

PLAN OF STORM WATER DRAINAGE IMPROVEMENTS

ROWENA LANE CITY OF NORMAN PROJECT NO. K-2122-100



The City of
Norman



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OK COA #4193
EXPIRES 06/30/2024

BRANDI STUDLEY
Council Member

LAUREN SCHUELER
Council Member

KELLY LYNN
Council Member

LEE HALL
Council Member

BREEA CLARK
Mayor

DARREL PYLE
City Manager

KATHRYN WALKER
City Attorney

RARCHAR TORTORELLO
Council Member

ELIZABETH FOREMAN
Council Member

STEPHEN HOLMAN
Council Member

MATTHEW PEACOCK
Council Member

ROCK CREEK RD.

ROBINSON ST.

MAIN ST.

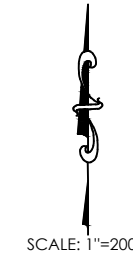
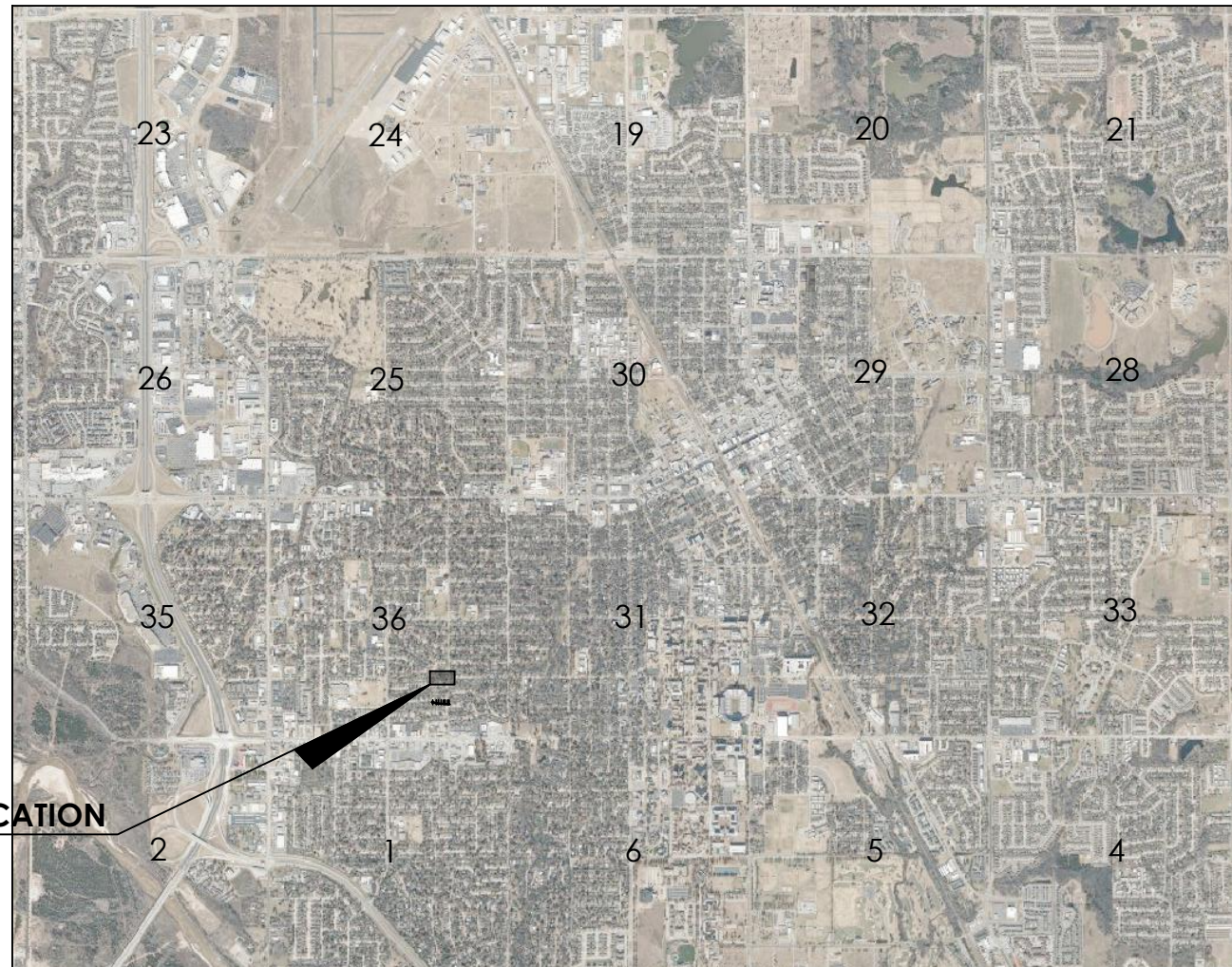
LINDSEY ST.

PROJECT LOCATION
ROWENA

IMHOFF RD.

R-3-W

R-2-W



T
9
N

T
8
N

24TH AVE.

HWY 9

BERRY RD.

CHAUTAQUA AVE.

JENKINS AVE.

OAK TREE AVE.

HWY 77

24TH AVE.

SHEET INDEX	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	GENERAL NOTES AND ESTIMATED QUANTITIES
3	ROWENA PLAN AND PROFILE SHEET
4-9	STANDARD DETAILS
10-13	CROSS SECTIONS

ALL HORIZONTAL (N, E) COORDINATES ARE REFERENCED TO THE OKLAHOMA STATE PLANE SOUTH (NAD83) COORDINATE SYSTEM. ALL VERTICAL (Z) UNITS ARE REFERENCED TO THE NAVD88 VERTICAL DATUM

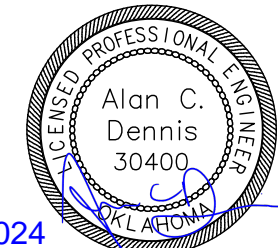
ONE CALL UTILITY LOCATION NUMBER

(405) 840-5032
(800) 522-6543

THIS NUMBER IS TO BE USED FOR INFORMATION ON THE LOCATION OF ALL UNDERGROUND UTILITIES. CONTACT THIS NUMBER AND OTHER SPECIFIED NUMBERS IN THE PLANS PRIOR TO ANY EXCAVATION.

PREPARED BY:

[Signature]
ALAN C. DENNIS, P.E.
REGISTERED PROFESSIONAL ENGINEER NO. 30400



03/27/2024

UTILITY OWNERS	
ONG	(405) 556.6411
OG&E	(405) 553.5785
CHICKASAW TELEPHONE CO.	(580) 622.3837
ONENET	(405) 225.9453
CITY OF NORMAN	(405) 217.7778
CITY OF NORMAN WATER	(405) 291.5545
CITY OF NORMAN SEWER	(405) 329.0703
AT&T	(405) 291.5545

SHEET 1 OF 2

REV	DATE	DESCRIPTION	BY

CITY OF NORMAN
NORMAN, OKLAHOMA
STORM WATER DRAINAGE IMPROVEMENTS
ROWENA LANE

TITLE SHEET

DATE: MARCH 2024
DESIGNED BY: ACD
DRAWN BY: NTB

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DRAWING NUMBER

G-001

SHEET NUMBER **1**

L:\2020\2010100 - Norman Stormwater 2020\Drawings\DESIGN\Profiles\PLAN AND PROFILE SHEETS - UPDATES BACKUP 8AM.dwg GEN NOTES & QUANTITIES TITLE - ROWENA NTBradford 3/25/2024 4:05 PM



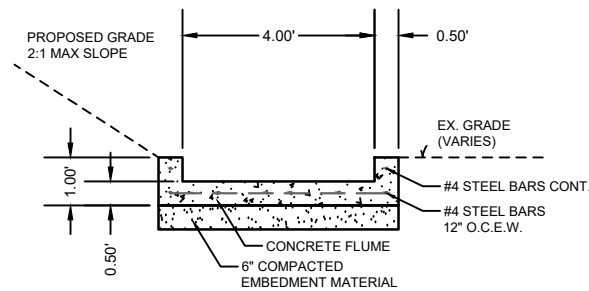
GENERAL EROSION AND SEDIMENT CONTROL NOTES

THE PROJECT MUST BE CONSTRUCTED TO MINIMIZE ADVERSE OFF-SITE EFFECTS OF SOIL EROSION AND RESULTING SEDIMENT LOSS THROUGH THE USE OF PROPER EROSION AND SEDIMENT CONTROL TECHNIQUES; AND BY INSTALLING BOTH TEMPORARY AND PERMANENT MANAGEMENT PRACTICES. ALL SOIL-DISTURBING ACTIVITIES PERFORMED BY THE CONTRACTOR WILL BE ACCOMPLISHED IN SUCH MANNER AS TO PREVENT LOSS OF SEDIMENT FROM THE CONSTRUCTION SITE DURING RAINFALL EVENTS. TO ACCOMPLISH THIS, THE FOLLOWING SPECIFIC STEPS WILL BE TAKEN DURING CONSTRUCTION:

- IMMEDIATELY AFTER MOBILIZATION BUT PRIOR TO INITIATING ANY SOIL-DISTURBING ACTIVITIES, THE CONTRACTOR WILL INSTALL ALL SPECIFIED PERIMETER CONTROLS ON THE SITE. THESE PRACTICES SHALL BE DESIGNED TO TRAP ALL SEDIMENT PRODUCED DURING SOIL-DISTURBING ACTIVITIES, AND TO PREVENT OFF-SITE DAMAGE. IT IS RECOGNIZED THAT SOME SITE PREPARATION MAY BE REQUIRED TO PROPERLY INSTALL THESE PRACTICES.
- DURING ALL SOIL-DISTURBING ACTIVITIES, THE CONTRACTOR WILL TAKE APPROPRIATE STEPS USING ACCEPTED CONSTRUCTION METHODS TO MINIMIZE EXPOSURE OF UNPROTECTED SOIL AND OTHER CONSTRUCTION MATERIALS TO RAINFALL. PARTICULAR CARE MUST BE EXERCISED WHEN DEALING WITH TOPSOIL STOCKPILES, FILL MATERIAL, OR SOIL ON SLOPES. THE CONTRACTOR WILL MAINTAIN A DATE LOG OF ALL SOIL DISTURBANCE ACTIVITIES OR MAJOR GRADING OPERATIONS, AND OF ALL MANAGEMENT PRACTICE OR CONTROL MEASURE INSTALLATIONS.
- IF, DURING THE COURSE OF CONSTRUCTION, ANY AREA OF SOIL (INCLUDING STOCKPILES) WILL REMAIN EXPOSED FOR MORE THAN FOURTEEN CALENDAR DAYS WITHOUT SUITABLE EROSION CONTROL, THEN TEMPORARY STABILIZATION MEASURES SHOULD BE INSTALLED UNLESS SOIL-DISTURBING ACTIVITIES ARE PLANNED ON SUCH AREAS WITHIN AN ADDITIONAL SEVEN CALENDAR DAYS. SUITABLE TEMPORARY STABILIZATION MEASURES ARE PERIMETER CONTROLS AND SILT BARRIERS (SUCH AS ROCK BAGS, SAND BAGS, AND SILT FENCING) ALONG ALL SIDE-SLOPE AND DOWN-SLOPE BORDERS OF THE DISTURBED AREA. NOTE THAT PERIMETER CONTROLS ALONE MAY NOT BE SUCCESSFUL; MOVEMENT OF LARGE AMOUNTS OF SEDIMENT PRODUCED BY HEAVY RAIN ON EXPOSED SOIL COULD OVERWHELM SUCH MEASURES.
- AT THE CONTRACTOR'S DISCRETION, ADDITIONAL TEMPORARY EROSION CONTROL PRACTICES (SUCH AS ROCK BAGS, SAND BAG BARRIERS, AND SILT FENCES) MAY BE INSTALLED ALONG ANY DOWN-SLOPE OF SIDE-SLOPE PERIMETER OF A SOIL-DISTURBED AREA TO PREVENT SEDIMENT MOVEMENT. ANCHORED EROSION CONTROL MATTING, MULCHES, OR OTHER ACCEPTABLE METHODS MAY ALSO BE INSTALLED TO STABILIZE ANY UNPROTECTED SLOPES DURING CONSTRUCTION, AND HOLD THEM TO THE APPROPRIATE GRADE.
- AS SITE CONDITIONS WARRANT, THE CONTRACTOR MAY ALSO CHOOSE TO MODIFY THE TYPE OR ARRANGEMENT OF SPECIFIED PRACTICES TO IMPROVE THEIR EFFECTIVENESS. AS WITH ANY OTHER PROJECT CHANGES, THE CONTRACTOR MUST PRESENT ALL PROPOSED MODIFICATIONS TO THE PROJECT ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
- THE CONTRACTOR WILL INSPECT ALL SPECIFIED PRACTICES AT LEAST ONCE EVERY FOURTEEN CALENDAR DAYS, AND AFTER ALL RAINFALL EVENTS TO INSURE THAT EACH SPECIFIED PRACTICE REMAINS INTACT. ANY DAMAGE NOTED DURING SUCH INSPECTIONS SHALL BE REPAIRED PROMPTLY TO RESTORE THE PRACTICE TO ORIGINAL SPECIFICATIONS. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES AS SPECIFIED IN THE PLANS, INCLUDING PERIODIC REGRADING, AND FINAL GRADING AFTER REMOVAL OF ALL SUCH PRACTICES.
- WHEN WATER IS USED FOR DUST CONTROL OR TO PROMOTE VEGETATION, THE CONTRACTOR WILL PREVENT THE ESCAPE OF THIS WATER AND ANY SEDIMENT IT MAY CARRY FROM THE CONSTRUCTION SITE.
- CARE MUST BE EXERCISED TO PREVENT EXCESSIVE OFF-SITE TRACKING OF MUD OR SEDIMENT BY CONSTRUCTION VEHICLES. PROPERLY GRAVELED TRANSITION AREAS SHOULD BE ESTABLISHED AT ALL TEMPORARY SITE EXITS TO ASSIST IN MUD REMOVAL FROM DEPARTING VEHICLES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING THE STREET DAILY, OR AS DIRECTED BY THE CITY, WHEN MUD IS TRACKED ONTO THE STREET FROM THE CONSTRUCTION SITE.
- DURING THE SITE CLEANUP PRIOR TO THE POSSESSION DATE, EACH TEMPORARY PRACTICE WILL BE COMPLETELY REMOVED AND THE AREA FINISHED TO THE APPROPRIATE POST-PROJECT CONDITION. THIS INVOLVES FINAL GRADING, AND INSTALLATION OF SOD OR GRASS SEED ON ALL BARE SOIL AREAS. A MINIMUM VEGETATION DENSITY OF SEVENTY PERCENT, OR AN EQUIVALENT SEDIMENT STABILIZATION MEASURE (GEOTEXTILES, MULCHES, OR GABIONS), IS REQUIRED UNTIL VEGETATION IS ESTABLISHED.

GENERAL TRAFFIC NOTES

- A WORK ZONE PERMIT MUST BE OBTAINED FROM THE TRAFFIC MANAGEMENT DIVISION AT LEAST TWO (2) WORKING DAYS PRIOR TO THE START OF WORK AND/OR PLACING OR REMOVING ANY BARRICADES OR MODIFYING EXISTING TRAFFIC CONTROL DEVICES.
- THE CONTRACTOR IS RESPONSIBLE FOR THE PROMPT REPLACEMENT AND/OR REPAIR OF ALL TRAFFIC CONTROL DEVICES AND APPURTENANCES DAMAGED OR DISTURBED DUE TO CONSTRUCTION.



