## Development Application

Planning Division
9220 Kimmer Drive, Lone Tree, CO 80124
CITY OF LONE TREE
303.708.1818 | www.cityoflonetree.com

| Instructions: All sections must be completed and typed or legibly printed. All required attachments must be included. This application does not cover Building Division and Public Works submittal requirements and fees. |  |  |  |
| :---: | :---: | :---: | :---: |
| Application Type |  |  | For Planning Division Use |
|  | Presubmittal | Final Plat | Project Name: RidgeGate Well House |
| $\checkmark$ | SIP | Re-Plat | Job \# SP19-64R |
|  | SIP Amendment | Rezoning | Application Fee: \$3,200 |
|  | Preliminary Plan | Variance | Check/Transaction \#: 009237 |
|  | Other |  | Date: 12/03/19 Staff Initials: HGF |


| Project Information |  |
| :--- | :--- |
| Project Name: <br> Ridgegate Well House Design | Project Address: <br> 12107 Ridgegate Parkway <br> (Temporary Address) |
| State Parcel ID: 2231-242-00-001 | Lot \#: |
| Acreage: 5.00 | Filing \#: |
| Existing Zoning: Planned Development/Institutional | Block \#: |
| Proposed Rezoning: N/A |  |
| Project Description (submit additional sheets if necessary): |  |
| See attached description |  |


| Owner and Representative Information |  |
| :--- | :--- |
| Property Owner Information | Applicant Information if Different than Owner |
| Name (Individual or Organization): <br> Parker Water and Sanitation District | Name (Individual or Organization): |
| Mailing Address: 18100 E Woodman Dr <br> Parker, CO,80314 | Mailing Address: |
| Phone: 720.842.4254 | Phone: |
| Email: jbarker@pWSd.org | Email: |

# Site Improvement Plan Project Narrative \& Statement of Design Intent Template 

Planning Division

## CITY OF LONE TREE

Project Name _PWSD Ridgegate Well House Design

Project Location

Project \# _SP19-64R

Date _12/03/19

## Project Narrative

ARTICLE XXVII - Site Improvement Plan (SIP) Project Narrative. The SIP process is intended to provide for development that enhances the quality of life in the City by promoting high-quality design and a strong economy, and by fostering a sustainable and healthy community. The SIP process is required to ensure the development will be in conformance with the Comprehensive Plan, the Design Guidelines, applicable chapters of this Code and applicable Planned Developments and Sub-Area Plans.

Using this form or a separate page(s), the applicant shall provide a written narrative describing their project. Use the following outline (Sec. 16-27-60) as a guide when formulating your narrative - please disregard sections that do not apply to your project:

## 1. General information.

Provide the subdivision name, filing number, planning area number when located in a Planned Development, lot and block number or street address and section, township and range if not in a subdivision, and name of project.

The temporary address, as given by Douglas County, is 12107 Ridgegate Parkway. It is located on State Parcel Number 2231-242-00-001 in the northwest quarter of Section 24, Township 6 South, Range 67 West of the $6^{\text {th }}$ PM. It is located just north of Ridgegate Parkway, east of I-25 and south of the Meridian International Business Center. The site will be used for the from Parker Water and Sanitation District (PWSD), Ridgegate Well House project.

This Site Improvement Plan Application includes a Site Plan, Landscaping Plan, Grading Plan, Building Elevations, and Drainage Report.

The project does not include an irrigation plan because the proposed landscaping consists of native vegetation and will be established with truck watering and water bags. See landscape plan for further information.

The project does not include a site furnishing plan as the facility is unmanned and access is limited to PWSD employees with maintenance trucks.

The lighting plan is not included as the project will only include dark sky compliant fixtures over the three man-doors. No other exterior lighting is proposed

The erosion control plan is requested to transfer from the existing GESC to the proposed GESC.

The material and color boards will be provided prior to the planning commission meeting.

## Indicate zoning of the site and the zoning and current uses of adjacent land.

Currently, the site is zoned as Planned Development. To the west is an existing electrical booster station, which is zoned Business and the land use is Institutional. The properties to the north, east and south are all currently undeveloped but are zoned for Planned Development.
2. Development impacts.

