

**DESIGN NOTES:**

1. IT IS THE RESPONSIBILITY OF THE DESIGN ENGINEER TO SIZE, DESIGN AND DETAIL ALL EDB STRUCTURES, INCLUDING REINFORCING STEEL GRATING, ORIFICE PLATE, WELL SCREEN, HINGED OPENING FOR ACCESS AND ALL METAL WORK CONNECTIONS.
2. A STANDARD EDB MAY BE USED FOR SITES WITH A TRIBUTARY AREA OF 5 ACRES UP TO 1 SQUARE MILE.
3. EDB MAY PROVIDE WQCV AND FULL-SPECTRUM DETENTION (EURV AND 100-YEAR) IN A SINGLE FACILITY, OR THESE MAY BE SPLIT BETWEEN SEPARATE FACILITIES.
4. ACCESS IS REQUIRED TO FOREBAY, OUTLET AND SPILLWAY. SEE MAINTENANCE ACCESS ON THE GENERAL DETAILS SHEET.
5. FOREBAY, TRICKLE CHANNEL AND MICPOOL MUST ALL BE CONCRETE (NOT VEGETATED OR SOFT BOTTOMED).
6. THE MINIMUM TRICKLE CHANNEL LONGITUDINAL SLOPE IS 0.5%.
7. THE DISTANCE BETWEEN THE INLET(S) AND OUTLET SHALL BE MAXIMIZED TO MINIMIZE SHORT CIRCUITING. THE BASIN LENGTH (MEASURED ALONG THE FLOW PATH FROM THE INLET TO THE OUTLET) TO WIDTH RATIO SHOULD BE A MINIMUM OF 2:1.
8. OVERFLOW EMBANKMENT (EMERGENCY SPILLWAY) SHALL BE DESIGNED PER USDCM CHAPTER 12.
9. THE OUTLET STRUCTURE SHALL BE LOCATED IN THE EMBANKMENT OF THE EDB. THE MICPOOL SHALL BE DIRECTLY IN FRONT OF OR INTEGRATED WITH THE STRUCTURE (SEE OUTLET STRUCTURE DETAILS).
10. PROVIDE AN INITIAL SURCHARGE VOLUME ABOVE THE MICPOOL FOR FREQUENT EVENTS (SEE OUTLET STRUCTURE DETAILS).
11. HANDRAIL IS RECOMMENDED FOR USE ADJACENT TO COARSE GRATING AND/OR WHERE PEDESTRIAN TRAFFIC IS IN CLOSE PROXIMITY TO THE OUTLET STRUCTURE. IT IS THE RESPONSIBILITY OF THE DESIGN ENGINEER TO DETERMINE WHETHER HANDRAIL IS TO BE USED.
12. THE WELL SCREEN MAY BE OMITTED FROM THE OUTLET STRUCTURE IF THE CONTROL ORIFICES ARE 2.5 INCHES IN DIAMETER OR 2 INCHES SQUARE OR GREATER.
13. EDBS SHALL BE VEGETATED WITH SEMSWA'S STANDARD SEED MIXES. ROCK AND MULCH ARE NOT PERMITTED WITHIN AN EDB. SHRUBS AND TREES MAY BE PLANTED ABOVE THE EURV WATER SURFACE.
14. OUTLET MODIFICATION AND FLOOD HAZARD WARNING SIGNS SHALL BE PROVIDED AND MEET THE REQUIREMENTS ON THE GENERAL DETAILS SHEET.

**CONSTRUCTION NOTES: (INCLUDE ON CONSTRUCTION DRAWINGS)**

1. TEMPORARY IRRIGATION IS REQUIRED FOR ALL EDBS TO AID IN ESTABLISHING VEGETATION. IRRIGATION HEADS SHALL BE PLACED ABOVE THE EURV AND LOCATED TO ENSURE COMPLETE COVERAGE.