CONCRETE FLUME TYPICAL SECTION
SCALE: 1" = 2'

GENERAL CONSTRUCTION NOTES

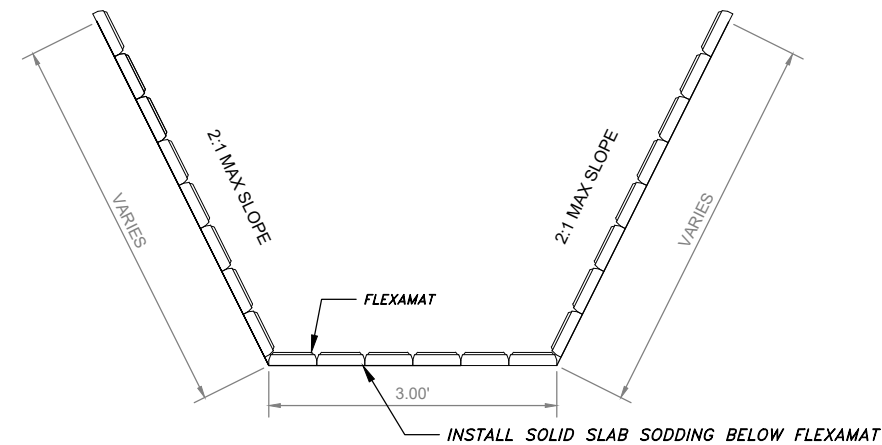
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL UTILITY LINES AND STRUCTURES REGARDLESS WHETHER OR NOT THEY ARE SHOWN ON THESE PLANS. DURING CONSTRUCTION AND WORK ASSOCIATED WITH THESE PLANS, THE CONTRACTOR SHALL CARRY OUT OPERATIONS IN SUCH A MANNER AS TO PRECLUDE DAMAGE TO ANY EXISTING UTILITIES OR STRUCTURES. ANY SUCH DAMAGE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL VERIFY EXACT HORIZONTAL AND VERTICAL LOCATION OF EXISTING UTILITIES, SPECIFICALLY AT CRITICAL POINTS, PRIOR TO INITIATION OF THE WORK OF THE APPROVED PLANS. VERIFICATION OF SIZE AND CONSTRUCTION MATERIAL (I.E., PVC, DIP, RCP, ETC.) SHALL ALSO BE PERFORMED DURING THESE ACTIVITIES.
- ALL WASTE MATERIAL RECOVERED FROM CONSTRUCTION ACTIVITIES SHALL BECOME THE CONTRACTOR'S PROPERTY AND SHALL BE DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.
- ALL DISCHARGE/DISPOSAL EVENTS SHALL CONFORM TO THE SITE STORMWATER POLLUTION PREVENTION PLAN. THE CONTRACTOR SHALL INSTALL ANY AND ALL ADDITIONAL EROSION CONTROL DEVICES OR EQUIPMENT NECESSARY TO CONTAIN RUNOFF. CONTRACTOR SHALL MINIMIZE EROSION AND MAINTAIN COMPLIANCE WITH ALL PERMIT REQUIREMENTS.
- CONTRACTOR SHALL NOTIFY THE ENGINEER AT THE EARLIEST CONVENIENCE UPON ENCOUNTERING ANY CIRCUMSTANCE THAT MAY RESULT IN A VARIANCE FROM THE APPROVED PLANS. VARIANCE FROM THE PLANS WITHOUT APPROVAL FROM THE OWNER AND ENGINEER SHALL BE AT THE RISK OF THE CONTRACTOR.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK SHOWN IN THE PLAN SET, REGARDLESS OF ITS PRESENCE OR ABSENCE IN THE SUMMARY OF QUANTITIES.
- CONTRACTOR SHALL COORDINATE ALL WORK WITH PROPERTY OWNERS ADJACENT TO, OR IMPACTED BY THE WORK OF THE PROJECT.
- THE CONTRACTOR SHALL ATTEND ALL MEETINGS SCHEDULED BY THE ENGINEER AND/OR OWNER. MEETING SHALL BE ATTENDED BY THE CONTRACTOR'S SUPERINTENDENT OR QUALIFIED REPRESENTATIVE WHO IS AUTHORIZED TO DISCUSS AND MAKE DECISIONS REGARDING THE PROJECT.
- CONTRACTOR SHALL NOT BEGIN WORK UNTIL ALL REQUIRED PERMITS ARE OBTAINED.
- CONTRACTOR SHALL REMOVE FROM THE PROJECT SITE AND DISPOSE OF ALL CONSTRUCTION DEBRIS DISTURBED DURING CLEARING AND EXCAVATION.
- THE CONTRACTOR SHALL COMPLY WITH ALL CITY OF NORMAN ORDINANCES WHEN STOCKPILING AND STORING MATERIALS AND EQUIPMENT.
- CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY AND ALL TEMPORARY CONSTRUCTION EASEMENTS NECESSARY TO PERFORM HIS WORK. ALL COST OF SAID TEMPORARY EASEMENTS SHALL BE INCLUDED IN OTHER ITEMS. ALL SURFACE RESTORATION TO SAID TEMPORARY EASEMENTS SHALL BE TO THE SATISFACTION OF THE PROPERTY OWNER AND ALL COST OF RESTORATION TO BE INCLUDED IN OTHER ITEMS.
- THE CONTRACTOR, AT HIS EXPENSE, SHALL PROVIDE AN ELECTRICAL OR MECHANICAL DEVICE OR USE SUCH OTHER MEANS HE MAY SELECT TO LOCATE ANY HIDDEN UTILITY LINE, OIL OR GAS PIPELINE, WATER PIPELINE, SEWER PIPELINE, TELEGRAPH AND TELEPHONE LINE, AND LOCATE SUCH LINES OR STRUCTURES SHOWN ON THE PLANS AND ANY UNCHARTED LINE OR STRUCTURE WHETHER SHOWN ON THE PLANS OR NOT AND PROTECT, ADJUST TO GRADE, DISCONNECT AND REPLACE, RELOCATE AND REPLACE, REMOVE, PROVIDE SUPPORTS DURING THE CONSTRUCTION AND SETTLEMENT OF BACKFILL AND PROTECT AGAINST FREEZING OR UNNECESSARY DAMAGE BY THE ELEMENTS OF EXISTING UTILITY LINES, OIL OR GAS PIPELINES, WATER PIPELINES, SEWER PIPELINES, TELEGRAPH AND TELEPHONE LINES, RAILROAD RIGHT-OF-WAY LINES AND OTHER STRUCTURES AND SHALL PAY ALL FEES TO COUNTY, CITY, STATE OR FEDERAL AGENCIES WHICH MAY BE REQUIRED IN THE PERFORMANCE OF THIS WORK THE CONTRACTOR SHALL MAKE SATISFACTORY ARRANGEMENTS WITH THE OWNERS OF SUCH STRUCTURES FOR PERFORMING THE WORK. THE CONTRACTOR SHALL NOT BE ENTITLED TO ANY ADDITIONAL PAYMENT FOR SUCH WORK.

ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	AS BUILT
BASE BID				
1	CLASS C CONCRETE	(A) CY	29.72	
2	UNCLASSIFIED EXCAVATION	CY	297.58	
3	MODIFY CURB INLET	(B) EA	1.00	
4	REMOVAL OF CURB AND GUTTER	LF	10.00	
5	REMOVAL OF SIDEWALK	SY	8.00	
6	REMOVE AND RECONSTRUCT FENCE	LF	96.00	
7	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	1.00	
8	COMBINED CURB AND GUTTER (6" BARRIER)	(C) LF	10.00	
9	4" CONCRETE SIDEWALK	(D) SY	8.00	
10	TEMPORARY SILT FENCE	LF	850.00	
11	SOLID SLAB SODDING	SY	727.00	
12	CLEARING AND GRUBBING	(E) LS	1.00	
13	SWPPP DOCUMENTATION AND MANAGEMENT	LS	1.00	
14	PRE/POST-CONSTRUCTION AUDIO/VIDEO RECORDING	(F) LS	1.00	
15	DITCH LINER PROTECTION	LF	267.50	
16	CONSTRUCTION TRAFFIC CONTROL	LS	1.00	
17	CONSTRUCTION STAKING (CONSTRUCTION SURVEY)	LS	1.00	
18	MOBILIZATION/DEMObILIZATION	LS	1.00	
19	STANDARD BEDDING MATERIAL, CLASS B	CY	45.00	
20	FLEXAMAT, COMPLETE IN PLACE	SF	1375.00	

PAY ITEM NOTES

- PAY ITEM INCLUDES STEEL REINFORCEMENT AS SHOWN IN THESE PLANS, AS WELL AS ANY OTHER INCIDENTALS NECESSARY TO CONSTRUCT CONCRETE FLUME NOT OTHERWISE NOTED.
- PAY ITEM INCLUDES ALL LABOR, TOOLS, MATERIALS, AND EQUIPMENT NECESSARY TO MODIFY THE CURB INLET TO ACCEPT FLOW FROM THE PROPOSED CONCRETE FLUME. CONTRACTOR IS REQUIRED TO SUBMIT SHOP DRAWINGS TO THE ENGINEER OF PROPOSED CURB INLET MODIFICATIONS PRIOR TO BEGINNING CONSTRUCTION.
- PAY ITEM INCLUDES IS ONLY TO BE USED IF THE CONDITION OF THE EXISTING CURB AND GUTTER IS NOT SUITABLE TO BEING CUT AS DETERMINED BY THE ENGINEER.
- PAY ITEM INCLUDES ALL LABOR, TOOLS, MATERIALS, AND EQUIPMENT NECESSARY TO CONSTRUCT THE ELEVATED PORTION OF NEW SIDEWALK.
- SIGNIFICANT VEGETATION IS PRESENT AT THE LOCATION.
- CONTRACTOR SHALL SUBMIT PRE-CONSTRUCTION VIDEO TO ENGINEER AND OWNER IN AN APPROVED DIGITAL FORMAT PRIOR TO COMMENCING CONSTRUCTION. THE VIDEO SHOULD SHOW PROJECT AND SURROUNDING AREAS, AND ANY OTHER AREAS WHICH MAY BE AFFECTED BY CONSTRUCTION ACTIVITIES. THE VIDEO SHOULD INCLUDE AUDIO COMMENTARY DISCUSSING LOCATION, SITE CONDITIONS, AND OBSERVATIONS.



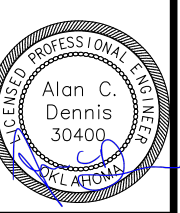
FLEXAMAT TYPICAL SECTION

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OK COA #4193
EXPIRES 06/30/2024



REV	DATE	DESCRIPTION	BY

CITY OF NORMAN
NORMAN, OKLAHOMA
STORM WATER DRAINAGE IMPROVEMENTS
ROWENA LANE

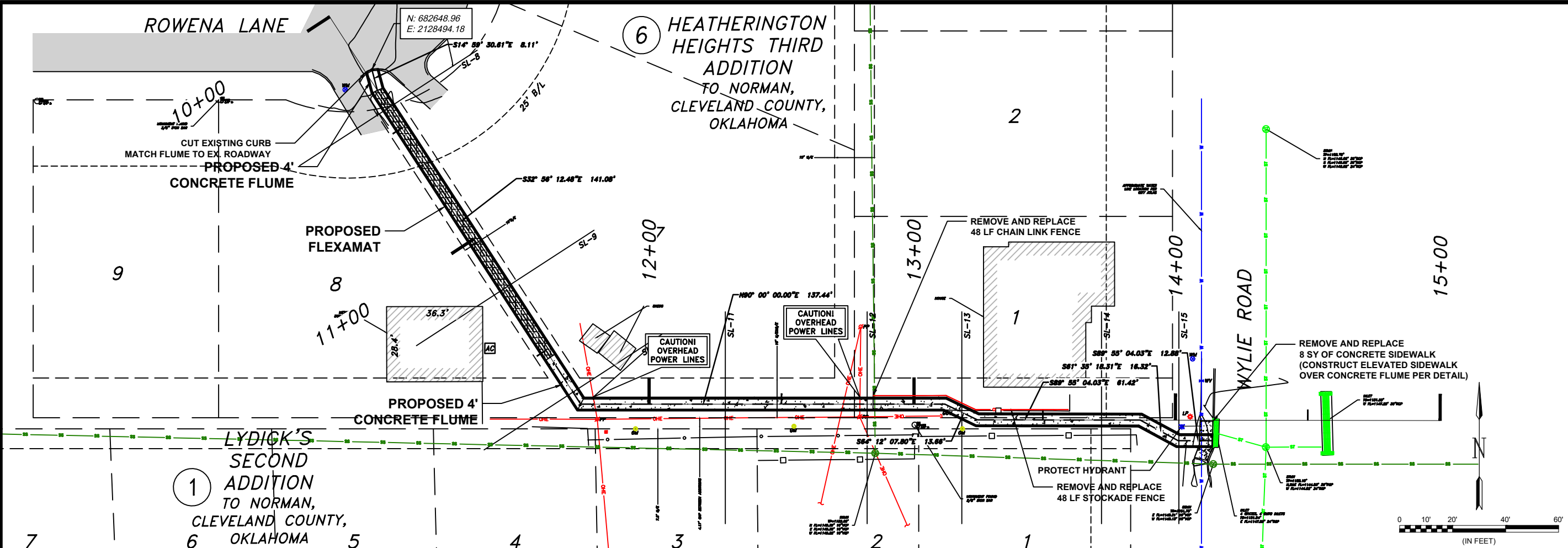
GENERAL NOTES AND ESTIMATED QUANTITIES

DATE: JUNE 2022
DESIGNED BY: SCP
DRAWN BY: JHD

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DRAWING NUMBER
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SHEET NUMBER
2

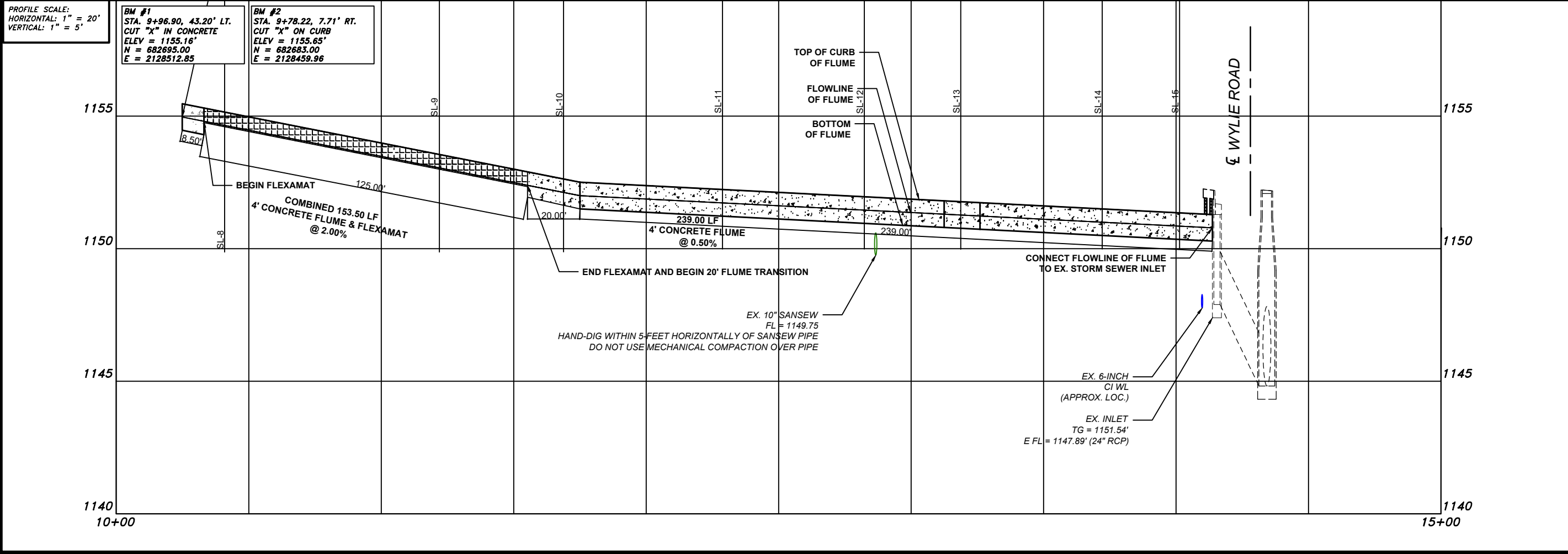
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PROFILE SCALE:
HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

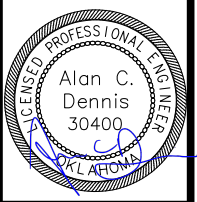
BM #1
STA. 9+96.90, 43.20' LT.
CUT "X" IN CONCRETE
ELEV = 1155.16'
N = 682695.00
E = 2128512.85