Describe overall impacts of the proposed development on adjacent lands and methods for mitigating those impacts.

## Contextual and Visual Impacts:

PWSD has met with the City of Lone Tree Planning Department for two (2) preapplication meetings to ensure the adjacent properties have been taken into careful consideration when developing this Site Improvement Plan (SIP). Much of the surrounding land is undeveloped and will therefore not create any major impact to the area. The electrical substation to the west of the site is a commercial/light industrial site and so the proposed well house will be of similar use. The facility will be built on the north side of the property, behind a ridge that will obstruct the view of the facility from the road. The land to the east is proposed as similar municipal use such as City Administration and Police. The land to the north, north of the existing utility easement, is proposed as residential. To reduce the impact to the proposed residential use, the proposed project includes the following considerations: landscape screening along the northern property boundary, no lighting fixtures are proposed along the northern property boundary, all lighting fixtures are Dark Sky compliant and will result in no light pollution beyond the property boundary.

The proposed facility is unmanned and will generate limited noise as all equipment, excepting the HVAC system and emergency generator, will be located inside the well house facility. The emergency generator will only be required for use during power loss scenarios and will be housed in a sound dampening enclosure.

All exterior lighting will be dark sky compliant.

## Grading and Access Impacts:

The proposed grading will best utilize existing topography. The site is proposed at the rear, north side, of the property allowing for the existing berm to reduce visibility from Ridgegate Parkway.

Access to the site will be maintained through the existing driveway to the electrical substation and does not propose any new driveway cuts along Ridgegate Parkway.

There will be minimal impacts to the traffic along Ridgegate Parkway as only PWSD employees will require access to the site for an anticipated two (2) trips per day.

## 3. Compliance with Intent and Approval Standards.

Describe how the development complies with the Intent (Section 16-27-10) and Approval Standards (Subsection 16-27-90(a)) of this Article.

The Ridgegate well house will keep in line with the comprehensive plan by strengthening the City of Lone Tree's water supply through PWSD and providing more access to clean, high-quality drinking water. The
design of the well house conforms to the design guidelines laid out as a part of the Ridgegate Planned Development guidelines and will be located at the back of the property with screening vegetation along the north side of the property.

The proposed project meets all setback and height limitations.
4. Development phasing.

Describe the proposed development schedule and phases of development for all proposed construction.
To meet increasing water demand, PWSD plans on beginning operation of the well houses by July of 2020. It is the intent to begin construction as soon as practical. If the early grading can begin in January, the project is anticipated to be completed in October 2020.

The wells were drilled earlier this year and are currently undergoing capacity testing and water quality analysis. Upon completion of this work, it is anticipated that work on the well house will begin.

## 5. Other project data.

a. Total number of employees on maximum shift when known (for parking purposes).

The equipment will be programmed to run automatically allowing for the facility to be unmanned. PWSD will require up to two (2) trips per day for operational maintenance.
b. Square footage of building.

7,211 square feet
c. Lot area.

5 acres
d. Anticipated opening date.

Startup July 2020; October 2020 completion
6. Sustainability.

Highlight ways in which the project furthers the City's environmental goals regarding sustainability. This may include a general description of the project location relative to other uses, public transit and trails; ease of travel to key destinations on foot or bicycle; water conservation and water quality measures; site layout; green building practices; or operational aspects of the use such as waste reduction, recycling or commuter trip reduction programs.

PWSD is committed to sustainability. The development of the site plan has taken into account the natural terrain, where the building is proposed on the rear of the lot, northeast corner, lot behind a naturally occurring ridge to prevent levelling the surface. Natural drainage and grading will be used where possible and flows from the well house are being controlled so as not to upset the local environment.

The lighting is proposed as dark sky compliant to reduce impacts to surrounding properties as well as reduce electric needs.
7. Variances if applicable.

For those SIPs for which a variance from the standards in this Chapter, the Design Guidelines or Sub-Area Plans is requested, the narrative shall also explain the need for the variance. (Public notice may be required, see Section 16-26-60).

