREA WITH ANY GROUTING, ETC. APPLIED SO AS TO NOT DISTURB THE NORMAL FLOW OR REDUCE THE AREA.





MANHOLE T–BASE

REFERENCE: CDOT M & S STANDARDS M-604-20

MANHOLES

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.43f**

811 Know what's **below.** **Call** before you dig.

ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

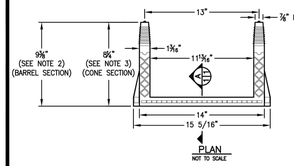
AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING DATE

RIDGEGATE SOUTHWEST VILLAGE FILING 1

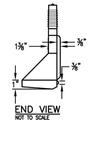
STORM SEWER & ROADWAY DETAILS–PHASE 1D

SHEET 149 OF 270

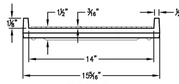
JOB NO. 15950.01



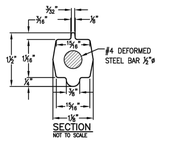
PLAN
NOT TO SCALE



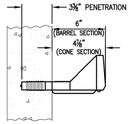
END VIEW
NOT TO SCALE



ELEVATION
NOT TO SCALE



SECTION
NOT TO SCALE

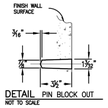


DETAIL
NOT TO SCALE

POLYPROPYLENE REINFORCED PLASTIC STEP

GENERAL NOTES

1. ASTM SPECIFICATIONS:
   A. ASTM C-478
   B. ASTM A-615 GRADE 60 (STEEL REBAR).
   C. ASTM 2146-69, TYPE III, GRADE 16906 (POLYPROPYLENE).
2. STEPS INSTALLED IN MANHOLE BARREL SECTIONS OR VERTICAL WALLS OF STRUCTURES SHALL HAVE A 9⅝" LEG AND SHALL PROJECT FROM THE WALL 6".
3. STEPS INSTALLED IN MANHOLE CONE SECTIONS SHALL HAVE AN 8⅝" LEG AND SHALL PROJECT FROM THE WALL 4⅝".
4. ALL STEPS SHALL HAVE A PENETRATION DEPTH INTO THE WALL OF 3⅛".
5. STEPS SHALL BE INSTALLED BY THE "PRESS-FIT" METHOD UTILIZING A SPECIALLY TAPERED PIN TO FORM THE INSERT HOLE AS SHOWN, FOLLOWING MANUFACTURER'S RECOMMENDED PROCEDURE AND SHALL NOT BE GROUTED IN PLACE.
6. INSTALLED STEPS SHALL BE CAPABLE OF WITHSTANDING A PULL OUT FORCE OF 2500 LB. PER LEG FOR A MINIMUM PERIOD OF TWO MINUTES.
7. PINS MUST BE SMOOTH AND CONTINUOUSLY TAPERED. DIMENSIONS OF THE PIN AND THE INSERTED PORTION OF THE MANHOLE STEP ARE TYPICAL ONLY. DOUGLAS COUNTY INSTALLATIONS REQUIRE A MATCHED COMBINATION OF A TAPERED INSERT PIN AND MANHOLE STEP, AS RECOMMENDED OR REQUIRED BY SPECIFIC MANUFACTURER OF THE STEP TO BE USED.
8. THIS STEP CAN ALSO BE USED IN TOE POCKET INSTALLATIONS PROVIDED 5" TOE CLEARANCE IS ALLOWED.



DETAIL PIN BLOCK OUT
NOT TO SCALE

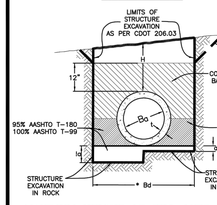
REFERENCE:
CITY AND COUNTY OF DENVER
DRAWING NUMBER S-750

MANHOLE AND INLET STEPS

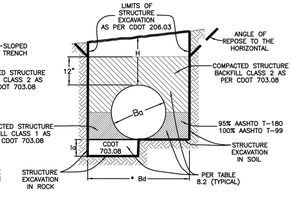
DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.45**

RIGID PIPE



FLEXIBLE PIPE



MAXIMUM HEIGHT OF FILL OVER TOP OF PIPE IN FEET

REINFORCED CONCRETE

Ba in.	Min. Bd in.	.01 INCH CRACK D-LOAD 1350	2000	3000
	**	PIPE CLASS III	IV	V
18	35	19	28	43
24	42	18	28	42
30	50	18	28	42
36	59	18	27	41
42	68	18	27	41
48	78	18	27	41
54	89	17	26	40
60	98	17	26	40
66	108	17	26	40
72	117	17	26	40
78	125	17	26	40
84	135	17	26	40
90	154	17	26	40
96	163	17	26	40
108	173	17	26	40
120	191	17	26	40
132	208	17	26	40
144	224	17	26	40

** Based on Bd=1.33(Ba+2I). Wall thickness can vary between manufacturers.

STEEL - 2 2/3" x 1/2" CORRUGATIONS

Ba in.	Bd ft.	H ABOVE TOP OF PIPE IN FEET 1-15	16-20	21-25	26-30	31-35	36-40
		THICKNESS IN INCHES					
18-48	4-7	.064	.064	.064	.064	.064	.064
54	7.50	.079	.079	.079	.079	.079	.079
60	8.00	.079	.079	.079	.079	.109	.109
66	8.50	.079	.079	.109	.109	.138	.138
72	9.00	.079	.109	.109	.138	.168	.168
78	9.50	.109	.138	.138	.168		
84	10.00	.109	.138	.168			

LEGEND

H = Height of fill over top of pipe
Ba = Inside diameter (I.D.) of pipe
* Bd = Trench Width
t = Wall thickness of pipe
CLSM = Controlled Low Strength Material
c = Loose granular bedding, as follows:
  cm=3" for Flexible Culverts in Soil.
  cm=6" for Culvert in Soil.
  cm=12" for Culvert in Rock.

* TRENCH WIDTH:
RCP: Bd = Min. of 1.33(Ba+2I), or (Ba+2I)+12" (Per AASHTO Section 17)
CSP: Bd = Min. of Ba+4 (Per AASHTO Section 12)

I Bedding material for SOIL shall be Structural Backfill Class 1 or 2.
I Bedding material for ROCK shall be Structural Backfill Class 1.

GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS APPLICABLE TO THE PROJECT.
2. ALL TRENCH INSTALLATIONS SHALL BE IN ACCORDANCE WITH OSHA AND COLORADO DEPARTMENT OF TRANSPORTATION REGULATIONS.
3. THE USE OF NON-REINFORCED CONCRETE PIPE WILL NOT BE ALLOWED IN DOUGLAS COUNTY.

RCP DESIGN CRITERIA

Safety Factor = Per ASTM C76
Soil Weight = 120 lb. per cu. ft.
Bedding = Type 2

CSP DESIGN CRITERIA

3"x1" CORRUGATIONS: 60 TO 84 Pipe shall be .064" thick (16 gauge) to H=40 ft.

Soil Weight = 120 lb. per cu. ft.
Safety Factor for Seam Strength = 2.00
Buckling Stress Level = 1/2 Yield Strength
Load Factor (Backfill) = 95% Standard Density, AASHTO-T 99 (K=0.86)

ALL UTILITY REPAIRS MUST BE BACKFILLED WITH CLSM. SEE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS MANUAL FOR SPECIFIC DETAILS.

NOTE: All trenching shall comply with all State, Federal and O.S.H.A. safety requirements. It will be the responsibility of the Contractor to meet all safety requirements.

TO BE USED IN OPEN FIELDS OR PRIOR TO PAVING ROADS

PIPE INSTALLATION IN TRENCH

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.46a**

NOTES:

1. This trench backfill detail specifies requirements in addition to those specified in the latest edition of the Colorado Department of Transportation's Standard Specifications for Road and Bridge Construction.
2. A construction traffic control plan shall be submitted to and approved by Douglas County prior to issuance of construction permits in the County right-of-way.
3. Trench shall be braced or shored as necessary for the safety of the workers and protection of other utilities or structures in accordance with applicable local, state and federal safety regulations.
4. The trench width shall be confined to those minimum dimensions, which will permit proper installation and acceptable pipe loading, as established by current local, state and federal Safety regulations.
5. Backfill compaction requirements: Minimum density will be determined in accordance with AASHTO T 99 or T 180 as defined by CDOT Standard Specifications Section 203.07 and CDOT 703.03. Except for CLSM.
6. Full depth asphalt can be used as an alternative to base course.
7. Pavement edges shall be saw-cut. Edges shall be tack coated prior to patching.
8. All storm sewers shall be constructed so that a minimum cover is maintained to withstand AASHTO HS-20 loading on the pipe. The minimum cover to withstand live loading depends upon the pipe size, type and class, and soil bedding condition, but shall be not less than 1-foot at any point along the pipe. Other factors that affect the depth of the pipe are hydraulic grade line elevations, inlet depths, adjacent utilities or utility crossings, including water and sewer services lines along residential streets, and connections to existing storm sewer systems. The roadway subgrade, which supports the pavement section is typically plowed to a certain depth, moisture treated and compacted prior to the placement of the sub-base, base course, and surfacing. There are also instances where the subgrade material must be excavated and replaced or treated to a certain depth to mitigate swelling soils. These efforts can impact the storm sewer system if it has not been designed with adequate depth. The design engineer shall use the best information available, including pavement design or soils reports (if available) to ensure that storm sewer pipes have adequate depth.
9. Changes in design criteria will require compensating change in pipe design.
10. When pipe sewer is to be extended or replaced with pipe of different material, the connections shall conform to the detail shown on plans or be approved through Douglas County Engineering.
11. When two or more conduits are laid side-by-side, they shall be placed so that they are ½ outside diameter, or ½ outside span, or 3' apart, whichever is less. However, if end sections are used, the minimum spacing shall be 1' between the outside edge of end sections.
12. TRENCH INSTALLATION (per OSHA Standards):
    a. Trenches over 5 feet in depth shall be either shored or the trench walls shall be sloped no steeper than 3:1 to the angle of repose. If sloped, the bottom of the slope shall be a minimum of 1 foot above the top of the pipe.
    b. Shoring will be required when the bottom of the slope is more than 3 feet above the bottom of the trench.
    c. All sheeting or shoring to be removed.
13. CLSM may be used in place of Structural Backfill.
14. CLSM shall not exceed a strength over 1000 p.s.i.

REFERENCE: Douglas County Drainage Manual and Colorado Department of Transportation "M" Standards.

TO BE USED IN OPEN FIELDS OR PRIOR TO PAVING ROADS

PIPE INSTALLATION IN TRENCH NOTES

DOUGLAS COUNTY COLORADO

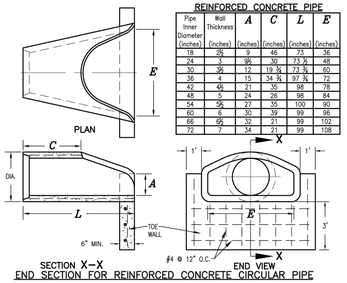
Issued: 05/2013
Revised:
Drawing No. **SP.46b**

GENERAL NOTES

1. DIMENSIONS OF END SECTIONS MAY VARY SLIGHTLY FROM THOSE SHOWN ON THE TABLES DUE TO DIFFERENT MANUFACTURER'S VARIATIONS.
2. CONCRETE END SECTIONS ARE TO BE FURNISHED WITH TONGUE OR GROOVE AS REQUIRED.
3. DESIGN LENGTH OF CULVERT OR SIDE DRAIN IS BASED ON LENGTH OF END SECTION SHOWN IN TABLE. ANY ADDITIONAL PIPE REQUIRED TO PROVIDE THE DESIGN LENGTH SHALL BE FURNISHED BY AND AT THE EXPENSE OF THE CONTRACTOR.
4. INSIDE CONFIGURATION AND JOINT OF CONCRETE END SECTION END PIPE SHALL MATCH.
5. END SECTIONS FOR CMP ARCH CULVERT SHALL MATCH THE DIMENSIONS OF THE CULVERT SHOWN ON THE PLANS.
6. GALVANIZED TOE PLATE AS SHOWN, WILL BE REQUIRED ON END SECTIONS FOR CORRUGATED STEEL PIPE AND SHALL BE THE SAME THICKNESS AS END SECTIONS. TOE PLATE SHALL BE FIELD-BOLTED TO END SECTION WITH ⅜" GALVANIZED BOLTS, NUTS AND WASHERS.
7. GALVANIZED STEEL SHALL BE IN CONFORMANCE WITH AASHTO M 111, M 218 OR M 232.
8. FOR TYPE SD END SECTIONS, BARS SHALL BE FABRICATED FROM NPS-3 GALVANIZED STEEL SCHEDULE 40 PIPE WHICH SHALL BE IN CONFORMANCE WITH ASTM A 53.
9. FOR A TYPE SD END SECTION, THE INSTALLATION OF ALTERNATIVE 1 OR ALTERNATIVE 2 END SECTION SHALL BE THE CONTRACTOR'S OPTION.
10. CONCRETE PIPE JOINT FASTENERS SHALL BE INSTALLED AT THE FLARED END SECTION AND LAST TWO PIPE JOINTS OF ALL RCP OUTFALLS.
11. CONNECTIONS OF METAL END SECTIONS TO PLASTIC PIPE SHALL BE APPROVED BY THE ENGINEER.
12. CLASS D CONCRETE TOE WALLS ARE REQUIRED AT THE ENDS OF ALL FLARED END SECTIONS.

REINFORCED CONCRETE PIPE

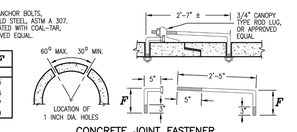
Pipe Inner Diameter (inches)	Wall Thickness (inches)	A (inches)	C (inches)	L (inches)	E (inches)
18	2⅝	9	46	73	36
24	3	9½	30	73 ⅞	48
30	3⅝	12	19 ⅜	73 ⅞	60
36	4	15	34 ⅜	97 ⅛	72
42	4½	21	35	98	78
48	5	24	26	98	84
54	5½	27	35	100	90
60	6	30	39	99	96
66	6½	32	21	99	102
72	7	34	21	99	108



END SECTION FOR REINFORCED CONCRETE CIRCULAR PIPE

3/4 INCH GALVANIZED ANCHOR BOLTS, NUTS AND WASHERS, MILD STEEL, ASTM A 307. ROD LUG SHALL BE COATED WITH COAL-TAR, EPOXY PAINT OR APPROVED EQUAL.

PIPE DIAMETER (inches)	F
18 - 30	5
36 - 42	6
48 - 60	7
72 - 84	9



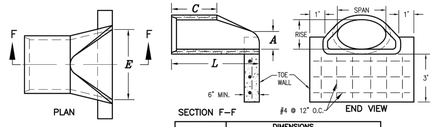
CONCRETE JOINT FASTENER (TWO PER JOINT)

REFERENCE:
CDOT M & S STANDARDS
M-603-10

CONCRETE OR METAL END SECTIONS

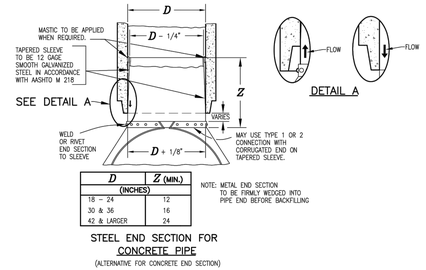
DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised: 09/2017
Drawing No. **SP.52a**



EQUIVALENT CIRCULAR DIA.	NOMINAL SPAN x RISE	DIMENSIONS A	C	L	E
		(inches)			
24	30 x 19	9	33	72	48
30	38 x 24	10	18	72	60
36	45 x 29	12	24	84	72
42	53 x 34	16	36	96	78
48	60 x 38	21	36	96	84
54	68 x 43	26	36	96	90
60	76 x 48	30	36	96	96

END SECTION FOR REINFORCED CONCRETE ELLIPTICAL PIPE



D	Z (MIN.)
(INCHES)	
18 - 24	12
30 & 36	16
42 & LARGER	24

NOTE: METAL END SECTION TO BE FIRMLY WEDGED INTO PIPE END BEFORE BACKFILLING

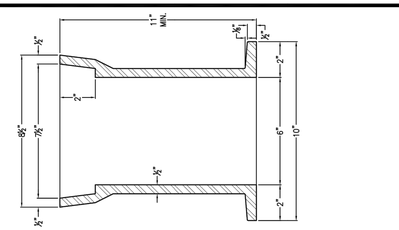
STEEL END SECTION FOR CONCRETE PIPE
(ALTERNATIVE FOR CONCRETE END SECTION)

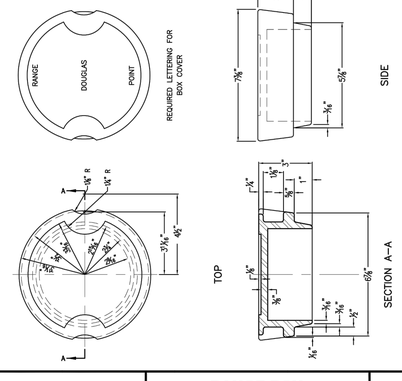
REFERENCE:
CDOT M & S STANDARDS
M-603-10

CONCRETE OR METAL END SECTIONS

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised: 09/2017
Drawing No. **SP.52b**





RANGE BOX

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.54**

Know what's **below.** **Call** before you dig.

ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE N/A
V-SCALE N/A
DATE 2/12/21
DESIGNED BY GVT
DRAWN BY GVT
CHECKED BY

RIDGEGATE SOUTHWEST VILLAGE FILING 1
STORM SEWER & ROADWAY DETAILS-PHASE 1D

SHEET 150 OF 270
JOB NO. 15950.01

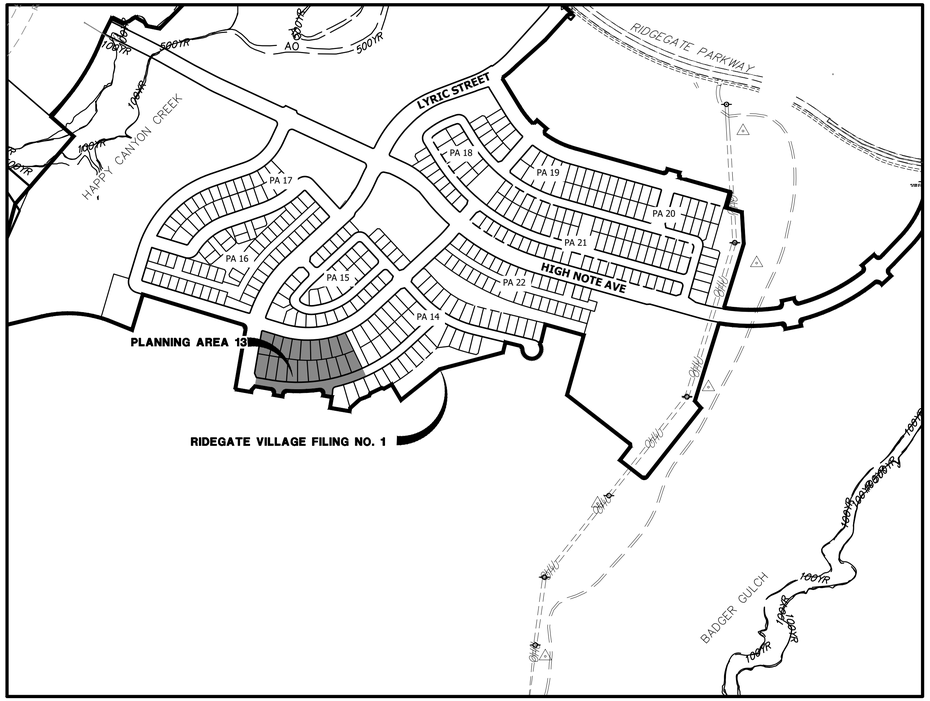
RIDGEGATE SOUTHWEST VILLAGE FILING 1-PLANNING AREA 13

A PORTION OF THE RIDGEGATE PLANNED DEVELOPMENT DISTRICT, EAST SIDE PROPERTY
LOCATED IN SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST
OF THE 6TH P.M., CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO

STREET & DRAINAGE CONSTRUCTION PLANS

ABBREVIATIONS

AC	ACRE
AD	ALGEBRAIC DIFFERENCE
AH	AHEAD
ARCH	ARCHITECT
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASS'Y	ASSEMBLY
AVE	AVENUE
BB	BOX BASE
BK	BACK
BNDY	BOUNDARY
BOP	BOTTOM OF PIPE
BOV	BLOW OFF VALVE
BFV	BUTTERFLY VALVE
BLVD	BOULEVARD
BW	BOTTOM OF WALL
C&G	CURB & GUTTER
CATV	CABLE TELEVISION
CB	CATCH BASIN
CBC	CONCRETE BOX CULVERT
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION
CDS	CUL-DE-SAC
CF	CUBIC FOOT
CFS	CUBIC FEET PER SECOND
CIP	COMPLETE IN PLACE
CL	CENTER LINE
CLOMR	CONDITIONAL LETTER OF MAP REVISION
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
COCS	CITY OF COLORADO SPRINGS
CONC	CONCRETE
CR	CIRCLE
CSP	CORRUGATED STEEL PIPE
CSU	COLORADO SPRINGS UTILITIES
CT	COURT
CTRB	CONCRETE THRUST REDUCER BLOCK
CY	CUBIC YARD
DBPS	DRAINAGE BASIN PLANNING STUDY
DE	DRAINAGE EASEMENT
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DR	DRIVE
DRC	DESIGN REVIEW COMMITTEE
DU	DWELLING UNITS
DY	DAY
E	EAST
EA	EACH
EGL	ENERGY GRADE LINE
EL	ELEVATION
ELEC	ELECTRIC
EOA	EDGE OF ASPHALT
EPC	EL PASO COUNTY
ERCP	ELLIPTICAL RCP
ESMT	EASEMENT
EST	ESTIMATE
EX	EXISTING
FDP	FINAL DEVELOPMENT PLAN
FDR	FINAL DRAINAGE REPORT
FES	FLARED END SECTION
FF	FINISHED FLOOR ELEVATION
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOWLINE
FIL	FILING
FO	FIBER OPTIC CABLE
GB	GRADE BREAK
GE	GAS EASEMENT
GIS	GEOGRAPHIC INFORMATION SYSTEM
GL	GAS LINE
GPS	GLOBAL POSITIONING SYSTEM
GV	GATE VALVE
HBP	HOT BITUMINOUS PAVEMENT
HC	HANDICAP
HDC	HIGH DEFLECTION COUPLING
HDPE	HIGH DENSITY POLYETHYLENE
HGL	HYDRAULIC GRADE LINE
HMA	HOT MIX ASPHALT
HOA	HOME OWNERS ASSOCIATION
HP	HIGH POINT
HR	HOUR
I	INLET
IE	IRRIGATION EASEMENT
INT	INTERSECTION
INV	INVERT
IRR	IRRIGATION
KB	KICK (THRUST) BLOCK
LB	POUND
LE	LANDSCAPE EASEMENT
LF	LINEAR FOOT
LN	LANE
LOMR	LETTER OF MAP REVISION
LP	LOW POINT
LS	LUMP SUM
LT	LEFT
MAX	MAXIMUM
M/D	MOISTURE DENSITY
MDDP	MASTER DEVELOPMENT DRAINAGE PLAN
MH	MANHOLE
MIN	MINIMUM
MS	MOUNTABLE SIDEWALK
N	NORTH
NRCP	NON-REINFORCED CONCRETE PIPE
ODP	OFFICIAL DEVELOPMENT PLAN
OHE	OVERHEAD ELECTRIC
OHU	OVERHEAD UTILITY
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PCR	POINT OF CURB RETURN
PDP	PRELIMINARY DEVELOPMENT PLAN
PE	PROFESSIONAL ENGINEER
PI	POINT OF INTERSECTION
PKWY	PARKWAY
PL	PROPERTY LINE
PR	PROPOSED
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PV	PLUG VALVE
PVC	POLYVINYL CHLORIDE
R	RADIUS
RCBC	REINFORCED CONCRETE BOX CULVERT
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
ROW	RIGHT OF WAY
RT	RIGHT
S	SOUTH
STE	STEEL
SAN	SANITARY SEWER
SF	SQUARE FOOT
ST	STREET
STA	STATION
STM	STORM SEWER
SY	SQUARE YARD
SY-IN	SQUARE YARD INCH
TB	THRUST BLOCK
TBC	TOP BACK OF CURB
TBW	TOP BACK OF WALK
TEL	TELEPHONE
TN	TON
TOA	TOP OF ASPHALT
TOB	TOP OF BOX
TOC	TOP OF CURB OR CONCRETE
TOF	TOP OF FOUNDATION
TOP	TOP OF PIPE
TW	TOP OF WALL
TYP	TYPICAL
UDFCD	URBAN DRAINAGE AND FLOOD CONTROL DISTRICT
UE	UTILITY EASEMENT
U&DE	UTILITY & DRAINAGE EASEMENT
UGE	UNDERGROUND ELECTRIC
VCP	VITRIFIED CLAY PIPE
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
VTC	VEHICLE TRACKING CONTROL
W	WEST
WL	WATER LINE
WM	WATER MAIN
WRD	WATER RESOURCES DEPARTMENT
WS	WATER SURFACE
WSE	WATER SURFACE ELEVATION
WTR	WATER
YR	YEAR



VICINITY MAP
SCALE: 1"=400'

SHEET INDEX

151	COVER SHEET
152	GENERAL NOTES
153	LEGEND
154	OVERALL UTILITY PLAN
155 – 156	ROADWAY PLAN & PROFILES
157	CURB RETURN PROFILES
158	CURB RAMP DETAILS
159	STORM SEWER PLANS & PROFILES
160	SIGNAGE & STRIPING PLANS

APPLICANT/OWNER

SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
P~303.791.8180

CIVIL ENGINEER/SURVEYOR

JR ENGINEERING
7200 SOUTH ALTON WAY, SUITE C400
CENTENNIAL, CO
P~303.267.6220

PLANNER

SAGE DESIGN GROUP
1500 SOUTH PEARL STREET, SUITE 200
DENVER, CO 80210
P~303.470.2855

TRAFFIC ENGINEER

JR ENGINEERING
7200 SOUTH ALTON WAY, SUITE C400
CENTENNIAL, CO
P~303.267.6183

GEOTECHNICAL ENGINEER

CTL THOMPSON, INC
1971 WEST 12TH VAE.
DENVER, CO 80204
P~303.825.0777

BENCHMARK

NGS CONTROL POINT UNBEWUST BEING A 3.5 INCH DIAMETER BRASS CAP. LOCATED ABOUT 3.2 MILES SOUTH OF INTERSTATE 25 AND COLORADO STATE HIGHWAY 470 INTERCHANGE, GO SOUTH ON INTERSTATE 25 FOR 2.9 MILES TO EXIT 191. PROCEED ON A PAVED ROAD TO THE SOUTHWEST FOR 0.2 MILES TO THE STATION ON THE LEFT. IN THE NORTHWEST CORNER OF A 24 FOOT BY 16 FOOT ROCK OUTCROP. IT IS 22.5 FEET EAST OF THE CENTERLINE OF THE PAVED ROAD, 123 FEET NORTH OF THE OUTLET OF A 3 FOOT CORRUGATED STEEL PIPE CULVERT AND APPROXIMATELY 350 FEET WEST OF THE WEST EDGE OF OIL OF SOUTHBOUND INTERSTATE 25, ELEVATION: 6125.32 (NAVD88).

BASIS OF BEARING

BEARING SHOWN HEREON ARE GRID BEARINGS DERIVED FROM GPS OBSERVATION BASED UPON THE COLORADO COORDINATE SYSTEM OF 1983 CENTRAL ZONE (NAD 83, 2011) REFERENCED TO THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, SIXTH PRINCIPAL MERIDIAN BEING MONUMENTED AS SHOWN HEREON, TAKEN TO BEAR NORTH 89°31'58" EAST, A DISTANCE OF 2635.13 FEET.

Know what's below. Call before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=400'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
COVER SHEET

SHEET 151 OF 270

JOB NO. 15950.01

GENERAL PROJECT NOTES:

1. ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION OF IMPROVEMENTS SHALL MEET OR EXCEED THE GOVERNING CITY, COUNTY, AND/OR STATE AND APPLICABLE UTILITY DISTRICT STANDARDS AND SPECIFICATIONS, AND APPLICABLE STATE AND FEDERAL REGULATIONS. WHERE THERE IS A CONFLICT BETWEEN THESE PLANS AND ANY APPLICABLE STANDARDS, THE HIGHER QUALITY STANDARD SHALL APPLY. ALL WORK SHALL BE INSPECTED AND APPROVED BY THE CITY AND APPLICABLE UTILITY DISTRICT(S).

2. THE SITE CONSTRUCTION PLANS LISTED WITHIN THIS PLAN SET ARE NOT FOR CONSTRUCTION UNLESS APPROVED BY THE APPROPRIATE GOVERNING JURISDICTION. THE CONTRACTOR SHALL CONFIRM SAID APPROVAL PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL KEEP ONE (1) SIGNED COPY OF THE APPROVED SET OF PLANS, APPROPRIATE SPECIFICATIONS AND STANDARDS, AND APPROVED PERMITS ONSITE AT ALL TIMES.

3. NO REVISIONS SHALL BE MADE TO THESE PLANS WITHOUT THE APPROVAL OF THE CITY, COUNTY, STATE OR LOCAL DISTRICT AND THE ENGINEER OF RECORD.

4. ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARDS, UNLESS SPECIFICALLY STATED OTHERWISE.

5. THE CONTRACTOR IS RESPONSIBLE FOR ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS SHOWN ON THESE DRAWINGS OR DESIGNATED TO BE PROVIDED, INSTALLED, CONSTRUCTED, REMOVED, OR RELOCATED UNLESS SPECIFICALLY NOTED OTHERWISE.

6. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND LICENSES FOR WORK INCLUDING, BUT NOT LIMITED TO DEMOLITION, STREET CUTS, UTILITY INTERFERENCES, TRAFFIC CONTROL, GRADING, AND UTILITY FROM ALL APPLICABLE AGENCIES; AND FOR COMPLYING WITH ALL PROVISIONS INCLUDED THEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL OTHER APPLICABLE PERMITS NOT SPECIFICALLY REQUIRED BY THE AUTHORITY HAVING JURISDICTION.

7. THE CONTRACTOR SHALL UTILITY STAKE PROJECT AT LEAST 2 WORKING DAYS PRIOR TO BEGINNING EXCAVATION OR GRADING, TO HAVE ALL REGISTERED UTILITY LOCATIONS MARKED. OTHER UNREGISTERED UTILITY ENTITIES (I.E. DITCH COMPANY) ARE TO BE LOCATED BY CONTACTING THE RESPECTIVE REPRESENTATIVE.

8. THE CONTRACTOR IS RESPONSIBLE FOR FIELD LOCATING AND VERIFYING ELEVATIONS OF ALL EXISTING SEWER MAINS, WATER MAINS, CURBS, GUTTERS, AND OTHER UTILITIES AT THE POINTS OF CONNECTION SHOWN ON THE PLANS, AND AT ANY UTILITY CROSSINGS PRIOR TO INSTALLING ANY OF THE NEW IMPROVEMENTS. IF A CONFLICT EXISTS AND/OR A DESIGN MODIFICATION IS REQUIRED, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO MODIFY THE DESIGN. DESIGN MODIFICATION(S) MUST BE APPROVED BY THE APPROPRIATE AUTHORITY PRIOR TO BEGINNING CONSTRUCTION.

9. ANY DISRUPTION OF UTILITY SERVICE THAT IS REQUIRED TO ADJUST, EXTEND, RELOCATE OR OTHERWISE REARRANGE ANY UTILITY WITHIN THE PROJECT AREA SHALL BE COORDINATED IN ADVANCE WITH THE AFFECTED UTILITY ENTITY.

10. RIM ELEVATIONS SHOWN ARE APPROXIMATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS. THE CONTRACTOR SHALL USE PRECAST CONCRETE ADJUSTMENT RINGS, GROUT, AND STEEL SHIMS TO ADJUST THE MANHOLE FRAMES TO FINAL GRADE IN CONFORMANCE WITH THE CITY OR UTILITY COMPANY/DISTRICT STANDARD SPECIFICATIONS. ALL FRAMES SHALL BE ADJUSTED TO FINAL GRADE PRIOR TO THE FINAL LIFT OF ASPHALT.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF PROJECT SAFETY INCLUDING, BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.

12. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN, IN ACCORDANCE WITH THE M.U.T.C.D. TO THE APPROPRIATE RIGHT-OF-WAY AUTHORITY (CITY, COUNTY, OR STATE) FOR APPROVAL, PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN, OR AFFECTING, THE RIGHT-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED BY THE CONSTRUCTION ACTIVITIES. ALL WORK WITHIN THE RIGHT OF WAY SHALL BE DONE IN ACCORDANCE WITH THE GOVERNING AUTHORITY'S STANDARDS AND SPECIFICATIONS.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANING AND RESTORATION OF ANY EXISTING IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO STREET PAVEMENT, FENCES, SOD, LANDSCAPING, SPRINKLER SYSTEMS, AND UTILITIES DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL LOCATION AND CONDITION.

14. INCLUDED IN THESE PLANS IS THE DEMOLITION AND DISPOSAL OF ALL EXISTING UTILITIES, SITE IMPROVEMENTS, STRUCTURES, AND SITE FURNISHINGS NEEDED FOR CONSTRUCTION OF THE IMPROVEMENTS SHOWN HEREON. ALL QUESTIONS IN REGARD TO DEMOLITION SHALL BE SUBMITTED TO THE OWNER IN WRITING PRIOR TO BID.

15. ALL DEMOLITION, REMOVAL, DISPOSAL, AND ABANDONMENT OF UTILITIES, STRUCTURES, SITE IMPROVEMENTS, AND SITE FURNISHINGS SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL STANDARDS AND SPECIFICATIONS, AND PERMIT REQUIREMENTS.

16. ALL DISTURBED SOIL, ON- OR OFF-SITE AND RELATED TO WORK AT THIS PROJECT SITE, IS REQUIRED TO BE PROTECTED FROM WIND AND STORM WATER EROSION. TO MITIGATE EROSION, THE CONTRACTOR SHALL USE STANDARD EROSION CONTROL TECHNIQUES DESCRIBED IN THE GESC PLAN SET AND GESC REPORT FOR THIS PROJECT.

17. ALL STRUCTURAL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY GROUND-DISTURBING ACTIVITY. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED IN GOOD REPAIR BY THE CONTRACTOR UNTIL SUCH TIME AS THE ENTIRE DISTURBED AREA IS STABILIZED WITH HARD SURFACE OR PERMANENT LANDSCAPING. THE CONTRACTOR IS RESPONSIBLE FOR REFERRING TO ANY EROSION AND SEDIMENT CONTROL, STORMWATER MANAGEMENT, STORMWATER POLLUTION PREVENTION, OR SIMILAR PLAN AND/OR NARRATIVE AND ASSOCIATED PERMITS INCLUDING, BUT NOT LIMITED TO GRADING PERMITS, AND COMPLYING WITH THE REQUIREMENTS THEREIN.

18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK, INSPECTIONS, AND CERTIFICATIONS AS REQUIRED BY THE CITY, STATE OR LOCAL DISTRICTS. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST ASSOCIATED WITH THE INSPECTION AND CERTIFICATION UNLESS OTHERWISE ARRANGED WITH THE OWNER/DEVELOPER. THE CONTRACTOR SHALL COORDINATE ALL CERTIFICATIONS, AND PROVIDE FIELD SURVEYED AS-BUILT INFORMATION FOR REVIEW BY THE OWNER/DEVELOPER AND/OR ENGINEER AS EARLY AS POSSIBLE IN THE CONSTRUCTION SCHEDULE TO AVOID POTENTIAL DELAYS.

19. CONTRACTOR IS RESPONSIBLE FOR AS-BUILT DRAWINGS, TESTS, REPORTS, AND/OR ANY OTHER CERTIFICATES OR INFORMATION AS REQUIRED FOR ACCEPTANCE OF WORK FROM CITY, UTILITY DISTRICTS, OR ANY OTHER GOVERNING AGENCY, OR TO THE OWNER/DEVELOPER AS REQUIRED BY AND IN ACCORDANCE WITH THE GOVERNING AUTHORITY OR OWNER/DEVELOPER'S CRITERIA. CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING AS-BUILT INFORMATION AN A SET OF RECORD DRAWINGS KEPT AT THE CONSTRUCTION SITE AND AVAILABLE TO THE GOVERNING CITY, COUNTY, AND/OR STATE AND UTILITY DISTRICT INSPECTOR AT ALL TIMES. THE CONTRACTOR SHALL CONFIRM ANY REQUIREMENTS AS EARLY AS POSSIBLE IN THE CONSTRUCTION SCHEDULE TO ACCOUNT FOR PREPARATION AND REVIEW OF THE INFORMATION TO AVOID POTENTIAL DELAYS.

20. IF, DURING THE CONSTRUCTION PROCESS, CONDITIONS ARE ENCOUNTERED BY THE CONTRACTOR, HIS SUBCONTRACTORS, OR OTHER AFFECTED PARTIES, WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE OWNER/DEVELOPER AND THE ENGINEER IMMEDIATELY.

21. DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. IF PERTINENT DIMENSIONS ARE NOT SHOWN, CONTACT THE CONSULTING ENGINEER FOR CLARIFICATION AND ANNOTATE THE DIMENSION ON THE AS-BUILT RECORD DRAWING.

22. BENCHMARK VERIFICATION: THE CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS AND THE PROPOSED ELEVATIONS IN THIS CONSTRUCTION PLAN SET AGAINST THE PROJECT BENCHMARK, IDENTIFIED HEREIN, PRIOR TO COMMENCING WORK.

ROADWAY NOTES

1. GUTTERS SHALL BE AT LEAST 6" THICK.
2. ALL CURBS SHALL USE THE CATCH SECTION UNLESS OTHERWISE NOTED.
3. ALL COMBINATION CURB, GUTTER AND SIDEWALKS TO BE 6" THICK (MIN.). SIDEWALKS WITH VERTICAL CURB AND GUTTER TO BE 6" THICK (MIN.).
4. NON-LANDSCAPED MEDIAN ISLANDS SHALL BE COVERED WITH AN ACCEPTABLE IMPERMEABLE SURFACE.
5. IF ANY SECTION OF A DETACHED SIDEWALK IS TO BE PLACED OUTSIDE OF THE ROAD RIGHT-OF-WAY, THEN A SIDEWALK EASEMENT SHALL BE REQUIRED TO MAINTAIN PUBLIC USE.
6. PLACEMENT, MOISTURE AND DENSITY CONTROL FOR SUBGRADE, SUBBASE, AND SURFACING MATERIALS SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS OF CHAPTER 8 OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.

CITY OF LONE TREE GENERAL NOTES

1. THE CITY OF LONE TREE ENGINEER'S SIGNATURE AFFIXED TO THIS DOCUMENT INDICATES THE ENGINEERING DIVISION HAS REVIEWED THE DOCUMENT AND FOUND IT IN GENERAL CONFORMANCE WITH THE CITY OF LONE TREE SUBDIVISION RESOLUTION OR APPROVED VARIANCES TO THOSE REGULATIONS. THE CITY OF LONE TREE ENGINEER, THROUGH ACCEPTANCE OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY, OTHER THAN STATED ABOVE, FOR THE COMPLETENESS AND/OR ACCURACY OF THESE DOCUMENTS. THE OWNER AND ENGINEER UNDERSTAND THAT THE RESPONSIBILITY FOR THE ENGINEERING ADEQUACY OF THE FACILITIES DEPICTED IN THIS DOCUMENT LIES SOLELY WITH THE REGISTERED PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE IS AFFIXED TO THIS DOCUMENT.
2. ALL ROADWAY CONSTRUCTION SHALL CONFORM TO CURRENT DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
3. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE CITY OF LONE TREE ENGINEERING DIVISION. THE CITY RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS STANDARDS AND SPECIFICATIONS.
4. THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS, INSPECTION SECTION, (303) 662-8112, A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO STARTING CONSTRUCTION, AND/OR BEFORE RESTARTING CONSTRUCTION AFTER A SHUTDOWN OF MORE THAN 10 DAYS.
5. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ACTUAL CONSTRUCTION. FOR INFORMATION, CONTACT: UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT (800) 922-1987 OR 811
6. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY (SIGNED BY BOTH DESIGN ENGINEER AND CITY OF LONE TREE) OF THE CONSTRUCTION PLANS AND GESC REPORT AND PLAN, AND ONE (1) COPY OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS AT THE JOB SITE AT ALL TIMES.
7. ALL PROPOSED STREET CUTS TO EXISTING PAVEMENTS FOR UTILITIES, STORM SEWER, OR OTHER PURPOSES ARE LISTED AND REFERENCED BELOW:

   RIDGEGATE PARKWAY

8. A ROW/CONSTRUCTION PERMIT MUST BE OBTAINED BEFORE ANY WORK WITHIN EXISTING OR PROPOSED PUBLIC ROW. THE PERMIT APPLICATION MUST BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR REVIEW/PROCESSING A MINIMUM OF 7 DAYS PRIOR TO UPDATED 2-3-09 REQUESTED START FOR THE WORK IN THE ROW.
9. A PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR ACCEPTANCE WITH THE PERMIT APPLICATION. AN EXCAVATION OR PUBLIC IMPROVEMENTS CONSTRUCTION PERMIT WILL NOT BE ISSUED WITHOUT AN APPROVED TRAFFIC CONTROL PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION.
10. THE CONSTRUCTION PLANS SHALL BE CONSIDERED VALID FOR TWO (2) YEARS FROM THE DATE OF CITY OF LONE TREE ACCEPTANCE/APPROVAL IF APPLICABLE CONSTRUCTION PERMITS HAVE NOT BEEN OBTAINED, AND CONSTRUCTION STARTED WITHIN THAT TIME, THESE PLANS SHALL BE VOID AND WILL BE SUBJECT TO RE-REVIEW AND RE-ACCEPTANCE BY THE CITY OF LONE TREE.
11. CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE ENGINEER INSPECTOR WHEN WORKING OUTSIDE OF THE PUBLIC RIGHT-OF-WAY ON ANY FACILITY WHICH WILL BE CONVEYED TO THE CITY, URBAN DRAINAGE AND FLOOD CONTROL DISTRICT, OR OTHER SPECIAL DISTRICT FOR MAINTENANCE (STORM SEWER, ENERGY DISSIPATERS, DETENTION OUTLET STRUCTURES, OR OTHER DRAINAGE INFRASTRUCTURES). FAILURE TO NOTIFY ENGINEERING INSPECTOR TO ALLOW THEM TO INSPECT THE CONSTRUCTION MAY RESULT IN NON-ACCEPTANCE OF THE FACILITIES/INFRASTRUCTURE BY CITY AND/OR URBAN DRAINAGE.

CITY OF LONE TREE SIGNAGE & STRIPING NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MOST RECENT VERSION OF THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE "COLORADO SUPPLEMENTAL MUTCD" AND THE DOUGLAS COUNTY "ROAD AND CONSTRUCTION STANDARDS MANUAL". FURTHER SPECIFICATIONS AND ILLUSTRATIONS ARE LOCATED IN THE COLORADO DIVISION OF HIGHWAYS "M AND S STANDARDS".
2. DELINEATION OF ROADWAYS SHALL BE AS SPECIFIED IN THE COLORADO "M AND S MANUAL".
3. SPECIAL CARE SHALL BE TAKEN IN SIGN LOCATION TO ENSURE AN UNOBSTRUCTED VIEW OF EACH SIGN. STREET NAME SIGNS SHALL BE MOUNTED SO THAT THEY CAN BE SEEN FROM ALL DIRECTIONS OF TRAVEL.
4. INSTALLATION OF SIGNS SHALL CONFORM TO THE MUTCD MOUNTING HEIGHT REQUIREMENTS, INCLUDING A 7-FOOT MINIMUM HEIGHT FROM THE BOTTOM OF THE LOWEST SIGN PANEL TO THE TOP GRADE OF SIDEWALK.
5. ALL NEWLY INSTALLED TRAFFIC SIGNS SHALL MEET THE MINIMUM RETRO-REFLECTIVITY AND ILLUMINATION STANDARDS AS SET FORTH BY THE MUTCD (LATEST EDITION). THESE MINIMUM REQUIREMENTS SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
6. DIAMOND GRADE MATERIAL SHALL BE USED ON ALL STOP SIGNS.
7. THE CONTRACTOR INSTALLING SIGNS IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND UTILITIES. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.
8. FOLLOWING INSTALLATION, THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS DEPARTMENT, 303-662-8112. A FIELD INSPECTION OF LOCATION AND INSTALLATION OF ALL SIGNS SHALL BE PERFORMED BY PUBLIC WORKS. ALL DISCREPANCIES IDENTIFIED DURING THE FIELD INSPECTION MUST BE CORRECTED BEFORE THE TWO-YEAR WARRANTY PERIOD WILL BEGIN.
9. SIGNAGE AND STRIPING HAS BEEN DETERMINED BY INFORMATION AVAILABLE AT THE TIME OF REVIEW.
   PRIOR TO INITIATION OF THE WARRANTY PERIOD, LONE TREE RESERVES THE RIGHT TO REQUIRE MODIFICATIONS TO EXISTING OR INSTALLATION OF ADDITIONAL SIGNAGE AND/OR STRIPING IF THEY DETERMINE THAT AN UNFORESEEN CONDITION WARRANTS SUCH MODIFICATION ACCORDING TO THE MUTCD OR THE CDOT M AND S STANDARDS. ALL SIGNAGE AND STRIPING SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
10. FINAL STRIPING AND CROSSWALK LAYOUT TO BE APPROVED BY THE CITY OF LONE TREE PRIOR TO INSTALLATION. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.
11. CROSSWALKS SHALL:
    BE CONSTRUCTED USING 125 MIL PREFORMED THERMOPLASTIC.
    LINE UP WITH THE HANDICAP RAMPS AT BOTH ENDS.
    BE CENTERED ON LANE LINES SO AS TO BE STRADDLED BY VEHICLES.
12. ALL PAVEMENT MARKINGS SHALL BE AS FOLLOWS:
    FOR CONCRETE SURFACE: METHYL METHACRYLATE OR EPOXY PAINT.
    FOR ASPHALT SURFACE: PAINT, 90 MIL PREFORMED THERMOPLASTIC, INLAID MARKING TAPE, METHYL METHACRYLATE, OR EPOXY PAINT.
    TURN ARROWS AND ONLYS: 125 MIL PREFORMED THERMOPLASTIC.
13. ALL PAVEMENT MARKING SHALL BE PRECEDED BY THE APPROPRIATE SURFACE PREPARATION.
14. ANY SIGNAGE AND/OR OTHER TRAFFIC CONTROL DEVICES REMOVED SHALL BE RETURNED TO THE CITY OF LONE TREE.
15. TYPE III LIGHTED BARRICADES SHALL BE SET AT ENDS OF ROADWAYS, SEPARATING FINISHED AND UNFINISHED CONSTRUCTION AREAS AND WILL BE MAINTAINED BY THE CONTRACTOR/DEVELOPER.

NOTE: ALSO SEE CITY OF LONE TREE "STREET SIGN DETAILS"FOR ADDITIONAL INTERSECTION STREET SIGNAGE REQUIREMENTS.

STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON-GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.

DRAINAGE STRUCTURE NOTES

1. CONCRETE WORK SHALL CONFORM TO ACI 301, ACI 350.
2. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM-615, GRADE 60.
3. ALL EXPOSED CONCRETE SHALL HAVE A CDOT CLASS 2 OR 5 FINISH.
4. ALL EXPOSED CONCRETE CORNERS SHALL HAVE ¾"CHAMFERS.
5. DETAILING, FABRICATION, AND PLACING OF REBAR SHALL BE IN ACCORDANCE WITH ACI 315.
6. CONSTRUCTION TOLERANCES SHALL BE IN ACCORDANCE WITH ACI 347.
7. ALL MANHOLES SHALL BE SLAB BASE UNLESS SPECIFIED OTHERWISE. MANHOLE SHALL BE FABRICATED IN ACCORDANCE WITH CDOT STANDARD M-604-20.
8. COORDINATES FOR MANHOLES AND AREA INLETS ARE SHOWN AT THE CENTER OF THE STRUCTURE. COORDINATES FOR MOUNTABLE CURB INLETS ARE SHOWN ALONG THE FLOWLINE AT CENTER OF THE STRUCTURE.
9. ALL TYPE C AND D INLETS SHALL HAVE CLOSE MESH GRATES UNLESS SPECIFIED OTHERWISE.
10. LENGTH OF FABRICATED BAR GRATING PANELS IS LENGTH OF BEARING BARS, WIDTH REFERS TO DIMENSION PERPENDICULAR TO BEARING BARS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PANEL DIMENSIONS GIVEN PRIOR TO FABRICATION.

DRAINAGE GENERAL NOTES

1. PROJECT FACILITIES ARE TO BE LOCATED BASED ON THE SURVEY COORDINATES, ELEVATIONS, DIMENSIONS, AND/OR GEOMETRIC DESIGN DATA PROVIDED ON THE DRAWINGS.
2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES AND FOR SATISFYING ALL APPLICABLE OSHA, FEDERAL, STATE, AND LOCAL REGULATIONS. TEMPORARY EXCAVATIONS SHALL PROVIDE, AT MINIMUM, THE TRENCH DIMENSIONS AND CLEARANCES SHOWN OR SPECIFIED. TEMPORARY CONSTRUCTION SLOPES SHALL BE SLOPED, SHORED, SHEETED, AND/OR BRACED IN ACCORDANCE WITH STABILITY REQUIREMENTS AND APPLICABLE REGULATIONS, AND SHALL BE NO STEEPER THAN THE SLOPES SHOWN OR SPECIFIED WITHOUT THE APPROVAL OF THE ENGINEER. ANY SUCH APPROVALS BY THE ENGINEER WILL NOT RELIEVE THE CONTRACTOR FROM SOLE RESPONSIBILITY FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES.
3. EXISTING FACILITIES NOT INDICATED TO BE REMOVED SHALL BE PROTECTED IN PLACE OR REMOVED AND REPLACED IN KIND, AS APPROVED BY ENGINEER.
4. THE WORK WILL TAKE PLACE IN AND AROUND DRAINAGE SWALES AND THE HAPPY CANYON CREEK, SUBJECT TO PERIODIC FLOODING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF SURFACE AND SUBSURFACE WATER DURING THE COURSE OF THE WORK. ANY DAMAGE TO THE WORK RESULTING FROM SURFACE FLOWS, BASE FLOWS, OR FLOOD FLOWS INCLUDING BUOYANCY FORCES ON PIPELINES AND OTHER FACILITIES SHALL BE CORRECTED BY THE CONTRACTOR AT THE CONTRACTOR'S SOLE COST. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND SATISFYING THE REQUIREMENTS OF ANY APPLICABLE PERMITS PERTAINING TO WATER AND EROSION CONTROL.
5. CONTACT THE ENGINEER FOR CLARIFICATIONS OF ANY ABBREVIATIONS SHOWN ON THE DRAWINGS.
6. THE SITE WHERE THE WORK IS TO BE PERFORMED SHALL BE OVERLOT GRADED. TOPSOIL SHALL BE SPREAD IN OPEN SPACE AREAS TO A DEPTH OF APPROXIMATELY 6-INCHES. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED, AND SOME AREAS COVERED WITH EROSION CONTROL BLANKETS, UNLESS OTHERWISE DIRECTED IN THE PLANS OR BY THE ENGINEER. CARE SHALL BE TAKEN TO AVOID DISTURBING ANY OPEN SPACE AREAS EXCEPT THE MINIMUM NECESSARY TO PERFORM THE WORK. TOPSOIL IN ANY WORK AREAS OR ACCESS ROADS WITHIN THE OPEN SPACE SHALL BE STRIPPED AND STOCKPILED PRIOR TO THE WORK, PROTECTED FROM MIXING WITH ANY OTHER MATERIALS DURING THE WORK, AND REPLACED TO A LOOSE DEPTH OF 7- TO 8- INCHES (FINAL DEPTH AFTER SETTLEMENT SHALL BE 6- INCHES MINIMUM) AS THE WORK IS BEING COMPLETED. WHERE BLANKETS EXIST, THE MINIMUM AREA OF BLANKET TO ALLOW WORK TO PROGRESS SHALL BE REMOVED AND THEN THE REMOVED OR NEW BLANKET REPLACED AFTER UNDERLYING WORK IS COMPLETE (EXCEPT NO TEMPORARY BLANKET NEEDS TO BE REPLACED OVER ROCK OR COIR BLANKET SHOWN IN THE PLANS). JUST PRIOR TO REPLACEMENT OF TOPSOIL AFTER UNDERLYING WORK IS COMPLETE AND APPROVED, THE UNDERLYING SUBGRADE IN OPEN SPACE AREAS SHALL BE LOOSENED BY TILLING TO A DEPTH OF 12- INCHES UNTIL CLODS ARE NO LARGER THAN 3 INCHES, AND APPROVED BY THE ENGINEER. THIS NOTE ALSO APPLIES TO AREAS WHERE COIR MAT IS TO BE INSTALLED.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ANY COMPLETED WORK FROM DISTURBANCE OR DAMAGE DURING THE COURSE OF THE WORK. IF REQUESTED BY THE CONTRACTOR AND APPROVED BY THE OWNER, SIGNIFICANT COMPLETED SECTIONS OF THE WORK MAY BE ACCEPTED AS FINAL PRIOR TO THE COMPLETION OF THE ENTIRE PROJECT. ANY SUCH EARLY ACCEPTANCE WILL NEED TO BE IN WRITING BY THE ENGINEER AND OWNER AND THOSE PORTIONS OF THE WORK SHALL BE PROTECTED BY THE CONTRACTOR AGAINST VEHICLES RUNNING OVER THE AREA BY ENCIRCLING THE WORK WITH FLAGGING OR FENCING OR BY OTHER MEANS AGREED TO BY THE OWNER AND MAINTAINED BY THE CONTRACTOR UNTIL THE END OF THE PROJECT.
8. ALL FINE GRADING REQUIRED TO CONSTRUCT DRAINAGE IMPROVEMENTS AND PROVIDE FINISHED GRADES ADJACENT TO IMPROVEMENTS SHALL BE DONE BY THE DRAINAGE CONTRACTOR AND SHALL BE CONSIDERED PART OF THE WORK, AND NOT PAID FOR SEPARATELY.

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	N/A
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
GENERAL NOTES

SHEET 152 OF 270

JOB NO. 15950.01

LAYER LINETYPE LEGEND

	EXISTING	PROPOSED
PHASE LINE		
MATCH LINE		
SECTION LINE		
BOUNDARY LINE		
PROPERTY LINE		
EASEMENT LINE		
RIGHT OF WAY		
R.O.W. A LINE	A	A
CENTERLINE		
CITY LIMITS		
WIRE FENCE		
CHAIN LINK FENCE		
WOOD FENCE		
MASONRY FENCE		
GUARDRAIL		
CONC. BARRIER		
CABLE TV	TV	TV
ELECTRIC	E	E
FIBER OPTIC	FO	FO
GAS MAIN	G	G
IRRIGATION MAIN	IRR	IRR
OIL/PETRO. MAIN	O	O
OVERHEAD UTILITY	OHU	OHU
SANITARY SEWER	S	
STORM DRAIN		
TELEPHONE	T	T
WATER MAIN	W	
RAW WATER LINE	RWL	RWL
SWALE/WATERWAY FLOWLINE		
DIVERSION DITCH		
DIVERSION CHANNEL		
MAJOR DRAINAGE BASIN		
MINOR DRAINAGE BASIN		
TOP OF SLOPE		
TOE OF SLOPE		
EDGE OF WATER		
INDEX CONTOUR	6100	6100
INTERMEDIATE CONTOUR		
DEPRESSION CONT. (INDEX)	6100	6100
DEPRESSION CONT. (INTER)		
TOP OF CUTS		
TOE OF FILLS		
CUT AND FILL LINE		C/F
SILT FENCE	SF	SF
100 YEAR FLOODPLAIN	100YR	100YR
500 YEAR FLOODPLAIN	500YR	500YR
FLOODWAY	FLDWY	FLDWY
BASE FLOOD ELEVATION		
EDGE OF WETLANDS		
STONE WALL		

UTILITIES LEGEND

	EXISTING	PROPOSED
STORM SEWER		
MANHOLE	Ⓓ	◉
STORM INLET		▣
AREA INLET – SQUARE	□	
AREA INLET – ROUND	○	
FLARED END SECTION	▷	
RIPRAP		
SANITARY SEWER		
LINE MARKER	Mkr San	
SERVICE MARKER	△	
CLEAN–OUT	⊸	⊸
MANHOLE W/ DIRECTIONAL FLOW ARROW	Ⓢ	◉
WATER LINE		
LINE MARKER	Mkr W	
SERVICE MARKER	△	
FIRE HYDRANT		
FIRE CONNECTION		
MANHOLE	Ⓜ	●
BEND		
BLOW–OFF VALVE		
WELL	WELL	WELL
METER	Ⓜ	●
VALVE	⋈	
REDUCER		
THRUST BLOCK		
CROSS		
PLUG W/ THRUST BLOCK		
TEE		
REVERSE ANCHOR		
ANODE		
AIR & VACUUM VALVE ASSEMBLY		
TRANSMISSION BLOW–OFF ASSEMBLY		
GAS LINE		
MARKER	Mkr G	
SERVICE MARKER	△	
METER	Ⓖ	●
VALVE	⋈	
PLUG	℄	℄
TEE		
DRY UTILITIES		
CABLE TV MARKER	Mkr TV	
CABLE TELEVISION PEDESTAL	TV	
ELECTRIC MARKER	Mkr E	
ELECTRIC SERVICE MARKER	△	
ELECTRICAL PEDESTAL	E	
ELECTRICAL METER	Ⓔ	
ELECTRICAL MANHOLE	Ⓔ	
FIBER–OPTIC MARKER	Mkr FO	
IRRIGATION PEDESTAL	I	
TELEPHONE MARKER	Mkr T	
TELEPHONE PEDESTAL	T	
TELEPHONE MANHOLE	Ⓣ	
UTILITY POLE	⊸	⊸
GUY ANCHOR	⊸	
GUY POLE	⊸	
MISC. UTILITIES		
VENT PIPE	VP	VP
TEST HOLE DESIGNATOR	THE FIRM AGENCY	

MONUMENTATION LEGEND

ALUMINUM CAP – FOUND	●AC
BRASS CAP – FOUND	●BC
BENCHMARK – FOUND	
CROSS – FOUND	+
MONUMENT – SET	○
MONUMENT – FOUND (DEFAULT)	●
MONUMENT – FOUND (ALTERNATE 1)	■
MONUMENT – FOUND (ALTERNATE 2)	◉
MONUMENT – FOUND (ALTERNATE 3)	▲
MONUMENT – FOUND (ALTERNATE 4)	◬
MONUMENT – FOUND (ALTERNATE 5)	⬟
MONUMENT – FOUND (ALTERNATE 6)	◉
MONUMENT – FOUND (ALTERNATE 7)	◬
NAIL & WASHER – FOUND	●NAIL & WASHER
PANEL – FOUND	
PK NAIL – FOUND	●PK NAIL
ROW MONUMENT – FOUND	
ROW MARKER – FOUND	⊡
SECTION CORNER – FOUND	
SECTION CORNER – SET	
QUARTER–SECTION CORNER – FOUND	
QUARTER–SECTION CORNER – SET	
SECTION CENTER – FOUND	◉
SECTION CENTER – FOUND	◎
CONTROL/TRAVERSE POINT – SET	△

TRAFFIC LEGEND

	EXISTING	PROPOSED
PARKING METER		
TRAFFIC SIGNAL BOX		
TRAFFIC SIGNAL POLE		
TRAFFIC SIGNAL		
BARRICADE		
GUARD RAIL POST		
IMPACT ATTENUATOR		
BRIDGE STYLE HIGHWAY SIGN POST		
CANTILEVER STYLE HIGHWAY SIGN POST		
SIGN		
RAILROAD MARKER/SIGN		
STREET LIGHT		
STREET LIGHT – SINGLE		
STREET LIGHT – DOUBLE		
LUMINAIRE		
ALTERNATE LUMINAIRE		
SIGNAL MAST ARM W/ LUMINAIRE		
PEDESTAL POLE FOUNDATION		
TRAFFIC SIGNAL POLE		
ROUND PULL BOX		
MEDIUM PULL BOX		
LARGE PULL BOX (20X33X15)		
SIGNAL HEAD WITHOUT BACK PLATE		
SIGNAL HEAD WITH BACK PLATE		
PEDESTRIAN SIGNAL HEAD		
VIDEO IMAGE DETECTOR		
OPTICOM DETECTOR		
VEHICLE DETECTION ZONE		V

STORM WATER MANAGEMENT

	KEY	SYMBOL
CHECK DAM	CD	
CONSTRUCTION ROAD STABILIZATION	CRS	
CURB SOCK INLET PROTECTION	CS	
CONCRETE WASHOUT AREA	CWA	
DIVERSION DITCH AND DIKE, TEMPORARY	DD	
DIVERSION CHANNEL, TEMPORARY	DV	
DEWATERING	DW	
EROSION CONTROL BLANKET	ECB	
INLET FILTER	IF	
INLET PROTECTION	IP	
MULCHING	MU	
OUTLET PROTECTION	OP	
PAVED FLUME	PF	
PERMENENT SEEDING	PS	
REINFORCED CONCRETE DAM	RCD	
ROUGH CUT STREET CONTROL	RCS	
SEDIMENT BASIN	SB	
SEDIMENT CONTROL LOG	SCL	
SILT FENCE	SF	
SURFACE ROUGHENING	SR	
STABILIZED STAGING AREA	SSA	
SEDIMENT TRAP	ST	
STRAW BALE BARRIER	STB	
TERRACING	TER	
TEMPORARY SEEDING	TS	
TEMPORARY STREAM CROSSING CULVERT/BRIDGE	TSC C	
TEMPORARY STREAM CROSSING FORD TYPE	TSC F	
TEMPORARY SLOPE DRAIN	TSD	
VEHICLE TRACKING CONTROL	VTC	
VEHICLE TRACKING CONTROL WITH WASH RACK	WR	

DRAINAGE REPORT PLANS

	KEY
BASIN DESIGNATION (NO COEFFICIENT)	# #.##
BASIN DESIGNATION (1 COEFFICIENT)	# #.## | #
BASIN DESIGNATION (2 COEFFICIENTS)	# #.# | # #
ANALISYS POINT IDENTIFIER	#
BASIN DESIGNATION (HISTORIC)	# #-##
BASIN DESIGNATION (DEVELOPED)	# #.##
SUB–BASIN DESIGNATION (DEVELOPED)	# ##
DRAINAGE PIPE IDENTIFIER	##
DRAINAGE POINT IDENTIFIER (HEXAGONAL)	##
DRAINAGE POINT IDENTIFIER (TRIANGULAR)	?
SWMM DESIGNATION 1	#
SWMM DESIGNATION 2	#
SWMM DESIGNATION 3	#
SWMM DESIGNATION 4	?

LANDSCAPE LEGEND

	EXISTING	PROPOSED
TREE – CONIFEROUS		
TREE – DECIDUOUS		
SHRUB/BUSH		
SHRUBS AND BUSHES		
IRRIGATION BOX		
IRRIGATION SPRINKLER		
IRRIGATION VALVE		
BOLLARD		
FLAGPOLE	FP	

Know what's **below.** **Call** before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

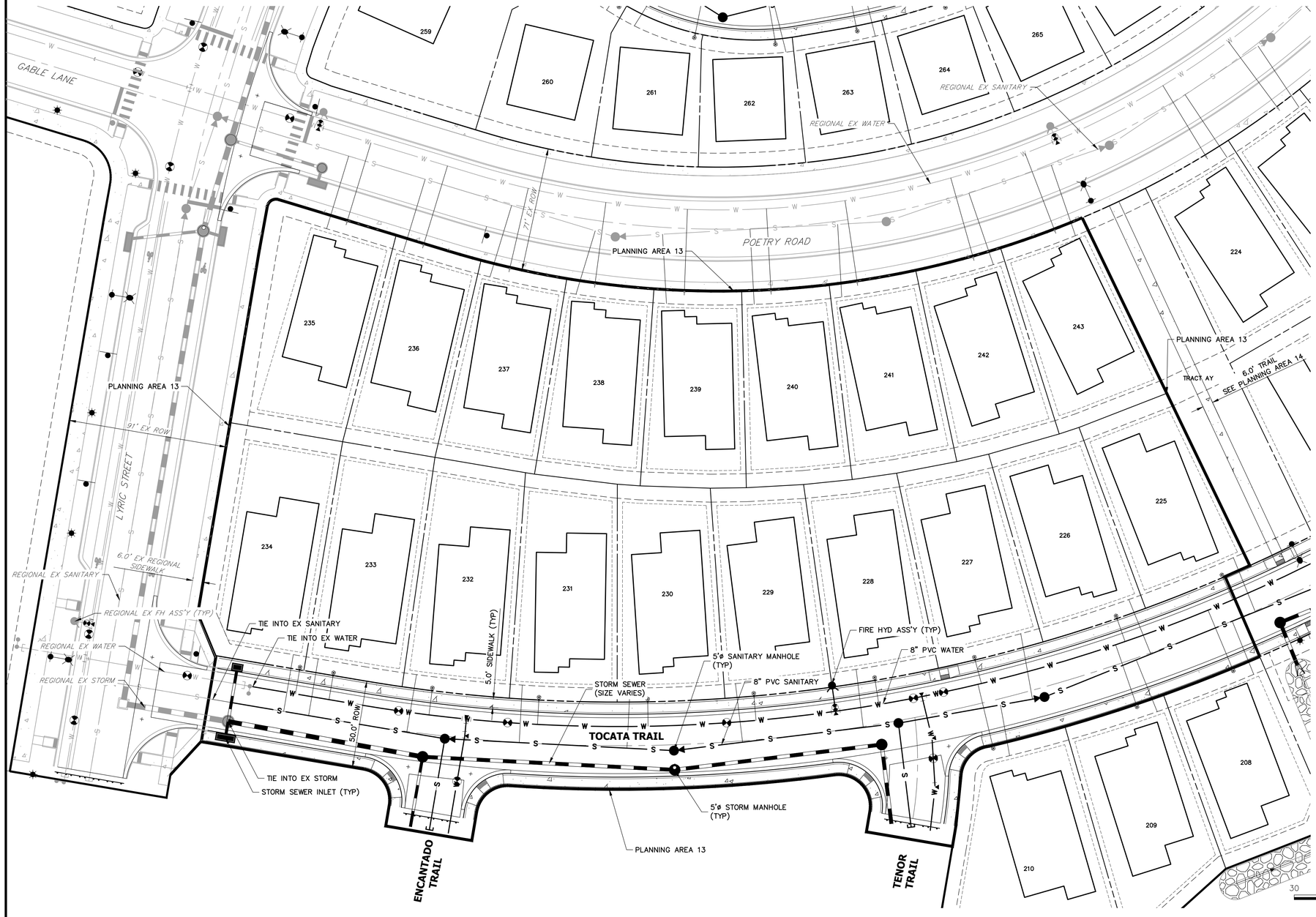
No.	REVISION	BY	DATE

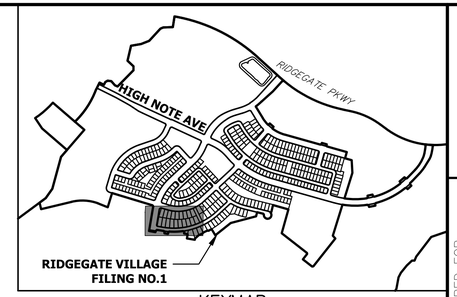
H–SCALE	N/A
V–SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
LEGEND

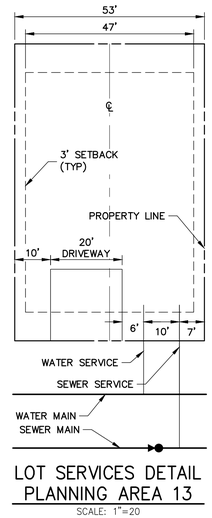
SHEET 153 OF 270

JOB NO. 15950.01





KEYMAP
SCALE: 1"=1000'



LOT SERVICES DETAIL
PLANNING AREA 13
SCALE: 1"=20

30 15 0 30 60
ORIGINAL SCALE: 1" = 30'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

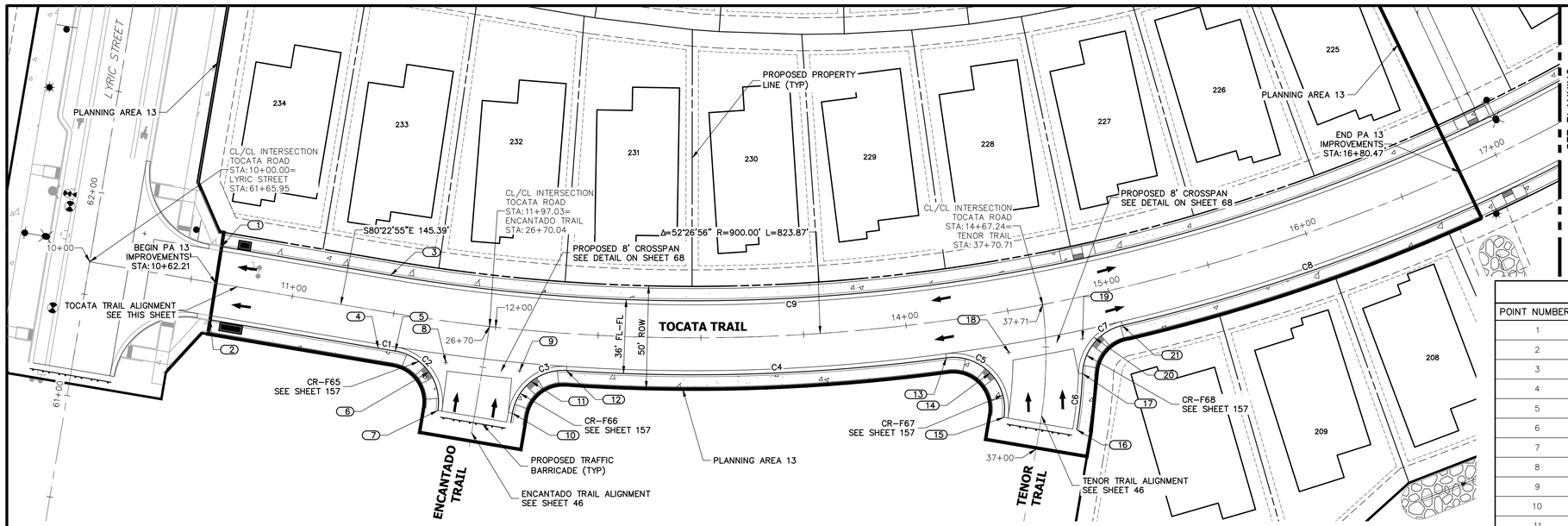
No.	REVISION	BY	DATE

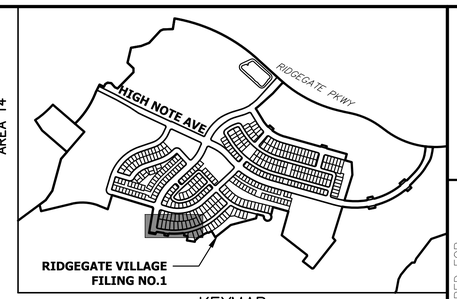
H-SCALE	1" = 30'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
OVERALL UTILITY PLAN

SHEET 154 OF 270

JOB NO. 15950.01



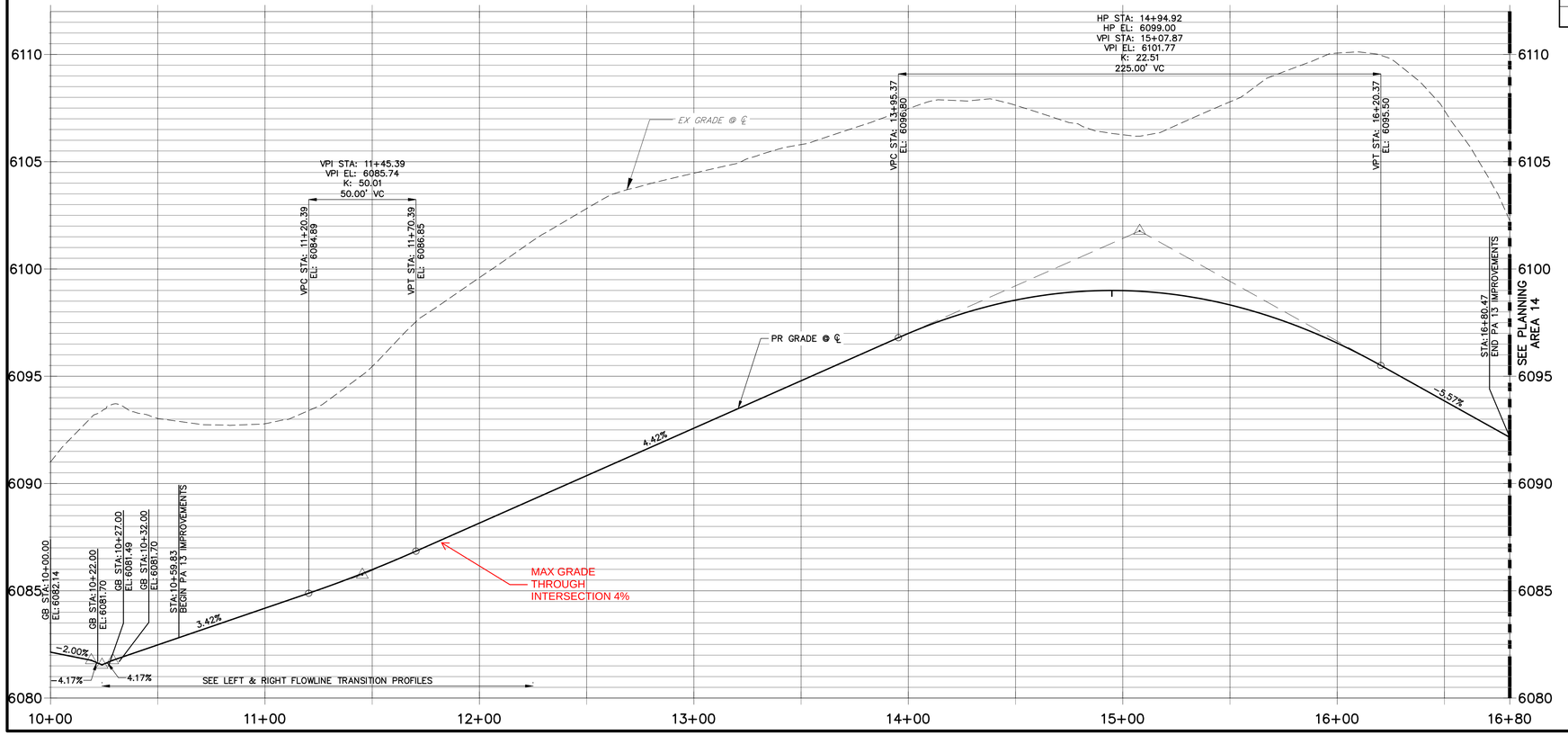


KEYMAP
SCALE: 1"=1000'

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
1	10+62.00	18.00' (LT)	TOCATA ROAD	6082.22		PT
2	10+62.42	18.00' (RT)	TOCATA ROAD	6083.06		PT
3	11+45.39	18.00' (LT)	TOCATA ROAD	6084.98		PCC
4	11+45.39	18.00' (RT)	TOCATA ROAD	6085.65		PC
5	11+53.61	18.00' (RT)	TOCATA ROAD	6085.95		PCC
6	26+43.36	25.40' (LT)	ENCANTADO TRAIL	6087.14		HC RAMP MID PT
7	26+25.60	18.00' (LT)	ENCANTADO TRAIL	6087.35		PT
8	11+78.28	20.00' (RT)	TOCATA ROAD	6087.13		FL-FL INTERCEPT
9	12+13.55	20.00' (RT)	TOCATA ROAD	6088.51		FL-FL INTERCEPT
10	26+30.32	18.00' (RT)	ENCANTADO TRAIL	6088.57		PC
11	26+47.09	24.46' (RT)	ENCANTADO TRAIL	6088.78		HC RAMP MID PT
12	12+35.84	18.00' (RT)	TOCATA ROAD	6089.26		PCC
13	14+17.32	18.00' (RT)	TOCATA ROAD	6097.18		PCC
14	37+36.09	26.92' (LT)	TENOR TRAIL	6098.49		HC RAMP MID PT
15	37+12.72	18.00' (LT)	TENOR TRAIL	6098.90		PT
16	37+12.65	18.00' (RT)	TENOR TRAIL	6099.59		PC
17	37+37.79	18.00' (RT)	TENOR TRAIL	6098.98		PCC
18	14+47.17	20.00' (RT)	TOCATA ROAD	6098.35		FL-FL INTERCEPT
19	14+82.85	20.00' (RT)	TOCATA ROAD	6098.42		FL-FL INTERCEPT
20	37+53.66	23.71' (RT)	TENOR TRAIL	6098.39		HC RAMP MID PT
21	15+02.66	18.00' (RT)	TOCATA ROAD	6098.50		PCC

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C1	0°31'23"	918.00'	8.38'
C2	90°31'23"	25.00'	39.50'
C3	84°14'31"	25.00'	36.76'
C4	11°33'13"	918.00'	185.11'
C5	107°18'43"	25.00'	46.82'
C6	7°12'38"	218.00'	27.43'
C7	74°39'43"	25.00'	32.58'
C8	11°20'40"	918.00'	181.76'
C9	34°02'17"	882.00'	523.97'

TOCATA TRAIL PROFILE
STA 10+00.00 TO 16+80.47



30 15 0 30 60
HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

Know what's below. Call before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON L. CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE PLANS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

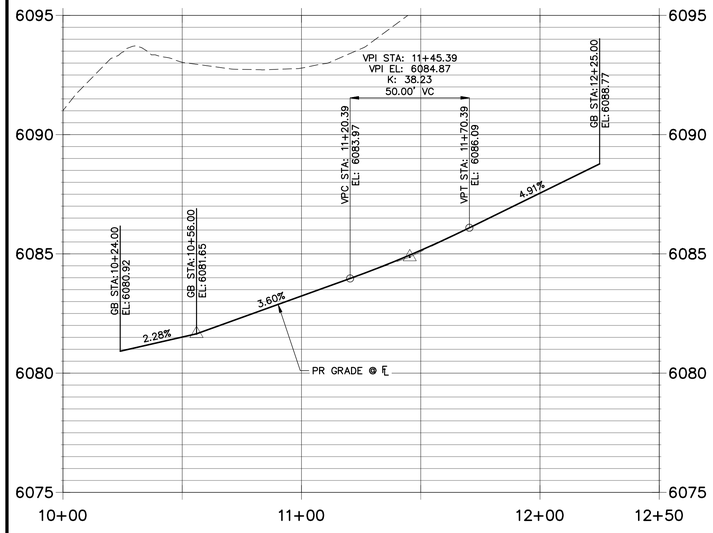
H-SCALE	1" = 30'
V-SCALE	1" = 3'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
ROADWAY PLAN & PROFILES

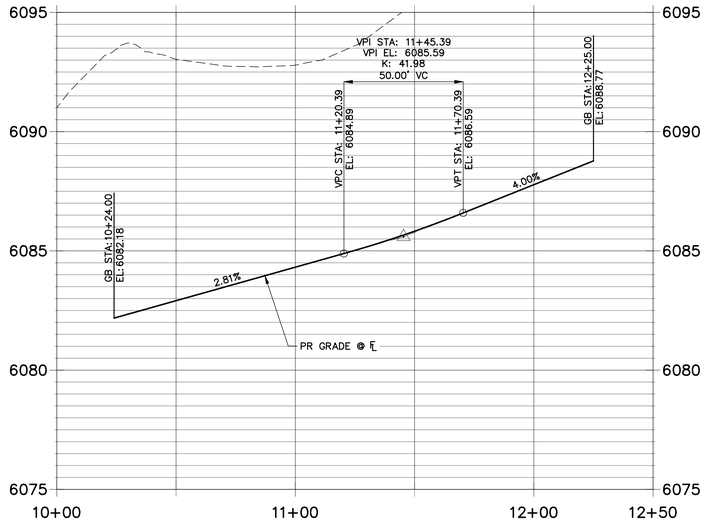
SHEET 155 OF 270

JOB NO. 15950.01

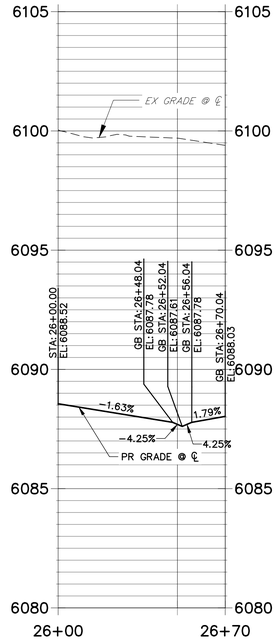
TOCATA TRAIL LEFT FLOWLINE TRANSITION PROFILE
STA 10+00.00 TO 12+50.00

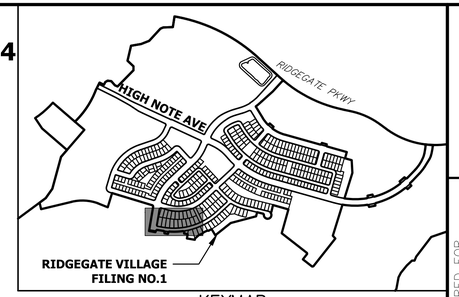


TOCATA TRAIL RIGHT FLOWLINE TRANSITION PROFILE
STA 10+00.00 TO 12+50.00



ENCANTADO TRAIL
STA 26+00.00 TO 26+70.04



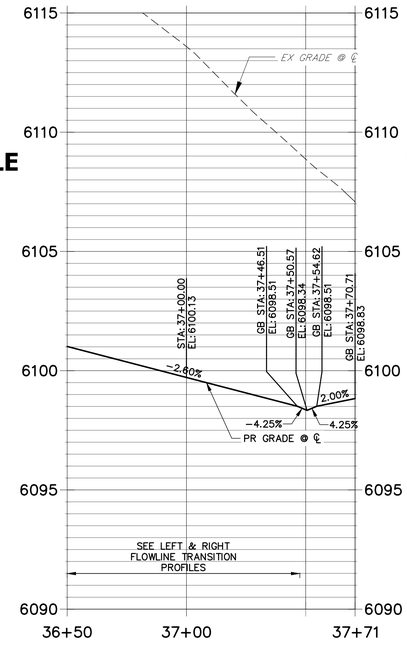


KEYMAP
SCALE:1"=1000'

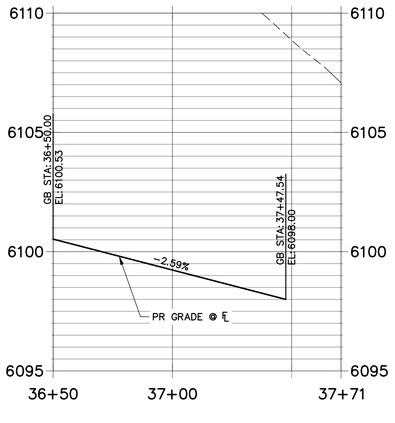
NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE SHEET 153 FOR LEGEND.
4. SEE SHEET 159 FOR SUMP PROFILES.
5. SEE SHEET 157 FOR CURB RETURN PROFILES.
6. SEE SHEET 158 FOR CURB RAMP DETAILS.
7. SEE SHEET 160 FOR SIGNAGE AND STRIPING.
8. ALL CURB RADII ARE 25' UNLESS OTHERWISE NOTED.
9. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.

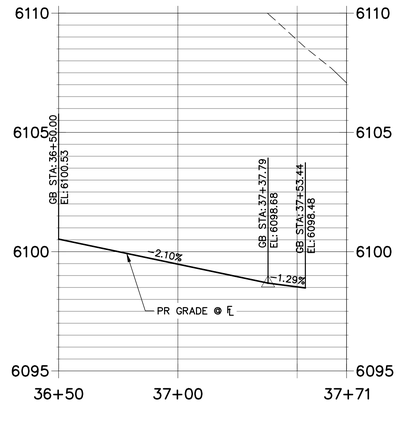
TENOR TRAIL
STA 36+50.00 TO 37+70.71

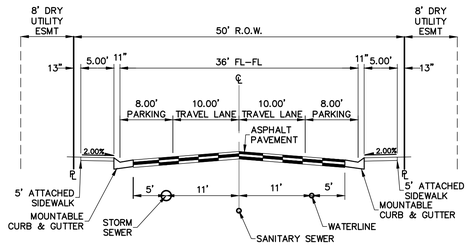


TENOR TRAIL LEFT FLOWLINE TRANSITION PROFILE
STA 36+50.00 TO 37+70.71



TENOR TRAIL RIGHT FLOWLINE TRANSITION PROFILE
STA 36+50.00 TO 37+70.71





SECTION B–B
TYPE II – TYPICAL 50–FOOT R.O.W. RESIDENTIAL LOCAL STREET WITH ATTACHED SIDEWALK (PUBLIC)
(NTS)

30 15 0 30 60
HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

DATE

COLORADO REGISTERED AARON L. CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

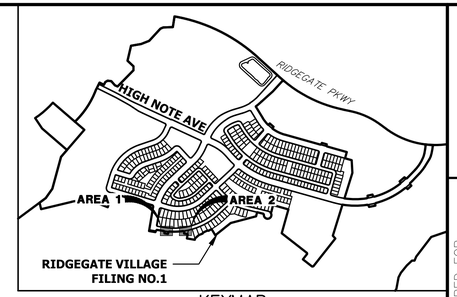
J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1" = 30'
V-SCALE	1" = 3'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

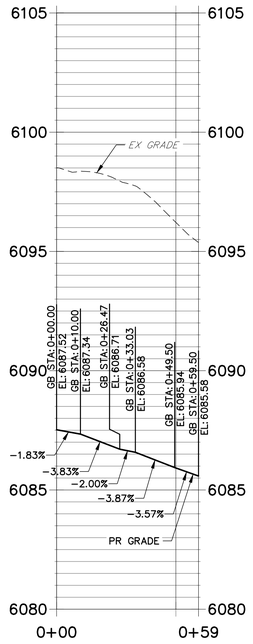
RIDGEGATE SOUTHWEST VILLAGE FILING 1
ROADWAY PLAN & PROFILES

SHEET 156 OF 270
JOB NO. 15950.01



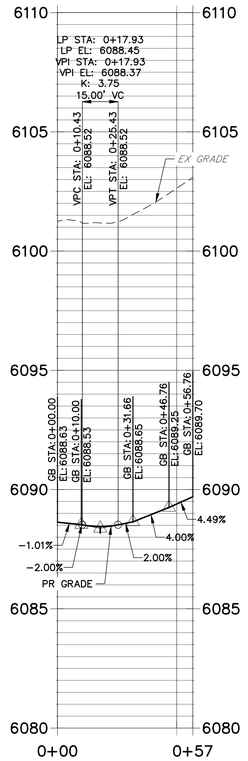
KEYMAP
SCALE:1"=1000'

F65 PROFILE
STA 0+00.00 TO 0+59.50



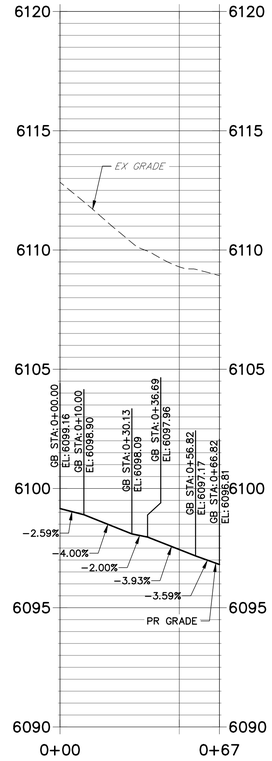
AREA 1

F66 PROFILE
STA 0+00.00 TO 0+56.76



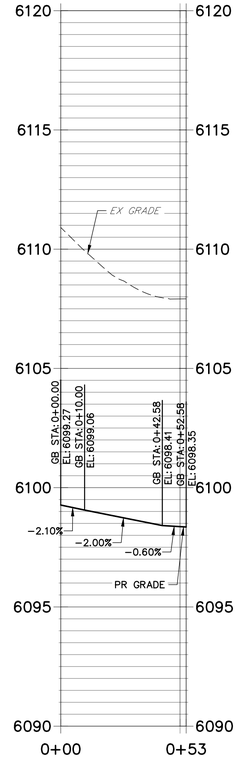
AREA 1

F67 PROFILE
STA 0+00.00 TO 0+66.82



AREA 2

F68 PROFILE
STA 0+00.00 TO 0+52.58



AREA 2

30 15 0 30 60

HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

Know what's **below.**
Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

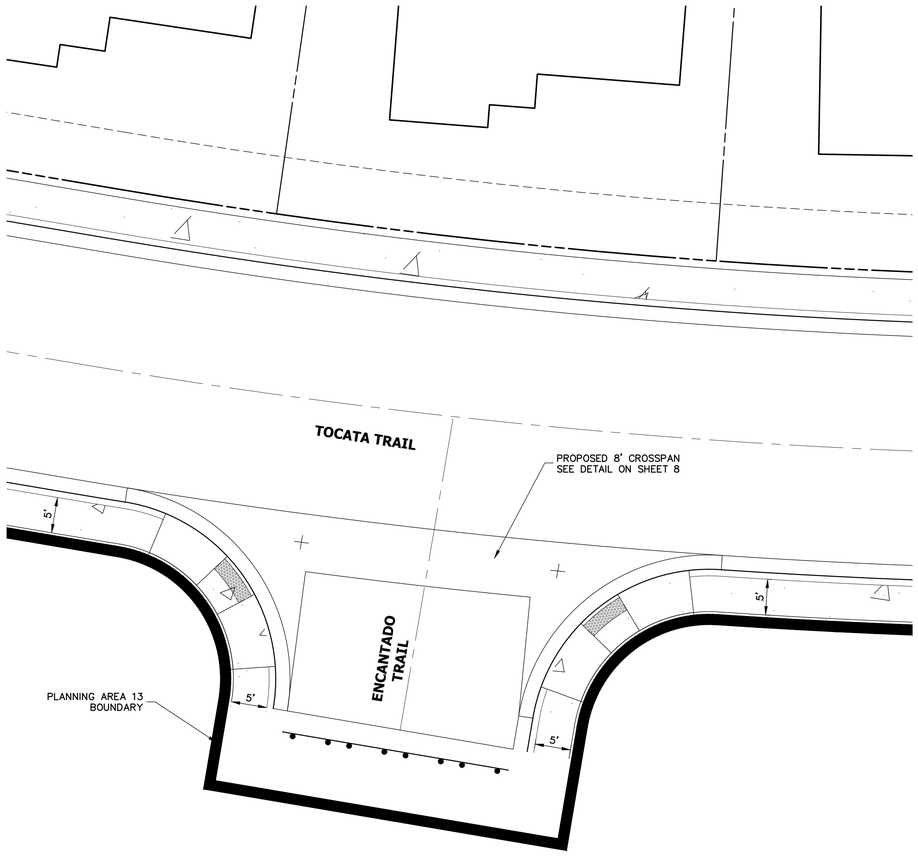
NO.	REVISION	BY	DATE

H-SCALE	1"=30'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

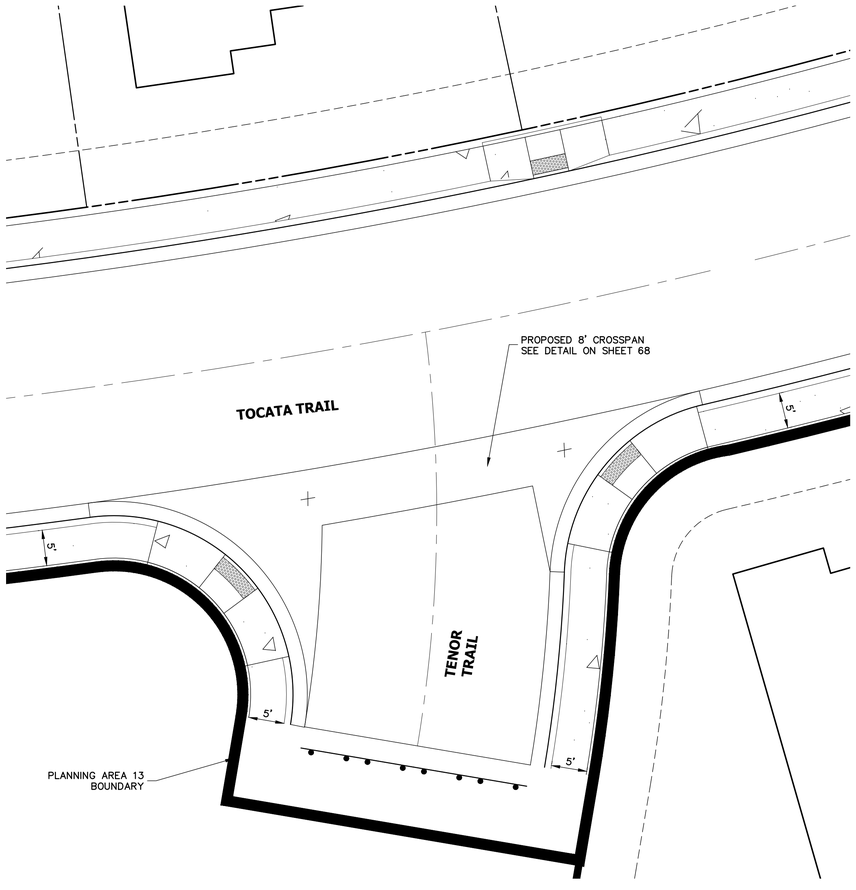
RIDGEGATE SOUTHWEST VILLAGE FILING 1
CURB RETURN PROFILES

SHEET 157 OF 270

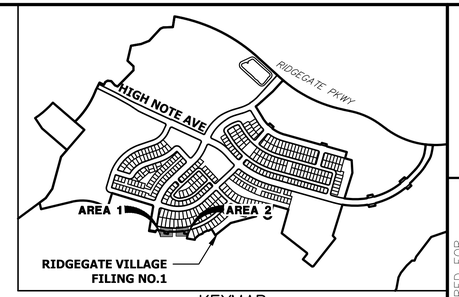
JOB NO. 15950.01



AREA 1



AREA 2



KEYMAP
SCALE: 1"=1000'

NOTE: CURB RAMP DETAILS TO BE PROVIDED WITH NEXT SUBMITTAL

10 5 0 10 20
ORIGINAL SCALE: 1" = 10'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

DATE

COLORADO REGISTERED
AARON LEE CLUTTER
36742
PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

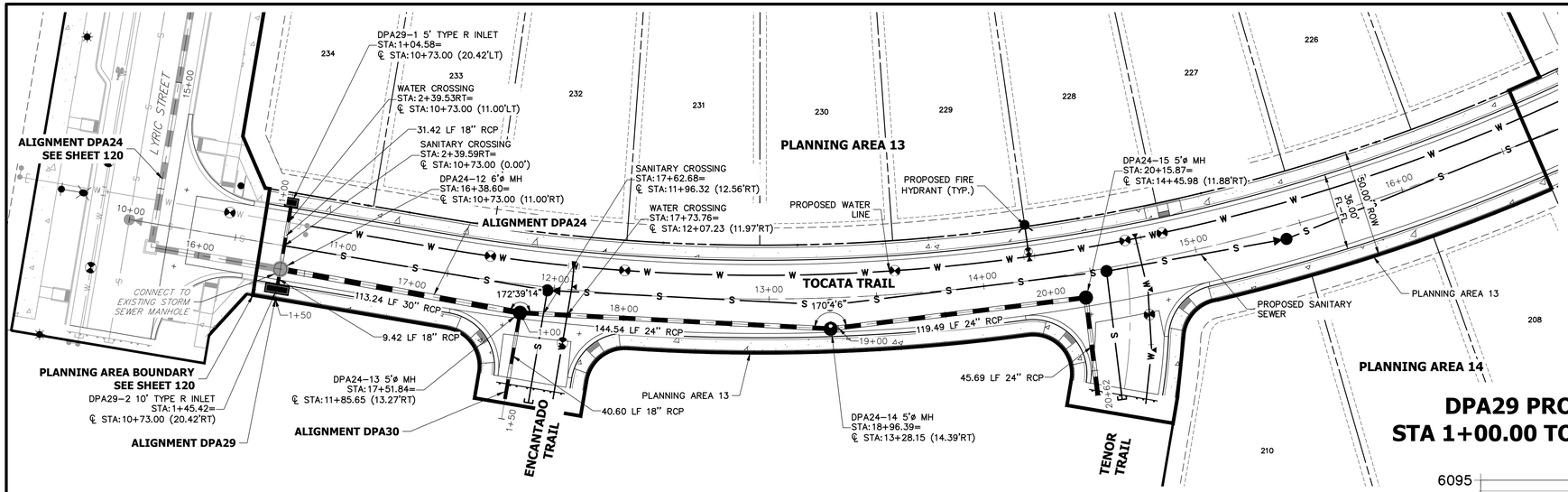
No.	REVISION	BY	DATE

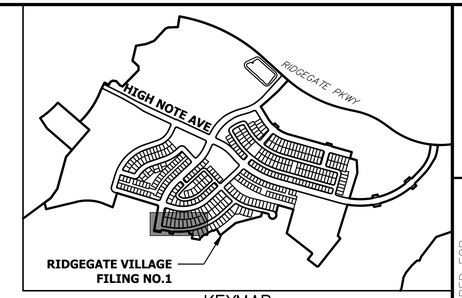
H-SCALE	1"=10'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
CURB RAMP DETAILS

SHEET 158 OF 270

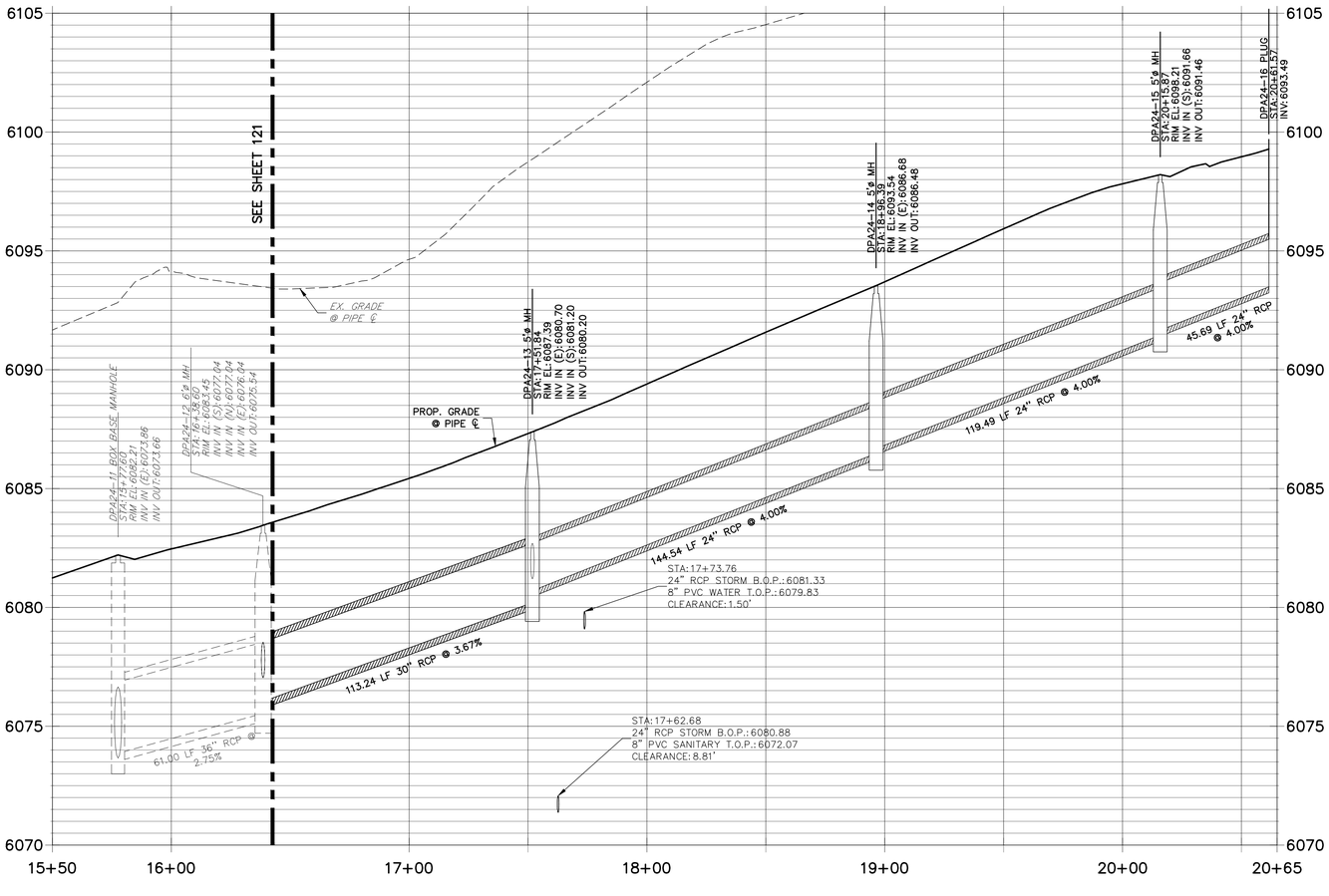
JOB NO. 15950.01



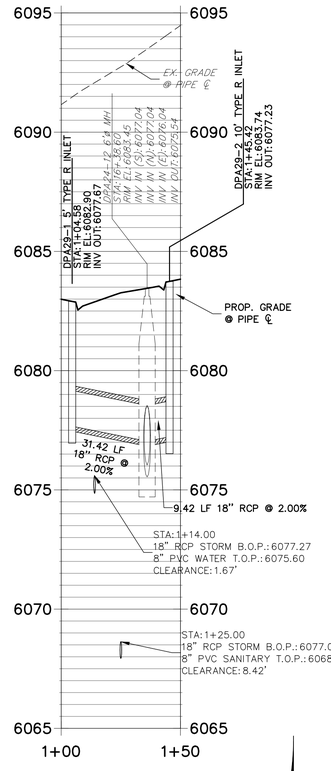


KEYMAP
SCALE:1"=1000'

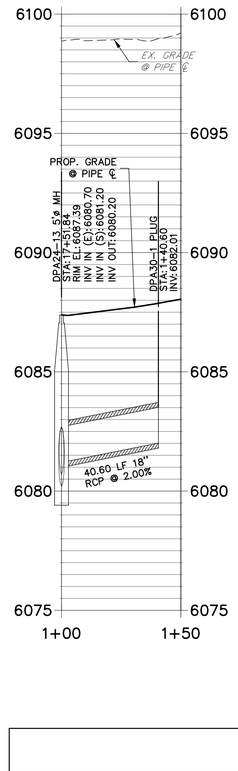
DPA24 PROFILE
STA 15+50.00 TO 20+65.00



DPA29 PROFILE
STA 1+00.00 TO 1+50.00



DPA30 PROFILE
STA 1+00.00 TO 1+50.00



30 15 0 30 60

HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON L. CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

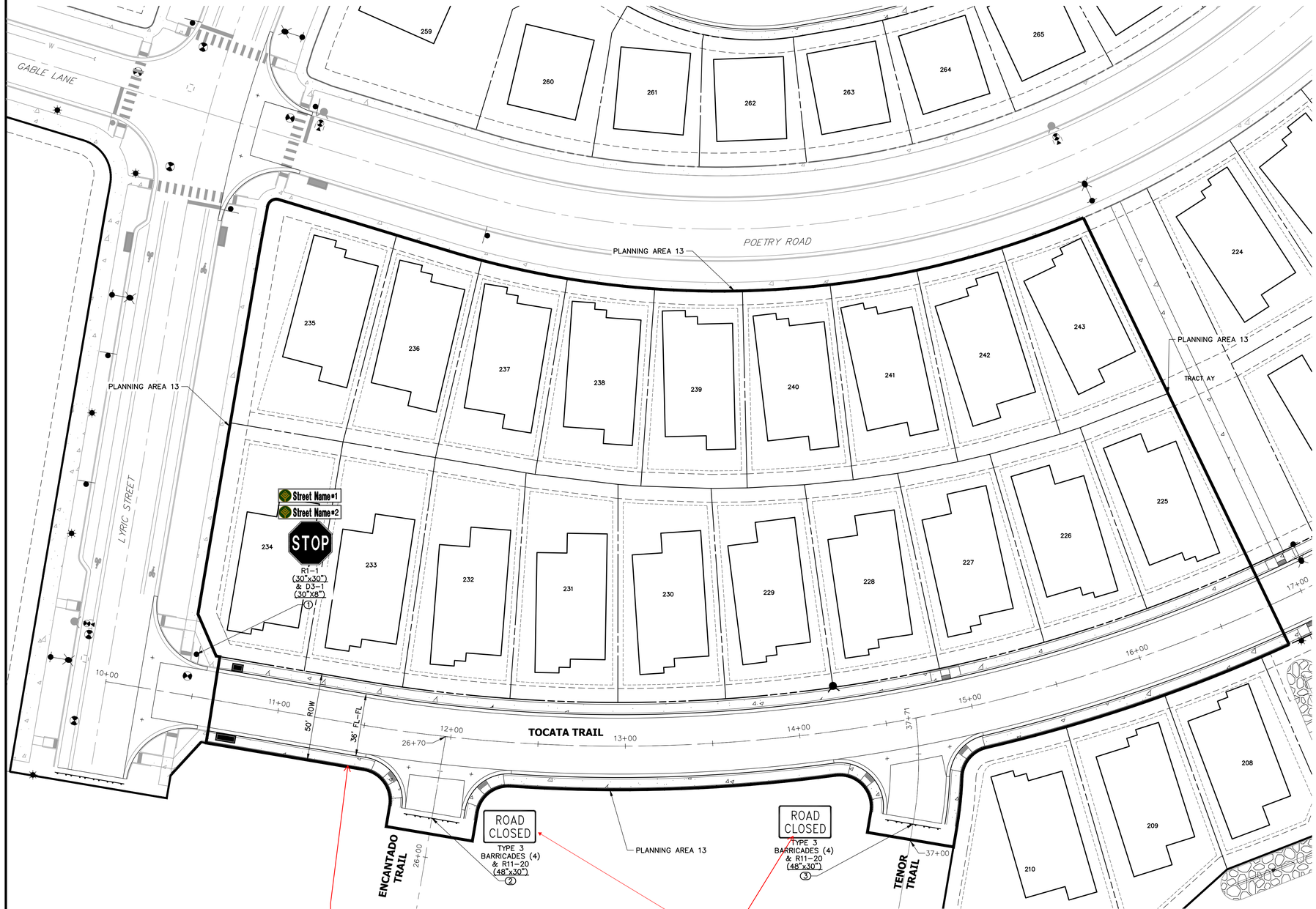
H-SCALE	1" = 30'	DESIGNED BY	CGM
V-SCALE	1" = 3'	DRAWN BY	GVT
DATE	2/12/21	CHECKED BY	

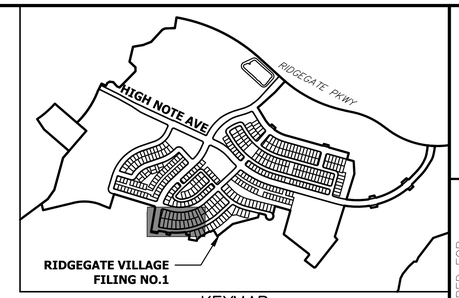
RIDGEGATE SOUTHWEST VILLAGE FILING 1

STORM SEWER PLANS & PROFILES

SHEET 159 OF 270

JOB NO. 15950.01





KEYMAP
SCALE:1"=1000'

SIGN TABULATION				
SIGN NUMBER	STATION	OFFSET	ALIGNMENT	DESCRIPTION
1	10+48.50	24.11' (LT)	TOCATA ROAD	30"X30" R1-1 30"X8" D3-1 (2)
2	26+22.61	0.00' (RT)	ENCANTADO TRAIL	TYPE 3 BARRICADE (4) 48"X30" R11-20
3	37+09.65	0.00' ()	TENOR TRAIL	TYPE 3 BARRICADE (4) 48"X30" R11-20

30 15 0 30 60
ORIGINAL SCALE: 1" = 30'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED PROFESSIONAL ENGINEER 36742

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1" = 30'	DESIGNED BY	GVT
V-SCALE	N/A	DRAWN BY	GVT
DATE	2/12/21	CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
SIGNAGE & STRIPING PLANS

SHEET 160 OF 270

JOB NO. 15950.01

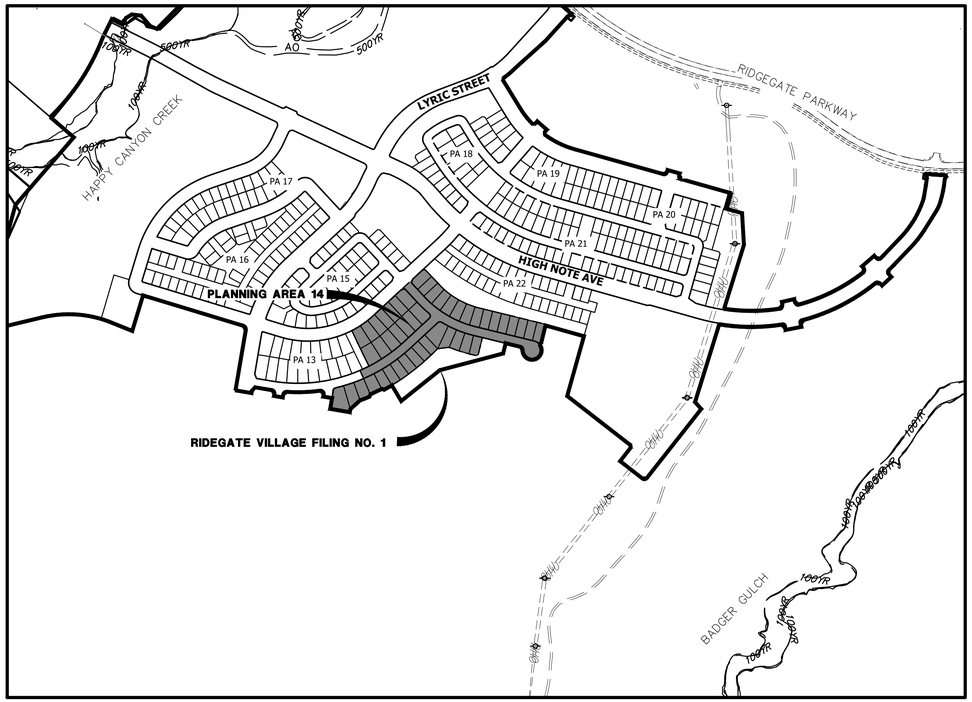
RIDGEGATE SOUTHWEST VILLAGE FILING 1 - PLANNING AREA 14

A PORTION OF THE RIDGEGATE PLANNED DEVELOPMENT DISTRICT, EAST SIDE PROPERTY
LOCATED IN SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST
OF THE 6TH P.M., CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO

STREET & DRAINAGE CONSTRUCTION PLANS

ABBREVIATIONS

AC	ACRE
AD	ALGEBRAIC DIFFERENCE
AH	AHEAD
ARCH	ARCHITECT
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASS'Y	ASSEMBLY
AVE	AVENUE
BB	BOX BASE
BK	BACK
BNDY	BOUNDARY
BOP	BOTTOM OF PIPE
BOV	BLOW OFF VALVE
BFV	BUTTERFLY VALVE
BLVD	BOULEVARD
BW	BOTTOM OF WALL
C&G	CURB & GUTTER
CATV	CABLE TELEVISION
CB	CATCH BASIN
CBC	CONCRETE BOX CULVERT
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION
CDS	CUL-DE-SAC
CF	CUBIC FOOT
CFS	CUBIC FEET PER SECOND
CIP	COMPLETE IN PLACE
CL	CENTER LINE
CLOMR	CONDITIONAL LETTER OF MAP REVISION
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
COCS	CITY OF COLORADO SPRINGS
CONC	CONCRETE
CR	CIRCLE
CSP	CORRUGATED STEEL PIPE
CSU	COLORADO SPRINGS UTILITIES
CT	COURT
CTRB	CONCRETE THRUST REDUCER BLOCK
CY	CUBIC YARD
DBPS	DRAINAGE BASIN PLANNING STUDY
DE	DRAINAGE EASEMENT
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DR	DRIVE
DRC	DESIGN REVIEW COMMITTEE
DU	DWELLING UNITS
DY	DAY
E	EAST
EA	EACH
EGL	ENERGY GRADE LINE
EL	ELEVATION
ELEC	ELECTRIC
EOA	EDGE OF ASPHALT
EPC	EL PASO COUNTY
ERCP	ELLIPTICAL RCP
ESMT	EASEMENT
EST	ESTIMATE
EX	EXISTING
FDP	FINAL DEVELOPMENT PLAN
FDR	FINAL DRAINAGE REPORT
FES	FLARED END SECTION
FF	FINISHED FLOOR ELEVATION
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOWLINE
FIL	FILING
FO	FIBER OPTIC CABLE
GB	GRADE BREAK
GE	GAS EASEMENT
GIS	GEOGRAPHIC INFORMATION SYSTEM
GL	GAS LINE
GPS	GLOBAL POSITIONING SYSTEM
GV	GATE VALVE
HBP	HOT BITUMINOUS PAVEMENT
HC	HANDICAP
HDC	HIGH DEFLECTION COUPLING
HDPE	HIGH DENSITY POLYETHYLENE
HGL	HYDRAULIC GRADE LINE
HMA	HOT MIX ASPHALT
HOA	HOME OWNERS ASSOCIATION
HP	HIGH POINT
HR	HOUR
I	INLET
IE	IRRIGATION EASEMENT
INT	INTERSECTION
INV	INVERT
IRR	IRRIGATION
KB	KICK (THRUST) BLOCK
LB	POUND
LE	LANDSCAPE EASEMENT
LF	LINEAR FOOT
LN	LANE
LOMR	LETTER OF MAP REVISION
LP	LOW POINT
LS	LUMP SUM
LT	LEFT
MAX	MAXIMUM
M/D	MOISTURE DENSITY
MDDP	MASTER DEVELOPMENT DRAINAGE PLAN
MH	MANHOLE
MIN	MINIMUM
MS	MOUNTABLE SIDEWALK
N	NORTH
NRCP	NON-REINFORCED CONCRETE PIPE
ODP	OFFICIAL DEVELOPMENT PLAN
OHE	OVERHEAD ELECTRIC
OHU	OVERHEAD UTILITY
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PCR	POINT OF CURB RETURN
PDP	PRELIMINARY DEVELOPMENT PLAN
PE	PROFESSIONAL ENGINEER
PI	POINT OF INTERSECTION
PKWY	PARKWAY
PL	PROPERTY LINE
PR	PROPOSED
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PV	PLUG VALVE
PVC	POLYVINYL CHLORIDE
R	RADIUS
RCBC	REINFORCED CONCRETE BOX CULVERT
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
ROW	RIGHT OF WAY
RT	RIGHT
S	SOUTH
STE	STEEL
SAN	SANITARY SEWER
SF	SQUARE FOOT
ST	STREET
STA	STATION
STM	STORM SEWER
SY	SQUARE YARD
SY-IN	SQUARE YARD INCH
TB	THRUST BLOCK
TBC	TOP BACK OF CURB
TBW	TOP BACK OF WALK
TEL	TELEPHONE
TN	TON
TOA	TOP OF ASPHALT
TOB	TOP OF BOX
TOC	TOP OF CURB OR CONCRETE
TOF	TOP OF FOUNDATION
TOP	TOP OF PIPE
TW	TOP OF WALL
TYP	TYPICAL
UDFCD	URBAN DRAINAGE AND FLOOD CONTROL DISTRICT
UE	UTILITY EASEMENT
U&DE	UTILITY & DRAINAGE EASEMENT
UGE	UNDERGROUND ELECTRIC
VCP	VITRIFIED CLAY PIPE
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
VTC	VEHICLE TRACKING CONTROL
W	WEST
WL	WATER LINE
WM	WATER MAIN
WRD	WATER RESOURCES DEPARTMENT
WS	WATER SURFACE
WSE	WATER SURFACE ELEVATION
WTR	WATER
YR	YEAR



VICINITY MAP
SCALE: 1"=400'

SHEET INDEX

161	COVER SHEET
162	GENERAL NOTES
163	LEGEND
164-168	ROADWAY PLAN AND PROFILES
169	CURB RETURN PROFILES
170	CURB RAMP DETAILS
171-175	STORM SEWER PLAN AND PROFILE
176	SIGNAGE AND STRIPING PLAN

APPLICANT/OWNER

SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
P~303.791.8180

CIVIL ENGINEER/SURVEYOR

JR ENGINEERING
7200 SOUTH ALTON WAY, SUITE C400
CENTENNIAL, CO
P~303.267.6220

PLANNER

SAGE DESIGN GROUP
1500 SOUTH PEARL STREET, SUITE 200
DENVER, CO 80210
P~303.470.2855

TRAFFIC ENGINEER

JR ENGINEERING
7200 SOUTH ALTON WAY, SUITE C400
CENTENNIAL, CO
P~303.267.6183

GEOTECHNICAL ENGINEER

CTL THOMPSON, INC
1971 WEST 12TH VAE.
DENVER, CO 80204
P~303.825.0777

BENCHMARK

NGS CONTROL POINT UNBEWUST BEING A 3.5 INCH DIAMETER BRASS CAP. LOCATED ABOUT 3.2 MILES SOUTH OF INTERSTATE 25 AND COLORADO STATE HIGHWAY 470 INTERCHANGE, GO SOUTH ON INTERSTATE 25 FOR 2.9 MILES TO EXIT 191. PROCEED ON A PAVED ROAD TO THE SOUTHWEST FOR 0.2 MILES TO THE STATION ON THE LEFT. IN THE NORTHWEST CORNER OF A 24 FOOT BY 16 FOOT ROCK OUTCROP. IT IS 22.5 FEET EAST OF THE CENTERLINE OF THE PAVED ROAD, 123 FEET NORTH OF THE OUTLET OF A 3 FOOT CORRUGATED STEEL PIPE CULVERT AND APPROXIMATELY 350 FEET WEST OF THE WEST EDGE OF OIL OF SOUTHBOUND INTERSTATE 25, ELEVATION: 6125.32 (NAVD88).

BASIS OF BEARING

BEARING SHOWN HEREON ARE GRID BEARINGS DERIVED FROM GPS OBSERVATION BASED UPON THE COLORADO COORDINATE SYSTEM OF 1983 CENTRAL ZONE (NAD 83, 2011) REFERENCED TO THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, SIXTH PRINCIPAL MERIDIAN BEING MONUMENTED AS SHOWN HEREON, TAKEN TO BEAR NORTH 89°31'58" EAST, A DISTANCE OF 2635.13 FEET.

Know what's below. Call before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=400'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	ARJ
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
COVER SHEET

SHEET 161 OF 270

JOB NO. 15950.01

GENERAL PROJECT NOTES:

1. ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION OF IMPROVEMENTS SHALL MEET OR EXCEED THE GOVERNING CITY, COUNTY, AND/OR STATE AND APPLICABLE UTILITY DISTRICT STANDARDS AND SPECIFICATIONS, AND APPLICABLE STATE AND FEDERAL REGULATIONS. WHERE THERE IS A CONFLICT BETWEEN THESE PLANS AND ANY APPLICABLE STANDARDS, THE HIGHER QUALITY STANDARD SHALL APPLY. ALL WORK SHALL BE INSPECTED AND APPROVED BY THE CITY AND APPLICABLE UTILITY DISTRICT(S).

2. THE SITE CONSTRUCTION PLANS LISTED WITHIN THIS PLAN SET ARE NOT FOR CONSTRUCTION UNLESS APPROVED BY THE APPROPRIATE GOVERNING JURISDICTION. THE CONTRACTOR SHALL CONFIRM SAID APPROVAL PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL KEEP ONE (1) SIGNED COPY OF THE APPROVED SET OF PLANS, APPROPRIATE SPECIFICATIONS AND STANDARDS, AND APPROVED PERMITS ONSITE AT ALL TIMES.

3. NO REVISIONS SHALL BE MADE TO THESE PLANS WITHOUT THE APPROVAL OF THE CITY, COUNTY, STATE OR LOCAL DISTRICT AND THE ENGINEER OF RECORD.

4. ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARDS, UNLESS SPECIFICALLY STATED OTHERWISE.

5. THE CONTRACTOR IS RESPONSIBLE FOR ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS SHOWN ON THESE DRAWINGS OR DESIGNATED TO BE PROVIDED, INSTALLED, CONSTRUCTED, REMOVED, OR RELOCATED UNLESS SPECIFICALLY NOTED OTHERWISE.

6. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND LICENSES FOR WORK INCLUDING, BUT NOT LIMITED TO DEMOLITION, STREET CUTS, UTILITY INTERFERENCES, TRAFFIC CONTROL, GRADING, AND UTILITY FROM ALL APPLICABLE AGENCIES; AND FOR COMPLYING WITH ALL PROVISIONS INCLUDED THEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL OTHER APPLICABLE PERMITS NOT SPECIFICALLY REQUIRED BY THE AUTHORITY HAVING JURISDICTION.

7. THE CONTRACTOR SHALL UTILITY STAKE PROJECT AT LEAST 2 WORKING DAYS PRIOR TO BEGINNING EXCAVATION OR GRADING, TO HAVE ALL REGISTERED UTILITY LOCATIONS MARKED. OTHER UNREGISTERED UTILITY ENTITIES (I.E. DITCH COMPANY) ARE TO BE LOCATED BY CONTACTING THE RESPECTIVE REPRESENTATIVE.

8. THE CONTRACTOR IS RESPONSIBLE FOR FIELD LOCATING AND VERIFYING ELEVATIONS OF ALL EXISTING SEWER MAINS, WATER MAINS, CURBS, GUTTERS, AND OTHER UTILITIES AT THE POINTS OF CONNECTION SHOWN ON THE PLANS, AND AT ANY UTILITY CROSSINGS PRIOR TO INSTALLING ANY OF THE NEW IMPROVEMENTS. IF A CONFLICT EXISTS AND/OR A DESIGN MODIFICATION IS REQUIRED, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO MODIFY THE DESIGN. DESIGN MODIFICATION(S) MUST BE APPROVED BY THE APPROPRIATE AUTHORITY PRIOR TO BEGINNING CONSTRUCTION.

9. ANY DISRUPTION OF UTILITY SERVICE THAT IS REQUIRED TO ADJUST, EXTEND, RELOCATE OR OTHERWISE REARRANGE ANY UTILITY WITHIN THE PROJECT AREA SHALL BE COORDINATED IN ADVANCE WITH THE AFFECTED UTILITY ENTITY.

10. RIM ELEVATIONS SHOWN ARE APPROXIMATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS. THE CONTRACTOR SHALL USE PRECAST CONCRETE ADJUSTMENT RINGS, GROUT, AND STEEL SHIMS TO ADJUST THE MANHOLE FRAMES TO FINAL GRADE IN CONFORMANCE WITH THE CITY OR UTILITY COMPANY/DISTRICT STANDARD SPECIFICATIONS. ALL FRAMES SHALL BE ADJUSTED TO FINAL GRADE PRIOR TO THE FINAL LIFT OF ASPHALT.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF PROJECT SAFETY INCLUDING, BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.

12. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN, IN ACCORDANCE WITH THE M.U.T.C.D. TO THE APPROPRIATE RIGHT-OF-WAY AUTHORITY (CITY, COUNTY, OR STATE) FOR APPROVAL, PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN, OR AFFECTING, THE RIGHT-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED BY THE CONSTRUCTION ACTIVITIES. ALL WORK WITHIN THE RIGHT OF WAY SHALL BE DONE IN ACCORDANCE WITH THE GOVERNING AUTHORITY'S STANDARDS AND SPECIFICATIONS.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANING AND RESTORATION OF ANY EXISTING IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO STREET PAVEMENT, FENCES, SOD, LANDSCAPING, SPRINKLER SYSTEMS, AND UTILITIES DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL LOCATION AND CONDITION.

14. INCLUDED IN THESE PLANS IS THE DEMOLITION AND DISPOSAL OF ALL EXISTING UTILITIES, SITE IMPROVEMENTS, STRUCTURES, AND SITE FURNISHINGS NEEDED FOR CONSTRUCTION OF THE IMPROVEMENTS SHOWN HEREON. ALL QUESTIONS IN REGARD TO DEMOLITION SHALL BE SUBMITTED TO THE OWNER IN WRITING PRIOR TO BID.

15. ALL DEMOLITION, REMOVAL, DISPOSAL, AND ABANDONMENT OF UTILITIES, STRUCTURES, SITE IMPROVEMENTS, AND SITE FURNISHINGS SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL STANDARDS AND SPECIFICATIONS, AND PERMIT REQUIREMENTS.

16. ALL DISTURBED SOIL, ON- OR OFF-SITE AND RELATED TO WORK AT THIS PROJECT SITE, IS REQUIRED TO BE PROTECTED FROM WIND AND STORM WATER EROSION. TO MITIGATE EROSION, THE CONTRACTOR SHALL USE STANDARD EROSION CONTROL TECHNIQUES DESCRIBED IN THE GESC PLAN SET AND GESC REPORT FOR THIS PROJECT.

17. ALL STRUCTURAL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY GROUND-DISTURBING ACTIVITY. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED IN GOOD REPAIR BY THE CONTRACTOR UNTIL SUCH TIME AS THE ENTIRE DISTURBED AREA IS STABILIZED WITH HARD SURFACE OR PERMANENT LANDSCAPING. THE CONTRACTOR IS RESPONSIBLE FOR REFERRING TO ANY EROSION AND SEDIMENT CONTROL, STORMWATER MANAGEMENT, STORMWATER POLLUTION PREVENTION, OR SIMILAR PLAN AND/OR NARRATIVE AND ASSOCIATED PERMITS INCLUDING, BUT NOT LIMITED TO GRADING PERMITS, AND COMPLYING WITH THE REQUIREMENTS THEREIN.

18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK, INSPECTIONS, AND CERTIFICATIONS AS REQUIRED BY THE CITY, STATE OR LOCAL DISTRICTS. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST ASSOCIATED WITH THE INSPECTION AND CERTIFICATION UNLESS OTHERWISE ARRANGED WITH THE OWNER/DEVELOPER. THE CONTRACTOR SHALL COORDINATE ALL CERTIFICATIONS, AND PROVIDE FIELD SURVEYED AS-BUILT INFORMATION FOR REVIEW BY THE OWNER/DEVELOPER AND/OR ENGINEER AS EARLY AS POSSIBLE IN THE CONSTRUCTION SCHEDULE TO AVOID POTENTIAL DELAYS.