BM #2
STA. 9+78.22, 7.71' RT.
CUT "X" ON CURB
ELEV = 1155.65'
N = 682683.00
E = 2128459.96



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REV	DATE	DESCRIPTION	BY

CITY OF NORMAN
NORMAN, OKLAHOMA
STORM WATER DRAINAGE IMPROVEMENTS
ROWENA LANE

ROWENA PLAN AND PROFILE

DATE: JUNE 2022
DESIGNED BY: SCP
DRAWN BY: JHD

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SHEET NUMBER
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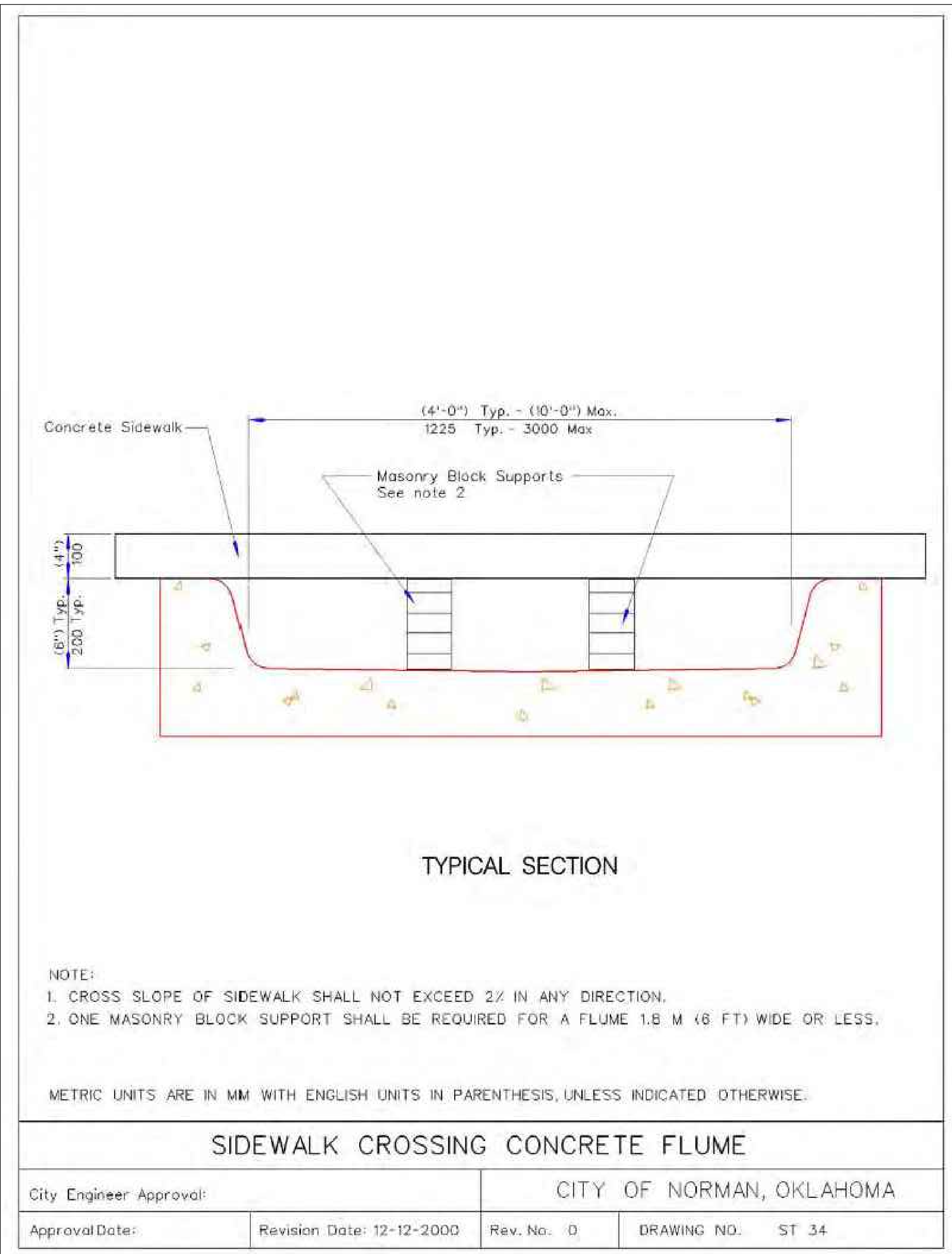
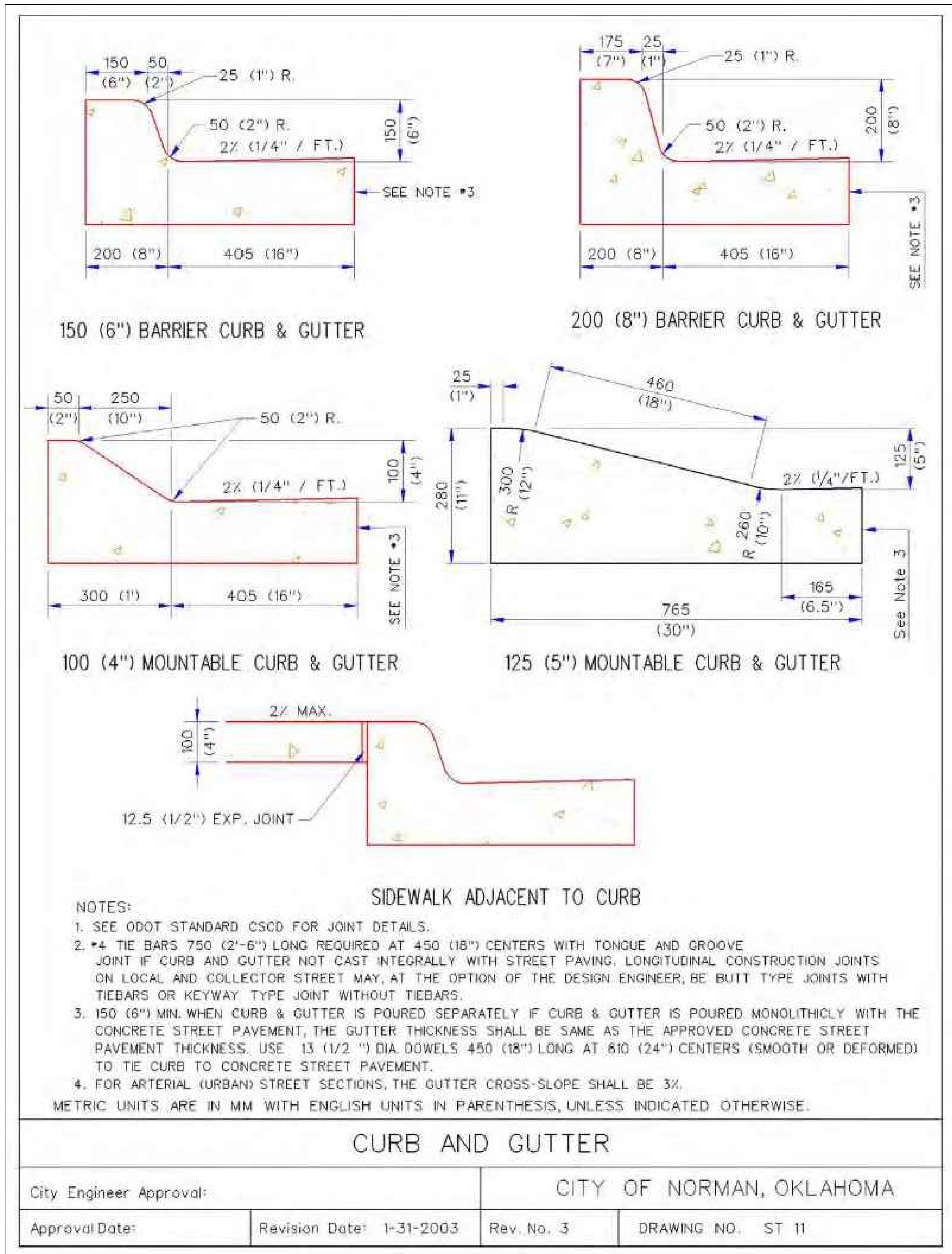
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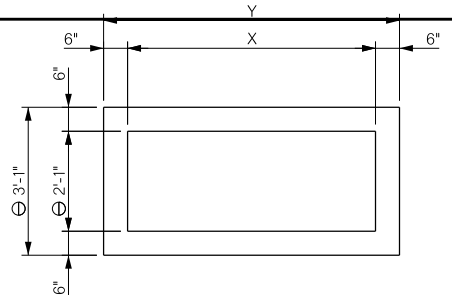
CITY OF NORMAN
NORMAN, OKLAHOMA
STORM WATER DRAINAGE IMPROVEMENTS
ROWENA LANE

STANDARD
DETAILS

DATE: JUNE 2022
DESIGNED BY: SCP
DRAWN BY: JHD

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DRAWING NUMBER
D-201
SHEET NUMBER
4



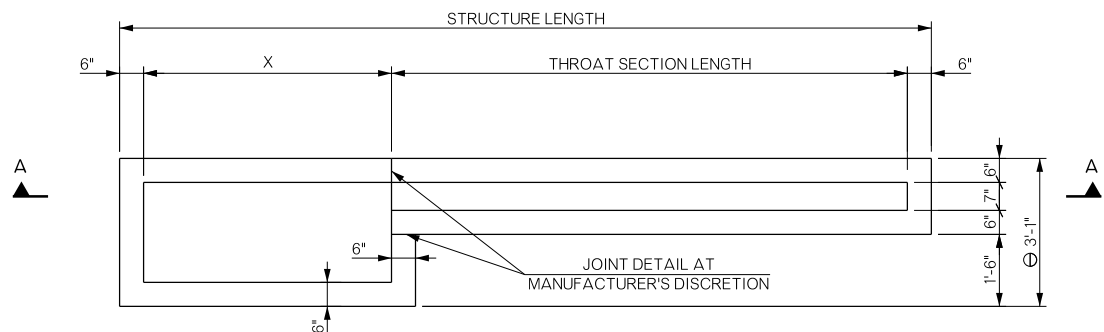


PLAN VIEW - STANDARD CURB INLET

DESIGNATION	STRUCTURE LENGTH		
	DESIGN 1	DESIGN 2	DESIGN 3
STD.	3'-7"	6'-2"	11'-6"
A	6'-3"	8'-10"	14'-2"
B	8'-11"	11'-6"	16'-10"
C	11'-7"	14'-2"	19'-6"
D	14'-4"	16'-11"	22'-3"
2A	8'-11"	11'-6"	16'-10"
A-B	11'-7"	14'-2"	19'-6"
A-C	14'-3"	16'-10"	22'-2"
2B	14'-3"	16'-10"	22'-2"
B-C	16'-11"	19'-6"	24'-10"
2C	19'-7"	22'-2"	27'-6"
B-D	19'-8"	22'-3"	27'-7"
2D	25'-1"	27'-8"	33'-0"

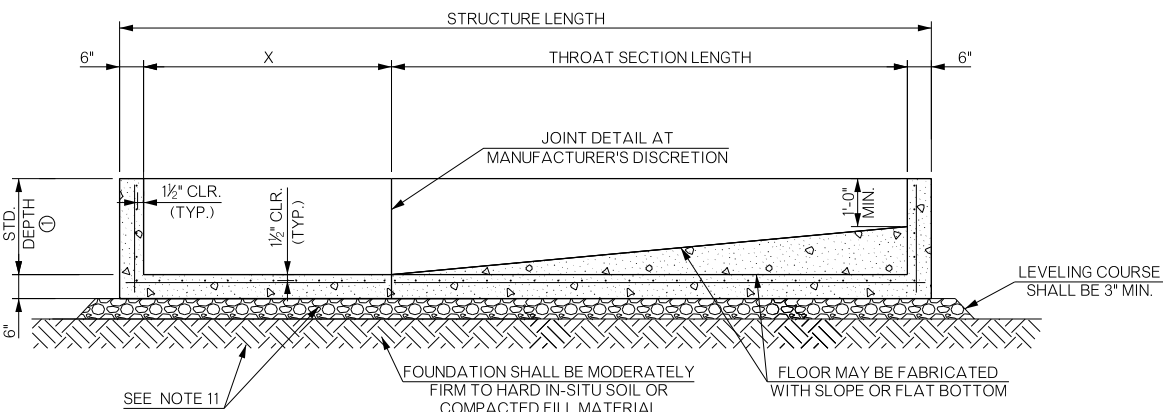
CURB INLET ADDITIONAL OPENINGS	
CURB OPENING DESIGNATION	THROAT SECTION LENGTH
A	2'-8"
B	5'-4"
C	8'-0"
D	10'-9"

① STANDARD DEPTH
 2'-9" FOR 18" DIA. PIPE
 3'-4" FOR 24" DIA. PIPE
 4'-0" FOR 30" DIA. PIPE
 4'-6" FOR 36" DIA. PIPE

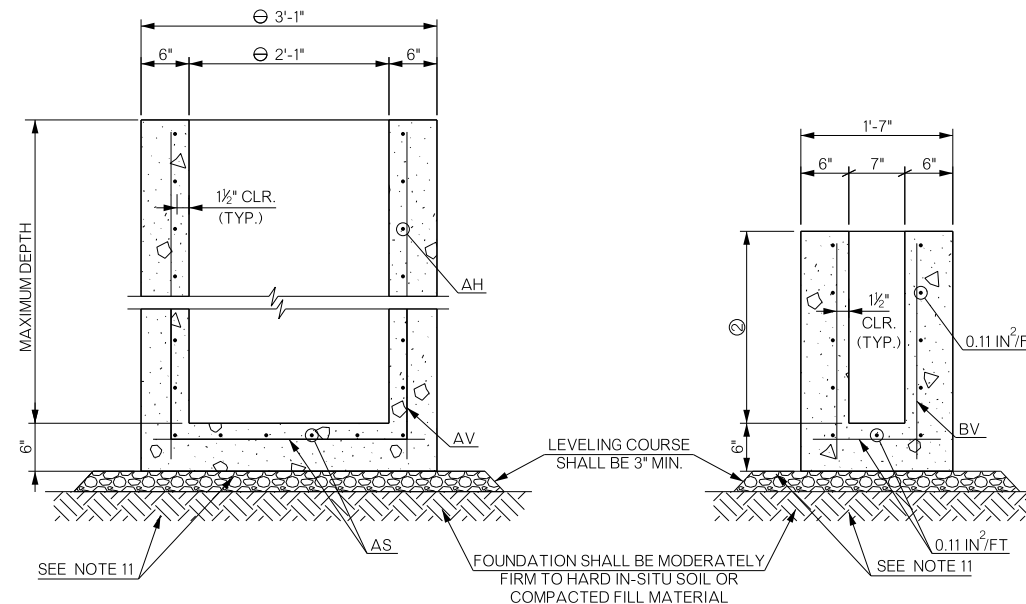


PLAN VIEW - CURB INLET WITH ADDITIONAL OPENINGS

NOTE: THROAT SECTION MAY ENTER EITHER OR BOTH SIDES OF CURB INLET.



SECTION A-A - STANDARD DEPTH



CROSS-SECTIONAL VIEW - CURB INLET

CROSS-SECTIONAL VIEW - THROAT

② STANDARD DEPTH SHALL BE AS SHOWN IN STANDARD DEPTH TABLE ABOVE. NON-STD. DEPTH SHALL BE A MINIMUM OF 2'-0" AND A MAXIMUM OF 5'-0"

INLET DESIGN	ØX	ØY	AH BARS (IN ² /FT)											BV BARS (IN ² /FT)		
			DEPTH							AS BARS (IN ² /FT)	AV BARS (IN ² /FT)	DEPTH				
			3'	4'	5'	6'	7'	8'	9'			10'	3'	4'	5'	
1	2'-7"	3'-7"	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.20	0.11				
2	5'-2"	6'-2"	0.11	0.11	0.11	0.11	0.12	0.13	0.14	0.18	0.11	0.11	0.16	0.26		
3	10'-6"	11'-6"	0.20	0.25	0.29	0.33	0.37	0.41	0.46	0.50	0.13	0.17				

Ø DIMENSIONS SHOWN ARE THE MAXIMUM DIMENSIONS ALLOWED. INLET DIMENSIONS LESS THAN THOSE SHOWN ARE ACCEPTABLE FOR THE APPLICABLE INLET DESIGN NUMBER PROVIDED THE DIMENSIONS MEET GEOMETRIC REQUIREMENTS OF THE FRAMES, GRATES AND HOODS.

REINFORCING STEEL VALUES LISTED IN "SCHEDULE OF DIMENSIONS AND REINFORCING STEEL" ARE MINIMUM VALUES. STRUCTURES THAT PROVIDE VALUES LARGER THAN THOSE SHOWN WILL BE CONSIDERED ACCEPTABLE.

