

Utility Advisory Committee
City Council Chambers
Port Angeles, WA 98362
September 11, 2018
3:00 p.m.

AGENDA

- I. Call To Order**
- II. Roll Call**
- III. Approval Of Minutes for August 14, 2018**
- IV. Late Items**
- V. Public Comment** – *The Utility Advisory Committee desires to allow the opportunity for Public Comment. However, the business of the City must proceed in an orderly, timely manner. At its most restrictive, Public Comment shall be limited to a total of 15 minutes. Individuals may speak for three (3) minutes or less, depending on the number of people wishing to speak. If more than 20 people are signed up to speak, each speaker may be allocated two (2) minutes. (Taken from Council Rules of Procedure Section 12).*
- VI. Discussion Items:**
 - A. Design Briefing for Pump Station 3 Replacement, Project WW0308
- VII. Information Only Items:**
 - A. Pre-Design Briefing for H St. Stormwater Outfall, Project DR0213
 - B. Pre-Design Briefing for Decant Facility at Transfer Station, project SW0112
- VIII. Next Meeting Date:** October 9, 2018
- IX. Adjournment**

Utility Advisory Committee
City Council Chambers
Port Angeles, WA 98362
August 14, 2018
3:00 p.m.

I. Call To Order

Councilmember and Chair Cherie Kidd called the meeting to order at 3:02 pm.

II. Roll Call

UAC Assigned

Councilmembers Present: Deputy Mayor Kate Dexter, Councilmember Cherie Kidd and Councilmember Lindsey Schromen-Wawrin

Councilmembers Absent: none

UAC Members Present: Vice Chair William Atkinson, Rob Feller and Mattias Järvegren (3:04p.m.)

UAC Members Absent: Laura Dodd and Paul Collins

Staff Present: Gregg King, Bill Bloor, Therese Agesson, Teresa Reed-Jennings, Lucio Baack, Glen Goodworth and Marian Bodart

Others Present: One Citizen

III. Approval Of Minutes

Kate Dexter requested a motion for approval of the June 12, 2018 minutes and Lindsey Schromen-Wawrin seconded the motion. Motion carried 6-0.

IV. Late Items: Bonneville Environmental Foundation MOU (Item C in Discussion Items)

V. Public Comment: None

VI. Discussion Items:

A. Francis Street Outfall Repair

Teresa Reed-Jennings, City Engineer, and Lucio Baack, Civil Engineer I, informed the UAC that a clogged stormwater outfall located underwater causing back pressure on the system. The outfall would be relocated above the water line in the rip rap head. Funding is available in the approved 218 budget and Stormwater Utility capital projects in the amount of \$35,000. Discussion followed.

Kate Dexter made a motion to provide a favorable recommendation to the City Council to award a construction contract in 2019 for a not-to-exceed amount that fits within the project budget. Rob Feller seconded. Motion carried 6-0.

B. Landfill Gas Flare Replacement

Teresa Reed-Jennings, City Engineer, reported that only one bid was received and the cost was much more than internal engineering estimates. Staff was reviewing the project to determine the cause of any variances. No action by the UAC was requested. Discussion followed

C. Bonneville Environmental Foundation MOU

Gregg King, Power Resource Manager, discussed recent changes by the Washington State Legislature and continuation of Federal tax and depreciation credits has caused staff to look at the possibility of a 1 MW community solar project. However staff does not have the time and expertise to make a solid and well-informed decision. The Bonneville Environmental Foundation (BEF) is a non-profit that specializes in encouraging clean energy projects and does have both expertise and experience in this area. BEF has provided a Memo of Understanding (MOU) to provide its services to the City at no cost. Discussion followed.

Kate Dexter made a motion to forward a favorable recommendation to the City Council to authorize the City Manager to sign the Memorandum of Understanding with the Bonneville Environmental Foundation. Mattias Järvegren seconded the motion. The Motion carried 5-1.

