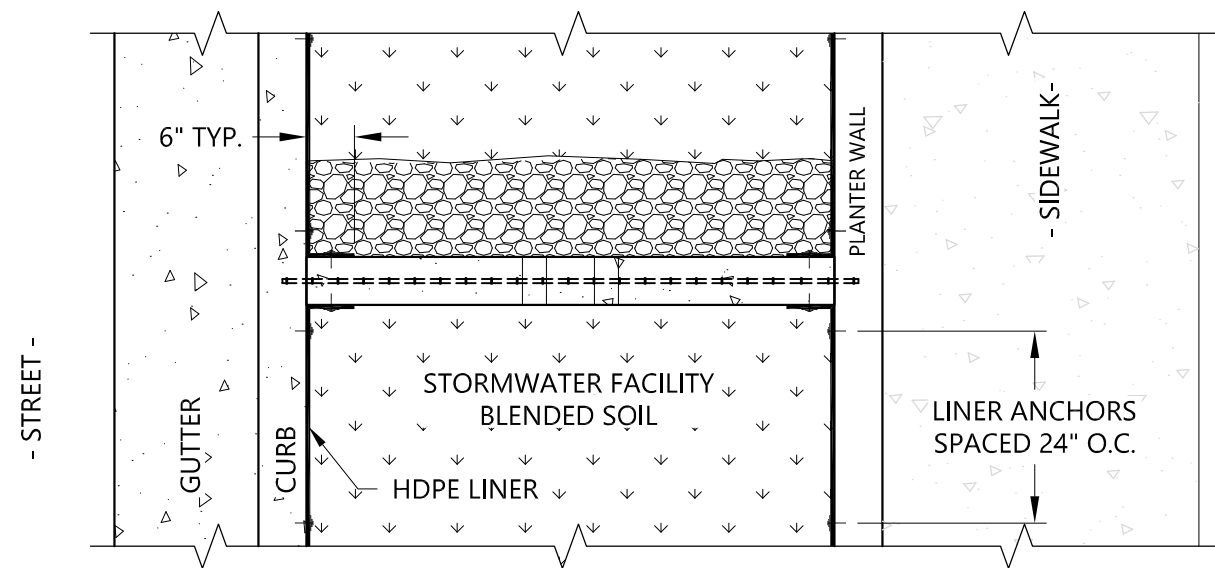


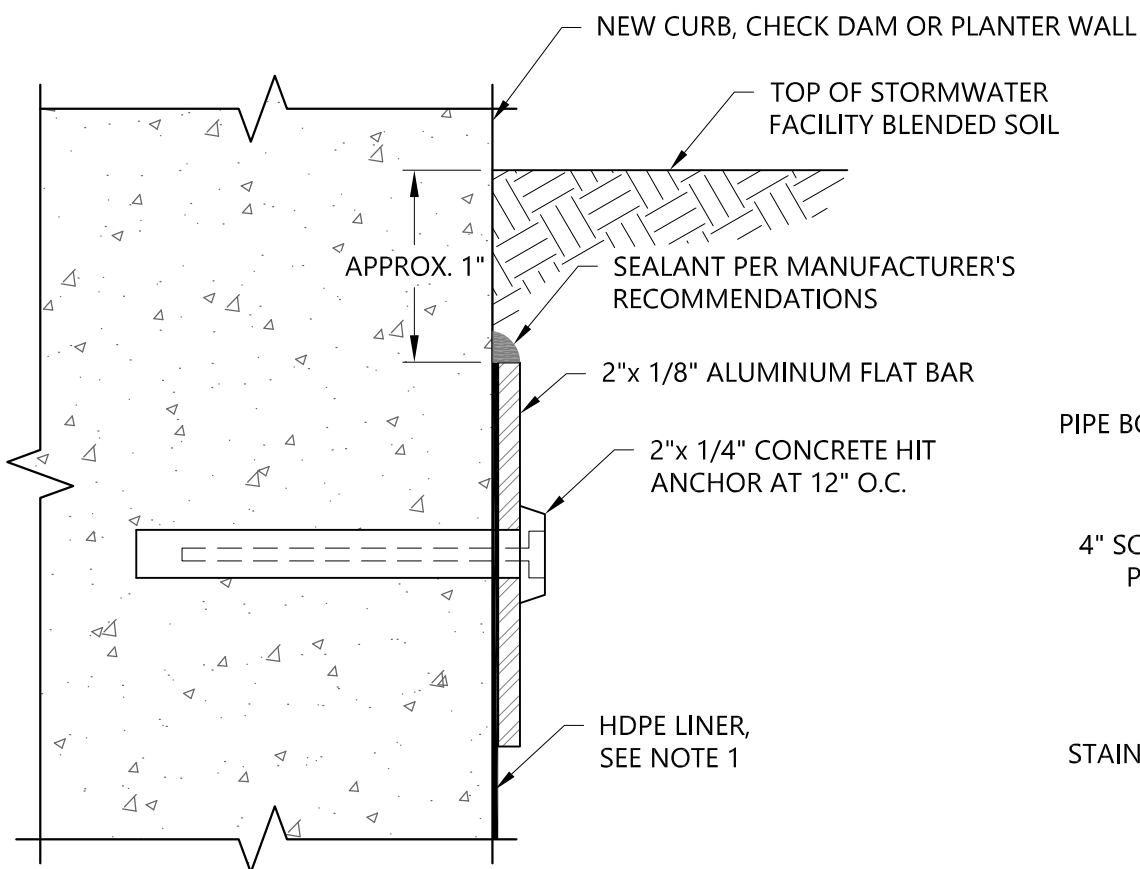
P-340_LINER_ATTACHMENT_AND_PIPE_BOOT.DWG 8/24/20 7:50 AM DANPE



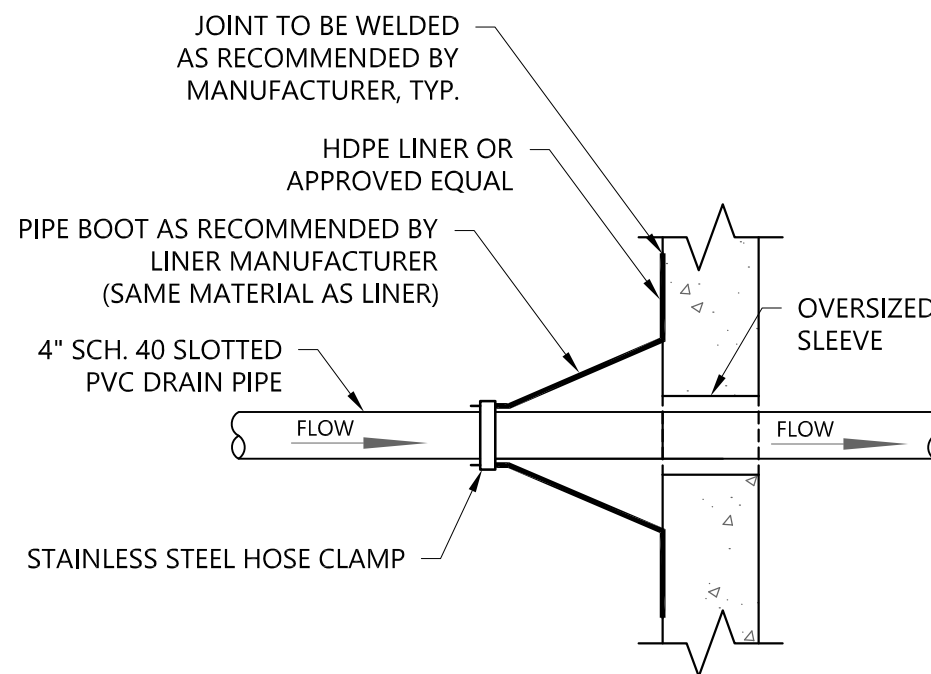
PLAN
(SHIELD LINER)

NOTES:


1. LINER MATERIAL TO BE HDPE. LINER TO EXTEND FROM TOP OF BLENDED SOIL TO THE BOTTOM OF EXCAVATION. SEE CONSTRUCTION DRAWINGS FOR EXTENTS AND THICKNESS OF LINER.
 - 1.1. 24 MIL HDPE LINER REQUIRED ON THE STREET-SIDE CURB AND GUTTER ON NEIGHBORHOOD COLLECTORS AND HIGHER CLASSIFICATIONS.
 - 1.2. 24 MIL LINER MAY BE REQUIRED ON THE STREET-SIDE CURB AND GUTTER ON LOCAL STREETS WITH TRANSIT ROUTES, HIGHER TRAFFIC VOLUMES OR AT THE DISCRETION OF THE OWNER.
 - 1.3. 30 MIL LINER REQUIRED WHEN FACE OF NEW CURB IS LESS THAN 2' FROM OD OF ADJACENT WATER MAIN. LINER WILL EXTEND DOWN SIDE ADJACENT TO WATER MAIN AND EXTEND 6" BELOW BOTTOM OF FACILITY.
 - 1.4. 40 MIL LINER REQUIRED IN THE COLUMBIA SOUTH SHORE WELL FIELD WELLHEAD PROTECTION AREA. FACILITY MUST BE FULLY LINED.
2. START ATTACHING THE LINER IN THE MIDDLE OF THE FACILITY FIRST. WORKING TOWARD THE ENDS TO MINIMIZE WRINKLES, CORNERS SHOULD BE CUT TO FIT WITHOUT WRINKLE.