DESIGN DATA

MATERIAL:
 CLASS A CONCRETE f_c = 4 KSI
 REINFORCING STEEL f_y = 60 KSI

LOADING:
 HL-93

DESIGN:
 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 7TH EDITION
 ASTM C890
 ASTM C913

GENERAL NOTES

- ALL CONSTRUCTION AND MATERIAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE 2019 ODOT STANDARD SPECIFICATIONS.
- FOR DETAILS OF FRAMES, GRATES AND HOODS SEE ROADWAY STANDARDS SSIF-5, CIG-4 AND CI-2. COST OF FRAMES, GRATES AND HOODS SHALL BE INCLUDED IN THE COST OF THE STRUCTURE.
- THERE SHALL BE A MINIMUM VERTICAL DISTANCE OF 6" BETWEEN AN OPENING AND ANY EDGE.
- PROVIDE LIFTING DEVICES IN CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE GRADE 60 REINFORCING STEEL CONFORMING TO ASTM A615 OR EQUIVALENT AREA OF WELDED WIRE REINFORCING CONFORMING TO ASTM A1064.
- PROVIDE A MINIMUM CLEAR COVER OF 1 1/2" TO REINFORCING STEEL.
- WALLS OR SLABS WITH A THICKNESS OF 8" OR GREATER REQUIRE A SECONDARY LAYER OF REINFORCING STEEL. PROVIDE AN AREA OF REINFORCING STEEL EQUAL TO 0.11 IN²/FT EACH WAY IN THE SECONDARY LAYER.
- BLOCKOUTS IN WALLS MAY BE FORMED FOR GRATE SUPPORT BEAMS. THE SUPPORT BEAM SHALL BE OF SIZE S4x7.7 OR AS DESCRIBED ON ROADWAY STANDARD SSIF-5.
- MAXIMUM OPENING DIAMETER SHALL BE 4" LARGER THAN OUTSIDE DIAMETER OF PIPE.
- DO NOT GROUT RUBBER GASKET JOINTS WITHOUT THE MANUFACTURER'S RECOMMENDATIONS.
- THE FOUNDATION SHALL BE STABILIZED OR REMOVED AND REPLACED WITH FIRM AND STABLE FOUNDATION MATERIAL. A MINIMUM 3" THICK LEVELING COURSE SHALL BE PROVIDED BELOW THE BASE AREA OF THE INLET AND EXTEND 6" BEYOND THE BASE AREA. THE LEVELING COURSE SHALL BE CONSTRUCTED WITH AGGREGATE BASE TYPE A. COSTS ASSOCIATED WITH THE FOUNDATION AND LEVELING COURSE SHALL BE INCLUDED IN THE PRICE BID OF THE STRUCTURE.
- WALLS AND SLABS WILL HAVE A MINIMUM THICKNESS OF 6". A TOLERANCE OF ±3/8" WILL BE ALLOWED FOR FABRICATION.
- FLEXURAL REINFORCING STEEL SHALL NOT EXCEED SPACING OF 6" CENTER TO CENTER

BASIS OF PAYMENT

ITEM NO.	ITEM	UNIT
611(G)	PRECAST INLET CI DES. 1 (STD)	EA.
611(G)	PRECAST INLET CI DES. 1 (A)	EA.
611(G)	PRECAST INLET CI DES. 1 (B)	EA.
611(G)	PRECAST INLET CI DES. 1 (C)	EA.
611(G)	PRECAST INLET CI DES. 1 (D)	EA.
611(G)	PRECAST INLET CI DES. 1 (2A)	EA.
611(G)	PRECAST INLET CI DES. 1 (A-B)	EA.
611(G)	PRECAST INLET CI DES. 1 (A-C)	EA.
611(G)	PRECAST INLET CI DES. 1 (2B)	EA.
611(G)	PRECAST INLET CI DES. 1 (B-C)	EA.
611(G)	PRECAST INLET CI DES. 1 (2C)	EA.
611(G)	PRECAST INLET CI DES. 2 (STD)	EA.
611(G)	PRECAST INLET CI DES. 2 (B)	EA.
611(G)	PRECAST INLET CI DES. 2 (C)	EA.
611(G)	PRECAST INLET CI DES. 2 (D)	EA.
611(G)	PRECAST INLET CI DES. 2 (2B)	EA.
611(G)	PRECAST INLET CI DES. 2 (2C)	EA.
611(G)	PRECAST INLET CI DES. 2 (B-D)	EA.
611(G)	PRECAST INLET CI DES. 2 (2D)	EA.
611(G)	PRECAST INLET CI DES. 3 (STD)	EA.
611(G)	PRECAST INLET CI DES. 3 (B)	EA.
611(G)	PRECAST INLET CI DES. 3 (D)	EA.
611(G)	PRECAST INLET CI DES. 3 (2B)	EA.
611(G)	PRECAST INLET CI DES. 3 (B-D)	EA.
611(G)	PRECAST INLET CI DES. 3 (2D)	EA.
611(G)	ADD'L DEPTH IN PRECAST INLET CI DES. 1	VF
611(G)	ADD'L DEPTH IN PRECAST INLET CI DES. 2	VF
611(G)	ADD'L DEPTH IN PRECAST INLET CI DES. 3	VF

APPROVED BY ROADWAY ENGINEER: *[Signature]* DATE 5/27/20

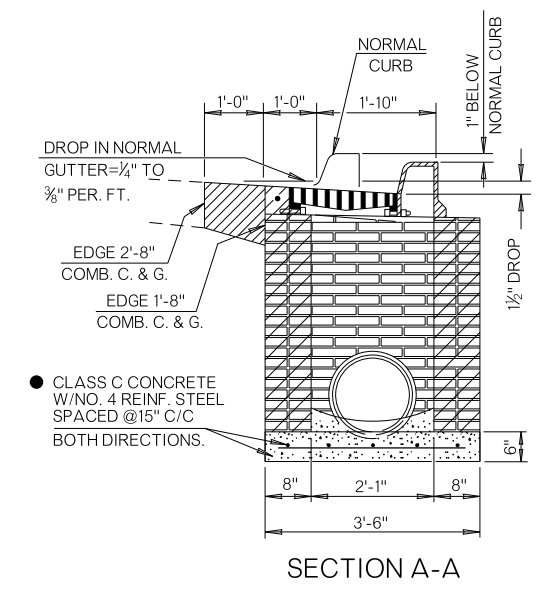
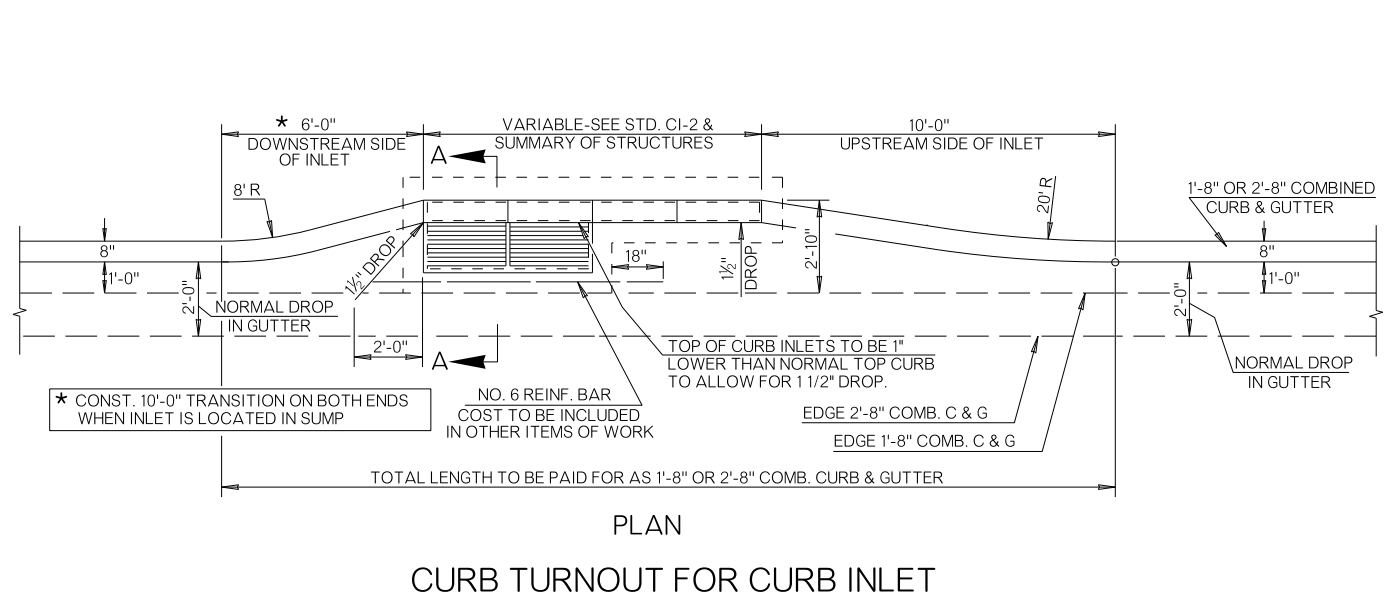
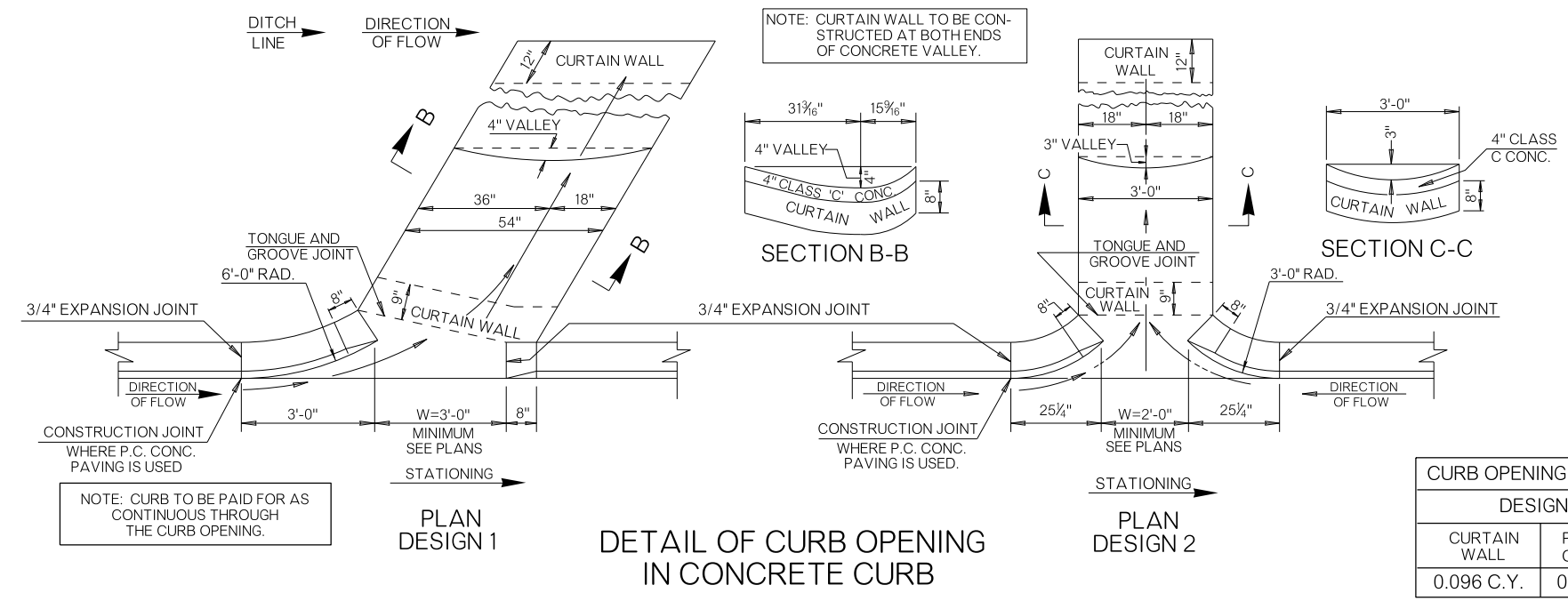
ROADWAY DESIGN DIVISION STANDARD

PRECAST CURB INLET (DESIGNS 1, 2 AND 3)



2019 SPECIFICATIONS

PCI-1	0
	R-25

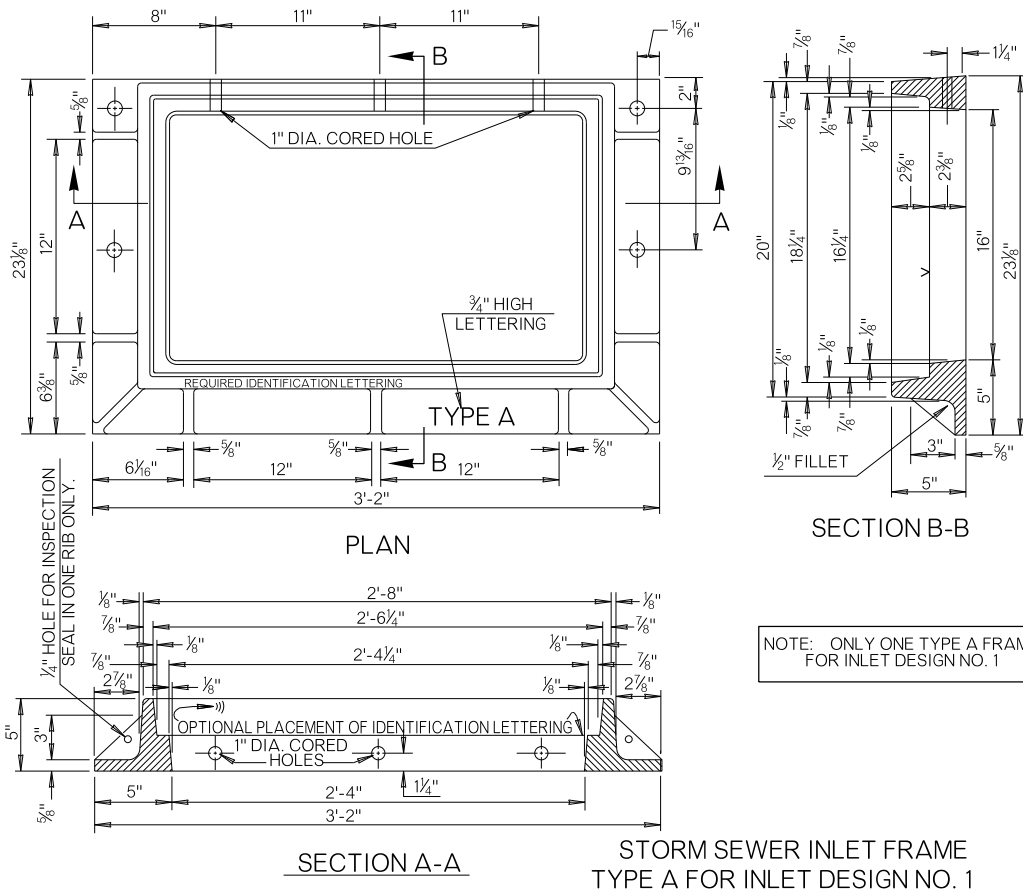


- GENERAL NOTES**
- ALL CONSTRUCTION AND MATERIAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE 2019 ODOT STANDARD SPECIFICATIONS.
 - INLET STRUCTURES MAY BE SUPPLIED AS PRECAST UNITS IF PROPOSED PRECAST DESIGN IS SUBMITTED TO THE ENGINEER AND APPROVED FOR USE. SEE ROADWAY STANDARD CI-2.

