July 13, 2018

ENGINEERS, INC

PND No. 154038.07

MEMORANDUM FOR

John Floyd, Consulting Planner for City of Kalama

SUBJECT: PORT OF KALAMA T-BARGE DOCK PROJECT

John Floyd:

The intent of this memorandum is to respond to comments provided in the Completeness Determination for the Port of Kalama T-Barge Dock Project. The following comments were provided on June 8, 2018 and responded to on June 11, 2018:

1) Please expand on why the removal of 51 additional orphan timber piles will not result in any potentially adverse impact to species and habitat.

The removal of the additional 51 piles will not result in any potentially adverse impact to species and habitat. The piles can provide predator coverage to fish preying on salmonids. The piles, if they were treated, could release contaminants to the water column. Removal of the piles is a known and accepted mitigation measure to restore benthic and water column habitat to fish.

2) While it appears that per the biological evaluation, most project impacts do not derive from vibrating the orphan timber piles, it would be helpful to understand how the removal of 51 additional orphan timber piles is not anticipated to result in any cumulative impacts.

Adverse impacts from removing the orphan timber piles is not anticipated to impact listed or sensitive species or habitat. The vibratory hammer does not result in noise impacts such as an impact hammer would and will not in fish mortality, and the piles are expected to be removed quickly. Other piles recently removed from the marina by vibratory hammer were removed very quickly and easily.

The WDFW and NOAA did not have concerns about removal of the orphan piles, nor do we expect timing restrictions with this element of the project.

The following comments were provided on May 15, 2018 and responded to below:

 Please provide plans and/or a description of what is proposed for the existing access to the fenced portion of the RSG Forest Lot, proposed vehicle circulation, parking, and loading for the T-barge dock, the number and types of vehicles anticipated, and any associated proposed permanent and temporary structures in the existing graveled area between the rip-rap and Hendrickson Drive.



There are no proposed changes to the existing vehicle access point. Vehicle traffic may increase by one additional delivery truck per day, 3 days a week max, for delivery of cargo to ships. There are no associated proposed permanent and temporary structures in the existing graveled area between the rip-rap and Hendrickson Drive. Forklift parking will occur on the barge and in the upland lot. No temporary or permanent storage structures will be provided in the uplands during construction or following completion.

2) Please provide contours for the parking area to demonstrate that surface water will flow away from the Columbia River.

There are no proposed alterations to the existing parking lot. Please see Attachment I for upland contours.

3) Are any best management practices (BMPs) proposed for reducing in-water sediment disturbance and turbidity during pile-driving and removal?

The following BMPs are proposed for reducing in-water sediment disturbance and turbidity during pile-driving and removal:

- The T-barge dock, work boats, and the derrick barge, will not "ground out" at any time. Commercial boats that will moore at the barge dock have drafts are shallower than the Tbarge dock.
- Pile driving with an impact hammer to proof piles will take place within a confined bubble curtain.
- A soft-start technique will be used for vibratory and impact-hammer pile driving to allow any aquatic species to leave the work area before full energy is used to drive the pile.
- 4) Is any sewer pump-out equipment proposed? If proposed, application materials will need to address general conformance with applicable state and local regulations (DSHS, ECY, Cowlitz County Public Health Department, etc.) per 'Sewage Collection and Treatment' of the Cowlitz County SMP.

No sewer pump-out equipment is proposed.

5) Please clarify if utilities will be undergrounded.

Aboveground utilities are allowed in lieu of underground utilities, as installation of underground utilities would require greater in-water disturbance; most of the existing exhibits and documents, however, describe water and electrical service extending along the pier and gangway and onto the T-barge dock, while the narrative response to SMP goals, objectives, policies, and use regulations specify underground utilities.

Utilities will be installed aboveground along the promenade and then be buried near the base of the fixed pier. Excavation and backfill for the waterline will be $120' \times 3'$ deep x 1' wide for a total of ~13 CY.

6) Please either submit a Floodplain Development Permit (FDP) application (or provide justification for why one is not required).



Although no "structures" are proposed, the scope of work falls under the City's definition of "development" per KMC 14.16.030. In addition to the application form, please provide some substantiation of how docks and piles will be designed to withstand flood flow and hydrologic pressure related to debris hangups, per KMC 14.16.100(F).

Please see Attachment II for the Floodplain Development Permit application. The docks and piles, will be designed to withstand flood flow and hydrologic pressure related to debris hangups, per KMC 14.16.100(F).

1. All bridges shall be designed and constructed to provide for the passage of regulatory floodflows. The total design of the bridge, its road approaches and associated utilities and bank stabilization shall allow for floodflows to pass under or around the bridge structure without resulting in a significant damming of the stream. Plans may be submitted to the county engineer for review.

There are no proposed bridges.

2. The minimum floodway width shall be maintained. When center support piles are necessary, the structure shall be designed to withstand floodwater velocities with debris hangup and shall not result in increased flood depth or velocities.

There are no proposed center support piles.

3. Culverts shall be sized to adequately pass regulatory floodflows. The culvert and road shall allow floodwaters to pass through, over or around the road without causing significant damming of the stream. Plans may be submitted to the county engineer for review.

There are no proposed culverts.

4. Docks, piles and bridge abutments shall be designed to withstand regulatory floodflows and the additional hydrologic pressures associated with debris hangup on the structure during a flood.

Hydrologic pressure from debris hangups is expected to be minimal due to the location of the project in a semi-protected basin.

7) Please provide documentation for how proposed commercial boat traffic will interface with existing recreational marina boat traffic.

Vessel traffic within the marina will decrease as the existing tenant is currently operating out of the marina. Traffic will be limited to the mouth of the marina, but will not hinder flow.



Should you require any additional information, please don't hesitate to contact me at (206) 624-1387 or via email at nwhite@pndengineers.com.

Sincerely,

PND Engineers, Inc. | Seattle Office

Nicole L White

Nicole White, Environmental Scientist

CC: Tabitha Reeder, Port of Kalama