

1. ALL CONSTRUCTION METHODS AND MATERIALS USED IN THE CONSTRUCTION OF THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE IN ACCORDANCE WITH THE STANDARD TECHNICAL SPECIFICATIONS AND CURRENT REVISIONS ON FILE IN THE OFFICE OF THE CITY ENGINEER, CITY OF TOPEKA, SHAWNEE COUNTY, KANSAS. THE CITY ENGINEERS DECISIONS ON QUESTIONS REGARDING THESE PLANS SHALL GOVERN.

2. THE LOCATION OF ALL UNDERGROUND UTILITIES MAY VARY FROM WHAT IS INDICATED IN THESE PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE UTILITY OWNER TO LOCATE AND FLAG ALL UNDERGROUND UTILITIES WHETHER INDICATED OR NOT. NO EXCAVATION SHALL BE PERMITTED IN THE AREA OF UNDERGROUND UTILITIES UNTIL ALL SUCH UTILITIES HAVE BEEN LOCATED AND IDENTIFIED TO THE SATISFACTION OF ALL PARTIES. ANY DAMAGE TO THE UTILITY SHALL BE REPAIRED OR REPLACED BY THE UTILITY COMPANY AT THE EXPENSE OF THE CONTRACTOR.

3. ALL PROPERTY PINS DISTURBED BY CONSTRUCTION SHALL BE REPLACED BY A LICENSED ENGINEER OR LAND SURVEYOR. THIS WORK SHALL BE SUBSIDIARY TO OTHER ITEMS OF THE CONTRACT.

4. FULL DEPTH SAWCUTS SHALL BE USED TO REMOVE A PORTION OF PAVEMENT OR CURB AND GUTTER. ALL SAWCUTS SHALL BE FULL DEPTH AND SHALL BE SUBSIDIARY TO OTHER BID ITEMS.

5. CONTRACTOR SHALL MAINTAIN CONSTRUCTION LIMITS WITHIN THE EXISTING RIGHT-OF-WAY.

6. CONTRACTOR SHALL SUBMIT A DETAILED WRITTEN TRAFFIC CONTROL PLAN FOR ALL PHASES OF THE PROJECT. THE PROJECT HAS BEEN DIVIDED INTO A TWO-YEAR PROJECT, WITH SPECIFIC AREAS TO BE COMPLETED IN EACH YEAR. CONTRACTOR SHALL ADHERE TO THE TRAFFIC SEQUENCING IN THE PLANS, UNLESS OTHERWISE APPROVED BY THE CITY OF TOPEKA.

7. CONTRACTOR PROVIDED TRAFFIC CONTROL SHALL ADHERE TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE TYPICAL DETAILS SHOWN IN THE PLAN SET. CONTRACTOR SHALL COMMUNICATE AND COORDINATE WITH HOMEOWNERS. MINIMUM HOMEOWNER ACCESS REQUIREMENTS ARE REQUIRED - SEE SPECIAL PROVISIONS IN THE CONTRACT DOCUMENTS FOR PERFORMANCE SPECIFICATION OF HOMEOWNER ACCESS.

8. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER, FOR APPROVAL, A DETAILED WORK SCHEDULE OUTLINING ESTIMATED TIME PERIODS FOR CONSTRUCTION OF SEGMENTS.

9. THE CONTRACTOR WILL BE RESPONSIBLE FOR ORDERING THE PROJECT SIGNS FROM THE CITY OF TOPEKA ON-CALL SIGN CONTRACTOR, WHICH IS ALL SIGNS, LLC, AND WILL ALSO BE RESPONSIBLE FOR PAYING ALL SIGNS, LLC, FOR THE SIGNS AT THE ESTABLISHED MATERIAL COSTS. THE SIGN DETAIL IS SHOWN ON CITY STANDARD DT-019. ANY ADDITIONAL COST TO INSTALL, MAINTAIN, AND REMOVE THE SIGNS AFTER PROJECT COMPLETION SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED SUBSIDIARY TO THE BID ITEM "PROJECT SIGN". CONTRACTOR SHALL RETAIN OWNERSHIP OF THE SIGN(S) UPON COMPLETION OF THE PROJECT. ONLY SIGNS IN NEW CONDITION SHALL BE INSTALLED AT THE COMMENCEMENT OF A PROJECT.

10. TRAFFIC CONTROL SHOWN IN PLANS AND TRAFFIC CONTROL DEVICES TABULATION ARE SHOWN FOR INFORMATION ONLY. ALL DEVICES AND FLAGGER OPERATIONS SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED SUBSIDIARY TO THE BID ITEM "TRAFFIC CONTROL (L.S.)"

11. ALL DISTURBED AREAS WITHIN THE RIGHT-OF-WAY SHALL BE SODDED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, AND PAID BY THE BID ITEM "SODDING - SY". IN THE EVENT THAT THE DISTURBED AREAS EXCEEDS THE CONSTRUCTION LIMITS SHOWN ON THE PLANS, THOSE AREAS SHALL BE SODDED. THESE ADDITIONAL AREAS SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED SUBSIDIARY TO THE BID ITEM "SODDING - SY". AREA ADDITIONS MAY BE DEEMED NECESSARY BY THE OWNER FOR REASONS INCLUDING BUT NOT LIMITED TO: HEAVY EQUIPMENT TRACKING, WHEEL RUTTING, AND TEMPORARY STORAGE OF MATERIALS ON EXISTING GREENSPACE AREAS, OR OTHER CONTRACTOR RELATED EVENTS THAT CAUSE ADDITIONAL DISTURBED AREAS. IN THE EVENT OF WHEEL RUTTING, CONTRACTOR MAY BE REQUIRED TO PROVIDE BLACK TOPSOIL PRIOR TO SEEDING TO BRING THE GROUND BACK TO LEVEL. LABOR AND MATERIALS TO REPAIR WHEEL RUTTING SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED SUBSIDIARY TO THE BID ITEM "SODDING - SY". ALL SODDING SHALL BE COMPLETED WITHIN THE TIMEFRAME SPECIFIED IN THE CITY OF TOPEKA SPECIFICATIONS.

12. TEMPORARY EROSION POLLUTION CONTROL STANDARD DETAILS HAVE BEEN INCLUDED. CONTRACTOR SHALL BE REQUIRED TO MEET OR EXCEED THE REQUIREMENTS OF THE STANDARD TECHNICAL SPECIFICATIONS OF THE CITY OF TOPEKA. OWNER RESERVES THE RIGHT TO UNDER-RUN OR OVER-RUN TEMPORARY EROSION CONTROL RELATED ITEMS AS FIELD CONDITIONS ALLOW.

13. SUITABLE BACKFILL MATERIAL SHALL BE ACQUIRED FROM ON SITE MATERIALS, UNLESS OTHERWISE REJECTED ON THE BASIS OF CITY OF TOPEKA SPECIFICATIONS.

14. HAUL AND WASTE IS SUBSIDIARY TO OTHER ITEMS IN CONTRACT.

WATER METER SERVICE SCHEDULE

Address	Meter Size	Size Service line at point of connection	Service line material at point of connection	New Meter Pit Lid Elev.	Main Size	Remarks
1300 NW Norris St.	5/8"	3/4"	Copper	881.43	6"	
1222 NW Norris St.	5/8"	3/4"	Copper	881.52	6"	
1220 NW Norris St.	5/8"	3/4"	Copper	882.35	6"	
1210 NW Norris St.	5/8"	3/4"	Copper	882.20	6"	

ALIGNMENT INFORMATION

Begin Proposed Norris CL N 590,277.0061 E 11,377,122.1883	100+00.00	Line (5) S46° 58' 18"E 117.559' N 589,466.4925 E 11,378,488.1329	116+22.61
Line (1) S4° 31' 03"E 46.056' N 590,231.0927 E 11,377,125.8159	100+46.06	Line (5) Curve (6) BC N 589,466.4925 E 11,378,488.1329 CTR N 589,722.3479 E 11,378,726.9592 PI N 589,373.8489 E 11,378,587.3823	116+22.61
Curve (2) BC N 590,231.0927 E 11,377,125.8159 CTR N 590,235.8187 E 11,377,185.6295 PI N 590,197.3696 E 11,377,128.4804	100+46.06	Direction Back S46° 58' 18"E Radius 350.000' Delta 42°24'13"(LT) Length 259.030' Tangent 135.769' Chord Direction S68° 10' 24"E Distance 253.159' Direction Ahead S89° 22' 31"E	
Direction Back S4° 31' 03"E Radius 60.000' Delta 58°49'45"(LT) Length 61.606' Tangent 33.828' Chord Direction S33° 55' 56"E Distance 58.935' Direction Ahead S63° 20' 48"E		EC N 589,372.3687 E 11,378,723.1435	118+81.64
EC N 590,182.1945 E 11,377,158.7140	101+07.66	Curve (6) Line (7) S89° 22' 31"E 193.167' N 589,370.2628 E 11,378,916.2993	120+74.81
Line (3) S63° 20' 48"E 1,325.937' N 589,587.3907 E 11,378,343.7529	114+33.60	Line (7) N 589,370.2628 E 11,378,916.2993 End Proposed Norris CL	120+74.81
Curve (4) BC N 589,587.3907 E 11,378,343.7529 CTR N 589,363.9564 E 11,378,231.6050 PI N 589,571.2549 E 11,378,375.9006	114+33.60		
Direction Back S63° 20' 48"E Radius 250.000' Delta 16°22'30"(RT) Length 71.450' Tangent 35.970' Chord Direction S55° 09' 33"E Distance 71.207' Direction Ahead S46° 58' 18"E		EC N 589,546.7103 E 11,378,402.1952	115+05.05
EC N 589,546.7103 E 11,378,402.1952	115+05.05	Curve (4)	

QUANTITY RECAP

Item	Description	Quantity	Units
1	Mobilization	1	L.S.
2	Pavement Removal	5,083	S.Y.
3	Combined Curb & Gutter - Type I	108	L.F.
4	8" Non-Reinforced Concrete Pavement	222	S.Y.
5	6" Concrete Driveway	2,154	S.F.
6	4" Crushed Rock Surfacing (Permanent)*	1,938	S.Y.
7	6" Crushed Rock Surfacing (Permanent)	171	S.Y.
8	6" Aggregate Base, Type AB-3	5,712	S.Y.
9	4" Concrete Sidewalk (5' Wide)	70	S.F.
10	Sidewalk Ramp	47	S.F.
11	Adjust Exist. Manhole Cover	3	EACH
12	Adjust Exist. Valve Cover	4	EACH
13	6" RJ PVC Waterline, PC 305	15	L.F.
14	6" Swivel/Solid Adapter	2	EACH
15	Fire Hydrant	2	EACH
16	1" Service Line	96	L.F.
17	Install Meter, Meter Pit and Top	4	EACH
18	Contractor Construction Staking	1	L.S.
19	Mailbox (Remove and Reset)	4	EACH
20	Sign (Remove and Reset)	8	EACH
21	Inlet Protection (Curb)	2	EACH
22	Ditch Check	280	L.F.
23	Fence (Construction)(Temporary)	1,422	L.F.
24	Temporary Seeding & Mulching	0.9	ACRES
25	Sodding	2,498	S.Y.
26	Large Tree Removal	14	EACH
27	Clearing and Grubbing	1	L.S.
28	6" Aggregate Base, Type AB-3 (Temp. Surfacing)	300	S.Y.
29	Railroad Protective Services (Set Price)	1	L.S.
30	Traffic Control	1	L.S.

*Note: 4" Crushed Surfacing to be used as ditch lining along ditch between Norris and UPRR.

**ADD ALTERNATE 1
(Asphalt Street Option)**

Item	Description	Quantity	Units
A1.1	Unclassified Excavation	2,130	C.Y.
A1.2	8" Asphaltic Concrete Pavement	5,135	S.Y.

**ADD ALTERNATE 2
(Concrete Street Option)**

Item	Description	Quantity	Units
A2.1	Unclassified Excavation	1,860	C.Y.
A2.2	6" Reinforced Concrete Pavement	5,135	S.Y.

Contractor shall begin work at the west end for Phase 1, followed by Phase 2 and Phase 3. Phase 1, 2, and 3 are all west of Station 115+05.05, which are areas that do not require RR permitting due to the available clearance to the Right-of-Way. Contractor must still adhere to Railroad clearance limitations as shown on Sheet 4 of the plan set. Phase 4, 5 and 6 require Railroad Permitting completion and City of Topeka Railroad Right-of-Way encroachment agreements. Phase 4, 5 and 6 will not commence until all agreements and permits are in place. These are in process and The City of Topeka anticipates them to be in place with no delay to the contractor. However, in the event of a delay of agreements/permitting, contractor shall receive a Stop Work order to establish the number of remaining contract days upon the completion of Phase 3, followed by a new Start Work order once permits and agreements are in place, along with 14 days additional time to the contract for re-mobilization. No additional costs will be added to the project in the event of a stop/start due to delay time.

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NO.	DATE:	REVISION	BY:	APP'D

DRAWN BY: xx
APP'D BY: xx



Cook, Flatt & Strobel Engineers
2930 SW Woodside Drive
Topeka, Kansas 66614
785.272.4706

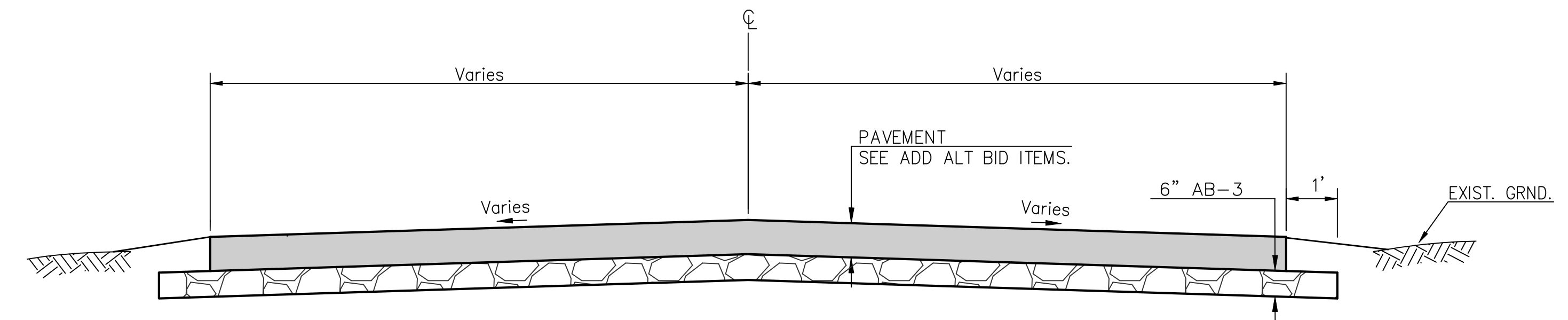


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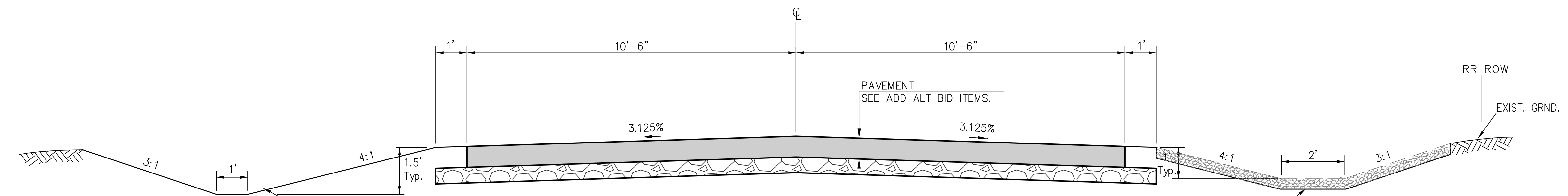
STREET IMPROVEMENT PROJECT
No. 841097.07
NW NORRIS ST.
FROM NW WEST ST. TO NW WESTERN AVE.

GENERAL NOTES
AND
QUANTITY RECAP

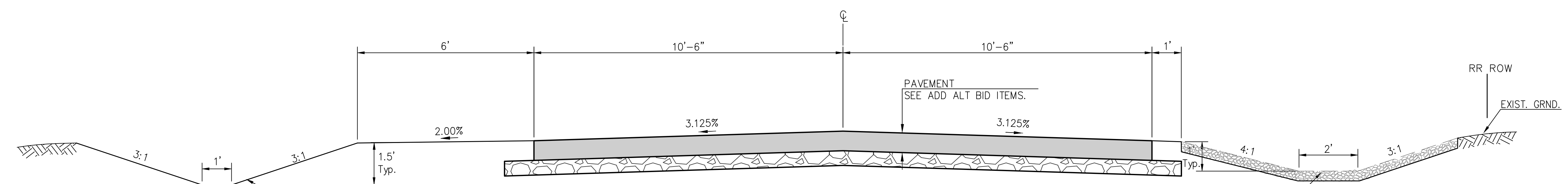
DATE: Dec. 2025
SHEET: 02 of 39
PROJ.: 841087.07



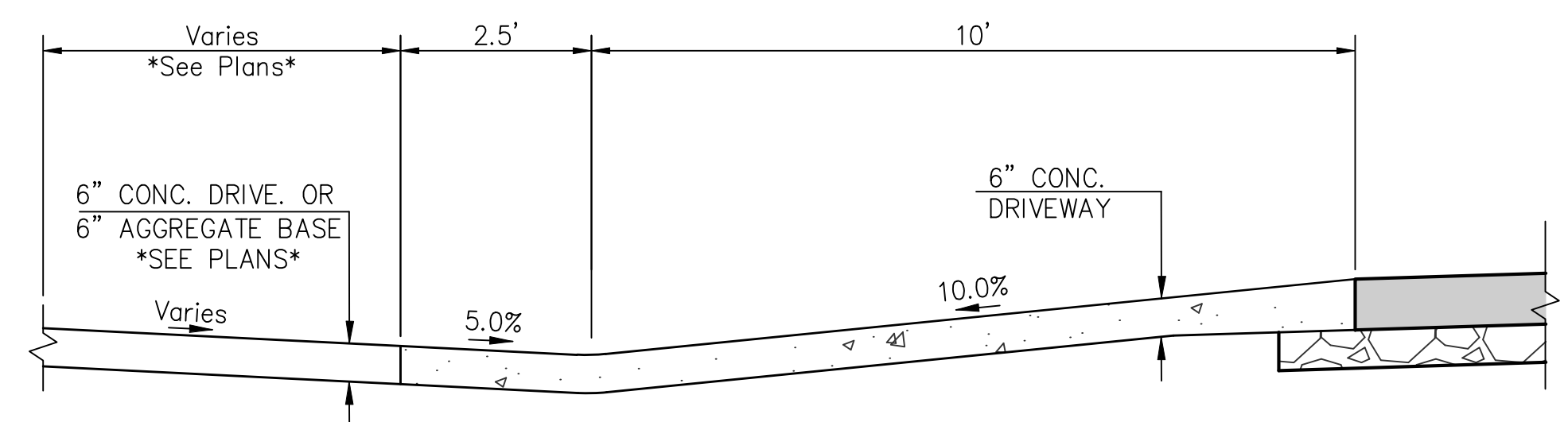
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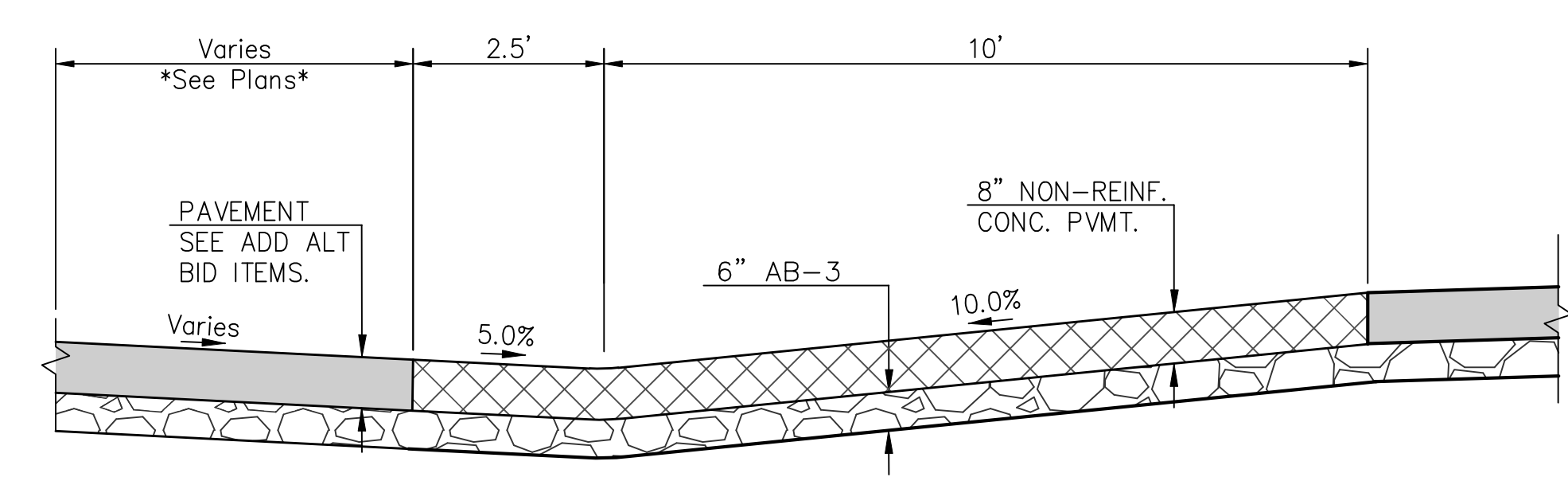
TYPICAL SECTION
Sta. 100+60.00 to 108+00.00
Sta. 113+75.00 to 119+48.90



TYPICAL SECTION
Sta. 108+00.00 to 113+75.00



DRIVEWAY CONNECTIONS
See Plan Sheets



INTERSECTIONS CONNECTIONS
NW LANE ST., NW LINCOLN ST. & NW BUCHANAN ST.

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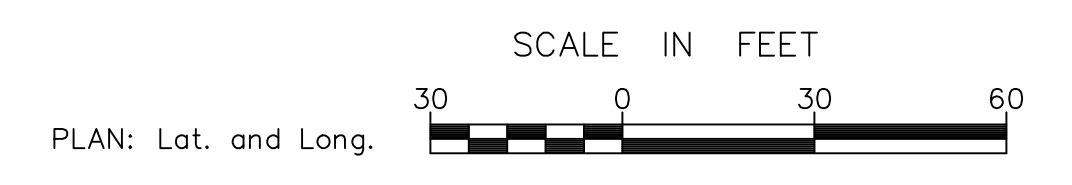
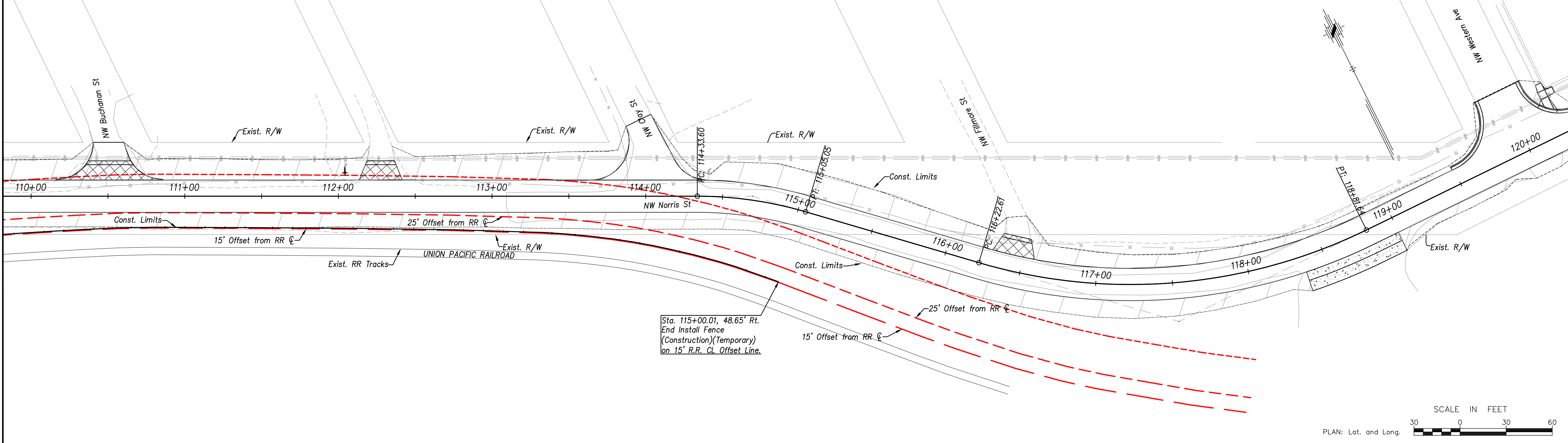
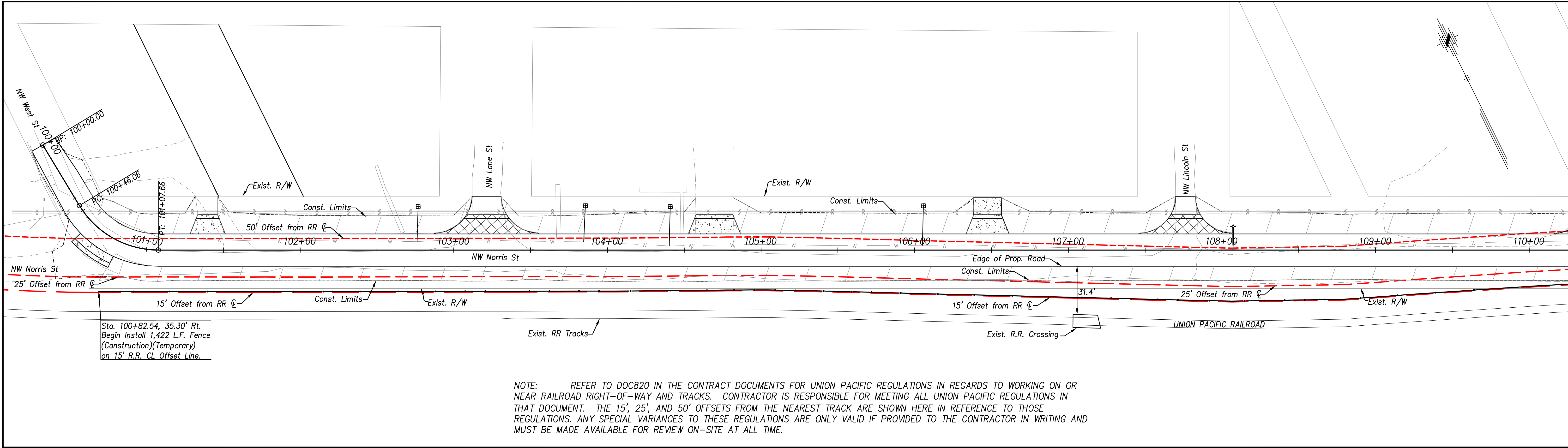
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STREET IMPROVEMENT PROJECT
No. 841097.07
NW NORRIS ST.
FROM NW WEST ST. TO NW WESTERN AVE.

ROADWAY & STORM SEWER
QUANTITIES RECAP

DATE: Dec. 2025
SHEET: 03 of 117
PROJ.: 841087.07



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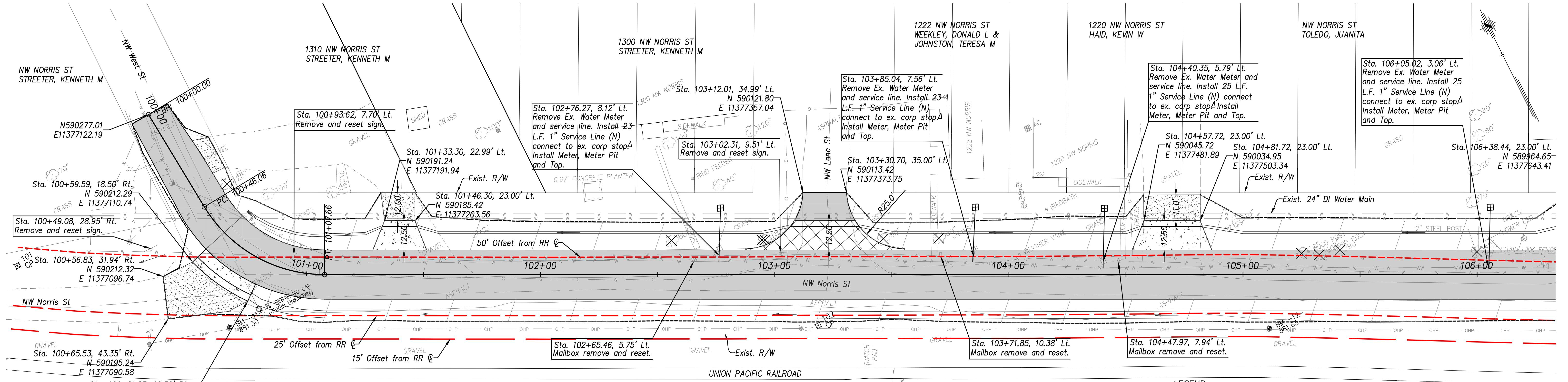
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STREET IMPROVEMENT PROJECT
No. 841097.07
NW NORRIS ST.
FROM NW WEST ST. TO NW WESTERN AVE.

RAILROAD WORK ZONE
SPECIAL PROVISIONS

DATE: Dec. 2025
SHEET: 04 of 39
PROJ.: 841087.07



HORIZONTAL DATUM: NAD 83 KRCS ZONE 11
 VERTICAL DATUM: NAVD 88

CP-101 SET 3/8" REBAR W/RED CFS CONTROL CAP
 N: 590244.3950 E: 11377043.2540 EL: 579.28

- TO CENTERLINE NORTHWEST NORRIS STREET (TRAVEL WAY)
- TO CENTERLINE NORTHWEST WEST STREET (TRAVEL WAY)
- TO TOP OF FIRE HYDRANT

17.5' SSW
 93.0' ESE
 63.0' E

CP-102 SET 3/8" REBAR W/RED CFS CONTROL CAP
 N: 590068.0910 E: 11377337.4900 EL: 881.23

- TO CENTERLINE NORTHWEST NORRIS STREET (TRAVEL WAY)
- TO CENTERLINE NORTHWEST LANE STREET (TRAVEL WAY)
- TO CENTERLINE BASE POWER POLE

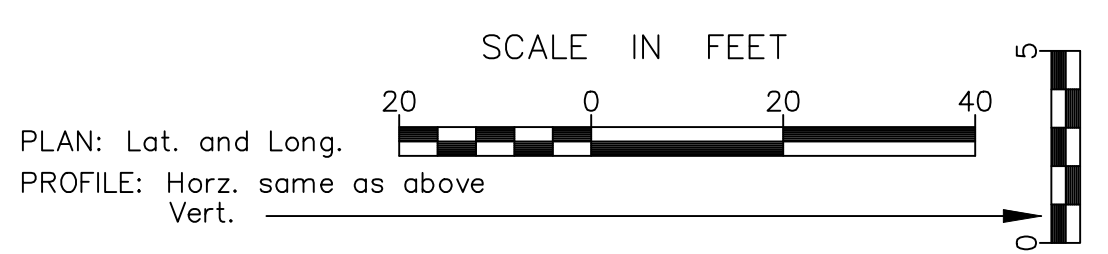
15.5' NNE
 5.5' ESE
 6.5' W

BM#11 RAILROAD SPIKE IN NORTH FACE OF POWER POLE ON SOUTH SIDE OF NORTHWEST NORRIS STREET IN LINE WITH CENTERLINE OF NORTHWEST WEST STREET
 EL: 881.30

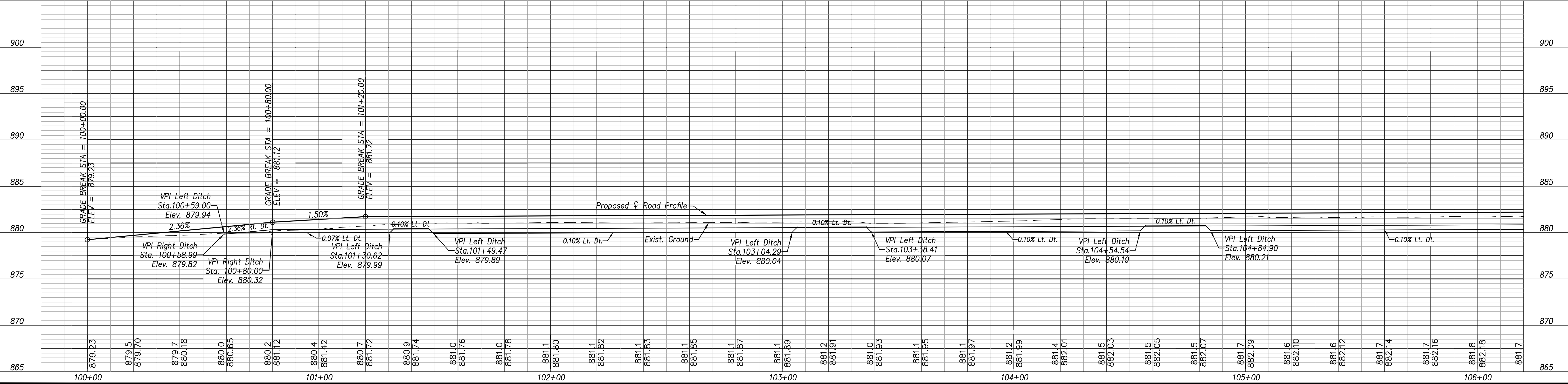
BM#12 RAILROAD SPIKE IN NORTH FACE OF POWER POLE ON SOUTH SIDE OF NORTHWEST NORRIS STREET IN LINE WITH EAST PROPERTY LINE OF 1220 NORTHWEST NORRIS STREET
 EL: 881.65

LEGEND

- Pavement *See Alt Bids*
- 8" Non-Reinforced Concrete Pavement
- 6" Concrete Driveway
- 6" Crushed Rock Surfacing
- Large Tree Removal



△ Note: Corp Adapter from 3/4" to 1" Subsidiary.