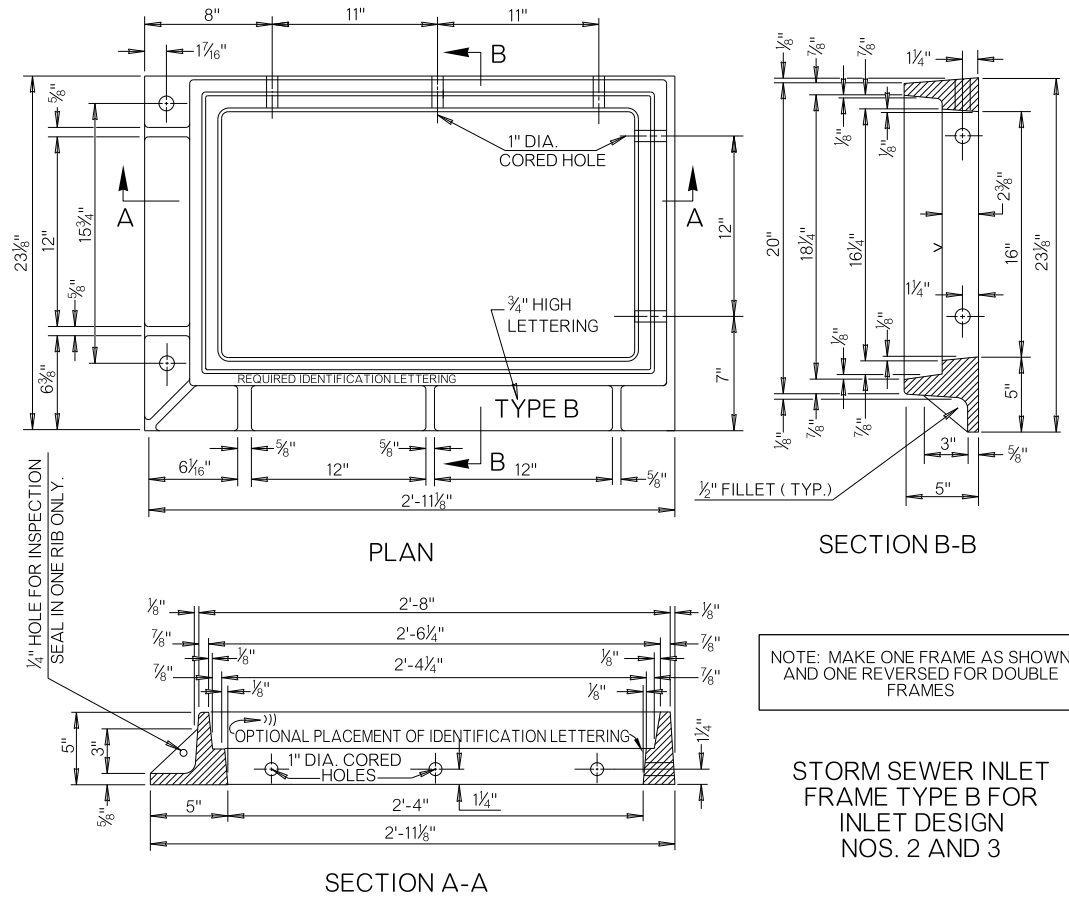
BASIS OF PAYMENT		
ITEM NO.	ITEM	UNIT
509 (D)	CLASS C CONCRETE	CY

APPROVED BY ROADWAY ENGINEER: *[Signature]* DATE: 5/27/20
ROADWAY DESIGN DIVISION STANDARD

OKLAHOMA DEPARTMENT OF TRANSPORTATION	
STANDARD REVISIONS	
DESCRIPTION	DATE

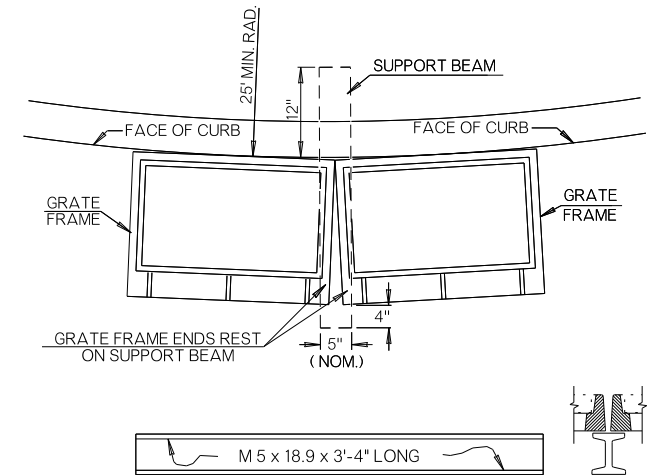


NOTE: ONLY ONE TYPE A FRAME FOR INLET DESIGN NO. 1

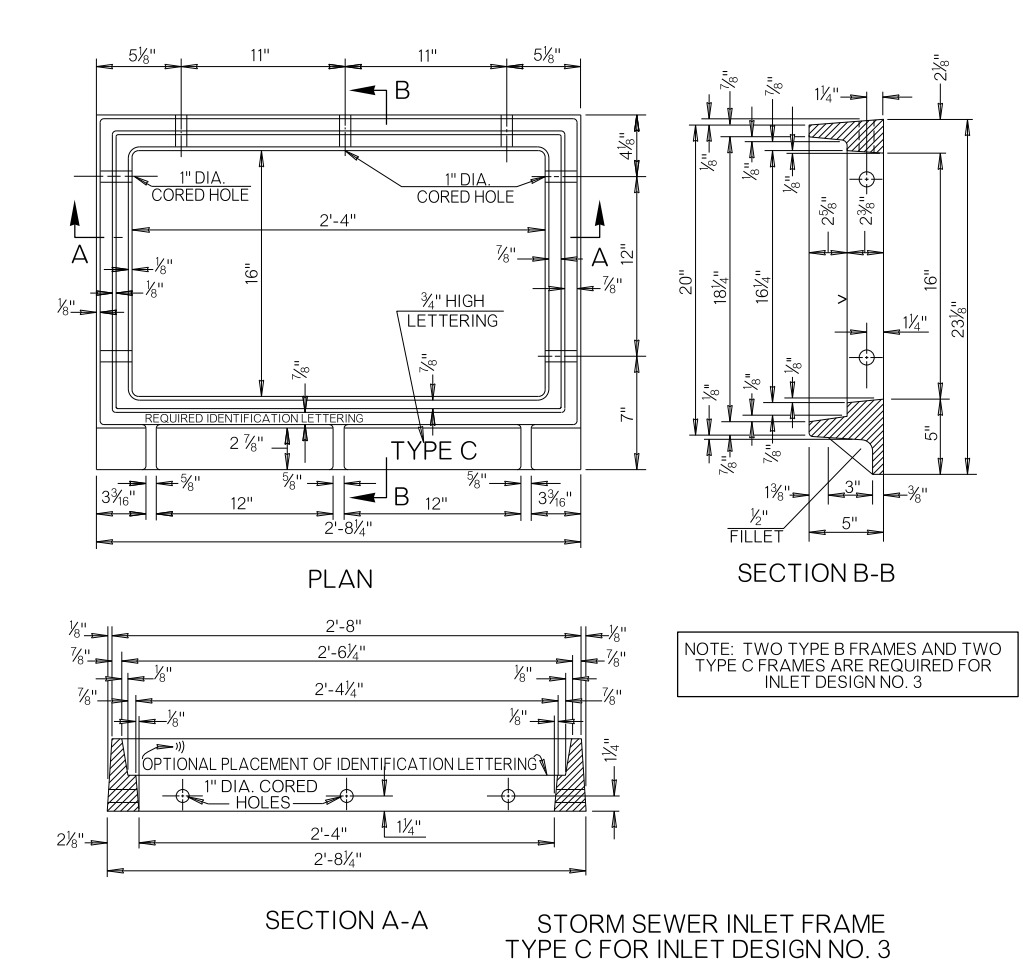


NOTE: MAKE ONE FRAME AS SHOWN AND ONE REVERSED FOR DOUBLE FRAMES

STORM SEWER INLET FRAME TYPE B FOR INLET DESIGN NOS. 2 AND 3

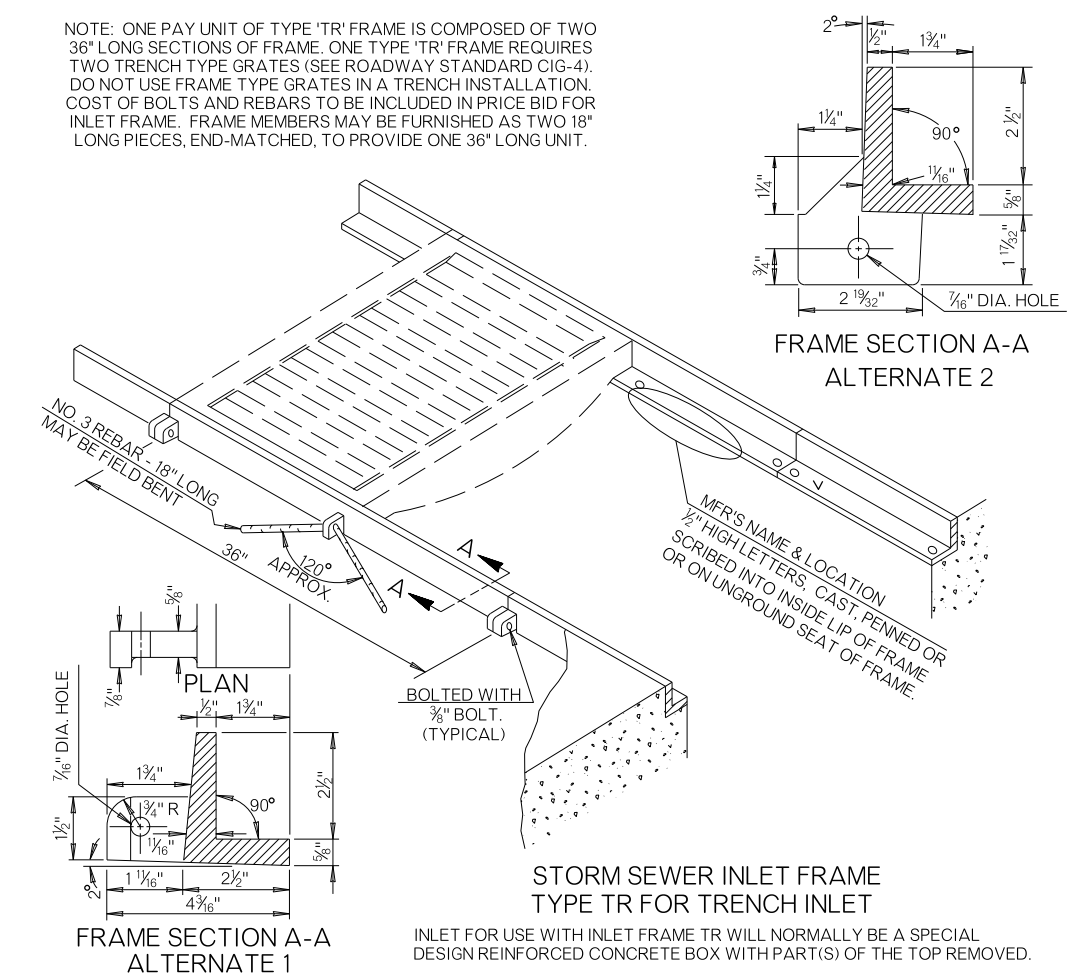


ALTERNATE SUPPORT BEAM
TO BE USED IN LIEU OF S 4 x 7.7, WHEN STRUCTURE IS BUILT ALONG CURVED CURB



NOTE: TWO TYPE B FRAMES AND TWO TYPE C FRAMES ARE REQUIRED FOR INLET DESIGN NO. 3

STORM SEWER INLET FRAME TYPE C FOR INLET DESIGN NO. 3



STORM SEWER INLET FRAME TYPE TR FOR TRENCH INLET
INLET FOR USE WITH INLET FRAME TR WILL NORMALLY BE A SPECIAL DESIGN REINFORCED CONCRETE BOX WITH PART(S) OF THE TOP REMOVED.

- GENERAL NOTES**
- ALL CONSTRUCTION AND MATERIAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE 2019 ODOT STANDARD SPECIFICATIONS.
 - INLET DESIGN NO. 1 REQUIRES ONE TYPE 'A' FRAME.
 - INLET DESIGN NO. 2 REQUIRES TWO TYPE 'B' FRAMES AND 2 EA. 3/4" x 5" BOLTS WITH NUTS AND ONE S 4 x 7.7 x 3'-4" LONG SUPPORT BEAM. IF BUILT ON CURVED CURB, THE INLET REQUIRES 1 EA. 3/4" x 5" BOLT WITH NUT AND 1 EA. 3/4" x 6 1/2" BOLT WITH NUT AND ONE M 5 x 18.9 x 3'-4" LONG SUPPORT BEAM.
 - INLET DESIGN NO. 3 REQUIRES THE SAME APPURTENANCES AS DESIGN NO. 2 WITH TWO OR MORE TYPE 'C' FRAMES LOCATED BETWEEN THE TWO TYPE 'B' FRAMES AND ONE ADDITIONAL SUPPORT BEAM AND A PAIR OF BOLTS WITH NUTS FOR EACH ADDED TYPE 'C' FRAME, PLUS ONE ADDITIONAL PAIR OF BOLTS AND SUPPORT BEAM.
 - ALL LETTERING TO BE RECESSED 1/16" AND SHALL NOT EXCEED 1" IN HEIGHT. INFORMATION REQUIRED SHALL BE STATED IN THE SPECIFICATIONS. LOCATION OF LETTERING TO BE AS SHOWN WITH ADDITIONAL IDENTIFICATION LETTERING AT OTHER LOCATIONS ACCEPTABLE.
 - FRAMES SHALL BE CAST STEEL, DUCTILE IRON, OR GRAY IRON CONFORMING TO SECTION 725 OF THE SPECIFICATIONS.
 - INLET FRAMES AND GRATES INSTALLED DURING ORIGINAL CONSTRUCTION SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE OF THE ORIGINAL INLET.
- NOTE: MACHINING (SYMBOL ^) MAY BE ACCOMPLISHED BY MILLING OR BY LEVEL GRINDING.

BASIS OF PAYMENT		
ITEM NO.	ITEM	UNIT
611 (I)	REPLACEMENT OF INLET FRAME AND GRATE (■)	EA
611 (J)	REPLACEMENT OF INLET FRAME (■)	EA

■ TYPE OF FRAME AND TYPE OF GRATE SHALL BE SPECIFIED.
TYPE A, B, OR C FRAMES AS SHOWN HERE WITH GRATES FROM STANDARD CIG-4 (TYPE VG-F OR RVG-F) COMPRISE THE PAY ITEM. SEE NOTE THIS SHEET FOR PAY UNIT.

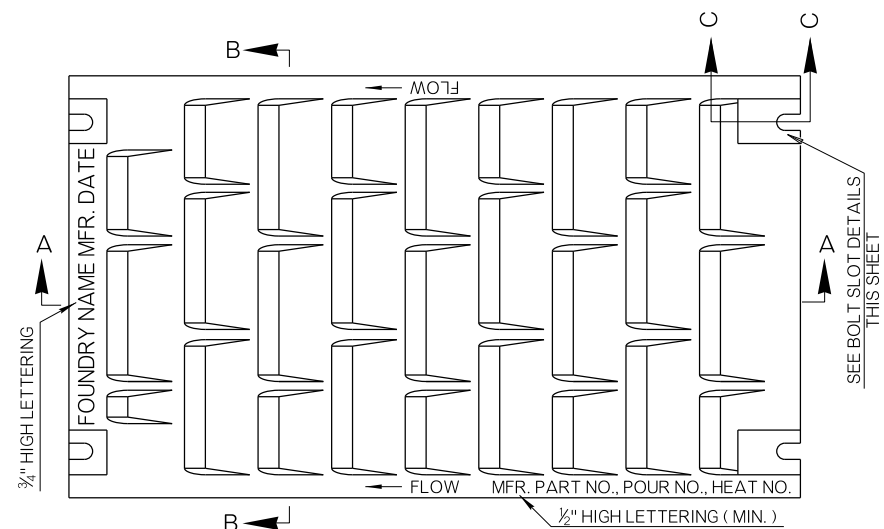
APPROVED BY ROADWAY ENGINEER: *Calvin A.* DATE: 5/27/20
ROADWAY DESIGN DIVISION STANDARD



STORM SEWER INLET FRAMES (CURB INLETS)

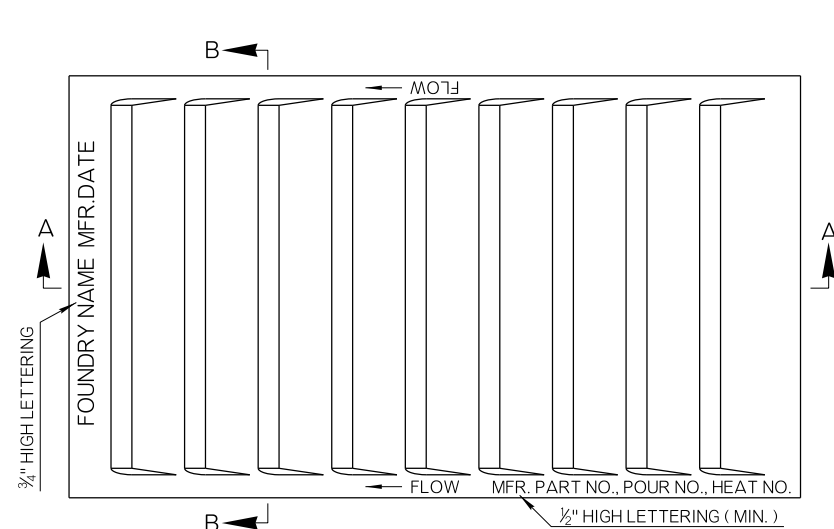
2019 SPECIFICATIONS	
SSIF-5	0
	R-40

OKLAHOMA DEPARTMENT OF TRANSPORTATION	
STANDARD REVISIONS	
DESCRIPTION	DATE



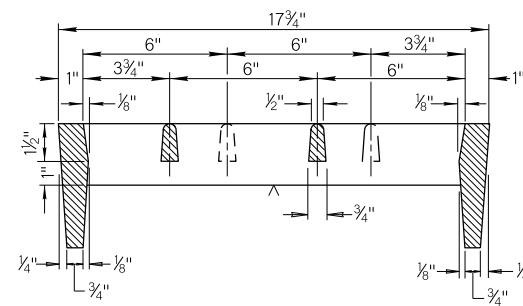
PLAN - RIBBED VANE GRATE
(SHOWN FOR TRENCH INSTALLATION)

TYPE RVG-F (FRAME INSTALLATION)
TYPE RVG-T (TRENCH INSTALLATION)

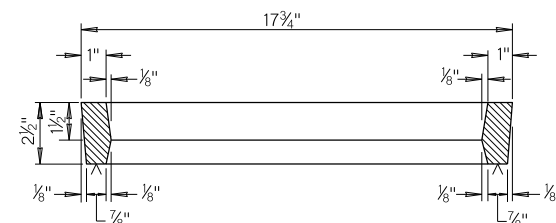


PLAN - VANE GRATE
(SHOWN FOR FRAME INSTALLATION)

TYPE VG-F (FRAME INSTALLATION)
TYPE VG-T (TRENCH INSTALLATION)



SECTION B - B (TRENCH INSTALLATION)

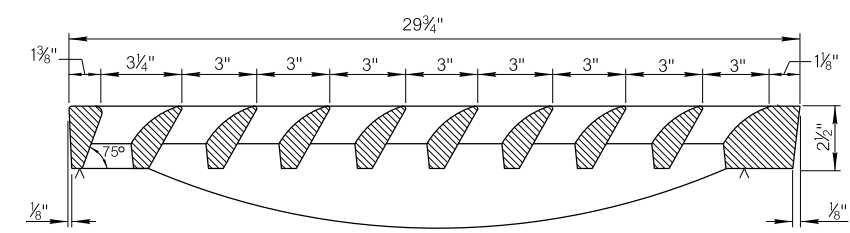


SECTION B - B (FRAME INSTALLATION)

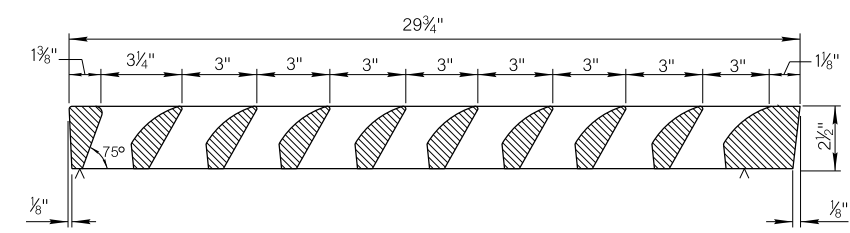
GENERAL NOTES

1. ALL CONSTRUCTION AND MATERIAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE 2019 ODOT STANDARD SPECIFICATIONS.
2. FRAME TYPE GRATES SHALL NOT TO BE USED IN TRENCH INSTALLATIONS.
3. GRATES SHALL BE INSTALLED IN THE FRAME WITH FLOW ARROW POINTING DOWNSTREAM OR TOWARD THE LOW POINT IN A SUMP.
4. ALL LETTERING IS TO BE RECESSED 1/16". ALL INFORMATION REQUIRED SHALL BE SUFFICIENT FOR IDENTIFICATION, AS SHOWN.
5. GRATES SHALL BE CAST STEEL, DUCTILE IRON, OR GRAY IRON CONFORMING TO SECTION 725 OF THE SPECIFICATIONS.
6. ALL GRATES INSTALLED IN A TRENCH FRAME (STD. SSIF-5) SHALL HAVE A BOLTED HOLD-DOWN FEATURE. IF INSTALLED IN AN ANGLE IRON FRAME OR RESTING ON A CONCRETE SHOULDER, A POSITIVE HOLD-DOWN FEATURE, APPROVED BY THE ENGINEER, SHALL BE USED.
7. INLET FRAMES, GRATES AND COVER GRATES INSTALLED DURING ORIGINAL CONSTRUCTION SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE OF THE ORIGINAL INLET OR MANHOLE.