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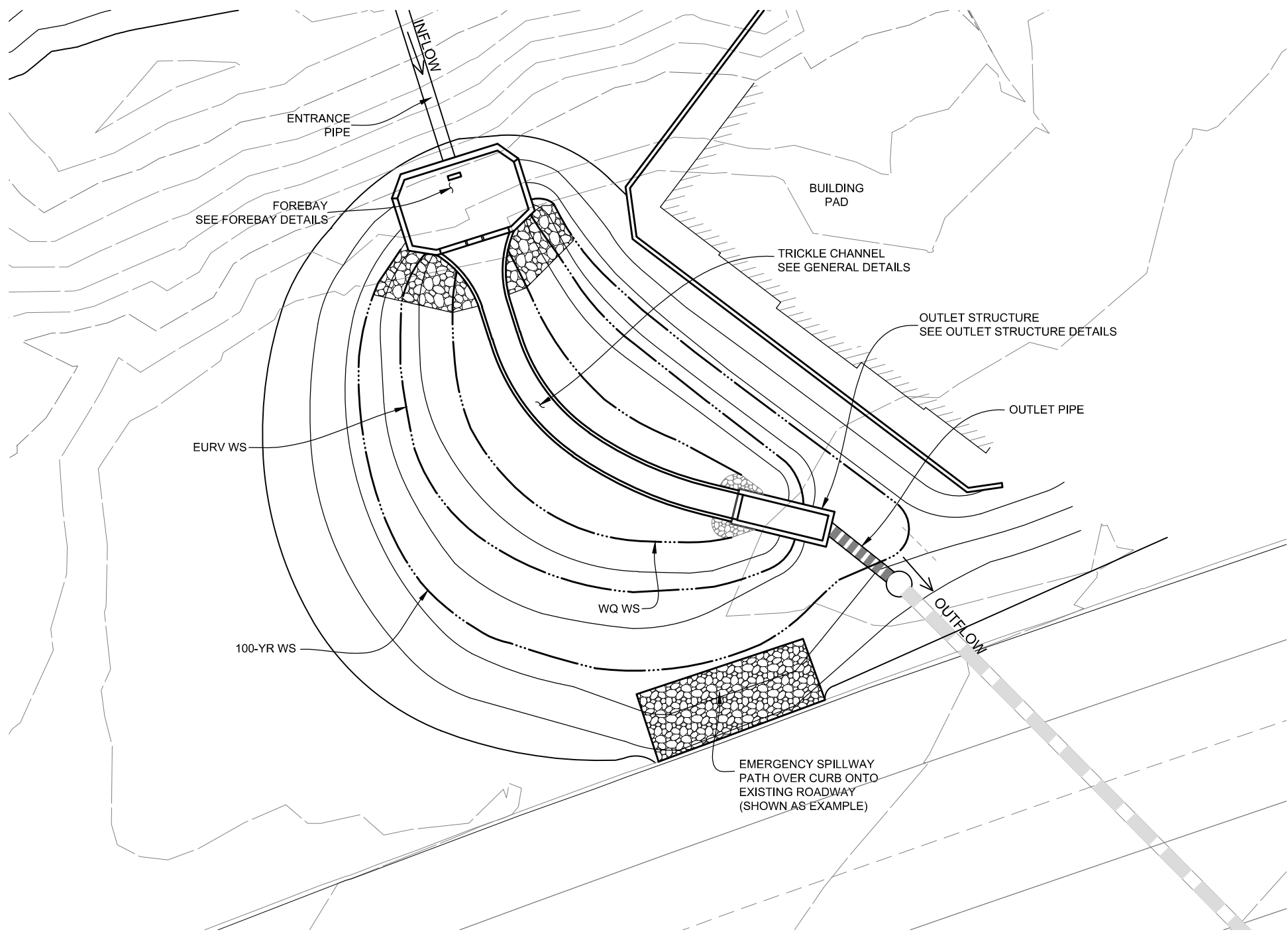


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**EXAMPLE PLAN**  
**EXTENDED DETENTION**  
**BASIN**

SHEET  
 1 OF 1

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**DESIGN NOTES:**

1. IT IS THE RESPONSIBILITY OF THE DESIGN ENGINEER TO SIZE, DESIGN AND DETAIL ALL MEDB STRUCTURES, INCLUDING REINFORCING STEEL GRATING, ORIFICE PLATE, WELL SCREEN, HINGED OPENING FOR ACCESS AND ALL METAL WORK CONNECTIONS.
2. A MODIFIED EDB (MEDB) MAY BE USED FOR SITES WITH A TRIBUTARY AREA GREATER THAN 1 ACRE AND LESS THAN 5 ACRES.
3. MEDB MAY PROVIDE WQCV AND FULL-SPECTRUM DETENTION (EURV AND 100-YEAR) IN A SINGLE FACILITY, OR THESE MAY BE SPLIT BETWEEN SEPARATE FACILITIES.
4. A HARD SURFACE MAINTENANCE ACCESS IS REQUIRED TO THE MEDB OUTLET STRUCTURE VIA SIDEWALK, PARKING LOT OR OTHER FORMALIZED PATH.
5. FOREBAY AND MICROPOL MUST BE CONCRETE. A MEDB TRICKLE CHANNEL MAY BE CONCRETE OR VEGETATED. CONCRETE TRICKLE CHANNELS SHALL BE CONSTRUCTED AT A MINIMUM LONGITUDINAL SLOPE OF 0.5%. VEGETATED TRICKLE CHANNELS ARE ONLY ALLOWED IN STABLE TRIBUTARY AREAS AND MUST BE CONSTRUCTED WITH A 1.5-FOOT DEPTH IN ACCORDANCE WITH VOLUME 3 OF THE USDCM.
6. THE DISTANCE BETWEEN THE INLET(S) AND OUTLET SHALL BE MAXIMIZED TO MINIMIZE SHORT CIRCUITING. THE BASIN LENGTH (MEASURED ALONG THE FLOW PATH FROM THE INLET TO THE OUTLET) TO WIDTH RATIO SHOULD BE A MINIMUM OF 2:1.
7. OVERFLOW EMBANKMENT (EMERGENCY SPILLWAY) SHALL BE DESIGNED PER USDCM CHAPTER 12.
8. THE OUTLET STRUCTURE SHALL BE LOCATED IN THE EMBANKMENT OF THE MEDB. THE MICROPOL SHALL BE DIRECTLY IN FRONT OF OR INTEGRATED INTO THE STRUCTURE (SEE OUTLET STRUCTURE DETAILS).
9. PROVIDE AN INITIAL SURCHARGE VOLUME ABOVE THE MICROPOL FOR FREQUENT EVENTS (SEE OUTLET STRUCTURE DETAILS).
10. HANDRAIL IS RECOMMENDED FOR USE ADJACENT TO COARSE GRATING AND/OR WHERE PEDESTRIAN TRAFFIC IS IN CLOSE PROXIMITY TO THE OUTLET STRUCTURE. IT IS THE RESPONSIBILITY OF THE DESIGN ENGINEER TO DETERMINE WHETHER HANDRAIL IS TO BE USED.
11. THE WELL SCREEN MAY BE OMITTED FROM THE OUTLET STRUCTURE IF THE CONTROL ORIFICES ARE 2.5 INCHES IN DIAMETER OR 2 INCHES SQUARE OR GREATER.
12. MEDBS SHALL BE VEGETATED WITH SEMSWA'S STANDARD SEED MIXES. ROCK AND MULCH ARE NOT PERMITTED WITHIN A MEDB. SHRUBS MAY BE PLANTED ABOVE THE EURV WATER SURFACE AND TREES ABOVE THE 100-YEAR WATER SURFACE.
13. OUTLET MODIFICATION AND FLOOD HAZARD WARNING SIGNS SHALL BE PROVIDED AND MEET REQUIREMENTS ON THE GENERAL DETAILS SHEET.