VII. Information Only Items:

A. 2018 Electric Utility Resource Plan

Gregg King, Power Resources Manager, discussed the Washington State requirement to provide a biennial update to its resource plan. The electric utility must provide a five (5) and ten (10) year forecast showing forecasted electric loads and the generating source that will service those loads. Since the City is a Bonneville Power Administration (BPA) full-resource customer, the forecast was directly provided by BPA and BPA will provide all power to service the City's loads. Discussion followed.

B. Morse Creek Hydro Project Tour on Friday, September 14 8:30-11:00 am

Gregg King, Power Resource Manager, invited the UAC and City Council to tour the shuttered Morse Creek Hydro Project. Mr. King asked interested members to RSVP.

VIII. Next Meeting Date: September 11, 2018

IX. Adjournment: 3:45 p.m.

Chair Cherie Kidd

Gregg King, Power Resource Manager



Date: September 11, 2018
To: Utility Advisory Committee
From: Jeffrey Bender, P.E., *Civil Engineer 2*
Subject: Design Briefing for Pump Station 3 Replacement, Project WW0308

Summary: Pump Station No. 3 Replacement, Project WW03-08, was first included in the Capital Facilities Plan in 2008, and was programmed for in-house design in 2016. Originally scheduled as a significant multi-year project that would install additional gravity mains and force mains, and replace a small pump station with a significantly larger pumping facility, this project is now being scheduled as a simple upgrade to the existing pump station.

Funding: Funds are available in the approved 2018 budget for the Wastewater Utility Capitol projects in the amount of \$159,000. An additional \$900,000 is scheduled for 2019 in the approved CFP.

Recommendation: It is requested that the UAC endorse the design strategy for Pump Station No. 3 Replacement, Project WW03-08, and provide a favorable recommendation that City Council award a construction contract in 2018 that is within the approved project budget.

Background / Analysis: Pump Station No. 3 (PS3) is located at the intersection of Marine Drive and Hill Street. Since 1969, when PS3 and the force main system were constructed, surges in combined wastewater and storm flows, due to increased development and the expansion of the upstream service area, often exceed the capacity of PS3 to convey flows to Pump Station 4. The imminent upgrade of the aging PS3 is crucial for the continued successful operation of the system.

In 2008 when the replacement of PS3 was originally evaluated, it was determined that a new upsized pump station, a new gravity main, and a new force main was required to handle the existing and projected flows in this basin. At that time, the Combined Sewer Overflow (CSO) Program was still under evaluation and design. Staff reevaluated this project in 2016, before completion of the new CSO Pump Station 4, and determined, based on best available information, that the original assessment and need for this project was still valid.

Since CSO Pump Station 4 has been brought online, engineering staff has further evaluated the system, both upstream and downstream of PS3, utilizing information gathered from data collection equipment located in the field and at Pump Station 4. In addition to data collection efforts by the Engineering staff, City Operations staff inspected the sewer main between PS3 and Pump Station 4 utilizing CCTV equipment. The results of this inspection concluded that the sewer mains were partially filled with sediment and debris, thereby severely limiting flows. The sediment and debris was subsequently removed by Operations staff which restored the capacity of the sewer mains.

With restored flow capacity to the existing main and using the data collected, the Engineering staff determined that the upsized replacement of PS3 and installation of new gravity and pressure mains was not necessary. The current analysis reveals that this project will require a moderate upgrade of the

existing PS3 facility with a new, self-priming pump station, sized to convey both the current measured flows and anticipated future flows from development in the Western Urban Growth Area.

This project was originally estimated to exceed \$3 million dollars. The revised 30% Design Phase Engineer's Estimate for this project ranges between \$400,000 and \$600,000.

Funding Overview: Funds are available in the approved 2018 budget for the Wastewater Utility Capitol projects in the amount of \$159,000. An additional \$900,000 is scheduled for 2019 in the approved CFP.