No variances are being requested for this project.

## Statement of Design Intent

Please describe how the project meets the intent of the City of Lone Tree Design Guidelines, including the city's Core Design Principles (p. 11). If the project is located within a Planned Development that is governed by additional design standards or guidelines, please address how the project satisfies the intent of those standards and guidelines as well.

Please use the outline below as a guide in formulating your response. You may also use this opportunity describe particular strengths, unique features, sustainable practices, or innovations that distinguish the design of the project, as well as any particular opportunities or challenges that should be considered. This Statement of Design Intent is intended to encourage thoughtful consideration of design guidelines and to give project reviewers and decision makers a more thorough understanding of the project.

## 1. Overall Design Concept.

Briefly describe the use and overall concept for the project as a whole.
The Ridgegate Well house will be a groundwater well house that will be capable of treating up to 5 million gallons per day (MGD) of groundwater from the Denver, Dawson, and Arapahoe aquifers. It will provide finished drinking water for Parker Water and Sanitation District customers.

The facility includes a 7,200 square foot well house, three onsite wells, and associated access drives. Inside the well house water will be treated with SeaQuest, a phosphate blend used to control iron and manganese levels, and Sodium Hypochlorite as primary disinfection. Water will then flow to a below-grade disinfection contact basin to provide contact time for disinfection. A liquid ammonium sulfate (LAS) basin will provide a feed of LAS and sufficient mixing as a residual disinfection method. A series of four high service pumps will then pump water to an existing distribution line for the PWSD system and Canyons community. In addition to the process equipment required for treatment, sufficient chemical storage will also be provided within the facility. The proposed development will include a main facility building, a detention pond, groundwater wells and a gravel well access pad, and a paved access road and loading areas to service the building. Both the building and the access road will be enclosed by an ornamental security fence.
2. Context and Site.

Describe how the project relates functionally and visually to the context of the surrounding area. Consider issues of form and character, the natural environment, vehicular and pedestrian access and circulation, etc.

Currently the surrounding area is undeveloped, however, the well house will be placed behind a ridge to shelter it from view from Ridgegate Parkway and not disturb the natural terrain as much as possible and a landscape buffer along the north. Since the site will only be accessed by PWSD employees, there will be minimal impacts to vehicular traffic and there will be no pedestrian access.
3. Public Realm.

Describe how the project contributes to an inviting, safe and functional public realm. Consider public spaces, street/sidewalk - level experience, lighting, landscaping, and signage.

The well house will provide high-quality, clean drinking water to the residents of Lone Tree within PWSD. The well house will also be sheltered from view and designed to blend into the surroundings as much as practical.

## 4. Architectural Design.

Describe how the architectural design contributes to the unique qualities of the area and how design concepts result in a unified, functional and high-quality design. Consider building form and composition, façade composition and articulation, and materials, colors, and lighting.

The new wellhouse building has been designed with elements to respect the residential nature of the surrounding future housing developments while still meeting the requirements of an industrial building to be durable, functional and low maintenance over the long life of the facility. The building exterior reflects a rural agricultural look with a gabled roof broken up with additional dormers that vary in size to reduce the scale of the overall building. The exterior walls include a mix of three textures and colors with patterns that break up the wall façade lengths both horizontally and vertically. The exterior of the building will be constructed of pre-cast concrete panels that have a cast finished face that mimics the size and pattern of masonry units with a cast color and texture that also will match a masonry block. The roof dormers will have a vertical standing seam metal siding with 'truss' detail accents to bring in the 'farmhouse' style. Additional similar detail elements will include longer roof overhangs supported by roof eave brackets and canopies over the doors. The roof will be a pre-finished standing seam metal panel. Windows into the facility are minimized but are provided to allow for some natural light as well as to break up the facades of the building. All colors have been chosen to provide a muted earth tone finish that blend into the surrounding areas and respect the neighboring environment. These colors have been coordinated with Ridgegate DRC to match the recently approved $1^{\text {st }}$ Street Lift Station.