**CONSTRUCTION NOTES: (INCLUDE ON CONTRUCTION DRAWINGS)**

1. PERMANENT IRRIGATION IS REQUIRED FOR ALL MEDBS. IRRIGATION HEADS SHALL BE PLACED ABOVE THE EURV AND LOCATED TO ENSURE COMPLETE COVERAGE.

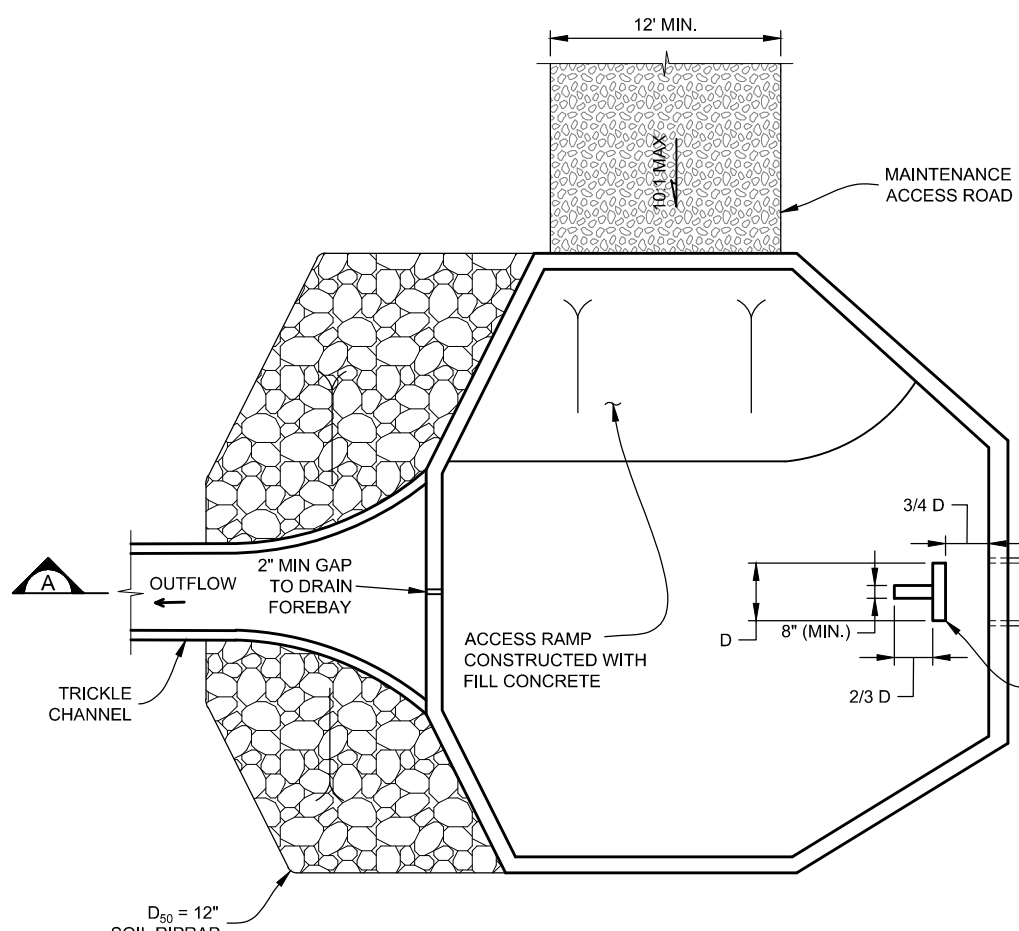
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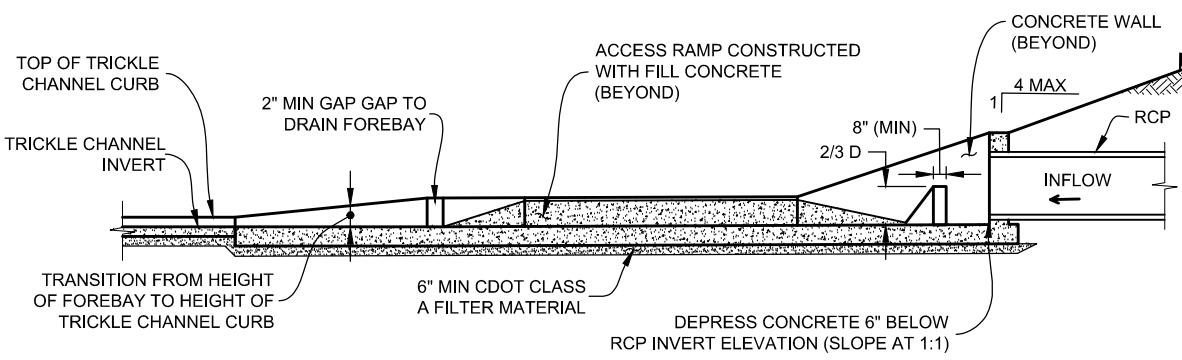
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**EXAMPLE PLAN 1**  
**MODIFIED EXTENDED**  
**DETENTION BASIN**