Date: September 11, 2018
To: Utility Advisory Committee
From: Vince McIntyre, *Civil/Utility Engineer I*
Subject: Pre-Design Briefing for H St. Stormwater Outfall, Project DR0213

Summary: Investigation of flooding, occurring in residential homes and garages due to overflowing stormwater catchbasins, resulted in identifying the Crown Park stormwater subbasin infrastructure as being overwhelmed. The existing conveyance system is too small to accommodate the runoff generated by the built-out residential area. A 12” stormwater pipe was installed in 2014 over the bluff at H St. to divert 25% of the entire subbasin to a new outfall. The current project will complete the diversion effort by connecting the 12” pipe to a new outfall to be located at the southwest corner of the Boat Haven (near the entrance of Castaways). The proposed design will utilize the vacant 48” Industrial Water Line as a casing pipe to house the new storm pipe which will minimize land disturbance in an archeologically sensitive area.

Funding: As reflected in the 2019-2024 Capital Facilities Plan (CFP), this project has \$510,000 sourced from Utility Reserves in the 2018 budget.

Recommendation: Not applicable – information only.

Background / Analysis: Residential flooding occurring in 2008 in the Crown Park stormwater subbasin identified capacity constraints in the City’s stormwater conveyance system. This subbasin consisted of 134 acres of residential properties that drained to the saltwater lagoon at the base of Crown Park.



Image 1. Flooding in the Crown Park subbasin, August 2008.

Some of the burden on this system was alleviated in 2014 during the 4th St. Stormwater Improvements Project which installed eight bioretention facilities (rain gardens) at selected intersections on 5th, 6th, and

7th Streets. This improvement was due to the upgrade of conveyance pipes within the intersections, promoting infiltration in the rain gardens, and from available storage in the rain gardens themselves. However, it was recognized at that time by the City and the engineering consultant, PACE Engineers, Inc., that the Crown Park subbasin needed to be split in order to completely resolve the flooding issue. There was simply too much stormwater being directed to the Crown Park outfall. Therefore, to initiate a solution, a 12” High Density Polyethylene (HDPE) surface staked pipe was installed over the bluff at H St. allowing the Crown Park subbasin to be split into East and West fractions – the East fraction (32 acres) being directed over the bluff and the West fraction (102 acres) continuing uninterrupted to the Crown Park outfall. As the stormwater network at the base of Hill St. (along Marine Drive) is also not sized to accommodate the water coming from the East fraction, the H St. Stormwater Outfall project was devised to pick-up where the 4th St. Stormwater Improvements Project left-off.

Several design options were considered for feasibility in 2016 and 2017. The ultimate design selected by Engineering capitalizes on the existing Industrial Waterline (IWL) that is no longer being used which subsequently reduces the need to excavate in a known archeologically sensitive area. The current design will access the IWL at the base of Hill St. and in front of the Boat Haven and approximately 1,700 lineal feet of 16” HDPE stormwater pipe will be pulled through the IWL. The new pipe will be connected to the existing HDPE surface staked pipe at the base of Hill St. and to a new energy dissipating outfall structure to be installed at the southwest corner of the Boat Haven. As the IWL is essentially flat in this stretch, the conveyance of water will be achieved by the available 200 ft. of pressure head coming down the bluff.

This design eliminates the need to obtain easements from downstream property owners, eliminates disturbances to the transitional wetland complex near the lagoon, and, as mentioned earlier, minimizes excavation in a known archeologically sensitive area. The new outfall to be installed at the Boat Haven will be subject to environmental permitting such as an Army Corp of Engineers permit and a Hydraulic Project Approval (HPA) from the Washington Department of Fish and Wildlife. We believe this project is categorically exempt from the State Environmental Policy Act (SEPA) review process.

This project is currently in the pre-design phase. Survey information is being collected by Wengler Surveying and Mapping to support a preliminary in-house engineered design, necessary for environmental permitting. While permitting applications are being reviewed through the winter, an engineered design will be completed in-house. The project is expected to go out to bid in early spring with construction anticipated in summer 2019.

Funding Overview:

Expenditure distribution for the project, as reflected in the 2019-2024 CFP, are summarized below:

Tasks – H St. Outfall	Total Eligible Cost
1. Project Admin/Management	\$10,000
2. Construction	\$500,000
Total	\$510,000

A preliminary engineer cost estimate performed in 2016 placed the project within an overall cost range of \$450,000 - \$500,00, however, this will be reevaluated to reflect current material prices, an inflation correction, and to ensure it reflects the reduced risk assessment associated with the current alignment.



