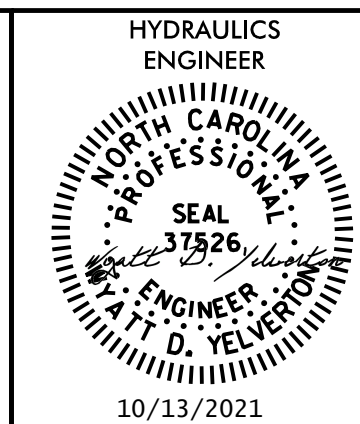
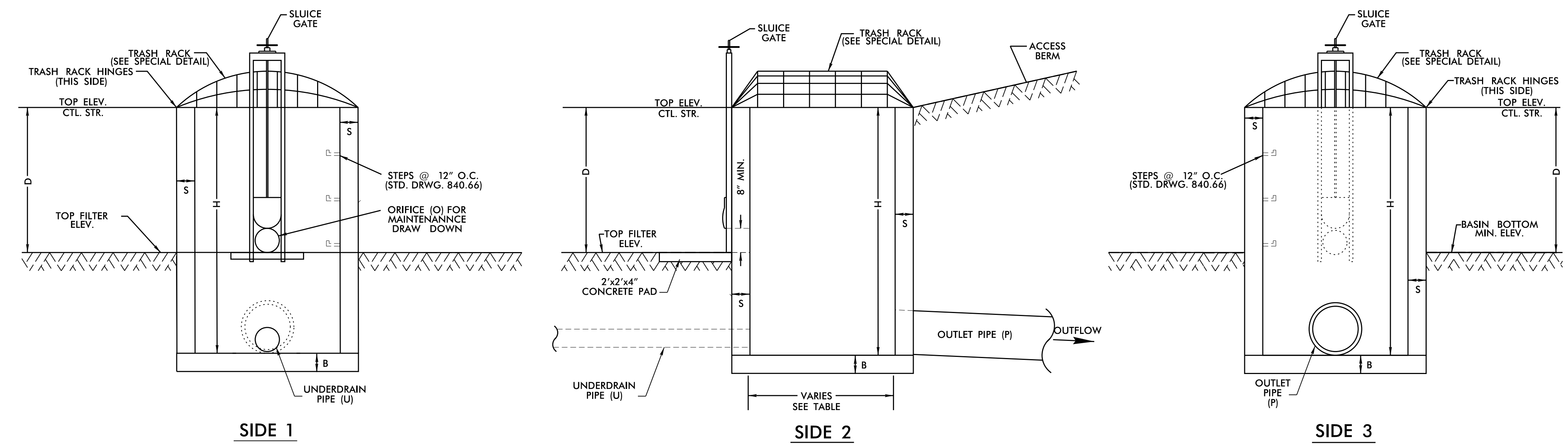


