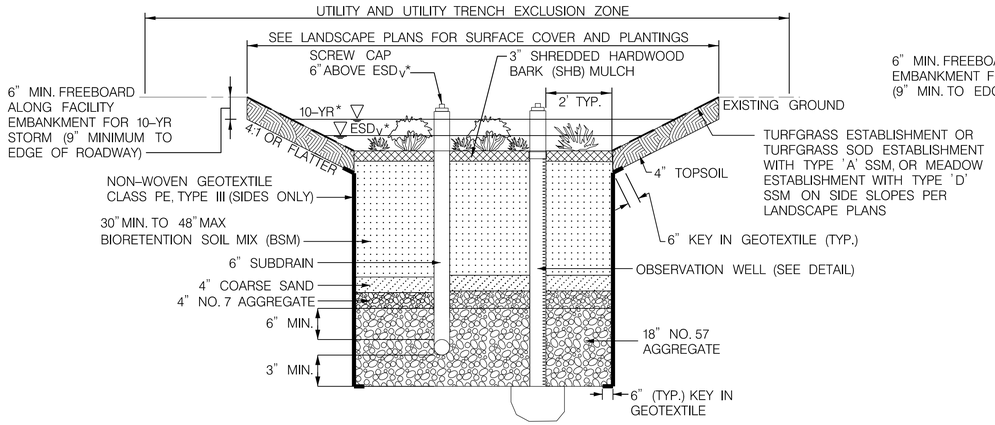
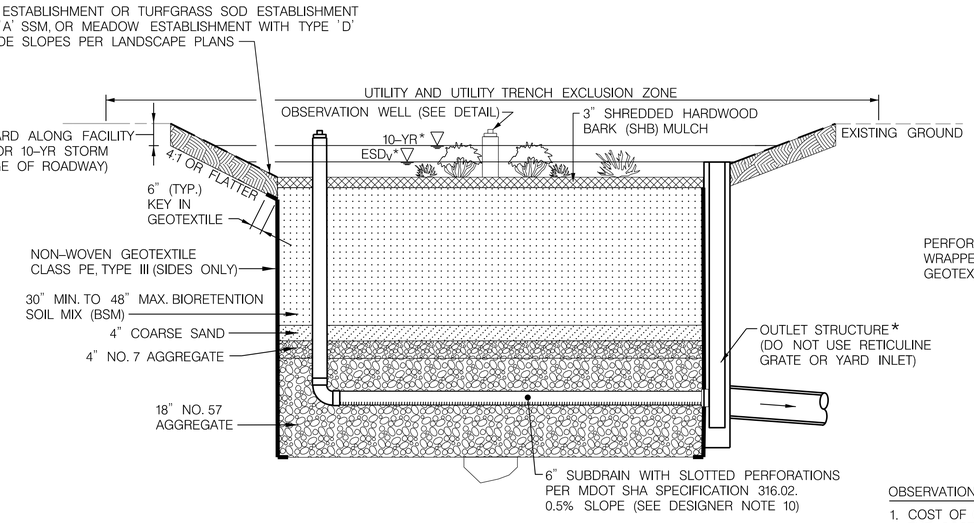