NOTE: MACHINING (SYMBOL ^) MAY BE ACCOMPLISHED BY MILLING OR BY LEVEL GRINDING.

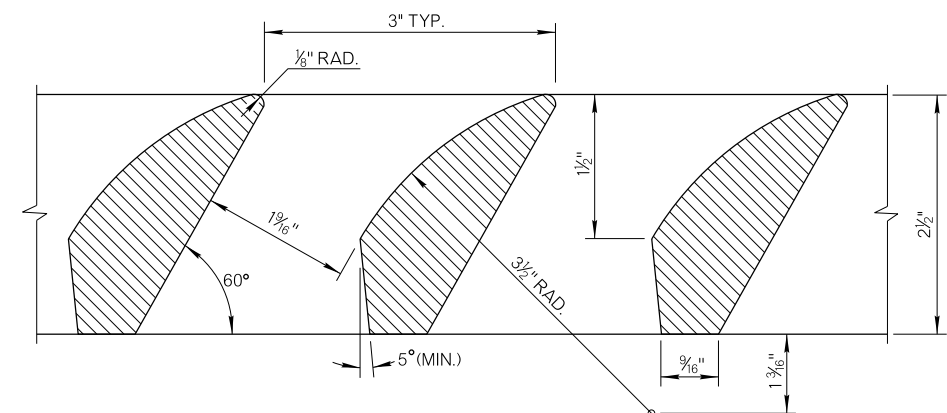


SECTION A - A (TRENCH INSTALLATION)

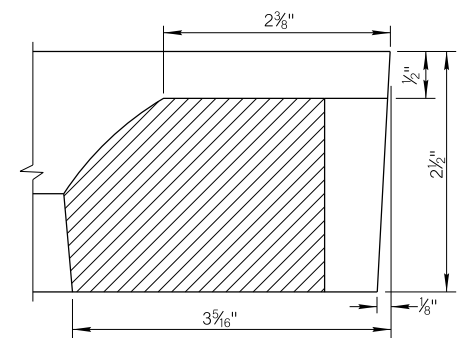


SECTION A - A (FRAME INSTALLATION)

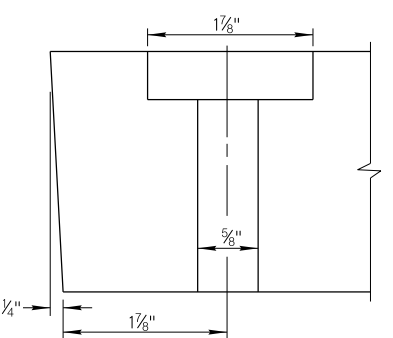
^ MACHINING ONLY ON END BEARING AREAS



TYPICAL SECTION THRU VANES



SECTION C - C



END VIEW

BASIS OF PAYMENT		
ITEM NO.	ITEM	UNIT
611 (I)	REPLACEMENT OF INLET FRAME AND GRATE	EA
611 (K)	REPLACEMENT OF INLET GRATE (TYPE ■)	EA

▼ ANY FRAME TYPE GRATE ON THIS DRAWING INSTALLED IN A PROPER FRAME, AS SHOWN ON ROADWAY STANDARD SSIF-5 (TYPES A, B AND C) WILL COMPRISE THE PAY ITEM.

■ CAST INLET GRATE NOMENCLATURE	
TYPE VG-F	VANE GRATE - FRAME TYPE
TYPE VG-T	VANE GRATE - TRENCH TYPE
TYPE RVG-F	RIBBED VANE GRATE - FRAME TYPE
TYPE RVG-T	RIBBED VANE GRATE - TRENCH TYPE

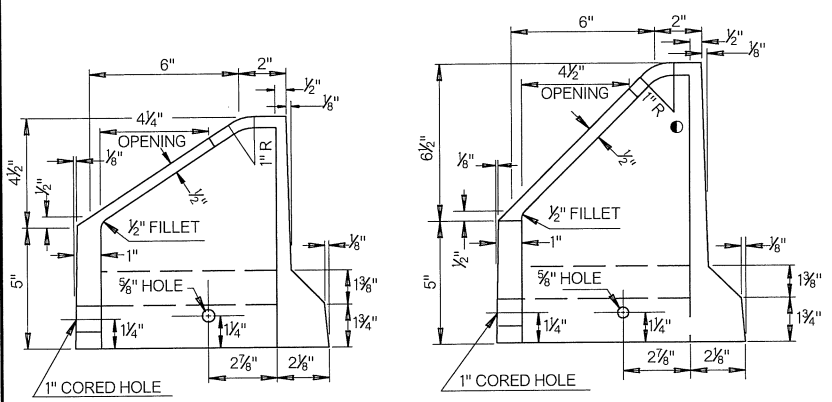
APPROVED BY ROADWAY ENGINEER: *Calvin A.* DATE: 5/27/20
ROADWAY DESIGN DIVISION STANDARD



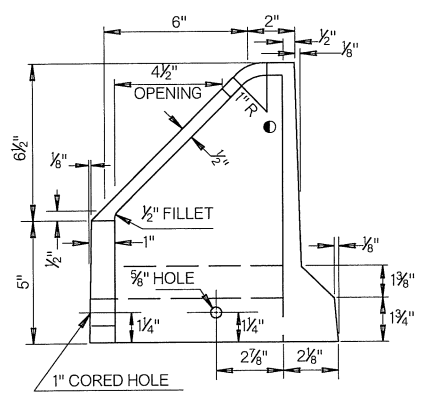
CAST IRON GRATES
(CURB INLETS)

2019 SPECIFICATIONS	
CIG-4	0
R-41	

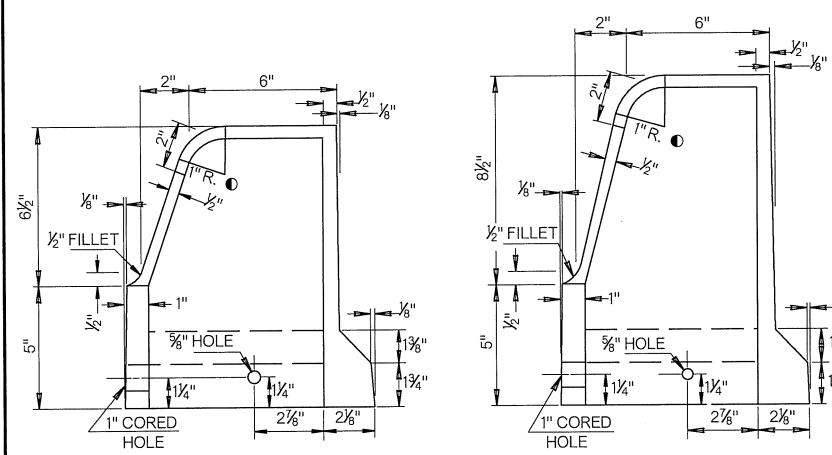
STANDARD REVISIONS		
DESCRIPTION	DATE	



4" MOUNTABLE CURB HOOD

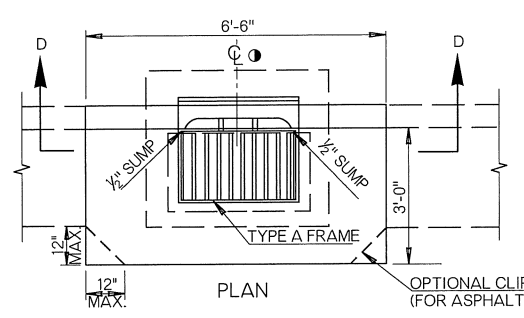


6" MOUNTABLE CURB HOOD

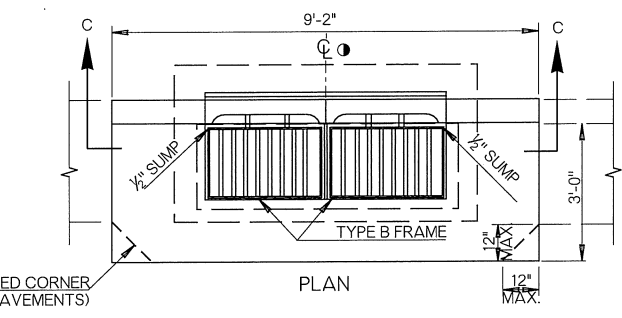


6" BARRIER CURB HOOD

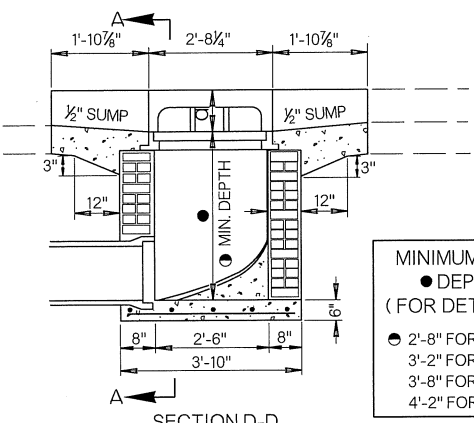
8" BARRIER CURB HOOD



PLAN TYPE A FRAME (FOR ASPHALT PAVEMENTS)

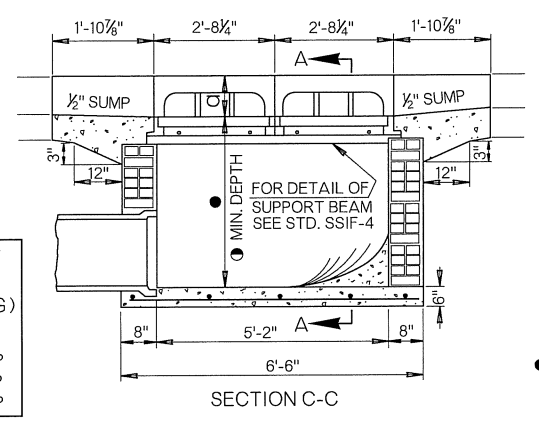


PLAN TYPE B FRAME

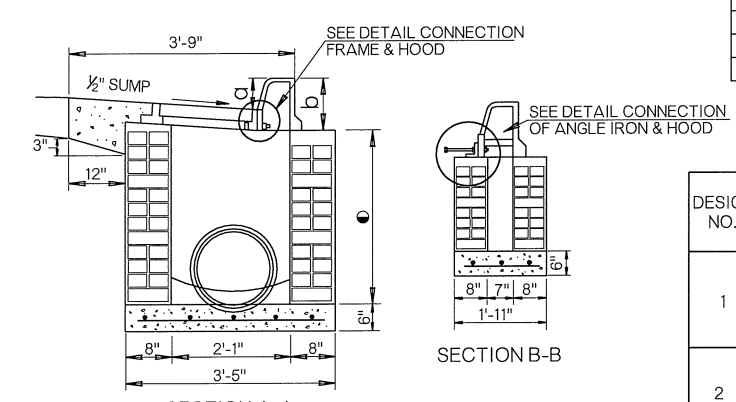


SECTION D-D DESIGN 1 (SINGLE GRATE)

MINIMUM INLET DEPTH (FOR DETAILING)
 ● 2'-8" FOR 18" RCP
 ● 3'-2" FOR 24" RCP
 ● 3'-8" FOR 30" RCP
 ● 4'-2" FOR 36" RCP

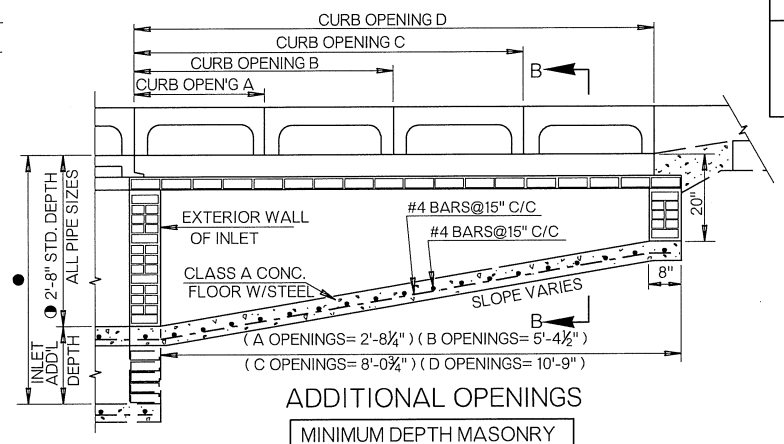


SECTION C-C DESIGN 3 (MULTIPLE DOUBLE GRATING)



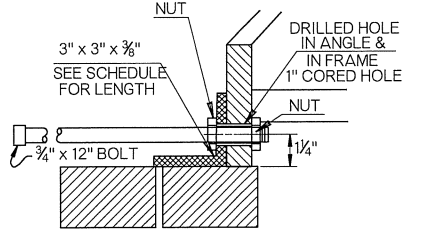
SECTION A-A

SECTION B-B

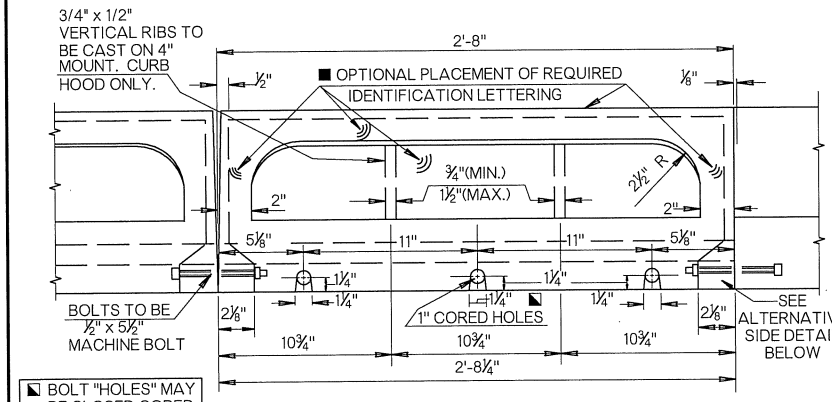


ADDITIONAL OPENINGS

MINIMUM DEPTH MASONRY OR PRECAST WALLS
 ● 2'-3" FOR 18" RCP
 ● 2'-9" FOR 24" RCP
 ● 3'-3" FOR 30" RCP
 ● 3'-9" FOR 36" RCP



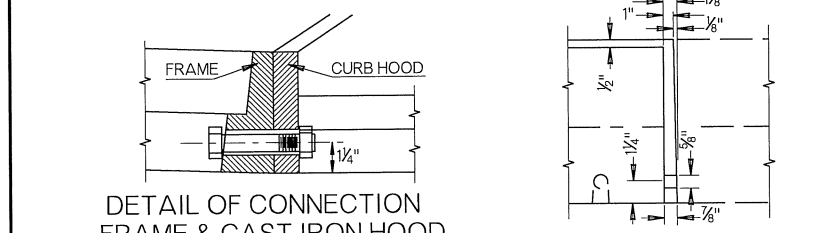
DETAIL OF CONNECTION ANGLE IRON & CAST IRON HOOD
 NOTE: ANGLE IRON TO BE BOLTED TO HOOD WITH 3 EACH - 3/4" x 12" MACHINE BOLTS IN EACH HOOD SECTION.