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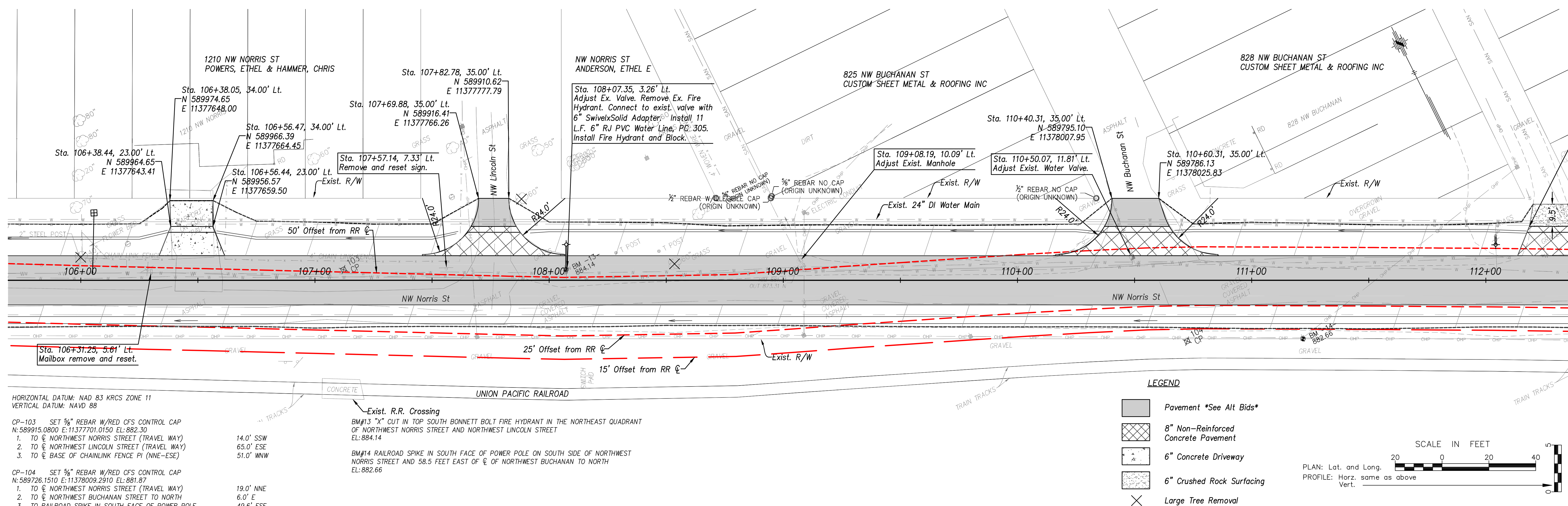
CFS ENGINEERS
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STREET IMPROVEMENT PROJECT
 No. 841097.07
 NW NORRIS ST.
 FROM NW WEST ST. TO NW WESTERN AVE.

PLAN / PROFILE
 Sta. 100+00.00 to Sta. 106+00.00

DATE: Sept 2025
 SHEET: 05 of 39
 PROJ.: 841097.07



HORIZONTAL DATUM: NAD 83 KRCS ZONE 11
 VERTICAL DATUM: NAVD 88

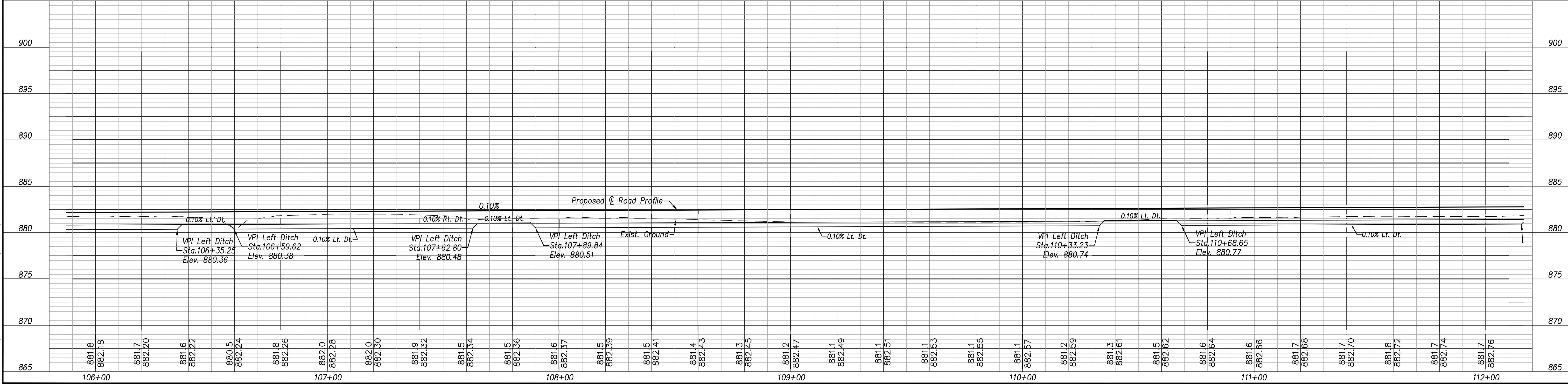
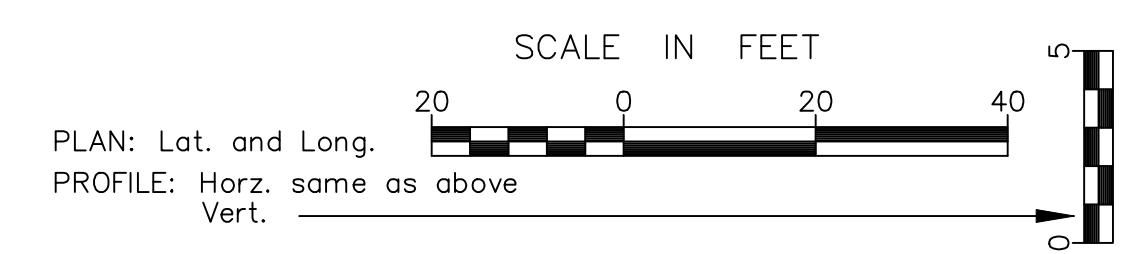
CP-103 SET 3/8" REBAR W/RED CFS CONTROL CAP
 N: 589915.0800 E: 1137701.0150 EL: 882.30
 1. TO C NORTHWEST NORRIS STREET (TRAVEL WAY) 14.0' SSW
 2. TO C NORTHWEST LINCOLN STREET (TRAVEL WAY) 65.0' ESE
 3. TO C BASE OF CHAINLINK FENCE PI (NNE-ESE) 51.0' WNW

CP-104 SET 3/8" REBAR W/RED CFS CONTROL CAP
 N: 589726.1510 E: 11378009.2910 EL: 881.87
 1. TO C NORTHWEST NORRIS STREET (TRAVEL WAY) 19.0' NNE
 2. TO C NORTHWEST BUCHANAN STREET TO NORTH 6.0' E
 3. TO RAILROAD SPIKE IN SOUTH FACE OF POWER POLE 49.6' ESE

Exist. R.R. Crossing
 BM#13 "X" CUT IN TOP SOUTH BONNETT BOLT FIRE HYDRANT IN THE NORTHEAST QUADRANT OF NORTHWEST NORRIS STREET AND NORTHWEST LINCOLN STREET EL: 884.14

BM#14 RAILROAD SPIKE IN SOUTH FACE OF POWER POLE ON SOUTH SIDE OF NORTHWEST NORRIS STREET AND 58.5 FEET EAST OF C OF NORTHWEST BUCHANAN TO NORTH EL: 882.66

- LEGEND**
- Pavement *See All Bids*
 - 8" Non-Reinforced Concrete Pavement
 - 6" Concrete Driveway
 - 6" Crushed Rock Surfacing
 - Large Tree Removal



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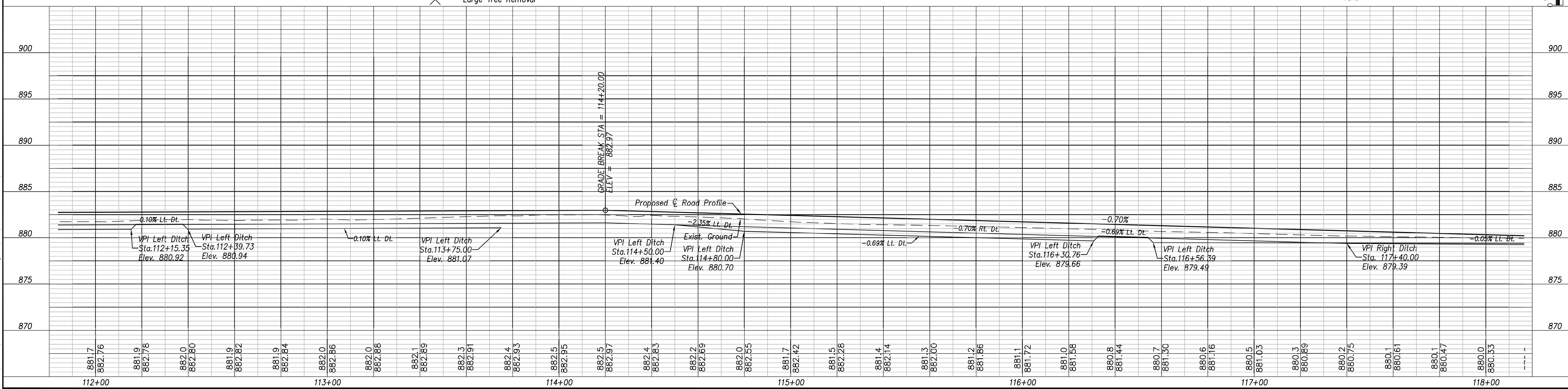
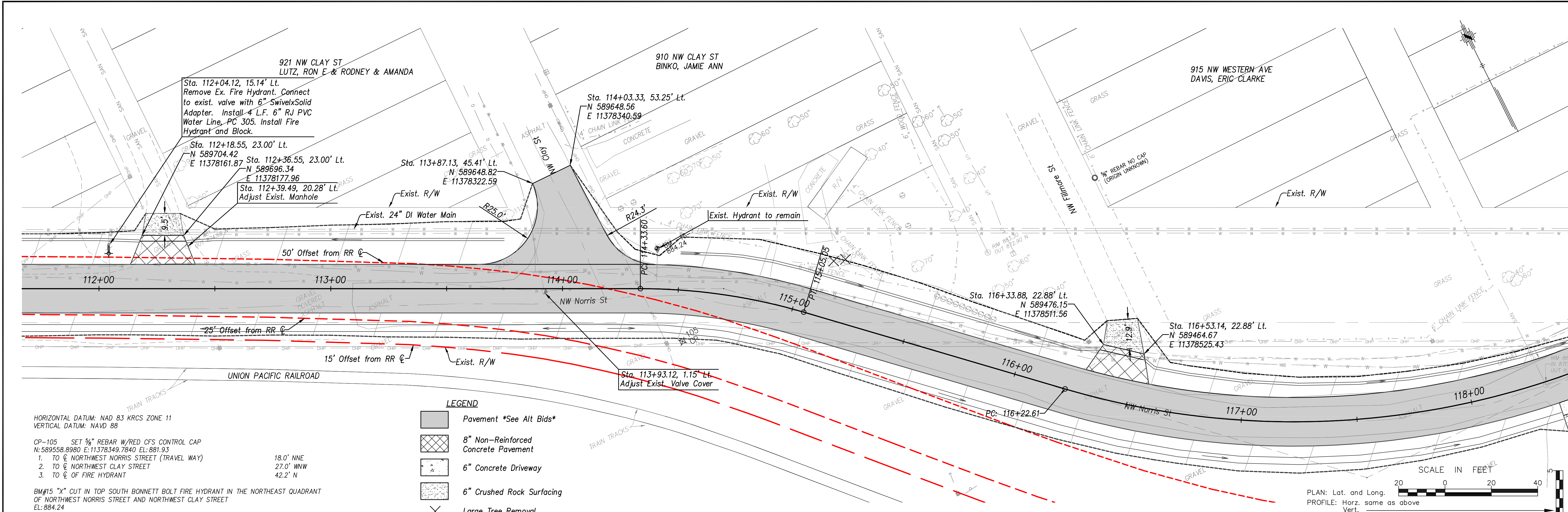
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STREET IMPROVEMENT PROJECT
 No. 841097.07
 NW NORRIS ST.
 FROM NW WEST ST. TO NW WESTERN AVE.

PLAN / PROFILE
 Sta. 106+00.00 to Sta. 112+00.00

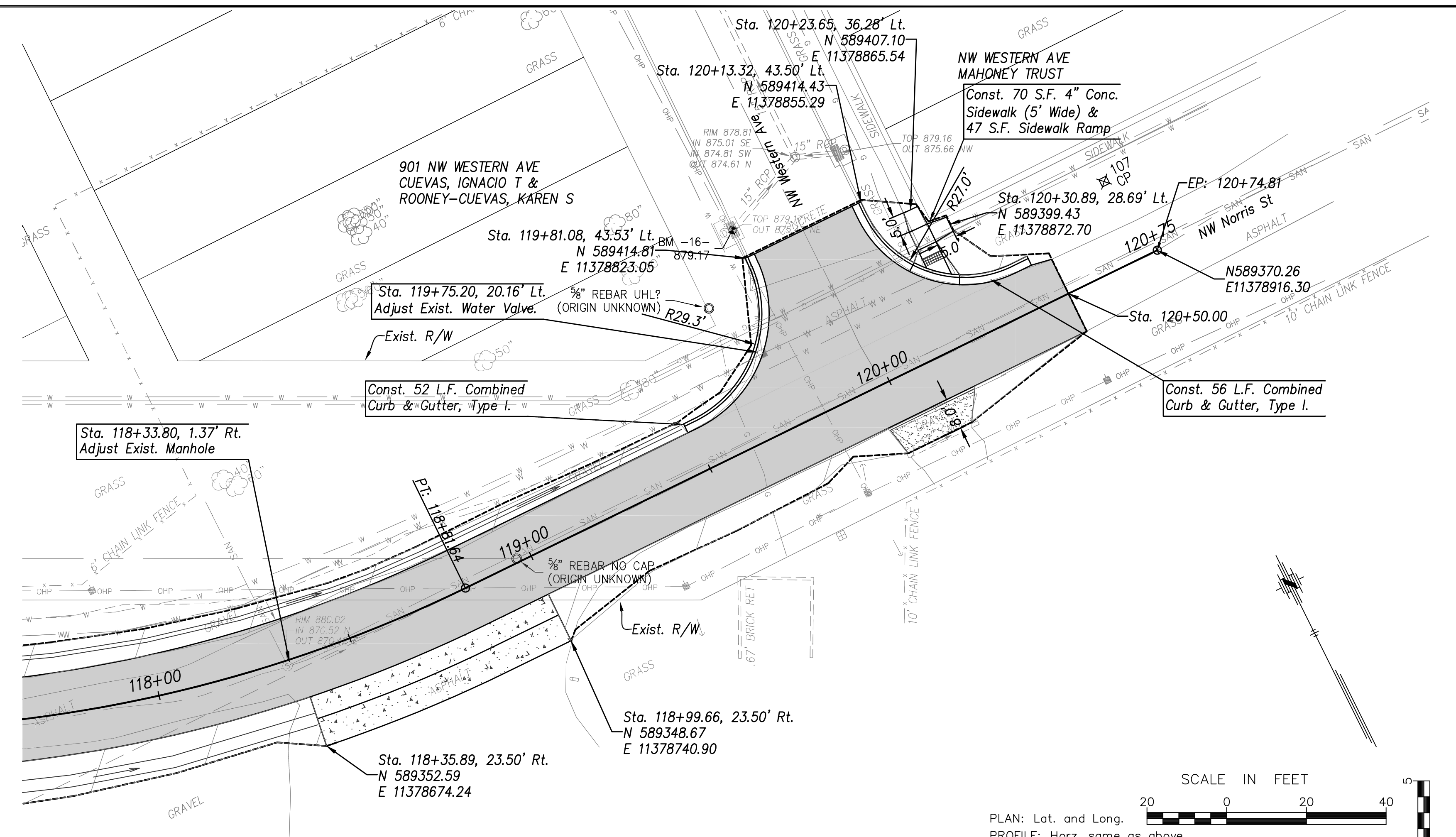
DATE: Sept 2025
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APP'D BY: <u>MJM</u>						
NO.	DATE:	REVISION	BY:	APP'D		

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- LEGEND**
- Pavement *See Alt Bids*
 - 8" Non-Reinforced Concrete Pavement
 - 6" Concrete Driveway
 - 6" Crushed Rock Surfacing
 - Large Tree Removal

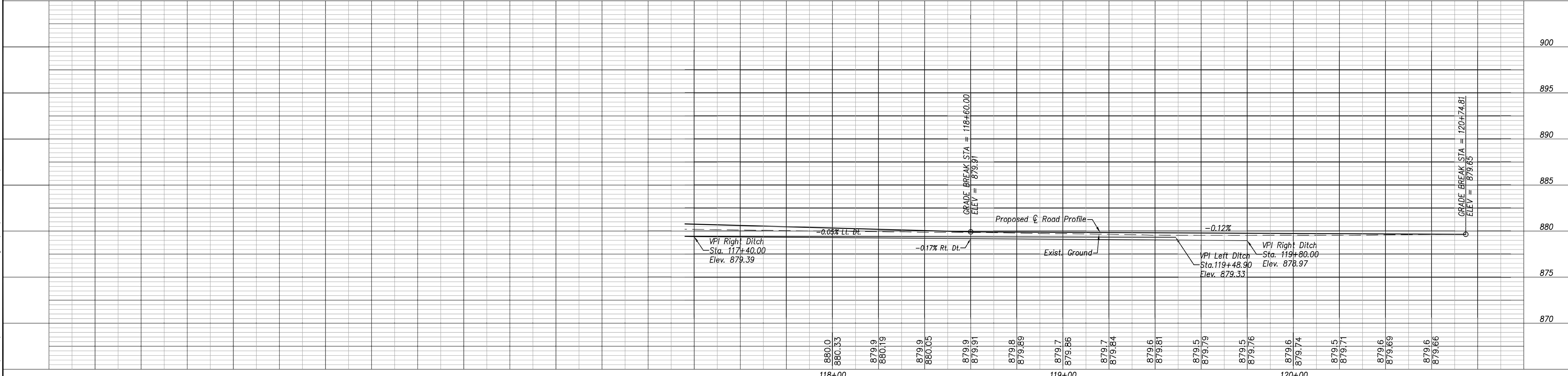
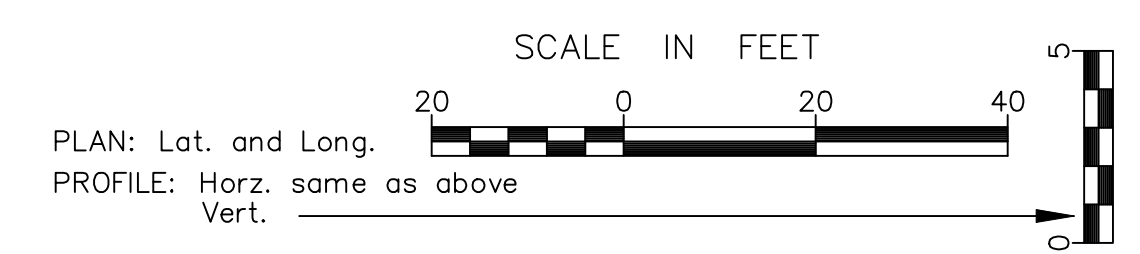
HORIZONTAL DATUM: NAD 83 KRCS ZONE 11
 VERTICAL DATUM: NAVD 88

CP-107 SET 3/8" REBAR W/ RED CFS CONTROL CAP
 N: 589391.6280 E: 11378912.1480 EL: 880.21

1. TO C/NORTHWEST LAURENT STREET
2. TO C/NORTHWEST WESTERN AVENUE
3. TO C/BASE OF POWER POLE

20.0' S
75.0' W
49.5' SW

BM#16 SQUARE CUT IN C/N OF STORM INLET AT THE B/C OF THE NORTHWEST QUADRANT OF NORTHWEST NORRIS STREET AND NORTHWEST WESTERN AVE
 EL: 879.17



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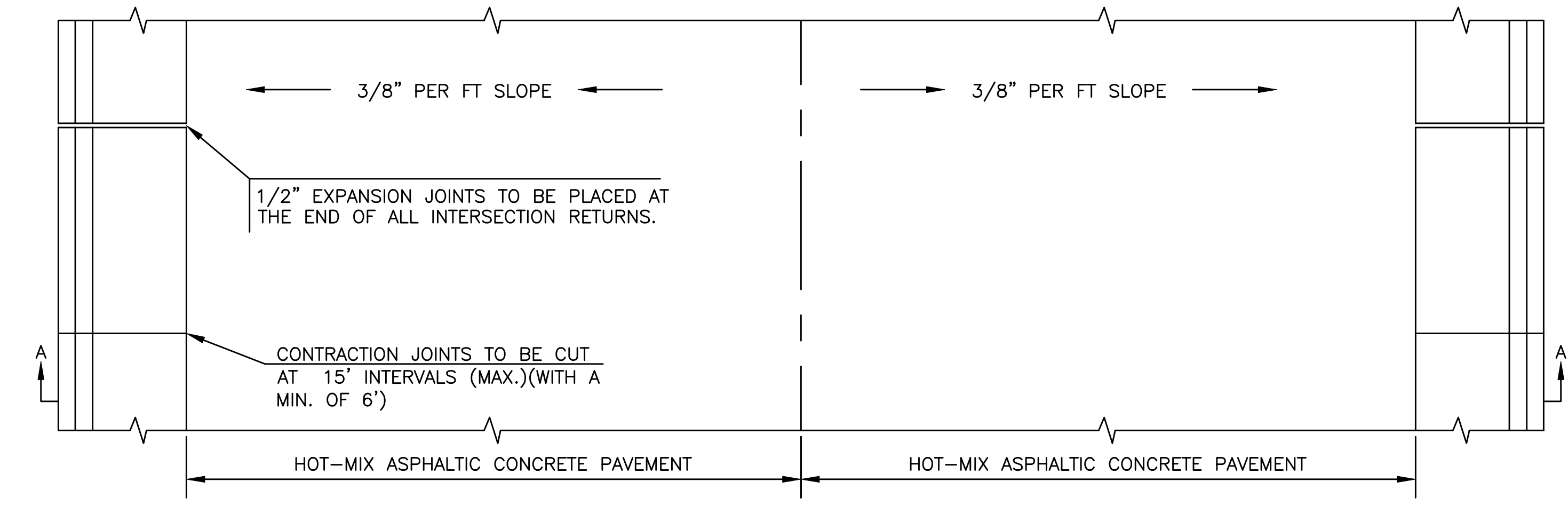
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 620 SE MADISON ST. • 2nd Floor • TOPEKA, KS 66607
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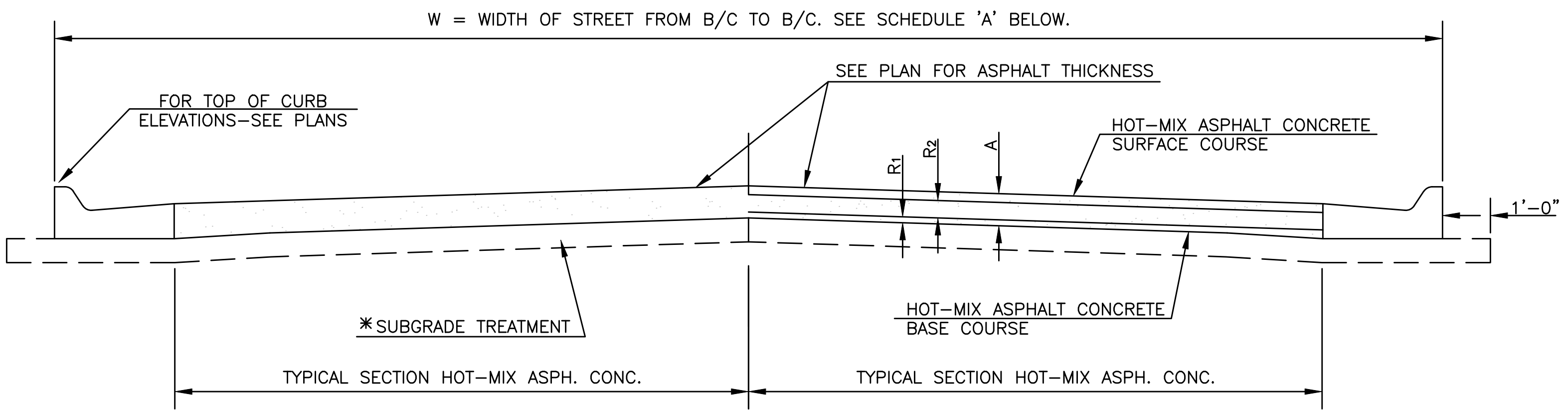
STREET IMPROVEMENT PROJECT
 No. 841097.07
 NW NORRIS ST.
 FROM NW WEST ST. TO NW WESTERN AVE.

PLAN / PROFILE
 Sta. 118+00.00 to Sta. 112+75.00

DATE: Sept 2025
 SHEET: 08 of 39
 PROJ.: 841087.07



PLAN

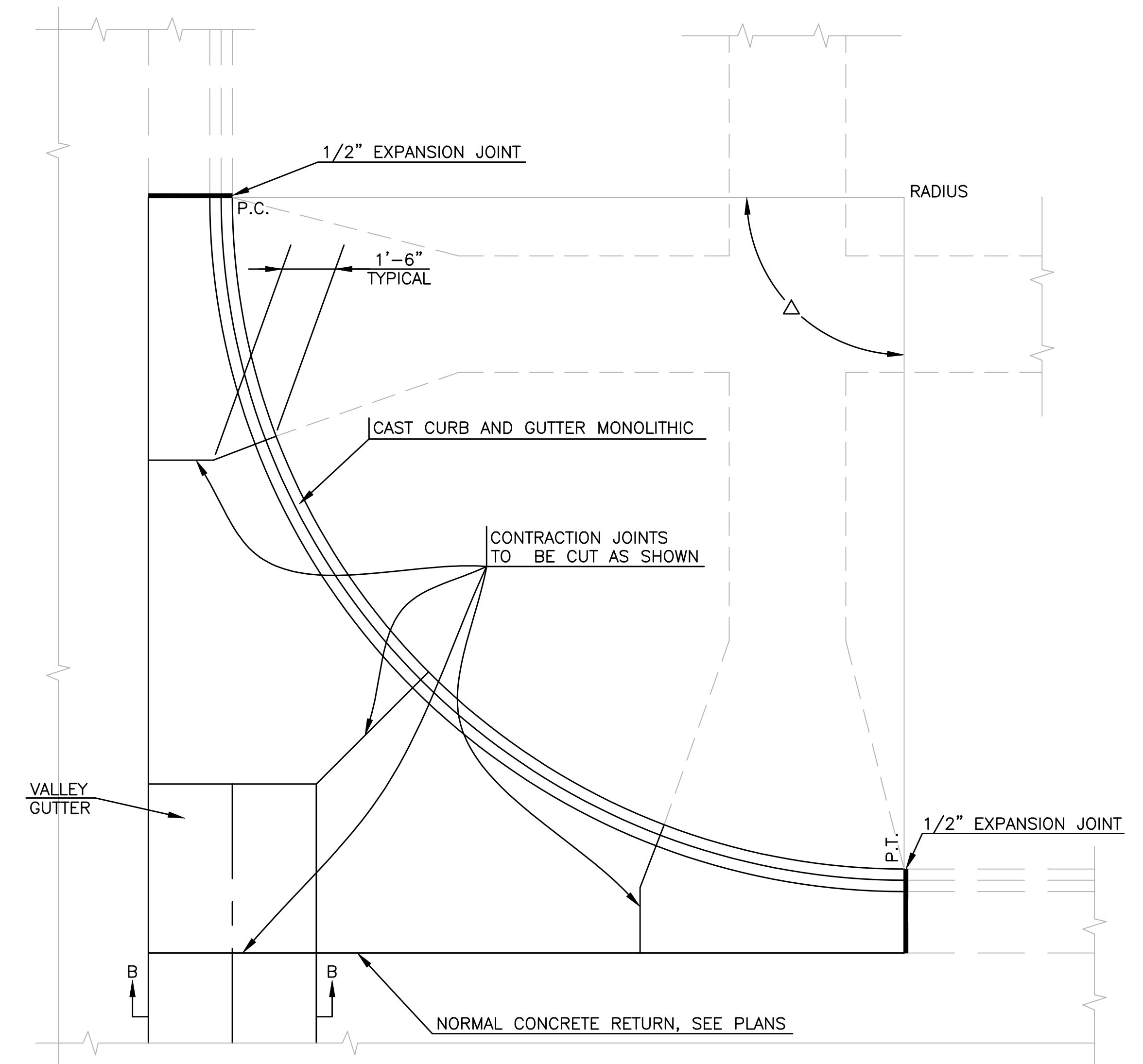


TYPICAL SECTION HOT-MIX ASPH. CONC. PAVE SECTION A-A

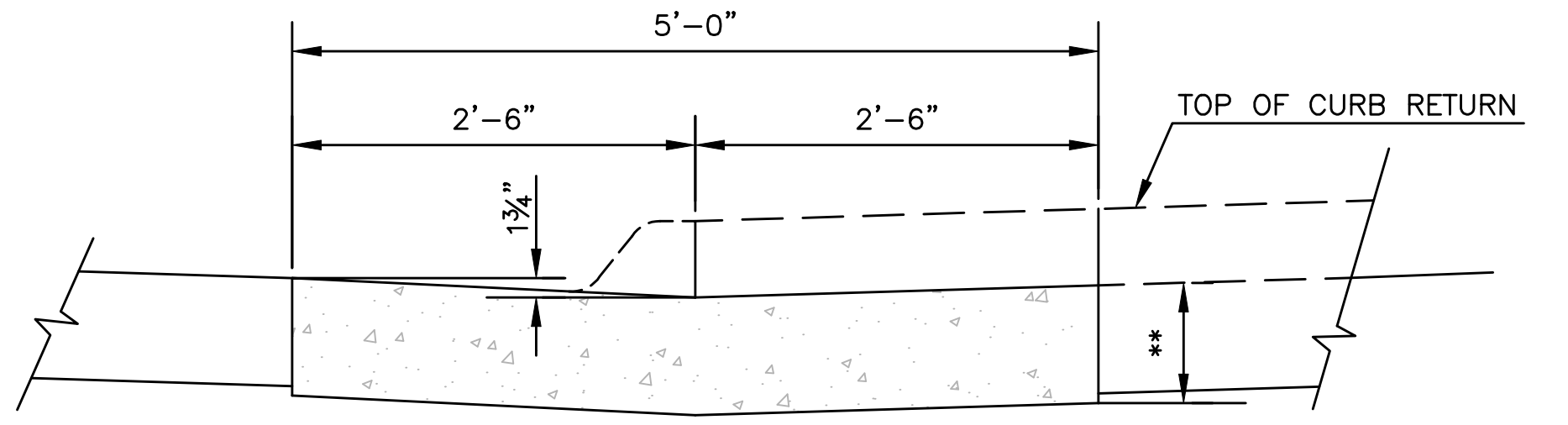
PAVEMENT DETAILS

*SUBGRADE TREATMENT PER GEOTECHNICAL REPORT

SCHEDULE 'A'						
STREET	FROM	TO	W	R ₁	R ₂	A



TYPICAL JOINTING PLAN



SECTION B-B

VALLEY GUTTER DETAILS

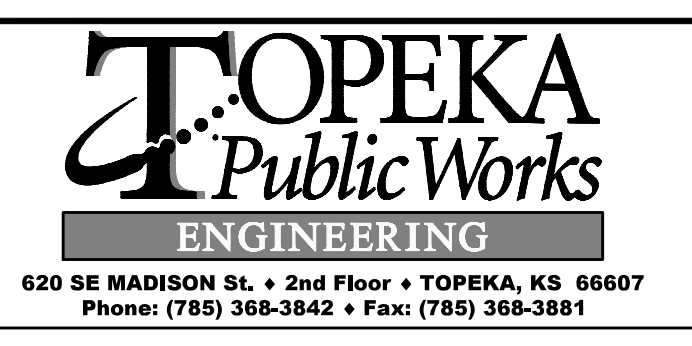
- NOTES:
1. PAY LENGTH OF VALLEY GUTTER IS FROM P.C. TO P.C. ACROSS STREET INTERSECTION.
 2. PAY WIDTH OF VALLEY GUTTER IS 5'.
 3. PAY AREA OF VALLEY GUTTER IS PAY LENGTH X PAY WIDTH (SQ. YD.)
 4. PAY CURB AND GUTTER FROM P.C. TO P.T. AROUND RADIAL.
 5. NO ADDITIONAL PAYMENT FOR OTHER WORK AND MATERIALS REQUIRED TO COMPLETE RETURN AS DETAILED. SEE PLANS FOR TYPE OF RETURN TO BE CONSTRUCTED.
 6. SAND IS NOT AN APPROVED FILL OR SUBGRADE MATERIAL.
 7. WHERE VALLEY GUTTER ABUTS CONCRETE PAVEMENT, THE VALLEY GUTTER SECTION SHALL BE TIED TO THE CONCRETE PAVEMENT WITH 1/2" x 3'-0" DEFORMED TIE BARS AT 5'-0" CENTERS.
 8. WHERE VALLEY GUTTER IS CONSTRUCTED ADJACENT TO NEW ASPHALT PAVEMENT, THE CONTRACTOR MAY, AT THEIR OPTION, CONSTRUCT A CONTINUOUS ASPHALT PAVEMENT SECTION THROUGH THE VALLEY GUTTER AREA, FOLLOWED BY SAWCUTTING AND REMOVING THE ASPHALT STRIP FOR CONSTRUCTION OF THE VALLEY GUTTER SECTION. NO PAY ADJUSTMENT SHALL BE MADE FROM PLAN QUANTITIES FOR THE ADDITIONAL ASPHALT PAVEMENT THAT IS REMOVED. SAWCUTS SHALL BE FULL DEPTH. THE SUBGRADE MUST MEET COMPACTION REQUIREMENTS IN THE REMOVAL AREA PRIOR TO PLACEMENT OF THE VALLEY GUTTER.