Date: September 11, 2018
To: Utility Advisory Committee
From: Lucio Baack, *Civil Engineer I*
Subject: Pre-Design Briefing for Decant Facility at Transfer Station, Project SW0112

Summary: In 2016 The Department of Ecology (DOE) offered the City a \$474,300 Water Quality Combined Financial Assistance Grant with a 15% local match requirement to design and construct a Decant Facility at the Port Angeles Regional Transfer Station. On February 9th, 2016 the Port Angeles City Council Authorized the City Manager to sign the grant agreement with Ecology. However, due to a funding shortfall in State Fiscal Year 2016, the State Legislature directed Ecology to delay awarding the offered Grant.

Funding: Earlier this year, the City was notified that the funding shortfall was resolved and Ecology was authorized to award the offered grant and resume grant agreement negotiations. The \$474,300 Water Quality Combined Financial Assistance Grant with a 15% local match requirement is now available for the design and construction for a Decant Facility at the Port Angeles Regional Transfer Station. The Decant Facility grant requires a minimum of \$83,700 (15%) match from the City; \$160,000 has been included in the Solid Waste Utility CFP budget for this match and other non-grant eligible work.

Recommendation: Not applicable – information only.

Background / Analysis: The existing decant facility is undersized for the efficient processing of current vector waste volumes. The lack of a roof, size, and configuration of the current facility makes it almost impossible to dry the vector waste to sufficient levels to allow for inert materials testing and subsequent land application. Currently, the partially dried vector waste material must be transported to the transfer station for disposal. The inability to sufficiently dry the vector waste before disposal basically equates to paying tipping fees on the additional “water” present in the material. Additionally, the City’s National Pollutant Discharge Elimination System (NPDES) Phase II permit requires a gradual increase in the collection of catch basin sediments and street sweepings. A new decant facility would provide the ability to dewater and store more solids, and prevent contaminated runoff from entering into the municipal separate stormwater system. The decant facility design will incorporate the following basic elements; solids dewatering bays; water collection and conveyance system; sedimentation basins; discharge connection to the sanitary sewer system; and a truck wash.

In 2014, a pre-design grant enabled the City to contract with Herrera Environmental Consultants for the creation of a pre-design report to assess the potential of vacant areas at the landfill to house the future decant facility. Four sites were evaluated for suitability in the pre-design report and a subsurface exploration and preliminary geotechnical engineering report were prepared for the top rated site. Since the original pre-design investigation, the specifications of the decant facility have slightly changed and now include flexibility of configuration and facility expandability. Additionally, the ongoing processes at the

landfill have been reevaluated, putting more emphasis on traffic flow and safety within the site. This reevaluation has resulted in a priority reordering of the original four sites, and a new top choice emerged.

The newly selected alternative decant facility location is located on privately owned land west of the Port Angeles Transfer Station. The land is currently for sale and would need to be purchased, partially deforested, cleared, graded, and paved. These are all additional costs not accounted for in the original cost estimate for the facility. Staff is currently exploring the ramifications associated with siting the facility at this location.

City staff are currently in contact with the Department of Ecology to finalize the grant agreement. Once the grant agreement has been negotiated and signed, the City will issue a Request for Qualifications seeking professional services to design a new decant facility on the preferred site.

Funding Overview:

An engineer’s estimate of probable construction costs for the decant project are summarized below (includes City match):

Tasks – Decant Project	Total Eligible Cost
1. Project Admin/Management	\$20,000
2. Design Plans and Specs, Environmental Review	\$90,000
3. Construction Management	\$43,000
4. Construction	\$490,000
5. Land Purchase	\$29,000
Total	\$672,000

Based on Herrera’s 2014 Pre-design Report, the undeveloped land alternative would cost approximately \$672,000, which is \$114,000 in excess of the available budget. In the event this option is chosen, City staff will update the engineering cost estimate, including corrections for inflation and an updated property value. It is anticipated that this project will require a budget supplemental to cover the additional costs associated with this option.