19. CONTRACTOR IS RESPONSIBLE FOR AS-BUILT DRAWINGS, TESTS, REPORTS, AND/OR ANY OTHER CERTIFICATES OR INFORMATION AS REQUIRED FOR ACCEPTANCE OF WORK FROM CITY, UTILITY DISTRICTS, OR ANY OTHER GOVERNING AGENCY, OR TO THE OWNER/DEVELOPER AS REQUIRED BY AND IN ACCORDANCE WITH THE GOVERNING AUTHORITY OR OWNER/DEVELOPER'S CRITERIA. CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING AS-BUILT INFORMATION AN A SET OF RECORD DRAWINGS KEPT AT THE CONSTRUCTION SITE AND AVAILABLE TO THE GOVERNING CITY, COUNTY, AND/OR STATE AND UTILITY DISTRICT INSPECTOR AT ALL TIMES. THE CONTRACTOR SHALL CONFIRM ANY REQUIREMENTS AS EARLY AS POSSIBLE IN THE CONSTRUCTION SCHEDULE TO ACCOUNT FOR PREPARATION AND REVIEW OF THE INFORMATION TO AVOID POTENTIAL DELAYS.

20. IF, DURING THE CONSTRUCTION PROCESS, CONDITIONS ARE ENCOUNTERED BY THE CONTRACTOR, HIS SUBCONTRACTORS, OR OTHER AFFECTED PARTIES, WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE OWNER/DEVELOPER AND THE ENGINEER IMMEDIATELY.

21. DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. IF PERTINENT DIMENSIONS ARE NOT SHOWN, CONTACT THE CONSULTING ENGINEER FOR CLARIFICATION AND ANNOTATE THE DIMENSION ON THE AS-BUILT RECORD DRAWING.

22. BENCHMARK VERIFICATION: THE CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS AND THE PROPOSED ELEVATIONS IN THIS CONSTRUCTION PLAN SET AGAINST THE PROJECT BENCHMARK, IDENTIFIED HEREIN, PRIOR TO COMMENCING WORK.

ROADWAY NOTES

1. GUTTERS SHALL BE AT LEAST 6" THICK.
2. ALL CURBS SHALL USE THE CATCH SECTION UNLESS OTHERWISE NOTED.
3. ALL COMBINATION CURB, GUTTER AND SIDEWALKS TO BE 6" THICK (MIN.). SIDEWALKS WITH VERTICAL CURB AND GUTTER TO BE 6" THICK (MIN.).
4. NON-LANDSCAPED MEDIAN ISLANDS SHALL BE COVERED WITH AN ACCEPTABLE IMPERMEABLE SURFACE.
5. IF ANY SECTION OF A DETACHED SIDEWALK IS TO BE PLACED OUTSIDE OF THE ROAD RIGHT-OF-WAY, THEN A SIDEWALK EASEMENT SHALL BE REQUIRED TO MAINTAIN PUBLIC USE.
6. PLACEMENT, MOISTURE AND DENSITY CONTROL FOR SUBGRADE, SUBBASE, AND SURFACING MATERIALS SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS OF CHAPTER 8 OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.

CITY OF LONE TREE GENERAL NOTES

1. THE CITY OF LONE TREE ENGINEER'S SIGNATURE AFFIXED TO THIS DOCUMENT INDICATES THE ENGINEERING DIVISION HAS REVIEWED THE DOCUMENT AND FOUND IT IN GENERAL CONFORMANCE WITH THE CITY OF LONE TREE SUBDIVISION RESOLUTION OR APPROVED VARIANCES TO THOSE REGULATIONS. THE CITY OF LONE TREE ENGINEER, THROUGH ACCEPTANCE OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY, OTHER THAN STATED ABOVE, FOR THE COMPLETENESS AND/OR ACCURACY OF THESE DOCUMENTS. THE OWNER AND ENGINEER UNDERSTAND THAT THE RESPONSIBILITY FOR THE ENGINEERING ADEQUACY OF THE FACILITIES DEPICTED IN THIS DOCUMENT LIES SOLELY WITH THE REGISTERED PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE IS AFFIXED TO THIS DOCUMENT.
2. ALL ROADWAY CONSTRUCTION SHALL CONFORM TO CURRENT DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
3. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE CITY OF LONE TREE ENGINEERING DIVISION. THE CITY RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS STANDARDS AND SPECIFICATIONS.
4. THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS, INSPECTION SECTION, (303) 662-8112, A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO STARTING CONSTRUCTION, AND/OR BEFORE RESTARTING CONSTRUCTION AFTER A SHUTDOWN OF MORE THAN 10 DAYS.
5. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ACTUAL CONSTRUCTION. FOR INFORMATION, CONTACT: UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT (800) 922-1987 OR 811
6. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY (SIGNED BY BOTH DESIGN ENGINEER AND CITY OF LONE TREE) OF THE CONSTRUCTION PLANS AND GESC REPORT AND PLAN, AND ONE (1) COPY OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS AT THE JOB SITE AT ALL TIMES.
7. ALL PROPOSED STREET CUTS TO EXISTING PAVEMENTS FOR UTILITIES, STORM SEWER, OR OTHER PURPOSES ARE LISTED AND REFERENCED BELOW:

   RIDGEGATE PARKWAY

8. A ROW/CONSTRUCTION PERMIT MUST BE OBTAINED BEFORE ANY WORK WITHIN EXISTING OR PROPOSED PUBLIC ROW. THE PERMIT APPLICATION MUST BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR REVIEW/PROCESSING A MINIMUM OF 7 DAYS PRIOR TO UPDATED 2-3-09 REQUESTED START FOR THE WORK IN THE ROW.
9. A PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR ACCEPTANCE WITH THE PERMIT APPLICATION. AN EXCAVATION OR PUBLIC IMPROVEMENTS CONSTRUCTION PERMIT WILL NOT BE ISSUED WITHOUT AN APPROVED TRAFFIC CONTROL PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION.
10. THE CONSTRUCTION PLANS SHALL BE CONSIDERED VALID FOR TWO (2) YEARS FROM THE DATE OF CITY OF LONE TREE ACCEPTANCE/APPROVAL IF APPLICABLE CONSTRUCTION PERMITS HAVE NOT BEEN OBTAINED, AND CONSTRUCTION STARTED WITHIN THAT TIME, THESE PLANS SHALL BE VOID AND WILL BE SUBJECT TO RE-REVIEW AND RE-ACCEPTANCE BY THE CITY OF LONE TREE.
11. CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE ENGINEER INSPECTOR WHEN WORKING OUTSIDE OF THE PUBLIC RIGHT-OF-WAY ON ANY FACILITY WHICH WILL BE CONVEYED TO THE CITY, URBAN DRAINAGE AND FLOOD CONTROL DISTRICT, OR OTHER SPECIAL DISTRICT FOR MAINTENANCE (STORM SEWER, ENERGY DISSIPATERS, DETENTION OUTLET STRUCTURES, OR OTHER DRAINAGE INFRASTRUCTURES). FAILURE TO NOTIFY ENGINEERING INSPECTOR TO ALLOW THEM TO INSPECT THE CONSTRUCTION MAY RESULT IN NON-ACCEPTANCE OF THE FACILITIES/INFRASTRUCTURE BY CITY AND/OR URBAN DRAINAGE.

CITY OF LONE TREE SIGNAGE & STRIPING NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MOST RECENT VERSION OF THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE "COLORADO SUPPLEMENTAL MUTCD" AND THE DOUGLAS COUNTY "ROAD AND CONSTRUCTION STANDARDS MANUAL". FURTHER SPECIFICATIONS AND ILLUSTRATIONS ARE LOCATED IN THE COLORADO DIVISION OF HIGHWAYS "M AND S STANDARDS".
2. DELINEATION OF ROADWAYS SHALL BE AS SPECIFIED IN THE COLORADO "M AND S MANUAL".
3. SPECIAL CARE SHALL BE TAKEN IN SIGN LOCATION TO ENSURE AN UNOBSTRUCTED VIEW OF EACH SIGN. STREET NAME SIGNS SHALL BE MOUNTED SO THAT THEY CAN BE SEEN FROM ALL DIRECTIONS OF TRAVEL.
4. INSTALLATION OF SIGNS SHALL CONFORM TO THE MUTCD MOUNTING HEIGHT REQUIREMENTS, INCLUDING A 7-FOOT MINIMUM HEIGHT FROM THE BOTTOM OF THE LOWEST SIGN PANEL TO THE TOP GRADE OF SIDEWALK.
5. ALL NEWLY INSTALLED TRAFFIC SIGNS SHALL MEET THE MINIMUM RETRO-REFLECTIVITY AND ILLUMINATION STANDARDS AS SET FORTH BY THE MUTCD (LATEST EDITION). THESE MINIMUM REQUIREMENTS SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
6. DIAMOND GRADE MATERIAL SHALL BE USED ON ALL STOP SIGNS.
7. THE CONTRACTOR INSTALLING SIGNS IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND UTILITIES. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.
8. FOLLOWING INSTALLATION, THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS DEPARTMENT, 303-662-8112. A FIELD INSPECTION OF LOCATION AND INSTALLATION OF ALL SIGNS SHALL BE PERFORMED BY PUBLIC WORKS. ALL DISCREPANCIES IDENTIFIED DURING THE FIELD INSPECTION MUST BE CORRECTED BEFORE THE TWO-YEAR WARRANTY PERIOD WILL BEGIN.
9. SIGNAGE AND STRIPING HAS BEEN DETERMINED BY INFORMATION AVAILABLE AT THE TIME OF REVIEW.
   PRIOR TO INITIATION OF THE WARRANTY PERIOD, LONE TREE RESERVES THE RIGHT TO REQUIRE MODIFICATIONS TO EXISTING OR INSTALLATION OF ADDITIONAL SIGNAGE AND/OR STRIPING IF THEY DETERMINE THAT AN UNFORESEEN CONDITION WARRANTS SUCH MODIFICATION ACCORDING TO THE MUTCD OR THE CDOT M AND S STANDARDS. ALL SIGNAGE AND STRIPING SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
10. FINAL STRIPING AND CROSSWALK LAYOUT TO BE APPROVED BY THE CITY OF LONE TREE PRIOR TO INSTALLATION. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.
11. CROSSWALKS SHALL:
    BE CONSTRUCTED USING 125 MIL PREFORMED THERMOPLASTIC.
    LINE UP WITH THE HANDICAP RAMPS AT BOTH ENDS.
    BE CENTERED ON LANE LINES SO AS TO BE STRADDLED BY VEHICLES.
12. ALL PAVEMENT MARKINGS SHALL BE AS FOLLOWS:
    FOR CONCRETE SURFACE: METHYL METHACRYLATE OR EPOXY PAINT.
    FOR ASPHALT SURFACE: PAINT, 90 MIL PREFORMED THERMOPLASTIC, INLAID MARKING TAPE, METHYL METHACRYLATE, OR EPOXY PAINT.
    TURN ARROWS AND ONLYS: 125 MIL PREFORMED THERMOPLASTIC.
13. ALL PAVEMENT MARKING SHALL BE PRECEDED BY THE APPROPRIATE SURFACE PREPARATION.
14. ANY SIGNAGE AND/OR OTHER TRAFFIC CONTROL DEVICES REMOVED SHALL BE RETURNED TO THE CITY OF LONE TREE.
15. TYPE III LIGHTED BARRICADES SHALL BE SET AT ENDS OF ROADWAYS, SEPARATING FINISHED AND UNFINISHED CONSTRUCTION AREAS AND WILL BE MAINTAINED BY THE CONTRACTOR/DEVELOPER.

NOTE: ALSO SEE CITY OF LONE TREE "STREET SIGN DETAILS"FOR ADDITIONAL INTERSECTION STREET SIGNAGE REQUIREMENTS.

STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON-GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.

DRAINAGE STRUCTURE NOTES

1. CONCRETE WORK SHALL CONFORM TO ACI 301, ACI 350.
2. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM-615, GRADE 60.
3. ALL EXPOSED CONCRETE SHALL HAVE A CDOT CLASS 2 OR 5 FINISH.
4. ALL EXPOSED CONCRETE CORNERS SHALL HAVE ¾"CHAMFERS.
5. DETAILING, FABRICATION, AND PLACING OF REBAR SHALL BE IN ACCORDANCE WITH ACI 315.
6. CONSTRUCTION TOLERANCES SHALL BE IN ACCORDANCE WITH ACI 347.
7. ALL MANHOLES SHALL BE SLAB BASE UNLESS SPECIFIED OTHERWISE. MANHOLE SHALL BE FABRICATED IN ACCORDANCE WITH CDOT STANDARD M-604-20.
8. COORDINATES FOR MANHOLES AND AREA INLETS ARE SHOWN AT THE CENTER OF THE STRUCTURE. COORDINATES FOR MOUNTABLE CURB INLETS ARE SHOWN ALONG THE FLOWLINE AT CENTER OF THE STRUCTURE.
9. ALL TYPE C AND D INLETS SHALL HAVE CLOSE MESH GRATES UNLESS SPECIFIED OTHERWISE.
10. LENGTH OF FABRICATED BAR GRATING PANELS IS LENGTH OF BEARING BARS, WIDTH REFERS TO DIMENSION PERPENDICULAR TO BEARING BARS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PANEL DIMENSIONS GIVEN PRIOR TO FABRICATION.

DRAINAGE GENERAL NOTES

1. PROJECT FACILITIES ARE TO BE LOCATED BASED ON THE SURVEY COORDINATES, ELEVATIONS, DIMENSIONS, AND/OR GEOMETRIC DESIGN DATA PROVIDED ON THE DRAWINGS.
2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES AND FOR SATISFYING ALL APPLICABLE OSHA, FEDERAL, STATE, AND LOCAL REGULATIONS. TEMPORARY EXCAVATIONS SHALL PROVIDE, AT MINIMUM, THE TRENCH DIMENSIONS AND CLEARANCES SHOWN OR SPECIFIED. TEMPORARY CONSTRUCTION SLOPES SHALL BE SLOPED, SHORED, SHEETED, AND/OR BRACED IN ACCORDANCE WITH STABILITY REQUIREMENTS AND APPLICABLE REGULATIONS, AND SHALL BE NO STEEPER THAN THE SLOPES SHOWN OR SPECIFIED WITHOUT THE APPROVAL OF THE ENGINEER. ANY SUCH APPROVALS BY THE ENGINEER WILL NOT RELIEVE THE CONTRACTOR FROM SOLE RESPONSIBILITY FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES.
3. EXISTING FACILITIES NOT INDICATED TO BE REMOVED SHALL BE PROTECTED IN PLACE OR REMOVED AND REPLACED IN KIND, AS APPROVED BY ENGINEER.
4. THE WORK WILL TAKE PLACE IN AND AROUND DRAINAGE SWALES AND THE HAPPY CANYON CREEK, SUBJECT TO PERIODIC FLOODING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF SURFACE AND SUBSURFACE WATER DURING THE COURSE OF THE WORK. ANY DAMAGE TO THE WORK RESULTING FROM SURFACE FLOWS, BASE FLOWS, OR FLOOD FLOWS INCLUDING BUOYANCY FORCES ON PIPELINES AND OTHER FACILITIES SHALL BE CORRECTED BY THE CONTRACTOR AT THE CONTRACTOR'S SOLE COST. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND SATISFYING THE REQUIREMENTS OF ANY APPLICABLE PERMITS PERTAINING TO WATER AND EROSION CONTROL.
5. CONTACT THE ENGINEER FOR CLARIFICATIONS OF ANY ABBREVIATIONS SHOWN ON THE DRAWINGS.
6. THE SITE WHERE THE WORK IS TO BE PERFORMED SHALL BE OVERLOT GRADED. TOPSOIL SHALL BE SPREAD IN OPEN SPACE AREAS TO A DEPTH OF APPROXIMATELY 6-INCHES. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED, AND SOME AREAS COVERED WITH EROSION CONTROL BLANKETS, UNLESS OTHERWISE DIRECTED IN THE PLANS OR BY THE ENGINEER. CARE SHALL BE TAKEN TO AVOID DISTURBING ANY OPEN SPACE AREAS EXCEPT THE MINIMUM NECESSARY TO PERFORM THE WORK. TOPSOIL IN ANY WORK AREAS OR ACCESS ROADS WITHIN THE OPEN SPACE SHALL BE STRIPPED AND STOCKPILED PRIOR TO THE WORK, PROTECTED FROM MIXING WITH ANY OTHER MATERIALS DURING THE WORK, AND REPLACED TO A LOOSE DEPTH OF 7- TO 8- INCHES (FINAL DEPTH AFTER SETTLEMENT SHALL BE 6- INCHES MINIMUM) AS THE WORK IS BEING COMPLETED. WHERE BLANKETS EXIST, THE MINIMUM AREA OF BLANKET TO ALLOW WORK TO PROGRESS SHALL BE REMOVED AND THEN THE REMOVED OR NEW BLANKET REPLACED AFTER UNDERLYING WORK IS COMPLETE (EXCEPT NO TEMPORARY BLANKET NEEDS TO BE REPLACED OVER ROCK OR COIR BLANKET SHOWN IN THE PLANS). JUST PRIOR TO REPLACEMENT OF TOPSOIL AFTER UNDERLYING WORK IS COMPLETE AND APPROVED, THE UNDERLYING SUBGRADE IN OPEN SPACE AREAS SHALL BE LOOSENED BY TILLING TO A DEPTH OF 12- INCHES UNTIL CLODS ARE NO LARGER THAN 3 INCHES, AND APPROVED BY THE ENGINEER. THIS NOTE ALSO APPLIES TO AREAS WHERE COIR MAT IS TO BE INSTALLED.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ANY COMPLETED WORK FROM DISTURBANCE OR DAMAGE DURING THE COURSE OF THE WORK. IF REQUESTED BY THE CONTRACTOR AND APPROVED BY THE OWNER, SIGNIFICANT COMPLETED SECTIONS OF THE WORK MAY BE ACCEPTED AS FINAL PRIOR TO THE COMPLETION OF THE ENTIRE PROJECT. ANY SUCH EARLY ACCEPTANCE WILL NEED TO BE IN WRITING BY THE ENGINEER AND OWNER AND THOSE PORTIONS OF THE WORK SHALL BE PROTECTED BY THE CONTRACTOR AGAINST VEHICLES RUNNING OVER THE AREA BY ENCIRCLING THE WORK WITH FLAGGING OR FENCING OR BY OTHER MEANS AGREED TO BY THE OWNER AND MAINTAINED BY THE CONTRACTOR UNTIL THE END OF THE PROJECT.
8. ALL FINE GRADING REQUIRED TO CONSTRUCT DRAINAGE IMPROVEMENTS AND PROVIDE FINISHED GRADES ADJACENT TO IMPROVEMENTS SHALL BE DONE BY THE DRAINAGE CONTRACTOR AND SHALL BE CONSIDERED PART OF THE WORK, AND NOT PAID FOR SEPARATELY.

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	N/A
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
15950001GENERAL NOTES - GN PA 14

SHEET 162 OF 270
JOB NO. 15950.01

LAYER LINETYPE LEGEND

	EXISTING	PROPOSED
PHASE LINE		
MATCH LINE		
SECTION LINE		
BOUNDARY LINE		
PROPERTY LINE		
EASEMENT LINE		
RIGHT OF WAY		
R.O.W. A LINE	A	A
CENTERLINE		
CITY LIMITS		
WIRE FENCE		
CHAIN LINK FENCE		
WOOD FENCE		
MASONRY FENCE		
GUARDRAIL		
CONC. BARRIER		
CABLE TV	TV	TV
ELECTRIC	E	E
FIBER OPTIC	FO	FO
GAS MAIN	G	G
IRRIGATION MAIN	IRR	IRR
OIL/PETRO. MAIN	O	O
OVERHEAD UTILITY	OHU	OHU
SANITARY SEWER	S	
STORM DRAIN		
TELEPHONE	T	T
WATER MAIN	W	
RAW WATER LINE	RWL	RWL
SWALE/WATERWAY FLOWLINE		
DIVERSION DITCH		
DIVERSION CHANNEL		
MAJOR DRAINAGE BASIN		
MINOR DRAINAGE BASIN		
TOP OF SLOPE		
TOE OF SLOPE		
EDGE OF WATER		
INDEX CONTOUR	6100	6100
INTERMEDIATE CONTOUR		
DEPRESSION CONT. (INDEX)	6100	6100
DEPRESSION CONT. (INTER)		
TOP OF CUTS		
TOE OF FILLS		
CUT AND FILL LINE		C/F
SILT FENCE	SF	SF
100 YEAR FLOODPLAIN	100YR	100YR
500 YEAR FLOODPLAIN	500YR	500YR
FLOODWAY	FLDWY	FLDWY
BASE FLOOD ELEVATION		
EDGE OF WETLANDS		
STONE WALL		

UTILITIES LEGEND

	EXISTING	PROPOSED
STORM SEWER		
MANHOLE		
STORM INLET		
AREA INLET – SQUARE		
AREA INLET – ROUND		
FLARED END SECTION		
RIPRAP		
SANITARY SEWER		
LINE MARKER	Mkr San	
SERVICE MARKER		
CLEAN–OUT		
MANHOLE W/ DIRECTIONAL FLOW ARROW		
WATER LINE		
LINE MARKER	Mkr W	
SERVICE MARKER		
FIRE HYDRANT		
FIRE CONNECTION		
MANHOLE		
BEND		
BLOW–OFF VALVE		
WELL	WELL	WELL
METER		
VALVE		
REDUCER		
THRUST BLOCK		
CROSS		
PLUG W/ THRUST BLOCK		
TEE		
REVERSE ANCHOR		
ANODE		
AIR & VACUUM VALVE ASSEMBLY		
TRANSMISSION BLOW–OFF ASSEMBLY		
GAS LINE		
MARKER	Mkr G	
SERVICE MARKER		
METER		
VALVE		
PLUG		
TEE		
DRY UTILITIES		
CABLE TV MARKER	Mkr TV	
CABLE TELEVISION PEDESTAL		
ELECTRIC MARKER	Mkr E	
ELECTRIC SERVICE MARKER		
ELECTRICAL PEDESTAL		
ELECTRICAL METER		
ELECTRICAL MANHOLE		
FIBER–OPTIC MARKER	Mkr FO	
IRRIGATION PEDESTAL		
TELEPHONE MARKER	Mkr T	
TELEPHONE PEDESTAL		
TELEPHONE MANHOLE		
UTILITY POLE		
GUY ANCHOR		
GUY POLE		
MISC. UTILITIES		
VENT PIPE	VP	VP
TEST HOLE DESIGNATOR	THE FIRM AGENCY	

MONUMENTATION LEGEND

ALUMINUM CAP – FOUND	AC
BRASS CAP – FOUND	BC
BENCHMARK – FOUND	
CROSS – FOUND	
MONUMENT – SET	
MONUMENT – FOUND (DEFAULT)	
MONUMENT – FOUND (ALTERNATE 1)	
MONUMENT – FOUND (ALTERNATE 2)	
MONUMENT – FOUND (ALTERNATE 3)	
MONUMENT – FOUND (ALTERNATE 4)	
MONUMENT – FOUND (ALTERNATE 5)	
MONUMENT – FOUND (ALTERNATE 6)	
MONUMENT – FOUND (ALTERNATE 7)	
NAIL & WASHER – FOUND	NAIL & WASHER
PANEL – FOUND	
PK NAIL – FOUND	PK NAIL
ROW MONUMENT – FOUND	
ROW MARKER – FOUND	
SECTION CORNER – FOUND	
SECTION CORNER – SET	
QUARTER–SECTION CORNER – FOUND	
QUARTER–SECTION CORNER – SET	
SECTION CENTER – FOUND	
SECTION CENTER – FOUND	
CONTROL/TRAVERSE POINT – SET	

TRAFFIC LEGEND

	EXISTING	PROPOSED
PARKING METER		
TRAFFIC SIGNAL BOX		
TRAFFIC SIGNAL POLE		
TRAFFIC SIGNAL		
BARRICADE		
GUARD RAIL POST		
IMPACT ATTENUATOR		
BRIDGE STYLE HIGHWAY SIGN POST		
CANTILEVER STYLE HIGHWAY SIGN POST		
SIGN		
RAILROAD MARKER/SIGN		
STREET LIGHT		
STREET LIGHT – SINGLE		
STREET LIGHT – DOUBLE		
LUMINAIRE		
ALTERNATE LUMINAIRE		
SIGNAL MAST ARM W/ LUMINAIRE		
PEDESTAL POLE FOUNDATION		
TRAFFIC SIGNAL POLE		
ROUND PULL BOX		
MEDIUM PULL BOX		
LARGE PULL BOX (20X33X15)		
SIGNAL HEAD WITHOUT BACK PLATE		
SIGNAL HEAD WITH BACK PLATE		
PEDESTRIAN SIGNAL HEAD		
VIDEO IMAGE DETECTOR		
OPTICOM DETECTOR		
VEHICLE DETECTION ZONE		V

STORM WATER MANAGEMENT

	KEY	SYMBOL
CHECK DAM	CD	
CONSTRUCTION ROAD STABILIZATION	CRS	
CURB SOCK INLET PROTECTION	CS	
CONCRETE WASHOUT AREA	CWA	
DIVERSION DITCH AND DIKE, TEMPORARY	DD	
DIVERSION CHANNEL, TEMPORARY	DV	
DEWATERING	DW	
EROSION CONTROL BLANKET	ECB	
INLET FILTER	IF	
INLET PROTECTION	IP	
MULCHING	MU	
OUTLET PROTECTION	OP	
PAVED FLUME	PF	
PERMENENT SEEDING	PS	
REINFORCED CONCRETE DAM	RCD	
ROUGH CUT STREET CONTROL	RCS	
SEDIMENT BASIN	SB	
SEDIMENT CONTROL LOG	SCL	
SILT FENCE	SF	
SURFACE ROUGHENING	SR	
STABILIZED STAGING AREA	SSA	
SEDIMENT TRAP	ST	
STRAW BALE BARRIER	STB	
TERRACING	TER	
TEMPORARY SEEDING	TS	
TEMPORARY STREAM CROSSING CULVERT/BRIDGE	TSC C	
TEMPORARY STREAM CROSSING FORD TYPE	TSC F	
TEMPORARY SLOPE DRAIN	TSD	
VEHICLE TRACKING CONTROL	VTC	
VEHICLE TRACKING CONTROL WITH WASH RACK	WR	

DRAINAGE REPORT PLANS

	KEY
BASIN DESIGNATION (NO COEFFICIENT)	# / #.##
BASIN DESIGNATION (1 COEFFICIENT)	# / #.## / #
BASIN DESIGNATION (2 COEFFICIENTS)	# / #.# / # / #
ANALISYS POINT IDENTIFIER	#
BASIN DESIGNATION (HISTORIC)	# / #-#
BASIN DESIGNATION (DEVELOPED)	# / #.##
SUB–BASIN DESIGNATION (DEVELOPED)	# / ##
DRAINAGE PIPE IDENTIFIER	##
DRAINAGE POINT IDENTIFIER (HEXAGONAL)	##
DRAINAGE POINT IDENTIFIER (TRIANGULAR)	?
SWMM DESIGNATION 1	#
SWMM DESIGNATION 2	#
SWMM DESIGNATION 3	#
SWMM DESIGNATION 4	?

LANDSCAPE LEGEND

	EXISTING	PROPOSED
TREE – CONIFEROUS		
TREE – DECIDUOUS		
SHRUB/BUSH		
SHRUBS AND BUSHES		
IRRIGATION BOX		
IRRIGATION SPRINKLER		
IRRIGATION VALVE		
BOLLARD		
FLAGPOLE	FP	

811 Know what's **below.** **Call** before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED PROFESSIONAL ENGINEER — CHARLES LEE CLUTTER — 36742

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

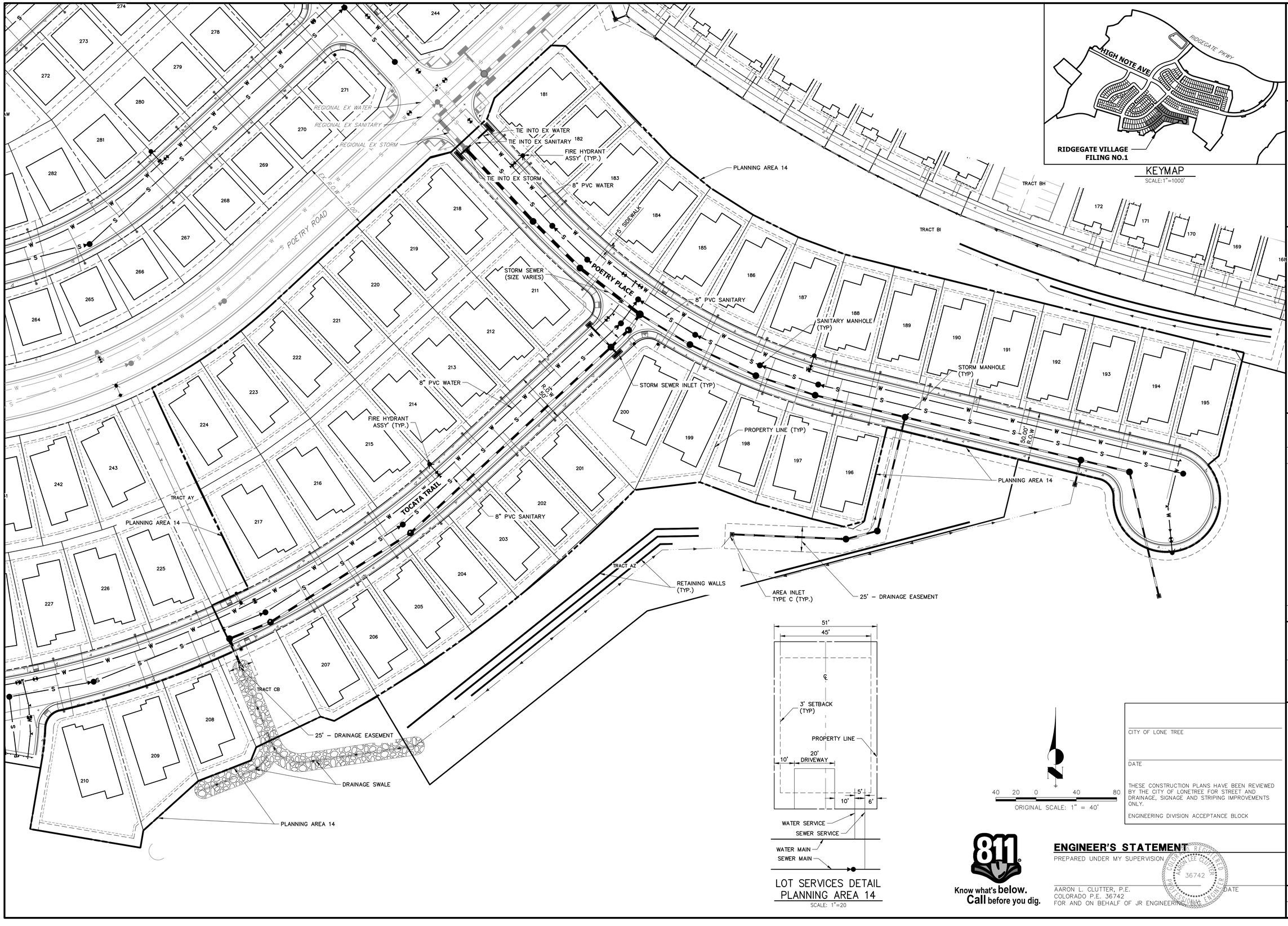
No.	REVISION	BY	DATE

H–SCALE	N/A
V–SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
15950011EGEND – LEGEND
PA 14

SHEET 163 OF 270

JOB NO. 15950.01



LOT SERVICES DETAIL
PLANNING AREA 14
SCALE: 1"=20

40 20 0 40 80
ORIGINAL SCALE: 1" = 40'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

Know what's **below.** **Call** before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

DATE

COLORADO REGISTERED PROFESSIONAL ENGINEER 36742

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

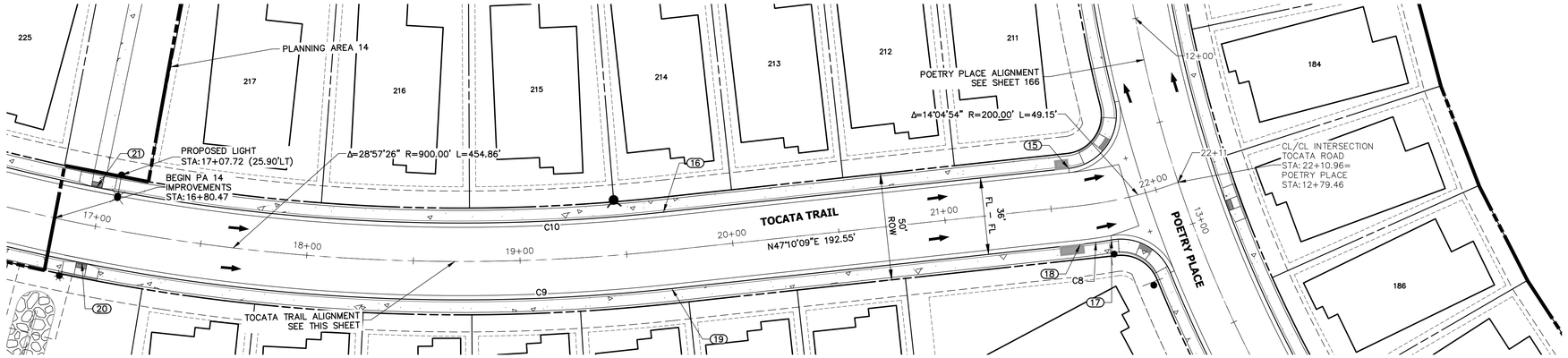
H-SCALE	1"=40'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	ARJ
CHECKED BY	

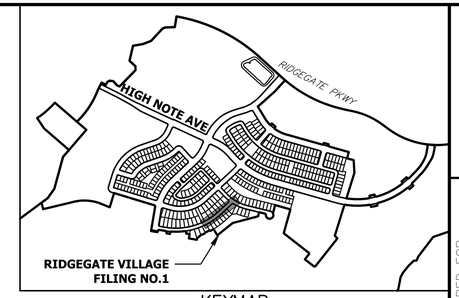
RIDGEGATE SOUTHWEST VILLAGE FILING 1

OVERALL UTILITY PLAN

SHEET 164 OF 270

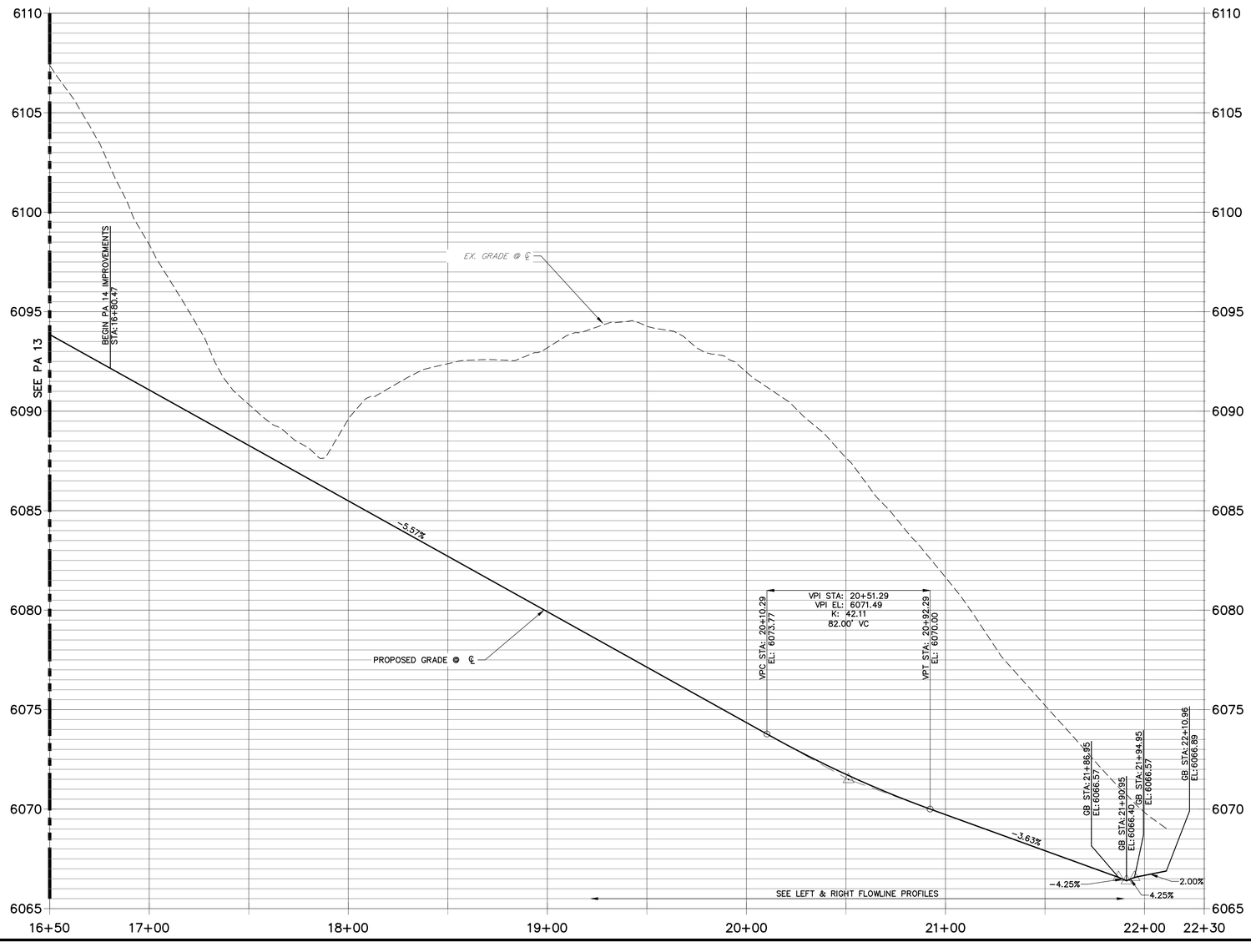
JOB NO. 15950.01

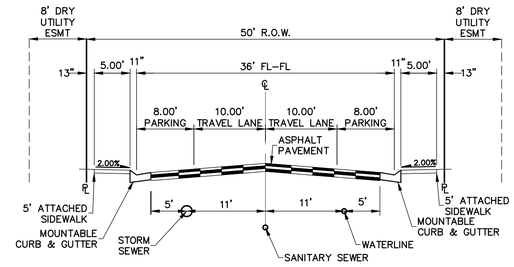




KEYMAP
SCALE: 1"=1000'

TOCATA TRAIL PROFILE
STA 16+50.00 TO 22+30.00





SECTION B–B

E II – TYPICAL 50–FOOT R.O.W. RESIDENTIAL LOCAL STREET WITH ATTACHED SIDEWALK (PUBLIC)
NTS

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
16	19+69.26	18.00' (LT)	TOCATA ROAD	6074.79		PC
17	21+75.37	18.00' (RT)	TOCATA ROAD	6067.99		PCR
18	21+61.81	18.00' (RT)	TOCATA ROAD	6068.18		PCR
19	19+69.26	18.00' (RT)	TOCATA ROAD	6075.33		PC
20	16+97.06	18.00' (RT)	TOCATA ROAD	6090.76		RAMP – MID SECTION
21	16+97.06	18.00' (LT)	TOCATA ROAD	6090.75		RAMP – MID SECTION

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C8	3°53'12"	218.00'	14.79'
C9	29°42'16"	918.00'	475.93'
C10	52°26'56"	882.00'	807.39'

30 15 0 30 60

HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED PROFESSIONAL ENGINEER 36742

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS CONSTRUCTION PLANS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

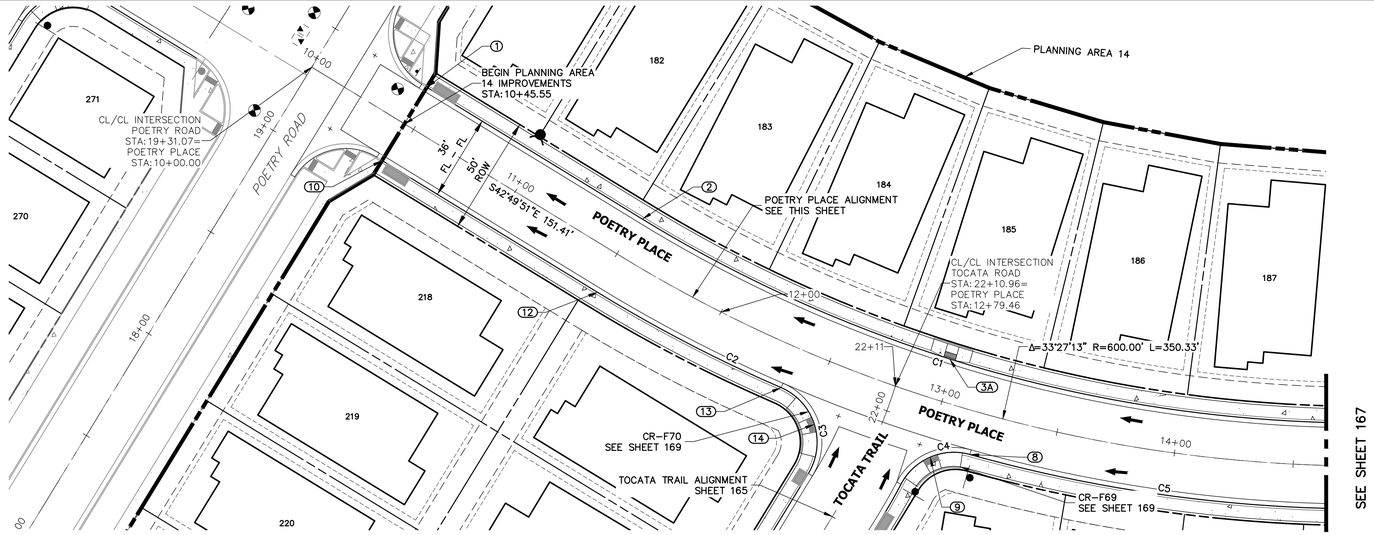
H-SCALE	1" = 30'
V-SCALE	1" = 3'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	ARJ
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

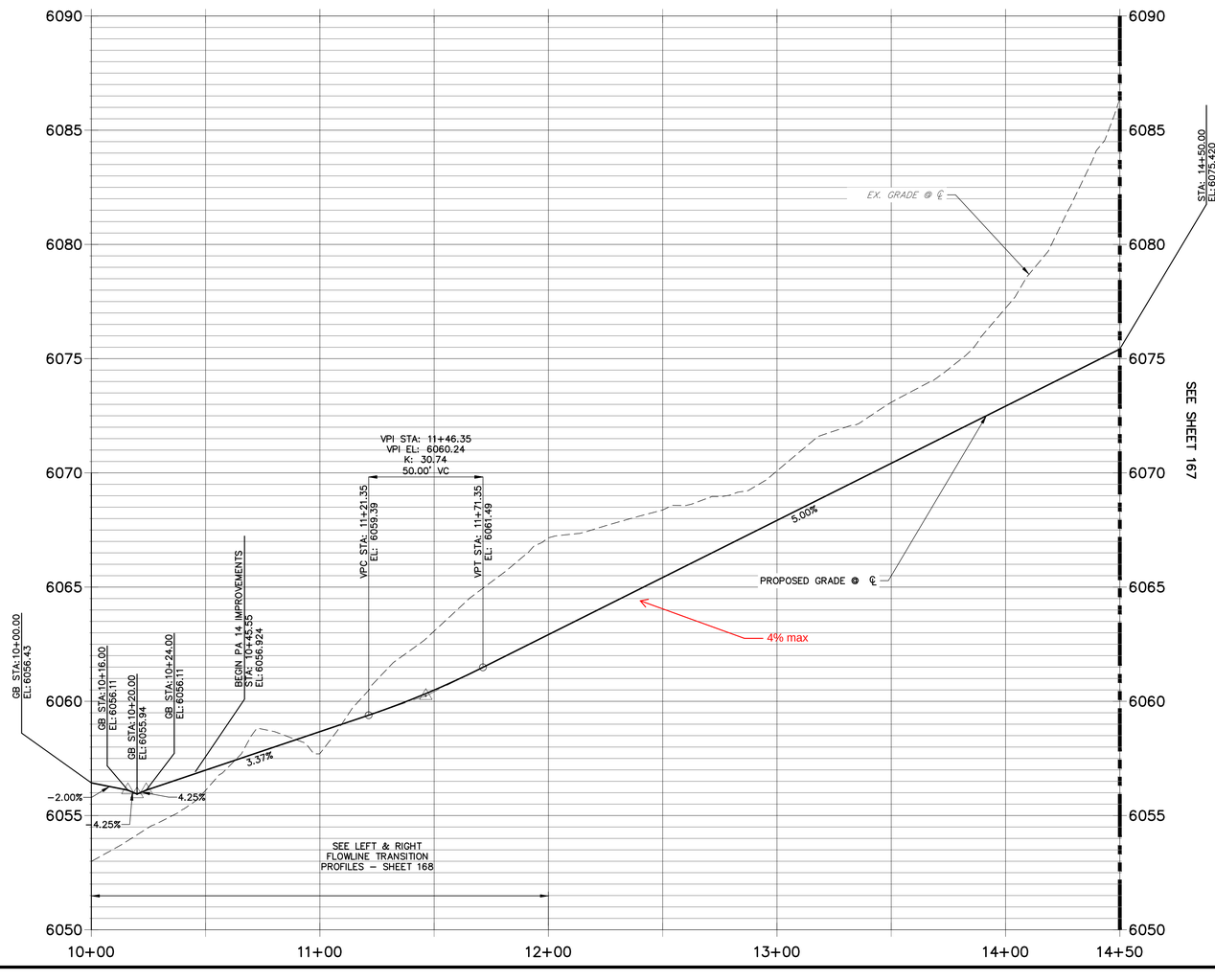
ROADWAY PLAN AND PROFILES

SHEET 165 OF 270

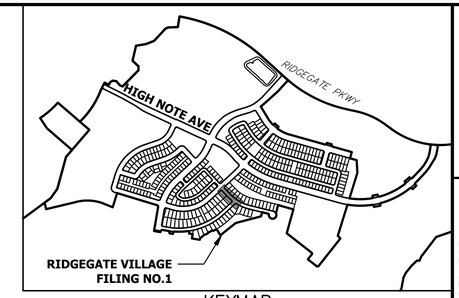
JOB NO. 15950.01



POETRY PLACE PROFILE - 1
STA 10+00.00 TO 14+50.00

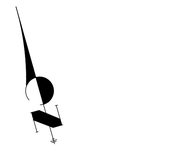


CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C1	33°27'13"	582.00'	339.82'
C2	8°02'57"	618.36'	86.87'
C3	98°03'14"	25.00'	42.78'
C4	78°02'41"	25.00'	34.05'
C5	17°36'42"	618.00'	189.96'
C6	77°48'12"	25.00'	33.95'
C7	257°48'12"	46.00'	206.98'



KEYMAP
SCALE:1"=1000'

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
1	10+45.55	18.00' (LT)	POETRY PLACE	6055.76		FL
2	11+51.41	18.00' (LT)	POETRY PLACE	6059.90		PC
3A	12+97.69	18.01' (LT)	POETRY PLACE	6067.32		RAMP – MID SECTION
3	15+01.74	18.00' (LT)	POETRY PLACE	6077.52		PT
4	18+41.20	18.00' (LT)	POETRY PLACE	6092.75		PC
5	17+96.24	37.72' (RT)	POETRY PLACE	6091.99		PCR
6	17+71.81	18.00' (RT)	POETRY PLACE	6090.88		PT
7	15+01.74	18.00' (RT)	POETRY PLACE	6077.52		PC
8	13+17.31	18.00' (RT)	POETRY PLACE	6068.30		PCR
9	13+02.17	23.78' (RT)	POETRY PLACE	6067.74		RAMP – MID SECTION
10	10+45.55	18.00' (RT)	POETRY PLACE	6057.31		FL
12	11+51.41	18.00' (RT)	POETRY PLACE	6060.32		PC
13	12+35.75	18.00' (RT)	POETRY PLACE	6064.22		PCR
14	12+53.82	26.89' (RT)	POETRY PLACE	6065.49		RAMP – MID SECTION
15	21+60.20	18.00' (LT)	TOCATA ROAD	6066.10		PT



HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE PLANS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

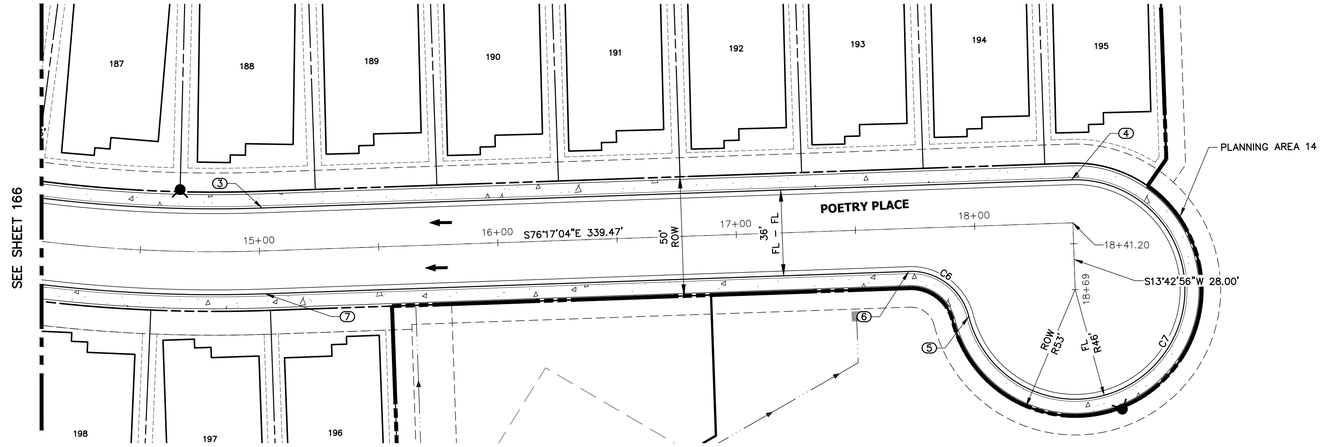
No.	REVISION	BY	DATE

H-SCALE	1" = 30'
V-SCALE	1" = 3'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	ARJ
CHECKED BY	

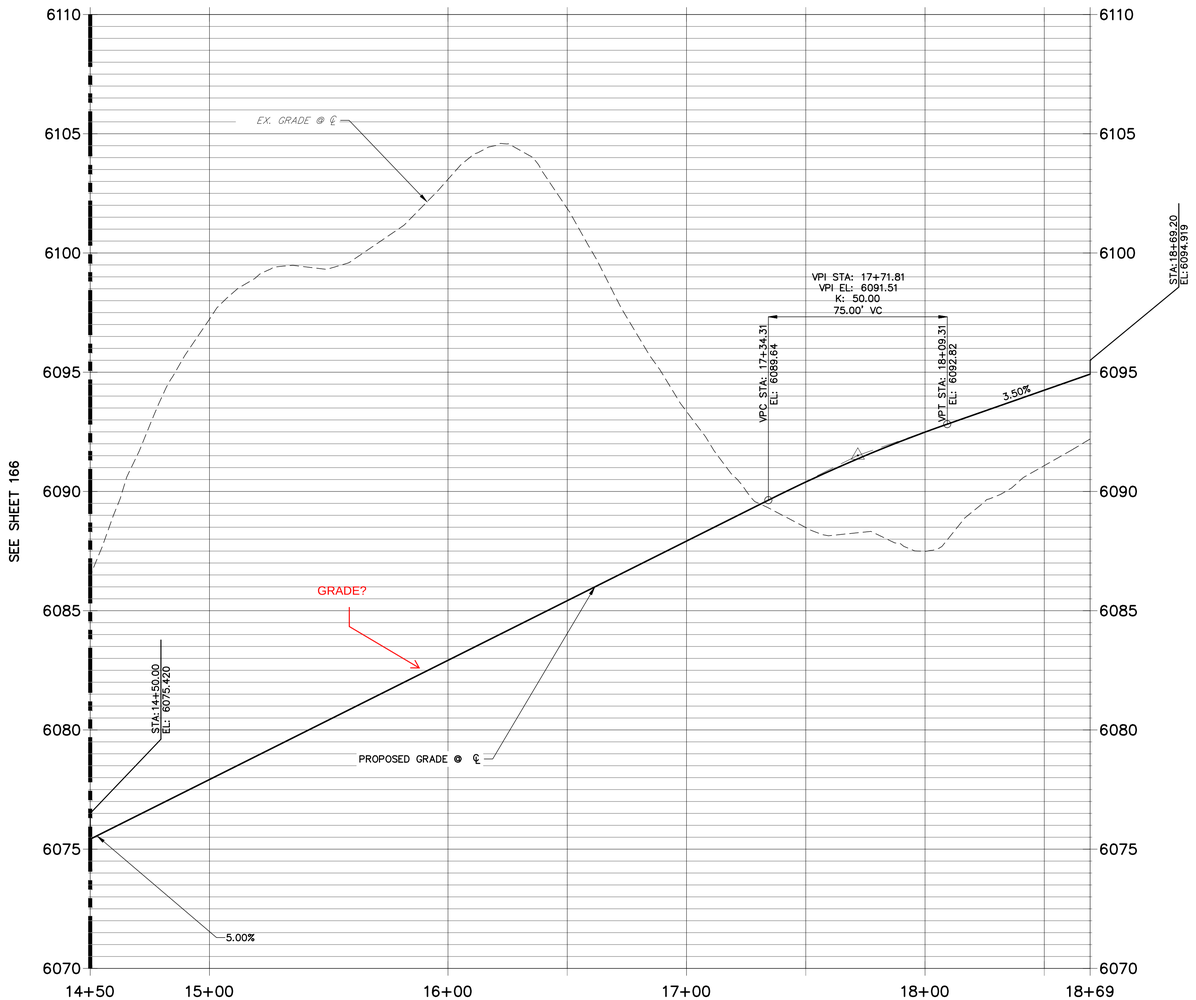
RIDGEGATE SOUTHWEST VILLAGE FILING 1
ROADWAY PLAN AND PROFILES

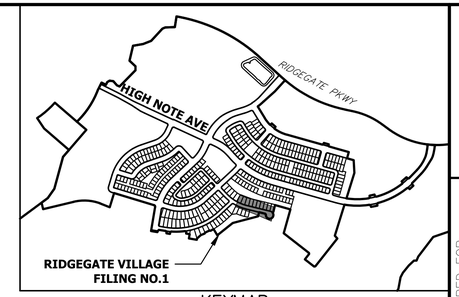
SHEET 166 OF 270

JOB NO. 15950.01



POETRY PLACE PROFILE - 2
STA 14+50.00 TO 18+69.20





KEYMAP
SCALE: 1"=1000'

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
1	10+45.55	18.00' (LT)	POETRY PLACE	6055.76		FL
2	11+51.41	18.00' (LT)	POETRY PLACE	6059.90		PC
3A	12+97.69	18.01' (LT)	POETRY PLACE	6067.32		RAMP – MID SECTION
3	15+01.74	18.00' (LT)	POETRY PLACE	6077.52		PT
4	18+41.20	18.00' (LT)	POETRY PLACE	6092.75		PC
5	17+96.24	37.72' (RT)	POETRY PLACE	6091.99		PCR
6	17+71.81	18.00' (RT)	POETRY PLACE	6090.88		PT
7	15+01.74	18.00' (RT)	POETRY PLACE	6077.52		PC
8	13+17.31	18.00' (RT)	POETRY PLACE	6068.30		PCR
9	13+02.17	23.78' (RT)	POETRY PLACE	6067.74		RAMP – MID SECTION
10	10+45.55	18.00' (RT)	POETRY PLACE	6057.31		FL
12	11+51.41	18.00' (RT)	POETRY PLACE	6060.32		PC
13	12+35.75	18.00' (RT)	POETRY PLACE	6064.22		PCR
14	12+53.82	26.89' (RT)	POETRY PLACE	6065.49		RAMP – MID SECTION
15	21+60.20	18.00' (LT)	TOCATA ROAD	6066.10		PT

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C1	33°27'13"	582.00'	339.82'
C2	8°02'57"	618.36'	86.87'
C3	98°03'14"	25.00'	42.78'
C4	78°02'41"	25.00'	34.05'
C5	17°36'42"	618.00'	189.96'
C6	77°48'12"	25.00'	33.95'
C7	257°48'12"	46.00'	206.98'

30 15 0 30 60
HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

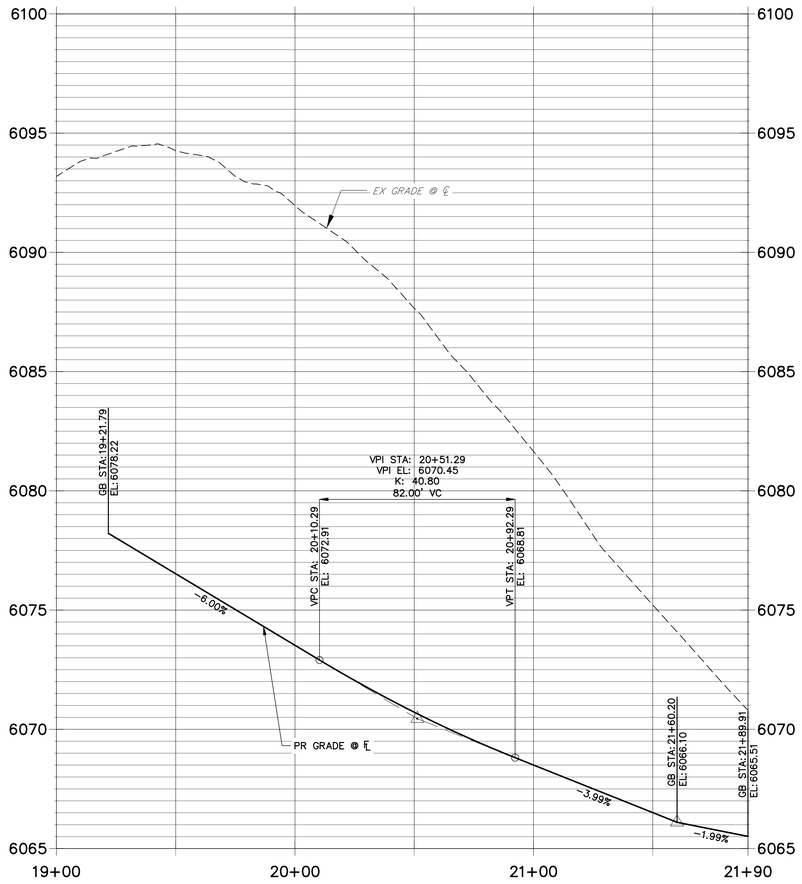
H-SCALE	1" = 30'
V-SCALE	1" = 3'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	ARJ
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
ROADWAY PLAN AND PROFILES

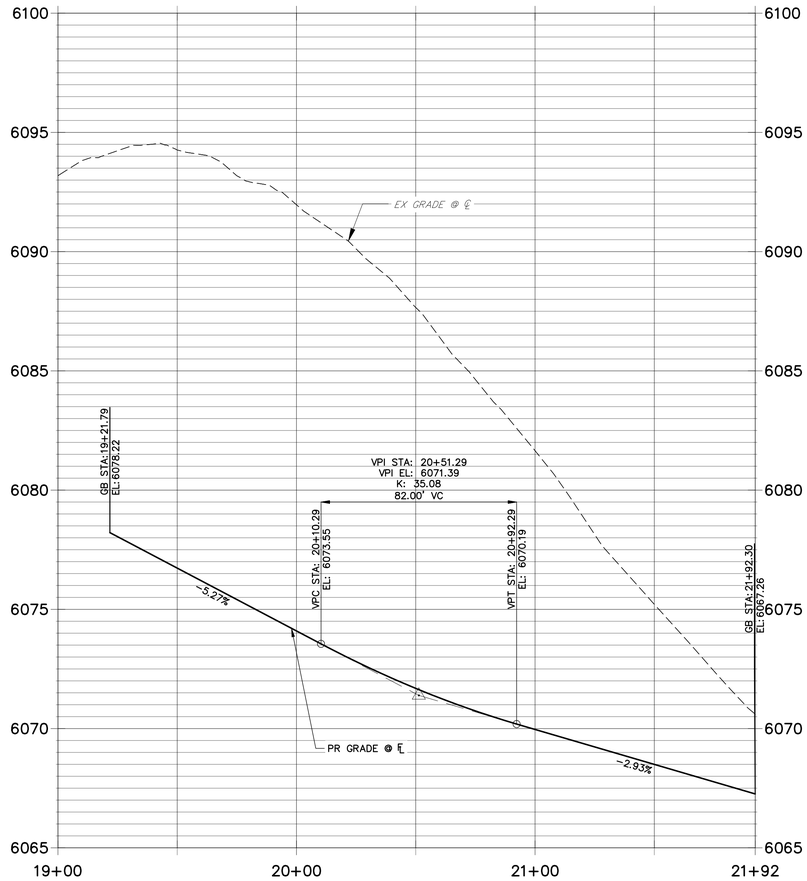
SHEET 167 OF 270

JOB NO. 15950.01

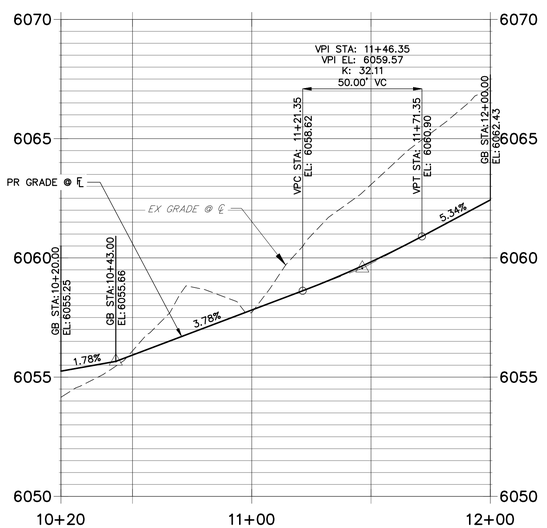
TOCATA TRAIL LEFT FLOW LINE TRANSITION PROFILE
STA 19+00.00 TO 21+89.91



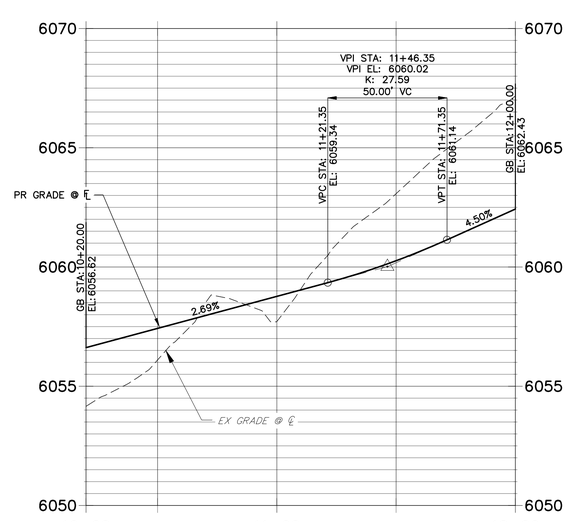
TOCATA TRAIL RIGHT FLOW LINE TRANSITION PROFILE
STA 19+00.00 TO 21+92.30

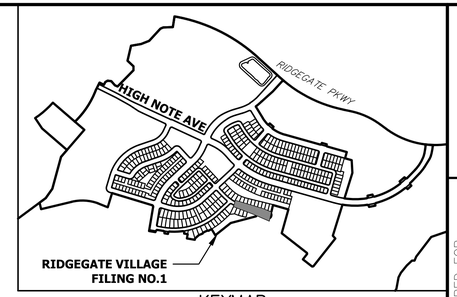


POETRY PLACE LEFT FLOW LINE TRANSITION PROFILE
STA 10+20.00 TO 12+00.00



POETRY PLACE RIGHT FLOW LINE TRANSITION PROFILE
STA 10+20.00 TO 12+00.00





KEYMAP
SCALE:1"=1000'

NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE SHEET 163 FOR LEGEND.
4. SEE SHEET 170 FOR CURB RAMP DETAILS.
5. SEE SHEET 176 FOR SIGNAGE AND STRIPING.
6. ALL CURB RADII ARE 25' UNLESS OTHERWISE NOTED.
7. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.

Know what's below. Call before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

30 15 0 30 60

HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

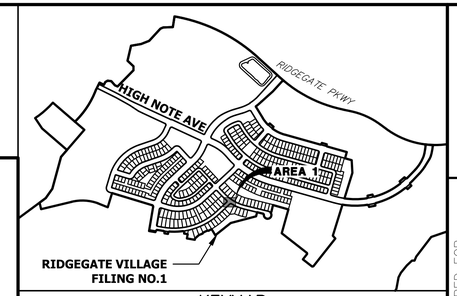
H-SCALE	1" = 30'
V-SCALE	1" = 3'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	ARJ
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

ROADWAY PLAN AND PROFILES

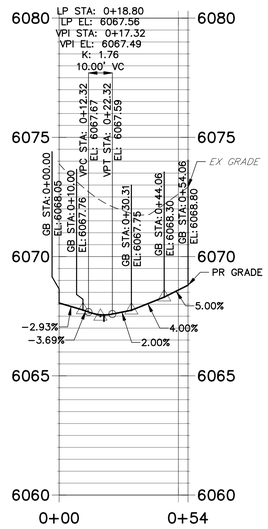
SHEET 168 OF 270

JOB NO. 15950.01



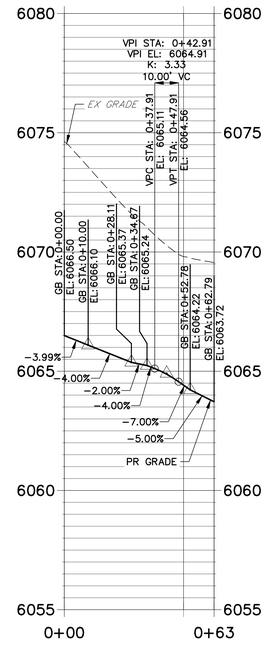
KEYMAP
SCALE: 1"=1000'

F69 PROFILE
STA 0+00.00 TO 0+54.06



AREA 1

F70 PROFILE
STA 0+00.00 TO 0+62.79



AREA 1

30 15 0 30 60
HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

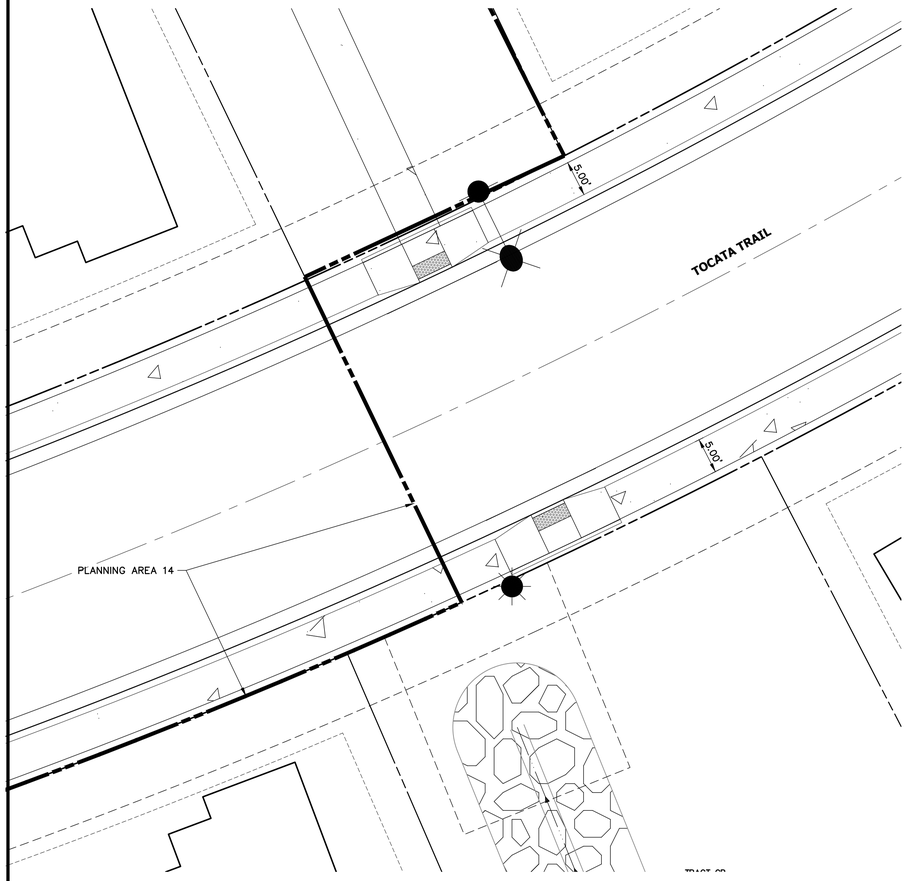
H-SCALE	1" = 30'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

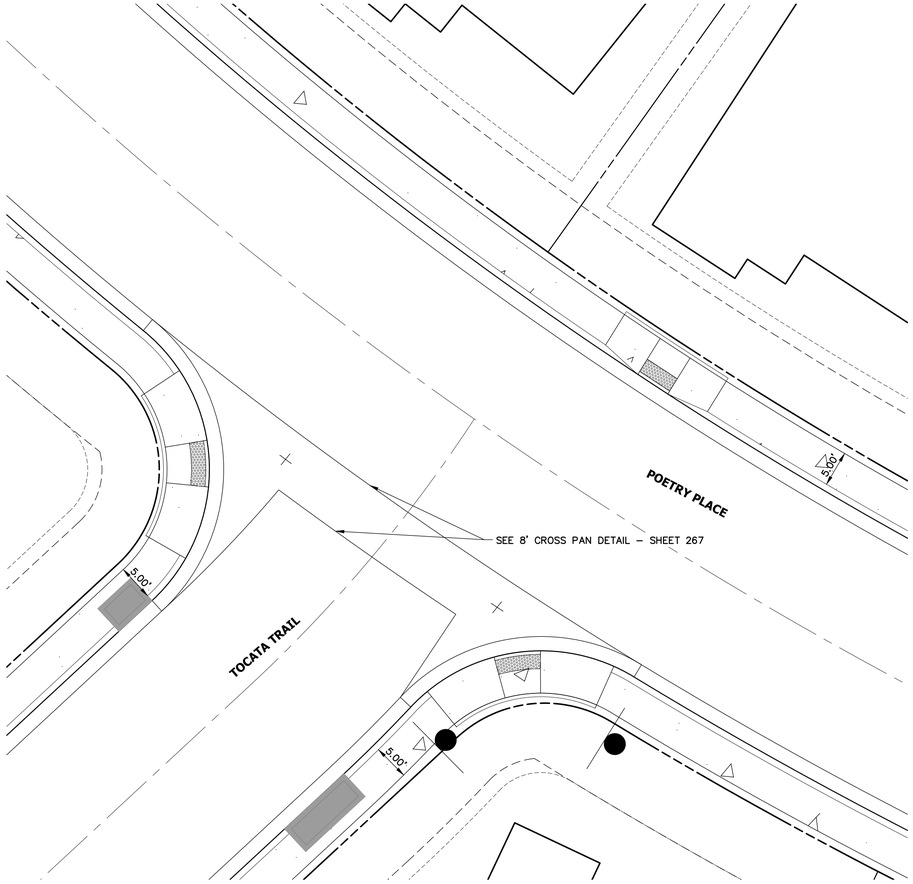
CURB RETURN PROFILES

SHEET 169 OF 270

JOB NO. 15950.01

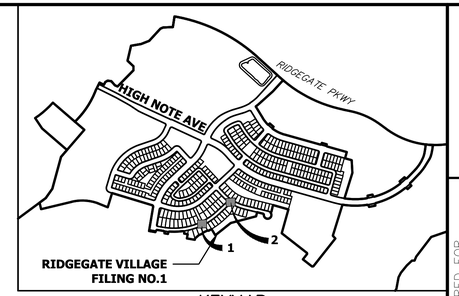


AREA 1

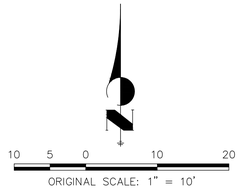


AREA 2

NOTE: CURB RAMP DETAILS TO BE PROVIDED WITH NEXT SUBMITTAL



KEYMAP
SCALE: 1"=1000'



ORIGINAL SCALE: 1" = 10'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

Know what's below. Call before you dig.

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

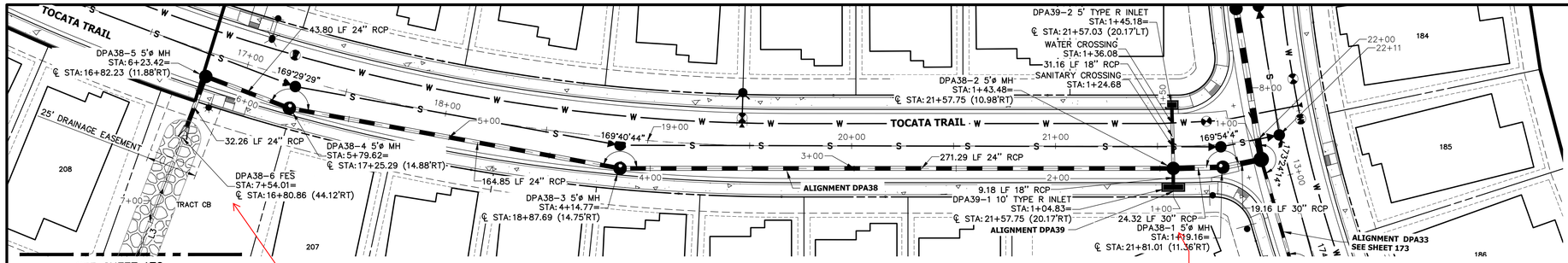
H-SCALE	1"=10'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	ARJ
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

CURB RAMP DETAILS

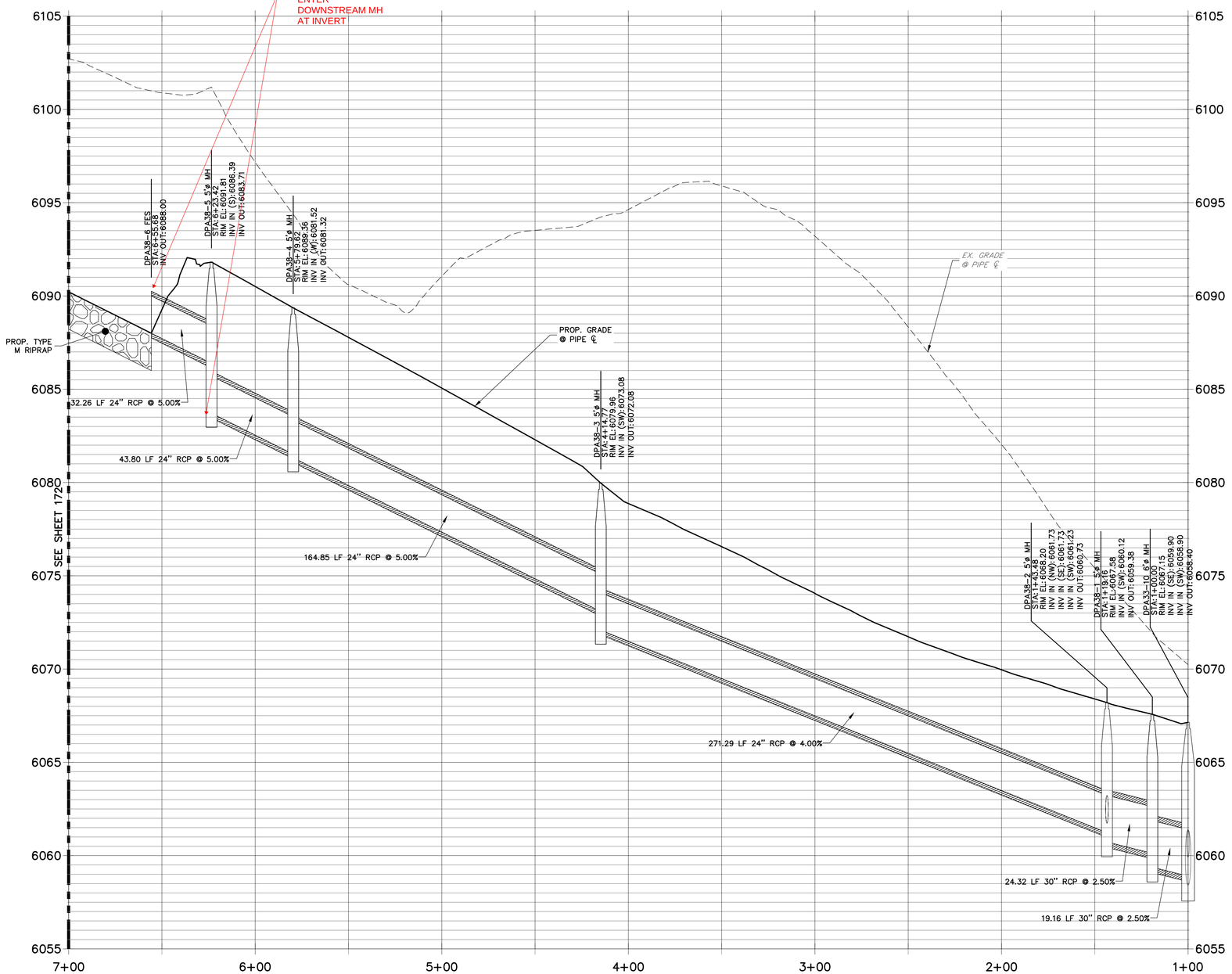
SHEET 170 OF 270

JOB NO. 15950.01

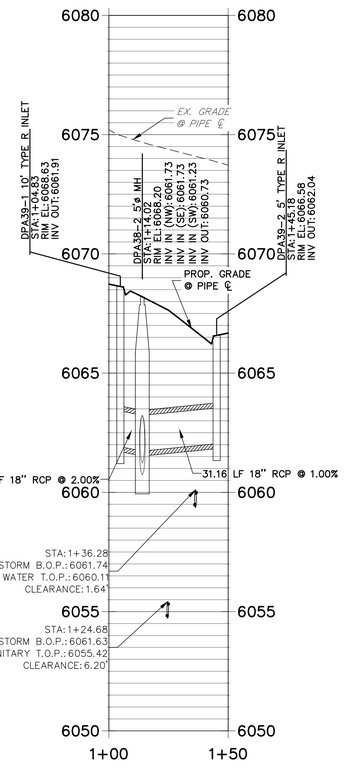


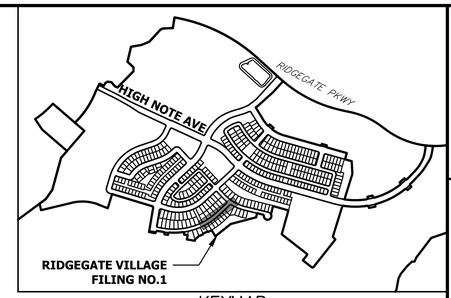
DPA38 PROFILE - 1
STA 1+00.00 TO 7+00.00

CHANGE TO TYPE C OR 13 INLET AND ALIGN PIPE TO ENTER DOWNSTREAM MH AT INVERT

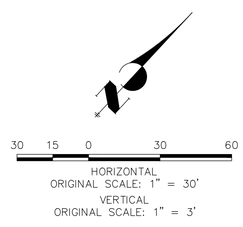


DPA39 PROFILE
STA 1+00.00 TO 1+50.00





KEYMAP
SCALE: 1"=1000'



UNTIL SUCH TIME AS THESE PLANS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=30'	DESIGNED BY	GVT
V-SCALE	1"=3'	DRAWN BY	ARJ
DATE	2/12/21	CHECKED BY	

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

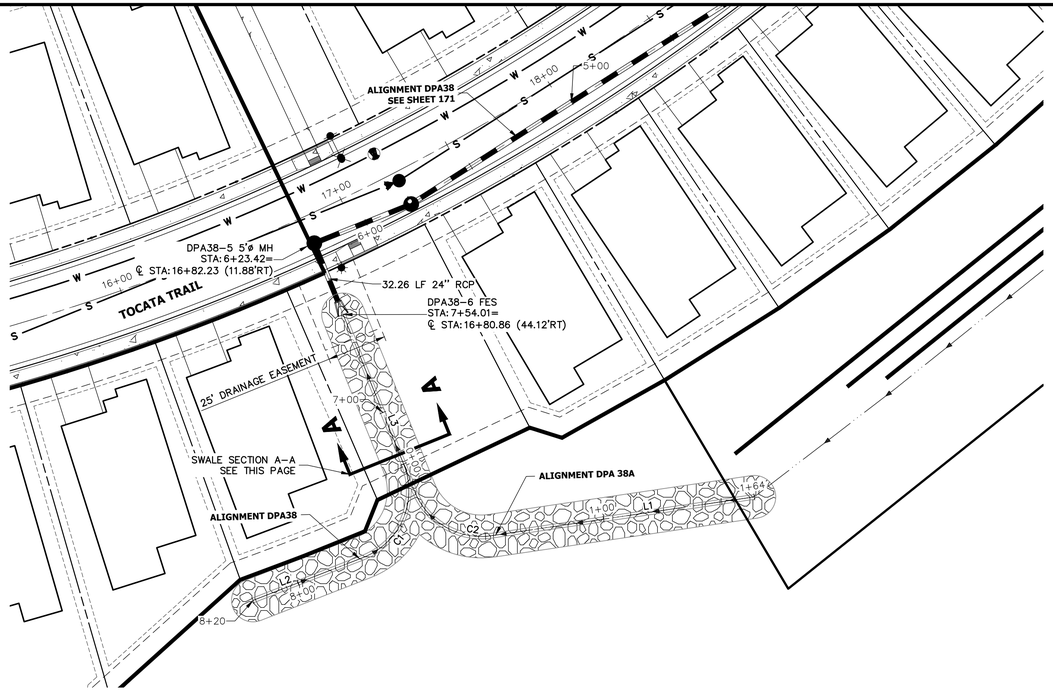
COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

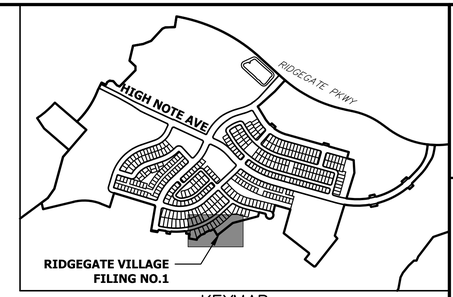
RIDGEGATE SOUTHWEST VILLAGE FILING 1

STORM SEWER PLAN AND PROFILE

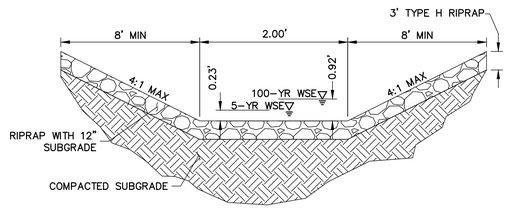
SHEET 171 OF 270

JOB NO. 15950.01



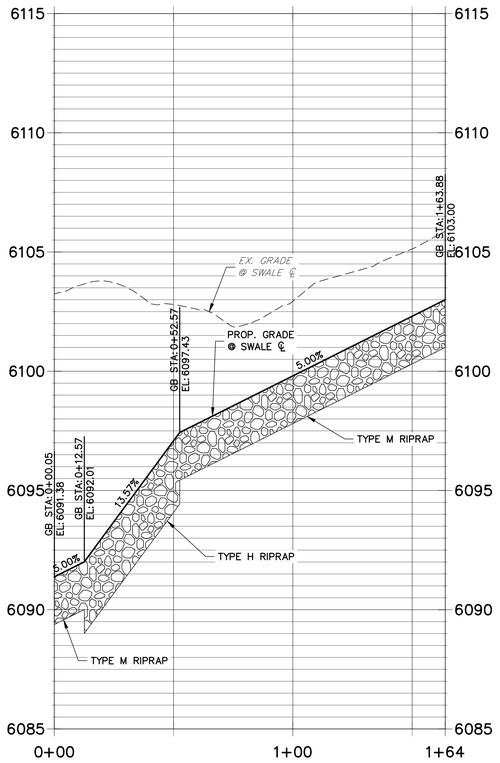


KEYMAP
SCALE: 1"=1000'

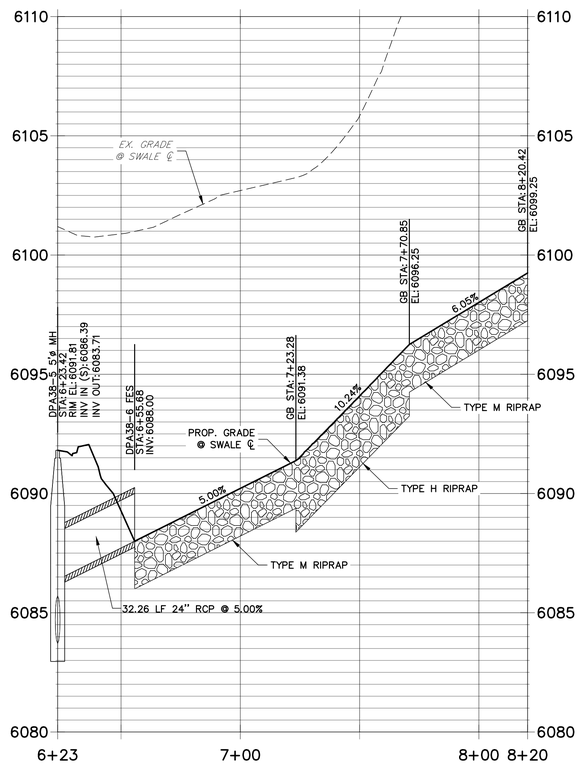


GRASS SWALE A-A
SCALE: NTS
IF SWALE SLOPE EXCEEDS 7% USE TYPE H RIPRAP. OTHERWISE, USE TYPE M RIPRAP.

DPA 38A PROFILE
STA 0+00.00 TO 1+63.88



DPA38 PROFILE -2
STA 6+23.42 TO 8+20.42



CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C1	91°18'04"	29.86'	47.59'
C2	76°22'49"	30.00'	39.99'

LINE TABLE		
LINE	BEARING	DISTANCE
L1	N81°35'20"E	111.31'
L2	S68°43'05"W	49.57'
L3	S22°00'17"E	99.84'

30 15 0 30 60
HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT
PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC
DATE

COLORADO REGISTERED PROFESSIONAL ENGINEER 36742

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

NO.	REVISION	BY	DATE

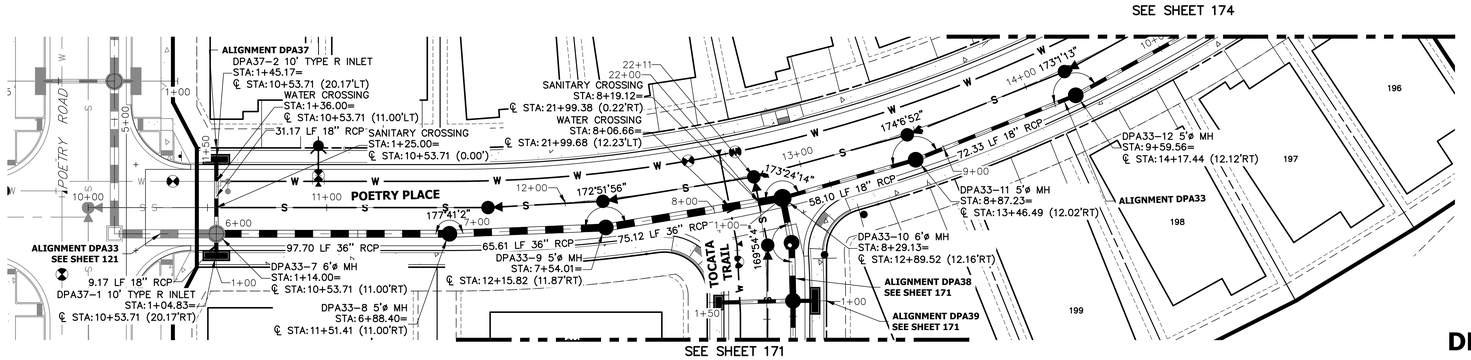
H-SCALE	1" = 30'
V-SCALE	1" = 3'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	ARJ
CHECKED BY	

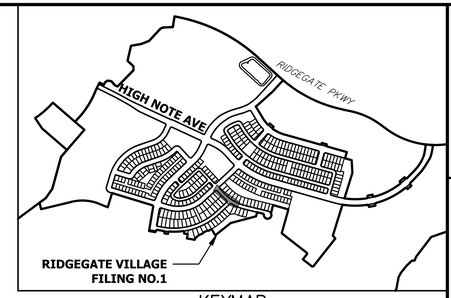
RIDGEGATE SOUTHWEST VILLAGE FILING 1

STORM SEWER PLAN AND PROFILE

SHEET 172 OF 270

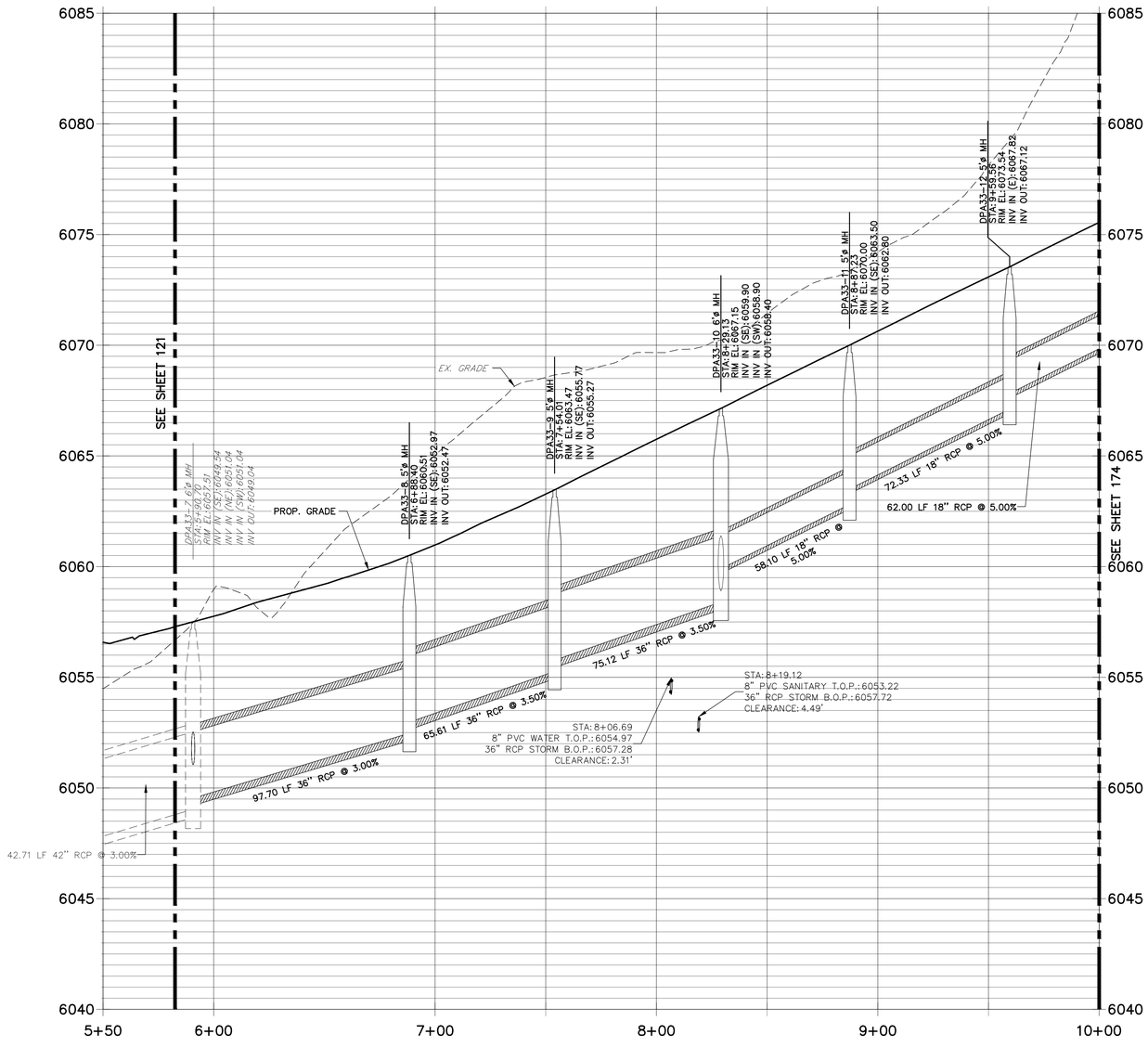
JOB NO. 15950.01



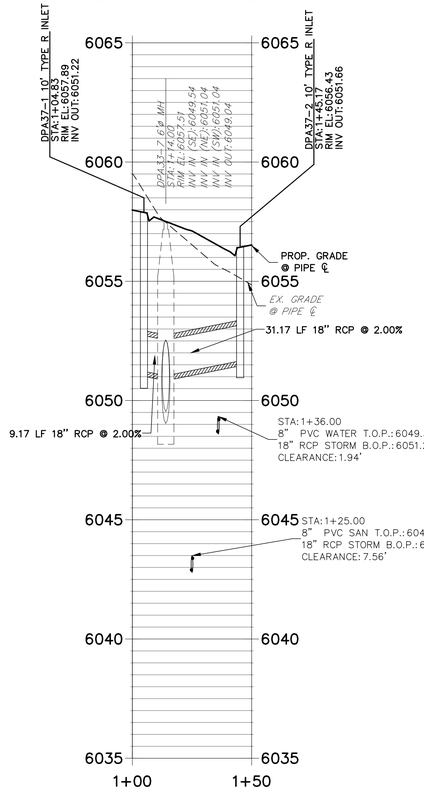


KEYMAP
SCALE:1"=1000'

DPA33 PROFILE - 1
STA 5+50.00 TO 10+00.00



DPA37 PROFILE
STA 1+00.00 TO 1+50.00



30 15 0 30 60

HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

UNTIL SUCH TIME AS USE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

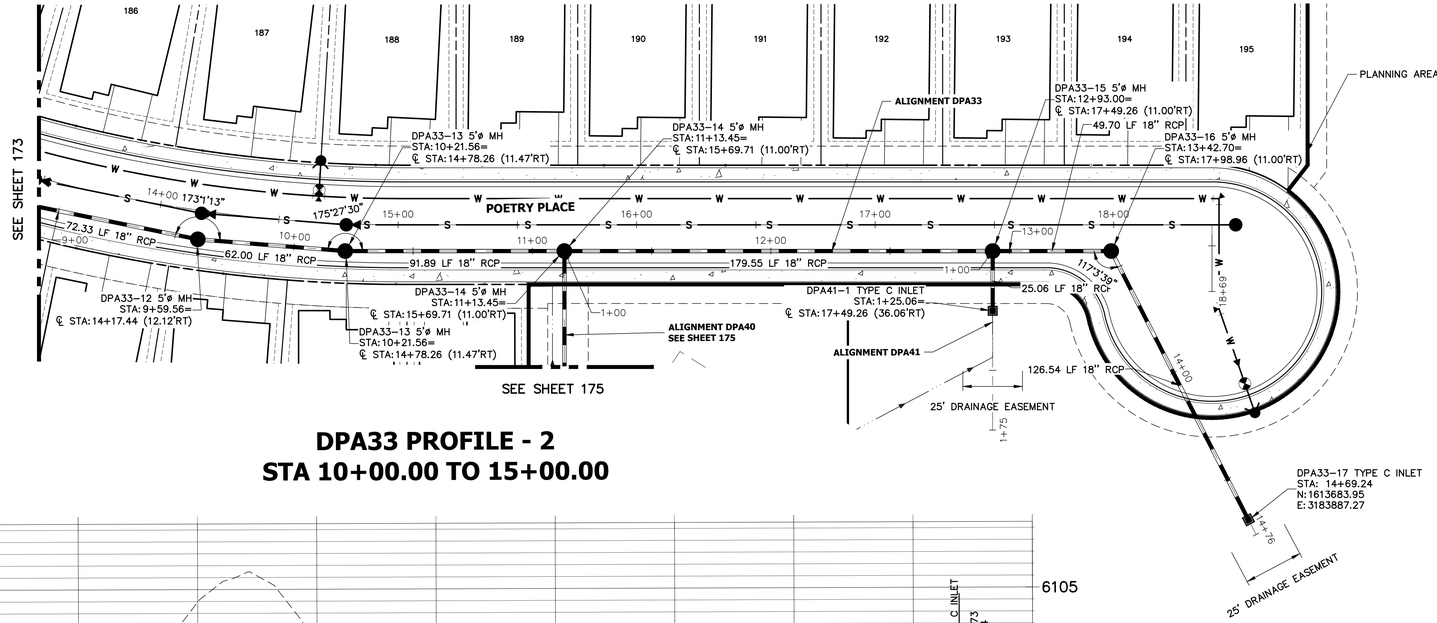
No.	REVISION	BY	DATE

H-SCALE	1" = 30'
V-SCALE	1" = 3'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	ARJ
CHECKED BY	

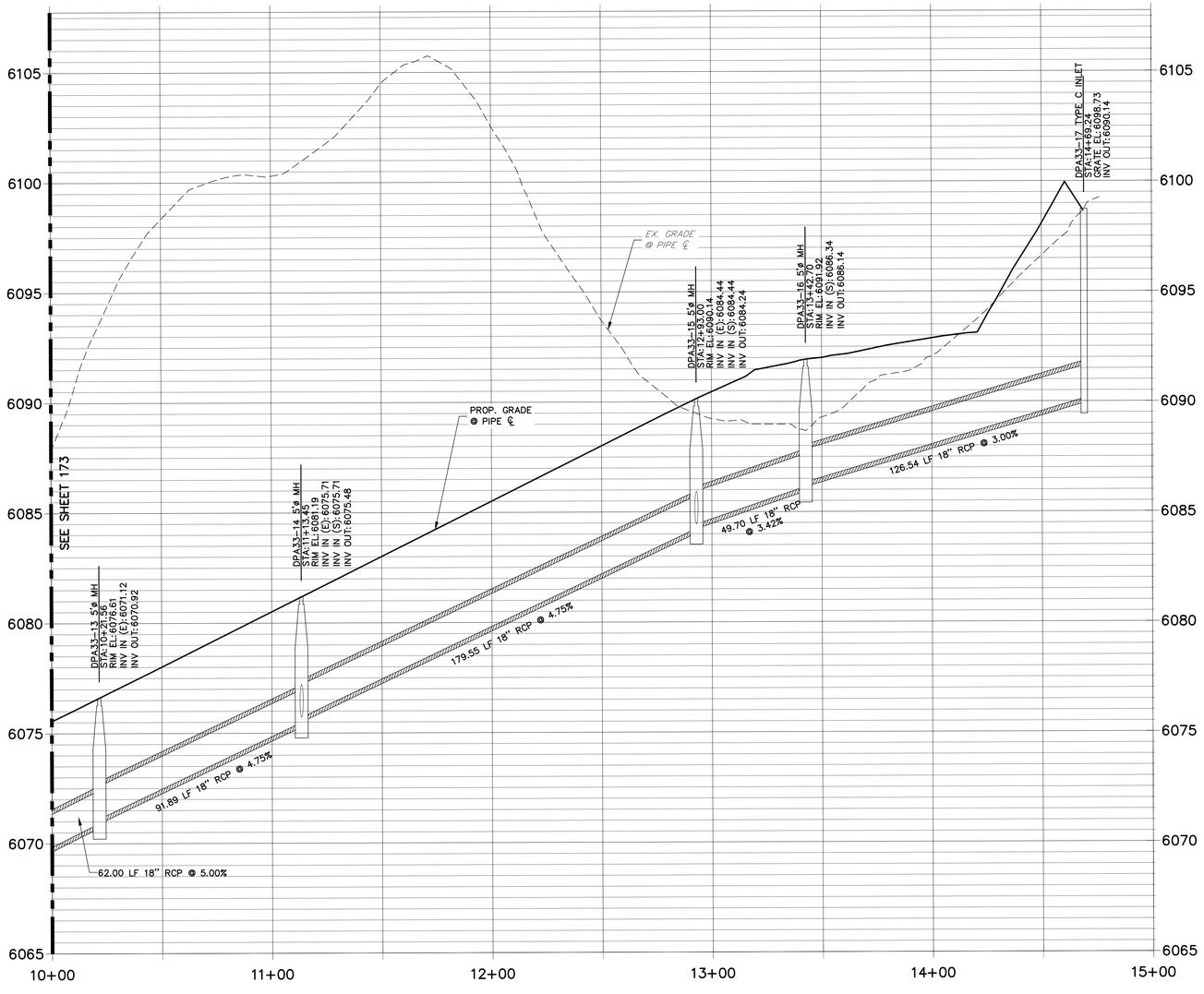
RIDGEGATE SOUTHWEST VILLAGE FILING 1
STORM SEWER PLAN AND PROFILE

SHEET 173 OF 270

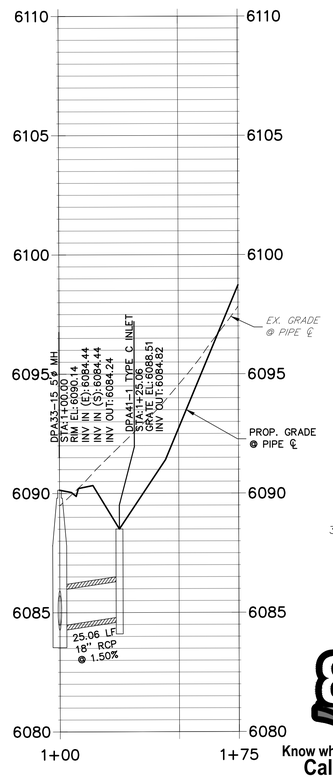
JOB NO. 15950.01

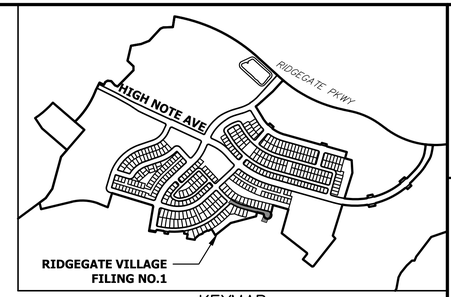


DPA33 PROFILE - 2
STA 10+00.00 TO 15+00.00



DPA41 PROFILE
STA 1+00.00 TO 1+75.07





KEYMAP
SCALE: 1"=1000'

30 15 0 30 60
HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT
PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC
DATE

COLORADO REGISTERED
AARON LEE CLUTTER
36742
PROFESSIONAL ENGINEER

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

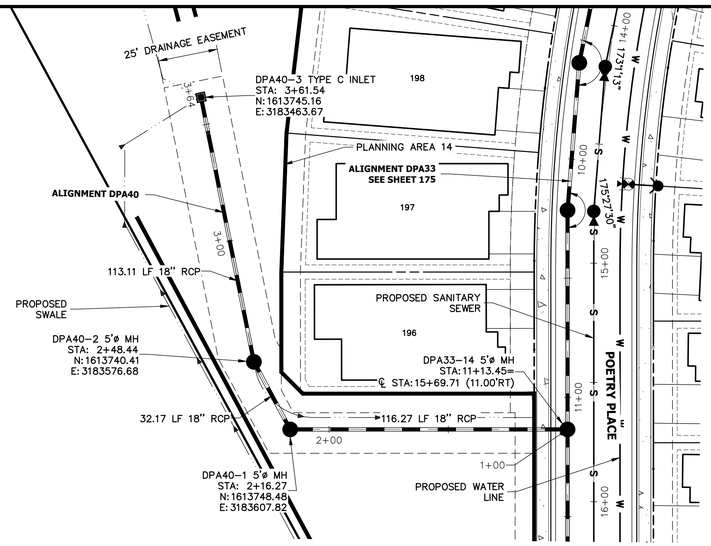
J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

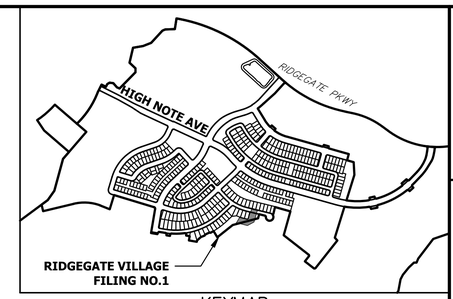
No.	REVISION	BY	DATE

H-SCALE	1"=30'
V-SCALE	1"=3'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	ARJ
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
STORM SEWER PLAN AND PROFILE

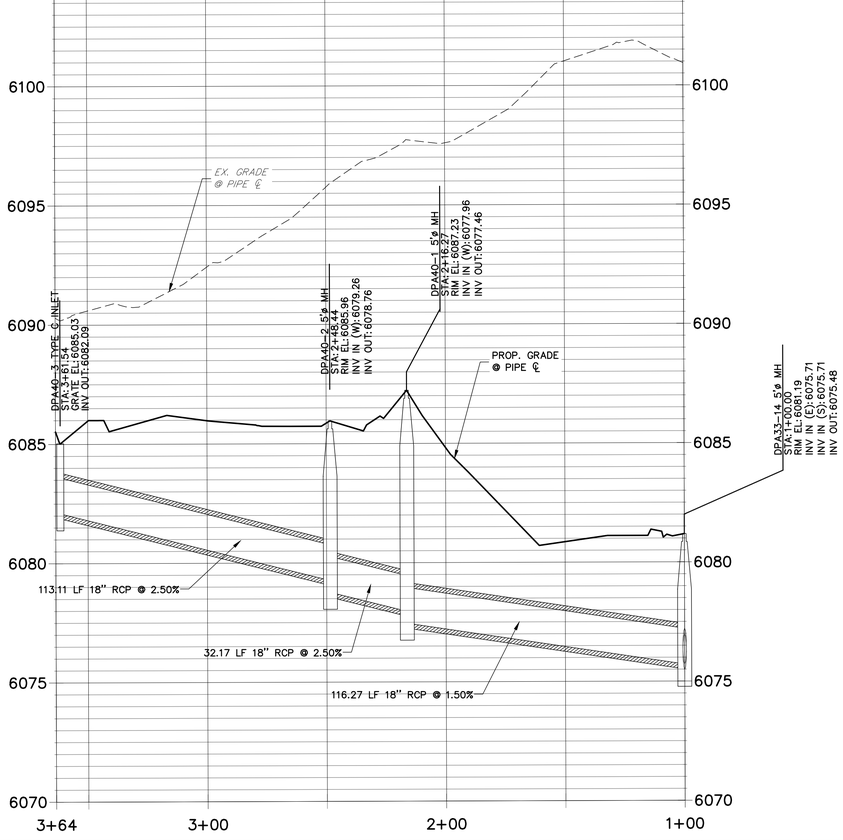
SHEET 174 OF 270
JOB NO. 15950.01





KEYMAP
SCALE: 1"=1000'

DPA40 PROFILE
STA 1+00.00 TO 3+63.50



30 15 0 30 60

HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

Know what's below. Call before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

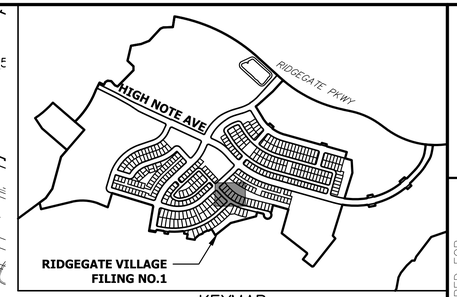
H-SCALE	1" = 30'	DESIGNED BY	GVT
V-SCALE	1" = 3'	DRAWN BY	ARJ
DATE	2/12/21	CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

STORM SEWER PLAN AND PROFILE

SHEET 175 OF 270

JOB NO. 15950.01



KEYMAP
SCALE: 1"=1000'

SIGN TABULATION				
SIGN NUMBER	STATION	OFFSET	ALIGNMENT	DESCRIPTION
1	10+38.50	21.52' (LT)	POETRY PLACE	30"X30" R1-1 30"X8" D3-1 (2)
2	21+75.38	24.70' (RT)	TOCATA ROAD	30"X30" R1-1 30"X8" D3-1 (2)
3	13+19.78	27.42' (RT)	POETRY PLACE	30"X30" W14-1

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

30 15 0 30 60
ORIGINAL SCALE: 1" = 30'

811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=30'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	ARJ
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

SIGNAGE AND STRIPING PLAN

SHEET 176 OF 270

JOB NO. 15950.01

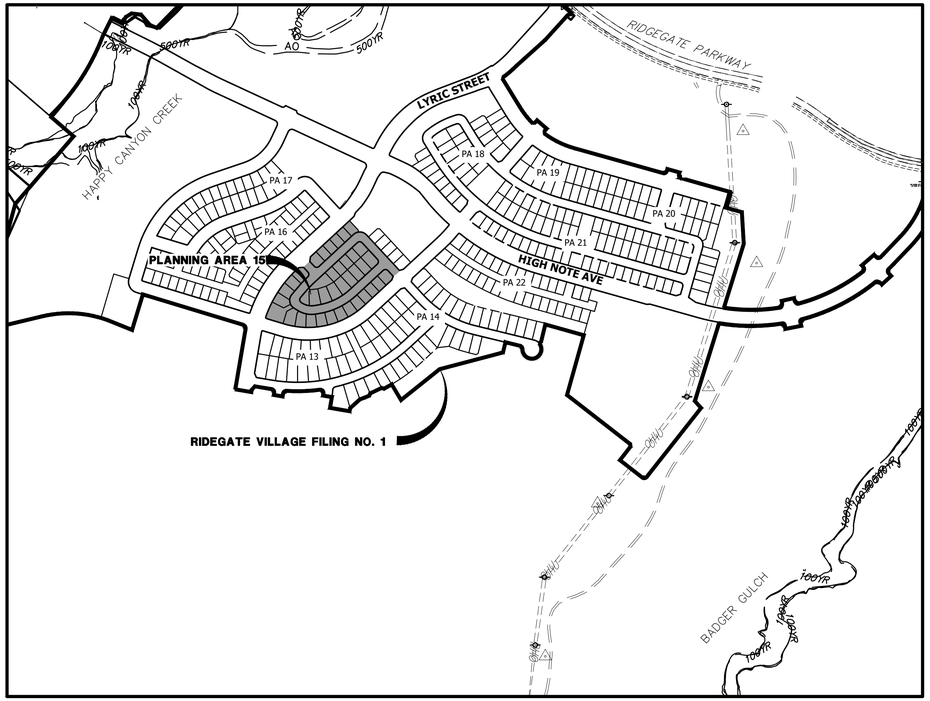
RIDGEGATE SOUTHWEST VILLAGE FILING 1-PLANNING AREA 15

A PORTION OF THE RIDGEGATE PLANNED DEVELOPMENT DISTRICT, EAST SIDE PROPERTY
LOCATED IN SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST
OF THE 6TH P.M., CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO

STREET & DRAINAGE CONSTRUCTION PLANS

ABBREVIATIONS

AC	ACRE
AD	ALGEBRAIC DIFFERENCE
AH	AHEAD
ARCH	ARCHITECT
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASS'Y	ASSEMBLY
AVE	AVENUE
BB	BOX BASE
BK	BACK
BNDY	BOUNDARY
BOP	BOTTOM OF PIPE
BOV	BLOW OFF VALVE
BFV	BUTTERFLY VALVE
BLVD	BOULEVARD
BW	BOTTOM OF WALL
C&G	CURB & GUTTER
CATV	CABLE TELEVISION
CB	CATCH BASIN
CBC	CONCRETE BOX CULVERT
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION
CDS	CUL-DE-SAC
CF	CUBIC FOOT
CFS	CUBIC FEET PER SECOND
CIP	COMPLETE IN PLACE
CL	CENTER LINE
CLOMR	CONDITIONAL LETTER OF MAP REVISION
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
COCS	CITY OF COLORADO SPRINGS
CONC	CONCRETE
CR	CIRCLE
CSP	CORRUGATED STEEL PIPE
CSU	COLORADO SPRINGS UTILITIES
CT	COURT
CTRB	CONCRETE THRUST REDUCER BLOCK
CY	CUBIC YARD
DBPS	DRAINAGE BASIN PLANNING STUDY
DE	DRAINAGE EASEMENT
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DR	DRIVE
DRC	DESIGN REVIEW COMMITTEE
DU	DWELLING UNITS
DY	DAY
E	EAST
EA	EACH
EGL	ENERGY GRADE LINE
EL	ELEVATION
ELEC	ELECTRIC
EOA	EDGE OF ASPHALT
EPC	EL PASO COUNTY
ERCP	ELLIPTICAL RCP
ESMT	EASEMENT
EST	ESTIMATE
EX	EXISTING
FDP	FINAL DEVELOPMENT PLAN
FDR	FINAL DRAINAGE REPORT
FES	FLARED END SECTION
FF	FINISHED FLOOR ELEVATION
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOWLINE
FIL	FILING
FO	FIBER OPTIC CABLE
GB	GRADE BREAK
GE	GAS EASEMENT
GIS	GEOGRAPHIC INFORMATION SYSTEM
GL	GAS LINE
GPS	GLOBAL POSITIONING SYSTEM
GV	GATE VALVE
HBP	HOT BITUMINOUS PAVEMENT
HC	HANDICAP
HDC	HIGH DEFLECTION COUPLING
HDPE	HIGH DENSITY POLYETHYLENE
HGL	HYDRAULIC GRADE LINE
HMA	HOT MIX ASPHALT
HOA	HOME OWNERS ASSOCIATION
HP	HIGH POINT
HR	HOUR
I	INLET
IE	IRRIGATION EASEMENT
INT	INTERSECTION
INV	INVERT
IRR	IRRIGATION
KB	KICK (THRUST) BLOCK
LB	POUND
LE	LANDSCAPE EASEMENT
LF	LINEAR FOOT
LN	LANE
LOMR	LETTER OF MAP REVISION
LP	LOW POINT
LS	LUMP SUM
LT	LEFT
MAX	MAXIMUM
M/D	MOISTURE DENSITY
MDDP	MASTER DEVELOPMENT DRAINAGE PLAN
MH	MANHOLE
MIN	MINIMUM
MS	MOUNTABLE SIDEWALK
N	NORTH
NRCP	NON-REINFORCED CONCRETE PIPE
ODP	OFFICIAL DEVELOPMENT PLAN
OHE	OVERHEAD ELECTRIC
OHU	OVERHEAD UTILITY
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PCR	POINT OF CURB RETURN
PDP	PRELIMINARY DEVELOPMENT PLAN
PE	PROFESSIONAL ENGINEER
PI	POINT OF INTERSECTION
PKWY	PARKWAY
PL	PROPERTY LINE
PR	PROPOSED
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PV	PLUG VALVE
PVC	POLYVINYL CHLORIDE
R	RADIUS
RCBC	REINFORCED CONCRETE BOX CULVERT
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
ROW	RIGHT OF WAY
RT	RIGHT
S	SOUTH
STE	STEEL
SAN	SANITARY SEWER
SF	SQUARE FOOT
ST	STREET
STA	STATION
STM	STORM SEWER
SY	SQUARE YARD
SY-IN	SQUARE YARD INCH
TB	THRUST BLOCK
TBC	TOP BACK OF CURB
TBW	TOP BACK OF WALK
TEL	TELEPHONE
TN	TON
TOA	TOP OF ASPHALT
TOB	TOP OF BOX
TOC	TOP OF CURB OR CONCRETE
TOF	TOP OF FOUNDATION
TOP	TOP OF PIPE
TW	TOP OF WALL
TYP	TYPICAL
UDFCD	URBAN DRAINAGE AND FLOOD CONTROL DISTRICT
UE	UTILITY EASEMENT
U&DE	UTILITY & DRAINAGE EASEMENT
UGE	UNDERGROUND ELECTRIC
VCP	VITRIFIED CLAY PIPE
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
VTC	VEHICLE TRACKING CONTROL
W	WEST
WL	WATER LINE
WM	WATER MAIN
WRD	WATER RESOURCES DEPARTMENT
WS	WATER SURFACE
WSE	WATER SURFACE ELEVATION
WTR	WATER
YR	YEAR



VICINITY MAP
SCALE: 1"=400'

SHEET INDEX

177	COVER SHEET
178	GENERAL NOTES
179	LEGEND
180	OVERALL UTILITY PLAN
181 – 183	ROADWAY PLAN & PROFILES
184	CURB RETURN PROFILES
185	CURB RAMP DETAILS
186	STORM SEWER PLANS & PROFILES
187	SIGNAGE AND STRIPING PLANS

APPLICANT/OWNER

SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
P~303.791.8180

CIVIL ENGINEER/SURVEYOR

JR ENGINEERING
7200 SOUTH ALTON WAY, SUITE C400
CENTENNIAL, CO
P~303.267.6220

PLANNER

SAGE DESIGN GROUP
1500 SOUTH PEARL STREET, SUITE 200
DENVER, CO 80210
P~303.470.2855

TRAFFIC ENGINEER

JR ENGINEERING
7200 SOUTH ALTON WAY, SUITE C400
CENTENNIAL, CO
P~303.267.6183

GEOTECHNICAL ENGINEER

CTL THOMPSON, INC
1971 WEST 12TH VAE.
DENVER, CO 80204
P~303.825.0777

BENCHMARK

NGS CONTROL POINT UNBEWUST BEING A 3.5 INCH DIAMETER BRASS CAP. LOCATED ABOUT 3.2 MILES SOUTH OF INTERSTATE 25 AND COLORADO STATE HIGHWAY 470 INTERCHANGE, GO SOUTH ON INTERSTATE 25 FOR 2.9 MILES TO EXIT 191. PROCEED ON A PAVED ROAD TO THE SOUTHWEST FOR 0.2 MILES TO THE STATION ON THE LEFT. IN THE NORTHWEST CORNER OF A 24 FOOT BY 16 FOOT ROCK OUTCROP. IT IS 22.5 FEET EAST OF THE CENTERLINE OF THE PAVED ROAD, 123 FEET NORTH OF THE OUTLET OF A 3 FOOT CORRUGATED STEEL PIPE CULVERT AND APPROXIMATELY 350 FEET WEST OF THE WEST EDGE OF OIL OF SOUTHBOUND INTERSTATE 25, ELEVATION: 6125.32 (NAVD88).

BASIS OF BEARING

BEARING SHOWN HEREON ARE GRID BEARINGS DERIVED FROM GPS OBSERVATION BASED UPON THE COLORADO COORDINATE SYSTEM OF 1983 CENTRAL ZONE (NAD 83, 2011) REFERENCED TO THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, SIXTH PRINCIPAL MERIDIAN BEING MONUMENTED AS SHOWN HEREON, TAKEN TO BEAR NORTH 89°31'58" EAST, A DISTANCE OF 2635.13 FEET.

Know what's below. Call before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=400'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
COVER SHEET

SHEET 177 OF 270

JOB NO. 15950.01

GENERAL PROJECT NOTES:

1. ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION OF IMPROVEMENTS SHALL MEET OR EXCEED THE GOVERNING CITY, COUNTY, AND/OR STATE AND APPLICABLE UTILITY DISTRICT STANDARDS AND SPECIFICATIONS, AND APPLICABLE STATE AND FEDERAL REGULATIONS. WHERE THERE IS A CONFLICT BETWEEN THESE PLANS AND ANY APPLICABLE STANDARDS, THE HIGHER QUALITY STANDARD SHALL APPLY. ALL WORK SHALL BE INSPECTED AND APPROVED BY THE CITY AND APPLICABLE UTILITY DISTRICT(S).

2. THE SITE CONSTRUCTION PLANS LISTED WITHIN THIS PLAN SET ARE NOT FOR CONSTRUCTION UNLESS APPROVED BY THE APPROPRIATE GOVERNING JURISDICTION. THE CONTRACTOR SHALL CONFIRM SAID APPROVAL PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL KEEP ONE (1) SIGNED COPY OF THE APPROVED SET OF PLANS, APPROPRIATE SPECIFICATIONS AND STANDARDS, AND APPROVED PERMITS ONSITE AT ALL TIMES.

3. NO REVISIONS SHALL BE MADE TO THESE PLANS WITHOUT THE APPROVAL OF THE CITY, COUNTY, STATE OR LOCAL DISTRICT AND THE ENGINEER OF RECORD.

4. ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARDS, UNLESS SPECIFICALLY STATED OTHERWISE.

5. THE CONTRACTOR IS RESPONSIBLE FOR ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS SHOWN ON THESE DRAWINGS OR DESIGNATED TO BE PROVIDED, INSTALLED, CONSTRUCTED, REMOVED, OR RELOCATED UNLESS SPECIFICALLY NOTED OTHERWISE.

6. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND LICENSES FOR WORK INCLUDING, BUT NOT LIMITED TO DEMOLITION, STREET CUTS, UTILITY INTERFERENCES, TRAFFIC CONTROL, GRADING, AND UTILITY FROM ALL APPLICABLE AGENCIES; AND FOR COMPLYING WITH ALL PROVISIONS INCLUDED THEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL OTHER APPLICABLE PERMITS NOT SPECIFICALLY REQUIRED BY THE AUTHORITY HAVING JURISDICTION.

7. THE CONTRACTOR SHALL UTILITY STAKE PROJECT AT LEAST 2 WORKING DAYS PRIOR TO BEGINNING EXCAVATION OR GRADING, TO HAVE ALL REGISTERED UTILITY LOCATIONS MARKED. OTHER UNREGISTERED UTILITY ENTITIES (I.E. DITCH COMPANY) ARE TO BE LOCATED BY CONTACTING THE RESPECTIVE REPRESENTATIVE.

8. THE CONTRACTOR IS RESPONSIBLE FOR FIELD LOCATING AND VERIFYING ELEVATIONS OF ALL EXISTING SEWER MAINS, WATER MAINS, CURBS, GUTTERS, AND OTHER UTILITIES AT THE POINTS OF CONNECTION SHOWN ON THE PLANS, AND AT ANY UTILITY CROSSINGS PRIOR TO INSTALLING ANY OF THE NEW IMPROVEMENTS. IF A CONFLICT EXISTS AND/OR A DESIGN MODIFICATION IS REQUIRED, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO MODIFY THE DESIGN. DESIGN MODIFICATION(S) MUST BE APPROVED BY THE APPROPRIATE AUTHORITY PRIOR TO BEGINNING CONSTRUCTION.

9. ANY DISRUPTION OF UTILITY SERVICE THAT IS REQUIRED TO ADJUST, EXTEND, RELOCATE OR OTHERWISE REARRANGE ANY UTILITY WITHIN THE PROJECT AREA SHALL BE COORDINATED IN ADVANCE WITH THE AFFECTED UTILITY ENTITY.

10. RIM ELEVATIONS SHOWN ARE APPROXIMATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS. THE CONTRACTOR SHALL USE PRECAST CONCRETE ADJUSTMENT RINGS, GROUT, AND STEEL SHIMS TO ADJUST THE MANHOLE FRAMES TO FINAL GRADE IN CONFORMANCE WITH THE CITY OR UTILITY COMPANY/DISTRICT STANDARD SPECIFICATIONS. ALL FRAMES SHALL BE ADJUSTED TO FINAL GRADE PRIOR TO THE FINAL LIFT OF ASPHALT.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF PROJECT SAFETY INCLUDING, BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.

12. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN, IN ACCORDANCE WITH THE M.U.T.C.D. TO THE APPROPRIATE RIGHT-OF-WAY AUTHORITY (CITY, COUNTY, OR STATE) FOR APPROVAL, PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN, OR AFFECTING, THE RIGHT-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED BY THE CONSTRUCTION ACTIVITIES. ALL WORK WITHIN THE RIGHT OF WAY SHALL BE DONE IN ACCORDANCE WITH THE GOVERNING AUTHORITY'S STANDARDS AND SPECIFICATIONS.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANING AND RESTORATION OF ANY EXISTING IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO STREET PAVEMENT, FENCES, SOD, LANDSCAPING, SPRINKLER SYSTEMS, AND UTILITIES DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL LOCATION AND CONDITION.

14. INCLUDED IN THESE PLANS IS THE DEMOLITION AND DISPOSAL OF ALL EXISTING UTILITIES, SITE IMPROVEMENTS, STRUCTURES, AND SITE FURNISHINGS NEEDED FOR CONSTRUCTION OF THE IMPROVEMENTS SHOWN HEREON. ALL QUESTIONS IN REGARD TO DEMOLITION SHALL BE SUBMITTED TO THE OWNER IN WRITING PRIOR TO BID.

15. ALL DEMOLITION, REMOVAL, DISPOSAL, AND ABANDONMENT OF UTILITIES, STRUCTURES, SITE IMPROVEMENTS, AND SITE FURNISHINGS SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL STANDARDS AND SPECIFICATIONS, AND PERMIT REQUIREMENTS.

16. ALL DISTURBED SOIL, ON- OR OFF-SITE AND RELATED TO WORK AT THIS PROJECT SITE, IS REQUIRED TO BE PROTECTED FROM WIND AND STORM WATER EROSION. TO MITIGATE EROSION, THE CONTRACTOR SHALL USE STANDARD EROSION CONTROL TECHNIQUES DESCRIBED IN THE GESC PLAN SET AND GESC REPORT FOR THIS PROJECT.

17. ALL STRUCTURAL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY GROUND-DISTURBING ACTIVITY. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED IN GOOD REPAIR BY THE CONTRACTOR UNTIL SUCH TIME AS THE ENTIRE DISTURBED AREA IS STABILIZED WITH HARD SURFACE OR PERMANENT LANDSCAPING. THE CONTRACTOR IS RESPONSIBLE FOR REFERRING TO ANY EROSION AND SEDIMENT CONTROL, STORMWATER MANAGEMENT, STORMWATER POLLUTION PREVENTION, OR SIMILAR PLAN AND/OR NARRATIVE AND ASSOCIATED PERMITS INCLUDING, BUT NOT LIMITED TO GRADING PERMITS, AND COMPLYING WITH THE REQUIREMENTS THEREIN.

18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK, INSPECTIONS, AND CERTIFICATIONS AS REQUIRED BY THE CITY, STATE OR LOCAL DISTRICTS. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST ASSOCIATED WITH THE INSPECTION AND CERTIFICATION UNLESS OTHERWISE ARRANGED WITH THE OWNER/DEVELOPER. THE CONTRACTOR SHALL COORDINATE ALL CERTIFICATIONS, AND PROVIDE FIELD SURVEYED AS-BUILT INFORMATION FOR REVIEW BY THE OWNER/DEVELOPER AND/OR ENGINEER AS EARLY AS POSSIBLE IN THE CONSTRUCTION SCHEDULE TO AVOID POTENTIAL DELAYS.

19. CONTRACTOR IS RESPONSIBLE FOR AS-BUILT DRAWINGS, TESTS, REPORTS, AND/OR ANY OTHER CERTIFICATES OR INFORMATION AS REQUIRED FOR ACCEPTANCE OF WORK FROM CITY, UTILITY DISTRICTS, OR ANY OTHER GOVERNING AGENCY, OR TO THE OWNER/DEVELOPER AS REQUIRED BY AND IN ACCORDANCE WITH THE GOVERNING AUTHORITY OR OWNER/DEVELOPER'S CRITERIA. CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING AS-BUILT INFORMATION AN A SET OF RECORD DRAWINGS KEPT AT THE CONSTRUCTION SITE AND AVAILABLE TO THE GOVERNING CITY, COUNTY, AND/OR STATE AND UTILITY DISTRICT INSPECTOR AT ALL TIMES. THE CONTRACTOR SHALL CONFIRM ANY REQUIREMENTS AS EARLY AS POSSIBLE IN THE CONSTRUCTION SCHEDULE TO ACCOUNT FOR PREPARATION AND REVIEW OF THE INFORMATION TO AVOID POTENTIAL DELAYS.

20. IF, DURING THE CONSTRUCTION PROCESS, CONDITIONS ARE ENCOUNTERED BY THE CONTRACTOR, HIS SUBCONTRACTORS, OR OTHER AFFECTED PARTIES, WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE OWNER/DEVELOPER AND THE ENGINEER IMMEDIATELY.

21. DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. IF PERTINENT DIMENSIONS ARE NOT SHOWN, CONTACT THE CONSULTING ENGINEER FOR CLARIFICATION AND ANNOTATE THE DIMENSION ON THE AS-BUILT RECORD DRAWING.

22. BENCHMARK VERIFICATION: THE CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS AND THE PROPOSED ELEVATIONS IN THIS CONSTRUCTION PLAN SET AGAINST THE PROJECT BENCHMARK, IDENTIFIED HEREIN, PRIOR TO COMMENCING WORK.

ROADWAY NOTES

1. GUTTERS SHALL BE AT LEAST 6" THICK.
2. ALL CURBS SHALL USE THE CATCH SECTION UNLESS OTHERWISE NOTED.
3. ALL COMBINATION CURB, GUTTER AND SIDEWALKS TO BE 6" THICK (MIN.). SIDEWALKS WITH VERTICAL CURB AND GUTTER TO BE 6" THICK (MIN.).
4. NON-LANDSCAPED MEDIAN ISLANDS SHALL BE COVERED WITH AN ACCEPTABLE IMPERMEABLE SURFACE.
5. IF ANY SECTION OF A DETACHED SIDEWALK IS TO BE PLACED OUTSIDE OF THE ROAD RIGHT-OF-WAY, THEN A SIDEWALK EASEMENT SHALL BE REQUIRED TO MAINTAIN PUBLIC USE.
6. PLACEMENT, MOISTURE AND DENSITY CONTROL FOR SUBGRADE, SUBBASE, AND SURFACING MATERIALS SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS OF CHAPTER 8 OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.

CITY OF LONE TREE GENERAL NOTES

1. THE CITY OF LONE TREE ENGINEER'S SIGNATURE AFFIXED TO THIS DOCUMENT INDICATES THE ENGINEERING DIVISION HAS REVIEWED THE DOCUMENT AND FOUND IT IN GENERAL CONFORMANCE WITH THE CITY OF LONE TREE SUBDIVISION RESOLUTION OR APPROVED VARIANCES TO THOSE REGULATIONS. THE CITY OF LONE TREE ENGINEER, THROUGH ACCEPTANCE OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY, OTHER THAN STATED ABOVE, FOR THE COMPLETENESS AND/OR ACCURACY OF THESE DOCUMENTS. THE OWNER AND ENGINEER UNDERSTAND THAT THE RESPONSIBILITY FOR THE ENGINEERING ADEQUACY OF THE FACILITIES DEPICTED IN THIS DOCUMENT LIES SOLELY WITH THE REGISTERED PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE IS AFFIXED TO THIS DOCUMENT.
2. ALL ROADWAY CONSTRUCTION SHALL CONFORM TO CURRENT DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
3. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE CITY OF LONE TREE ENGINEERING DIVISION. THE CITY RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS STANDARDS AND SPECIFICATIONS.
4. THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS, INSPECTION SECTION, (303) 662-8112, A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO STARTING CONSTRUCTION, AND/OR BEFORE RESTARTING CONSTRUCTION AFTER A SHUTDOWN OF MORE THAN 10 DAYS.
5. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ACTUAL CONSTRUCTION. FOR INFORMATION, CONTACT: UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT (800) 922-1987 OR 811
6. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY (SIGNED BY BOTH DESIGN ENGINEER AND CITY OF LONE TREE) OF THE CONSTRUCTION PLANS AND GESC REPORT AND PLAN, AND ONE (1) COPY OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS AT THE JOB SITE AT ALL TIMES.
7. ALL PROPOSED STREET CUTS TO EXISTING PAVEMENTS FOR UTILITIES, STORM SEWER, OR OTHER PURPOSES ARE LISTED AND REFERENCED BELOW:

   RIDGEGATE PARKWAY

8. A ROW/CONSTRUCTION PERMIT MUST BE OBTAINED BEFORE ANY WORK WITHIN EXISTING OR PROPOSED PUBLIC ROW. THE PERMIT APPLICATION MUST BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR REVIEW/PROCESSING A MINIMUM OF 7 DAYS PRIOR TO UPDATED 2-3-09 REQUESTED START FOR THE WORK IN THE ROW.
9. A PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR ACCEPTANCE WITH THE PERMIT APPLICATION. AN EXCAVATION OR PUBLIC IMPROVEMENTS CONSTRUCTION PERMIT WILL NOT BE ISSUED WITHOUT AN APPROVED TRAFFIC CONTROL PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION.
10. THE CONSTRUCTION PLANS SHALL BE CONSIDERED VALID FOR TWO (2) YEARS FROM THE DATE OF CITY OF LONE TREE ACCEPTANCE/APPROVAL IF APPLICABLE CONSTRUCTION PERMITS HAVE NOT BEEN OBTAINED, AND CONSTRUCTION STARTED WITHIN THAT TIME, THESE PLANS SHALL BE VOID AND WILL BE SUBJECT TO RE-REVIEW AND RE-ACCEPTANCE BY THE CITY OF LONE TREE.
11. CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE ENGINEER INSPECTOR WHEN WORKING OUTSIDE OF THE PUBLIC RIGHT-OF-WAY ON ANY FACILITY WHICH WILL BE CONVEYED TO THE CITY, URBAN DRAINAGE AND FLOOD CONTROL DISTRICT, OR OTHER SPECIAL DISTRICT FOR MAINTENANCE (STORM SEWER, ENERGY DISSIPATERS, DETENTION OUTLET STRUCTURES, OR OTHER DRAINAGE INFRASTRUCTURES). FAILURE TO NOTIFY ENGINEERING INSPECTOR TO ALLOW THEM TO INSPECT THE CONSTRUCTION MAY RESULT IN NON-ACCEPTANCE OF THE FACILITIES/INFRASTRUCTURE BY CITY AND/OR URBAN DRAINAGE.

CITY OF LONE TREE SIGNAGE & STRIPING NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MOST RECENT VERSION OF THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE "COLORADO SUPPLEMENTAL MUTCD" AND THE DOUGLAS COUNTY "ROAD AND CONSTRUCTION STANDARDS MANUAL". FURTHER SPECIFICATIONS AND ILLUSTRATIONS ARE LOCATED IN THE COLORADO DIVISION OF HIGHWAYS "M AND S STANDARDS".
2. DELINEATION OF ROADWAYS SHALL BE AS SPECIFIED IN THE COLORADO "M AND S MANUAL".
3. SPECIAL CARE SHALL BE TAKEN IN SIGN LOCATION TO ENSURE AN UNOBSTRUCTED VIEW OF EACH SIGN. STREET NAME SIGNS SHALL BE MOUNTED SO THAT THEY CAN BE SEEN FROM ALL DIRECTIONS OF TRAVEL.
4. INSTALLATION OF SIGNS SHALL CONFORM TO THE MUTCD MOUNTING HEIGHT REQUIREMENTS, INCLUDING A 7-FOOT MINIMUM HEIGHT FROM THE BOTTOM OF THE LOWEST SIGN PANEL TO THE TOP GRADE OF SIDEWALK.
5. ALL NEWLY INSTALLED TRAFFIC SIGNS SHALL MEET THE MINIMUM RETRO-REFLECTIVITY AND ILLUMINATION STANDARDS AS SET FORTH BY THE MUTCD (LATEST EDITION). THESE MINIMUM REQUIREMENTS SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
6. DIAMOND GRADE MATERIAL SHALL BE USED ON ALL STOP SIGNS.
7. THE CONTRACTOR INSTALLING SIGNS IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND UTILITIES. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.
8. FOLLOWING INSTALLATION, THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS DEPARTMENT, 303-662-8112. A FIELD INSPECTION OF LOCATION AND INSTALLATION OF ALL SIGNS SHALL BE PERFORMED BY PUBLIC WORKS. ALL DISCREPANCIES IDENTIFIED DURING THE FIELD INSPECTION MUST BE CORRECTED BEFORE THE TWO-YEAR WARRANTY PERIOD WILL BEGIN.
9. SIGNAGE AND STRIPING HAS BEEN DETERMINED BY INFORMATION AVAILABLE AT THE TIME OF REVIEW.
   PRIOR TO INITIATION OF THE WARRANTY PERIOD, LONE TREE RESERVES THE RIGHT TO REQUIRE MODIFICATIONS TO EXISTING OR INSTALLATION OF ADDITIONAL SIGNAGE AND/OR STRIPING IF THEY DETERMINE THAT AN UNFORESEEN CONDITION WARRANTS SUCH MODIFICATION ACCORDING TO THE MUTCD OR THE CDOT M AND S STANDARDS. ALL SIGNAGE AND STRIPING SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
10. FINAL STRIPING AND CROSSWALK LAYOUT TO BE APPROVED BY THE CITY OF LONE TREE PRIOR TO INSTALLATION. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.
11. CROSSWALKS SHALL:
    BE CONSTRUCTED USING 125 MIL PREFORMED THERMOPLASTIC.
    LINE UP WITH THE HANDICAP RAMPS AT BOTH ENDS.
    BE CENTERED ON LANE LINES SO AS TO BE STRADDLED BY VEHICLES.
12. ALL PAVEMENT MARKINGS SHALL BE AS FOLLOWS:
    FOR CONCRETE SURFACE: METHYL METHACRYLATE OR EPOXY PAINT.
    FOR ASPHALT SURFACE: PAINT, 90 MIL PREFORMED THERMOPLASTIC, INLAID
    MARKING TAPE, METHYL METHACRYLATE, OR EPOXY PAINT.
    TURN ARROWS AND ONLYS: 125 MIL PREFORMED THERMOPLASTIC.
13. ALL PAVEMENT MARKING SHALL BE PRECEDED BY THE APPROPRIATE SURFACE PREPARATION.
14. ANY SIGNAGE AND/OR OTHER TRAFFIC CONTROL DEVICES REMOVED SHALL BE RETURNED TO THE CITY OF LONE TREE.
15. TYPE III LIGHTED BARRICADES SHALL BE SET AT ENDS OF ROADWAYS, SEPARATING FINISHED AND UNFINISHED CONSTRUCTION AREAS AND WILL BE MAINTAINED BY THE CONTRACTOR/DEVELOPER.

NOTE: ALSO SEE CITY OF LONE TREE "STREET SIGN DETAILS"FOR ADDITIONAL INTERSECTION STREET SIGNAGE REQUIREMENTS.

STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON-GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.

DRAINAGE STRUCTURE NOTES

1. CONCRETE WORK SHALL CONFORM TO ACI 301, ACI 350.
2. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM-615, GRADE 60.
3. ALL EXPOSED CONCRETE SHALL HAVE A CDOT CLASS 2 OR 5 FINISH.
4. ALL EXPOSED CONCRETE CORNERS SHALL HAVE ¾"CHAMFERS.
5. DETAILING, FABRICATION, AND PLACING OF REBAR SHALL BE IN ACCORDANCE WITH ACI 315.
6. CONSTRUCTION TOLERANCES SHALL BE IN ACCORDANCE WITH ACI 347.
7. ALL MANHOLES SHALL BE SLAB BASE UNLESS SPECIFIED OTHERWISE. MANHOLE SHALL BE FABRICATED IN ACCORDANCE WITH CDOT STANDARD M-604-20.
8. COORDINATES FOR MANHOLES AND AREA INLETS ARE SHOWN AT THE CENTER OF THE STRUCTURE. COORDINATES FOR MOUNTABLE CURB INLETS ARE SHOWN ALONG THE FLOWLINE AT CENTER OF THE STRUCTURE.
9. ALL TYPE C AND D INLETS SHALL HAVE CLOSE MESH GRATES UNLESS SPECIFIED OTHERWISE.
10. LENGTH OF FABRICATED BAR GRATING PANELS IS LENGTH OF BEARING BARS, WIDTH REFERS TO DIMENSION PERPENDICULAR TO BEARING BARS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PANEL DIMENSIONS GIVEN PRIOR TO FABRICATION.

DRAINAGE GENERAL NOTES

1. PROJECT FACILITIES ARE TO BE LOCATED BASED ON THE SURVEY COORDINATES, ELEVATIONS, DIMENSIONS, AND/OR GEOMETRIC DESIGN DATA PROVIDED ON THE DRAWINGS.
2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES AND FOR SATISFYING ALL APPLICABLE OSHA, FEDERAL, STATE, AND LOCAL REGULATIONS. TEMPORARY EXCAVATIONS SHALL PROVIDE, AT MINIMUM, THE TRENCH DIMENSIONS AND CLEARANCES SHOWN OR SPECIFIED. TEMPORARY CONSTRUCTION SLOPES SHALL BE SLOPED, SHORED, SHEETED, AND/OR BRACED IN ACCORDANCE WITH STABILITY REQUIREMENTS AND APPLICABLE REGULATIONS, AND SHALL BE NO STEEPER THAN THE SLOPES SHOWN OR SPECIFIED WITHOUT THE APPROVAL OF THE ENGINEER. ANY SUCH APPROVALS BY THE ENGINEER WILL NOT RELIEVE THE CONTRACTOR FROM SOLE RESPONSIBILITY FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES.
3. EXISTING FACILITIES NOT INDICATED TO BE REMOVED SHALL BE PROTECTED IN PLACE OR REMOVED AND REPLACED IN KIND, AS APPROVED BY ENGINEER.
4. THE WORK WILL TAKE PLACE IN AND AROUND DRAINAGE SWALES AND THE HAPPY CANYON CREEK, SUBJECT TO PERIODIC FLOODING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF SURFACE AND SUBSURFACE WATER DURING THE COURSE OF THE WORK. ANY DAMAGE TO THE WORK RESULTING FROM SURFACE FLOWS, BASE FLOWS, OR FLOOD FLOWS INCLUDING BUOYANCY FORCES ON PIPELINES AND OTHER FACILITIES SHALL BE CORRECTED BY THE CONTRACTOR AT THE CONTRACTOR'S SOLE COST. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND SATISFYING THE REQUIREMENTS OF ANY APPLICABLE PERMITS PERTAINING TO WATER AND EROSION CONTROL.
5. CONTACT THE ENGINEER FOR CLARIFICATIONS OF ANY ABBREVIATIONS SHOWN ON THE DRAWINGS.
6. THE SITE WHERE THE WORK IS TO BE PERFORMED SHALL BE OVERLOT GRADED. TOPSOIL SHALL BE SPREAD IN OPEN SPACE AREAS TO A DEPTH OF APPROXIMATELY 6-INCHES. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED, AND SOME AREAS COVERED WITH EROSION CONTROL BLANKETS, UNLESS OTHERWISE DIRECTED IN THE PLANS OR BY THE ENGINEER. CARE SHALL BE TAKEN TO AVOID DISTURBING ANY OPEN SPACE AREAS EXCEPT THE MINIMUM NECESSARY TO PERFORM THE WORK. TOPSOIL IN ANY WORK AREAS OR ACCESS ROADS WITHIN THE OPEN SPACE SHALL BE STRIPPED AND STOCKPILED PRIOR TO THE WORK, PROTECTED FROM MIXING WITH ANY OTHER MATERIALS DURING THE WORK, AND REPLACED TO A LOOSE DEPTH OF 7- TO 8- INCHES (FINAL DEPTH AFTER SETTLEMENT SHALL BE 6- INCHES MINIMUM) AS THE WORK IS BEING COMPLETED. WHERE BLANKETS EXIST, THE MINIMUM AREA OF BLANKET TO ALLOW WORK TO PROGRESS SHALL BE REMOVED AND THEN THE REMOVED OR NEW BLANKET REPLACED AFTER UNDERLYING WORK IS COMPLETE (EXCEPT NO TEMPORARY BLANKET NEEDS TO BE REPLACED OVER ROCK OR COIR BLANKET SHOWN IN THE PLANS). JUST PRIOR TO REPLACEMENT OF TOPSOIL AFTER UNDERLYING WORK IS COMPLETE AND APPROVED, THE UNDERLYING SUBGRADE IN OPEN SPACE AREAS SHALL BE LOOSENED BY TILLING TO A DEPTH OF 12- INCHES UNTIL CLODS ARE NO LARGER THAN 3 INCHES, AND APPROVED BY THE ENGINEER. THIS NOTE ALSO APPLIES TO AREAS WHERE COIR MAT IS TO BE INSTALLED.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ANY COMPLETED WORK FROM DISTURBANCE OR DAMAGE DURING THE COURSE OF THE WORK. IF REQUESTED BY THE CONTRACTOR AND APPROVED BY THE OWNER, SIGNIFICANT COMPLETED SECTIONS OF THE WORK MAY BE ACCEPTED AS FINAL PRIOR TO THE COMPLETION OF THE ENTIRE PROJECT. ANY SUCH EARLY ACCEPTANCE WILL NEED TO BE IN WRITING BY THE ENGINEER AND OWNER AND THOSE PORTIONS OF THE WORK SHALL BE PROTECTED BY THE CONTRACTOR AGAINST VEHICLES RUNNING OVER THE AREA BY ENCIRCLING THE WORK WITH FLAGGING OR FENCING OR BY OTHER MEANS AGREED TO BY THE OWNER AND MAINTAINED BY THE CONTRACTOR UNTIL THE END OF THE PROJECT.
8. ALL FINE GRADING REQUIRED TO CONSTRUCT DRAINAGE IMPROVEMENTS AND PROVIDE FINISHED GRADES ADJACENT TO IMPROVEMENTS SHALL BE DONE BY THE DRAINAGE CONTRACTOR AND SHALL BE CONSIDERED PART OF THE WORK, AND NOT PAID FOR SEPARATELY.

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	N/A
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
GENERAL NOTES

SHEET 178 OF 270
JOB NO. 15950.01

LAYER LINETYPE LEGEND

	EXISTING	PROPOSED
PHASE LINE		
MATCH LINE		
SECTION LINE		
BOUNDARY LINE		
PROPERTY LINE		
EASEMENT LINE		
RIGHT OF WAY		
R.O.W. A LINE	A	A
CENTERLINE		
CITY LIMITS		
WIRE FENCE		
CHAIN LINK FENCE		
WOOD FENCE		
MASONRY FENCE		
GUARDRAIL		
CONC. BARRIER		
CABLE TV	TV	TV
ELECTRIC	E	E
FIBER OPTIC	FO	FO
GAS MAIN	G	G
IRRIGATION MAIN	IRR	IRR
OIL/PETRO. MAIN	O	O
OVERHEAD UTILITY	OHU	OHU
SANITARY SEWER	S	
STORM DRAIN		
TELEPHONE	T	T
WATER MAIN	W	
RAW WATER LINE	RWL	RWL
SWALE/WATERWAY FLOWLINE		
DIVERSION DITCH		
DIVERSION CHANNEL		
MAJOR DRAINAGE BASIN		
MINOR DRAINAGE BASIN		
TOP OF SLOPE		
TOE OF SLOPE		
EDGE OF WATER		
INDEX CONTOUR	6100	6100
INTERMEDIATE CONTOUR		
DEPRESSION CONT. (INDEX)	6100	6100
DEPRESSION CONT. (INTER)		
TOP OF CUTS		
TOE OF FILLS		
CUT AND FILL LINE		C/F
SILT FENCE	SF	SF
100 YEAR FLOODPLAIN	100YR	100YR
500 YEAR FLOODPLAIN	500YR	500YR
FLOODWAY	FLDWY	FLDWY
BASE FLOOD ELEVATION		
EDGE OF WETLANDS		
STONE WALL		

UTILITIES LEGEND

	EXISTING	PROPOSED
STORM SEWER		
MANHOLE		
STORM INLET		
AREA INLET – SQUARE		
AREA INLET – ROUND		
FLARED END SECTION		
RIPRAP		
SANITARY SEWER		
LINE MARKER	Mkr San	
SERVICE MARKER		
CLEAN–OUT		
MANHOLE W/ DIRECTIONAL FLOW ARROW		
WATER LINE		
LINE MARKER	Mkr W	
SERVICE MARKER		
FIRE HYDRANT		
FIRE CONNECTION		
MANHOLE		
BEND		
BLOW–OFF VALVE		
WELL	WELL	WELL
METER		
VALVE		
REDUCER		
THRUST BLOCK		
CROSS		
PLUG W/ THRUST BLOCK		
TEE		
REVERSE ANCHOR		
ANODE		
AIR & VACUUM VALVE ASSEMBLY		
TRANSMISSION BLOW–OFF ASSEMBLY		
GAS LINE		
MARKER	Mkr G	
SERVICE MARKER		
METER		
VALVE		
PLUG		
TEE		
DRY UTILITIES		
CABLE TV MARKER	Mkr TV	
CABLE TELEVISION PEDESTAL		
ELECTRIC MARKER	Mkr E	
ELECTRIC SERVICE MARKER		
ELECTRICAL PEDESTAL		
ELECTRICAL METER		
ELECTRICAL MANHOLE		
FIBER–OPTIC MARKER	Mkr FO	
IRRIGATION PEDESTAL		
TELEPHONE MARKER	Mkr T	
TELEPHONE PEDESTAL		
TELEPHONE MANHOLE		
UTILITY POLE		
GUY ANCHOR		
GUY POLE		
MISC. UTILITIES		
VENT PIPE	VP	VP
TEST HOLE DESIGNATOR	THE FIRM AGENCY	

MONUMENTATION LEGEND

ALUMINUM CAP – FOUND	AC
BRASS CAP – FOUND	BC
BENCHMARK – FOUND	
CROSS – FOUND	
MONUMENT – SET	
MONUMENT – FOUND (DEFAULT)	
MONUMENT – FOUND (ALTERNATE 1)	
MONUMENT – FOUND (ALTERNATE 2)	
MONUMENT – FOUND (ALTERNATE 3)	
MONUMENT – FOUND (ALTERNATE 4)	
MONUMENT – FOUND (ALTERNATE 5)	
MONUMENT – FOUND (ALTERNATE 6)	
MONUMENT – FOUND (ALTERNATE 7)	
NAIL & WASHER – FOUND	NAIL & WASHER
PANEL – FOUND	
PK NAIL – FOUND	PK NAIL
ROW MONUMENT – FOUND	
ROW MARKER – FOUND	
SECTION CORNER – FOUND	
SECTION CORNER – SET	
QUARTER–SECTION CORNER – FOUND	
QUARTER–SECTION CORNER – SET	
SECTION CENTER – FOUND	
SECTION CENTER – FOUND	
CONTROL/TRAVERSE POINT – SET	

TRAFFIC LEGEND

	EXISTING	PROPOSED
PARKING METER		
TRAFFIC SIGNAL BOX		
TRAFFIC SIGNAL POLE		
TRAFFIC SIGNAL		
BARRICADE		
GUARD RAIL POST		
IMPACT ATTENUATOR		
BRIDGE STYLE HIGHWAY SIGN POST		
CANTILEVER STYLE HIGHWAY SIGN POST		
SIGN		
RAILROAD MARKER/SIGN		
STREET LIGHT		
STREET LIGHT – SINGLE		
STREET LIGHT – DOUBLE		
LUMINAIRE		
ALTERNATE LUMINAIRE		
SIGNAL MAST ARM W/ LUMINAIRE		
PEDESTAL POLE FOUNDATION		
TRAFFIC SIGNAL POLE		
ROUND PULL BOX		
MEDIUM PULL BOX		
LARGE PULL BOX (20X33X15)		
SIGNAL HEAD WITHOUT BACK PLATE		
SIGNAL HEAD WITH BACK PLATE		
PEDESTRIAN SIGNAL HEAD		
VIDEO IMAGE DETECTOR		
OPTICOM DETECTOR		
VEHICLE DETECTION ZONE		V

STORM WATER MANAGEMENT

	KEY	SYMBOL
CHECK DAM	CD	
CONSTRUCTION ROAD STABILIZATION	CRS	
CURB SOCK INLET PROTECTION	CS	
CONCRETE WASHOUT AREA	CWA	
DIVERSION DITCH AND DIKE, TEMPORARY	DD	
DIVERSION CHANNEL, TEMPORARY	DV	
DEWATERING	DW	
EROSION CONTROL BLANKET	ECB	
INLET FILTER	IF	
INLET PROTECTION	IP	
MULCHING	MU	
OUTLET PROTECTION	OP	
PAVED FLUME	PF	
PERMENENT SEEDING	PS	
REINFORCED CONCRETE DAM	RCD	
ROUGH CUT STREET CONTROL	RCS	
SEDIMENT BASIN	SB	
SEDIMENT CONTROL LOG	SCL	
SILT FENCE	SF	
SURFACE ROUGHENING	SR	
STABILIZED STAGING AREA	SSA	
SEDIMENT TRAP	ST	
STRAW BALE BARRIER	STB	
TERRACING	TER	
TEMPORARY SEEDING	TS	
TEMPORARY STREAM CROSSING CULVERT/BRIDGE	TSC C	
TEMPORARY STREAM CROSSING FORD TYPE	TSC F	
TEMPORARY SLOPE DRAIN	TSD	
VEHICLE TRACKING CONTROL	VTC	
VEHICLE TRACKING CONTROL WITH WASH RACK	WR	

DRAINAGE REPORT PLANS

	KEY
BASIN DESIGNATION (NO COEFFICIENT)	# #.##
BASIN DESIGNATION (1 COEFFICIENT)	# #.## | #
BASIN DESIGNATION (2 COEFFICIENTS)	# #.## | # #
ANALISYS POINT IDENTIFIER	#
BASIN DESIGNATION (HISTORIC)	# #-##
BASIN DESIGNATION (DEVELOPED)	# #.##
SUB–BASIN DESIGNATION (DEVELOPED)	# ##
DRAINAGE PIPE IDENTIFIER	##
DRAINAGE POINT IDENTIFIER (HEXAGONAL)	##
DRAINAGE POINT IDENTIFIER (TRIANGULAR)	?
SWMM DESIGNATION 1	#
SWMM DESIGNATION 2	#
SWMM DESIGNATION 3	#
SWMM DESIGNATION 4	?

LANDSCAPE LEGEND

	EXISTING	PROPOSED
TREE – CONIFEROUS		
TREE – DECIDUOUS		
SHRUB/BUSH		
SHRUBS AND BUSHES		
IRRIGATION BOX		
IRRIGATION SPRINKLER		
IRRIGATION VALVE		
BOLLARD		
FLAGPOLE	FP	

Know what's **below.** **Call** before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

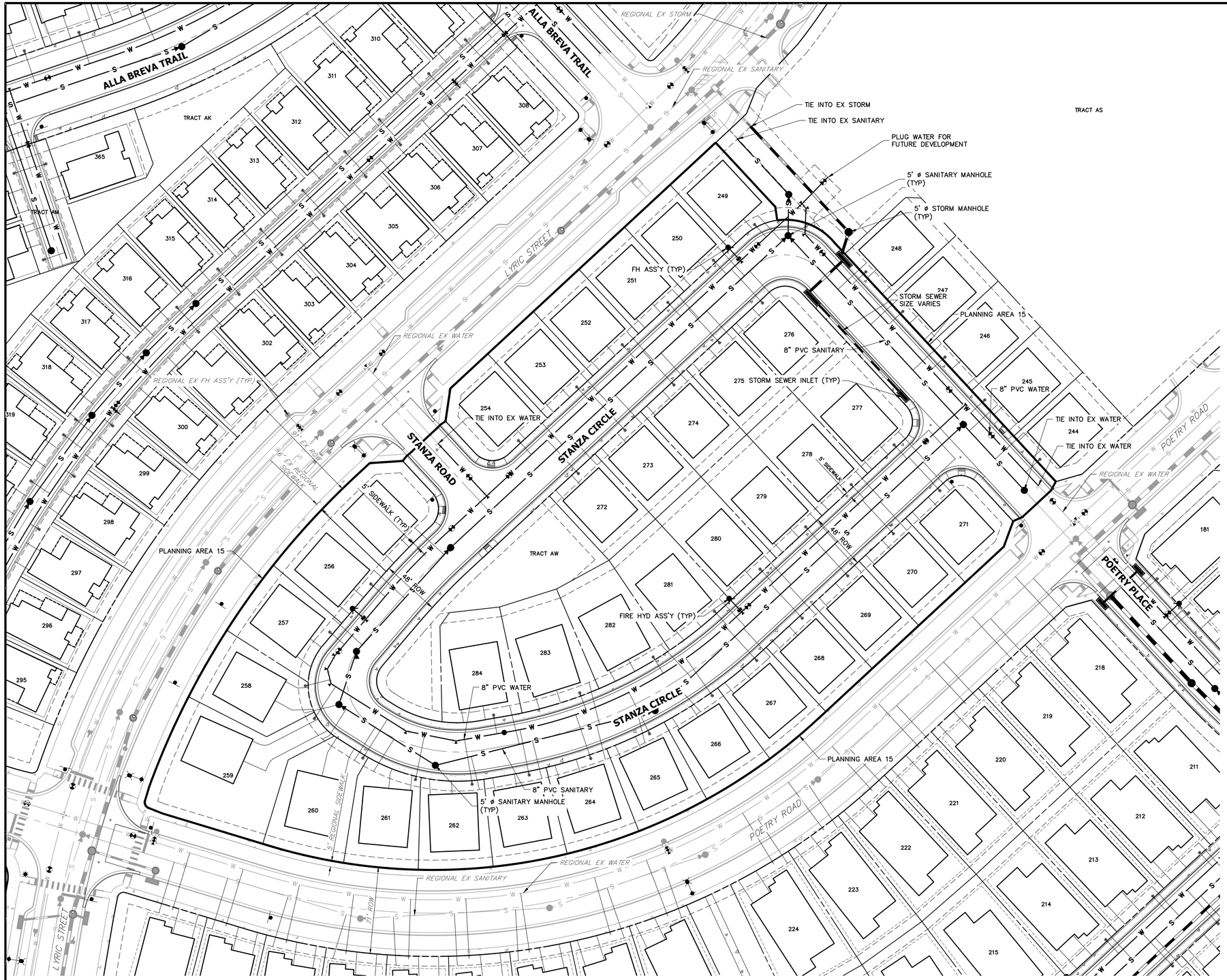
No.	REVISION	BY	DATE

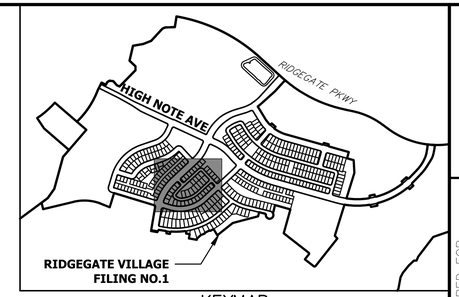
H–SCALE	N/A
V–SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
LEGEND

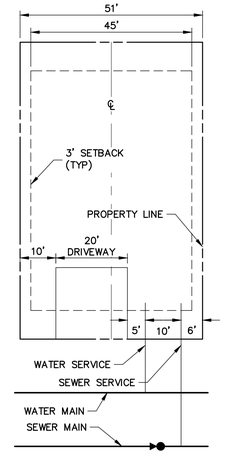
SHEET 179 OF 270

JOB NO. 15950.01





KEYMAP
SCALE:1"=1000'



LOT SERVICES DETAIL
PLANNING AREA 15
SCALE: 1"=20

40 20 0 40 80
ORIGINAL SCALE: 1" = 40'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

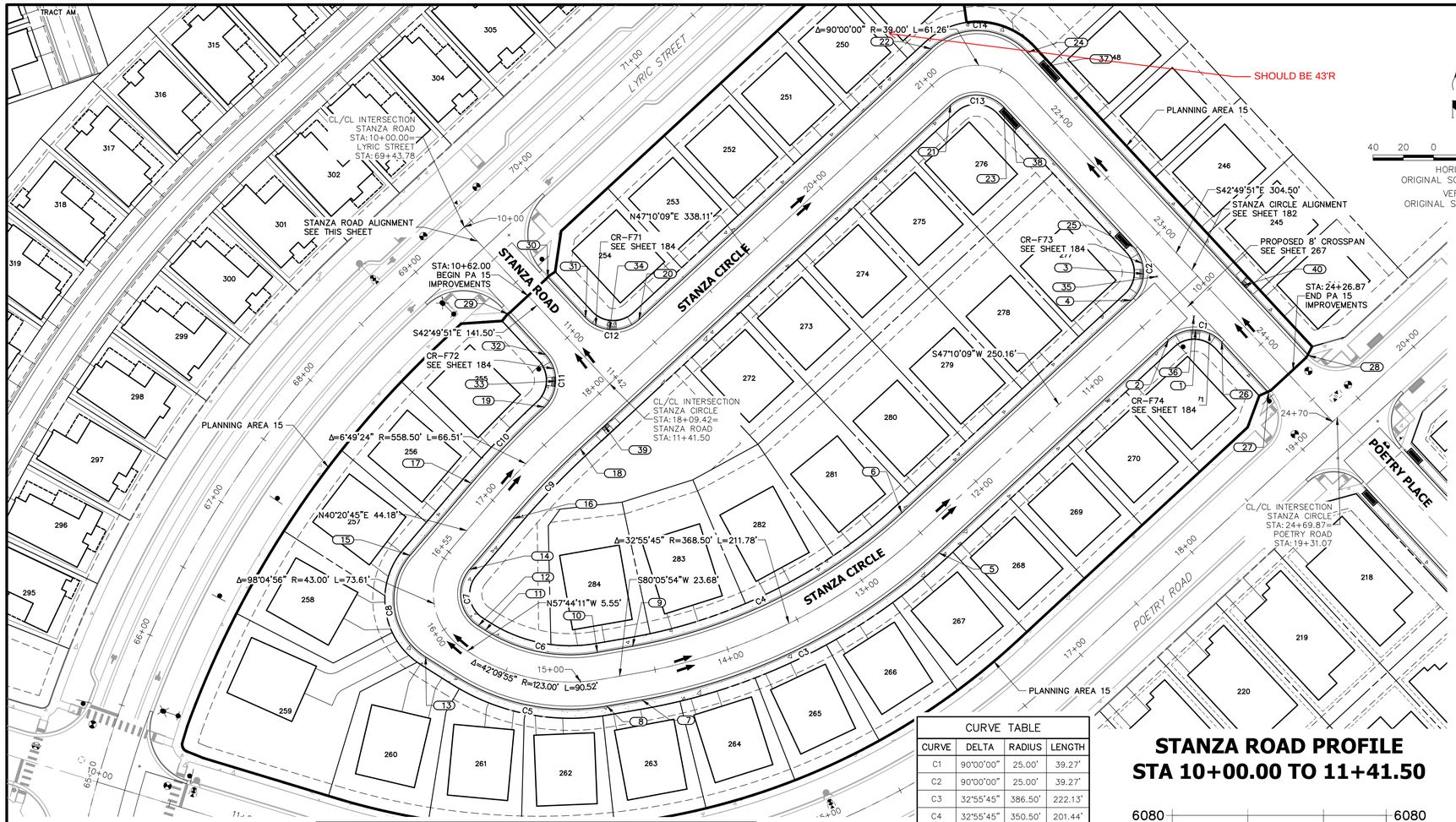
No.	REVISION	BY	DATE

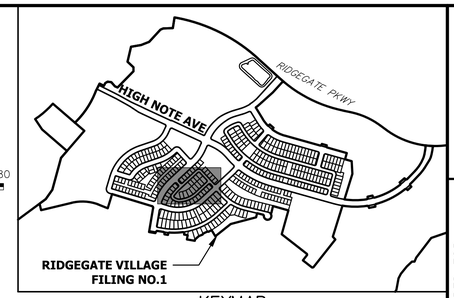
H-SCALE	1"=40'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
OVERALL UTILITY PLAN

SHEET 180 OF 270

JOB NO. 15950.01





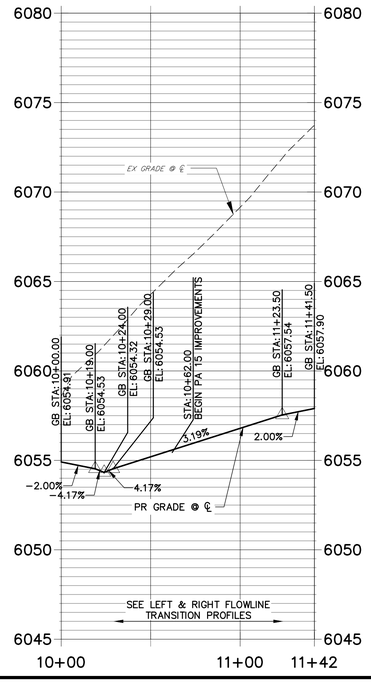
KEYMAP
SCALE:1"=1000'

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C1	90°00'00"	25.00'	39.27'
C2	90°00'00"	25.00'	39.27'
C3	32°55'45"	386.50'	222.13'
C4	32°55'45"	350.50'	201.44'
C5	42°09'55"	141.00'	103.77'
C6	42°09'55"	105.00'	77.27'
C7	98°33'33"	24.91'	42.85'
C8	98°04'56"	45.00'	77.03'
C9	6°49'24"	540.50'	64.37'
C10	6°57'06"	576.50'	69.95'
C11	87°52'11"	25.03'	38.39'
C12	89°45'53"	25.05'	39.25'
C13	90°16'37"	24.94'	39.30'
C14	89°59'53"	45.00'	70.68'

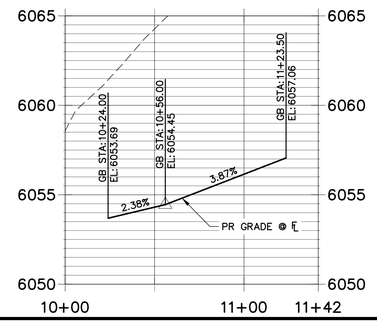
POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
35	10+20.00	18.00' (RT)	STANZA CIRCLE	6052.58		FL-FL INTERCEPT
36	10+20.00	18.00' (LT)	STANZA CIRCLE	6053.96		FL-FL INTERCEPT
37	21+67.03	18.00' (LT)	STANZA CIRCLE	6048.72		LOW PT
38	21+77.53	18.00' (RT)	STANZA CIRCLE	6048.73		LOW PT
39	17+88.04	18.00' (RT)	STANZA CIRCLE	6058.14		HC RAMP MID PT
40	23+63.69	18.00' (LT)	STANZA CIRCLE	6053.70		HC RAMP MID PT

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
1	10+25.32	25.32' (LT)	STANZA CIRCLE	6054.30		HC RAMP MID PT
2	10+43.00	18.00' (LT)	STANZA CIRCLE	6054.00		PC
3	10+25.32	25.32' (RT)	STANZA CIRCLE	6052.46		HC RAMP MID PT
4	10+43.00	18.00' (RT)	STANZA CIRCLE	6052.70		PT
5	12+50.16	18.00' (LT)	STANZA CIRCLE	6059.17		PT
6	12+50.16	18.00' (RT)	STANZA CIRCLE	6059.17		PC
7	14+61.95	18.00' (LT)	STANZA CIRCLE	6065.15		PCC
8	14+85.63	18.00' (LT)	STANZA CIRCLE	6065.49		PT
9	14+61.95	18.00' (RT)	STANZA CIRCLE	6065.15		PCC
10	14+85.63	18.00' (RT)	STANZA CIRCLE	6065.49		PT
11	15+76.14	18.00' (RT)	STANZA CIRCLE	6064.26		PT
12	15+81.69	18.00' (RT)	STANZA CIRCLE	6064.09		PC
13	15+94.31	20.72' (LT)	STANZA CIRCLE	6064.16		PT
14	16+55.30	18.00' (RT)	STANZA CIRCLE	6061.85		PT
15	16+42.69	20.72' (LT)	STANZA CIRCLE	6062.65		PT
16	16+99.48	18.00' (RT)	STANZA CIRCLE	6060.57		PC
17	16+99.48	18.00' (LT)	STANZA CIRCLE	6060.57		PC
18	17+65.99	18.00' (RT)	STANZA CIRCLE	6058.75		PT
19	17+67.29	18.00' (LT)	STANZA CIRCLE	6058.71		PC
20	18+52.42	18.00' (LT)	STANZA CIRCLE	6056.38		PT
21	21+00.10	18.00' (RT)	STANZA CIRCLE	6049.59		PC
22	21+12.20	19.25' (LT)	STANZA CIRCLE	6048.75		PC
23	21+69.37	18.00' (RT)	STANZA CIRCLE	6048.72		PT
24	21+57.27	19.25' (LT)	STANZA CIRCLE	6048.33		PT
25	22+95.37	18.00' (RT)	STANZA CIRCLE	6051.22		PC
26	23+81.37	18.00' (RT)	STANZA CIRCLE	6054.75		PT
27	24+26.82	18.00' (RT)	STANZA CIRCLE	6056.36		PT
28	24+26.86	18.00' (LT)	STANZA CIRCLE	6055.05		PT
29	10+62.00	18.00' (RT)	STANZA ROAD	6056.14		PT
30	10+62.00	18.00' (LT)	STANZA ROAD	6054.69		PT
31	10+98.50	18.00' (LT)	STANZA ROAD	6056.10		PC
32	10+98.52	18.00' (RT)	STANZA ROAD	6057.27		PC
33	11+15.88	25.03' (RT)	STANZA ROAD	6058.17		HC RAMP MID PT
34	11+15.18	24.38' (LT)	STANZA ROAD	6056.71		HC RAMP MID PT

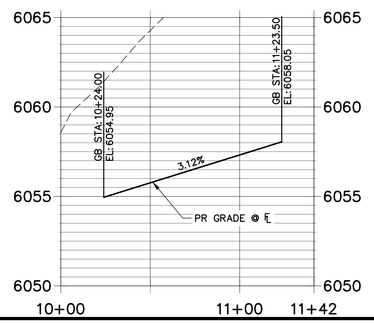
STANZA ROAD PROFILE
STA 10+00.00 TO 11+41.50



STANZA ROAD LEFT FLOWLINE TRANSITION
STA 10+00.00 TO 11+41.50



STANZA ROAD RIGHT FLOWLINE TRANSITION
STA 10+00.00 TO 11+41.50



Know what's below. Call before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED DOUGLAS COUNTY AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

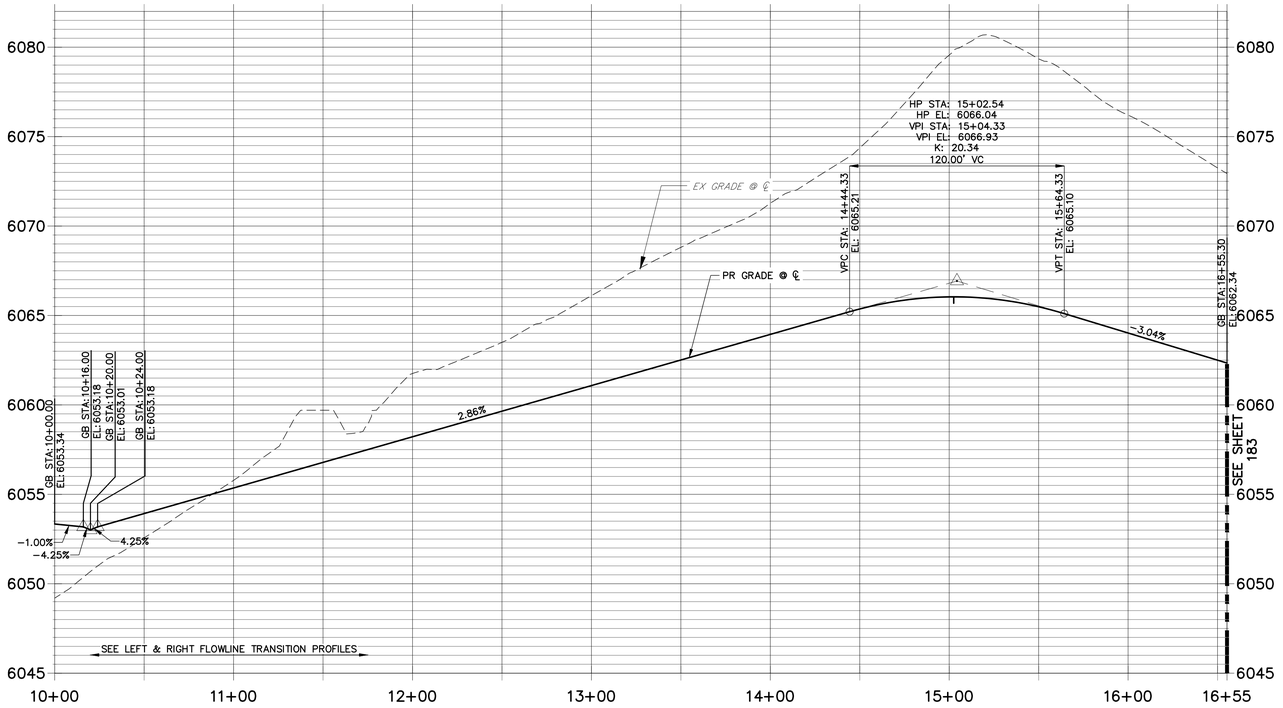
H-SCALE	1"=40'
V-SCALE	1"=4'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

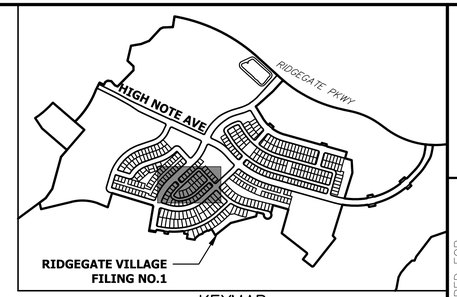
RIDGEGATE SOUTHWEST
VILLAGE FILING 1
ROADWAY PLAN & PROFILES

SHEET 181 OF 270

JOB NO. 15950.01

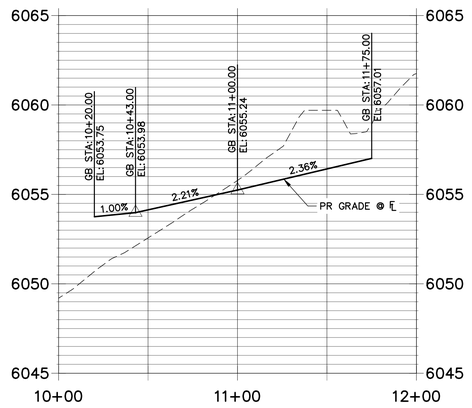
STANZA CIRCLE PROFILE
STA 10+00.00 TO 16+55.30



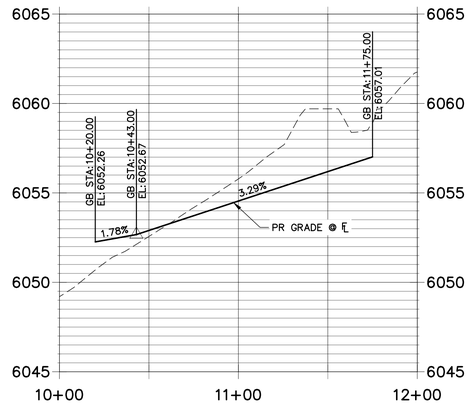


KEYMAP
SCALE:1"=1000'

STANZA CIRCLE LEFT FLOWLINE TRANSITION
STA 10+00.00 TO 12+00.00

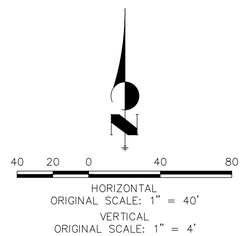


STANZA CIRCLE RIGHT FLOWLINE TRANSITION
STA 10+00.00 TO 12+00.00



NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE SHEET 179 FOR LEGEND.
4. SEE SHEET 182 FOR TYPICAL STREET SECTIONS.
5. SEE SHEET 186 FOR SUMP PROFILES.
6. SEE SHEET 184 FOR CURB RETURN PROFILES.
7. SEE SHEET 185 FOR CURB RAMP DETAILS.
8. SEE SHEET 187 FOR SIGNAGE AND STRIPING.
9. ALL CURB RADII ARE 25' UNLESS OTHERWISE NOTED.
10. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.



HORIZONTAL
ORIGINAL SCALE: 1" = 40'
VERTICAL
ORIGINAL SCALE: 1" = 4'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

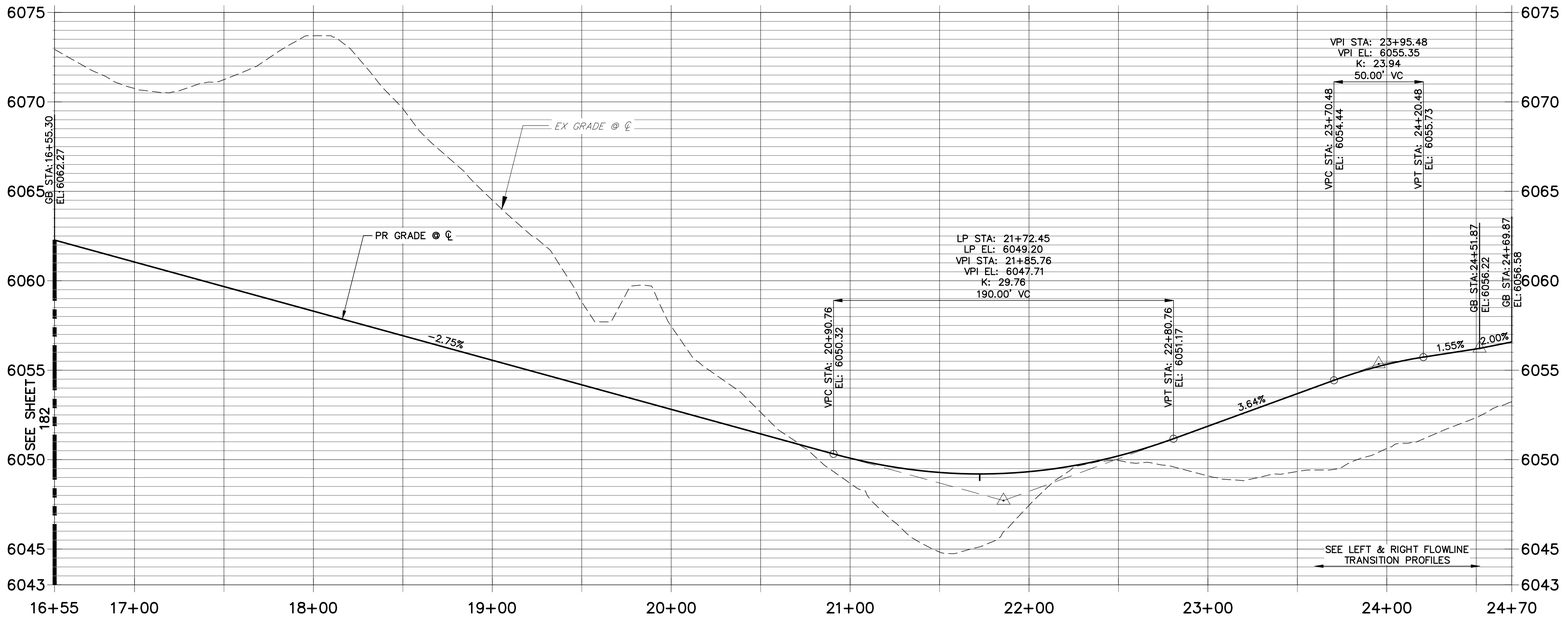
H-SCALE	1" = 40'
V-SCALE	1" = 4'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

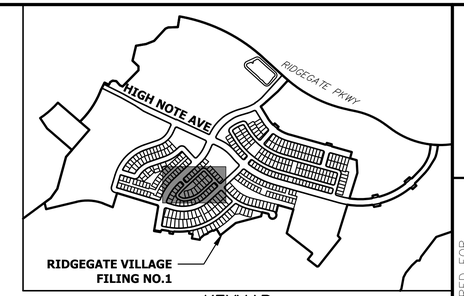
RIDGEGATE SOUTHWEST
VILLAGE FILING 1
ROADWAY PLAN & PROFILES

SHEET 182 OF 270

JOB NO. 15950.01

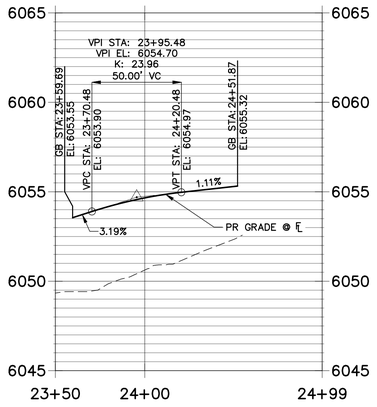
STANZA CIRCLE PROFILE
STA 16+55.30 TO 24+69.87



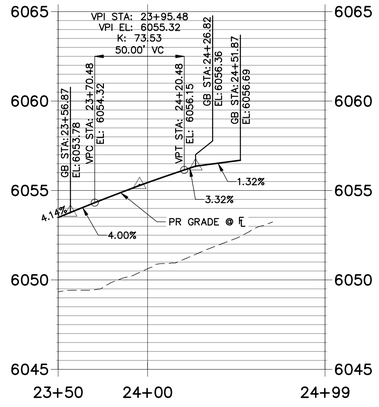


KEYMAP
SCALE: 1"=1000'

STANZA CIRCLE LEFT FLOWLINE TRANSITION
STA 23+50.00 TO 24+99.18

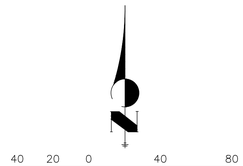


STANZA CIRCLE RIGHT FLOWLINE TRANSITION
STA 23+50.00 TO 24+99.18



NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE SHEET 179 FOR LEGEND.
4. SEE SHEET 182 FOR TYPICAL STREET SECTIONS.
5. SEE SHEET 186 FOR SUMP PROFILES.
6. SEE SHEET 184 FOR CURB RETURN PROFILES.
7. SEE SHEET 185 FOR CURB RAMP DETAILS.
8. SEE SHEET 187 FOR SIGNAGE AND STRIPING.
9. ALL CURB RADII ARE 25' UNLESS OTHERWISE NOTED.
10. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.



HORIZONTAL
ORIGINAL SCALE: 1" = 40'
VERTICAL
ORIGINAL SCALE: 1" = 4'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

Know what's **below.**
Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

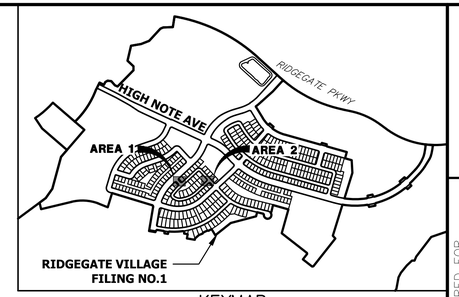
No.	REVISION	BY	DATE

H-SCALE	1" = 40'
V-SCALE	1" = 4'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST
VILLAGE FILING 1
ROADWAY PLAN & PROFILES

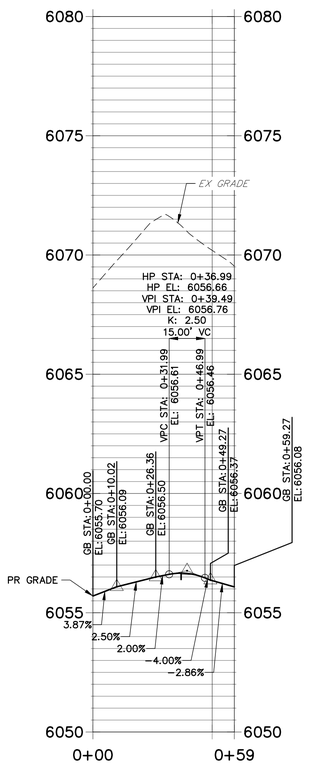
SHEET 183 OF 270

JOB NO. 15950.01



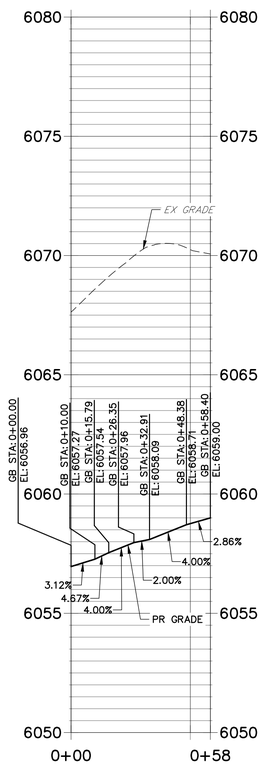
KEYMAP
SCALE:1"=1000'

F71 PROFILE
STA 0+00.00 TO 0+59.27



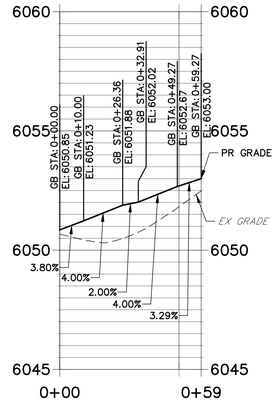
AREA 1

F72 PROFILE
STA 0+00.00 TO 0+58.40



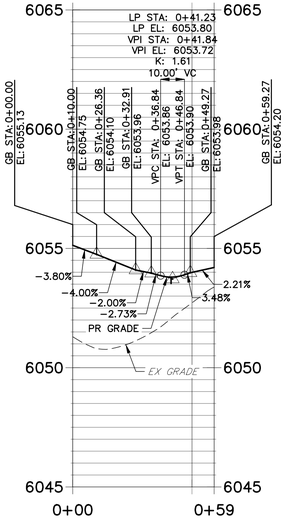
AREA 1

F73 PROFILE
STA 0+00.00 TO 0+59.27



AREA 2

F74 PROFILE
STA 0+00.00 TO 0+59.27



AREA 2

30 15 0 30 60

HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED PROFESSIONAL ENGINEER 36742

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1" = 30'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

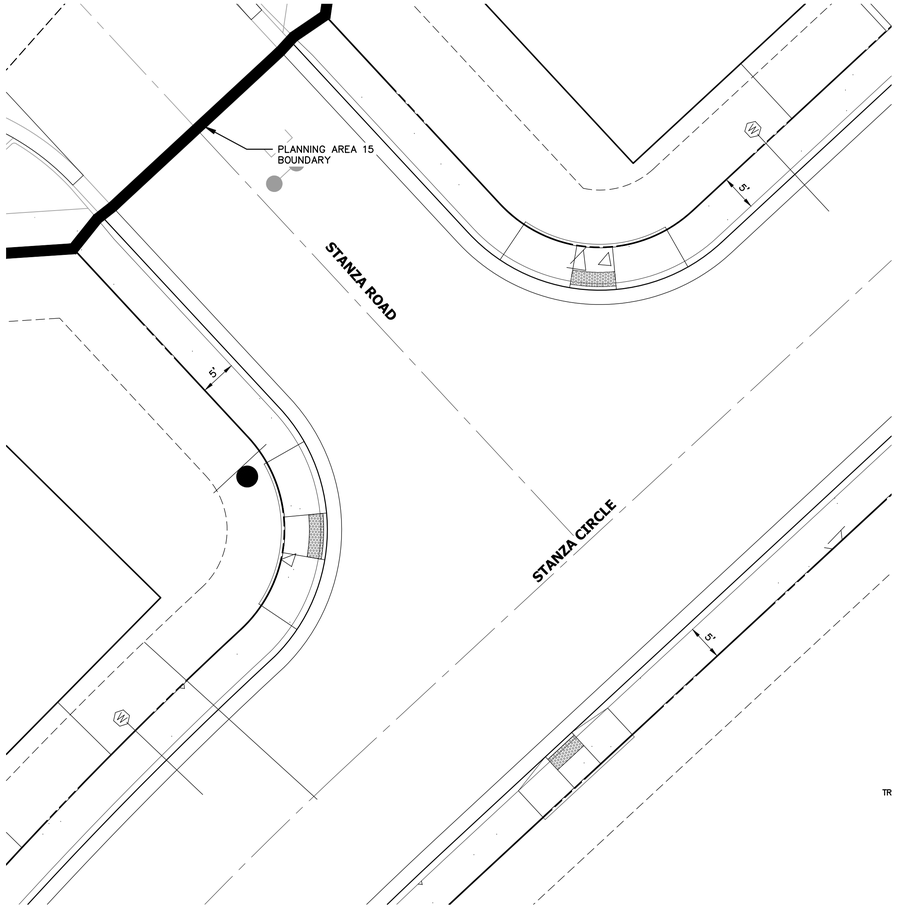
RIDGEGATE SOUTHWEST VILLAGE FILING 1

CURB RETURN PROFILES

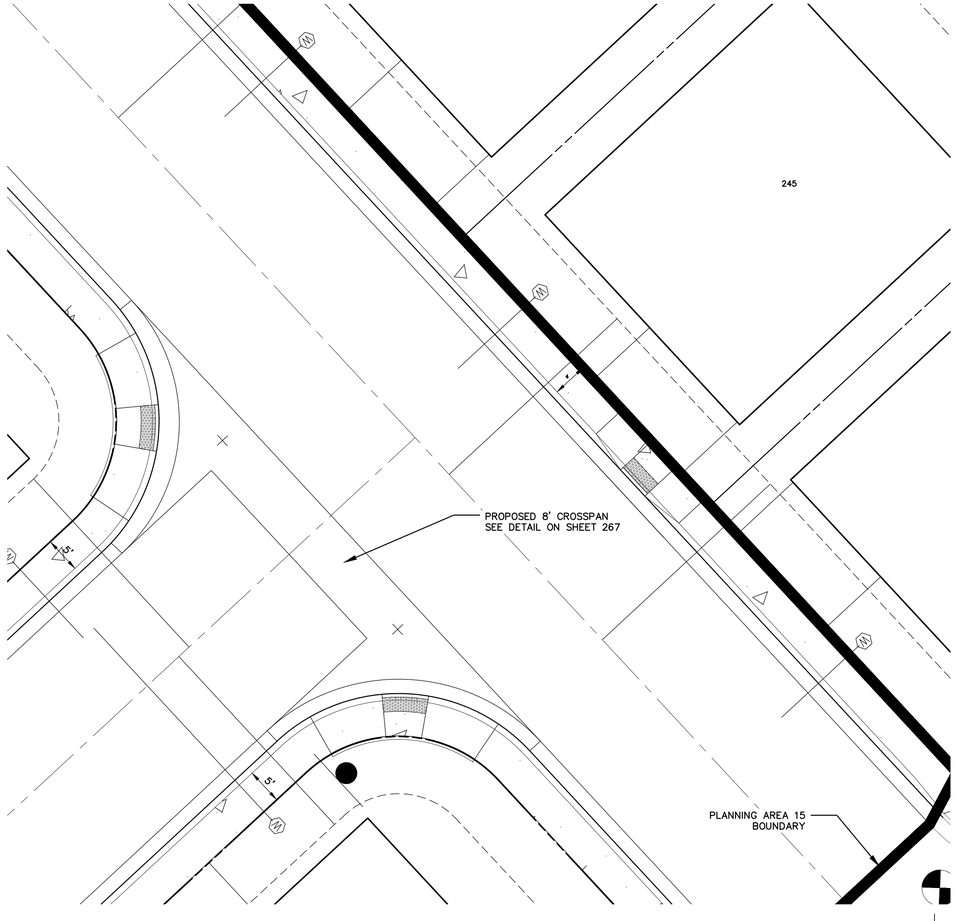
SHEET 184 OF 270

JOB NO. 15950.01

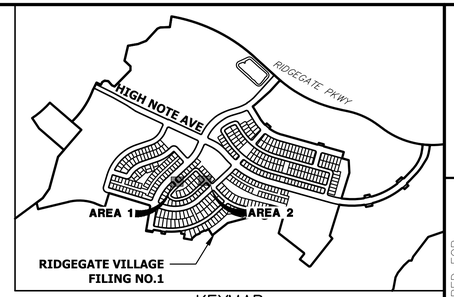
NOTE: CURB RAMP DETAILS TO BE PROVIDED WITH NEXT SUBMITTAL



AREA 1



AREA 2



KEYMAP
SCALE:1"=1000'

10 5 0 10 20
ORIGINAL SCALE: 1" = 10'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

DATE

AARON LEE CLUTTER
36742
PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

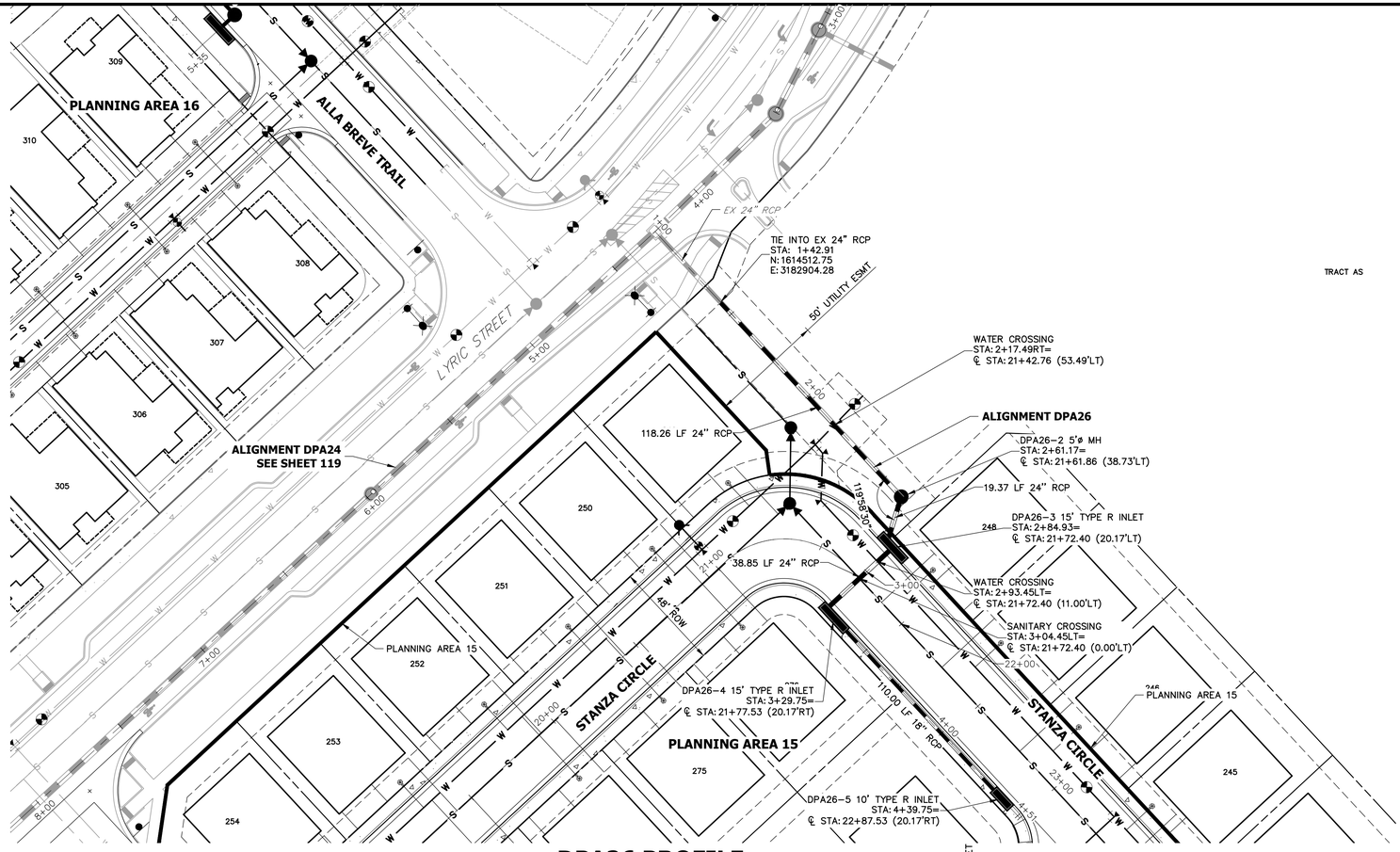
H-SCALE	1"=10'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

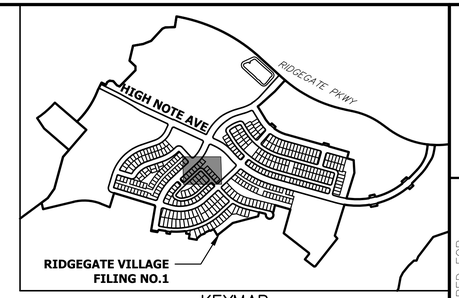
RIDGEGATE SOUTHWEST VILLAGE FILING 1

CURB RAMP DETAILS

SHEET 185 OF 270

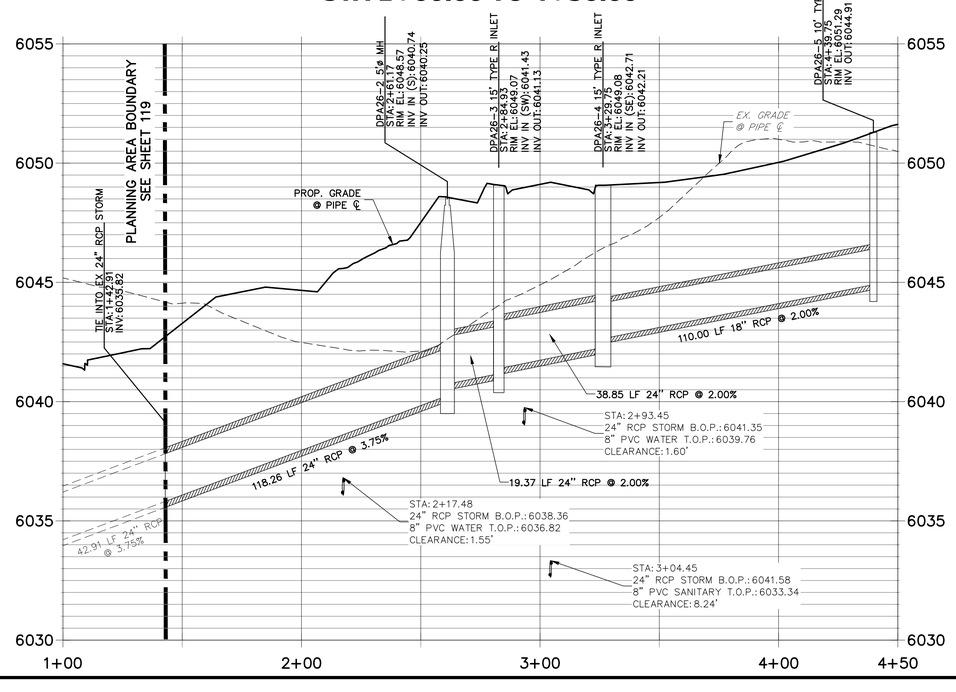
JOB NO. 15950.01





KEYMAP
SCALE: 1"=1000'

DPA26 PROFILE
STA 1+00.00 TO 4+50.00



30 15 0 30 60
HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

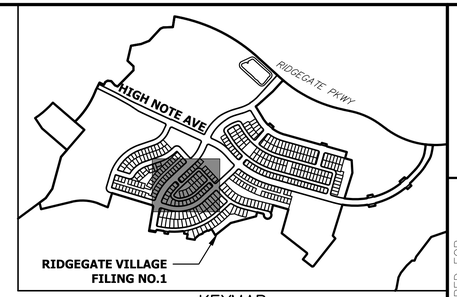
H-SCALE 1"=30'
V-SCALE 1"=3'
DATE 2/12/21
DESIGNED BY GVT
DRAWN BY GVT
CHECKED BY

RIDGEGATE SOUTHWEST VILLAGE FILING 1

STORM SEWER PLANS & PROFILES

SHEET 186 OF 270

JOB NO. 15950.01



KEYMAP
SCALE:1"=1000'

SIGN TABULATION				
SIGN NUMBER	STATION	OFFSET	ALIGNMENT	DESCRIPTION
1	10+50.54	23.21' (LT)	STANZA ROAD	30"X30" R1-1 30"X8" D3-1 (2)
2	11+02.44	27.82' (RT)	STANZA ROAD	30"X30" R1-1 30"X8" D3-1
3	10+38.92	27.86' (LT)	STANZA CIRCLE	30"X30" R1-1 30"X8" D3-1 (2)
4	24+31.37	21.52' (RT)	STANZA CIRCLE	30"X30" R1-1 30"X8" D3-1 (2)

40 20 0 40 80
ORIGINAL SCALE: 1" = 40'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT
PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

DATE

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=40'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

SIGNAGE AND STRIPING PLANS

SHEET 187 OF 270

JOB NO. 15950.01

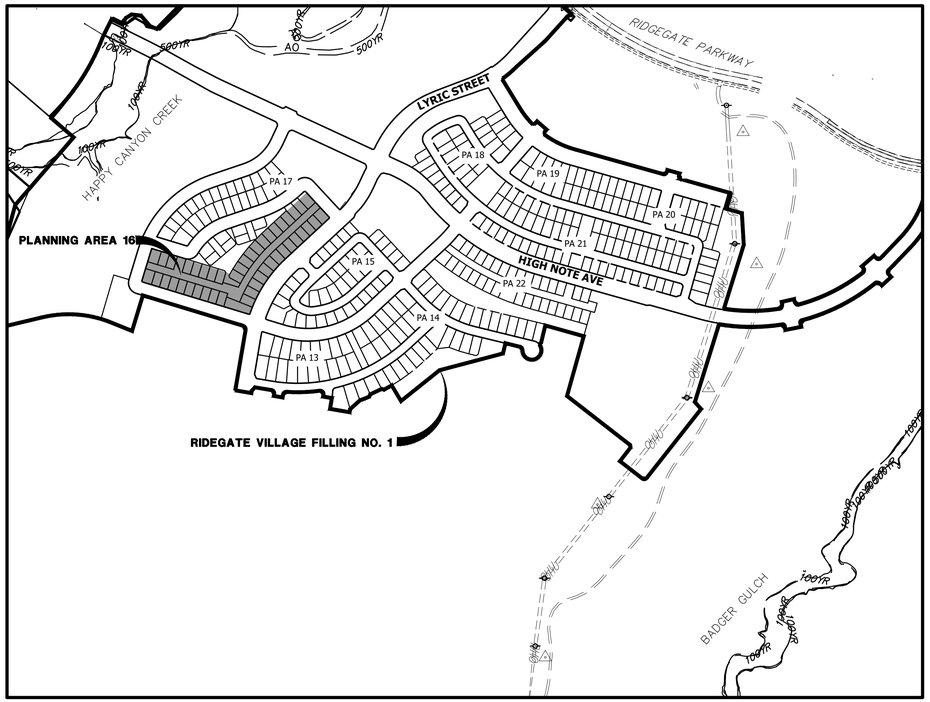
RIDGEGATE SOUTHWEST VILLAGE FILING 1-PLANNING AREA 16

A PORTION OF THE RIDGEGATE PLANNED DEVELOPMENT DISTRICT, EAST SIDE PROPERTY
LOCATED IN SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST
OF THE 6TH P.M., CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO

STREET & DRAINAGE CONSTRUCTION PLANS

ABBREVIATIONS

AC	ACRE
AD	ALGEBRAIC DIFFERENCE
AH	AHEAD
ARCH	ARCHITECT
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASS'Y	ASSEMBLY
AVE	AVENUE
BB	BOX BASE
BK	BACK
BNDY	BOUNDARY
BOP	BOTTOM OF PIPE
BOV	BLOW OFF VALVE
BFV	BUTTERFLY VALVE
BLVD	BOULEVARD
BW	BOTTOM OF WALL
C&G	CURB & GUTTER
CATV	CABLE TELEVISION
CB	CATCH BASIN
CBC	CONCRETE BOX CULVERT
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION
CDS	CUL-DE-SAC
CF	CUBIC FOOT
CFS	CUBIC FEET PER SECOND
CIP	COMPLETE IN PLACE
CL	CENTER LINE
CLOMR	CONDITIONAL LETTER OF MAP REVISION
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
COCS	CITY OF COLORADO SPRINGS
CONC	CONCRETE
CR	CIRCLE
CSP	CORRUGATED STEEL PIPE
CSU	COLORADO SPRINGS UTILITIES
CT	COURT
CTRB	CONCRETE THRUST REDUCER BLOCK
CY	CUBIC YARD
DBPS	DRAINAGE BASIN PLANNING STUDY
DE	DRAINAGE EASEMENT
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DR	DRIVE
DRC	DESIGN REVIEW COMMITTEE
DU	DWELLING UNITS
DY	DAY
E	EAST
EA	EACH
EGL	ENERGY GRADE LINE
EL	ELEVATION
ELEC	ELECTRIC
EOA	EDGE OF ASPHALT
EPC	EL PASO COUNTY
ERCP	ELLIPTICAL RCP
ESMT	EASEMENT
EST	ESTIMATE
EX	EXISTING
FDP	FINAL DEVELOPMENT PLAN
FDR	FINAL DRAINAGE REPORT
FES	FLARED END SECTION
FF	FINISHED FLOOR ELEVATION
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOWLINE
FIL	FILING
FO	FIBER OPTIC CABLE
GB	GRADE BREAK
GE	GAS EASEMENT
GIS	GEOGRAPHIC INFORMATION SYSTEM
GL	GAS LINE
GPS	GLOBAL POSITIONING SYSTEM
GV	GATE VALVE
HBP	HOT BITUMINOUS PAVEMENT
HC	HANDICAP
HDC	HIGH DEFLECTION COUPLING
HDPE	HIGH DENSITY POLYETHYLENE
HGL	HYDRAULIC GRADE LINE
HMA	HOT MIX ASPHALT
HOA	HOME OWNERS ASSOCIATION
HP	HIGH POINT
HR	HOUR
I	INLET
IE	IRRIGATION EASEMENT
INT	INTERSECTION
INV	INVERT
IRR	IRRIGATION
KB	KICK (THRUST) BLOCK
LB	POUND
LE	LANDSCAPE EASEMENT
LF	LINEAR FOOT
LN	LANE
LOMR	LETTER OF MAP REVISION
LP	LOW POINT
LS	LUMP SUM
LT	LEFT
MAX	MAXIMUM
M/D	MOISTURE DENSITY
MDDP	MASTER DEVELOPMENT DRAINAGE PLAN
MH	MANHOLE
MIN	MINIMUM
MS	MOUNTABLE SIDEWALK
N	NORTH
NRCP	NON-REINFORCED CONCRETE PIPE
ODP	OFFICIAL DEVELOPMENT PLAN
OHE	OVERHEAD ELECTRIC
OHU	OVERHEAD UTILITY
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PCR	POINT OF CURB RETURN
PDP	PRELIMINARY DEVELOPMENT PLAN
PE	PROFESSIONAL ENGINEER
PI	POINT OF INTERSECTION
PKWY	PARKWAY
PL	PROPERTY LINE
PR	PROPOSED
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PV	PLUG VALVE
PVC	POLYVINYL CHLORIDE
R	RADIUS
RCBC	REINFORCED CONCRETE BOX CULVERT
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
ROW	RIGHT OF WAY
RT	RIGHT
S	SOUTH
STE	STEEL
SAN	SANITARY SEWER
SF	SQUARE FOOT
ST	STREET
STA	STATION
STM	STORM SEWER
SY	SQUARE YARD
SY-IN	SQUARE YARD INCH
TB	THRUST BLOCK
TBC	TOP BACK OF CURB
TBW	TOP BACK OF WALK
TEL	TELEPHONE
TN	TON
TOA	TOP OF ASPHALT
TOB	TOP OF BOX
TOC	TOP OF CURB OR CONCRETE
TOF	TOP OF FOUNDATION
TOP	TOP OF PIPE
TW	TOP OF WALL
TYP	TYPICAL
UDFCD	URBAN DRAINAGE AND FLOOD CONTROL DISTRICT
UE	UTILITY EASEMENT
U&DE	UTILITY & DRAINAGE EASEMENT
UGE	UNDERGROUND ELECTRIC
VCP	VITRIFIED CLAY PIPE
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
VTC	VEHICLE TRACKING CONTROL
W	WEST
WL	WATER LINE
WM	WATER MAIN
WRD	WATER RESOURCES DEPARTMENT
WS	WATER SURFACE
WSE	WATER SURFACE ELEVATION
WTR	WATER
YR	YEAR



VICINITY MAP
SCALE: 1"=400'

SHEET INDEX

188	COVER SHEET
189	GENERAL NOTES
190	LEGEND
191	OVERALL UTILITY PLAN
193 – 196	ROADWAY PLAN & PROFILES
197	CURB RAMP DETAILS
###	##########################
199	SIGNAGE AND STRIPING PLANS

BENCHMARK

NGS CONTROL POINT UNBEWUST BEING A 3.5 INCH DIAMETER BRASS CAP. LOCATED ABOUT 3.2 MILES SOUTH OF INTERSTATE 25 AND COLORADO STATE HIGHWAY 470 INTERCHANGE, GO SOUTH ON INTERSTATE 25 FOR 2.9 MILES TO EXIT 191. PROCEED ON A PAVED ROAD TO THE SOUTHWEST FOR 0.2 MILES TO THE STATION ON THE LEFT. IN THE NORTHWEST CORNER OF A 24 FOOT BY 16 FOOT ROCK OUTCROP. IT IS 22.5 FEET EAST OF THE CENTERLINE OF THE PAVED ROAD, 123 FEET NORTH OF THE OUTLET OF A 3 FOOT CORRUGATED STEEL PIPE CULVERT AND APPROXIMATELY 350 FEET WEST OF THE WEST EDGE OF OIL OF SOUTHBOUND INTERSTATE 25, ELEVATION: 6125.32 (NAVD88).

BASIS OF BEARING

BEARING SHOWN HEREON ARE GRID BEARINGS DERIVED FROM GPS OBSERVATION BASED UPON THE COLORADO COORDINATE SYSTEM OF 1983 CENTRAL ZONE (NAD 83, 2011) REFERENCED TO THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, SIXTH PRINCIPAL MERIDIAN BEING MONUMENTED AS SHOWN HEREON, TAKEN TO BEAR NORTH 89°31'58" EAST, A DISTANCE OF 2635.13 FEET.

Know what's **below.**
Call before you dig.

APPLICANT/OWNER

SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
P~303.791.8180

CIVIL ENGINEER/SURVEYOR

JR ENGINEERING
7200 SOUTH ALTON WAY, SUITE C400
CENTENNIAL, CO
P~303.267.6220

PLANNER

SAGE DESIGN GROUP
1500 SOUTH PEARL STREET, SUITE 200
DENVER, CO 80210
P~303.470.2855

TRAFFIC ENGINEER

JR ENGINEERING
7200 SOUTH ALTON WAY, SUITE C400
CENTENNIAL, CO
P~303.267.6183

GEOTECHNICAL ENGINEER

CTL THOMPSON, INC
1971 WEST 12TH VAE.
DENVER, CO 80204
P~303.825.0777

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=400'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

COVER SHEET

SHEET 188 OF 270

JOB NO. 15950.01

GENERAL PROJECT NOTES:

1. ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION OF IMPROVEMENTS SHALL MEET OR EXCEED THE GOVERNING CITY, COUNTY, AND/OR STATE AND APPLICABLE UTILITY DISTRICT STANDARDS AND SPECIFICATIONS, AND APPLICABLE STATE AND FEDERAL REGULATIONS. WHERE THERE IS A CONFLICT BETWEEN THESE PLANS AND ANY APPLICABLE STANDARDS, THE HIGHER QUALITY STANDARD SHALL APPLY. ALL WORK SHALL BE INSPECTED AND APPROVED BY THE CITY AND APPLICABLE UTILITY DISTRICT(S).

2. THE SITE CONSTRUCTION PLANS LISTED WITHIN THIS PLAN SET ARE NOT FOR CONSTRUCTION UNLESS APPROVED BY THE APPROPRIATE GOVERNING JURISDICTION. THE CONTRACTOR SHALL CONFIRM SAID APPROVAL PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL KEEP ONE (1) SIGNED COPY OF THE APPROVED SET OF PLANS, APPROPRIATE SPECIFICATIONS AND STANDARDS, AND APPROVED PERMITS ONSITE AT ALL TIMES.

3. NO REVISIONS SHALL BE MADE TO THESE PLANS WITHOUT THE APPROVAL OF THE CITY, COUNTY, STATE OR LOCAL DISTRICT AND THE ENGINEER OF RECORD.

4. ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARDS, UNLESS SPECIFICALLY STATED OTHERWISE.

5. THE CONTRACTOR IS RESPONSIBLE FOR ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS SHOWN ON THESE DRAWINGS OR DESIGNATED TO BE PROVIDED, INSTALLED, CONSTRUCTED, REMOVED, OR RELOCATED UNLESS SPECIFICALLY NOTED OTHERWISE.

6. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND LICENSES FOR WORK INCLUDING, BUT NOT LIMITED TO DEMOLITION, STREET CUTS, UTILITY INTERFERENCES, TRAFFIC CONTROL, GRADING, AND UTILITY FROM ALL APPLICABLE AGENCIES; AND FOR COMPLYING WITH ALL PROVISIONS INCLUDED THEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL OTHER APPLICABLE PERMITS NOT SPECIFICALLY REQUIRED BY THE AUTHORITY HAVING JURISDICTION.

7. THE CONTRACTOR SHALL UTILITY STAKE PROJECT AT LEAST 2 WORKING DAYS PRIOR TO BEGINNING EXCAVATION OR GRADING, TO HAVE ALL REGISTERED UTILITY LOCATIONS MARKED. OTHER UNREGISTERED UTILITY ENTITIES (I.E. DITCH COMPANY) ARE TO BE LOCATED BY CONTACTING THE RESPECTIVE REPRESENTATIVE.

8. THE CONTRACTOR IS RESPONSIBLE FOR FIELD LOCATING AND VERIFYING ELEVATIONS OF ALL EXISTING SEWER MAINS, WATER MAINS, CURBS, GUTTERS, AND OTHER UTILITIES AT THE POINTS OF CONNECTION SHOWN ON THE PLANS, AND AT ANY UTILITY CROSSINGS PRIOR TO INSTALLING ANY OF THE NEW IMPROVEMENTS. IF A CONFLICT EXISTS AND/OR A DESIGN MODIFICATION IS REQUIRED, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO MODIFY THE DESIGN. DESIGN MODIFICATION(S) MUST BE APPROVED BY THE APPROPRIATE AUTHORITY PRIOR TO BEGINNING CONSTRUCTION.

9. ANY DISRUPTION OF UTILITY SERVICE THAT IS REQUIRED TO ADJUST, EXTEND, RELOCATE OR OTHERWISE REARRANGE ANY UTILITY WITHIN THE PROJECT AREA SHALL BE COORDINATED IN ADVANCE WITH THE AFFECTED UTILITY ENTITY.

10. RIM ELEVATIONS SHOWN ARE APPROXIMATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS. THE CONTRACTOR SHALL USE PRECAST CONCRETE ADJUSTMENT RINGS, GROUT, AND STEEL SHIMS TO ADJUST THE MANHOLE FRAMES TO FINAL GRADE IN CONFORMANCE WITH THE CITY OR UTILITY COMPANY/DISTRICT STANDARD SPECIFICATIONS. ALL FRAMES SHALL BE ADJUSTED TO FINAL GRADE PRIOR TO THE FINAL LIFT OF ASPHALT.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF PROJECT SAFETY INCLUDING, BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.

12. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN, IN ACCORDANCE WITH THE M.U.T.C.D. TO THE APPROPRIATE RIGHT-OF-WAY AUTHORITY (CITY, COUNTY, OR STATE) FOR APPROVAL, PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN, OR AFFECTING, THE RIGHT-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED BY THE CONSTRUCTION ACTIVITIES. ALL WORK WITHIN THE RIGHT OF WAY SHALL BE DONE IN ACCORDANCE WITH THE GOVERNING AUTHORITY'S STANDARDS AND SPECIFICATIONS.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANING AND RESTORATION OF ANY EXISTING IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO STREET PAVEMENT, FENCES, SOD, LANDSCAPING, SPRINKLER SYSTEMS, AND UTILITIES DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL LOCATION AND CONDITION.

14. INCLUDED IN THESE PLANS IS THE DEMOLITION AND DISPOSAL OF ALL EXISTING UTILITIES, SITE IMPROVEMENTS, STRUCTURES, AND SITE FURNISHINGS NEEDED FOR CONSTRUCTION OF THE IMPROVEMENTS SHOWN HEREON. ALL QUESTIONS IN REGARD TO DEMOLITION SHALL BE SUBMITTED TO THE OWNER IN WRITING PRIOR TO BID.

15. ALL DEMOLITION, REMOVAL, DISPOSAL, AND ABANDONMENT OF UTILITIES, STRUCTURES, SITE IMPROVEMENTS, AND SITE FURNISHINGS SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL STANDARDS AND SPECIFICATIONS, AND PERMIT REQUIREMENTS.

16. ALL DISTURBED SOIL, ON- OR OFF-SITE AND RELATED TO WORK AT THIS PROJECT SITE, IS REQUIRED TO BE PROTECTED FROM WIND AND STORM WATER EROSION. TO MITIGATE EROSION, THE CONTRACTOR SHALL USE STANDARD EROSION CONTROL TECHNIQUES DESCRIBED IN THE GESC PLAN SET AND GESC REPORT FOR THIS PROJECT.

17. ALL STRUCTURAL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY GROUND-DISTURBING ACTIVITY. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED IN GOOD REPAIR BY THE CONTRACTOR UNTIL SUCH TIME AS THE ENTIRE DISTURBED AREA IS STABILIZED WITH HARD SURFACE OR PERMANENT LANDSCAPING. THE CONTRACTOR IS RESPONSIBLE FOR REFERRING TO ANY EROSION AND SEDIMENT CONTROL, STORMWATER MANAGEMENT, STORMWATER POLLUTION PREVENTION, OR SIMILAR PLAN AND/OR NARRATIVE AND ASSOCIATED PERMITS INCLUDING, BUT NOT LIMITED TO GRADING PERMITS, AND COMPLYING WITH THE REQUIREMENTS THEREIN.

18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK, INSPECTIONS, AND CERTIFICATIONS AS REQUIRED BY THE CITY, STATE OR LOCAL DISTRICTS. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST ASSOCIATED WITH THE INSPECTION AND CERTIFICATION UNLESS OTHERWISE ARRANGED WITH THE OWNER/DEVELOPER. THE CONTRACTOR SHALL COORDINATE ALL CERTIFICATIONS, AND PROVIDE FIELD SURVEYED AS-BUILT INFORMATION FOR REVIEW BY THE OWNER/DEVELOPER AND/OR ENGINEER AS EARLY AS POSSIBLE IN THE CONSTRUCTION SCHEDULE TO AVOID POTENTIAL DELAYS.

19. CONTRACTOR IS RESPONSIBLE FOR AS-BUILT DRAWINGS, TESTS, REPORTS, AND/OR ANY OTHER CERTIFICATES OR INFORMATION AS REQUIRED FOR ACCEPTANCE OF WORK FROM CITY, UTILITY DISTRICTS, OR ANY OTHER GOVERNING AGENCY, OR TO THE OWNER/DEVELOPER AS REQUIRED BY AND IN ACCORDANCE WITH THE GOVERNING AUTHORITY OR OWNER/DEVELOPER'S CRITERIA. CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING AS-BUILT INFORMATION AN A SET OF RECORD DRAWINGS KEPT AT THE CONSTRUCTION SITE AND AVAILABLE TO THE GOVERNING CITY, COUNTY, AND/OR STATE AND UTILITY DISTRICT INSPECTOR AT ALL TIMES. THE CONTRACTOR SHALL CONFIRM ANY REQUIREMENTS AS EARLY AS POSSIBLE IN THE CONSTRUCTION SCHEDULE TO ACCOUNT FOR PREPARATION AND REVIEW OF THE INFORMATION TO AVOID POTENTIAL DELAYS.

20. IF, DURING THE CONSTRUCTION PROCESS, CONDITIONS ARE ENCOUNTERED BY THE CONTRACTOR, HIS SUBCONTRACTORS, OR OTHER AFFECTED PARTIES, WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE OWNER/DEVELOPER AND THE ENGINEER IMMEDIATELY.

21. DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. IF PERTINENT DIMENSIONS ARE NOT SHOWN, CONTACT THE CONSULTING ENGINEER FOR CLARIFICATION AND ANNOTATE THE DIMENSION ON THE AS-BUILT RECORD DRAWING.

22. BENCHMARK VERIFICATION: THE CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS AND THE PROPOSED ELEVATIONS IN THIS CONSTRUCTION PLAN SET AGAINST THE PROJECT BENCHMARK, IDENTIFIED HEREIN, PRIOR TO COMMENCING WORK.

ROADWAY NOTES

1. GUTTERS SHALL BE AT LEAST 6" THICK.
2. ALL CURBS SHALL USE THE CATCH SECTION UNLESS OTHERWISE NOTED.
3. ALL COMBINATION CURB, GUTTER AND SIDEWALKS TO BE 6" THICK (MIN.). SIDEWALKS WITH VERTICAL CURB AND GUTTER TO BE 6" THICK (MIN.).
4. NON-LANDSCAPED MEDIAN ISLANDS SHALL BE COVERED WITH AN ACCEPTABLE IMPERMEABLE SURFACE.
5. IF ANY SECTION OF A DETACHED SIDEWALK IS TO BE PLACED OUTSIDE OF THE ROAD RIGHT-OF-WAY, THEN A SIDEWALK EASEMENT SHALL BE REQUIRED TO MAINTAIN PUBLIC USE.
6. PLACEMENT, MOISTURE AND DENSITY CONTROL FOR SUBGRADE, SUBBASE, AND SURFACING MATERIALS SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS OF CHAPTER 8 OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.

CITY OF LONE TREE GENERAL NOTES

1. THE CITY OF LONE TREE ENGINEER'S SIGNATURE AFFIXED TO THIS DOCUMENT INDICATES THE ENGINEERING DIVISION HAS REVIEWED THE DOCUMENT AND FOUND IT IN GENERAL CONFORMANCE WITH THE CITY OF LONE TREE SUBDIVISION RESOLUTION OR APPROVED VARIANCES TO THOSE REGULATIONS. THE CITY OF LONE TREE ENGINEER, THROUGH ACCEPTANCE OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY, OTHER THAN STATED ABOVE, FOR THE COMPLETENESS AND/OR ACCURACY OF THESE DOCUMENTS. THE OWNER AND ENGINEER UNDERSTAND THAT THE RESPONSIBILITY FOR THE ENGINEERING ADEQUACY OF THE FACILITIES DEPICTED IN THIS DOCUMENT LIES SOLELY WITH THE REGISTERED PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE IS AFFIXED TO THIS DOCUMENT.
2. ALL ROADWAY CONSTRUCTION SHALL CONFORM TO CURRENT DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
3. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE CITY OF LONE TREE ENGINEERING DIVISION. THE CITY RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS STANDARDS AND SPECIFICATIONS.
4. THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS, INSPECTION SECTION, (303) 662-8112, A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO STARTING CONSTRUCTION, AND/OR BEFORE RESTARTING CONSTRUCTION AFTER A SHUTDOWN OF MORE THAN 10 DAYS.
5. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ACTUAL CONSTRUCTION. FOR INFORMATION, CONTACT: UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT (800) 922-1987 OR 811
6. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY (SIGNED BY BOTH DESIGN ENGINEER AND CITY OF LONE TREE) OF THE CONSTRUCTION PLANS AND GESC REPORT AND PLAN, AND ONE (1) COPY OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS AT THE JOB SITE AT ALL TIMES.
7. ALL PROPOSED STREET CUTS TO EXISTING PAVEMENTS FOR UTILITIES, STORM SEWER, OR OTHER PURPOSES ARE LISTED AND REFERENCED BELOW:

   RIDGEGATE PARKWAY

8. A ROW/CONSTRUCTION PERMIT MUST BE OBTAINED BEFORE ANY WORK WITHIN EXISTING OR PROPOSED PUBLIC ROW. THE PERMIT APPLICATION MUST BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR REVIEW/PROCESSING A MINIMUM OF 7 DAYS PRIOR TO UPDATED 2-3-09 REQUESTED START FOR THE WORK IN THE ROW.
9. A PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR ACCEPTANCE WITH THE PERMIT APPLICATION. AN EXCAVATION OR PUBLIC IMPROVEMENTS CONSTRUCTION PERMIT WILL NOT BE ISSUED WITHOUT AN APPROVED TRAFFIC CONTROL PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION.
10. THE CONSTRUCTION PLANS SHALL BE CONSIDERED VALID FOR TWO (2) YEARS FROM THE DATE OF CITY OF LONE TREE ACCEPTANCE/APPROVAL IF APPLICABLE CONSTRUCTION PERMITS HAVE NOT BEEN OBTAINED, AND CONSTRUCTION STARTED WITHIN THAT TIME, THESE PLANS SHALL BE VOID AND WILL BE SUBJECT TO RE-REVIEW AND RE-ACCEPTANCE BY THE CITY OF LONE TREE.
11. CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE ENGINEER INSPECTOR WHEN WORKING OUTSIDE OF THE PUBLIC RIGHT-OF-WAY ON ANY FACILITY WHICH WILL BE CONVEYED TO THE CITY, URBAN DRAINAGE AND FLOOD CONTROL DISTRICT, OR OTHER SPECIAL DISTRICT FOR MAINTENANCE (STORM SEWER, ENERGY DISSIPATERS, DETENTION OUTLET STRUCTURES, OR OTHER DRAINAGE INFRASTRUCTURES). FAILURE TO NOTIFY ENGINEERING INSPECTOR TO ALLOW THEM TO INSPECT THE CONSTRUCTION MAY RESULT IN NON-ACCEPTANCE OF THE FACILITIES/INFRASTRUCTURE BY CITY AND/OR URBAN DRAINAGE.

CITY OF LONE TREE SIGNAGE & STRIPING NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MOST RECENT VERSION OF THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE "COLORADO SUPPLEMENTAL MUTCD" AND THE DOUGLAS COUNTY "ROAD AND CONSTRUCTION STANDARDS MANUAL". FURTHER SPECIFICATIONS AND ILLUSTRATIONS ARE LOCATED IN THE COLORADO DIVISION OF HIGHWAYS "M AND S STANDARDS".
2. DELINEATION OF ROADWAYS SHALL BE AS SPECIFIED IN THE COLORADO "M AND S MANUAL".
3. SPECIAL CARE SHALL BE TAKEN IN SIGN LOCATION TO ENSURE AN UNOBSTRUCTED VIEW OF EACH SIGN. STREET NAME SIGNS SHALL BE MOUNTED SO THAT THEY CAN BE SEEN FROM ALL DIRECTIONS OF TRAVEL.
4. INSTALLATION OF SIGNS SHALL CONFORM TO THE MUTCD MOUNTING HEIGHT REQUIREMENTS, INCLUDING A 7-FOOT MINIMUM HEIGHT FROM THE BOTTOM OF THE LOWEST SIGN PANEL TO THE TOP GRADE OF SIDEWALK.
5. ALL NEWLY INSTALLED TRAFFIC SIGNS SHALL MEET THE MINIMUM RETRO-REFLECTIVITY AND ILLUMINATION STANDARDS AS SET FORTH BY THE MUTCD (LATEST EDITION). THESE MINIMUM REQUIREMENTS SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
6. DIAMOND GRADE MATERIAL SHALL BE USED ON ALL STOP SIGNS.
7. THE CONTRACTOR INSTALLING SIGNS IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND UTILITIES. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.
8. FOLLOWING INSTALLATION, THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS DEPARTMENT, 303-662-8112. A FIELD INSPECTION OF LOCATION AND INSTALLATION OF ALL SIGNS SHALL BE PERFORMED BY PUBLIC WORKS. ALL DISCREPANCIES IDENTIFIED DURING THE FIELD INSPECTION MUST BE CORRECTED BEFORE THE TWO-YEAR WARRANTY PERIOD WILL BEGIN.
9. SIGNAGE AND STRIPING HAS BEEN DETERMINED BY INFORMATION AVAILABLE AT THE TIME OF REVIEW.
   PRIOR TO INITIATION OF THE WARRANTY PERIOD, LONE TREE RESERVES THE RIGHT TO REQUIRE MODIFICATIONS TO EXISTING OR INSTALLATION OF ADDITIONAL SIGNAGE AND/OR STRIPING IF THEY DETERMINE THAT AN UNFORESEEN CONDITION WARRANTS SUCH MODIFICATION ACCORDING TO THE MUTCD OR THE CDOT M AND S STANDARDS. ALL SIGNAGE AND STRIPING SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
10. FINAL STRIPING AND CROSSWALK LAYOUT TO BE APPROVED BY THE CITY OF LONE TREE PRIOR TO INSTALLATION. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.
11. CROSSWALKS SHALL:
    BE CONSTRUCTED USING 125 MIL PREFORMED THERMOPLASTIC.
    LINE UP WITH THE HANDICAP RAMPS AT BOTH ENDS.
    BE CENTERED ON LANE LINES SO AS TO BE STRADDLED BY VEHICLES.
12. ALL PAVEMENT MARKINGS SHALL BE AS FOLLOWS:
    FOR CONCRETE SURFACE: METHYL METHACRYLATE OR EPOXY PAINT.
    FOR ASPHALT SURFACE: PAINT, 90 MIL PREFORMED THERMOPLASTIC, INLAID MARKING TAPE, METHYL METHACRYLATE, OR EPOXY PAINT.
    TURN ARROWS AND ONLYS: 125 MIL PREFORMED THERMOPLASTIC.
13. ALL PAVEMENT MARKING SHALL BE PRECEDED BY THE APPROPRIATE SURFACE PREPARATION.
14. ANY SIGNAGE AND/OR OTHER TRAFFIC CONTROL DEVICES REMOVED SHALL BE RETURNED TO THE CITY OF LONE TREE.
15. TYPE III LIGHTED BARRICADES SHALL BE SET AT ENDS OF ROADWAYS, SEPARATING FINISHED AND UNFINISHED CONSTRUCTION AREAS AND WILL BE MAINTAINED BY THE CONTRACTOR/DEVELOPER.

NOTE: ALSO SEE CITY OF LONE TREE "STREET SIGN DETAILS"FOR ADDITIONAL INTERSECTION STREET SIGNAGE REQUIREMENTS.

STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON-GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.

DRAINAGE STRUCTURE NOTES

1. CONCRETE WORK SHALL CONFORM TO ACI 301, ACI 350.
2. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM-615, GRADE 60.
3. ALL EXPOSED CONCRETE SHALL HAVE A CDOT CLASS 2 OR 5 FINISH.
4. ALL EXPOSED CONCRETE CORNERS SHALL HAVE ¾"CHAMFERS.
5. DETAILING, FABRICATION, AND PLACING OF REBAR SHALL BE IN ACCORDANCE WITH ACI 315.
6. CONSTRUCTION TOLERANCES SHALL BE IN ACCORDANCE WITH ACI 347.
7. ALL MANHOLES SHALL BE SLAB BASE UNLESS SPECIFIED OTHERWISE. MANHOLE SHALL BE FABRICATED IN ACCORDANCE WITH CDOT STANDARD M-604-20.
8. COORDINATES FOR MANHOLES AND AREA INLETS ARE SHOWN AT THE CENTER OF THE STRUCTURE. COORDINATES FOR MOUNTABLE CURB INLETS ARE SHOWN ALONG THE FLOWLINE AT CENTER OF THE STRUCTURE.
9. ALL TYPE C AND D INLETS SHALL HAVE CLOSE MESH GRATES UNLESS SPECIFIED OTHERWISE.
10. LENGTH OF FABRICATED BAR GRATING PANELS IS LENGTH OF BEARING BARS, WIDTH REFERS TO DIMENSION PERPENDICULAR TO BEARING BARS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PANEL DIMENSIONS GIVEN PRIOR TO FABRICATION.

DRAINAGE GENERAL NOTES

1. PROJECT FACILITIES ARE TO BE LOCATED BASED ON THE SURVEY COORDINATES, ELEVATIONS, DIMENSIONS, AND/OR GEOMETRIC DESIGN DATA PROVIDED ON THE DRAWINGS.
2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES AND FOR SATISFYING ALL APPLICABLE OSHA, FEDERAL, STATE, AND LOCAL REGULATIONS. TEMPORARY EXCAVATIONS SHALL PROVIDE, AT MINIMUM, THE TRENCH DIMENSIONS AND CLEARANCES SHOWN OR SPECIFIED. TEMPORARY CONSTRUCTION SLOPES SHALL BE SLOPED, SHORED, SHEETED, AND/OR BRACED IN ACCORDANCE WITH STABILITY REQUIREMENTS AND APPLICABLE REGULATIONS, AND SHALL BE NO STEEPER THAN THE SLOPES SHOWN OR SPECIFIED WITHOUT THE APPROVAL OF THE ENGINEER. ANY SUCH APPROVALS BY THE ENGINEER WILL NOT RELIEVE THE CONTRACTOR FROM SOLE RESPONSIBILITY FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES.
3. EXISTING FACILITIES NOT INDICATED TO BE REMOVED SHALL BE PROTECTED IN PLACE OR REMOVED AND REPLACED IN KIND, AS APPROVED BY ENGINEER.
4. THE WORK WILL TAKE PLACE IN AND AROUND DRAINAGE SWALES AND THE HAPPY CANYON CREEK, SUBJECT TO PERIODIC FLOODING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF SURFACE AND SUBSURFACE WATER DURING THE COURSE OF THE WORK. ANY DAMAGE TO THE WORK RESULTING FROM SURFACE FLOWS, BASE FLOWS, OR FLOOD FLOWS INCLUDING BUOYANCY FORCES ON PIPELINES AND OTHER FACILITIES SHALL BE CORRECTED BY THE CONTRACTOR AT THE CONTRACTOR'S SOLE COST. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND SATISFYING THE REQUIREMENTS OF ANY APPLICABLE PERMITS PERTAINING TO WATER AND EROSION CONTROL.
5. CONTACT THE ENGINEER FOR CLARIFICATIONS OF ANY ABBREVIATIONS SHOWN ON THE DRAWINGS.
6. THE SITE WHERE THE WORK IS TO BE PERFORMED SHALL BE OVERLOT GRADED. TOPSOIL SHALL BE SPREAD IN OPEN SPACE AREAS TO A DEPTH OF APPROXIMATELY 6-INCHES. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED, AND SOME AREAS COVERED WITH EROSION CONTROL BLANKETS, UNLESS OTHERWISE DIRECTED IN THE PLANS OR BY THE ENGINEER. CARE SHALL BE TAKEN TO AVOID DISTURBING ANY OPEN SPACE AREAS EXCEPT THE MINIMUM NECESSARY TO PERFORM THE WORK. TOPSOIL IN ANY WORK AREAS OR ACCESS ROADS WITHIN THE OPEN SPACE SHALL BE STRIPPED AND STOCKPILED PRIOR TO THE WORK, PROTECTED FROM MIXING WITH ANY OTHER MATERIALS DURING THE WORK, AND REPLACED TO A LOOSE DEPTH OF 7- TO 8- INCHES (FINAL DEPTH AFTER SETTLEMENT SHALL BE 6- INCHES MINIMUM) AS THE WORK IS BEING COMPLETED. WHERE BLANKETS EXIST, THE MINIMUM AREA OF BLANKET TO ALLOW WORK TO PROGRESS SHALL BE REMOVED AND THEN THE REMOVED OR NEW BLANKET REPLACED AFTER UNDERLYING WORK IS COMPLETE (EXCEPT NO TEMPORARY BLANKET NEEDS TO BE REPLACED OVER ROCK OR COIR BLANKET SHOWN IN THE PLANS). JUST PRIOR TO REPLACEMENT OF TOPSOIL AFTER UNDERLYING WORK IS COMPLETE AND APPROVED, THE UNDERLYING SUBGRADE IN OPEN SPACE AREAS SHALL BE LOOSENED BY TILLING TO A DEPTH OF 12- INCHES UNTIL CLODS ARE NO LARGER THAN 3 INCHES, AND APPROVED BY THE ENGINEER. THIS NOTE ALSO APPLIES TO AREAS WHERE COIR MAT IS TO BE INSTALLED.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ANY COMPLETED WORK FROM DISTURBANCE OR DAMAGE DURING THE COURSE OF THE WORK. IF REQUESTED BY THE CONTRACTOR AND APPROVED BY THE OWNER, SIGNIFICANT COMPLETED SECTIONS OF THE WORK MAY BE ACCEPTED AS FINAL PRIOR TO THE COMPLETION OF THE ENTIRE PROJECT. ANY SUCH EARLY ACCEPTANCE WILL NEED TO BE IN WRITING BY THE ENGINEER AND OWNER AND THOSE PORTIONS OF THE WORK SHALL BE PROTECTED BY THE CONTRACTOR AGAINST VEHICLES RUNNING OVER THE AREA BY ENCIRCLING THE WORK WITH FLAGGING OR FENCING OR BY OTHER MEANS AGREED TO BY THE OWNER AND MAINTAINED BY THE CONTRACTOR UNTIL THE END OF THE PROJECT.
8. ALL FINE GRADING REQUIRED TO CONSTRUCT DRAINAGE IMPROVEMENTS AND PROVIDE FINISHED GRADES ADJACENT TO IMPROVEMENTS SHALL BE DONE BY THE DRAINAGE CONTRACTOR AND SHALL BE CONSIDERED PART OF THE WORK, AND NOT PAID FOR SEPARATELY.

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LTD

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	N/A	DESIGNED BY	GVT
V-SCALE	N/A	DRAWN BY	GVT
DATE	2/12/21	CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
GENERAL NOTES

SHEET 189 OF 270

JOB NO. 15950.01

LAYER LINETYPE LEGEND

	EXISTING	PROPOSED
PHASE LINE		
MATCH LINE		
SECTION LINE		
BOUNDARY LINE		
PROPERTY LINE		
EASEMENT LINE		
RIGHT OF WAY		
R.O.W. A LINE	A	A
CENTERLINE		
CITY LIMITS		
WIRE FENCE		
CHAIN LINK FENCE		
WOOD FENCE		
MASONRY FENCE		
GUARDRAIL		
CONC. BARRIER		
CABLE TV	TV	TV
ELECTRIC	E	E
FIBER OPTIC	FO	FO
GAS MAIN	G	G
IRRIGATION MAIN	IRR	IRR
OIL/PETRO. MAIN	O	O
OVERHEAD UTILITY	OHU	OHU
SANITARY SEWER	S	
STORM DRAIN		
TELEPHONE	T	T
WATER MAIN	W	
RAW WATER LINE	RWL	RWL
SWALE/WATERWAY FLOWLINE		
DIVERSION DITCH		
DIVERSION CHANNEL		
MAJOR DRAINAGE BASIN		
MINOR DRAINAGE BASIN		
TOP OF SLOPE		
TOE OF SLOPE		
EDGE OF WATER		
INDEX CONTOUR	6100	6100
INTERMEDIATE CONTOUR		
DEPRESSION CONT. (INDEX)	6100	6100
DEPRESSION CONT. (INTER)		
TOP OF CUTS		
TOE OF FILLS		
CUT AND FILL LINE		C/F
SILT FENCE	SF	SF
100 YEAR FLOODPLAIN	100YR	100YR
500 YEAR FLOODPLAIN	500YR	500YR
FLOODWAY	FLDWY	FLDWY
BASE FLOOD ELEVATION		
EDGE OF WETLANDS		
STONE WALL		

UTILITIES LEGEND

	EXISTING	PROPOSED
STORM SEWER		
MANHOLE	Ⓓ	◉
STORM INLET		▣
AREA INLET – SQUARE	□	
AREA INLET – ROUND	○	
FLARED END SECTION	▷	
RIPRAP		
SANITARY SEWER		
LINE MARKER	Mkr San	
SERVICE MARKER		
CLEAN–OUT		
MANHOLE W/ DIRECTIONAL FLOW ARROW	Ⓢ	
WATER LINE		
LINE MARKER	Mkr W	
SERVICE MARKER		
FIRE HYDRANT		
FIRE CONNECTION		
MANHOLE	Ⓦ	
BEND		
BLOW–OFF VALVE		
WELL	WELL	WELL
METER	Ⓜ	
VALVE		
REDUCER		
THRUST BLOCK		
CROSS		
PLUG W/ THRUST BLOCK		
TEE		
REVERSE ANCHOR		
ANODE		
AIR & VACUUM VALVE ASSEMBLY		
TRANSMISSION BLOW–OFF ASSEMBLY		
GAS LINE		
MARKER	Mkr G	
SERVICE MARKER		
METER		
VALVE		
PLUG		
TEE		
DRY UTILITIES		
CABLE TV MARKER	Mkr TV	
CABLE TELEVISION PEDESTAL	TV	
ELECTRIC MARKER	Mkr E	
ELECTRIC SERVICE MARKER		
ELECTRICAL PEDESTAL	E	
ELECTRICAL METER	E	
ELECTRICAL MANHOLE	E	
FIBER–OPTIC MARKER	Mkr FO	
IRRIGATION PEDESTAL	I	
TELEPHONE MARKER	Mkr T	
TELEPHONE PEDESTAL	T	
TELEPHONE MANHOLE	T	
UTILITY POLE		
GUY ANCHOR		
GUY POLE		
MISC. UTILITIES		
VENT PIPE	VP	VP
TEST HOLE DESIGNATOR	THE FIRM AGENCY	

MONUMENTATION LEGEND

ALUMINUM CAP – FOUND	AC
BRASS CAP – FOUND	BC
BENCHMARK – FOUND	
CROSS – FOUND	+
MONUMENT – SET	○
MONUMENT – FOUND (DEFAULT)	●
MONUMENT – FOUND (ALTERNATE 1)	■
MONUMENT – FOUND (ALTERNATE 2)	◉
MONUMENT – FOUND (ALTERNATE 3)	▲
MONUMENT – FOUND (ALTERNATE 4)	◬
MONUMENT – FOUND (ALTERNATE 5)	⬟
MONUMENT – FOUND (ALTERNATE 6)	◉
MONUMENT – FOUND (ALTERNATE 7)	◬
NAIL & WASHER – FOUND	NAIL & WASHER
PANEL – FOUND	
PK NAIL – FOUND	PK NAIL
ROW MONUMENT – FOUND	
ROW MARKER – FOUND	⊡
SECTION CORNER – FOUND	
SECTION CORNER – SET	
QUARTER–SECTION CORNER – FOUND	
QUARTER–SECTION CORNER – SET	
SECTION CENTER – FOUND	◉
SECTION CENTER – FOUND	◎
CONTROL/TRAVERSE POINT – SET	◬

TRAFFIC LEGEND

	EXISTING	PROPOSED
PARKING METER		
TRAFFIC SIGNAL BOX		
TRAFFIC SIGNAL POLE		
TRAFFIC SIGNAL		
BARRICADE		
GUARD RAIL POST		
IMPACT ATTENUATOR		
BRIDGE STYLE HIGHWAY SIGN POST		
CANTILEVER STYLE HIGHWAY SIGN POST		
SIGN		
RAILROAD MARKER/SIGN		
STREET LIGHT		
STREET LIGHT – SINGLE		
STREET LIGHT – DOUBLE		
LUMINAIRE		
ALTERNATE LUMINAIRE		
SIGNAL MAST ARM W/ LUMINAIRE		
PEDESTAL POLE FOUNDATION		
TRAFFIC SIGNAL POLE		
ROUND PULL BOX		
MEDIUM PULL BOX		
LARGE PULL BOX (20X33X15)		
SIGNAL HEAD WITHOUT BACK PLATE		
SIGNAL HEAD WITH BACK PLATE		
PEDESTRIAN SIGNAL HEAD		
VIDEO IMAGE DETECTOR		
OPTICOM DETECTOR		
VEHICLE DETECTION ZONE		V

STORM WATER MANAGEMENT

	KEY	SYMBOL
CHECK DAM	CD	
CONSTRUCTION ROAD STABILIZATION	CRS	
CURB SOCK INLET PROTECTION	CS	
CONCRETE WASHOUT AREA	CWA	
DIVERSION DITCH AND DIKE, TEMPORARY	DD	
DIVERSION CHANNEL, TEMPORARY	DV	
DEWATERING	DW	
EROSION CONTROL BLANKET	ECB	
INLET FILTER	IF	
INLET PROTECTION	IP	
MULCHING	MU	
OUTLET PROTECTION	OP	
PAVED FLUME	PF	
PERMENENT SEEDING	PS	
REINFORCED CONCRETE DAM	RCD	
ROUGH CUT STREET CONTROL	RCS	
SEDIMENT BASIN	SB	
SEDIMENT CONTROL LOG	SCL	
SILT FENCE	SF	
SURFACE ROUGHENING	SR	
STABILIZED STAGING AREA	SSA	
SEDIMENT TRAP	ST	
STRAW BALE BARRIER	STB	
TERRACING	TER	
TEMPORARY SEEDING	TS	
TEMPORARY STREAM CROSSING CULVERT/BRIDGE	TSC C	
TEMPORARY STREAM CROSSING FORD TYPE	TSC F	
TEMPORARY SLOPE DRAIN	TSD	
VEHICLE TRACKING CONTROL	VTC	
VEHICLE TRACKING CONTROL WITH WASH RACK	WR	

DRAINAGE REPORT PLANS

	KEY
BASIN DESIGNATION (NO COEFFICIENT)	# / #.##
BASIN DESIGNATION (1 COEFFICIENT)	# / #.## / #
BASIN DESIGNATION (2 COEFFICIENTS)	# / #.## / # / #
ANALISYS POINT IDENTIFIER	#
BASIN DESIGNATION (HISTORIC)	# / #-#
BASIN DESIGNATION (DEVELOPED)	# / #.##
SUB–BASIN DESIGNATION (DEVELOPED)	# / ##
DRAINAGE PIPE IDENTIFIER	##
DRAINAGE POINT IDENTIFIER (HEXAGONAL)	##
DRAINAGE POINT IDENTIFIER (TRIANGULAR)	?
SWMM DESIGNATION 1	#
SWMM DESIGNATION 2	#
SWMM DESIGNATION 3	#
SWMM DESIGNATION 4	?

LANDSCAPE LEGEND

	EXISTING	PROPOSED
TREE – CONIFEROUS		
TREE – DECIDUOUS		
SHRUB/BUSH		
SHRUBS AND BUSHES		
IRRIGATION BOX		
IRRIGATION SPRINKLER		
IRRIGATION VALVE		
BOLLARD		
FLAGPOLE	FP	

811 Know what's **below.** **Call** before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

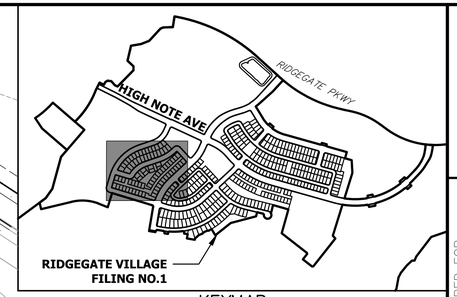
No.	REVISION	BY	DATE

H–SCALE	N/A
V–SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
LEGEND

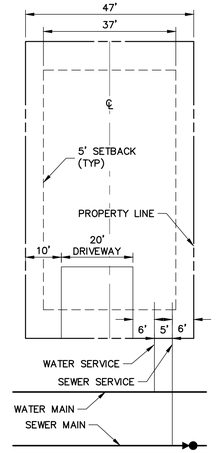
SHEET 190 OF 270

JOB NO. 15950.01



KEYMAP

SCALE:1"=1000'



LOT SERVICES DETAIL
PLANNING AREA 16

SCALE: 1"=20

40 20 0 40 80

ORIGINAL SCALE: 1" = 40'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

Know what's **below.**
Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

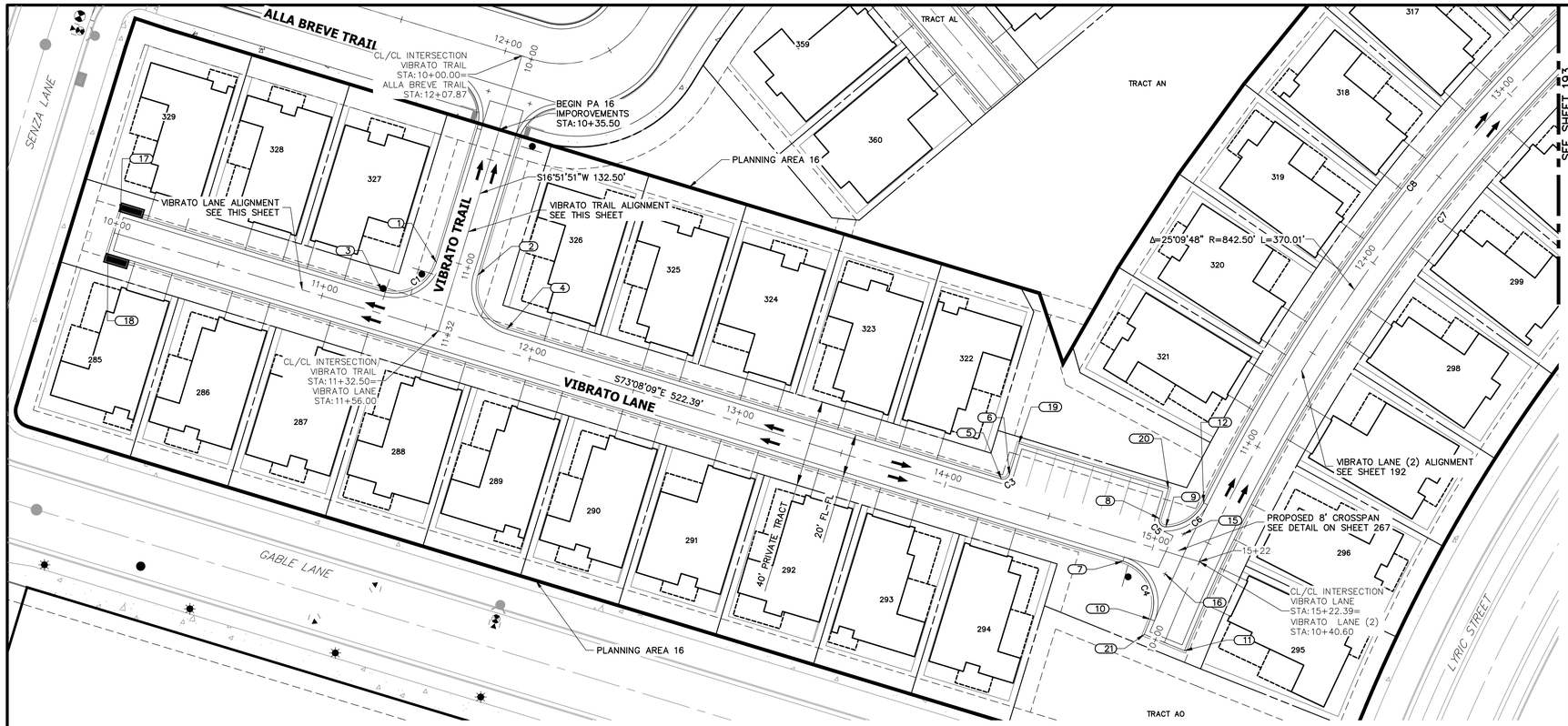
H-SCALE	1"=40'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

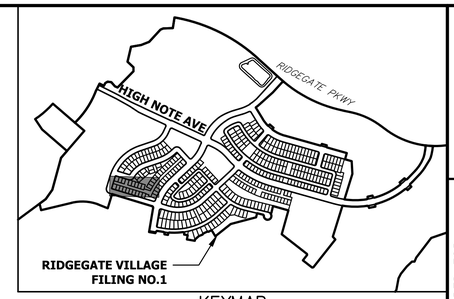
RIDGEGATE SOUTHWEST VILLAGE FILING 1

OVERALL UTILITY PLAN

SHEET 191 OF 270

JOB NO. 15950.01

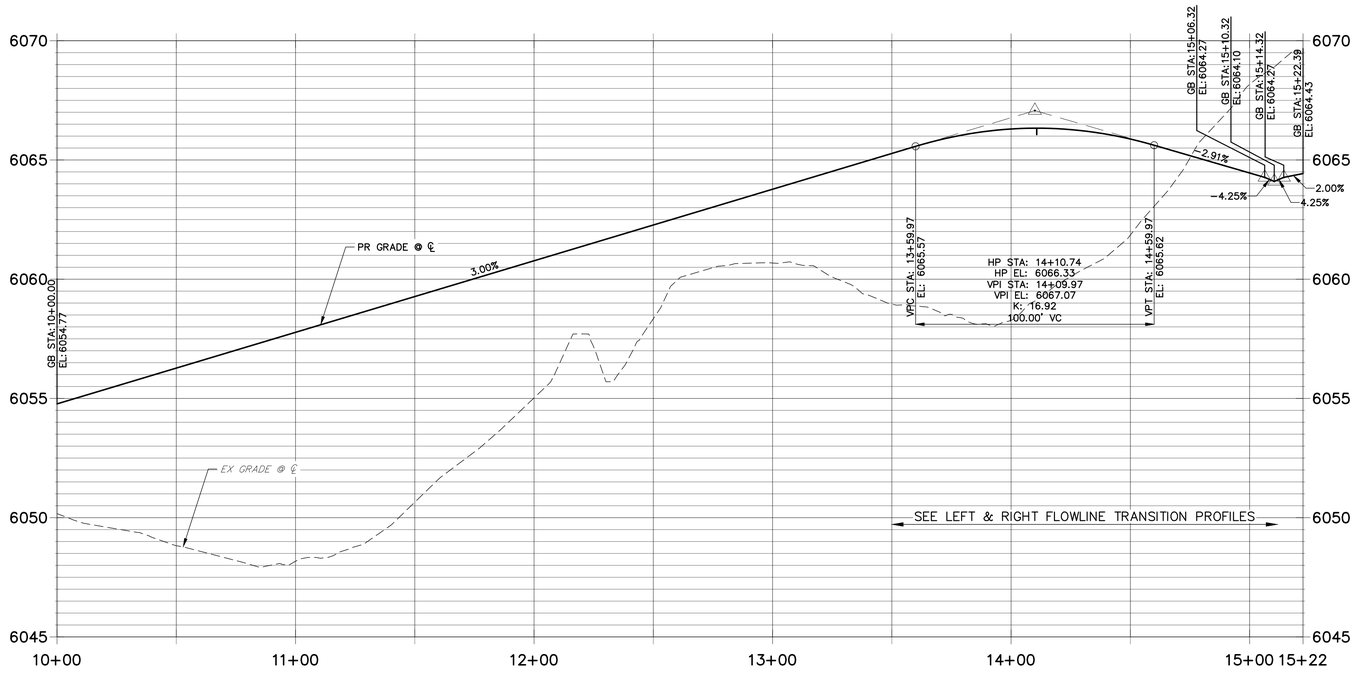




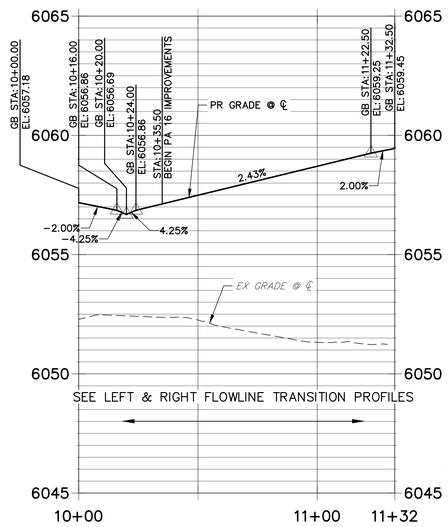
KEYMAP
SCALE:1"=1000'

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
1	11+02.50	10.00' (RT)	VIBRATO TRAIL	6058.50		PC
2	11+02.50	10.00' (LT)	VIBRATO TRAIL	6058.93		PC
3	11+26.00	10.00' (LT)	VIBRATO LANE	6058.51		PC
4	11+86.00	10.00' (LT)	VIBRATO LANE	6060.03		PT
5	14+24.00	10.00' (LT)	VIBRATO LANE	6066.26		PC
6	14+27.00	13.00' (LT)	VIBRATO LANE	6066.42		PT
7	14+88.62	10.00' (RT)	VIBRATO LANE	6066.10		PC
8	14+99.00	13.70' (LT)	VIBRATO LANE	6064.29		PC
9	15+02.94	10.85' (LT)	VIBRATO LANE	6064.26		PCC
10	10+07.42	10.00' (LT)	VIBRATO LANE (2)	6065.41		PC
11	???	???' (???)	VIBRATO LANE (2)	6065.32		PC
12	10+65.76	9.94' (LT)	VIBRATO LANE (2)	6063.35		PCC
15	15+11.70	10.00' (LT)	VIBRATO LANE	6064.08		FL-FL INTERCEPT
16	15+08.96	10.00' (RT)	VIBRATO LANE	6064.67		FL-FL INTERCEPT
17	10+00.00	10.00' (LT)	VIBRATO LANE	6054.45		LOW PT
18	10+00.00	10.00' (RT)	VIBRATO LANE	6054.45		LOW PT
19	14+27.00	28.00' (LT)	VIBRATO LANE	6066.20		PT
20	14+99.00	28.00' (LT)	VIBRATO LANE	6063.96		PT
21	10+00.00	10.00' (LT)	VIBRATO LANE (2)	6065.50		PI

VIBRATO LANE PROFILE
STA 10+00.00 TO 15+22.39



VIBRATO TRAIL PROFILE
STA 10+00.00 TO 11+32.50



CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C1	90°06'31"	19.98'	31.42'
C3	90°00'00"	3.00'	4.71'
C4	95°38'46"	20.00'	33.39'
C5	108°10'09"	3.00'	5.66'
C6	62°14'27"	20.00'	21.73'
C7	25°09'47"	832.50'	365.61'
C8	20°44'21"	850.52'	307.86'

30 15 0 30 60
HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

NOTES
1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE SHEET 190 FOR LEGEND.
4. SEE SHEET 198 FOR SUMP PROFILES.
5. SEE SHEET 197 FOR CURB RAMP DETAILS.
6. SEE SHEET 199 FOR SIGNAGE AND STRIPING.
7. ALL CURB RADII ARE 25' UNLESS OTHERWISE NOTED.
8. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.