NO.	DATE:	REVISION	BY:	APP'D
3	March 2013	Added min. it. spacing & made bar size"	DHS SB	
2	Dec. 2009	Added to Valley Gutter Details	DHS SB	
1	Feb. 2008	Mod. Typ. Jt. Plan & Pvmnt. Det.	DHS SB	

DRAWN BY: *rm/mc*
 APP'D BY: *R. Chmetyk*



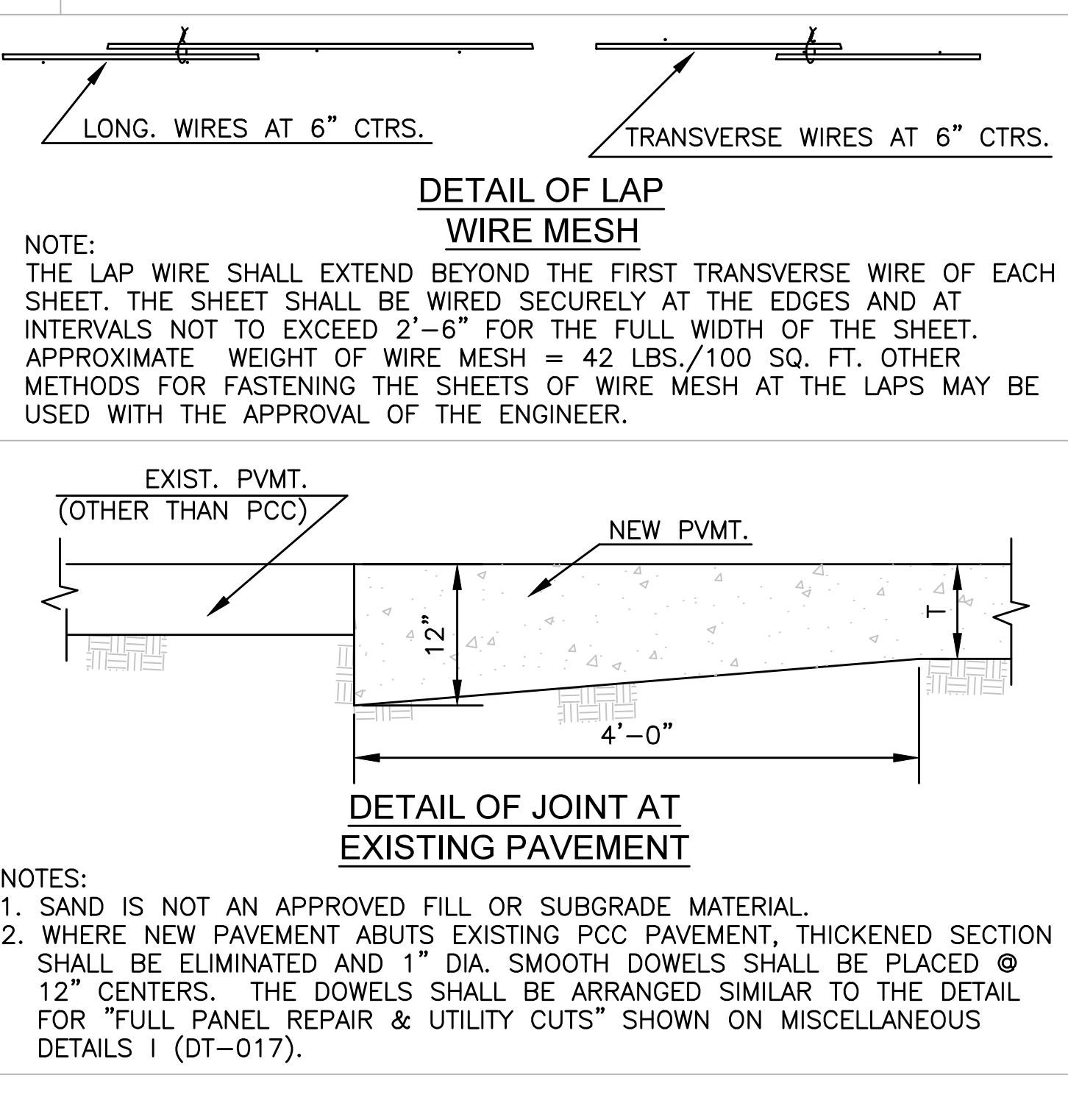
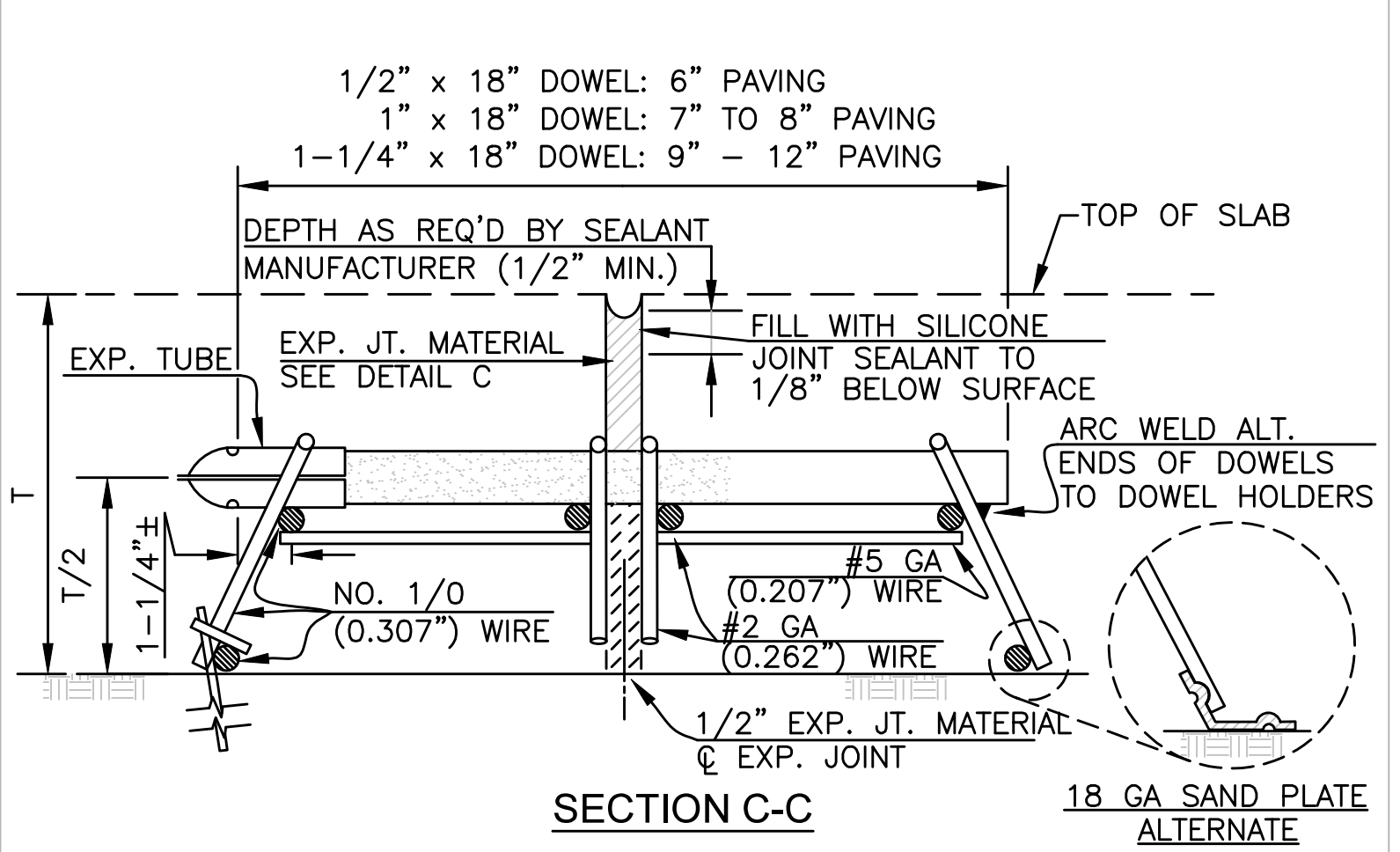
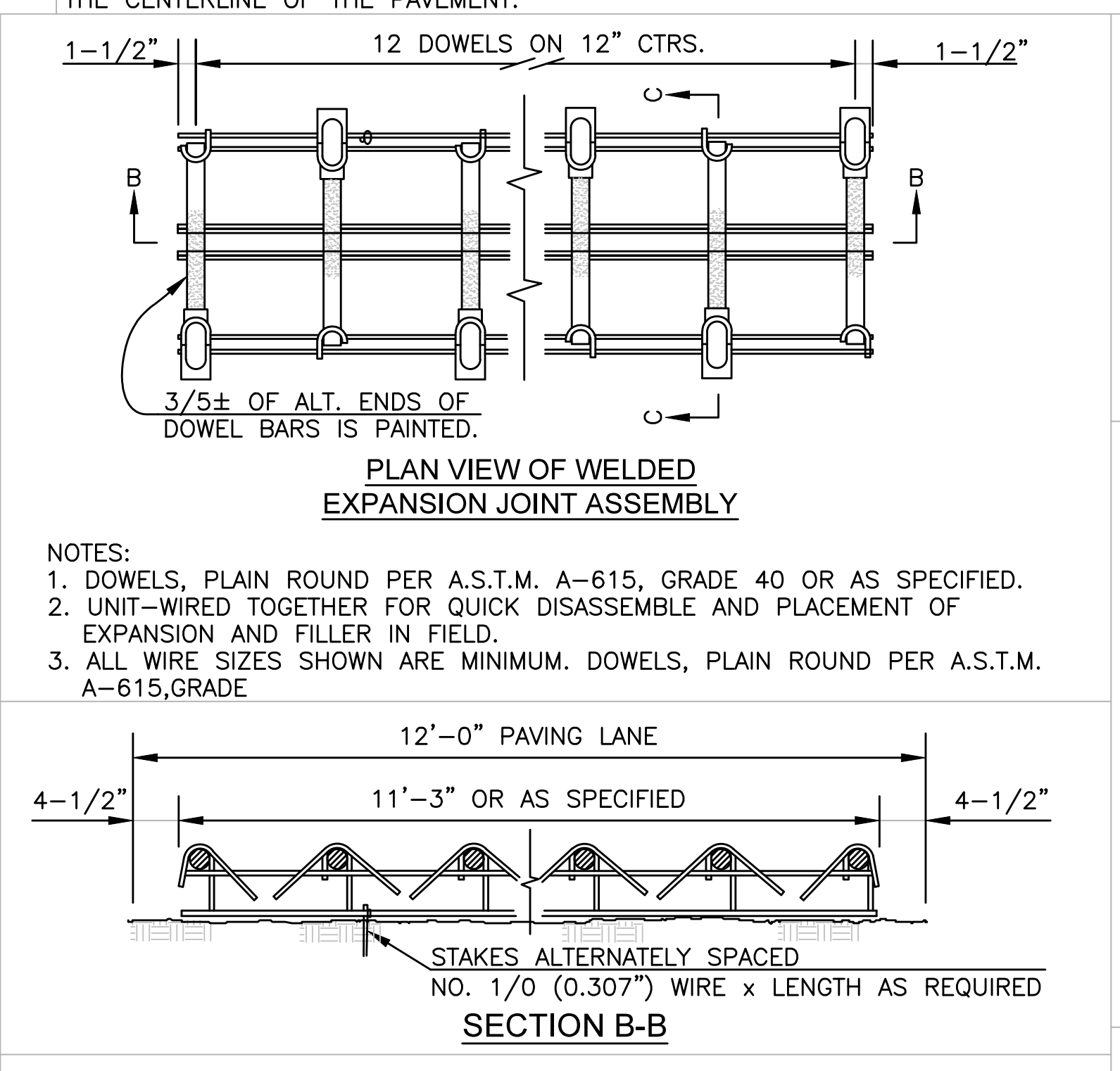
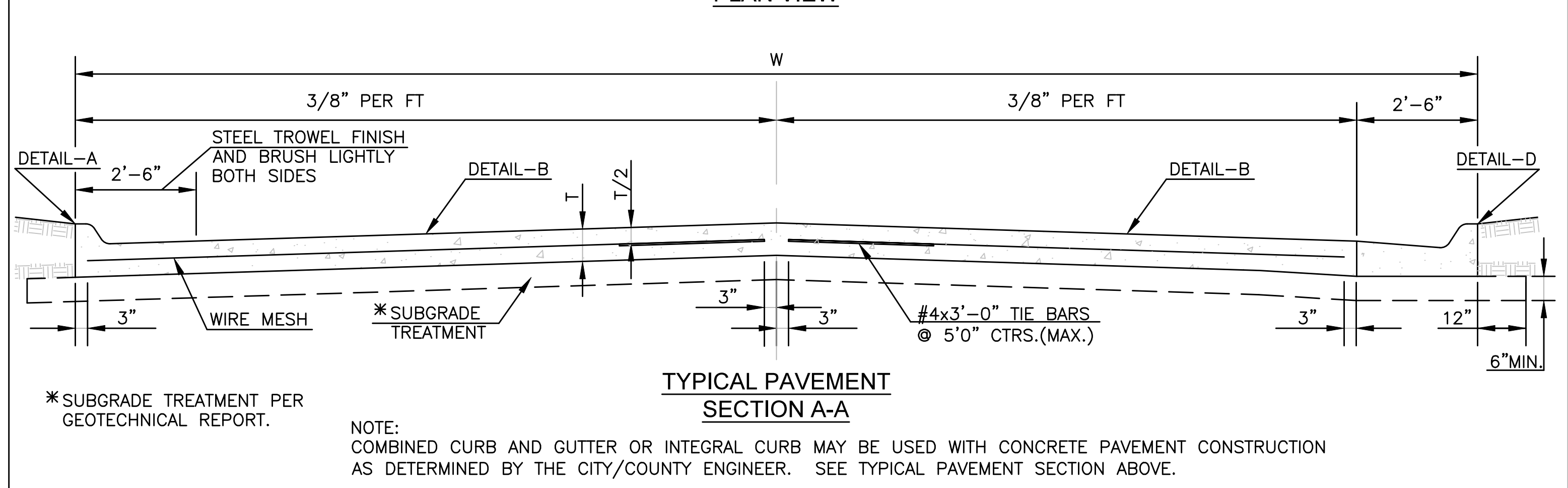
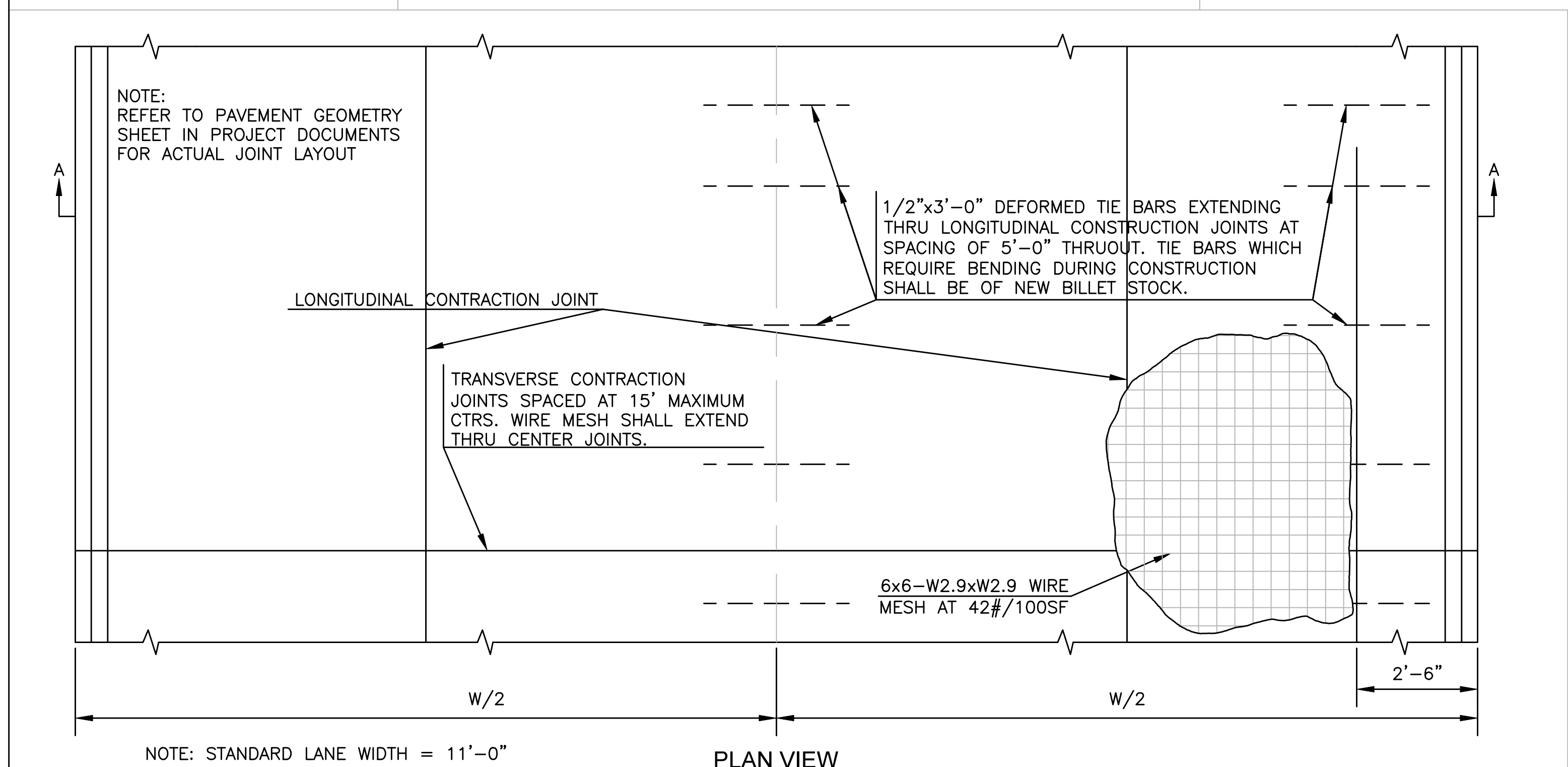
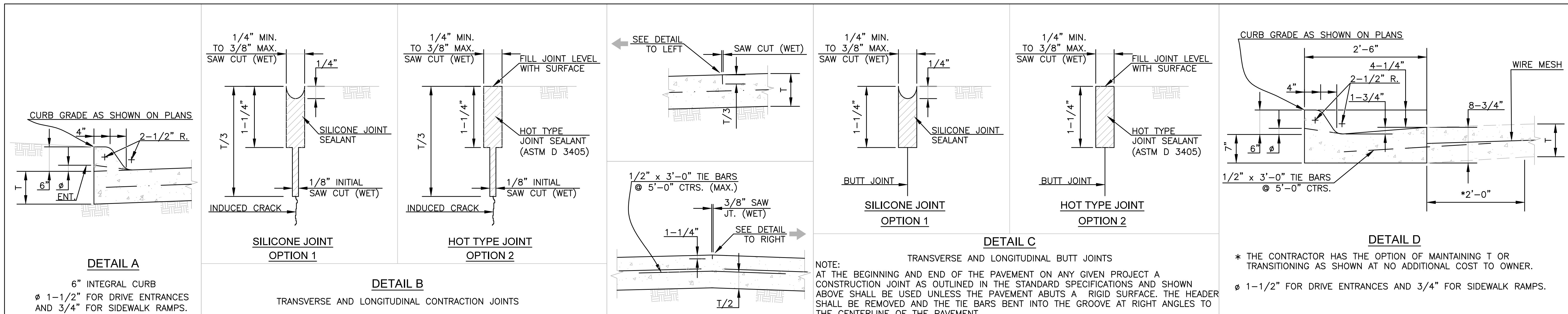
**SHAWNEE COUNTY, KANSAS
 PUBLIC WORKS DEPARTMENT**
 1515 NW SALINE
 TOPEKA, KS 66618
 (785) 233-7702



STANDARD DETAILS

**ASPHALT CONCRETE
 PAVEMENT DETAILS**
 (DT-001)

DATE: Sept. 2025
 SHEET: 09 of 39
 PROJ.: 841097.07



6	June 2018	Eliminated sealing butt joint at curb toe	DHS	JVH
5	March 2013	Made bar size " & added ref. to DT-017	DHS	SB
4	Dec. 2012	Changed to tie bars at Detail D	DHS	SB
3	March 2010	Eliminated keyed joint at Typical Section	DHS	SB
2	Dec. 2009	Eliminated keyed joints	DHS	SB
1	Feb. 2008	Mod. Det.'s B,C&D and Sect.'s A-A&D-D	DHS	SB
NO.	DATE:	REVISION	BY:	APP'D

DRAWN BY: *rm/mc*

APP'D BY: *R. Clumerty*

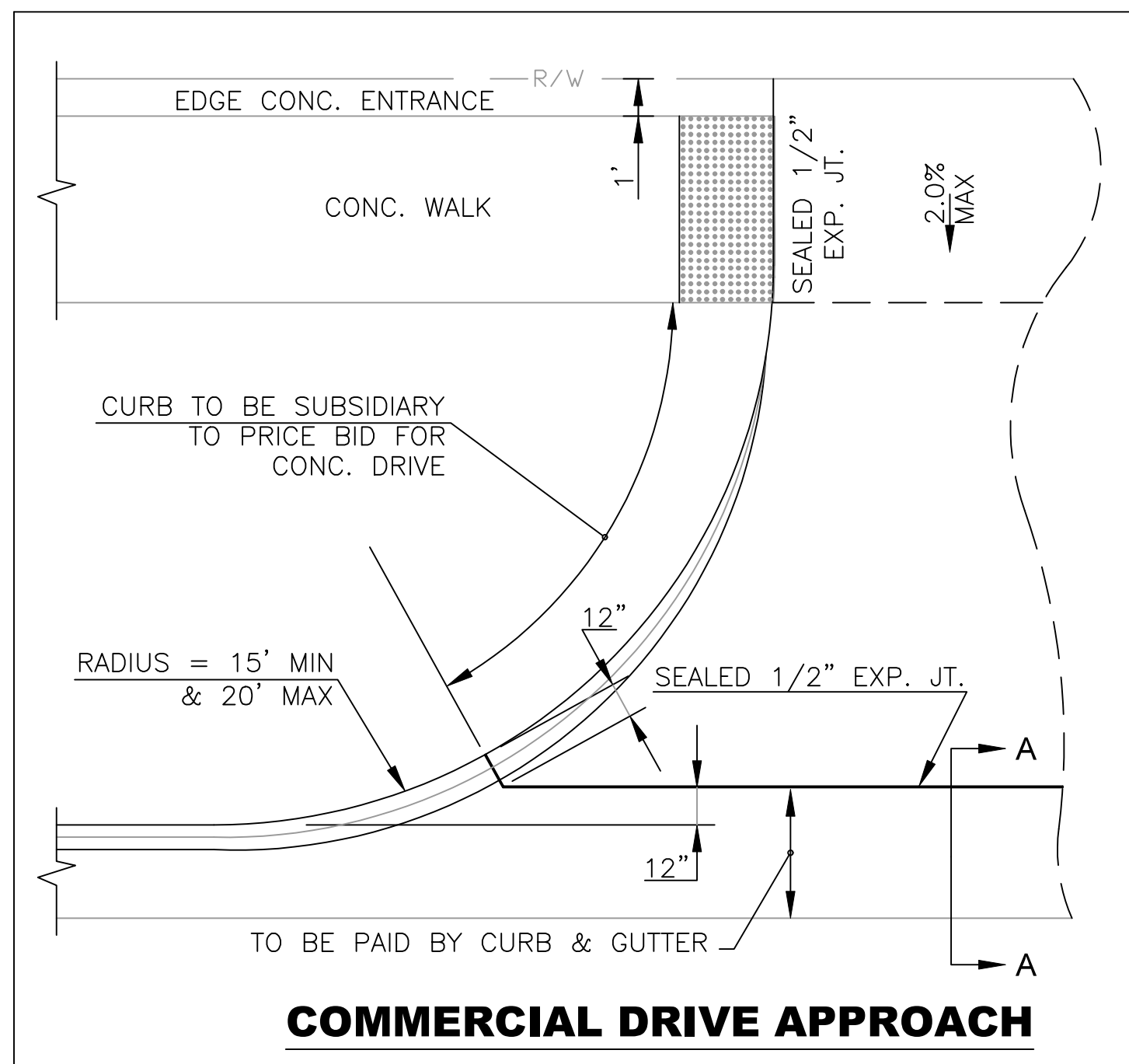
SHAWNEE COUNTY, KANSAS
PUBLIC WORKS DEPARTMENT
1515 NW SALINE
TOPEKA, KS 66618
(785) 233-7702

TOPEKA
Public Works
ENGINEERING
620 SE MADISON St. • 2nd Floor • TOPEKA, KS 66607
Phone: (785) 368-3842 • Fax: (785) 368-3881

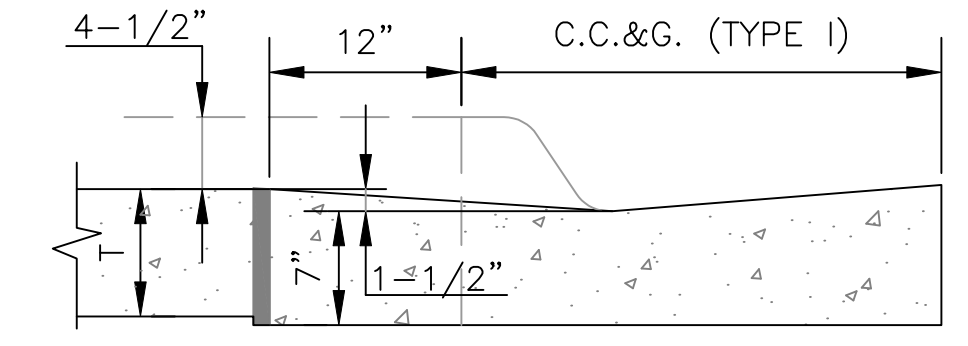
STANDARD DETAILS

CONCRETE PAVEMENT DETAILS
(DT-002)

DATE: Sept. 2025
SHEET: 10 of 39
PROJ.: 841097.07

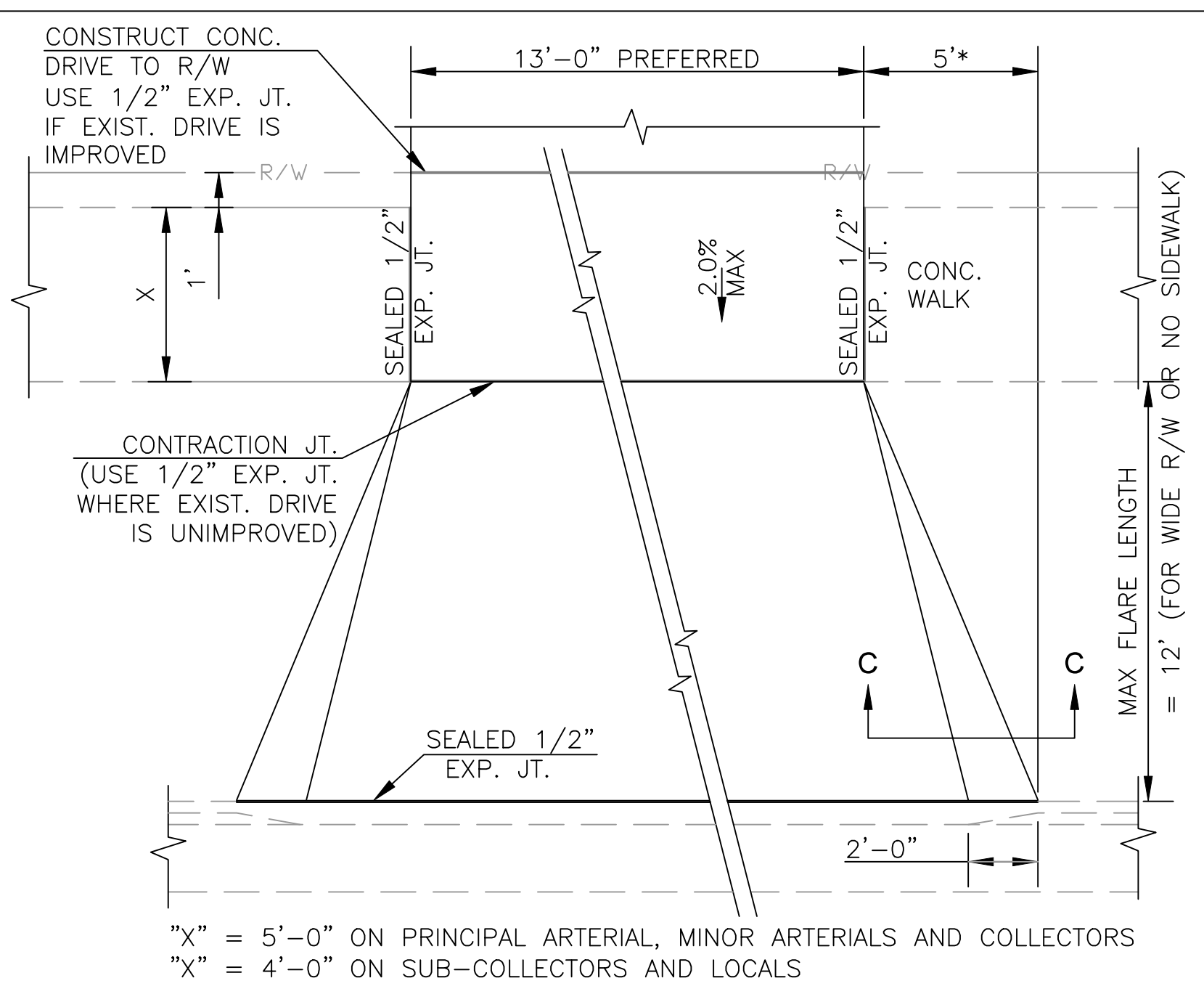


COMMERCIAL DRIVE APPROACH



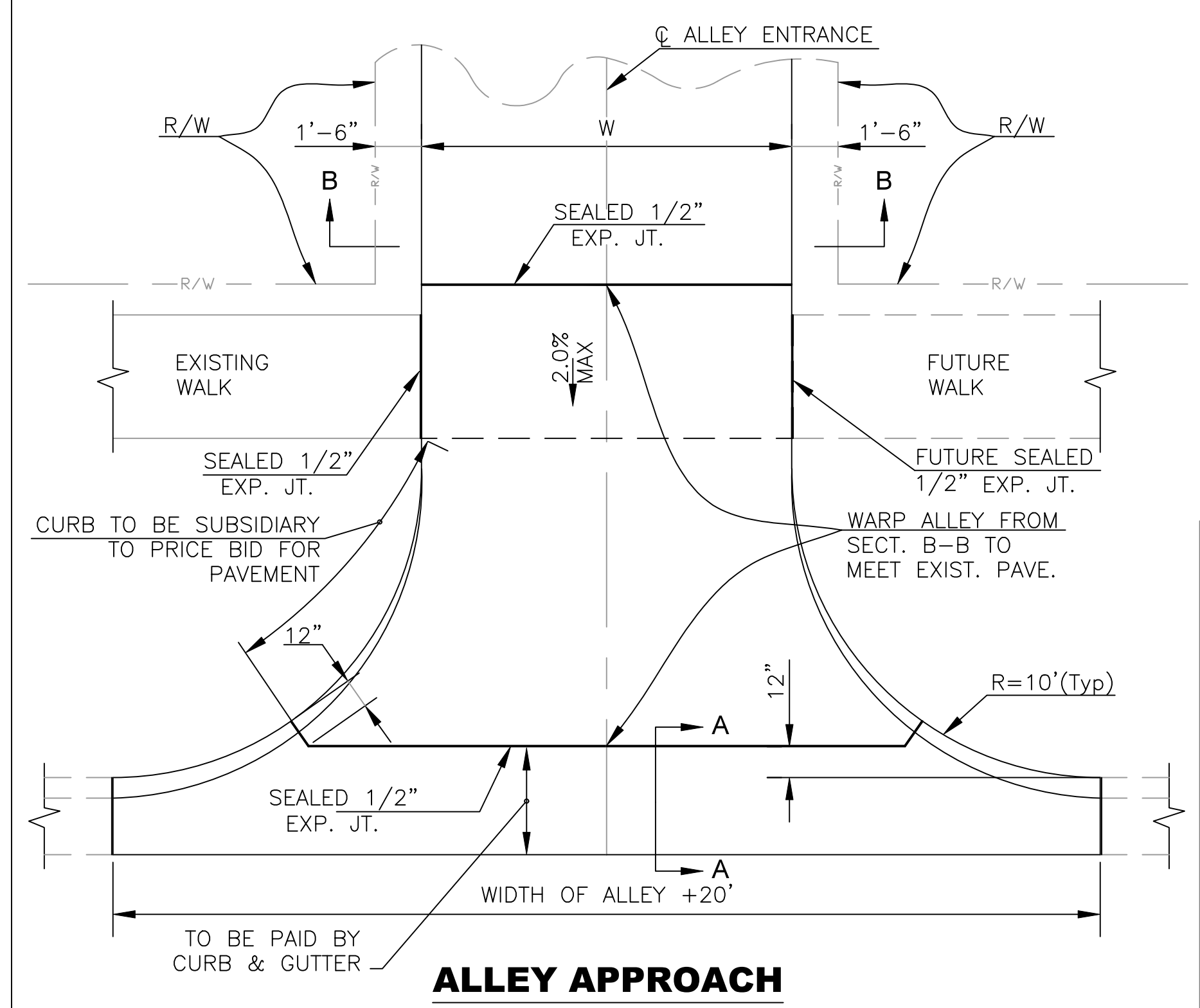
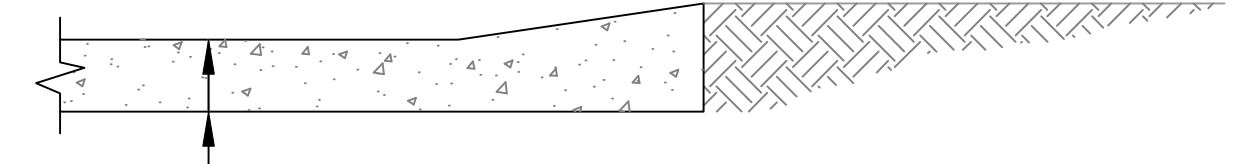
SECTION A - A

T=8" NON-REINFORCED FOR COMMERCIAL DRIVE, ALLEY APPROACH, AND SIDEWALK IN DRIVE ENTRANCE.