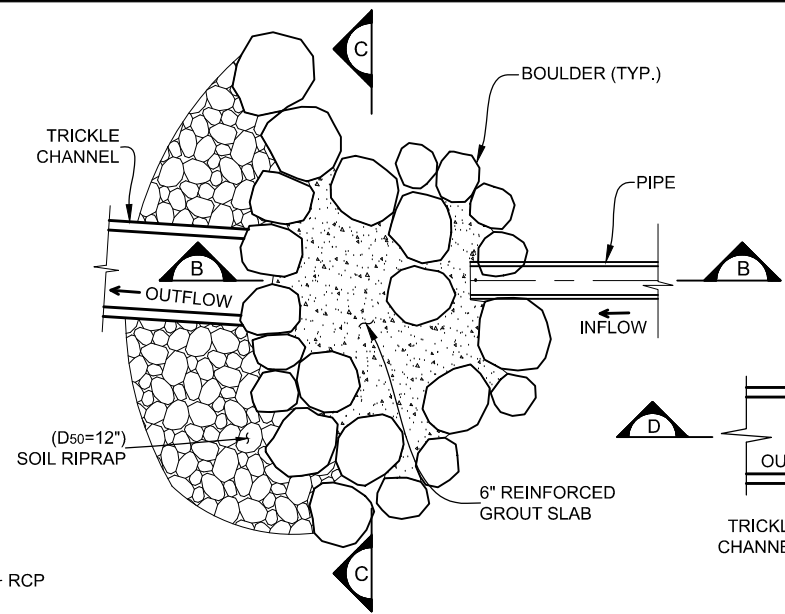
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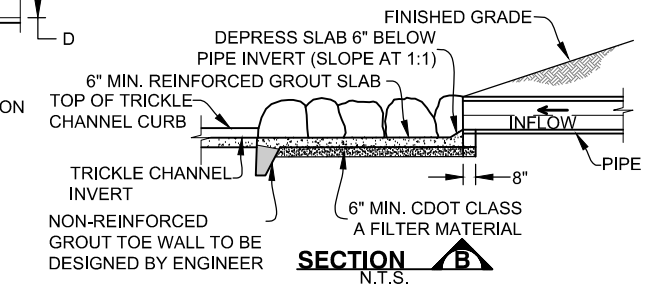
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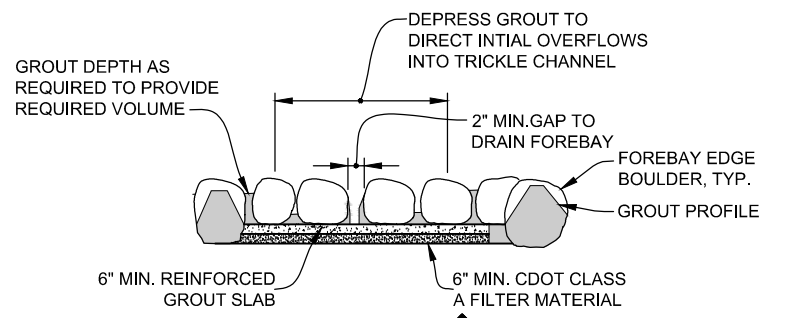
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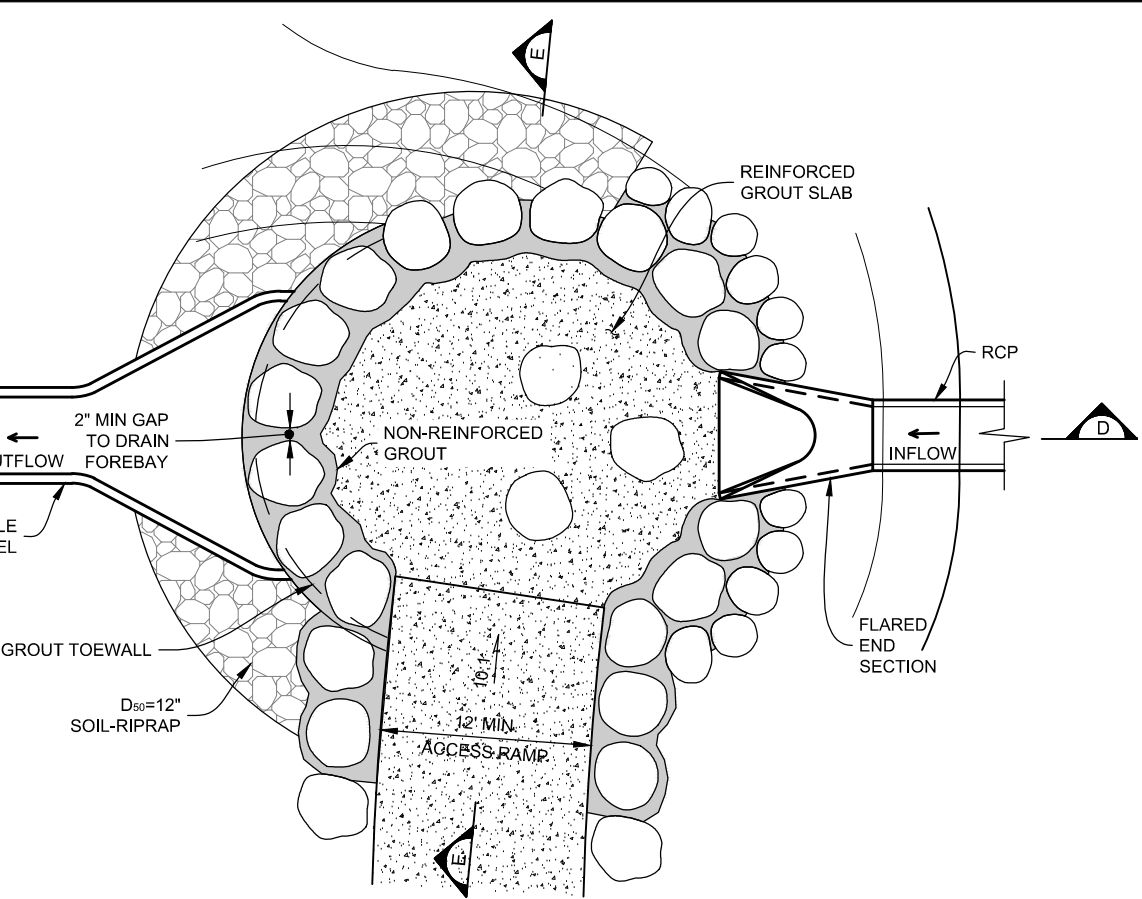
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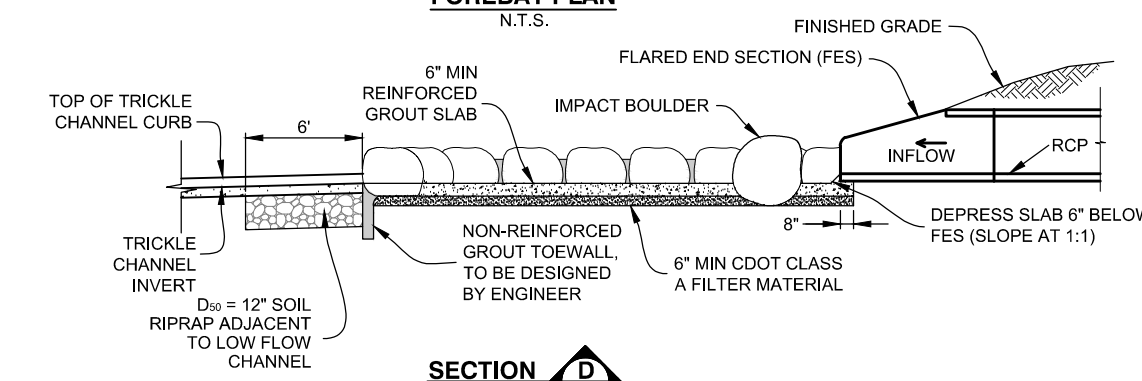
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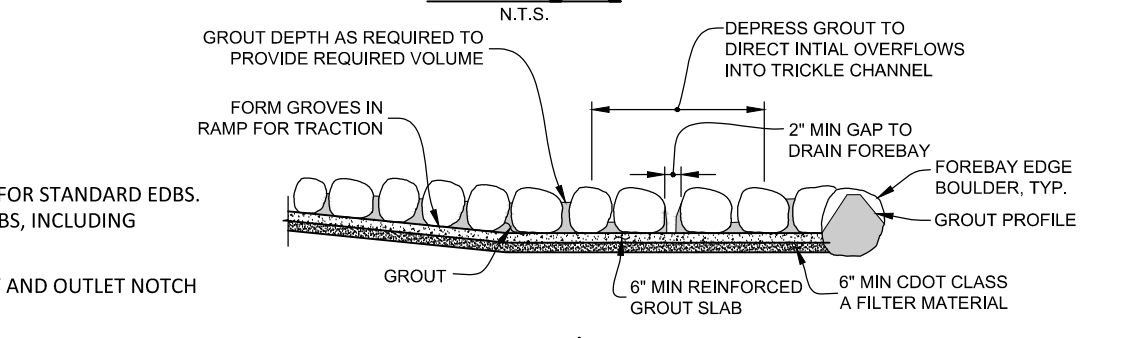
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**FOREBAY PLAN**  
N.T.S.