Know what's below. Call before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT
PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

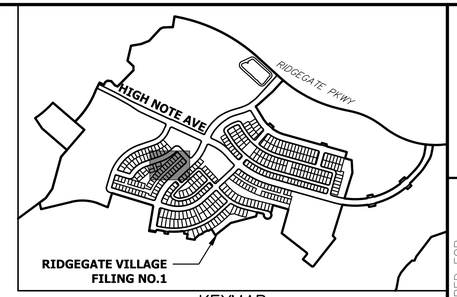
J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

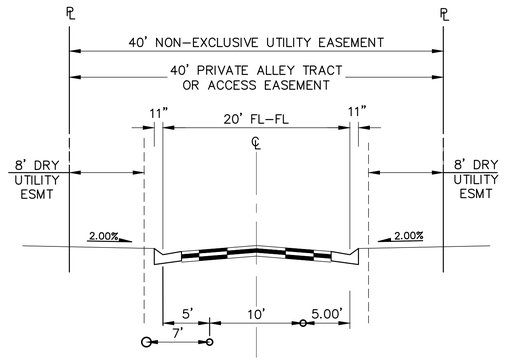
H-SCALE	1"= 30'
V-SCALE	1"= 3'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST
VILLAGE FILING 1
ROADWAY PLAN & PROFILES

SHEET 192 OF 270
JOB NO. 15950.01



KEYMAP
SCALE:1"=1000'



SECTION G-G
PRIVATE ALLEY
N.T.S.

NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE SHEET 190 FOR LEGEND.
4. SEE SHEET 198 FOR SUMP PROFILES.
5. SEE SHEET 197 FOR CURB RAMP DETAILS.
6. SEE SHEET 199 FOR SIGNAGE AND STRIPING.
7. ALL CURB RADII ARE 25' UNLESS OTHERWISE NOTED.
8. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.

30 15 0 30 60

HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
13	13+70.01	10.00' (LT)	VIBRATO LANE (2)	6050.19		PT
14	13+70.02	10.00' (RT)	VIBRATO LANE (2)	6050.19		PT
22	17+03.60	10.00' (LT)	VIBRATO LANE (2)	6041.60		PT
23	17+03.60	10.00' (RT)	VIBRATO LANE (2)	6041.92		PT

Know what's below. Call before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED PROFESSIONAL ENGINEER 36742

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=30'
V-SCALE	1"=3'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

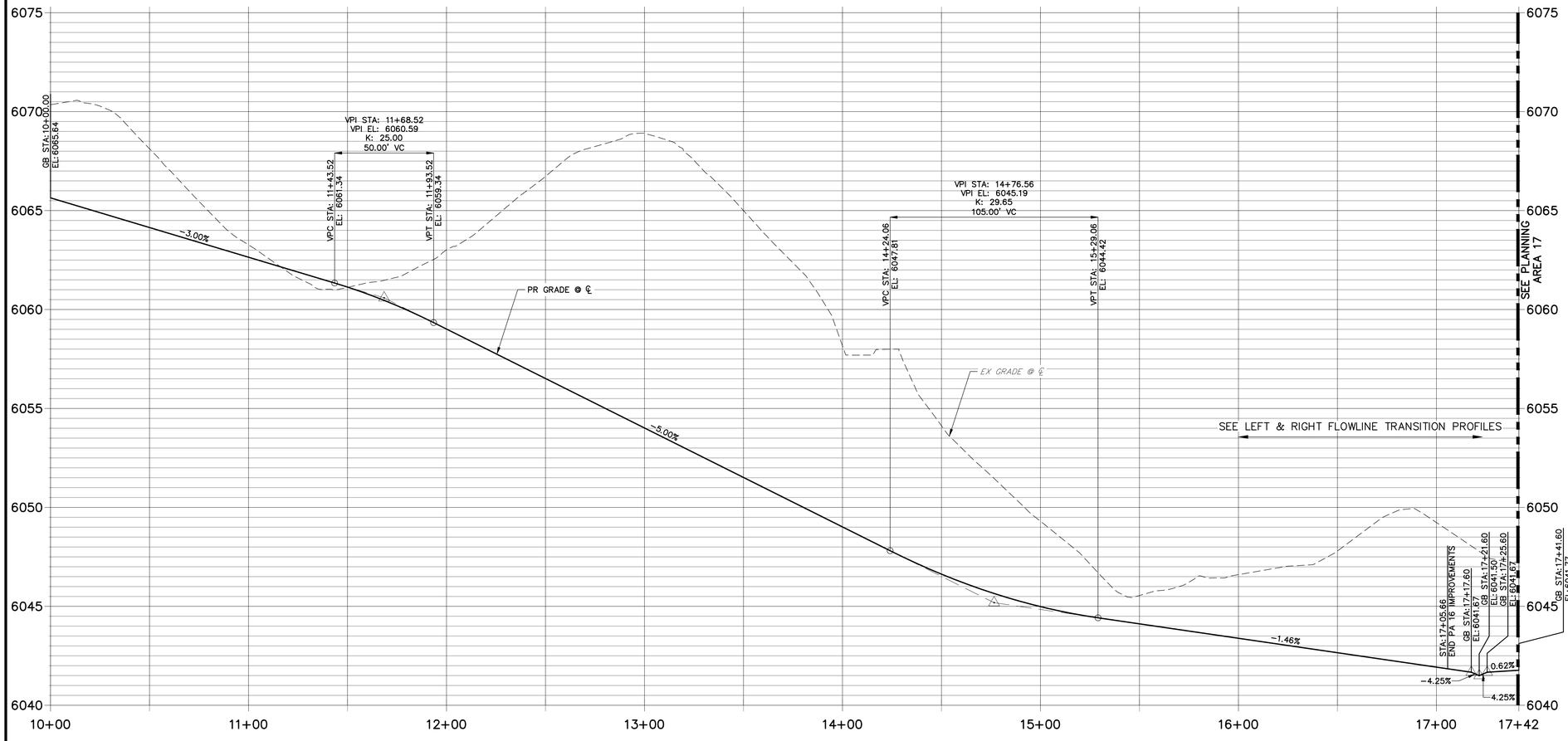
RIDGEGATE SOUTHWEST VILLAGE FILING 1

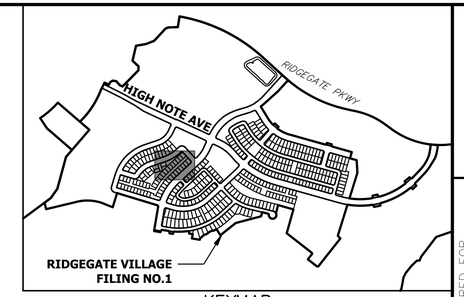
ROADWAY PLAN & PROFILES

SHEET 193 OF 270

JOB NO. 15950.01

VIBRATO LANE (2) PROFILE
STA 10+00.00 TO 17+41.60





KEYMAP
SCALE: 1"=1000'

NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE SHEET 190 FOR LEGEND.
4. SEE SHEET 198 FOR SUMP PROFILES.
5. SEE SHEET 197 FOR CURB RAMP DETAILS.
6. SEE SHEET 199 FOR SIGNAGE AND STRIPING.
7. ALL CURB RADII ARE 25' UNLESS OTHERWISE NOTED.
8. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.

30 15 0 30 60

HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

Know what's **below.**
Call before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

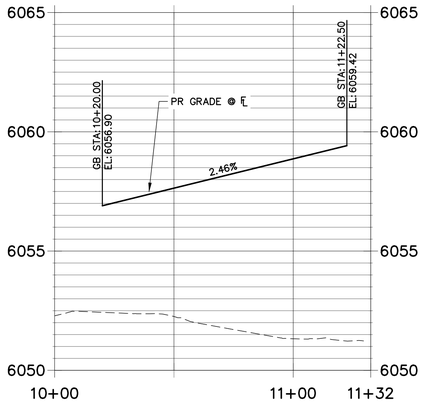
H-SCALE	1" = 30'	DESIGNED BY	GVT
V-SCALE	1" = 3'	DRAWN BY	GVT
DATE	2/12/21	CHECKED BY	

RIDGEGATE SOUTHWEST
VILLAGE FILING 1
ROADWAY PLAN & PROFILES

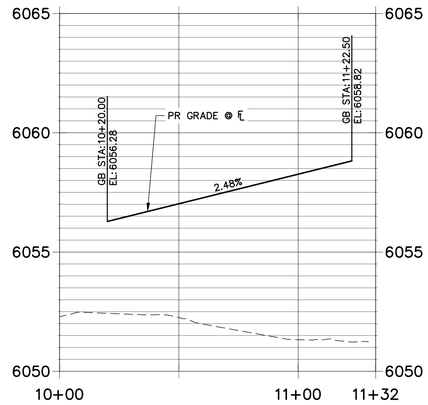
SHEET 194 OF 270

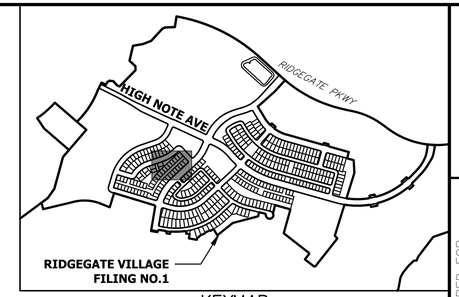
JOB NO. 15950.01

VIBRATO TRAIL LEFT FLOW LINE TRANSITION
STA 10+00.00 TO 11+32.50



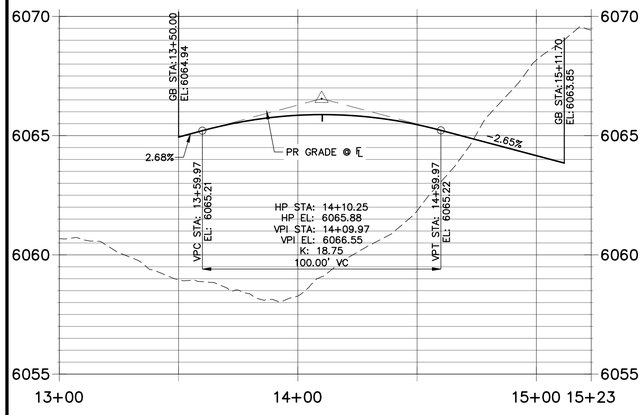
VIBRATO TRAIL RIGHT FLOW LINE TRANSITION
STA 10+00.00 TO 11+32.50



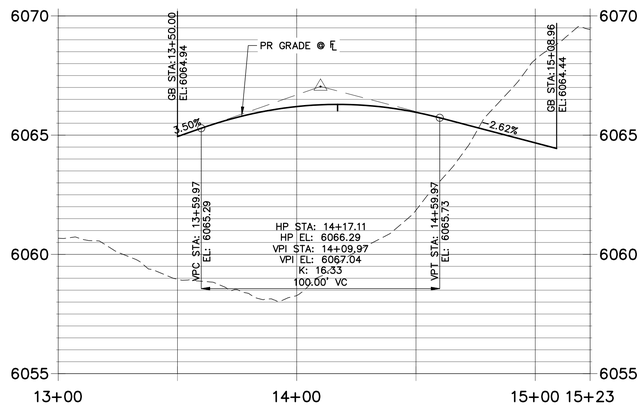


KEYMAP
SCALE:1"=1000'

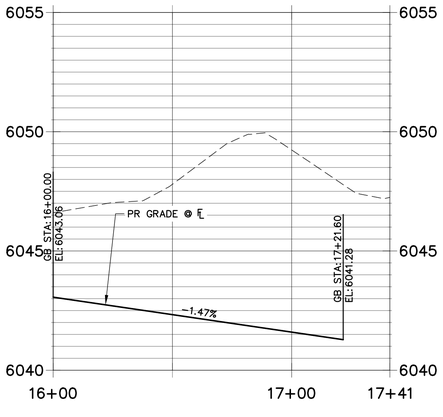
VIBRATO LANE LEFT TRANSITION
STA 13+00.00 TO 15+22.98



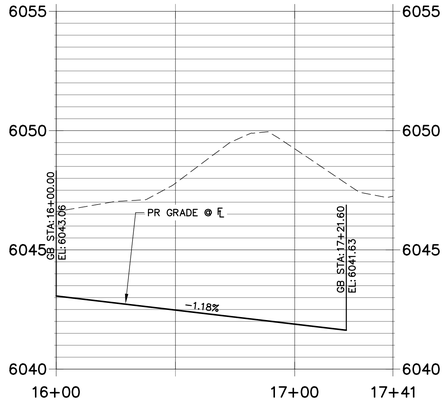
VIBRATO LANE RIGHT TRANSITION
STA 13+00.00 TO 15+22.98



VIBRATO LANE LEFT TRANSITION
STA 16+00.00 TO 17+41.16



VIBRATO LANE RIGHT TRANSITION
STA 16+00.00 TO 17+41.16



NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE SHEET 190 FOR LEGEND.
4. SEE SHEET 198 FOR SUMP PROFILES.
5. SEE SHEET 197 FOR CURB RAMP DETAILS.
6. SEE SHEET 199 FOR SIGNAGE AND STRIPING.
7. ALL CURB RADII ARE 25' UNLESS OTHERWISE NOTED.
8. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.

30 15 0 30 60

HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

Know what's below. Call before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

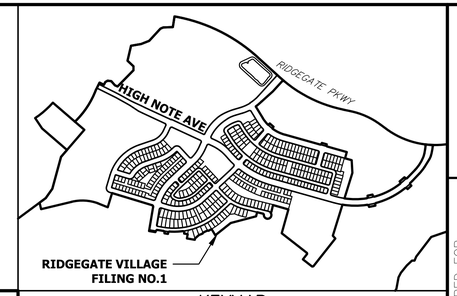
H-SCALE	1" = 30'
V-SCALE	1" = 3'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST
VILLAGE FILING 1
ROADWAY PLAN & PROFILES

SHEET 195 OF 270

JOB NO. 15950.01

PLACE HOLDER SHEET



KEYMAP
SCALE: 1"=1000'

30 15 0 30 60

HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

Know what's below.
Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

COLORADO REGISTERED
AARON LEE CLUTTER
36742
PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=30'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

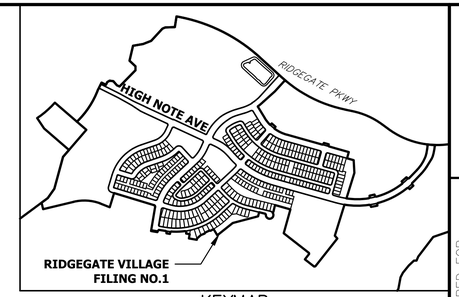
RIDGEGATE SOUTHWEST VILLAGE FILING 1

ROADWAY PLAN & PROFILES

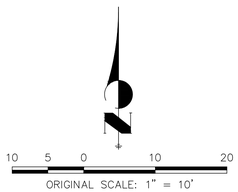
SHEET 196 OF 270

JOB NO. 15950.01

PLACEHOLDER SHEET



KEYMAP
SCALE: 1"=1000'



ORIGINAL SCALE: 1" = 10'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED PROFESSIONAL ENGINEER 36742

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

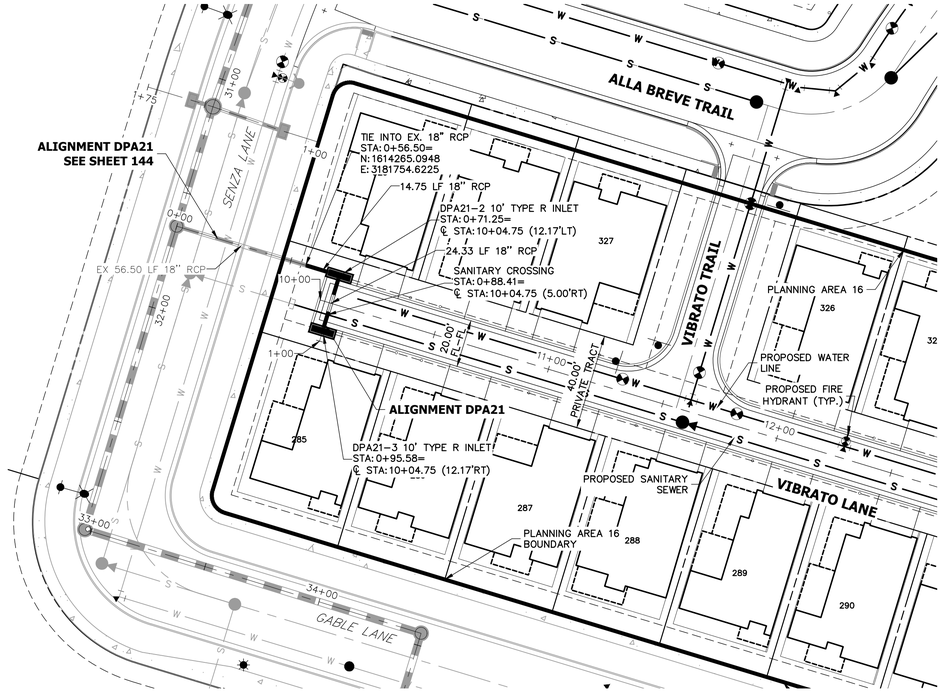
H-SCALE	1"=10'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

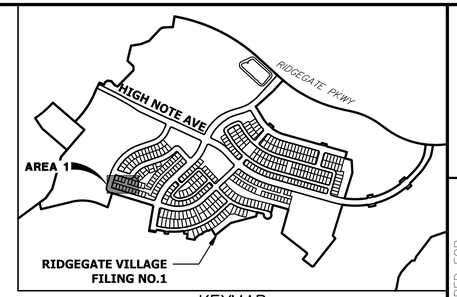
RIDGEGATE SOUTHWEST VILLAGE FILING 1

CURB RAMP DETAILS

SHEET 197 OF 270

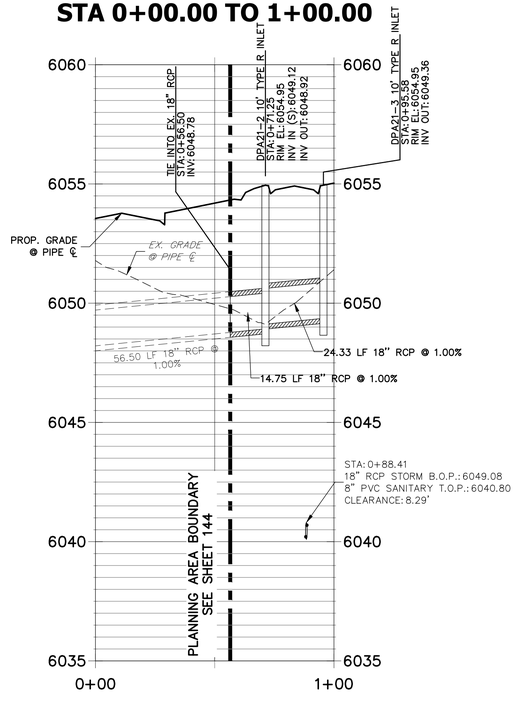
JOB NO. 15950.01





KEYMAP
SCALE: 1"=1000'

DPA21 PROFILE
STA 0+00.00 TO 1+00.00



30 15 0 30 60

HORIZONTAL
ORIGINAL SCALE: 1" = 30'

VERTICAL
ORIGINAL SCALE: 1" = 3'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

Know what's **below.** **Call** before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

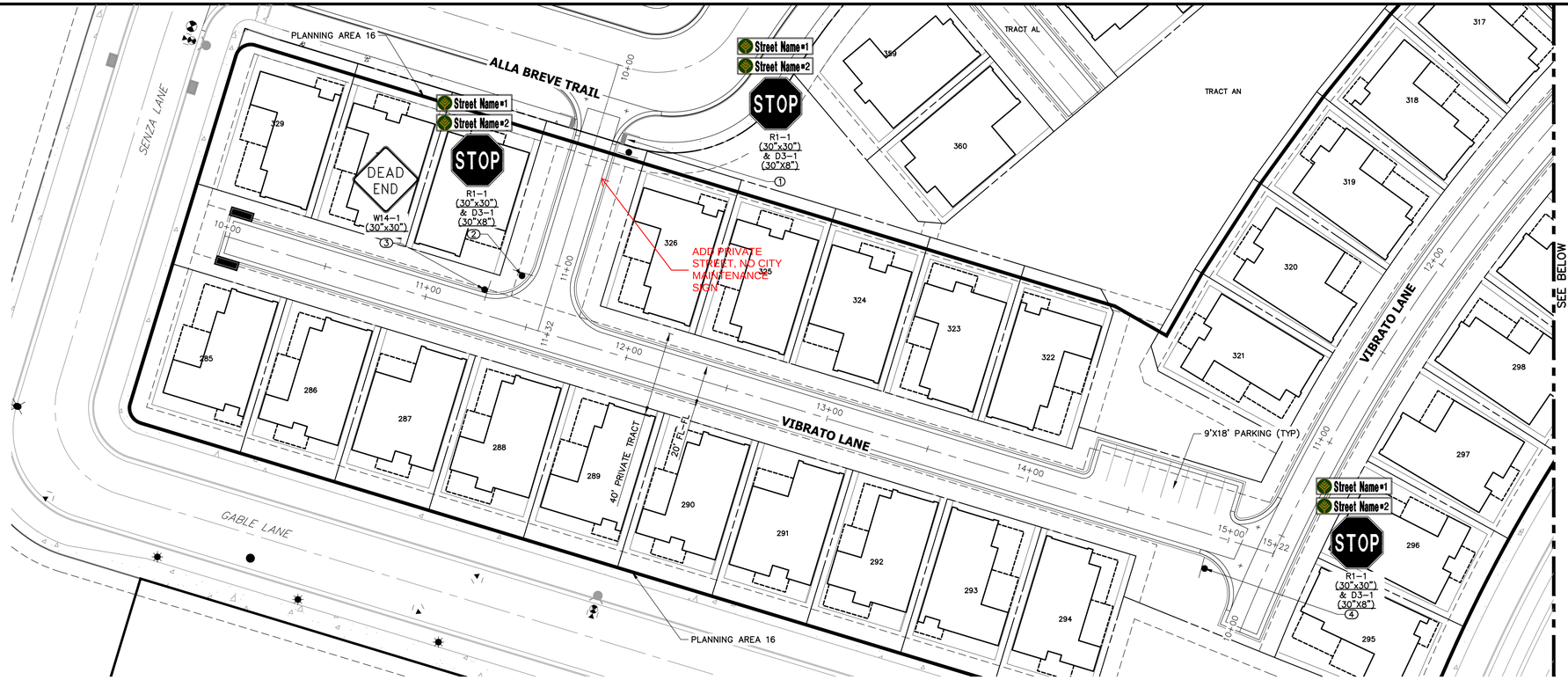
No.	REVISION	BY	DATE

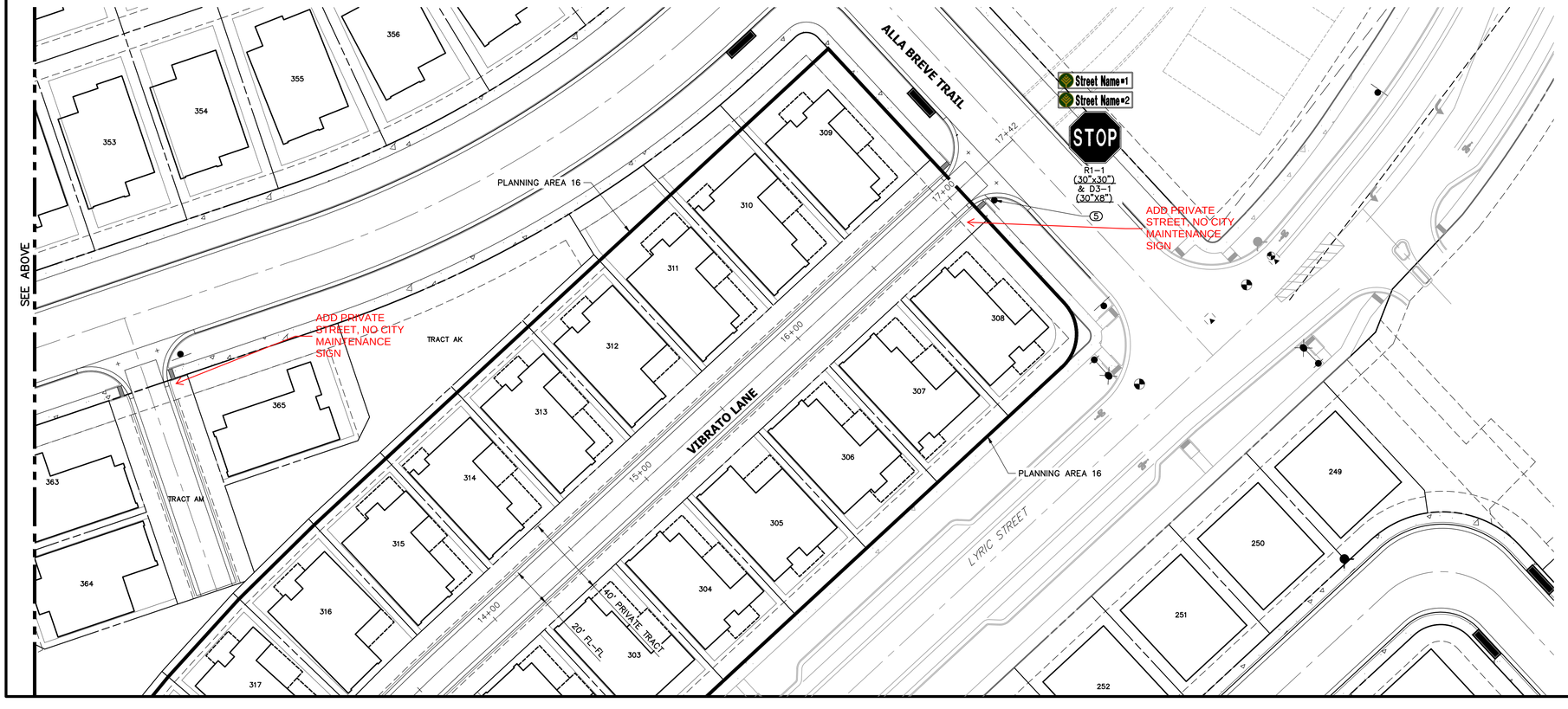
H-SCALE	1" = 30'
V-SCALE	1" = 3'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

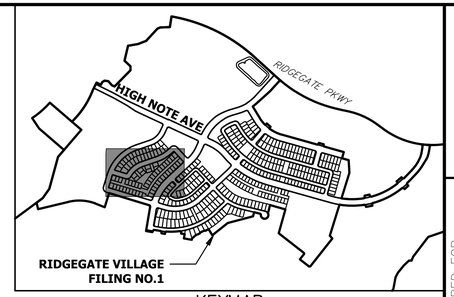
RIDGEGATE SOUTHWEST VILLAGE FILING 1
STORM SEWER PLANS & PROFILES

SHEET 198 OF 270

JOB NO. 15950.01







KEYMAP
SCALE: 1"=1000'

SIGN TABULATION				
SIGN NUMBER	STATION	OFFSET	ALIGNMENT	DESCRIPTION
1	10+32.79	14.42' (LT)	VIBRATO TRAIL	30"X30" R1-1 30"X8" D3-1
2	11+09.58	14.86' (RT)	VIBRATO TRAIL	30"X30" R1-1 30"X8" D3-1 (2)
3	11+26.00	11.42' (LT)	VIBRATO LANE	30"X30 W14-1
4	14+93.01	16.22' (RT)	VIBRATO LANE	30"X30" R1-1 30"X8" D3-1 (2)
5	17+15.16	15.42' (RT)	VIBRATO LANE	30"X30" R1-1 30"X8" D3-1 (2)

30 15 0 30 60
ORIGINAL SCALE: 1" = 30'

Know what's below. Call before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE PLANS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE 1" = 30'
V-SCALE N/A
DATE 2/12/21
DESIGNED BY GVT
DRAWN BY GVT
CHECKED BY

RIDGEGATE SOUTHWEST VILLAGE FILING 1

SIGNAGE AND STRIPING PLANS

SHEET 199 OF 270

JOB NO. 15950.01

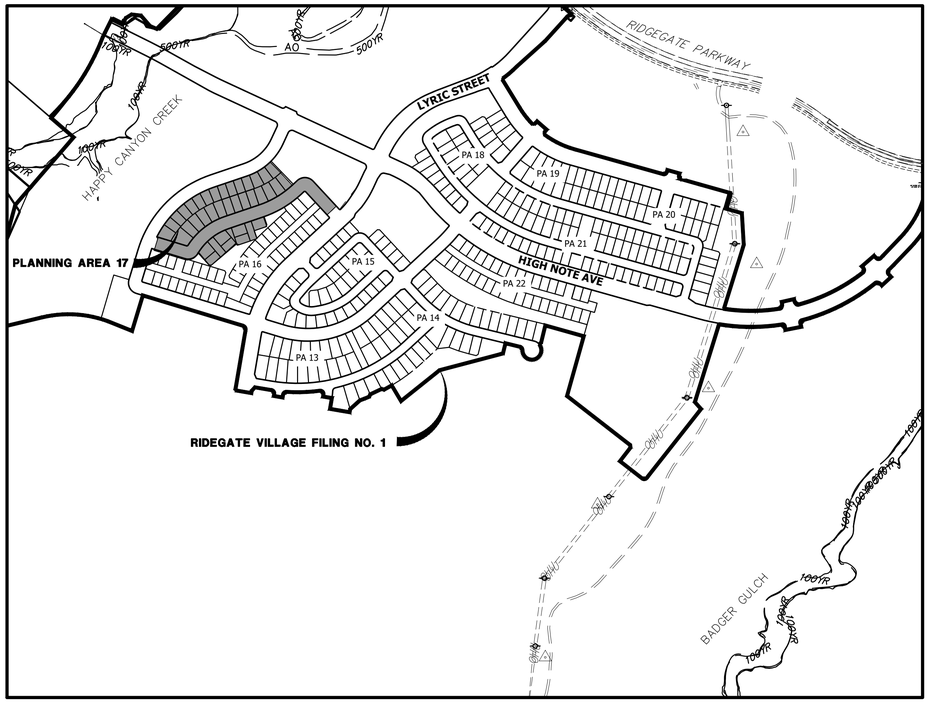
RIDGEGATE SOUTHWEST VILLAGE FILING 1-PLANNING AREA 17

A PORTION OF THE RIDGEGATE PLANNED DEVELOPMENT DISTRICT, EAST SIDE PROPERTY
LOCATED IN SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST
OF THE 6TH P.M., CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO

STREET & DRAINAGE CONSTRUCTION PLANS

ABBREVIATIONS

AC	ACRE
AD	ALGEBRAIC DIFFERENCE
AH	AHEAD
ARCH	ARCHITECT
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASS'Y	ASSEMBLY
AVE	AVENUE
BB	BOX BASE
BK	BACK
BNDY	BOUNDARY
BOP	BOTTOM OF PIPE
BOV	BLOW OFF VALVE
BFV	BUTTERFLY VALVE
BLVD	BOULEVARD
BW	BOTTOM OF WALL
C&G	CURB & GUTTER
CATV	CABLE TELEVISION
CB	CATCH BASIN
CBC	CONCRETE BOX CULVERT
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION
CDS	CUL-DE-SAC
CF	CUBIC FOOT
CFS	CUBIC FEET PER SECOND
CIP	COMPLETE IN PLACE
CL	CENTER LINE
CLOMR	CONDITIONAL LETTER OF MAP REVISION
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
COCS	CITY OF COLORADO SPRINGS
CONC	CONCRETE
CR	CIRCLE
CSP	CORRUGATED STEEL PIPE
CSU	COLORADO SPRINGS UTILITIES
CT	COURT
CTRB	CONCRETE THRUST REDUCER BLOCK
CY	CUBIC YARD
DBPS	DRAINAGE BASIN PLANNING STUDY
DE	DRAINAGE EASEMENT
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DR	DRIVE
DRC	DESIGN REVIEW COMMITTEE
DU	DWELLING UNITS
DY	DAY
E	EAST
EA	EACH
EGL	ENERGY GRADE LINE
EL	ELEVATION
ELEC	ELECTRIC
EOA	EDGE OF ASPHALT
EPC	EL PASO COUNTY
ERCP	ELLIPTICAL RCP
ESMT	EASEMENT
EST	ESTIMATE
EX	EXISTING
FDP	FINAL DEVELOPMENT PLAN
FDR	FINAL DRAINAGE REPORT
FES	FLARED END SECTION
FF	FINISHED FLOOR ELEVATION
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOWLINE
FIL	FILING
FO	FIBER OPTIC CABLE
GB	GRADE BREAK
GE	GAS EASEMENT
GIS	GEOGRAPHIC INFORMATION SYSTEM
GL	GAS LINE
GPS	GLOBAL POSITIONING SYSTEM
GV	GATE VALVE
HBP	HOT BITUMINOUS PAVEMENT
HC	HANDICAP
HDC	HIGH DEFLECTION COUPLING
HDPE	HIGH DENSITY POLYETHYLENE
HGL	HYDRAULIC GRADE LINE
HMA	HOT MIX ASPHALT
HOA	HOME OWNERS ASSOCIATION
HP	HIGH POINT
HR	HOUR
I	INLET
IE	IRRIGATION EASEMENT
INT	INTERSECTION
INV	INVERT
IRR	IRRIGATION
KB	KICK (THRUST) BLOCK
LB	POUND
LE	LANDSCAPE EASEMENT
LF	LINEAR FOOT
LN	LANE
LOMR	LETTER OF MAP REVISION
LP	LOW POINT
LS	LUMP SUM
LT	LEFT
MAX	MAXIMUM
M/D	MOISTURE DENSITY
MDDP	MASTER DEVELOPMENT DRAINAGE PLAN
MH	MANHOLE
MIN	MINIMUM
MS	MOUNTABLE SIDEWALK
N	NORTH
NRCP	NON-REINFORCED CONCRETE PIPE
ODP	OFFICIAL DEVELOPMENT PLAN
OHE	OVERHEAD ELECTRIC
OHU	OVERHEAD UTILITY
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PCR	POINT OF CURB RETURN
PDP	PRELIMINARY DEVELOPMENT PLAN
PE	PROFESSIONAL ENGINEER
PI	POINT OF INTERSECTION
PKWY	PARKWAY
PL	PROPERTY LINE
PR	PROPOSED
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PV	PLUG VALVE
PVC	POLYVINYL CHLORIDE
R	RADIUS
RCBC	REINFORCED CONCRETE BOX CULVERT
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
ROW	RIGHT OF WAY
RT	RIGHT
S	SOUTH
STE	STEEL
SAN	SANITARY SEWER
SF	SQUARE FOOT
ST	STREET
STA	STATION
STM	STORM SEWER
SY	SQUARE YARD
SY-IN	SQUARE YARD INCH
TB	THRUST BLOCK
TBC	TOP BACK OF CURB
TBW	TOP BACK OF WALK
TEL	TELEPHONE
TN	TON
TOA	TOP OF ASPHALT
TOB	TOP OF BOX
TOC	TOP OF CURB OR CONCRETE
TOF	TOP OF FOUNDATION
TOP	TOP OF PIPE
TW	TOP OF WALL
TYP	TYPICAL
UDFCD	URBAN DRAINAGE AND FLOOD CONTROL DISTRICT
UE	UTILITY EASEMENT
U&DE	UTILITY & DRAINAGE EASEMENT
UGE	UNDERGROUND ELECTRIC
VCP	VITRIFIED CLAY PIPE
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
VTC	VEHICLE TRACKING CONTROL
W	WEST
WL	WATER LINE
WM	WATER MAIN
WRD	WATER RESOURCES DEPARTMENT
WS	WATER SURFACE
WSE	WATER SURFACE ELEVATION
WTR	WATER
YR	YEAR



VICINITY MAP
SCALE: 1"=400'

SHEET INDEX

200	COVER SHEET
201	GENERAL NOTES
202	LEGEND
203	OVERALL UTILITY PLAN
204 – 207	ROADWAY PLAN & PROFILES
207.1	CURB RETURN PROFILES
208	CURB RAMP DETAILS
209	STORM SEWER PLAN & PROFILES
210	SIGNAGE AND STRIPING PLANS

BENCHMARK

NGS CONTROL POINT UNBEWUST BEING A 3.5 INCH DIAMETER BRASS CAP. LOCATED ABOUT 3.2 MILES SOUTH OF INTERSTATE 25 AND COLORADO STATE HIGHWAY 470 INTERCHANGE, GO SOUTH ON INTERSTATE 25 FOR 2.9 MILES TO EXIT 191. PROCEED ON A PAVED ROAD TO THE SOUTHWEST FOR 0.2 MILES TO THE STATION ON THE LEFT. IN THE NORTHWEST CORNER OF A 24 FOOT BY 16 FOOT ROCK OUTCROP. IT IS 22.5 FEET EAST OF THE CENTERLINE OF THE PAVED ROAD, 123 FEET NORTH OF THE OUTLET OF A 3 FOOT CORRUGATED STEEL PIPE CULVERT AND APPROXIMATELY 350 FEET WEST OF THE WEST EDGE OF OIL OF SOUTHBOUND INTERSTATE 25, ELEVATION: 6125.32 (NAVD88).

BASIS OF BEARING

BEARING SHOWN HEREON ARE GRID BEARINGS DERIVED FROM GPS OBSERVATION BASED UPON THE COLORADO COORDINATE SYSTEM OF 1983 CENTRAL ZONE (NAD 83, 2011) REFERENCED TO THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, SIXTH PRINCIPAL MERIDIAN BEING MONUMENTED AS SHOWN HEREON, TAKEN TO BEAR NORTH 89°31'58" EAST, A DISTANCE OF 2635.13 FEET.

Know what's **below.**
Call before you dig.

APPLICANT/OWNER

SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
P~303.791.8180

CIVIL ENGINEER/SURVEYOR

JR ENGINEERING
7200 SOUTH ALTON WAY, SUITE C400
CENTENNIAL, CO
P~303.267.6220

PLANNER

SAGE DESIGN GROUP
1500 SOUTH PEARL STREET, SUITE 200
DENVER, CO 80210
P~303.470.2855

TRAFFIC ENGINEER

JR ENGINEERING
7200 SOUTH ALTON WAY, SUITE C400
CENTENNIAL, CO
P~303.267.6183

GEOTECHNICAL ENGINEER

CTL THOMPSON, INC
1971 WEST 12TH VAE.
DENVER, CO 80204
P~303.825.0777

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=400'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
COVER SHEET

SHEET 200 OF 270

JOB NO. 15950.01

GENERAL PROJECT NOTES:

1. ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION OF IMPROVEMENTS SHALL MEET OR EXCEED THE GOVERNING CITY, COUNTY, AND/OR STATE AND APPLICABLE UTILITY DISTRICT STANDARDS AND SPECIFICATIONS, AND APPLICABLE STATE AND FEDERAL REGULATIONS. WHERE THERE IS A CONFLICT BETWEEN THESE PLANS AND ANY APPLICABLE STANDARDS, THE HIGHER QUALITY STANDARD SHALL APPLY. ALL WORK SHALL BE INSPECTED AND APPROVED BY THE CITY AND APPLICABLE UTILITY DISTRICT(S).

2. THE SITE CONSTRUCTION PLANS LISTED WITHIN THIS PLAN SET ARE NOT FOR CONSTRUCTION UNLESS APPROVED BY THE APPROPRIATE GOVERNING JURISDICTION. THE CONTRACTOR SHALL CONFIRM SAID APPROVAL PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL KEEP ONE (1) SIGNED COPY OF THE APPROVED SET OF PLANS, APPROPRIATE SPECIFICATIONS AND STANDARDS, AND APPROVED PERMITS ONSITE AT ALL TIMES.

3. NO REVISIONS SHALL BE MADE TO THESE PLANS WITHOUT THE APPROVAL OF THE CITY, COUNTY, STATE OR LOCAL DISTRICT AND THE ENGINEER OF RECORD.

4. ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARDS, UNLESS SPECIFICALLY STATED OTHERWISE.

5. THE CONTRACTOR IS RESPONSIBLE FOR ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS SHOWN ON THESE DRAWINGS OR DESIGNATED TO BE PROVIDED, INSTALLED, CONSTRUCTED, REMOVED, OR RELOCATED UNLESS SPECIFICALLY NOTED OTHERWISE.

6. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND LICENSES FOR WORK INCLUDING, BUT NOT LIMITED TO DEMOLITION, STREET CUTS, UTILITY INTERFERENCES, TRAFFIC CONTROL, GRADING, AND UTILITY FROM ALL APPLICABLE AGENCIES; AND FOR COMPLYING WITH ALL PROVISIONS INCLUDED THEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL OTHER APPLICABLE PERMITS NOT SPECIFICALLY REQUIRED BY THE AUTHORITY HAVING JURISDICTION.

7. THE CONTRACTOR SHALL UTILITY STAKE PROJECT AT LEAST 2 WORKING DAYS PRIOR TO BEGINNING EXCAVATION OR GRADING, TO HAVE ALL REGISTERED UTILITY LOCATIONS MARKED. OTHER UNREGISTERED UTILITY ENTITIES (I.E. DITCH COMPANY) ARE TO BE LOCATED BY CONTACTING THE RESPECTIVE REPRESENTATIVE.

8. THE CONTRACTOR IS RESPONSIBLE FOR FIELD LOCATING AND VERIFYING ELEVATIONS OF ALL EXISTING SEWER MAINS, WATER MAINS, CURBS, GUTTERS, AND OTHER UTILITIES AT THE POINTS OF CONNECTION SHOWN ON THE PLANS, AND AT ANY UTILITY CROSSINGS PRIOR TO INSTALLING ANY OF THE NEW IMPROVEMENTS. IF A CONFLICT EXISTS AND/OR A DESIGN MODIFICATION IS REQUIRED, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO MODIFY THE DESIGN. DESIGN MODIFICATION(S) MUST BE APPROVED BY THE APPROPRIATE AUTHORITY PRIOR TO BEGINNING CONSTRUCTION.

9. ANY DISRUPTION OF UTILITY SERVICE THAT IS REQUIRED TO ADJUST, EXTEND, RELOCATE OR OTHERWISE REARRANGE ANY UTILITY WITHIN THE PROJECT AREA SHALL BE COORDINATED IN ADVANCE WITH THE AFFECTED UTILITY ENTITY.

10. RIM ELEVATIONS SHOWN ARE APPROXIMATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS. THE CONTRACTOR SHALL USE PRECAST CONCRETE ADJUSTMENT RINGS, GROUT, AND STEEL SHIMS TO ADJUST THE MANHOLE FRAMES TO FINAL GRADE IN CONFORMANCE WITH THE CITY OR UTILITY COMPANY/DISTRICT STANDARD SPECIFICATIONS. ALL FRAMES SHALL BE ADJUSTED TO FINAL GRADE PRIOR TO THE FINAL LIFT OF ASPHALT.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF PROJECT SAFETY INCLUDING, BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.

12. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN, IN ACCORDANCE WITH THE M.U.T.C.D. TO THE APPROPRIATE RIGHT-OF-WAY AUTHORITY (CITY, COUNTY, OR STATE) FOR APPROVAL, PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN, OR AFFECTING, THE RIGHT-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED BY THE CONSTRUCTION ACTIVITIES. ALL WORK WITHIN THE RIGHT OF WAY SHALL BE DONE IN ACCORDANCE WITH THE GOVERNING AUTHORITY'S STANDARDS AND SPECIFICATIONS.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANING AND RESTORATION OF ANY EXISTING IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO STREET PAVEMENT, FENCES, SOD, LANDSCAPING, SPRINKLER SYSTEMS, AND UTILITIES DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL LOCATION AND CONDITION.

14. INCLUDED IN THESE PLANS IS THE DEMOLITION AND DISPOSAL OF ALL EXISTING UTILITIES, SITE IMPROVEMENTS, STRUCTURES, AND SITE FURNISHINGS NEEDED FOR CONSTRUCTION OF THE IMPROVEMENTS SHOWN HEREON. ALL QUESTIONS IN REGARD TO DEMOLITION SHALL BE SUBMITTED TO THE OWNER IN WRITING PRIOR TO BID.

15. ALL DEMOLITION, REMOVAL, DISPOSAL, AND ABANDONMENT OF UTILITIES, STRUCTURES, SITE IMPROVEMENTS, AND SITE FURNISHINGS SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL STANDARDS AND SPECIFICATIONS, AND PERMIT REQUIREMENTS.

16. ALL DISTURBED SOIL, ON- OR OFF-SITE AND RELATED TO WORK AT THIS PROJECT SITE, IS REQUIRED TO BE PROTECTED FROM WIND AND STORM WATER EROSION. TO MITIGATE EROSION, THE CONTRACTOR SHALL USE STANDARD EROSION CONTROL TECHNIQUES DESCRIBED IN THE GESC PLAN SET AND GESC REPORT FOR THIS PROJECT.

17. ALL STRUCTURAL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY GROUND-DISTURBING ACTIVITY. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED IN GOOD REPAIR BY THE CONTRACTOR UNTIL SUCH TIME AS THE ENTIRE DISTURBED AREA IS STABILIZED WITH HARD SURFACE OR PERMANENT LANDSCAPING. THE CONTRACTOR IS RESPONSIBLE FOR REFERRING TO ANY EROSION AND SEDIMENT CONTROL, STORMWATER MANAGEMENT, STORMWATER POLLUTION PREVENTION, OR SIMILAR PLAN AND/OR NARRATIVE AND ASSOCIATED PERMITS INCLUDING, BUT NOT LIMITED TO GRADING PERMITS, AND COMPLYING WITH THE REQUIREMENTS THEREIN.

18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK, INSPECTIONS, AND CERTIFICATIONS AS REQUIRED BY THE CITY, STATE OR LOCAL DISTRICTS. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST ASSOCIATED WITH THE INSPECTION AND CERTIFICATION UNLESS OTHERWISE ARRANGED WITH THE OWNER/DEVELOPER. THE CONTRACTOR SHALL COORDINATE ALL CERTIFICATIONS, AND PROVIDE FIELD SURVEYED AS-BUILT INFORMATION FOR REVIEW BY THE OWNER/DEVELOPER AND/OR ENGINEER AS EARLY AS POSSIBLE IN THE CONSTRUCTION SCHEDULE TO AVOID POTENTIAL DELAYS.

19. CONTRACTOR IS RESPONSIBLE FOR AS-BUILT DRAWINGS, TESTS, REPORTS, AND/OR ANY OTHER CERTIFICATES OR INFORMATION AS REQUIRED FOR ACCEPTANCE OF WORK FROM CITY, UTILITY DISTRICTS, OR ANY OTHER GOVERNING AGENCY, OR TO THE OWNER/DEVELOPER AS REQUIRED BY AND IN ACCORDANCE WITH THE GOVERNING AUTHORITY OR OWNER/DEVELOPER'S CRITERIA. CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING AS-BUILT INFORMATION AN A SET OF RECORD DRAWINGS KEPT AT THE CONSTRUCTION SITE AND AVAILABLE TO THE GOVERNING CITY, COUNTY, AND/OR STATE AND UTILITY DISTRICT INSPECTOR AT ALL TIMES. THE CONTRACTOR SHALL CONFIRM ANY REQUIREMENTS AS EARLY AS POSSIBLE IN THE CONSTRUCTION SCHEDULE TO ACCOUNT FOR PREPARATION AND REVIEW OF THE INFORMATION TO AVOID POTENTIAL DELAYS.

20. IF, DURING THE CONSTRUCTION PROCESS, CONDITIONS ARE ENCOUNTERED BY THE CONTRACTOR, HIS SUBCONTRACTORS, OR OTHER AFFECTED PARTIES, WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE OWNER/DEVELOPER AND THE ENGINEER IMMEDIATELY.

21. DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. IF PERTINENT DIMENSIONS ARE NOT SHOWN, CONTACT THE CONSULTING ENGINEER FOR CLARIFICATION AND ANNOTATE THE DIMENSION ON THE AS-BUILT RECORD DRAWING.

22. BENCHMARK VERIFICATION: THE CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS AND THE PROPOSED ELEVATIONS IN THIS CONSTRUCTION PLAN SET AGAINST THE PROJECT BENCHMARK, IDENTIFIED HEREIN, PRIOR TO COMMENCING WORK.

ROADWAY NOTES

1. GUTTERS SHALL BE AT LEAST 6" THICK.
2. ALL CURBS SHALL USE THE CATCH SECTION UNLESS OTHERWISE NOTED.
3. ALL COMBINATION CURB, GUTTER AND SIDEWALKS TO BE 6" THICK (MIN.). SIDEWALKS WITH VERTICAL CURB AND GUTTER TO BE 6" THICK (MIN.).
4. NON-LANDSCAPED MEDIAN ISLANDS SHALL BE COVERED WITH AN ACCEPTABLE IMPERMEABLE SURFACE.
5. IF ANY SECTION OF A DETACHED SIDEWALK IS TO BE PLACED OUTSIDE OF THE ROAD RIGHT-OF-WAY, THEN A SIDEWALK EASEMENT SHALL BE REQUIRED TO MAINTAIN PUBLIC USE.
6. PLACEMENT, MOISTURE AND DENSITY CONTROL FOR SUBGRADE, SUBBASE, AND SURFACING MATERIALS SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS OF CHAPTER 8 OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.

CITY OF LONE TREE GENERAL NOTES

1. THE CITY OF LONE TREE ENGINEER'S SIGNATURE AFFIXED TO THIS DOCUMENT INDICATES THE ENGINEERING DIVISION HAS REVIEWED THE DOCUMENT AND FOUND IT IN GENERAL CONFORMANCE WITH THE CITY OF LONE TREE SUBDIVISION RESOLUTION OR APPROVED VARIANCES TO THOSE REGULATIONS. THE CITY OF LONE TREE ENGINEER, THROUGH ACCEPTANCE OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY, OTHER THAN STATED ABOVE, FOR THE COMPLETENESS AND/OR ACCURACY OF THESE DOCUMENTS. THE OWNER AND ENGINEER UNDERSTAND THAT THE RESPONSIBILITY FOR THE ENGINEERING ADEQUACY OF THE FACILITIES DEPICTED IN THIS DOCUMENT LIES SOLELY WITH THE REGISTERED PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE IS AFFIXED TO THIS DOCUMENT.
2. ALL ROADWAY CONSTRUCTION SHALL CONFORM TO CURRENT DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
3. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE CITY OF LONE TREE ENGINEERING DIVISION. THE CITY RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS STANDARDS AND SPECIFICATIONS.
4. THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS, INSPECTION SECTION, (303) 662-8112, A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO STARTING CONSTRUCTION, AND/OR BEFORE RESTARTING CONSTRUCTION AFTER A SHUTDOWN OF MORE THAN 10 DAYS.
5. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ACTUAL CONSTRUCTION. FOR INFORMATION, CONTACT: UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT (800) 922-1987 OR 811
6. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY (SIGNED BY BOTH DESIGN ENGINEER AND CITY OF LONE TREE) OF THE CONSTRUCTION PLANS AND GESC REPORT AND PLAN, AND ONE (1) COPY OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS AT THE JOB SITE AT ALL TIMES.
7. ALL PROPOSED STREET CUTS TO EXISTING PAVEMENTS FOR UTILITIES, STORM SEWER, OR OTHER PURPOSES ARE LISTED AND REFERENCED BELOW:

   RIDGEGATE PARKWAY

8. A ROW/CONSTRUCTION PERMIT MUST BE OBTAINED BEFORE ANY WORK WITHIN EXISTING OR PROPOSED PUBLIC ROW. THE PERMIT APPLICATION MUST BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR REVIEW/PROCESSING A MINIMUM OF 7 DAYS PRIOR TO UPDATED 2-3-09 REQUESTED START FOR THE WORK IN THE ROW.
9. A PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR ACCEPTANCE WITH THE PERMIT APPLICATION. AN EXCAVATION OR PUBLIC IMPROVEMENTS CONSTRUCTION PERMIT WILL NOT BE ISSUED WITHOUT AN APPROVED TRAFFIC CONTROL PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION.
10. THE CONSTRUCTION PLANS SHALL BE CONSIDERED VALID FOR TWO (2) YEARS FROM THE DATE OF CITY OF LONE TREE ACCEPTANCE/APPROVAL IF APPLICABLE CONSTRUCTION PERMITS HAVE NOT BEEN OBTAINED, AND CONSTRUCTION STARTED WITHIN THAT TIME, THESE PLANS SHALL BE VOID AND WILL BE SUBJECT TO RE-REVIEW AND RE-ACCEPTANCE BY THE CITY OF LONE TREE.
11. CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE ENGINEER INSPECTOR WHEN WORKING OUTSIDE OF THE PUBLIC RIGHT-OF-WAY ON ANY FACILITY WHICH WILL BE CONVEYED TO THE CITY, URBAN DRAINAGE AND FLOOD CONTROL DISTRICT, OR OTHER SPECIAL DISTRICT FOR MAINTENANCE (STORM SEWER, ENERGY DISSIPATERS, DETENTION OUTLET STRUCTURES, OR OTHER DRAINAGE INFRASTRUCTURES). FAILURE TO NOTIFY ENGINEERING INSPECTOR TO ALLOW THEM TO INSPECT THE CONSTRUCTION MAY RESULT IN NON-ACCEPTANCE OF THE FACILITIES/INFRASTRUCTURE BY CITY AND/OR URBAN DRAINAGE.

CITY OF LONE TREE SIGNAGE & STRIPING NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MOST RECENT VERSION OF THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE "COLORADO SUPPLEMENTAL MUTCD" AND THE DOUGLAS COUNTY "ROAD AND CONSTRUCTION STANDARDS MANUAL". FURTHER SPECIFICATIONS AND ILLUSTRATIONS ARE LOCATED IN THE COLORADO DIVISION OF HIGHWAYS "M AND S STANDARDS".
2. DELINEATION OF ROADWAYS SHALL BE AS SPECIFIED IN THE COLORADO "M AND S MANUAL".
3. SPECIAL CARE SHALL BE TAKEN IN SIGN LOCATION TO ENSURE AN UNOBSTRUCTED VIEW OF EACH SIGN. STREET NAME SIGNS SHALL BE MOUNTED SO THAT THEY CAN BE SEEN FROM ALL DIRECTIONS OF TRAVEL.
4. INSTALLATION OF SIGNS SHALL CONFORM TO THE MUTCD MOUNTING HEIGHT REQUIREMENTS, INCLUDING A 7-FOOT MINIMUM HEIGHT FROM THE BOTTOM OF THE LOWEST SIGN PANEL TO THE TOP GRADE OF SIDEWALK.
5. ALL NEWLY INSTALLED TRAFFIC SIGNS SHALL MEET THE MINIMUM RETRO-REFLECTIVITY AND ILLUMINATION STANDARDS AS SET FORTH BY THE MUTCD (LATEST EDITION). THESE MINIMUM REQUIREMENTS SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
6. DIAMOND GRADE MATERIAL SHALL BE USED ON ALL STOP SIGNS.
7. THE CONTRACTOR INSTALLING SIGNS IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND UTILITIES. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.
8. FOLLOWING INSTALLATION, THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS DEPARTMENT, 303-662-8112. A FIELD INSPECTION OF LOCATION AND INSTALLATION OF ALL SIGNS SHALL BE PERFORMED BY PUBLIC WORKS. ALL DISCREPANCIES IDENTIFIED DURING THE FIELD INSPECTION MUST BE CORRECTED BEFORE THE TWO-YEAR WARRANTY PERIOD WILL BEGIN.
9. SIGNAGE AND STRIPING HAS BEEN DETERMINED BY INFORMATION AVAILABLE AT THE TIME OF REVIEW.
   PRIOR TO INITIATION OF THE WARRANTY PERIOD, LONE TREE RESERVES THE RIGHT TO REQUIRE MODIFICATIONS TO EXISTING OR INSTALLATION OF ADDITIONAL SIGNAGE AND/OR STRIPING IF THEY DETERMINE THAT AN UNFORESEEN CONDITION WARRANTS SUCH MODIFICATION ACCORDING TO THE MUTCD OR THE CDOT M AND S STANDARDS. ALL SIGNAGE AND STRIPING SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
10. FINAL STRIPING AND CROSSWALK LAYOUT TO BE APPROVED BY THE CITY OF LONE TREE PRIOR TO INSTALLATION. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.
11. CROSSWALKS SHALL:
    BE CONSTRUCTED USING 125 MIL PREFORMED THERMOPLASTIC.
    LINE UP WITH THE HANDICAP RAMPS AT BOTH ENDS.
    BE CENTERED ON LANE LINES SO AS TO BE STRADDLED BY VEHICLES.
12. ALL PAVEMENT MARKINGS SHALL BE AS FOLLOWS:
    FOR CONCRETE SURFACE: METHYL METHACRYLATE OR EPOXY PAINT.
    FOR ASPHALT SURFACE: PAINT, 90 MIL PREFORMED THERMOPLASTIC, INLAID
    MARKING TAPE, METHYL METHACRYLATE, OR EPOXY PAINT.
    TURN ARROWS AND ONLYS: 125 MIL PREFORMED THERMOPLASTIC.
13. ALL PAVEMENT MARKING SHALL BE PRECEDED BY THE APPROPRIATE SURFACE PREPARATION.
14. ANY SIGNAGE AND/OR OTHER TRAFFIC CONTROL DEVICES REMOVED SHALL BE RETURNED TO THE CITY OF LONE TREE.
15. TYPE III LIGHTED BARRICADES SHALL BE SET AT ENDS OF ROADWAYS, SEPARATING FINISHED AND UNFINISHED CONSTRUCTION AREAS AND WILL BE MAINTAINED BY THE CONTRACTOR/DEVELOPER.

NOTE: ALSO SEE CITY OF LONE TREE "STREET SIGN DETAILS"FOR ADDITIONAL INTERSECTION STREET SIGNAGE REQUIREMENTS.

STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON-GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.

DRAINAGE STRUCTURE NOTES

1. CONCRETE WORK SHALL CONFORM TO ACI 301, ACI 350.
2. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM-615, GRADE 60.
3. ALL EXPOSED CONCRETE SHALL HAVE A CDOT CLASS 2 OR 5 FINISH.
4. ALL EXPOSED CONCRETE CORNERS SHALL HAVE ¾"CHAMFERS.
5. DETAILING, FABRICATION, AND PLACING OF REBAR SHALL BE IN ACCORDANCE WITH ACI 315.
6. CONSTRUCTION TOLERANCES SHALL BE IN ACCORDANCE WITH ACI 347.
7. ALL MANHOLES SHALL BE SLAB BASE UNLESS SPECIFIED OTHERWISE. MANHOLE SHALL BE FABRICATED IN ACCORDANCE WITH CDOT STANDARD M-604-20.
8. COORDINATES FOR MANHOLES AND AREA INLETS ARE SHOWN AT THE CENTER OF THE STRUCTURE. COORDINATES FOR MOUNTABLE CURB INLETS ARE SHOWN ALONG THE FLOWLINE AT CENTER OF THE STRUCTURE.
9. ALL TYPE C AND D INLETS SHALL HAVE CLOSE MESH GRATES UNLESS SPECIFIED OTHERWISE.
10. LENGTH OF FABRICATED BAR GRATING PANELS IS LENGTH OF BEARING BARS, WIDTH REFERS TO DIMENSION PERPENDICULAR TO BEARING BARS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PANEL DIMENSIONS GIVEN PRIOR TO FABRICATION.

DRAINAGE GENERAL NOTES

1. PROJECT FACILITIES ARE TO BE LOCATED BASED ON THE SURVEY COORDINATES, ELEVATIONS, DIMENSIONS, AND/OR GEOMETRIC DESIGN DATA PROVIDED ON THE DRAWINGS.
2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES AND FOR SATISFYING ALL APPLICABLE OSHA, FEDERAL, STATE, AND LOCAL REGULATIONS. TEMPORARY EXCAVATIONS SHALL PROVIDE, AT MINIMUM, THE TRENCH DIMENSIONS AND CLEARANCES SHOWN OR SPECIFIED. TEMPORARY CONSTRUCTION SLOPES SHALL BE SLOPED, SHORED, SHEETED, AND/OR BRACED IN ACCORDANCE WITH STABILITY REQUIREMENTS AND APPLICABLE REGULATIONS, AND SHALL BE NO STEEPER THAN THE SLOPES SHOWN OR SPECIFIED WITHOUT THE APPROVAL OF THE ENGINEER. ANY SUCH APPROVALS BY THE ENGINEER WILL NOT RELIEVE THE CONTRACTOR FROM SOLE RESPONSIBILITY FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES.
3. EXISTING FACILITIES NOT INDICATED TO BE REMOVED SHALL BE PROTECTED IN PLACE OR REMOVED AND REPLACED IN KIND, AS APPROVED BY ENGINEER.
4. THE WORK WILL TAKE PLACE IN AND AROUND DRAINAGE SWALES AND THE HAPPY CANYON CREEK, SUBJECT TO PERIODIC FLOODING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF SURFACE AND SUBSURFACE WATER DURING THE COURSE OF THE WORK. ANY DAMAGE TO THE WORK RESULTING FROM SURFACE FLOWS, BASE FLOWS, OR FLOOD FLOWS INCLUDING BUOYANCY FORCES ON PIPELINES AND OTHER FACILITIES SHALL BE CORRECTED BY THE CONTRACTOR AT THE CONTRACTOR'S SOLE COST. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND SATISFYING THE REQUIREMENTS OF ANY APPLICABLE PERMITS PERTAINING TO WATER AND EROSION CONTROL.
5. CONTACT THE ENGINEER FOR CLARIFICATIONS OF ANY ABBREVIATIONS SHOWN ON THE DRAWINGS.
6. THE SITE WHERE THE WORK IS TO BE PERFORMED SHALL BE OVERLOT GRADED. TOPSOIL SHALL BE SPREAD IN OPEN SPACE AREAS TO A DEPTH OF APPROXIMATELY 6-INCHES. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED, AND SOME AREAS COVERED WITH EROSION CONTROL BLANKETS, UNLESS OTHERWISE DIRECTED IN THE PLANS OR BY THE ENGINEER. CARE SHALL BE TAKEN TO AVOID DISTURBING ANY OPEN SPACE AREAS EXCEPT THE MINIMUM NECESSARY TO PERFORM THE WORK. TOPSOIL IN ANY WORK AREAS OR ACCESS ROADS WITHIN THE OPEN SPACE SHALL BE STRIPPED AND STOCKPILED PRIOR TO THE WORK, PROTECTED FROM MIXING WITH ANY OTHER MATERIALS DURING THE WORK, AND REPLACED TO A LOOSE DEPTH OF 7- TO 8- INCHES (FINAL DEPTH AFTER SETTLEMENT SHALL BE 6- INCHES MINIMUM) AS THE WORK IS BEING COMPLETED. WHERE BLANKETS EXIST, THE MINIMUM AREA OF BLANKET TO ALLOW WORK TO PROGRESS SHALL BE REMOVED AND THEN THE REMOVED OR NEW BLANKET REPLACED AFTER UNDERLYING WORK IS COMPLETE (EXCEPT NO TEMPORARY BLANKET NEEDS TO BE REPLACED OVER ROCK OR COIR BLANKET SHOWN IN THE PLANS). JUST PRIOR TO REPLACEMENT OF TOPSOIL AFTER UNDERLYING WORK IS COMPLETE AND APPROVED, THE UNDERLYING SUBGRADE IN OPEN SPACE AREAS SHALL BE LOOSENED BY TILLING TO A DEPTH OF 12- INCHES UNTIL CLODS ARE NO LARGER THAN 3 INCHES, AND APPROVED BY THE ENGINEER. THIS NOTE ALSO APPLIES TO AREAS WHERE COIR MAT IS TO BE INSTALLED.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ANY COMPLETED WORK FROM DISTURBANCE OR DAMAGE DURING THE COURSE OF THE WORK. IF REQUESTED BY THE CONTRACTOR AND APPROVED BY THE OWNER, SIGNIFICANT COMPLETED SECTIONS OF THE WORK MAY BE ACCEPTED AS FINAL PRIOR TO THE COMPLETION OF THE ENTIRE PROJECT. ANY SUCH EARLY ACCEPTANCE WILL NEED TO BE IN WRITING BY THE ENGINEER AND OWNER AND THOSE PORTIONS OF THE WORK SHALL BE PROTECTED BY THE CONTRACTOR AGAINST VEHICLES RUNNING OVER THE AREA BY ENCIRCLING THE WORK WITH FLAGGING OR FENCING OR BY OTHER MEANS AGREED TO BY THE OWNER AND MAINTAINED BY THE CONTRACTOR UNTIL THE END OF THE PROJECT.
8. ALL FINE GRADING REQUIRED TO CONSTRUCT DRAINAGE IMPROVEMENTS AND PROVIDE FINISHED GRADES ADJACENT TO IMPROVEMENTS SHALL BE DONE BY THE DRAINAGE CONTRACTOR AND SHALL BE CONSIDERED PART OF THE WORK, AND NOT PAID FOR SEPARATELY.

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	N/A
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
GENERAL NOTES

SHEET 201 OF 270

JOB NO. 15950.01

LAYER LINETYPE LEGEND

	EXISTING	PROPOSED
PHASE LINE		
MATCH LINE		
SECTION LINE		
BOUNDARY LINE		
PROPERTY LINE		
EASEMENT LINE		
RIGHT OF WAY		
R.O.W. A LINE	A	A
CENTERLINE		
CITY LIMITS		
WIRE FENCE		
CHAIN LINK FENCE		
WOOD FENCE		
MASONRY FENCE		
GUARDRAIL		
CONC. BARRIER		
CABLE TV	TV	TV
ELECTRIC	E	E
FIBER OPTIC	FO	FO
GAS MAIN	G	G
IRRIGATION MAIN	IRR	IRR
OIL/PETRO. MAIN	O	O
OVERHEAD UTILITY	OHU	OHU
SANITARY SEWER	S	
STORM DRAIN		
TELEPHONE	T	T
WATER MAIN	W	
RAW WATER LINE	RWL	RWL
SWALE/WATERWAY FLOWLINE		
DIVERSION DITCH		
DIVERSION CHANNEL		
MAJOR DRAINAGE BASIN		
MINOR DRAINAGE BASIN		
TOP OF SLOPE		
TOE OF SLOPE		
EDGE OF WATER		
INDEX CONTOUR	6100	6100
INTERMEDIATE CONTOUR		
DEPRESSION CONT. (INDEX)	6100	6100
DEPRESSION CONT. (INTER)		
TOP OF CUTS		
TOE OF FILLS		
CUT AND FILL LINE		C/F
SILT FENCE	SF	SF
100 YEAR FLOODPLAIN	100YR	100YR
500 YEAR FLOODPLAIN	500YR	500YR
FLOODWAY	FLDWY	FLDWY
BASE FLOOD ELEVATION		
EDGE OF WETLANDS		
STONE WALL		

UTILITIES LEGEND

	EXISTING	PROPOSED
STORM SEWER		
MANHOLE		
STORM INLET		
AREA INLET – SQUARE		
AREA INLET – ROUND		
FLARED END SECTION		
RIPRAP		
SANITARY SEWER		
LINE MARKER	Mkr San	
SERVICE MARKER		
CLEAN–OUT		
MANHOLE W/ DIRECTIONAL FLOW ARROW		
WATER LINE		
LINE MARKER	Mkr W	
SERVICE MARKER		
FIRE HYDRANT		
FIRE CONNECTION		
MANHOLE		
BEND		
BLOW–OFF VALVE		
WELL	WELL	WELL
METER		
VALVE		
REDUCER		
THRUST BLOCK		
CROSS		
PLUG W/ THRUST BLOCK		
TEE		
REVERSE ANCHOR		
ANODE		
AIR & VACUUM VALVE ASSEMBLY		
TRANSMISSION BLOW–OFF ASSEMBLY		
GAS LINE		
MARKER	Mkr G	
SERVICE MARKER		
METER		
VALVE		
PLUG		
TEE		
DRY UTILITIES		
CABLE TV MARKER	Mkr TV	
CABLE TELEVISION PEDESTAL		
ELECTRIC MARKER	Mkr E	
ELECTRIC SERVICE MARKER		
ELECTRICAL PEDESTAL		
ELECTRICAL METER		
ELECTRICAL MANHOLE		
FIBER–OPTIC MARKER	Mkr FO	
IRRIGATION PEDESTAL		
TELEPHONE MARKER	Mkr T	
TELEPHONE PEDESTAL		
TELEPHONE MANHOLE		
UTILITY POLE		
GUY ANCHOR		
GUY POLE		
MISC. UTILITIES		
VENT PIPE	VP	VP
TEST HOLE DESIGNATOR	THE FIRM AGENCY	

MONUMENTATION LEGEND

ALUMINUM CAP – FOUND	AC
BRASS CAP – FOUND	BC
BENCHMARK – FOUND	
CROSS – FOUND	
MONUMENT – SET	
MONUMENT – FOUND (DEFAULT)	
MONUMENT – FOUND (ALTERNATE 1)	
MONUMENT – FOUND (ALTERNATE 2)	
MONUMENT – FOUND (ALTERNATE 3)	
MONUMENT – FOUND (ALTERNATE 4)	
MONUMENT – FOUND (ALTERNATE 5)	
MONUMENT – FOUND (ALTERNATE 6)	
MONUMENT – FOUND (ALTERNATE 7)	
NAIL & WASHER – FOUND	NAIL & WASHER
PANEL – FOUND	
PK NAIL – FOUND	PK NAIL
ROW MONUMENT – FOUND	
ROW MARKER – FOUND	
SECTION CORNER – FOUND	
SECTION CORNER – SET	
QUARTER–SECTION CORNER – FOUND	
QUARTER–SECTION CORNER – SET	
SECTION CENTER – FOUND	
SECTION CENTER – FOUND	
CONTROL/TRAVERSE POINT – SET	

TRAFFIC LEGEND

	EXISTING	PROPOSED
PARKING METER		
TRAFFIC SIGNAL BOX		
TRAFFIC SIGNAL POLE		
TRAFFIC SIGNAL		
BARRICADE		
GUARD RAIL POST		
IMPACT ATTENUATOR		
BRIDGE STYLE HIGHWAY SIGN POST		
CANTILEVER STYLE HIGHWAY SIGN POST		
SIGN		
RAILROAD MARKER/SIGN		
STREET LIGHT		
STREET LIGHT – SINGLE		
STREET LIGHT – DOUBLE		
LUMINAIRE		
ALTERNATE LUMINAIRE		
SIGNAL MAST ARM W/ LUMINAIRE		
PEDESTAL POLE FOUNDATION		
TRAFFIC SIGNAL POLE		
ROUND PULL BOX		
MEDIUM PULL BOX		
LARGE PULL BOX (20X33X15)		
SIGNAL HEAD WITHOUT BACK PLATE		
SIGNAL HEAD WITH BACK PLATE		
PEDESTRIAN SIGNAL HEAD		
VIDEO IMAGE DETECTOR		
OPTICOM DETECTOR		
VEHICLE DETECTION ZONE		V

STORM WATER MANAGEMENT

	KEY	SYMBOL
CHECK DAM	CD	
CONSTRUCTION ROAD STABILIZATION	CRS	
CURB SOCK INLET PROTECTION	CS	
CONCRETE WASHOUT AREA	CWA	
DIVERSION DITCH AND DIKE, TEMPORARY	DD	
DIVERSION CHANNEL, TEMPORARY	DV	
DEWATERING	DW	
EROSION CONTROL BLANKET	ECB	
INLET FILTER	IF	
INLET PROTECTION	IP	
MULCHING	MU	
OUTLET PROTECTION	OP	
PAVED FLUME	PF	
PERMENENT SEEDING	PS	
REINFORCED CONCRETE DAM	RCD	
ROUGH CUT STREET CONTROL	RCS	
SEDIMENT BASIN	SB	
SEDIMENT CONTROL LOG	SCL	
SILT FENCE	SF	
SURFACE ROUGHENING	SR	
STABILIZED STAGING AREA	SSA	
SEDIMENT TRAP	ST	
STRAW BALE BARRIER	STB	
TERRACING	TER	
TEMPORARY SEEDING	TS	
TEMPORARY STREAM CROSSING CULVERT/BRIDGE	TSC C	
TEMPORARY STREAM CROSSING FORD TYPE	TSC F	
TEMPORARY SLOPE DRAIN	TSD	
VEHICLE TRACKING CONTROL	VTC	
VEHICLE TRACKING CONTROL WITH WASH RACK	WR	

DRAINAGE REPORT PLANS

	KEY
BASIN DESIGNATION (NO COEFFICIENT)	# / #.##
BASIN DESIGNATION (1 COEFFICIENT)	# / #.## / #
BASIN DESIGNATION (2 COEFFICIENTS)	# / #.## / # / #
ANALISYS POINT IDENTIFIER	#
BASIN DESIGNATION (HISTORIC)	# / #-#
BASIN DESIGNATION (DEVELOPED)	# / #.##
SUB–BASIN DESIGNATION (DEVELOPED)	# / ##
DRAINAGE PIPE IDENTIFIER	##
DRAINAGE POINT IDENTIFIER (HEXAGONAL)	##
DRAINAGE POINT IDENTIFIER (TRIANGULAR)	?
SWMM DESIGNATION 1	#
SWMM DESIGNATION 2	#
SWMM DESIGNATION 3	#
SWMM DESIGNATION 4	?

LANDSCAPE LEGEND

	EXISTING	PROPOSED
TREE – CONIFEROUS		
TREE – DECIDUOUS		
SHRUB/BUSH		
SHRUBS AND BUSHES		
IRRIGATION BOX		
IRRIGATION SPRINKLER		
IRRIGATION VALVE		
BOLLARD		
FLAGPOLE	FP	

Know what's **below.** **Call** before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

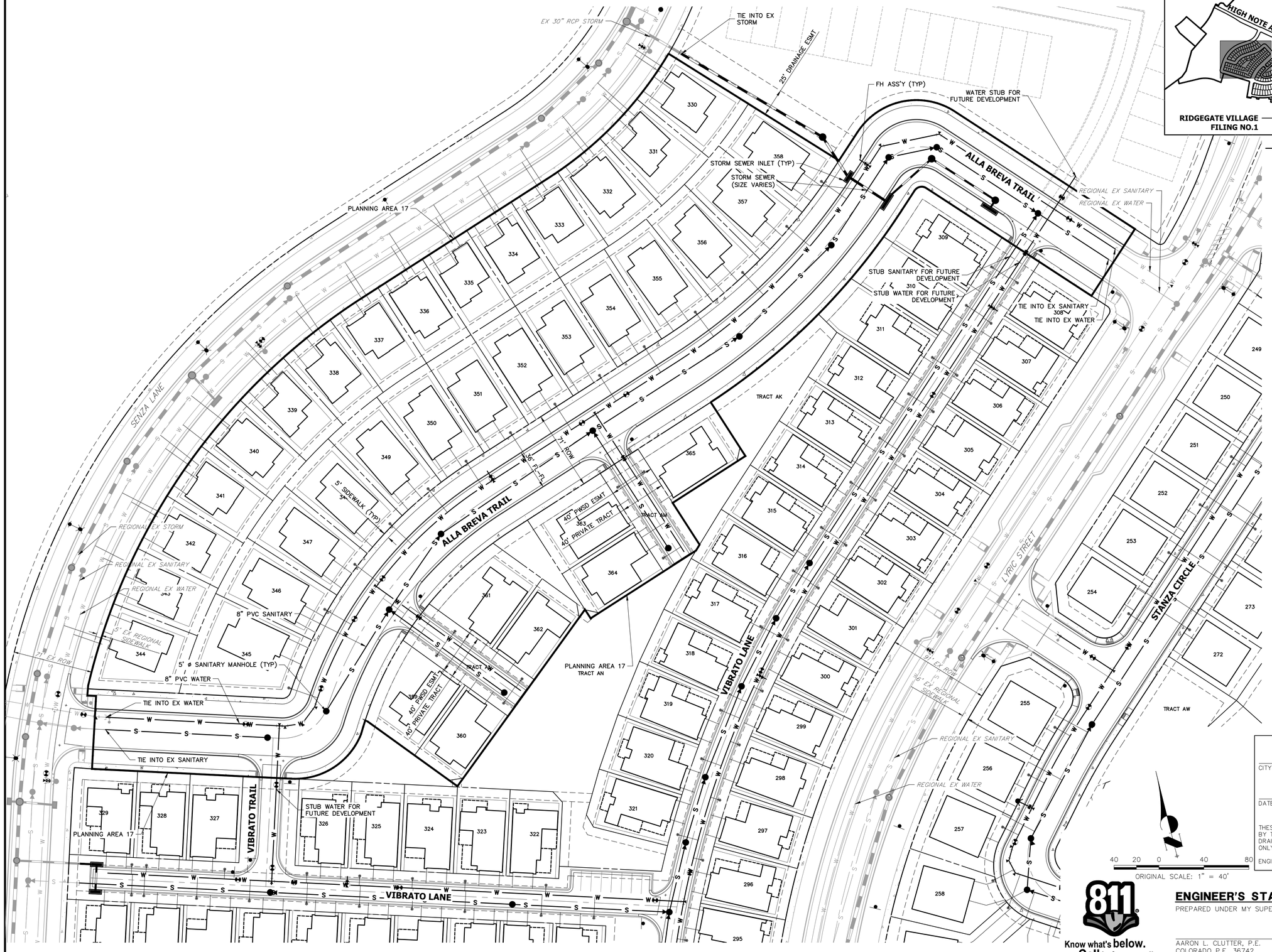
No.	REVISION	BY	DATE

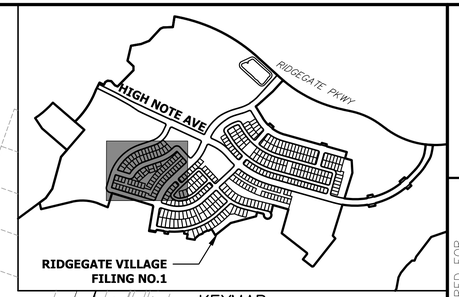
H–SCALE	N/A	DESIGNED BY	GVT	CHECKED BY	
V–SCALE	N/A	DRAWN BY	GVT		
DATE	2/12/21				

RIDGEGATE SOUTHWEST VILLAGE FILING 1
LEGEND

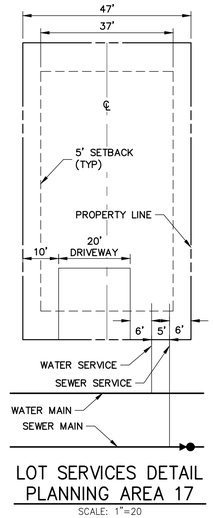
SHEET 202 OF 270

JOB NO. 15950.01





KEYMAP
SCALE:1"=1000'



LOT SERVICES DETAIL
PLANNING AREA 17
SCALE: 1"=20

40 20 0 40 80
ORIGINAL SCALE: 1" = 40'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED CLAYTON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

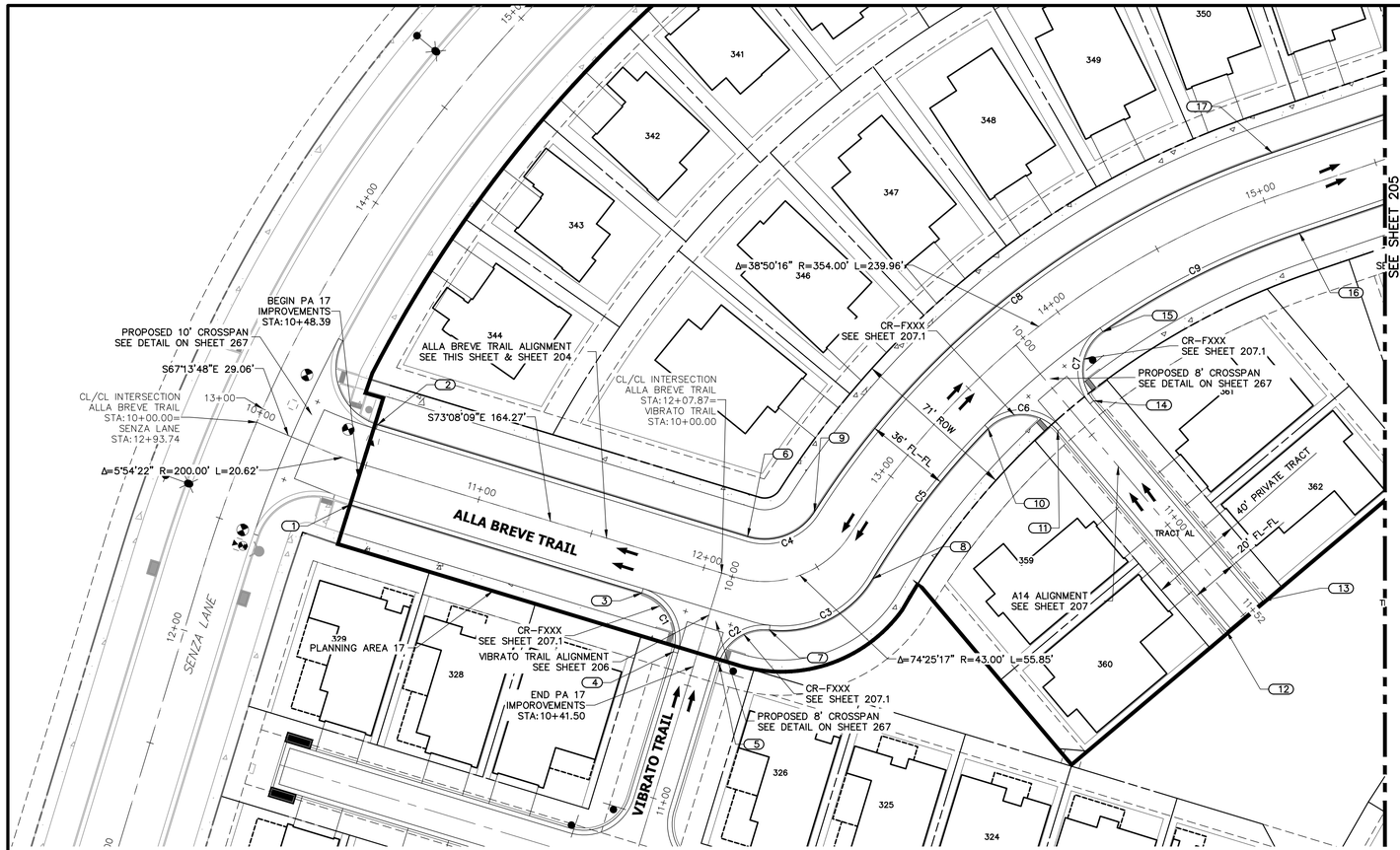
No.	REVISION	BY	DATE

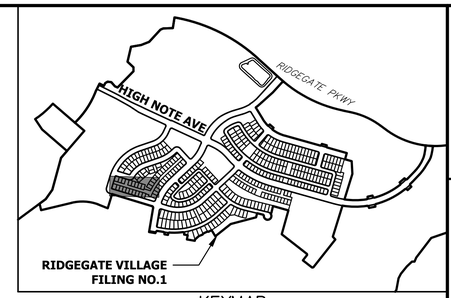
H-SCALE	1"=40'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
OVERALL UTILITY PLAN

SHEET 203 OF 270

JOB NO. 15950.01



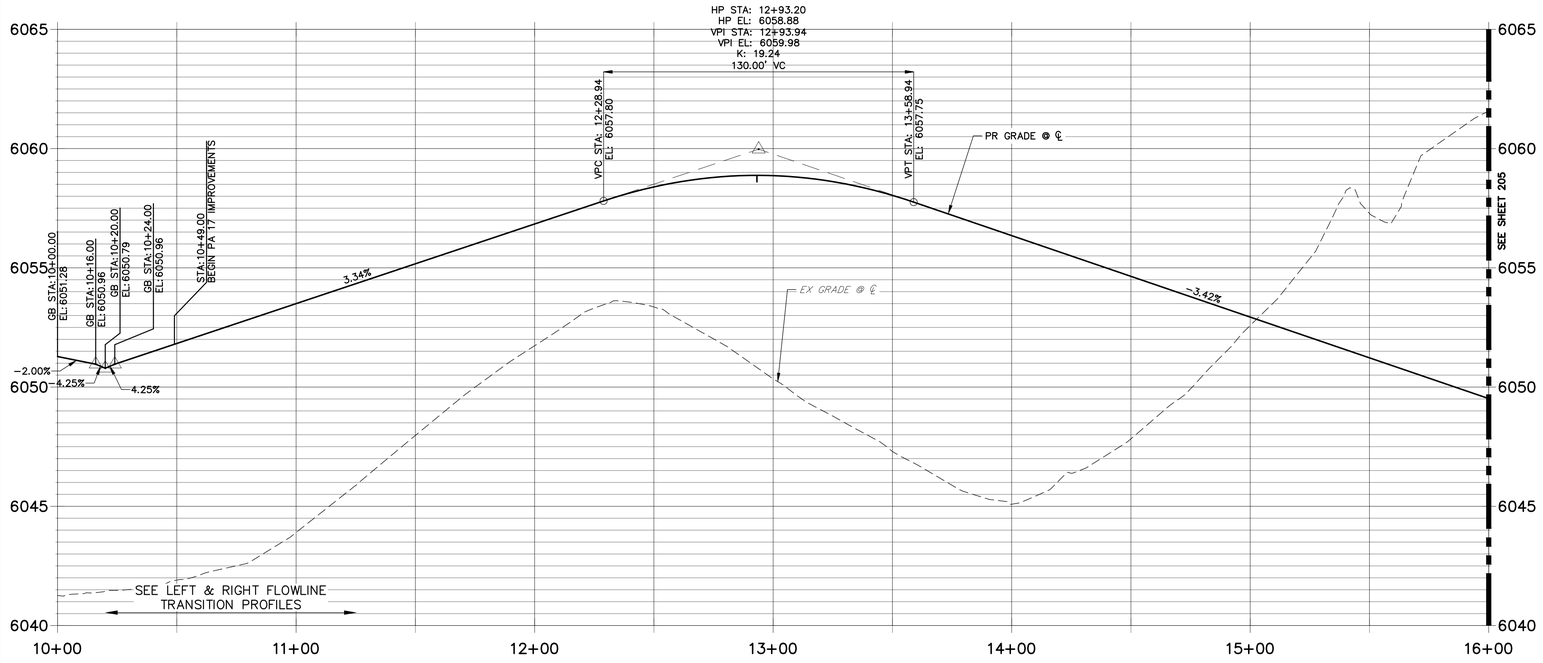


KEYMAP
SCALE:1"=1000'

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
1	10+48.45	17.99' (RT)	ALLA BREVE TRAIL	6051.72		PC
2	10+49.68	18.00' (LT)	ALLA BREVE TRAIL	6051.37		PT
3	11+77.87	18.00' (RT)	ALLA BREVE TRAIL	6055.61		PT
4	10+38.00	10.00' (RT)	VIBRATO TRAIL	6056.92		PT
5	10+36.96	10.00' (LT)	VIBRATO TRAIL	6057.63		PT
6	12+13.95	18.00' (LT)	ALLA BREVE TRAIL	6056.82		PC
7	12+27.95	20.63' (RT)	ALLA BREVE TRAIL	6057.81		PCC
8	12+62.38	19.09' (RT)	ALLA BREVE TRAIL	6058.69		PCC
9	12+69.80	18.00' (LT)	ALLA BREVE TRAIL	6058.25		PCC
10	13+43.61	18.00' (RT)	ALLA BREVE TRAIL	6058.13		PCR
11	10+39.43	9.99' (RT)	A 14	6057.32		PT
12	11+50.72	10.00' (RT)	A 14	6058.92		PT
13	11+50.72	10.00' (LT)	A 14	6058.92		PT
14	10+39.42	10.01' (LT)	A 14	6056.87		PT
15	14+10.93	18.00' (RT)	ALLA BREVE TRAIL	6055.51		PC
16	15+09.76	18.00' (RT)	ALLA BREVE TRAIL	6052.11		PT
17	15+09.76	18.00' (LT)	ALLA BREVE TRAIL	6052.11		PT

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C1	90°00'00"	20.00'	31.42'
C2	79°44'49"	20.00'	27.84'
C3	65°51'42"	45.08'	51.82'
C4	74°25'17"	25.00'	32.47'
C5	13°45'56"	336.00'	80.72'
C6	95°27'43"	20.00'	33.32'
C7	95°26'00"	20.00'	33.31'
C8	38°50'16"	372.00'	252.16'
C9	15°59'46"	336.00'	93.81'

ALLA BREVE TRAIL PROFILE
STA 10+00.00 TO 16+00.00



NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE SHEET 202 FOR LEGEND.
4. SEE SHEET 209 FOR SUMP PROFILES.
5. SEE SHEET 207.1 FOR CURB RETURN PROFILES.
6. SEE SHEET 208 FOR CURB RAMP DETAILS.
7. SEE SHEET 210 FOR SIGNAGE AND STRIPING.
8. ALL CURB RADII ARE 25' UNLESS OTHERWISE NOTED.
9. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.

30 15 0 30 60

HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

Know what's below. Call before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

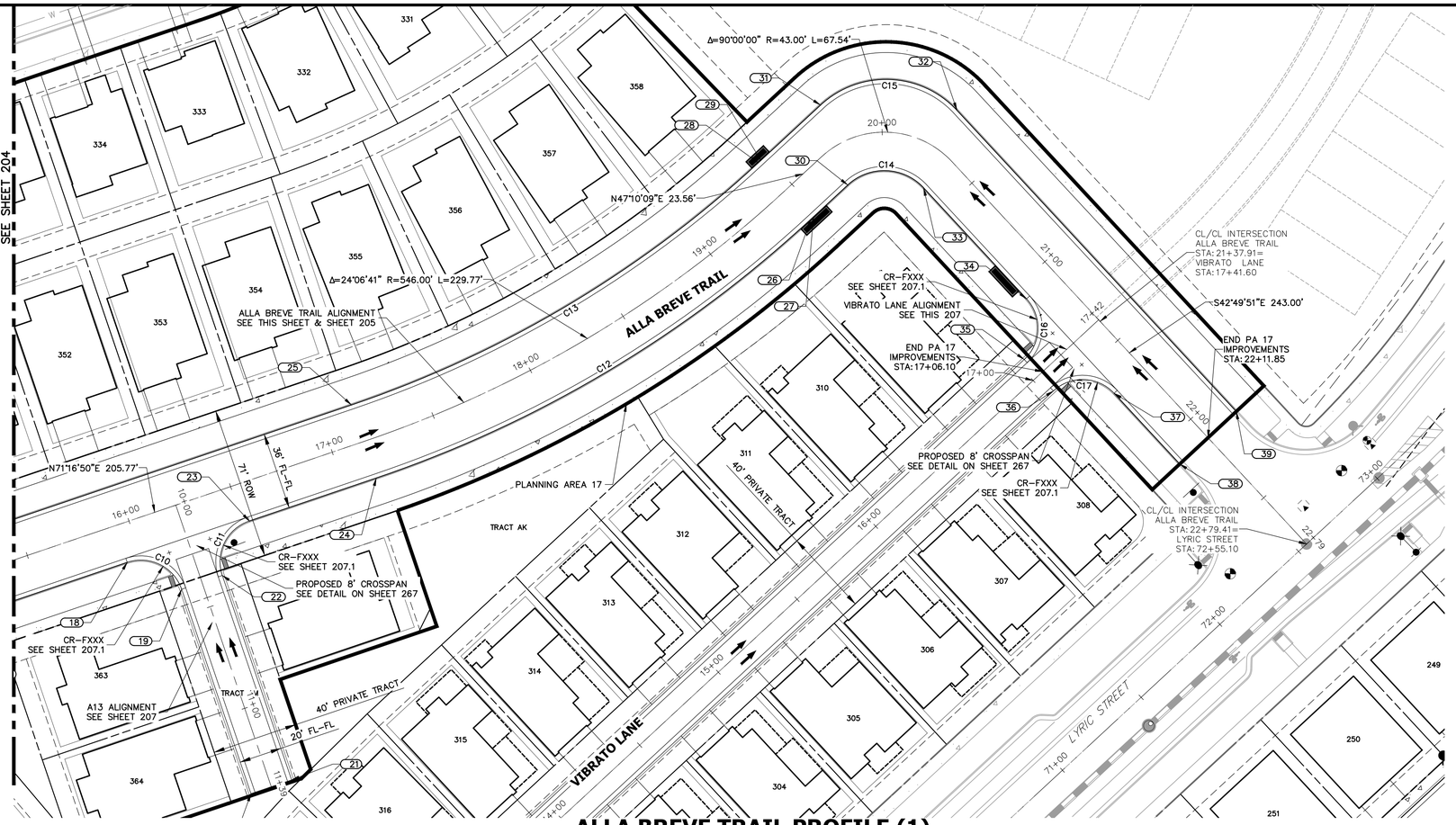
H-SCALE	1"= 30'
V-SCALE	1"= 3'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

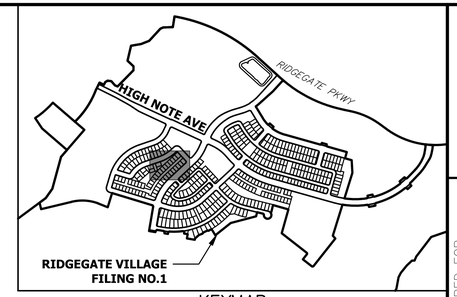
RIDGEGATE SOUTHWEST VILLAGE FILING 1

ROADWAY PLAN & PROFILES

SHEET 204 OF 270

JOB NO. 15950.01





KEYMAP
SCALE:1"=1000'

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1" = 30'	DESIGNED BY	GVT
V-SCALE	1" = 3'	DRAWN BY	GVT
DATE	2/12/21	CHECKED BY	

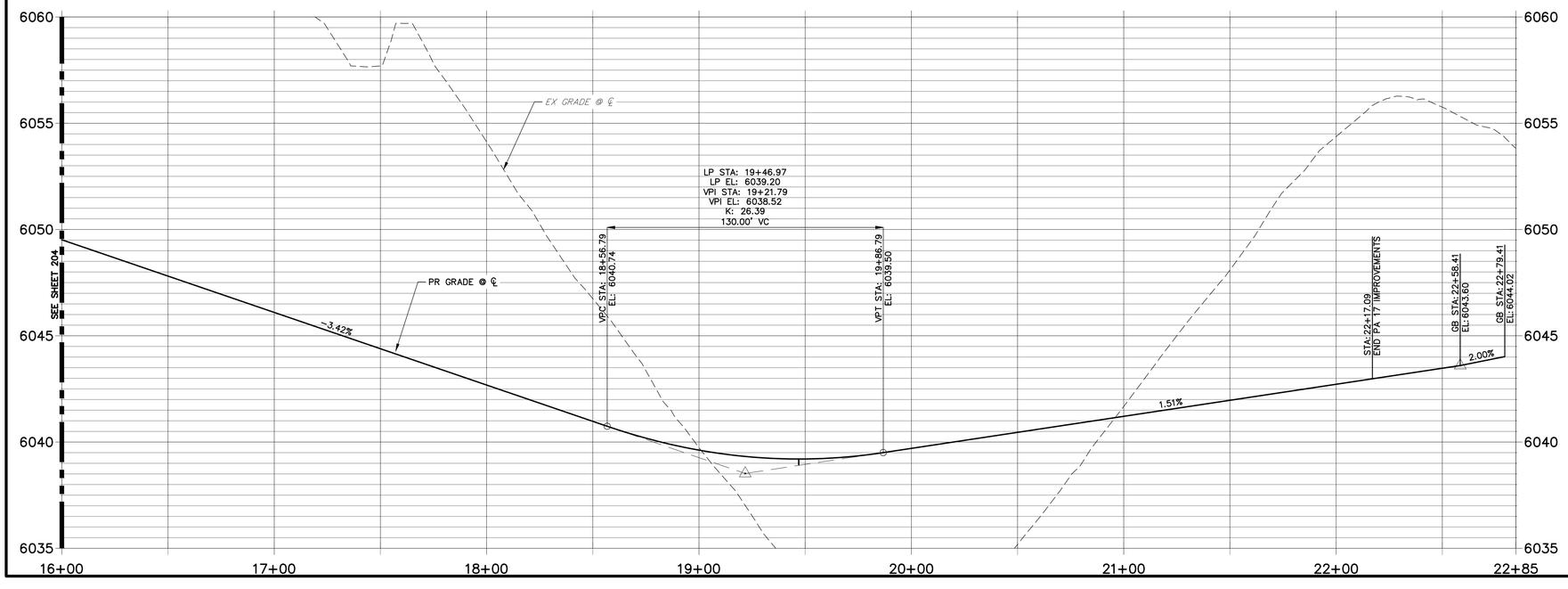
RIDGEGATE SOUTHWEST
VILLAGE FILING 1
ROADWAY PLAN & PROFILES

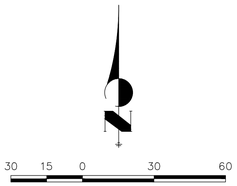
SHEET 205 OF 270
JOB NO. 15950.01

POINT TABULATION

POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
18	15+93.04	18.00' (RT)	ALLA BREVE TRAIL	6049.27		PCR
19	10+38.02	10.00' (RT)	A 13	6049.13		PT
20	11+38.60	10.00' (RT)	A 13	6050.91		PT
21	11+38.60	10.00' (LT)	A 13	6051.47		PT
22	10+38.02	10.00' (LT)	A 13	6048.52		PT
23	10+18.02	30.00' (LT)	A 13	6047.22		PT
24	17+15.53	18.00' (RT)	ALLA BREVE TRAIL	6045.08		PC
25	17+15.53	18.00' (LT)	ALLA BREVE TRAIL	6045.08		PC
26	19+45.30	18.00' (RT)	ALLA BREVE TRAIL	6038.71		PT
27	19+46.98	18.00' (RT)	ALLA BREVE TRAIL	6038.71		LOW PT
28	19+45.30	18.00' (LT)	ALLA BREVE TRAIL	6038.71		PT
29	19+46.98	18.00' (LT)	ALLA BREVE TRAIL	6038.71		LOW PT
30	19+68.86	18.00' (RT)	ALLA BREVE TRAIL	6038.81		PC
31	19+79.89	20.06' (LT)	ALLA BREVE TRAIL	6039.45		PC
32	20+25.38	20.06' (LT)	ALLA BREVE TRAIL	6040.13		PT
33	20+36.41	18.00' (RT)	ALLA BREVE TRAIL	6039.76		PT
34	17+23.60	30.00' (LT)	VIBRATO LANE	6041.00		PT
35	17+03.60	10.00' (LT)	VIBRATO LANE	6041.60		PT
36	17+03.60	10.00' (RT)	VIBRATO LANE	6041.92		PT
37	17+23.60	30.00' (RT)	VIBRATO LANE	6042.20		PT
38	22+11.88	18.00' (RT)	ALLA BREVE TRAIL	6043.10		PT
39	22+11.83	18.00' (LT)	ALLA BREVE TRAIL	6042.19		PT

ALLA BREVE TRAIL PROFILE (1)
STA 16+00.00 TO 22+84.65





HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

CURVE TABLE

CURVE	DELTA	RADIUS	LENGTH
C10	89°59'26"	20.00'	31.42'
C11	90°00'00"	20.00'	31.42'
C12	24°06'41"	564.00'	237.34'
C13	24°06'41"	528.00'	222.19'
C14	90°00'00"	25.00'	39.27'
C15	90°00'00"	45.00'	70.69'
C16	90°00'00"	20.00'	31.42'
C17	90°00'00"	20.00'	31.42'

NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE SHEET 202 FOR LEGEND.
4. SEE SHEET 209 FOR SUMP PROFILES.
5. SEE SHEET 207.1 FOR CURB RETURN PROFILES.
6. SEE SHEET 208 FOR CURB RAMP DETAILS.
7. SEE SHEET 210 FOR SIGNAGE AND STRIPING.
8. ALL CURB RADII ARE 25' UNLESS OTHERWISE NOTED.
9. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.

Know what's below.
Call before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

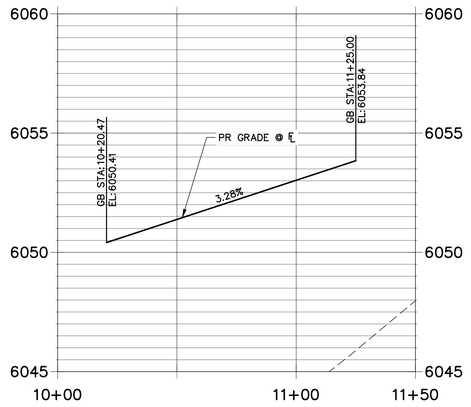
PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

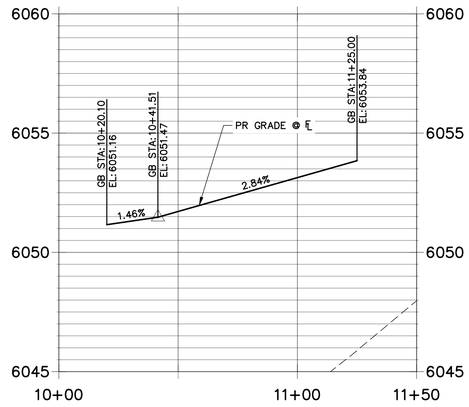
AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

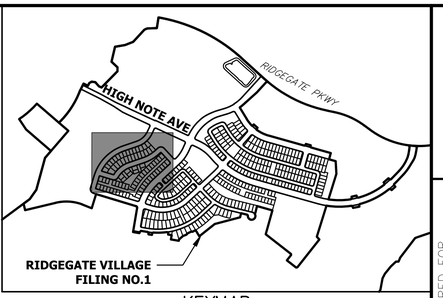
DATE

ALLA BREVE TRAIL LEFT FLOWLINE TRANSITION
STA 10+00.00 TO 11+50.00



ALLA BREVE TRAIL RIGHT FLOWLINE TRANSITION
STA 10+00.00 TO 11+50.00

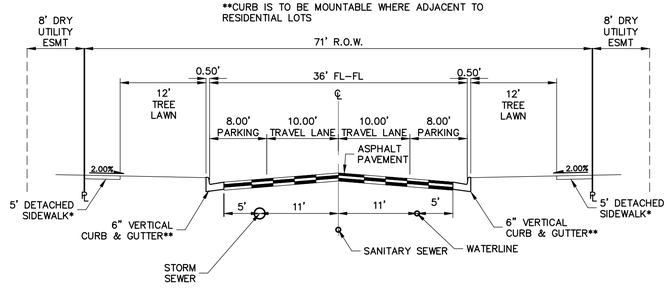




KEYMAP
SCALE:1"=1000'

*10 FOOT SIDEWALK TO BE INSTALLED ADJACENT TO THE SCHOOL SITE AND WHERE DEPICTED ON THE PLANS.

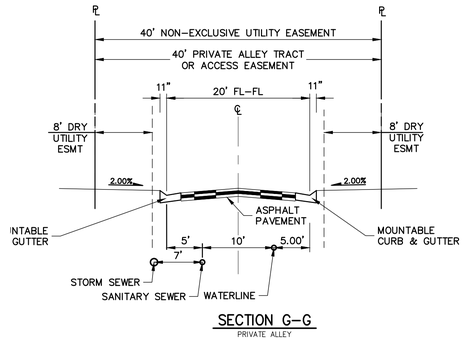
**CURB IS TO BE MOUNTABLE WHERE ADJACENT TO RESIDENTIAL LOTS



SECTION A-A

TYPE I - TYPICAL 71-FOOT R.O.W. RESIDENTIAL LOCAL STREET WITH DETACHED SIDEWALK (PUBLIC)

N.T.S.

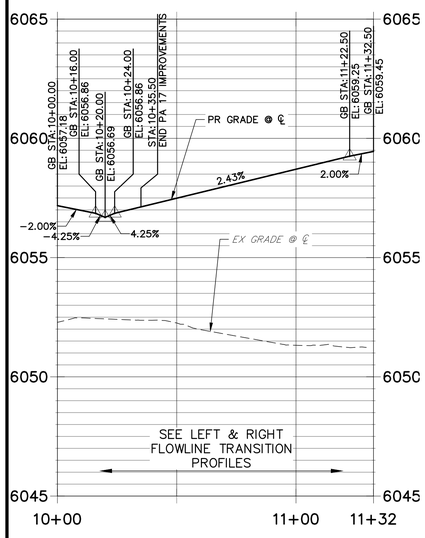


SECTION G-G

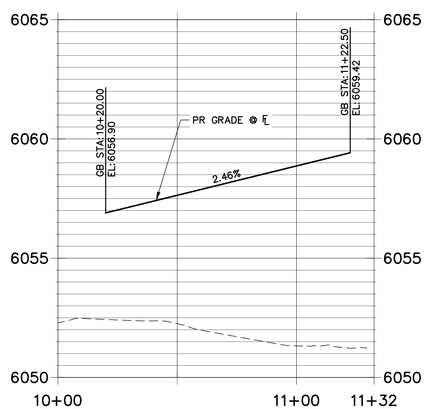
PRIVATE ALLEY

N.T.S.

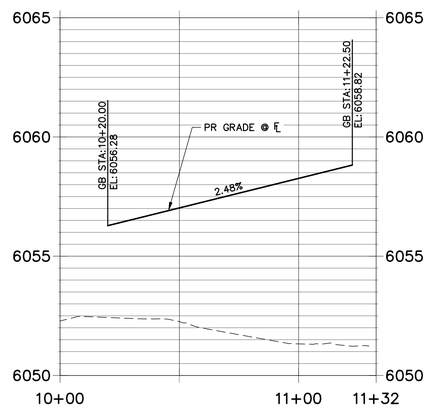
VIBRATO TRAIL PROFILE
STA 10+00.00 TO 11+32.50



VIBRATO TRAIL LEFT FLOWLINE TRANSITION
STA 10+00.00 TO 11+32.50



VIBRATO TRAIL RIGHT FLOWLINE TRANSITION
STA 10+00.00 TO 11+32.50



NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE SHEET 202 FOR LEGEND.
4. SEE SHEET 209 FOR SUMP PROFILES.
5. SEE SHEET 207.1 FOR CURB RETURN PROFILES.
6. SEE SHEET 208 FOR CURB RAMP DETAILS.
7. SEE SHEET 210 FOR SIGNAGE AND STRIPING.
8. ALL CURB RADII ARE 25' UNLESS OTHERWISE NOTED.
9. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.

30 15 0 30 60

HORIZONTAL
ORIGINAL SCALE: 1" = 30'

VERTICAL
ORIGINAL SCALE: 1" = 3'

Know what's below. Call before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=30'
V-SCALE	1"=3'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

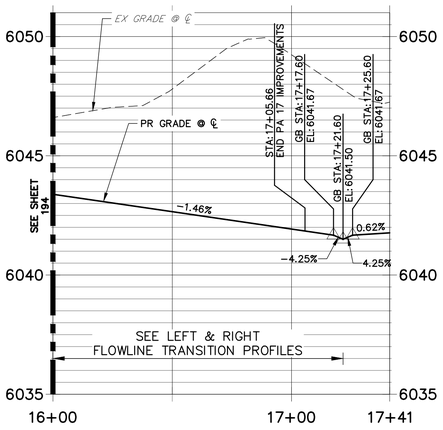
RIDGEGATE SOUTHWEST VILLAGE FILING 1

ROADWAY PLAN & PROFILES

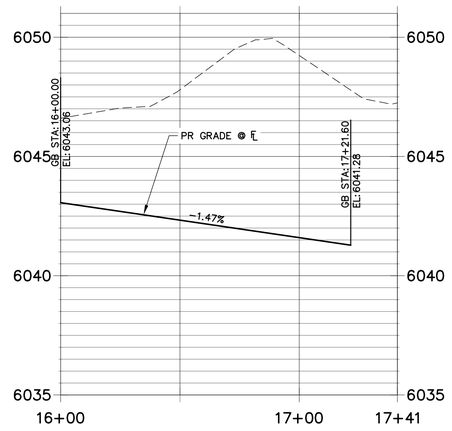
SHEET 206 OF 270

JOB NO. 15950.01

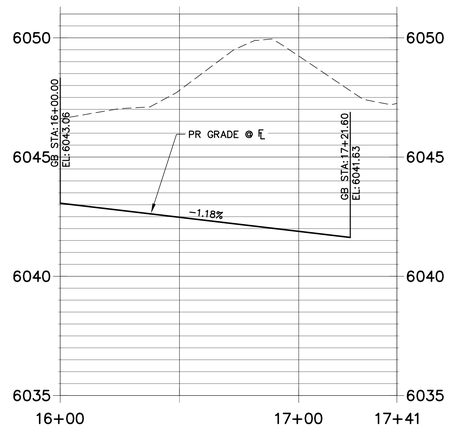
VIBRATO LANE PROFILE
STA 16+00.00 TO 17+41.16



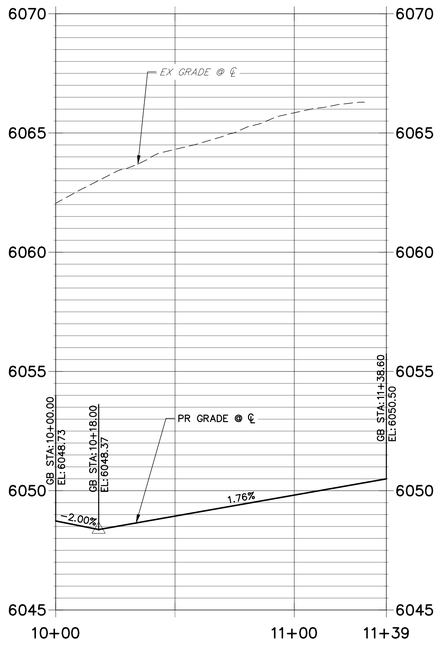
VIBRATO LANE LEFT FLOWLINE TRANSITION
STA 16+00.00 TO 17+41.16



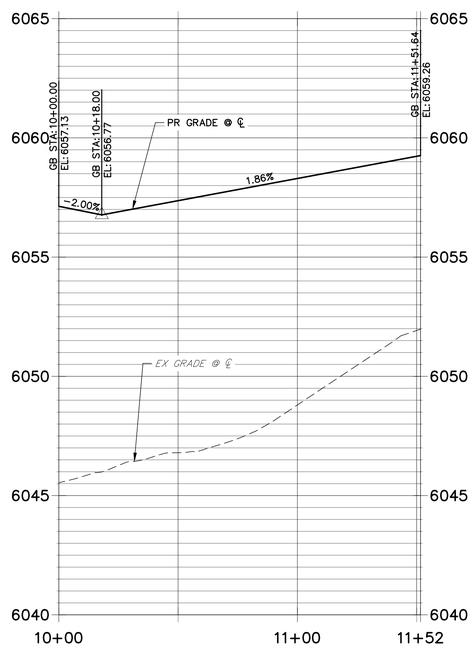
VIBRATO LANE RIGHT FLOWLINE TRANSITION
STA 16+00.00 TO 17+41.16



A 13 PROFILE
STA 10+00.00 TO 11+38.60



A 14 PROFILE
STA 10+00.00 TO 11+51.64



NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE SHEET 202 FOR LEGEND.
4. SEE SHEET 209 FOR SUMP PROFILES.
5. SEE SHEET 207.1 FOR CURB RETURN PROFILES.
6. SEE SHEET 208 FOR CURB RAMP DETAILS.
7. SEE SHEET 210 FOR SIGNAGE AND STRIPING.
8. ALL CURB RADII ARE 25' UNLESS OTHERWISE NOTED.
9. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.

30 15 0 30 60

HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

Know what's **below.**
Call before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

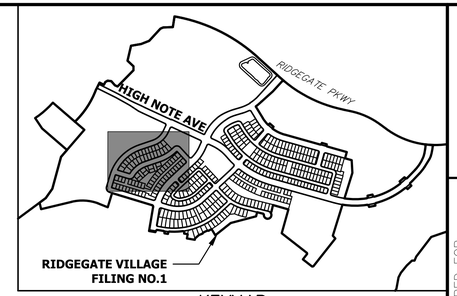
ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED
AARON LEE CLUTTER
36742
PROFESSIONAL ENGINEER



KEYMAP
SCALE:1"=1000'

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

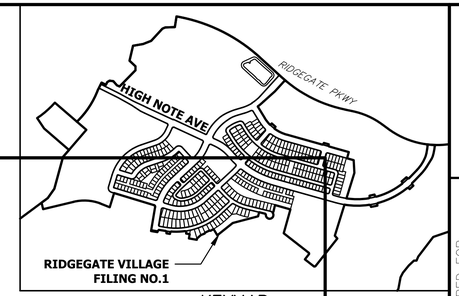
H-SCALE	1" = 30'
V-SCALE	1" = 3'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
ROADWAY PLAN & PROFILES

SHEET 207 OF 270

JOB NO. 15950.01

PLACE HOLDER SHEET



KEYMAP
SCALE: 1"=1000'

30 15 0 30 60

HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

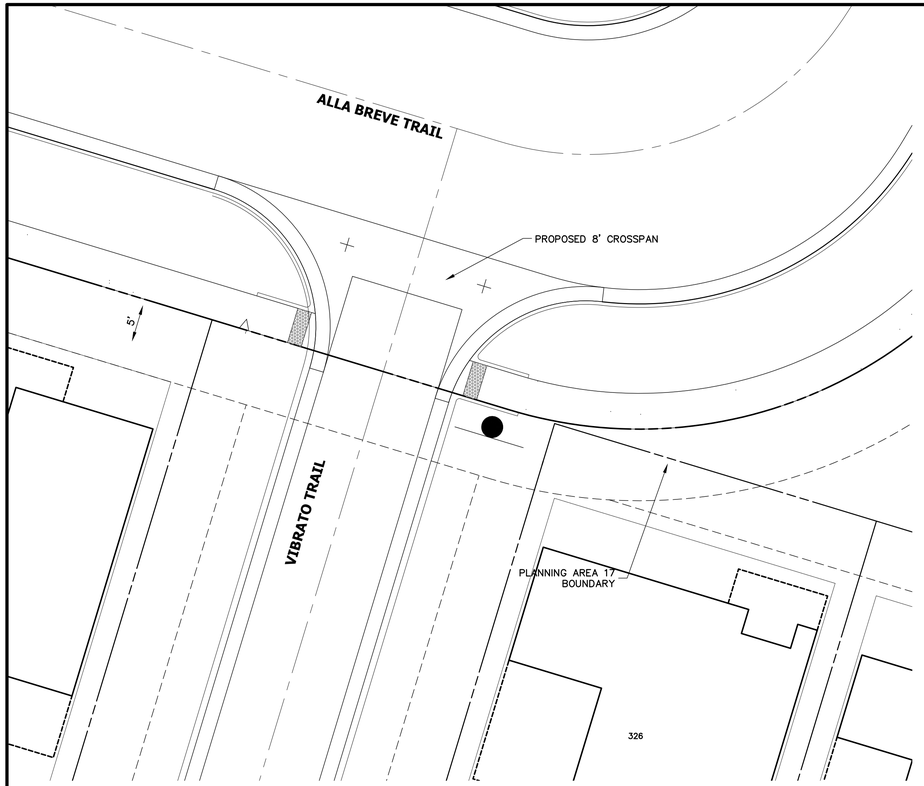
H-SCALE	1"=30'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

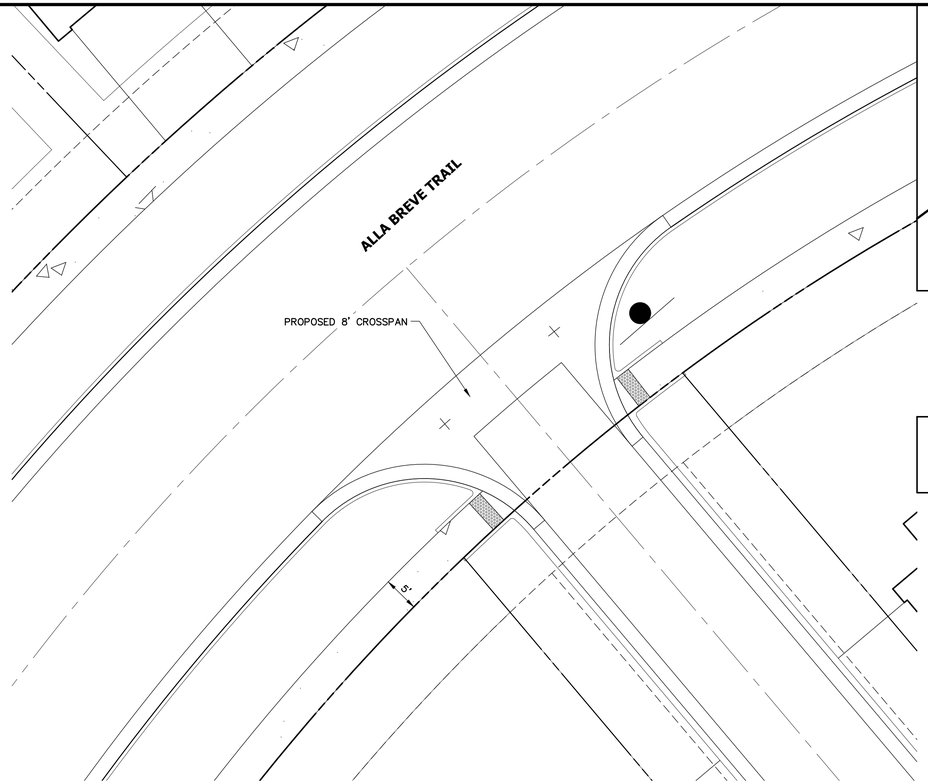
CURB RETURN PROFILES

SHEET 207.1 OF 270

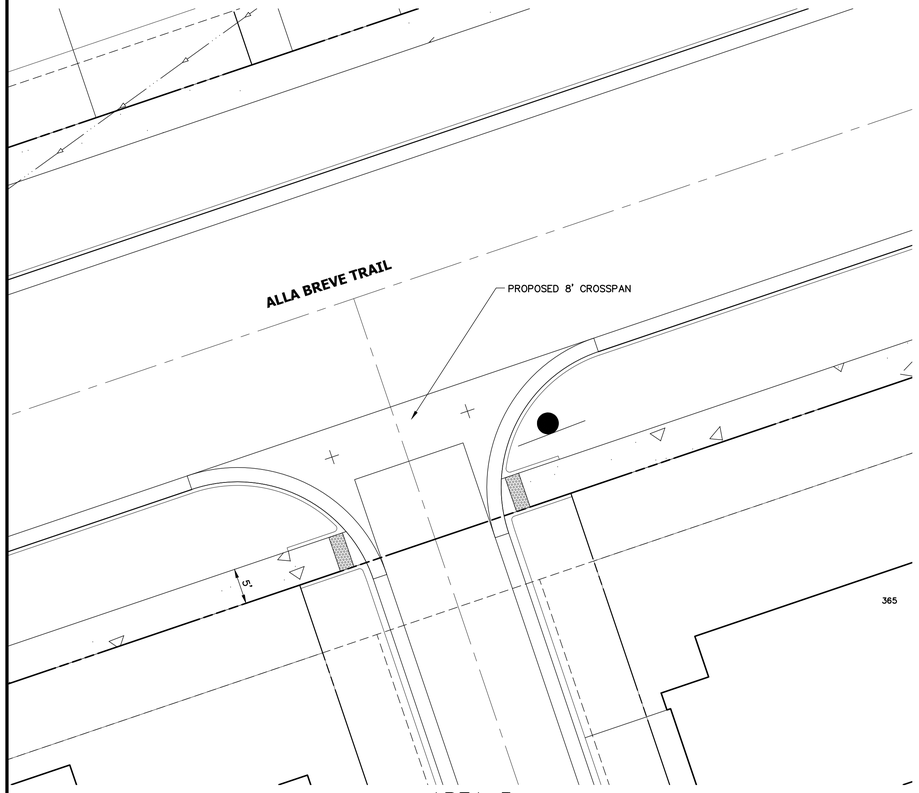
JOB NO. 15950.01



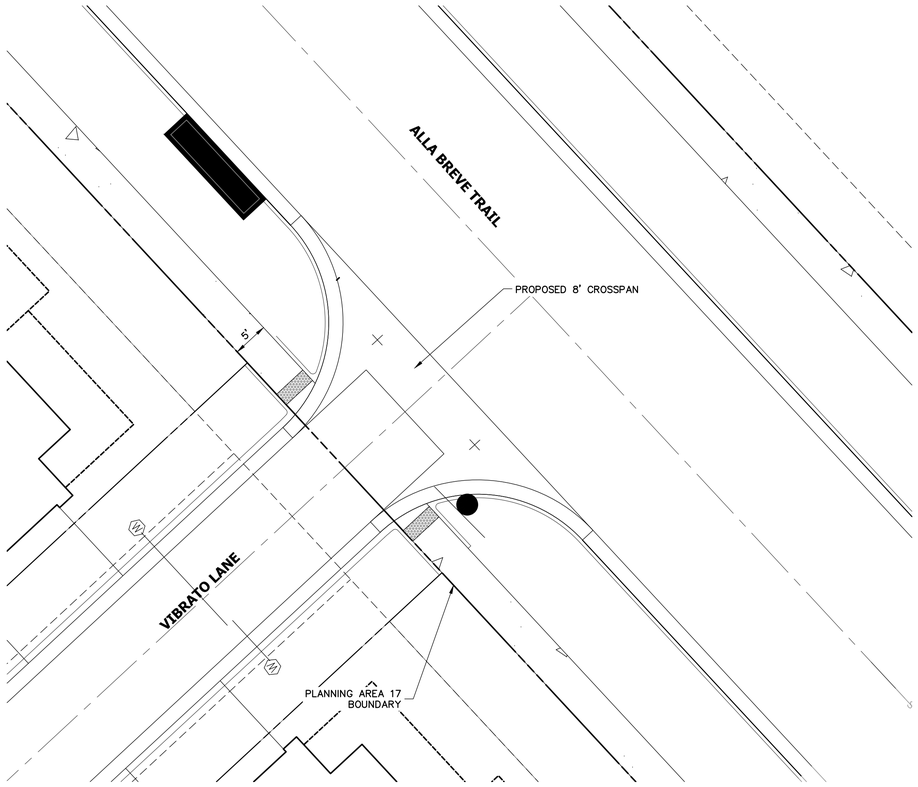
AREA 1



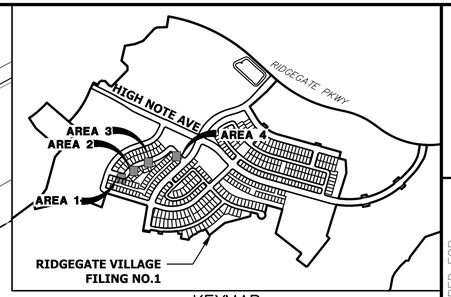
AREA 2



AREA 3



AREA 4



KEYMAP

SCALE:1"=1000'

NOTE: CURB RAMP DETAILS TO BE PROVIDED WITH NEXT SUBMITTAL

Know what's **below.** **Call** before you dig.