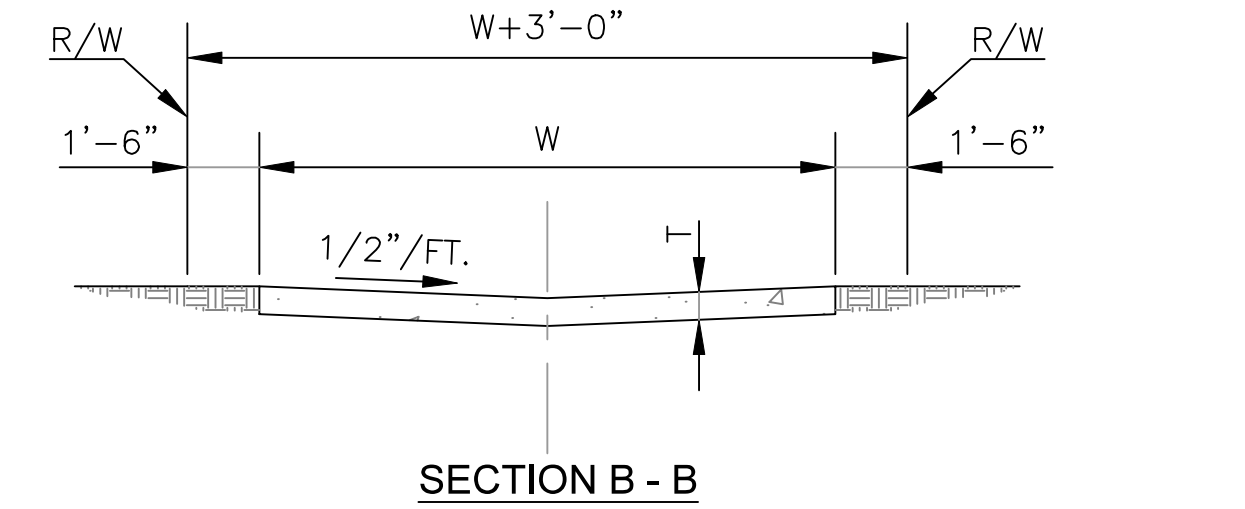


TYPICAL PRIVATE DRIVE APPROACH

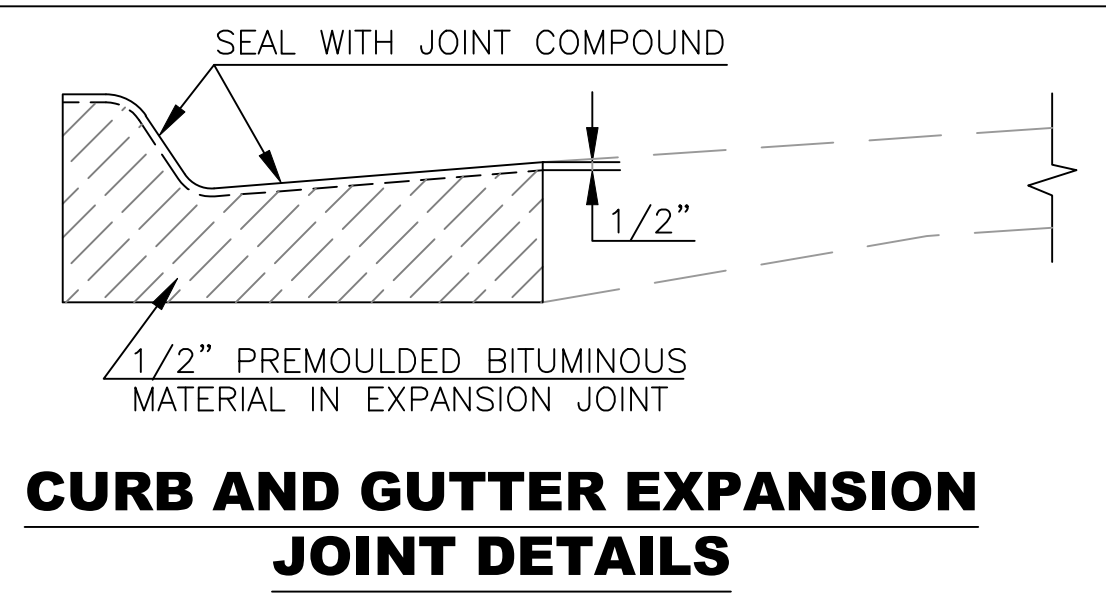
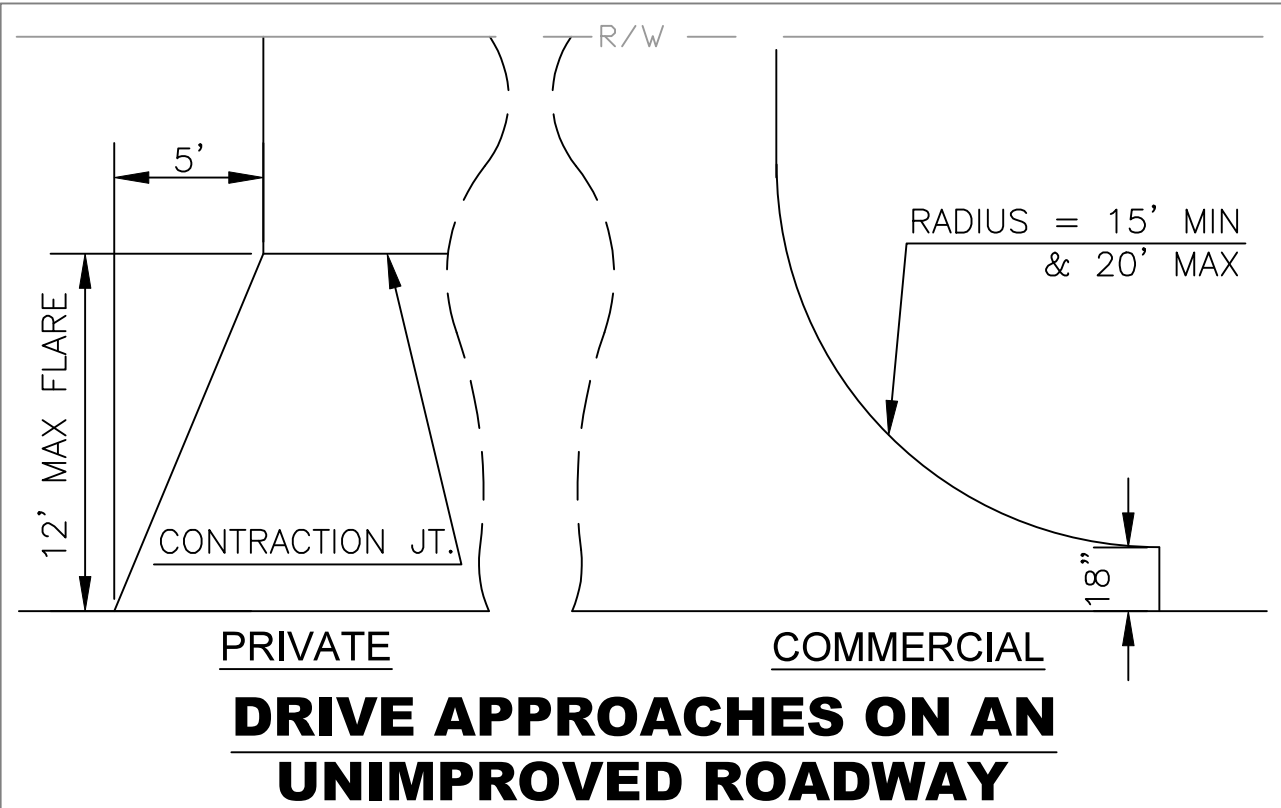
NOTES:
1. A SPECIAL DETAIL WILL BE PROVIDED WHEN SIDEWALK IS CLOSER THAN 6'-0" FROM BACK OF CURB.
2. THEORETICAL CURB HEIGHT OF 6" ABOVE \bar{E} SHALL BE OBTAINED IN ENTRANCE PAVEMENT.
* FLARE SHALL BE 5 FEET WIDE IN NEW CONSTRUCTION. VARIANCES MAY BE MADE WITH APPROVAL OF THE CITY ENGINEER IN SPECIAL CIRCUMSTANCES FOR THE REPLACEMENT OF EXISTING DRIVEWAYS.



ALLEY APPROACH

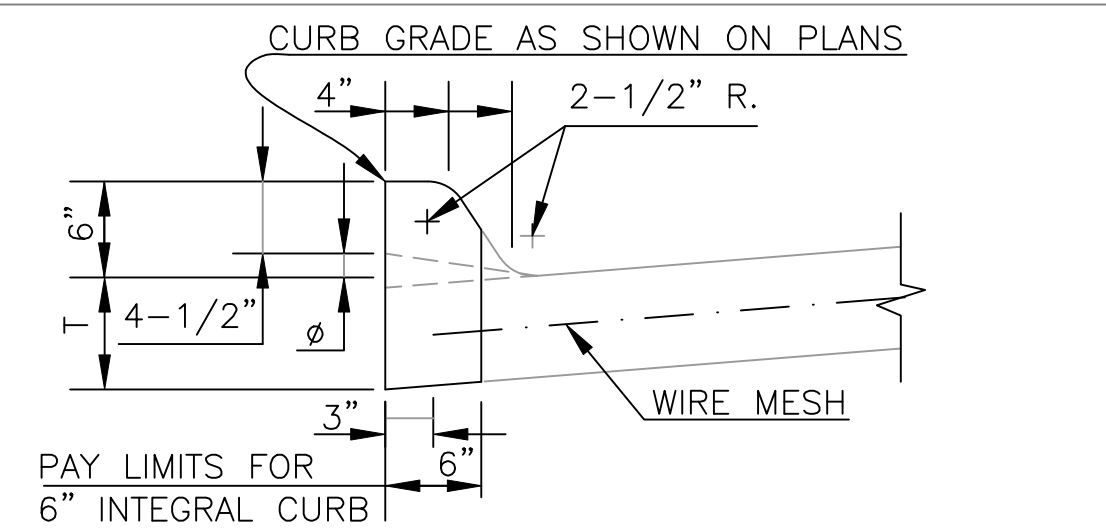


NOTES:
1. T=7" REINFORCED CONCRETE
2. WIDTH OF W WILL BE USED THROUGHOUT ON ALL ALLEY PAVING PROJECTS.
3. ALLEY RETURNS SHALL BE THE SAME THICKNESS AS THE ADJACENT STREET THICKNESS.
4. 1/2" EXP. JOINT AT EACH END OF ALLEY RETURN.

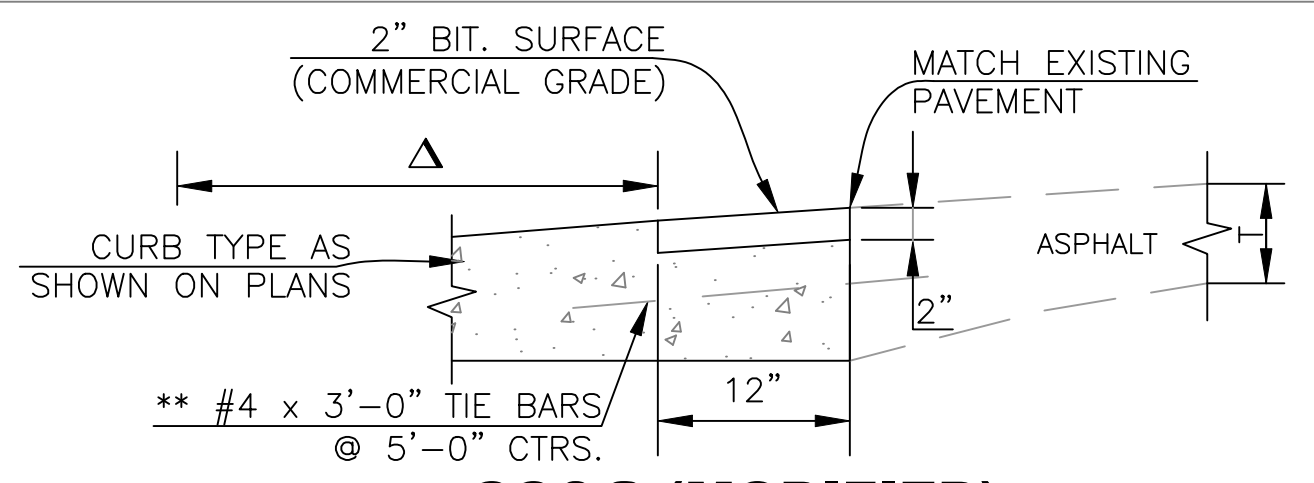


CURB AND GUTTER EXPANSION JOINT DETAILS

NOTES:
1. 1/2" EXPANSION JOINTS TO BE PLACED AT THE END OF ALL INTERSECTION RETURNS.
2. SAND IS NOT AN APPROVED FILL OR SUBGRADE MATERIAL.
3. ALL EXPANSION JOINTS SHALL BE SEALED WITH APPROVED MATERIAL.

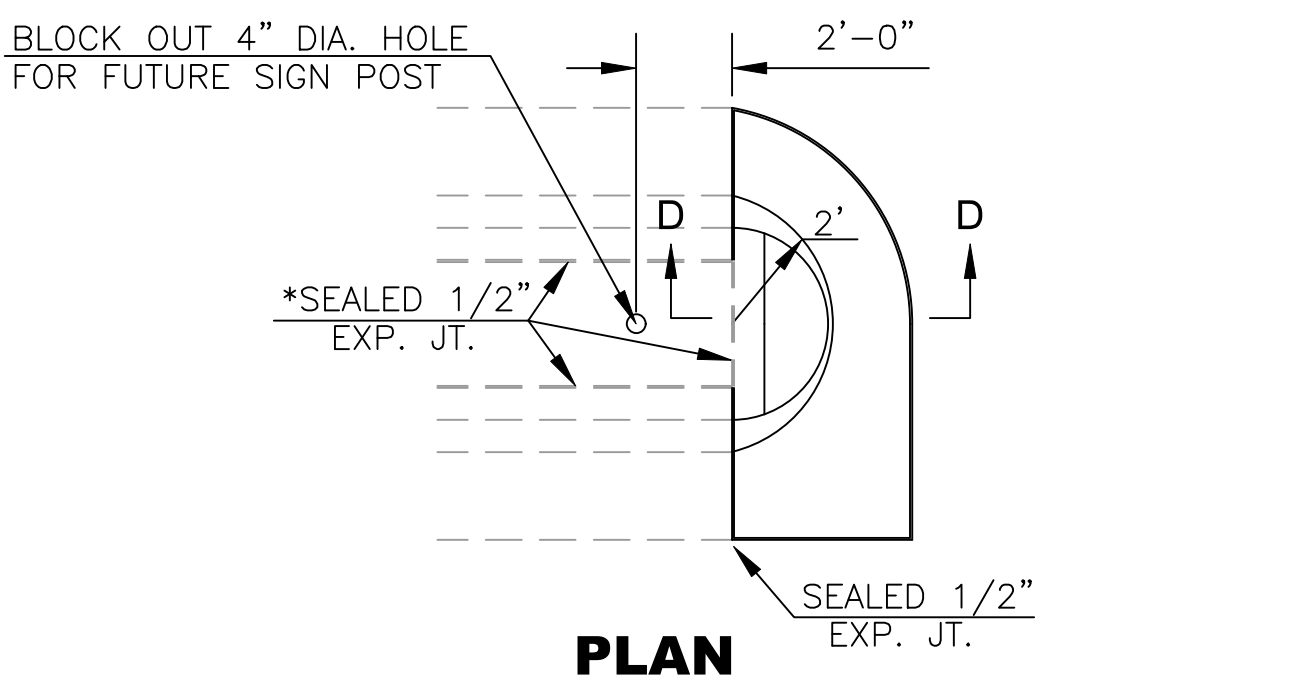


6" INTEGRAL CURB



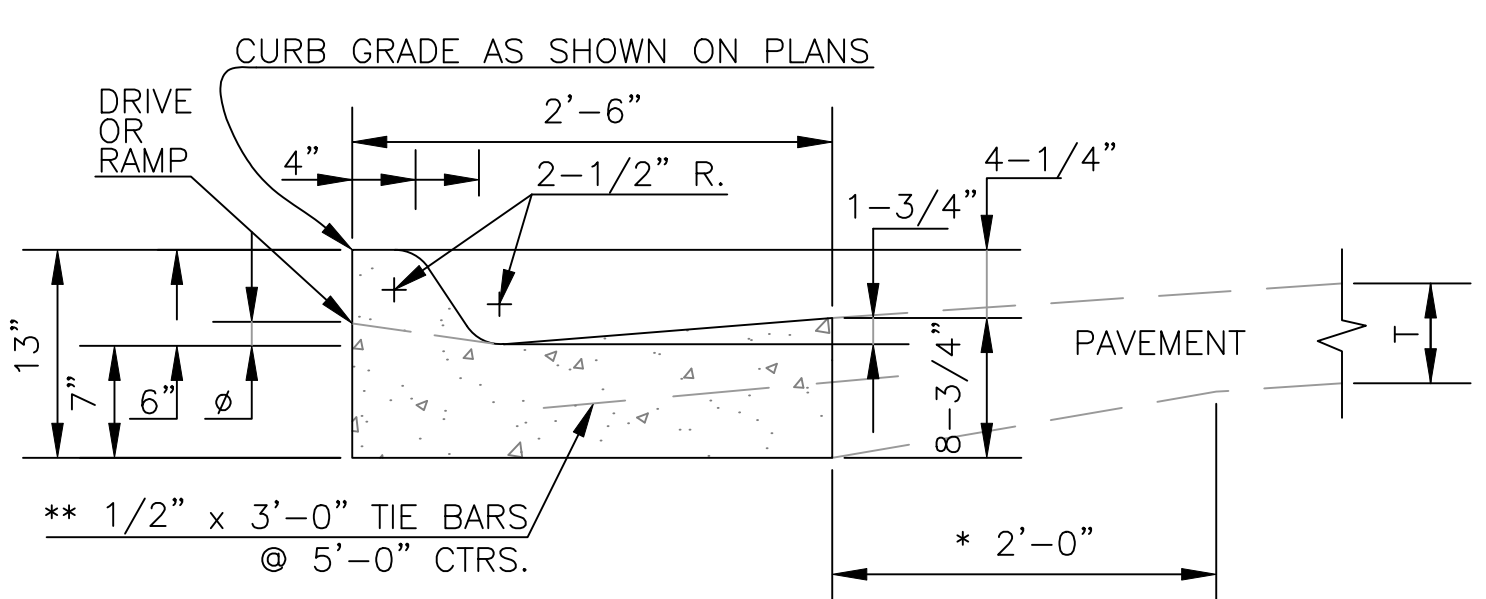
CC&G (MODIFIED)

NOTE:
CURB AND GUTTER ABUTTING EXISTING ASPHALT
Δ DIMENSION IS FROM BACK OF CURB TO TOE, SEE APPROPRIATE DETAIL FOR CURB TYPE AS SHOWN ON PLANS

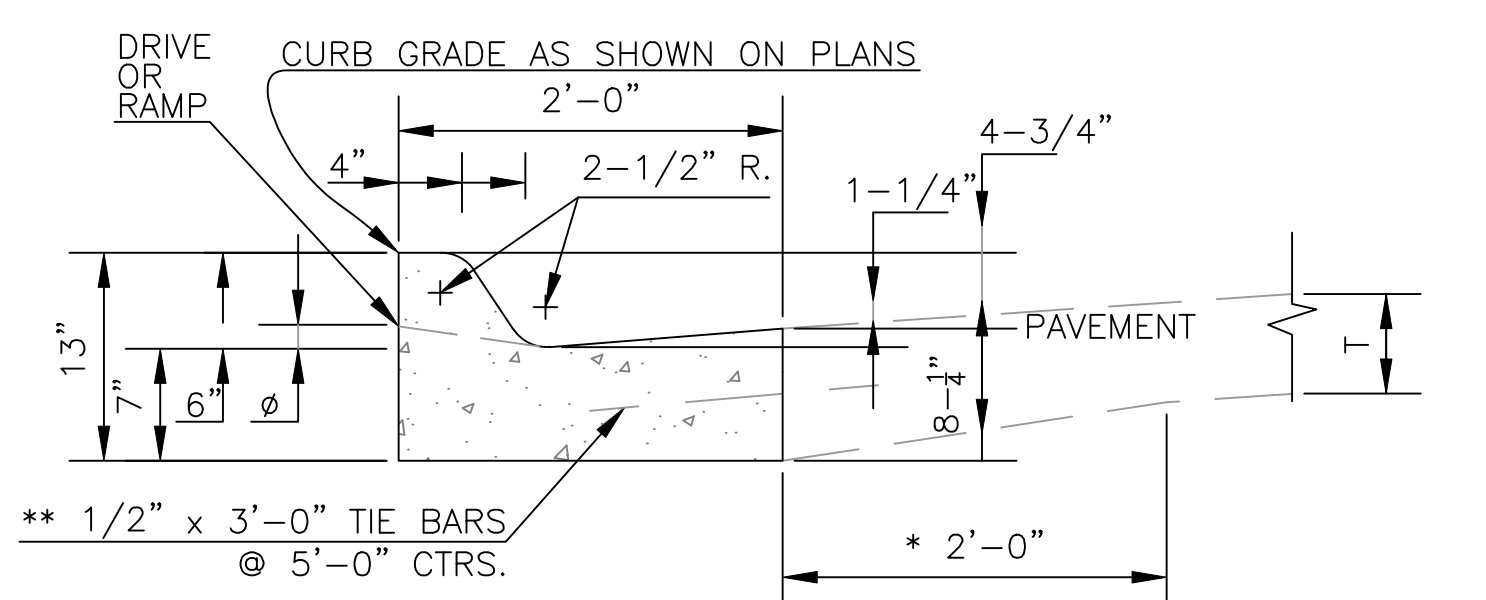


SOLID NOSE DETAILS

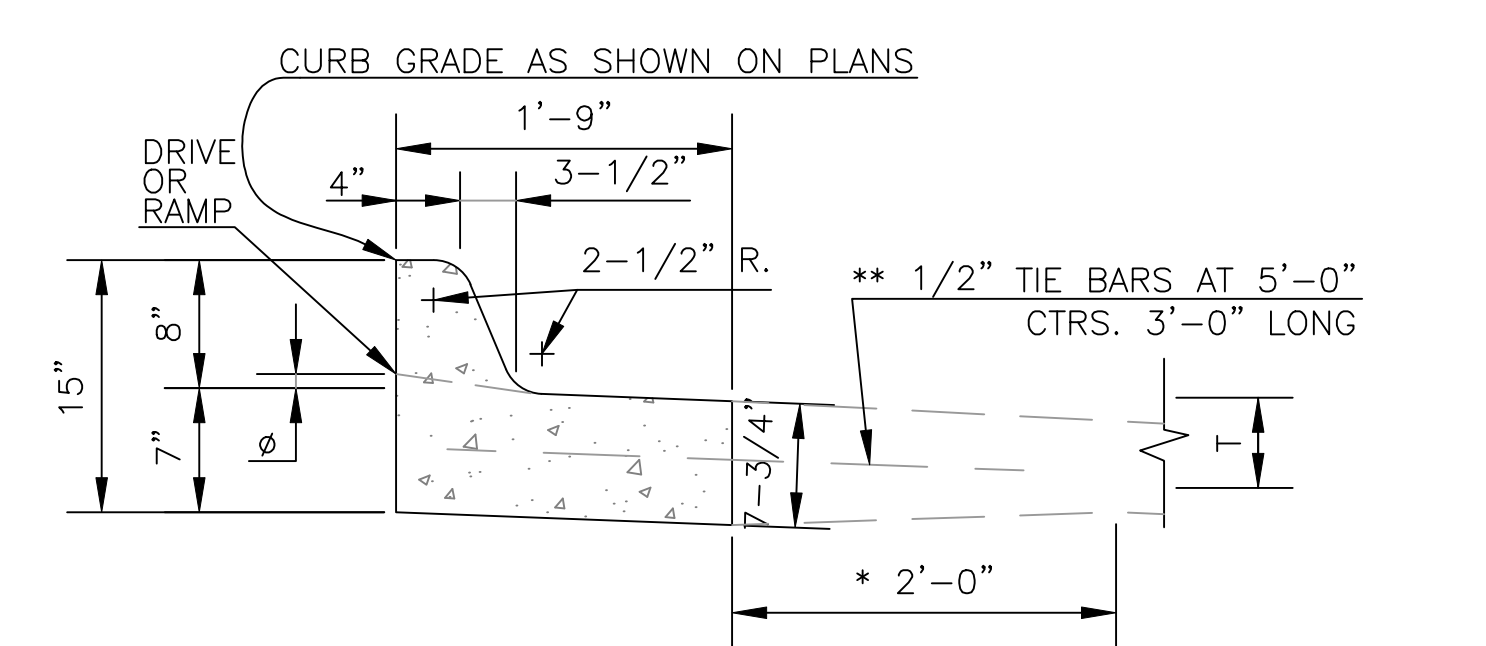
NOTE:
PAVEMENT CLASS CONCRETE (AE) NEEDED TO COMPLETE THE MEDIAN NOSE SHALL BE SUBSIDIARY TO THE BID ITEM FOR COMBINED CURB AND GUTTER TYPE III.
* OMIT SEALED 1/2" EXPANSION JOINT WHEN SURFACE MATERIAL USED IN MEDIAN IS OTHER THAN CONCRETE.



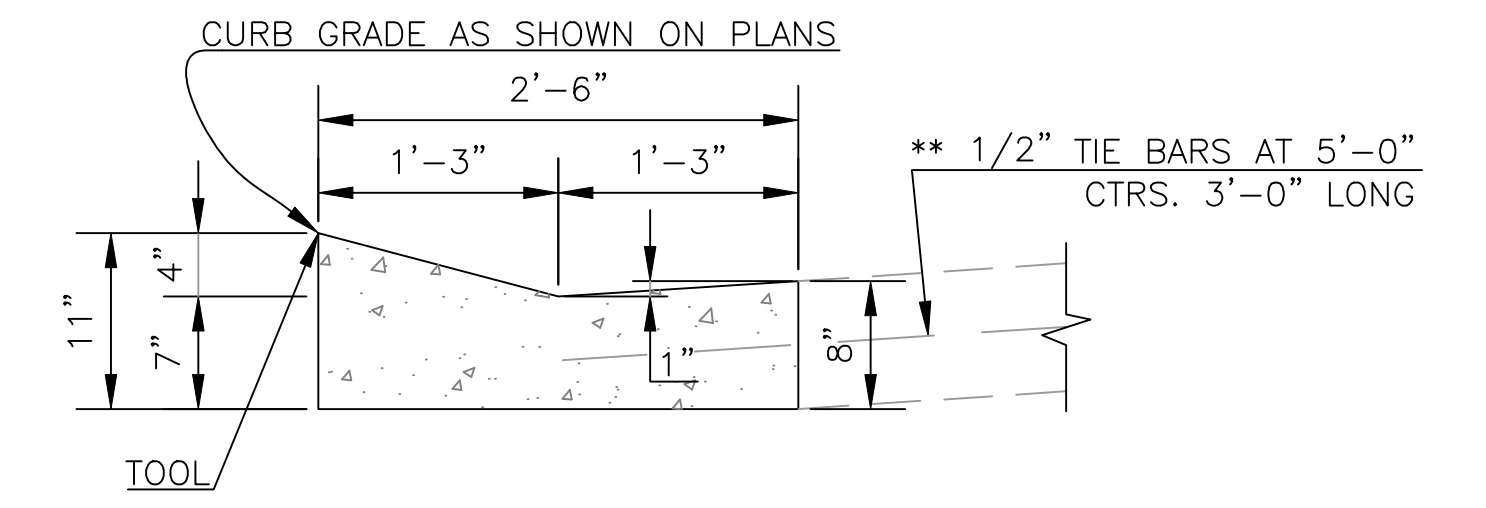
COMBINED CURB & GUTTER-TYPE I



COMBINED CURB & GUTTER-TYPE II



COMBINED CURB & GUTTER-TYPE III



LAYBACK CURB & GUTTER-TYPE IV

NOTES:
1. USE OF LAYBACK CURB AND GUTTER IS RESTRICTED TO STREET CLASSIFICATION OF SUB-COLLECTOR AND LOCAL. LAYBACK CURB AND GUTTER SHALL NOT BE USED IN INTERSECTION CURB RETURNS.
2. FOR CURB AND GUTTER ABUTTING EXISTING ASPHALT, REFER TO CC&G MODIFIED DETAIL

* THE CONTRACTOR HAS THE OPTION OF MAINTAINING OR TRANSITIONING AS SHOWN AT NO ADDITIONAL COST.

