From:	Sarah Grice
To:	Mark Ewbank
Cc:	Erickson, Vivian (Consultant); Fieser, Aaron (Consultant); Logan Dougherty
Subject:	FW: WSDOT SR 167 Completion project - preliminary design of a replaced storm drain outfall through river bank revetment near Meridian Avenue bridge
Date:	Tuesday, June 6, 2023 10:59:52 AM
Attachments:	image001.png
	image002.png
	image003.png
	SR167 Puvallup Outfall Profile.pdf

Mark,

We find the attached detail to be acceptable for the replacement of outfall, as it will closely match pre-project levee conditions.

Thank you for requesting our concurrence,



## Sarah Grice, PE

Traffic Engineer Planning & Public Works | Office of the County Engineer (253) 798-8004 sarah.grice@piercecountywa.gov

From: Mark Ewbank <mewbank@herrerainc.com>
Sent: Monday, June 5, 2023 4:33 PM
To: Sarah Grice <sarah.grice@piercecountywa.gov>
Cc: Erickson, Vivian (Consultant) <ErickVi@consultant.wsdot.wa.gov>; Fieser, Aaron (Consultant)
<fiesera@consultant.wsdot.wa.gov>; Logan Dougherty <ldougherty@HNTB.com>
Subject: WSDOT SR 167 Completion project - preliminary design of a replaced storm drain outfall through river bank revetment near Meridian Avenue bridge

Sarah,

We shared the attached outfall design profile with Russ Ladley of the Puyallup Tribe of Indians and Miles Penk of WDFW, and neither of them requested any changes to it. Miles told us he will include this outfall in the HPA he writes for WSDOT's SR 167 Stage 2 project because flows emanating from it can potentially affect the river bank below OHWM (downslope of the new outfall pipe). The outfall location is shown in the image below. We attempted to emulate revetment re-construction around the new pipe based on the drawing you sent to me several months ago for the nearby Murphy Revetment repair project.

This design configuration includes a check valve in the pipe interior to prevent fish from swimming upstream in the pipe (and prevent river water from going upstream in the storm drain system when at flood stage). That feature was a request from Russ Ladley that he voiced several months ago, before we prepared this profile.

As part of City of Puyallup shoreline permit approval, the City needs confirmation that this outfall design is acceptable to Pierce County. And thus we seek that confirmation from you, or otherwise we need to understand design revisions that are necessary in order for Pierce County to endorse it.

Please let me know if you have any questions or comments on this detail, ideally by June 16th.

Thanks!



Mark



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## NOTES:

- 1. BACKFILL EXISTING DEPRESSION NEAR TOP OF BANK WITH SELECT BORROW BEHIND 3' THICKNESS OF REVETMENT ROCK
- 2. MIN. 3' THICKNESS REVETMENT FACE ROCK (CLASS C ROCK FOR EROSION AND SCOUR PROTECTION, WHICH CAN BE SALVAGED DURING REVETMENT EXCAVATION FOR PIPE INSTALLATION) DRESSED WITH TOPSOIL IN ROCK VOIDS AND PLANTED WITH LIVE STAKES ABOVE NEW PIPE.