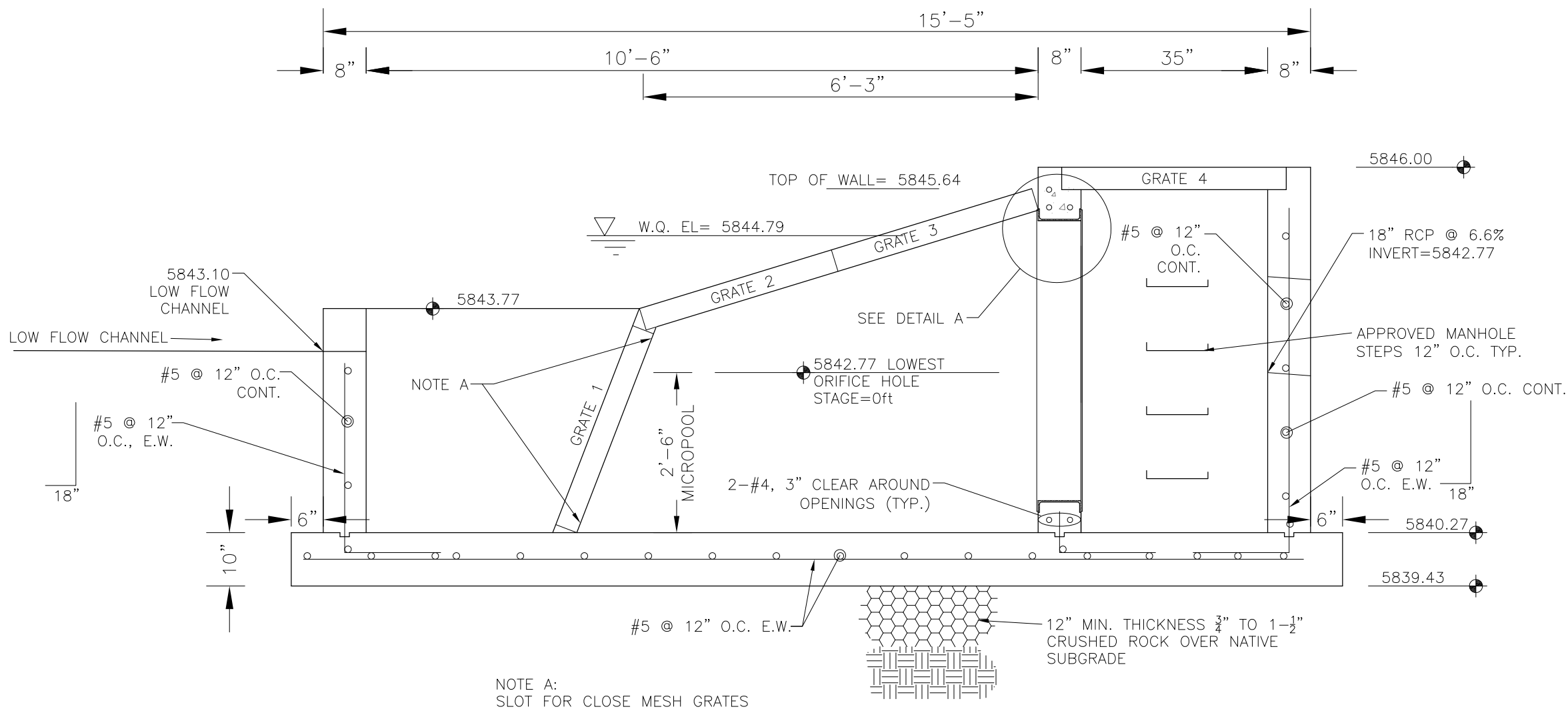