CAST IRON HOOD ELEVATION

● BOLT "HOLES" MAY BE CLOSED CORED HOLES OR SLOTS.

■ TOP OF HOOD SHALL STATE "DUMP NO WASTE" AND "DRAINS TO RIVER" OR SIMILAR WORDING.



DETAIL OF CONNECTION FRAME & CAST IRON HOOD

ALTERNATE SIDE DETAIL

NOTE: FRAME TO BE BOLTED TO THE HOOD WITH 3 EA. - 3/4" x 4 1/2" MACHINE BOLTS. FOR FRAME DETAILS, SEE ROADWAY STANDARD SSIF-4

QUANTITIES (FOR 18" R.C. PIPE AND MIN. DEPTH)							
DESIGN	DESIGNATION	CU. YD.	INLET		CAST IRON HOOD	ANGLE IRON	
			BASE AMT.	ADD'L. CF PER VERT FT.		EACH	LENGTH
1	STD.	0.24	17.76	7.89	1	1	-
	A	0.34	23.84	7.89	1	2	2'-5 3/8"
	B	0.43	30.11	7.89	1	3	5'-1 1/2"
	C	0.53	36.38	7.89	1	4	7'-9 1/4"
	D	0.63	42.66	7.89	1	5	10'-6 1/8"
	2A	0.43	29.91	7.89	1	3	2'-5 3/8" 2'-5 3/8"
	A-B	0.53	36.19	7.89	1	4	2'-5 3/8" 5'-1 1/2"
	A-C	0.62	42.46	7.89	1	5	2'-5 3/8" 7'-9 1/4"
	2B	0.62	42.46	7.89	1	5	2'-5 1/8" 5'-1 1/2"
	B-C	0.72	48.74	7.89	1	6	5'-1 1/8" 7'-9 1/4"
2	2C	0.82	55.01	7.89	1	7	7'-9 1/4" 7'-9 1/4"
	STD.	0.41	25.76	11.45	2	2	-
	B	0.60	38.11	11.45	2	4	1 5'-1 1/8" -
	C	0.73	44.39	11.45	2	5	1 7'-9 1/4" -
	D	0.79	50.66	11.45	2	6	1 10'-6 1/8" -
	2B	0.79	50.46	11.45	2	6	2 5'-1 1/8" 5'-1 1/8"
	2C	0.98	63.01	11.45	2	8	2 7'-9 1/8" 7'-9 1/8"
	B-D	0.98	63.01	11.45	2	8	2 5'-1 1/8" 10'-6 1/8"
	2D	1.17	75.56	11.45	2	10	2 10'-6 1/8" 10'-6 1/8"
	3	STD.	0.74	41.27	18.34	4	4
B		0.93	53.62	18.34	4	6	1 5'-1 1/8" -
D		1.12	66.17	18.34	4	8	1 10'-6 1/8" -
2B		1.12	65.98	18.34	4	8	1 5'-1 1/8" 5'-1 1/8"
B-D		1.31	78.52	18.34	4	10	2 5'-1 1/8" 10'-6 1/8"
2D		1.50	91.07	18.34	4	12	2 10'-6 1/8" 10'-6 1/8"

■ DEPTH OF 2'-8" SHALL BE USED FOR STANDARD DEPTH FOR ALL PIPE SIZES AND/OR PIPE TYPES. FOR INLET DEPTHS GREATER THAN STANDARD DEPTH, A PAY ITEM FOR ADDITIONAL DEPTH, VERTICAL FEET, SHALL BE USED. TO DETERMINE TOTAL INLET QUANTITY FOR INLET DEPTHS GREATER THAN 2'-8", MULTIPLY ADDITIONAL DEPTH BY ADDITIONAL CU. FT. PER VERTICAL FOOT AND ADD TO THE BASE AMOUNT.

■ QUANTITIES SHOWN ARE FOR 2 DOUBLE GRATED INLETS.

PAYMENT FOR ALL CLASS A CONCRETE AND ANY REINFORCING STEEL USED TO CONSTRUCT CAST IN PLACE INLET WALLS OR FLOORS SHALL BE INCLUDED IN THE PRICE BID FOR THE INLET.

PRECAST INLET ALTERNATIVES MAY BE ACCEPTED, IN LIEU OF BRICK MASONRY OR CAST-IN-PLACE CONCRETE, IF APPROVED BY THE ENGINEER.

SPECIAL DESIGN CASTINGS, HOODS, FRAMES OR GRATES MAY BE USED, IN LIEU OF STANDARD DESIGNS SHOWN ON THIS SHEET, IF APPROVED BY THE ENGINEER.

GENERAL NOTES

- ALL CONSTRUCTION AND MATERIAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE 2009 ODOT STANDARD SPECIFICATIONS.
- STANDARD SSIF-4 FRAMES AND STANDARD CIG-3 GRATES TO BE USED WITH THESE INLETS UNLESS OTHERWISE SPECIFIED. COST OF THESE ITEMS AND HOODS SHALL BE INCLUDED IN THE COST OF INLET.
- WHEN THE INLET IS BUILT IN NEW CONCRETE PAVEMENT, THE APRON AROUND THE INLET MAY BE BUILT INTEGRAL WITH PAVEMENT OR MAY BE SEPARATE AND OF THE SIZE AS SHOWN. THE THICKNESS SHALL BE THE SAME AS THE CONCRETE PAVEMENT OR CURB AND GUTTER. IF CONSTRUCTED IN ANY OTHER AREA OR IN EXISTING PAVEMENT, THE APRON AROUND THE INLET SHALL BE THE SIZE AS SHOWN AND BUILT OF P.C. CONCRETE TO A MINIMUM 8 INCH THICKNESS.
- THERE WILL BE NO DEDUCTION OF PAYMENT FOR CONCRETE CURB AND GUTTER OR P.C. CONCRETE THRU THE EXTENTS OF THE INLET HOODS. DEDUCTION WILL BE MADE FOR THE PAYMENT OF INTEGRAL CURB THROUGH THE EXTENTS OF THE INLET HOODS.
- ALL LETTERING TO BE RECESSED 1/8 INCH AND SHALL NOT EXCEED ONE INCH IN HEIGHT. INFORMATION REQUIRED SHALL BE AS STATED IN THE SPECIFICATIONS. LOCATION OF LETTERING TO BE AS SHOWN, WITH ADDITIONAL IDENTIFICATION LETTERING AT OTHER LOCATIONS PERMITTED.
- CAST IN PLACE CONCRETE WALLS MEETING MIX REQUIREMENTS OF CLASS A CONCRETE MAY BE BUILT IN LIEU OF THE BRICK MASONRY TO THE SAME DIMENSIONS AS SHOWN. NO. 4 REINFORCING STEEL BARS SPACED 30" VERTICALLY AND 12" HORIZONTALLY WILL BE REQUIRED FOR ALL CAST IN PLACE INLET WALLS EXCEEDING 5.0 FEET IN DEPTH (GUTTERLINE TO FLOWLINE). COST OF STEEL REINFORCING TO BE INCLUDED IN THE COST OF THE INLET.
- ALL CAST IN PLACE CLASS A CONCRETE INLET FLOORS SHALL HAVE NO. 4 REINFORCING STEEL PLACED AT 15" MAXIMUM C/C SPACING IN BOTH DIRECTIONS.
- THE STANDARD DRAWING, DESIGN NO., DESIGNATION NO., AND NUMBER OF ADDITIONAL OPENINGS SHALL BE INDICATED ON THE PLANS, I.E., EXAMPLE: STD. CI-1, DES. 1(A-B).
- TYPE B & C FRAMES TO BE USED FOR MULTIPLE DOUBLE GRATES. SEE ROADWAY STD. SSIF-4 FOR DETAILS.
- BOLT(S) WITH EXPANSION DEVICES OR EPOXY TYPE PUTTY TO BE USED TO INSTALL CAST IRON HOOD INTO CONCRETE CURB. COST OF INSTALLATION TO BE INCLUDED IN PRICE BID FOR THE CURB INLET.
- CASTINGS AS SHOWN HERE SHALL BE CAST STEEL, DUCTILE IRON OR GRAY IRON CONFORMING TO SECTION 725 OF THE SPECIFICATIONS.
- TWO INCH RADIUS MAY BE USED IF APPROVED BY THE ENGINEER.
- CONSTRUCTION STATIONING OF CURB INLETS IS DETERMINED BY THE CENTERLINE (C) OF THE SURFACE GRATES.

BASIS OF PAYMENT		
ITEM NO.	ITEM	UNIT
611 (G)	INLET (CI DES. ▲)	EA
611 (H)	ADDITIONAL DEPTH IN INLET (CI DES. ▼)	VF
611 (I)	REPLACEMENT OF INLET FRAME AND GRATE▲	EA
611 (J)	REPLACEMENT OF INLET FRAME	EA
611 (K)	REPLACEMENT OF INLET GRATE	EA
611 (M)	REPLACEMENT OF CAST IRON HOOD	EA

- ▲ SPECIFY INLET DESIGN & CURB OPENING DESIGNATION.
- ▼ SPECIFY INLET DESIGN 1, 2 OR 3.
- ▲ TYPE OF FRAME AND TYPE OF GRATE SHALL BE SPECIFIED.

APPROVED BY ROADWAY ENGINEER: *Caleba F. A.* DATE: 04/14/15

ROADWAY DESIGN DIVISION STANDARD

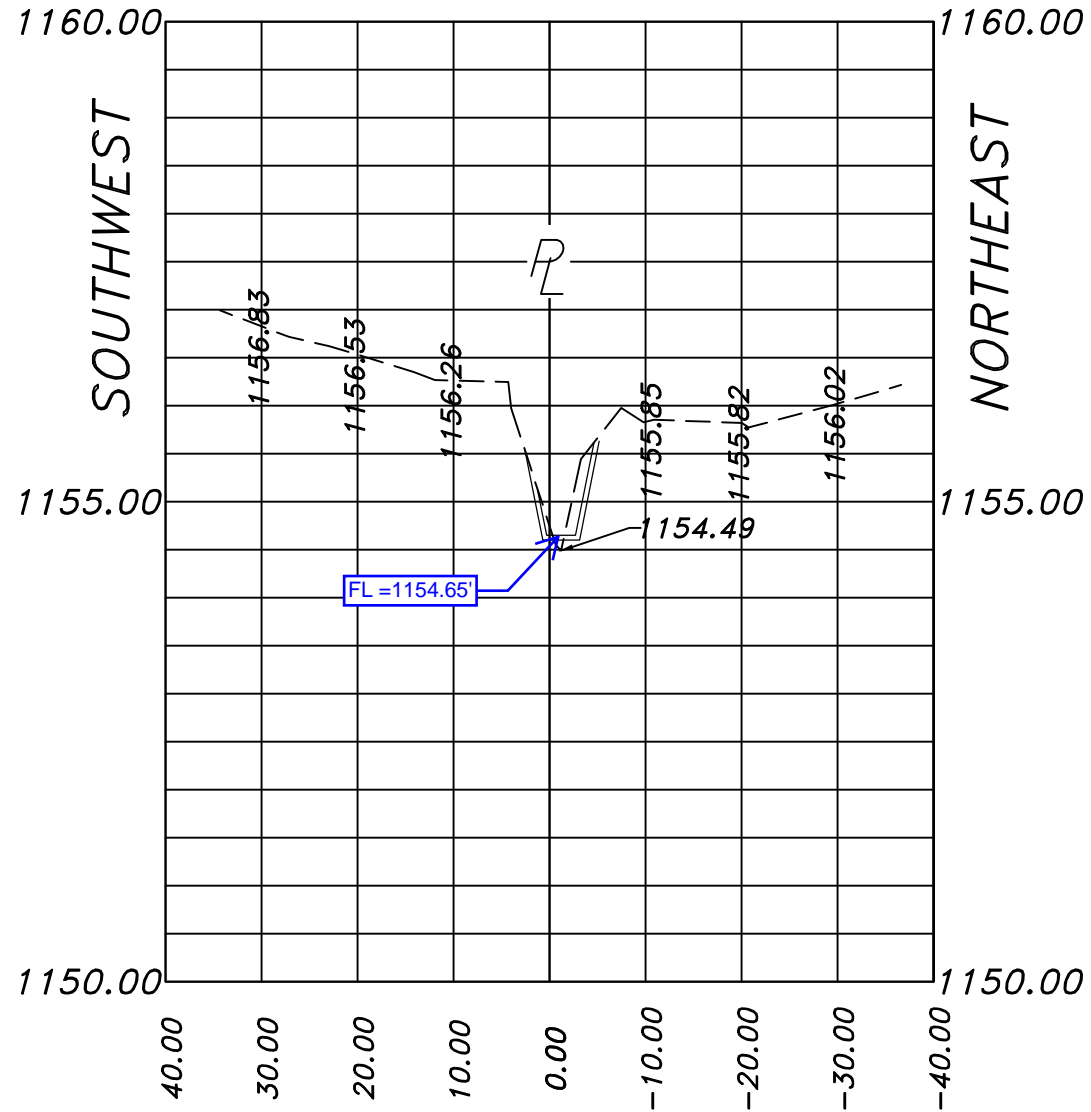
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CURB INLETS

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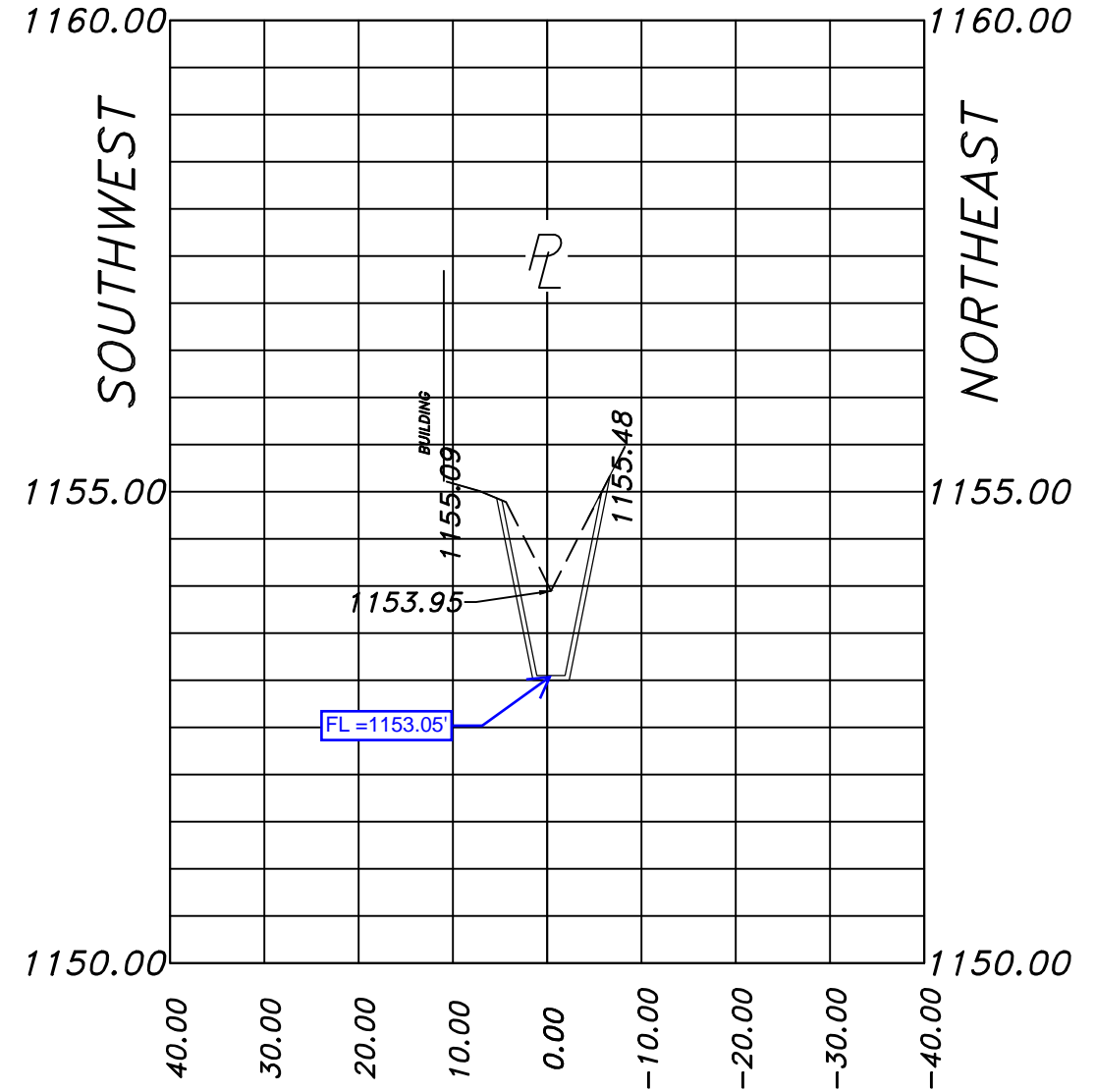
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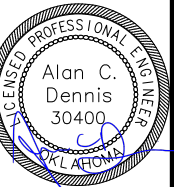
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OK COA #4193
 EXPIRES 06/30/2024



