WITHOUT UNDERDRAIN WITH UNDERDRAIN

STABILIZE INLET (SEE NOTE 7)

2'-0" MIN

FOR PARKING LOTS, RAISED TIRE STOPS OR CURBS W/CUTS (SEE STD. DTL. NDP-10)

TOP WIDTH VARIES

3:1 SIDE SLOPES (TYP.)

INLET ELEVATION

3" DEPTH COMPOST MULCH

12"x12" CLEAR FLOW AREA AT CUTOUTS

FREEBOARD (SEE NOTE 3)

PONDING ZONE (SEE NOTE 2)

BOTTOM WIDTH 1' MIN

6"MIN

2"-12" MAX.

BIORETENTION SOIL MIX, 12" MIN. SEE NOTE 5

DETENTION/FILTER LAYER: 12" - 36" (SEE NOTE 4)

6"-8" UNDERDRAIN (SEE NOTE 9)

1' MIN

RETENTION ZONE 12"-36" (SEE NOTE 9)

GEOTEXTILE (IF DIRECTED BY ENGINEER)

NATIVE SOILS

GEOTEXTILE OR LINER (IF DIRECTED BY ENGINEER)

AGGREGATE (VARIES WITH UNDERDRAIN PIPE SELECTED) (SEE NOTE 5)
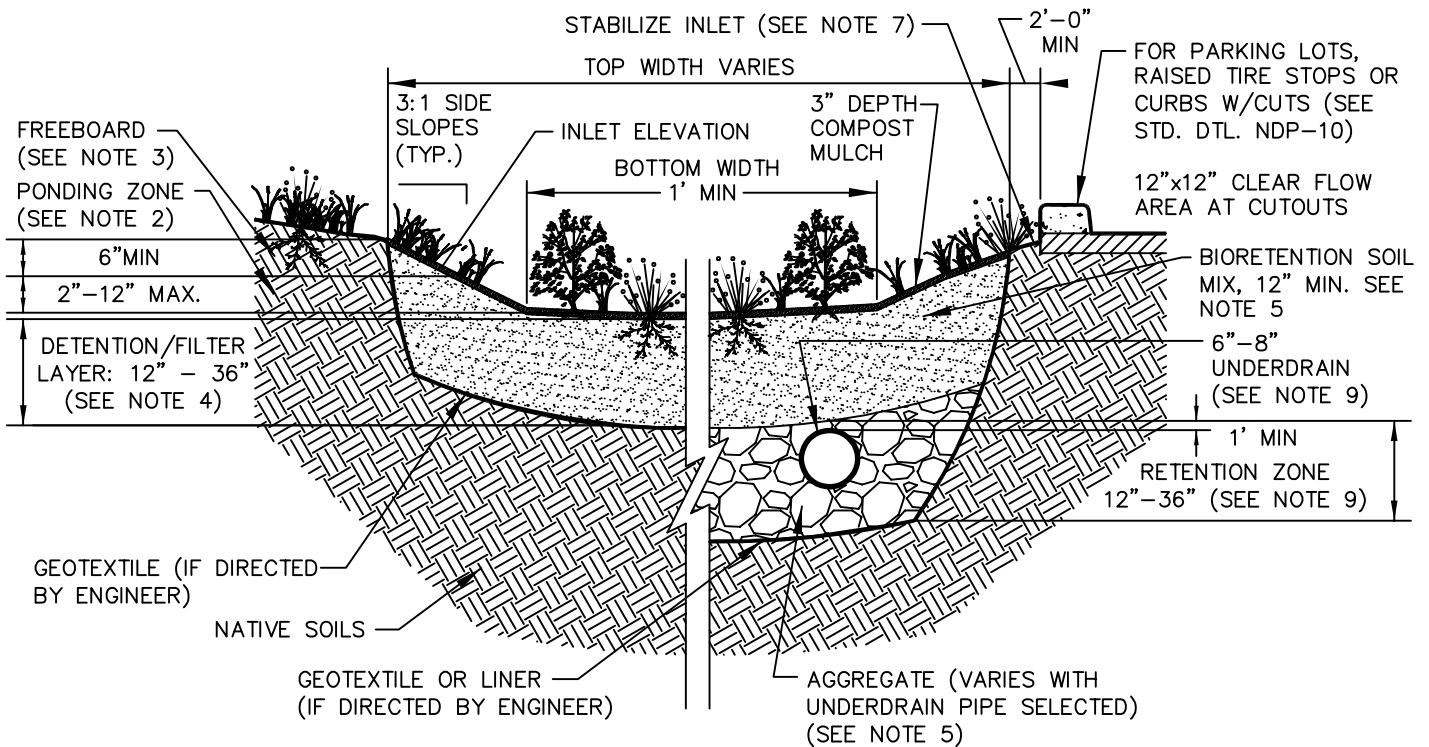
NOTES:

1. PROVIDE PROTECTION FROM ALL VEHICLE TRAFFIC, EQUIPMENT STAGING, AND FOOT TRAFFIC IN PROPOSED INFILTRATION AREAS PRIOR TO, DURING, AND AFTER CONSTRUCTION.

2. DIMENSIONS:
   A. PONDING ZONE (FROM TOP OF GROWING MEDIUM TO OVERFLOW ELEVATION); 2"-6" MINIMUM AND 12" MAXIMUM DEPENDING ON INFILTRATION RATE AND DEVELOPMENT TYPE.
   B. FLAT BOTTOM WIDTH: 1' MINIMUM.
   C. PLANTED SIDE SLOPES OF BASIN: 2.5:1 MAXIMUM ADJACENT TO SIDEWALK, 4:1 MAXIMUM FOR SHEET FLOW INLET.

3. OVERFLOW:
   A. OVERFLOW REQUIRED (PIPE OR OVERLAND) SEE STANDARD DETAILS NDP-6, 7 & 8.
   B. INLET ELEVATION MUST ALLOW FOR 6" OF FREEBOARD, MINIMUM.
   C. PROTECT OVERFLOW INLET FROM DEBRIS AND SEDIMENT WITH STRAINER OR GRATE (PIPE ONLY).
   D. DISCHARGE PER CITY OF BELLEVUE ENGINEERING STANDARDS.

4. BIORETENTION SOIL MIX:
   A. 18" MINIMUM DEPTH, FOR ON-SITE STORMWATER MANAGEMENT (MR 5) OR RUNOFF TREATMENT (MR 6).
   B. 12" MINIMUM DEPTH FOR FLOW CONTROL.
   C. COMPACT SUBSOILS MUST BE SCARIFIED TO 6" BELOW THE BIORETENTION SOIL LAYER.

5. SEE CHAPTER D6-05 FOR ALL MATERIALS AND SPECIFICATIONS.

6. VEGETATION:
   A. FLOOR OF PLANTING ISLAND SHOULD BE PLANTED WITH ZONE 1 HERBACEOUS, EMERGENTS, SHRUBS, AND GROUND COVER. SEE APPENDIX 1 IN THE *LID TECHNICAL GUIDANCE MANUAL FOR PUGET SOUND* (2012 OR AS AMENDED).
   B. SIDE SLOPES SHOULD BE PLANTED WITH ZONE 2 OR 3 PLANTS.
   C. USE AT LEAST 3 SPECIES OF EACH PLANT COVER TYPE, NOT INCLUDING TREES.

7. INSTALL APPROXIMATELY 6" THICK LAYER WASHED DRAIN ROCK OR STREAMED COBBLE PER WSDOT 9-03.11(2) (2"-4" MIN) TO TRANSITION FROM INLET OR SPLASH PAD TO BIORETENTION SOIL MIX TO DISSIPATE ENERGY AND/OR DISPERSE FLOW.

8. INSTALL OBSERVATION PORT PER STANDARD DETAIL NDP-9, IF FLOW CONTROL (MR 7) AND OR RUNOFF TREATMENT (MR6) IS REQUIRED.

9. RETENTION ZONE OPTIONAL - REQUIRED WITH UNDERDRAIN AND IF NATIVE SOIL INFILTRATION RATE IS LESS THAN 0.3"/HOUR. SEE STANDARD DETAIL NDP-3, DETAIL A.

City of Bellevue

STORM AND SURFACE WATER UTILITY

TITLE

BIORETENTION CELL

NO. NDP-2

JANUARY 2020   NO SCALE