**THE TIE BARS MAY BE ELIMINATED WITH ASPHALTIC CONCRETE PAVEMENT CONSTRUCTION.

∅ 1-1/2" FOR DRIVE ENTRANCES AND 3/4" FOR SIDEWALK RAMP

5	March 2013	C&G payment @ alley appr. & bars to "	DHS	SB
4	Dec. 2012	Changed to tie bar from rebar	DHS	SB
3	March 2010	Eliminated keyed jt. at Com. Drive Appr.	DHS	SB
2	Dec. 2009	Added Dr. Appr. on Unimpr. Rdwy., added flare verbage, mod. S/W x-slope & remov. keyed joints from C & G.	DHS	SB
1	Feb. 2008	Mod. Com. Dr. & Alley Appr.	DHS	SB
NO.	DATE:	REVISION	BY:	APP'D

DRAWN BY: *rm/mc*
APP'D BY: *R. Anthony Kany*



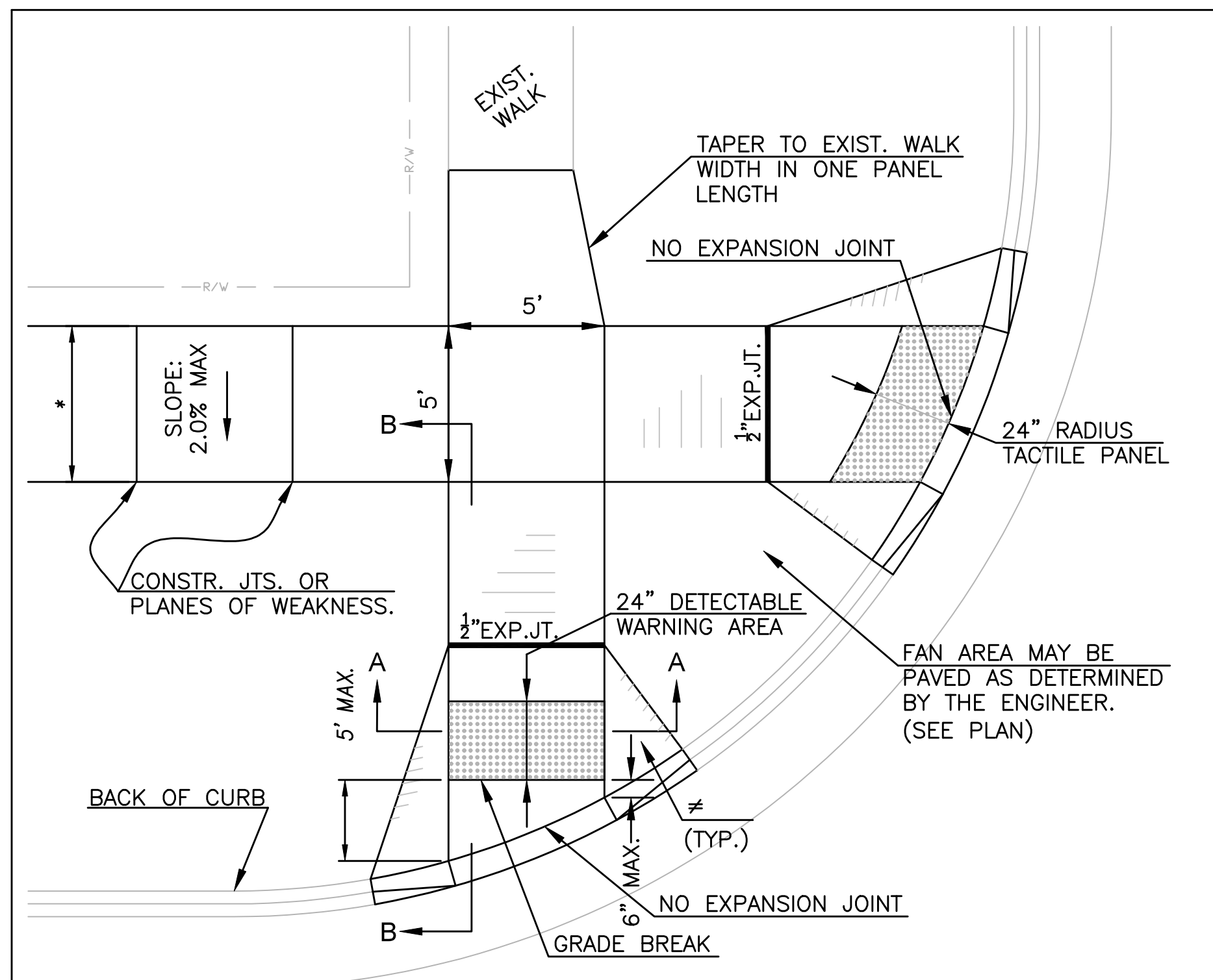
SHAWNEE COUNTY, KANSAS PUBLIC WORKS DEPARTMENT
1515 NW SALINE
TOPEKA, KS 66618
(785) 233-7702



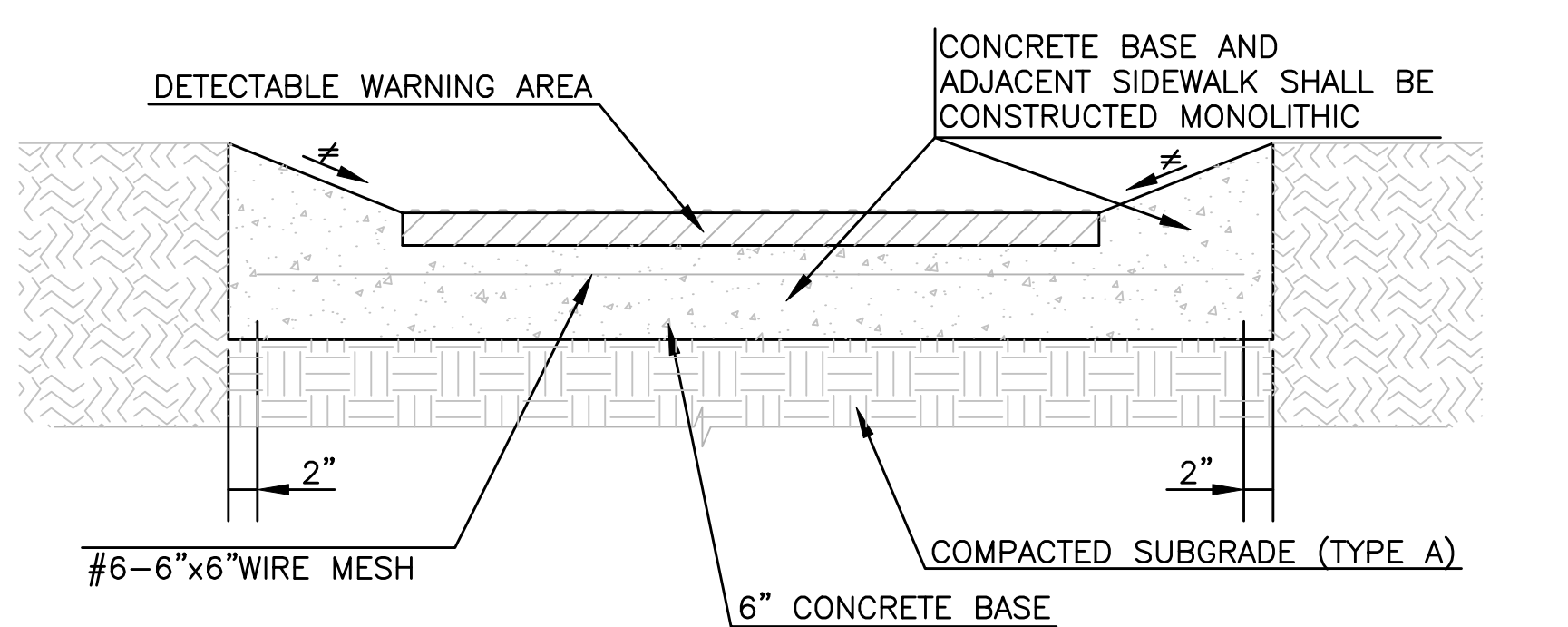
STANDARD DETAILS (MODIFIED)

CURB & GUTTER AND APPROACH DETAILS (DT-003)

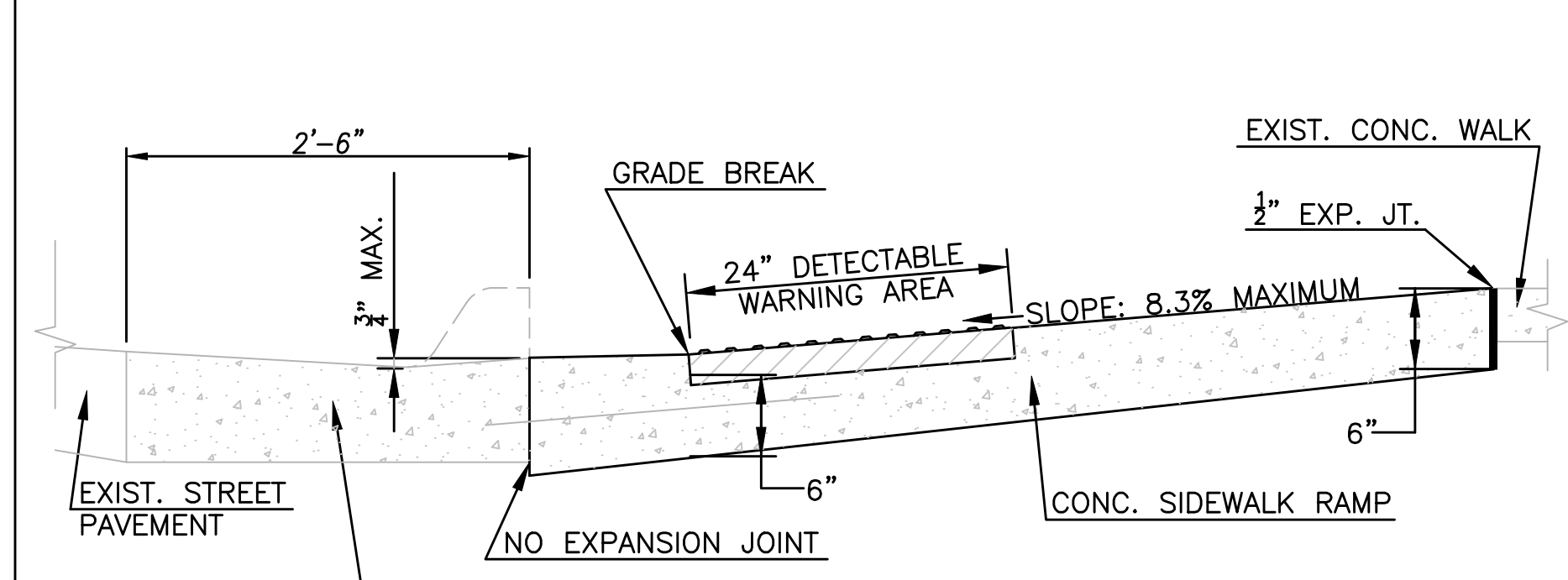
DATE: Sept. 2025
SHEET: 11 of 39
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NOTES:
 1. FAN AREA PAVEMENT TO BE PAID FOR AS 6" CONCRETE.
 2. EXPANSION JOINTS SHALL BE THE CONSTRUCTION LIMITS OF 6" CONCRETE IN RAMP.
 * 5' - PRINCIPAL ARTERIALS, MINOR ARTERIALS, COLLECTORS
 4' - SUB-COLLECTORS, LOCALS
 ≠ 10:1 MAXIMUM AT PAVED FAN AREA, 4:1 AT STANDARD RAMP



SECTION A-A
 ≠ 10:1 MAXIMUM AT PAVED FAN AREA, 4:1 AT STANDARD RAMP



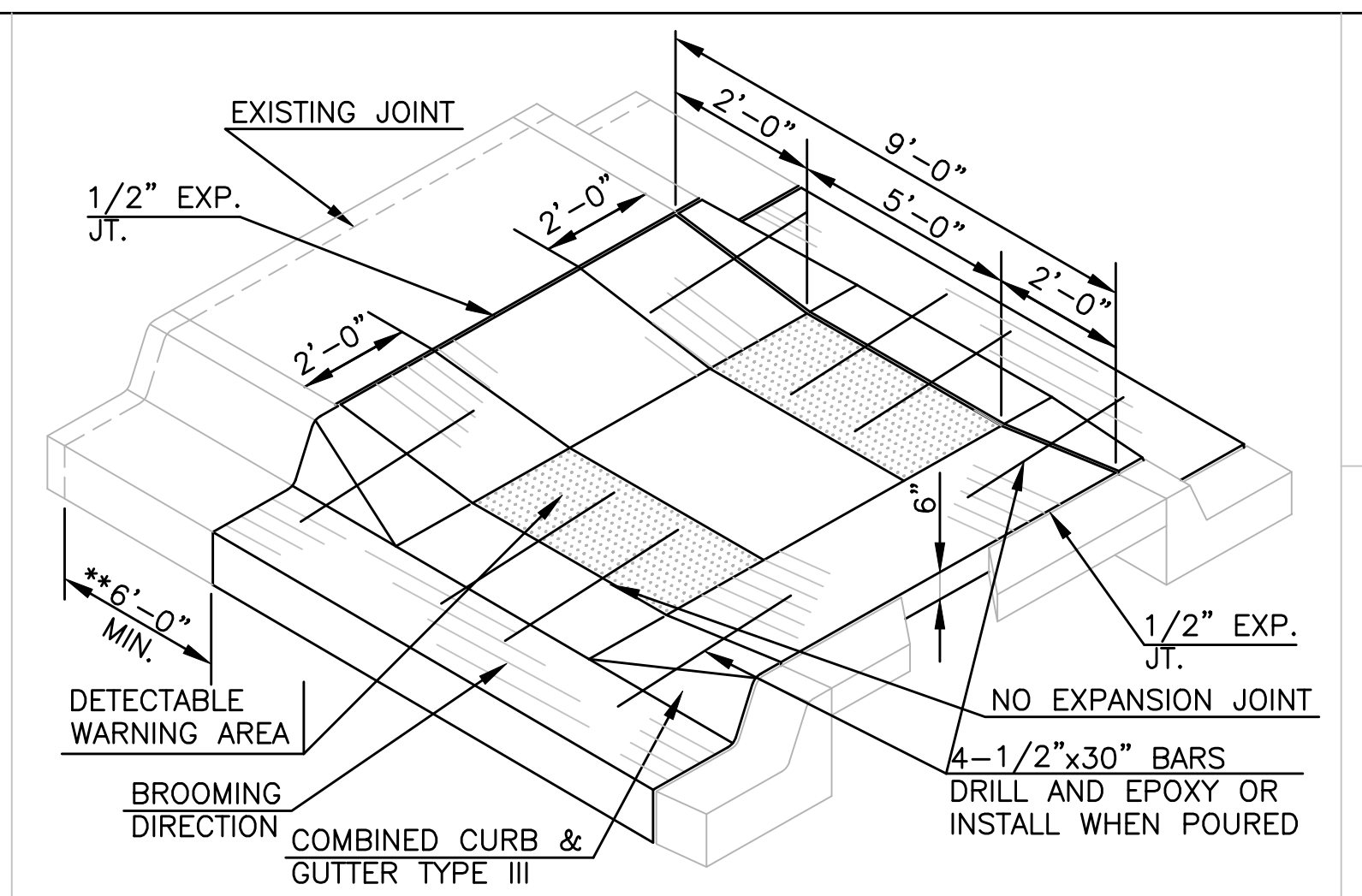
NOTES:
 1. RAMP TO BE PAID FOR AS SIDEWALK RAMP. CURB AND GUTTER TO BE INCLUDED IN THE PRICE BID FOR COMBINED CURB AND GUTTER TYPE I.
 2. SIDEWALK RAMP SHALL OBTAIN A MINIMUM OF 6" ABOVE $\bar{\bar{L}}$ FOR NEW SIDEWALK CONSTRUCTION.

7	May 2016	Lightened lines, added "No Exp. Jt." @ B/C	DHS	SB
6	June 2015	Added Grade Break at & Updated Notes	DHS	SB
5	March 2013	Mod. bar spacing @ ret wall & bar size	DHS	SB
4	Feb. 2013	Add. Radial Ramps and Rearranged sheet	DHS	BC
3	Aug. 2011	Add. Access-Tile Remv.Sys. to Spec.Req.	DHS	SB
2	Dec. 2009	Mod. S/W Details & cross slope to 2%	DHS	SB
1	Feb. 2008	Add. Armor-Tile Sys. & Mod. All Iso. Det.	DHS	SB
NO.	DATE:	REVISION	BY:	APP'D

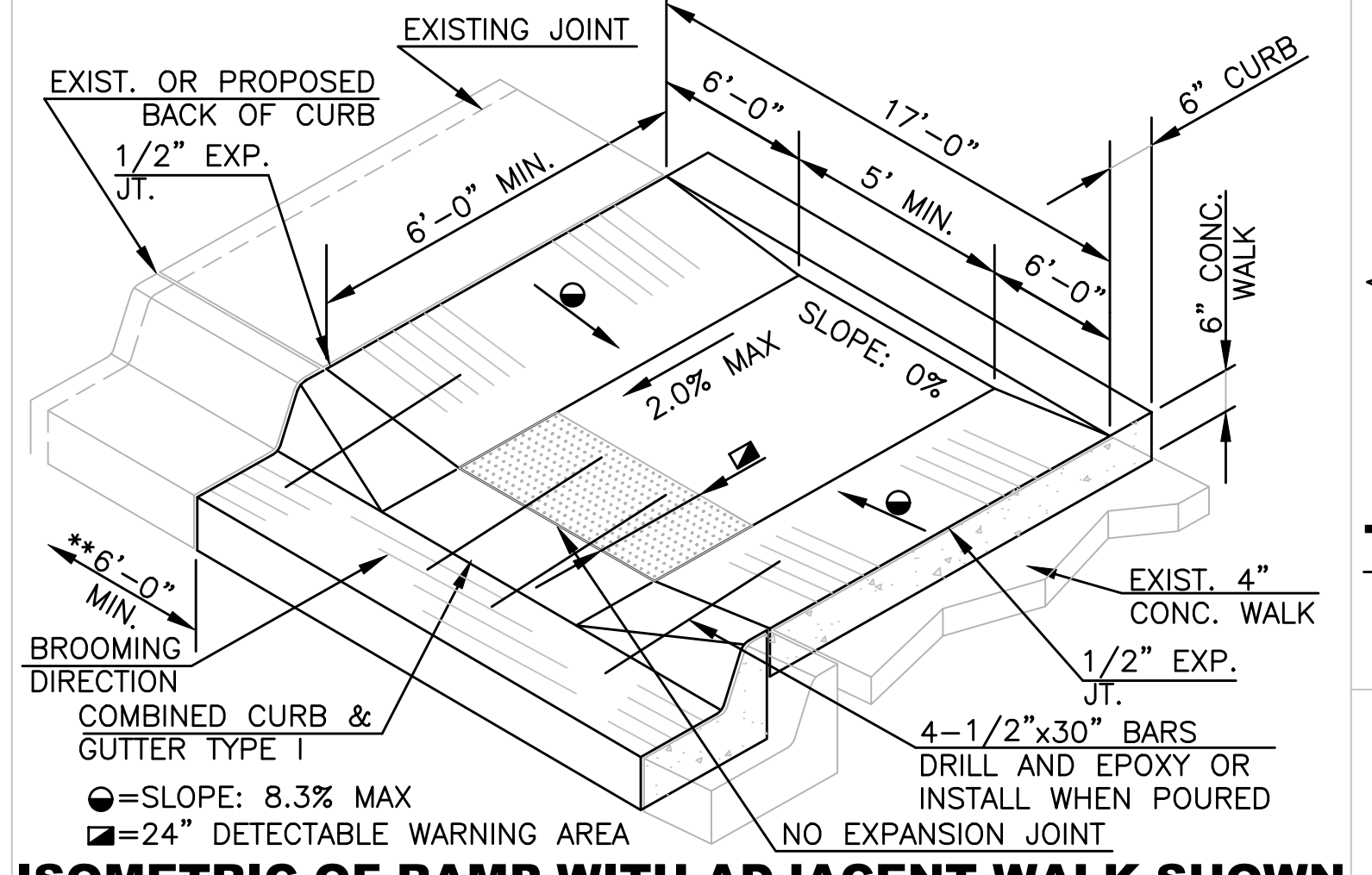
DRAWN BY: *rm/mc*
 APP'D BY: *R. Clumley-Kearney*



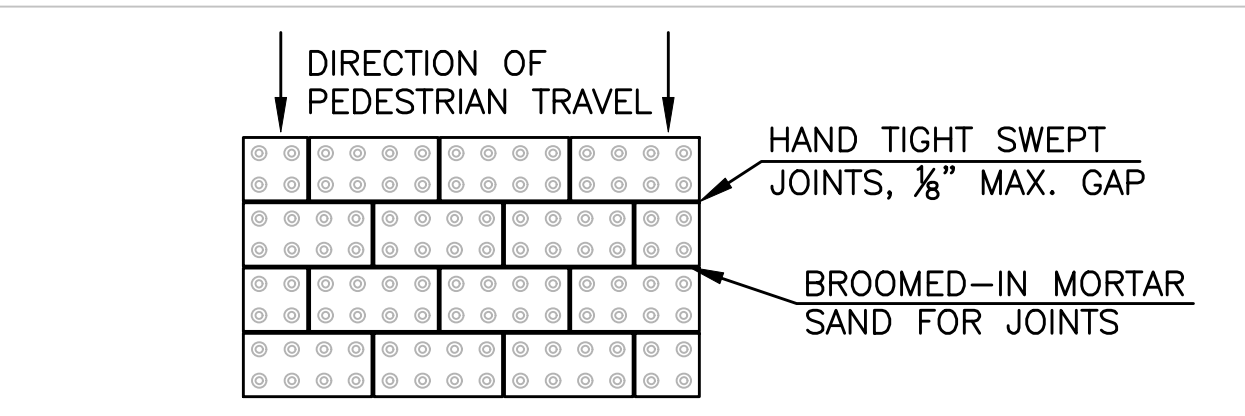
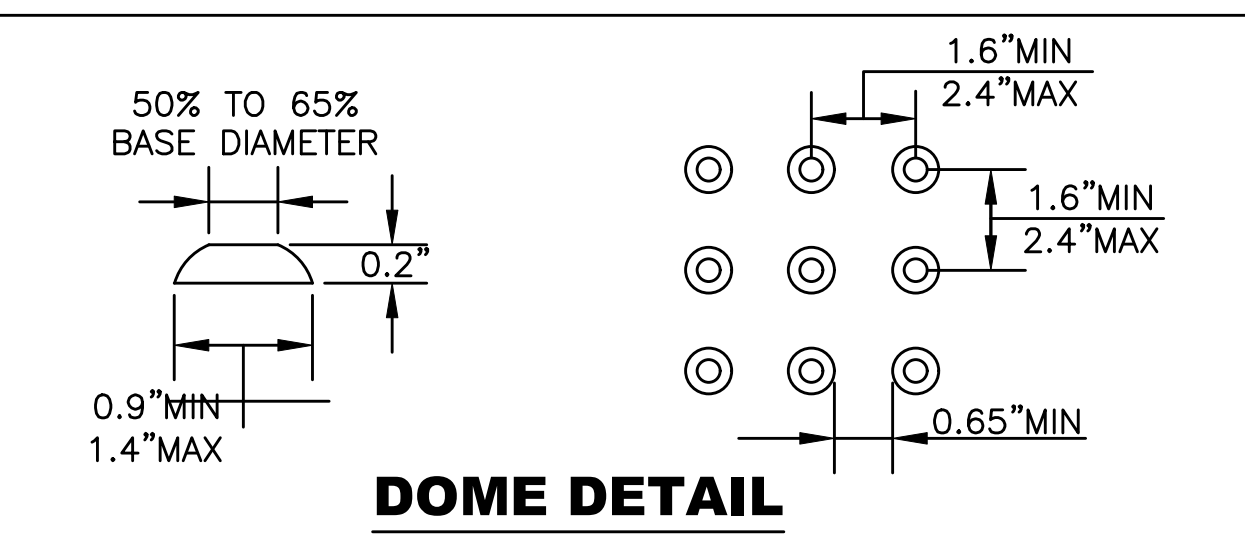
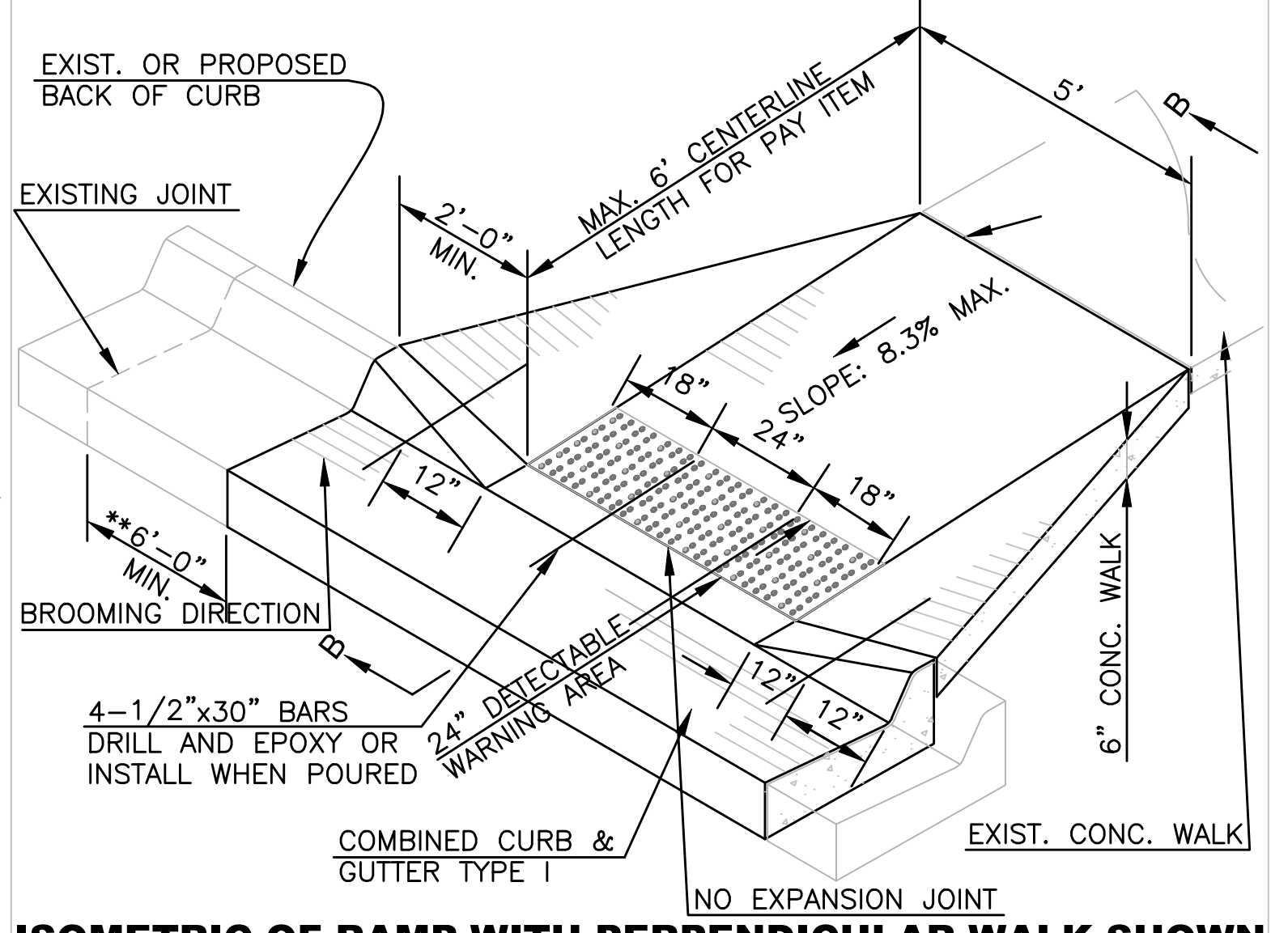
SHAWNEE COUNTY, KANSAS
PUBLIC WORKS DEPARTMENT
 1515 NW SALINE
 TOPEKA, KS 66618
 (785) 233-7702



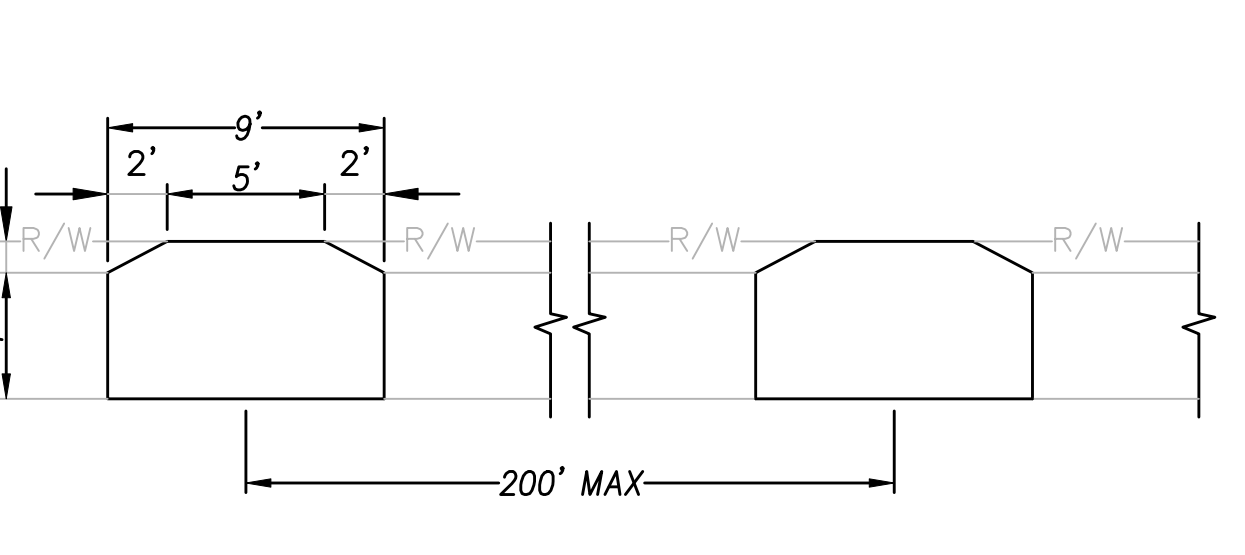
NOTE:
 MEDIAN RAMP CROSSING SHALL BE BUILT AT LOCATIONS SHOWN ON THE PLANS. CONCRETE MEDIAN CROSSINGS TO BE PAID FOR AS SIDEWALK RAMP.



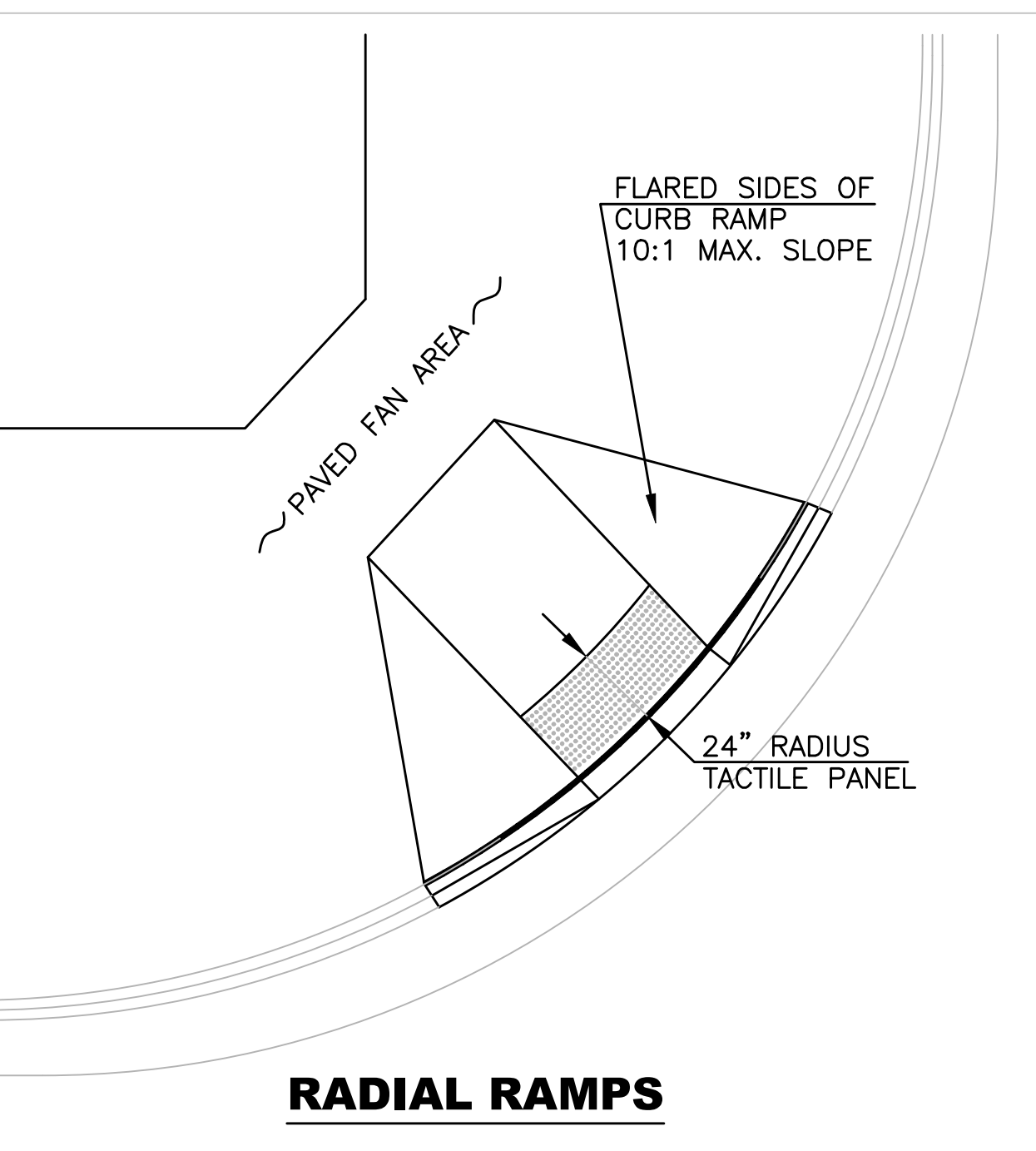
**** IF CURB AND GUTTER AND/OR SIDEWALK TO BE REMOVED IS WITHIN 6'-0" OF AN EXISTING JOINT, REMOVE CURB AND GUTTER AND/OR SIDEWALK BACK TO EXISTING JOINT. JOINTS ARE TO BE PLACED AS PER SECTION 5, SUBSECTION B OF CITY/COUNTY STANDARD TECHNICAL SPECIFICATIONS.**



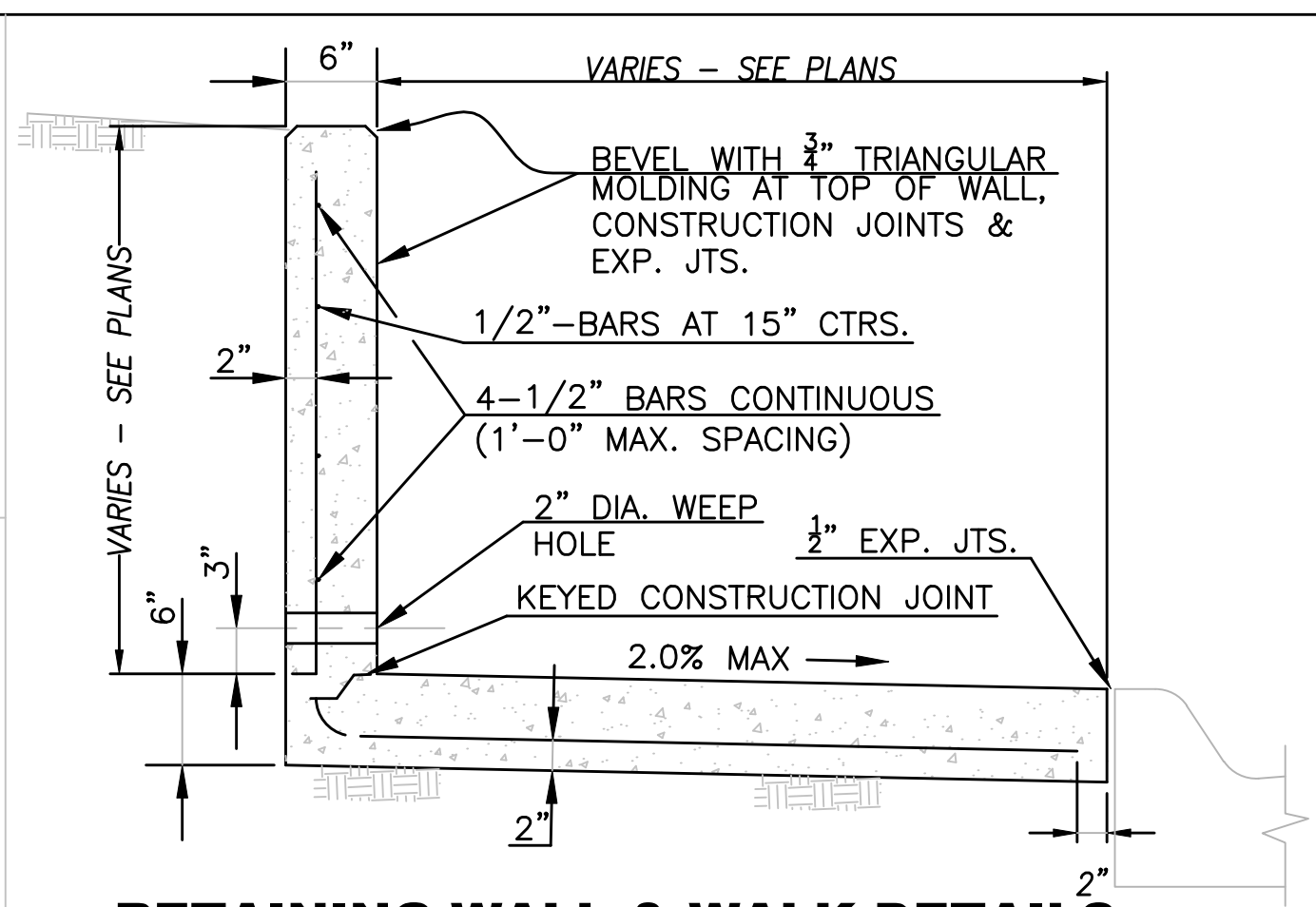
Installation pattern for detectable warning paving bricks



FLARED SIDES OF CURB RAMP
10:1 MAX. SLOPE



NOTE:
 RADIAL RAMPS WILL NOT BE PERMITTED IN NEW TRAFFICWAY IMPROVEMENT PROJECTS, AND WILL ONLY BE ALLOWED AS DIRECTED BY THE ENGINEER IN RETRO-FIT CONSTRUCTION WHEN PERPENDICULAR RAMPS CANNOT BE CONSTRUCTED.



