



## **MEMORANDUM**

**TO:** PORT LUDLOW DRAINAGE DISTRICT  
COMMISSIONERS  
**FROM:** KERRI SIDEBOTTOM, P.E.  
**DATE:** AUGUST 3, 2023  
**SUBJECT:** BEACH OUTFALL RECONNAISSANCE  
JULY 13, 2023  
PORT LUDLOW DRAINAGE DISTRICT  
JEFFERSON COUNTY, WASHINGTON  
G&O #23429.00

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**Attendees:** Mr. Gary Rygmyr, Commissioner  
Mr. Dean Cole, Commissioner  
Mr. Michael Nilssen, Commissioner  
Ms. Kerri Sidebottom, P.E., Gray & Osborne, Inc.

The inspection of the beach outfall structures at Pope Way, Libby Court, Montgomery Court (between 70 and 120 Montgomery Court), and North Montgomery Court (between 192 and 200 Montgomery Court) was scheduled for the early morning of July 13, 2023 during a low tide.

Note that this inspection was conducted only to observe the stormwater outfall structures and pipes, and no evaluation of the bluffs was made. No determination of bluff condition, stability, sloughing, etc., was made, and no description of the bluffs is included in this memo.

### **POPE WAY OUTFALL**

The outfall structure was installed in 2007 and includes a 14-inch diameter HDPE overbank discharge pipe and a 48-inch diameter catch basin/diffuser structure on the beach below the bluff. The outfall structure including the overbank pipe is in good condition. The outfall structure is surrounded by dense vegetation and driftwood, which does not impact the function of the outfall. The amount of vegetation around the outfall does not appear to have notably increased since the last inspection in 2021. The outfall structure was difficult to locate behind an overgrown bush, and vines were observed over the top of and around the structure. It did not appear that any vegetation or roots were intruding into the structure itself or the pipe joints.

The inside of the outfall structure was inspected, and there was no apparent accumulation of debris or other blockages. The outfall structure does not appear to need debris removal



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at this time. There was no obvious erosion or channelization on the beach downslope of the outfall structure.

The District may consider trimming back some of the vegetation around the structure to make the structure more easily visible for maintenance and inspection in the future. Any vegetation removal should be limited to branches and leaves, so that the slope stability provided by the plant roots is not compromised. Roots and vines may be cleared from the top of the structure to prevent vegetation from intruding into the structure.



**Pope Way Outfall Structure – July 13, 2023**



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**Pope Way Outfall Structure Inlet Pipe – July 13, 2023**





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**Pope Way Outfall – July 13, 2023  
(Outfall Structure Behind Driftwood and Vegetation)**





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**Pope Way Outfall – July 13, 2017**  
**(Outfall Structure Behind Driftwood and Vegetation)**

### **LIBBY COURT OUTFALL**

The Libby Court Outfall structure was constructed in 2004. The structure consists of a 32-inch diameter HDPE overbank discharge pipe and a 60-inch diameter concrete catch basin/diffuser structure on the beach adjacent to the bluff. The outfall structure including the overbank pipe is in good condition. The condition of the beach at the base of the structure has not changed significantly since 2017. The interior of the structure was inspected and does not appear to need cleaning at this time, with no accumulated debris





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or vegetation. A permanent pool of water was observed within the structure. The bank immediately behind the overbank pipe and outfall structure does not appear to have changed significantly since 2017. There was no obvious erosion or channelization on the beach downslope of the outfall structure.



**Libby Court Outfall – July 13, 2023**



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**Libby Court Outfall Interior – July 13, 2023**





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**Libby Court Outfall – July 13, 2017**

**MONTGOMERY COURT OUTFALL (BETWEEN 70 AND 120 MONTGOMERY COURT)**

This 18-inch diameter HDPE outfall was identified on the 2017 beach walk. The LMC does not have any information regarding who installed the outfall pipe or when it was installed. It appears that flow from Basin E1 (northeast end of Jackson Lane) and Oak Bay Road is conveyed between 81 and 101 Montgomery Court and is discharged along with flow from basin E2 (Montgomery Court north from Montgomery Lane), to a catch basin in front of 81 Montgomery Court and then into the outfall. The pipe appears to have been installed below grade on the LMC parcel. The condition of the pipe at the outfall is excellent and has not changed since 2017. There is no indication of erosion or potential for damage to the outfall at the beach. The exterior of the lower half of the pipe is covered in barnacles, and a small amount of sand has accumulated at the end of the pipe, presumably due to the tide. These conditions do not compromise the function of the pipe.





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**Montgomery Court Outfall (Between 70 and 120 Montgomery Court) –  
July 13, 2023**





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**Montgomery Court Outfall (Between 70 and 120 Montgomery Court) –  
May 23, 2017**





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### **NORTH MONTGOMERY COURT OUTFALL (BETWEEN 192 AND 200 MONTGOMERY COURT)**

This 18-inch diameter HDPE outfall collects drainage from Basin C2 in the north portion of the District (a gully between Jackson and Foster Lanes, Oak Bay Road, and the north end of Montgomery Court). This culvert was installed by homeowners on an LMC parcel and was designed by Dick Reagan, P.E. The outfall daylights at the top of the bank between 192 and 200 Montgomery Court in a thickly wooded area and appears to continue above grade down to the beach. During the inspection, the pipe was observed to have water flowing out of it, despite a period of dry weather prior to the inspection. The water had created a small channel within the sand at the outlet of the pipe; however, this channel is below the high tide level and does not appear to be causing any damage to the outfall or the beach. The condition of the pipe at the outfall is excellent and the end of the pipe is clear. The condition of the outfall has not changed since 2017.



**Montgomery Court Outfall (Between 192 and 200 Montgomery Court) –  
July 13, 2023**





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**Montgomery Court Outfall (Between 192 and 200 Montgomery Court) –  
July 13, 2017**

As previously noted, no attempt was made to survey or investigate the condition of the bluffs along the beach, and no assessment of bluff stability was made at this time. The scope of this inspection was limited to the outfall structures and pipes on the beach described in the memo, and any interest in investigating the bluff condition or stability should be explored by a geotechnical expert.





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## **WASTEWATER TREATMENT PLANT OUTFALL**

A 12-to 15-inch diameter CMP outfall collects drainage from the wastewater treatment plant site and discharges to the beach over a rocky bank. This outfall pipe appears to be in fair condition and appears to be situated well above the high tide level. No maintenance needs were identified at this time. The District did not originally install this pipe and has not historically maintained it. The District's mapping indicates a 42-inch pipe in the same area as this outfall pipe, but the larger pipe was not found during the inspection.



**Wastewater Treatment Plant Drainage Outfall – July 13, 2023**

The attached figure shows the locations of the outfalls (Outfall Map – North of Beach Club).

KS/sr