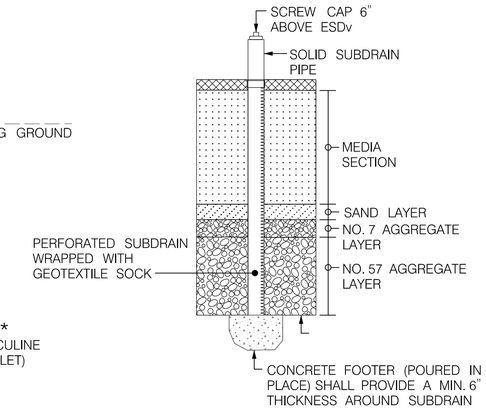
BIORETENTION TYPICAL SECTION

NOT TO SCALE



BIORETENTION PROFILE WITH PIPE OUTFALL

NOT TO SCALE

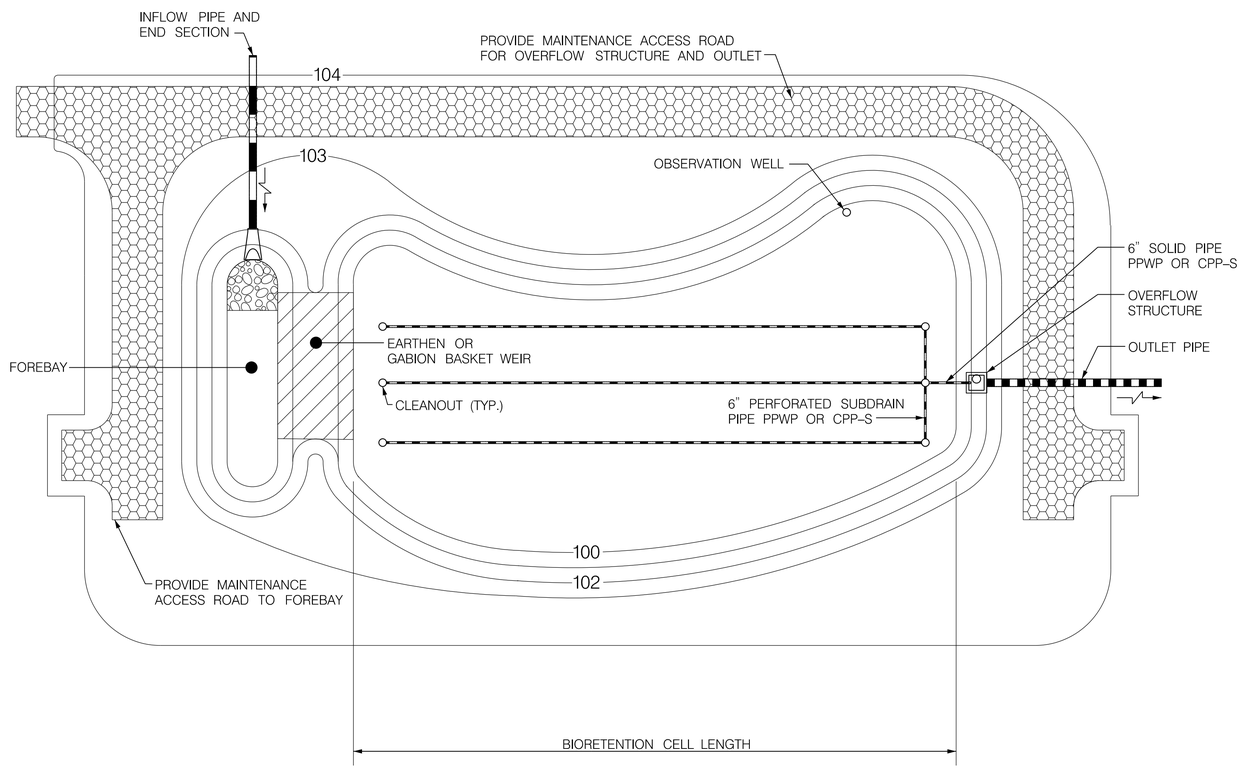


TYPICAL OBSERVATION WELL DETAIL

NOT TO SCALE

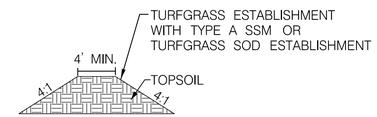
OBSERVATION WELL NOTES:

1. COST OF CONCRETE FOOTER AND GEOTEXTILE SOCK ARE INCIDENTAL TO THE COST OF THE SUBDRAIN ITEM AS USED FOR THE OBSERVATION WELL.
2. SEE SECTION 316 OF THE MDOT SHA STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS.