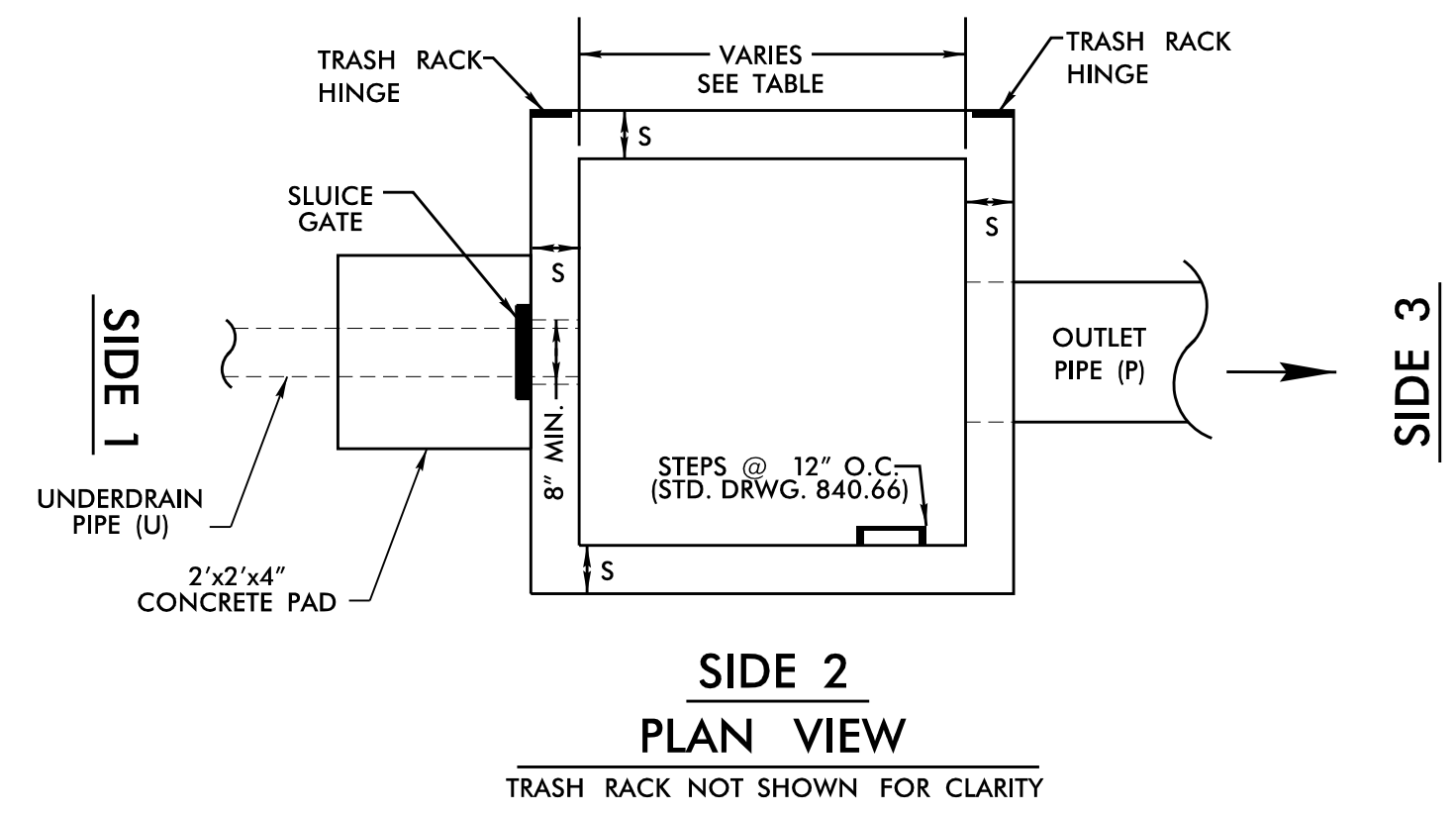
PROJECT REFERENCE NO.	SHEET NO.
U-2579AB	2D-4
RW SHEET NO.	
	
 HDR Engineering, Inc. of the Carolinas 555 Fayetteville St. Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116	

