

Project Narrative: Clark Public Utilities Flow Station No. 1 Reconstruction Project

Project Overview:

Clark Public Utilities (Utility) is proposing to reconstruct the existing potable water flow station, known as Flow Station No. 1, located within the north right-of-way of the NW La Center Road and NW Timmen Road Intersection.

Flow Station No. 1 is the means by which the Utility provides potable water to the City of La Center and its outlying areas. The flow station regulates water flow and reduces the pressure to meet the City's potable water demand. The automated valve within the flow station opens and closes as needed to keep the City's water reservoirs full, but not overflowing. The Utility's water system pressure at NW La Center Road and NW Timmen Road Intersection is high, and the flow station reduces the pressure to match the City's reservoir pressure.

The Utility constructed the initial flow station in 1997/1998 to replace the City's existing wells. The existing flow station automated valves are at ground level and prone to damage from storm surface water flowing from La Center Road. In addition, growth within the general La Center area has increased water demand. Water demand has recently increased to a point that the existing flow station now has insufficient capacity. Therefore, the purpose of the new flow station is to meet current and future water demand, while providing a more reliable water system.

The new flow station will consist of the following:

1. A 10.5' wide X 16' long pre-manufactured concrete utility building to house the automated valve and electric control equipment.
2. New automated valve and pressure regulator manifold assembly. Also, a separate manually operated valve and pressure regulator manifold assembly will be provided for emergency situations when the power is out, or the automated valve is malfunctioning.
3. Electric control equipment to operate the automated valve and monitor the water system. Electric service from the power pole to the flow station building.
4. Emergency backup power. The nature of the emergency backup power has not been determined yet. The utility is leaning towards a battery backup system, which could be provided inside the building, or in an outside enclosure. The battery backup is the preferred solution, but provides limited charge life. During extended power outages longer than 24 hours, the Utility will need to employ a small portable emergency generator outside the building.

5. Concrete walk adjacent to the south and east sides of the flow station building.
6. Gravel driveway to provide on truck parking and access to the flow station building.
7. Underground water mains to connect to the flow station valve and pipe manifold.

The total new hard surfacing will include 168 sf of roof area, 630 sf of concrete sidewalk, 723 sf of gravel parking and 246 sf of rip-rap for a total of 1,767 sf of new impervious surfacing.

Total earthwork for this site is estimated at less than 25 cy not including water main trenching.

Stormwater management for this work will include sheet flow dispersion to native grasses and vegetation surrounding the facility.

Other activities related to Flow Station No.1 reconstruction is the construction of a new 12-inch diameter water main easterly from the Flow Station to the East Fork Lewis River Bridge. Growth and water demand in La Center has increased to a point that the existing 8-inch water main within La Center Road corridor has insufficient capacity. The Utility will keep the existing 8-inch water main in service. With the existing 8-inch water main, combined with the new 12-inch water main and reconstructed flow station, the Utility can provide reliable water transmission conveyance to the City of La Center for the present and future. The new 12-inch water main will be constructed by way of a combined public works project with the City of La Center's La Center Road Paving project.

Applicable Approval Criteria:

This application will be reviewed for compliance with the following La Center Municipal Codes (LCMC). Applicable code sections are listed in bold with project narrative response following in italics.

LCMC 3.35 Impact Fees

No impact fees are associated with this project.

LCMC Title 12- Street, Sidewalks and Public Ways

Since no development will be done, there are no public improvements requirements per LCMC 12.10.040. However, the City's CFP shows a roundabout may be warranted in the future at the intersection of Timmen Road and La Center Road. A schematic drawing of the roundabout was provided to the applicant. The flow station building

as proposed is outside of the footprint of the roundabout and does not appear to cause a conflict. In the future, if the roundabout is to be constructed, CPU will coordinate with the City to review locations and make any accommodations for conflict avoidance. All work will be conducted within existing public right of way owned and maintained by the City of La Center.

LCMC Title 13 – Public Utilities

Since a structure is proposed that will result in no added impact, no sewer improvements are necessary.

LCMC Title 18.30 Procedures

Although all work will be conducted in existing City right of way and roadway, the site is bound by critical areas of potential geologic and archaeological impacts. As such this application is subject to a Type II review process.

A pre-application meeting was held on Tuesday January 25, 2022 and the date of pre-app issuance was February 4, 2022, (File # 2022-002-PAC). A copy the pre-application conference notes is included with this submittal.

LCMC Title 18.165 (Mixed Use MX)

The location of the proposed flow station, 12" water main and pavement improvements are within the La Center Road right of way. According to the City's adopted zoning map, the site is zoned Mixed Use (MX). Utilities and communication facilities are a permitted use in this zone. City staff has determined that the design standards in the MX zone do not apply to a utility use.

LCMC Title 18.215 Site Plan Review

This code section requires that proposals undergo site plan review for proposal that exceed 4,000 square feet. This proposal is subject to Critical Area and therefore subject to a Type II Site Plan review process.

LCMC Title 18.245 – Supplementary Development Standards

This code states that if fencing is proposed it must be no taller than 6 ft and shall not conflict with sight distance.

No fencing is proposed with this project.