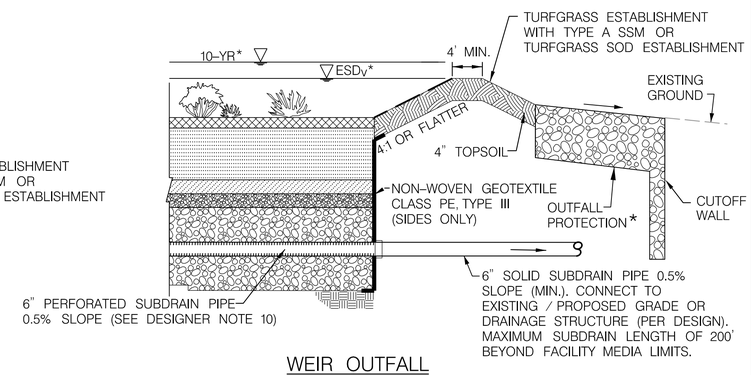
PLAN VIEW

NOT TO SCALE



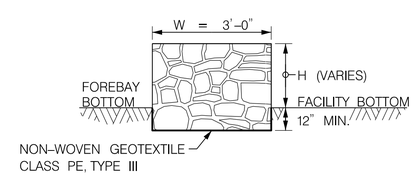
EARTHEN WEIR DETAIL

NOT TO SCALE



WEIR OUTFALL

NOT TO SCALE



GABION BASKET WEIR DETAIL

NOT TO SCALE

DESIGNER NOTES:

1. REFER TO SECTION 316 OF THE MDOT SHA STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS FOR MORE INFORMATION.
2. INCLUDE SWMFAC NUMBER ON SWM SHEETS.
3. MAX. ESDv DEPTH: 12'.
4. UTILITY (INCLUDING GUY-WIRES) AND UTILITY TRENCH EXCLUSION ZONE EXTENDS A MINIMUM OF 10 FEET FROM THE BOTTOM OF MEDIA. 10 FEET FROM TOP OF EMBANKMENT IS PREFERABLE.
5. SUBDRAIN TO CONNECT TO INLET OR OUTFALL OVERFLOW. PROVIDE RODENT SCREEN WHEN SUBDRAIN IS AN OPEN OUTFALL.
6. PLANT FACILITY SURFACE WITH AT LEAST THREE SPECIES FROM THE APPROVED PLANTING LIST.
7. DO NOT PLACE SEED, SOD, OR SSM ON THE BOTTOM SURFACE OF FACILITY.
9. ALL SUBDRAINS, CLEANOUTS, OBSERVATION WELLS, AND OUTFALLS SHOULD BE SHOWN IN PLAN VIEW DRAWINGS.
10. THE PREFERRED SLOPE OF LONGITUDINAL SUBDRAIN PIPE IS 0.5%. FLATTER SLOPES MAY BE ACCEPTED WITH APPROVAL FROM THE HIGHWAY HYDRAULICS DIVISION. THE NO. 57 AGGREGATE LAYER MAY NEED TO EXTEND DEEPER THAN 18" FOR LENGTHY SUBDRAIN PIPES.
11. IF A GABION BASKET WEIR IS SPECIFIED, THE DESIGNER MUST INCLUDE THE FOLLOWING NOTE ON THE SWM PLANS FOR THE FACILITY:
THE GABION BASKET WEIR WILL NOT BE MEASURED BUT WILL BE INCIDENTAL TO THE AGGREGATE ITEMS FOR THE SWM FACILITY.

*DETERMINE BY DESIGN

MARYLAND DEPARTMENT OF TRANSPORTATION

STATE HIGHWAY ADMINISTRATION

DESIGN GUIDANCE DRAWING
F-6 BIORETENTION

REVISION DATE: JUNE 1, 2022

*** NOTE: THIS DRAWING IS ONLY TO BE USED AS A DESIGN GUIDE AND IS NOT A SUBSTITUTE FOR PROJECT-SPECIFIC PROFILES AND SECTIONS IN CONTRACT DOCUMENTS***