## OUTLET CONTROL STRUCTURE

\*NOT TO SCALE\*



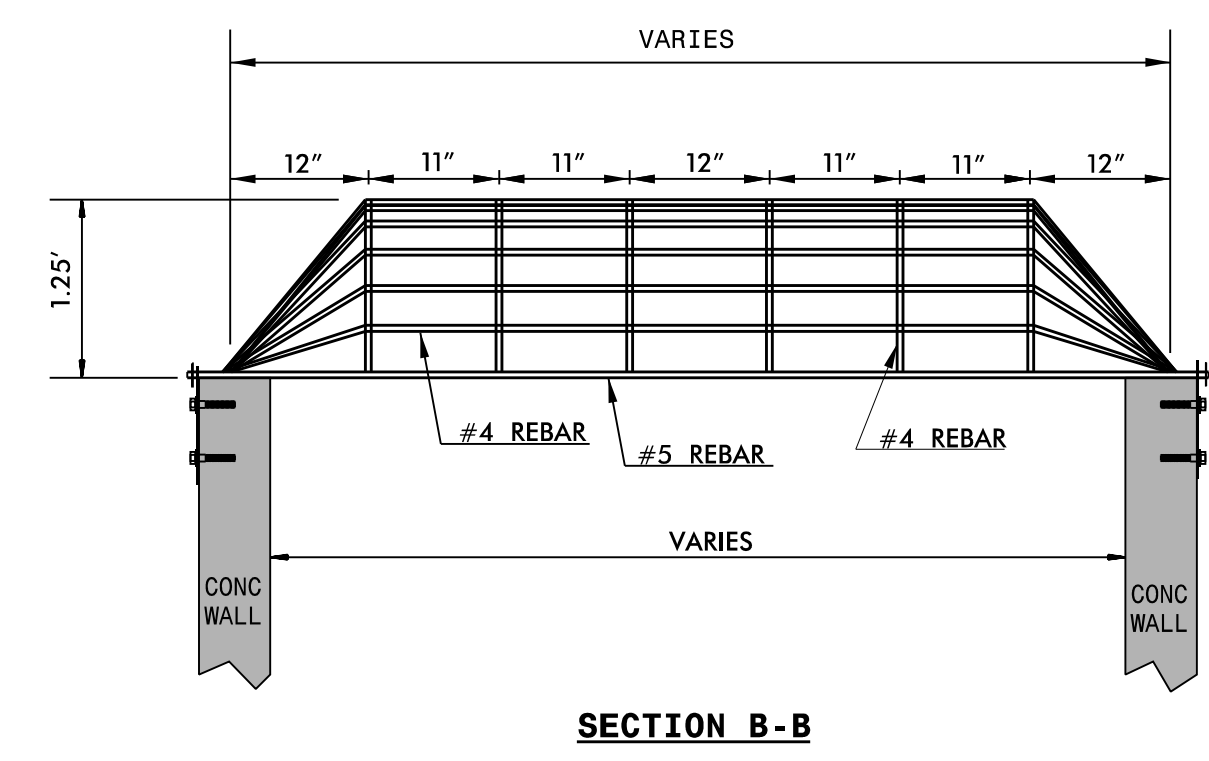
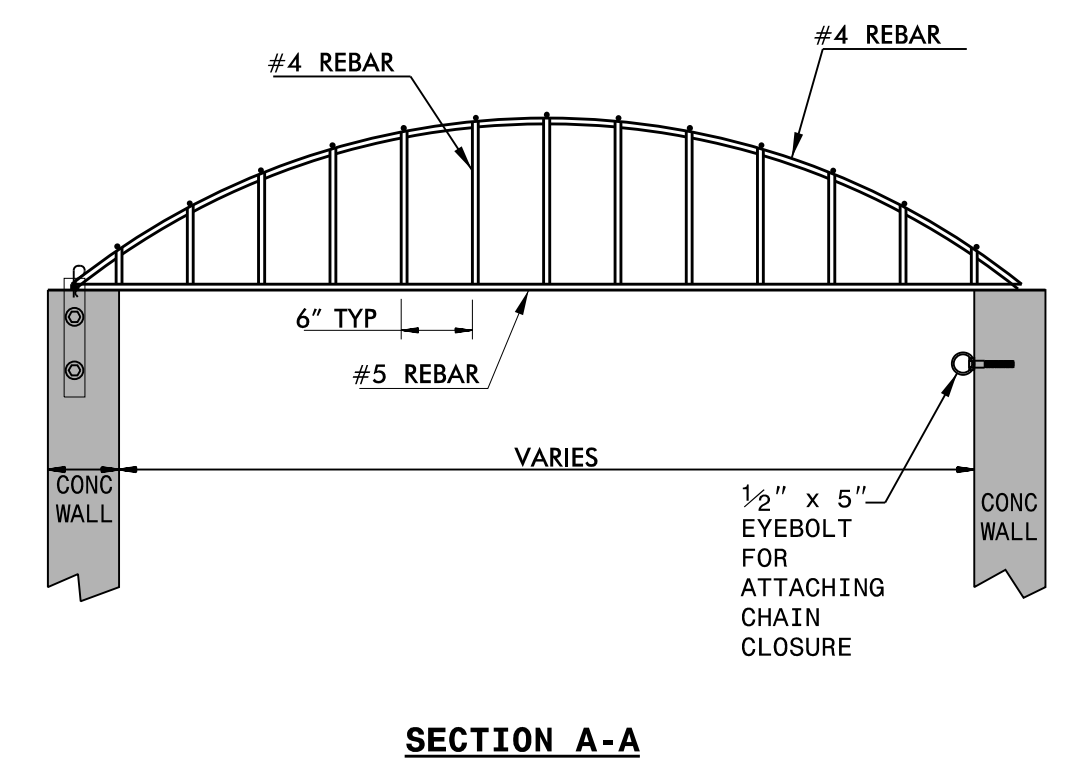
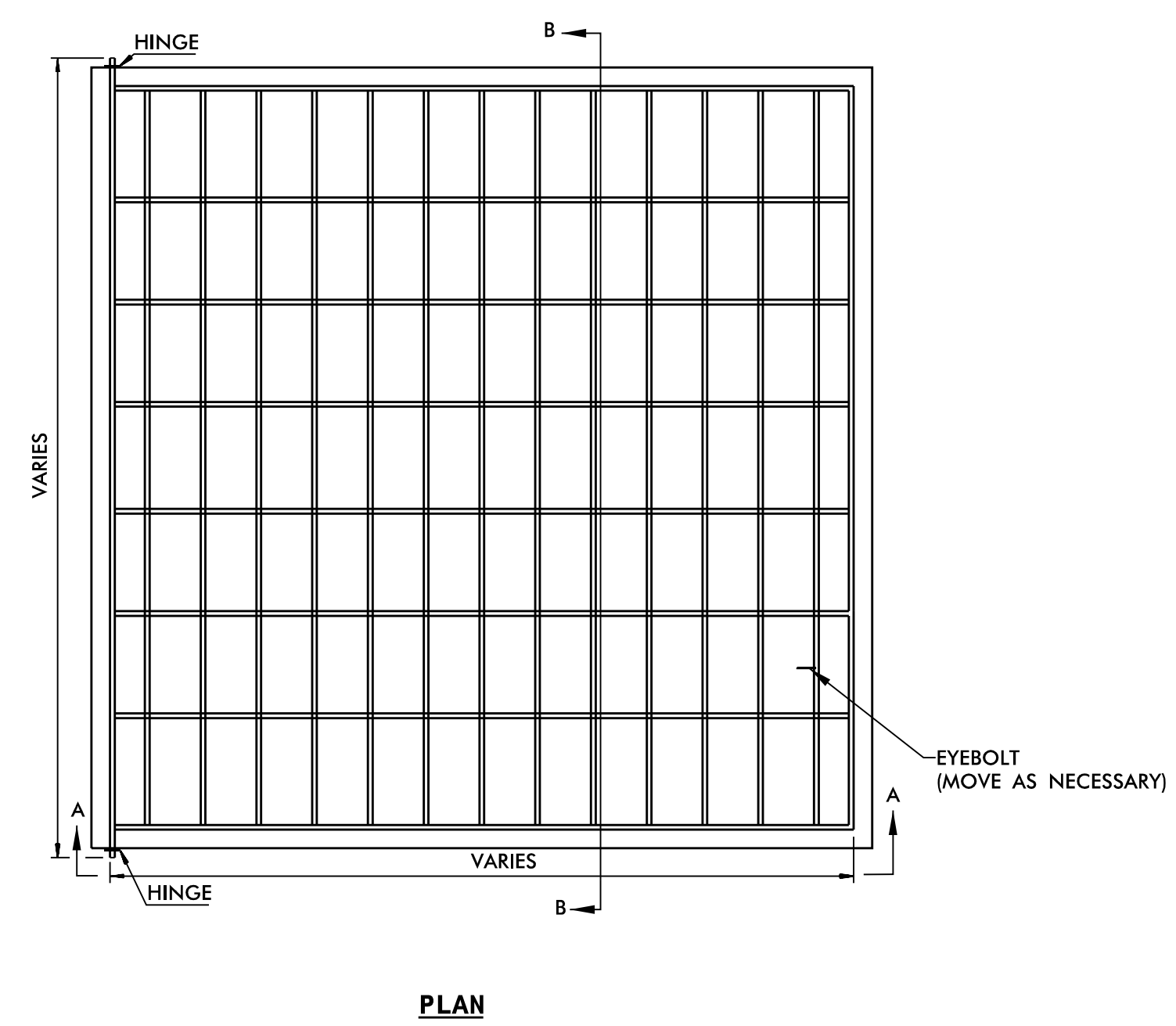
- NOTES:
1. THE BASIN SHOULD BE DESIGNED TO HOLD THE WATER QUALITY VOLUME.
  2. TOP ELEVATION OF CONTROL STRUCTURE (WEIR ELEVATION) SHOULD BE SET AT THE WATER QUALITY VOLUME.
  3. NO BEDDING MATERIAL TO BE USED. THEREFORE, DO NOT FOLLOW STANDARD DRAWINGS FOR METHOD OF PIPE INSTALLATION FOR OUTLET PIPE THROUGH EMBANKMENT.
  4. 8" MIN. ORIFICE WITH SLUICE GATE IS FOR MAINTENANCE AND SHOULD REMAIN CLOSED DURING NORMAL OPERATION. A GATE VALVE MAY BE USED IN LIEU OF THE 8" SLUICE GATE.
  5. SLUICE GATE SHALL PROVIDE WATERTIGHT SEAL. PROVIDE ADEQUATE CLEARANCE FOR GATE OPERATION AND FOR PROPER SEATING OF GATE OVER PIPE.
  6. SELECT BOX STANDARD AS REQUIRED TO ACCOMMODATE SLUICE GATE AND ORIFICE TRASH RACK WIDTH.
  7. ENSURE TRASH RACK OPENS FREELY AND WITHOUT INTERFERENCE WITH SLUICE GATE.
  8. FOOTER DIMENSION (B) IS ADJUST FOR ANTI-FLOTATION.
  9. TOP ELEVATION OF OUTLET CONTROL STRUCTURE SHALL BE SET AT THE WATER QUALITY VOLUME (WQV) ELEVATION.
  10. WATER TIGHT SEALS ARE REQUIRED AT ALL PIPE CONNECTIONS TO STRUCTURE.