REV	DATE	DESCRIPTION	BY

CITY OF NORMAN
 NORMAN, OKLAHOMA
 STORM WATER DRAINAGE IMPROVEMENTS
 ROWENA LANE

CROSS SECTIONS

DATE: MARCH 2024
 DESIGNED BY: ACD
 DRAWN BY: NTB

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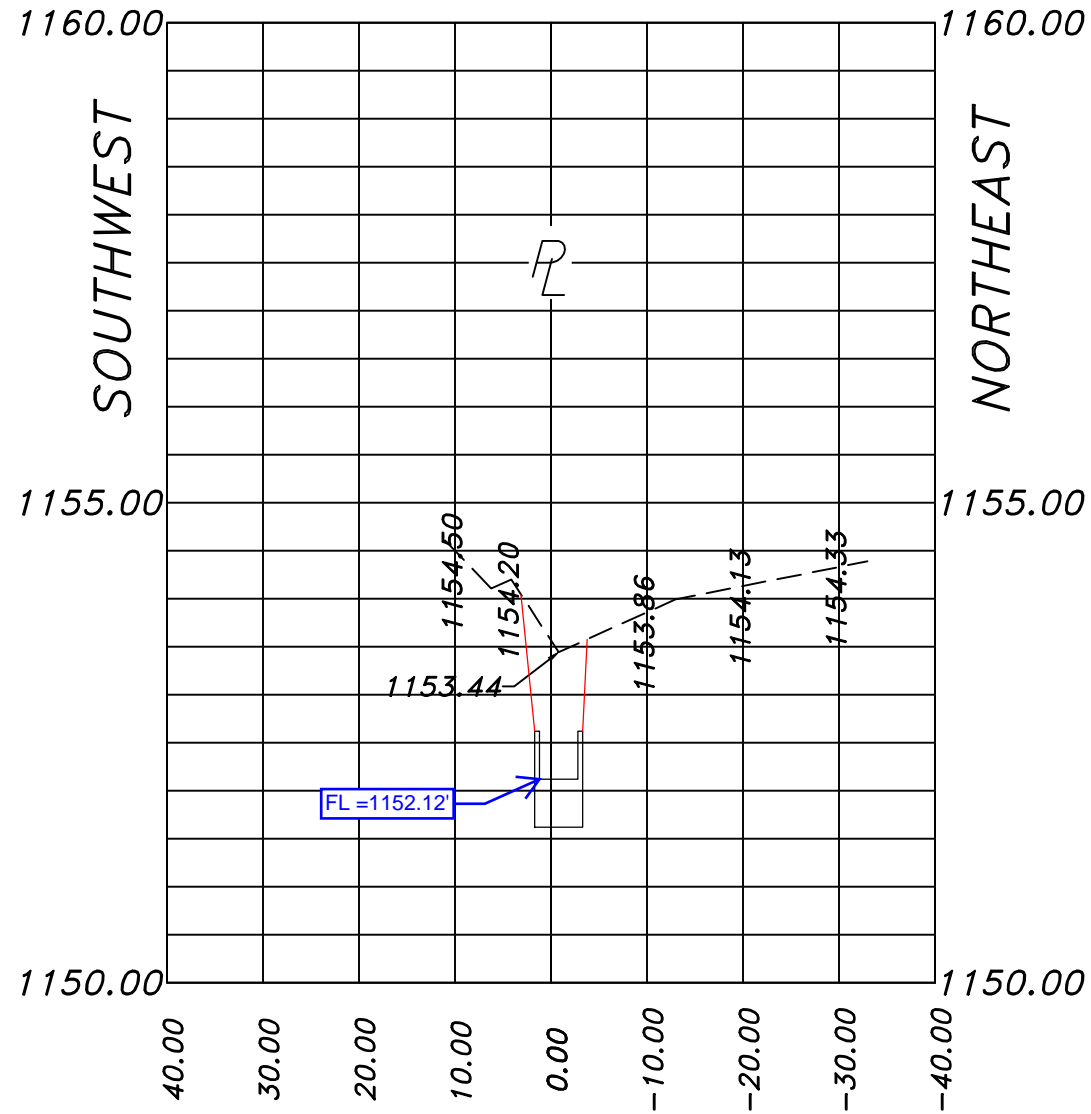
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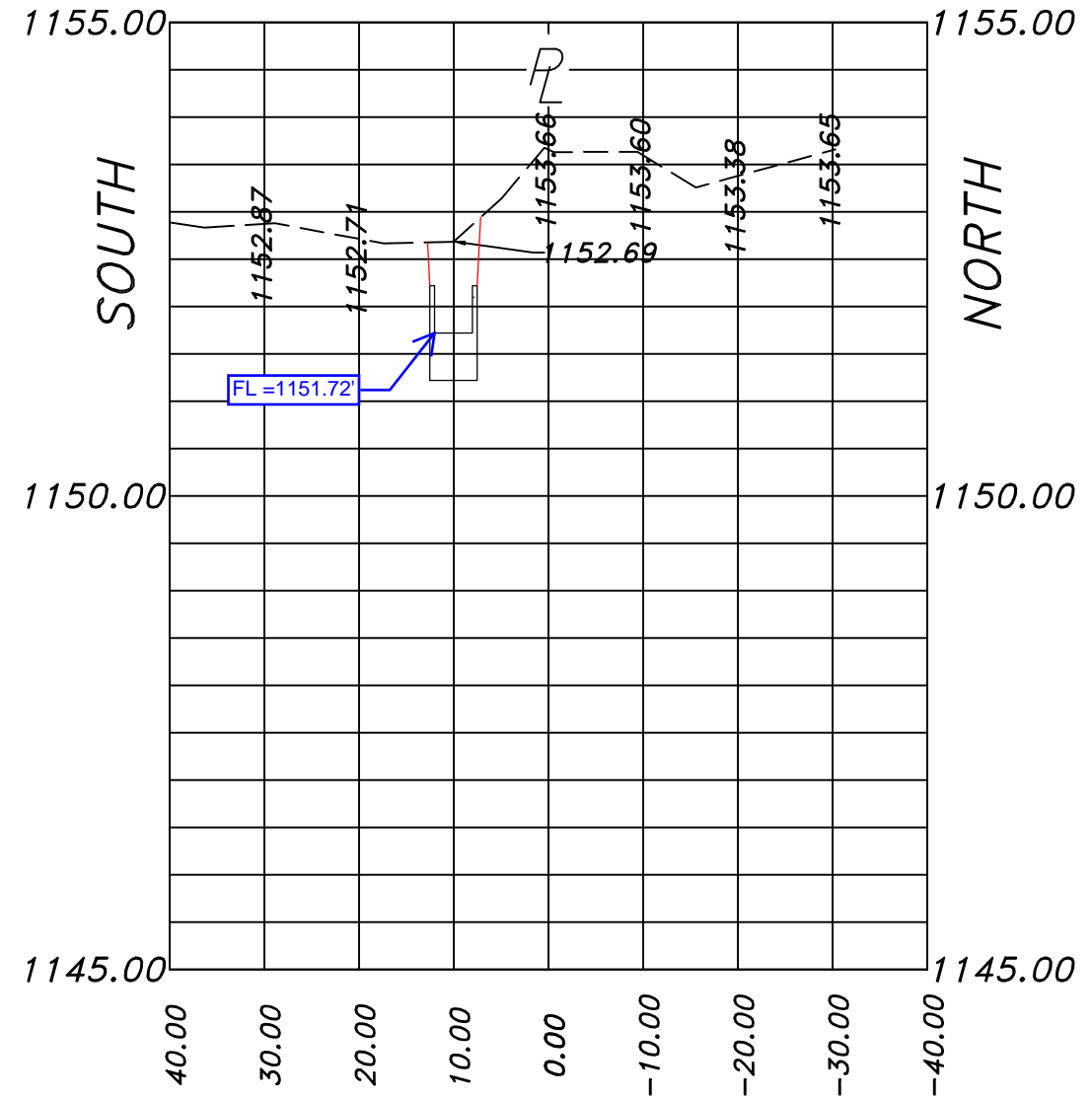
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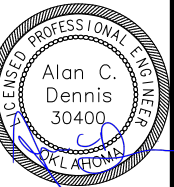
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12+28.79



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CITY OF NORMAN
 NORMAN, OKLAHOMA
 STORM WATER DRAINAGE IMPROVEMENTS
 ROWENA LANE

CROSS SECTIONS

DATE: MARCH 2024
 DESIGNED BY: ACD
 DRAWN BY: NTB

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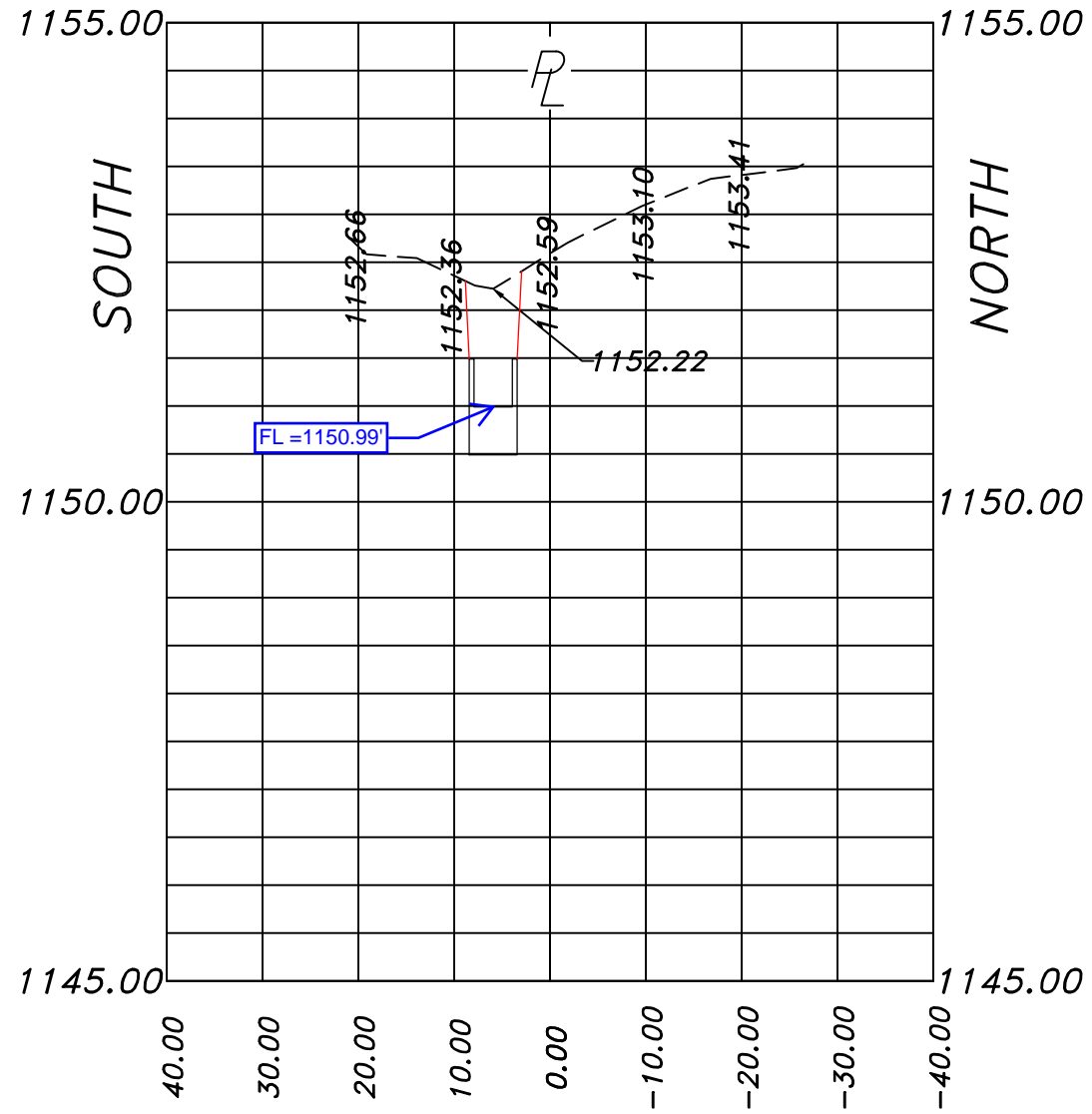
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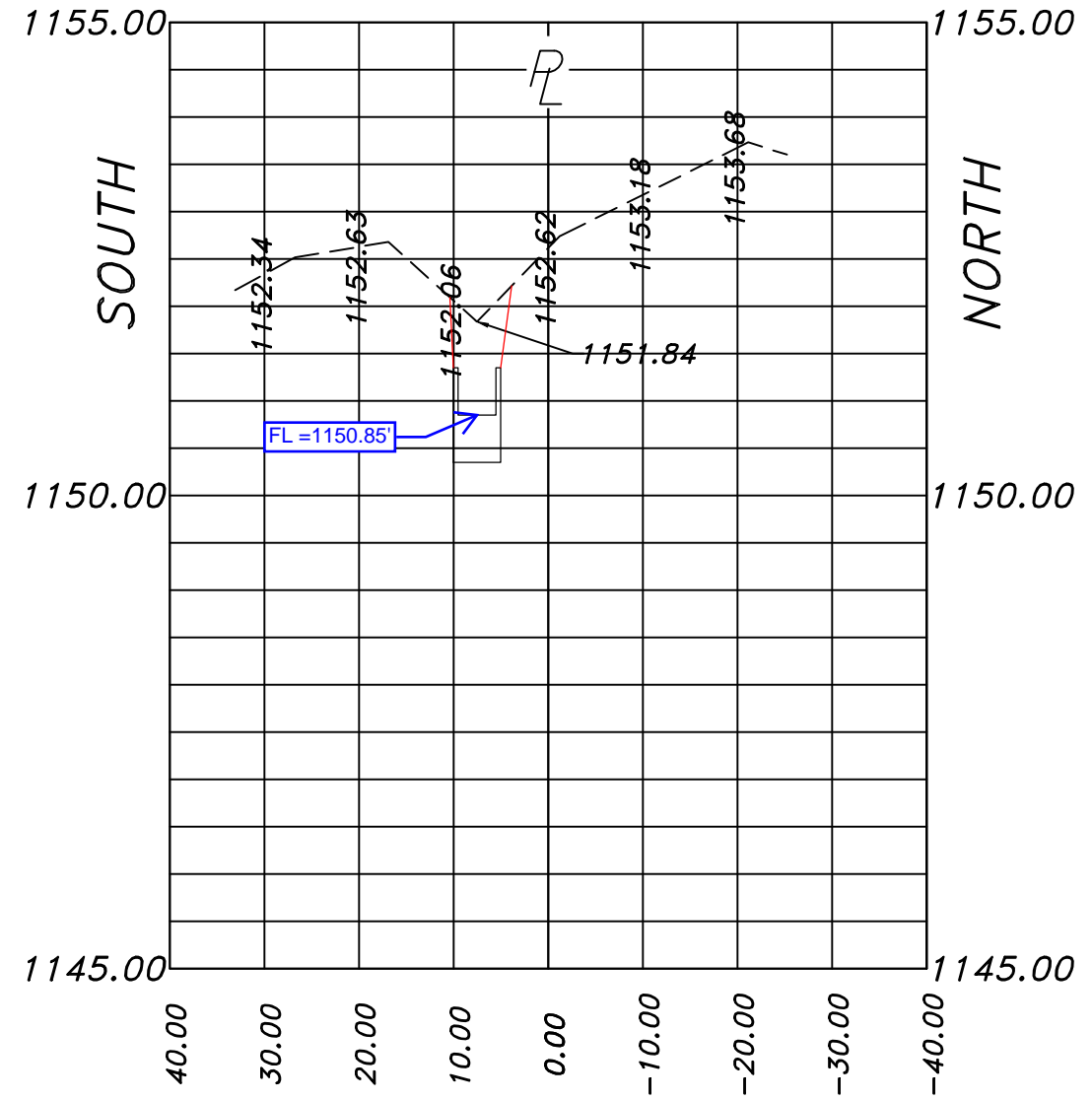
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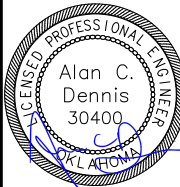
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14+01.32



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X-004

SHEET NUMBER
13