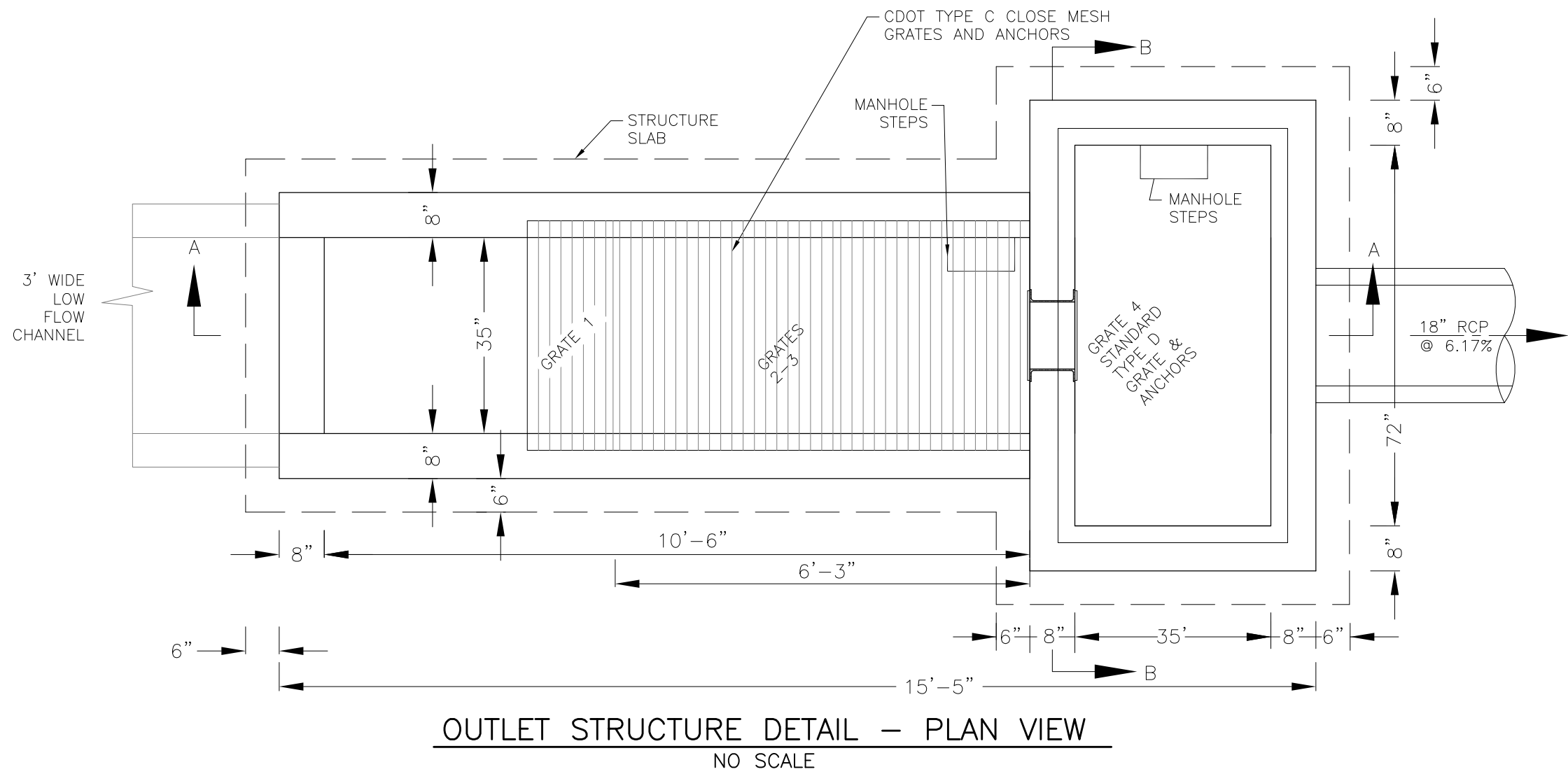
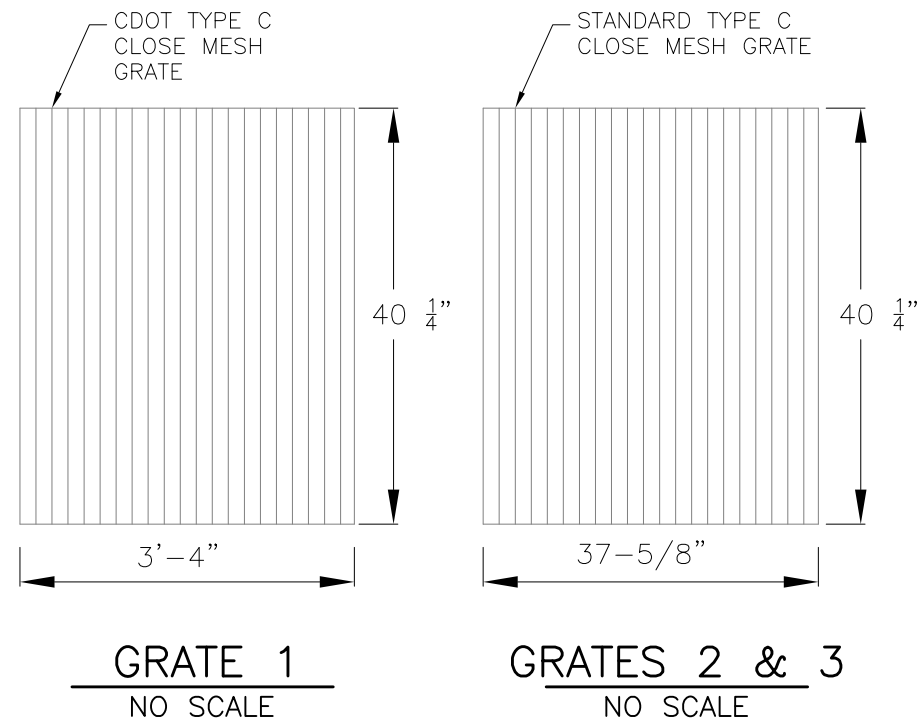