NOTE:
 ► THIS TYPE OF WALL MAY BE USED TO A MAXIMUM HEIGHT OF 3'-0".
 ► WEEP HOLES AT A MAXIMUM OF 15' CENTER TO CENTER WITH COARSE AGGREGATE PLACED AT EACH WEEP HOLE 18" IN ALL DIRECTIONS ABOVE FLOW LINE.
 ► CONCRETE SHALL BE CLASS "A" THROUGHOUT WITH GRADE 40 REINFORCING.
 ► PLACE 1/2" HARDWARE SCREEN AT WEEP HOLES TO RETAIN AGGREGATE.

SIDEWALK (RESIDENTIAL AND COMMERCIAL) CONSTRUCTION

► SIDEWALKS SHALL BE CONSTRUCTED USING 4" THICK CONCRETE, EXCEPT AT DRIVEWAY CROSSINGS, WHERE IT SHALL BE 6" THICK PAVEMENT CLASS CONCRETE, 4000 PSI (RESIDENTIAL) OR 8" THICK PAVEMENT CLASS CONCRETE, 4000 PSI (COMMERCIAL).
 ► FINE GRADING MATERIAL SHALL BE CRUSHED ROCK AB-3. ALLOWABLE MAXIMUM COMPACTED THICKNESS OF AB-3 SHALL BE 6".
 ► SAND IS NOT AN APPROVED FILL, SUBGRADE, OR FINE GRADING MATERIAL UNDER PAVEMENT, SIDEWALKS, RAMPS, OR DRIVEWAYS.
 ► ALL SIDEWALKS AND RAMPS WITHIN PUBLIC RIGHTS-OF-WAY SHALL MEET THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG).

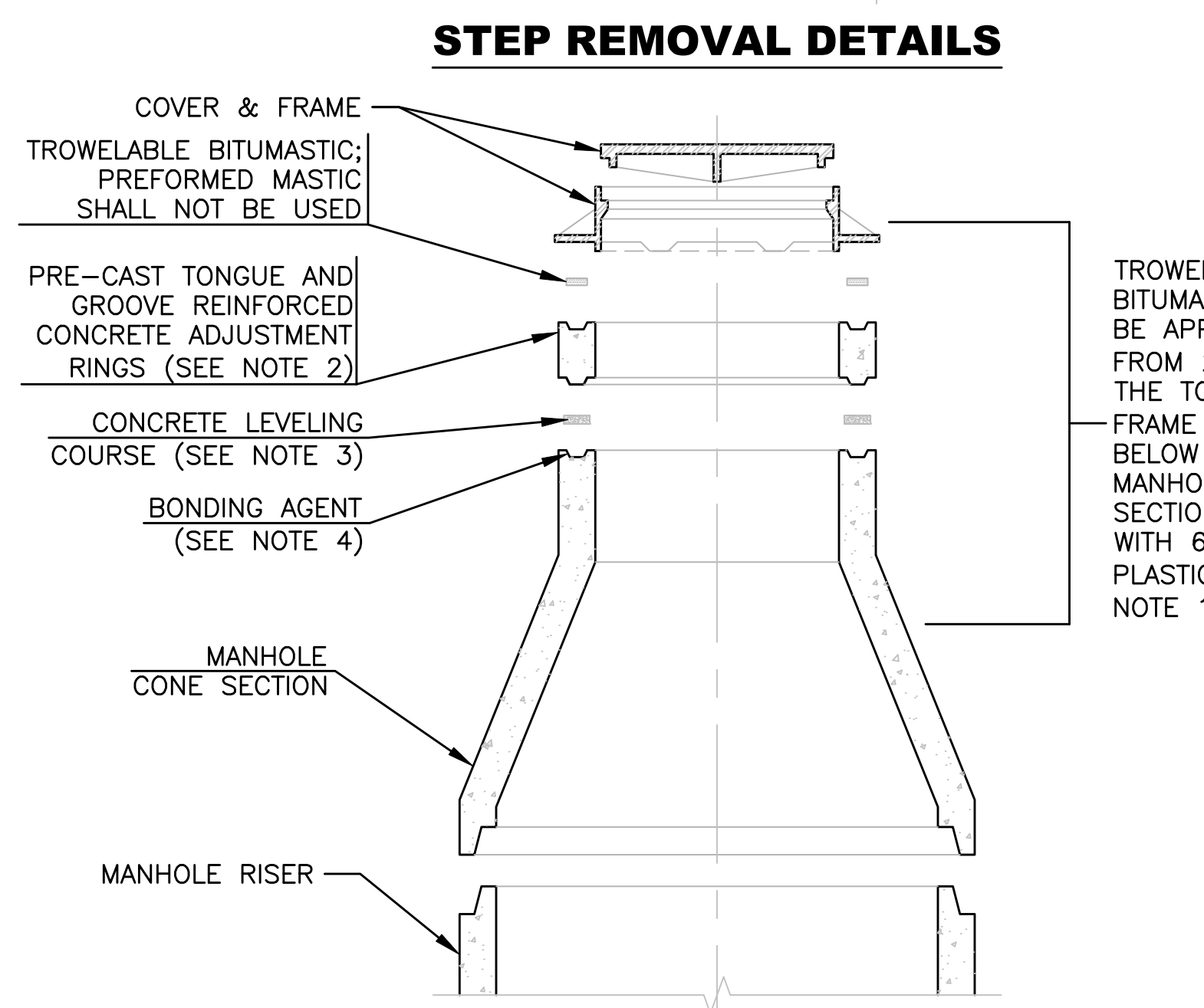
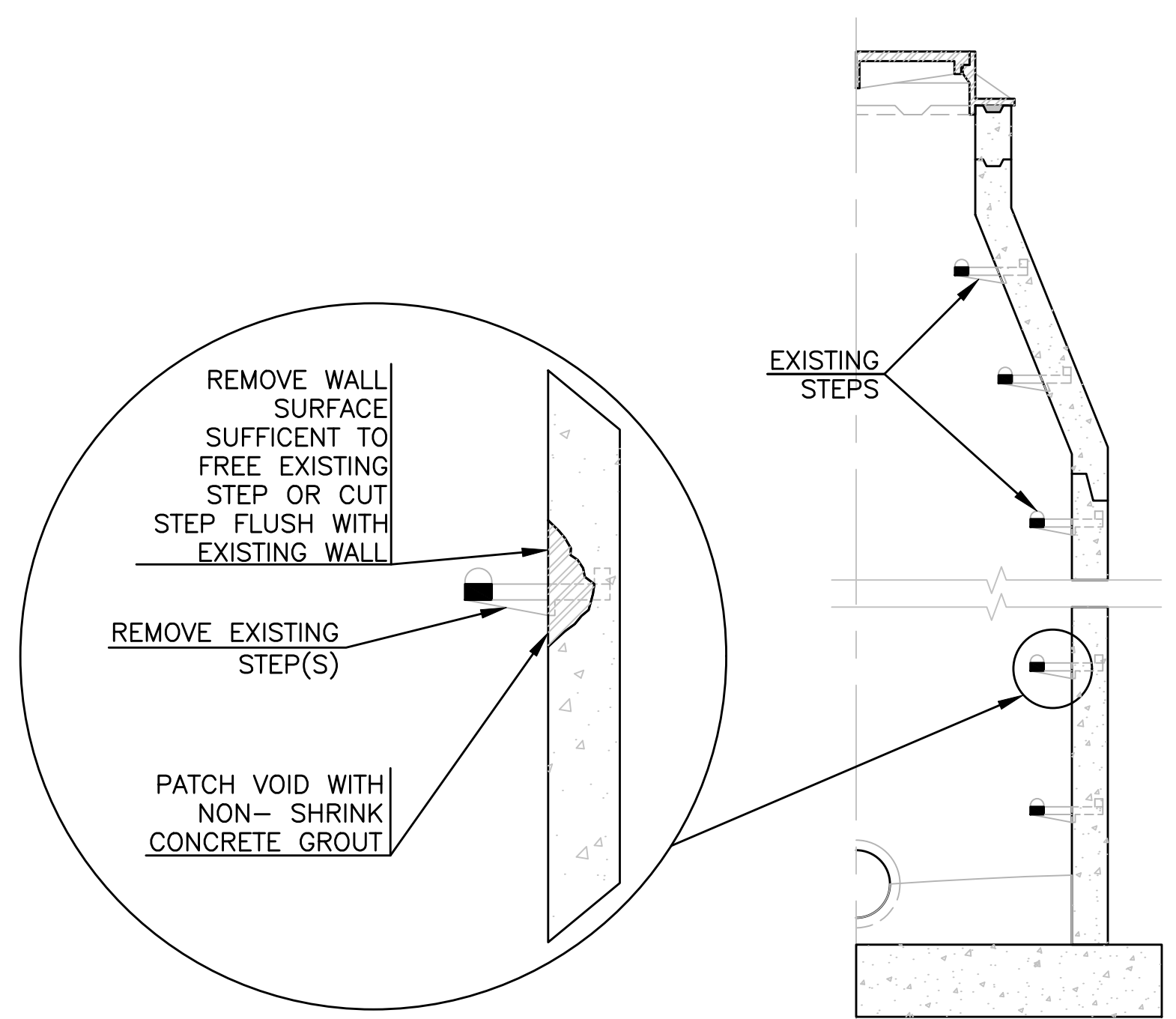
SPECIAL REQUIREMENTS FOR SIDEWALK RAMP CONSTRUCTION

► SIDEWALK RAMPS SHALL BE CONSTRUCTED USING 6" THICK PAVEMENT CLASS CONCRETE (4000 PSI) AS DETAILED IN THE STANDARD TECHNICAL SPECIFICATIONS.
 ► EXPANSION JOINTS SHALL BE SEALED WITH APPROVED JOINT SEALANT WHERE SIDEWALKS AND DRIVE ENTRANCES (COMMERCIAL AND RESIDENTIAL) INTERSECT WITH PAVEMENT CURB.
 ► DETECTABLE WARNING SYSTEMS SHALL MEET THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS.
 ► THE TRUNCATED DOME AREA SHALL BE A MAXIMUM WIDTH OF THE SIDEWALK RAMP OR MEDIAN RAMP. WIDER MEDIAN ISLANDS WILL RESULT IN A GAP BETWEEN THE TRUNCATED DOME AREAS.
 ► THE TRUNCATED DOME AREA SHALL BE A CONTRASTING COLOR TO THE ADJACENT SURFACES.
 ► DETECTABLE WARNING PANELS SHALL NOT BE CUT. BRICKS MAY BE SAW CUT BUT ANY BRICK SHALL NOT BE LESS THAN 25% OF A FULL BRICK.
 ► THE ADA SOLUTIONS CAST IN PLACE DETECTABLE WARNING PANELS, ARMORCAST DETECTABLE WARNING PANELS, PAVESTONE DETECTABLE WARNING PAVERS OR APPROVED EQUAL SHALL BE USED IN ALL SIDEWALK RAMPS.
 ► DETECTABLE WARNING SYSTEMS SHALL BE PLACED ALONG THE BACK OF CURB OR AT A MAXIMUM DISTANCE OF 5 FEET FROM BACK OF CURB.
 ► TRUNCATED DOMES SHALL BE ALIGNED WITH THE DIRECTION OF TRAVEL, OR MAY BE PLACED ON RADIAL LINES IN RADIUS TACTILE PATTERNS.
 ► MORTAR SAND SHALL MEET THE REQUIREMENTS IN THE STANDARD SPECIFICATIONS.
 ► THE SIDEWALK RAMP WILL BE BID AS "SIDEWALK RAMP" AND PAYMENT FOR THIS WORK WILL BE MEASURED BY THE SQUARE FOOT, MAXIMUM 6 FEET CENTERLINE PAY LENGTH.
 ► ALL MATERIALS AND LABOR TO INSTALL THE SIDEWALK RAMP SHALL BE SUBSIDIARY TO THE BID ITEM "SIDEWALK RAMP".

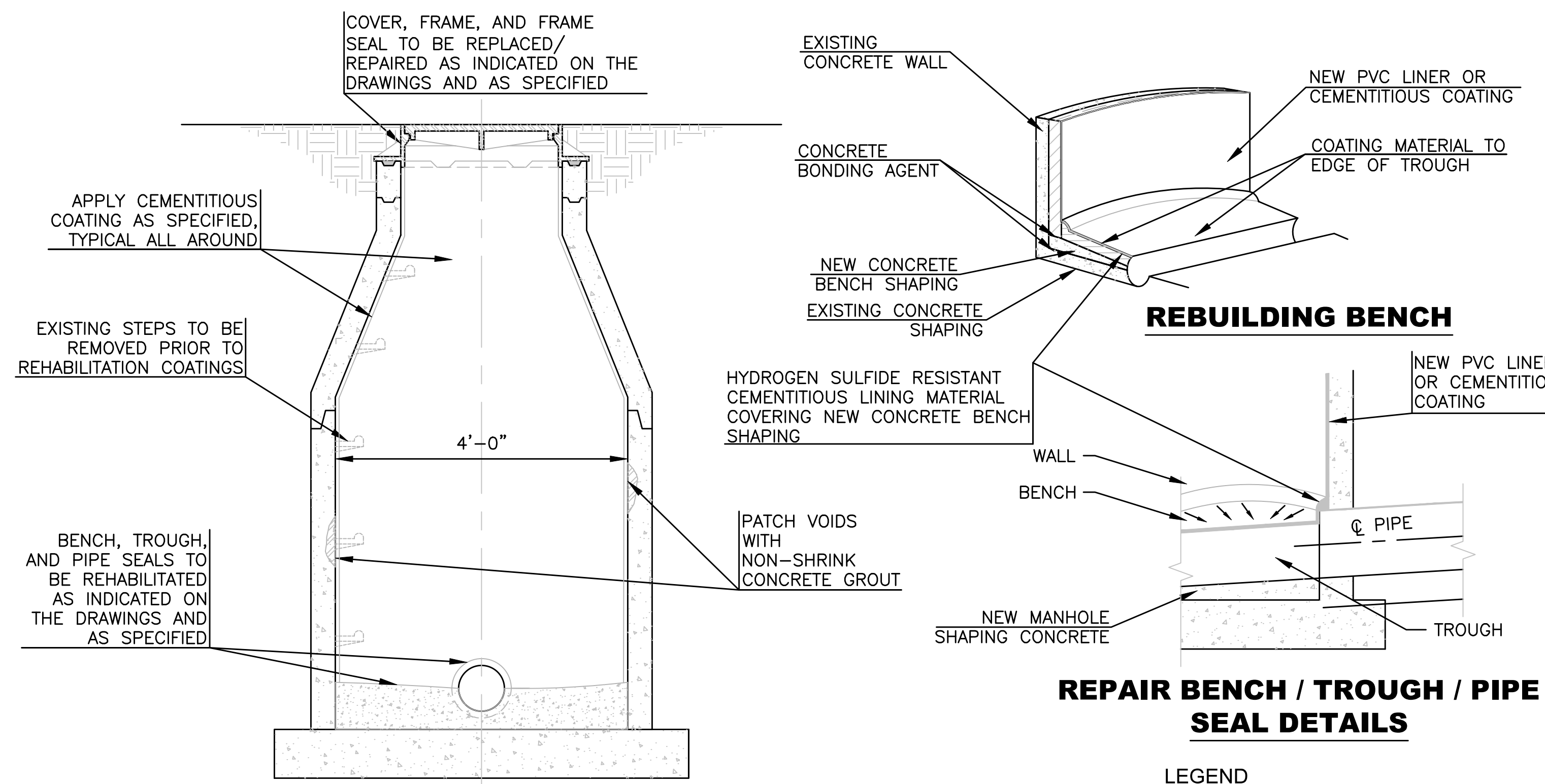
STANDARD DETAILS

RAMP & WALK DETAILS
 (DT-004)

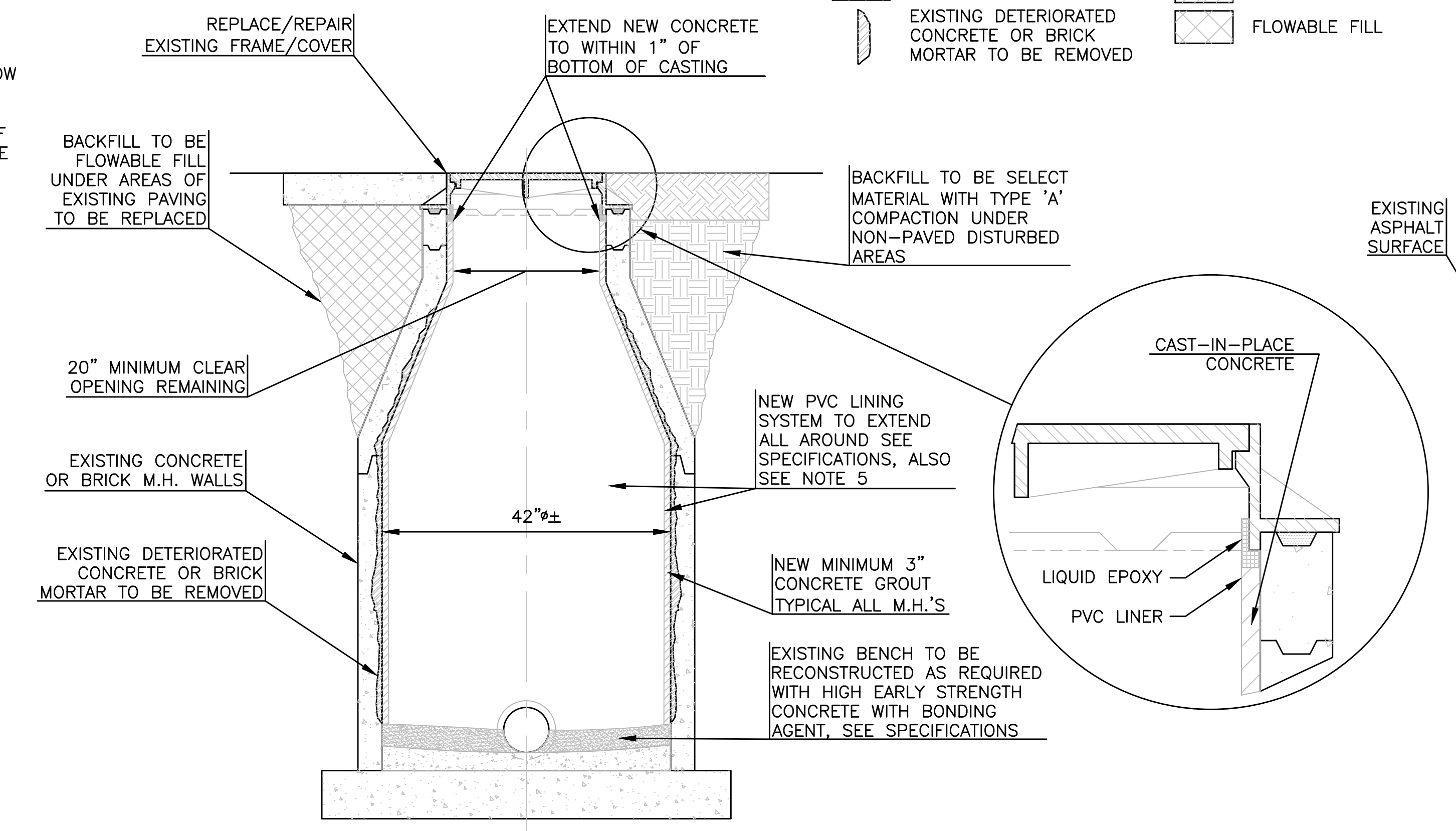
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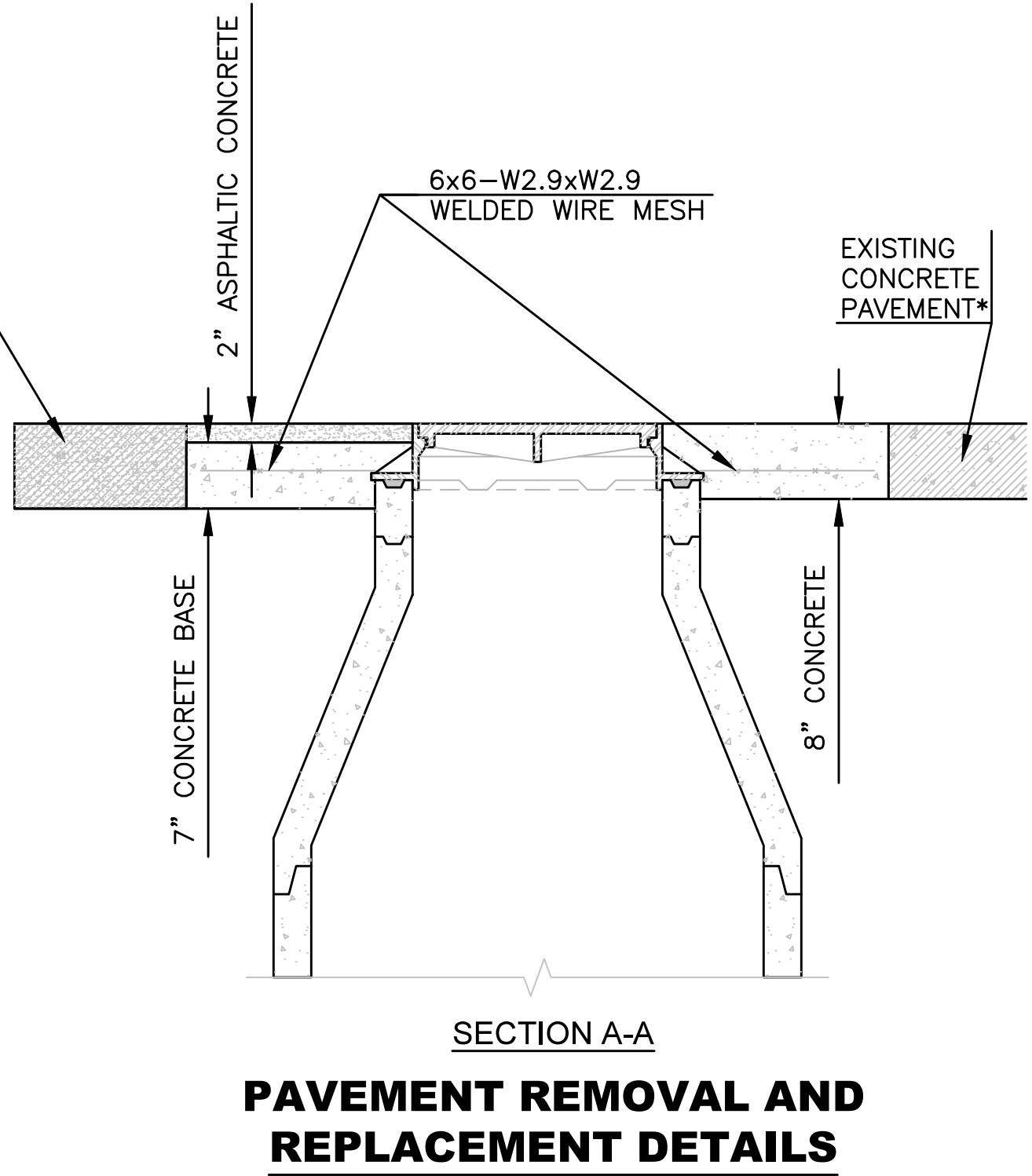
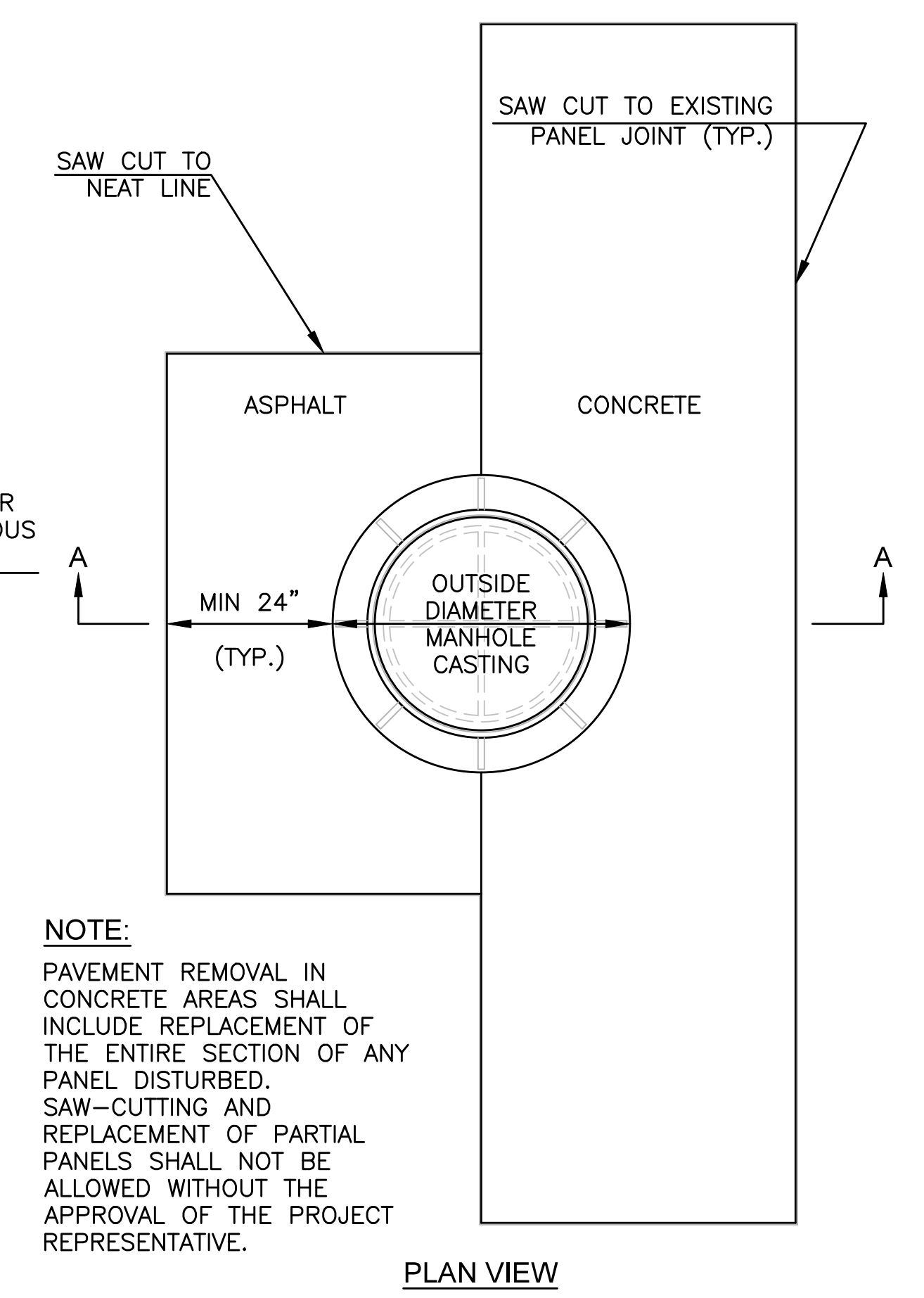
- NOTES:**
- FOR COLD OR WET WEATHER CONDITIONS, USE TNEMEC 465 BLACK, SERIES 46, H.B. TNEMECOL.
 - IF MULTIPLE RINGS ARE USED, BITUMASTIC SEALER SHALL BE USED BETWEEN RINGS.
 - ALL LEVELING FOR SLOPED STREETS OR GRADES SHALL BE ACCOMPLISHED WITH THE CONCRETE LEVELING COURSE. BITUMASTIC SHALL NOT BE USED TO ACCOMPLISH LEVELING.
 - CONCRETE BONDING AGENT SHALL BE 'WELD-CRETE' (R) BY LARSEN PRODUCTS CORP. OF JESSUP, MD., OR EQUAL.
 - OVERLAPPING OR OPEN JOINTS WHERE 2 SHEETS OF PVC MEET, OR WHERE PVC HAS BEEN CUT, SHALL HAVE HEAT FUSION WELD STRIPS APPLIED.



DETAIL OF REHABILITATION WITH CEMENTITIOUS COATING ON 4' DIAMETER EXISTING MANHOLES



- LEGEND**
- LIQUID EPOXY
 - CAST-IN-PLACE CONCRETE
 - EXISTING DETERIORATED CONCRETE OR BRICK MORTAR TO BE REMOVED
 - SELECT MATERIAL WITH TYPE 'A' COMPACTION
 - COMPACTED TOPSOIL
 - FLOWABLE FILL



* ANY EXISTING PANEL OF CONCRETE PAVEMENT PARTIALLY REMOVED OR DISTURBED DURING CONSTRUCTION ACTIVITIES SHALL BE COMPLETELY REMOVED AND REPLACED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND/OR TYPICAL CITY/COUNTY STANDARD SPECIFICATIONS.