## Owner/ Applicant Contact Information

Name: Jenna Barker, P.E.
Business: Parker Water and Sanitation District
Address: 18100 E Woodman Dr
Parker, CO 80314
Phone: 720-842-4254
Email: JBarker@pwsd.org

## Engineering Consultant Contact Information

Name: Michael Saxton, P.E.
Business: Tetra Tech, Inc
Address: 1560 Broadway, Suite 1400
Denver, CO 80202
Phone: 303-825-5999
Email: michael.saxton@tetratech.com

## RIDGEGATE WELL HOUSE

WELL SITE RRC 6
RIDGEGATE PLANNED DEVELOPMENT 5TH AMENDMENT PLANNING AREA 31, INSTITUTIONAL

28 ACRES
SIP SP19-64R


SITE DATA TABLE:

| ITEM | SQUARE FOOTAGE | \% OF GROSS | ITEM | SPACES REQUIRED |
| :---: | :---: | :---: | :---: | :---: |
| GROsS SITE AREA | 217,800 | 100\% | PARKING |  |
| BUILDING FOOTPRINT | 7,207 | 3\% | REQUIRED PROVIDED | $\begin{aligned} & \hline 0 \\ & 0 \end{aligned}$ |
| PARKING/ROADS (INCLUDING PLANTED INTERIOR PARKING ISLANDS) | 40,301 | 19\% | BICYCLE PARKING |  |
| LANDSCAPED AREA (EXCLUDING PLANTED INTERIOR PARKING ISLANDS, TRAILS AND WALKS) <br> NATURAL AREAS (NOT INCLUDED IN THE REQUIRED LANDSCAPED AREA) | 83,077 | $\begin{aligned} & 38 \% \\ & 38 \% \end{aligned}$ | REQUIRED PROVIDED | $\begin{aligned} & 0 \\ & 0 \\ & 0 \end{aligned}$ |
| ImPERVIOUS SURFACE | 47,508 | 22\% |  |  |
| ITEM | SQUARE FOOTAGE |  |  |  |
| BUILDING SIZE |  |  |  |  |
| MAXIMUM HEIGHT (AS MEASURED BY THE CITY's BuILDING CODE) | 29.50 FT |  |  |  |
| TOTAL FLOOR AREA (SEE DEFINITION OF FLOOR AREA IN ARTICLE XxxVI) | 6,800 SQ. FT. |  |  |  |

## APPROVAL CERTIFICATE:


Br:- TTILE: ComMUNTY OEVELOPMENT DRECTOR ${ }^{\text {PRRITE N NAME) }}$




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## RIDGEGATE WELL HOUSE

WELL SITE RRC 6
RIDGEGATE PLANNED DEVELOPMENT 5TH AMENDMENT
PLANNING AREA 31，INSTITUTIONAL
28 ACRES
SIP SP19－64R

$\left(\frac{1}{4}\right.$ ） SORALE NOT TOASCALE PERSPECTIVE
2 NORTHWEST PERSPECTIVE
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PC-1 : PRE-CAST CONC. PANEL WITH CMU $8 \times 16$ REVEAL JOINT - SPLIT FACE TEXTURE NAWTONE MINERAL STAIN
BEST BLOCK \#329 SEQUOIA


PC-3: PRE-CAST CONC. PANEL WITH CMU $8 \times 16$ REVEAL JOINT - GROUND FACE TEXTURE NAWTONE MINERAL STAIN TO MATCH BEST BLOCK \#5447


PC-2: PRE-CAST CONC. PANEL, DOORS \& FRAME COLOR MATCH SHERWIN WILLIAMS SW 7033 BRAINSTORM BRONZE

METAL VERTICAL STANDING SEAM SIDING BERRIDGE BUCKSKIN


PC-4 : PRE-CAST CONC. PANEL WITH CMU $8 \times 8$ REVEAL JOINT - GROUND FACE TEXTURE NAWTONE MINERAL STAIN TO MATCH
BEST BLOCK $\# 733$ PADRE REDSTONE