MINIMUM DIMENSIONS FOR OUTLET CONTROL STRUCTURE										
STATION	STRUCTURE NUMBER	S (INCHES) 6" MIN.	B (INCHES) 6" MIN.	TOP ELEVATION CONTROL STRUCTURE	MAX. STORAGE DEPTH(D) FEET	ORIFICE DIAMETER (O) INCHES	ORIFICE INV. ELEV.	CONTROL STRUCTURE INV. ELEV.	CTL. STR. DIMENSIONS (W x L x H)	OUTLET PIPE DIAMETER(P) INCHES
-L- 691+50 RT	0409	6	20	880.50	3.50	1.50	877.00	874.00	4.5x4.5x6.5	42
-SR1- 12+00 LT	0759	6	14	910.50	3.50	0.75	907.00	903.00	4.0x4.0x7.5	42

## REMOVABLE ORIFICE TRASH RACK

\*NOT TO SCALE\*



- RISER TRASH RACK NOTES:
1. ALL JOINTS SHALL BE FULLY WELDED AROUND JOINT WITH A MINIMUM OF A 1/4" BEAD.
  2. IF BOLTS ARE ANCHORED IN CONCRETE, FOLLOW STD. DWG. 862.03 AND 862.04 FOR ANCHORING PROCEDURE.
  3. EYEBOLT FOR CHAIN CLOSURE SHALL BE INSTALLED BY THE SAME METHOD AS THE HINGE PLATE BOLTS.
  4. RACK AND HARDWARE SHALL BE ALUMINUM OR REBAR AND GALVANIZED IN ACCORDANCE WITH ASTM A-153.
  5. ENSURE TRASH RACK OPENS FREELY AND WITHOUT INTERFERENCE WITH SLUICE GATES.

PLOT DRIVER: NCDOT\_color\_eng\_50.plt  
 USER: CHARRIS  
 FILE: NCDOT\NCDOT-U2579AB\6.0.CAD.BTM\6.2.Work\In\_Progress\U-2579AB\Hydr-oultcs\CADD\U2579AB\_HYD\_BASIN\_DET.DWG  
 PENTABLE: NCDOT\_pshpfl\_conventional.tbi  
 DATE: 7/13/2021  
 TIME: 12:48:29 PM

REVISIONS