10 5 0 10 20

ORIGINAL SCALE: 1" = 10'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

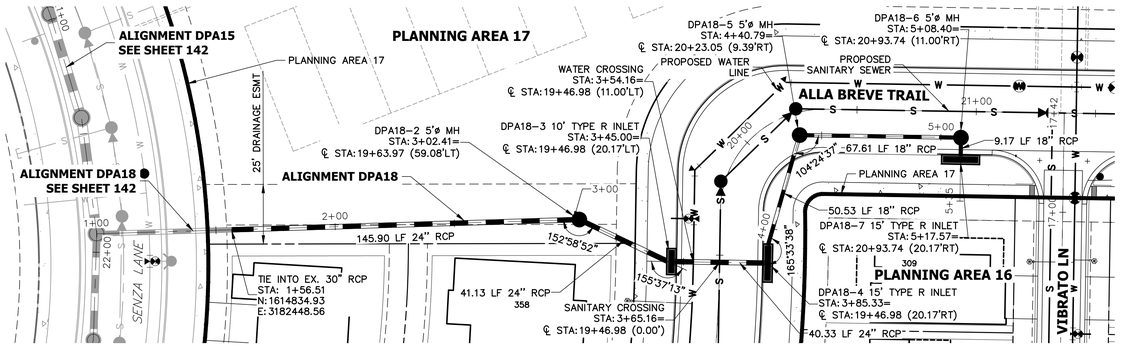
H-SCALE	1"=10'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

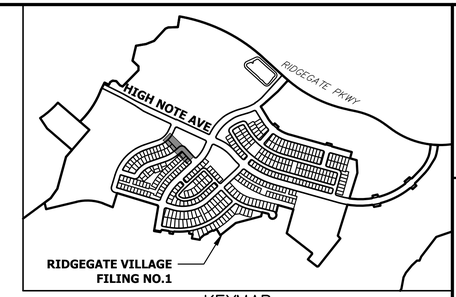
RIDGEGATE SOUTHWEST VILLAGE FILING 1

CURB RAMP DETAILS

SHEET 208 OF 270

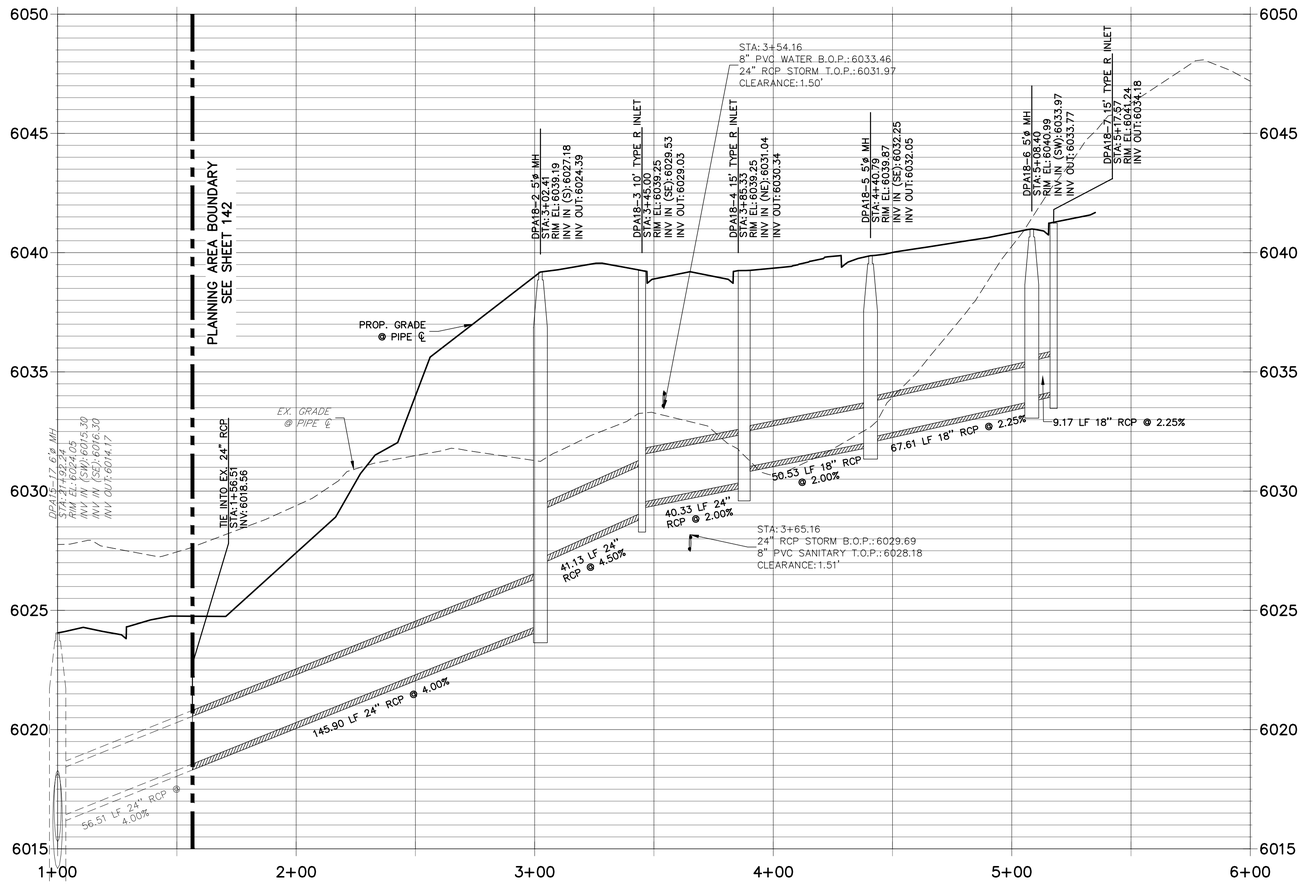
JOB NO. 15950.01





KEYMAP
SCALE: 1"=1000'

DPA18 PROFILE
STA 1+00.00 TO 6+00.00



HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED PROFESSIONAL ENGINEER 36742

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

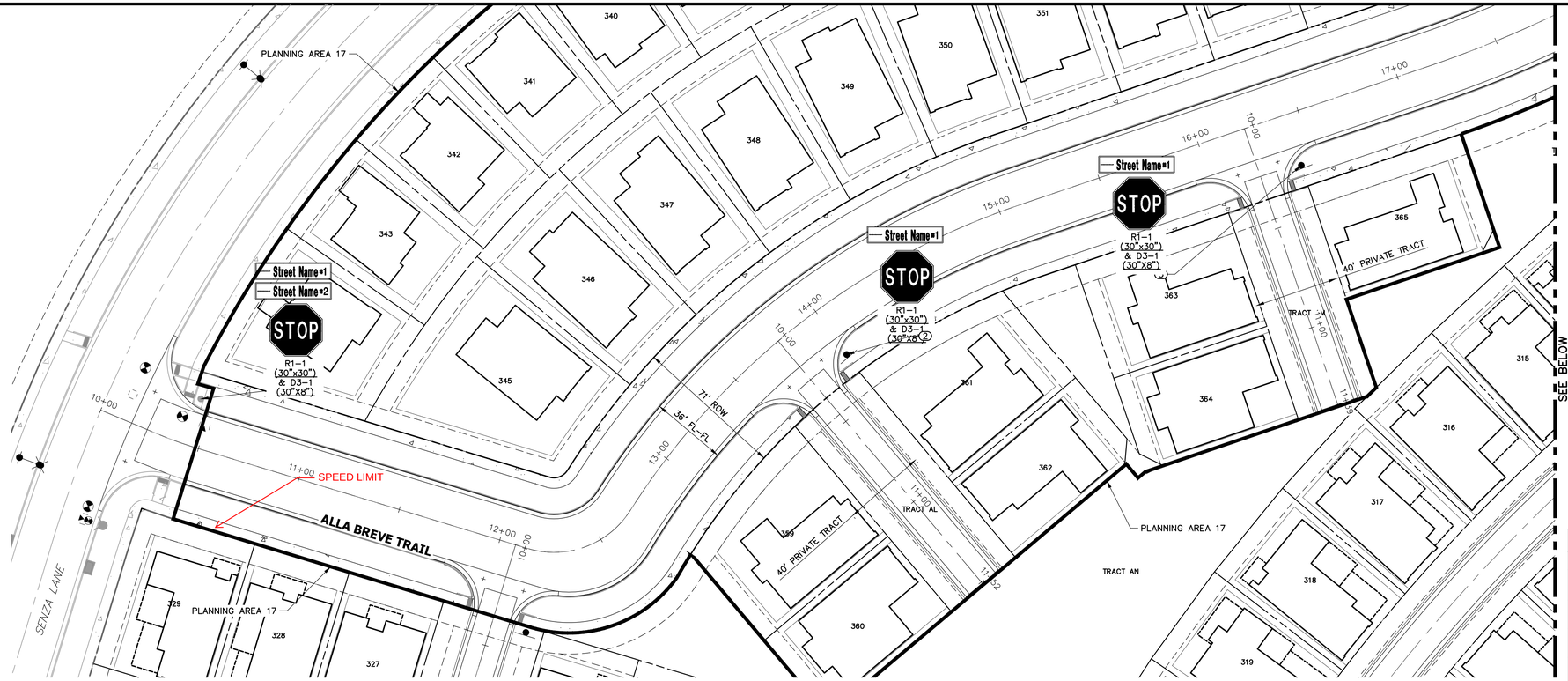
H-SCALE	1" = 30'
V-SCALE	1" = 3'
DATE	2/12/21
DESIGNED BY	CGM
DRAWN BY	CGM
CHECKED BY	

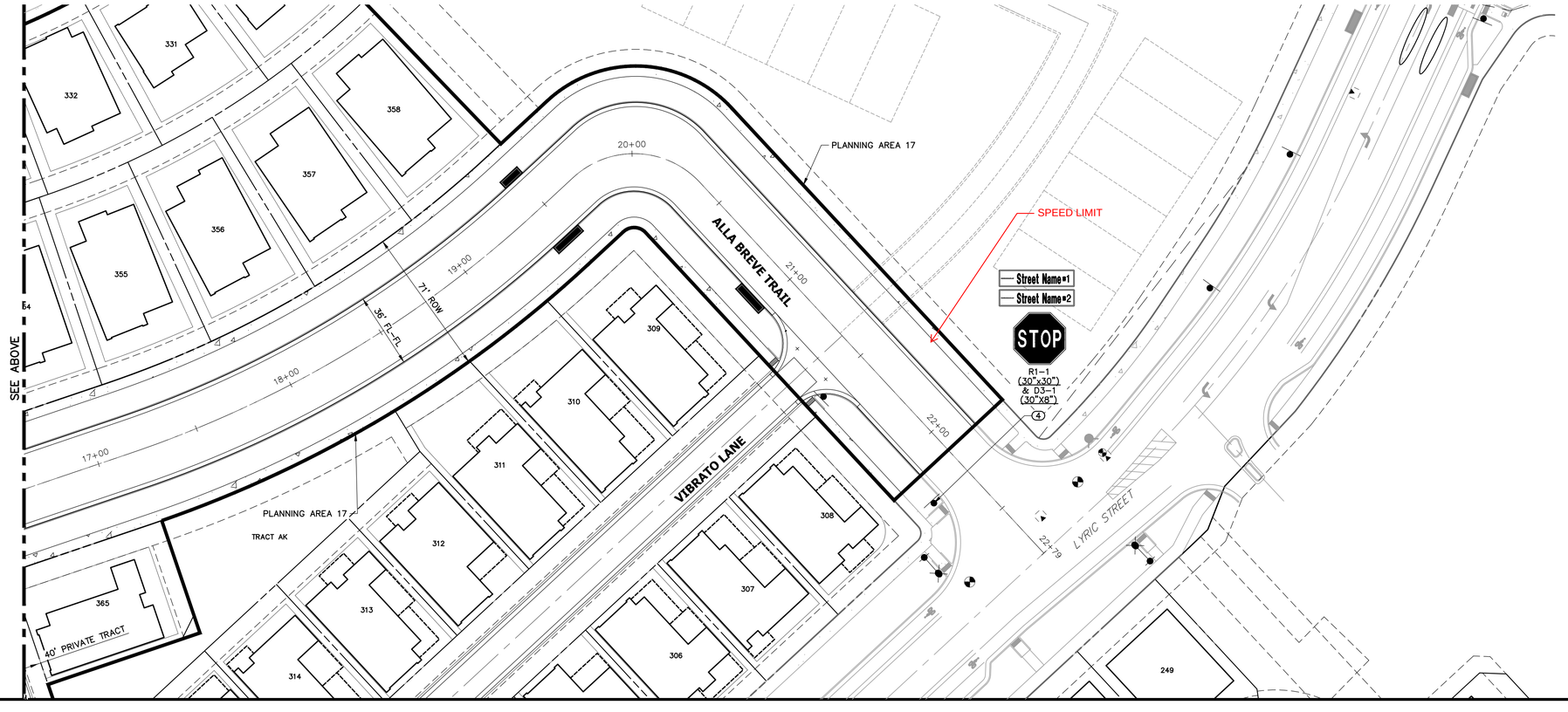
RIDGEGATE SOUTHWEST VILLAGE FILING 1

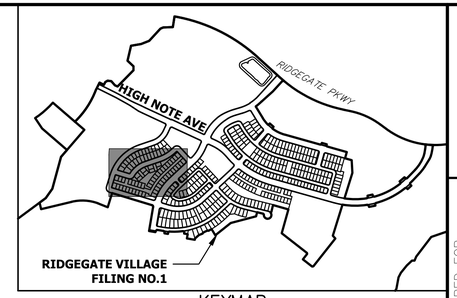
STORM SEWER PLAN & PROFILES

SHEET 209 OF 270

JOB NO. 15950.01







KEYMAP
SCALE:1"=1000'

SIGN TABULATION				
SIGN NUMBER	STATION	OFFSET	ALIGNMENT	DESCRIPTION
1	10+43.57	22.91' (LT)	ALLA BREVE TRAIL	30"X30" R1-1 30"X8" D3-1 (2)
2	10+25.92	20.86' (LT)	A 14	30"X30" R1-1 30"X8" D3-1
3	10+25.24	20.10' (LT)	A 13	30"X30" R1-1 30"X8" D3-1
4	22+25.91	22.38' (RT)	ALLA BREVE TRAIL	30"X30" R1-1 30"X8" D3-1 (2)

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED PROFESSIONAL ENGINEER 36742

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

30 15 0 30 60
ORIGINAL SCALE: 1" = 30'

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=30'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
SIGNAGE AND STRIPING PLANS

SHEET 210 OF 270

JOB NO. 15950.01

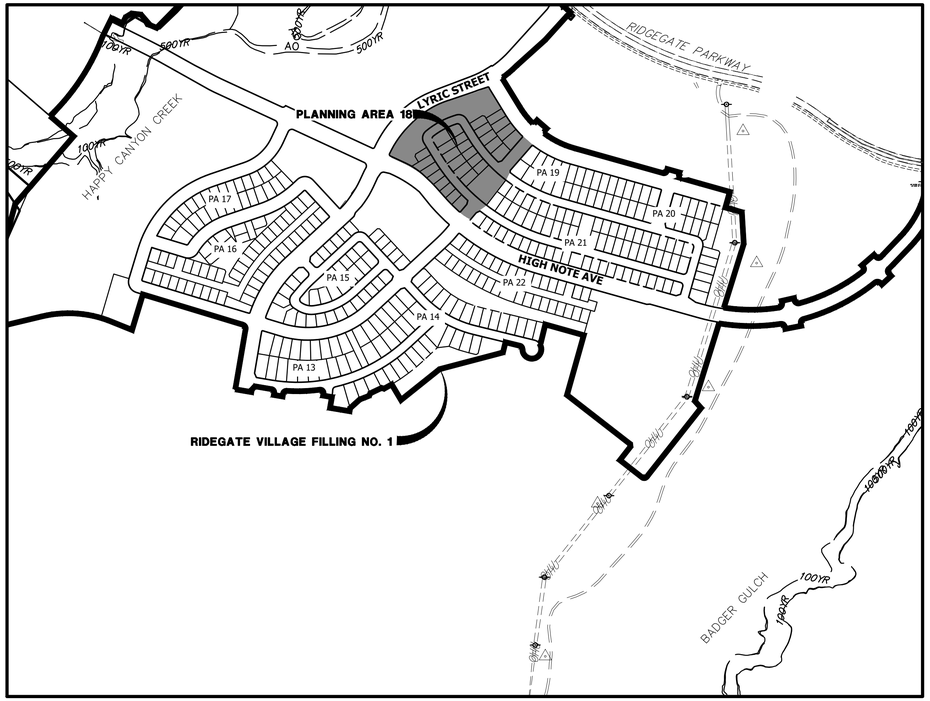
RIDGEGATE SOUTHWEST VILLAGE FILING 1-PLANNING AREA 18

A PORTION OF THE RIDGEGATE PLANNED DEVELOPMENT DISTRICT, EAST SIDE PROPERTY
LOCATED IN SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST
OF THE 6TH P.M., CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO

STREET & DRAINAGE CONSTRUCTION PLANS

ABBREVIATIONS

AC	ACRE
AD	ALGEBRAIC DIFFERENCE
AH	AHEAD
ARCH	ARCHITECT
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASS'Y	ASSEMBLY
AVE	AVENUE
BB	BOX BASE
BK	BACK
BNDY	BOUNDARY
BOP	BOTTOM OF PIPE
BOV	BLOW OFF VALVE
BFV	BUTTERFLY VALVE
BLVD	BOULEVARD
BW	BOTTOM OF WALL
C&G	CURB & GUTTER
CATV	CABLE TELEVISION
CB	CATCH BASIN
CBC	CONCRETE BOX CULVERT
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION
CDS	CUL-DE-SAC
CF	CUBIC FOOT
CFS	CUBIC FEET PER SECOND
CIP	COMPLETE IN PLACE
CL	CENTER LINE
CLOMR	CONDITIONAL LETTER OF MAP REVISION
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
COCS	CITY OF COLORADO SPRINGS
CONC	CONCRETE
CR	CIRCLE
CSP	CORRUGATED STEEL PIPE
CSU	COLORADO SPRINGS UTILITIES
CT	COURT
CTRB	CONCRETE THRUST REDUCER BLOCK
CY	CUBIC YARD
DBPS	DRAINAGE BASIN PLANNING STUDY
DE	DRAINAGE EASEMENT
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DR	DRIVE
DRC	DESIGN REVIEW COMMITTEE
DU	DWELLING UNITS
DY	DAY
E	EAST
EA	EACH
EGL	ENERGY GRADE LINE
EL	ELEVATION
ELEC	ELECTRIC
EOA	EDGE OF ASPHALT
EPC	EL PASO COUNTY
ERCP	ELLIPTICAL RCP
ESMT	EASEMENT
EST	ESTIMATE
EX	EXISTING
FDP	FINAL DEVELOPMENT PLAN
FDR	FINAL DRAINAGE REPORT
FES	FLARED END SECTION
FF	FINISHED FLOOR ELEVATION
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOWLINE
FIL	FILING
FO	FIBER OPTIC CABLE
GB	GRADE BREAK
GE	GAS EASEMENT
GIS	GEOGRAPHIC INFORMATION SYSTEM
GL	GAS LINE
GPS	GLOBAL POSITIONING SYSTEM
GV	GATE VALVE
HBP	HOT BITUMINOUS PAVEMENT
HC	HANDICAP
HDC	HIGH DEFLECTION COUPLING
HDPE	HIGH DENSITY POLYETHYLENE
HGL	HYDRAULIC GRADE LINE
HMA	HOT MIX ASPHALT
HOA	HOME OWNERS ASSOCIATION
HP	HIGH POINT
HR	HOUR
I	INLET
IE	IRRIGATION EASEMENT
INT	INTERSECTION
INV	INVERT
IRR	IRRIGATION
KB	KICK (THRUST) BLOCK
LB	POUND
LE	LANDSCAPE EASEMENT
LF	LINEAR FOOT
LN	LANE
LOMR	LETTER OF MAP REVISION
LP	LOW POINT
LS	LUMP SUM
LT	LEFT
MAX	MAXIMUM
M/D	MOISTURE DENSITY
MDDP	MASTER DEVELOPMENT DRAINAGE PLAN
MH	MANHOLE
MIN	MINIMUM
MS	MOUNTABLE SIDEWALK
N	NORTH
NRCP	NON-REINFORCED CONCRETE PIPE
ODP	OFFICIAL DEVELOPMENT PLAN
OHE	OVERHEAD ELECTRIC
OHU	OVERHEAD UTILITY
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PCR	POINT OF CURB RETURN
PDP	PRELIMINARY DEVELOPMENT PLAN
PE	PROFESSIONAL ENGINEER
PI	POINT OF INTERSECTION
PKWY	PARKWAY
PL	PROPERTY LINE
PR	PROPOSED
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PV	PLUG VALVE
PVC	POLYVINYL CHLORIDE
R	RADIUS
RCBC	REINFORCED CONCRETE BOX CULVERT
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
ROW	RIGHT OF WAY
RT	RIGHT
S	SOUTH
STE	STEEL
SAN	SANITARY SEWER
SF	SQUARE FOOT
ST	STREET
STA	STATION
STM	STORM SEWER
SY	SQUARE YARD
SY-IN	SQUARE YARD INCH
TB	THRUST BLOCK
TBC	TOP BACK OF CURB
TBW	TOP BACK OF WALK
TEL	TELEPHONE
TN	TON
TOA	TOP OF ASPHALT
TOB	TOP OF BOX
TOC	TOP OF CURB OR CONCRETE
TOF	TOP OF FOUNDATION
TOP	TOP OF PIPE
TW	TOP OF WALL
TYP	TYPICAL
UDFCD	URBAN DRAINAGE AND FLOOD CONTROL DISTRICT
UE	UTILITY EASEMENT
U&DE	UTILITY & DRAINAGE EASEMENT
UGE	UNDERGROUND ELECTRIC
VCP	VITRIFIED CLAY PIPE
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
VTC	VEHICLE TRACKING CONTROL
W	WEST
WL	WATER LINE
WM	WATER MAIN
WRD	WATER RESOURCES DEPARTMENT
WS	WATER SURFACE
WSE	WATER SURFACE ELEVATION
WTR	WATER
YR	YEAR



VICINITY MAP
SCALE: 1"=400'

SHEET INDEX

211	COVER SHEET
212	GENERAL NOTES
213	LEGEND
214	OVERALL UTILITY PLAN
215 – 218	ROADWAY PLAN & PROFILES
219	CURB RETURN PROFILES
220	CURB RAMP DETAILS
221	STORM SEWER PLANS & PROFILE
222	SIGNAGE & STRIPING PLANS

APPLICANT/OWNER

SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
P~303.791.8180

CIVIL ENGINEER/SURVEYOR

JR ENGINEERING
7200 SOUTH ALTON WAY, SUITE C400
CENTENNIAL, CO
P~303.267.6220

PLANNER

SAGE DESIGN GROUP
1500 SOUTH PEARL STREET, SUITE 200
DENVER, CO 80210
P~303.470.2855

TRAFFIC ENGINEER

JR ENGINEERING
7200 SOUTH ALTON WAY, SUITE C400
CENTENNIAL, CO
P~303.267.6183

GEOTECHNICAL ENGINEER

CTL THOMPSON, INC
1971 WEST 12TH VAE.
DENVER, CO 80204
P~303.825.0777

BENCHMARK

NGS CONTROL POINT UNBEWUST BEING A 3.5 INCH DIAMETER BRASS CAP. LOCATED ABOUT 3.2 MILES SOUTH OF INTERSTATE 25 AND COLORADO STATE HIGHWAY 470 INTERCHANGE, GO SOUTH ON INTERSTATE 25 FOR 2.9 MILES TO EXIT 191. PROCEED ON A PAVED ROAD TO THE SOUTHWEST FOR 0.2 MILES TO THE STATION ON THE LEFT. IN THE NORTHWEST CORNER OF A 24 FOOT BY 16 FOOT ROCK OUTCROP. IT IS 22.5 FEET EAST OF THE CENTERLINE OF THE PAVED ROAD, 123 FEET NORTH OF THE OUTLET OF A 3 FOOT CORRUGATED STEEL PIPE CULVERT AND APPROXIMATELY 350 FEET WEST OF THE WEST EDGE OF OIL OF SOUTHBOUND INTERSTATE 25, ELEVATION: 6125.32 (NAVD88).

BASIS OF BEARING

BEARING SHOWN HEREON ARE GRID BEARINGS DERIVED FROM GPS OBSERVATION BASED UPON THE COLORADO COORDINATE SYSTEM OF 1983 CENTRAL ZONE (NAD 83, 2011) REFERENCED TO THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, SIXTH PRINCIPAL MERIDIAN BEING MONUMENTED AS SHOWN HEREON, TAKEN TO BEAR NORTH 89°31'58" EAST, A DISTANCE OF 2635.13 FEET.

Know what's below. Call before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=400'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	APL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
COVER

SHEET 211 OF 270

JOB NO. 15950.01

GENERAL PROJECT NOTES:

1. ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION OF IMPROVEMENTS SHALL MEET OR EXCEED THE GOVERNING CITY, COUNTY, AND/OR STATE AND APPLICABLE UTILITY DISTRICT STANDARDS AND SPECIFICATIONS, AND APPLICABLE STATE AND FEDERAL REGULATIONS. WHERE THERE IS A CONFLICT BETWEEN THESE PLANS AND ANY APPLICABLE STANDARDS, THE HIGHER QUALITY STANDARD SHALL APPLY. ALL WORK SHALL BE INSPECTED AND APPROVED BY THE CITY AND APPLICABLE UTILITY DISTRICT(S).

2. THE SITE CONSTRUCTION PLANS LISTED WITHIN THIS PLAN SET ARE NOT FOR CONSTRUCTION UNLESS APPROVED BY THE APPROPRIATE GOVERNING JURISDICTION. THE CONTRACTOR SHALL CONFIRM SAID APPROVAL PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL KEEP ONE (1) SIGNED COPY OF THE APPROVED SET OF PLANS, APPROPRIATE SPECIFICATIONS AND STANDARDS, AND APPROVED PERMITS ONSITE AT ALL TIMES.

3. NO REVISIONS SHALL BE MADE TO THESE PLANS WITHOUT THE APPROVAL OF THE CITY, COUNTY, STATE OR LOCAL DISTRICT AND THE ENGINEER OF RECORD.

4. ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARDS, UNLESS SPECIFICALLY STATED OTHERWISE.

5. THE CONTRACTOR IS RESPONSIBLE FOR ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS SHOWN ON THESE DRAWINGS OR DESIGNATED TO BE PROVIDED, INSTALLED, CONSTRUCTED, REMOVED, OR RELOCATED UNLESS SPECIFICALLY NOTED OTHERWISE.

6. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND LICENSES FOR WORK INCLUDING, BUT NOT LIMITED TO DEMOLITION, STREET CUTS, UTILITY INTERFERENCES, TRAFFIC CONTROL, GRADING, AND UTILITY FROM ALL APPLICABLE AGENCIES; AND FOR COMPLYING WITH ALL PROVISIONS INCLUDED THEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL OTHER APPLICABLE PERMITS NOT SPECIFICALLY REQUIRED BY THE AUTHORITY HAVING JURISDICTION.

7. THE CONTRACTOR SHALL UTILITY STAKE PROJECT AT LEAST 2 WORKING DAYS PRIOR TO BEGINNING EXCAVATION OR GRADING, TO HAVE ALL REGISTERED UTILITY LOCATIONS MARKED. OTHER UNREGISTERED UTILITY ENTITIES (I.E. DITCH COMPANY) ARE TO BE LOCATED BY CONTACTING THE RESPECTIVE REPRESENTATIVE.

8. THE CONTRACTOR IS RESPONSIBLE FOR FIELD LOCATING AND VERIFYING ELEVATIONS OF ALL EXISTING SEWER MAINS, WATER MAINS, CURBS, GUTTERS, AND OTHER UTILITIES AT THE POINTS OF CONNECTION SHOWN ON THE PLANS, AND AT ANY UTILITY CROSSINGS PRIOR TO INSTALLING ANY OF THE NEW IMPROVEMENTS. IF A CONFLICT EXISTS AND/OR A DESIGN MODIFICATION IS REQUIRED, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO MODIFY THE DESIGN. DESIGN MODIFICATION(S) MUST BE APPROVED BY THE APPROPRIATE AUTHORITY PRIOR TO BEGINNING CONSTRUCTION.

9. ANY DISRUPTION OF UTILITY SERVICE THAT IS REQUIRED TO ADJUST, EXTEND, RELOCATE OR OTHERWISE REARRANGE ANY UTILITY WITHIN THE PROJECT AREA SHALL BE COORDINATED IN ADVANCE WITH THE AFFECTED UTILITY ENTITY.

10. RIM ELEVATIONS SHOWN ARE APPROXIMATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS. THE CONTRACTOR SHALL USE PRECAST CONCRETE ADJUSTMENT RINGS, GROUT, AND STEEL SHIMS TO ADJUST THE MANHOLE FRAMES TO FINAL GRADE IN CONFORMANCE WITH THE CITY OR UTILITY COMPANY/DISTRICT STANDARD SPECIFICATIONS. ALL FRAMES SHALL BE ADJUSTED TO FINAL GRADE PRIOR TO THE FINAL LIFT OF ASPHALT.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF PROJECT SAFETY INCLUDING, BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.

12. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN, IN ACCORDANCE WITH THE M.U.T.C.D. TO THE APPROPRIATE RIGHT-OF-WAY AUTHORITY (CITY, COUNTY, OR STATE) FOR APPROVAL, PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN, OR AFFECTING, THE RIGHT-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED BY THE CONSTRUCTION ACTIVITIES. ALL WORK WITHIN THE RIGHT OF WAY SHALL BE DONE IN ACCORDANCE WITH THE GOVERNING AUTHORITY'S STANDARDS AND SPECIFICATIONS.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANING AND RESTORATION OF ANY EXISTING IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO STREET PAVEMENT, FENCES, SOD, LANDSCAPING, SPRINKLER SYSTEMS, AND UTILITIES DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL LOCATION AND CONDITION.

14. INCLUDED IN THESE PLANS IS THE DEMOLITION AND DISPOSAL OF ALL EXISTING UTILITIES, SITE IMPROVEMENTS, STRUCTURES, AND SITE FURNISHINGS NEEDED FOR CONSTRUCTION OF THE IMPROVEMENTS SHOWN HEREON. ALL QUESTIONS IN REGARD TO DEMOLITION SHALL BE SUBMITTED TO THE OWNER IN WRITING PRIOR TO BID.

15. ALL DEMOLITION, REMOVAL, DISPOSAL, AND ABANDONMENT OF UTILITIES, STRUCTURES, SITE IMPROVEMENTS, AND SITE FURNISHINGS SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL STANDARDS AND SPECIFICATIONS, AND PERMIT REQUIREMENTS.

16. ALL DISTURBED SOIL, ON- OR OFF-SITE AND RELATED TO WORK AT THIS PROJECT SITE, IS REQUIRED TO BE PROTECTED FROM WIND AND STORM WATER EROSION. TO MITIGATE EROSION, THE CONTRACTOR SHALL USE STANDARD EROSION CONTROL TECHNIQUES DESCRIBED IN THE GESC PLAN SET AND GESC REPORT FOR THIS PROJECT.

17. ALL STRUCTURAL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY GROUND-DISTURBING ACTIVITY. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED IN GOOD REPAIR BY THE CONTRACTOR UNTIL SUCH TIME AS THE ENTIRE DISTURBED AREA IS STABILIZED WITH HARD SURFACE OR PERMANENT LANDSCAPING. THE CONTRACTOR IS RESPONSIBLE FOR REFERRING TO ANY EROSION AND SEDIMENT CONTROL, STORMWATER MANAGEMENT, STORMWATER POLLUTION PREVENTION, OR SIMILAR PLAN AND/OR NARRATIVE AND ASSOCIATED PERMITS INCLUDING, BUT NOT LIMITED TO GRADING PERMITS, AND COMPLYING WITH THE REQUIREMENTS THEREIN.

18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK, INSPECTIONS, AND CERTIFICATIONS AS REQUIRED BY THE CITY, STATE OR LOCAL DISTRICTS. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST ASSOCIATED WITH THE INSPECTION AND CERTIFICATION UNLESS OTHERWISE ARRANGED WITH THE OWNER/DEVELOPER. THE CONTRACTOR SHALL COORDINATE ALL CERTIFICATIONS, AND PROVIDE FIELD SURVEYED AS-BUILT INFORMATION FOR REVIEW BY THE OWNER/DEVELOPER AND/OR ENGINEER AS EARLY AS POSSIBLE IN THE CONSTRUCTION SCHEDULE TO AVOID POTENTIAL DELAYS.

19. CONTRACTOR IS RESPONSIBLE FOR AS-BUILT DRAWINGS, TESTS, REPORTS, AND/OR ANY OTHER CERTIFICATES OR INFORMATION AS REQUIRED FOR ACCEPTANCE OF WORK FROM CITY, UTILITY DISTRICTS, OR ANY OTHER GOVERNING AGENCY, OR TO THE OWNER/DEVELOPER AS REQUIRED BY AND IN ACCORDANCE WITH THE GOVERNING AUTHORITY OR OWNER/DEVELOPER'S CRITERIA. CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING AS-BUILT INFORMATION AN A SET OF RECORD DRAWINGS KEPT AT THE CONSTRUCTION SITE AND AVAILABLE TO THE GOVERNING CITY, COUNTY, AND/OR STATE AND UTILITY DISTRICT INSPECTOR AT ALL TIMES. THE CONTRACTOR SHALL CONFIRM ANY REQUIREMENTS AS EARLY AS POSSIBLE IN THE CONSTRUCTION SCHEDULE TO ACCOUNT FOR PREPARATION AND REVIEW OF THE INFORMATION TO AVOID POTENTIAL DELAYS.

20. IF, DURING THE CONSTRUCTION PROCESS, CONDITIONS ARE ENCOUNTERED BY THE CONTRACTOR, HIS SUBCONTRACTORS, OR OTHER AFFECTED PARTIES, WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE OWNER/DEVELOPER AND THE ENGINEER IMMEDIATELY.

21. DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. IF PERTINENT DIMENSIONS ARE NOT SHOWN, CONTACT THE CONSULTING ENGINEER FOR CLARIFICATION AND ANNOTATE THE DIMENSION ON THE AS-BUILT RECORD DRAWING.

22. BENCHMARK VERIFICATION: THE CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS AND THE PROPOSED ELEVATIONS IN THIS CONSTRUCTION PLAN SET AGAINST THE PROJECT BENCHMARK, IDENTIFIED HEREIN, PRIOR TO COMMENCING WORK.

ROADWAY NOTES

1. GUTTERS SHALL BE AT LEAST 6" THICK.
2. ALL CURBS SHALL USE THE CATCH SECTION UNLESS OTHERWISE NOTED.
3. ALL COMBINATION CURB, GUTTER AND SIDEWALKS TO BE 6" THICK (MIN.). SIDEWALKS WITH VERTICAL CURB AND GUTTER TO BE 6" THICK (MIN.).
4. NON-LANDSCAPED MEDIAN ISLANDS SHALL BE COVERED WITH AN ACCEPTABLE IMPERMEABLE SURFACE.
5. IF ANY SECTION OF A DETACHED SIDEWALK IS TO BE PLACED OUTSIDE OF THE ROAD RIGHT-OF-WAY, THEN A SIDEWALK EASEMENT SHALL BE REQUIRED TO MAINTAIN PUBLIC USE.
6. PLACEMENT, MOISTURE AND DENSITY CONTROL FOR SUBGRADE, SUBBASE, AND SURFACING MATERIALS SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS OF CHAPTER 8 OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.

CITY OF LONE TREE GENERAL NOTES

1. THE CITY OF LONE TREE ENGINEER'S SIGNATURE AFFIXED TO THIS DOCUMENT INDICATES THE ENGINEERING DIVISION HAS REVIEWED THE DOCUMENT AND FOUND IT IN GENERAL CONFORMANCE WITH THE CITY OF LONE TREE SUBDIVISION RESOLUTION OR APPROVED VARIANCES TO THOSE REGULATIONS. THE CITY OF LONE TREE ENGINEER, THROUGH ACCEPTANCE OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY, OTHER THAN STATED ABOVE, FOR THE COMPLETENESS AND/OR ACCURACY OF THESE DOCUMENTS. THE OWNER AND ENGINEER UNDERSTAND THAT THE RESPONSIBILITY FOR THE ENGINEERING ADEQUACY OF THE FACILITIES DEPICTED IN THIS DOCUMENT LIES SOLELY WITH THE REGISTERED PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE IS AFFIXED TO THIS DOCUMENT.
2. ALL ROADWAY CONSTRUCTION SHALL CONFORM TO CURRENT DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
3. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE CITY OF LONE TREE ENGINEERING DIVISION. THE CITY RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS STANDARDS AND SPECIFICATIONS.
4. THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS, INSPECTION SECTION, (303) 662-8112, A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO STARTING CONSTRUCTION, AND/OR BEFORE RESTARTING CONSTRUCTION AFTER A SHUTDOWN OF MORE THAN 10 DAYS.
5. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ACTUAL CONSTRUCTION. FOR INFORMATION, CONTACT: UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT (800) 922-1987 OR 811
6. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY (SIGNED BY BOTH DESIGN ENGINEER AND CITY OF LONE TREE) OF THE CONSTRUCTION PLANS AND GESC REPORT AND PLAN, AND ONE (1) COPY OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS AT THE JOB SITE AT ALL TIMES.
7. ALL PROPOSED STREET CUTS TO EXISTING PAVEMENTS FOR UTILITIES, STORM SEWER, OR OTHER PURPOSES ARE LISTED AND REFERENCED BELOW:

   RIDGEGATE PARKWAY

8. A ROW/CONSTRUCTION PERMIT MUST BE OBTAINED BEFORE ANY WORK WITHIN EXISTING OR PROPOSED PUBLIC ROW. THE PERMIT APPLICATION MUST BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR REVIEW/PROCESSING A MINIMUM OF 7 DAYS PRIOR TO UPDATED 2-3-09 REQUESTED START FOR THE WORK IN THE ROW.
9. A PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR ACCEPTANCE WITH THE PERMIT APPLICATION. AN EXCAVATION OR PUBLIC IMPROVEMENTS CONSTRUCTION PERMIT WILL NOT BE ISSUED WITHOUT AN APPROVED TRAFFIC CONTROL PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION.
10. THE CONSTRUCTION PLANS SHALL BE CONSIDERED VALID FOR TWO (2) YEARS FROM THE DATE OF CITY OF LONE TREE ACCEPTANCE/APPROVAL IF APPLICABLE CONSTRUCTION PERMITS HAVE NOT BEEN OBTAINED, AND CONSTRUCTION STARTED WITHIN THAT TIME, THESE PLANS SHALL BE VOID AND WILL BE SUBJECT TO RE-REVIEW AND RE-ACCEPTANCE BY THE CITY OF LONE TREE.
11. CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE ENGINEER INSPECTOR WHEN WORKING OUTSIDE OF THE PUBLIC RIGHT-OF-WAY ON ANY FACILITY WHICH WILL BE CONVEYED TO THE CITY, URBAN DRAINAGE AND FLOOD CONTROL DISTRICT, OR OTHER SPECIAL DISTRICT FOR MAINTENANCE (STORM SEWER, ENERGY DISSIPATERS, DETENTION OUTLET STRUCTURES, OR OTHER DRAINAGE INFRASTRUCTURES). FAILURE TO NOTIFY ENGINEERING INSPECTOR TO ALLOW THEM TO INSPECT THE CONSTRUCTION MAY RESULT IN NON-ACCEPTANCE OF THE FACILITIES/INFRASTRUCTURE BY CITY AND/OR URBAN DRAINAGE.

CITY OF LONE TREE SIGNAGE & STRIPING NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MOST RECENT VERSION OF THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE "COLORADO SUPPLEMENTAL MUTCD" AND THE DOUGLAS COUNTY "ROAD AND CONSTRUCTION STANDARDS MANUAL". FURTHER SPECIFICATIONS AND ILLUSTRATIONS ARE LOCATED IN THE COLORADO DIVISION OF HIGHWAYS "M AND S STANDARDS".
2. DELINEATION OF ROADWAYS SHALL BE AS SPECIFIED IN THE COLORADO "M AND S MANUAL".
3. SPECIAL CARE SHALL BE TAKEN IN SIGN LOCATION TO ENSURE AN UNOBSTRUCTED VIEW OF EACH SIGN. STREET NAME SIGNS SHALL BE MOUNTED SO THAT THEY CAN BE SEEN FROM ALL DIRECTIONS OF TRAVEL.
4. INSTALLATION OF SIGNS SHALL CONFORM TO THE MUTCD MOUNTING HEIGHT REQUIREMENTS, INCLUDING A 7-FOOT MINIMUM HEIGHT FROM THE BOTTOM OF THE LOWEST SIGN PANEL TO THE TOP GRADE OF SIDEWALK.
5. ALL NEWLY INSTALLED TRAFFIC SIGNS SHALL MEET THE MINIMUM RETRO-REFLECTIVITY AND ILLUMINATION STANDARDS AS SET FORTH BY THE MUTCD (LATEST EDITION). THESE MINIMUM REQUIREMENTS SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
6. DIAMOND GRADE MATERIAL SHALL BE USED ON ALL STOP SIGNS.
7. THE CONTRACTOR INSTALLING SIGNS IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND UTILITIES. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.
8. FOLLOWING INSTALLATION, THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS DEPARTMENT, 303-662-8112. A FIELD INSPECTION OF LOCATION AND INSTALLATION OF ALL SIGNS SHALL BE PERFORMED BY PUBLIC WORKS. ALL DISCREPANCIES IDENTIFIED DURING THE FIELD INSPECTION MUST BE CORRECTED BEFORE THE TWO-YEAR WARRANTY PERIOD WILL BEGIN.
9. SIGNAGE AND STRIPING HAS BEEN DETERMINED BY INFORMATION AVAILABLE AT THE TIME OF REVIEW.
   PRIOR TO INITIATION OF THE WARRANTY PERIOD, LONE TREE RESERVES THE RIGHT TO REQUIRE MODIFICATIONS TO EXISTING OR INSTALLATION OF ADDITIONAL SIGNAGE AND/OR STRIPING IF THEY DETERMINE THAT AN UNFORESEEN CONDITION WARRANTS SUCH MODIFICATION ACCORDING TO THE MUTCD OR THE CDOT M AND S STANDARDS. ALL SIGNAGE AND STRIPING SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
10. FINAL STRIPING AND CROSSWALK LAYOUT TO BE APPROVED BY THE CITY OF LONE TREE PRIOR TO INSTALLATION. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.
11. CROSSWALKS SHALL:
    BE CONSTRUCTED USING 125 MIL PREFORMED THERMOPLASTIC.
    LINE UP WITH THE HANDICAP RAMPS AT BOTH ENDS.
    BE CENTERED ON LANE LINES SO AS TO BE STRADDLED BY VEHICLES.
12. ALL PAVEMENT MARKINGS SHALL BE AS FOLLOWS:
    FOR CONCRETE SURFACE: METHYL METHACRYLATE OR EPOXY PAINT.
    FOR ASPHALT SURFACE: PAINT, 90 MIL PREFORMED THERMOPLASTIC, INLAID MARKING TAPE, METHYL METHACRYLATE, OR EPOXY PAINT.
    TURN ARROWS AND ONLYS: 125 MIL PREFORMED THERMOPLASTIC.
13. ALL PAVEMENT MARKING SHALL BE PRECEDED BY THE APPROPRIATE SURFACE PREPARATION.
14. ANY SIGNAGE AND/OR OTHER TRAFFIC CONTROL DEVICES REMOVED SHALL BE RETURNED TO THE CITY OF LONE TREE.
15. TYPE III LIGHTED BARRICADES SHALL BE SET AT ENDS OF ROADWAYS, SEPARATING FINISHED AND UNFINISHED CONSTRUCTION AREAS AND WILL BE MAINTAINED BY THE CONTRACTOR/DEVELOPER.

NOTE: ALSO SEE CITY OF LONE TREE "STREET SIGN DETAILS"FOR ADDITIONAL INTERSECTION STREET SIGNAGE REQUIREMENTS.

STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON-GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.

DRAINAGE STRUCTURE NOTES

1. CONCRETE WORK SHALL CONFORM TO ACI 301, ACI 350.
2. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM-615, GRADE 60.
3. ALL EXPOSED CONCRETE SHALL HAVE A CDOT CLASS 2 OR 5 FINISH.
4. ALL EXPOSED CONCRETE CORNERS SHALL HAVE ¾"CHAMFERS.
5. DETAILING, FABRICATION, AND PLACING OF REBAR SHALL BE IN ACCORDANCE WITH ACI 315.
6. CONSTRUCTION TOLERANCES SHALL BE IN ACCORDANCE WITH ACI 347.
7. ALL MANHOLES SHALL BE SLAB BASE UNLESS SPECIFIED OTHERWISE. MANHOLE SHALL BE FABRICATED IN ACCORDANCE WITH CDOT STANDARD M-604-20.
8. COORDINATES FOR MANHOLES AND AREA INLETS ARE SHOWN AT THE CENTER OF THE STRUCTURE. COORDINATES FOR MOUNTABLE CURB INLETS ARE SHOWN ALONG THE FLOWLINE AT CENTER OF THE STRUCTURE.
9. ALL TYPE C AND D INLETS SHALL HAVE CLOSE MESH GRATES UNLESS SPECIFIED OTHERWISE.
10. LENGTH OF FABRICATED BAR GRATING PANELS IS LENGTH OF BEARING BARS, WIDTH REFERS TO DIMENSION PERPENDICULAR TO BEARING BARS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PANEL DIMENSIONS GIVEN PRIOR TO FABRICATION.

DRAINAGE GENERAL NOTES

1. PROJECT FACILITIES ARE TO BE LOCATED BASED ON THE SURVEY COORDINATES, ELEVATIONS, DIMENSIONS, AND/OR GEOMETRIC DESIGN DATA PROVIDED ON THE DRAWINGS.
2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES AND FOR SATISFYING ALL APPLICABLE OSHA, FEDERAL, STATE, AND LOCAL REGULATIONS. TEMPORARY EXCAVATIONS SHALL PROVIDE, AT MINIMUM, THE TRENCH DIMENSIONS AND CLEARANCES SHOWN OR SPECIFIED. TEMPORARY CONSTRUCTION SLOPES SHALL BE SLOPED, SHORED, SHEETED, AND/OR BRACED IN ACCORDANCE WITH STABILITY REQUIREMENTS AND APPLICABLE REGULATIONS, AND SHALL BE NO STEEPER THAN THE SLOPES SHOWN OR SPECIFIED WITHOUT THE APPROVAL OF THE ENGINEER. ANY SUCH APPROVALS BY THE ENGINEER WILL NOT RELIEVE THE CONTRACTOR FROM SOLE RESPONSIBILITY FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES.
3. EXISTING FACILITIES NOT INDICATED TO BE REMOVED SHALL BE PROTECTED IN PLACE OR REMOVED AND REPLACED IN KIND, AS APPROVED BY ENGINEER.
4. THE WORK WILL TAKE PLACE IN AND AROUND DRAINAGE SWALES AND THE HAPPY CANYON CREEK, SUBJECT TO PERIODIC FLOODING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF SURFACE AND SUBSURFACE WATER DURING THE COURSE OF THE WORK. ANY DAMAGE TO THE WORK RESULTING FROM SURFACE FLOWS, BASE FLOWS, OR FLOOD FLOWS INCLUDING BUOYANCY FORCES ON PIPELINES AND OTHER FACILITIES SHALL BE CORRECTED BY THE CONTRACTOR AT THE CONTRACTOR'S SOLE COST. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND SATISFYING THE REQUIREMENTS OF ANY APPLICABLE PERMITS PERTAINING TO WATER AND EROSION CONTROL.
5. CONTACT THE ENGINEER FOR CLARIFICATIONS OF ANY ABBREVIATIONS SHOWN ON THE DRAWINGS.
6. THE SITE WHERE THE WORK IS TO BE PERFORMED SHALL BE OVERLOT GRADED. TOPSOIL SHALL BE SPREAD IN OPEN SPACE AREAS TO A DEPTH OF APPROXIMATELY 6-INCHES. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED, AND SOME AREAS COVERED WITH EROSION CONTROL BLANKETS, UNLESS OTHERWISE DIRECTED IN THE PLANS OR BY THE ENGINEER. CARE SHALL BE TAKEN TO AVOID DISTURBING ANY OPEN SPACE AREAS EXCEPT THE MINIMUM NECESSARY TO PERFORM THE WORK. TOPSOIL IN ANY WORK AREAS OR ACCESS ROADS WITHIN THE OPEN SPACE SHALL BE STRIPPED AND STOCKPILED PRIOR TO THE WORK, PROTECTED FROM MIXING WITH ANY OTHER MATERIALS DURING THE WORK, AND REPLACED TO A LOOSE DEPTH OF 7- TO 8- INCHES (FINAL DEPTH AFTER SETTLEMENT SHALL BE 6- INCHES MINIMUM) AS THE WORK IS BEING COMPLETED. WHERE BLANKETS EXIST, THE MINIMUM AREA OF BLANKET TO ALLOW WORK TO PROGRESS SHALL BE REMOVED AND THEN THE REMOVED OR NEW BLANKET REPLACED AFTER UNDERLYING WORK IS COMPLETE (EXCEPT NO TEMPORARY BLANKET NEEDS TO BE REPLACED OVER ROCK OR COIR BLANKET SHOWN IN THE PLANS). JUST PRIOR TO REPLACEMENT OF TOPSOIL AFTER UNDERLYING WORK IS COMPLETE AND APPROVED, THE UNDERLYING SUBGRADE IN OPEN SPACE AREAS SHALL BE LOOSENED BY TILLING TO A DEPTH OF 12- INCHES UNTIL CLODS ARE NO LARGER THAN 3 INCHES, AND APPROVED BY THE ENGINEER. THIS NOTE ALSO APPLIES TO AREAS WHERE COIR MAT IS TO BE INSTALLED.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ANY COMPLETED WORK FROM DISTURBANCE OR DAMAGE DURING THE COURSE OF THE WORK. IF REQUESTED BY THE CONTRACTOR AND APPROVED BY THE OWNER, SIGNIFICANT COMPLETED SECTIONS OF THE WORK MAY BE ACCEPTED AS FINAL PRIOR TO THE COMPLETION OF THE ENTIRE PROJECT. ANY SUCH EARLY ACCEPTANCE WILL NEED TO BE IN WRITING BY THE ENGINEER AND OWNER AND THOSE PORTIONS OF THE WORK SHALL BE PROTECTED BY THE CONTRACTOR AGAINST VEHICLES RUNNING OVER THE AREA BY ENCIRCLING THE WORK WITH FLAGGING OR FENCING OR BY OTHER MEANS AGREED TO BY THE OWNER AND MAINTAINED BY THE CONTRACTOR UNTIL THE END OF THE PROJECT.
8. ALL FINE GRADING REQUIRED TO CONSTRUCT DRAINAGE IMPROVEMENTS AND PROVIDE FINISHED GRADES ADJACENT TO IMPROVEMENTS SHALL BE DONE BY THE DRAINAGE CONTRACTOR AND SHALL BE CONSIDERED PART OF THE WORK, AND NOT PAID FOR SEPARATELY.

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LTD.

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	N/A
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
GENERAL NOTES

SHEET 212 OF 270

JOB NO. 15950.01

LAYER LINETYPE LEGEND

	EXISTING	PROPOSED
PHASE LINE		
MATCH LINE		
SECTION LINE		
BOUNDARY LINE		
PROPERTY LINE		
EASEMENT LINE		
RIGHT OF WAY		
R.O.W. A LINE	A	A
CENTERLINE		
CITY LIMITS		
WIRE FENCE		
CHAIN LINK FENCE		
WOOD FENCE		
MASONRY FENCE		
GUARDRAIL		
CONC. BARRIER		
CABLE TV	TV	TV
ELECTRIC	E	E
FIBER OPTIC	FO	FO
GAS MAIN	G	G
IRRIGATION MAIN	IRR	IRR
OIL/PETRO. MAIN	O	O
OVERHEAD UTILITY	OHU	OHU
SANITARY SEWER	S	
STORM DRAIN		
TELEPHONE	T	T
WATER MAIN	W	
RAW WATER LINE	RWL	RWL
SWALE/WATERWAY FLOWLINE		
DIVERSION DITCH		
DIVERSION CHANNEL		
MAJOR DRAINAGE BASIN		
MINOR DRAINAGE BASIN		
TOP OF SLOPE		
TOE OF SLOPE		
EDGE OF WATER		
INDEX CONTOUR	6100	6100
INTERMEDIATE CONTOUR		
DEPRESSION CONT. (INDEX)	6100	6100
DEPRESSION CONT. (INTER)		
TOP OF CUTS		
TOE OF FILLS		
CUT AND FILL LINE		C/F
SILT FENCE	SF	SF
100 YEAR FLOODPLAIN	100YR	100YR
500 YEAR FLOODPLAIN	500YR	500YR
FLOODWAY	FLDWY	FLDWY
BASE FLOOD ELEVATION		
EDGE OF WETLANDS		
STONE WALL		

UTILITIES LEGEND

	EXISTING	PROPOSED
STORM SEWER		
MANHOLE		
STORM INLET		
AREA INLET – SQUARE		
AREA INLET – ROUND		
FLARED END SECTION		
RIPRAP		
SANITARY SEWER		
LINE MARKER	Mkr San	
SERVICE MARKER		
CLEAN–OUT		
MANHOLE W/ DIRECTIONAL FLOW ARROW		
WATER LINE		
LINE MARKER	Mkr W	
SERVICE MARKER		
FIRE HYDRANT		
FIRE CONNECTION		
MANHOLE		
BEND		
BLOW–OFF VALVE		
WELL	WELL	WELL
METER		
VALVE		
REDUCER		
THRUST BLOCK		
CROSS		
PLUG W/ THRUST BLOCK		
TEE		
REVERSE ANCHOR		
ANODE		
AIR & VACUUM VALVE ASSEMBLY		
TRANSMISSION BLOW–OFF ASSEMBLY		
GAS LINE		
MARKER	Mkr G	
SERVICE MARKER		
METER		
VALVE		
PLUG		
TEE		
DRY UTILITIES		
CABLE TV MARKER	Mkr TV	
CABLE TELEVISION PEDESTAL		
ELECTRIC MARKER	Mkr E	
ELECTRIC SERVICE MARKER		
ELECTRICAL PEDESTAL		
ELECTRICAL METER		
ELECTRICAL MANHOLE		
FIBER–OPTIC MARKER	Mkr FO	
IRRIGATION PEDESTAL		
TELEPHONE MARKER	Mkr T	
TELEPHONE PEDESTAL		
TELEPHONE MANHOLE		
UTILITY POLE		
GUY ANCHOR		
GUY POLE		
MISC. UTILITIES		
VENT PIPE	VP	VP
TEST HOLE DESIGNATOR	THE FIRM AGENCY	

MONUMENTATION LEGEND

ALUMINUM CAP – FOUND	AC
BRASS CAP – FOUND	BC
BENCHMARK – FOUND	
CROSS – FOUND	
MONUMENT – SET	
MONUMENT – FOUND (DEFAULT)	
MONUMENT – FOUND (ALTERNATE 1)	
MONUMENT – FOUND (ALTERNATE 2)	
MONUMENT – FOUND (ALTERNATE 3)	
MONUMENT – FOUND (ALTERNATE 4)	
MONUMENT – FOUND (ALTERNATE 5)	
MONUMENT – FOUND (ALTERNATE 6)	
MONUMENT – FOUND (ALTERNATE 7)	
NAIL & WASHER – FOUND	NAIL & WASHER
PANEL – FOUND	
PK NAIL – FOUND	PK NAIL
ROW MONUMENT – FOUND	
ROW MARKER – FOUND	
SECTION CORNER – FOUND	
SECTION CORNER – SET	
QUARTER–SECTION CORNER – FOUND	
QUARTER–SECTION CORNER – SET	
SECTION CENTER – FOUND	
SECTION CENTER – FOUND	
CONTROL/TRAVERSE POINT – SET	

TRAFFIC LEGEND

	EXISTING	PROPOSED
PARKING METER		
TRAFFIC SIGNAL BOX		
TRAFFIC SIGNAL POLE		
TRAFFIC SIGNAL		
BARRICADE		
GUARD RAIL POST		
IMPACT ATTENUATOR		
BRIDGE STYLE HIGHWAY SIGN POST		
CANTILEVER STYLE HIGHWAY SIGN POST		
SIGN		
RAILROAD MARKER/SIGN		
STREET LIGHT		
STREET LIGHT – SINGLE		
STREET LIGHT – DOUBLE		
LUMINAIRE		
ALTERNATE LUMINAIRE		
SIGNAL MAST ARM W/ LUMINAIRE		
PEDESTAL POLE FOUNDATION		
TRAFFIC SIGNAL POLE		
ROUND PULL BOX		
MEDIUM PULL BOX		
LARGE PULL BOX (20X33X15)		
SIGNAL HEAD WITHOUT BACK PLATE		
SIGNAL HEAD WITH BACK PLATE		
PEDESTRIAN SIGNAL HEAD		
VIDEO IMAGE DETECTOR		
OPTICOM DETECTOR		
VEHICLE DETECTION ZONE		V

STORM WATER MANAGEMENT

	KEY	SYMBOL
CHECK DAM	CD	
CONSTRUCTION ROAD STABILIZATION	CRS	
CURB SOCK INLET PROTECTION	CS	
CONCRETE WASHOUT AREA	CWA	
DIVERSION DITCH AND DIKE, TEMPORARY	DD	
DIVERSION CHANNEL, TEMPORARY	DV	
DEWATERING	DW	
EROSION CONTROL BLANKET	ECB	
INLET FILTER	IF	
INLET PROTECTION	IP	
MULCHING	MU	
OUTLET PROTECTION	OP	
PAVED FLUME	PF	
PERMENENT SEEDING	PS	
REINFORCED CONCRETE DAM	RCD	
ROUGH CUT STREET CONTROL	RCS	
SEDIMENT BASIN	SB	
SEDIMENT CONTROL LOG	SCL	
SILT FENCE	SF	
SURFACE ROUGHENING	SR	
STABILIZED STAGING AREA	SSA	
SEDIMENT TRAP	ST	
STRAW BALE BARRIER	STB	
TERRACING	TER	
TEMPORARY SEEDING	TS	
TEMPORARY STREAM CROSSING CULVERT/BRIDGE	TSC C	
TEMPORARY STREAM CROSSING FORD TYPE	TSC F	
TEMPORARY SLOPE DRAIN	TSD	
VEHICLE TRACKING CONTROL	VTC	
VEHICLE TRACKING CONTROL WITH WASH RACK	WR	

DRAINAGE REPORT PLANS

	KEY
BASIN DESIGNATION (NO COEFFICIENT)	# / #.##
BASIN DESIGNATION (1 COEFFICIENT)	# / #.## / #
BASIN DESIGNATION (2 COEFFICIENTS)	# / #.## / # / #
ANALISYS POINT IDENTIFIER	#
BASIN DESIGNATION (HISTORIC)	# / #-#
BASIN DESIGNATION (DEVELOPED)	# / #.##
SUB–BASIN DESIGNATION (DEVELOPED)	# / ##
DRAINAGE PIPE IDENTIFIER	##
DRAINAGE POINT IDENTIFIER (HEXAGONAL)	##
DRAINAGE POINT IDENTIFIER (TRIANGULAR)	?
SWMM DESIGNATION 1	#
SWMM DESIGNATION 2	#
SWMM DESIGNATION 3	#
SWMM DESIGNATION 4	?

LANDSCAPE LEGEND

	EXISTING	PROPOSED
TREE – CONIFEROUS		
TREE – DECIDUOUS		
SHRUB/BUSH		
SHRUBS AND BUSHES		
IRRIGATION BOX		
IRRIGATION SPRINKLER		
IRRIGATION VALVE		
BOLLARD		
FLAGPOLE		FP

811 Know what's **below.** **Call** before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED PROFESSIONAL ENGINEER — AARON LEE CLUTTER — 36742

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

No.	REVISION	BY	DATE

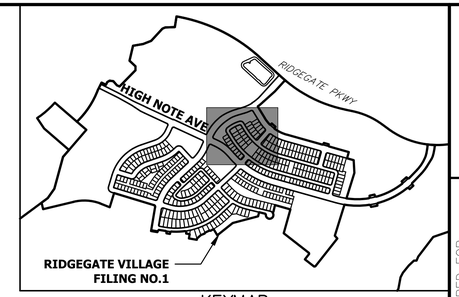
H–SCALE	N/A
V–SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

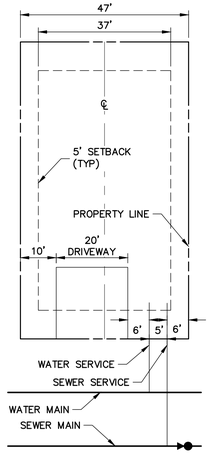
LEGEND

SHEET 213 OF 270

JOB NO. 15950.01



KEYMAP
SCALE:1"=1000'



LOT SERVICES DETAIL
PLANNING AREA 18
SCALE: 1"=20

40 20 0 40 80
ORIGINAL SCALE: 1" = 40'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT
PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

DATE

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	REVISION

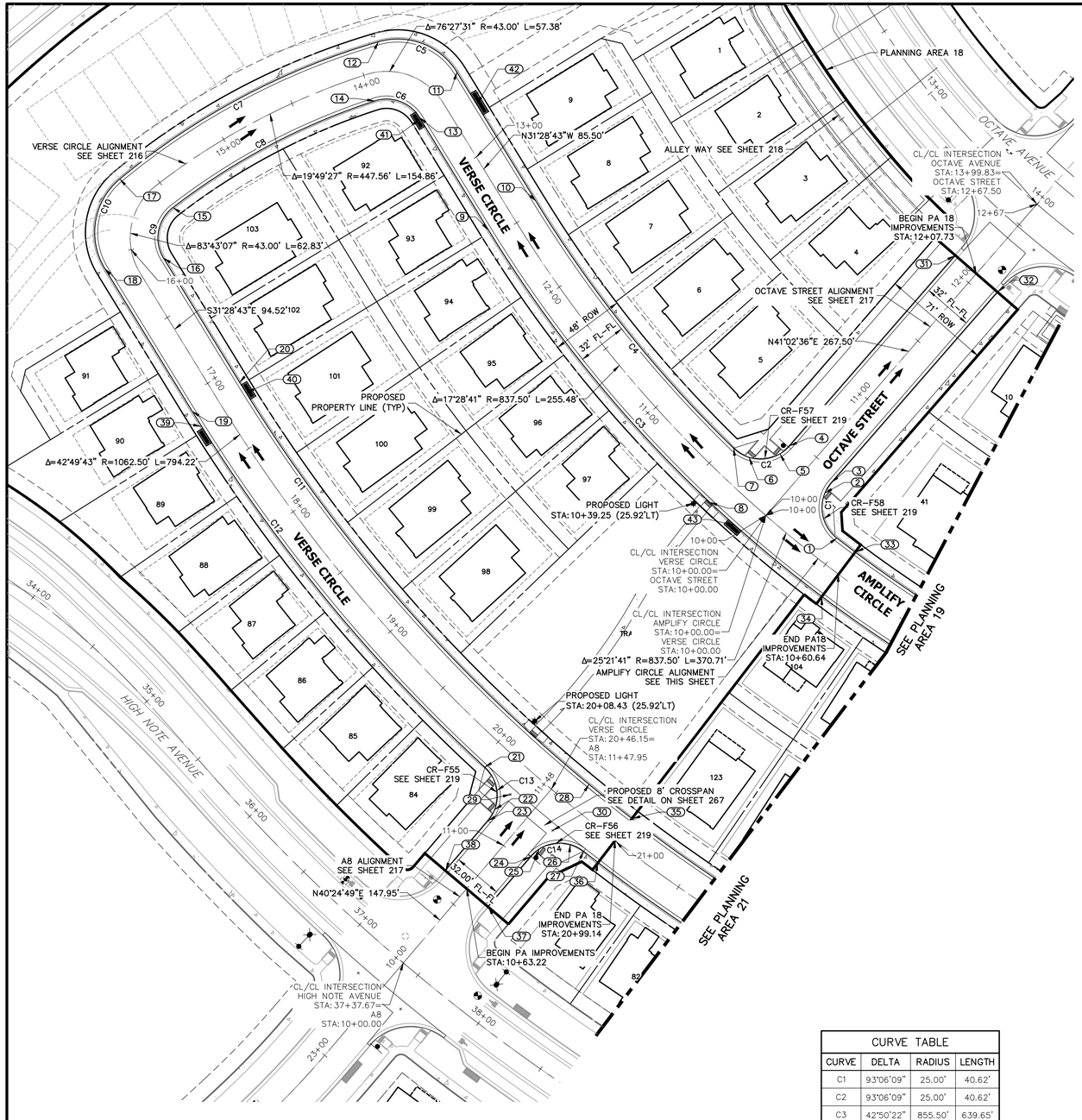
H-SCALE	1"=40'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	APL
CHECKED BY	

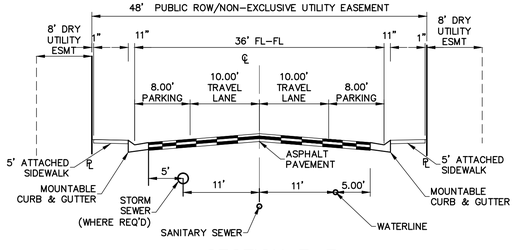
RIDGEGATE SOUTHWEST VILLAGE FILING 1

OVERALL UTILITY PLAN

SHEET 214 OF 270

JOB NO. 15950.01





SECTION F-F

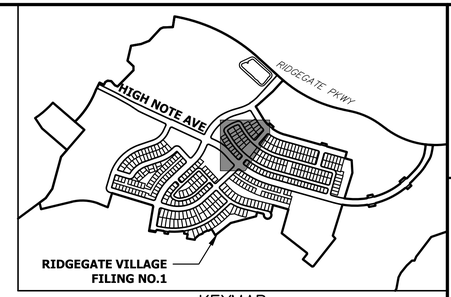
TYPE IV – ALTERNATE 48-FOOT R.O.W. LOCAL STREET WITH PARKING ON BOTH SIDES OF THE STREET (PUBLI

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
1	20+92.01	243.00' (LT)	VERSE CIRCLE	6020.46		PCC
2	10+36.15	19.32' (RT)	OCTAVE STREET	6019.30		HC RAMP MID PT
3	10+44.16	18.00' (RT)	OCTAVE STREET	6018.94		PC
4	10+44.16	18.00' (LT)	OCTAVE STREET	6017.73		PC
5	10+36.15	19.32' (LT)	OCTAVE STREET	6018.02		HC RAMP MID PT
6	10+33.78	20.61' (RT)	VERSE CIRCLE	6018.21		HC RAMP MID PT
7	10+45.35	18.00' (RT)	VERSE CIRCLE	6017.80		PCC
8	10+32.31	18.00' (LT)	VERSE CIRCLE	6018.20		HC RAMP MID PT
9	12+55.48	18.00' (LT)	VERSE CIRCLE	6011.63		PT
10	12+55.48	18.00' (RT)	VERSE CIRCLE	6011.63		PT
11	13+49.60	19.25' (RT)	VERSE CIRCLE	6011.43		PC
12	13+88.62	19.38' (RT)	VERSE CIRCLE	6012.13		PCC
13	13+40.98	18.00' (LT)	VERSE CIRCLE	6010.85		PT
14	13+98.36	18.00' (LT)	VERSE CIRCLE	6011.88		PCC
15	15+53.21	18.00' (LT)	VERSE CIRCLE	6017.25		PCC

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
16	16+16.04	18.00' (LT)	VERSE CIRCLE	6019.45		PC
17	15+64.22	19.78' (RT)	VERSE CIRCLE	6018.08		PCC
18	16+06.28	19.61' (RT)	VERSE CIRCLE	6019.54		PT
19	17+10.36	18.00' (RT)	VERSE CIRCLE	6023.20		PT
20	17+10.36	18.00' (LT)	VERSE CIRCLE	6023.20		PT
21	20+04.81	18.00' (RT)	VERSE CIRCLE	6037.17		PCC
22	11+14.02	19.39' (LT)	A8	6039.01		HC RAMP MID PT
23	11+05.85	18.00' (LT)	A8	6038.93		PC
24	11+05.79	18.00' (RT)	A8	6038.93		PC
25	11+13.17	19.11' (RT)	A8	6039.26		HC RAMP MID PT
26	20+78.13	19.93' (RT)	VERSE CIRCLE	6039.68		HC RAMP MID PT
27	20+87.49	18.00' (RT)	VERSE CIRCLE	6039.99		PCC
28	20+62.99	18.00' (LT)	VERSE CIRCLE	6039.20		HC RAMP MID PT
29	20+28.48	20.00' (RT)	VERSE CIRCLE	6038.33		FL-FL INTERCEPT
30	20+63.82	20.00' (RT)	VERSE CIRCLE	6039.35		FL-FL INTERCEPT

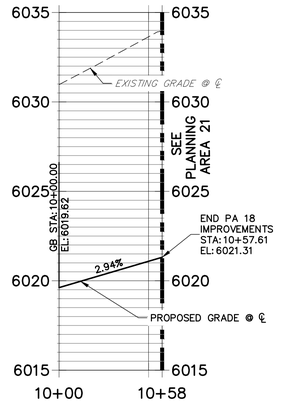
POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
31	12+07.73	18.00' (LT)	OCTAVE STREET	6012.30		PC
32	12+07.73	18.00' (RT)	OCTAVE STREET	6013.93		PC
33	10+60.64	18.00' (LT)	AMPLIFY CIRCLE	6020.92		PCC
34	10+60.64	18.00' (RT)	AMPLIFY CIRCLE	6020.95		PCC
35	20+99.14	18.00' (LT)	VERSE CIRCLE	6040.37		PCC
36	20+99.14	18.00' (RT)	VERSE CIRCLE	6040.37		PCC
37	10+63.27	18.00' (RT)	A8	6040.36		PC
38	10+63.18	18.00' (LT)	A8	6040.37		PC
39	17+21.70	17.99' (RT)	VERSE CIRCLE	6023.74		SUMP INLET
40	17+18.48	18.00' (LT)	VERSE CIRCLE	6023.58		SUMP INLET
41	13+39.81	18.00' (LT)	VERSE CIRCLE	6010.85		SUMP INLET
42	13+28.99	18.00' (RT)	VERSE CIRCLE	6011.04		SUMP INLET
43	10+10.83	18.00' (LT)	VERSE CIRCLE	6018.85		SUMP INLET

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C1	93°06'09"	25.00'	40.62'
C2	93°06'09"	25.00'	40.62'
C3	42°50'22"	855.50'	639.65'
C4	14°22'32"	819.50'	205.61'
C5	74°43'55"	45.00'	58.69'
C6	76°27'21"	25.00'	33.36'
C7	23°30'30"	465.50'	190.99'
C8	19°49'38"	429.50'	148.63'
C9	83°43'01"	25.00'	36.53'
C10	81°45'35"	45.00'	64.21'
C11	42°50'22"	1044.50'	780.96'
C12	15°52'43"	1080.50'	299.44'
C13	87°46'15"	25.00'	38.30'
C14	87°46'15"	25.00'	38.30'



KEYMAP
SCALE:1"=1000'

AMPLIFY CIRCLE PROFILE STA 10+00.00 TO 10+57.61



HORIZONTAL
ORIGINAL SCALE: 1" = 40'
VERTICAL
ORIGINAL SCALE: 1" = 4'

Know what's below. Call before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=40'	DESIGNED BY	GVT	
V-SCALE	1"=4'	DRAWN BY	APL	
DATE	2/12/21	CHECKED BY		

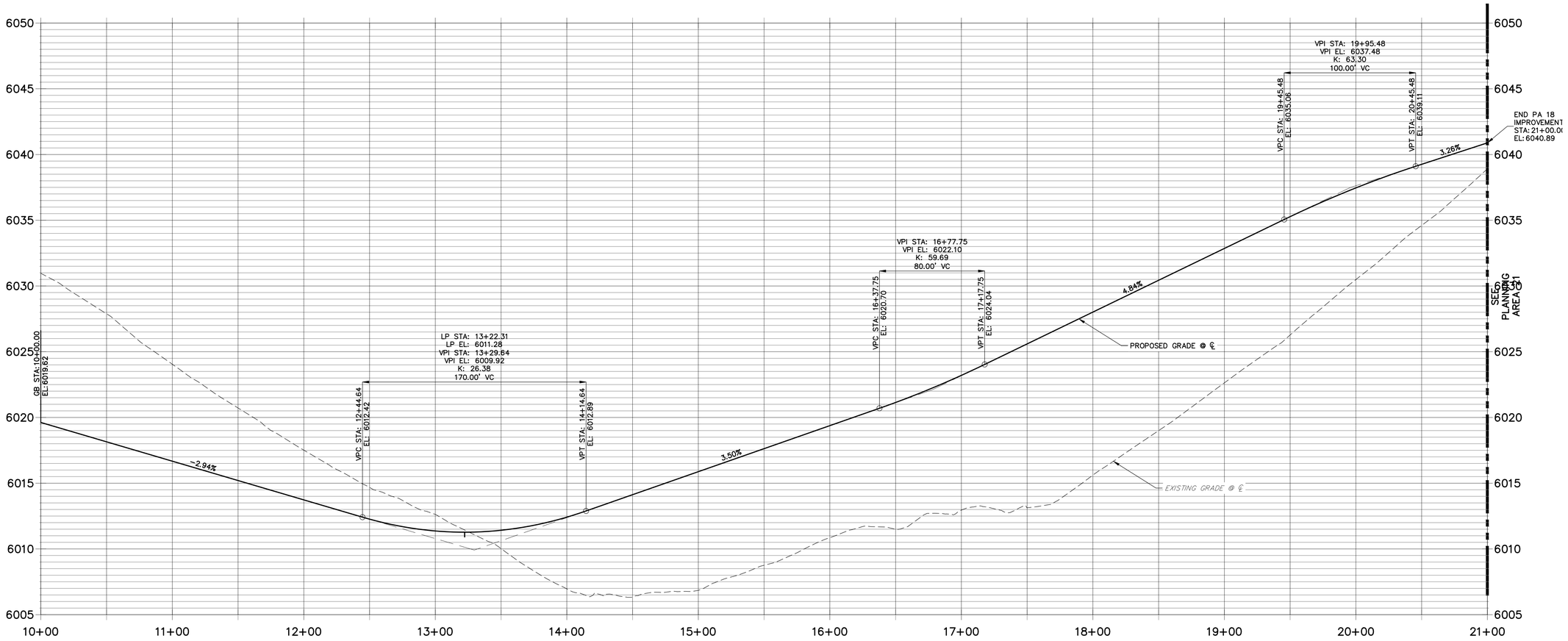
RIDGEGATE SOUTHWEST VILLAGE FILING 1

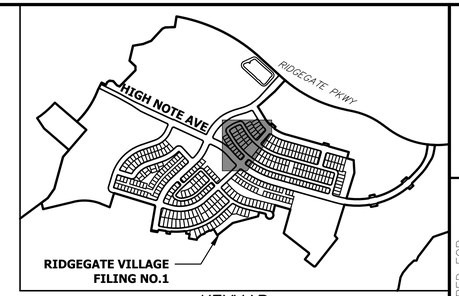
ROADWAY PLAN & PROFILES

SHEET 215 OF 270

JOB NO. 15950.01

VERSE CIRCLE PROFILE
STA 10+00.00 TO 21+00.00





KEYMAP
SCALE:1"=1000'

NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE SHEET 213 FOR LEGEND.
4. SEE SHEET 215 FOR TYPICAL STREET SECTIONS.
5. SEE SHEET 221 FOR SUMP PROFILES.
6. SEE SHEET 219 FOR CURB RETURN PROFILES.
7. SEE SHEET 220 FOR CURB RAMP DETAILS.
8. SEE SHEET 222 FOR SIGNAGE AND STRIPING.
9. ALL CURB RADII ARE 25' UNLESS OTHERWISE NOTED.
10. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.

N

40 20 0 40 80

HORIZONTAL
ORIGINAL SCALE: 1" = 40'
VERTICAL
ORIGINAL SCALE: 1" = 4'

Know what's **below.**
Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

COLORADO REGISTERED
AARON LEE CLUTTER
36742
PROFESSIONAL ENGINEER

DATE

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=40'
V-SCALE	1"=4'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	APL
CHECKED BY	

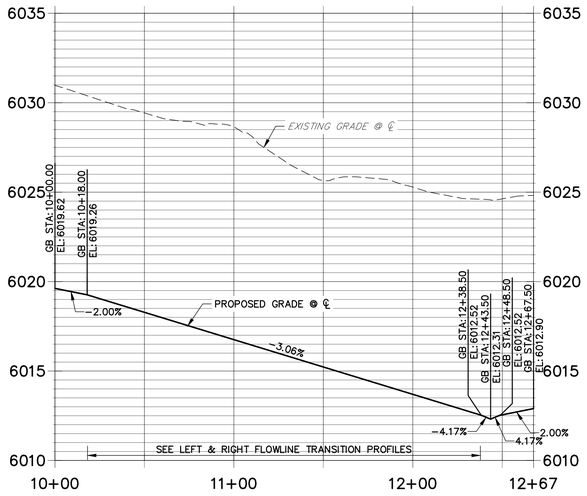
RIDGEGATE SOUTHWEST VILLAGE FILING 1

ROADWAY PLAN & PROFILES

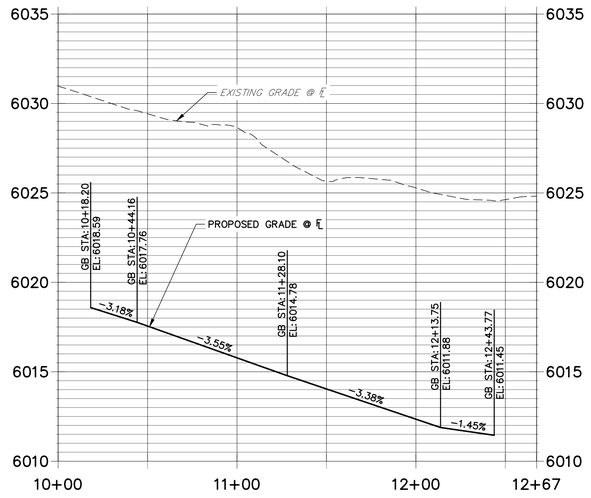
SHEET 216 OF 270

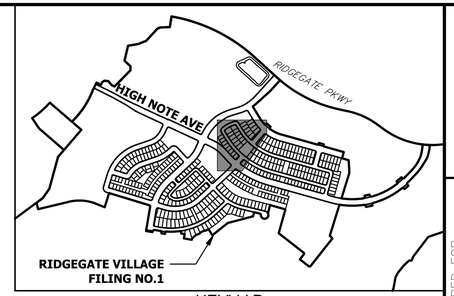
JOB NO. 15950.01

OCTAVE STREET PROFILE
STA 10+00.00 TO 12+67.50



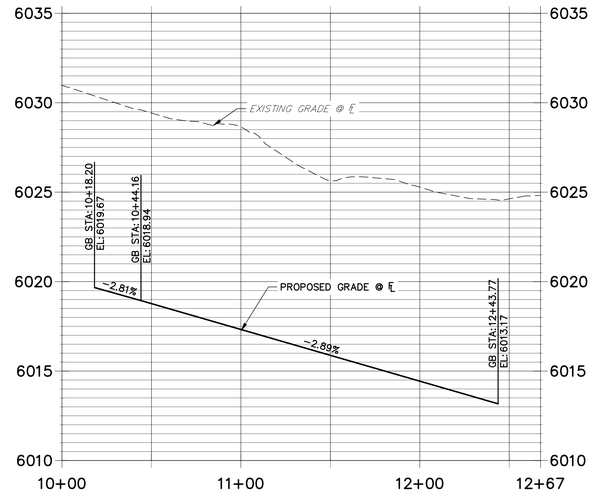
OCTAVE STREET LEFT FLOWLINE TRANSITION PROFILE
STA 10+00.00 TO 12+67.50



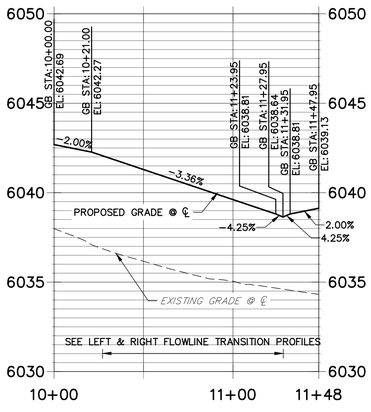


KEYMAP
SCALE:1"=1000'

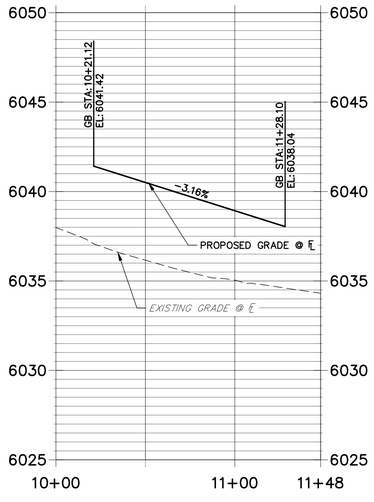
OCTAVE STREET RIGHT FLOWLINE TRANSITION PROFILE
STA 10+00.00 TO 12+67.50



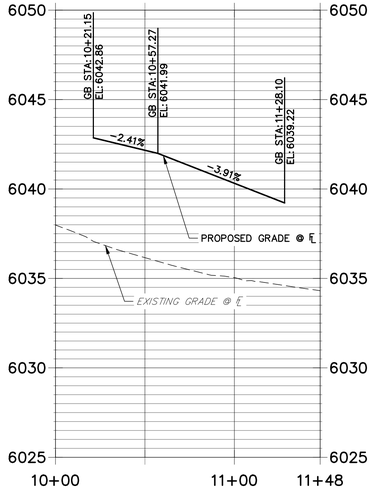
A8 PROFILE
STA 10+00.00 TO 11+47.95



A8 LEFT FLOWLINE TRANSITION PROFILE
STA 10+00.00 TO 11+47.95



A8 RIGHT FLOWLINE TRANSITION PROFILE
STA 10+00.00 TO 11+47.95



NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE SHEET 213 FOR LEGEND.
4. SEE SHEET 215 FOR TYPICAL STREET SECTIONS.
5. SEE SHEET 221 FOR SUMP PROFILES.
6. SEE SHEET 219 FOR CURB RETURN PROFILES.
7. SEE SHEET 220 FOR CURB RAMP DETAILS.
8. SEE SHEET 222 FOR SIGNAGE AND STRIPING.
9. ALL CURB RADII ARE 25' UNLESS OTHERWISE NOTED.
10. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=40'	DESIGNED BY	GVT
V-SCALE	1"=4'	DRAWN BY	APL
DATE	2/12/21	CHECKED BY	

HORIZONTAL
ORIGINAL SCALE: 1" = 40'
VERTICAL
ORIGINAL SCALE: 1" = 4'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

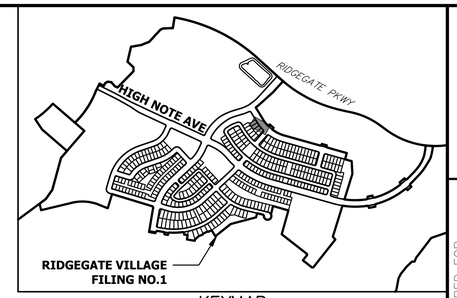
COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

RIDGEGATE SOUTHWEST VILLAGE FILING 1

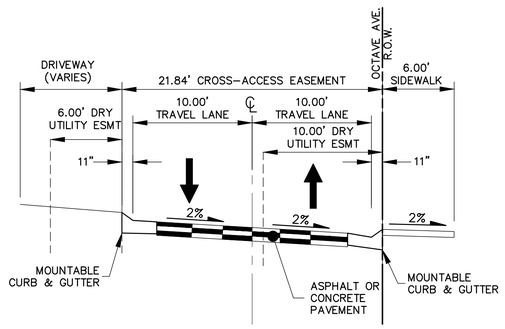
ROADWAY PLAN & PROFILES

SHEET 217 OF 270

JOB NO. 15950.01



KEYMAP
SCALE:1"=1000'



PRIVATE ALLEY
ENTRANCE FROM OCTAVE AVENUE
N.T.S.

NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE SHEET 213 FOR LEGEND.
4. SEE SHEET 215 FOR TYPICAL STREET SECTIONS.
5. SEE SHEET 221 FOR SUMP PROFILES.
6. SEE SHEET 219 FOR CURB RETURN PROFILES.
7. SEE SHEET 220 FOR CURB RAMP DETAILS.
8. SEE SHEET 222 FOR SIGNAGE AND STRIPING.
9. ALL CURB RADII ARE 25' UNLESS OTHERWISE NOTED.
10. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.

Know what's **below.**
Call before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

10 5 0 10 20
ORIGINAL SCALE: 1" = 10'

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

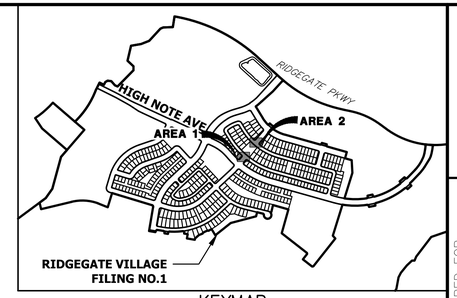
No.	REVISION	BY	DATE

H-SCALE	1"=10'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	APL
CHECKED BY	

RIDGEGATE SOUTHWEST
VILLAGE FILING 1
ROADWAY PLAN & PROFILES

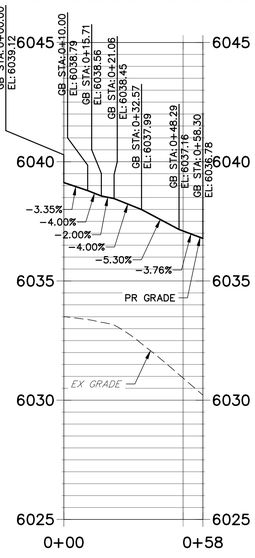
SHEET 218 OF 270

JOB NO. 15950.01



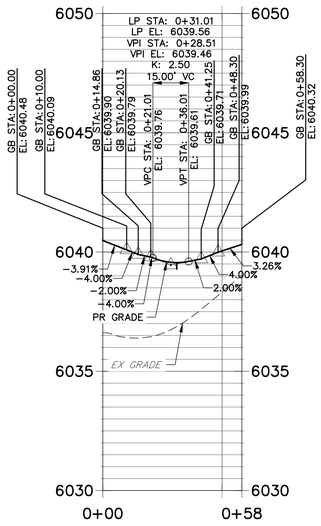
KEYMAP
SCALE:1"=1000'

F55 PROFILE
STA 0+00.00 TO 0+58.30



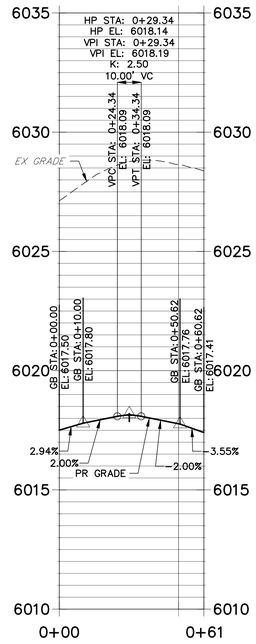
AREA 1

F56 PROFILE
STA 0+00.00 TO 0+58.30



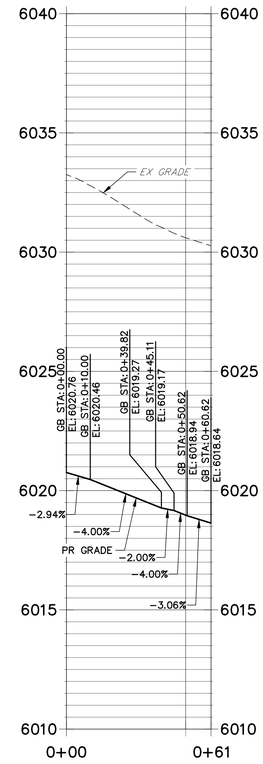
AREA 1

F57 PROFILE
STA 0+00.00 TO 0+60.62



AREA 2

F58 PROFILE
STA 0+00.00 TO 0+60.62



AREA 2

30 15 0 30 60

HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

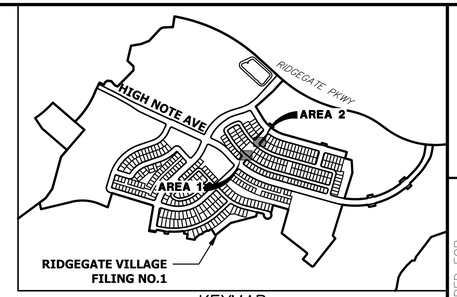
H-SCALE	1" = 30'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

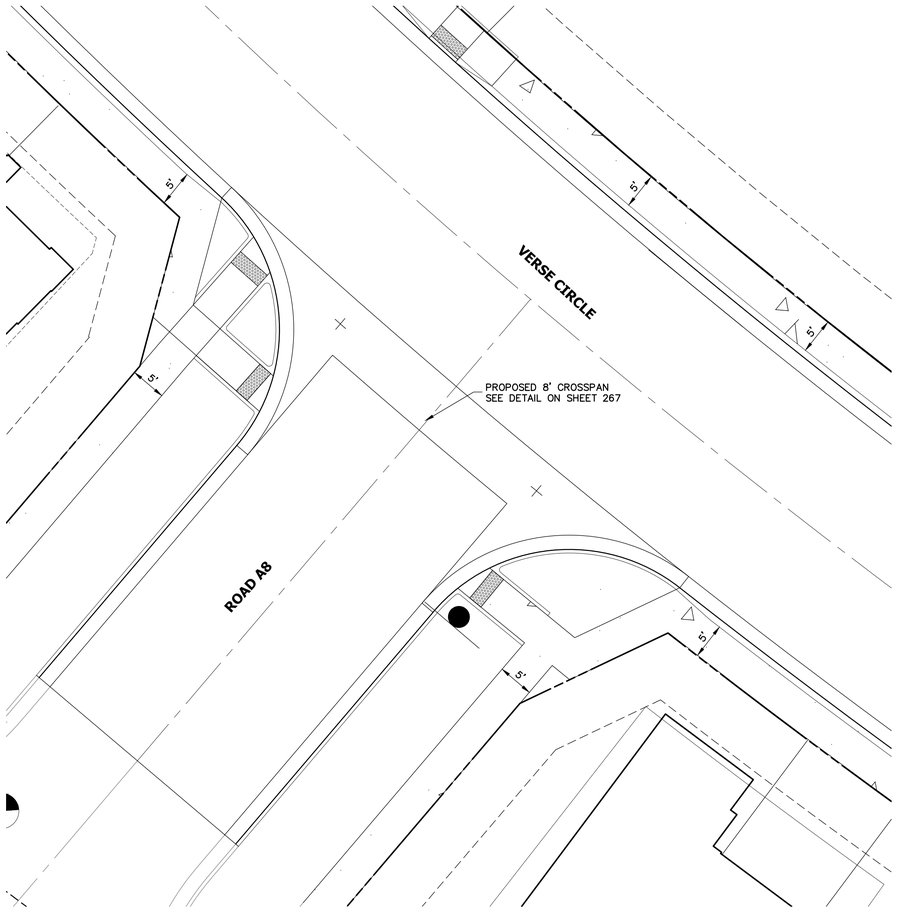
CURB RETURN PROFILE

SHEET 219 OF 270

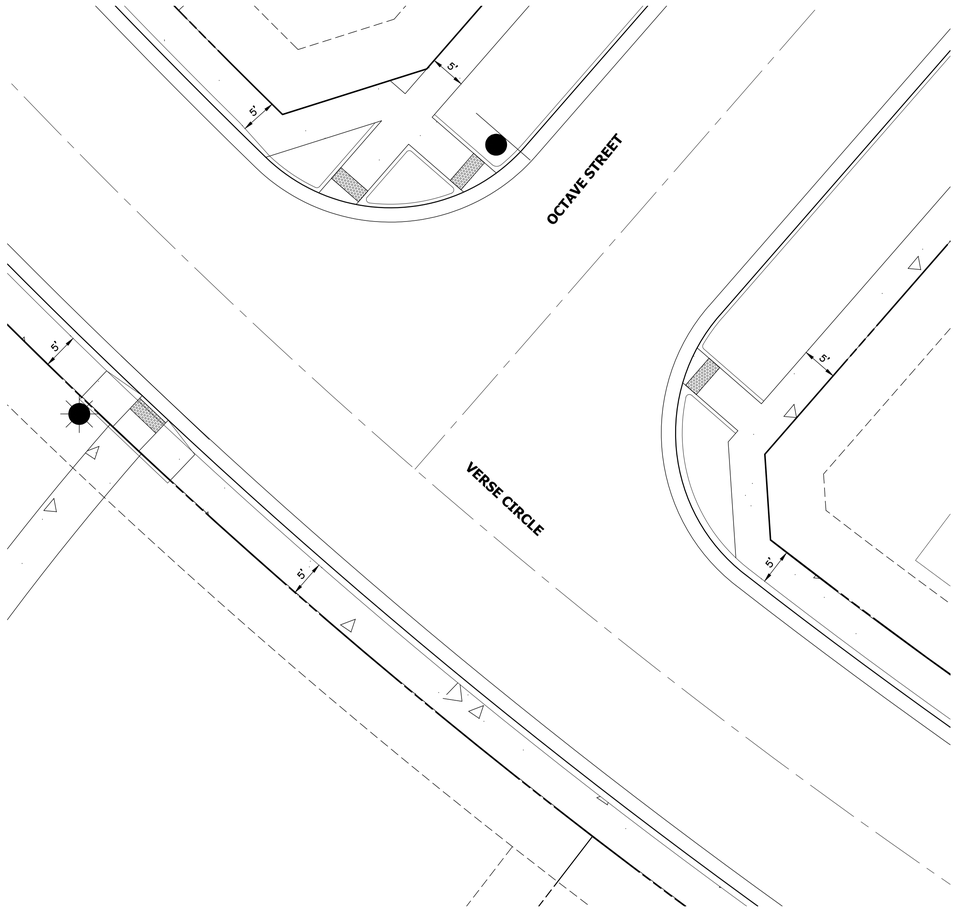
JOB NO. 15950.01



KEYMAP
SCALE:1"=1000'



AREA 1



AREA 2

NOTE: CURB RAMP DETAILS TO BE PROVIDED WITH NEXT SUBMITTAL

10 5 0 10 20
ORIGINAL SCALE: 1" = 10'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

DATE

COURTLAND REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

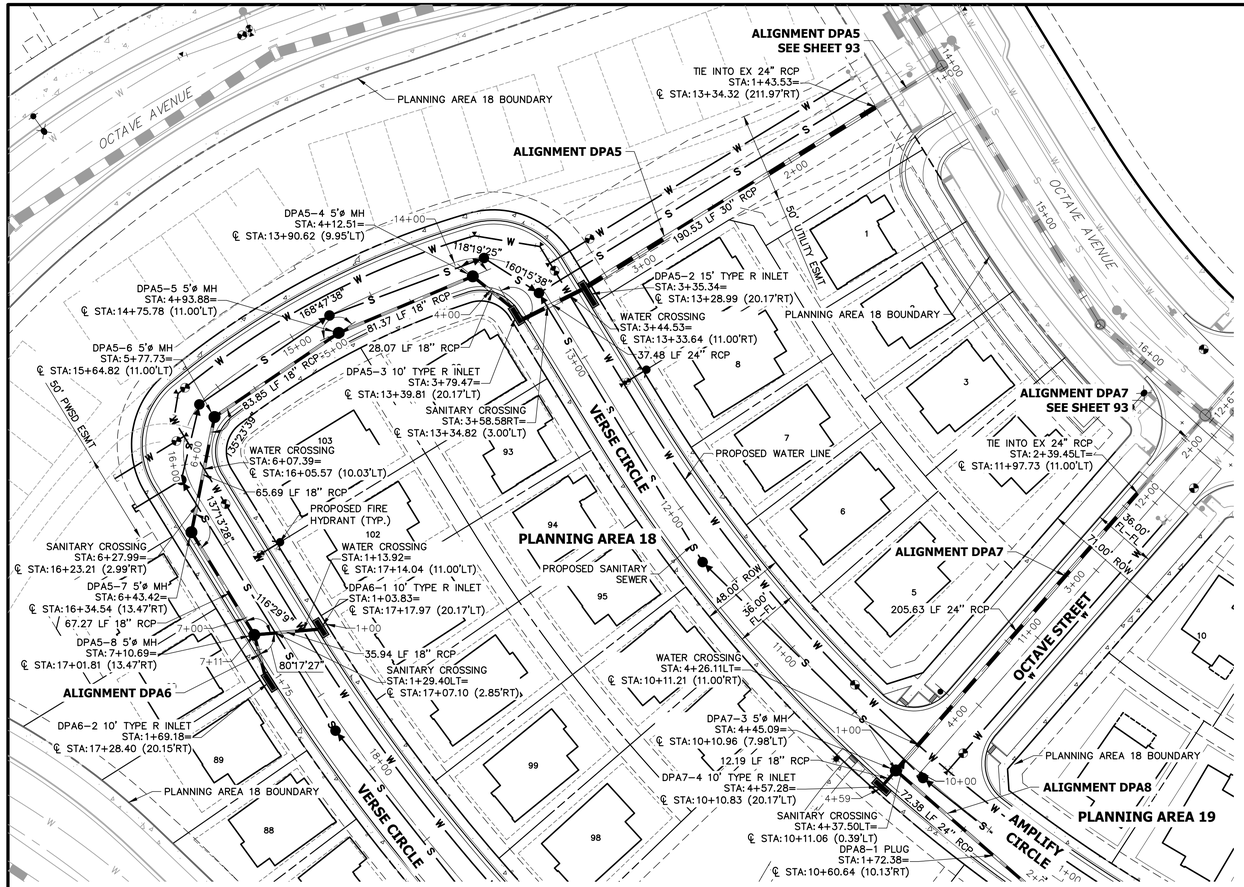
No.	REVISION	BY	DATE

H-SCALE	1"=10'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	APL
CHECKED BY	

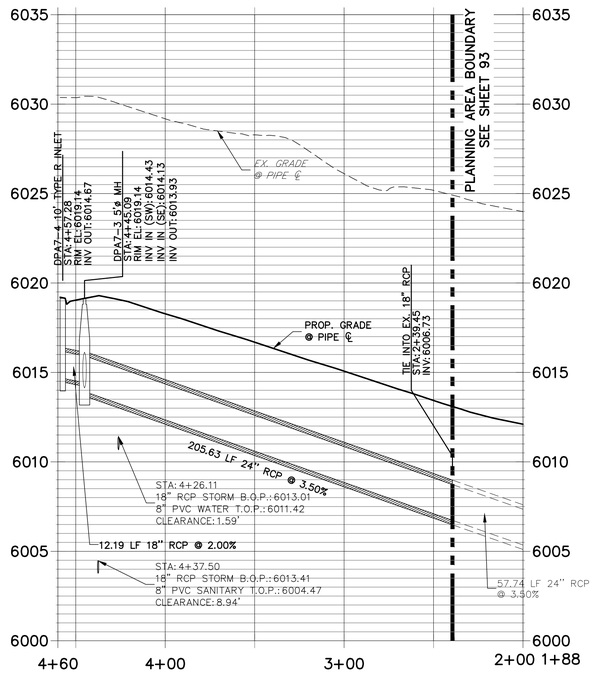
RIDGEGATE SOUTHWEST VILLAGE FILING 1
CURB RAMP DETAILS

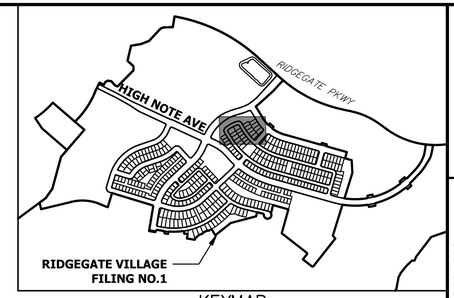
SHEET 220 OF 270

JOB NO. 15950.01



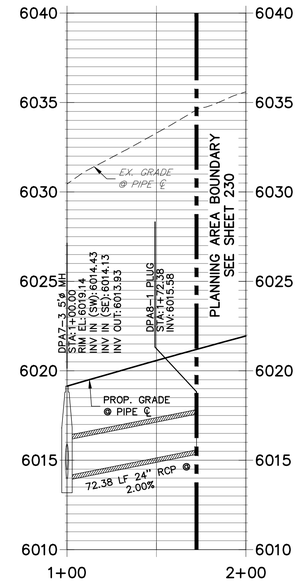
DPA7 PROFILE
STA 2+00.00 TO 4+60.00



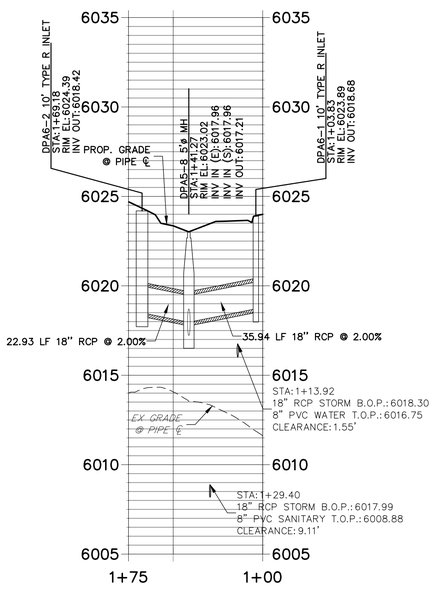


KEYMAP
SCALE: 1"=1000'

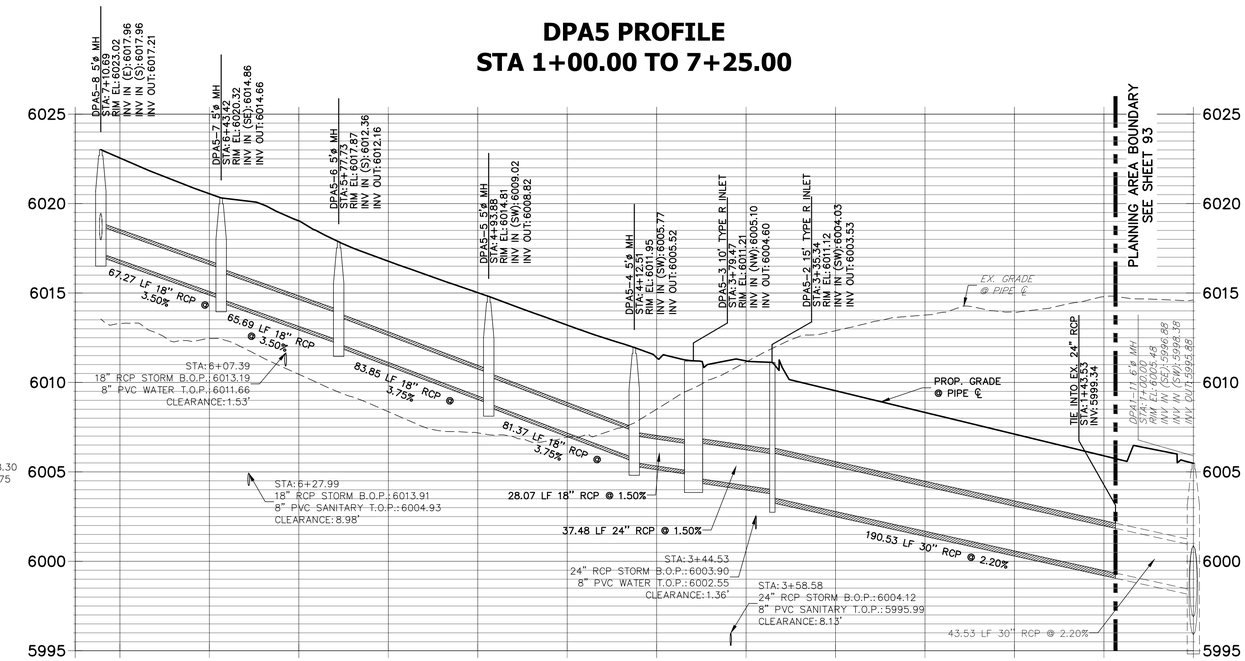
DPA8 PROFILE
STA 1+00.00 TO 2+00.00



DPA6 PROFILE
STA 1+00.00 TO 1+75.00



DPA5 PROFILE
STA 1+00.00 TO 7+25.00



HORIZONTAL
ORIGINAL SCALE: 1" = 40'
VERTICAL
ORIGINAL SCALE: 1" = 4'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED
AARON LEE CLUTTER
36742
PROFESSIONAL ENGINEER

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial: 303-740-9393 • Colorado Springs: 719-593-2593
Fort Collins: 970-491-9888 • www.jrengineering.com

BY	DATE

No.	REVISION

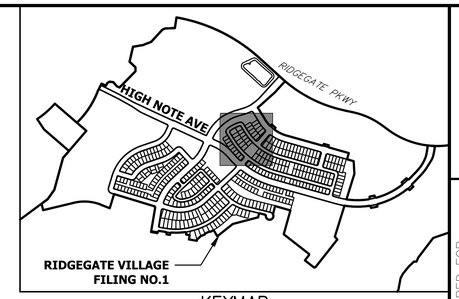
H-SCALE	1"=40'
V-SCALE	1"=4'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	APL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

STORM SEWER PLANS & PROFILES

SHEET 221 OF 270

JOB NO. 15950.01



KEYMAP
SCALE:1"=1000'

SIGN TABULATION				
SIGN NUMBER	STATION	OFFSET	ALIGNMENT	DESCRIPTION
1	10+53.98	22.35' (LT)	A8	30"X30" R1-1 30"X8" D3-1 (2)
2	12+14.93	21.88' (RT)	OCTAVE STREET	30"X30" R1-1 30"X8" D3-1 (2)
3	11+07.66	21.17' (RT)	A8	30"X30" R1-1 30"X8" D3-1 (2)
4	10+41.66	21.23' (LT)	OCTAVE STREET	30"X30" R1-1 30"X8" D3-1 (2)

30 15 0 30 60
ORIGINAL SCALE: 1" = 30'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

CLUTTER, REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1" = 30'	DESIGNED BY	GVT
V-SCALE	N/A	DRAWN BY	APL
DATE	2/12/21	CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

SIGNAGE AND STRIPING PLANS

SHEET 222 OF 270

JOB NO. 15950.01

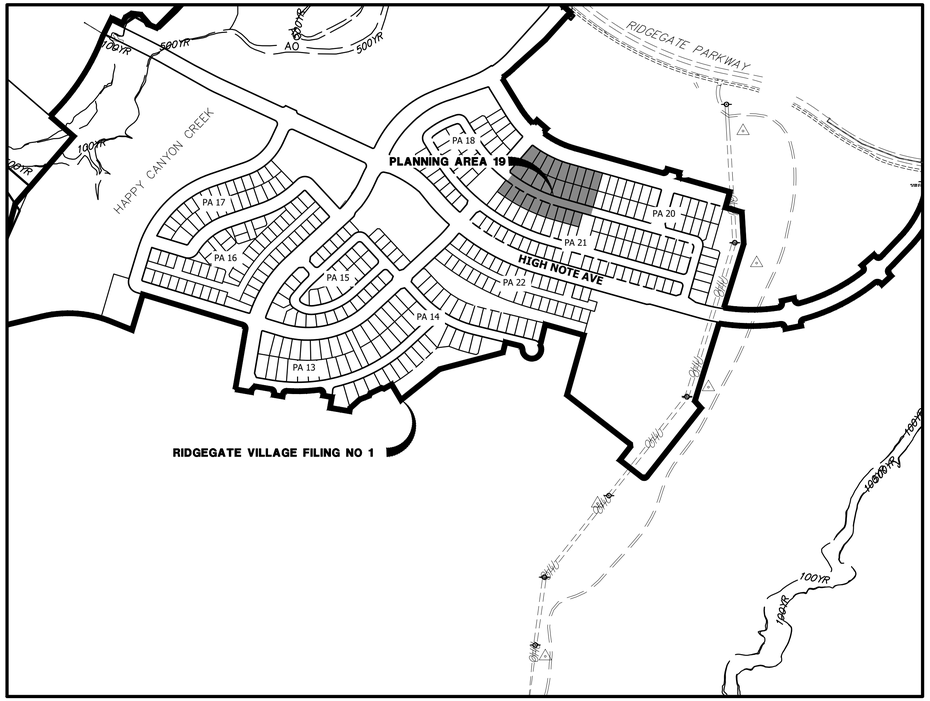
RIDGEGATE SOUTHWEST VILLAGE FILING 1-PLANNING AREA 19

A PORTION OF THE RIDGEGATE PLANNED DEVELOPMENT DISTRICT, EAST SIDE PROPERTY
LOCATED IN SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST
OF THE 6TH P.M., CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO

STREET & DRAINAGE CONSTRUCTION PLANS

ABBREVIATIONS

AC	ACRE
AD	ALGEBRAIC DIFFERENCE
AH	AHEAD
ARCH	ARCHITECT
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASS'Y	ASSEMBLY
AVE	AVENUE
BB	BOX BASE
BK	BACK
BNDY	BOUNDARY
BOP	BOTTOM OF PIPE
BOV	BLOW OFF VALVE
BFV	BUTTERFLY VALVE
BLVD	BOULEVARD
BW	BOTTOM OF WALL
C&G	CURB & GUTTER
CATV	CABLE TELEVISION
CB	CATCH BASIN
CBC	CONCRETE BOX CULVERT
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION
CDS	CUL-DE-SAC
CF	CUBIC FOOT
CFS	CUBIC FEET PER SECOND
CIP	COMPLETE IN PLACE
CL	CENTER LINE
CLOMR	CONDITIONAL LETTER OF MAP REVISION
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
COCS	CITY OF COLORADO SPRINGS
CONC	CONCRETE
CR	CIRCLE
CSP	CORRUGATED STEEL PIPE
CSU	COLORADO SPRINGS UTILITIES
CT	COURT
CTRB	CONCRETE THRUST REDUCER BLOCK
CY	CUBIC YARD
DBPS	DRAINAGE BASIN PLANNING STUDY
DE	DRAINAGE EASEMENT
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DR	DRIVE
DRC	DESIGN REVIEW COMMITTEE
DU	DWELLING UNITS
DY	DAY
E	EAST
EA	EACH
EGL	ENERGY GRADE LINE
EL	ELEVATION
ELEC	ELECTRIC
EOA	EDGE OF ASPHALT
EPC	EL PASO COUNTY
ERCP	ELLIPTICAL RCP
ESMT	EASEMENT
EST	ESTIMATE
EX	EXISTING
FDP	FINAL DEVELOPMENT PLAN
FDR	FINAL DRAINAGE REPORT
FES	FLARED END SECTION
FF	FINISHED FLOOR ELEVATION
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOWLINE
FIL	FILING
FO	FIBER OPTIC CABLE
GB	GRADE BREAK
GE	GAS EASEMENT
GIS	GEOGRAPHIC INFORMATION SYSTEM
GL	GAS LINE
GPS	GLOBAL POSITIONING SYSTEM
GV	GATE VALVE
HBP	HOT BITUMINOUS PAVEMENT
HC	HANDICAP
HDC	HIGH DEFLECTION COUPLING
HDPE	HIGH DENSITY POLYETHYLENE
HGL	HYDRAULIC GRADE LINE
HMA	HOT MIX ASPHALT
HOA	HOME OWNERS ASSOCIATION
HP	HIGH POINT
HR	HOUR
I	INLET
IE	IRRIGATION EASEMENT
INT	INTERSECTION
INV	INVERT
IRR	IRRIGATION
KB	KICK (THRUST) BLOCK
LB	POUND
LE	LANDSCAPE EASEMENT
LF	LINEAR FOOT
LN	LANE
LOMR	LETTER OF MAP REVISION
LP	LOW POINT
LS	LUMP SUM
LT	LEFT
MAX	MAXIMUM
M/D	MOISTURE DENSITY
MDDP	MASTER DEVELOPMENT DRAINAGE PLAN
MH	MANHOLE
MIN	MINIMUM
MS	MOUNTABLE SIDEWALK
N	NORTH
NRCP	NON-REINFORCED CONCRETE PIPE
ODP	OFFICIAL DEVELOPMENT PLAN
OHE	OVERHEAD ELECTRIC
OHU	OVERHEAD UTILITY
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PCR	POINT OF CURB RETURN
PDP	PRELIMINARY DEVELOPMENT PLAN
PE	PROFESSIONAL ENGINEER
PI	POINT OF INTERSECTION
PKWY	PARKWAY
PL	PROPERTY LINE
PR	PROPOSED
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PV	PLUG VALVE
PVC	POLYVINYL CHLORIDE
R	RADIUS
RCBC	REINFORCED CONCRETE BOX CULVERT
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
ROW	RIGHT OF WAY
RT	RIGHT
S	SOUTH
STE	STEEL
SAN	SANITARY SEWER
SF	SQUARE FOOT
ST	STREET
STA	STATION
STM	STORM SEWER
SY	SQUARE YARD
SY-IN	SQUARE YARD INCH
TB	THRUST BLOCK
TBC	TOP BACK OF CURB
TBW	TOP BACK OF WALK
TEL	TELEPHONE
TN	TON
TOA	TOP OF ASPHALT
TOB	TOP OF BOX
TOC	TOP OF CURB OR CONCRETE
TOF	TOP OF FOUNDATION
TOP	TOP OF PIPE
TW	TOP OF WALL
TYP	TYPICAL
UDFCD	URBAN DRAINAGE AND FLOOD CONTROL DISTRICT
UE	UTILITY EASEMENT
U&DE	UTILITY & DRAINAGE EASEMENT
UGE	UNDERGROUND ELECTRIC
VCP	VITRIFIED CLAY PIPE
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
VTC	VEHICLE TRACKING CONTROL
W	WEST
WL	WATER LINE
WM	WATER MAIN
WRD	WATER RESOURCES DEPARTMENT
WS	WATER SURFACE
WSE	WATER SURFACE ELEVATION
WTR	WATER
YR	YEAR



VICINITY MAP
SCALE: 1"=400'

SHEET INDEX

223	COVER SHEET
224	GENERAL NOTES
225	LEGEND
226	OVERALL UTILITY PLAN
227 – 228	ROADWAY PLAN & PROFILES
229	CURB RAMP DETAILS
230	STORM SEWER PLANS & PROFILE
231	SIGNAGE & STRIPNG PLANS

APPLICANT/OWNER

SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
P~303.791.8180

CIVIL ENGINEER/SURVEYOR

JR ENGINEERING
7200 SOUTH ALTON WAY, SUITE C400
CENTENNIAL, CO
P~303.267.6220

PLANNER

SAGE DESIGN GROUP
1500 SOUTH PEARL STREET, SUITE 200
DENVER, CO 80210
P~303.470.2855

TRAFFIC ENGINEER

JR ENGINEERING
7200 SOUTH ALTON WAY, SUITE C400
CENTENNIAL, CO
P~303.267.6183

GEOTECHNICAL ENGINEER

CTL THOMPSON, INC
1971 WEST 12TH VAE.
DENVER, CO 80204
P~303.825.0777

BENCHMARK

NGS CONTROL POINT UNBEWUST BEING A 3.5 INCH DIAMETER BRASS CAP. LOCATED ABOUT 3.2 MILES SOUTH OF INTERSTATE 25 AND COLORADO STATE HIGHWAY 470 INTERCHANGE, GO SOUTH ON INTERSTATE 25 FOR 2.9 MILES TO EXIT 191. PROCEED ON A PAVED ROAD TO THE SOUTHWEST FOR 0.2 MILES TO THE STATION ON THE LEFT. IN THE NORTHWEST CORNER OF A 24 FOOT BY 16 FOOT ROCK OUTCROP. IT IS 22.5 FEET EAST OF THE CENTERLINE OF THE PAVED ROAD, 123 FEET NORTH OF THE OUTLET OF A 3 FOOT CORRUGATED STEEL PIPE CULVERT AND APPROXIMATELY 350 FEET WEST OF THE WEST EDGE OF OIL OF SOUTHBOUND INTERSTATE 25, ELEVATION: 6125.32 (NAVD88).

BASIS OF BEARING

BEARING SHOWN HEREON ARE GRID BEARINGS DERIVED FROM GPS OBSERVATION BASED UPON THE COLORADO COORDINATE SYSTEM OF 1983 CENTRAL ZONE (NAD 83, 2011) REFERENCED TO THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, SIXTH PRINCIPAL MERIDIAN BEING MONUMENTED AS SHOWN HEREON, TAKEN TO BEAR NORTH 89°31'58" EAST, A DISTANCE OF 2635.13 FEET.

Know what's below. Call before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=400'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	APL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
COVER

SHEET 223 OF 270

JOB NO. 15950.01

GENERAL PROJECT NOTES:

1. ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION OF IMPROVEMENTS SHALL MEET OR EXCEED THE GOVERNING CITY, COUNTY, AND/OR STATE AND APPLICABLE UTILITY DISTRICT STANDARDS AND SPECIFICATIONS, AND APPLICABLE STATE AND FEDERAL REGULATIONS. WHERE THERE IS A CONFLICT BETWEEN THESE PLANS AND ANY APPLICABLE STANDARDS, THE HIGHER QUALITY STANDARD SHALL APPLY. ALL WORK SHALL BE INSPECTED AND APPROVED BY THE CITY AND APPLICABLE UTILITY DISTRICT(S).

2. THE SITE CONSTRUCTION PLANS LISTED WITHIN THIS PLAN SET ARE NOT FOR CONSTRUCTION UNLESS APPROVED BY THE APPROPRIATE GOVERNING JURISDICTION. THE CONTRACTOR SHALL CONFIRM SAID APPROVAL PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL KEEP ONE (1) SIGNED COPY OF THE APPROVED SET OF PLANS, APPROPRIATE SPECIFICATIONS AND STANDARDS, AND APPROVED PERMITS ONSITE AT ALL TIMES.

3. NO REVISIONS SHALL BE MADE TO THESE PLANS WITHOUT THE APPROVAL OF THE CITY, COUNTY, STATE OR LOCAL DISTRICT AND THE ENGINEER OF RECORD.

4. ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARDS, UNLESS SPECIFICALLY STATED OTHERWISE.

5. THE CONTRACTOR IS RESPONSIBLE FOR ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS SHOWN ON THESE DRAWINGS OR DESIGNATED TO BE PROVIDED, INSTALLED, CONSTRUCTED, REMOVED, OR RELOCATED UNLESS SPECIFICALLY NOTED OTHERWISE.

6. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND LICENSES FOR WORK INCLUDING, BUT NOT LIMITED TO DEMOLITION, STREET CUTS, UTILITY INTERFERENCES, TRAFFIC CONTROL, GRADING, AND UTILITY FROM ALL APPLICABLE AGENCIES; AND FOR COMPLYING WITH ALL PROVISIONS INCLUDED THEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL OTHER APPLICABLE PERMITS NOT SPECIFICALLY REQUIRED BY THE AUTHORITY HAVING JURISDICTION.

7. THE CONTRACTOR SHALL UTILITY STAKE PROJECT AT LEAST 2 WORKING DAYS PRIOR TO BEGINNING EXCAVATION OR GRADING, TO HAVE ALL REGISTERED UTILITY LOCATIONS MARKED. OTHER UNREGISTERED UTILITY ENTITIES (I.E. DITCH COMPANY) ARE TO BE LOCATED BY CONTACTING THE RESPECTIVE REPRESENTATIVE.

8. THE CONTRACTOR IS RESPONSIBLE FOR FIELD LOCATING AND VERIFYING ELEVATIONS OF ALL EXISTING SEWER MAINS, WATER MAINS, CURBS, GUTTERS, AND OTHER UTILITIES AT THE POINTS OF CONNECTION SHOWN ON THE PLANS, AND AT ANY UTILITY CROSSINGS PRIOR TO INSTALLING ANY OF THE NEW IMPROVEMENTS. IF A CONFLICT EXISTS AND/OR A DESIGN MODIFICATION IS REQUIRED, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO MODIFY THE DESIGN. DESIGN MODIFICATION(S) MUST BE APPROVED BY THE APPROPRIATE AUTHORITY PRIOR TO BEGINNING CONSTRUCTION.

9. ANY DISRUPTION OF UTILITY SERVICE THAT IS REQUIRED TO ADJUST, EXTEND, RELOCATE OR OTHERWISE REARRANGE ANY UTILITY WITHIN THE PROJECT AREA SHALL BE COORDINATED IN ADVANCE WITH THE AFFECTED UTILITY ENTITY.

10. RIM ELEVATIONS SHOWN ARE APPROXIMATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS. THE CONTRACTOR SHALL USE PRECAST CONCRETE ADJUSTMENT RINGS, GROUT, AND STEEL SHIMS TO ADJUST THE MANHOLE FRAMES TO FINAL GRADE IN CONFORMANCE WITH THE CITY OR UTILITY COMPANY/DISTRICT STANDARD SPECIFICATIONS. ALL FRAMES SHALL BE ADJUSTED TO FINAL GRADE PRIOR TO THE FINAL LIFT OF ASPHALT.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF PROJECT SAFETY INCLUDING, BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.

12. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN, IN ACCORDANCE WITH THE M.U.T.C.D. TO THE APPROPRIATE RIGHT-OF-WAY AUTHORITY (CITY, COUNTY, OR STATE) FOR APPROVAL, PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN, OR AFFECTING, THE RIGHT-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED BY THE CONSTRUCTION ACTIVITIES. ALL WORK WITHIN THE RIGHT OF WAY SHALL BE DONE IN ACCORDANCE WITH THE GOVERNING AUTHORITY'S STANDARDS AND SPECIFICATIONS.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANING AND RESTORATION OF ANY EXISTING IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO STREET PAVEMENT, FENCES, SOD, LANDSCAPING, SPRINKLER SYSTEMS, AND UTILITIES DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL LOCATION AND CONDITION.

14. INCLUDED IN THESE PLANS IS THE DEMOLITION AND DISPOSAL OF ALL EXISTING UTILITIES, SITE IMPROVEMENTS, STRUCTURES, AND SITE FURNISHINGS NEEDED FOR CONSTRUCTION OF THE IMPROVEMENTS SHOWN HEREON. ALL QUESTIONS IN REGARD TO DEMOLITION SHALL BE SUBMITTED TO THE OWNER IN WRITING PRIOR TO BID.

15. ALL DEMOLITION, REMOVAL, DISPOSAL, AND ABANDONMENT OF UTILITIES, STRUCTURES, SITE IMPROVEMENTS, AND SITE FURNISHINGS SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL STANDARDS AND SPECIFICATIONS, AND PERMIT REQUIREMENTS.

16. ALL DISTURBED SOIL, ON- OR OFF-SITE AND RELATED TO WORK AT THIS PROJECT SITE, IS REQUIRED TO BE PROTECTED FROM WIND AND STORM WATER EROSION. TO MITIGATE EROSION, THE CONTRACTOR SHALL USE STANDARD EROSION CONTROL TECHNIQUES DESCRIBED IN THE GESC PLAN SET AND GESC REPORT FOR THIS PROJECT.

17. ALL STRUCTURAL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY GROUND-DISTURBING ACTIVITY. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED IN GOOD REPAIR BY THE CONTRACTOR UNTIL SUCH TIME AS THE ENTIRE DISTURBED AREA IS STABILIZED WITH HARD SURFACE OR PERMANENT LANDSCAPING. THE CONTRACTOR IS RESPONSIBLE FOR REFERRING TO ANY EROSION AND SEDIMENT CONTROL, STORMWATER MANAGEMENT, STORMWATER POLLUTION PREVENTION, OR SIMILAR PLAN AND/OR NARRATIVE AND ASSOCIATED PERMITS INCLUDING, BUT NOT LIMITED TO GRADING PERMITS, AND COMPLYING WITH THE REQUIREMENTS THEREIN.

18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK, INSPECTIONS, AND CERTIFICATIONS AS REQUIRED BY THE CITY, STATE OR LOCAL DISTRICTS. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST ASSOCIATED WITH THE INSPECTION AND CERTIFICATION UNLESS OTHERWISE ARRANGED WITH THE OWNER/DEVELOPER. THE CONTRACTOR SHALL COORDINATE ALL CERTIFICATIONS, AND PROVIDE FIELD SURVEYED AS-BUILT INFORMATION FOR REVIEW BY THE OWNER/DEVELOPER AND/OR ENGINEER AS EARLY AS POSSIBLE IN THE CONSTRUCTION SCHEDULE TO AVOID POTENTIAL DELAYS.

19. CONTRACTOR IS RESPONSIBLE FOR AS-BUILT DRAWINGS, TESTS, REPORTS, AND/OR ANY OTHER CERTIFICATES OR INFORMATION AS REQUIRED FOR ACCEPTANCE OF WORK FROM CITY, UTILITY DISTRICTS, OR ANY OTHER GOVERNING AGENCY, OR TO THE OWNER/DEVELOPER AS REQUIRED BY AND IN ACCORDANCE WITH THE GOVERNING AUTHORITY OR OWNER/DEVELOPER'S CRITERIA. CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING AS-BUILT INFORMATION AN A SET OF RECORD DRAWINGS KEPT AT THE CONSTRUCTION SITE AND AVAILABLE TO THE GOVERNING CITY, COUNTY, AND/OR STATE AND UTILITY DISTRICT INSPECTOR AT ALL TIMES. THE CONTRACTOR SHALL CONFIRM ANY REQUIREMENTS AS EARLY AS POSSIBLE IN THE CONSTRUCTION SCHEDULE TO ACCOUNT FOR PREPARATION AND REVIEW OF THE INFORMATION TO AVOID POTENTIAL DELAYS.

20. IF, DURING THE CONSTRUCTION PROCESS, CONDITIONS ARE ENCOUNTERED BY THE CONTRACTOR, HIS SUBCONTRACTORS, OR OTHER AFFECTED PARTIES, WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE OWNER/DEVELOPER AND THE ENGINEER IMMEDIATELY.

21. DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. IF PERTINENT DIMENSIONS ARE NOT SHOWN, CONTACT THE CONSULTING ENGINEER FOR CLARIFICATION AND ANNOTATE THE DIMENSION ON THE AS-BUILT RECORD DRAWING.

22. BENCHMARK VERIFICATION: THE CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS AND THE PROPOSED ELEVATIONS IN THIS CONSTRUCTION PLAN SET AGAINST THE PROJECT BENCHMARK, IDENTIFIED HEREIN, PRIOR TO COMMENCING WORK.

ROADWAY NOTES

1. GUTTERS SHALL BE AT LEAST 6" THICK.
2. ALL CURBS SHALL USE THE CATCH SECTION UNLESS OTHERWISE NOTED.
3. ALL COMBINATION CURB, GUTTER AND SIDEWALKS TO BE 6" THICK (MIN.). SIDEWALKS WITH VERTICAL CURB AND GUTTER TO BE 6" THICK (MIN.).
4. NON-LANDSCAPED MEDIAN ISLANDS SHALL BE COVERED WITH AN ACCEPTABLE IMPERMEABLE SURFACE.
5. IF ANY SECTION OF A DETACHED SIDEWALK IS TO BE PLACED OUTSIDE OF THE ROAD RIGHT-OF-WAY, THEN A SIDEWALK EASEMENT SHALL BE REQUIRED TO MAINTAIN PUBLIC USE.
6. PLACEMENT, MOISTURE AND DENSITY CONTROL FOR SUBGRADE, SUBBASE, AND SURFACING MATERIALS SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS OF CHAPTER 8 OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.