LCMC Title 18.270 – Landscape

This title requires that public utilities subject to Type II reviews require L3 landscaping. A preliminary Landscape plan has been prepared and attached with the site plans.

LCMC 18.280 – Off Street Parking

LCMC 18.280 does not list the proposed use and therefore no parking is required. However, a gravel parking area is provided in front of the proposed flow station building to allow for up to two maintenance vehicles to park.

LCMC Title 18.282 – Outdoor Lighting

This title requires that any proposed onsite lighting must not cause more than one foot-candle measured at the property line.

No lighting is proposed with these improvements.

LCMC 18.300 – Critical Areas

City of La Center Municipal Code (LCMC Development Code Section 18.300) defines geologic hazard requirements for proposed development in areas subject to the City of La Center jurisdiction. Three potential geologic hazards are identified: (1) erosion hazard areas, (2) landslide hazard and steep slope areas, and (3) seismic hazard areas.

A site investigation report was prepared by Columbia West Geotechnical outlining findings of the above potential geologic hazards as they apply to the proposal. A copy is attached with this application.

Columbia West conducted a geologic hazard review to assess whether a geologic hazard is present in the vicinity of proposed development, and if so, to provide mitigation recommendations.

- Erosion Hazard Areas - According to Clark County Maps Online, and the Soil Survey of Clark County, Washington an erosion hazard is mapped approximately 130 feet northwesterly of the area of proposed development at a mapped contact of surficial soil units consisting of Gee silt loam and Rough Broken Land. This mapped erosion hazard is not anticipated to adversely affect proposed development and no erosion hazard is mapped on the development site. Therefore, according to the City of La Center Development Code, a soil erosion hazard is not present at the site.*
- Landslide Hazard and Steep Slope Areas - To evaluate steep slope areas and assess whether landslide hazards are present in the vicinity of proposed development, Columbia West conducted a review of literature, subsurface exploration, and physical slope reconnaissance. The site and neighboring slopes are mapped as (1) stable areas – no slides or unstable slopes. Columbia West*

also reviewed the *Geologic Map of the Ridgefield Quadrangle, Clark County, Washington* (R.C. Evarts, Washington Division of Geology and Earth Resources, Scientific Investigations Map 2844, 2004), which indicates that no landslide deposits are mapped at the subject site or in the surrounding vicinity. There was no observed direct evidence of large-scale, mass slope movements or historic landslides. No landslide debris was observed within subsurface soils explored onsite and no slope face groundwater seeps or springs were observed. Based upon the results of slope reconnaissance, subsurface exploration, and site research, slopes on the subject site do not appear to meet the definition of a landslide hazard according to City of La Center Municipal Code.

- *Seismic Hazard Areas - According to the Liquefaction Susceptibility Map of Clark County Washington* (Washington State Department of Natural Resources, 2004), the area of proposed development is mapped as very low to moderate susceptibility for liquefaction. Neighboring slopes are primarily mapped as very low susceptibility for liquefaction with areas mapped as high nearing the toe of the northeast trending slope and the wetland. These areas are not anticipated to adversely affect proposed development as Columbia West understand it. Based upon results of literature review, site-specific testing, and laboratory analysis, the potential for soil liquefaction in the location of proposed development is considered to be low.

The flow station site has a Ground Shaking Amplification Site Class C to D. Site Class D is considered a Geohazard per the City of La Center Municipal Code. The Applicant does not consider this to be a significant hazard and the impacts of this can be mitigated by competent structural design of the building. Columbia West discusses the Ground Shaking Amplification Site Class on Page 8 of their report.

Site construction recommendations are provided in the geotechnical report and will be utilized in the design and construction of facilities.

LCMC Title 18.320 – Stormwater and Erosion Control

Projects that create more than 2,000 square feet of impervious surface are subject to the provisions of this code section. This proposal will create new impervious surfaces including roof, gravel driveway, and concrete sidewalk totaling 1,767 square feet and therefore not subject to all sections of this code. However, projects that create in excess of 500 square feet of ground disturbance are subject to the “City of La Center Erosion Control Guidelines.

A preliminary Grading and Erosion Control Plan has been prepared and include with the preliminary plans. Surface waters from gravel drives and from roof water will sheet flow to existing ground surfaces. The project does not alter the existing site drainage pattern. A low area just west of the proposed flow station currently has an existing gravel infiltration trench where surface waters drain and apparently infiltrate.

The water main project includes erosion control measures off the side of the existing pavement to ensure no soils migrate offsite or into the existing roadside ditch systems. See erosion control plans attached with this application.

LCMC Title 310 – Environmental Policy

A SEPA determination of a mitigated determination of non-significance (DNS) has been published for the project. The DNS covers the Flow Station Building and Site Improvements, the La Center Road 12" Water Main construction and the City of La Center Road Paving Project.

A copy of the DNS is attached with this application.

LCMC Title 18.360 – Archaeological Resource Protection

An Archaeological Predetermination investigation was performed by Applied Archaeological Research Inc. (Report # 2574). Copy attached with this application. The archaeological investigation covered the areas of the flow station site, the 12" water main length and the pavement improvements for La Center Road. The results of the investigation concluded that no artifacts were identified on the surface or in the soil test pit's (STP's), and that no further archaeological work is necessary in the footprint related to the proposed project.