**SECTION D**  
N.T.S.



**SECTION E**  
N.T.S.

**MEDB - BOULDER LINED FOREBAY**  
N.T.S.

**FOREBAY DESIGN NOTES:**

1. CONCRETE FOREBAY SHOWN INCLUDES ACCESS RAMP AS REQUIRED FOR STANDARD EDBS. THIS DETAIL SHALL BE MODIFIED AS APPROPRIATE FOR MODIFIED EDBS, INCLUDING REMOVAL OF THE ACCESS RAMP.
2. IT IS THE RESPONSIBILITY OF THE DESIGN ENGINEER TO SIZE FOREBAY AND OUTLET NOTCH (GAP) IN ACCORDANCE WITH USDCM VOLUME 3.
3. OUTLET NOTCH SHALL EXTEND TO BOTTOM ELEVATION OF FOREBAY TO ALLOW FOREBAY TO COMPLETELY DRAIN.
4. ALL CONCRETE SHALL BE REINFORCED, CAST-IN-PLACE AND DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER. THE ENGINEER SHALL DESIGN AND DETAIL CONCRETE THICKNESS, REBAR AND COLD JOINT CONNECTIONS (WHEN MULTIPLE CONCRETE POURS ARE REQUIRED).
5. ALL DIMENSIONS PROVIDED ON DETAILS SHALL BE CONSIDERED MINIMUMS.