CITY OF LONE TREE GENERAL NOTES

1. THE CITY OF LONE TREE ENGINEER'S SIGNATURE AFFIXED TO THIS DOCUMENT INDICATES THE ENGINEERING DIVISION HAS REVIEWED THE DOCUMENT AND FOUND IT IN GENERAL CONFORMANCE WITH THE CITY OF LONE TREE SUBDIVISION RESOLUTION OR APPROVED VARIANCES TO THOSE REGULATIONS. THE CITY OF LONE TREE ENGINEER, THROUGH ACCEPTANCE OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY, OTHER THAN STATED ABOVE, FOR THE COMPLETENESS AND/OR ACCURACY OF THESE DOCUMENTS. THE OWNER AND ENGINEER UNDERSTAND THAT THE RESPONSIBILITY FOR THE ENGINEERING ADEQUACY OF THE FACILITIES DEPICTED IN THIS DOCUMENT LIES SOLELY WITH THE REGISTERED PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE IS AFFIXED TO THIS DOCUMENT.
2. ALL ROADWAY CONSTRUCTION SHALL CONFORM TO CURRENT DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
3. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE CITY OF LONE TREE ENGINEERING DIVISION. THE CITY RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS STANDARDS AND SPECIFICATIONS.
4. THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS, INSPECTION SECTION, (303) 662-8112, A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO STARTING CONSTRUCTION, AND/OR BEFORE RESTARTING CONSTRUCTION AFTER A SHUTDOWN OF MORE THAN 10 DAYS.
5. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ACTUAL CONSTRUCTION. FOR INFORMATION, CONTACT: UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT (800) 922-1987 OR 811
6. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY (SIGNED BY BOTH DESIGN ENGINEER AND CITY OF LONE TREE) OF THE CONSTRUCTION PLANS AND GESC REPORT AND PLAN, AND ONE (1) COPY OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS AT THE JOB SITE AT ALL TIMES.
7. ALL PROPOSED STREET CUTS TO EXISTING PAVEMENTS FOR UTILITIES, STORM SEWER, OR OTHER PURPOSES ARE LISTED AND REFERENCED BELOW:

   RIDGEGATE PARKWAY

8. A ROW/CONSTRUCTION PERMIT MUST BE OBTAINED BEFORE ANY WORK WITHIN EXISTING OR PROPOSED PUBLIC ROW. THE PERMIT APPLICATION MUST BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR REVIEW/PROCESSING A MINIMUM OF 7 DAYS PRIOR TO UPDATED 2-3-09 REQUESTED START FOR THE WORK IN THE ROW.
9. A PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR ACCEPTANCE WITH THE PERMIT APPLICATION. AN EXCAVATION OR PUBLIC IMPROVEMENTS CONSTRUCTION PERMIT WILL NOT BE ISSUED WITHOUT AN APPROVED TRAFFIC CONTROL PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION.
10. THE CONSTRUCTION PLANS SHALL BE CONSIDERED VALID FOR TWO (2) YEARS FROM THE DATE OF CITY OF LONE TREE ACCEPTANCE/APPROVAL IF APPLICABLE CONSTRUCTION PERMITS HAVE NOT BEEN OBTAINED, AND CONSTRUCTION STARTED WITHIN THAT TIME, THESE PLANS SHALL BE VOID AND WILL BE SUBJECT TO RE-REVIEW AND RE-ACCEPTANCE BY THE CITY OF LONE TREE.
11. CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE ENGINEER INSPECTOR WHEN WORKING OUTSIDE OF THE PUBLIC RIGHT-OF-WAY ON ANY FACILITY WHICH WILL BE CONVEYED TO THE CITY, URBAN DRAINAGE AND FLOOD CONTROL DISTRICT, OR OTHER SPECIAL DISTRICT FOR MAINTENANCE (STORM SEWER, ENERGY DISSIPATERS, DETENTION OUTLET STRUCTURES, OR OTHER DRAINAGE INFRASTRUCTURES). FAILURE TO NOTIFY ENGINEERING INSPECTOR TO ALLOW THEM TO INSPECT THE CONSTRUCTION MAY RESULT IN NON-ACCEPTANCE OF THE FACILITIES/INFRASTRUCTURE BY CITY AND/OR URBAN DRAINAGE.

CITY OF LONE TREE SIGNAGE & STRIPING NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MOST RECENT VERSION OF THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE "COLORADO SUPPLEMENTAL MUTCD" AND THE DOUGLAS COUNTY "ROAD AND CONSTRUCTION STANDARDS MANUAL". FURTHER SPECIFICATIONS AND ILLUSTRATIONS ARE LOCATED IN THE COLORADO DIVISION OF HIGHWAYS "M AND S STANDARDS".
2. DELINEATION OF ROADWAYS SHALL BE AS SPECIFIED IN THE COLORADO "M AND S MANUAL".
3. SPECIAL CARE SHALL BE TAKEN IN SIGN LOCATION TO ENSURE AN UNOBSTRUCTED VIEW OF EACH SIGN. STREET NAME SIGNS SHALL BE MOUNTED SO THAT THEY CAN BE SEEN FROM ALL DIRECTIONS OF TRAVEL.
4. INSTALLATION OF SIGNS SHALL CONFORM TO THE MUTCD MOUNTING HEIGHT REQUIREMENTS, INCLUDING A 7-FOOT MINIMUM HEIGHT FROM THE BOTTOM OF THE LOWEST SIGN PANEL TO THE TOP GRADE OF SIDEWALK.
5. ALL NEWLY INSTALLED TRAFFIC SIGNS SHALL MEET THE MINIMUM RETRO-REFLECTIVITY AND ILLUMINATION STANDARDS AS SET FORTH BY THE MUTCD (LATEST EDITION). THESE MINIMUM REQUIREMENTS SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
6. DIAMOND GRADE MATERIAL SHALL BE USED ON ALL STOP SIGNS.
7. THE CONTRACTOR INSTALLING SIGNS IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND UTILITIES. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.
8. FOLLOWING INSTALLATION, THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS DEPARTMENT, 303-662-8112. A FIELD INSPECTION OF LOCATION AND INSTALLATION OF ALL SIGNS SHALL BE PERFORMED BY PUBLIC WORKS. ALL DISCREPANCIES IDENTIFIED DURING THE FIELD INSPECTION MUST BE CORRECTED BEFORE THE TWO-YEAR WARRANTY PERIOD WILL BEGIN.
9. SIGNAGE AND STRIPING HAS BEEN DETERMINED BY INFORMATION AVAILABLE AT THE TIME OF REVIEW.
   PRIOR TO INITIATION OF THE WARRANTY PERIOD, LONE TREE RESERVES THE RIGHT TO REQUIRE MODIFICATIONS TO EXISTING OR INSTALLATION OF ADDITIONAL SIGNAGE AND/OR STRIPING IF THEY DETERMINE THAT AN UNFORESEEN CONDITION WARRANTS SUCH MODIFICATION ACCORDING TO THE MUTCD OR THE CDOT M AND S STANDARDS. ALL SIGNAGE AND STRIPING SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
10. FINAL STRIPING AND CROSSWALK LAYOUT TO BE APPROVED BY THE CITY OF LONE TREE PRIOR TO INSTALLATION. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.
11. CROSSWALKS SHALL:
    BE CONSTRUCTED USING 125 MIL PREFORMED THERMOPLASTIC.
    LINE UP WITH THE HANDICAP RAMPS AT BOTH ENDS.
    BE CENTERED ON LANE LINES SO AS TO BE STRADDLED BY VEHICLES.
12. ALL PAVEMENT MARKINGS SHALL BE AS FOLLOWS:
    FOR CONCRETE SURFACE: METHYL METHACRYLATE OR EPOXY PAINT.
    FOR ASPHALT SURFACE: PAINT, 90 MIL PREFORMED THERMOPLASTIC, INLAID MARKING TAPE, METHYL METHACRYLATE, OR EPOXY PAINT.
    TURN ARROWS AND ONLYS: 125 MIL PREFORMED THERMOPLASTIC.
13. ALL PAVEMENT MARKING SHALL BE PRECEDED BY THE APPROPRIATE SURFACE PREPARATION.
14. ANY SIGNAGE AND/OR OTHER TRAFFIC CONTROL DEVICES REMOVED SHALL BE RETURNED TO THE CITY OF LONE TREE.
15. TYPE III LIGHTED BARRICADES SHALL BE SET AT ENDS OF ROADWAYS, SEPARATING FINISHED AND UNFINISHED CONSTRUCTION AREAS AND WILL BE MAINTAINED BY THE CONTRACTOR/DEVELOPER.

NOTE: ALSO SEE CITY OF LONE TREE "STREET SIGN DETAILS"FOR ADDITIONAL INTERSECTION STREET SIGNAGE REQUIREMENTS.

STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON-GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.

DRAINAGE STRUCTURE NOTES

1. CONCRETE WORK SHALL CONFORM TO ACI 301, ACI 350.
2. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM-615, GRADE 60.
3. ALL EXPOSED CONCRETE SHALL HAVE A CDOT CLASS 2 OR 5 FINISH.
4. ALL EXPOSED CONCRETE CORNERS SHALL HAVE ¾"CHAMFERS.
5. DETAILING, FABRICATION, AND PLACING OF REBAR SHALL BE IN ACCORDANCE WITH ACI 315.
6. CONSTRUCTION TOLERANCES SHALL BE IN ACCORDANCE WITH ACI 347.
7. ALL MANHOLES SHALL BE SLAB BASE UNLESS SPECIFIED OTHERWISE. MANHOLE SHALL BE FABRICATED IN ACCORDANCE WITH CDOT STANDARD M-604-20.
8. COORDINATES FOR MANHOLES AND AREA INLETS ARE SHOWN AT THE CENTER OF THE STRUCTURE. COORDINATES FOR MOUNTABLE CURB INLETS ARE SHOWN ALONG THE FLOWLINE AT CENTER OF THE STRUCTURE.
9. ALL TYPE C AND D INLETS SHALL HAVE CLOSE MESH GRATES UNLESS SPECIFIED OTHERWISE.
10. LENGTH OF FABRICATED BAR GRATING PANELS IS LENGTH OF BEARING BARS, WIDTH REFERS TO DIMENSION PERPENDICULAR TO BEARING BARS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PANEL DIMENSIONS GIVEN PRIOR TO FABRICATION.

DRAINAGE GENERAL NOTES

1. PROJECT FACILITIES ARE TO BE LOCATED BASED ON THE SURVEY COORDINATES, ELEVATIONS, DIMENSIONS, AND/OR GEOMETRIC DESIGN DATA PROVIDED ON THE DRAWINGS.
2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES AND FOR SATISFYING ALL APPLICABLE OSHA, FEDERAL, STATE, AND LOCAL REGULATIONS. TEMPORARY EXCAVATIONS SHALL PROVIDE, AT MINIMUM, THE TRENCH DIMENSIONS AND CLEARANCES SHOWN OR SPECIFIED. TEMPORARY CONSTRUCTION SLOPES SHALL BE SLOPED, SHORED, SHEETED, AND/OR BRACED IN ACCORDANCE WITH STABILITY REQUIREMENTS AND APPLICABLE REGULATIONS, AND SHALL BE NO STEEPER THAN THE SLOPES SHOWN OR SPECIFIED WITHOUT THE APPROVAL OF THE ENGINEER. ANY SUCH APPROVALS BY THE ENGINEER WILL NOT RELIEVE THE CONTRACTOR FROM SOLE RESPONSIBILITY FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES.
3. EXISTING FACILITIES NOT INDICATED TO BE REMOVED SHALL BE PROTECTED IN PLACE OR REMOVED AND REPLACED IN KIND, AS APPROVED BY ENGINEER.
4. THE WORK WILL TAKE PLACE IN AND AROUND DRAINAGE SWALES AND THE HAPPY CANYON CREEK, SUBJECT TO PERIODIC FLOODING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF SURFACE AND SUBSURFACE WATER DURING THE COURSE OF THE WORK. ANY DAMAGE TO THE WORK RESULTING FROM SURFACE FLOWS, BASE FLOWS, OR FLOOD FLOWS INCLUDING BUOYANCY FORCES ON PIPELINES AND OTHER FACILITIES SHALL BE CORRECTED BY THE CONTRACTOR AT THE CONTRACTOR'S SOLE COST. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND SATISFYING THE REQUIREMENTS OF ANY APPLICABLE PERMITS PERTAINING TO WATER AND EROSION CONTROL.
5. CONTACT THE ENGINEER FOR CLARIFICATIONS OF ANY ABBREVIATIONS SHOWN ON THE DRAWINGS.
6. THE SITE WHERE THE WORK IS TO BE PERFORMED SHALL BE OVERLOT GRADED. TOPSOIL SHALL BE SPREAD IN OPEN SPACE AREAS TO A DEPTH OF APPROXIMATELY 6-INCHES. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED, AND SOME AREAS COVERED WITH EROSION CONTROL BLANKETS, UNLESS OTHERWISE DIRECTED IN THE PLANS OR BY THE ENGINEER. CARE SHALL BE TAKEN TO AVOID DISTURBING ANY OPEN SPACE AREAS EXCEPT THE MINIMUM NECESSARY TO PERFORM THE WORK. TOPSOIL IN ANY WORK AREAS OR ACCESS ROADS WITHIN THE OPEN SPACE SHALL BE STRIPPED AND STOCKPILED PRIOR TO THE WORK, PROTECTED FROM MIXING WITH ANY OTHER MATERIALS DURING THE WORK, AND REPLACED TO A LOOSE DEPTH OF 7- TO 8- INCHES (FINAL DEPTH AFTER SETTLEMENT SHALL BE 6- INCHES MINIMUM) AS THE WORK IS BEING COMPLETED. WHERE BLANKETS EXIST, THE MINIMUM AREA OF BLANKET TO ALLOW WORK TO PROGRESS SHALL BE REMOVED AND THEN THE REMOVED OR NEW BLANKET REPLACED AFTER UNDERLYING WORK IS COMPLETE (EXCEPT NO TEMPORARY BLANKET NEEDS TO BE REPLACED OVER ROCK OR COIR BLANKET SHOWN IN THE PLANS). JUST PRIOR TO REPLACEMENT OF TOPSOIL AFTER UNDERLYING WORK IS COMPLETE AND APPROVED, THE UNDERLYING SUBGRADE IN OPEN SPACE AREAS SHALL BE LOOSENED BY TILLING TO A DEPTH OF 12- INCHES UNTIL CLODS ARE NO LARGER THAN 3 INCHES, AND APPROVED BY THE ENGINEER. THIS NOTE ALSO APPLIES TO AREAS WHERE COIR MAT IS TO BE INSTALLED.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ANY COMPLETED WORK FROM DISTURBANCE OR DAMAGE DURING THE COURSE OF THE WORK. IF REQUESTED BY THE CONTRACTOR AND APPROVED BY THE OWNER, SIGNIFICANT COMPLETED SECTIONS OF THE WORK MAY BE ACCEPTED AS FINAL PRIOR TO THE COMPLETION OF THE ENTIRE PROJECT. ANY SUCH EARLY ACCEPTANCE WILL NEED TO BE IN WRITING BY THE ENGINEER AND OWNER AND THOSE PORTIONS OF THE WORK SHALL BE PROTECTED BY THE CONTRACTOR AGAINST VEHICLES RUNNING OVER THE AREA BY ENCIRCLING THE WORK WITH FLAGGING OR FENCING OR BY OTHER MEANS AGREED TO BY THE OWNER AND MAINTAINED BY THE CONTRACTOR UNTIL THE END OF THE PROJECT.
8. ALL FINE GRADING REQUIRED TO CONSTRUCT DRAINAGE IMPROVEMENTS AND PROVIDE FINISHED GRADES ADJACENT TO IMPROVEMENTS SHALL BE DONE BY THE DRAINAGE CONTRACTOR AND SHALL BE CONSIDERED PART OF THE WORK, AND NOT PAID FOR SEPARATELY.

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	N/A
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
GENERAL NOTES

SHEET 224 OF 270

JOB NO. 15950.01

LAYER LINETYPE LEGEND

	EXISTING	PROPOSED
PHASE LINE		
MATCH LINE		
SECTION LINE		
BOUNDARY LINE		
PROPERTY LINE		
EASEMENT LINE		
RIGHT OF WAY		
R.O.W. A LINE	A	A
CENTERLINE		
CITY LIMITS		
WIRE FENCE		
CHAIN LINK FENCE		
WOOD FENCE		
MASONRY FENCE		
GUARDRAIL		
CONC. BARRIER		
CABLE TV	TV	TV
ELECTRIC	E	E
FIBER OPTIC	FO	FO
GAS MAIN	G	G
IRRIGATION MAIN	IRR	IRR
OIL/PETRO. MAIN	O	O
OVERHEAD UTILITY	OHU	OHU
SANITARY SEWER	S	
STORM DRAIN		
TELEPHONE	T	T
WATER MAIN	W	
RAW WATER LINE	RWL	RWL
SWALE/WATERWAY FLOWLINE		
DIVERSION DITCH		
DIVERSION CHANNEL		
MAJOR DRAINAGE BASIN		
MINOR DRAINAGE BASIN		
TOP OF SLOPE		
TOE OF SLOPE		
EDGE OF WATER		
INDEX CONTOUR	6100	6100
INTERMEDIATE CONTOUR		
DEPRESSION CONT. (INDEX)	6100	6100
DEPRESSION CONT. (INTER)		
TOP OF CUTS		
TOE OF FILLS		
CUT AND FILL LINE		C/F
SILT FENCE	SF	SF
100 YEAR FLOODPLAIN	100YR	100YR
500 YEAR FLOODPLAIN	500YR	500YR
FLOODWAY	FLDWY	FLDWY
BASE FLOOD ELEVATION		
EDGE OF WETLANDS		
STONE WALL		

UTILITIES LEGEND

	EXISTING	PROPOSED
STORM SEWER		
MANHOLE	Ⓓ	◉
STORM INLET		▣
AREA INLET – SQUARE	□	
AREA INLET – ROUND	○	
FLARED END SECTION	▷	
RIPRAP		
SANITARY SEWER		
LINE MARKER	Mkr San	
SERVICE MARKER	△	
CLEAN–OUT	⊸	⊸
MANHOLE W/ DIRECTIONAL FLOW ARROW	Ⓢ	◉
WATER LINE		
LINE MARKER	Mkr W	
SERVICE MARKER	△	
FIRE HYDRANT		
FIRE CONNECTION		
MANHOLE	Ⓦ	●
BEND		
BLOW–OFF VALVE		
WELL	WELL	WELL
METER	Ⓜ	●
VALVE	⋈	
REDUCER		
THRUST BLOCK		
CROSS		
PLUG W/ THRUST BLOCK		
TEE		
REVERSE ANCHOR		
ANODE		
AIR & VACUUM VALVE ASSEMBLY		
TRANSMISSION BLOW–OFF ASSEMBLY		
GAS LINE		
MARKER	Mkr G	
SERVICE MARKER	△	
METER		
VALVE		
PLUG		
TEE		
DRY UTILITIES		
CABLE TV MARKER	Mkr TV	
CABLE TELEVISION PEDESTAL	TV	
ELECTRIC MARKER	Mkr E	
ELECTRIC SERVICE MARKER	△	
ELECTRICAL PEDESTAL	E	
ELECTRICAL METER	E	
ELECTRICAL MANHOLE	E	
FIBER–OPTIC MARKER	Mkr FO	
IRRIGATION PEDESTAL	I	
TELEPHONE MARKER	Mkr T	
TELEPHONE PEDESTAL	T	
TELEPHONE MANHOLE	T	
UTILITY POLE		
GUY ANCHOR		
GUY POLE		
MISC. UTILITIES		
VENT PIPE	VP	VP
TEST HOLE DESIGNATOR	THE FIRM AGENCY	

MONUMENTATION LEGEND

ALUMINUM CAP – FOUND	●AC
BRASS CAP – FOUND	●BC
BENCHMARK – FOUND	
CROSS – FOUND	+
MONUMENT – SET	○
MONUMENT – FOUND (DEFAULT)	●
MONUMENT – FOUND (ALTERNATE 1)	■
MONUMENT – FOUND (ALTERNATE 2)	◉
MONUMENT – FOUND (ALTERNATE 3)	▲
MONUMENT – FOUND (ALTERNATE 4)	◬
MONUMENT – FOUND (ALTERNATE 5)	⬟
MONUMENT – FOUND (ALTERNATE 6)	◉
MONUMENT – FOUND (ALTERNATE 7)	◬
NAIL & WASHER – FOUND	●NAIL & WASHER
PANEL – FOUND	
PK NAIL – FOUND	●PK NAIL
ROW MONUMENT – FOUND	
ROW MARKER – FOUND	⊡
SECTION CORNER – FOUND	
SECTION CORNER – SET	
QUARTER–SECTION CORNER – FOUND	
QUARTER–SECTION CORNER – SET	
SECTION CENTER – FOUND	◉
SECTION CENTER – FOUND	◎
CONTROL/TRAVERSE POINT – SET	△

TRAFFIC LEGEND

	EXISTING	PROPOSED
PARKING METER		
TRAFFIC SIGNAL BOX		
TRAFFIC SIGNAL POLE		
TRAFFIC SIGNAL		
BARRICADE		
GUARD RAIL POST		
IMPACT ATTENUATOR		
BRIDGE STYLE HIGHWAY SIGN POST		
CANTILEVER STYLE HIGHWAY SIGN POST		
SIGN		
RAILROAD MARKER/SIGN		
STREET LIGHT		
STREET LIGHT – SINGLE		
STREET LIGHT – DOUBLE		
LUMINAIRE		
ALTERNATE LUMINAIRE		
SIGNAL MAST ARM W/ LUMINAIRE		
PEDESTAL POLE FOUNDATION		
TRAFFIC SIGNAL POLE		
ROUND PULL BOX		
MEDIUM PULL BOX		
LARGE PULL BOX (20X33X15)		
SIGNAL HEAD WITHOUT BACK PLATE		
SIGNAL HEAD WITH BACK PLATE		
PEDESTRIAN SIGNAL HEAD		
VIDEO IMAGE DETECTOR		
OPTICOM DETECTOR		
VEHICLE DETECTION ZONE		V

STORM WATER MANAGEMENT

	KEY	SYMBOL
CHECK DAM	CD	
CONSTRUCTION ROAD STABILIZATION	CRS	
CURB SOCK INLET PROTECTION	CS	
CONCRETE WASHOUT AREA	CWA	
DIVERSION DITCH AND DIKE, TEMPORARY	DD	
DIVERSION CHANNEL, TEMPORARY	DV	
DEWATERING	DW	
EROSION CONTROL BLANKET	ECB	
INLET FILTER	IF	
INLET PROTECTION	IP	
MULCHING	MU	
OUTLET PROTECTION	OP	
PAVED FLUME	PF	
PERMENENT SEEDING	PS	
REINFORCED CONCRETE DAM	RCD	
ROUGH CUT STREET CONTROL	RCS	
SEDIMENT BASIN	SB	
SEDIMENT CONTROL LOG	SCL	
SILT FENCE	SF	
SURFACE ROUGHENING	SR	
STABILIZED STAGING AREA	SSA	
SEDIMENT TRAP	ST	
STRAW BALE BARRIER	STB	
TERRACING	TER	
TEMPORARY SEEDING	TS	
TEMPORARY STREAM CROSSING CULVERT/BRIDGE	TSC C	
TEMPORARY STREAM CROSSING FORD TYPE	TSC F	
TEMPORARY SLOPE DRAIN	TSD	
VEHICLE TRACKING CONTROL	VTC	
VEHICLE TRACKING CONTROL WITH WASH RACK	WR	

DRAINAGE REPORT PLANS

	KEY
BASIN DESIGNATION (NO COEFFICIENT)	# #.##
BASIN DESIGNATION (1 COEFFICIENT)	# #.## #
BASIN DESIGNATION (2 COEFFICIENTS)	# #.## #
ANALISYS POINT IDENTIFIER	#
BASIN DESIGNATION (HISTORIC)	# #-##
BASIN DESIGNATION (DEVELOPED)	# #.##
SUB–BASIN DESIGNATION (DEVELOPED)	# ##
DRAINAGE PIPE IDENTIFIER	##
DRAINAGE POINT IDENTIFIER (HEXAGONAL)	##
DRAINAGE POINT IDENTIFIER (TRIANGULAR)	?
SWMM DESIGNATION 1	#
SWMM DESIGNATION 2	#
SWMM DESIGNATION 3	#
SWMM DESIGNATION 4	?

LANDSCAPE LEGEND

	EXISTING	PROPOSED
TREE – CONIFEROUS		
TREE – DECIDUOUS		
SHRUB/BUSH		
SHRUBS AND BUSHES		
IRRIGATION BOX		
IRRIGATION SPRINKLER		
IRRIGATION VALVE		
BOLLARD		
FLAGPOLE	FP	

811 Know what's **below.** **Call** before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED PROFESSIONAL ENGINEER — AARON LEE CLUTTER — 36742

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

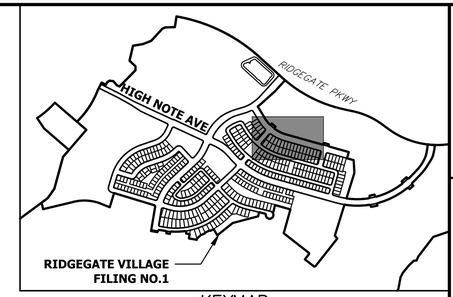
No.	REVISION	BY	DATE

H–SCALE	N/A
V–SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

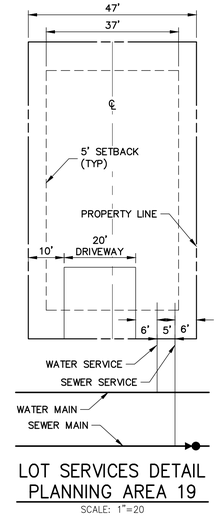
RIDGEGATE SOUTHWEST VILLAGE FILING 1
LEGEND

SHEET 225 OF 270

JOB NO. 15950.01



KEYMAP
SCALE:1"=1000'



LOT SERVICES DETAIL
PLANNING AREA 19
SCALE: 1"=20

30 15 0 30 60
ORIGINAL SCALE: 1" = 30'

Know what's below. Call before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

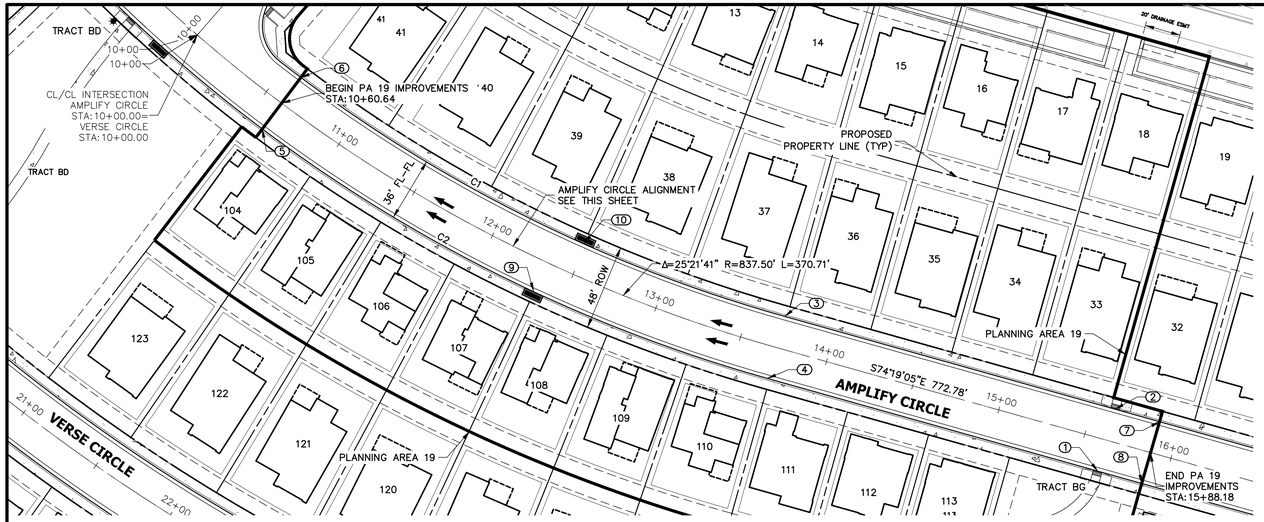
H-SCALE	1"=30'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	APL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

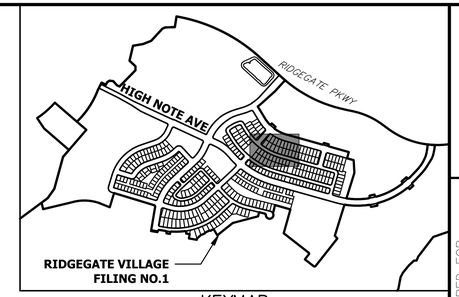
OVERALL UTILITY PLAN

SHEET 226 OF 270

JOB NO. 15950.01



POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
1	15+62.51	18.00' (RT)	AMPLIFY CIRCLE	6044.97		HC RAMP MID PT
2	15+62.51	18.00' (LT)	AMPLIFY CIRCLE	6044.97		HC RAMP MID PT
3	13+70.71	18.00' (LT)	AMPLIFY CIRCLE	6035.64		PT
4	13+70.71	18.00' (RT)	AMPLIFY CIRCLE	6035.64		PT
5	10+60.64	18.00' (RT)	AMPLIFY CIRCLE	6020.95		PC
6	10+60.64	18.00' (LT)	AMPLIFY CIRCLE	6020.92		PC
7	15+88.32	18.00' (LT)	AMPLIFY CIRCLE	6045.68		PC
8	15+88.04	18.00' (RT)	AMPLIFY CIRCLE	6045.94		PC
9	12+34.40	18.00' (RT)	AMPLIFY CIRCLE	6028.52		SUMP INLET
10	12+48.51	18.00' (LT)	AMPLIFY CIRCLE	6029.22		SUMP INLET



KEYMAP
SCALE:1"=1000'

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

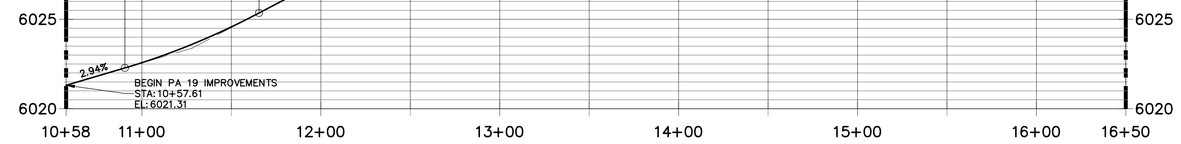
PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

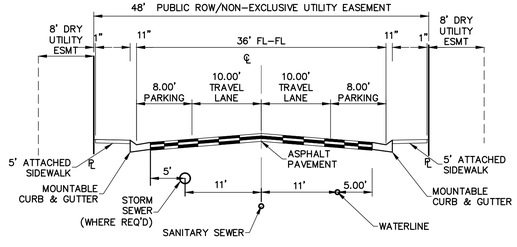
NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE SHEET 225 FOR LEGEND.
4. SEE THIS SHEET FOR TYPICAL STREET SECTIONS.
5. SEE SHEET 230 FOR SUMP PROFILES.
6. SEE SHEET 229 FOR CURB RAMP DETAILS.
7. SEE SHEET 231 FOR SIGNAGE AND STRIPING.
8. ALL CURB RADII ARE 25' UNLESS OTHERWISE NOTED.
9. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.

AMPLIFY CIRCLE PROFILE
STA 10+57.61 TO 16+50.00

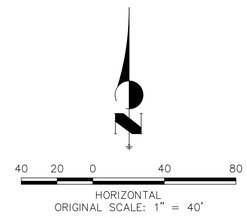


CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C1	22°15'32"	819.50'	318.37'
C2	42°50'22"	855.50'	639.65'



SECTION F-F

TYPE IV - ALTERNATE 48-FOOT R.O.W. LOCAL STREET WITH PARKING ON BOTH SIDES OF THE STREET (PUBLIC)



HORIZONTAL
ORIGINAL SCALE: 1" = 40'
VERTICAL
ORIGINAL SCALE: 1" = 4'

Know what's **below.**
Call before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED PROFESSIONAL ENGINEER 36742

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

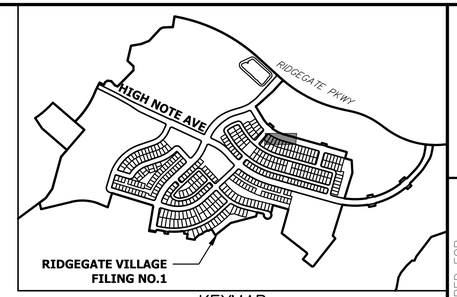
No.	REVISION	BY	DATE

H-SCALE	1"=40'
V-SCALE	1"=4'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	APL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
ROADWAY PLAN & PROFILES

SHEET 227 OF 270

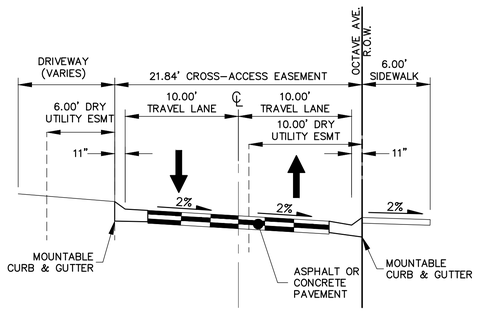
JOB NO. 15950.01



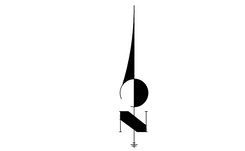
KEYMAP
SCALE:1"=1000'

NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE SHEET 225 FOR LEGEND.
4. SEE THIS SHEET FOR TYPICAL STREET SECTIONS.
5. SEE SHEET 230 FOR SUMP PROFILES.
6. SEE SHEET 229 FOR CURB RAMP DETAILS.
7. SEE SHEET 231 FOR SIGNAGE AND STRIPING.
8. ALL CURB RADII ARE 25' UNLESS OTHERWISE NOTED.
9. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.



PRIVATE ALLEY
ENTRANCE FROM OCTAVE AVENUE
N.T.S.



ORIGINAL SCALE: 1" = 20'

Know what's **below.**
Call before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

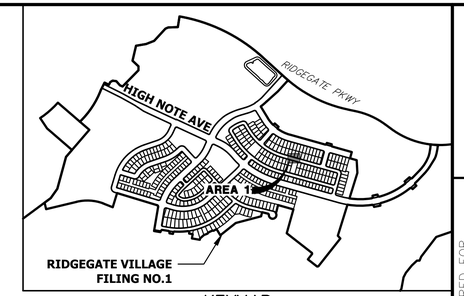
No.	REVISION	BY	DATE

H-SCALE	1"=20'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	APL
CHECKED BY	

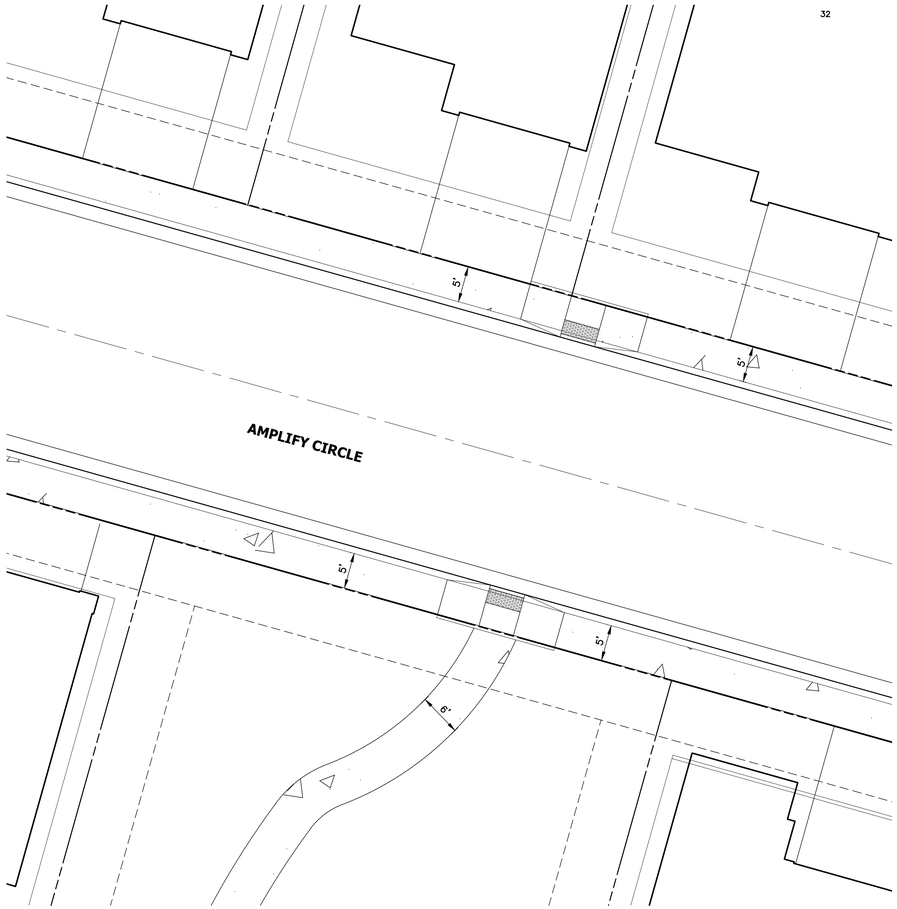
RIDGEGATE SOUTHWEST VILLAGE FILING 1
ROADWAY PLAN & PROFILES

SHEET 228 OF 270

JOB NO. 15950.01



KEYMAP
SCALE:1"=1000'



AREA 1

NOTE: CURB RAMP DETAILS TO BE PROVIDED WITH NEXT SUBMITTAL

10 5 0 10 20
ORIGINAL SCALE: 1" = 10'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

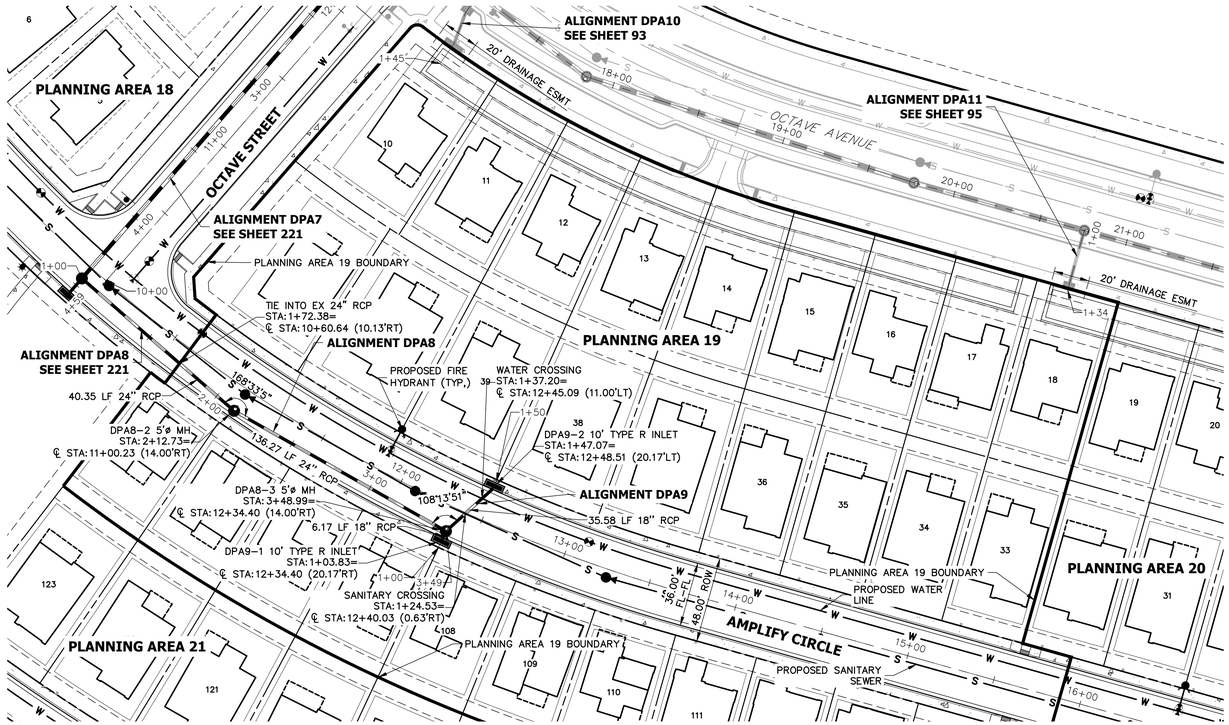
No.	REVISION	BY	DATE

H-SCALE	1"=10'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	APL
CHECKED BY	

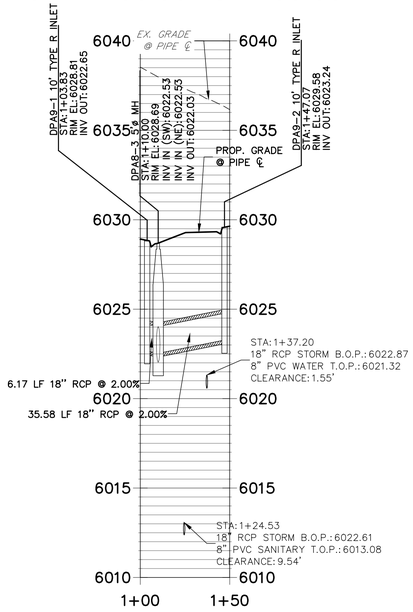
RIDGEGATE SOUTHWEST VILLAGE FILING 1
CURB RAMP DETAILS

SHEET 229 OF 270

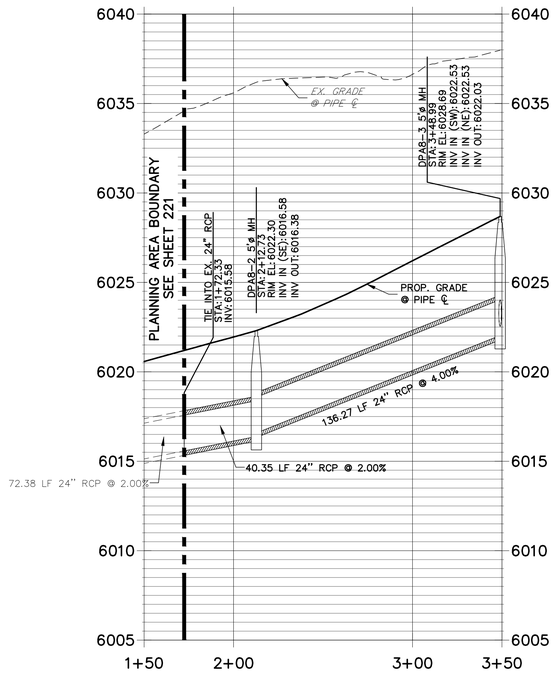
JOB NO. 15950.01

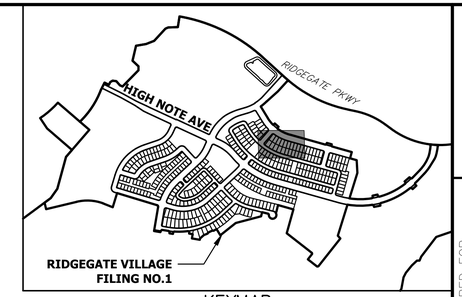


DPA9 PROFILE
STA 1+00.00 TO 1+50.00



DPA8 PROFILE
STA 1+50.00 TO 3+50.00





KEYMAP
SCALE:1"=1000'

UNTIL SUCH TIME AS UNDERGROUND UTILITIES ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=40'
V-SCALE	1"=4'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	APL
CHECKED BY	

HORIZONTAL
ORIGINAL SCALE: 1" = 40'
VERTICAL
ORIGINAL SCALE: 1" = 4'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

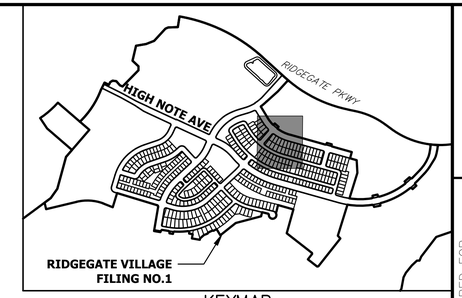
DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

RIDGEGATE SOUTHWEST VILLAGE FILING 1
STORM SEWER PLANS & PROFILES

SHEET 230 OF 270

JOB NO. 15950.01



KEYMAP
SCALE:1"=1000'

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=30'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	APL
CHECKED BY	

30 15 0 30 60
ORIGINAL SCALE: 1" = 30'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

Know what's **below.**
Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

DATE

RIDGEGATE SOUTHWEST VILLAGE FILING 1

SIGNAGE AND STRIPING PLANS

SHEET 231 OF 270

JOB NO. 15950.01

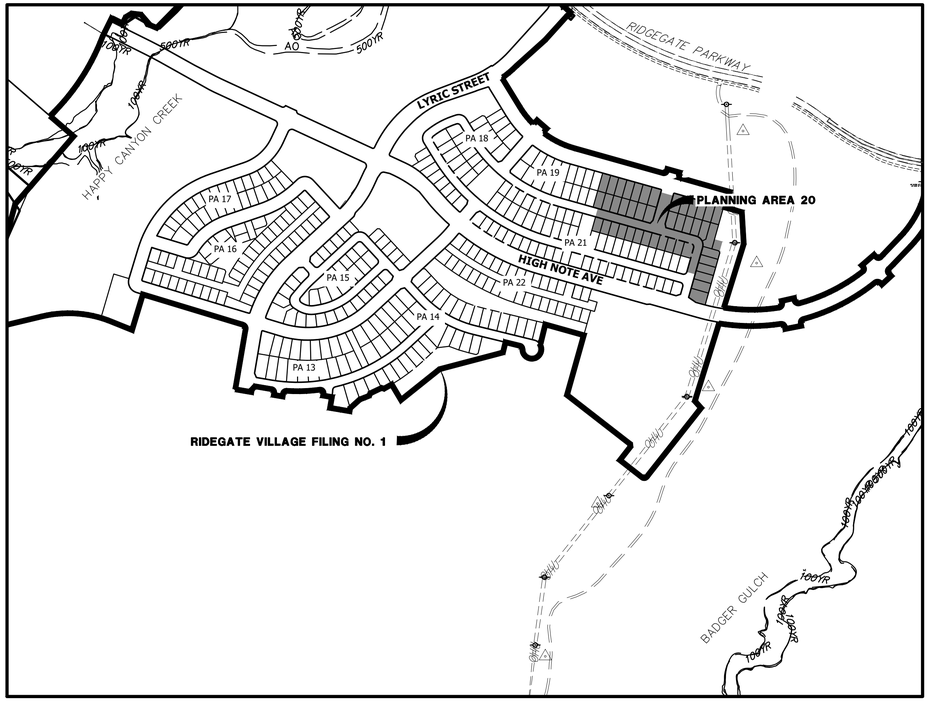
RIDGEGATE SOUTHWEST VILLAGE FILING 1-PLANNING AREA 20

A PORTION OF THE RIDGEGATE PLANNED DEVELOPMENT DISTRICT, EAST SIDE PROPERTY
LOCATED IN SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST
OF THE 6TH P.M., CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO

STREET & DRAINAGE CONSTRUCTION PLANS

ABBREVIATIONS

AC	ACRE
AD	ALGEBRAIC DIFFERENCE
AH	AHEAD
ARCH	ARCHITECT
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASS'Y	ASSEMBLY
AVE	AVENUE
BB	BOX BASE
BK	BACK
BNDY	BOUNDARY
BOP	BOTTOM OF PIPE
BOV	BLOW OFF VALVE
BFV	BUTTERFLY VALVE
BLVD	BOULEVARD
BW	BOTTOM OF WALL
C&G	CURB & GUTTER
CATV	CABLE TELEVISION
CB	CATCH BASIN
CBC	CONCRETE BOX CULVERT
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION
CDS	CUL-DE-SAC
CF	CUBIC FOOT
CFS	CUBIC FEET PER SECOND
CIP	COMPLETE IN PLACE
CL	CENTER LINE
CLOMR	CONDITIONAL LETTER OF MAP REVISION
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
COCS	CITY OF COLORADO SPRINGS
CONC	CONCRETE
CR	CIRCLE
CSP	CORRUGATED STEEL PIPE
CSU	COLORADO SPRINGS UTILITIES
CT	COURT
CTRB	CONCRETE THRUST REDUCER BLOCK
CY	CUBIC YARD
DBPS	DRAINAGE BASIN PLANNING STUDY
DE	DRAINAGE EASEMENT
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DR	DRIVE
DRC	DESIGN REVIEW COMMITTEE
DU	DWELLING UNITS
DY	DAY
E	EAST
EA	EACH
EGL	ENERGY GRADE LINE
EL	ELEVATION
ELEC	ELECTRIC
EOA	EDGE OF ASPHALT
EPC	EL PASO COUNTY
ERCP	ELLIPTICAL RCP
ESMT	EASEMENT
EST	ESTIMATE
EX	EXISTING
FDP	FINAL DEVELOPMENT PLAN
FDR	FINAL DRAINAGE REPORT
FES	FLARED END SECTION
FF	FINISHED FLOOR ELEVATION
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOWLINE
FIL	FILING
FO	FIBER OPTIC CABLE
GB	GRADE BREAK
GE	GAS EASEMENT
GIS	GEOGRAPHIC INFORMATION SYSTEM
GL	GAS LINE
GPS	GLOBAL POSITIONING SYSTEM
GV	GATE VALVE
HBP	HOT BITUMINOUS PAVEMENT
HC	HANDICAP
HDC	HIGH DEFLECTION COUPLING
HDPE	HIGH DENSITY POLYETHYLENE
HGL	HYDRAULIC GRADE LINE
HMA	HOT MIX ASPHALT
HOA	HOME OWNERS ASSOCIATION
HP	HIGH POINT
HR	HOUR
I	INLET
IE	IRRIGATION EASEMENT
INT	INTERSECTION
INV	INVERT
IRR	IRRIGATION
KB	KICK (THRUST) BLOCK
LB	POUND
LE	LANDSCAPE EASEMENT
LF	LINEAR FOOT
LN	LANE
LOMR	LETTER OF MAP REVISION
LP	LOW POINT
LS	LUMP SUM
LT	LEFT
MAX	MAXIMUM
M/D	MOISTURE DENSITY
MDDP	MASTER DEVELOPMENT DRAINAGE PLAN
MH	MANHOLE
MIN	MINIMUM
MS	MOUNTABLE SIDEWALK
N	NORTH
NRCP	NON-REINFORCED CONCRETE PIPE
ODP	OFFICIAL DEVELOPMENT PLAN
OHE	OVERHEAD ELECTRIC
OHU	OVERHEAD UTILITY
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PCR	POINT OF CURB RETURN
PDP	PRELIMINARY DEVELOPMENT PLAN
PE	PROFESSIONAL ENGINEER
PI	POINT OF INTERSECTION
PKWY	PARKWAY
PL	PROPERTY LINE
PR	PROPOSED
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PV	PLUG VALVE
PVC	POLYVINYL CHLORIDE
R	RADIUS
RCBC	REINFORCED CONCRETE BOX CULVERT
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
ROW	RIGHT OF WAY
RT	RIGHT
S	SOUTH
STE	STEEL
SAN	SANITARY SEWER
SF	SQUARE FOOT
ST	STREET
STA	STATION
STM	STORM SEWER
SY	SQUARE YARD
SY-IN	SQUARE YARD INCH
TB	THRUST BLOCK
TBC	TOP BACK OF CURB
TBW	TOP BACK OF WALK
TEL	TELEPHONE
TN	TON
TOA	TOP OF ASPHALT
TOB	TOP OF BOX
TOC	TOP OF CURB OR CONCRETE
TOF	TOP OF FOUNDATION
TOP	TOP OF PIPE
TW	TOP OF WALL
TYP	TYPICAL
UDFCD	URBAN DRAINAGE AND FLOOD CONTROL DISTRICT
UE	UTILITY EASEMENT
U&DE	UTILITY & DRAINAGE EASEMENT
UGE	UNDERGROUND ELECTRIC
VCP	VITRIFIED CLAY PIPE
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
VTC	VEHICLE TRACKING CONTROL
W	WEST
WL	WATER LINE
WM	WATER MAIN
WRD	WATER RESOURCES DEPARTMENT
WS	WATER SURFACE
WSE	WATER SURFACE ELEVATION
WTR	WATER
YR	YEAR



VICINITY MAP
SCALE: 1"=400'

SHEET INDEX

232	COVER SHEET
233	GENERAL NOTES
234	LEGEND
235	OVERALL UTILITY PLAN
236 – 239	ROADWAY PLAN & PROFILES
240	CURB RETURN PROFILES
241	CURB RAMP DETAILS
242	STORM SEWER PLANS & PROFILE
243	SIGNAGE & STRIPING PLANS

BENCHMARK

NGS CONTROL POINT UNBEWUST BEING A 3.5 INCH DIAMETER BRASS CAP. LOCATED ABOUT 3.2 MILES SOUTH OF INTERSTATE 25 AND COLORADO STATE HIGHWAY 470 INTERCHANGE, GO SOUTH ON INTERSTATE 25 FOR 2.9 MILES TO EXIT 191. PROCEED ON A PAVED ROAD TO THE SOUTHWEST FOR 0.2 MILES TO THE STATION ON THE LEFT. IN THE NORTHWEST CORNER OF A 24 FOOT BY 16 FOOT ROCK OUTCROP. IT IS 22.5 FEET EAST OF THE CENTERLINE OF THE PAVED ROAD, 123 FEET NORTH OF THE OUTLET OF A 3 FOOT CORRUGATED STEEL PIPE CULVERT AND APPROXIMATELY 350 FEET WEST OF THE WEST EDGE OF OIL OF SOUTHBOUND INTERSTATE 25, ELEVATION: 6125.32 (NAVD88).

BASIS OF BEARING

BEARING SHOWN HEREON ARE GRID BEARINGS DERIVED FROM GPS OBSERVATION BASED UPON THE COLORADO COORDINATE SYSTEM OF 1983 CENTRAL ZONE (NAD 83, 2011) REFERENCED TO THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, SIXTH PRINCIPAL MERIDIAN BEING MONUMENTED AS SHOWN HEREON, TAKEN TO BEAR NORTH 89°31'58" EAST, A DISTANCE OF 2635.13 FEET.

Know what's **below.**
Call before you dig.

APPLICANT/OWNER

SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
P~303.791.8180

CIVIL ENGINEER/SURVEYOR

JR ENGINEERING
7200 SOUTH ALTON WAY, SUITE C400
CENTENNIAL, CO
P~303.267.6220

PLANNER

SAGE DESIGN GROUP
1500 SOUTH PEARL STREET, SUITE 200
DENVER, CO 80210
P~303.470.2855

TRAFFIC ENGINEER

JR ENGINEERING
7200 SOUTH ALTON WAY, SUITE C400
CENTENNIAL, CO
P~303.267.6183

GEOTECHNICAL ENGINEER

CTL THOMPSON, INC
1971 WEST 12TH VAE.
DENVER, CO 80204
P~303.825.0777

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=400'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	APL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
COVER

SHEET 232 OF 270

JOB NO. 15950.01

GENERAL PROJECT NOTES:

1. ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION OF IMPROVEMENTS SHALL MEET OR EXCEED THE GOVERNING CITY, COUNTY, AND/OR STATE AND APPLICABLE UTILITY DISTRICT STANDARDS AND SPECIFICATIONS, AND APPLICABLE STATE AND FEDERAL REGULATIONS. WHERE THERE IS A CONFLICT BETWEEN THESE PLANS AND ANY APPLICABLE STANDARDS, THE HIGHER QUALITY STANDARD SHALL APPLY. ALL WORK SHALL BE INSPECTED AND APPROVED BY THE CITY AND APPLICABLE UTILITY DISTRICT(S).

2. THE SITE CONSTRUCTION PLANS LISTED WITHIN THIS PLAN SET ARE NOT FOR CONSTRUCTION UNLESS APPROVED BY THE APPROPRIATE GOVERNING JURISDICTION. THE CONTRACTOR SHALL CONFIRM SAID APPROVAL PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL KEEP ONE (1) SIGNED COPY OF THE APPROVED SET OF PLANS, APPROPRIATE SPECIFICATIONS AND STANDARDS, AND APPROVED PERMITS ONSITE AT ALL TIMES.

3. NO REVISIONS SHALL BE MADE TO THESE PLANS WITHOUT THE APPROVAL OF THE CITY, COUNTY, STATE OR LOCAL DISTRICT AND THE ENGINEER OF RECORD.

4. ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARDS, UNLESS SPECIFICALLY STATED OTHERWISE.

5. THE CONTRACTOR IS RESPONSIBLE FOR ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS SHOWN ON THESE DRAWINGS OR DESIGNATED TO BE PROVIDED, INSTALLED, CONSTRUCTED, REMOVED, OR RELOCATED UNLESS SPECIFICALLY NOTED OTHERWISE.

6. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND LICENSES FOR WORK INCLUDING, BUT NOT LIMITED TO DEMOLITION, STREET CUTS, UTILITY INTERFERENCES, TRAFFIC CONTROL, GRADING, AND UTILITY FROM ALL APPLICABLE AGENCIES; AND FOR COMPLYING WITH ALL PROVISIONS INCLUDED THEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL OTHER APPLICABLE PERMITS NOT SPECIFICALLY REQUIRED BY THE AUTHORITY HAVING JURISDICTION.

7. THE CONTRACTOR SHALL UTILITY STAKE PROJECT AT LEAST 2 WORKING DAYS PRIOR TO BEGINNING EXCAVATION OR GRADING, TO HAVE ALL REGISTERED UTILITY LOCATIONS MARKED. OTHER UNREGISTERED UTILITY ENTITIES (I.E. DITCH COMPANY) ARE TO BE LOCATED BY CONTACTING THE RESPECTIVE REPRESENTATIVE.

8. THE CONTRACTOR IS RESPONSIBLE FOR FIELD LOCATING AND VERIFYING ELEVATIONS OF ALL EXISTING SEWER MAINS, WATER MAINS, CURBS, GUTTERS, AND OTHER UTILITIES AT THE POINTS OF CONNECTION SHOWN ON THE PLANS, AND AT ANY UTILITY CROSSINGS PRIOR TO INSTALLING ANY OF THE NEW IMPROVEMENTS. IF A CONFLICT EXISTS AND/OR A DESIGN MODIFICATION IS REQUIRED, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO MODIFY THE DESIGN. DESIGN MODIFICATION(S) MUST BE APPROVED BY THE APPROPRIATE AUTHORITY PRIOR TO BEGINNING CONSTRUCTION.

9. ANY DISRUPTION OF UTILITY SERVICE THAT IS REQUIRED TO ADJUST, EXTEND, RELOCATE OR OTHERWISE REARRANGE ANY UTILITY WITHIN THE PROJECT AREA SHALL BE COORDINATED IN ADVANCE WITH THE AFFECTED UTILITY ENTITY.

10. RIM ELEVATIONS SHOWN ARE APPROXIMATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS. THE CONTRACTOR SHALL USE PRECAST CONCRETE ADJUSTMENT RINGS, GROUT, AND STEEL SHIMS TO ADJUST THE MANHOLE FRAMES TO FINAL GRADE IN CONFORMANCE WITH THE CITY OR UTILITY COMPANY/DISTRICT STANDARD SPECIFICATIONS. ALL FRAMES SHALL BE ADJUSTED TO FINAL GRADE PRIOR TO THE FINAL LIFT OF ASPHALT.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF PROJECT SAFETY INCLUDING, BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.

12. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN, IN ACCORDANCE WITH THE M.U.T.C.D. TO THE APPROPRIATE RIGHT-OF-WAY AUTHORITY (CITY, COUNTY, OR STATE) FOR APPROVAL, PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN, OR AFFECTING, THE RIGHT-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED BY THE CONSTRUCTION ACTIVITIES. ALL WORK WITHIN THE RIGHT OF WAY SHALL BE DONE IN ACCORDANCE WITH THE GOVERNING AUTHORITY'S STANDARDS AND SPECIFICATIONS.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANING AND RESTORATION OF ANY EXISTING IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO STREET PAVEMENT, FENCES, SOD, LANDSCAPING, SPRINKLER SYSTEMS, AND UTILITIES DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL LOCATION AND CONDITION.

14. INCLUDED IN THESE PLANS IS THE DEMOLITION AND DISPOSAL OF ALL EXISTING UTILITIES, SITE IMPROVEMENTS, STRUCTURES, AND SITE FURNISHINGS NEEDED FOR CONSTRUCTION OF THE IMPROVEMENTS SHOWN HEREON. ALL QUESTIONS IN REGARD TO DEMOLITION SHALL BE SUBMITTED TO THE OWNER IN WRITING PRIOR TO BID.

15. ALL DEMOLITION, REMOVAL, DISPOSAL, AND ABANDONMENT OF UTILITIES, STRUCTURES, SITE IMPROVEMENTS, AND SITE FURNISHINGS SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL STANDARDS AND SPECIFICATIONS, AND PERMIT REQUIREMENTS.

16. ALL DISTURBED SOIL, ON- OR OFF-SITE AND RELATED TO WORK AT THIS PROJECT SITE, IS REQUIRED TO BE PROTECTED FROM WIND AND STORM WATER EROSION. TO MITIGATE EROSION, THE CONTRACTOR SHALL USE STANDARD EROSION CONTROL TECHNIQUES DESCRIBED IN THE GESC PLAN SET AND GESC REPORT FOR THIS PROJECT.

17. ALL STRUCTURAL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY GROUND-DISTURBING ACTIVITY. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED IN GOOD REPAIR BY THE CONTRACTOR UNTIL SUCH TIME AS THE ENTIRE DISTURBED AREA IS STABILIZED WITH HARD SURFACE OR PERMANENT LANDSCAPING. THE CONTRACTOR IS RESPONSIBLE FOR REFERRING TO ANY EROSION AND SEDIMENT CONTROL, STORMWATER MANAGEMENT, STORMWATER POLLUTION PREVENTION, OR SIMILAR PLAN AND/OR NARRATIVE AND ASSOCIATED PERMITS INCLUDING, BUT NOT LIMITED TO GRADING PERMITS, AND COMPLYING WITH THE REQUIREMENTS THEREIN.

18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK, INSPECTIONS, AND CERTIFICATIONS AS REQUIRED BY THE CITY, STATE OR LOCAL DISTRICTS. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST ASSOCIATED WITH THE INSPECTION AND CERTIFICATION UNLESS OTHERWISE ARRANGED WITH THE OWNER/DEVELOPER. THE CONTRACTOR SHALL COORDINATE ALL CERTIFICATIONS, AND PROVIDE FIELD SURVEYED AS-BUILT INFORMATION FOR REVIEW BY THE OWNER/DEVELOPER AND/OR ENGINEER AS EARLY AS POSSIBLE IN THE CONSTRUCTION SCHEDULE TO AVOID POTENTIAL DELAYS.

19. CONTRACTOR IS RESPONSIBLE FOR AS-BUILT DRAWINGS, TESTS, REPORTS, AND/OR ANY OTHER CERTIFICATES OR INFORMATION AS REQUIRED FOR ACCEPTANCE OF WORK FROM CITY, UTILITY DISTRICTS, OR ANY OTHER GOVERNING AGENCY, OR TO THE OWNER/DEVELOPER AS REQUIRED BY AND IN ACCORDANCE WITH THE GOVERNING AUTHORITY OR OWNER/DEVELOPER'S CRITERIA. CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING AS-BUILT INFORMATION AN A SET OF RECORD DRAWINGS KEPT AT THE CONSTRUCTION SITE AND AVAILABLE TO THE GOVERNING CITY, COUNTY, AND/OR STATE AND UTILITY DISTRICT INSPECTOR AT ALL TIMES. THE CONTRACTOR SHALL CONFIRM ANY REQUIREMENTS AS EARLY AS POSSIBLE IN THE CONSTRUCTION SCHEDULE TO ACCOUNT FOR PREPARATION AND REVIEW OF THE INFORMATION TO AVOID POTENTIAL DELAYS.

20. IF, DURING THE CONSTRUCTION PROCESS, CONDITIONS ARE ENCOUNTERED BY THE CONTRACTOR, HIS SUBCONTRACTORS, OR OTHER AFFECTED PARTIES, WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE OWNER/DEVELOPER AND THE ENGINEER IMMEDIATELY.

21. DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. IF PERTINENT DIMENSIONS ARE NOT SHOWN, CONTACT THE CONSULTING ENGINEER FOR CLARIFICATION AND ANNOTATE THE DIMENSION ON THE AS-BUILT RECORD DRAWING.

22. BENCHMARK VERIFICATION: THE CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS AND THE PROPOSED ELEVATIONS IN THIS CONSTRUCTION PLAN SET AGAINST THE PROJECT BENCHMARK, IDENTIFIED HEREIN, PRIOR TO COMMENCING WORK.

ROADWAY NOTES

1. GUTTERS SHALL BE AT LEAST 6" THICK.
2. ALL CURBS SHALL USE THE CATCH SECTION UNLESS OTHERWISE NOTED.
3. ALL COMBINATION CURB, GUTTER AND SIDEWALKS TO BE 6" THICK (MIN.). SIDEWALKS WITH VERTICAL CURB AND GUTTER TO BE 6" THICK (MIN.).
4. NON-LANDSCAPED MEDIAN ISLANDS SHALL BE COVERED WITH AN ACCEPTABLE IMPERMEABLE SURFACE.
5. IF ANY SECTION OF A DETACHED SIDEWALK IS TO BE PLACED OUTSIDE OF THE ROAD RIGHT-OF-WAY, THEN A SIDEWALK EASEMENT SHALL BE REQUIRED TO MAINTAIN PUBLIC USE.
6. PLACEMENT, MOISTURE AND DENSITY CONTROL FOR SUBGRADE, SUBBASE, AND SURFACING MATERIALS SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS OF CHAPTER 8 OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.

CITY OF LONE TREE GENERAL NOTES

1. THE CITY OF LONE TREE ENGINEER'S SIGNATURE AFFIXED TO THIS DOCUMENT INDICATES THE ENGINEERING DIVISION HAS REVIEWED THE DOCUMENT AND FOUND IT IN GENERAL CONFORMANCE WITH THE CITY OF LONE TREE SUBDIVISION RESOLUTION OR APPROVED VARIANCES TO THOSE REGULATIONS. THE CITY OF LONE TREE ENGINEER, THROUGH ACCEPTANCE OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY, OTHER THAN STATED ABOVE, FOR THE COMPLETENESS AND/OR ACCURACY OF THESE DOCUMENTS. THE OWNER AND ENGINEER UNDERSTAND THAT THE RESPONSIBILITY FOR THE ENGINEERING ADEQUACY OF THE FACILITIES DEPICTED IN THIS DOCUMENT LIES SOLELY WITH THE REGISTERED PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE IS AFFIXED TO THIS DOCUMENT.
2. ALL ROADWAY CONSTRUCTION SHALL CONFORM TO CURRENT DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
3. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE CITY OF LONE TREE ENGINEERING DIVISION. THE CITY RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS STANDARDS AND SPECIFICATIONS.
4. THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS, INSPECTION SECTION, (303) 662-8112, A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO STARTING CONSTRUCTION, AND/OR BEFORE RESTARTING CONSTRUCTION AFTER A SHUTDOWN OF MORE THAN 10 DAYS.
5. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ACTUAL CONSTRUCTION. FOR INFORMATION, CONTACT: UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT (800) 922-1987 OR 811
6. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY (SIGNED BY BOTH DESIGN ENGINEER AND CITY OF LONE TREE) OF THE CONSTRUCTION PLANS AND GESC REPORT AND PLAN, AND ONE (1) COPY OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS AT THE JOB SITE AT ALL TIMES.
7. ALL PROPOSED STREET CUTS TO EXISTING PAVEMENTS FOR UTILITIES, STORM SEWER, OR OTHER PURPOSES ARE LISTED AND REFERENCED BELOW:

   RIDGEGATE PARKWAY

8. A ROW/CONSTRUCTION PERMIT MUST BE OBTAINED BEFORE ANY WORK WITHIN EXISTING OR PROPOSED PUBLIC ROW. THE PERMIT APPLICATION MUST BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR REVIEW/PROCESSING A MINIMUM OF 7 DAYS PRIOR TO UPDATED 2-3-09 REQUESTED START FOR THE WORK IN THE ROW.
9. A PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR ACCEPTANCE WITH THE PERMIT APPLICATION. AN EXCAVATION OR PUBLIC IMPROVEMENTS CONSTRUCTION PERMIT WILL NOT BE ISSUED WITHOUT AN APPROVED TRAFFIC CONTROL PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION.
10. THE CONSTRUCTION PLANS SHALL BE CONSIDERED VALID FOR TWO (2) YEARS FROM THE DATE OF CITY OF LONE TREE ACCEPTANCE/APPROVAL IF APPLICABLE CONSTRUCTION PERMITS HAVE NOT BEEN OBTAINED, AND CONSTRUCTION STARTED WITHIN THAT TIME, THESE PLANS SHALL BE VOID AND WILL BE SUBJECT TO RE-REVIEW AND RE-ACCEPTANCE BY THE CITY OF LONE TREE.
11. CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE ENGINEER INSPECTOR WHEN WORKING OUTSIDE OF THE PUBLIC RIGHT-OF-WAY ON ANY FACILITY WHICH WILL BE CONVEYED TO THE CITY, URBAN DRAINAGE AND FLOOD CONTROL DISTRICT, OR OTHER SPECIAL DISTRICT FOR MAINTENANCE (STORM SEWER, ENERGY DISSIPATERS, DETENTION OUTLET STRUCTURES, OR OTHER DRAINAGE INFRASTRUCTURES). FAILURE TO NOTIFY ENGINEERING INSPECTOR TO ALLOW THEM TO INSPECT THE CONSTRUCTION MAY RESULT IN NON-ACCEPTANCE OF THE FACILITIES/INFRASTRUCTURE BY CITY AND/OR URBAN DRAINAGE.

CITY OF LONE TREE SIGNAGE & STRIPING NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MOST RECENT VERSION OF THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE "COLORADO SUPPLEMENTAL MUTCD" AND THE DOUGLAS COUNTY "ROAD AND CONSTRUCTION STANDARDS MANUAL". FURTHER SPECIFICATIONS AND ILLUSTRATIONS ARE LOCATED IN THE COLORADO DIVISION OF HIGHWAYS "M AND S STANDARDS".
2. DELINEATION OF ROADWAYS SHALL BE AS SPECIFIED IN THE COLORADO "M AND S MANUAL".
3. SPECIAL CARE SHALL BE TAKEN IN SIGN LOCATION TO ENSURE AN UNOBSTRUCTED VIEW OF EACH SIGN. STREET NAME SIGNS SHALL BE MOUNTED SO THAT THEY CAN BE SEEN FROM ALL DIRECTIONS OF TRAVEL.
4. INSTALLATION OF SIGNS SHALL CONFORM TO THE MUTCD MOUNTING HEIGHT REQUIREMENTS, INCLUDING A 7-FOOT MINIMUM HEIGHT FROM THE BOTTOM OF THE LOWEST SIGN PANEL TO THE TOP GRADE OF SIDEWALK.
5. ALL NEWLY INSTALLED TRAFFIC SIGNS SHALL MEET THE MINIMUM RETRO-REFLECTIVITY AND ILLUMINATION STANDARDS AS SET FORTH BY THE MUTCD (LATEST EDITION). THESE MINIMUM REQUIREMENTS SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
6. DIAMOND GRADE MATERIAL SHALL BE USED ON ALL STOP SIGNS.
7. THE CONTRACTOR INSTALLING SIGNS IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND UTILITIES. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.
8. FOLLOWING INSTALLATION, THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS DEPARTMENT, 303-662-8112. A FIELD INSPECTION OF LOCATION AND INSTALLATION OF ALL SIGNS SHALL BE PERFORMED BY PUBLIC WORKS. ALL DISCREPANCIES IDENTIFIED DURING THE FIELD INSPECTION MUST BE CORRECTED BEFORE THE TWO-YEAR WARRANTY PERIOD WILL BEGIN.
9. SIGNAGE AND STRIPING HAS BEEN DETERMINED BY INFORMATION AVAILABLE AT THE TIME OF REVIEW.
   PRIOR TO INITIATION OF THE WARRANTY PERIOD, LONE TREE RESERVES THE RIGHT TO REQUIRE MODIFICATIONS TO EXISTING OR INSTALLATION OF ADDITIONAL SIGNAGE AND/OR STRIPING IF THEY DETERMINE THAT AN UNFORESEEN CONDITION WARRANTS SUCH MODIFICATION ACCORDING TO THE MUTCD OR THE CDOT M AND S STANDARDS. ALL SIGNAGE AND STRIPING SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
10. FINAL STRIPING AND CROSSWALK LAYOUT TO BE APPROVED BY THE CITY OF LONE TREE PRIOR TO INSTALLATION. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.
11. CROSSWALKS SHALL:
    BE CONSTRUCTED USING 125 MIL PREFORMED THERMOPLASTIC.
    LINE UP WITH THE HANDICAP RAMPS AT BOTH ENDS.
    BE CENTERED ON LANE LINES SO AS TO BE STRADDLED BY VEHICLES.
12. ALL PAVEMENT MARKINGS SHALL BE AS FOLLOWS:
    FOR CONCRETE SURFACE: METHYL METHACRYLATE OR EPOXY PAINT.
    FOR ASPHALT SURFACE: PAINT, 90 MIL PREFORMED THERMOPLASTIC, INLAID MARKING TAPE, METHYL METHACRYLATE, OR EPOXY PAINT.
    TURN ARROWS AND ONLYS: 125 MIL PREFORMED THERMOPLASTIC.
13. ALL PAVEMENT MARKING SHALL BE PRECEDED BY THE APPROPRIATE SURFACE PREPARATION.
14. ANY SIGNAGE AND/OR OTHER TRAFFIC CONTROL DEVICES REMOVED SHALL BE RETURNED TO THE CITY OF LONE TREE.
15. TYPE III LIGHTED BARRICADES SHALL BE SET AT ENDS OF ROADWAYS, SEPARATING FINISHED AND UNFINISHED CONSTRUCTION AREAS AND WILL BE MAINTAINED BY THE CONTRACTOR/DEVELOPER.

NOTE: ALSO SEE CITY OF LONE TREE "STREET SIGN DETAILS"FOR ADDITIONAL INTERSECTION STREET SIGNAGE REQUIREMENTS.

STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON-GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.

DRAINAGE STRUCTURE NOTES

1. CONCRETE WORK SHALL CONFORM TO ACI 301, ACI 350.
2. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM-615, GRADE 60.
3. ALL EXPOSED CONCRETE SHALL HAVE A CDOT CLASS 2 OR 5 FINISH.
4. ALL EXPOSED CONCRETE CORNERS SHALL HAVE ¾"CHAMFERS.
5. DETAILING, FABRICATION, AND PLACING OF REBAR SHALL BE IN ACCORDANCE WITH ACI 315.
6. CONSTRUCTION TOLERANCES SHALL BE IN ACCORDANCE WITH ACI 347.
7. ALL MANHOLES SHALL BE SLAB BASE UNLESS SPECIFIED OTHERWISE. MANHOLE SHALL BE FABRICATED IN ACCORDANCE WITH CDOT STANDARD M-604-20.
8. COORDINATES FOR MANHOLES AND AREA INLETS ARE SHOWN AT THE CENTER OF THE STRUCTURE. COORDINATES FOR MOUNTABLE CURB INLETS ARE SHOWN ALONG THE FLOWLINE AT CENTER OF THE STRUCTURE.
9. ALL TYPE C AND D INLETS SHALL HAVE CLOSE MESH GRATES UNLESS SPECIFIED OTHERWISE.
10. LENGTH OF FABRICATED BAR GRATING PANELS IS LENGTH OF BEARING BARS, WIDTH REFERS TO DIMENSION PERPENDICULAR TO BEARING BARS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PANEL DIMENSIONS GIVEN PRIOR TO FABRICATION.

DRAINAGE GENERAL NOTES

1. PROJECT FACILITIES ARE TO BE LOCATED BASED ON THE SURVEY COORDINATES, ELEVATIONS, DIMENSIONS, AND/OR GEOMETRIC DESIGN DATA PROVIDED ON THE DRAWINGS.
2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES AND FOR SATISFYING ALL APPLICABLE OSHA, FEDERAL, STATE, AND LOCAL REGULATIONS. TEMPORARY EXCAVATIONS SHALL PROVIDE, AT MINIMUM, THE TRENCH DIMENSIONS AND CLEARANCES SHOWN OR SPECIFIED. TEMPORARY CONSTRUCTION SLOPES SHALL BE SLOPED, SHORED, SHEETED, AND/OR BRACED IN ACCORDANCE WITH STABILITY REQUIREMENTS AND APPLICABLE REGULATIONS, AND SHALL BE NO STEEPER THAN THE SLOPES SHOWN OR SPECIFIED WITHOUT THE APPROVAL OF THE ENGINEER. ANY SUCH APPROVALS BY THE ENGINEER WILL NOT RELIEVE THE CONTRACTOR FROM SOLE RESPONSIBILITY FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES.
3. EXISTING FACILITIES NOT INDICATED TO BE REMOVED SHALL BE PROTECTED IN PLACE OR REMOVED AND REPLACED IN KIND, AS APPROVED BY ENGINEER.
4. THE WORK WILL TAKE PLACE IN AND AROUND DRAINAGE SWALES AND THE HAPPY CANYON CREEK, SUBJECT TO PERIODIC FLOODING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF SURFACE AND SUBSURFACE WATER DURING THE COURSE OF THE WORK. ANY DAMAGE TO THE WORK RESULTING FROM SURFACE FLOWS, BASE FLOWS, OR FLOOD FLOWS INCLUDING BUOYANCY FORCES ON PIPELINES AND OTHER FACILITIES SHALL BE CORRECTED BY THE CONTRACTOR AT THE CONTRACTOR'S SOLE COST. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND SATISFYING THE REQUIREMENTS OF ANY APPLICABLE PERMITS PERTAINING TO WATER AND EROSION CONTROL.
5. CONTACT THE ENGINEER FOR CLARIFICATIONS OF ANY ABBREVIATIONS SHOWN ON THE DRAWINGS.
6. THE SITE WHERE THE WORK IS TO BE PERFORMED SHALL BE OVERLOT GRADED. TOPSOIL SHALL BE SPREAD IN OPEN SPACE AREAS TO A DEPTH OF APPROXIMATELY 6-INCHES. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED, AND SOME AREAS COVERED WITH EROSION CONTROL BLANKETS, UNLESS OTHERWISE DIRECTED IN THE PLANS OR BY THE ENGINEER. CARE SHALL BE TAKEN TO AVOID DISTURBING ANY OPEN SPACE AREAS EXCEPT THE MINIMUM NECESSARY TO PERFORM THE WORK. TOPSOIL IN ANY WORK AREAS OR ACCESS ROADS WITHIN THE OPEN SPACE SHALL BE STRIPPED AND STOCKPILED PRIOR TO THE WORK, PROTECTED FROM MIXING WITH ANY OTHER MATERIALS DURING THE WORK, AND REPLACED TO A LOOSE DEPTH OF 7- TO 8- INCHES (FINAL DEPTH AFTER SETTLEMENT SHALL BE 6- INCHES MINIMUM) AS THE WORK IS BEING COMPLETED. WHERE BLANKETS EXIST, THE MINIMUM AREA OF BLANKET TO ALLOW WORK TO PROGRESS SHALL BE REMOVED AND THEN THE REMOVED OR NEW BLANKET REPLACED AFTER UNDERLYING WORK IS COMPLETE (EXCEPT NO TEMPORARY BLANKET NEEDS TO BE REPLACED OVER ROCK OR COIR BLANKET SHOWN IN THE PLANS). JUST PRIOR TO REPLACEMENT OF TOPSOIL AFTER UNDERLYING WORK IS COMPLETE AND APPROVED, THE UNDERLYING SUBGRADE IN OPEN SPACE AREAS SHALL BE LOOSENED BY TILLING TO A DEPTH OF 12- INCHES UNTIL CLODS ARE NO LARGER THAN 3 INCHES, AND APPROVED BY THE ENGINEER. THIS NOTE ALSO APPLIES TO AREAS WHERE COIR MAT IS TO BE INSTALLED.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ANY COMPLETED WORK FROM DISTURBANCE OR DAMAGE DURING THE COURSE OF THE WORK. IF REQUESTED BY THE CONTRACTOR AND APPROVED BY THE OWNER, SIGNIFICANT COMPLETED SECTIONS OF THE WORK MAY BE ACCEPTED AS FINAL PRIOR TO THE COMPLETION OF THE ENTIRE PROJECT. ANY SUCH EARLY ACCEPTANCE WILL NEED TO BE IN WRITING BY THE ENGINEER AND OWNER AND THOSE PORTIONS OF THE WORK SHALL BE PROTECTED BY THE CONTRACTOR AGAINST VEHICLES RUNNING OVER THE AREA BY ENCIRCLING THE WORK WITH FLAGGING OR FENCING OR BY OTHER MEANS AGREED TO BY THE OWNER AND MAINTAINED BY THE CONTRACTOR UNTIL THE END OF THE PROJECT.
8. ALL FINE GRADING REQUIRED TO CONSTRUCT DRAINAGE IMPROVEMENTS AND PROVIDE FINISHED GRADES ADJACENT TO IMPROVEMENTS SHALL BE DONE BY THE DRAINAGE CONTRACTOR AND SHALL BE CONSIDERED PART OF THE WORK, AND NOT PAID FOR SEPARATELY.

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LTD

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	N/A			
V-SCALE	N/A			
DATE	2/12/21			
DESIGNED BY	GVT			
DRAWN BY	GVT			
CHECKED BY				

RIDGEGATE SOUTHWEST VILLAGE FILING 1
GENERAL NOTES

SHEET 233 OF 270

JOB NO. 15950.01

LAYER LINETYPE LEGEND

	EXISTING	PROPOSED
PHASE LINE		
MATCH LINE		
SECTION LINE		
BOUNDARY LINE		
PROPERTY LINE		
EASEMENT LINE		
RIGHT OF WAY		
R.O.W. A LINE	A	A
CENTERLINE		
CITY LIMITS		
WIRE FENCE		
CHAIN LINK FENCE		
WOOD FENCE		
MASONRY FENCE		
GUARDRAIL		
CONC. BARRIER		
CABLE TV	TV	TV
ELECTRIC	E	E
FIBER OPTIC	FO	FO
GAS MAIN	G	G
IRRIGATION MAIN	IRR	IRR
OIL/PETRO. MAIN	O	O
OVERHEAD UTILITY	OHU	OHU
SANITARY SEWER	S	
STORM DRAIN		
TELEPHONE	T	T
WATER MAIN	W	
RAW WATER LINE	RWL	RWL
SWALE/WATERWAY FLOWLINE		
DIVERSION DITCH		
DIVERSION CHANNEL		
MAJOR DRAINAGE BASIN		
MINOR DRAINAGE BASIN		
TOP OF SLOPE		
TOE OF SLOPE		
EDGE OF WATER		
INDEX CONTOUR	6100	6100
INTERMEDIATE CONTOUR		
DEPRESSION CONT. (INDEX)	6100	6100
DEPRESSION CONT. (INTER)		
TOP OF CUTS		
TOE OF FILLS		
CUT AND FILL LINE		C/F
SILT FENCE	SF	SF
100 YEAR FLOODPLAIN	100YR	100YR
500 YEAR FLOODPLAIN	500YR	500YR
FLOODWAY	FLDWY	FLDWY
BASE FLOOD ELEVATION		
EDGE OF WETLANDS		
STONE WALL		

UTILITIES LEGEND

	EXISTING	PROPOSED
STORM SEWER		
MANHOLE		
STORM INLET		
AREA INLET – SQUARE		
AREA INLET – ROUND		
FLARED END SECTION		
RIPRAP		
SANITARY SEWER		
LINE MARKER	Mkr San	
SERVICE MARKER		
CLEAN–OUT		
MANHOLE W/ DIRECTIONAL FLOW ARROW		
WATER LINE		
LINE MARKER	Mkr W	
SERVICE MARKER		
FIRE HYDRANT		
FIRE CONNECTION		
MANHOLE		
BEND		
BLOW–OFF VALVE		
WELL	WELL	WELL
METER		
VALVE		
REDUCER		
THRUST BLOCK		
CROSS		
PLUG W/ THRUST BLOCK		
TEE		
REVERSE ANCHOR		
ANODE		
AIR & VACUUM VALVE ASSEMBLY		
TRANSMISSION BLOW–OFF ASSEMBLY		
GAS LINE		
MARKER	Mkr G	
SERVICE MARKER		
METER		
VALVE		
PLUG		
TEE		
DRY UTILITIES		
CABLE TV MARKER	Mkr TV	
CABLE TELEVISION PEDESTAL		
ELECTRIC MARKER	Mkr E	
ELECTRIC SERVICE MARKER		
ELECTRICAL PEDESTAL		
ELECTRICAL METER		
ELECTRICAL MANHOLE		
FIBER–OPTIC MARKER	Mkr FO	
IRRIGATION PEDESTAL		
TELEPHONE MARKER	Mkr T	
TELEPHONE PEDESTAL		
TELEPHONE MANHOLE		
UTILITY POLE		
GUY ANCHOR		
GUY POLE		
MISC. UTILITIES		
VENT PIPE	VP	VP
TEST HOLE DESIGNATOR	THE FIRM AGENCY	

MONUMENTATION LEGEND

ALUMINUM CAP – FOUND	AC
BRASS CAP – FOUND	BC
BENCHMARK – FOUND	
CROSS – FOUND	
MONUMENT – SET	
MONUMENT – FOUND (DEFAULT)	
MONUMENT – FOUND (ALTERNATE 1)	
MONUMENT – FOUND (ALTERNATE 2)	
MONUMENT – FOUND (ALTERNATE 3)	
MONUMENT – FOUND (ALTERNATE 4)	
MONUMENT – FOUND (ALTERNATE 5)	
MONUMENT – FOUND (ALTERNATE 6)	
MONUMENT – FOUND (ALTERNATE 7)	
NAIL & WASHER – FOUND	NAIL & WASHER
PANEL – FOUND	
PK NAIL – FOUND	PK NAIL
ROW MONUMENT – FOUND	
ROW MARKER – FOUND	
SECTION CORNER – FOUND	
SECTION CORNER – SET	
QUARTER–SECTION CORNER – FOUND	
QUARTER–SECTION CORNER – SET	
SECTION CENTER – FOUND	
SECTION CENTER – FOUND	
CONTROL/TRAVERSE POINT – SET	

TRAFFIC LEGEND

	EXISTING	PROPOSED
PARKING METER		
TRAFFIC SIGNAL BOX		
TRAFFIC SIGNAL POLE		
TRAFFIC SIGNAL		
BARRICADE		
GUARD RAIL POST		
IMPACT ATTENUATOR		
BRIDGE STYLE HIGHWAY SIGN POST		
CANTILEVER STYLE HIGHWAY SIGN POST		
SIGN		
RAILROAD MARKER/SIGN		
STREET LIGHT		
STREET LIGHT – SINGLE		
STREET LIGHT – DOUBLE		
LUMINAIRE		
ALTERNATE LUMINAIRE		
SIGNAL MAST ARM W/ LUMINAIRE		
PEDESTAL POLE FOUNDATION		
TRAFFIC SIGNAL POLE		
ROUND PULL BOX		
MEDIUM PULL BOX		
LARGE PULL BOX (20X33X15)		
SIGNAL HEAD WITHOUT BACK PLATE		
SIGNAL HEAD WITH BACK PLATE		
PEDESTRIAN SIGNAL HEAD		
VIDEO IMAGE DETECTOR		
OPTICOM DETECTOR		
VEHICLE DETECTION ZONE		V

STORM WATER MANAGEMENT

	KEY	SYMBOL
CHECK DAM	CD	
CONSTRUCTION ROAD STABILIZATION	CRS	
CURB SOCK INLET PROTECTION	CS	
CONCRETE WASHOUT AREA	CWA	
DIVERSION DITCH AND DIKE, TEMPORARY	DD	
DIVERSION CHANNEL, TEMPORARY	DV	
DEWATERING	DW	
EROSION CONTROL BLANKET	ECB	
INLET FILTER	IF	
INLET PROTECTION	IP	
MULCHING	MU	
OUTLET PROTECTION	OP	
PAVED FLUME	PF	
PERMENENT SEEDING	PS	
REINFORCED CONCRETE DAM	RCD	
ROUGH CUT STREET CONTROL	RCS	
SEDIMENT BASIN	SB	
SEDIMENT CONTROL LOG	SCL	
SILT FENCE	SF	
SURFACE ROUGHENING	SR	
STABILIZED STAGING AREA	SSA	
SEDIMENT TRAP	ST	
STRAW BALE BARRIER	STB	
TERRACING	TER	
TEMPORARY SEEDING	TS	
TEMPORARY STREAM CROSSING CULVERT/BRIDGE	TSC C	
TEMPORARY STREAM CROSSING FORD TYPE	TSC F	
TEMPORARY SLOPE DRAIN	TSD	
VEHICLE TRACKING CONTROL	VTC	
VEHICLE TRACKING CONTROL WITH WASH RACK	WR	

DRAINAGE REPORT PLANS

	KEY
BASIN DESIGNATION (NO COEFFICIENT)	# / #.##
BASIN DESIGNATION (1 COEFFICIENT)	# / #.## / #
BASIN DESIGNATION (2 COEFFICIENTS)	# / #.## / # / #
ANALISYS POINT IDENTIFIER	#
BASIN DESIGNATION (HISTORIC)	# / #-#
BASIN DESIGNATION (DEVELOPED)	# / #.##
SUB–BASIN DESIGNATION (DEVELOPED)	# / ##
DRAINAGE PIPE IDENTIFIER	##
DRAINAGE POINT IDENTIFIER (HEXAGONAL)	##
DRAINAGE POINT IDENTIFIER (TRIANGULAR)	?
SWMM DESIGNATION 1	#
SWMM DESIGNATION 2	#
SWMM DESIGNATION 3	#
SWMM DESIGNATION 4	?

LANDSCAPE LEGEND

	EXISTING	PROPOSED
TREE – CONIFEROUS		
TREE – DECIDUOUS		
SHRUB/BUSH		
SHRUBS AND BUSHES		
IRRIGATION BOX		
IRRIGATION SPRINKLER		
IRRIGATION VALVE		
BOLLARD		
FLAGPOLE	FP	

811 Know what's **below.** **Call** before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED PROFESSIONAL ENGINEER AARON LEE CLUTTER 36742

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

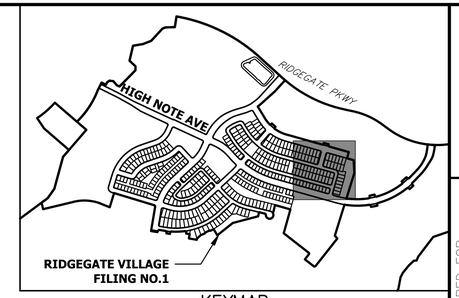
No.	REVISION	BY	DATE

H–SCALE	N/A
V–SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

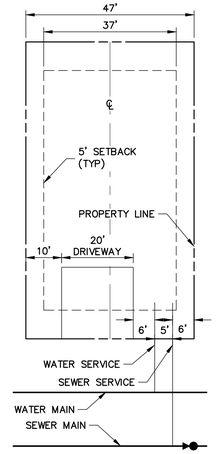
RIDGEGATE SOUTHWEST VILLAGE FILING 1
LEGEND

SHEET 234 OF 270

JOB NO. 15950.01



KEYMAP
SCALE:1"=1000'



LOT SERVICES DETAIL
PLANNING AREA 20
SCALE: 1"=20

40 20 0 40 80
ORIGINAL SCALE: 1" = 40'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

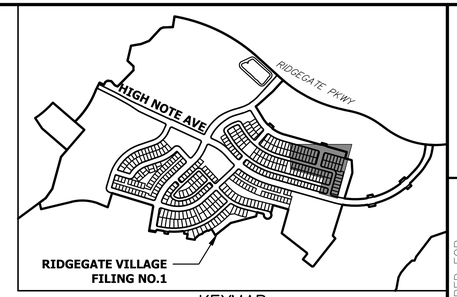
H-SCALE	1"=40'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	APL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

OVERALL UTILITY PLAN

SHEET 235 OF 270

JOB NO. 15950.01



KEYMAP
SCALE:1"=1000'

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
1	15+88.32	18.00' (LT)	AMPLIFY CIRCLE	6045.68		PT
2	15+88.32	18.00' (RT)	AMPLIFY CIRCLE	6045.94		PT
3	19+04.64	18.00' (RT)	AMPLIFY CIRCLE	6049.45		HC RAMP MID PT
4	19+24.03	18.00' (RT)	AMPLIFY CIRCLE	6049.87		SUMP INLET
5	19+04.59	20.11' (LT)	AMPLIFY CIRCLE	6049.56		HC RAMP MID PT
6	10+34.79	19.39' (LT)	AMPLIFY STREET	6049.64		HC RAMP MID PT
7	10+43.00	18.00' (LT)	AMPLIFY STREET	6049.04		PT
8	12+05.48	18.00' (LT)	AMPLIFY STREET	6044.94		PC
9	12+05.48	18.00' (RT)	AMPLIFY STREET	6045.17		PC
10	10+43.00	18.00' (RT)	AMPLIFY STREET	6049.95		PC
11	10+34.79	19.39' (RT)	AMPLIFY STREET	6050.60		HC RAMP MID PT
12	19+83.70	18.00' (LT)	AMPLIFY CIRCLE	6051.55		SUMP INLET
13	19+86.86	18.00' (LT)	AMPLIFY CIRCLE	6051.66		PT
14	21+54.52	20.06' (LT)	AMPLIFY CIRCLE	6057.61		PC
15	22+00.00	20.06' (LT)	AMPLIFY CIRCLE	6059.28		PT
16	21+43.49	18.00' (RT)	AMPLIFY CIRCLE	6057.24		PC
17	22+11.04	18.00' (RT)	AMPLIFY CIRCLE	6059.65		PT
18	23+50.04	18.00' (RT)	AMPLIFY CIRCLE	6064.62		PC
19	23+49.92	18.00' (LT)	AMPLIFY CIRCLE	6064.62		PT

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C1	90°00'00"	25.00'	39.27'
C2	90°00'00"	25.00'	39.27'
C3	90°00'00"	45.00'	70.69'
C4	90°00'00"	25.00'	39.27'

LINE TABLE		
LINE	BEARING	DISTANCE
L1	S74°19'05"E	523.82'
L2	S74°19'05"E	772.78'
L3	N15°40'55"E	162.50'
L5	S74°19'05"E	178.96'
L6	S15°40'55"W	139.00'
L7	S15°40'55"W	283.50'

NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE SHEET 234 FOR LEGEND.
4. SEE SHEET 236 FOR TYPICAL STREET SECTIONS.
5. SEE SHEET 242 FOR SUMP PROFILES.
6. SEE SHEET 240 FOR CURB RETURN PROFILES.
7. SEE SHEET 241 FOR CURB RAMP DETAILS.
8. SEE SHEET 243 FOR SIGNAGE AND STRIPING.
9. ALL CURB RADII ARE 25' UNLESS OTHERWISE NOTED.
10. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.

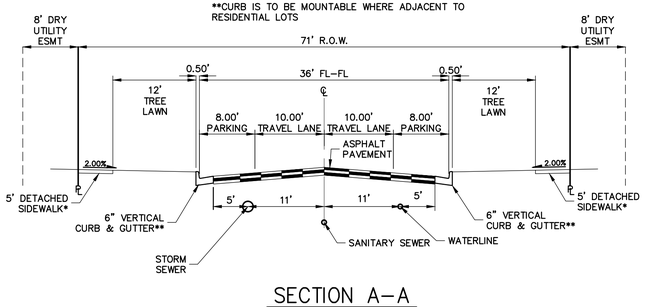
N

40 20 0 40 80

HORIZONTAL
ORIGINAL SCALE: 1" = 40'
VERTICAL
ORIGINAL SCALE: 1" = 4'

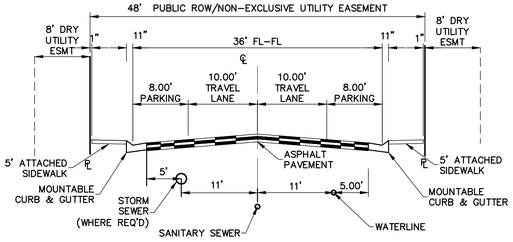
*10 FOOT SIDEWALK TO BE INSTALLED ADJACENT TO THE SCHOOL SITE AND WHERE DEPICTED ON THE PLANS.

**CURB IS TO BE MOUNTABLE WHERE ADJACENT TO RESIDENTIAL LOTS



SECTION A-A

TYPE I - TYPICAL 71-FOOT R.O.W. RESIDENTIAL LOCAL STREET WITH DETACHED SIDEWALK (PUBLIC)



SECTION F-F

TYPE IV - ALTERNATE 48-FOOT R.O.W. LOCAL STREET WITH PARKING ON BOTH SIDES OF THE STREET (PUBLI

811 Know what's below. Call before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON L. CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

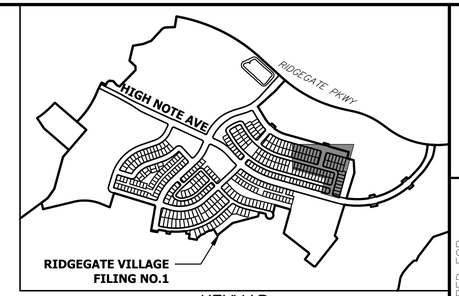
H-SCALE	1"=40'
V-SCALE	1"=4'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	APL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

ROADWAY PLAN & PROFILES

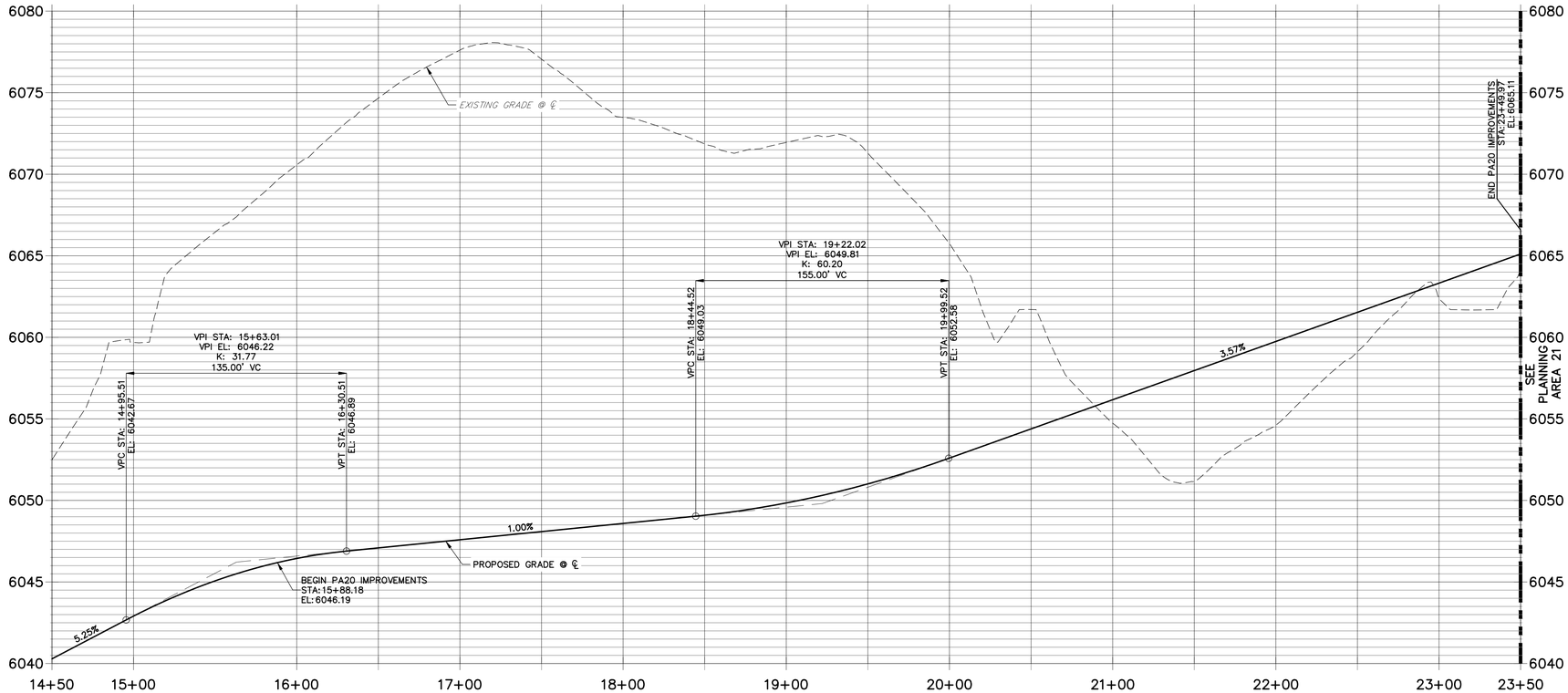
SHEET 236 OF 270

JOB NO. 15950.01



KEYMAP
SCALE: 1"=1000'

AMPLIFY CIRCLE PROFILE
STA 14+50.00 TO 23+50.00



NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE SHEET 234 FOR LEGEND.
4. SEE SHEET 236 FOR TYPICAL STREET SECTIONS.
5. SEE SHEET 242 FOR SUMP PROFILES.
6. SEE SHEET 240 FOR CURB RETURN PROFILES.
7. SEE SHEET 241 FOR CURB RAMP DETAILS.
8. SEE SHEET 243 FOR SIGNAGE AND STRIPING.
9. ALL CURB RADII ARE 25' UNLESS OTHERWISE NOTED.
10. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.

40 20 0 40 80

HORIZONTAL
ORIGINAL SCALE: 1" = 40'

VERTICAL
ORIGINAL SCALE: 1" = 4'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

Know what's below.
Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=40'
V-SCALE	1"=4'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	APL
CHECKED BY	

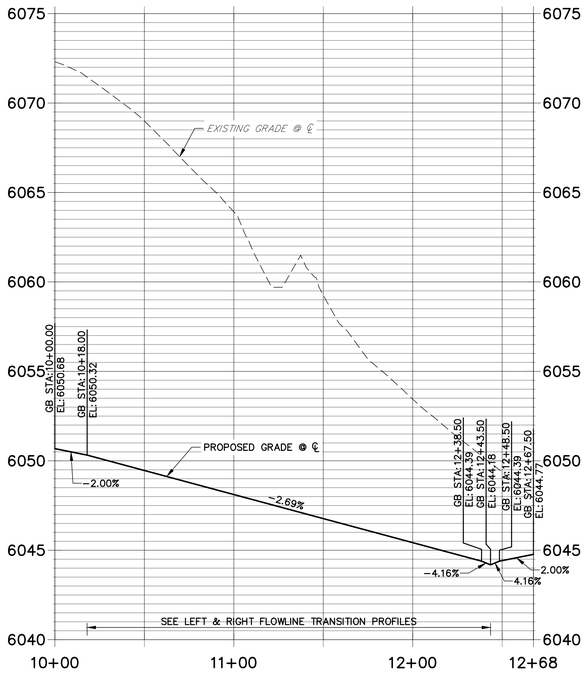
RIDGEGATE SOUTHWEST
VILLAGE FILING 1

ROADWAY PLAN & PROFILES

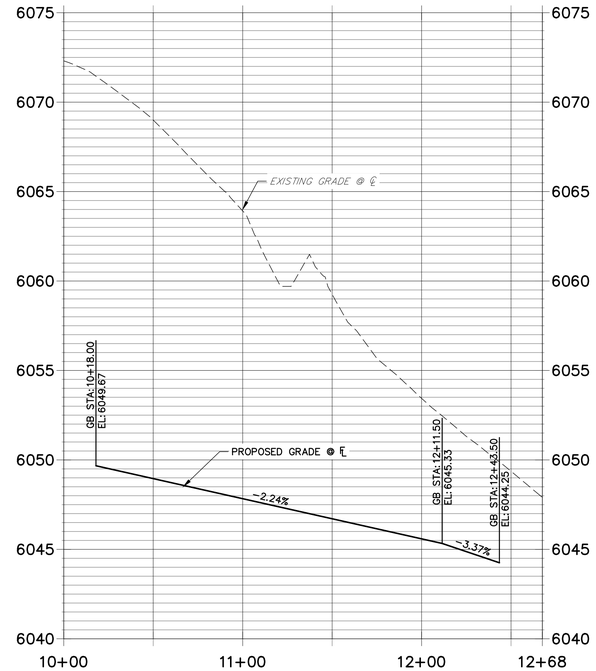
SHEET 237 OF 270

JOB NO. 15950.01

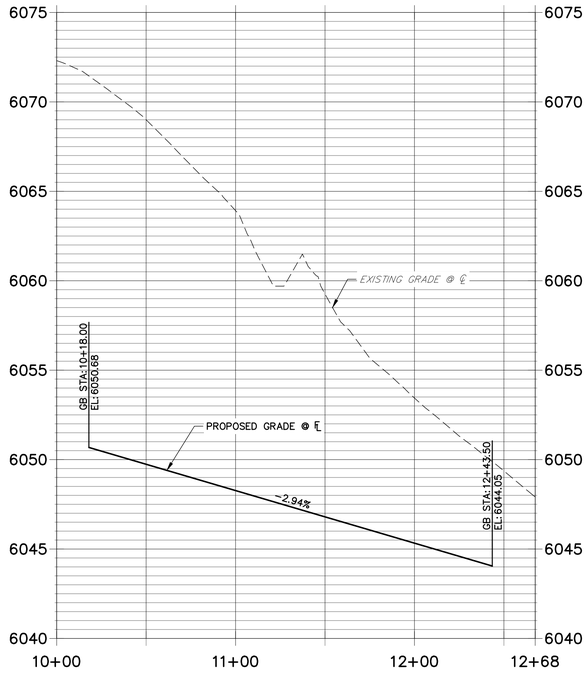
AMPLIFY STREET PROFILE
STA 10+00.00 TO 12+67.50

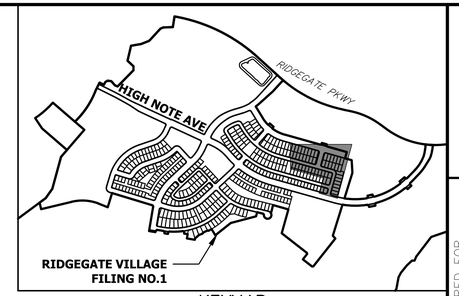


AMPLIFY STREET LEFT FLOWLINE TRANSITION PROFILE
STA 10+00.00 TO 12+67.50



AMPLIFY STREET RIGHT FLOWLINE TRANSITION PROFILE
STA 10+00.00 TO 12+67.50





KEYMAP
SCALE: 1"=1000'

NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE SHEET 234 FOR LEGEND.
4. SEE SHEET 236 FOR TYPICAL STREET SECTIONS.
5. SEE SHEET 242 FOR SUMP PROFILES.
6. SEE SHEET 240 FOR CURB RETURN PROFILES.
7. SEE SHEET 241 FOR CURB RAMP DETAILS.
8. SEE SHEET 243 FOR SIGNAGE AND STRIPING.
9. ALL CURB RADII ARE 25' UNLESS OTHERWISE NOTED.
10. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.

40 20 0 40 80
HORIZONTAL
ORIGINAL SCALE: 1" = 40'
VERTICAL
ORIGINAL SCALE: 1" = 4'

811 Know what's below. Call before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=40'
V-SCALE	1"=4'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	APL
CHECKED BY	

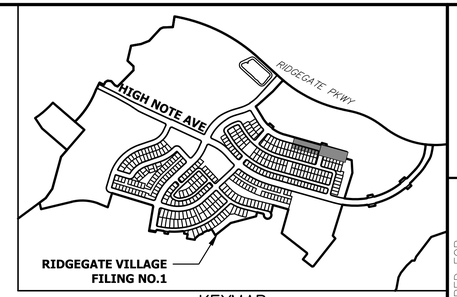
RIDGEGATE SOUTHWEST VILLAGE FILING 1

ROADWAY PLAN & PROFILES

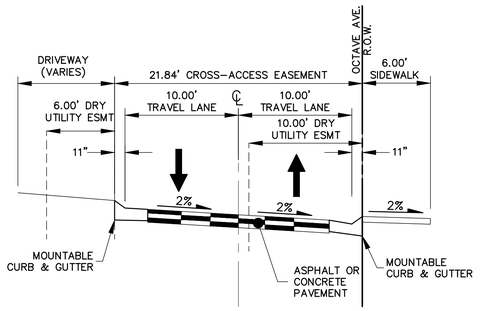
SHEET 238 OF 270

JOB NO. 15950.01

SHOW SIDEWALK DETACHED BETWEEN ALLEY AND OCTAVE AVE, TYP.



KEYMAP
SCALE: 1"=1000'



PRIVATE ALLEY
ENTRANCE FROM OCTAVE AVENUE
N.T.S.

20 10 0 20 40
ORIGINAL SCALE: 1" = 20'

NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE SHEET 234 FOR LEGEND.
4. SEE SHEET 236 FOR TYPICAL STREET SECTIONS.
5. SEE SHEET 242 FOR SUMP PROFILES.
6. SEE SHEET 240 FOR CURB RETURN PROFILES.
7. SEE SHEET 241 FOR CURB RAMP DETAILS.
8. SEE SHEET 243 FOR SIGNAGE AND STRIPING.
9. ALL CURB RADII ARE 25' UNLESS OTHERWISE NOTED.
10. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.

811 Know what's below. Call before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED
AARON LEE CLUTTER
36742
PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1" = 20'	DESIGNED BY	GVT
V-SCALE	N/A	DRAWN BY	APL
DATE	2/12/21	CHECKED BY	

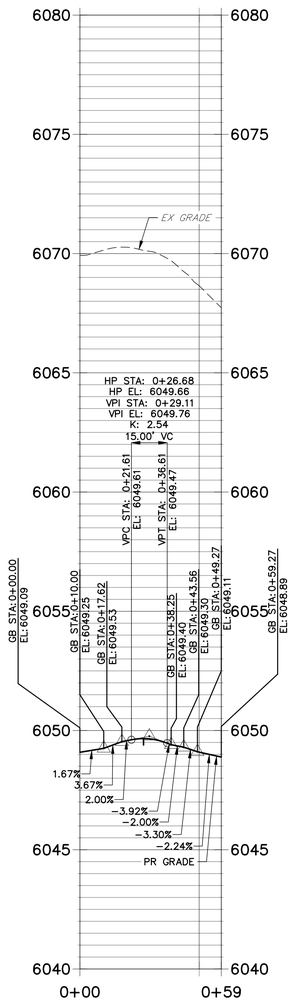
RIDGEGATE SOUTHWEST
VILLAGE FILING 1

ROADWAY PLAN & PROFILES

SHEET 239 OF 270

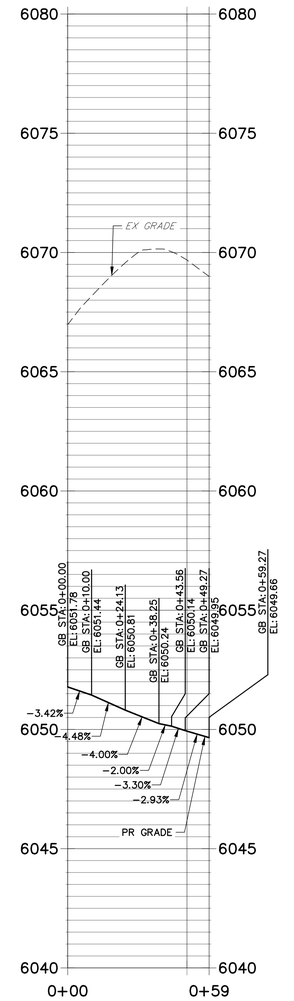
JOB NO. 15950.01

F59 PROFILE
STA 0+00.00 TO 0+59.27

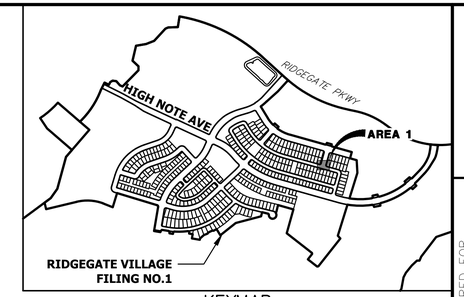


AREA 1

F60 PROFILE
STA 0+00.00 TO 0+59.27



AREA 1



KEYMAP
SCALE:1"=1000'

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=30'	DESIGNED BY	GVT
V-SCALE	N/A	DRAWN BY	GVT
DATE	2/12/21	CHECKED BY	

30 15 0 30 60
HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

Know what's **below.**
Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

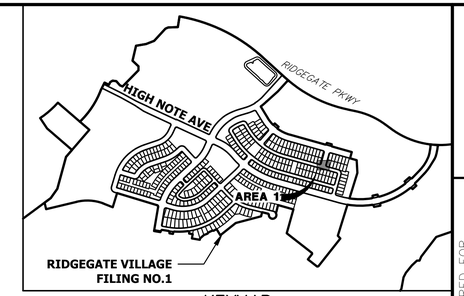
COLORADO REGISTERED PROFESSIONAL ENGINEER
AARON L. CLUTTER
36742

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

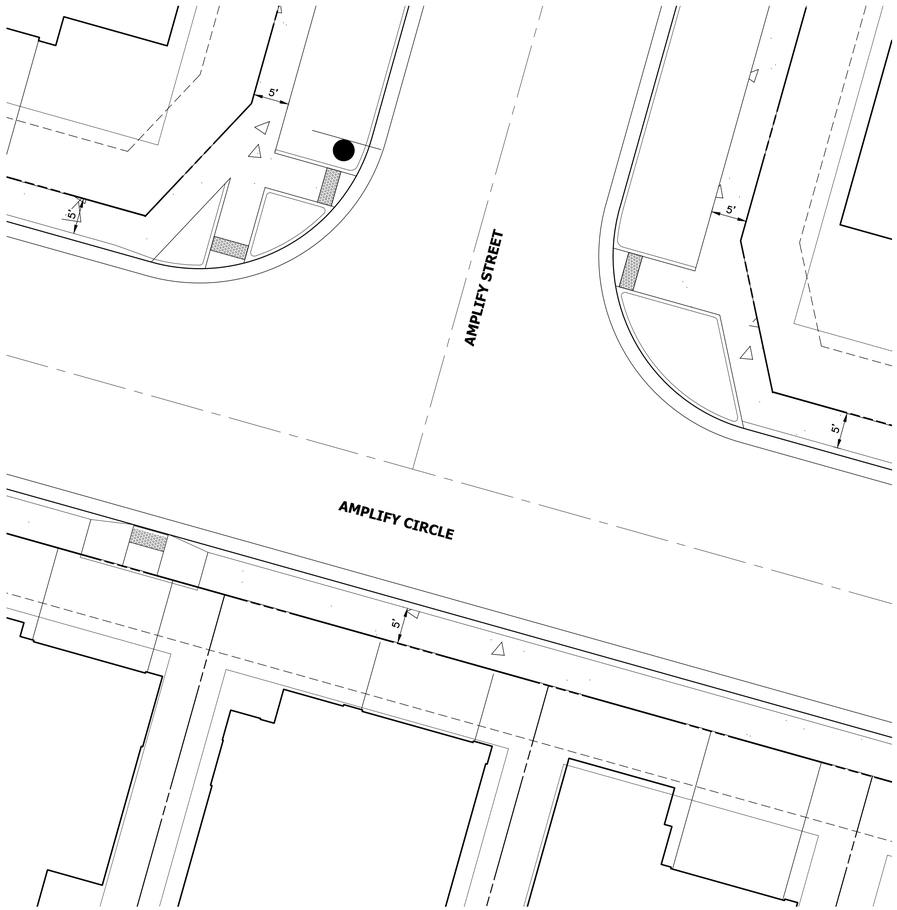
RIDGEGATE SOUTHWEST VILLAGE FILING 1
CURB RETURN PROFILE

SHEET 240 OF 270

JOB NO. 15950.01



KEYMAP
SCALE: 1"=1000'



AREA 1

NOTE: CURB RAMP DETAILS TO BE PROVIDED WITH NEXT SUBMITTAL

10 5 0 10 20
ORIGINAL SCALE: 1" = 10'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

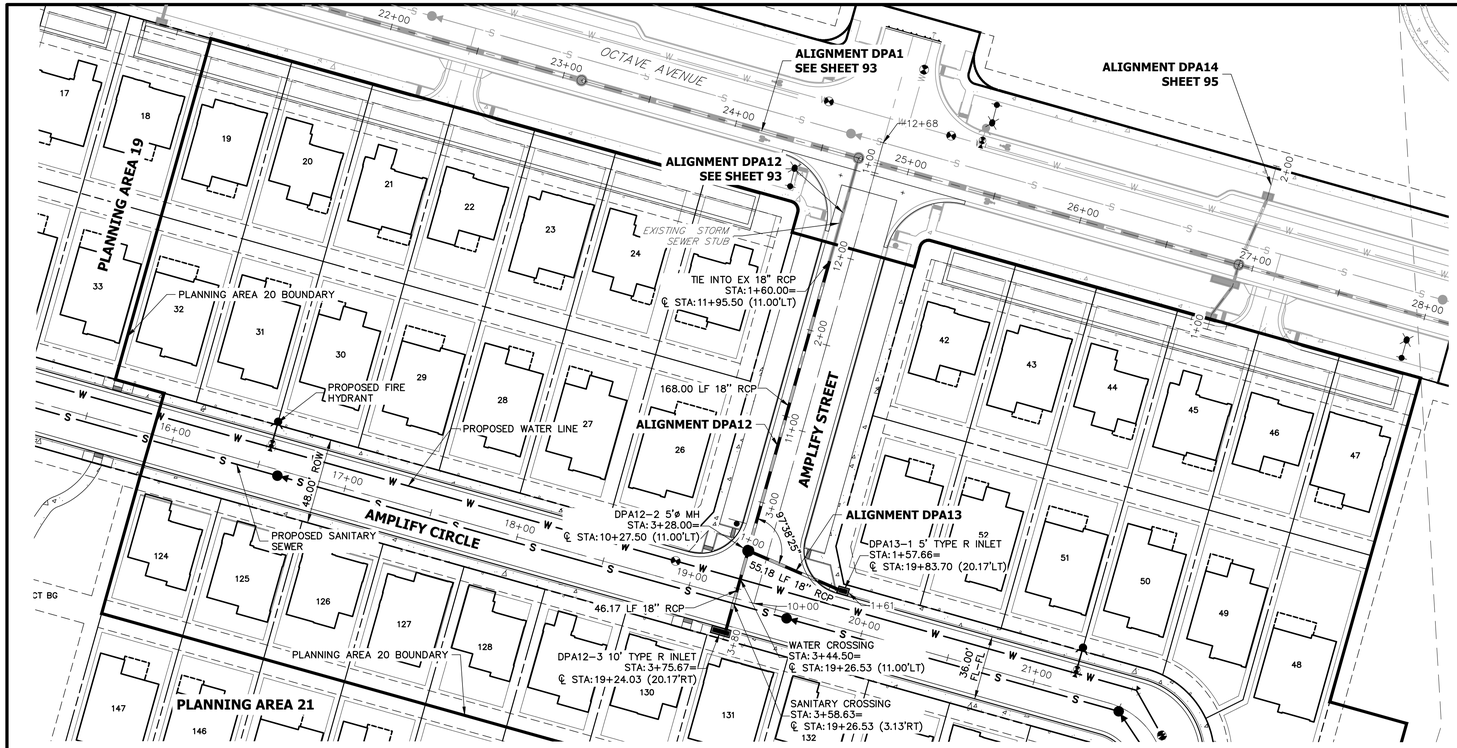
No.	REVISION	BY	DATE

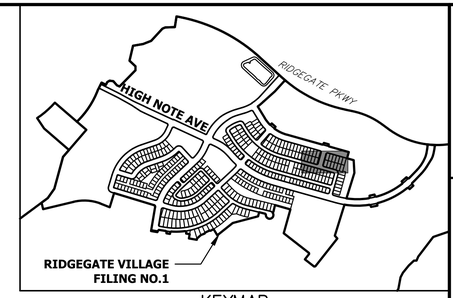
H-SCALE	1"=10'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	APL
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
CURB RAMP DETAILS

SHEET 241 OF 270

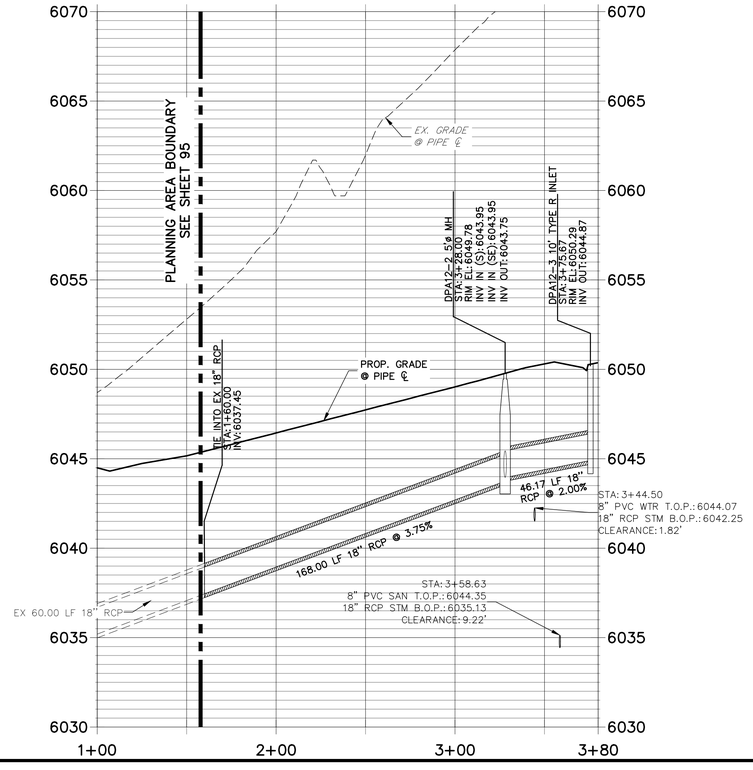
JOB NO. 15950.01



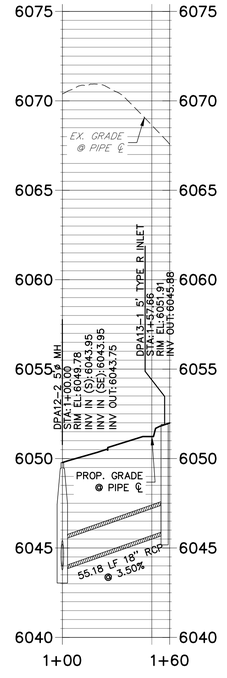


KEYMAP
SCALE:1"=1000'

DPA12 PROFILE
STA 1+00.00 TO 3+80.00



DPA13 PROFILE
STA 1+00.00 TO 1+60.00



40 20 0 40 80
HORIZONTAL
ORIGINAL SCALE: 1" = 40'
VERTICAL
ORIGINAL SCALE: 1" = 4'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

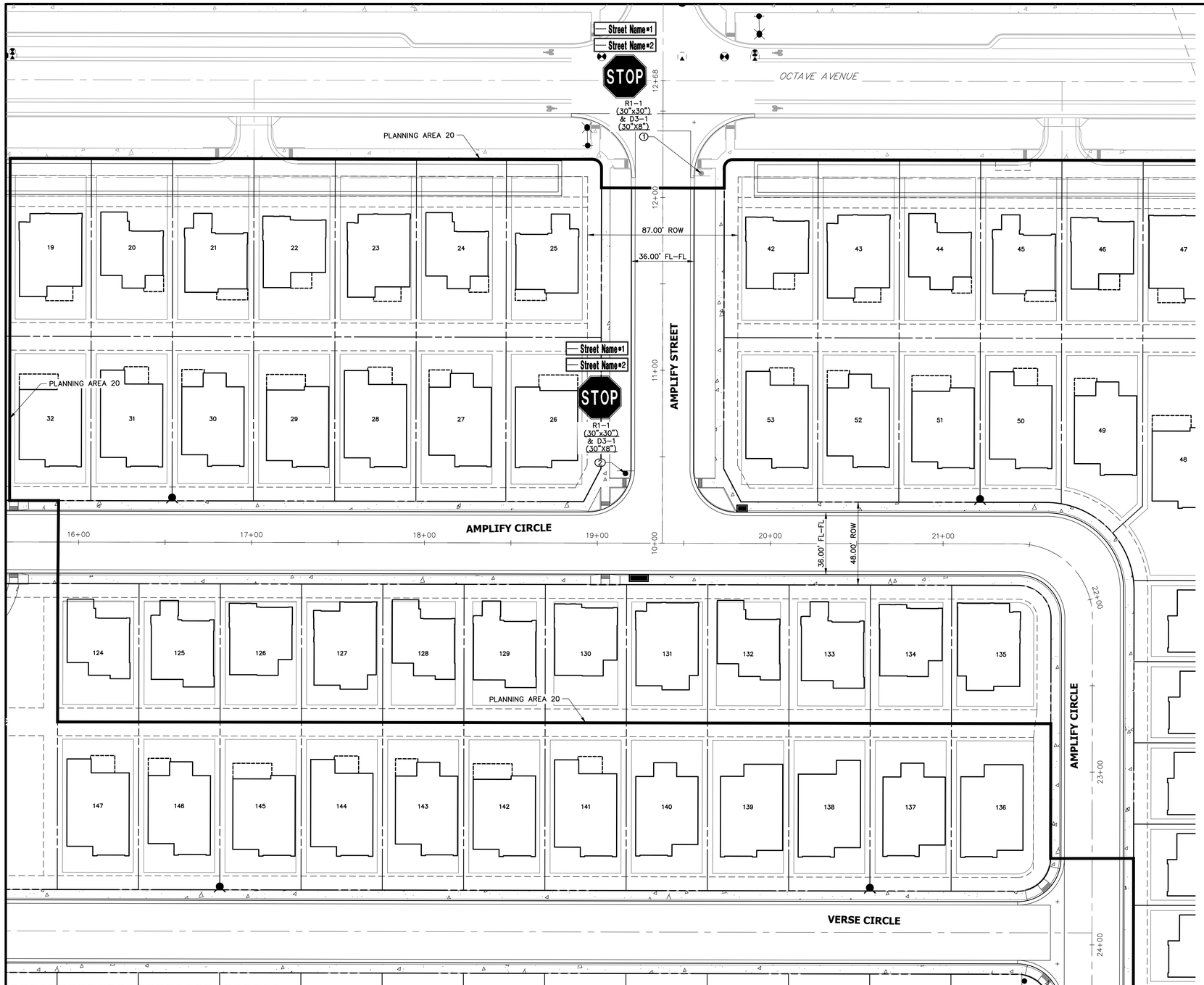
H-SCALE	1"=40'
V-SCALE	1"=4'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	APL
CHECKED BY	

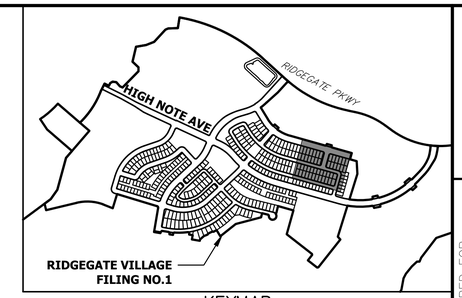
RIDGEGATE SOUTHWEST VILLAGE FILING 1

STORM SEWER PLANS & PROFILES

SHEET 242 OF 270

JOB NO. 15950.01





KEYMAP
SCALE: 1"=1000'

SIGN TABULATION				
SIGN NUMBER	STATION	OFFSET	ALIGNMENT	DESCRIPTION
1	12+14.00	22.17' (RT)	AMPLIFY STREET	30"X30" R1-1 30"X8" D3-1 (2)
2	10+40.31	21.32' (LT)	AMPLIFY STREET	30"X30" R1-1 30"X8" D3-1 (2)

30 15 0 30 60
ORIGINAL SCALE: 1" = 30'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1" = 30'	DESIGNED BY	GVT
V-SCALE	N/A	DRAWN BY	APL
DATE	2/12/21	CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
SIGNAGE AND STRIPING PLANS

SHEET 243 OF 270

JOB NO. 15950.01

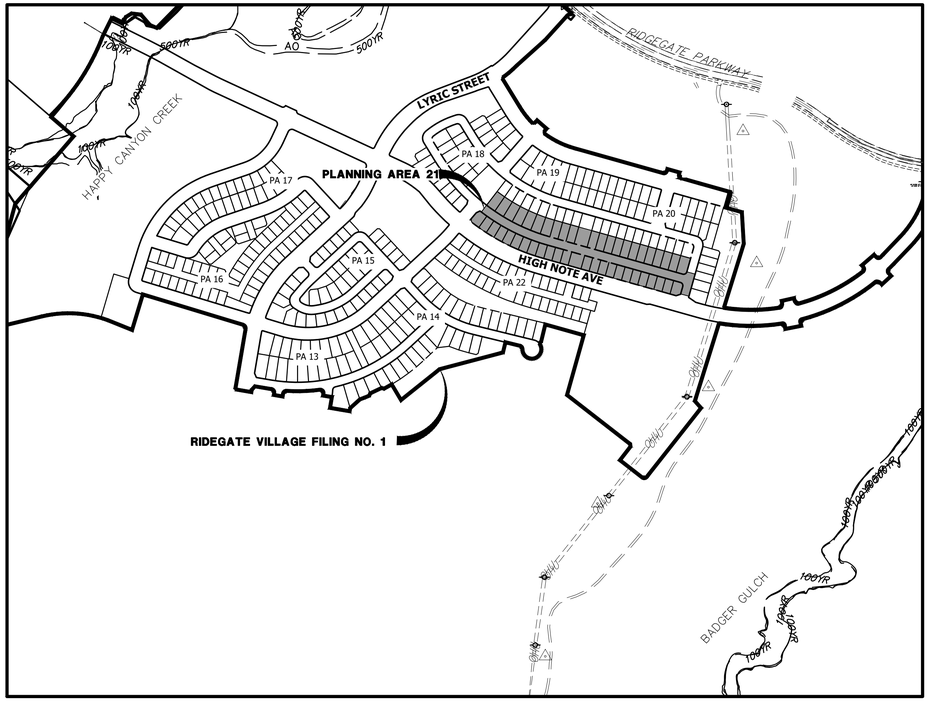
RIDGEGATE SOUTHWEST VILLAGE FILING 1-PLANNING AREA 21

A PORTION OF THE RIDGEGATE PLANNED DEVELOPMENT DISTRICT, EAST SIDE PROPERTY
LOCATED IN SECTION 23 & 34, TOWNSHIP 6 SOUTH, RANGE 67 WEST
OF THE 6TH P.M., CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO

STREET & DRAINAGE CONSTRUCTION PLANS

ABBREVIATIONS

AC	ACRE
AD	ALGEBRAIC DIFFERENCE
AH	AHEAD
ARCH	ARCHITECT
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASS'Y	ASSEMBLY
AVE	AVENUE
BB	BOX BASE
BK	BACK
BNDY	BOUNDARY
BOP	BOTTOM OF PIPE
BOV	BLOW OFF VALVE
BFV	BUTTERFLY VALVE
BLVD	BOULEVARD
BW	BOTTOM OF WALL
C&G	CURB & GUTTER
CATV	CABLE TELEVISION
CB	CATCH BASIN
CBC	CONCRETE BOX CULVERT
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION
CDS	CUL-DE-SAC
CF	CUBIC FOOT
CFS	CUBIC FEET PER SECOND
CIP	COMPLETE IN PLACE
CL	CENTER LINE
CLOMR	CONDITIONAL LETTER OF MAP REVISION
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
COCS	CITY OF COLORADO SPRINGS
CONC	CONCRETE
CR	CIRCLE
CSP	CORRUGATED STEEL PIPE
CSU	COLORADO SPRINGS UTILITIES
CT	COURT
CTRB	CONCRETE THRUST REDUCER BLOCK
CY	CUBIC YARD
DBPS	DRAINAGE BASIN PLANNING STUDY
DE	DRAINAGE EASEMENT
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DR	DRIVE
DRC	DESIGN REVIEW COMMITTEE
DU	DWELLING UNITS
DY	DAY
E	EAST
EA	EACH
EGL	ENERGY GRADE LINE
EL	ELEVATION
ELEC	ELECTRIC
EOA	EDGE OF ASPHALT
EPC	EL PASO COUNTY
ERCP	ELLIPTICAL RCP
ESMT	EASEMENT
EST	ESTIMATE
EX	EXISTING
FDP	FINAL DEVELOPMENT PLAN
FDR	FINAL DRAINAGE REPORT
FES	FLARED END SECTION
FF	FINISHED FLOOR ELEVATION
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOWLINE
FIL	FILING
FO	FIBER OPTIC CABLE
GB	GRADE BREAK
GE	GAS EASEMENT
GIS	GEOGRAPHIC INFORMATION SYSTEM
GL	GAS LINE
GPS	GLOBAL POSITIONING SYSTEM
GV	GATE VALVE
HBP	HOT BITUMINOUS PAVEMENT
HC	HANDICAP
HDC	HIGH DEFLECTION COUPLING
HDPE	HIGH DENSITY POLYETHYLENE
HGL	HYDRAULIC GRADE LINE
HMA	HOT MIX ASPHALT
HOA	HOME OWNERS ASSOCIATION
HP	HIGH POINT
HR	HOUR
I	INLET
IE	IRRIGATION EASEMENT
INT	INTERSECTION
INV	INVERT
IRR	IRRIGATION
KB	KICK (THRUST) BLOCK
LB	POUND
LE	LANDSCAPE EASEMENT
LF	LINEAR FOOT
LN	LANE
LOMR	LETTER OF MAP REVISION
LP	LOW POINT
LS	LUMP SUM
LT	LEFT
MAX	MAXIMUM
M/D	MOISTURE DENSITY
MDDP	MASTER DEVELOPMENT DRAINAGE PLAN
MH	MANHOLE
MIN	MINIMUM
MS	MOUNTABLE SIDEWALK
N	NORTH
NRCP	NON-REINFORCED CONCRETE PIPE
ODP	OFFICIAL DEVELOPMENT PLAN
OHE	OVERHEAD ELECTRIC
OHU	OVERHEAD UTILITY
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PCR	POINT OF CURB RETURN
PDP	PRELIMINARY DEVELOPMENT PLAN
PE	PROFESSIONAL ENGINEER
PI	POINT OF INTERSECTION
PKWY	PARKWAY
PL	PROPERTY LINE
PR	PROPOSED
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PV	PLUG VALVE
PVC	POLYVINYL CHLORIDE
R	RADIUS
RCBC	REINFORCED CONCRETE BOX CULVERT
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
ROW	RIGHT OF WAY
RT	RIGHT
S	SOUTH
STE	STEEL
SAN	SANITARY SEWER
SF	SQUARE FOOT
ST	STREET
STA	STATION
STM	STORM SEWER
SY	SQUARE YARD
SY-IN	SQUARE YARD INCH
TB	THRUST BLOCK
TBC	TOP BACK OF CURB
TBW	TOP BACK OF WALK
TEL	TELEPHONE
TN	TON
TOA	TOP OF ASPHALT
TOB	TOP OF BOX
TOC	TOP OF CURB OR CONCRETE
TOF	TOP OF FOUNDATION
TOP	TOP OF PIPE
TW	TOP OF WALL
TYP	TYPICAL
UDFCD	URBAN DRAINAGE AND FLOOD CONTROL DISTRICT
UE	UTILITY EASEMENT
U&DE	UTILITY & DRAINAGE EASEMENT
UGE	UNDERGROUND ELECTRIC
VCP	VITRIFIED CLAY PIPE
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
VTC	VEHICLE TRACKING CONTROL
W	WEST
WL	WATER LINE
WM	WATER MAIN
WRD	WATER RESOURCES DEPARTMENT
WS	WATER SURFACE
WSE	WATER SURFACE ELEVATION
WTR	WATER
YR	YEAR



VICINITY MAP
SCALE: 1"=400'

SHEET INDEX

244	COVER SHEET
245	GENERAL NOTES
246	LEGEND
247	OVERALL UTILITY PLAN
248 – 250	ROADWAY PLAN & PROFILES
251	ROADWAY PLAN & PROFILES
252	CURB RAMP DETAILS
253	SIGNAGE AND STRIPING PLANS

APPLICANT/OWNER

SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
P~303.791.8180

CIVIL ENGINEER/SURVEYOR

JR ENGINEERING
7200 SOUTH ALTON WAY, SUITE C400
CENTENNIAL, CO
P~303.267.6220

PLANNER

SAGE DESIGN GROUP
1500 SOUTH PEARL STREET, SUITE 200
DENVER, CO 80210
P~303.470.2855

TRAFFIC ENGINEER

JR ENGINEERING
7200 SOUTH ALTON WAY, SUITE C400
CENTENNIAL, CO
P~303.267.6183

GEOTECHNICAL ENGINEER

CTL THOMPSON, INC
1971 WEST 12TH VAE.
DENVER, CO 80204
P~303.825.0777

BENCHMARK

NGS CONTROL POINT UNBEWUST BEING A 3.5 INCH DIAMETER BRASS CAP. LOCATED ABOUT 3.2 MILES SOUTH OF INTERSTATE 25 AND COLORADO STATE HIGHWAY 470 INTERCHANGE, GO SOUTH ON INTERSTATE 25 FOR 2.9 MILES TO EXIT 191. PROCEED ON A PAVED ROAD TO THE SOUTHWEST FOR 0.2 MILES TO THE STATION ON THE LEFT. IN THE NORTHWEST CORNER OF A 24 FOOT BY 16 FOOT ROCK OUTCROP. IT IS 22.5 FEET EAST OF THE CENTERLINE OF THE PAVED ROAD, 123 FEET NORTH OF THE OUTLET OF A 3 FOOT CORRUGATED STEEL PIPE CULVERT AND APPROXIMATELY 350 FEET WEST OF THE WEST EDGE OF OIL OF SOUTHBOUND INTERSTATE 25, ELEVATION: 6125.32 (NAVD88).