NO.	DATE:	REVISION	DHS	SB
1	Feb. 2008	Update		
			BY:	APP'D

DRAWN BY: *rm/mc*
 APP'D BY: *R. Clumey-Kearney*



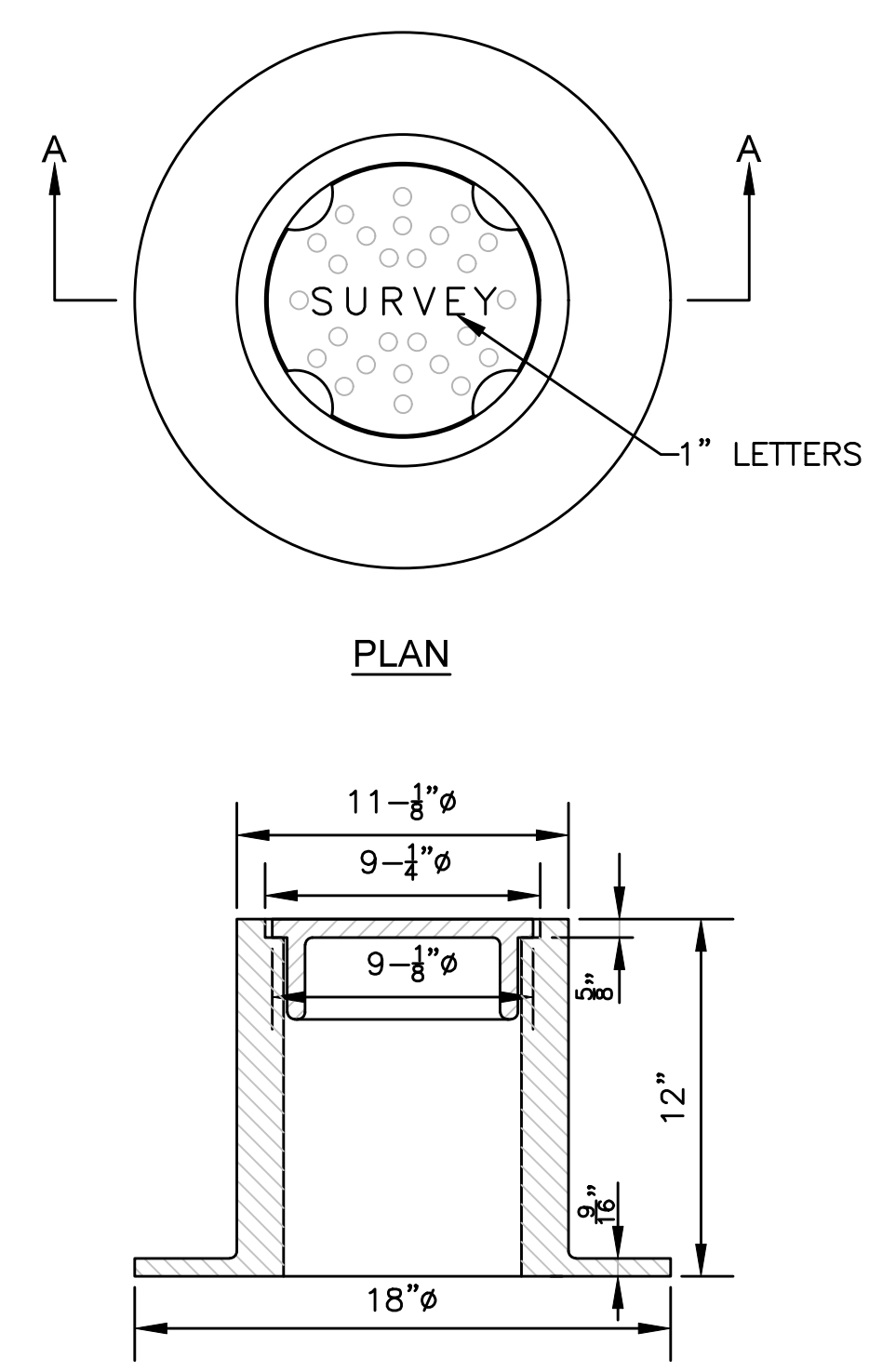
SHAWNEE COUNTY, KANSAS
PUBLIC WORKS DEPARTMENT
 1515 NW SALINE
 TOPEKA, KS 66618
 (785) 233-7702



STANDARD DETAILS

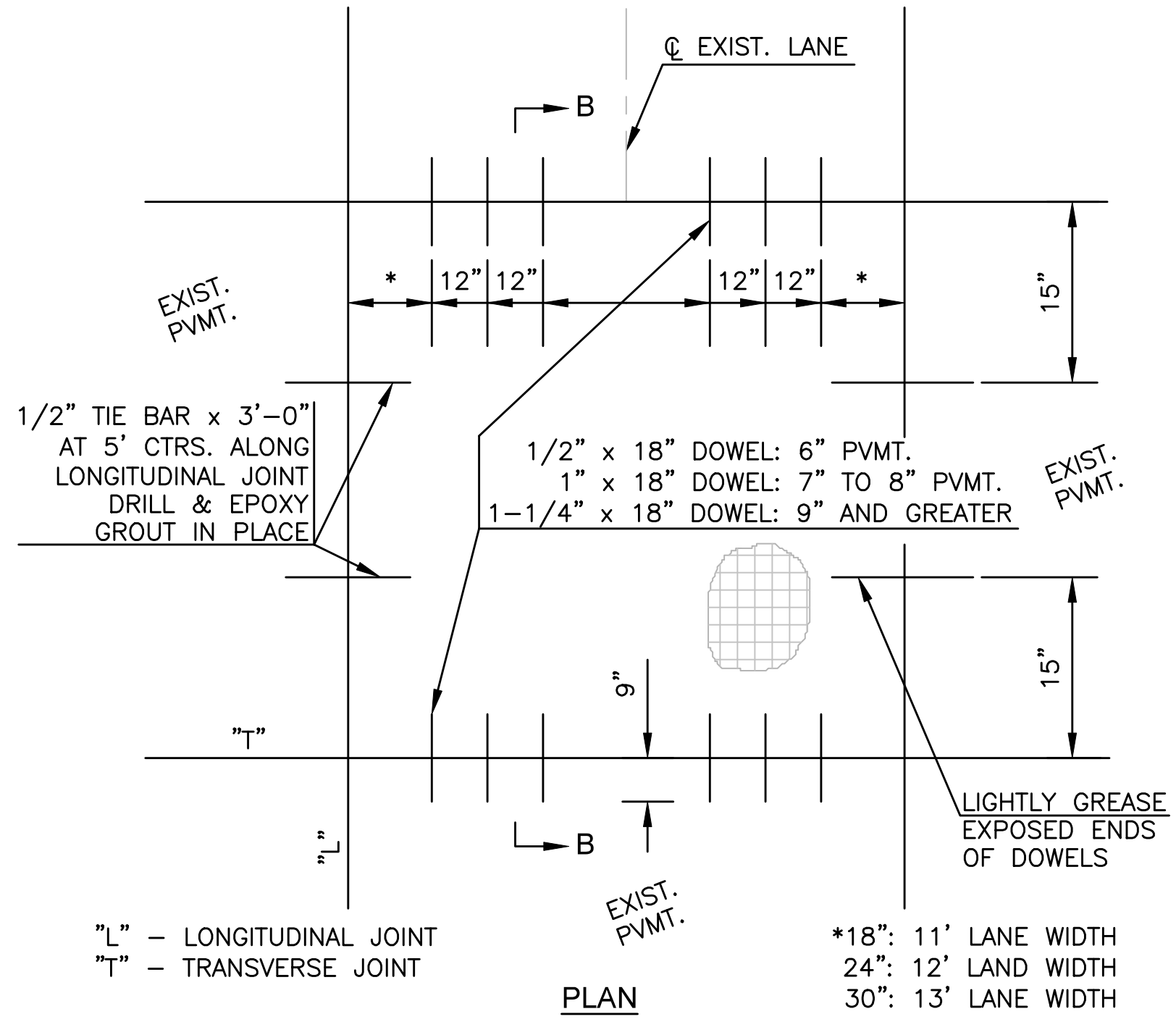
MANHOLE REHABILITATION DETAILS
 (DT-006)

DATE: Sept. 2025
 SHEET: 13 of 39
 PROJ.: 841097.07



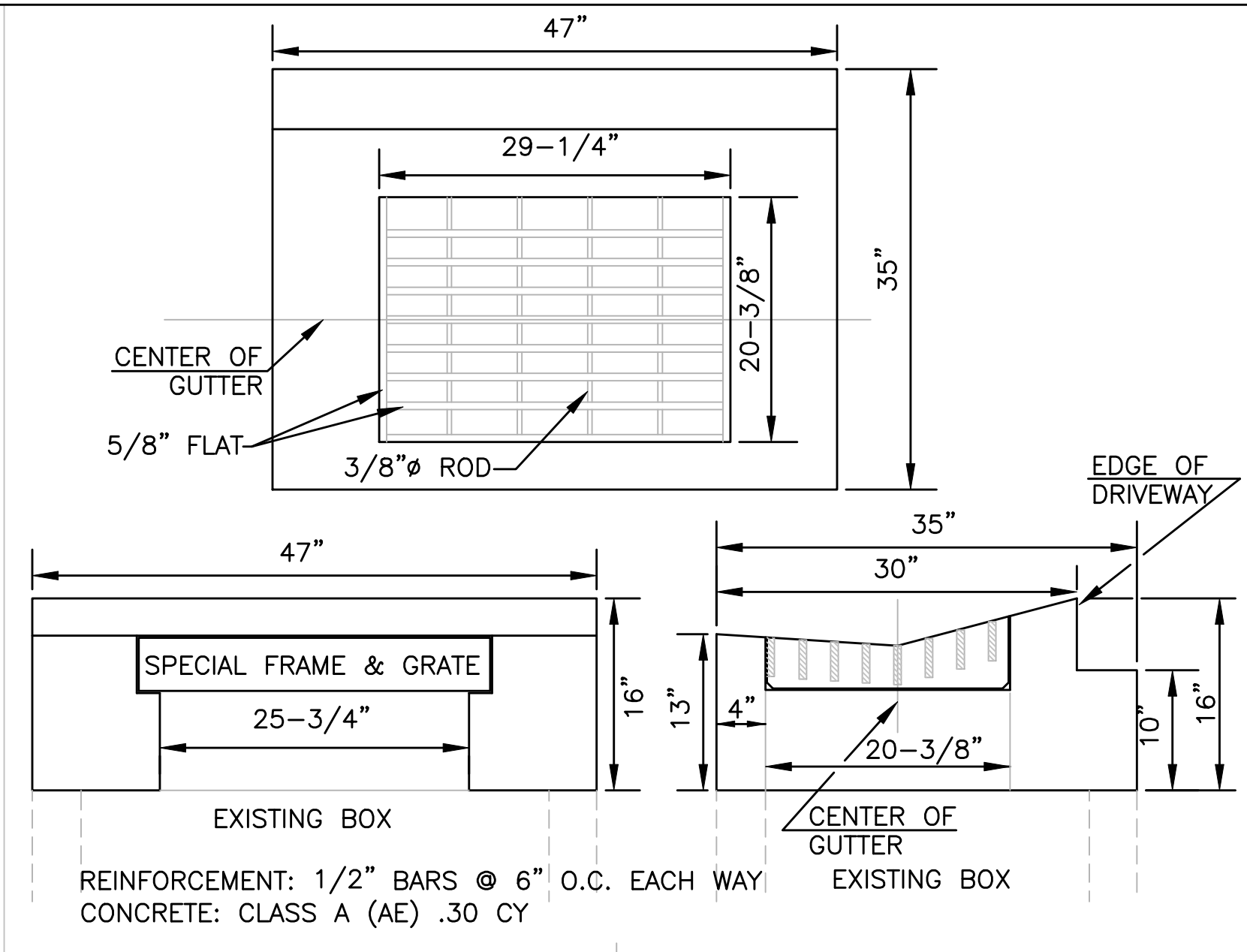
CAST IRON MONUMENT BOX

- NOTES:
1. THE TOP OF THE MONUMENTATION WITHIN THE MONUMENT BOX WILL BE BELOW THE BOTTOM OF THE MONUMENT BOX AND PAVEMENT ELEVATION TO ACCOMMODATE FREE PAVEMENT MOVEMENT WITHOUT DISPLACEMENT OF THE MONUMENT. ALL MONUMENTS IN CONCRETE WILL BE PLACED IN SUCH A WAY THAT THE TOP OF CONCRETE IS A MINIMUM OF 3" CLEAR OF THE BOTTOM OF THE MONUMENT BOX AND PAVEMENT, TO ALLOW DRAINAGE PERCOLATION OF SURFACE SEEPAGE AWAY FROM THE BOX.
 2. CLAY AND BAILEY MFG. CO. COVER NO. 2193-01-1003 RING NO. 2093-01-2050 COMBINED WEIGHT 95 LBS.

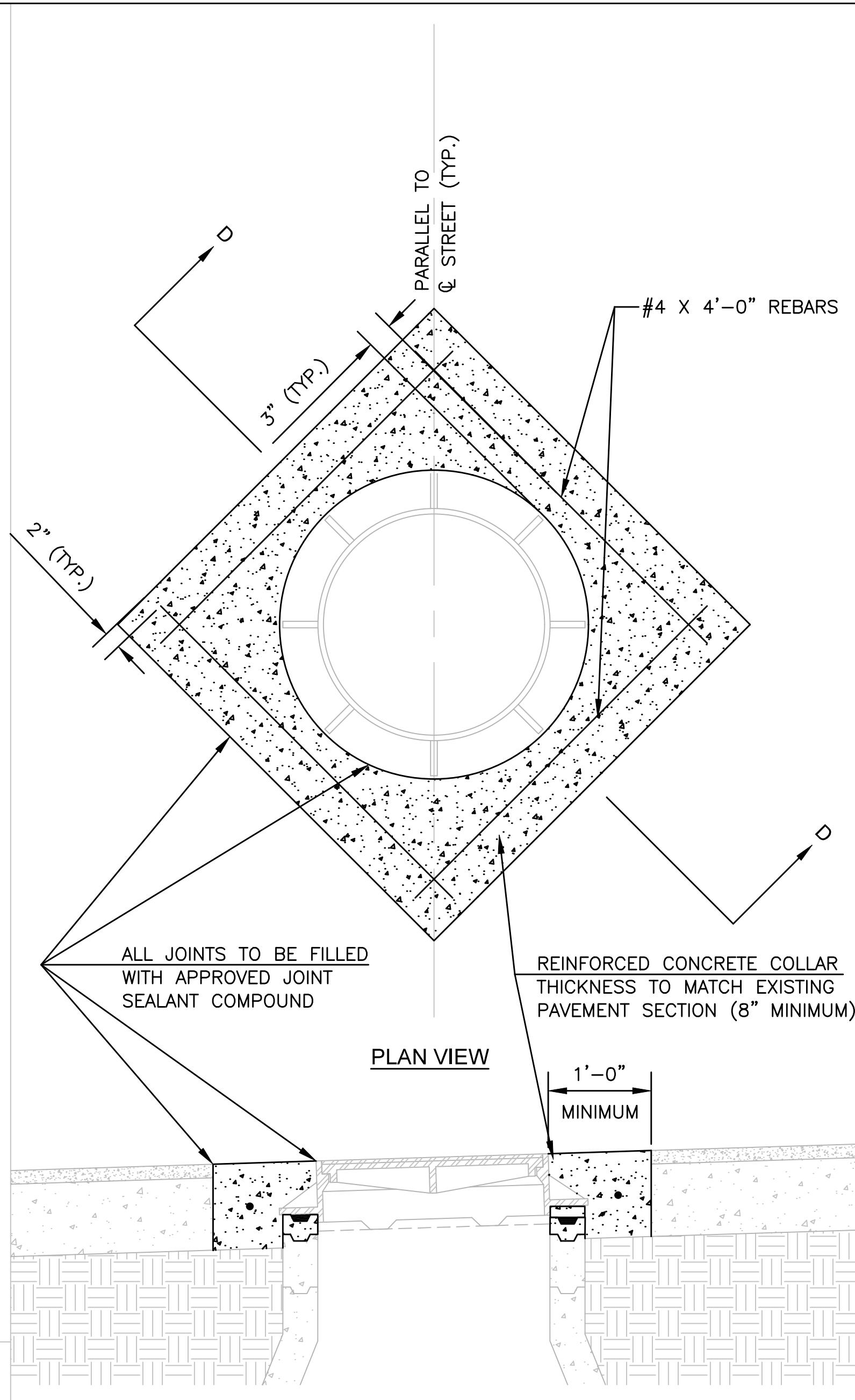
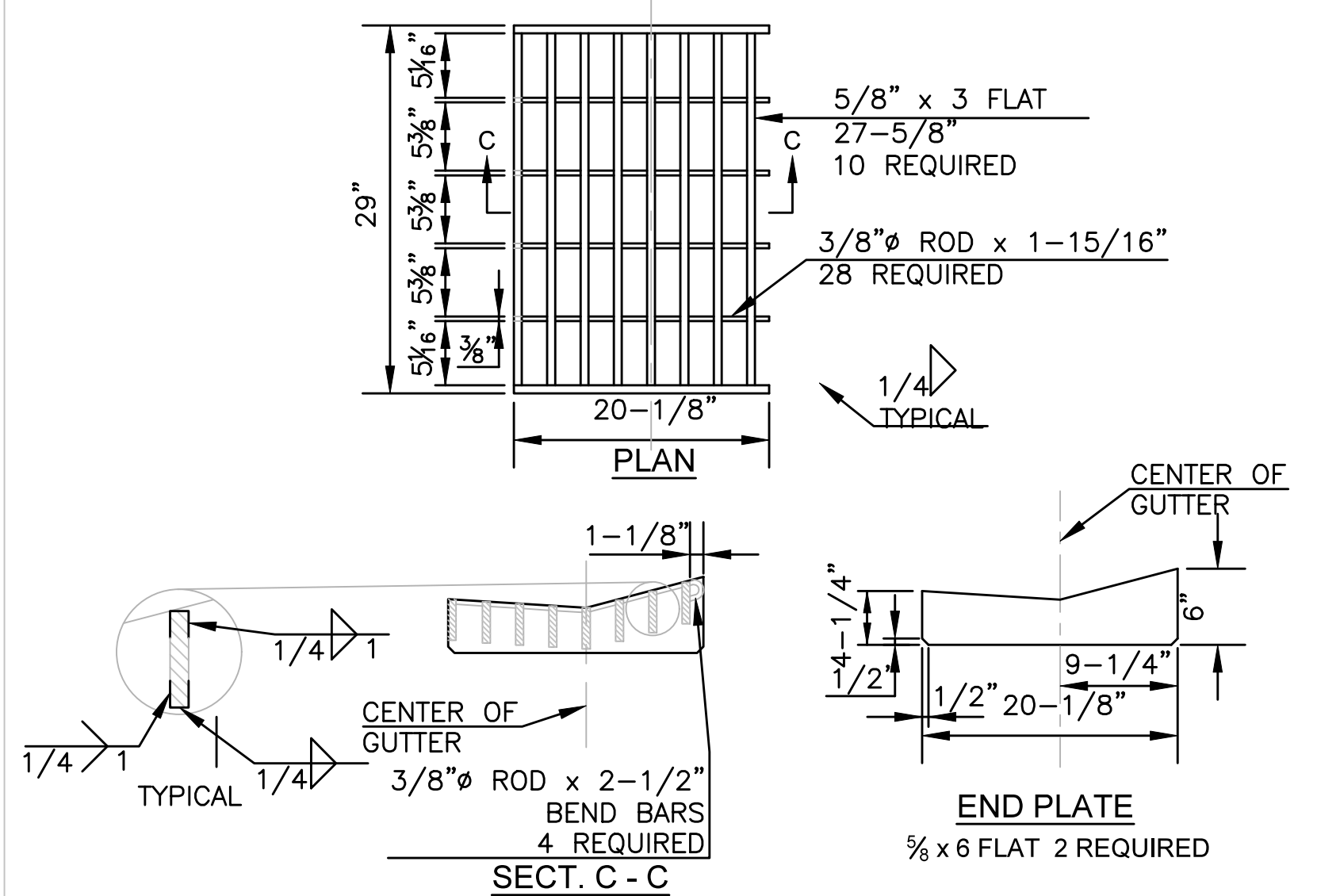


FULL PANEL REPAIR & UTILITY CUTS FOR CONCRETE PAVEMENT

- NOTES:
1. ALL MATERIAL AND METHODS SHALL BE IN ACCORDANCE WITH CITY OF TOPEKA STANDARD TECHNICAL SPECIFICATIONS, LATEST EDITION.
 2. DOWEL HOLE SIZE = O.D. OF DOWEL + 1/8".
 3. EPOXY GROUTING PER SEC. 830, KDOT STANDARD SPECIFICATIONS FOR STATE ROAD & BRIDGE CONSTRUCTION, LATEST EDITION.

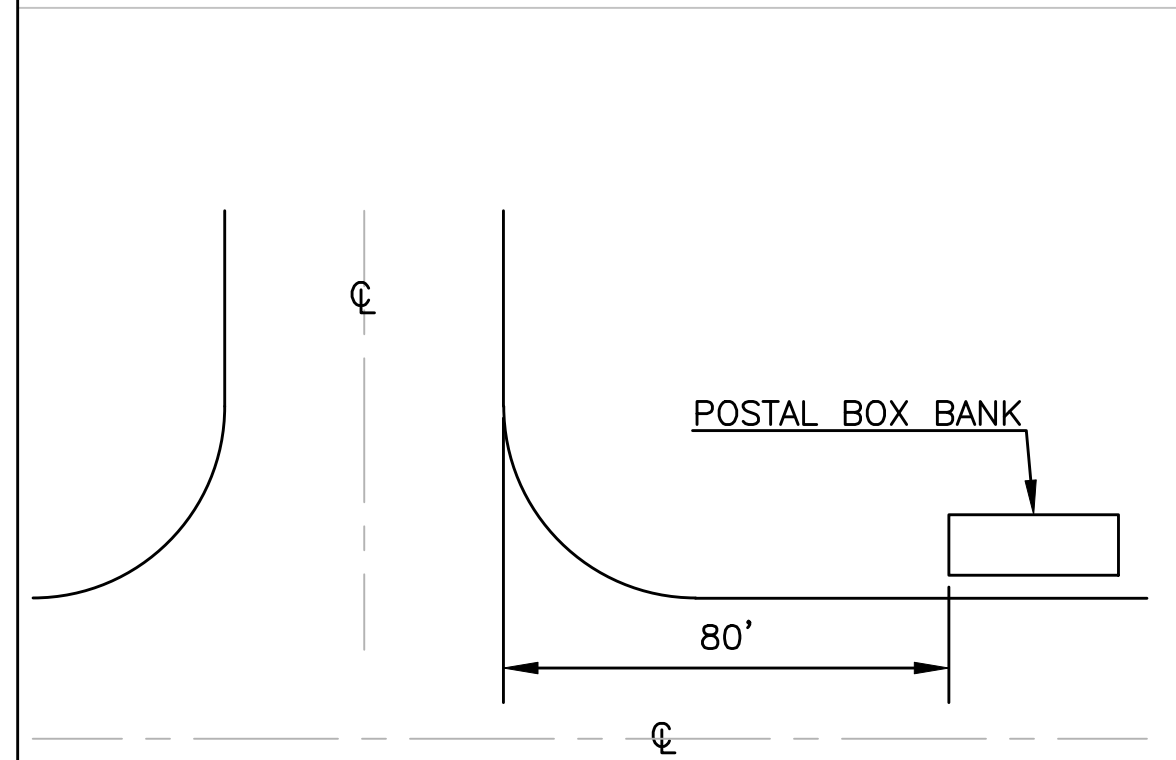


SPECIAL II-P GRATE TOP



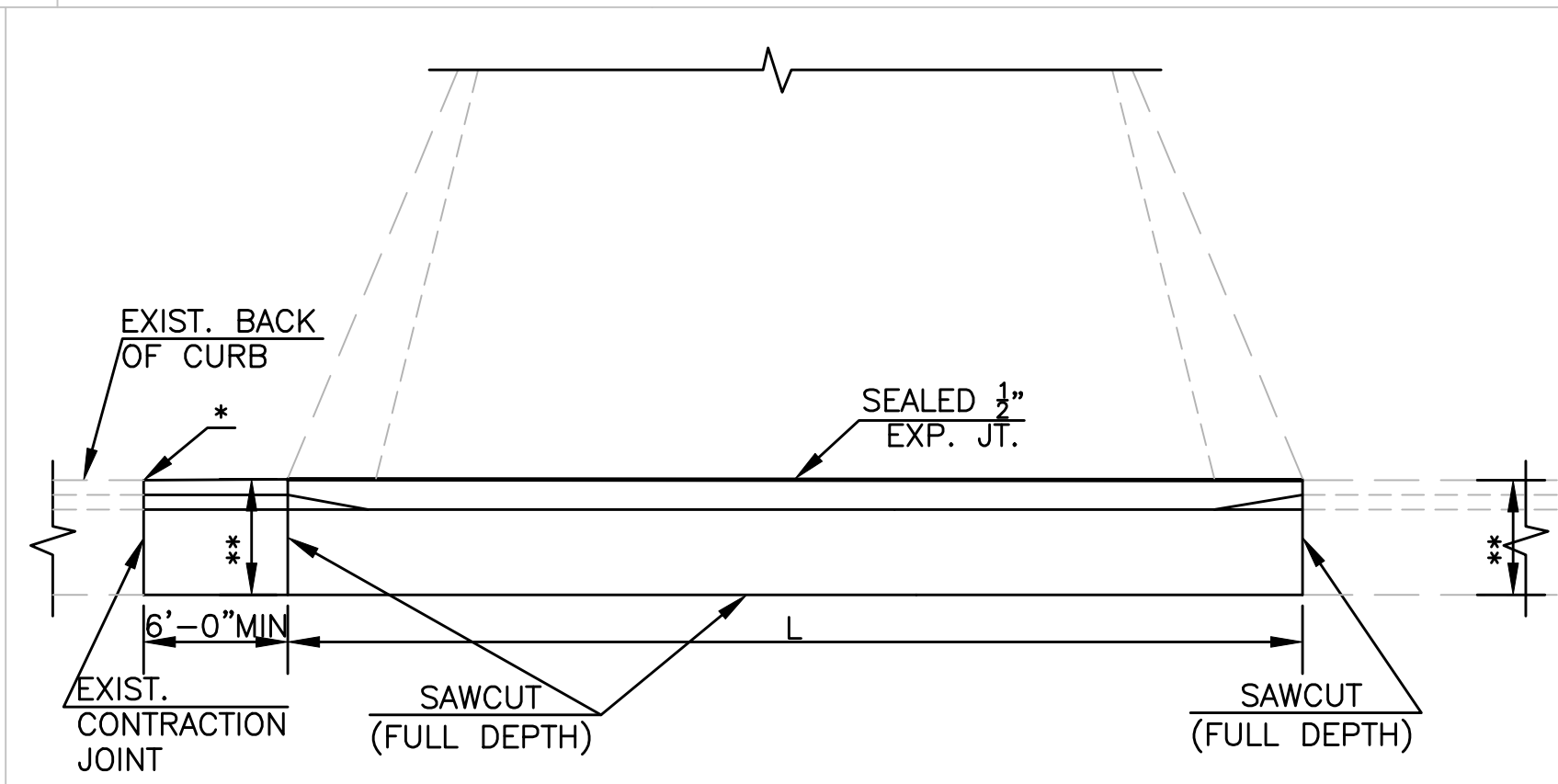
MANHOLE ADJUSTMENT

- NOTES:
1. PAVEMENT SHALL BE REMOVED BY FULL DEPTH SAW CUTTING WHILE PROTECTING NEW PAVEMENT.
 2. THE ORIENTATION OF THE REINFORCED CONCRETE COLLAR SHALL BE AS SHOWN OR FIELD DETERMINED BY ENGINEER.
 3. ADJUST MANHOLE RING TO MATCH PAVEMENT CROSS SLOPE USING APPROVED CONCRETE MANHOLE GRADE ADJUSTMENT RINGS AND CONCRETE BLOCKS OR APPROVED HIGH-DENSITY POLYETHYLENE MANHOLE ADJUSTMENT RINGS.
 4. SET MANHOLE RING WITH 2 RINGS OF 3/4" PREFORMED MASTIC SEALANT.
 5. ALL TIME AND MATERIAL NECESSARY TO PERFORM THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO THE BID ITEM "MANHOLE ADJUSTMENT".

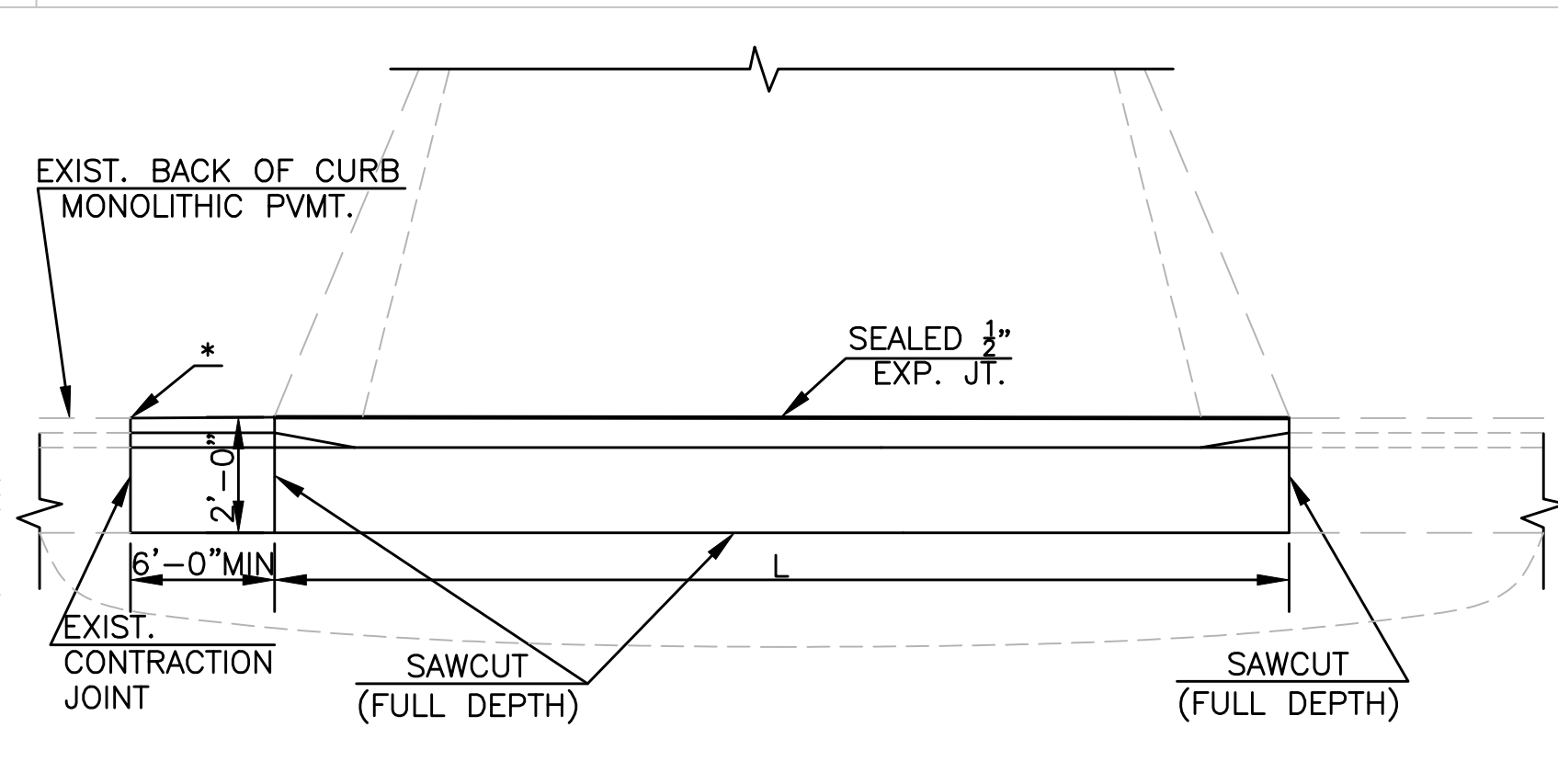


POSTAL BOX BANKS

NOTE: WHERE BANKS OR GROUPS OF POSTAL BANKS ARE TO BE INSTALLED, THEY SHALL BE A MINIMUM OF EIGHTY (80) FEET FROM THE INTERSECTION BACK OF CURB.



PAVEMENT WITH CURB & GUTTER



MONOLITHIC CONCRETE PAVEMENT WITH INTEGRAL CURB

CURB CUT/REMOVAL FOR NEW RESIDENTIAL DRIVE APPROACH

* IF CURB AND GUTTER TO BE REMOVED IS WITHIN 6'-0" OF AN EXISTING JOINT, REMOVE CURB AND GUTTER BACK TO EXISTING JOINT.
L - PER CITY STANDARD DESIGN CRITERIA.