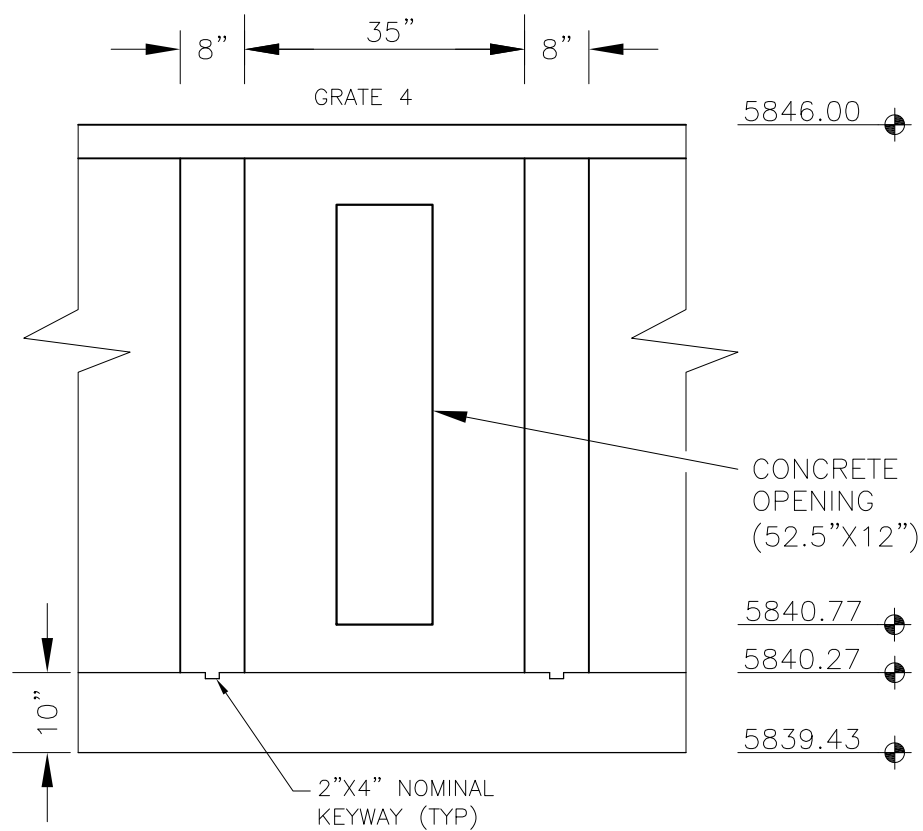