3. ON CLEAN CONCRETE SURFACE, ADD SILICONE SEALER TO TOP 1/2" OF LINER.
4. ADHERE LINER TO CONCRETE WITH SEALANT RECOMMENDED BY THE LINER MANUFACTURER.
5. SECURE LINER TO CONCRETE WITH 2" ALUMINUM FLAT BAR, PLACED AS DIRECTED (CURBSIDE, SIDEWALK-SIDE, OR ENTIRE FACILITY).
6. ATTACH FLAT BAR WITH CONCRETE HIT ANCHORS SPACED 24" O.C.
7. 3" OF CONCRETE IS REQUIRED ON ALL SIDES FOR ATTACHMENT. ADJUST SIDEWALK DEPTH AS NECESSARY.
8. TRIM EXCESS LINER TO THE TOP OF THE FLAT BAR.
9. SECURE LINER TO BEEHIVE OVERFLOW INLET STRUCTURES USING STAINLESS STEEL SHEAR BANDS.



LINER ATTACHMENT - DETAIL



PIPE BOOT - DETAIL

<p>The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user.</p> <p>Note: All material and workmanship shall be in accordance with the City of Portland Standard Construction Specifications.</p>	 <p>Bureau of Environmental Services CITY OF PORTLAND, OREGON William Ryan <small>Digitally signed by William Ryan Date: 2020.09.11 09:34:56 -0700</small></p> <p>Chief Engineer</p>	Standard Drawing No.
	<p>LINER ATTACHMENT AND PIPE BOOT</p>	
	<p>Effective Date: 07-31-20</p> <p>Calc. Book No.: N/A</p> <p>Baseline Report Date: N/A</p>	<p>Standard Drawing No.</p> <p>P-340</p>