BASIS OF BEARING

BEARING SHOWN HEREON ARE GRID BEARINGS DERIVED FROM GPS OBSERVATION BASED UPON THE COLORADO COORDINATE SYSTEM OF 1983 CENTRAL ZONE (NAD 83, 2011) REFERENCED TO THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, SIXTH PRINCIPAL MERIDIAN BEING MONUMENTED AS SHOWN HEREON, TAKEN TO BEAR NORTH 89°31'58" EAST, A DISTANCE OF 2635.13 FEET.

Know what's below. Call before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=400'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
COVER SHEET

SHEET 244 OF 270

JOB NO. 15950.01

GENERAL PROJECT NOTES:

1. ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION OF IMPROVEMENTS SHALL MEET OR EXCEED THE GOVERNING CITY, COUNTY, AND/OR STATE AND APPLICABLE UTILITY DISTRICT STANDARDS AND SPECIFICATIONS, AND APPLICABLE STATE AND FEDERAL REGULATIONS. WHERE THERE IS A CONFLICT BETWEEN THESE PLANS AND ANY APPLICABLE STANDARDS, THE HIGHER QUALITY STANDARD SHALL APPLY. ALL WORK SHALL BE INSPECTED AND APPROVED BY THE CITY AND APPLICABLE UTILITY DISTRICT(S).

2. THE SITE CONSTRUCTION PLANS LISTED WITHIN THIS PLAN SET ARE NOT FOR CONSTRUCTION UNLESS APPROVED BY THE APPROPRIATE GOVERNING JURISDICTION. THE CONTRACTOR SHALL CONFIRM SAID APPROVAL PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL KEEP ONE (1) SIGNED COPY OF THE APPROVED SET OF PLANS, APPROPRIATE SPECIFICATIONS AND STANDARDS, AND APPROVED PERMITS ONSITE AT ALL TIMES.

3. NO REVISIONS SHALL BE MADE TO THESE PLANS WITHOUT THE APPROVAL OF THE CITY, COUNTY, STATE OR LOCAL DISTRICT AND THE ENGINEER OF RECORD.

4. ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARDS, UNLESS SPECIFICALLY STATED OTHERWISE.

5. THE CONTRACTOR IS RESPONSIBLE FOR ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS SHOWN ON THESE DRAWINGS OR DESIGNATED TO BE PROVIDED, INSTALLED, CONSTRUCTED, REMOVED, OR RELOCATED UNLESS SPECIFICALLY NOTED OTHERWISE.

6. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND LICENSES FOR WORK INCLUDING, BUT NOT LIMITED TO DEMOLITION, STREET CUTS, UTILITY INTERFERENCES, TRAFFIC CONTROL, GRADING, AND UTILITY FROM ALL APPLICABLE AGENCIES; AND FOR COMPLYING WITH ALL PROVISIONS INCLUDED THEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL OTHER APPLICABLE PERMITS NOT SPECIFICALLY REQUIRED BY THE AUTHORITY HAVING JURISDICTION.

7. THE CONTRACTOR SHALL UTILITY STAKE PROJECT AT LEAST 2 WORKING DAYS PRIOR TO BEGINNING EXCAVATION OR GRADING, TO HAVE ALL REGISTERED UTILITY LOCATIONS MARKED. OTHER UNREGISTERED UTILITY ENTITIES (I.E. DITCH COMPANY) ARE TO BE LOCATED BY CONTACTING THE RESPECTIVE REPRESENTATIVE.

8. THE CONTRACTOR IS RESPONSIBLE FOR FIELD LOCATING AND VERIFYING ELEVATIONS OF ALL EXISTING SEWER MAINS, WATER MAINS, CURBS, GUTTERS, AND OTHER UTILITIES AT THE POINTS OF CONNECTION SHOWN ON THE PLANS, AND AT ANY UTILITY CROSSINGS PRIOR TO INSTALLING ANY OF THE NEW IMPROVEMENTS. IF A CONFLICT EXISTS AND/OR A DESIGN MODIFICATION IS REQUIRED, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO MODIFY THE DESIGN. DESIGN MODIFICATION(S) MUST BE APPROVED BY THE APPROPRIATE AUTHORITY PRIOR TO BEGINNING CONSTRUCTION.

9. ANY DISRUPTION OF UTILITY SERVICE THAT IS REQUIRED TO ADJUST, EXTEND, RELOCATE OR OTHERWISE REARRANGE ANY UTILITY WITHIN THE PROJECT AREA SHALL BE COORDINATED IN ADVANCE WITH THE AFFECTED UTILITY ENTITY.

10. RIM ELEVATIONS SHOWN ARE APPROXIMATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS. THE CONTRACTOR SHALL USE PRECAST CONCRETE ADJUSTMENT RINGS, GROUT, AND STEEL SHIMS TO ADJUST THE MANHOLE FRAMES TO FINAL GRADE IN CONFORMANCE WITH THE CITY OR UTILITY COMPANY/DISTRICT STANDARD SPECIFICATIONS. ALL FRAMES SHALL BE ADJUSTED TO FINAL GRADE PRIOR TO THE FINAL LIFT OF ASPHALT.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF PROJECT SAFETY INCLUDING, BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.

12. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN, IN ACCORDANCE WITH THE M.U.T.C.D. TO THE APPROPRIATE RIGHT-OF-WAY AUTHORITY (CITY, COUNTY, OR STATE) FOR APPROVAL, PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN, OR AFFECTING, THE RIGHT-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED BY THE CONSTRUCTION ACTIVITIES. ALL WORK WITHIN THE RIGHT OF WAY SHALL BE DONE IN ACCORDANCE WITH THE GOVERNING AUTHORITY'S STANDARDS AND SPECIFICATIONS.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANING AND RESTORATION OF ANY EXISTING IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO STREET PAVEMENT, FENCES, SOD, LANDSCAPING, SPRINKLER SYSTEMS, AND UTILITIES DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL LOCATION AND CONDITION.

14. INCLUDED IN THESE PLANS IS THE DEMOLITION AND DISPOSAL OF ALL EXISTING UTILITIES, SITE IMPROVEMENTS, STRUCTURES, AND SITE FURNISHINGS NEEDED FOR CONSTRUCTION OF THE IMPROVEMENTS SHOWN HEREON. ALL QUESTIONS IN REGARD TO DEMOLITION SHALL BE SUBMITTED TO THE OWNER IN WRITING PRIOR TO BID.

15. ALL DEMOLITION, REMOVAL, DISPOSAL, AND ABANDONMENT OF UTILITIES, STRUCTURES, SITE IMPROVEMENTS, AND SITE FURNISHINGS SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL STANDARDS AND SPECIFICATIONS, AND PERMIT REQUIREMENTS.

16. ALL DISTURBED SOIL, ON- OR OFF-SITE AND RELATED TO WORK AT THIS PROJECT SITE, IS REQUIRED TO BE PROTECTED FROM WIND AND STORM WATER EROSION. TO MITIGATE EROSION, THE CONTRACTOR SHALL USE STANDARD EROSION CONTROL TECHNIQUES DESCRIBED IN THE GESC PLAN SET AND GESC REPORT FOR THIS PROJECT.

17. ALL STRUCTURAL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY GROUND-DISTURBING ACTIVITY. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED IN GOOD REPAIR BY THE CONTRACTOR UNTIL SUCH TIME AS THE ENTIRE DISTURBED AREA IS STABILIZED WITH HARD SURFACE OR PERMANENT LANDSCAPING. THE CONTRACTOR IS RESPONSIBLE FOR REFERRING TO ANY EROSION AND SEDIMENT CONTROL, STORMWATER MANAGEMENT, STORMWATER POLLUTION PREVENTION, OR SIMILAR PLAN AND/OR NARRATIVE AND ASSOCIATED PERMITS INCLUDING, BUT NOT LIMITED TO GRADING PERMITS, AND COMPLYING WITH THE REQUIREMENTS THEREIN.

18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK, INSPECTIONS, AND CERTIFICATIONS AS REQUIRED BY THE CITY, STATE OR LOCAL DISTRICTS. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST ASSOCIATED WITH THE INSPECTION AND CERTIFICATION UNLESS OTHERWISE ARRANGED WITH THE OWNER/DEVELOPER. THE CONTRACTOR SHALL COORDINATE ALL CERTIFICATIONS, AND PROVIDE FIELD SURVEYED AS-BUILT INFORMATION FOR REVIEW BY THE OWNER/DEVELOPER AND/OR ENGINEER AS EARLY AS POSSIBLE IN THE CONSTRUCTION SCHEDULE TO AVOID POTENTIAL DELAYS.

19. CONTRACTOR IS RESPONSIBLE FOR AS-BUILT DRAWINGS, TESTS, REPORTS, AND/OR ANY OTHER CERTIFICATES OR INFORMATION AS REQUIRED FOR ACCEPTANCE OF WORK FROM CITY, UTILITY DISTRICTS, OR ANY OTHER GOVERNING AGENCY, OR TO THE OWNER/DEVELOPER AS REQUIRED BY AND IN ACCORDANCE WITH THE GOVERNING AUTHORITY OR OWNER/DEVELOPER'S CRITERIA. CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING AS-BUILT INFORMATION AN A SET OF RECORD DRAWINGS KEPT AT THE CONSTRUCTION SITE AND AVAILABLE TO THE GOVERNING CITY, COUNTY, AND/OR STATE AND UTILITY DISTRICT INSPECTOR AT ALL TIMES. THE CONTRACTOR SHALL CONFIRM ANY REQUIREMENTS AS EARLY AS POSSIBLE IN THE CONSTRUCTION SCHEDULE TO ACCOUNT FOR PREPARATION AND REVIEW OF THE INFORMATION TO AVOID POTENTIAL DELAYS.

20. IF, DURING THE CONSTRUCTION PROCESS, CONDITIONS ARE ENCOUNTERED BY THE CONTRACTOR, HIS SUBCONTRACTORS, OR OTHER AFFECTED PARTIES, WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE OWNER/DEVELOPER AND THE ENGINEER IMMEDIATELY.

21. DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. IF PERTINENT DIMENSIONS ARE NOT SHOWN, CONTACT THE CONSULTING ENGINEER FOR CLARIFICATION AND ANNOTATE THE DIMENSION ON THE AS-BUILT RECORD DRAWING.

22. BENCHMARK VERIFICATION: THE CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS AND THE PROPOSED ELEVATIONS IN THIS CONSTRUCTION PLAN SET AGAINST THE PROJECT BENCHMARK, IDENTIFIED HEREIN, PRIOR TO COMMENCING WORK.

ROADWAY NOTES

1. GUTTERS SHALL BE AT LEAST 6" THICK.
2. ALL CURBS SHALL USE THE CATCH SECTION UNLESS OTHERWISE NOTED.
3. ALL COMBINATION CURB, GUTTER AND SIDEWALKS TO BE 6" THICK (MIN.). SIDEWALKS WITH VERTICAL CURB AND GUTTER TO BE 6" THICK (MIN.).
4. NON-LANDSCAPED MEDIAN ISLANDS SHALL BE COVERED WITH AN ACCEPTABLE IMPERMEABLE SURFACE.
5. IF ANY SECTION OF A DETACHED SIDEWALK IS TO BE PLACED OUTSIDE OF THE ROAD RIGHT-OF-WAY, THEN A SIDEWALK EASEMENT SHALL BE REQUIRED TO MAINTAIN PUBLIC USE.
6. PLACEMENT, MOISTURE AND DENSITY CONTROL FOR SUBGRADE, SUBBASE, AND SURFACING MATERIALS SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS OF CHAPTER 8 OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.

CITY OF LONE TREE GENERAL NOTES

1. THE CITY OF LONE TREE ENGINEER'S SIGNATURE AFFIXED TO THIS DOCUMENT INDICATES THE ENGINEERING DIVISION HAS REVIEWED THE DOCUMENT AND FOUND IT IN GENERAL CONFORMANCE WITH THE CITY OF LONE TREE SUBDIVISION RESOLUTION OR APPROVED VARIANCES TO THOSE REGULATIONS. THE CITY OF LONE TREE ENGINEER, THROUGH ACCEPTANCE OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY, OTHER THAN STATED ABOVE, FOR THE COMPLETENESS AND/OR ACCURACY OF THESE DOCUMENTS. THE OWNER AND ENGINEER UNDERSTAND THAT THE RESPONSIBILITY FOR THE ENGINEERING ADEQUACY OF THE FACILITIES DEPICTED IN THIS DOCUMENT LIES SOLELY WITH THE REGISTERED PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE IS AFFIXED TO THIS DOCUMENT.
2. ALL ROADWAY CONSTRUCTION SHALL CONFORM TO CURRENT DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
3. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE CITY OF LONE TREE ENGINEERING DIVISION. THE CITY RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS STANDARDS AND SPECIFICATIONS.
4. THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS, INSPECTION SECTION, (303) 662-8112, A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO STARTING CONSTRUCTION, AND/OR BEFORE RESTARTING CONSTRUCTION AFTER A SHUTDOWN OF MORE THAN 10 DAYS.
5. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ACTUAL CONSTRUCTION. FOR INFORMATION, CONTACT: UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT (800) 922-1987 OR 811
6. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY (SIGNED BY BOTH DESIGN ENGINEER AND CITY OF LONE TREE) OF THE CONSTRUCTION PLANS AND GESC REPORT AND PLAN, AND ONE (1) COPY OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS AT THE JOB SITE AT ALL TIMES.
7. ALL PROPOSED STREET CUTS TO EXISTING PAVEMENTS FOR UTILITIES, STORM SEWER, OR OTHER PURPOSES ARE LISTED AND REFERENCED BELOW:

   RIDGEGATE PARKWAY

8. A ROW/CONSTRUCTION PERMIT MUST BE OBTAINED BEFORE ANY WORK WITHIN EXISTING OR PROPOSED PUBLIC ROW. THE PERMIT APPLICATION MUST BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR REVIEW/PROCESSING A MINIMUM OF 7 DAYS PRIOR TO UPDATED 2-3-09 REQUESTED START FOR THE WORK IN THE ROW.
9. A PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR ACCEPTANCE WITH THE PERMIT APPLICATION. AN EXCAVATION OR PUBLIC IMPROVEMENTS CONSTRUCTION PERMIT WILL NOT BE ISSUED WITHOUT AN APPROVED TRAFFIC CONTROL PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION.
10. THE CONSTRUCTION PLANS SHALL BE CONSIDERED VALID FOR TWO (2) YEARS FROM THE DATE OF CITY OF LONE TREE ACCEPTANCE/APPROVAL IF APPLICABLE CONSTRUCTION PERMITS HAVE NOT BEEN OBTAINED, AND CONSTRUCTION STARTED WITHIN THAT TIME, THESE PLANS SHALL BE VOID AND WILL BE SUBJECT TO RE-REVIEW AND RE-ACCEPTANCE BY THE CITY OF LONE TREE.
11. CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE ENGINEER INSPECTOR WHEN WORKING OUTSIDE OF THE PUBLIC RIGHT-OF-WAY ON ANY FACILITY WHICH WILL BE CONVEYED TO THE CITY, URBAN DRAINAGE AND FLOOD CONTROL DISTRICT, OR OTHER SPECIAL DISTRICT FOR MAINTENANCE (STORM SEWER, ENERGY DISSIPATERS, DETENTION OUTLET STRUCTURES, OR OTHER DRAINAGE INFRASTRUCTURES). FAILURE TO NOTIFY ENGINEERING INSPECTOR TO ALLOW THEM TO INSPECT THE CONSTRUCTION MAY RESULT IN NON-ACCEPTANCE OF THE FACILITIES/INFRASTRUCTURE BY CITY AND/OR URBAN DRAINAGE.

CITY OF LONE TREE SIGNAGE & STRIPING NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MOST RECENT VERSION OF THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE "COLORADO SUPPLEMENTAL MUTCD" AND THE DOUGLAS COUNTY "ROAD AND CONSTRUCTION STANDARDS MANUAL". FURTHER SPECIFICATIONS AND ILLUSTRATIONS ARE LOCATED IN THE COLORADO DIVISION OF HIGHWAYS "M AND S STANDARDS".
2. DELINEATION OF ROADWAYS SHALL BE AS SPECIFIED IN THE COLORADO "M AND S MANUAL".
3. SPECIAL CARE SHALL BE TAKEN IN SIGN LOCATION TO ENSURE AN UNOBSTRUCTED VIEW OF EACH SIGN. STREET NAME SIGNS SHALL BE MOUNTED SO THAT THEY CAN BE SEEN FROM ALL DIRECTIONS OF TRAVEL.
4. INSTALLATION OF SIGNS SHALL CONFORM TO THE MUTCD MOUNTING HEIGHT REQUIREMENTS, INCLUDING A 7-FOOT MINIMUM HEIGHT FROM THE BOTTOM OF THE LOWEST SIGN PANEL TO THE TOP GRADE OF SIDEWALK.
5. ALL NEWLY INSTALLED TRAFFIC SIGNS SHALL MEET THE MINIMUM RETRO-REFLECTIVITY AND ILLUMINATION STANDARDS AS SET FORTH BY THE MUTCD (LATEST EDITION). THESE MINIMUM REQUIREMENTS SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
6. DIAMOND GRADE MATERIAL SHALL BE USED ON ALL STOP SIGNS.
7. THE CONTRACTOR INSTALLING SIGNS IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND UTILITIES. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.
8. FOLLOWING INSTALLATION, THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS DEPARTMENT, 303-662-8112. A FIELD INSPECTION OF LOCATION AND INSTALLATION OF ALL SIGNS SHALL BE PERFORMED BY PUBLIC WORKS. ALL DISCREPANCIES IDENTIFIED DURING THE FIELD INSPECTION MUST BE CORRECTED BEFORE THE TWO-YEAR WARRANTY PERIOD WILL BEGIN.
9. SIGNAGE AND STRIPING HAS BEEN DETERMINED BY INFORMATION AVAILABLE AT THE TIME OF REVIEW.
   PRIOR TO INITIATION OF THE WARRANTY PERIOD, LONE TREE RESERVES THE RIGHT TO REQUIRE MODIFICATIONS TO EXISTING OR INSTALLATION OF ADDITIONAL SIGNAGE AND/OR STRIPING IF THEY DETERMINE THAT AN UNFORESEEN CONDITION WARRANTS SUCH MODIFICATION ACCORDING TO THE MUTCD OR THE CDOT M AND S STANDARDS. ALL SIGNAGE AND STRIPING SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
10. FINAL STRIPING AND CROSSWALK LAYOUT TO BE APPROVED BY THE CITY OF LONE TREE PRIOR TO INSTALLATION. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.
11. CROSSWALKS SHALL:
    BE CONSTRUCTED USING 125 MIL PREFORMED THERMOPLASTIC.
    LINE UP WITH THE HANDICAP RAMPS AT BOTH ENDS.
    BE CENTERED ON LANE LINES SO AS TO BE STRADDLED BY VEHICLES.
12. ALL PAVEMENT MARKINGS SHALL BE AS FOLLOWS:
    FOR CONCRETE SURFACE: METHYL METHACRYLATE OR EPOXY PAINT.
    FOR ASPHALT SURFACE: PAINT, 90 MIL PREFORMED THERMOPLASTIC, INLAID MARKING TAPE, METHYL METHACRYLATE, OR EPOXY PAINT.
    TURN ARROWS AND ONLYS: 125 MIL PREFORMED THERMOPLASTIC.
13. ALL PAVEMENT MARKING SHALL BE PRECEDED BY THE APPROPRIATE SURFACE PREPARATION.
14. ANY SIGNAGE AND/OR OTHER TRAFFIC CONTROL DEVICES REMOVED SHALL BE RETURNED TO THE CITY OF LONE TREE.
15. TYPE III LIGHTED BARRICADES SHALL BE SET AT ENDS OF ROADWAYS, SEPARATING FINISHED AND UNFINISHED CONSTRUCTION AREAS AND WILL BE MAINTAINED BY THE CONTRACTOR/DEVELOPER.

NOTE: ALSO SEE CITY OF LONE TREE "STREET SIGN DETAILS"FOR ADDITIONAL INTERSECTION STREET SIGNAGE REQUIREMENTS.

STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. INLET STATIONING IS TO CENTER OF INLET.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.
5. ALL ON-GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.
6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.
8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.
9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE
10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.
11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.

DRAINAGE STRUCTURE NOTES

1. CONCRETE WORK SHALL CONFORM TO ACI 301, ACI 350.
2. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM-615, GRADE 60.
3. ALL EXPOSED CONCRETE SHALL HAVE A CDOT CLASS 2 OR 5 FINISH.
4. ALL EXPOSED CONCRETE CORNERS SHALL HAVE ¾"CHAMFERS.
5. DETAILING, FABRICATION, AND PLACING OF REBAR SHALL BE IN ACCORDANCE WITH ACI 315.
6. CONSTRUCTION TOLERANCES SHALL BE IN ACCORDANCE WITH ACI 347.
7. ALL MANHOLES SHALL BE SLAB BASE UNLESS SPECIFIED OTHERWISE. MANHOLE SHALL BE FABRICATED IN ACCORDANCE WITH CDOT STANDARD M-604-20.
8. COORDINATES FOR MANHOLES AND AREA INLETS ARE SHOWN AT THE CENTER OF THE STRUCTURE. COORDINATES FOR MOUNTABLE CURB INLETS ARE SHOWN ALONG THE FLOWLINE AT CENTER OF THE STRUCTURE.
9. ALL TYPE C AND D INLETS SHALL HAVE CLOSE MESH GRATES UNLESS SPECIFIED OTHERWISE.
10. LENGTH OF FABRICATED BAR GRATING PANELS IS LENGTH OF BEARING BARS, WIDTH REFERS TO DIMENSION PERPENDICULAR TO BEARING BARS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PANEL DIMENSIONS GIVEN PRIOR TO FABRICATION.

DRAINAGE GENERAL NOTES

1. PROJECT FACILITIES ARE TO BE LOCATED BASED ON THE SURVEY COORDINATES, ELEVATIONS, DIMENSIONS, AND/OR GEOMETRIC DESIGN DATA PROVIDED ON THE DRAWINGS.
2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES AND FOR SATISFYING ALL APPLICABLE OSHA, FEDERAL, STATE, AND LOCAL REGULATIONS. TEMPORARY EXCAVATIONS SHALL PROVIDE, AT MINIMUM, THE TRENCH DIMENSIONS AND CLEARANCES SHOWN OR SPECIFIED. TEMPORARY CONSTRUCTION SLOPES SHALL BE SLOPED, SHORED, SHEETED, AND/OR BRACED IN ACCORDANCE WITH STABILITY REQUIREMENTS AND APPLICABLE REGULATIONS, AND SHALL BE NO STEEPER THAN THE SLOPES SHOWN OR SPECIFIED WITHOUT THE APPROVAL OF THE ENGINEER. ANY SUCH APPROVALS BY THE ENGINEER WILL NOT RELIEVE THE CONTRACTOR FROM SOLE RESPONSIBILITY FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES.
3. EXISTING FACILITIES NOT INDICATED TO BE REMOVED SHALL BE PROTECTED IN PLACE OR REMOVED AND REPLACED IN KIND, AS APPROVED BY ENGINEER.
4. THE WORK WILL TAKE PLACE IN AND AROUND DRAINAGE SWALES AND THE HAPPY CANYON CREEK, SUBJECT TO PERIODIC FLOODING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF SURFACE AND SUBSURFACE WATER DURING THE COURSE OF THE WORK. ANY DAMAGE TO THE WORK RESULTING FROM SURFACE FLOWS, BASE FLOWS, OR FLOOD FLOWS INCLUDING BUOYANCY FORCES ON PIPELINES AND OTHER FACILITIES SHALL BE CORRECTED BY THE CONTRACTOR AT THE CONTRACTOR'S SOLE COST. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND SATISFYING THE REQUIREMENTS OF ANY APPLICABLE PERMITS PERTAINING TO WATER AND EROSION CONTROL.
5. CONTACT THE ENGINEER FOR CLARIFICATIONS OF ANY ABBREVIATIONS SHOWN ON THE DRAWINGS.
6. THE SITE WHERE THE WORK IS TO BE PERFORMED SHALL BE OVERLOT GRADED. TOPSOIL SHALL BE SPREAD IN OPEN SPACE AREAS TO A DEPTH OF APPROXIMATELY 6-INCHES. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED, AND SOME AREAS COVERED WITH EROSION CONTROL BLANKETS, UNLESS OTHERWISE DIRECTED IN THE PLANS OR BY THE ENGINEER. CARE SHALL BE TAKEN TO AVOID DISTURBING ANY OPEN SPACE AREAS EXCEPT THE MINIMUM NECESSARY TO PERFORM THE WORK. TOPSOIL IN ANY WORK AREAS OR ACCESS ROADS WITHIN THE OPEN SPACE SHALL BE STRIPPED AND STOCKPILED PRIOR TO THE WORK, PROTECTED FROM MIXING WITH ANY OTHER MATERIALS DURING THE WORK, AND REPLACED TO A LOOSE DEPTH OF 7- TO 8- INCHES (FINAL DEPTH AFTER SETTLEMENT SHALL BE 6- INCHES MINIMUM) AS THE WORK IS BEING COMPLETED. WHERE BLANKETS EXIST, THE MINIMUM AREA OF BLANKET TO ALLOW WORK TO PROGRESS SHALL BE REMOVED AND THEN THE REMOVED OR NEW BLANKET REPLACED AFTER UNDERLYING WORK IS COMPLETE (EXCEPT NO TEMPORARY BLANKET NEEDS TO BE REPLACED OVER ROCK OR COIR BLANKET SHOWN IN THE PLANS). JUST PRIOR TO REPLACEMENT OF TOPSOIL AFTER UNDERLYING WORK IS COMPLETE AND APPROVED, THE UNDERLYING SUBGRADE IN OPEN SPACE AREAS SHALL BE LOOSENED BY TILLING TO A DEPTH OF 12- INCHES UNTIL CLODS ARE NO LARGER THAN 3 INCHES, AND APPROVED BY THE ENGINEER. THIS NOTE ALSO APPLIES TO AREAS WHERE COIR MAT IS TO BE INSTALLED.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ANY COMPLETED WORK FROM DISTURBANCE OR DAMAGE DURING THE COURSE OF THE WORK. IF REQUESTED BY THE CONTRACTOR AND APPROVED BY THE OWNER, SIGNIFICANT COMPLETED SECTIONS OF THE WORK MAY BE ACCEPTED AS FINAL PRIOR TO THE COMPLETION OF THE ENTIRE PROJECT. ANY SUCH EARLY ACCEPTANCE WILL NEED TO BE IN WRITING BY THE ENGINEER AND OWNER AND THOSE PORTIONS OF THE WORK SHALL BE PROTECTED BY THE CONTRACTOR AGAINST VEHICLES RUNNING OVER THE AREA BY ENCIRCLING THE WORK WITH FLAGGING OR FENCING OR BY OTHER MEANS AGREED TO BY THE OWNER AND MAINTAINED BY THE CONTRACTOR UNTIL THE END OF THE PROJECT.
8. ALL FINE GRADING REQUIRED TO CONSTRUCT DRAINAGE IMPROVEMENTS AND PROVIDE FINISHED GRADES ADJACENT TO IMPROVEMENTS SHALL BE DONE BY THE DRAINAGE CONTRACTOR AND SHALL BE CONSIDERED PART OF THE WORK, AND NOT PAID FOR SEPARATELY.

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	N/A
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
GENERAL NOTES

SHEET 245 OF 270

JOB NO. 15950.01

LAYER LINETYPE LEGEND

	EXISTING	PROPOSED
PHASE LINE		
MATCH LINE		
SECTION LINE		
BOUNDARY LINE		
PROPERTY LINE		
EASEMENT LINE		
RIGHT OF WAY		
R.O.W. A LINE	A	A
CENTERLINE		
CITY LIMITS		
WIRE FENCE		
CHAIN LINK FENCE		
WOOD FENCE		
MASONRY FENCE		
GUARDRAIL		
CONC. BARRIER		
CABLE TV	TV	TV
ELECTRIC	E	E
FIBER OPTIC	FO	FO
GAS MAIN	G	G
IRRIGATION MAIN	IRR	IRR
OIL/PETRO. MAIN	O	O
OVERHEAD UTILITY	OHU	OHU
SANITARY SEWER	S	
STORM DRAIN		
TELEPHONE	T	T
WATER MAIN	W	
RAW WATER LINE	RWL	RWL
SWALE/WATERWAY FLOWLINE		
DIVERSION DITCH		
DIVERSION CHANNEL		
MAJOR DRAINAGE BASIN		
MINOR DRAINAGE BASIN		
TOP OF SLOPE		
TOE OF SLOPE		
EDGE OF WATER		
INDEX CONTOUR	6100	6100
INTERMEDIATE CONTOUR		
DEPRESSION CONT. (INDEX)	6100	6100
DEPRESSION CONT. (INTER)		
TOP OF CUTS		
TOE OF FILLS		
CUT AND FILL LINE		C/F
SILT FENCE	SF	SF
100 YEAR FLOODPLAIN	100YR	100YR
500 YEAR FLOODPLAIN	500YR	500YR
FLOODWAY	FLDWY	FLDWY
BASE FLOOD ELEVATION		
EDGE OF WETLANDS		
STONE WALL		

UTILITIES LEGEND

	EXISTING	PROPOSED
STORM SEWER		
MANHOLE	Ⓓ	◉
STORM INLET		▣
AREA INLET – SQUARE	□	
AREA INLET – ROUND	○	
FLARED END SECTION	▷	
RIPRAP		
SANITARY SEWER		
LINE MARKER	Mkr San	
SERVICE MARKER	△	
CLEAN–OUT	⊸	⊸
MANHOLE W/ DIRECTIONAL FLOW ARROW	Ⓢ	◉
WATER LINE		
LINE MARKER	Mkr W	
SERVICE MARKER	△	
FIRE HYDRANT		
FIRE CONNECTION		
MANHOLE	Ⓜ	●
BEND		
BLOW–OFF VALVE		
WELL	WELL	WELL
METER	Ⓜ	●
VALVE	⋈	
REDUCER		
THRUST BLOCK		
CROSS		
PLUG W/ THRUST BLOCK		
TEE		
REVERSE ANCHOR		
ANODE		
AIR & VACUUM VALVE ASSEMBLY		
TRANSMISSION BLOW–OFF ASSEMBLY		
GAS LINE		
MARKER	Mkr G	
SERVICE MARKER	△	
METER	Ⓜ	●
VALVE	⋈	
PLUG	℄	℄
TEE		
DRY UTILITIES		
CABLE TV MARKER	Mkr TV	
CABLE TELEVISION PEDESTAL	TV	
ELECTRIC MARKER	Mkr E	
ELECTRIC SERVICE MARKER	△	
ELECTRICAL PEDESTAL	E	
ELECTRICAL METER	Ⓔ	
ELECTRICAL MANHOLE	Ⓔ	
FIBER–OPTIC MARKER	Mkr FO	
IRRIGATION PEDESTAL	I	
TELEPHONE MARKER	Mkr T	
TELEPHONE PEDESTAL	T	
TELEPHONE MANHOLE	Ⓣ	
UTILITY POLE	⊸	⊸
GUY ANCHOR	⊸	
GUY POLE	⊸	
MISC. UTILITIES		
VENT PIPE	VP	VP
TEST HOLE DESIGNATOR	THE FIRM AGENCY	

MONUMENTATION LEGEND

ALUMINUM CAP – FOUND	AC
BRASS CAP – FOUND	BC
BENCHMARK – FOUND	
CROSS – FOUND	+
MONUMENT – SET	○
MONUMENT – FOUND (DEFAULT)	●
MONUMENT – FOUND (ALTERNATE 1)	■
MONUMENT – FOUND (ALTERNATE 2)	◉
MONUMENT – FOUND (ALTERNATE 3)	▲
MONUMENT – FOUND (ALTERNATE 4)	◬
MONUMENT – FOUND (ALTERNATE 5)	⬟
MONUMENT – FOUND (ALTERNATE 6)	◉
MONUMENT – FOUND (ALTERNATE 7)	◬
NAIL & WASHER – FOUND	NAIL & WASHER
PANEL – FOUND	
PK NAIL – FOUND	PK NAIL
ROW MONUMENT – FOUND	
ROW MARKER – FOUND	⊡
SECTION CORNER – FOUND	
SECTION CORNER – SET	
QUARTER–SECTION CORNER – FOUND	
QUARTER–SECTION CORNER – SET	
SECTION CENTER – FOUND	◉
SECTION CENTER – FOUND	◎
CONTROL/TRAVERSE POINT – SET	△

TRAFFIC LEGEND

	EXISTING	PROPOSED
PARKING METER		
TRAFFIC SIGNAL BOX		
TRAFFIC SIGNAL POLE		
TRAFFIC SIGNAL		
BARRICADE		
GUARD RAIL POST		
IMPACT ATTENUATOR		
BRIDGE STYLE HIGHWAY SIGN POST		
CANTILEVER STYLE HIGHWAY SIGN POST		
SIGN		
RAILROAD MARKER/SIGN		
STREET LIGHT		
STREET LIGHT – SINGLE		
STREET LIGHT – DOUBLE		
LUMINAIRE		
ALTERNATE LUMINAIRE		
SIGNAL MAST ARM W/ LUMINAIRE		
PEDESTAL POLE FOUNDATION		
TRAFFIC SIGNAL POLE		
ROUND PULL BOX		
MEDIUM PULL BOX		
LARGE PULL BOX (20X33X15)		
SIGNAL HEAD WITHOUT BACK PLATE		
SIGNAL HEAD WITH BACK PLATE		
PEDESTRIAN SIGNAL HEAD		
VIDEO IMAGE DETECTOR		
OPTICOM DETECTOR		
VEHICLE DETECTION ZONE		V

STORM WATER MANAGEMENT

	KEY	SYMBOL
CHECK DAM	CD	
CONSTRUCTION ROAD STABILIZATION	CRS	
CURB SOCK INLET PROTECTION	CS	
CONCRETE WASHOUT AREA	CWA	
DIVERSION DITCH AND DIKE, TEMPORARY	DD	
DIVERSION CHANNEL, TEMPORARY	DV	
DEWATERING	DW	
EROSION CONTROL BLANKET	ECB	
INLET FILTER	IF	
INLET PROTECTION	IP	
MULCHING	MU	
OUTLET PROTECTION	OP	
PAVED FLUME	PF	
PERMENENT SEEDING	PS	
REINFORCED CONCRETE DAM	RCD	
ROUGH CUT STREET CONTROL	RCS	
SEDIMENT BASIN	SB	
SEDIMENT CONTROL LOG	SCL	
SILT FENCE	SF	
SURFACE ROUGHENING	SR	
STABILIZED STAGING AREA	SSA	
SEDIMENT TRAP	ST	
STRAW BALE BARRIER	STB	
TERRACING	TER	
TEMPORARY SEEDING	TS	
TEMPORARY STREAM CROSSING CULVERT/BRIDGE	TSC C	
TEMPORARY STREAM CROSSING FORD TYPE	TSC F	
TEMPORARY SLOPE DRAIN	TSD	
VEHICLE TRACKING CONTROL	VTC	
VEHICLE TRACKING CONTROL WITH WASH RACK	WR	

DRAINAGE REPORT PLANS

	KEY
BASIN DESIGNATION (NO COEFFICIENT)	# #.##
BASIN DESIGNATION (1 COEFFICIENT)	# #.## #
BASIN DESIGNATION (2 COEFFICIENTS)	# #.## #
ANALISYS POINT IDENTIFIER	#
BASIN DESIGNATION (HISTORIC)	# #-##
BASIN DESIGNATION (DEVELOPED)	# #.##
SUB–BASIN DESIGNATION (DEVELOPED)	# ##
DRAINAGE PIPE IDENTIFIER	##
DRAINAGE POINT IDENTIFIER (HEXAGONAL)	##
DRAINAGE POINT IDENTIFIER (TRIANGULAR)	?
SWMM DESIGNATION 1	#
SWMM DESIGNATION 2	#
SWMM DESIGNATION 3	#
SWMM DESIGNATION 4	?

LANDSCAPE LEGEND

	EXISTING	PROPOSED
TREE – CONIFEROUS		
TREE – DECIDUOUS		
SHRUB/BUSH		
SHRUBS AND BUSHES		
IRRIGATION BOX		
IRRIGATION SPRINKLER		
IRRIGATION VALVE		
BOLLARD		
FLAGPOLE	FP	

811 Know what's **below.** **Call** before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

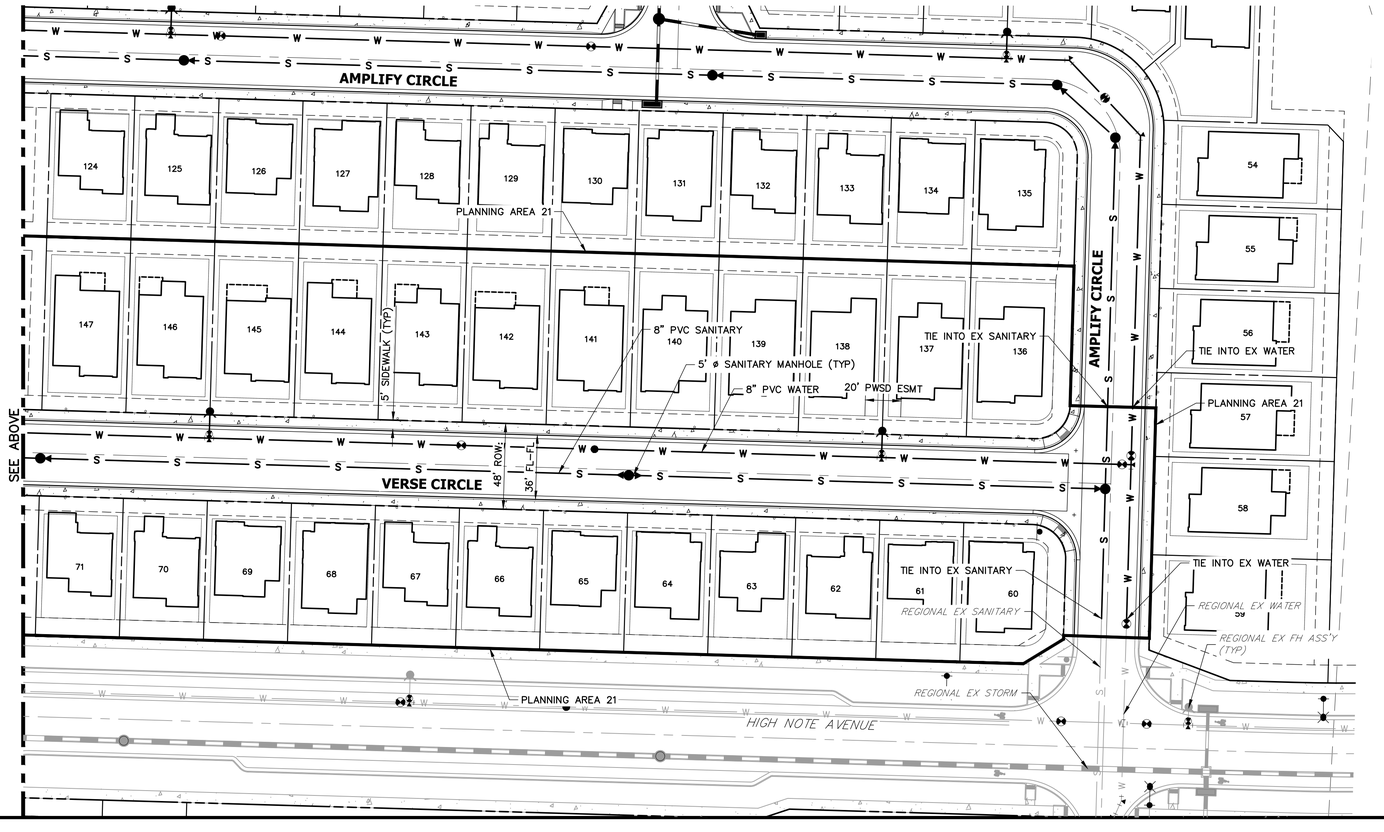
No.	REVISION	BY	DATE

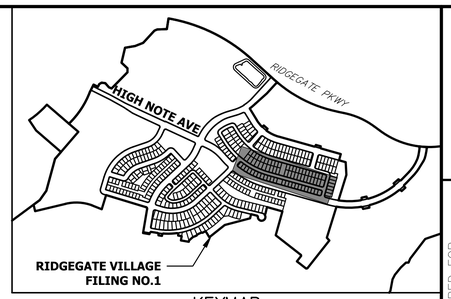
H–SCALE	N/A
V–SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
LEGEND

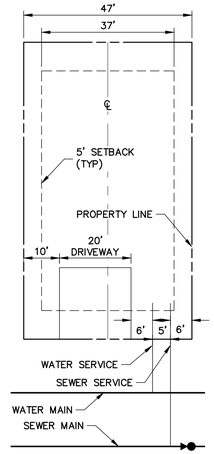
SHEET 246 OF 270

JOB NO. 15950.01





KEYMAP
SCALE: 1"=1000'



LOT SERVICES DETAIL
PLANNING AREA 21
SCALE: 1"=20

40 20 0 40 80
ORIGINAL SCALE: 1" = 40'

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED PROFESSIONAL ENGINEER 36742 AARON LEE CLUTTER CIVIL

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

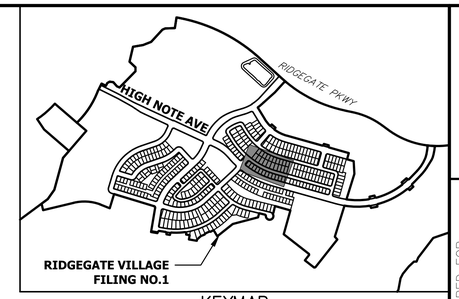
H-SCALE	1"=40'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
OVERALL UTILITY PLAN

SHEET 247 OF 270

JOB NO. 15950.01

VERSE CIRCLE PROFILE
STA 20+50.00 TO 27+00.00



KEYMAP
SCALE:1"=1000'

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
1	20+99.14	18.00' (LT)	VERSE CIRCLE	6040.37		PC
2	20+99.14	18.00' (RT)	VERSE CIRCLE	6040.37		PC
3	25+04.78	18.00' (LT)	VERSE CIRCLE	6053.60		PT
4	25+04.78	18.00' (RT)	VERSE CIRCLE	6053.60		PT
5	26+78.16	18.00' (RT)	VERSE CIRCLE	6059.25		HC RAMP MID PT
6	26+76.75	18.00' (LT)	VERSE CIRCLE	6059.20		HC RAMP MID PT

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C1	21°52'26"	1080.50'	412.50'
C2	21°52'26"	1044.50'	398.76'

NOTES
1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE SHEET 246 FOR LEGEND.
4. SEE SHEET 251 FOR CURB RETURN PROFILES.
5. SEE SHEET 252 FOR CURB RAMP DETAILS.
6. SEE SHEET 253 FOR SIGNAGE AND STRIPING.
7. ALL CURB RADII ARE 25' UNLESS OTHERWISE NOTED.
8. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.

30 15 0 30 60

HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

Know what's below. Call before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED DOUGLAS LEE CLUTTER PROFESSIONAL ENGINEER 36742

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

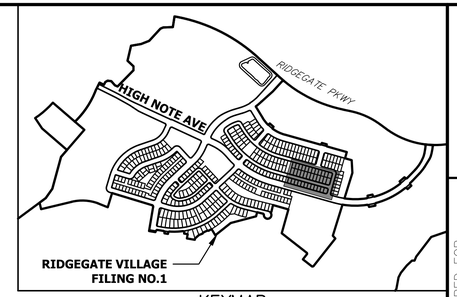
No.	REVISION	BY	DATE

H-SCALE	1" = 30'
V-SCALE	1" = 3'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST
VILLAGE FILING 1
ROADWAY PLAN & PROFILES

SHEET 248 OF 270

JOB NO. 15950.01

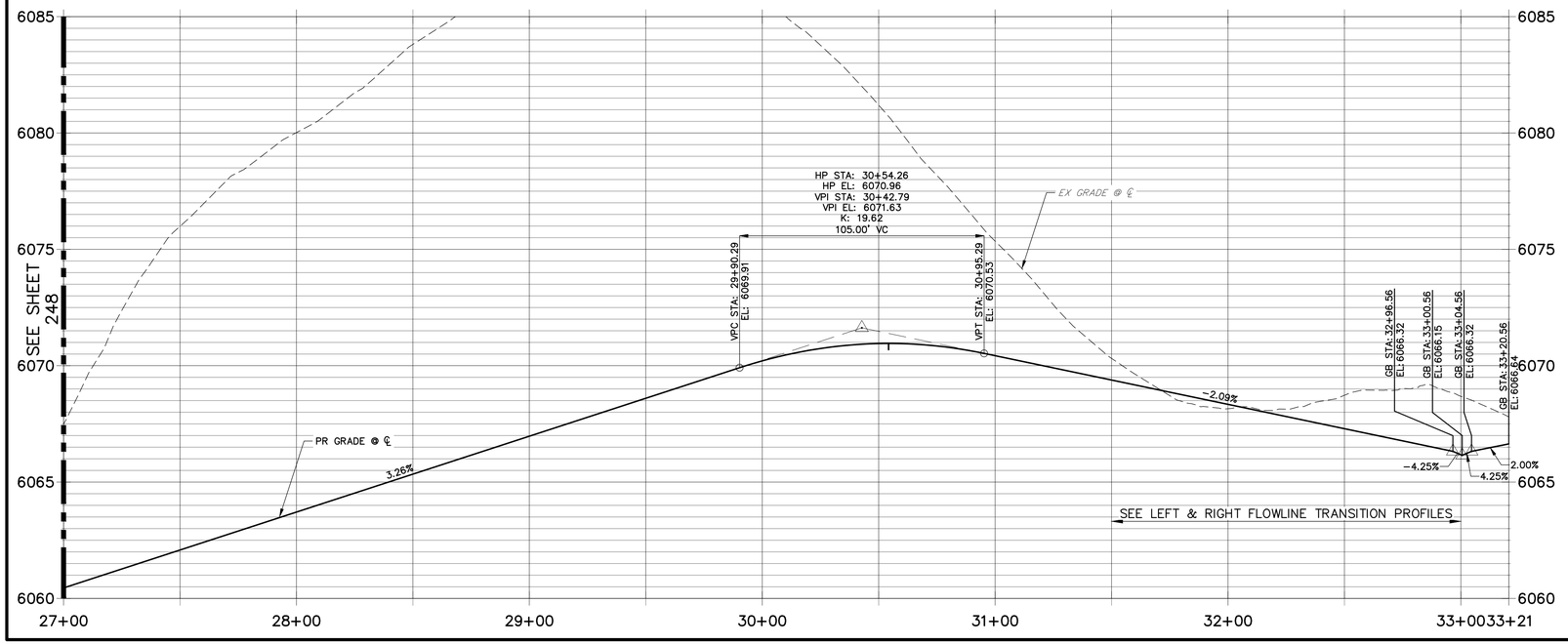


KEYMAP
SCALE:1"=1000'

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
7	32+77.56	18.00' (RT)	VERSE CIRCLE	6067.03		PC
8	32+95.23	25.32' (RT)	VERSE CIRCLE	6067.36		HC RAMP MID PT
9	24+36.04	18.00' (RT)	AMPLIFY CIRCLE	6067.73		PT
10	24+78.54	18.00' (RT)	AMPLIFY CIRCLE	6069.38		PC
11	24+78.54	18.00' (LT)	AMPLIFY CIRCLE	6069.16		PC
12	23+49.92	18.00' (LT)	AMPLIFY CIRCLE	6064.62		PT
13	23+50.04	18.00' (RT)	AMPLIFY CIRCLE	6064.62		PT
14	32+95.23	25.32' (LT)	VERSE CIRCLE	6065.52		HC RAMP MID PT
15	32+77.56	18.00' (LT)	VERSE CIRCLE	6066.06		PC
16	33+00.56	18.00' (LT)	VERSE CIRCLE	6065.74		FL-FL INTERCEPT
17	33+00.56	18.00' (RT)	VERSE CIRCLE	6067.02		FL-FL INTERCEPT

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C3	90°00'00"	25.00'	39.27'
C4	90°00'00"	25.00'	39.27'

VERSE CIRCLE PROFILE (2)
STA 27+00.00 TO 33+20.56



NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE SHEET 246 FOR LEGEND.
4. SEE SHEET 251 FOR CURB RETURN PROFILES.
5. SEE SHEET 252 FOR CURB RAMP DETAILS.
6. SEE SHEET 253 FOR SIGNAGE AND STRIPING.
7. ALL CURB RADII ARE 25' UNLESS OTHERWISE NOTED.
8. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.

30 15 0 30 60

HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

Know what's below. Call before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

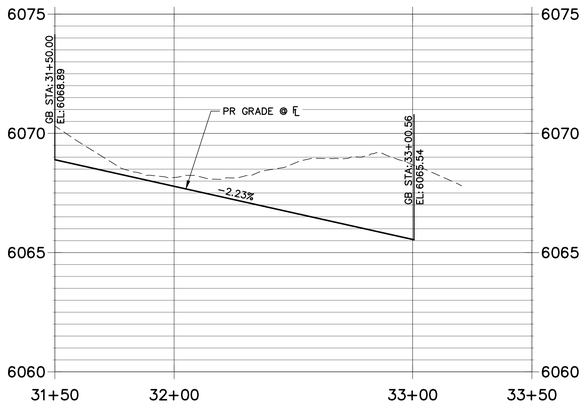
H-SCALE	1"=30'
V-SCALE	1"=3'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST
VILLAGE FILING 1
ROADWAY PLAN & PROFILES

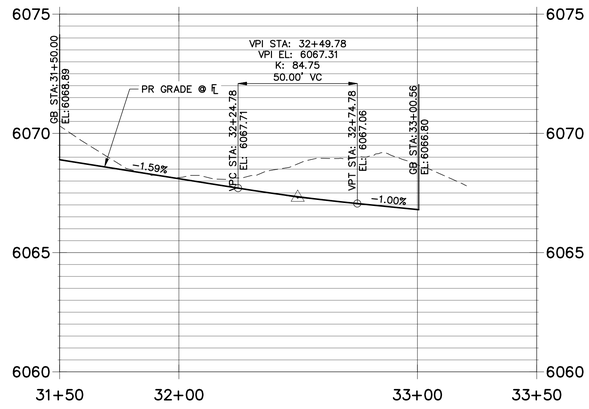
SHEET 249 OF 270

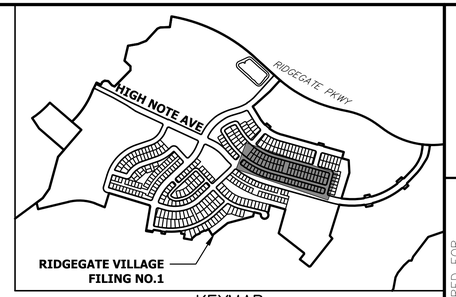
JOB NO. 15950.01

VERSE CIRCLE LEFT FLOWLINE TRANSITION
STA 31+50.00 TO 33+50.00



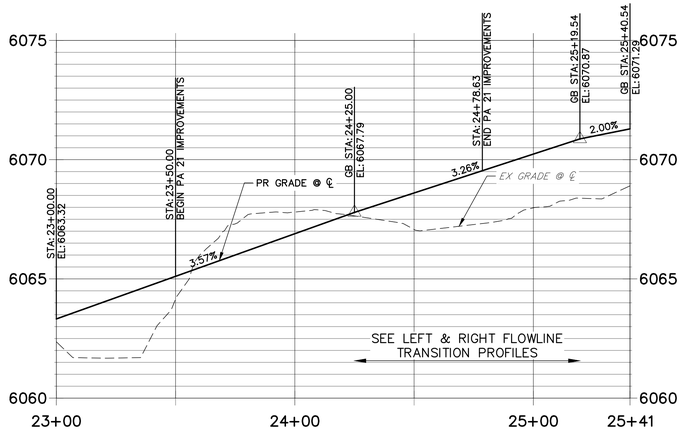
VERSE CIRCLE RIGHT FLOWLINE TRANSITION
STA 31+50.00 TO 33+50.00



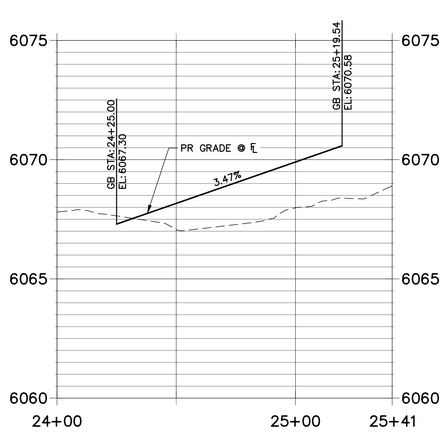


KEYMAP
SCALE:1"=1000'

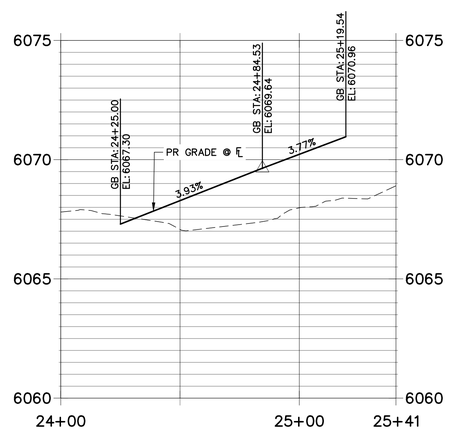
AMPLIFY CIRCLE PROFILE
STA 23+00.00 TO 25+40.54

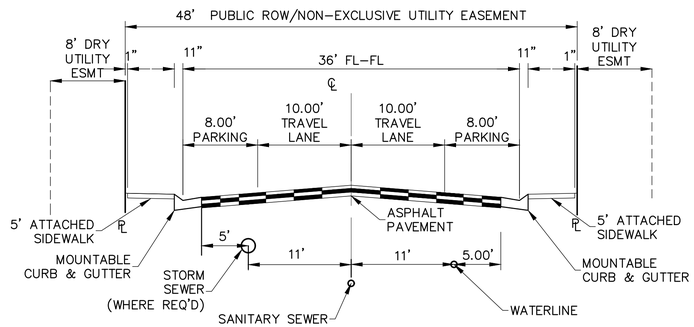


AMPLIFY CIRCLE LEFT FLOWLINE TRANSITION
STA 24+00.00 TO 25+40.54



AMPLIFY CIRCLE RIGHT FLOWLINE TRANSITION
STA 24+00.00 TO 25+40.54





SECTION F-F

E IV - ALTERNATE 48-FOOT R.O.W. LOCAL STREET WITH PARKING ON BOTH SIDES OF THE STREET
N.T.S

NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE SHEET 246 FOR LEGEND.
4. SEE SHEET 251 FOR CURB RETURN PROFILES.
5. SEE SHEET 252 FOR CURB RAMP DETAILS.
6. SEE SHEET 253 FOR SIGNAGE AND STRIPING.
7. ALL CURB RADII ARE 25' UNLESS OTHERWISE NOTED.
8. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.

N

30 15 0 30 60

HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

Know what's below.
Call before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED
AARON LEE CLUTTER
36742
PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1" = 30'
V-SCALE	1" = 3'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

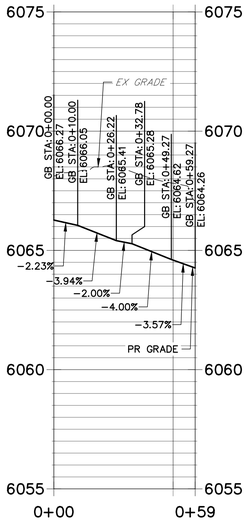
RIDGEGATE SOUTHWEST
VILLAGE FILING 1

ROADWAY PLAN & PROFILES

SHEET 250 OF 270

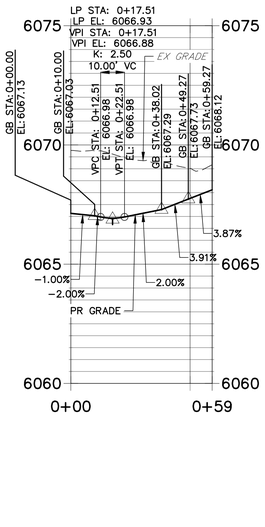
JOB NO. 15950.01

F61 PROFILE
STA 0+00.00 TO 0+59.27

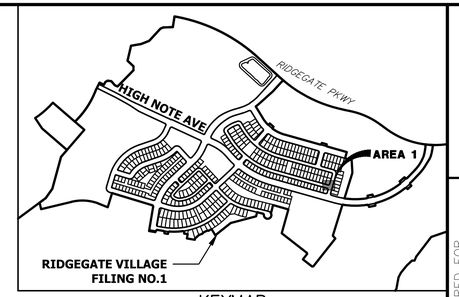


AREA 1

F62 PROFILE
STA 0+00.00 TO 0+59.27



AREA 1



KEYMAP
SCALE:1"=1000'

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=30'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

30 15 0 30 60
HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

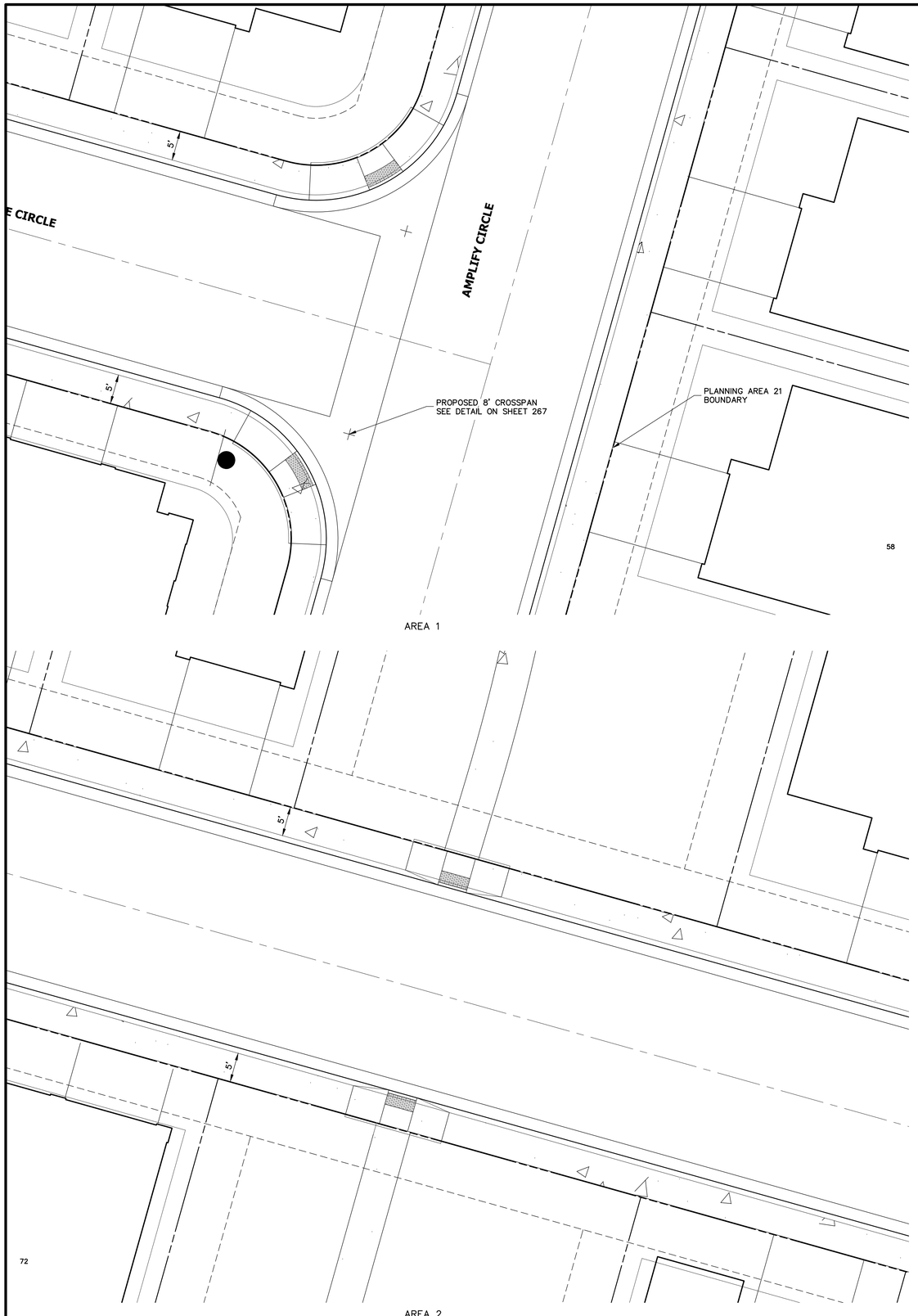
COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

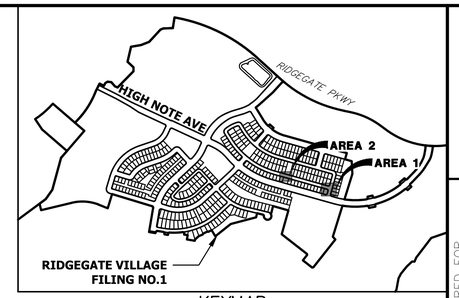
AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

RIDGEGATE SOUTHWEST VILLAGE FILING 1
CURB RETURN PROFILES

SHEET 251 OF 270

JOB NO. 15950.01





KEYMAP
SCALE:1"=1000'

NOTE: CURB RAMP DETAILS TO BE PROVIDED WITH NEXT SUBMITTAL

10 5 0 10 20
ORIGINAL SCALE: 1" = 10'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

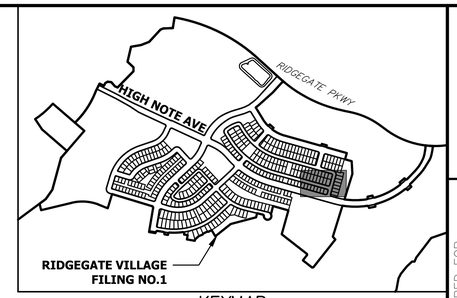
H-SCALE	1"=10'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

CURB RAMP DETAILS

SHEET 252 OF 270

JOB NO. 15950.01



KEYMAP
SCALE:1"=1000'

SIGN TABULATION				
SIGN NUMBER	STATION	OFFSET	ALIGNMENT	DESCRIPTION
1	32+81.56	27.93' (RT)	VERSE CIRCLE	30"X30" R-1 30"X8" D3-1 (2)
2	24+92.04	21.89' (RT)	AMPLIFY CIRCLE	30"X30" R-1 30"X8" D3-1 (2)

30 15 0 30 60
ORIGINAL SCALE: 1" = 30'

Know what's below.
Call before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED
AARON LEE CLUTTER
36742
PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=30'
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

SIGNAGE AND STRIPING PLANS

SHEET 253 OF 270

JOB NO. 15950.01

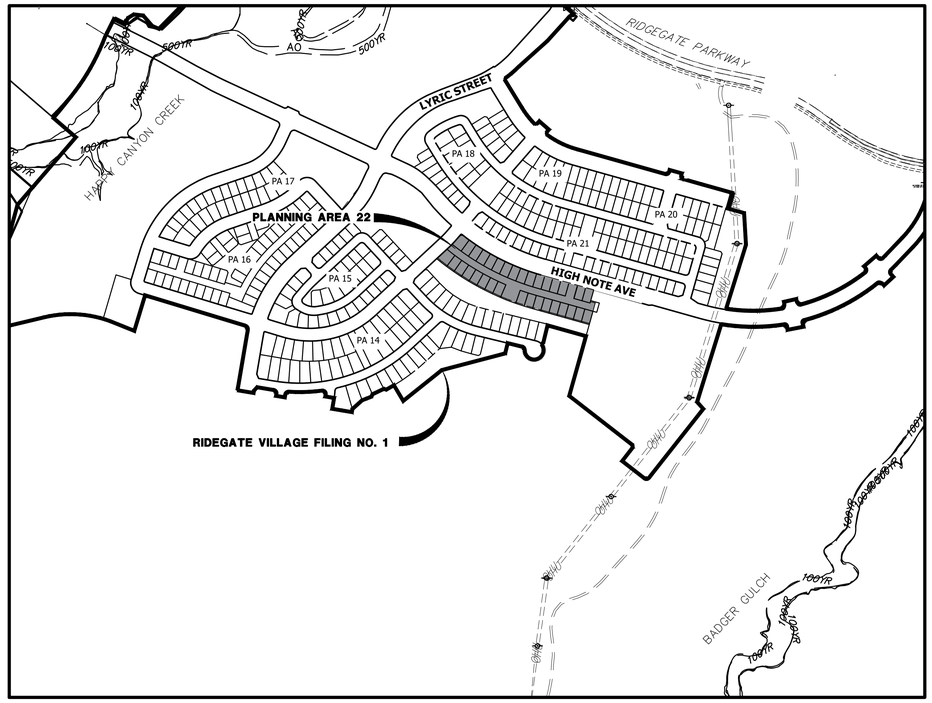
RIDGEGATE SOUTHWEST VILLAGE FILING 1 - PLANNING AREA 22

A PORTION OF THE RIDGEGATE PLANNED DEVELOPMENT DISTRICT, EAST SIDE PROPERTY
LOCATED IN SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST
OF THE 6TH P.M., CITY OF LONE TREE, COUNTY OF DOUGLAS, STATE OF COLORADO

STREET & DRAINAGE CONSTRUCTION PLANS

ABBREVIATIONS

AC	ACRE
AD	ALGEBRAIC DIFFERENCE
AH	AHEAD
ARCH	ARCHITECT
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASS'Y	ASSEMBLY
AVE	AVENUE
BB	BOX BASE
BK	BACK
BNDY	BOUNDARY
BOP	BOTTOM OF PIPE
BOV	BLOW OFF VALVE
BFV	BUTTERFLY VALVE
BLVD	BOULEVARD
BW	BOTTOM OF WALL
C&G	CURB & GUTTER
CATV	CABLE TELEVISION
CB	CATCH BASIN
CBC	CONCRETE BOX CULVERT
CDOT	COLORADO DEPARTMENT OF TRANSPORTATION
CDS	CUL-DE-SAC
CF	CUBIC FOOT
CFS	CUBIC FEET PER SECOND
CIP	COMPLETE IN PLACE
CL	CENTER LINE
CLOMR	CONDITIONAL LETTER OF MAP REVISION
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
COCS	CITY OF COLORADO SPRINGS
CONC	CONCRETE
CR	CIRCLE
CSP	CORRUGATED STEEL PIPE
CSU	COLORADO SPRINGS UTILITIES
CT	COURT
CTRB	CONCRETE THRUST REDUCER BLOCK
CY	CUBIC YARD
DBPS	DRAINAGE BASIN PLANNING STUDY
DE	DRAINAGE EASEMENT
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DR	DRIVE
DRC	DESIGN REVIEW COMMITTEE
DU	DWELLING UNITS
DY	DAY
E	EAST
EA	EACH
EGL	ENERGY GRADE LINE
EL	ELEVATION
ELEC	ELECTRIC
EOA	EDGE OF ASPHALT
EPC	EL PASO COUNTY
ERCP	ELLIPTICAL RCP
ESMT	EASEMENT
EST	ESTIMATE
EX	EXISTING
FDP	FINAL DEVELOPMENT PLAN
FDR	FINAL DRAINAGE REPORT
FES	FLARED END SECTION
FF	FINISHED FLOOR ELEVATION
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOWLINE
FIL	FILING
FO	FIBER OPTIC CABLE
GB	GRADE BREAK
GE	GAS EASEMENT
GIS	GEOGRAPHIC INFORMATION SYSTEM
GL	GAS LINE
GPS	GLOBAL POSITIONING SYSTEM
GV	GATE VALVE
HBP	HOT BITUMINOUS PAVEMENT
HC	HANDICAP
HDC	HIGH DEFLECTION COUPLING
HDPE	HIGH DENSITY POLYETHYLENE
HGL	HYDRAULIC GRADE LINE
HMA	HOT MIX ASPHALT
HOA	HOME OWNERS ASSOCIATION
HP	HIGH POINT
HR	HOUR
I	INLET
IE	IRRIGATION EASEMENT
INT	INTERSECTION
INV	INVERT
IRR	IRRIGATION
KB	KICK (THRUST) BLOCK
LB	POUND
LE	LANDSCAPE EASEMENT
LF	LINEAR FOOT
LN	LANE
LOMR	LETTER OF MAP REVISION
LP	LOW POINT
LS	LUMP SUM
LT	LEFT
MAX	MAXIMUM
M/D	MOISTURE DENSITY
MDDP	MASTER DEVELOPMENT DRAINAGE PLAN
MH	MANHOLE
MIN	MINIMUM
MS	MOUNTABLE SIDEWALK
N	NORTH
NRCP	NON-REINFORCED CONCRETE PIPE
ODP	OFFICIAL DEVELOPMENT PLAN
OHE	OVERHEAD ELECTRIC
OHU	OVERHEAD UTILITY
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PCR	POINT OF CURB RETURN
PDP	PRELIMINARY DEVELOPMENT PLAN
PE	PROFESSIONAL ENGINEER
PI	POINT OF INTERSECTION
PKWY	PARKWAY
PL	PROPERTY LINE
PR	PROPOSED
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PV	PLUG VALVE
PVC	POLYVINYL CHLORIDE
R	RADIUS
RCBC	REINFORCED CONCRETE BOX CULVERT
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
ROW	RIGHT OF WAY
RT	RIGHT
S	SOUTH
STE	STEEL
SAN	SANITARY SEWER
SF	SQUARE FOOT
ST	STREET
STA	STATION
STM	STORM SEWER
SY	SQUARE YARD
SY-IN	SQUARE YARD INCH
TB	THRUST BLOCK
TBC	TOP BACK OF CURB
TBW	TOP BACK OF WALK
TEL	TELEPHONE
TN	TON
TOA	TOP OF ASPHALT
TOB	TOP OF BOX
TOC	TOP OF CURB OR CONCRETE
TOF	TOP OF FOUNDATION
TOP	TOP OF PIPE
TW	TOP OF WALL
TYP	TYPICAL
UDFCD	URBAN DRAINAGE AND FLOOD CONTROL DISTRICT
UE	UTILITY EASEMENT
U&DE	UTILITY & DRAINAGE EASEMENT
UGE	UNDERGROUND ELECTRIC
VCP	VITRIFIED CLAY PIPE
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
VTC	VEHICLE TRACKING CONTROL
W	WEST
WL	WATER LINE
WM	WATER MAIN
WRD	WATER RESOURCES DEPARTMENT
WS	WATER SURFACE
WSE	WATER SURFACE ELEVATION
WTR	WATER
YR	YEAR



VICINITY MAP
SCALE: 1"=400'

SHEET INDEX

254	COVER SHEET
255	GENERAL NOTES
256	LEGEND
257	OVERALL UTILITY PLAN
258-260	ROADWAY PLAN & PROFILES
261-263	STORM SEWER PLANS & PROFILE
264	SIGNAGE & STRIPING PLANS

APPLICANT/OWNER

SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
P~303.791.8180

CIVIL ENGINEER/SURVEYOR

JR ENGINEERING
7200 SOUTH ALTON WAY, SUITE C400
CENTENNIAL, CO
P~303.267.6220

PLANNER

SAGE DESIGN GROUP
1500 SOUTH PEARL STREET, SUITE 200
DENVER, CO 80210
P~303.470.2855

TRAFFIC ENGINEER

JR ENGINEERING
7200 SOUTH ALTON WAY, SUITE C400
CENTENNIAL, CO
P~303.267.6183

GEOTECHNICAL ENGINEER

CTL THOMPSON, INC
1971 WEST 12TH VAE.
DENVER, CO 80204
P~303.825.0777

BENCHMARK

NGS CONTROL POINT UNBEWUST BEING A 3.5 INCH DIAMETER BRASS CAP. LOCATED ABOUT 3.2 MILES SOUTH OF INTERSTATE 25 AND COLORADO STATE HIGHWAY 470 INTERCHANGE, GO SOUTH ON INTERSTATE 25 FOR 2.9 MILES TO EXIT 191. PROCEED ON A PAVED ROAD TO THE SOUTHWEST FOR 0.2 MILES TO THE STATION ON THE LEFT. IN THE NORTHWEST CORNER OF A 24 FOOT BY 16 FOOT ROCK OUTCROP. IT IS 22.5 FEET EAST OF THE CENTERLINE OF THE PAVED ROAD, 123 FEET NORTH OF THE OUTLET OF A 3 FOOT CORRUGATED STEEL PIPE CULVERT AND APPROXIMATELY 350 FEET WEST OF THE WEST EDGE OF OIL OF SOUTHBOUND INTERSTATE 25, ELEVATION: 6125.32 (NAVD88).

BASIS OF BEARING

BEARING SHOWN HEREON ARE GRID BEARINGS DERIVED FROM GPS OBSERVATION BASED UPON THE COLORADO COORDINATE SYSTEM OF 1983 CENTRAL ZONE (NAD 83, 2011) REFERENCED TO THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 6 SOUTH, RANGE 67 WEST, SIXTH PRINCIPAL MERIDIAN BEING MONUMENTED AS SHOWN HEREON, TAKEN TO BEAR NORTH 89°31'58" EAST, A DISTANCE OF 2635.13 FEET.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1"=400'	DESIGNED BY	GVT	
V-SCALE	N/A	DRAWN BY	ARJ	
DATE	2/12/21	CHECKED BY		

RIDGEGATE SOUTHWEST VILLAGE FILING 1
COVER SHEET

SHEET 254 OF 270

JOB NO. 15950.01

GENERAL PROJECT NOTES:

1. ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION OF IMPROVEMENTS SHALL MEET OR EXCEED THE GOVERNING CITY, COUNTY, AND/OR STATE AND APPLICABLE UTILITY DISTRICT STANDARDS AND SPECIFICATIONS, AND APPLICABLE STATE AND FEDERAL REGULATIONS. WHERE THERE IS A CONFLICT BETWEEN THESE PLANS AND ANY APPLICABLE STANDARDS, THE HIGHER QUALITY STANDARD SHALL APPLY. ALL WORK SHALL BE INSPECTED AND APPROVED BY THE CITY AND APPLICABLE UTILITY DISTRICT(S).

2. THE SITE CONSTRUCTION PLANS LISTED WITHIN THIS PLAN SET ARE NOT FOR CONSTRUCTION UNLESS APPROVED BY THE APPROPRIATE GOVERNING JURISDICTION. THE CONTRACTOR SHALL CONFIRM SAID APPROVAL PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL KEEP ONE (1) SIGNED COPY OF THE APPROVED SET OF PLANS, APPROPRIATE SPECIFICATIONS AND STANDARDS, AND APPROVED PERMITS ONSITE AT ALL TIMES.

3. NO REVISIONS SHALL BE MADE TO THESE PLANS WITHOUT THE APPROVAL OF THE CITY, COUNTY, STATE OR LOCAL DISTRICT AND THE ENGINEER OF RECORD.

4. ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARDS, UNLESS SPECIFICALLY STATED OTHERWISE.

5. THE CONTRACTOR IS RESPONSIBLE FOR ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS SHOWN ON THESE DRAWINGS OR DESIGNATED TO BE PROVIDED, INSTALLED, CONSTRUCTED, REMOVED, OR RELOCATED UNLESS SPECIFICALLY NOTED OTHERWISE.

6. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND LICENSES FOR WORK INCLUDING, BUT NOT LIMITED TO DEMOLITION, STREET CUTS, UTILITY INTERFERENCES, TRAFFIC CONTROL, GRADING, AND UTILITY FROM ALL APPLICABLE AGENCIES; AND FOR COMPLYING WITH ALL PROVISIONS INCLUDED THEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL OTHER APPLICABLE PERMITS NOT SPECIFICALLY REQUIRED BY THE AUTHORITY HAVING JURISDICTION.

7. THE CONTRACTOR SHALL UTILITY STAKE PROJECT AT LEAST 2 WORKING DAYS PRIOR TO BEGINNING EXCAVATION OR GRADING, TO HAVE ALL REGISTERED UTILITY LOCATIONS MARKED. OTHER UNREGISTERED UTILITY ENTITIES (I.E. DITCH COMPANY) ARE TO BE LOCATED BY CONTACTING THE RESPECTIVE REPRESENTATIVE.

8. THE CONTRACTOR IS RESPONSIBLE FOR FIELD LOCATING AND VERIFYING ELEVATIONS OF ALL EXISTING SEWER MAINS, WATER MAINS, CURBS, GUTTERS, AND OTHER UTILITIES AT THE POINTS OF CONNECTION SHOWN ON THE PLANS, AND AT ANY UTILITY CROSSINGS PRIOR TO INSTALLING ANY OF THE NEW IMPROVEMENTS. IF A CONFLICT EXISTS AND/OR A DESIGN MODIFICATION IS REQUIRED, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO MODIFY THE DESIGN. DESIGN MODIFICATION(S) MUST BE APPROVED BY THE APPROPRIATE AUTHORITY PRIOR TO BEGINNING CONSTRUCTION.

9. ANY DISRUPTION OF UTILITY SERVICE THAT IS REQUIRED TO ADJUST, EXTEND, RELOCATE OR OTHERWISE REARRANGE ANY UTILITY WITHIN THE PROJECT AREA SHALL BE COORDINATED IN ADVANCE WITH THE AFFECTED UTILITY ENTITY.

10. RIM ELEVATIONS SHOWN ARE APPROXIMATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS. THE CONTRACTOR SHALL USE PRECAST CONCRETE ADJUSTMENT RINGS, GROUT, AND STEEL SHIMS TO ADJUST THE MANHOLE FRAMES TO FINAL GRADE IN CONFORMANCE WITH THE CITY OR UTILITY COMPANY/DISTRICT STANDARD SPECIFICATIONS. ALL FRAMES SHALL BE ADJUSTED TO FINAL GRADE PRIOR TO THE FINAL LIFT OF ASPHALT.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF PROJECT SAFETY INCLUDING, BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.

12. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN, IN ACCORDANCE WITH THE M.U.T.C.D. TO THE APPROPRIATE RIGHT-OF-WAY AUTHORITY (CITY, COUNTY, OR STATE) FOR APPROVAL, PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN, OR AFFECTING, THE RIGHT-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED BY THE CONSTRUCTION ACTIVITIES. ALL WORK WITHIN THE RIGHT OF WAY SHALL BE DONE IN ACCORDANCE WITH THE GOVERNING AUTHORITY'S STANDARDS AND SPECIFICATIONS.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANING AND RESTORATION OF ANY EXISTING IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO STREET PAVEMENT, FENCES, SOD, LANDSCAPING, SPRINKLER SYSTEMS, AND UTILITIES DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL LOCATION AND CONDITION.

14. INCLUDED IN THESE PLANS IS THE DEMOLITION AND DISPOSAL OF ALL EXISTING UTILITIES, SITE IMPROVEMENTS, STRUCTURES, AND SITE FURNISHINGS NEEDED FOR CONSTRUCTION OF THE IMPROVEMENTS SHOWN HEREON. ALL QUESTIONS IN REGARD TO DEMOLITION SHALL BE SUBMITTED TO THE OWNER IN WRITING PRIOR TO BID.

15. ALL DEMOLITION, REMOVAL, DISPOSAL, AND ABANDONMENT OF UTILITIES, STRUCTURES, SITE IMPROVEMENTS, AND SITE FURNISHINGS SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL STANDARDS AND SPECIFICATIONS, AND PERMIT REQUIREMENTS.

16. ALL DISTURBED SOIL, ON- OR OFF-SITE AND RELATED TO WORK AT THIS PROJECT SITE, IS REQUIRED TO BE PROTECTED FROM WIND AND STORM WATER EROSION. TO MITIGATE EROSION, THE CONTRACTOR SHALL USE STANDARD EROSION CONTROL TECHNIQUES DESCRIBED IN THE GESC PLAN SET AND GESC REPORT FOR THIS PROJECT.

17. ALL STRUCTURAL EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY GROUND-DISTURBING ACTIVITY. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED IN GOOD REPAIR BY THE CONTRACTOR UNTIL SUCH TIME AS THE ENTIRE DISTURBED AREA IS STABILIZED WITH HARD SURFACE OR PERMANENT LANDSCAPING. THE CONTRACTOR IS RESPONSIBLE FOR REFERRING TO ANY EROSION AND SEDIMENT CONTROL, STORMWATER MANAGEMENT, STORMWATER POLLUTION PREVENTION, OR SIMILAR PLAN AND/OR NARRATIVE AND ASSOCIATED PERMITS INCLUDING, BUT NOT LIMITED TO GRADING PERMITS, AND COMPLYING WITH THE REQUIREMENTS THEREIN.

18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK, INSPECTIONS, AND CERTIFICATIONS AS REQUIRED BY THE CITY, STATE OR LOCAL DISTRICTS. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COST ASSOCIATED WITH THE INSPECTION AND CERTIFICATION UNLESS OTHERWISE ARRANGED WITH THE OWNER/DEVELOPER. THE CONTRACTOR SHALL COORDINATE ALL CERTIFICATIONS, AND PROVIDE FIELD SURVEYED AS-BUILT INFORMATION FOR REVIEW BY THE OWNER/DEVELOPER AND/OR ENGINEER AS EARLY AS POSSIBLE IN THE CONSTRUCTION SCHEDULE TO AVOID POTENTIAL DELAYS.

19. CONTRACTOR IS RESPONSIBLE FOR AS-BUILT DRAWINGS, TESTS, REPORTS, AND/OR ANY OTHER CERTIFICATES OR INFORMATION AS REQUIRED FOR ACCEPTANCE OF WORK FROM CITY, UTILITY DISTRICTS, OR ANY OTHER GOVERNING AGENCY, OR TO THE OWNER/DEVELOPER AS REQUIRED BY AND IN ACCORDANCE WITH THE GOVERNING AUTHORITY OR OWNER/DEVELOPER'S CRITERIA. CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING AS-BUILT INFORMATION AN A SET OF RECORD DRAWINGS KEPT AT THE CONSTRUCTION SITE AND AVAILABLE TO THE GOVERNING CITY, COUNTY, AND/OR STATE AND UTILITY DISTRICT INSPECTOR AT ALL TIMES. THE CONTRACTOR SHALL CONFIRM ANY REQUIREMENTS AS EARLY AS POSSIBLE IN THE CONSTRUCTION SCHEDULE TO ACCOUNT FOR PREPARATION AND REVIEW OF THE INFORMATION TO AVOID POTENTIAL DELAYS.

20. IF, DURING THE CONSTRUCTION PROCESS, CONDITIONS ARE ENCOUNTERED BY THE CONTRACTOR, HIS SUBCONTRACTORS, OR OTHER AFFECTED PARTIES, WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE OWNER/DEVELOPER AND THE ENGINEER IMMEDIATELY.

21. DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. IF PERTINENT DIMENSIONS ARE NOT SHOWN, CONTACT THE CONSULTING ENGINEER FOR CLARIFICATION AND ANNOTATE THE DIMENSION ON THE AS-BUILT RECORD DRAWING.

22. BENCHMARK VERIFICATION: THE CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS AND THE PROPOSED ELEVATIONS IN THIS CONSTRUCTION PLAN SET AGAINST THE PROJECT BENCHMARK, IDENTIFIED HEREIN, PRIOR TO COMMENCING WORK.

ROADWAY NOTES

1. GUTTERS SHALL BE AT LEAST 6" THICK.

2. ALL CURBS SHALL USE THE CATCH SECTION UNLESS OTHERWISE NOTED.

3. ALL COMBINATION CURB, GUTTER AND SIDEWALKS TO BE 6" THICK (MIN.). SIDEWALKS WITH VERTICAL CURB AND GUTTER TO BE 6" THICK (MIN.).

4. NON-LANDSCAPED MEDIAN ISLANDS SHALL BE COVERED WITH AN ACCEPTABLE IMPERMEABLE SURFACE.

5. IF ANY SECTION OF A DETACHED SIDEWALK IS TO BE PLACED OUTSIDE OF THE ROAD RIGHT-OF-WAY, THEN A SIDEWALK EASEMENT SHALL BE REQUIRED TO MAINTAIN PUBLIC USE.

6. PLACEMENT, MOISTURE AND DENSITY CONTROL FOR SUBGRADE, SUBBASE, AND SURFACING MATERIALS SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS OF CHAPTER 8 OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.

CITY OF LONE TREE GENERAL NOTES

1. THE CITY OF LONE TREE ENGINEER'S SIGNATURE AFFIXED TO THIS DOCUMENT INDICATES THE ENGINEERING DIVISION HAS REVIEWED THE DOCUMENT AND FOUND IT IN GENERAL CONFORMANCE WITH THE CITY OF LONE TREE SUBDIVISION RESOLUTION OR APPROVED VARIANCES TO THOSE REGULATIONS. THE CITY OF LONE TREE ENGINEER, THROUGH ACCEPTANCE OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY, OTHER THAN STATED ABOVE, FOR THE COMPLETENESS AND/OR ACCURACY OF THESE DOCUMENTS. THE OWNER AND ENGINEER UNDERSTAND THAT THE RESPONSIBILITY FOR THE ENGINEERING ADEQUACY OF THE FACILITIES DEPICTED IN THIS DOCUMENT LIES SOLELY WITH THE REGISTERED PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE IS AFFIXED TO THIS DOCUMENT.

2. ALL ROADWAY CONSTRUCTION SHALL CONFORM TO CURRENT DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.

3. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE CITY OF LONE TREE ENGINEERING DIVISION. THE CITY RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS STANDARDS AND SPECIFICATIONS.

4. THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS, INSPECTION SECTION, (303) 662-8112, A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO STARTING CONSTRUCTION, AND/OR BEFORE RESTARTING CONSTRUCTION AFTER A SHUTDOWN OF MORE THAN 10 DAYS.

5. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ACTUAL CONSTRUCTION. FOR INFORMATION, CONTACT: UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT (800) 922-1987 OR 811

6. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY (SIGNED BY BOTH DESIGN ENGINEER AND CITY OF LONE TREE) OF THE CONSTRUCTION PLANS AND GESC REPORT AND PLAN, AND ONE (1) COPY OF THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS AT THE JOB SITE AT ALL TIMES.

7. ALL PROPOSED STREET CUTS TO EXISTING PAVEMENTS FOR UTILITIES, STORM SEWER, OR OTHER PURPOSES ARE LISTED AND REFERENCED BELOW:

   RIDGEGATE PARKWAY

8. A ROW/CONSTRUCTION PERMIT MUST BE OBTAINED BEFORE ANY WORK WITHIN EXISTING OR PROPOSED PUBLIC ROW. THE PERMIT APPLICATION MUST BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR REVIEW/PROCESSING A MINIMUM OF 7 DAYS PRIOR TO UPDATED 2-3-09 REQUESTED START FOR THE WORK IN THE ROW.

9. A PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE SUBMITTED TO THE CITY OF LONE TREE ENGINEER FOR ACCEPTANCE WITH THE PERMIT APPLICATION. AN EXCAVATION OR PUBLIC IMPROVEMENTS CONSTRUCTION PERMIT WILL NOT BE ISSUED WITHOUT AN APPROVED TRAFFIC CONTROL PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION.

10. THE CONSTRUCTION PLANS SHALL BE CONSIDERED VALID FOR TWO (2) YEARS FROM THE DATE OF CITY OF LONE TREE ACCEPTANCE/APPROVAL IF APPLICABLE CONSTRUCTION PERMITS HAVE NOT BEEN OBTAINED, AND CONSTRUCTION STARTED WITHIN THAT TIME, THESE PLANS SHALL BE VOID AND WILL BE SUBJECT TO RE-REVIEW AND RE-ACCEPTANCE BY THE CITY OF LONE TREE.

11. CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE ENGINEER INSPECTOR WHEN WORKING OUTSIDE OF THE PUBLIC RIGHT-OF-WAY ON ANY FACILITY WHICH WILL BE CONVEYED TO THE CITY, URBAN DRAINAGE AND FLOOD CONTROL DISTRICT, OR OTHER SPECIAL DISTRICT FOR MAINTENANCE (STORM SEWER, ENERGY DISSIPATERS, DETENTION OUTLET STRUCTURES, OR OTHER DRAINAGE INFRASTRUCTURES). FAILURE TO NOTIFY ENGINEERING INSPECTOR TO ALLOW THEM TO INSPECT THE CONSTRUCTION MAY RESULT IN NON-ACCEPTANCE OF THE FACILITIES/INFRASTRUCTURE BY CITY AND/OR URBAN DRAINAGE.

CITY OF LONE TREE SIGNAGE & STRIPING NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MOST RECENT VERSION OF THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE "COLORADO SUPPLEMENTAL MUTCD" AND THE DOUGLAS COUNTY "ROAD AND CONSTRUCTION STANDARDS MANUAL". FURTHER SPECIFICATIONS AND ILLUSTRATIONS ARE LOCATED IN THE COLORADO DIVISION OF HIGHWAYS "M AND S STANDARDS".

2. DELINEATION OF ROADWAYS SHALL BE AS SPECIFIED IN THE COLORADO "M AND S MANUAL".

3. SPECIAL CARE SHALL BE TAKEN IN SIGN LOCATION TO ENSURE AN UNOBSTRUCTED VIEW OF EACH SIGN. STREET NAME SIGNS SHALL BE MOUNTED SO THAT THEY CAN BE SEEN FROM ALL DIRECTIONS OF TRAVEL.

4. INSTALLATION OF SIGNS SHALL CONFORM TO THE MUTCD MOUNTING HEIGHT REQUIREMENTS, INCLUDING A 7-FOOT MINIMUM HEIGHT FROM THE BOTTOM OF THE LOWEST SIGN PANEL TO THE TOP GRADE OF SIDEWALK.

5. ALL NEWLY INSTALLED TRAFFIC SIGNS SHALL MEET THE MINIMUM RETRO-REFLECTIVITY AND ILLUMINATION STANDARDS AS SET FORTH BY THE MUTCD (LATEST EDITION). THESE MINIMUM REQUIREMENTS SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.

6. DIAMOND GRADE MATERIAL SHALL BE USED ON ALL STOP SIGNS.

7. THE CONTRACTOR INSTALLING SIGNS IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND UTILITIES. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.

8. FOLLOWING INSTALLATION, THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS DEPARTMENT, 303-662-8112, A FIELD INSPECTION OF LOCATION AND INSTALLATION OF ALL SIGNS SHALL BE PERFORMED BY PUBLIC WORKS. ALL DISCREPANCIES IDENTIFIED DURING THE FIELD INSPECTION MUST BE CORRECTED BEFORE THE TWO-YEAR WARRANTY PERIOD WILL BEGIN.

9. SIGNAGE AND STRIPING HAS BEEN DETERMINED BY INFORMATION AVAILABLE AT THE TIME OF REVIEW.
   PRIOR TO INITIATION OF THE WARRANTY PERIOD, LONE TREE RESERVES THE RIGHT TO REQUIRE MODIFICATIONS TO EXISTING OR INSTALLATION OF ADDITIONAL SIGNAGE AND/OR STRIPING IF THEY DETERMINE THAT AN UNFORESEEN CONDITION WARRANTS SUCH MODIFICATION ACCORDING TO THE MUTCD OR THE CDOT M AND S STANDARDS. ALL SIGNAGE AND STRIPING SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.

10. FINAL STRIPING AND CROSSWALK LAYOUT TO BE APPROVED BY THE CITY OF LONE TREE PRIOR TO INSTALLATION. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.

11. CROSSWALKS SHALL:
    BE CONSTRUCTED USING 125 MIL PREFORMED THERMOPLASTIC.
    LINE UP WITH THE HANDICAP RAMPS AT BOTH ENDS.
    BE CENTERED ON LANE LINES SO AS TO BE STRADDLED BY VEHICLES.

12. ALL PAVEMENT MARKINGS SHALL BE AS FOLLOWS:
    FOR CONCRETE SURFACE: METHYL METHACRYLATE OR EPOXY PAINT.
    FOR ASPHALT SURFACE: PAINT, 90 MIL PREFORMED THERMOPLASTIC, INLAID MARKING TAPE, METHYL METHACRYLATE, OR EPOXY PAINT.
    TURN ARROWS AND ONLYS: 125 MIL PREFORMED THERMOPLASTIC.

13. ALL PAVEMENT MARKING SHALL BE PRECEDED BY THE APPROPRIATE SURFACE PREPARATION.

14. ANY SIGNAGE AND/OR OTHER TRAFFIC CONTROL DEVICES REMOVED SHALL BE RETURNED TO THE CITY OF LONE TREE.

15. TYPE III LIGHTED BARRICADES SHALL BE SET AT ENDS OF ROADWAYS, SEPARATING FINISHED AND UNFINISHED CONSTRUCTION AREAS AND WILL BE MAINTAINED BY THE CONTRACTOR/DEVELOPER.

NOTE: ALSO SEE CITY OF LONE TREE "STREET SIGN DETAILS"FOR ADDITIONAL INTERSECTION STREET SIGNAGE REQUIREMENTS.

STORM SEWER NOTES:

1. SEE COVER SHEET FOR BENCHMARK.

2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.

3. INLET STATIONING IS TO CENTER OF INLET.

4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES.

5. ALL ON-GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES.

6. PIPE BEDDING SHALL CONFORM TO THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS.

7. ALL INLETS ARE TYPE R INLETS UNLESS OTHERWISE NOTED.

8. ALL TYPE R INLET RIM ELEVATIONS REFERENCE TBC ELEVATION AT CENTER OF INLET UNLESS OTHERWISE NOTED.

9. COORDINATES FOR RCP END SECTIONS ARE SHOWN AT THE DOWNSTREAM END ALONG CENTERLINE OF PIPE

10. UNLESS OTHERWISE SHOWN, RCP SHALL BE BACKFILLED ACCORDING TO THE STANDARD TRENCH SECTION SHOWN ON THE STORM SEWER DETAILS.

11. LENGTHS SHOWN FOR RCP REPRESENT HORIZONTAL LENGTHS AND NOT FOR LENGTHS ALONG THE PIPE SLOPE.

DRAINAGE STRUCTURE NOTES

1. CONCRETE WORK SHALL CONFORM TO ACI 301, ACI 350.

2. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM-615, GRADE 60.

3. ALL EXPOSED CONCRETE SHALL HAVE A CDOT CLASS 2 OR 5 FINISH.

4. ALL EXPOSED CONCRETE CORNERS SHALL HAVE ¾"CHAMFERS.

5. DETAILING, FABRICATION, AND PLACING OF REBAR SHALL BE IN ACCORDANCE WITH ACI 315.

6. CONSTRUCTION TOLERANCES SHALL BE IN ACCORDANCE WITH ACI 347.

7. ALL MANHOLES SHALL BE SLAB BASE UNLESS SPECIFIED OTHERWISE. MANHOLE SHALL BE FABRICATED IN ACCORDANCE WITH CDOT STANDARD M-604-20.

8. COORDINATES FOR MANHOLES AND AREA INLETS ARE SHOWN AT THE CENTER OF THE STRUCTURE. COORDINATES FOR MOUNTABLE CURB INLETS ARE SHOWN ALONG THE FLOWLINE AT CENTER OF THE STRUCTURE.

9. ALL TYPE C AND D INLETS SHALL HAVE CLOSE MESH GRATES UNLESS SPECIFIED OTHERWISE.

10. LENGTH OF FABRICATED BAR GRATING PANELS IS LENGTH OF BEARING BARS, WIDTH REFERS TO DIMENSION PERPENDICULAR TO BEARING BARS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PANEL DIMENSIONS GIVEN PRIOR TO FABRICATION.

DRAINAGE GENERAL NOTES

1. PROJECT FACILITIES ARE TO BE LOCATED BASED ON THE SURVEY COORDINATES, ELEVATIONS, DIMENSIONS, AND/OR GEOMETRIC DESIGN DATA PROVIDED ON THE DRAWINGS.

2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES AND FOR SATISFYING ALL APPLICABLE OSHA, FEDERAL, STATE, AND LOCAL REGULATIONS. TEMPORARY EXCAVATIONS SHALL PROVIDE, AT MINIMUM, THE TRENCH DIMENSIONS AND CLEARANCES SHOWN OR SPECIFIED. TEMPORARY CONSTRUCTION SLOPES SHALL BE SLOPED, SHORED, SHEETED, AND/OR BRACED IN ACCORDANCE WITH STABILITY REQUIREMENTS AND APPLICABLE REGULATIONS, AND SHALL BE NO STEEPER THAN THE SLOPES SHOWN OR SPECIFIED WITHOUT THE APPROVAL OF THE ENGINEER. ANY SUCH APPROVALS BY THE ENGINEER WILL NOT RELIEVE THE CONTRACTOR FROM SOLE RESPONSIBILITY FOR PROVIDING STABLE EXCAVATIONS AND TEMPORARY SLOPES.

3. EXISTING FACILITIES NOT INDICATED TO BE REMOVED SHALL BE PROTECTED IN PLACE OR REMOVED AND REPLACED IN KIND, AS APPROVED BY ENGINEER.

4. THE WORK WILL TAKE PLACE IN AND AROUND DRAINAGE SWALES AND THE HAPPY CANYON CREEK, SUBJECT TO PERIODIC FLOODING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF SURFACE AND SUBSURFACE WATER DURING THE COURSE OF THE WORK. ANY DAMAGE TO THE WORK RESULTING FROM SURFACE FLOWS, BASE FLOWS, OR FLOOD FLOWS INCLUDING BUOYANCY FORCES ON PIPELINES AND OTHER FACILITIES SHALL BE CORRECTED BY THE CONTRACTOR AT THE CONTRACTOR'S SOLE COST. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND SATISFYING THE REQUIREMENTS OF ANY APPLICABLE PERMITS PERTAINING TO WATER AND EROSION CONTROL.

5. CONTACT THE ENGINEER FOR CLARIFICATIONS OF ANY ABBREVIATIONS SHOWN ON THE DRAWINGS.

6. THE SITE WHERE THE WORK IS TO BE PERFORMED SHALL BE OVERLOT GRADED. TOPSOIL SHALL BE SPREAD IN OPEN SPACE AREAS TO A DEPTH OF APPROXIMATELY 6-INCHES. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED, AND SOME AREAS COVERED WITH EROSION CONTROL BLANKETS, UNLESS OTHERWISE DIRECTED IN THE PLANS OR BY THE ENGINEER. CARE SHALL BE TAKEN TO AVOID DISTURBING ANY OPEN SPACE AREAS EXCEPT THE MINIMUM NECESSARY TO PERFORM THE WORK. TOPSOIL IN ANY WORK AREAS OR ACCESS ROADS WITHIN THE OPEN SPACE SHALL BE STRIPPED AND STOCKPILED PRIOR TO THE WORK, PROTECTED FROM MIXING WITH ANY OTHER MATERIALS DURING THE WORK, AND REPLACED TO A LOOSE DEPTH OF 7- TO 8- INCHES (FINAL DEPTH AFTER SETTLEMENT SHALL BE 6- INCHES MINIMUM) AS THE WORK IS BEING COMPLETED. WHERE BLANKETS EXIST, THE MINIMUM AREA OF BLANKET TO ALLOW WORK TO PROGRESS SHALL BE REMOVED AND THEN THE REMOVED OR NEW BLANKET REPLACED AFTER UNDERLYING WORK IS COMPLETE (EXCEPT NO TEMPORARY BLANKET NEEDS TO BE REPLACED OVER ROCK OR COIR BLANKET SHOWN IN THE PLANS). JUST PRIOR TO REPLACEMENT OF TOPSOIL AFTER UNDERLYING WORK IS COMPLETE AND APPROVED, THE UNDERLYING SUBGRADE IN OPEN SPACE AREAS SHALL BE LOOSENED BY TILLING TO A DEPTH OF 12- INCHES UNTIL CLODS ARE NO LARGER THAN 3 INCHES, AND APPROVED BY THE ENGINEER. THIS NOTE ALSO APPLIES TO AREAS WHERE COIR MAT IS TO BE INSTALLED.

7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ANY COMPLETED WORK FROM DISTURBANCE OR DAMAGE DURING THE COURSE OF THE WORK. IF REQUESTED BY THE CONTRACTOR AND APPROVED BY THE OWNER, SIGNIFICANT COMPLETED SECTIONS OF THE WORK MAY BE ACCEPTED AS FINAL PRIOR TO THE COMPLETION OF THE ENTIRE PROJECT. ANY SUCH EARLY ACCEPTANCE WILL NEED TO BE IN WRITING BY THE ENGINEER AND OWNER AND THOSE PORTIONS OF THE WORK SHALL BE PROTECTED BY THE CONTRACTOR AGAINST VEHICLES RUNNING OVER THE AREA BY ENCIRCLING THE WORK WITH FLAGGING OR FENCING OR BY OTHER MEANS AGREED TO BY THE OWNER AND MAINTAINED BY THE CONTRACTOR UNTIL THE END OF THE PROJECT.

8. ALL FINE GRADING REQUIRED TO CONSTRUCT DRAINAGE IMPROVEMENTS AND PROVIDE FINISHED GRADES ADJACENT TO IMPROVEMENTS SHALL BE DONE BY THE DRAINAGE CONTRACTOR AND SHALL BE CONSIDERED PART OF THE WORK, AND NOT PAID FOR SEPARATELY.

Know what's below.
Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED PROFESSIONAL ENGINEER — AARON LEE CLUTTER — 36742 — PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. — DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	N/A
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

15950011GENERAL NOTES – GN PA 22

SHEET 255 OF 270

JOB NO. 15950.01

LAYER LINETYPE LEGEND

	EXISTING	PROPOSED
PHASE LINE		
MATCH LINE		
SECTION LINE		
BOUNDARY LINE		
PROPERTY LINE		
EASEMENT LINE		
RIGHT OF WAY		
R.O.W. A LINE	A	A
CENTERLINE		
CITY LIMITS		
WIRE FENCE		
CHAIN LINK FENCE		
WOOD FENCE		
MASONRY FENCE		
GUARDRAIL		
CONC. BARRIER		
CABLE TV	TV	TV
ELECTRIC	E	E
FIBER OPTIC	FO	FO
GAS MAIN	G	G
IRRIGATION MAIN	IRR	IRR
OIL/PETRO. MAIN	O	O
OVERHEAD UTILITY	OHU	OHU
SANITARY SEWER	S	
STORM DRAIN		
TELEPHONE	T	T
WATER MAIN	W	
RAW WATER LINE	RWL	RWL
SWALE/WATERWAY FLOWLINE		
DIVERSION DITCH		
DIVERSION CHANNEL		
MAJOR DRAINAGE BASIN		
MINOR DRAINAGE BASIN		
TOP OF SLOPE		
TOE OF SLOPE		
EDGE OF WATER		
INDEX CONTOUR	6100	6100
INTERMEDIATE CONTOUR		
DEPRESSION CONT. (INDEX)	6100	6100
DEPRESSION CONT. (INTER)		
TOP OF CUTS		
TOE OF FILLS		
CUT AND FILL LINE		C/F
SILT FENCE	SF	SF
100 YEAR FLOODPLAIN	100YR	100YR
500 YEAR FLOODPLAIN	500YR	500YR
FLOODWAY	FLDWY	FLDWY
BASE FLOOD ELEVATION		
EDGE OF WETLANDS		
STONE WALL		

UTILITIES LEGEND

	EXISTING	PROPOSED
STORM SEWER		
MANHOLE		
STORM INLET		
AREA INLET – SQUARE		
AREA INLET – ROUND		
FLARED END SECTION		
RIPRAP		
SANITARY SEWER		
LINE MARKER	Mkr San	
SERVICE MARKER		
CLEAN–OUT		
MANHOLE W/ DIRECTIONAL FLOW ARROW		
WATER LINE		
LINE MARKER	Mkr W	
SERVICE MARKER		
FIRE HYDRANT		
FIRE CONNECTION		
MANHOLE		
BEND		
BLOW–OFF VALVE		
WELL	WELL	WELL
METER		
VALVE		
REDUCER		
THRUST BLOCK		
CROSS		
PLUG W/ THRUST BLOCK		
TEE		
REVERSE ANCHOR		
ANODE		
AIR & VACUUM VALVE ASSEMBLY		
TRANSMISSION BLOW–OFF ASSEMBLY		
GAS LINE		
MARKER	Mkr G	
SERVICE MARKER		
METER		
VALVE		
PLUG		
TEE		
DRY UTILITIES		
CABLE TV MARKER	Mkr TV	
CABLE TELEVISION PEDESTAL		
ELECTRIC MARKER	Mkr E	
ELECTRIC SERVICE MARKER		
ELECTRICAL PEDESTAL		
ELECTRICAL METER		
ELECTRICAL MANHOLE		
FIBER–OPTIC MARKER	Mkr FO	
IRRIGATION PEDESTAL		
TELEPHONE MARKER	Mkr T	
TELEPHONE PEDESTAL		
TELEPHONE MANHOLE		
UTILITY POLE		
GUY ANCHOR		
GUY POLE		
MISC. UTILITIES		
VENT PIPE	VP	VP
TEST HOLE DESIGNATOR	THE FIRM AGENCY	

MONUMENTATION LEGEND

ALUMINUM CAP – FOUND	AC
BRASS CAP – FOUND	BC
BENCHMARK – FOUND	
CROSS – FOUND	
MONUMENT – SET	
MONUMENT – FOUND (DEFAULT)	
MONUMENT – FOUND (ALTERNATE 1)	
MONUMENT – FOUND (ALTERNATE 2)	
MONUMENT – FOUND (ALTERNATE 3)	
MONUMENT – FOUND (ALTERNATE 4)	
MONUMENT – FOUND (ALTERNATE 5)	
MONUMENT – FOUND (ALTERNATE 6)	
MONUMENT – FOUND (ALTERNATE 7)	
NAIL & WASHER – FOUND	NAIL & WASHER
PANEL – FOUND	
PK NAIL – FOUND	PK NAIL
ROW MONUMENT – FOUND	
ROW MARKER – FOUND	
SECTION CORNER – FOUND	
SECTION CORNER – SET	
QUARTER–SECTION CORNER – FOUND	
QUARTER–SECTION CORNER – SET	
SECTION CENTER – FOUND	
SECTION CENTER – FOUND	
CONTROL/TRAVERSE POINT – SET	

TRAFFIC LEGEND

	EXISTING	PROPOSED
PARKING METER		
TRAFFIC SIGNAL BOX		
TRAFFIC SIGNAL POLE		
TRAFFIC SIGNAL		
BARRICADE		
GUARD RAIL POST		
IMPACT ATTENUATOR		
BRIDGE STYLE HIGHWAY SIGN POST		
CANTILEVER STYLE HIGHWAY SIGN POST		
SIGN		
RAILROAD MARKER/SIGN		
STREET LIGHT		
STREET LIGHT – SINGLE		
STREET LIGHT – DOUBLE		
LUMINAIRE		
ALTERNATE LUMINAIRE		
SIGNAL MAST ARM W/ LUMINAIRE		
PEDESTAL POLE FOUNDATION		
TRAFFIC SIGNAL POLE		
ROUND PULL BOX		
MEDIUM PULL BOX		
LARGE PULL BOX (20X33X15)		
SIGNAL HEAD WITHOUT BACK PLATE		
SIGNAL HEAD WITH BACK PLATE		
PEDESTRIAN SIGNAL HEAD		
VIDEO IMAGE DETECTOR		
OPTICOM DETECTOR		
VEHICLE DETECTION ZONE		V

STORM WATER MANAGEMENT

	KEY	SYMBOL
CHECK DAM	CD	
CONSTRUCTION ROAD STABILIZATION	CRS	
CURB SOCK INLET PROTECTION	CS	
CONCRETE WASHOUT AREA	CWA	
DIVERSION DITCH AND DIKE, TEMPORARY	DD	
DIVERSION CHANNEL, TEMPORARY	DV	
DEWATERING	DW	
EROSION CONTROL BLANKET	ECB	
INLET FILTER	IF	
INLET PROTECTION	IP	
MULCHING	MU	
OUTLET PROTECTION	OP	
PAVED FLUME	PF	
PERMENENT SEEDING	PS	
REINFORCED CONCRETE DAM	RCD	
ROUGH CUT STREET CONTROL	RCS	
SEDIMENT BASIN	SB	
SEDIMENT CONTROL LOG	SCL	
SILT FENCE	SF	
SURFACE ROUGHENING	SR	
STABILIZED STAGING AREA	SSA	
SEDIMENT TRAP	ST	
STRAW BALE BARRIER	STB	
TERRACING	TER	
TEMPORARY SEEDING	TS	
TEMPORARY STREAM CROSSING CULVERT/BRIDGE	TSC C	
TEMPORARY STREAM CROSSING FORD TYPE	TSC F	
TEMPORARY SLOPE DRAIN	TSD	
VEHICLE TRACKING CONTROL	VTC	
VEHICLE TRACKING CONTROL WITH WASH RACK	WR	

DRAINAGE REPORT PLANS

	KEY
BASIN DESIGNATION (NO COEFFICIENT)	# / #.##
BASIN DESIGNATION (1 COEFFICIENT)	# / #.## / #
BASIN DESIGNATION (2 COEFFICIENTS)	# / #.## / # / #
ANALISYS POINT IDENTIFIER	#
BASIN DESIGNATION (HISTORIC)	# / #-#
BASIN DESIGNATION (DEVELOPED)	# / #.##
SUB–BASIN DESIGNATION (DEVELOPED)	# / ##
DRAINAGE PIPE IDENTIFIER	##
DRAINAGE POINT IDENTIFIER (HEXAGONAL)	##
DRAINAGE POINT IDENTIFIER (TRIANGULAR)	?
SWMM DESIGNATION 1	#
SWMM DESIGNATION 2	#
SWMM DESIGNATION 3	#
SWMM DESIGNATION 4	?

LANDSCAPE LEGEND

	EXISTING	PROPOSED
TREE – CONIFEROUS		
TREE – DECIDUOUS		
SHRUB/BUSH		
SHRUBS AND BUSHES		
IRRIGATION BOX		
IRRIGATION SPRINKLER		
IRRIGATION VALVE		
BOLLARD		
FLAGPOLE	FP	

Know what's **below.** **Call** before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED PROFESSIONAL ENGINEER — AARON LEE CLUTTER — 36742

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

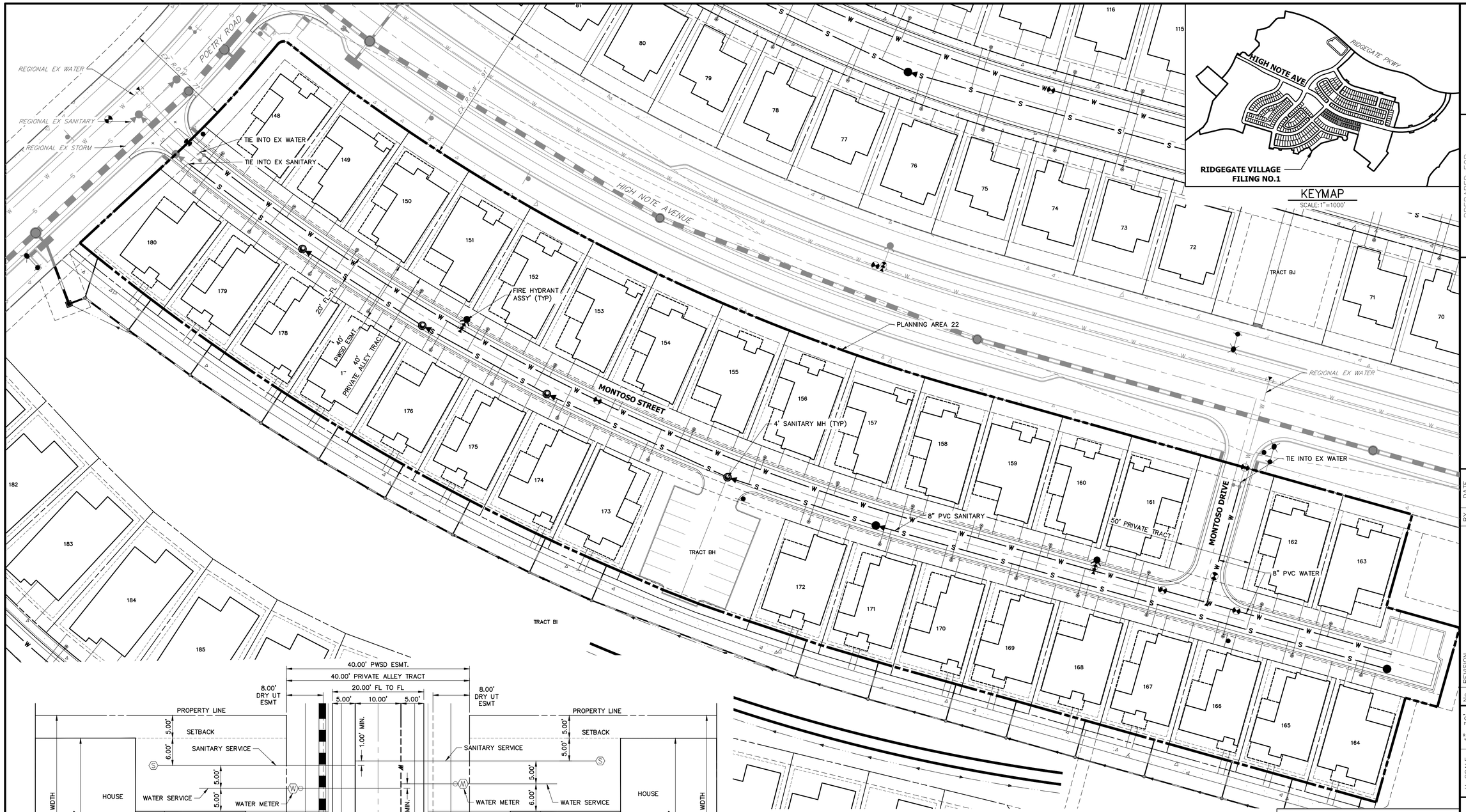
No.	REVISION	BY	DATE

H–SCALE	N/A
V–SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

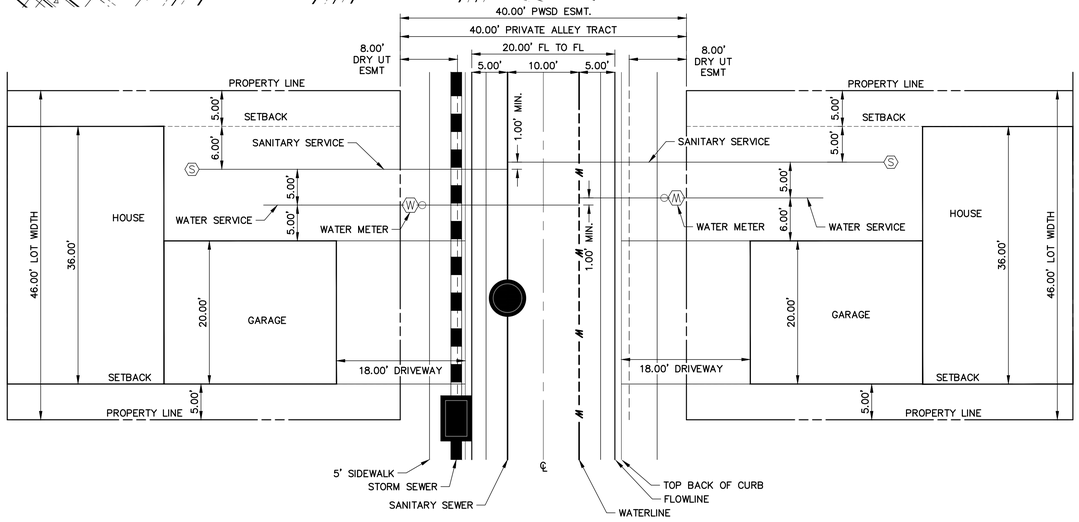
RIDGEGATE SOUTHWEST VILLAGE FILING 1
LEGEND

SHEET 256 OF 270

JOB NO. 15950.01



KEYMAP
SCALE: 1" = 1000'



ALLEY PRODUCT - TYPICAL SERVICE LOCATION (PLANNING AREA 22)

NTS

30 15 0 30 60

ORIGINAL SCALE: 1" = 30'

Know what's **below.** **Call** before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

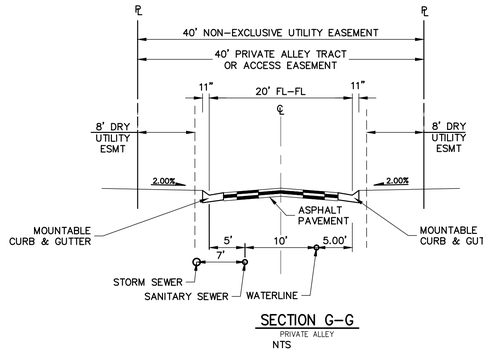
H-SCALE 1" = 30'
V-SCALE N/A
DATE 2/12/21
DESIGNED BY GVT
DRAWN BY ARJ
CHECKED BY

RIDGEGATE SOUTHWEST VILLAGE FILING 1
OVERALL UTILITY PLAN

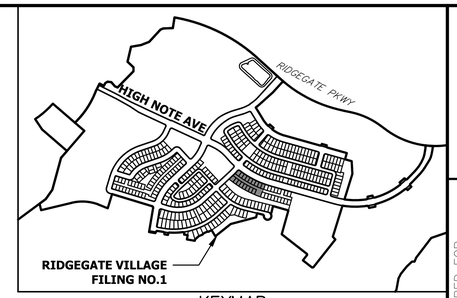
SHEET 257 OF 270

JOB NO. 15950.01

SEE SHEET 259



SECTION G-G
PRIVATE ALLEY
NTS



KEYMAP
SCALE:1"=1000'

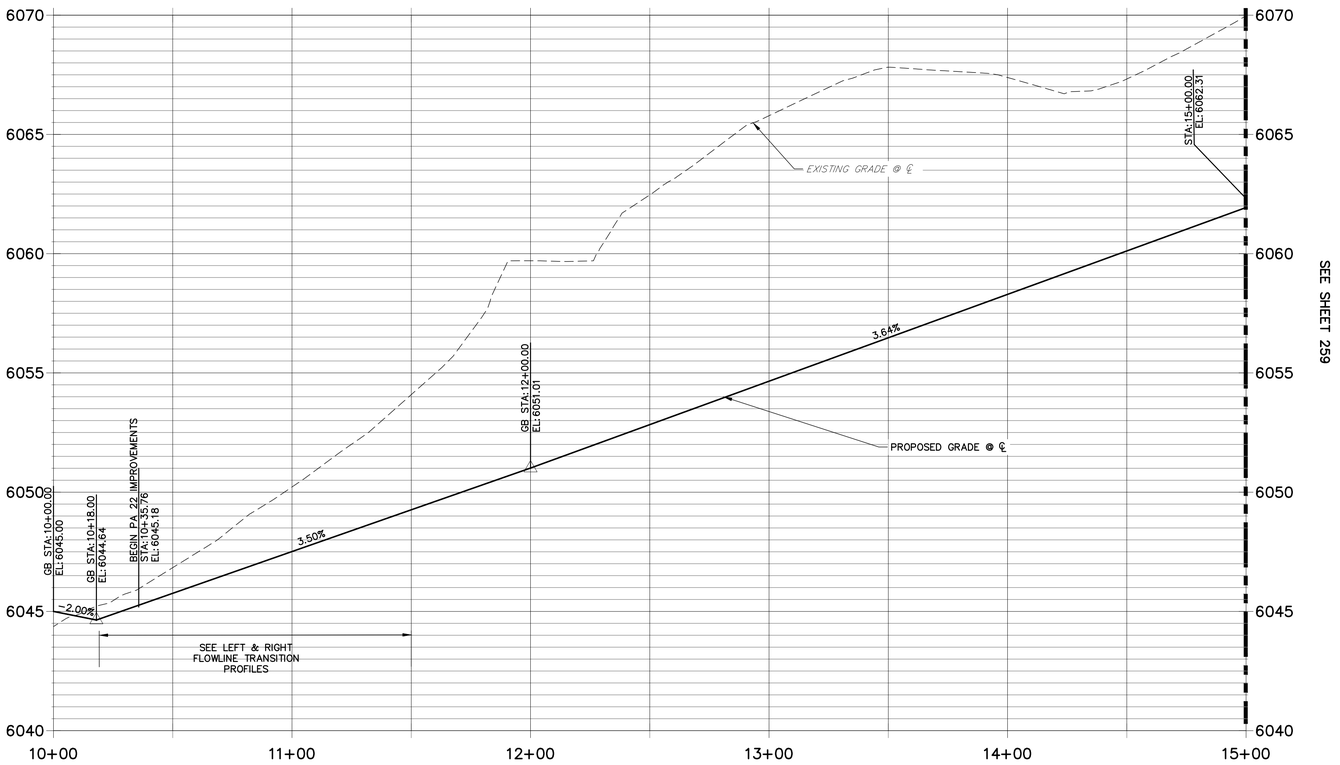
NOTES

1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE SHEET 153 FOR LEGEND.
4. SEE SHEET 264 FOR SIGNAGE AND STRIPING.
5. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.