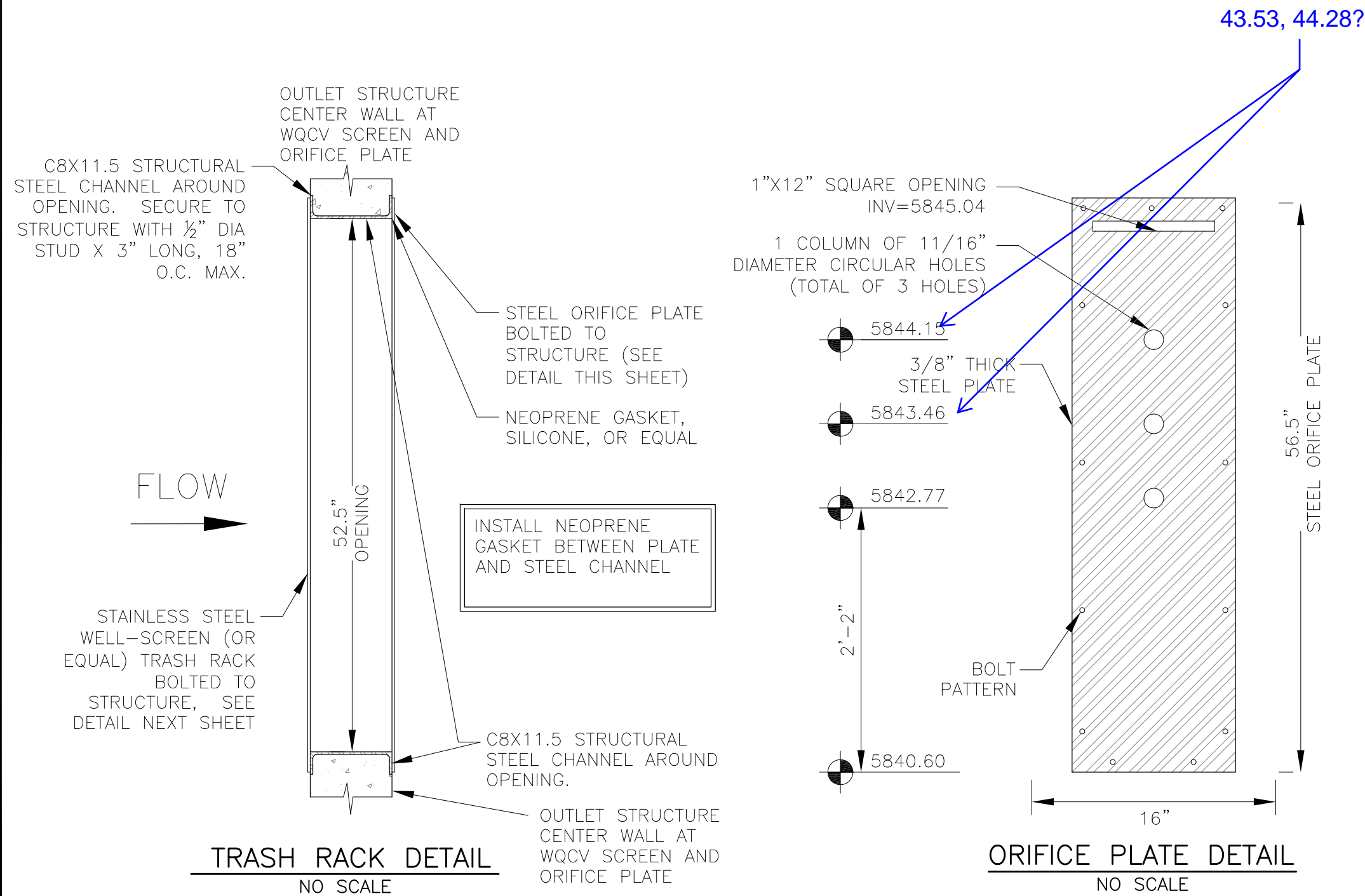
NOTE:
AFTER CONCRETE STRUCTURE HAS BEEN POURED
ALL GRATE DIMENSIONS SHALL BE FIELD VERIFIED
PRIOR TO GRATE CONSTRUCTION



