Project Memo - Level I Site Alteration Application

Portland Public Works – Water Resource

To: Barbara Barhydt, Development Review Services Manager

From: Justin Pellerin, P.E. Project Engineer

Date: January 29, 2018

Re: Bedford Street CSO Sewer Separation Project Drainage Outfalls into Back Cove

Project Need / Description

The City of Portland has been implementing a multi-year Combined Sewer Overflow (CSO) Long Term Control Plan (LTCP) since the original LTCP prepared by CH2M Hill was submitted and approved by the State in 1993. We are now implementing what is termed the "Tier III" action plan. A number of specific abatement projects have been completed and some are currently under construction or design, with more programmed to be completed over the coming years.

The referenced project is being undertaken to comply with the requirements laid out in our Tier III action plan and a report prepared for the Back Cove West Storage Conduit in 2016. The plan identified a sewer separation project of Bedford Street, Durham Street, and parts of Baxter Boulevard and Forest Avenue (Baxter outfall) as well as the residential neighborhood that includes Deerfield Road, Grassmere Road and Belmeade Road and parts of Forest Avenue (Belmeade outfall). This separation project is required to mitigate CSO activity at CSO 16 which outfall into Back Cove just to the north of Preble Street off Baxter Boulevard. The project will separate approximately 69 acres of watershed area with approximately 53 acres going to the Baxter outfalls and 16 acres going to the Belmeade outfall.

The City of Portland has hired the firm of Sebago Technics, Inc. to produce design plans and construction documents for construction to be started this spring. As such we are looking to bid the project in February of 2018. Per our tier III action plan this project is to be completed as soon as possible.

The City of Portland is also under a timing restriction with the Maine Department of Marine Resources and the Maine Department of Inland Fisheries and Wildlife to complete all construction activity within Back Cove by May 1, 2017 making the time for the start of the project critical to the bidding process in February.

The project involves the installation of twin 42" storm drainage outfalls adjacent to the CSO 16 outfall and a 30" storm drainage outfall at the end of Belmeade Road into Back Cove. Storm drainage will be installed within the rights-of-way of the aforementioned streets to separate the stormwater runoff from the existing CSO lines. Both systems will end up

crossing the Back Cove trail along Baxter Boulevard and discharge into Back Cove. Any disturbance within this area will be replaced as it exist today and the outfall locations will be stabilized with rip rap along the slopes and as outlet protection. The project includes green infrastructure improvements as well as to improve water quality from pavement runoff. This application is for a level one site alteration for the construction of the proposed 30" and 42" storm drainage outfalls into Back Cove to ensure that the project complies with the shoreland zone requirements.

As part of the project, DPW has obtained a National Resource Protection Act (NRPA) Permit by Rule from the Maine Department of Environmental Protection for the construction of the storm drainage outfalls. The permit is attached with this submission. The outfall location has been identified as a Tidal Waterfowl and Wading Bird Habitat. The Department of Public Works was required to notify the Department of Marine Resources and the Department of Inland Fisheries and Wildlife and receive timing approvals associated with installation of the outfalls. These timing approvals are attached with this submission. DPW was also required to submit a Category 2 Army Corp of Engineers permit for work to be done in tidal wetland areas; a copy of which is attached. DPW will adhere to any environmental timing restrictions required for the project.

<u>General Written Submissions Checklist</u>
Please see the attached items
1. Evidence of right, title and interest – being developed by City or Portland Corporation Counsel
2. Evidence of state and/or federal approvals – see attached for following:
a. Army Corp of Engineer Maine General permit application
b. Maine Natural Resource Protection Act Permit by Rule
c. Maine Department of Marine Resources and Maine Department of inland Fisheries and Wildlife timing approvals
d. State Revolving Loan Fund- Environmental Review- Application submitted.
3. Written assessment of proposed project's compliance with applicable zoning requirements – efforts have been made to place the new storm drainage for the Baxter outfall adjacent to the CSO outfall pipe for CSO 16. In addition, efforts were made to minimize the depth of the new storm drainage for the Belmeade outfall to shorten the length of the installation. These designs were done to minimize the impact to the tidal zones of Back Cove. The project outfall falls within a ROS recreational and open space zone. The project will adhere to requirements of this land use zone.
4. Flood Plain: The proposed storm drainage with discharge into a FEMA Flood plain AE zone. The AE zone elevation is 10.00. The storm drainage outfalls will be set below this elevation: at -2.00 for the Baxter outfall and 5.27 for the Belmeade outfall. These storm drainage outfalls are being installed with Tideflex gates that will prohibit tidal waters from surcharging the upstream storm drainage system.
5. Summary of existing or proposed easements, covenants, public or private rights-of- ways, or other burdens on the site:
a. Land Bank Commission - determination of exemption of approval by the Land Bank Commission due to the project being a state mandated project.
b. Portland Historical Preservation – A submission was sent to HP on December 15, 2017.
6. The are no requests for waivers.
7. Evidence of financial and technical capacity: On the City's FY18 CIP list.

8. Boundary survey – see attached Plan Sheets 4 & 26.
9. Preliminary Site Plan – see attached Plan Sheets 4 & 26.
10. Erosion Control Details- see attached plan 3.