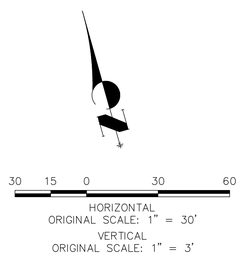
POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
1	10+41.58	10.00' (LT)	MONTOSO STREET	6044.96		PI
2	10+34.38	10.00' (RT)	MONTOSO STREET	6045.70		PC
3	14+31.99	10.00' (RT)	MONTOSO STREET	6059.37		PCR
4	14+41.85	19.89' (RT)	MONTOSO STREET	6060.01		PT
5	14+41.87	22.50' (RT)	MONTOSO STREET	6060.05		PC
6	14+38.95	25.53' (RT)	MONTOSO STREET	6060.12		PT
7	14+24.23	25.76' (RT)	MONTOSO STREET	6060.34		PI
8	14+25.47	88.75' (RT)	MONTOSO STREET	6061.29		PC
9	14+39.54	88.53' (RT)	MONTOSO STREET	6061.51		PC
9A	14+42.38	91.50' (RT)	MONTOSO STREET	6061.58		PT
10	14+42.40	93.50' (RT)	MONTOSO STREET	6061.61		PI
11	14+64.84	93.52' (RT)	MONTOSO STREET	6061.97		PI
12	14+64.86	91.52' (RT)	MONTOSO STREET	6061.94		PC
13	14+67.70	88.55' (RT)	MONTOSO STREET	6061.87		PT
14	14+81.78	88.80' (RT)	MONTOSO STREET	6062.17		PI
15	14+83.11	25.81' (RT)	MONTOSO STREET	6061.23		PI
16	14+68.39	25.55' (RT)	MONTOSO STREET	6061.00		FL
17	14+65.48	22.52' (RT)	MONTOSO STREET	6060.92		PT
18	14+65.50	19.87' (RT)	MONTOSO STREET	6060.87		PC
19	14+75.36	10.00' (RT)	MONTOSO STREET	6060.71		PCR

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C5	89°02'05"	10.00'	15.54'
C6	90°00'00"	3.00'	4.71'
C7	90°00'00"	3.00'	4.71'
C8	90°00'00"	3.00'	4.71'
C9	90°00'00"	3.00'	4.71'
C10	89°07'28"	10.00'	15.56'
C11	16°50'32"	1362.64'	400.55'
C13	23°05'17"	1342.50'	540.98'

MONTOSO STREET PROFILE - 1
STA 10+00.00 TO 15+00.00



SEE SHEET 259



HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED PROFESSIONAL ENGINEER 36742

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

NO.	REVISION	BY	DATE

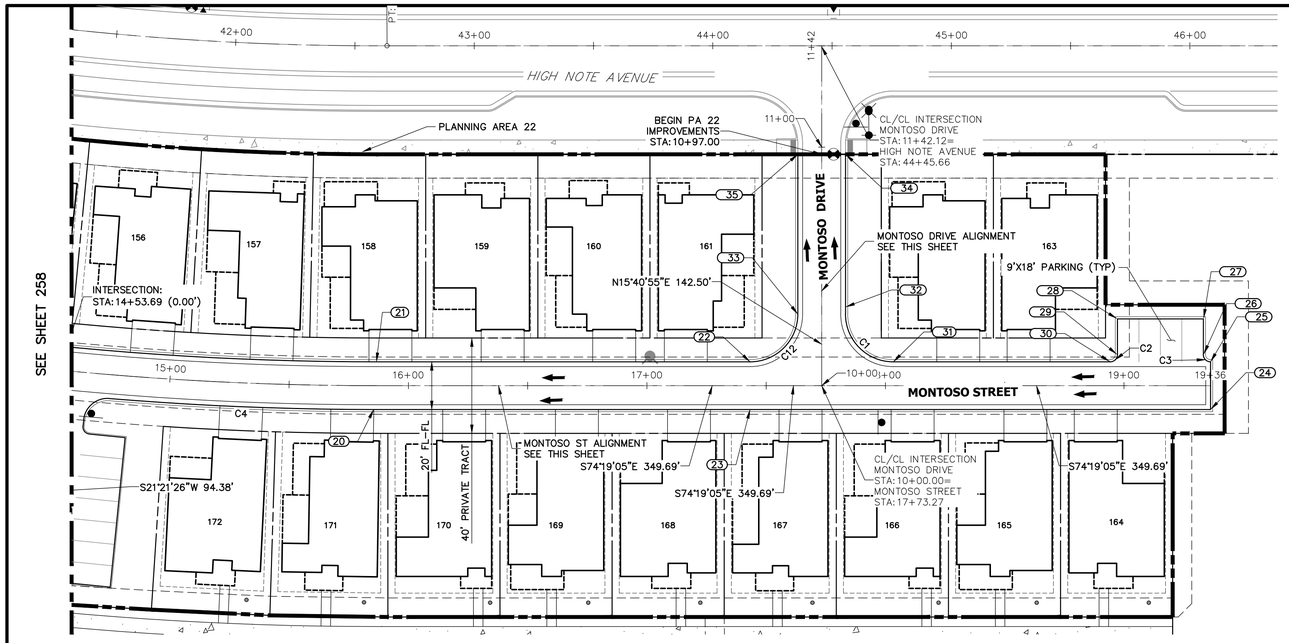
H-SCALE	1" = 30'
V-SCALE	1" = 3'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	ARJ
CHECKED BY	

RIDGEGATE SOUTHWEST
VILLAGE FILING 1

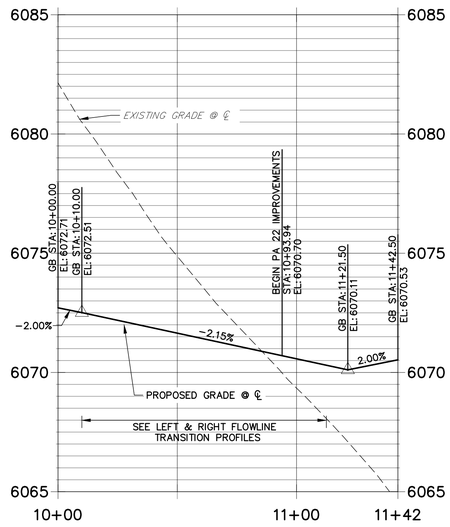
ROADWAY PLAN & PROFILES

SHEET 258 OF 270

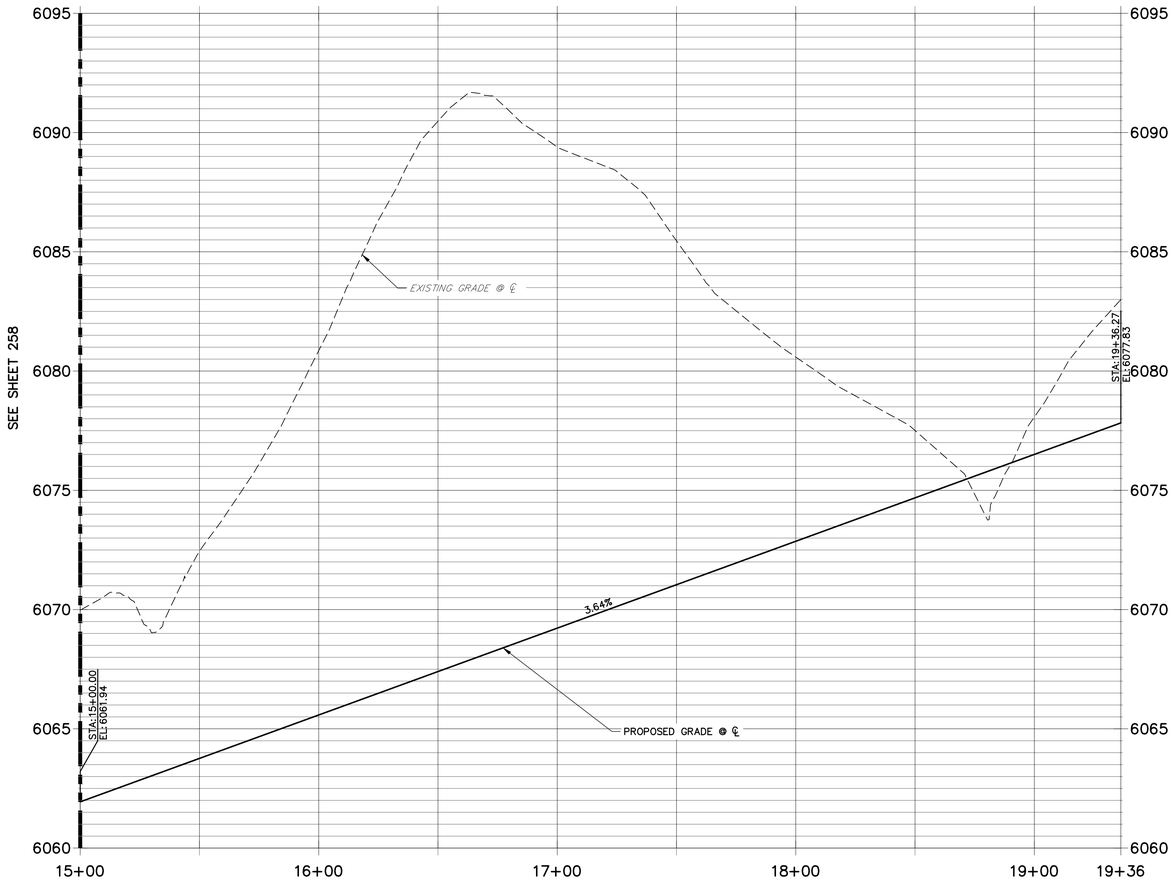
JOB NO. 15950.01

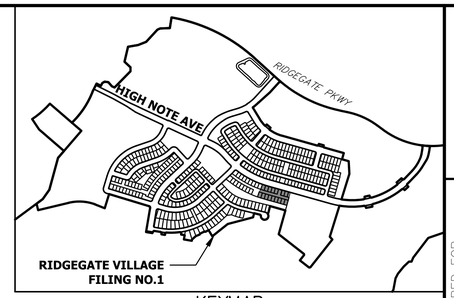


MONTOSO DRIVE PROFILE
STA 10+00.00 TO 11+42.50



MONTOSO STREET PROFILE - 2
STA 15+00.00 TO 19+36.27





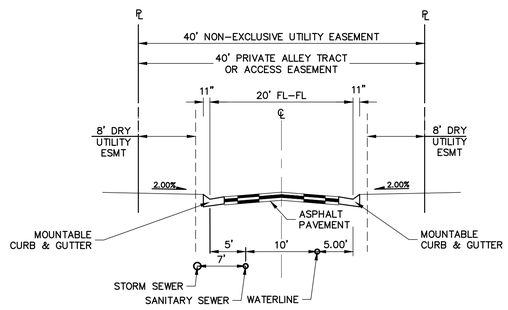
KEYMAP
SCALE:1"=1000'

NOTES

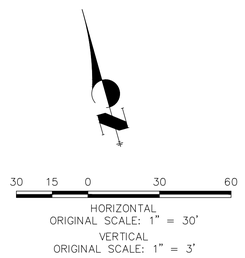
1. ALL PROFILE ELEVATIONS ARE CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL POINT TABULATIONS ARE FLOWLINE UNLESS OTHERWISE NOTED.
3. SEE SHEET 153 FOR LEGEND.
4. SEE SHEET 264 FOR SIGNAGE AND STRIPING.
5. SIDEWALK SHALL BE A DEPTH OF 6 INCHES.

POINT TABULATION						
POINT NUMBER	STATION	OFFSET	ALIGNMENT	ELEVATION	NOTES	DESCRIPTION
20	15+85.52	10.00' (RT)	MONTOSO STREET	6064.73		PT
21	15+86.59	10.00' (LT)	MONTOSO STREET	6064.76		PT
22	10+10.00	30.00' (LT)	MONTOSO DRIVE	6070.47		PCR
23	17+43.27	10.00' (RT)	MONTOSO STREET	6070.47		PI
24	19+36.27	10.00' (RT)	MONTOSO STREET	6077.50		PI
25	19+36.27	10.00' (LT)	MONTOSO STREET	6077.50		PI
26	10+13.00	160.00' (RT)	MONTOSO DRIVE	6077.89		PC
27	10+28.00	160.00' (RT)	MONTOSO DRIVE	6076.74		PT
28	10+28.00	124.00' (RT)	MONTOSO DRIVE	6075.45		PT
29	10+13.00	124.00' (RT)	MONTOSO DRIVE	6076.45		PT
30	10+10.00	121.00' (RT)	MONTOSO DRIVE	6075.97		PC
31	10+10.00	30.00' (RT)	MONTOSO DRIVE	6072.66		PC
32	10+33.00	10.00' (RT)	MONTOSO DRIVE	6072.27		PT
33	10+30.00	10.00' (LT)	MONTOSO DRIVE	6071.81		PT
34	10+97.00	10.00' (RT)	MONTOSO DRIVE	6071.20		PI
35	10+97.00	10.00' (LT)	MONTOSO DRIVE	6070.12		PI

CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C1	90°00'00"	20.00'	31.42'
C2	90°00'00"	3.00'	4.71'
C3	90°00'00"	3.00'	4.71'
C4	4°39'36"	1364.52'	110.98'
C12	89°59'54"	20.00'	31.42'



SECTION G-G
PRIVATE ALLEY
NTS



HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING, LLC

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

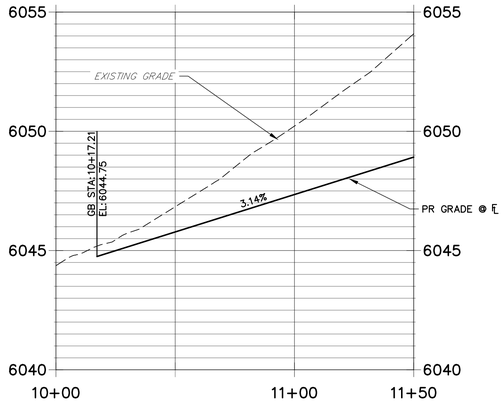
H-SCALE	1"=30'	DESIGNED BY	GVT
V-SCALE	1"=3'	DRAWN BY	ARJ
DATE	2/12/21	CHECKED BY	

RIDGEGATE SOUTHWEST
VILLAGE FILING 1
ROADWAY PLAN & PROFILES

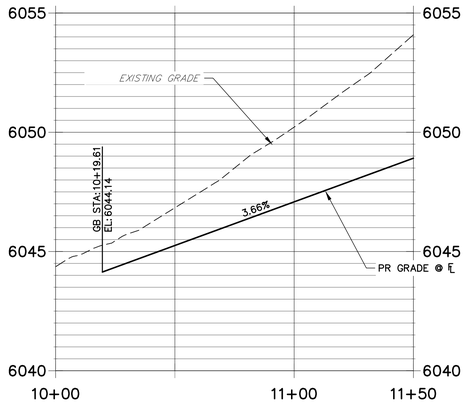
SHEET 259 OF 270

JOB NO. 15950.01

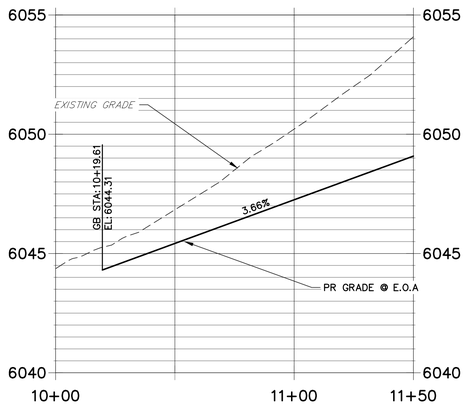
MONTOSO STREET RIGHT FLOW LINE TRANSITION PROFILE
STA 10+00.00 TO 11+50.00



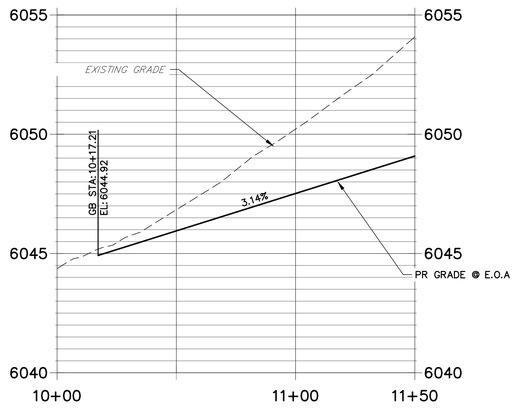
MONTOSO STREET LEFT FLOW LINE TRANSITION PROFILE
STA 10+00.00 TO 11+50.00



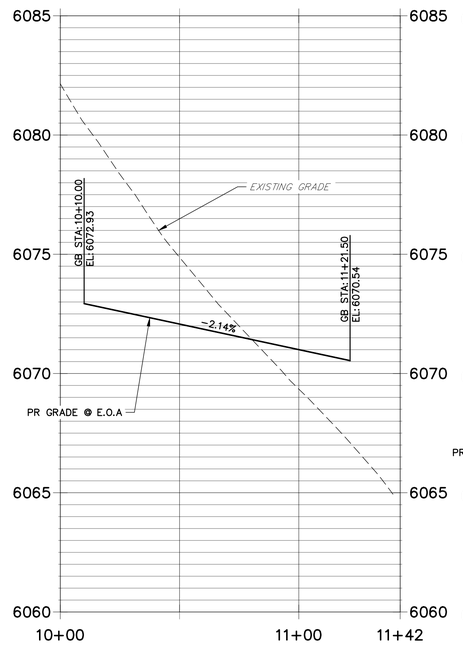
MONTOSO STREET LEFT E.O.A PROFILE
STA 10+00.00 TO 11+50.00



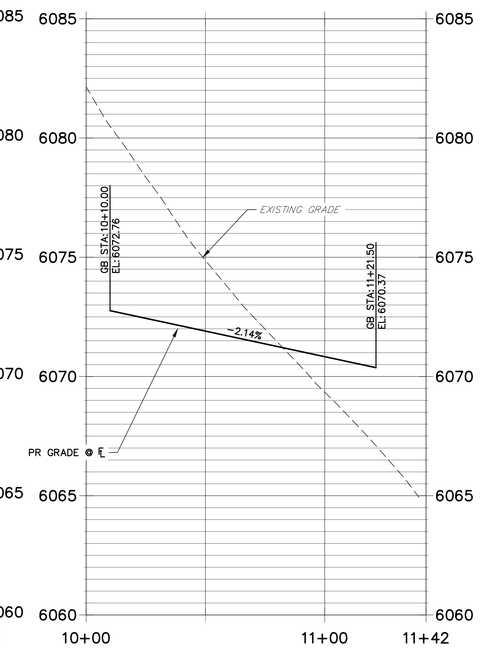
MONTOSO STREET RIGHT E.O.A PROFILE
STA 10+00.00 TO 11+50.00



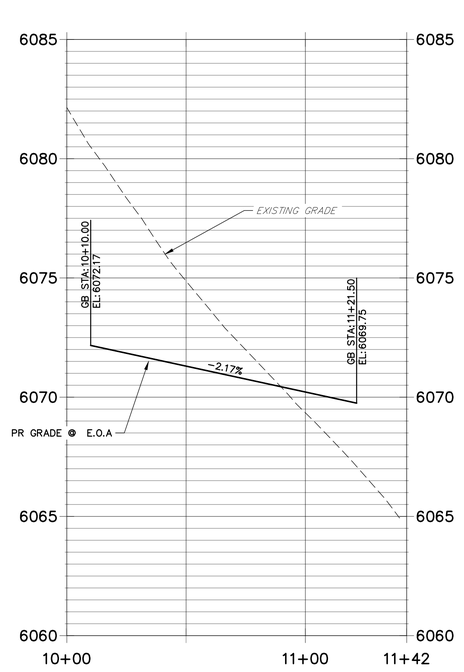
MONTOSO DRIVE RIGHT E.O.A PROFILE
STA 10+00.00 TO 11+42.50



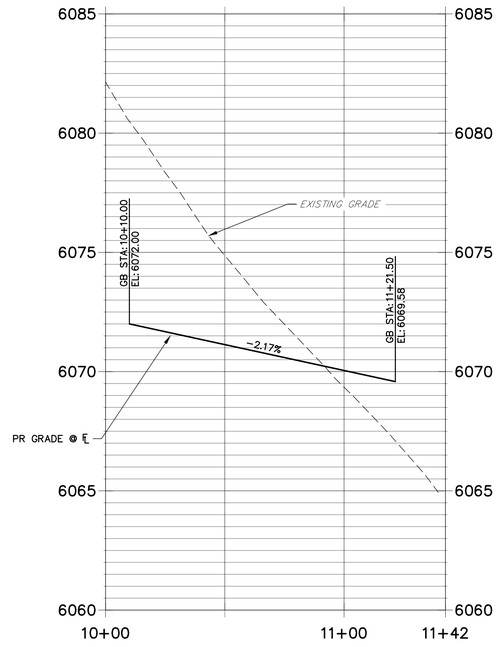
MONTOSO DRIVE RIGHT FLOW LINE TRANSITION PROFILE
STA 10+00.00 TO 11+42.50

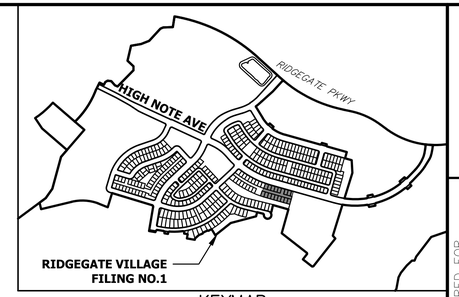


MONTOSO DRIVE LEFT E.O.A PROFILE
STA 10+00.00 TO 11+42.50



MONTOSO DRIVE LEFT FLOW LINE TRANSITION PROFILE
STA 10+00.00 TO 11+42.50





KEYMAP
SCALE:1"=1000'

30 15 0 30 60

HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

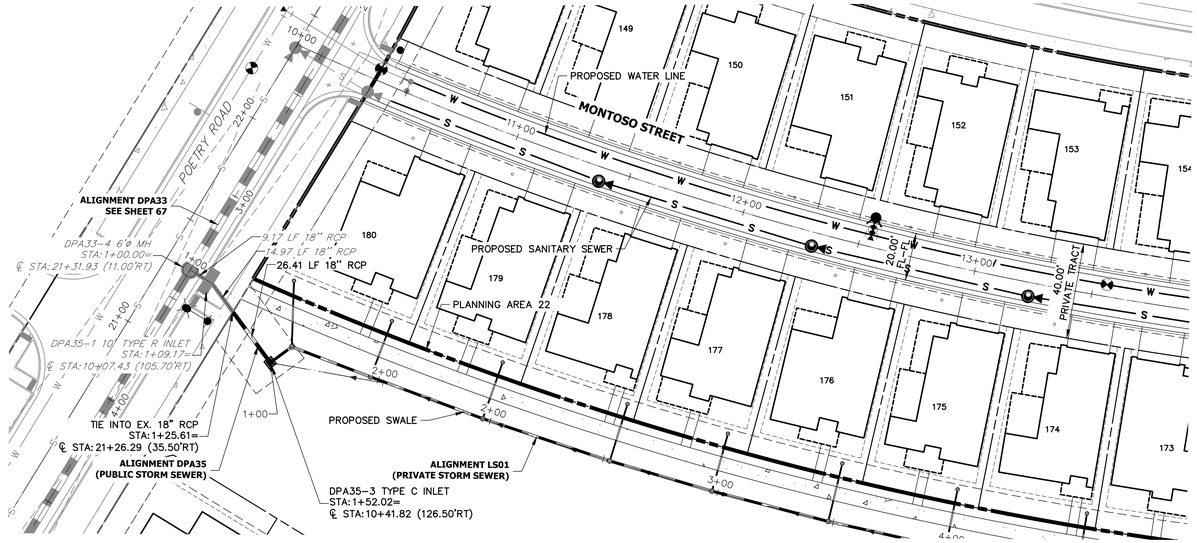
H-SCALE	1" = 30'
V-SCALE	1" = 3'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	ARJ
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

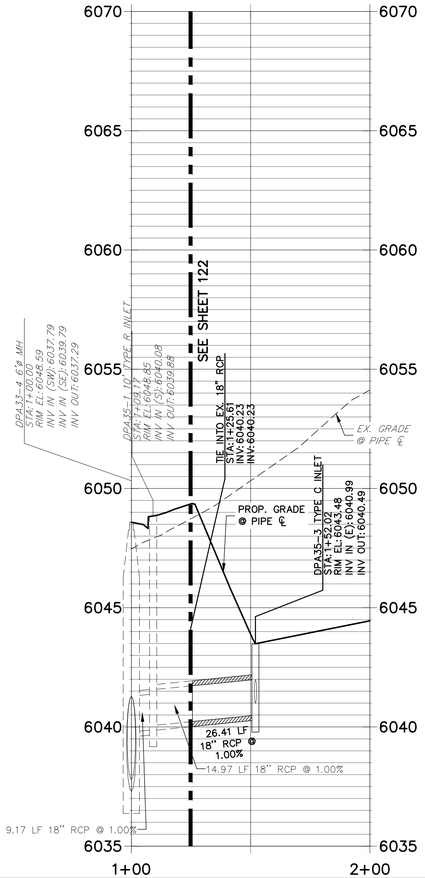
ROADWAY PLAN & PROFILES

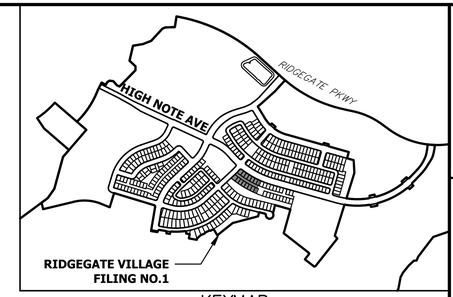
SHEET 260 OF 270

JOB NO. 15950.01

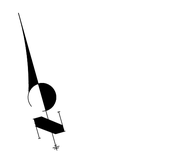


DPA35 PROFILE
STA 1+00.00 TO 2+00.00





KEYMAP
SCALE: 1"=1000'



30 15 0 30 60

HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED
AARON LEE CLUTTER
36742
PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

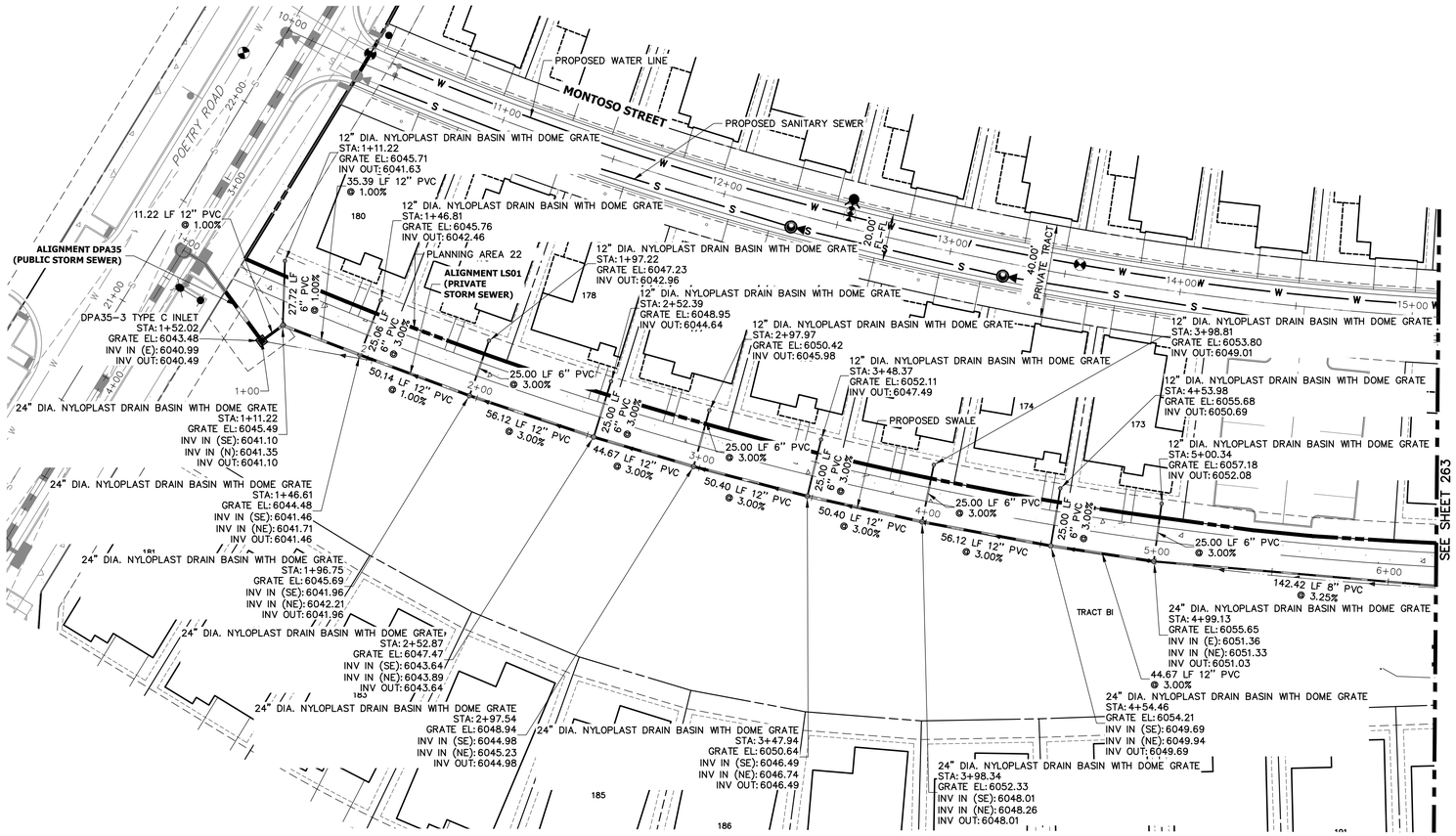
H-SCALE	1" = 30'
V-SCALE	1" = 3'
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	ARJ
CHECKED BY	

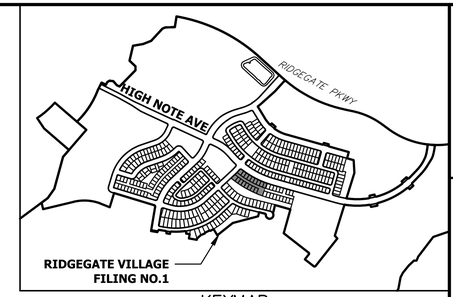
RIDGEGATE SOUTHWEST VILLAGE FILING 1

STORM SEWER PLANS & PROFILE

SHEET 261 OF 270

JOB NO. 15950.01





KEYMAP
SCALE: 1"=1000'

30 15 0 30 60

HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO REGISTERED
AARON LEE CLUTTER
36742
PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

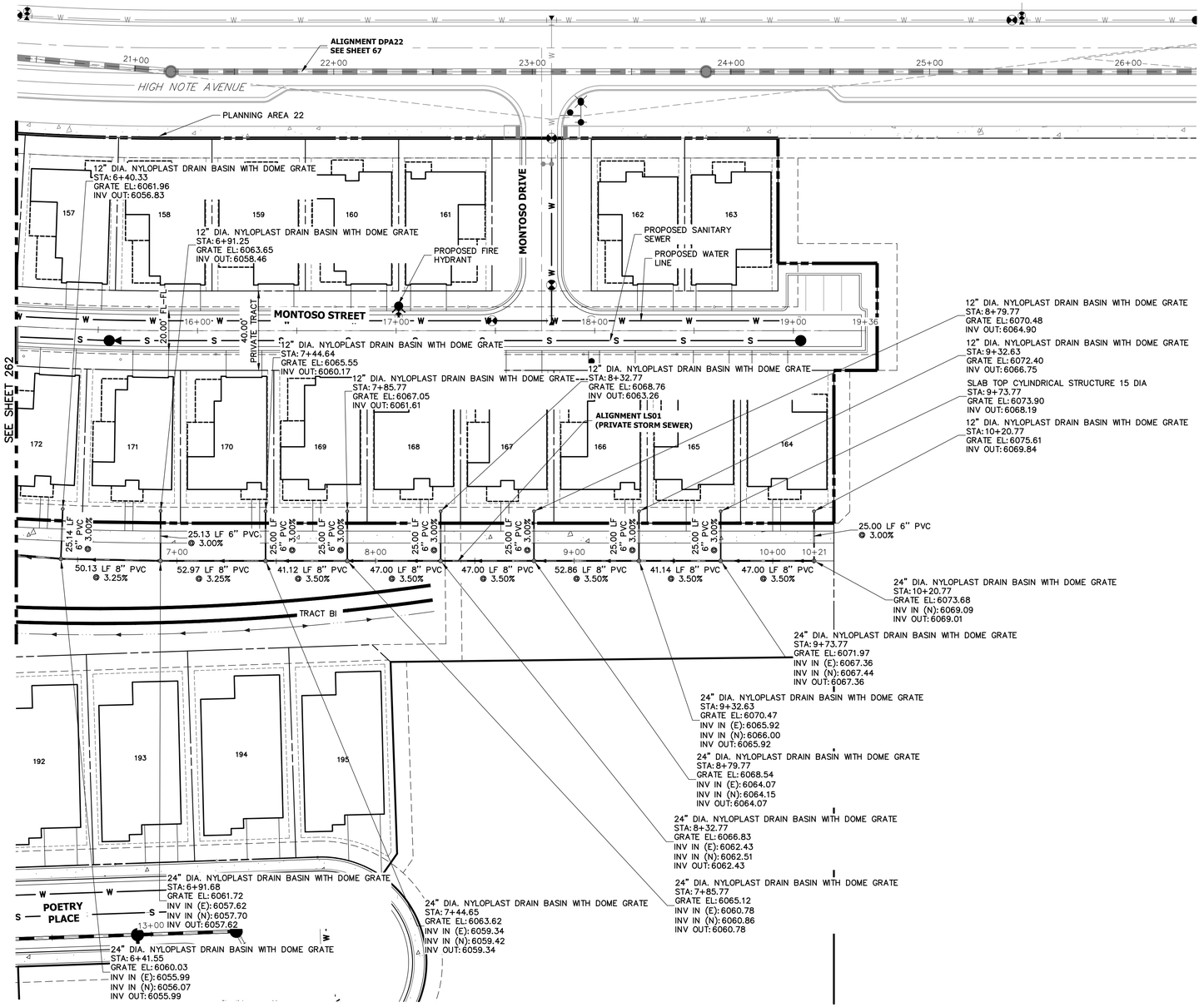
H-SCALE	1" = 30'
V-SCALE	1" = 3'
DATE	2/12/21
DESIGNED BY	CGM
DRAWN BY	SDL
CHECKED BY	

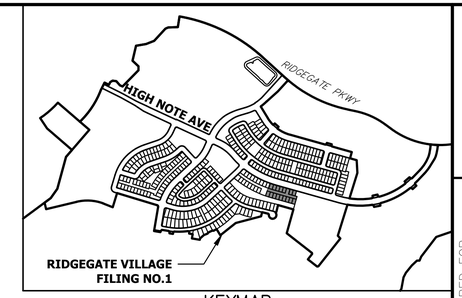
RIDGEGATE SOUTHWEST VILLAGE FILING 1

STORM SEWER PLANS & PROFILE

SHEET 262 OF 270

JOB NO. 15950.01





KEYMAP
SCALE: 1"=1000'

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	1" = 30'
V-SCALE	1" = 3'
DATE	2/12/21
DESIGNED BY	CGM
DRAWN BY	SDL
CHECKED BY	

30 15 0 30 60

HORIZONTAL
ORIGINAL SCALE: 1" = 30'
VERTICAL
ORIGINAL SCALE: 1" = 3'

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

811 Know what's below. Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

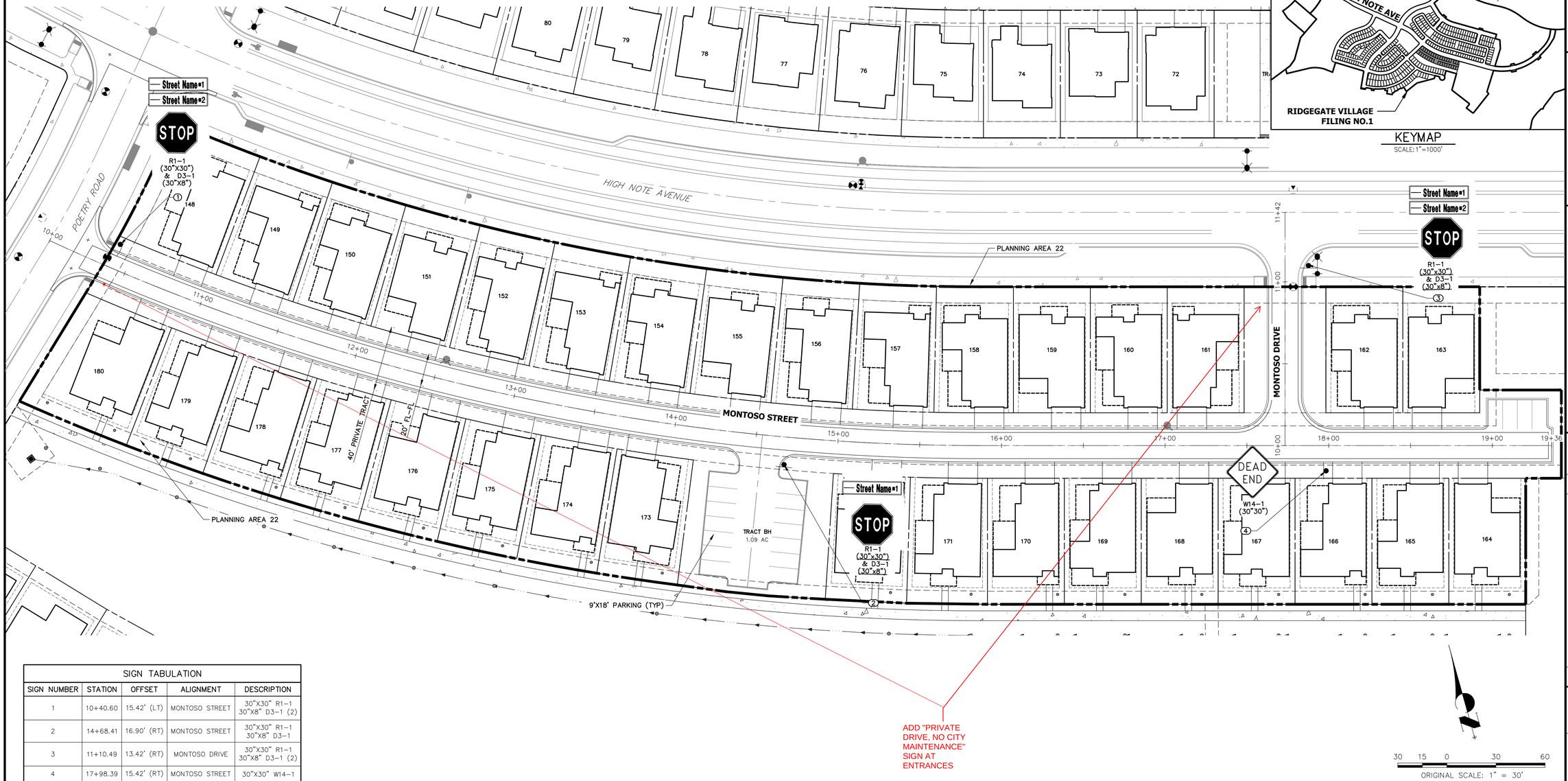
COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

RIDGEGATE SOUTHWEST VILLAGE FILING 1

STORM SEWER PLANS & PROFILE

SHEET 263 OF 270

JOB NO. 15950.01



SIGN TABULATION				
SIGN NUMBER	STATION	OFFSET	ALIGNMENT	DESCRIPTION
1	10+40.60	15.42' (LT)	MONTOSO STREET	30"X30" R1-1 30"X8" D3-1 (2)
2	14+68.41	16.90' (RT)	MONTOSO STREET	30"X30" R1-1 30"X8" D3-1
3	11+10.49	13.42' (RT)	MONTOSO DRIVE	30"X30" R1-1 30"X8" D3-1 (2)
4	17+98.39	15.42' (RT)	MONTOSO STREET	30"X30" W14-1

Know what's **below.** **Call** before you dig.

CITY OF LONE TREE

DATE

THESE CONSTRUCTION PLANS HAVE BEEN REVIEWED BY THE CITY OF LONETREE FOR STREET AND DRAINAGE, SIGNAGE AND STRIPING IMPROVEMENTS ONLY.

ENGINEERING DIVISION ACCEPTANCE BLOCK

ENGINEER'S STATEMENT

PREPARED UNDER MY SUPERVISION

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

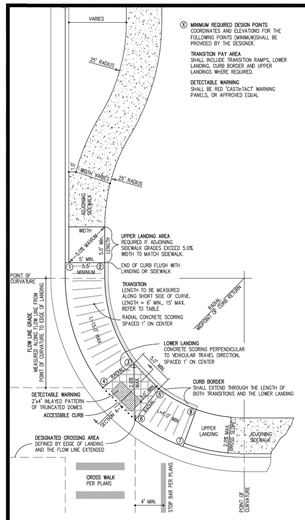
No.	REVISION	BY	DATE

H-SCALE 1" = 30' | DESIGNED BY GVT
V-SCALE N/A | DRAWN BY ARJ
DATE 2/12/21 | CHECKED BY

RIDGEGATE SOUTHWEST VILLAGE FILING 1
SIGNAGE & STRIPING PLANS

SHEET 264 OF 270

JOB NO. 15950.01



Ⓧ MINIMUM REQUIRED DESIGN POINTS
COORDINATES AND ELEVATIONS FOR THE FOLLOWING POINTS SHALL BE PROVIDED BY THE DESIGNER.

TRANSITION FAY AREA
INCLUDES TRANSITION RAMPS, LOWER LANDING, CURB BORDER AND UPPER LANDINGS WHERE REQUIRED.

DETECTABLE WARNING
SHALL BE RED "CAST-IN-PLACE" WARNING PAVERS, OR APPROVED EQUAL

NOTES

SLOPED TRANSITIONS SHALL COMPLY WITH ALL APPLICABLE RULES AND GUIDELINES OF THE AMERICANS WITH DISABILITIES ACT.

SLOPED TRANSITIONS SHALL BE CONSISTENT WITH THE CURRENT PUBLICATION OF FEDERAL GUIDELINES FOR ACCESSIBLE RIGHTS OF WAY.

LONGITUDINAL SLOPES WITHIN THE TRANSITION SHALL NOT EXCEED 1:12 (8.33%).

CROSS SLOPES, OR SLOPES PERPENDICULAR TO THE DIRECTION OF TRAVEL SHALL NOT EXCEED 1:50 (2.0%)

THE LOWER LANDING AREA IS A REQUIRED ELEMENT.

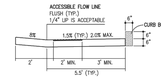
SLOPED TRANSITIONS ARE A REQUIRED ELEMENT AND SHALL:
- A. NOT EXCEED 1:12 (8.3%) LONGITUDINAL SLOPE ALONG THE SHORTEST SIDE UNLESS TRANSITION LENGTH EXCEEDS 15.0'
- B. NOT EXCEED 1:50 (2.0%) SLOPE PERPENDICULAR TO THE TRAVELED DIRECTION.
- C. NOT EXCEED 15.0' IN LENGTH AS MEASURED ALONG THE SHORTEST SIDE. MAXIMUM LONGITUDINAL SLOPE SHALL BE ADJUSTED TO ACCOMODATE THE LENGTH.
- D. NOT BE LESS THAN 6.0' IN LENGTH.

THE UPPER LANDING AREA IS REQUIRED IF:
- A. THE ADJOINING SIDEWALK HAS A LONGITUDINAL GRADE (DIRECTION OF TRAVEL) IN EXCESS OF 5.0% (5.0S). SAID LANDING SHALL NOT EXCEED A 1-20 (5.0S) SLOPE IN ANY DIRECTION.
- B. A CHANGE IN DIRECTION IS REQUIRED TO ENTER OF EXIT THE SLOPED TRANSITION. SAID LANDING SHALL NOT EXCEED 1:50 (2.0%) SLOPE IN ANY DIRECTION.

LANDINGS AND SLOPED TRANSITIONS SHALL MATCH THE WIDTH OF THE ADJOINING SIDEWALK, 3.0' MINIMUM.

ALL TOOLED JOINTS WITHIN THE SLOPED TRANSITIONS SHALL RUN PERPENDICULAR TO THE DIRECTION OF TRAVEL.

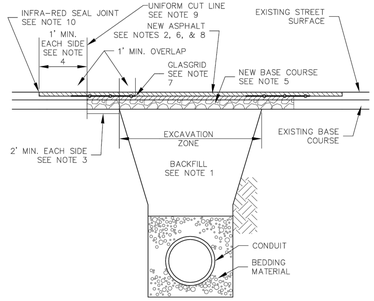
ALL TOOLED JOINTS WITHIN THE LOWER LANDING AREA SHALL RUN PARALLEL TO AND/OR PERPENDICULAR TO THE DIRECTION OF VEHICULAR TRAVEL WITHIN THE TRAVELED WAY.



SECTION A-A

TOOLED JOINT

CITY OF LONE TREE Department of Public Works	CURB TRANSITION	
	SCALE: NTS	DETAIL 1
	DATE: 3/05	



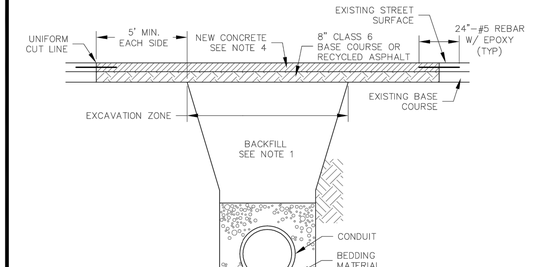
TYPICAL TRENCH SECTION

ROADWAY CLASSIFICATION	MIN. PAVEMENT PATCH THICKNESS
ARTERIAL	9 IN.
COLLECTOR	7 IN.
LOCAL	5 IN.

NOTES:

1. ALL PUBLIC STREET CUTS SHALL BE BACKFILLED WITH CLSM UNLESS THE TRENCH IS WIDE ENOUGH FOR A FULL-SIZED, SELF-PROPELLED COMPACTOR TO DRIVE THROUGH.
2. PAVEMENT PATCH THICKNESS SHALL NOT BE LESS THAN THE EXISTING SECTION.
3. SAW CUT AND REMOVE PAVEMENT AND BASE A MINIMUM OF 2' BACK FROM EXCAVATION ZONE OR LIMITS OF UNDISTURBED SUB-BASE, WHICHEVER IS GREATER.
4. ROTOMILL ASPHALT (2" DEPTH MINIMUM) A MINIMUM OF 1' BEYOND THE FULL DEPTH SAW CUT AND REMOVAL.
5. INSTALL 8 INCHES OF CDOT CLASS 6 ROAD BASE OR RECYCLED ASPHALT, COMPACTED IN PLACE TO MINIMUM 95% MODIFIED PROCTOR MAXIMUM DENSITY (ASTM D 1557).
6. INSTALL AND PROPERLY COMPACT REQUIRED DEPTH OF BASE COURSE ASPHALTIC CONCRETE (CDOT GRADING S).
7. INSTALL REINFORCEMENT MAT (TENSAR GLASGRID 8511, OR APPROVED EQUAL) PER MANUFACTURERS RECOMMENDATIONS. (MINIMUM 5 FOOT WIDTH)
8. INSTALL AND PROPERLY COMPACT ASPHALTIC CONCRETE TOP COURSE (CDOT GRADING SX).
9. ALL CUTS TO BE SQUARED OFF PRIOR TO RESTORATION. SAW CUT OR ROTOMILL.
10. THE JOINT BETWEEN THE NEW TOP COURSE ASPHALT AND THE EXISTING ASPHALT SHALL BE SEALED USING INFRARED JOINTING PROCESS.
11. ARTERIAL STREETS AND MAJOR COLLECTORS MUST BE PATCHED THE SAME DAY THE CUT OCCURS, UNLESS OTHERWISE AUTHORIZED BY THE ENGINEERING/PUBLIC WORKS DEPARTMENT.
12. ANY PAVEMENT MARKING (LANE LINES, TURN ARROWS, ETC.) DAMAGED BY THE STREET CUT AND REPAIR OPERATIONS SHALL BE REPLACED IN CONFORMANCE WITH CITY SIGNAGE AND STRIPING STANDARDS, AS DIRECTED BY THE ENGINEERING/PUBLIC WORKS DEPARTMENT.

CITY OF LONE TREE PUBLIC WORKS	ASPHALT PAVEMENT PATCHBACK	DETAIL NUMBER 1
DATE: 9/24/13	BY: GAW	DRAWING NO.: ST-01



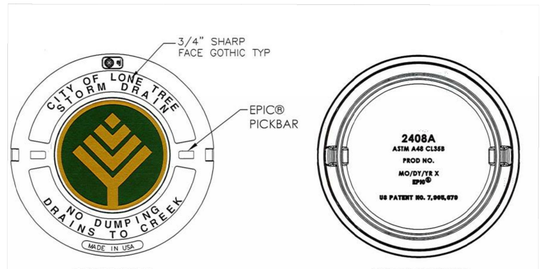
TYPICAL TRENCH SECTION

ROADWAY CLASSIFICATION	MIN. PAVEMENT PATCH THICKNESS
ARTERIAL	9 IN.
COLLECTOR	7 IN.
LOCAL	5 IN.

NOTES:

1. ALL PUBLIC STREET CUTS SHALL BE BACKFILLED WITH CLSM UNLESS THE TRENCH IS WIDE ENOUGH FOR A FULL-SIZED, SELF-PROPELLED COMPACTOR TO DRIVE THROUGH.
2. PAVEMENT PATCH THICKNESS SHALL NOT BE LESS THAN THE EXISTING SECTION.
3. SAW CUT AND REMOVE PAVEMENT AND BASE 5' BACK FROM EXCAVATION ZONE.
4. 8" OF COMPACTED CDOT CLASS 6 ROAD BASE OR RECYCLED ASPHALT SHALL BE INSTALLED PRIOR TO PAVING.
5. CONCRETE STREET PAVEMENT TO BE MINIMUM 7 SACK MIX, 5000 PSI AT 28 DAYS.
6. ALL CUTS TO BE SQUARED OFF PRIOR TO RESTORATION. SAW CUT OR ROTOMILL FULL DEPTH.
7. CONCRETE PATCHES SHALL BE DOWELED INTO EXISTING CONCERTE WITH 24"-#5 REBAR AT 18" O.C. AROUND THE PERIMETER OF THE PATCH.
8. ARTERIAL STREETS AND MAJOR COLLECTORS MUST BE PATCHED THE SAME DAY THE CUT OCCURS, UNLESS APPROVED BY THE ENGINEERING DEPARTMENT.

CITY OF LONE TREE PUBLIC WORKS	CONCRETE PAVEMENT PATCHBACK	DETAIL NUMBER 2
DATE: 12/9/11	BY: GAW	DRAWING NO.: ST-02



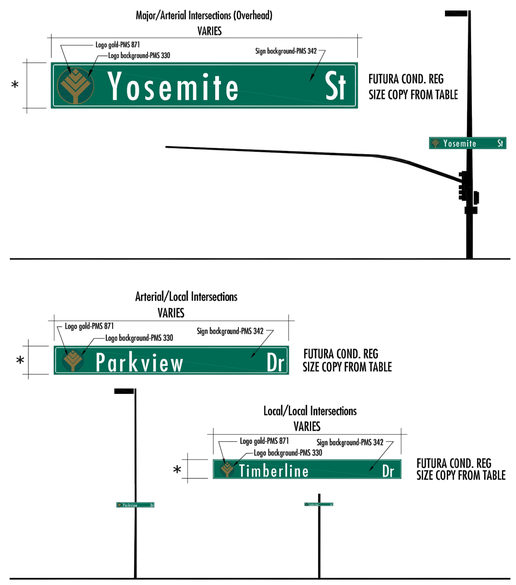
COVER FACE

COVER BOTTOM

SECTION

Design Features
- -Materials
  Gray Iron (CL35B)
- -Load Rating
  Heavy Duty
- -Open Area
  n/a
- -Coating
  Undipped
- -√ Designates Machined Surface

CITY OF LONE TREE PUBLIC WORKS	MANHOLE LID COVER	DETAIL NUMBER MH-1
DATE: 06/05/2020	BY: J. KRELL	DRAWING NO.:



* NOTE: SIGN HEIGHT SHALL BE 4" GREATER THAN RECOMMENDED MINIMUM UPPER-CASE LETTER HEIGHT PER TABLE, SHEET 3. CITY LOGO DIAMETER SHALL EQUAL UPPER-CASE LETTER HEIGHT.

CITY OF LONE TREE PUBLIC WORKS	INTERSECTION STREET NAME SIGNAGE	SHEET 1 OF 3
DATE: 08/28/13	BY: GRW	DRAWING NO.: SN-01

INTERSECTION STREET NAME SIGNAGE NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MOST RECENT VERSION OF THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE "COLORADO SUPPLEMENTAL MUTCD" AND THE DOUGLAS COUNTY "ROAD AND CONSTRUCTION STANDARDS MANUAL". FURTHER SPECIFICATIONS AND ILLUSTRATIONS ARE LOCATED IN THE COLORADO DIVISION OF HIGHWAYS "M AND S STANDARDS".
2. DELINEATION OF ROADWAYS SHALL BE AS SPECIFIED IN THE COLORADO "M AND S MANUAL".
3. STREET NAME SIGNS SHALL BE MOUNTED SO THAT THEY CAN BE SEEN FROM ALL DIRECTIONS OF TRAVEL.
4. INSTALLATION OF SIGNS SHALL CONFORM TO THE MUTCD MOUNTING HEIGHT REQUIREMENTS, INCLUDING A 7-FOOT MINIMUM HEIGHT FROM THE BOTTOM OF THE LOWEST SIGN PANEL TO THE TOP GRADE OF SIDEWALK.
5. ALL NEWLY INSTALLED TRAFFIC SIGNS SHALL MEET THE MINIMUM RETRO-REFLECTIVITY AND ILLUMINATION STANDARDS AS SET FORTH BY THE MUTCD (LATEST EDITION). THESE MINIMUM REQUIREMENTS SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
6. NON ILLUMINATED SIGNS SHALL BE USED AT MAJOR/MAJOR AND MAJOR/ARTERIAL INTERSECTIONS. THEY SHALL BE MOUNTED TO THE SIGNAL POLE WITH ASTRO-BRACS ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
7. THE CONTRACTOR INSTALLING SIGNS IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND UTILITIES. LONE TREE PUBLIC WORKS SHALL BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO INSTALLATION AT 303-662-8112.
8. FOLLOWING INSTALLATION, THE CONTRACTOR SHALL NOTIFY THE CITY OF LONE TREE PUBLIC WORKS DEPARTMENT, 303-662-8112. A FIELD INSPECTION OF LOCATION AND INSTALLATION OF ALL SIGNS SHALL BE PERFORMED BY PUBLIC WORKS. ALL DISCREPANCIES IDENTIFIED DURING THE FIELD INSPECTION MUST BE CORRECTED BEFORE THE TWO-YEAR WARRANTY PERIOD WILL BEGIN.
9. SIGNAGE AND STRIPING HAS BEEN DETERMINED BY INFORMATION AVAILABLE AT THE TIME OF REVIEW. PRIOR TO INITIATION OF THE WARRANTY PERIOD, LONE TREE RESERVES THE RIGHT TO REQUIRE MODIFICATIONS TO EXISTING OR INSTALLATION OF ADDITIONAL SIGNAGE AND/OR STRIPING IF THEY DETERMINE THAT AN UNFORESEEN CONDITION WARRANTS SUCH MODIFICATION ACCORDING TO THE MUTCD OR THE CDOT M AND S STANDARDS. ALL SIGNAGE AND STRIPING SHALL FALL UNDER THE REQUIREMENTS OF THE TWO (2) YEAR WARRANTY PERIOD FOR NEW CONSTRUCTION.
10. ANY INTERSECTION STREET NAME SIGNAGE REMOVED SHALL BE RETURNED TO THE CITY OF LONE TREE.

CITY OF LONE TREE PUBLIC WORKS	INTERSECTION STREET NAME SIGNAGE	SHEET 2 OF 3
DATE: 04/19/12	BY: GRW	DRAWING NO.: SN-02

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

AARON L. CLUTTER, P.E. DATE
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

UNTIL SUCH TIME AS LONE TREE PUBLIC WORKS ARE APPROVED BY ALL APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

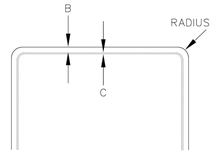
No.	REVISION	BY	DATE

H-SCALE	N/A
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
DETAILS 1

SHEET 265 OF 270
JOB NO. 15950.01

STANDARD SIGN BORDER SPECIFICATIONS



SIGN SIZE	BORDER WIDTHS (INCH)			RADIUS (INCH)
	A	B	C	
< 12"	N/A	.375	.375	1
≥ 12"	N/A	.375	.438	1.5

MINIMUM LETTER HEIGHTS ON STREET NAME SIGNS

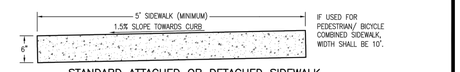
(MUTCD 2009 EDITION–TABLE 2D–2)

TYPE OF MOUNTING	TYPE OF STREET OR HIGHWAY	SPEED LIMIT	RECOMMENDED MINIMUM LETTER HEIGHT **	
			INITIAL UPPER–CASE	LOWER–CASE
OVERHEAD	ALL TYPES	ALL SPEED LIMITS	12 INCHES	9 INCHES
POST–MOUNTED	MULTI–LANE	MORE THAN 40 MPH	8 INCHES	6 INCHES
POST–MOUNTED	MULTI–LANE	40 MPH OR LESS	6 INCHES	4.5INCHES
POST–MOUNTED	2–LANE	ALL SPEED LIMITS	6 INCHES*	4.5 INCHES*

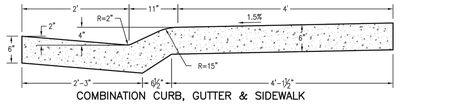
*ON LOCAL 2–LANE STREETS W/SPEED LIMITS OF 25 MPH OR LESS, 4" INITIAL UPPER–CASE LETTERS WITH 3" LOWER CASE LETTERS MAY BE USED.

** SUPPLEMENTARY LETTERING (E.G. ST., DR., LN., & NUMBERING) SHALL BE A MINIMUM OF ½ THE APPLICABLE RECOMMENDED MINIMUM LETTER HEIGHT PER ABOVE TABLE

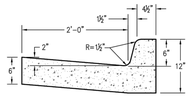
CITY OF LONE TREE PUBLIC WORKS	INTERSECTION STREET NAME SIGNAGE	SHEET
DATE: 04/19/12	BY: GRW	DRAWING NO.: SN–03	3 OF 3



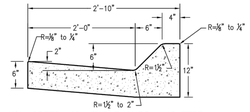
STANDARD ATTACHED OR DETACHED SIDEWALK



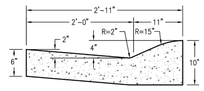
COMBINATION CURB, GUTTER & SIDEWALK



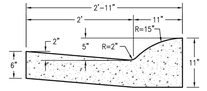
VERTICAL CURB & GUTTER



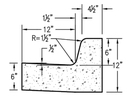
HIGH SPEED MOUNTABLE CURB & GUTTER
(DESIGN SPEED OF 45 M.P.H. OR HIGHER)



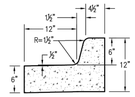
URBAN LOCAL MOUNTABLE CURB & GUTTER



RURAL LOCAL MOUNTABLE CURB & GUTTER



MEDIAN CURB & GUTTER (CATCH)



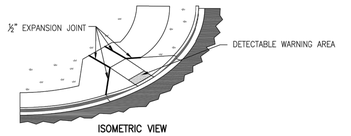
MEDIAN CURB & GUTTER (SPILL)

NOTES:
1. IF A SIDEWALK IS PLACED BEHIND THE CURB BUT IS NOT PLACED MONOLITHICALLY, EXPANSION JOINT MATERIAL AND A SILICONE BASE SEALER MUST BE APPLIED BETWEEN THE SIDEWALK AND THE CURB.
2. SEE DRAWING NUMBER SP.23a and SP.23b FOR TRENCH DRAIN.
3. SEE DRAWING NUMBER SP.31 AND SP.32 FOR CONCRETE JOINTS.

	CURB & GUTTERS AND SIDEWALKS	Issued: 05/2013
	DOUGLAS COUNTY COLORADO	Revised: 09/2017
		Drawing No. SP.17

CURB RAMP GENERAL NOTES:

1. IN ACCORDANCE WITH CRS43–2–107(2), ADA COMPLIANT CURB RAMPS SHALL BE PROVIDED AT ALL PEDESTRIAN CROSSINGS AND AT PUBLIC TRANSPORTATION STOPS WHERE WALKWAYS INTERSECT A CURB. THESE LOCATIONS USUALLY INCLUDE, BUT ARE NOT LIMITED TO STREET CROSSINGS AT INTERSECTIONS AND AT DESIGNATED MID–BLOCK LOCATIONS.
2. THE FOLLOWING CURB RAMP TYPES ARE GENERAL REPRESENTATIONS. SEE DETAILED RAMP LAYOUTS FOR CONSTRUCTION.
3. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF DOUGLAS COUNTY.
4. SIDEWALKS SHALL BE RAMPED WHERE A DRIVEWAY IS EXTENDED ACROSS THE WALK.
5. DETAILS SHOWN IN THE PLAN SHALL APPLY TO ALL CONSTRUCTION OR RECONSTRUCTION OF STREETS, CURBS OR SIDEWALKS PER CURB RAMP DETAILS.
6. IN NEW CONSTRUCTION, RAMP AND CURB MAY BE POURED MONOLITHICALLY.
7. RAMP AND WINGS SHALL BE POURED MONOLITHICALLY.
8. MINIMUM WIDTH OF RAMPS SHALL BE 4 FEET AND RAMP SLOPES SHALL NOT BE STEEPER THAN 13:1 (7.69%).
9. MAINTAIN BACK OF WALK ELEVATION AT 1.5% SLOPE FROM TOP OF CURB.
10. CONCRETE FOR SIDEWALK RAMPS SHALL BE CLASS "D".
11. A ½" EXPANSION JOINT SHALL BE REQUIRED WHERE THE CONCRETE RAMP JOINS ANY RIGID PAVEMENT OR STRUCTURE.
12. DRAINAGE STRUCTURES SHALL NOT BE PLACED IN LINE WITH RAMPS. LOCATION OF THE RAMP SHALL TAKE PRECEDENCE OVER LOCATION OF THE DRAINAGE STRUCTURE.



ISOMETRIC VIEW

DETECTABLE WARNING AREA NOTES

1. DETECTABLE WARNING AREAS SHALL BE INSTALLED WITHIN CURB RAMPS AT ALL SIDEWALK/STREET TRANSITIONS, AS DESCRIBED BY THE AMERICAN'S WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG), LATEST REVISION.
2. DETECTABLE WARNING DEVICES SHALL BE TRUNCATED DOME WARNING DEVICES. COLOR SHALL BE BRICK RED, TILE RED, OR OTHER EQUIVALENT COLOR TO PROVIDE COLOR CONTRAST WITH ADJACENT SURFACES, AS REQUIRED BY ADAAG SECTION 4.29.2. THE COUNTY ENGINEER MUST APPROVE THE TRUNCATED DOME WARNING AREA COLOR PRIOR TO CONSTRUCTION.
3. CONTRASTING COLOR REQUIREMENT SHALL BE MET BY TRUNCATED DOME SECTIONS AND NOT BY USE OF COLORED CONCRETE.
4. A SAMPLE OF THE DETECTABLE WARNING (TRUNCATED DOMES) TO BE USED ON THE PROJECT SHALL BE SUBMITTED TO AND ACCEPTED BY THE COUNTY ENGINEER PRIOR TO CONSTRUCTION.
5. ALL DETECTABLE WARNING AREAS SHALL START A MINIMUM OF 6 INCHES FROM THE FLOW LINE OF THE CURB. ALL DETECTABLE WARNING AREAS SHALL BE 24 INCHES IN LENGTH AND COVER THE COMPLETE WIDTH OF THE RAMP AREA ONLY.
6. SURFACE APPLIED TRUNCATED DOME PANELS ARE ONLY ALLOWED ON PRE–EXISTING CURB RAMPS AND ARE NOT ALLOWED IN NEW CONSTRUCTION.

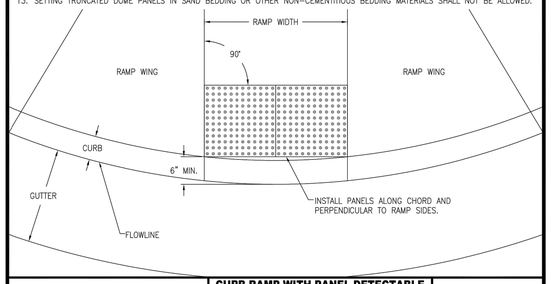
CDOT M & S STANDARDS M–608–1	CURB RAMP & DETECTABLE WARNING AREA NOTES	Issued: 05/2013
	DOUGLAS COUNTY COLORADO	Revised: 09/2017
		Drawing No. SP.18a

Panel Installation Notes:

1. DETECTABLE WARNING PANELS, 24" X 24" OR 24" X 30" IN SIZE, SHALL BE PREFABRICATED REDDISH WITH TRUNCATED DOMES AND COMPLY WITH ADA REQUIREMENTS. ONLY FULL PANELS SHALL BE USED TO OBTAIN SPECIFIC RAMP THROAT WIDTH, (I.E. TWO 24" PANELS FOR A 4' RAMP, TWO 30" PANELS FOR A 5' RAMP, ETC.)
2. PRIOR TO START OF WORK, CONTRACTOR SHALL SUBMIT, TO DOUGLAS COUNTY FOR APPROVAL, A SAMPLE PANEL AND DOCUMENTATION FROM THE MANUFACTURER. PANEL SURFACE SHALL HAVE A MINIMUM OF 70% LIGHT REFLECTIVITY CONTRAST WITH THE ADJOINING SURFACE. PANELS SHALL ONLY BE SELECTED FROM THE APPROVED PRODUCT LIST BELOW:

PRODUCT NAME	MANUFACTURER	PRODUCER SUPPLIER CODE
CAST–DWD	Pioneer Detectable, LLC	GEN130004
Cast–In–Place Tactile	ADA Solutions, Inc.	GEN100123
DURALAST	EJ USA, Inc.	GEN130020
Detectable Warning Paving Slab	StoneBilt Concepts	GEN100341
TekWay Dome–Tiles	StrongGo LLC	GEN100343
Tuftile Cast Iron Tile/Radius–Wedge (CIP)	Tuftile, Inc.	GEN150088

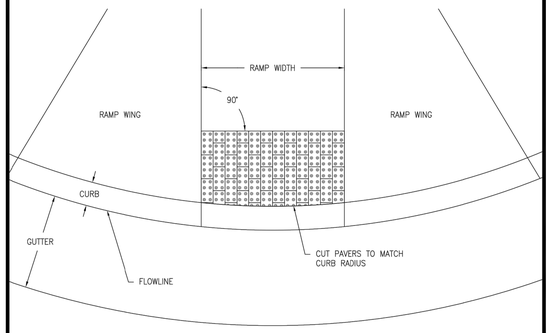
3. PANELS SHALL BE PLACED AS SHOWN, WITH DOME PATTERN IN A SQUARE GRID AND ALIGNED IN THE DIRECTION OF TRAVEL. A STEEL TEMPLATE SHALL BE USED TO ENSURE PROPER ALIGNMENT AND UNIFORM GRADE.
4. REMOVE THE PROPER AMOUNT OF CONCRETE WITHIN THE TEMPLATE FOR AN ACCURATE INSTALLATION. ONCE TO THE PROPER DEPTH, FLOAT THE AREA TO RECEIVE THE PANELS UNTIL A SMOOTH PASTE HAS DEVELOPED.
5. WET THE BACK SIDE OF EACH PANEL AND TROWEL SOME CONCRETE PASTE OR APPROVED BONDING AGENT OVER THE WET SURFACE FOR BETTER ADHERENCE.
6. SET THE FIRST PANEL ON THE FRESHLY PREPARED SURFACE. DO NOT PRESS DOWN HARD ON THE PANEL, BUT PREFERABLY TWIST FROM SIDE TO SIDE. SET PANEL WITH RUBBER MALLET TO PROPER DEPTH SO THAT THE BASE OF THE TRUNCATED DOME IS AT THE SAME ELEVATION AS THE ADJOINING RAMP SURFACE.
7. SET SUCCESSIVE PANELS WITH A TIGHT BUTT JOINT AGAINST THE PREVIOUSLY SET PANEL. PROVIDE A ⅛" GAP BETWEEN PANELS.
8. FLOAT FRESH CONCRETE AROUND PANELS. FINISH AND BROOM SURROUNDING CONCRETE AS SPECIFIED. CLEAN ANY CONCRETE OFF PANELS WITH A SPONGE.
9. PROVIDE 1" DEEP TOOL JOINTS AT CORNERS OF DETECTABLE WARNING AREA, AND TOOL AROUND PANELS WITH ⅜" RADIUS EDGER.
10. WHEN CUT PANELS ARE REQUIRED, CUT SECTIONS SHALL NOT SIGNIFICANTLY IMPACT OVERALL TRUNCATED DOMES PATTERN AND CUT DOMES SHALL BE BEVELED AT A 45–DEGREE ANGLE TO CREATE A SMOOTH TRANSITION.
11. ANY PANELS THAT ARE DAMAGED DURING TRANSPORT OR INSTALLATION WILL BE REJECTED AND SHALL NOT BE INSTALLED.
12. CLEAN OUT ⅛" JOINT(S) BETWEEN PANELS AND SEAL WITH EPOXY.
13. SETTING TRUNCATED DOME PANELS IN SAND BEDDING OR OTHER NON–CEMENTITIOUS BEDDING MATERIALS SHALL NOT BE ALLOWED.



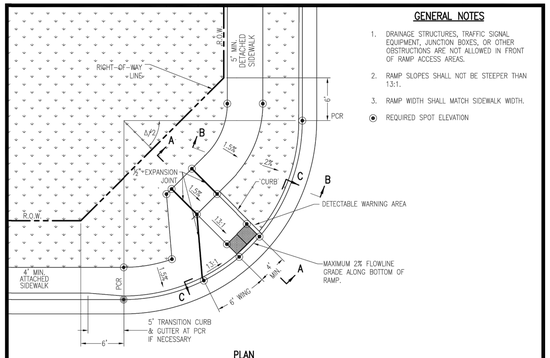
	CURB RAMP WITH PANEL DETECTABLE WARNING AREA INSTALLATION	Issued: 05/2013
	DOUGLAS COUNTY COLORADO	Revised: 09/2017
		Drawing No. SP.18b

Paver Installation Notes:

1. DETECTABLE WARNING PAVERS SHALL BE PREFABRICATED REDDISH INTEGRALLY COLORED TRUNCATED DOMES SURFACED CONCRETE OR MASONRY PAVERS. PAVERS SHALL MEET THE REQUIREMENTS OF ASTM C 902 OR ASTM C 936 AND COMPLY WITH ADA REQUIREMENTS.
2. PRIOR TO START OF WORK, CONTRACTOR SHALL SUBMIT, TO DOUGLAS COUNTY FOR APPROVAL, A SAMPLE PAVER AND DOCUMENTATION FROM THE MANUFACTURER. PAVERS SURFACE SHALL HAVE A MINIMUM OF 70% LIGHT REFLECTIVITY CONTRAST WITH THE ADJOINING SURFACE.
3. WELL FOR PAVERS SHALL BE ACCURATELY BLOCKED OUT TO ENSURE PROPER DEPTH, ALIGNMENT, AND UNIFORM GRADE. ONLY FULL WIDTH PAVERS SHALL BE USED TO OBTAIN SPECIFIED RAMP THROAT WIDTH.
4. PAVERS SHALL BE PLACED IN THE RUNNING PATTERN SHOWN, DOMES PLACED IN A SQUARE GRID AND ALIGNED IN THE DIRECTION OF TRAVEL. PAVERS SHALL BE INSTALLED SO THAT THE BASES OF THE TRUNCATED DOMES ARE AT THE SAME ELEVATION AS THE ADJOINING RAMP SURFACE.
5. SAND FOR BEDDING MATERIAL SHALL CONFORM TO ASTM C 33. SAND TO BE PLACED BETWEEN JOINTS SHALL CONFORM TO ASTM C 144.
6. BEDDING SAND SHALL BE SCREED TO THE APPROPRIATE DEPTH PRIOR TO THE PAVERS INSTALLATION. A PLATE VIBRATOR SHALL BE USED TO EMBED THE PAVERS INTO THE SAND. ANY PAVERS THAT ARE DAMAGED DURING TRANSPORTATION OR INSTALLATION WILL BE REJECTED AND SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
7. WHEN CUT PAVERS ARE REQUIRED, CUT SECTIONS SHALL NOT SIGNIFICANTLY IMPACT OVERALL TRUNCATED DOMES PATTERN AND CUT DOMES SHALL BE BEVELED AT A 45–DEGREE ANGLE TO CREATE A SMOOTH TRANSITION.
8. JOINT SPACING SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, BUT SHALL NOT BE MORE THAN ⅛". JOINTS SHALL BE FILLED COMPLETELY WITH SAND. EXCESS SAND SHALL BE REMOVED BY SWEEPING.

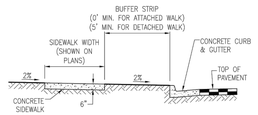


	CURB RAMP WITH PAVER DETECTABLE WARNING AREA INSTALLATION	Issued: 05/2013
	DOUGLAS COUNTY COLORADO	Revised: 09/2017
		Drawing No. SP.18c

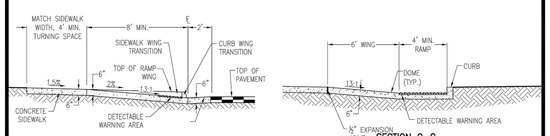


PLAN

GENERAL NOTES
1. DRAINAGE STRUCTURES, TRAFFIC SIGNAL EQUIPMENT, JUNCTION BOXES, OR OTHER OBSTRUCTIONS ARE NOT ALLOWED IN FRONT OF RAMP ACCESS AREAS.
2. RAMP SLOPES SHALL NOT BE STEEPER THAN 13:1.
3. RAMP WIDTH SHALL MATCH SIDEWALK WIDTH.
◉ REQUIRED SPOT ELEVATION



SECTION B–B



SECTION A–A — GUTTER SLOPE MODIFIED TO 5% MAX — SECTION C–C

	CURB RAMP FOR CURB RETURN RADIUS OF 20' TO 30'	Issued: 05/2013
	DOUGLAS COUNTY COLORADO	Revised: 09/2017
		Drawing No. SP.19a

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H–SCALE	N/A
V–SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1
DETAILS 2

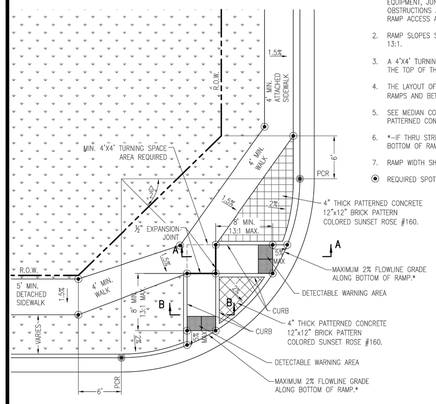
SHEET 266 OF 270

JOB NO. 15950.01

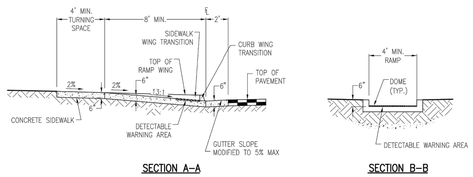
GENERAL NOTES

1. DRAINAGE STRUCTURES, TRAFFIC SIGNAL EQUIPMENT, JUNCTION BOXES, OR OTHER OBSTRUCTIONS ARE NOT ALLOWED IN FRONT OF RAMP ACCESS AREAS.
2. RAMP SLOPES SHALL NOT BE STEEPER THAN 13:1.
3. A 4'X4' TURNING SPACE AREA IS REQUIRED AT THE TOP OF THE RAMPS.
4. THE LAYOUT OF THE SIDEWALK BEHIND THE RAMPS AND BETWEEN THE PCR'S VARIES.
5. SEE MEDIAN COVER MATERIAL DETAIL FOR PATTERNED CONCRETE SPECIFICATIONS.
6. *-IF THRU STREET IS UNCONTROLLED, THE BOTTOM OF RAMP CAN MATCH STREET GRADE.
7. RAMP WIDTH SHALL MATCH SIDEWALK WIDTH.

⦿ REQUIRED SPOT ELEVATION



PLAN



SECTION A–A

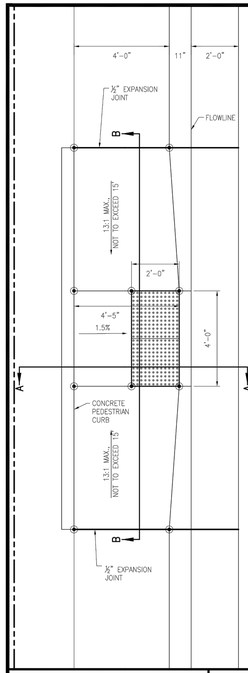
SECTION B–B

REFERENCE:	CURB RAMP FOR CURB RETURN RADIUS OF 35' TO 50'	Issued: 05/2013
	DOUGLAS COUNTY COLORADO	Revised: 09/2017
		Drawing No. SP.19b

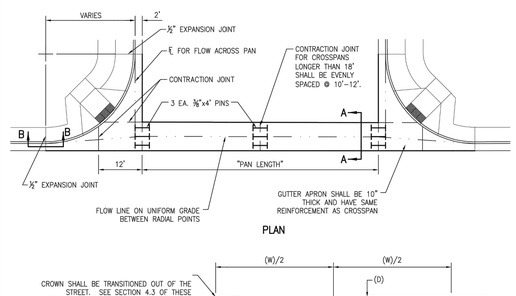
GENERAL NOTES

1. DRAINAGE STRUCTURES, TRAFFIC SIGNAL EQUIPMENT, JUNCTION BOXES, OR OTHER OBSTRUCTIONS ARE NOT ALLOWED IN FRONT OF RAMP ACCESS AREAS.
2. RAMP SLOPES SHALL NOT BE STEEPER THAN 13:1.
3. *-THE BOTTOM OF RAMP CAN MATCH STREET GRADE.

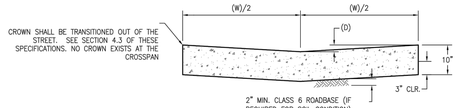
⦿ REQUIRED SPOT ELEVATION



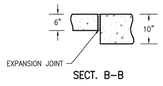
	MID-BLOCK CURB RAMP	Issued: 05/2013
	DOUGLAS COUNTY COLORADO	Revised: 09/2017
		Drawing No. SP.20



PLAN



SECTION A–A
FIBERMESH MIXED AT 1½ LBS. / C.Y. CONCRETE.

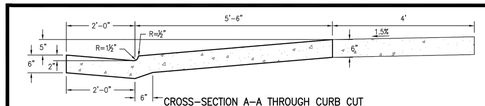


SECT. B–B

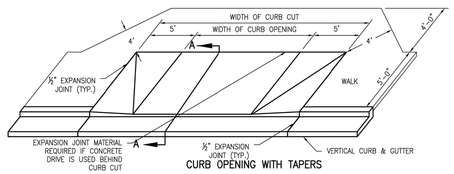
WIDTH (W)	DEPTH (D)	THICKNESS (T)
8'	2"	10"
10'	2½"	10"

NOTE: LOCAL STREET INTERSECTIONS REQUIRE AN 8' CROSSPAN. COLLECTOR STREET INTERSECTIONS REQUIRE AN 10' CROSSPAN. CROSSPANS ARE NOT ALLOWED AT ANY ARTERIAL STREET INTERSECTIONS.

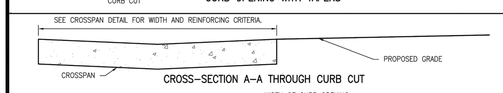
	CROSSPAN	Issued: 05/2013
	DOUGLAS COUNTY COLORADO	Revised: 09/2017
		Drawing No. SP.21



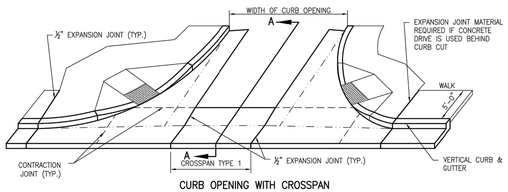
CROSS-SECTION A–A THROUGH CURB CUT
FIBERMESH MIXED AT 1½ LBS. / C.Y. CONCRETE.



CURB OPENING WITH TAPERS



CROSS-SECTION A–A THROUGH CURB CUT

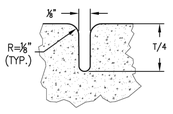


CURB OPENING WITH CROSSPAN

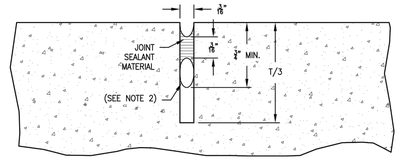
NOTES:

1. BACK OF CURB CUT EXTENDS TO BACK OF WALK OR BACK OF BICYCLE PATH. IF NO WALK IS PRESENT, EXTEND BACK OF CURB CUT TO 5'–6" BEHIND FLOWLINE OR TO R.O.W. LINE, WHICHEVER IS GREATER.
2. COUNTY SHALL APPROVE LOCATION OF CURB CUT BEFORE CONSTRUCTION.
3. CURB OPENINGS OF 30' OR MORE MUST BE CONSTRUCTED WITH A MINIMUM 20' RADIUS CURB RETURN.
4. DESIGN ENGINEER MUST DEMONSTRATE THAT STREET DRAINGE STAYS WITHIN THE STREET RIGHT-OF-WAY.

	CURB OPENING	Issued: 05/2013
	DOUGLAS COUNTY COLORADO	Revised: 09/2017
		Drawing No. SP.22

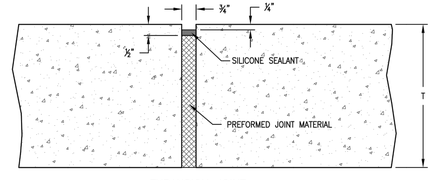


CONTRACTION OR WEAKEN PLANE JOINT
N.T.S.



NOTE: WASH & BLOW OUT WITH FORCED AIR UNTIL DRY BEFORE APPLYING SEALANT MATERIAL.

SAWED JOINT
N.T.S.

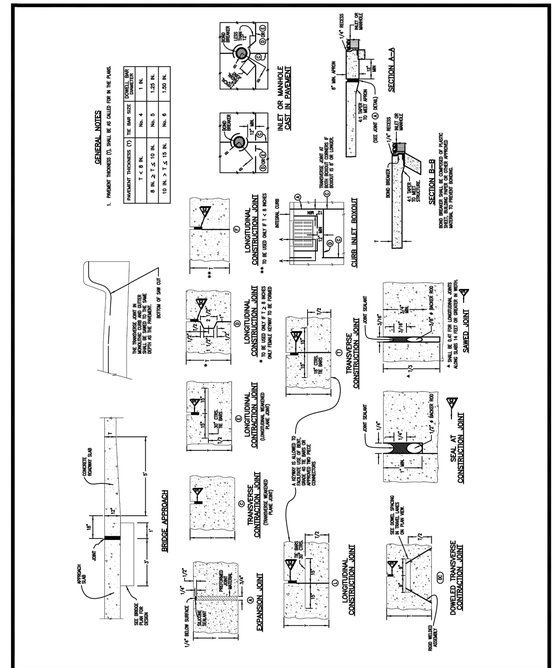


EXPANSION JOINT
N.T.S.

NOTES:

1. JOINT SEALANT MATERIAL MUST MEET ASTM 3406.
2. ¾" DIA. BACKER ROD.

	CONCRETE JOINTS	Issued: 05/2013
	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. SP.31



REFERENCE:	CONCRETE JOINTS	Issued: 05/2013
CDOT M & S STANDARDS M-412-1	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. SP.32

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

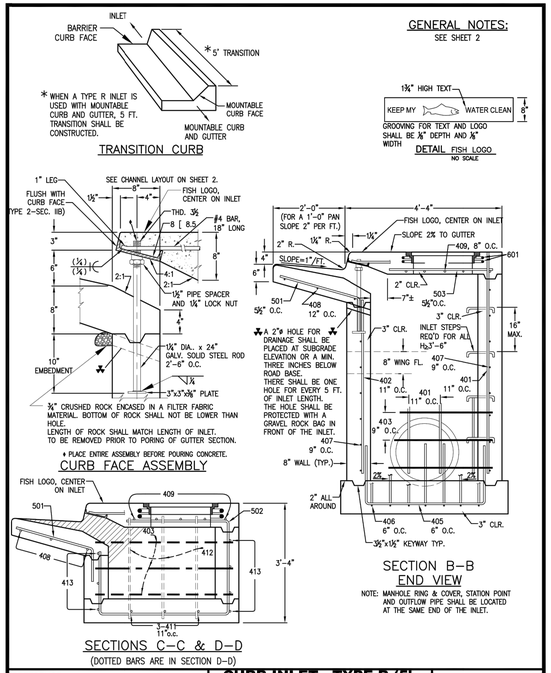
No.	REVISION	BY	DATE

H-SCALE	N/A
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGECATE SOUTHWEST VILLAGE FILING 1
DETAILS 3

SHEET 267 OF 270

JOB NO. 15950.01

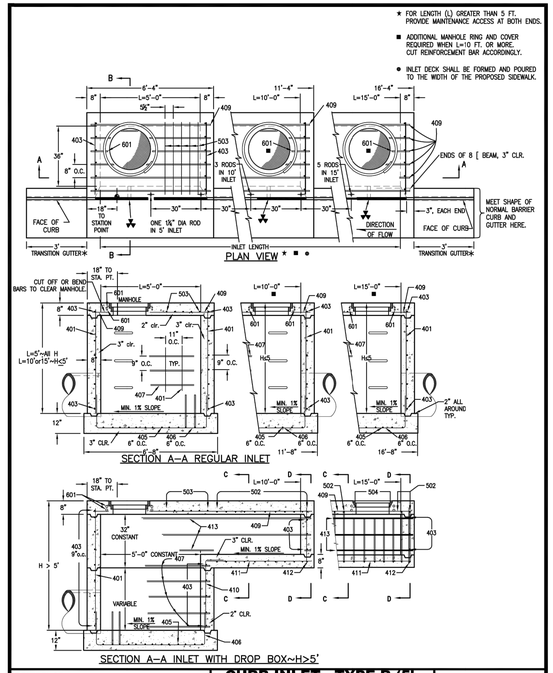


REFERENCE: CDOT M & S STANDARDS M-604-12

CURB INLET - TYPE R (5', 10' OR 15' IN LENGTH)

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.34a**



REFERENCE: CDOT M & S STANDARDS M-604-12

CURB INLET - TYPE R (5', 10' OR 15' IN LENGTH)

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.34b**

MARK	BAR # OR SIZE	O.C. SPACING	TYPE	ALL INLETS L = 5 FT. NO. REQ'D.	ALL INLETS L = 5 FT. LENGTH	INLETS: H ≤ 5 FT. L = 10 FT. NO. REQ'D.	INLETS: H ≤ 5 FT. L = 10 FT. LENGTH	INLETS: H ≤ 5 FT. L = 15 FT. NO. REQ'D.	INLETS: H ≤ 5 FT. L = 15 FT. LENGTH	INLETS: H > 5 FT. L = 10 FT. NO. REQ'D.	INLETS: H > 5 FT. L = 10 FT. LENGTH	INLETS: H > 5 FT. L = 15 FT. NO. REQ'D.	INLETS: H > 5 FT. L = 15 FT. LENGTH
401	4	1'-0"	II	15	*	21	*	26	*	11	*	11	*
402	4	1'-0"	II	7	*	13	*	18	*	7	*	7	*
403	4	9"	II	*	4'-0"	*	4'-0"	*	4'-0"	*	4'-0"	*	4'-0"
405	4	6"	VI	11	6'-10"	21	6'-10"	31	6'-10"	11	6'-10"	11	6'-10
406	4	6"	VIII	7	8'-10"	7	13'-10"	7	18'-10"	7	8'-10"	7	8'-10"
407	4	9"	II	*	5'-10"	*	10'-10"	*	15'-10"	*	5'-10"	*	5'-10"
408	4	12"	II	3	6'-10"	3	11'-10"	3	16'-0"	3	11'-10"	3	16'-0"
409	4	8"	II	6	5'-10"	6	10'-10"	6	15'-10"	6	10'-10"	6	15'-10"
410	4	1'-0"	VII							3	*	3	*
411	4	1'-0"	II							3	5'-2"	3	10'-2"
412	4	1'-0"	II							3	2'-9"	3	2'-9"
413	4	9"	II							7	10'-10"	7	15'-10"
501	5	5½"	IV	11	3'-4"	22	3'-4"	33	3'-4"	22	3'-4"	33	3'-4"
502	5	5½"	III							11	11'-5"	17	11'-5"
503	5	5½"	II	5	3'-6"	16	3'-6"	27	3'-6"	6	3'-6"	6	3'-6"
504	5	5½"	IX									5	8'-4"
601	6	2½"	V	2	8'-10"	2	8'-10"	2	8'-10"	2	8'-10"	4	8'-10"
■B(8.5				1	5'-10"	1	10'-10"	1	15'-10"	1	10'-10"	1	15'-10"
				2 BARS, 1 ROD	——	4 BARS, 3 RODS	——	6 BARS, 5 RODS	——	4 BARS, 3 RODS	——	6 BARS, 5 RODS	——

* VARIABLE, REFER TO TABLE TWO.
■ INCLUDE #4, 18 IN. BARS (SEE CHANNEL LAYOUT).

REGULAR INLETS | DROP BOX INLETS

TABLE ONE ~ BAR LIST FOR CURB INLETS, TYPE "R"

"H"	LENGTH 401	402	410	NO. REQ'D. REGULAR 403	407	NO. REQ'D. DROP BOX 403	407	L=5' CONC. CU. YDS.	L=5' STEEL LBS.	L=10' CONC. CU. YDS.	L=10' STEEL LBS.	L=15' CONC. CU. YDS.	L=15' STEEL LBS.
3'-0"	2'-8"	1'-8"		10	7			3.2	285	5.3	497	7.4	706
3'-6"	3'-2"	2'-2"		10	7			3.4	305	5.7	528	7.9	747
4'-0"	3'-8"	2'-8"		12	9			3.7	326	6.0	559	8.4	786
4'-6"	4'-2"	3'-2"		12	9			3.9	334	6.4	571	8.8	803
5'-0"	4'-8"	3'-8"		14	11			4.1	354	6.7	602	9.3	844
5'-6"	5'-2"	4'-2"	3'-5"	16	13	15	6	4.4	375	6.0	607	7.4	850
6'-0"	5'-8"	4'-8"	3'-11"	16	13	16	6	4.6	382	6.2	616	7.6	860
6'-6"	6'-2"	5'-2"	4'-5"	18	15	18	8	4.8	402	6.4	637	7.8	880
7'-0"	6'-8"	5'-8"	4'-11"	20	17	19	10	5.0	423	6.6	654	8.0	897
7'-6"	7'-2"	6'-2"	5'-5"	20	17	20	10	5.3	430	6.9	664	8.3	907
8'-0"	7'-8"	6'-8"	5'-11"	22	19	22	12	5.5	451	7.1	684	8.5	927
8'-6"	8'-2"	7'-2"	6'-5"	24	21	23	14	5.7	471	7.3	702	8.7	944
9'-0"	8'-8"	7'-8"	6'-11"	24	21	24	14	6.0	479	7.6	711	9.0	954
9'-6"	9'-2"	8'-2"	7'-5"	26	23	26	16	6.2	499	7.8	732	9.2	974
10'-0"	9'-8"	8'-8"	7'-11"	28	25	27	18	6.4	520	8.0	749	9.4	992
10'-6"	10'-2"	9'-2"	8'-5"	28	25	28	18	6.7	527	8.3	759	9.7	1001
11'-0"	10'-8"	9'-8"	8'-11"	30	27	30	20	6.9	547	8.5	779	9.9	1022

NOTES: FOR L=5 FT., L=10 FT., AND L=15 FT.
REGULAR INLETS: TOTAL QUANTITIES NEEDED ARE OUTSIDE THE HEAVY BLACK LINE.
DROP BOX INLETS: TOTAL QUANTITIES NEEDED ARE INSIDE THE HEAVY BLACK LINE.
STEEL WEIGHTS DO NOT INCLUDE STRUCTURAL STEEL CHANNEL.

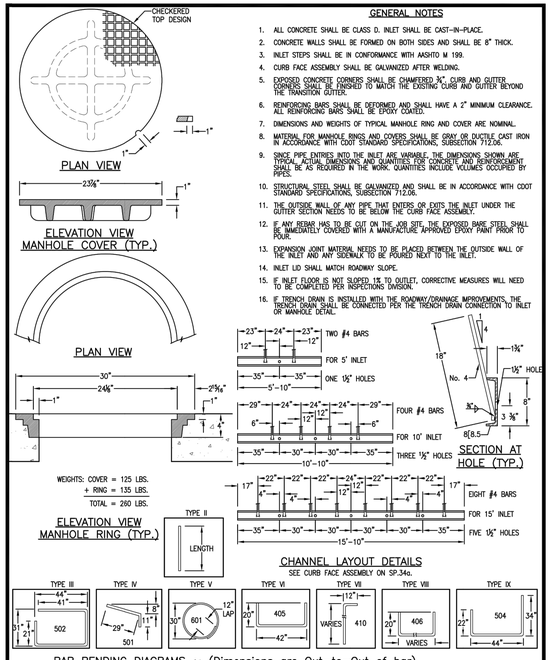
TABLE TWO ~ BARS AND QUANTITIES VARIABLE WITH "H"

REFERENCE: CDOT M & S STANDARDS M-604-12

CURB INLET - TYPE R (5', 10' OR 15' IN LENGTH)

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.34c**

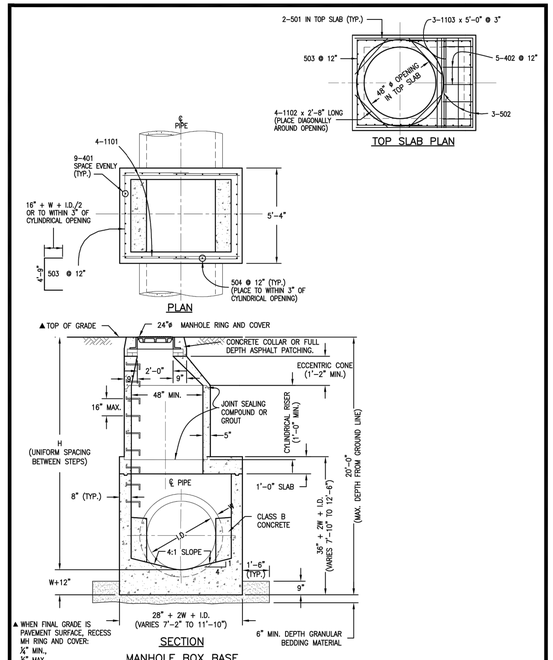


REFERENCE: CDOT M & S STANDARDS M-604-12

CURB INLET - TYPE R (5', 10' OR 15' IN LENGTH)

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.34d**



REFERENCE: CDOT M & S STANDARDS M-604-20

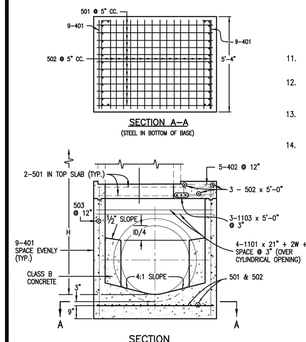
MANHOLES

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.43a**

GENERAL NOTES

1. SINCE ALL PIPE ENTRIES INTO THE BASE ARE VARIABLE, THE DIMENSIONS SHOWN ARE TYPICAL. ACTUAL DIMENSIONS AND QUANTITIES FOR CONCRETE AND REINFORCEMENT SHALL BE AS REQUIRED IN THE WORK.
2. THE PRECAST FLAT TOP MAY BE USED ON ANY MANHOLE. THE ECCENTRIC CONE MAY BE USED WHEN THE MANHOLE "H" HEIGHT IS AT LEAST 8'.
3. THE MH RING (FRAME) SHALL BE SET ON CONCRETE GRADE RINGS. THE FRAME SHALL BE SURROUNDED WITH A CONCRETE COLLAR IN UNPAVED AREA AND CONCRETE PAVEMENT, OR FULL DEPTH ASPHALT IN ASPHALT PAVEMENT. SEE DETAILS ON SHEETS 2 AND 3.
4. DESIGN OF BOX BASE IS BASED ON STRAIGHT RUNS OF CONDUIT OR CHANGE IN DIRECTION OF LESS THAN 45°. SPECIAL DESIGN IS REQUIRED FOR 45° OR GREATER.
5. PRECAST MANHOLES AND REINFORCEMENT SHALL CONFORM TO ASTM C 478 (AASHTO M 199).
6. CAST-IN-PLACE MANHOLES SHALL BE CLASS D CONCRETE.
7. STEPS SHALL BE REQUIRED WHEN THE MANHOLE DEPTH EXCEEDS 3'-6" AND SHALL BE IN ACCORDANCE WITH AASHTO M 199.
8. ALL REINFORCING STEEL SHALL HAVE A MINIMUM YIELD STRENGTH OF 60,000 PSI. VERTICAL STEEL SHALL BE PLACED AT L OF WALL. ALL BARS SHALL HAVE A 2" MINIMUM CLEARANCE. ALL REINFORCING BARS SHALL BE EPOXY COATED.
9. IF ANY REBAR HAS TO BE CUT ON THE JOB SITE, THE EXPOSED BARE STEEL SHALL BE IMMEDIATELY COVERED WITH A MANUFACTURE APPROVED EPOXY PAINT PRIOR TO POUR.
10. ALL PIPE ENTRIES INTO THE BASE OF MANHOLE SHALL BE CONNECTED BY OPEN CHANNELIZATION ADJUSTED FOR PIPE SIZE, SHAPE, SLOPE, AND DIRECTION OF FLOW. DETAILS SHOWN ARE TYPICAL FOR INSTALLATIONS WITH ALL INVERTS OF SAME RELATIVE ELEVATION. FOR EXCESSIVE ELEVATION DIFFERENCE BETWEEN INVERTS, SPECIAL BASE/CHANNEL DETAILS WILL BE SHOWN ON THE PLANS.
11. FLOW CHANNELS AND INVERTS SHALL BE FORMED BY SHAPING WITH CLASS B CONCRETE.
12. STUB-OUTS SHALL EXTEND A MINIMUM OF 1 PIPE SECTION BEYOND OUTSIDE WALL SURFACE OF MANHOLE AND BE SATISFACTORILY PLUGGED.
13. CHECK WITH THE LOCAL GOVERNMENT AUTHORITY FOR ANY ADDITIONAL SANITARY SEWER SPECIFICATIONS, DETAILS, OR REGULATIONS.
14. THE SLOPE OF THE MANHOLE COVER SHALL MATCH THE ROADWAY PROFILE AND CROSS SLOPE.



REFERENCE: CDOT M & S STANDARDS M-604-20

MANHOLES

DOUGLAS COUNTY COLORADO

Issued: 05/2013
Revised:
Drawing No. **SP.43b**

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	N/A	DESIGNED BY	GVT
V-SCALE	N/A	DRAWN BY	GVT
DATE	2/12/21	CHECKED BY	

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

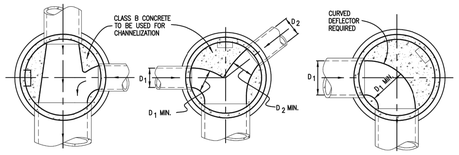
DATE

RIDGEGATE SOUTHWEST VILLAGE FILING 1

DETAILS 4

SHEET 268 OF 270

JOB NO. 15950.01



THROUGH PIPE ONE LATERAL | ANGLED LATERALS | SHARP ANGLE

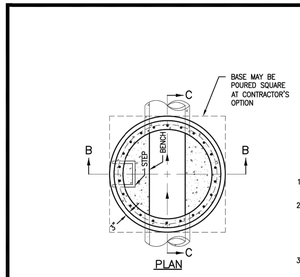
TYPICAL CHANNELIZATION DETAILS

QUANTITIES FOR CONCRETE MANHOLE BOX BASE

MARK	SIZE	TYPE	WT. #/FT.	BARS	I.D. 60"	66"	72"	84"	96"	FORMULAS
401	4	I	0.668	NO. REQ'D.	18	18	18	18	18	401
				LENGTH	8'-8"	9'-3"	9'-10"	11'-0"	12'-2"	BAR LENGTH = 32"+2W+I.D.
				WEIGHT #	104.2	111.2	118.2	132.3	146.3	
402	4	III	0.668	NO. REQ'D.	5	5	5	5	5	402
				LENGTH	6'-0"	6'-7"	7'-2"	8'-4"	9'-6"	BAR LENGTH = I.D. + 2W
				WEIGHT #	20.0	22.0	23.9	27.8	31.7	
501	5	I	1.043	NO. REQ'D.	17	17	17	17	17	501
				LENGTH	8'-0"	8'-7"	9'-2"	10'-4"	11'-6"	BAR LENGTH = 24" + I.D. + 2W
				WEIGHT #	141.8	152.2	162.5	183.2	203.9	
502	5	I	1.043	NO. REQ'D.	23	25	26	29	32	502
				LENGTH	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	NUMBER BARS REQ'D. = $3+\left(\frac{24+I.D.+2W}{@\ 5"}+1\right)$
				WEIGHT #	119.9	130.4	135.6	151.2	166.9	
503	5	II	1.043	NO. REQ'D.	16	18	18	20	24	503
				LENGTH	13'-5"	14'-0"	14'-7"	15'-9"	16'-11"	NUMBER BARS REQ'D. = $2\left(\frac{13+I.D.+2W}{@\ 12"}+1\right)$
				WEIGHT #	223.9	262.8	273.8	328.5	423.5	BAR LENGTH = 4'-9"+2(16"+W+I.D./2)
504	5	I	1.043	NO. REQ'D.	14	14	16	18	20	504
				LENGTH	8'-8"	9'-3"	9'-10"	11'-0"	12'-2"	NUMBER BARS REQ'D. = $2\left(\frac{2W+I.D.-4}{@\ 12"}+1\right)$
				WEIGHT #	126.6	135.1	164.1	206.5	253.8	BAR LENGTH = 32"+2W+I.D.
1101	11	I	5.313	NO. REQ'D.	4	4	4	4	4	1101
				LENGTH	7'-9"	8'-4"	8'-11"	10'-1"	11'-3"	BAR LENGTH = 21" + I.D. + 2W
				WEIGHT #	164.7	177.1	189.5	214.3	239.1	
1102	11	I	5.313	NO. REQ'D.	4	4	4	4	4	BENDING
				LENGTH	2'-8"	2'-8"	2'-8"	2'-8"	56.7	TYPE I STRAIGHT
				WEIGHT #	56.7	56.7	56.7	56.7	2'-8"	
1103	11	I	5.313	NO. REQ'D.	3	3	3	3	3	TYPE II 4'-9" 16"+W+I.D./2
				LENGTH	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	
				WEIGHT #	79.7	79.7	79.7	79.7	79.7	
REINFORCING STEEL TOTAL #					1,037.5	1,127.2	1,204.0	1,380.2	1,601.6	TYPE III 12" 12" 12" I.D.+2W-38"
CONCRETE – CUBIC YARDS – TOTAL					6.6	7.3	8.0	9.5	11.1	

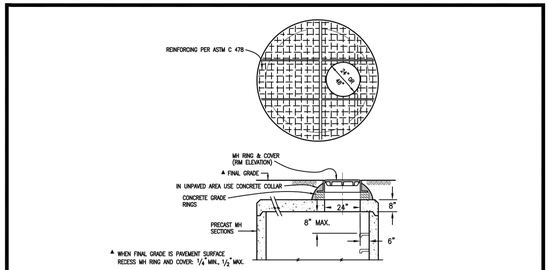
NOTE: QUANTITIES ARE BASED ON SAME SIZE PIPE ENTRANCE TO AND EXIT FROM, BASE AND A 4 FT. MANHOLE ENTRANCE INTO TOP SLAB OF BASE.

REFERENCE:	MANHOLES	Issued: 05/2013
CDOT M & S STANDARDS M-604-20	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. SP.43c



CAST–IN–PLACE SLAB BASE

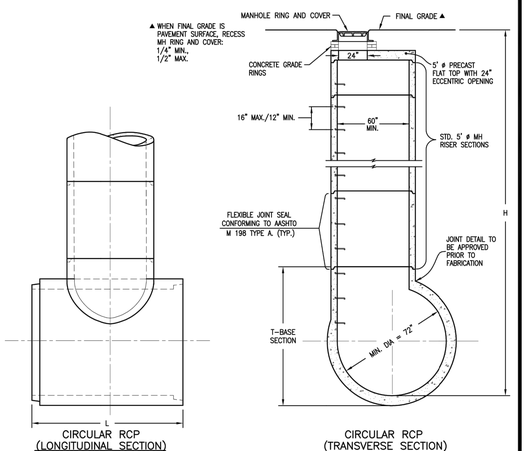
REFERENCE:	MANHOLES	Issued: 05/2013
CDOT M & S STANDARDS M-604-20	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. SP.43d



REFERENCE:	MANHOLES	Issued: 05/2013
CDOT M & S STANDARDS M-604-20	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. SP.43e

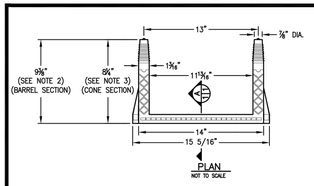
T–BASE MANHOLES:

1. THE T–BASE SECTION SHALL BE SHOP–FABRICATED FOR DELIVERY TO THE CONSTRUCTION SITE AS A COMPLETE UNIT.
2. THESE DETAILS SHALL ONLY BE CONSTRUED TO SHOW CONCEPTUAL AND STANDARD DIMENSIONAL REQUIREMENTS FOR TYPE T–BASE MANHOLES. THE CONTRACTOR SHALL FURNISH DETAILED SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION. THE DETAILS SHOWN HEREIN APPLY ONLY TO 72–INCH DIAMETER PIPE AND LARGER.
3. EXCEPT FOR CLASS OF PIPE, SPECIFICATIONS TO BE MET FOR THE MANHOLE SHALL BE THE SAME AS THOSE REQUIRED FOR THE ADJOINING PIPE CULVERT OR SEWER.
4. THE T–BASE SECTION SHALL MAINTAIN ITS INTERNAL SHAPE AND FLOW AREA WITH ANY GROUTING, ETC. APPLIED SO AS TO NOT DISTURB THE NORMAL FLOW OR REDUCE THE AREA.



MANHOLE T–BASE

REFERENCE:	MANHOLES	Issued: 05/2013
CDOT M & S STANDARDS M-604-20	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. SP.43f

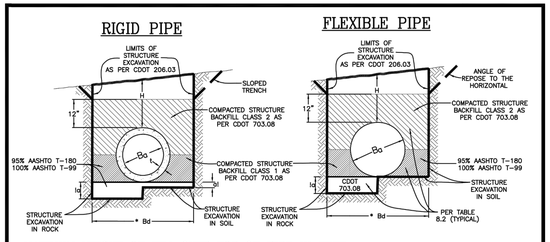


GENERAL NOTES

1. ASTM SPECIFICATIONS:
   A. ASTM C–478
   B. ASTM A–615 GRADE 60 (STEEL REBAR).
   C. ASTM 2146–69, TYPE III, GRADE 16906 (POLYPROPYLENE).
2. STEPS INSTALLED IN MANHOLE BARREL SECTIONS OR VERTICAL WALLS OF STRUCTURES SHALL HAVE A 9⅝" LEG AND SHALL PROJECT FROM THE WALL 6".
3. STEPS INSTALLED IN MANHOLE CONE SECTIONS SHALL HAVE AN 8¼" LEG AND SHALL PROJECT FROM THE WALL 4⅞".
4. ALL STEPS SHALL HAVE A PENETRATION DEPTH INTO THE WALL OF 3⅜".
5. STEPS SHALL BE INSTALLED BY THE "PRESS–FIT" METHOD UTILIZING A SPECIALLY TAPERED PIN TO FORM THE INSERT HOLE AS SHOWN, FOLLOWING MANUFACTURER'S RECOMMENDED PROCEDURE AND SHALL NOT BE GROUTED IN PLACE.
6. INSTALLED STEPS SHALL BE CAPABLE OF WITHSTANDING A PULL OUT FORCE OF 2500 LB. PER LEG FOR A MINIMUM PERIOD OF TWO MINUTES.
7. PINS MUST BE SMOOTH AND CONTINUOUSLY TAPERED. DIMENSIONS OF THE PIN AND THE INSERTED PORTION OF THE MANHOLE STEP ARE TYPICAL ONLY. DOUGLAS COUNTY INSTALLATIONS REQUIRE A MATCHED COMBINATION OF A TAPERED INSERT PIN AND MANHOLE STEP, AS RECOMMENDED OR REQUIRED BY SPECIFIC MANUFACTURER OF THE STEP TO BE USED.
8. THIS STEP CAN ALSO BE USED IN TOE POCKET INSTALLATIONS PROVIDED 5" TOE CLEARANCE IS ALLOWED.

POLYPROPYLENE REINFORCED PLASTIC STEP

REFERENCE:	MANHOLE AND INLET STEPS	Issued: 05/2013
CITY AND COUNTY OF DENVER DRAWING NUMBER S–750	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. SP.45



MAXIMUM HEIGHT OF FILL OVER TOP OF PIPE IN FEET

REINFORCED CONCRETE

Ba In.	Bd In. **	.01 INCH CRACK D–LOAD 1350	2000	3000
		PIPE CLASS II	IV	V
18	35	19	28	43
24	42	18	28	42
30	50	18	28	42
36	59	18	27	41
42	68	18	27	41
48	76	18	27	41
54	89	17	26	40
60	98	17	26	40
66	108	17	26	40
72	117	17	26	40
78	125	17	26	40
84	135	17	26	40
90	154	17	26	40
96	163	17	26	40
108	173	17	26	40
120	191	17	26	40
132	208	17	26	40
144	224	17	26	40

** Based on Bd=1.33(Ba+21). Wall thickness can vary between manufacturers.

STEEL – 2 2/3" x 1/2" CORRUGATIONS

Ba In.	Bd ft.	H ABOVE TOP OF PIPE IN FEET 1–15	16–20	21–25	26–30	31–35	36–40
		THICKNESS IN INCHES					
18–48	4–7	.064	.064	.064	.064	.064	.064
54	7.50	.079	.079	.079	.079	.079	.079
60	8.00	.079	.079	.079	.079	.109	.109
66	8.50	.079	.079	.109	.109	.138	.138
72	9.00	.079	.109	.109	.138	.168	.168
78	9.50	.109	.138	.138	.168		
84	10.00	.109	.138	.168			

LEGEND

H = Height of fill over top of pipe
Ba = Inside diameter (I.D.) of pipe
* Bd = Trench Width
t = Wall thickness of pipe
CLSM = Controlled Low Strength Material
a = Loose granular bedding, as follows:
  a=4" for Flexible Culverts in Soil.
  a=12" for Rigid Culvert in Soil.
  a=12" for Culvert in Rock.
* TRENCH WIDTH:
  RCP: Bd = Min. of 1.33(Ba+21), or (Ba+21)+12" (Per AASHTO Section 17)
  CSP: Bd = Min. of Ba+4 (Per AASHTO Section 12)
† Bedding material for SOIL shall be Structural Backfill Class 1 or 2.
‡ Bedding material for ROCK shall be Structural Backfill Class 1.

GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS APPLICABLE TO THE PROJECT.
2. ALL TRENCH INSTALLATIONS SHALL BE IN ACCORDANCE WITH OSHA AND COLORADO DEPARTMENT OF TRANSPORTATION REGULATIONS.
3. THE USE OF NON–REINFORCED CONCRETE PIPE WILL NOT BE ALLOWED IN DOUGLAS COUNTY.

RCP DESIGN CRITERIA

Safety Factor = Per ASTM C76
Soil Weight = 120 lb. per cu. ft.
Bedding = Type 2

CSP DESIGN CRITERIA

(3"x1" CORRUGATIONS: 60 TO 84 Pipe shall be .064" thick (16 gauge) to H=40 ft.)

Soil Weight = 120 lb. per cu. ft.
Safety Factor for Seam Strength = 2.00
Bucking Stress Level = 1/2 Yield Strength
Load Factor (Backfill) = 95% Standard Density, AASHTO–T 99 (K=0.86)

ALL UTILITY REPAIRS MUST BE BACKFILLED WITH CLSM. SEE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS MANUAL FOR SPECIFIC DETAILS.

NOTE: All trenching shall comply with all State, Federal and O.S.H.A. safety requirements. It will be the responsibility of the Contractor to meet all safety requirements.

TO BE USED IN OPEN FIELDS OR PRIOR TO PAVING ROADS

	PIPE INSTALLATION IN TRENCH	Issued: 05/2013
	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. SP.46a

Know what's below. Call before you dig.

ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

COLORADO REGISTERED AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791–8180

J·R ENGINEERING
A Westrian Company
Centennial 303–740–9393 • Colorado Springs 719–593–2593
Fort Collins 970–491–9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H–SCALE	N/A	DESIGNED BY	GVT
V–SCALE	N/A	DRAWN BY	GVT
DATE	2/12/21	CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

DETAILS 5

SHEET 269 OF 270

JOB NO. 15950.01

NOTES:

1. This trench backfill detail specifies requirements in addition to those specified in the latest edition of the Colorado Department of Transportation's Standard Specifications for Road and Bridge Construction.
2. A construction traffic control plan shall be submitted to and approved by Douglas County prior to issuance of construction permits in the County right-of-way.
3. Trench shall be braced or shored as necessary for the safety of the workers and protection of other utilities or structures in accordance with applicable local, state and federal safety regulations.
4. The trench width shall be confined to those minimum dimensions, which will permit proper installation and acceptable pipe loading, as established by current local, state and federal Safety regulations.
5. Backfill compaction requirements: Minimum density will be determined in accordance with AASHTO T 99 or T 180 as defined by CDOT Standard Specifications Section 203.07 and CDOT 703.03. Except for CLSM.
6. Full depth asphalt can be used as an alternative to base course.
7. Pavement edges shall be saw-cut. Edges shall be tack coated prior to patching.
8. All storm sewers shall be constructed so that a minimum cover is maintained to withstand AASHTO HS-20 loading on the pipe. The minimum cover to withstand live loading depends upon the pipe size, type and class, and soil bedding condition, but shall be not less than 1-foot at any point along the pipe. Other factors that affect the depth of the pipe are hydraulic grade line elevations, inlet depths, adjacent utilities or utility crossings, including water and sewer services lines along residential streets, and connections to existing storm sewer systems. The roadway subgrade, which supports the pavement section is typically plowed to a certain depth, moisture treated and compacted prior to the placement of the sub-base, base course, and surfacing. There are also instances where the subgrade material must be excavated and replaced or treated to a certain depth to mitigate swelling soils. These efforts can impact the storm sewer system if it has not been designed with adequate depth. The design engineer shall use the best information available, including pavement design or soils reports (if available) to ensure that storm sewer pipes have adequate depth.
9. Changes in design criteria will require compensating change in pipe design.
10. When pipe sewer is to be extended or replaced with pipe of different material, the connections shall conform to the detail shown on plans or be approved through Douglas County Engineering.
11. When two or more conduits are laid side-by-side, they shall be placed so that they are ½ outside diameter, or ½ outside span, or 3' apart, whichever is less. However, if end sections are used, the minimum spacing shall be 1' between the outside edge of end sections.
12. TRENCH INSTALLATION (per OSHA Standards):
    a. Trenches over 5 feet in depth shall be either shored or the trench walls shall be sloped no steeper than 3:1 to the angle of repose. If sloped, the bottom of the slope shall be a minimum of 1 foot above the top of the pipe.
    b. Shoring will be required when the bottom of the slope is more than 3 feet above the bottom of the trench.
    c. All sheeting or shoring to be removed.
13. CLSM may be used in place of Structural Backfill.
14. CLSM shall not exceed a strength over 1000 p.s.i.

REFERENCE: Douglas County Drainage Manual and Colorado Department of Transportation "M" Standards.

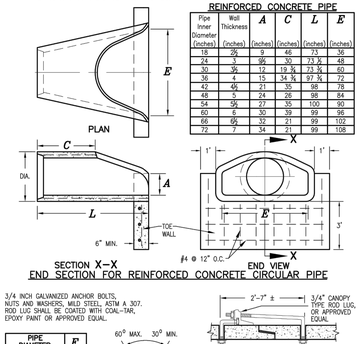
TO BE USED IN OPEN FIELDS OR PRIOR TO PAVING ROADS

	PIPE INSTALLATION IN TRENCH NOTES	Issued: 05/2013
	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. **SP.46b**

GENERAL NOTES

1. DIMENSIONS OF END SECTIONS MAY VARY SLIGHTLY FROM THOSE SHOWN ON THE TABLES DUE TO DIFFERENT MANUFACTURER'S VARIATIONS.
2. CONCRETE END SECTIONS ARE TO BE FURNISHED WITH TONGUE OR GROOVE AS REQUIRED.
3. DESIGN LENGTH OF CULVERT OR SIDE DRAIN IS BASED ON LENGTH OF END SECTION SHOWN IN TABLE, ANY ADDITIONAL PIPE REQUIRED TO PROVIDE THE DESIGN LENGTH SHALL BE FURNISHED BY AND AT THE EXPENSE OF THE CONTRACTOR.
4. INSIDE CONFIGURATION AND JOINT OF CONCRETE END SECTION END PIPE SHALL MATCH.
5. END SECTIONS FOR CMP ARCH CULVERT SHALL MATCH THE DIMENSIONS OF THE CULVERT SHOWN ON THE PLANS.
6. GALVANIZED TOE PLATE AS SHOWN, WILL BE REQUIRED ON END SECTIONS FOR CORRUGATED STEEL PIPE AND SHALL BE THE SAME THICKNESS AS END SECTIONS. TOE PLATE SHALL BE FIELD-BOLTED TO END SECTION WITH ¾" GALVANIZED BOLTS, NUTS AND WASHERS.
7. GALVANIZED STEEL SHALL BE IN CONFORMANCE WITH AASHTO M 111, M 218 OR M 232.
8. FOR TYPE SD END SECTIONS, BARS SHALL BE FABRICATED FROM NPS-3 GALVANIZED STEEL SCHEDULE 40 PIPE WHICH SHALL BE IN CONFORMANCE WITH ASTM A 53.
9. FOR A TYPE SD END SECTION, THE INSTALLATION OF ALTERNATIVE 1 OR ALTERNATIVE 2 END SECTION SHALL BE THE CONTRACTOR'S OPTION.
10. CONCRETE PIPE JOINT FASTENERS SHALL BE INSTALLED AT THE FLARED END SECTION AND LAST TWO PIPE JOINTS OF ALL RCP OUTFALLS.
11. CONNECTIONS OF METAL END SECTIONS TO PLASTIC PIPE SHALL BE APPROVED BY THE ENGINEER.
12. CLASS D CONCRETE TOE WALLS ARE REQUIRED AT THE ENDS OF ALL FLARED END SECTIONS.

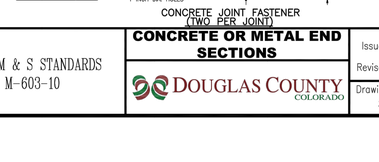
REINFORCED CONCRETE PIPE



Pipe Inner Diameter (inches)	Wall Thickness (inches)	A (inches)	C (inches)	L (inches)	E (inches)
18	2½	9	46	73	36
24	3	9½	30	73 ½	48
30	3½	12	19 ½	73 ½	60
36	4	15	34 ½	97 ½	72
42	4½	21	33	98	78
48	5	24	26	98	84
54	5½	27	35	100	90
60	6	30	39	99	96
66	6½	32	21	99	102
72	7	34	21	99	108

END SECTION FOR REINFORCED CONCRETE CIRCULAR PIPE

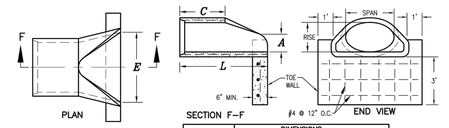
3/4 INCH GALVANIZED ANCHOR BOLTS, NUTS AND WASHERS, MILD STEEL, ASTM A 307. ROD LUG SHALL BE COATED WITH COAL-TAR, EPOXY PAINT OR APPROVED EQUAL.



PIPE DIAMETER (inches)	F
18 – 30	5
36 – 42	6
48 – 60	7
72 – 84	9

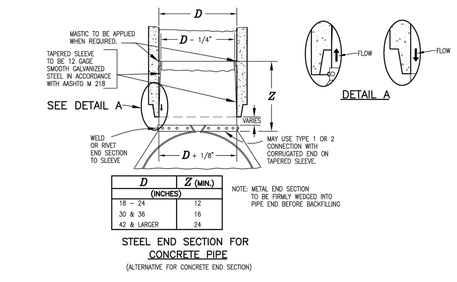
CONCRETE JOINT FASTENER (TWO PER JOINT)

REFERENCE: CDOT M & S STANDARDS M-603-10	**CONCRETE OR METAL END SECTIONS**	Issued: 05/2013
	DOUGLAS COUNTY COLORADO	Revised: 09/2017
		Drawing No. **SP.52a**



EQUIVALENT CIRCULAR DIA.	DIMENSIONS NOMINAL SPAN x RISE	A	C	L	E
	(inches)				
24	30 19	9	33	72	48
30	38 24	10	18	72	60
36	45 29	12	24	84	72
42	53 34	16	36	96	78
48	60 38	21	36	96	84
54	68 43	26	36	96	90
60	76 48	30	36	96	96

END SECTION FOR REINFORCED CONCRETE ELLIPTICAL PIPE

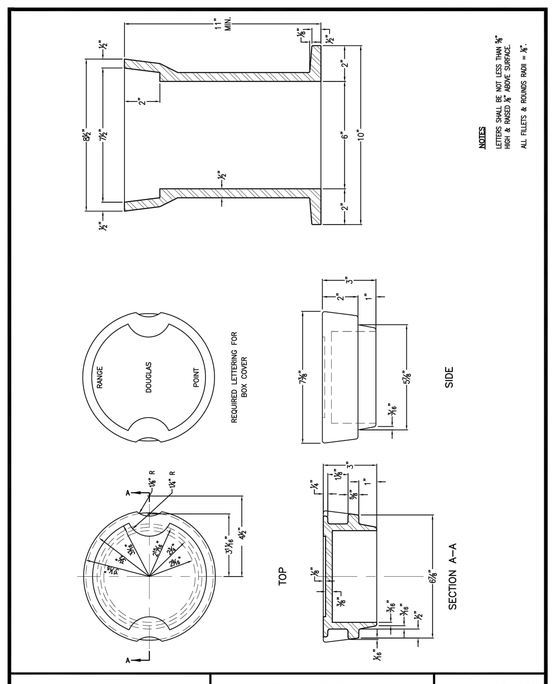


D (INCHES)	Z (MIN.)
18 – 24	12
30 & 36	16
42 & LARGER	24

NOTE: METAL END SECTION TO BE FIRMLY WEDGED INTO PIPE END BEFORE BACKFILLING

STEEL END SECTION FOR CONCRETE PIPE
(ALTERNATIVE FOR CONCRETE END SECTION)

REFERENCE: CDOT M & S STANDARDS M-603-10	**CONCRETE OR METAL END SECTIONS**	Issued: 05/2013
	DOUGLAS COUNTY COLORADO	Revised: 09/2017
		Drawing No. **SP.52b**



	RANGE BOX	Issued: 05/2013
	DOUGLAS COUNTY COLORADO	Revised:
		Drawing No. **SP.54**

Know what's **below.** **Call** before you dig.

ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT.

AARON L. CLUTTER, P.E.
COLORADO P.E. 36742
FOR AND ON BEHALF OF JR ENGINEERING

DATE

COLORADO AARON LEE CLUTTER 36742 PROFESSIONAL ENGINEER

UNTIL SUCH TIME AS THESE DOCUMENTS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR
SHEA HOMES
9380 STATION ST.
SUITE 600
LONE TREE, CO 80124
OFFICE PHONE
(303) 791-8180

J·R ENGINEERING
A Westrian Company
Centennial 303-740-9393 • Colorado Springs 719-593-2593
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE

H-SCALE	N/A
V-SCALE	N/A
DATE	2/12/21
DESIGNED BY	GVT
DRAWN BY	GVT
CHECKED BY	

RIDGEGATE SOUTHWEST VILLAGE FILING 1

DETAILS 6

SHEET 270 OF 270

JOB NO. 15950.01