OUTLET STRUCTURE DETAIL - SECTION A-A
NO SCALE



OUTLET STRUCTURE DETAIL - SECTION B-B
NO SCALE

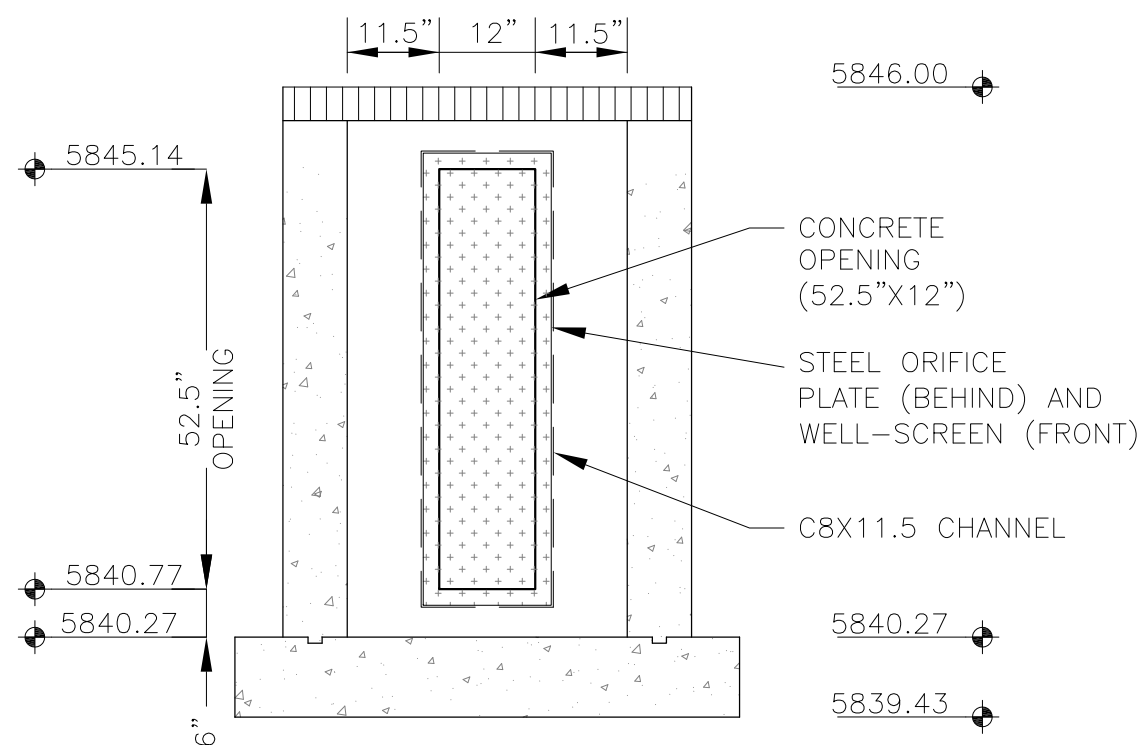


OUTLET STRUCTURE, FOREBAY, AND DRAIN CHANNEL NOTES:

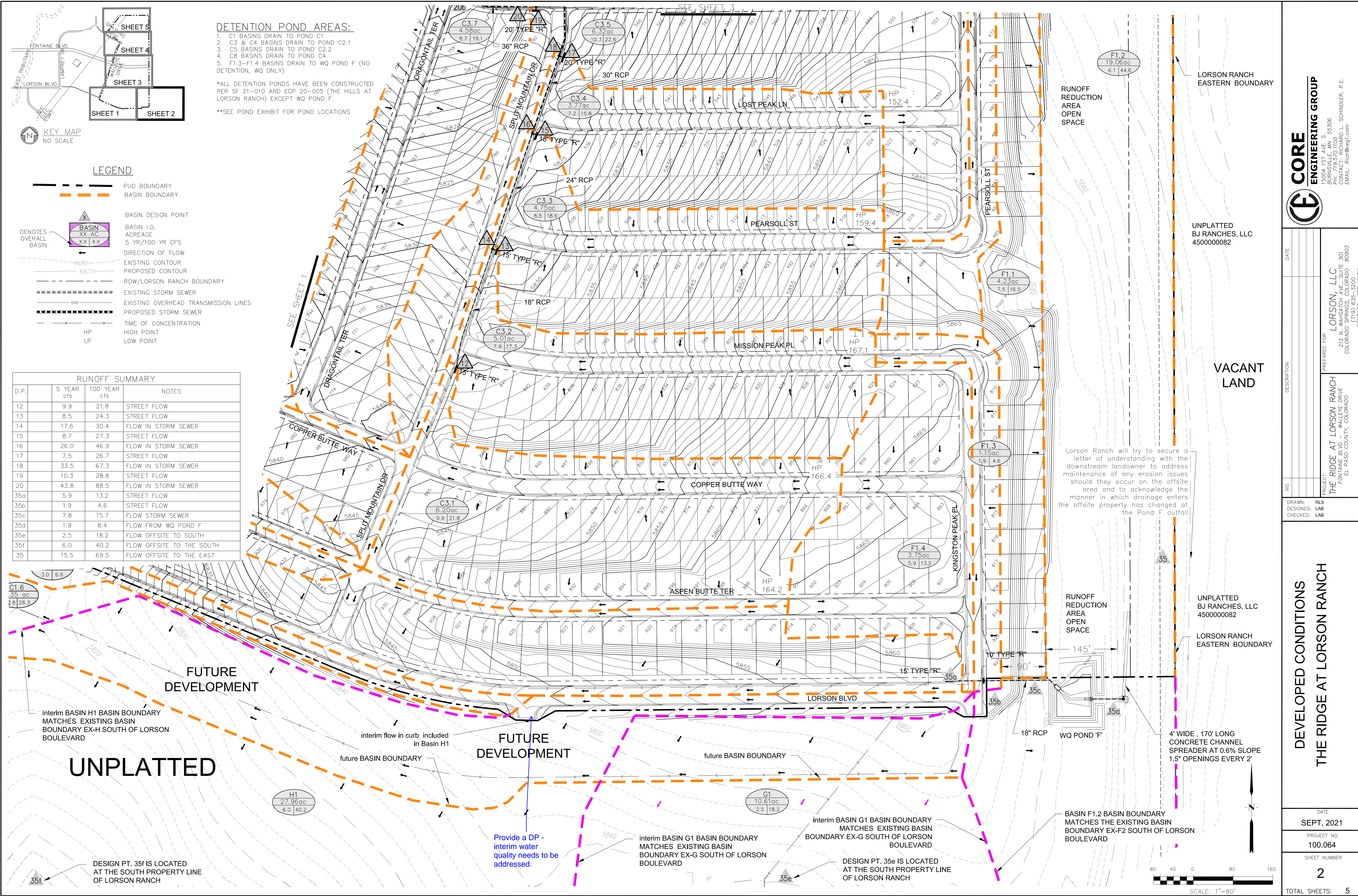
- PRIOR TO CONSTRUCTION, CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR ALL COMPONENTS OF THE OUTLET STRUCTURE.
- GRADE 60 REINFORCING STEEL REQUIRED. SEE TABLE FOR THE MINIMUM LAP SPLICE LENGTH FOR REINFORCING BARS. ALL REINFORCING STEEL SHALL HAVE A TWO-INCH MINIMUM CLEARANCE FROM EDGE OF CONCRETE, UNLESS OTHERWISE NOTED.
- CONCRETE FOR THE OUTLET STRUCTURE AND FOREBAY SHALL BE CDOT CLASS D CONCRETE.
- CONCRETE FOR DRAIN CHANNELS SHALL BE CDOT CLASS B CONCRETE
- EXPANSION JOINT MATERIAL SHALL MEET AASHTO SPECIFICATION M-213. EXPANSION JOINT MATERIAL SHALL BE 1/2" THICK, SHALL EXTEND THE FULL DEPTH OF CONTACT SURFACE AND THE JOINT SHALL BE SEALED, REFER TO DETAILS.
- ALL EXPOSED CONCRETE CORNERS SHALL HAVE A 3/8" CHAMFER UNLESS OTHERWISE NOTED.
- SUBGRADE TO BE 12" THICK CLEAN FILL COMPACTED TO 95% STANDARD PROCTOR DENSITY PER ASTM M698 UNDER STRUCTURE.
- REFER TO POND DETAILS FOR PRESEDIMENTATION/FOREBAY DESIGN.
- ENGINEER SHALL BE NOTIFIED PRIOR TO BEGINNING CONSTRUCTION OF OUTLET STRUCTURE TO SCHEDULE OBSERVATION VISITS FOR STRUCTURES.