**EDB BOULDER LINED FOREBAY**  
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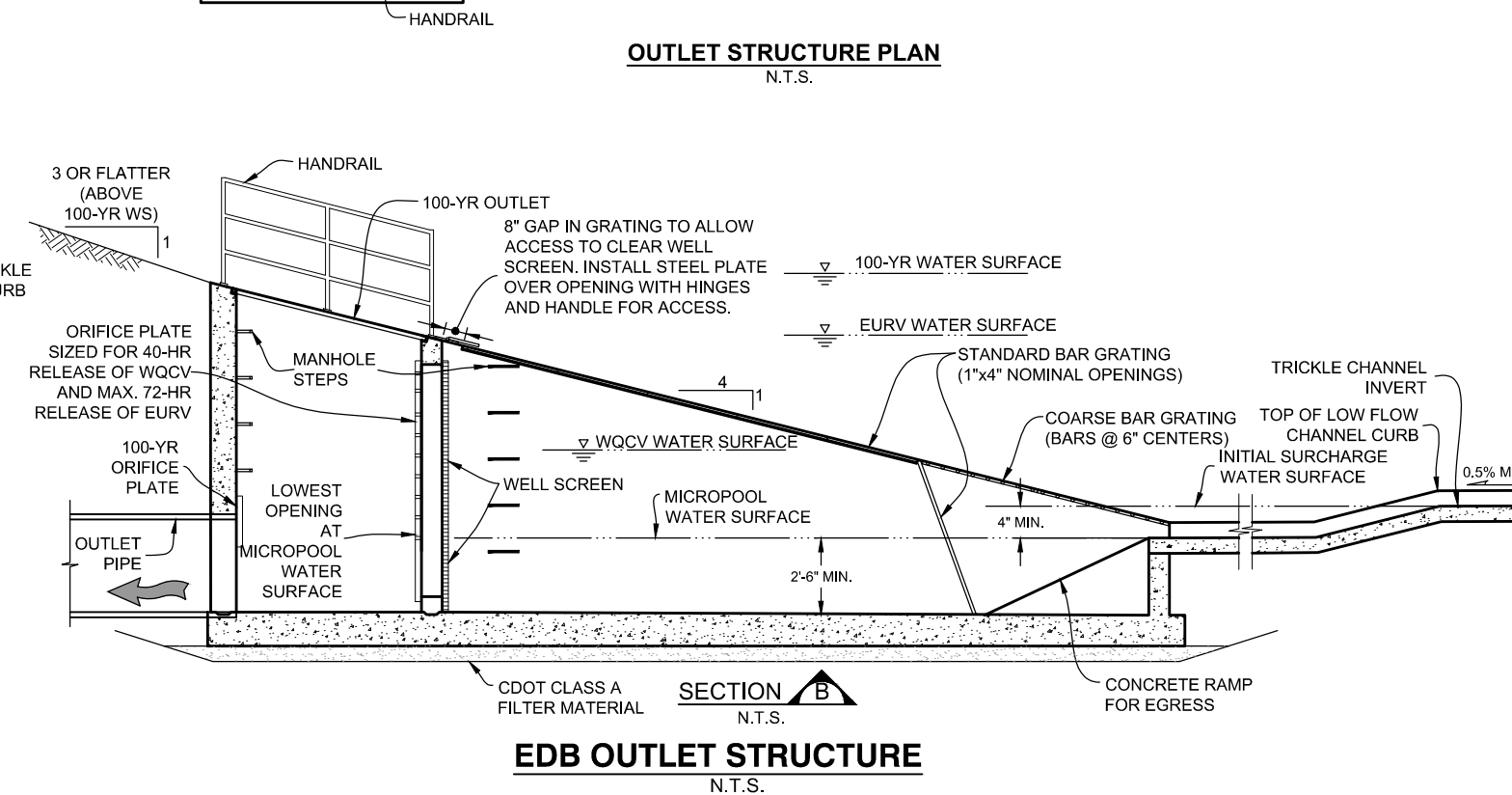
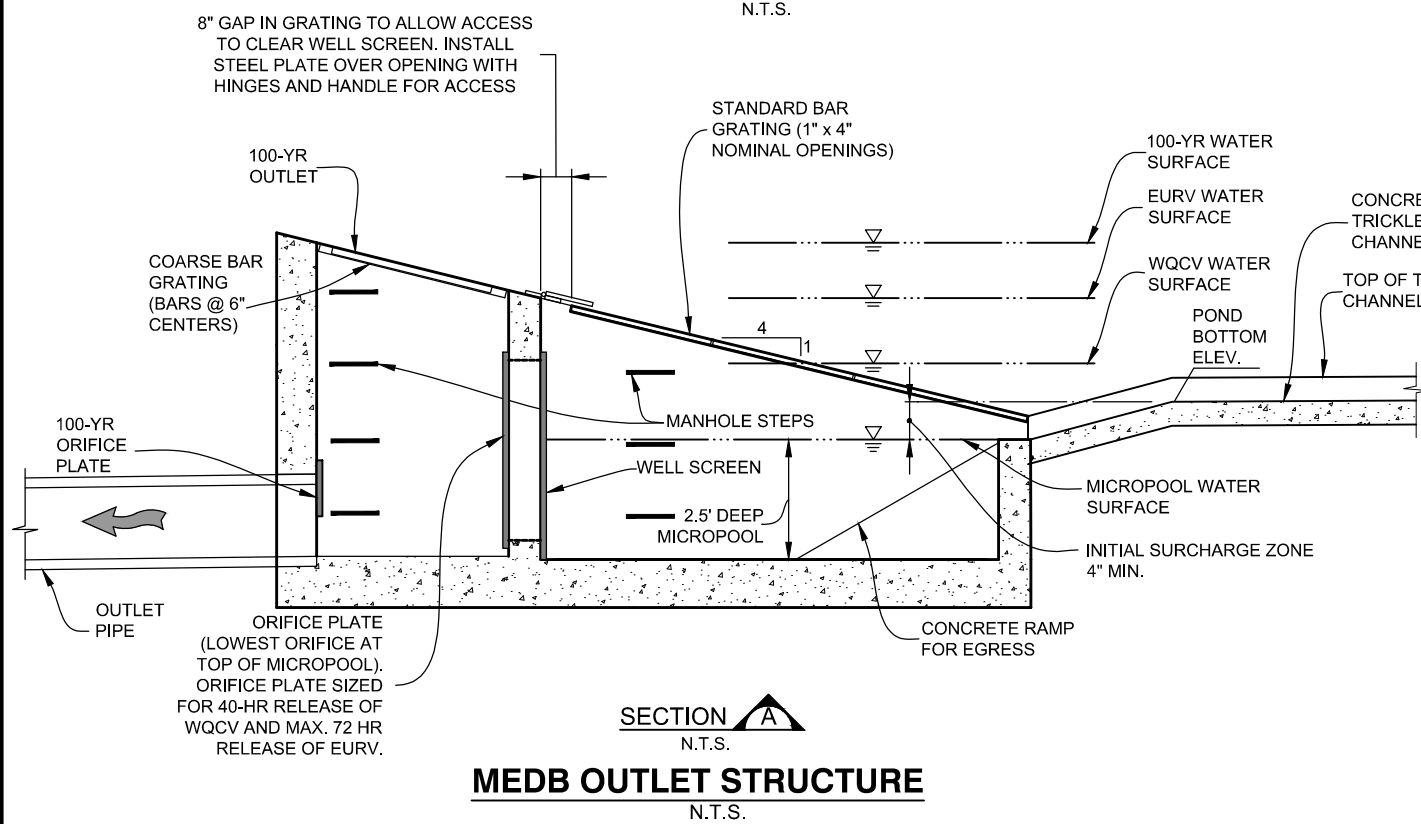
