FLOODPLAIN EVALUATION WASHINGTON DEPARTMENT OF FISH AND WILDLIFE NISQUALLY INDIAN TRIBE CENTRALIA CITY LIGHT DIVERSION DAM FISH TRAP

In response to feedback regarding the previously submitted no net rise letter, the drawings and grading plan for the site have been updated as of 8-26-2022. No net increase in fill material will be added in the floodplain as a result of the project. There is no increase in elevation through the construction site. The high spot will be leveled, the footprint of grading is confined to approximately a 35'x35' square area. The excavation is necessary for the construction of a fish trap and sorting pad located next to the dam. This fill will be placed immediately adjacent to and downstream of the existing diversion structure. Quantities are as shown on the drawings.

Last fall we received additional information from NOAA in the form of a Hec-Ras model. Our engineers have reviewed this model and determined that the location of the project will have a rise of 0.00 ft to the 100-yr flood.

FEMA FIRM Panel 335 of 625 (dated October 16,2012) maps the areas of the project into Zone A with no flood elevation determined. Also, a draft model of flood activity was provided by Bryr Harris at FEMA due to the fact they are re-evaluating the model. Because there were no elevations available in the initial review, the elevations provided in the Hec-Ras model were used in this re-evaluation. To estimate flood elevations in relation to the dam and existing infrastructure, the 1986 record drawings for the fishway modifications were used to evaluate flooding in the area. That drawing is attached to this letter. The elevations in that drawing were 1.4 feet below NGVD as shown on the drawings. The Hec Ras model appears to use NAVD 88. In our permit drawings we used LiDar based elevations in NGVD 29. In reviewing the FIRMette, it appears relative to that set of plans that the flood elevation would be approximately 340.5 to 341. The intake and fish ladder structure is elev. 345, whereas the finish floor elevation of the new sorting slab is 343.7. Using this method of evaluation, half of the accounted fill would be installed above the flood elevation

Considering the minimal overall material quantities for the project site within the 100-year flood plain, Centralia City Light's ability to regulate flow and water levels in the immediate vicinity, and that the project will be constructed in the hydraulic shadow (ineffective flow area) of the existing dam and intake structure for the Centralia City Light dam and diversion canal; Net result of project will not create a rise in flow elevations during a 100 year event.

ENGINEERING "NO-RISE" CERTIFICATION

This is to certify that I am a duly qualified engineer licensed to practice in the State of Washington. It is to further certify that the above technical data and submitted current and historical plans, supports the fact that the proposed fish trap and sorting slab will not increase the 100-year flood elevations on the Nisqually River.

(Date)

Seal:

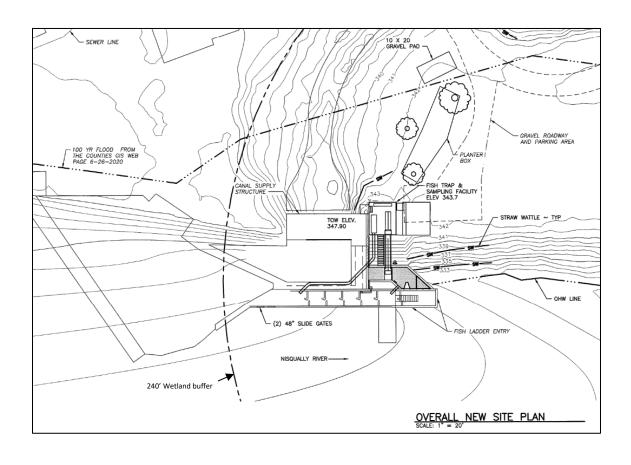
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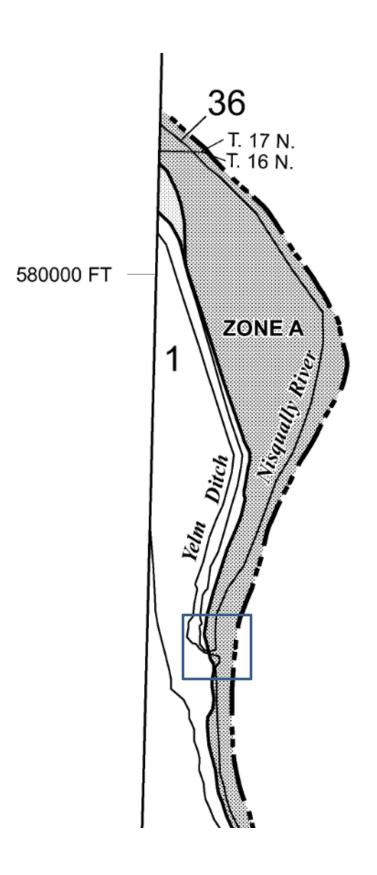
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