WQCV WELL-SCREEN NOTES:

- Well-Screen shall be stainless steel and attached by stainless steel bolts along edge of the mounting frame.
- WQCV Well Screen
 - Type of Screen: Stainless steel #93 Vee Wire (Johnson Vee Wire (tm) Stainless Steel Screen or equivalent with 60% open area)
 - Screen slot opening dimension: 0.139" (Screen #93 Vee Wire Slot Opening)
 - Type and Size of Support Rod: TE 0.074"x0.50"
 - Spacing of Support Rod (O.C.): 1.0 Inch
 - Total Screen Thickness: 0.655"
 - Carbon Steel Holding Frame Type: 3/4" x 1.0" angle



OUTLET STRUCTURE DETAIL - SECTION B-B
NO SCALE



DETENTION POND AREAS:

1. C1 BASINS DRAIN TO POND C1
2. C3 & C4 BASINS DRAIN TO POND C2.1
3. C5 BASINS DRAIN TO POND C2.2
4. C8 BASINS DRAIN TO POND C4
5. F1.3-F1.4 BASINS DRAIN TO WQ POND F (NO DETENTION, WQ ONLY)

*ALL DETENTION PONDS HAVE BEEN CONSTRUCTED PER SF 21-010 AND EGP 20-005 (THE HILLS AT LORSON RANCH) EXCEPT WQ POND F

**SEE POND EXHIBIT FOR POND LOCATIONS

LEGEND

--- PUD BOUNDARY
--- BASIN BOUNDARY

BASIN DESIGN POINT

BASIN I.D.
ACREAGE
5 YR/100 YR CFS
DIRECTION OF FLOW
EXISTING CONTOUR
PROPOSED CONTOUR
ROW/LORSON RANCH BOUNDARY
EXISTING STORM SEWER
EXISTING OVERHEAD TRANSMISSION LINES
PROPOSED STORM SEWER
TIME OF CONCENTRATION
HP
LP

DESIGN PT. 35f IS LOCATED AT THE SOUTH PROPERTY LINE OF LORSON RANCH

RUNOFF SUMMARY			
D.P.	5 YEAR cfs	100 YEAR cfs	NOTES
12	9.9	21.8	STREET FLOW
13	8.5	24.3	STREET FLOW
14	17.6	30.4	FLOW IN STORM SEWER
15	8.7	27.3	STREET FLOW
16	26.0	46.9	FLOW IN STORM SEWER
17	7.5	26.7	STREET FLOW
18	33.5	67.3	FLOW IN STORM SEWER
19	10.3	28.8	STREET FLOW
20	43.8	88.5	FLOW IN STORM SEWER
35a	5.9	13.2	STREET FLOW
35b	1.9	4.6	STREET FLOW
35c	7.8	15.7	FLOW STORM SEWER
35d	1.9	8.4	FLOW FROM WQ POND F
35e	2.5	18.2	FLOW OFFSITE TO SOUTH
35f	6.0	40.2	FLOW OFFSITE TO THE SOUTH
35	15.5	69.5	FLOW OFFSITE TO THE EAST

Lorson Ranch will try to secure a letter of understanding with the downstream landowner to address maintenance of any erosion issues should they occur on the offsite area and to acknowledge the manner in which drainage enters the offsite property has changed at the Pond F outfall

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PROJECT:
THE RIDGE AT LORSON RANCH
FONTAINE BLVD. - WALLEYE DRIVE
EL PASO COUNTY, COLORADO

CONTACT: JEFF MARK

DATE: SEP, 2021
PROJECT NO.: 100.064
SHEET NUMBER: 2
TOTAL SHEETS: 5