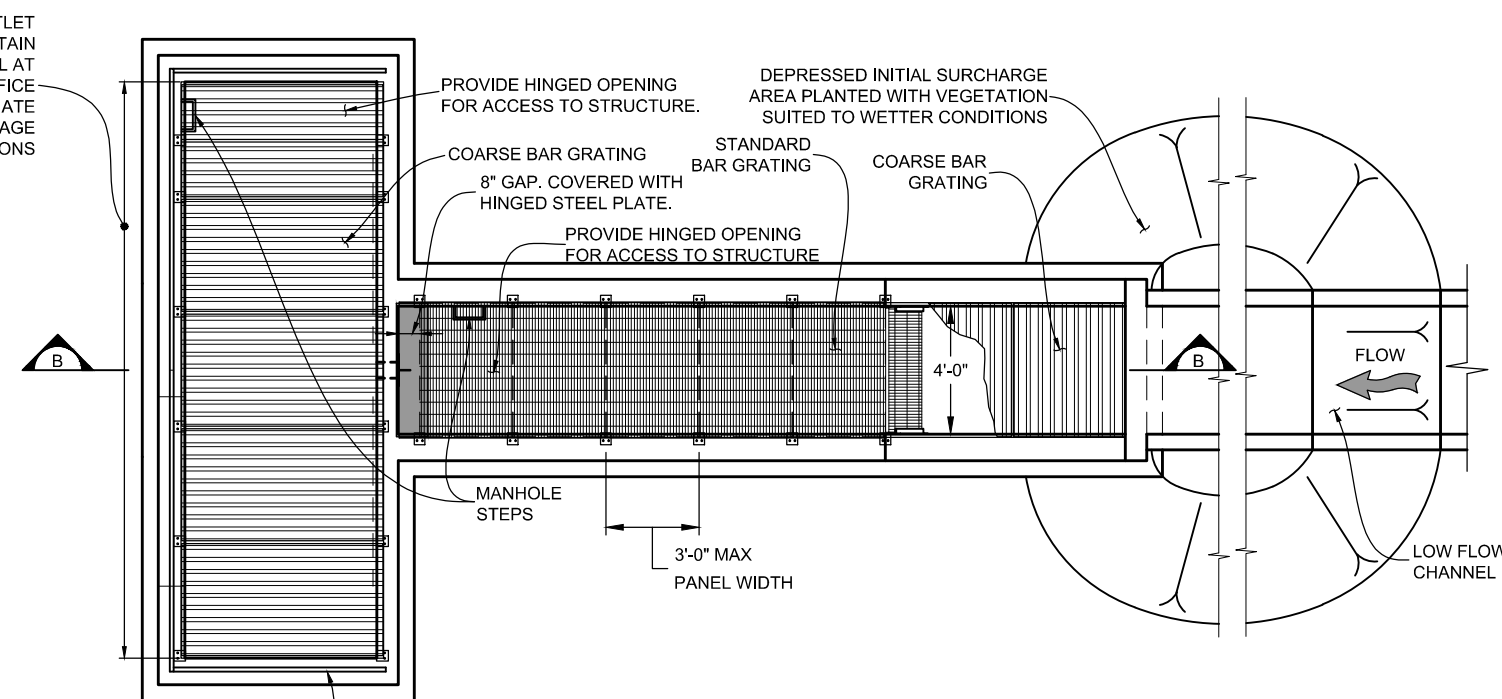
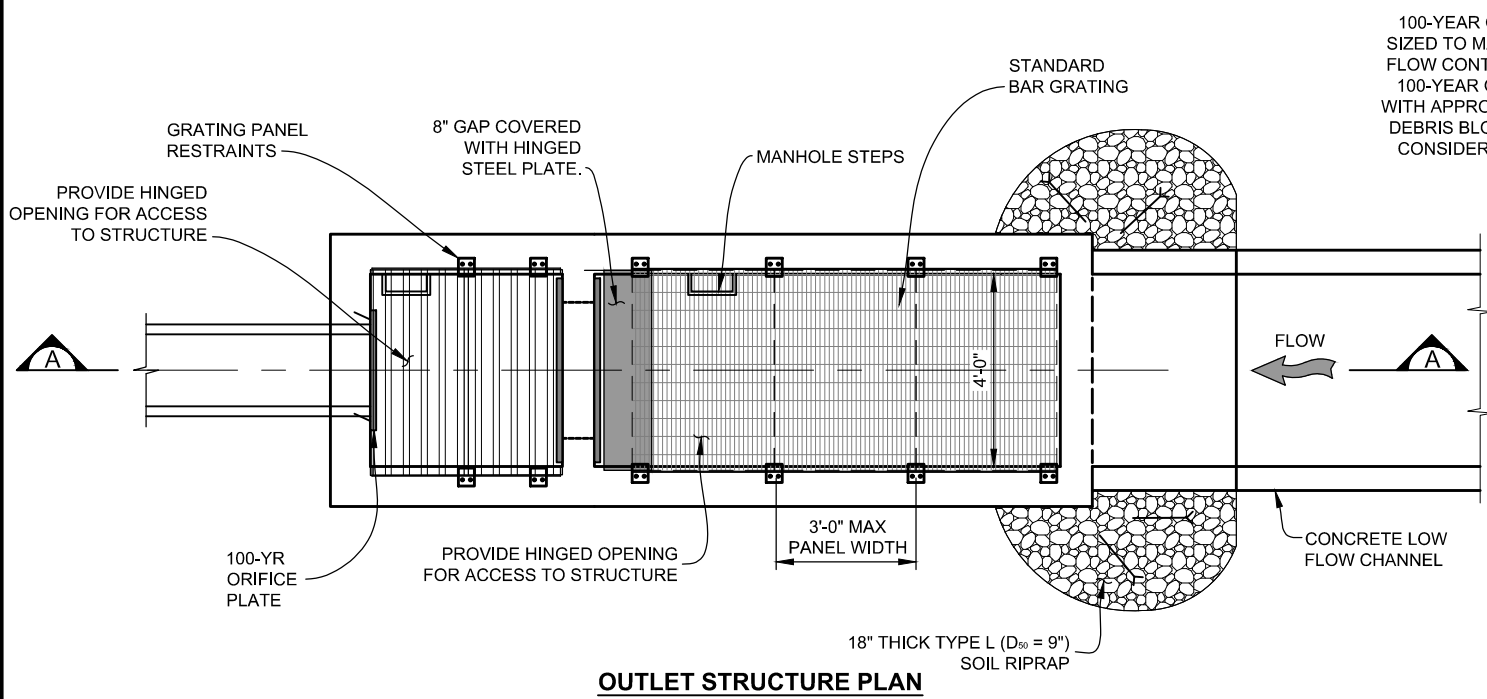
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**FOREBAY DETAILS**



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**MODIFIED EXTENDED DETENTION BASIN AND EXTENDED DETENTION BASIN**

**OUTLET STRUCTURE DETAILS**

**SHEET 1 OF 1**