** MATCH EXISTING CURB WIDTH.

NO.	DATE:	REVISION	BY:	APP'D
7	Oct. 2017	Updated cast iron monument box	DHS	JPS
6	March 2013	Added grease to dowels & bar size to "	DHS	SB
5	Jan. 2013	Added Manhole Adjustment detail	DHS	SB
4	Jan. 2013	Removed Brick S/W & Stone Curb details	DHS	SB
3	Dec. 2012	Changed to tie bar from dowel	DHS	SB
2	Dec. 2009	Dowel size & # pvmt range and curb det.	DHS	SB
1	Feb. 2008	Repl. Both Pvmt. w/ Curb Det.'s	DHS	SB

DRAWN BY: *rm/mc*
APP'D BY: *R. Clumley*



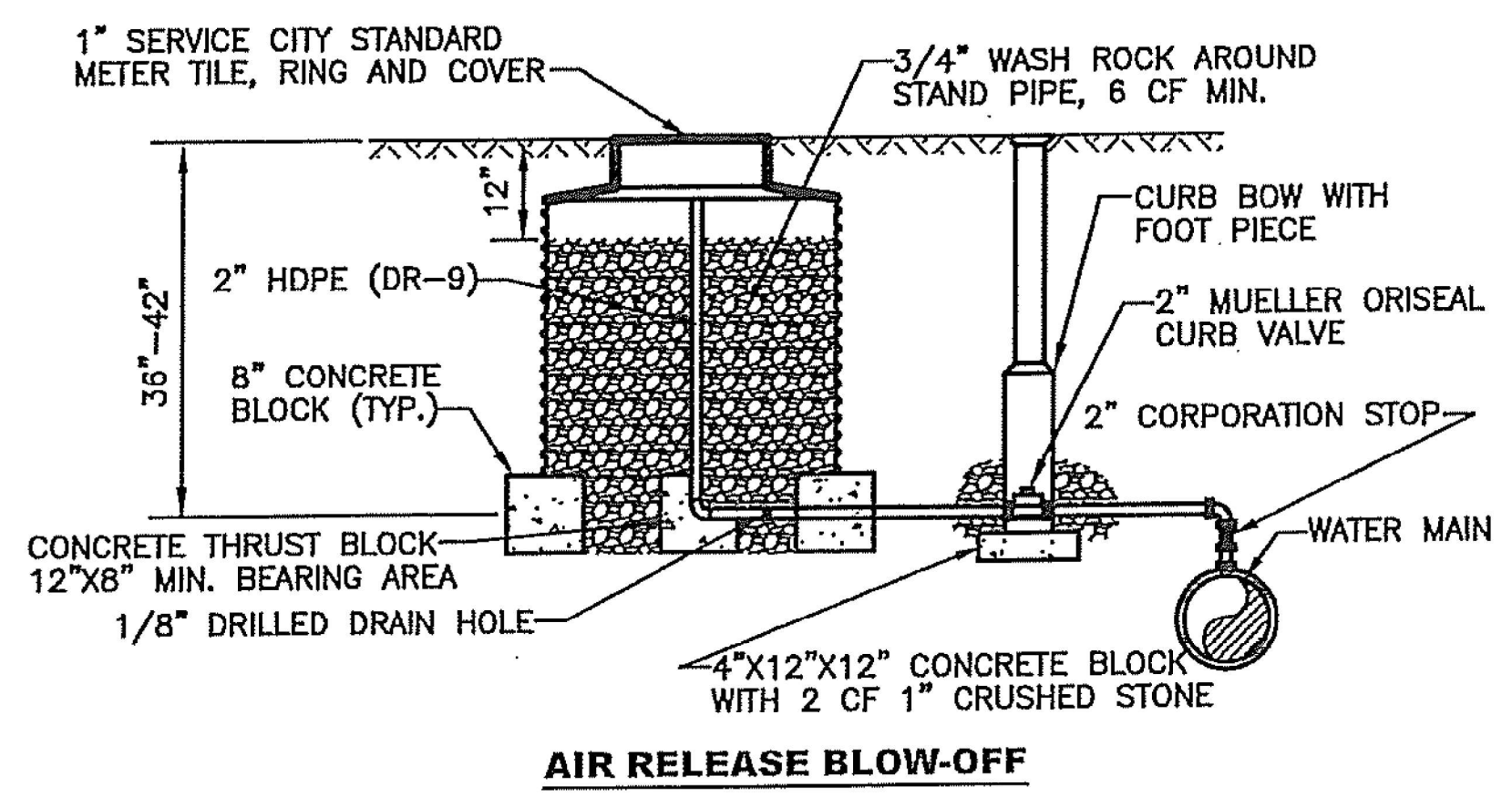
SHAWNEE COUNTY, KANSAS PUBLIC WORKS DEPARTMENT
1515 NW SALINE
TOPEKA, KS 66618
(785) 233-7702



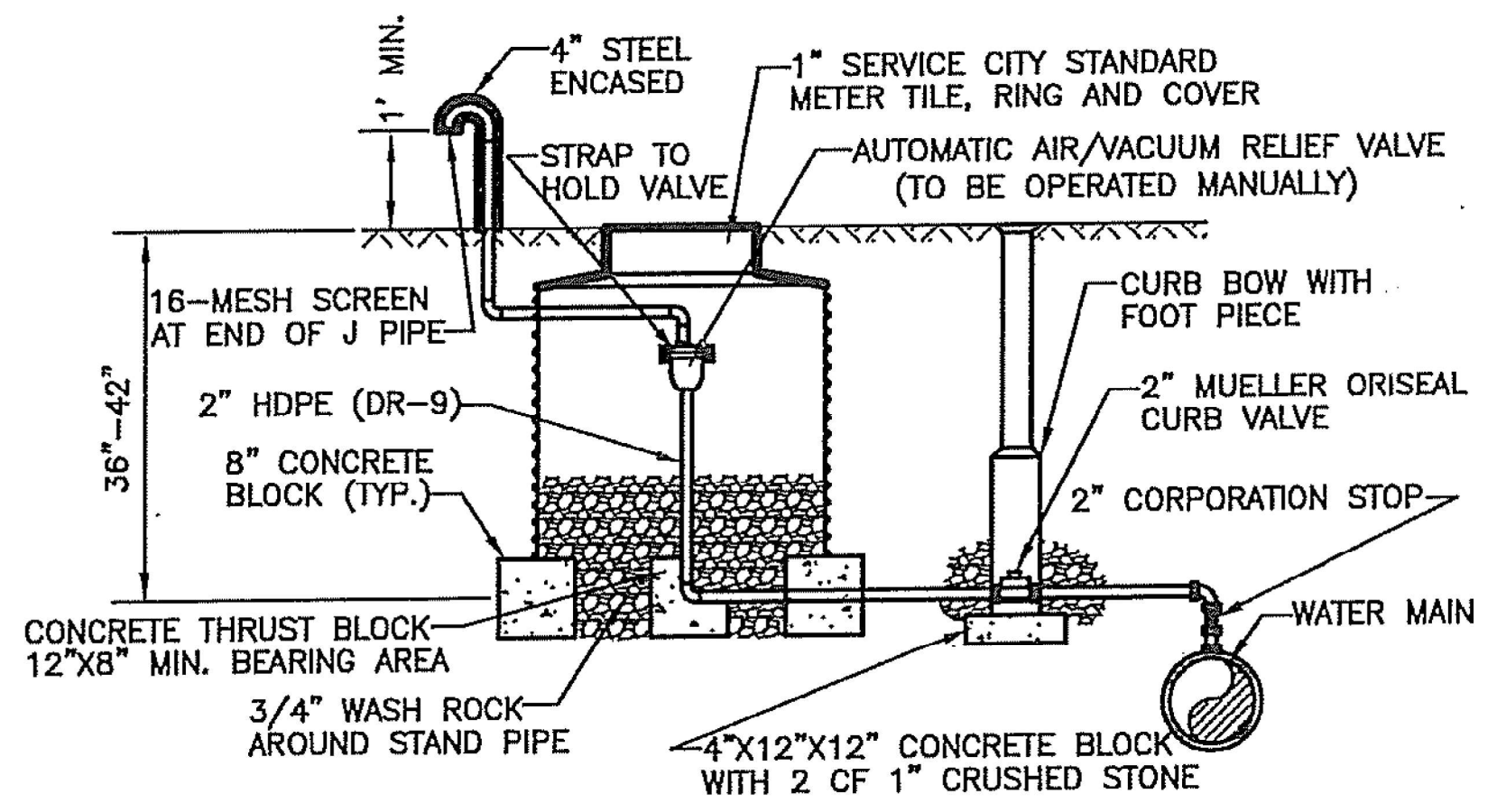
STANDARD DETAILS

MISCELLANEOUS DETAILS I
(DT-017)

DATE: Sept. 2025
SHEET: 14 of 39
PROJ.: 841097.07



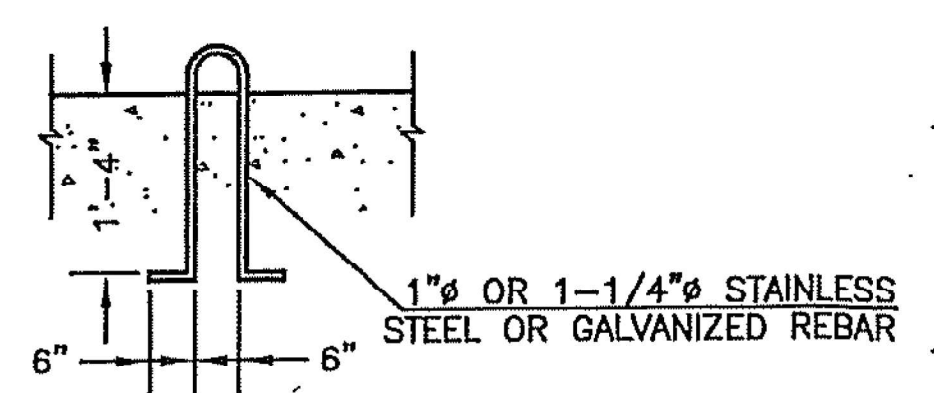
AIR RELEASE BLOW-OFF



AUTOMATIC AIR/VACUUM RELEASE (OPERATED MANUALLY)

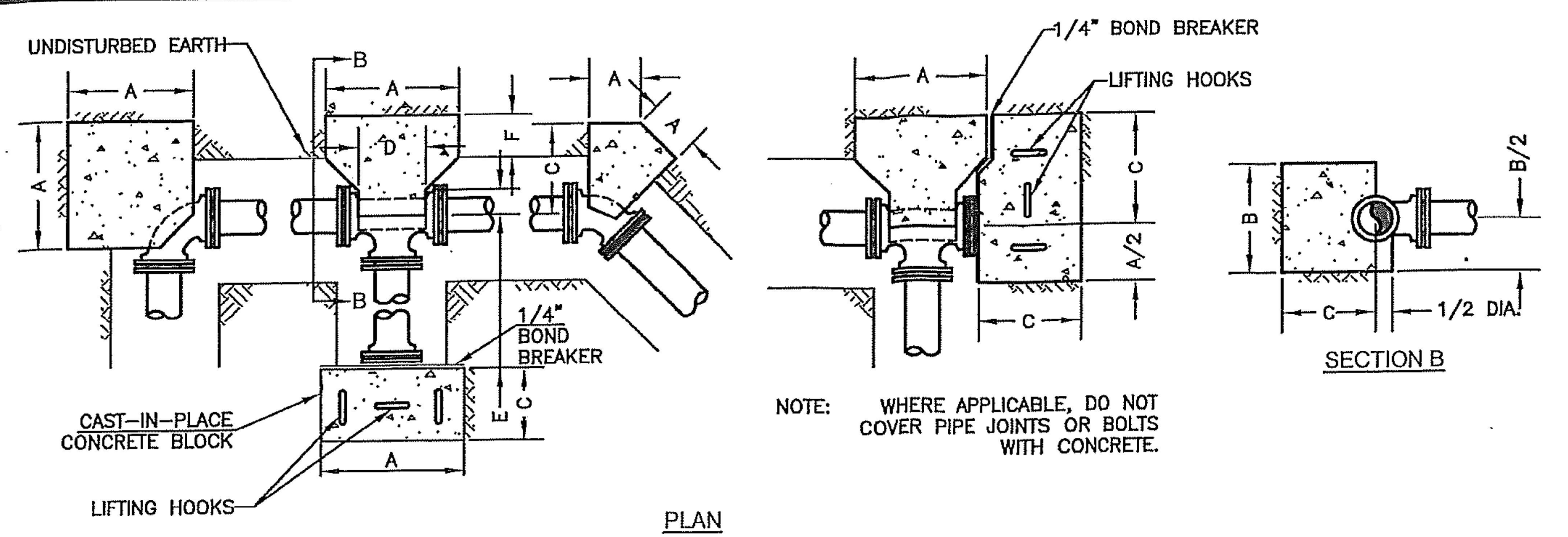
PIPE DIA.	45° VERTICAL BEND						22.5° VERTICAL BEND						11.25° VERTICAL BEND					
	A	B	C	D	E	F	A	B	C	D	E	F	A	B	C	D	E	F
4"	30	30	30	18	12	12	21	21	12	12	12	18	18	18	24	12	12	12
6"	36	36	36	21	24	12	21	21	18	15	18	12	21	21	27	15	18	12
8"	42	42	42	27	36	18	36	36	42	18	24	18	24	24	30	18	24	18
10"	48	48	48	36	39	27	42	42	48	24	30	27	30	30	36	24	30	27
12"	54	54	54	42	48	33	48	48	54	27	36	30	33	33	39	27	36	30

ALL DIMENSIONS ARE IN INCHES.



LIFTING HOOK DETAIL

ONE (1) 1" HOOK FOR 16" AND SMALLER PIPING
 TWO (2) 1-1/4" HOOKS FOR 18" AND 24" PIPING
 FOUR (4) 1-1/4" HOOKS FOR 30" AND LARGER PIPING

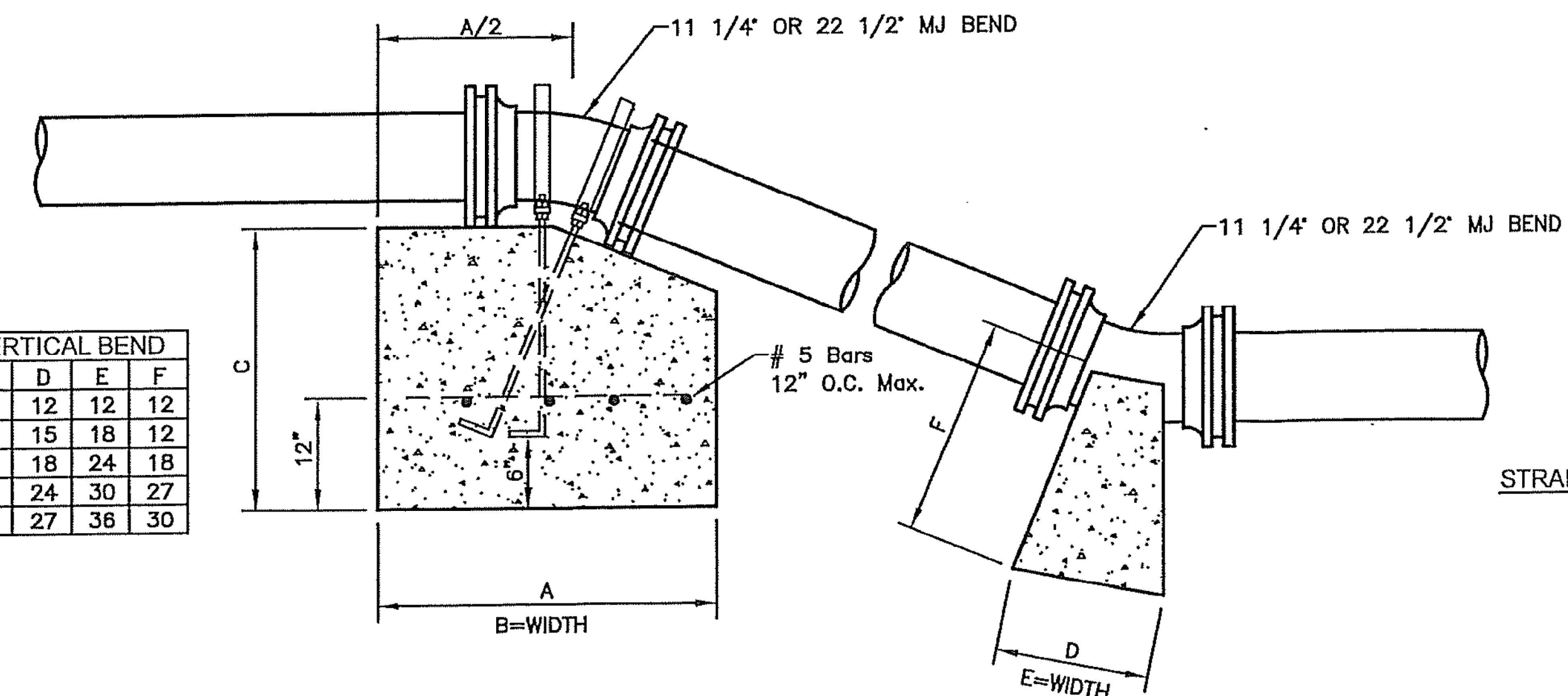


PLAN

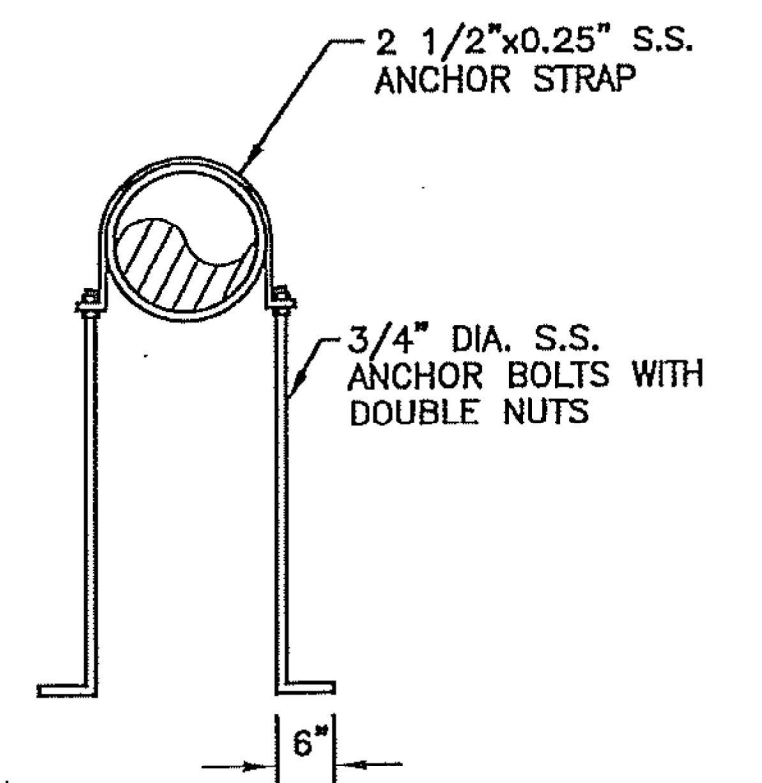
PIPE DIA.	TEES						PLUGS			90° BEND			45° BEND			22.5° BEND			11.25° BEND		
	A	B	C	D	E	F	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
4"	13	22	9	13	-	-	13	22	9	18	12	9	9	12	12	6	12	12	-	-	-
6"	24	30	18	16	6	6	24	30	12	24	18	16	10	24	12	7	18	12	-	-	-
8"	34	32	21	18	7	6	34	32	18	30	26	21	13	36	18	9	24	18	9	24	18
10"	40	42	23	22	8	6	40	42	24	35	34	24	18	38	27	12	30	27	12	30	27
12"	48	52	27	24	9	6	48	52	24	42	42	30	21	48	33	14	36	30	10	42	24
16"	54	54	32	30	12	6	54	54	24	50	42	36	24	48	40	15	42	34	10	42	24
18"	60	60	34	32	12	6	60	60	24	54	48	38	27	54	44	17	46	37	10	42	24
20"	72	66	36	36	24	10	72	66	24	72	66	54	36	66	48	18	66	42	15	48	30
24"	96	72	36	44	19	8	96	72	24	82	60	60	44	60	72	22	60	54	15	48	36
30"	108	96	60	50	20	12	108	96	24	108	72	84	54	72	84	28	72	64	17	60	36
36"	108	108	60	56	23	12	108	108	24	108	108	80	68	84	96	34	84	69	20	72	36

ALL DIMENSIONS ARE IN INCHES.
 BLOCKING DESIGNED FOR 150 PSI WORKING PRESSURE AND 1500 PSF SOIL BEARING.
 BLOCKING FOR REDUCED BRANCH TEES SHALL BE BASED ON BRANCH DIAMETER.
 MAINTAIN MINIMUM "F" DIMENSION.

CONCRETE BLOCKING DETAILS



11 1/4, 22 1/2, OR 45° VERTICAL BEND BLOCKING DETAIL



STRAP DETAIL FOR VERTICAL BEND

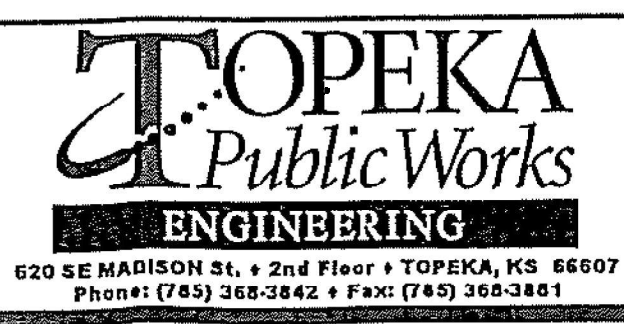
Professional Engineer
 14155
 6.7.2018
 KANSAS

NO.	DATE	REVISION	BY	APP'D
1	6/9/18	Corrected table values	DHS	PB

EDITED BY: DHS
 APP'D BY: PR



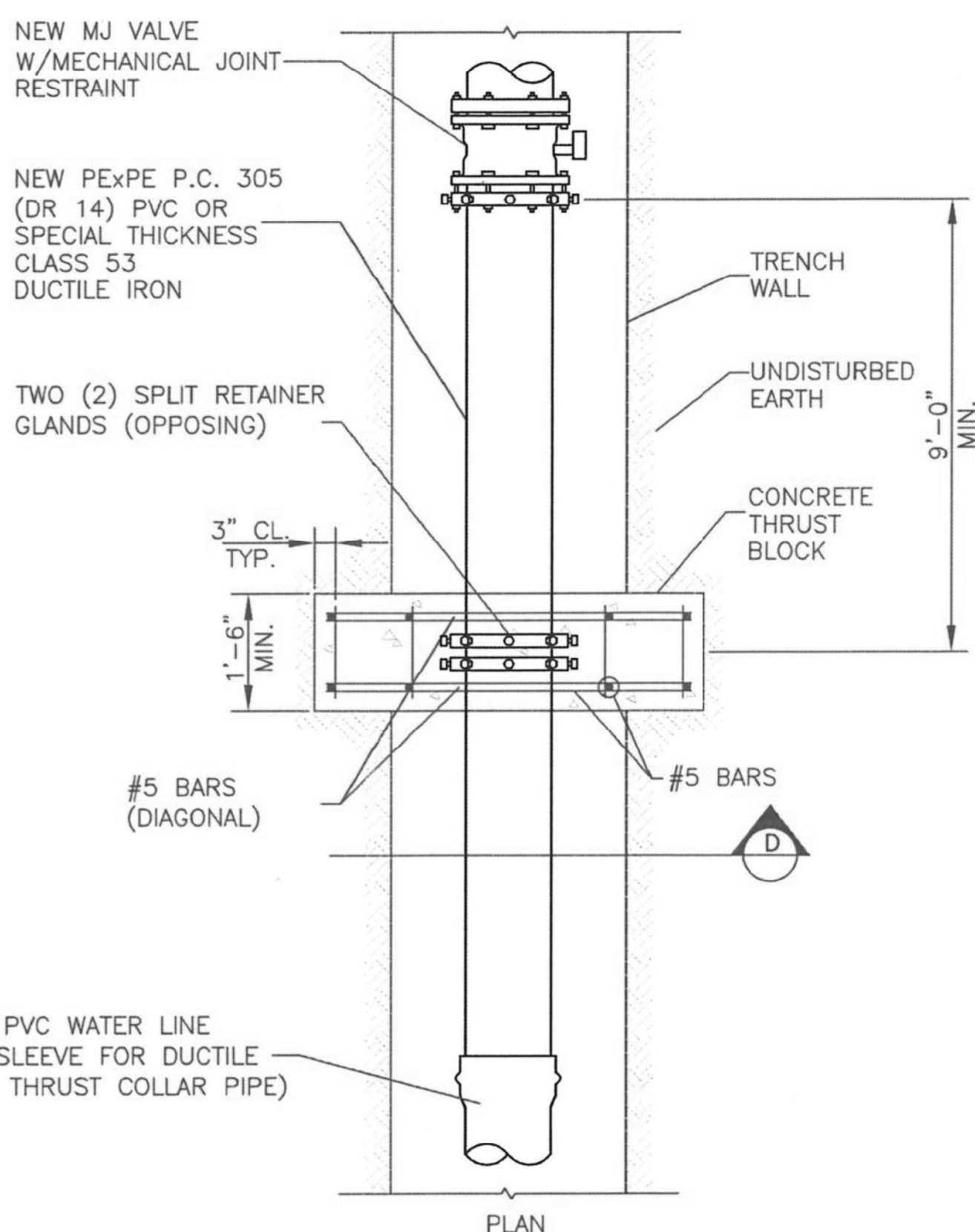
SHAWNEE COUNTY, KANSAS
PUBLIC WORKS DEPARTMENT
 1515 NW SALINE
 TOPEKA, KS 66618
 (785) 233-7702



STANDARD DETAILS

WATER DETAILS I
 (DT-23)

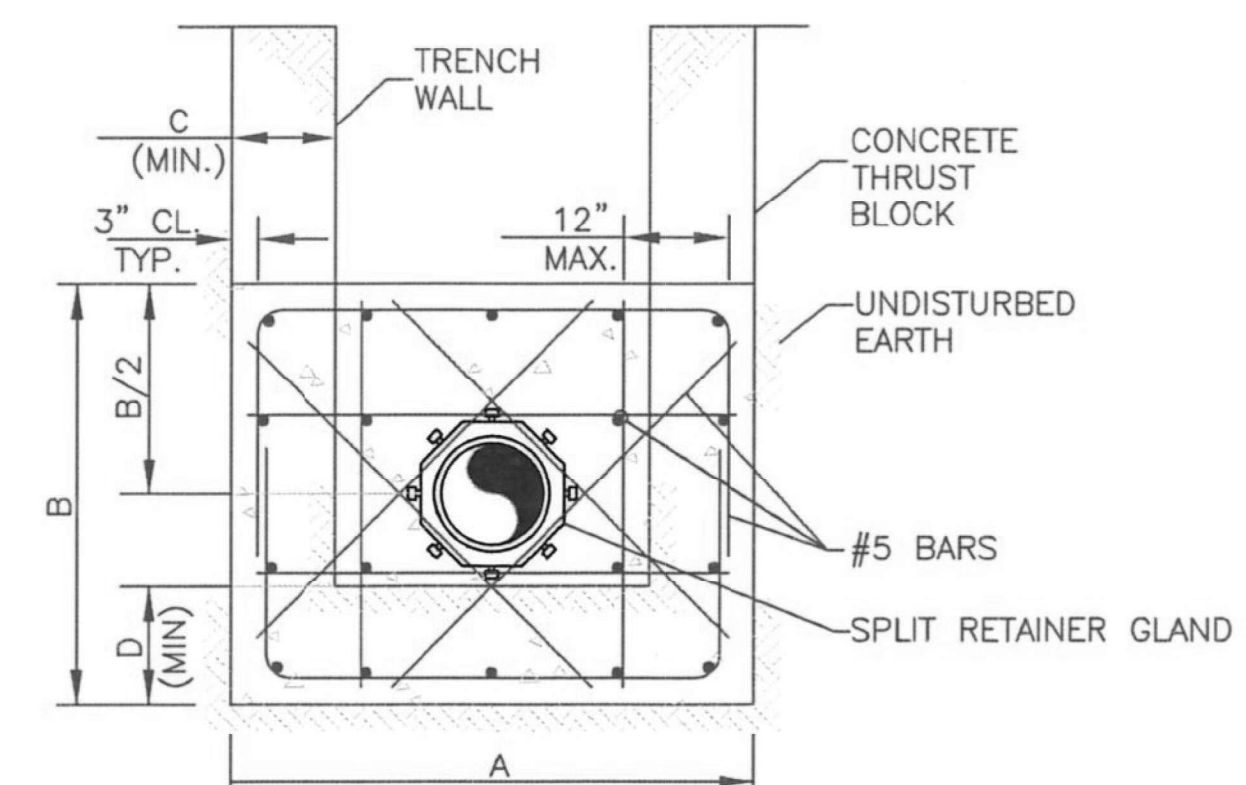
DATE: Dec. 2025
 SHEET: 15 of 39
 PROJ.: 841097.07



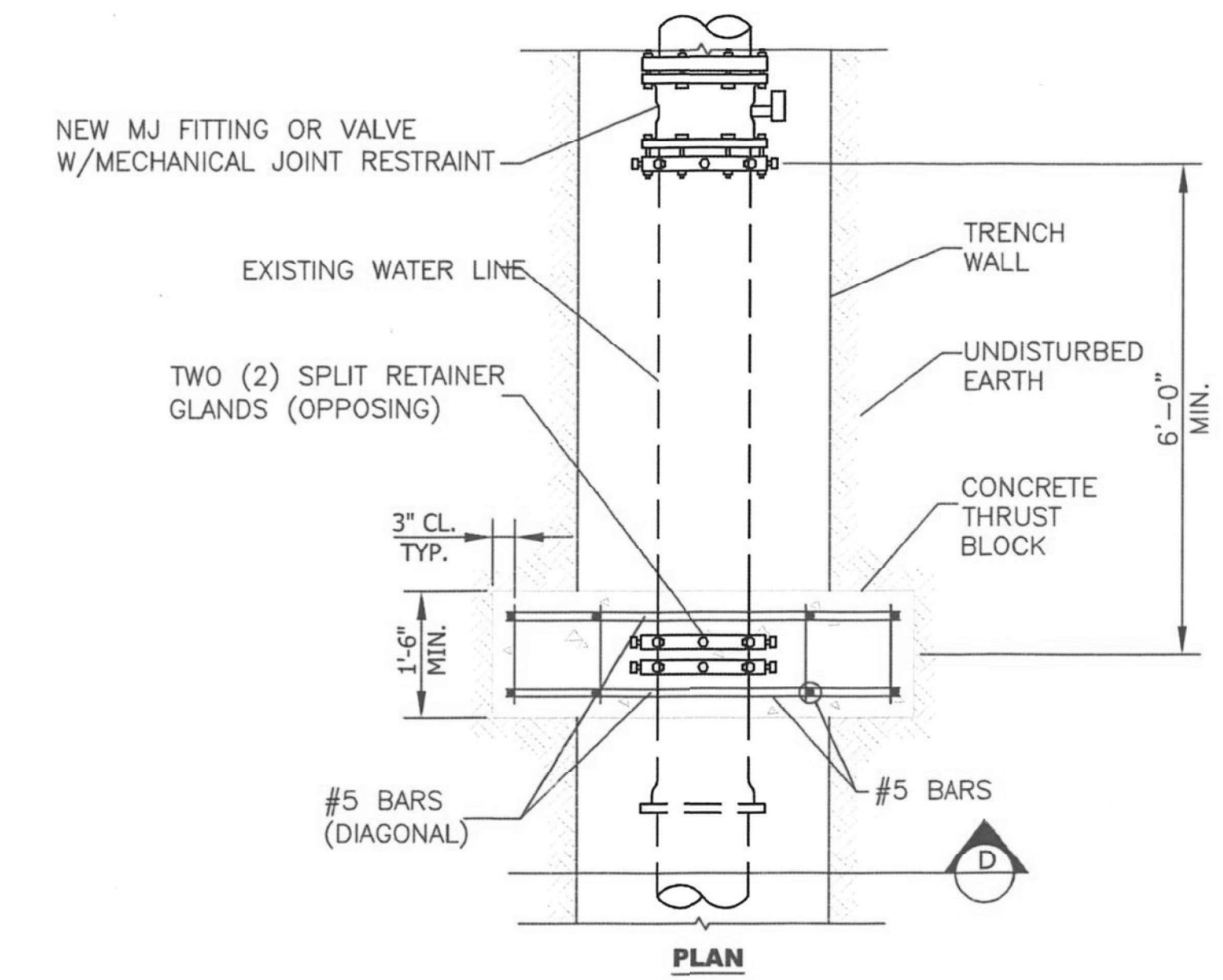
12" AND SMALLER CONCRETE THRUST COLLAR PIPE DETAIL
NO SCALE

PIPE DIA.	THRUST COLLAR			
	A	B	C	D
4"	36	24	4	8
6"	46	30	8	10
8"	52	36	12	12
10"	64	42	15	14
12"	72	48	18	16

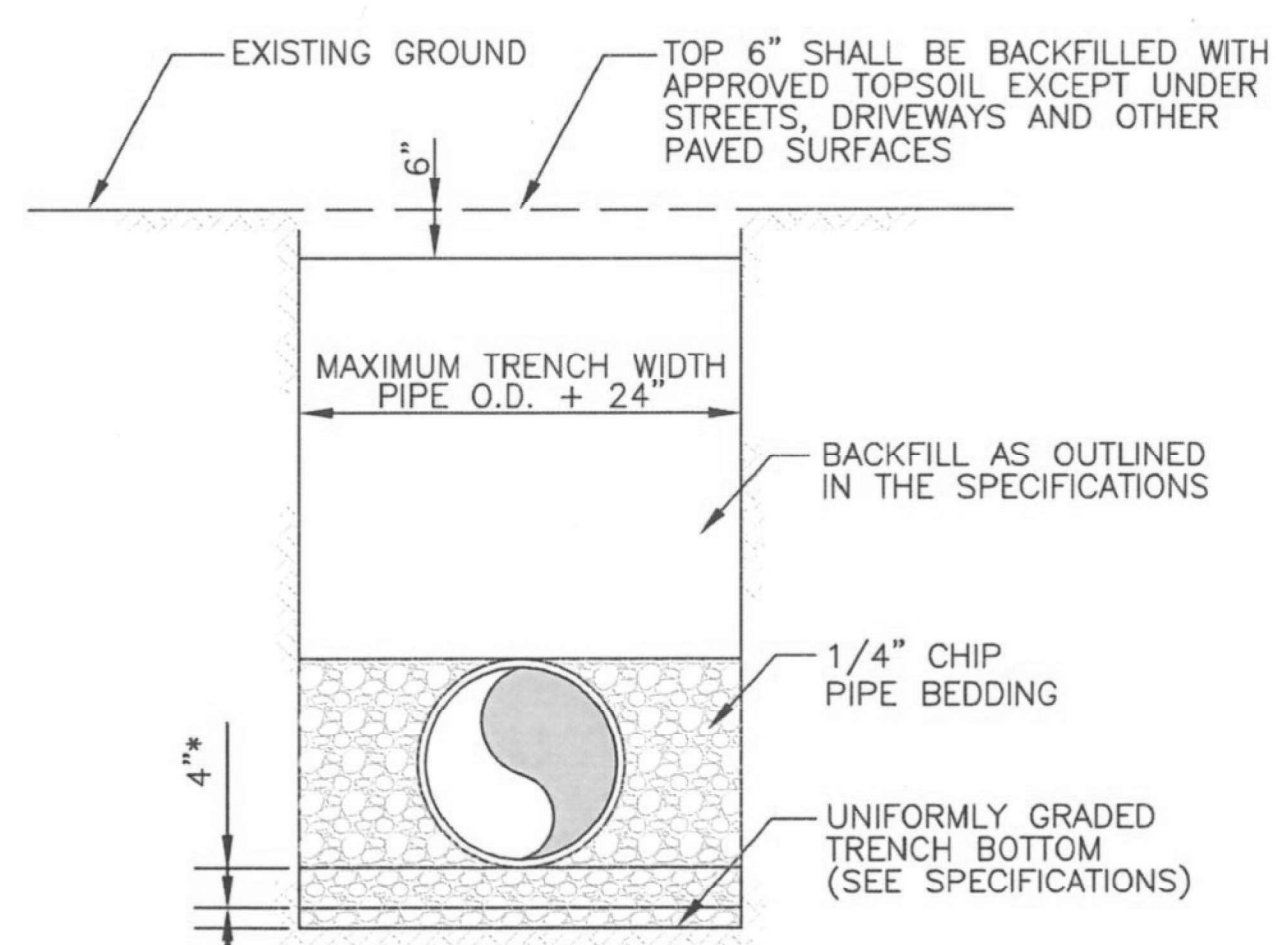
ALL DIMENSIONS ARE IN INCHES.



SECTION D NOTE: BARS SHOWN AT MAXIMUM SPACING. MINIMUM NUMBER AND SIZE OF BARS REQUIRED AS SHOWN.

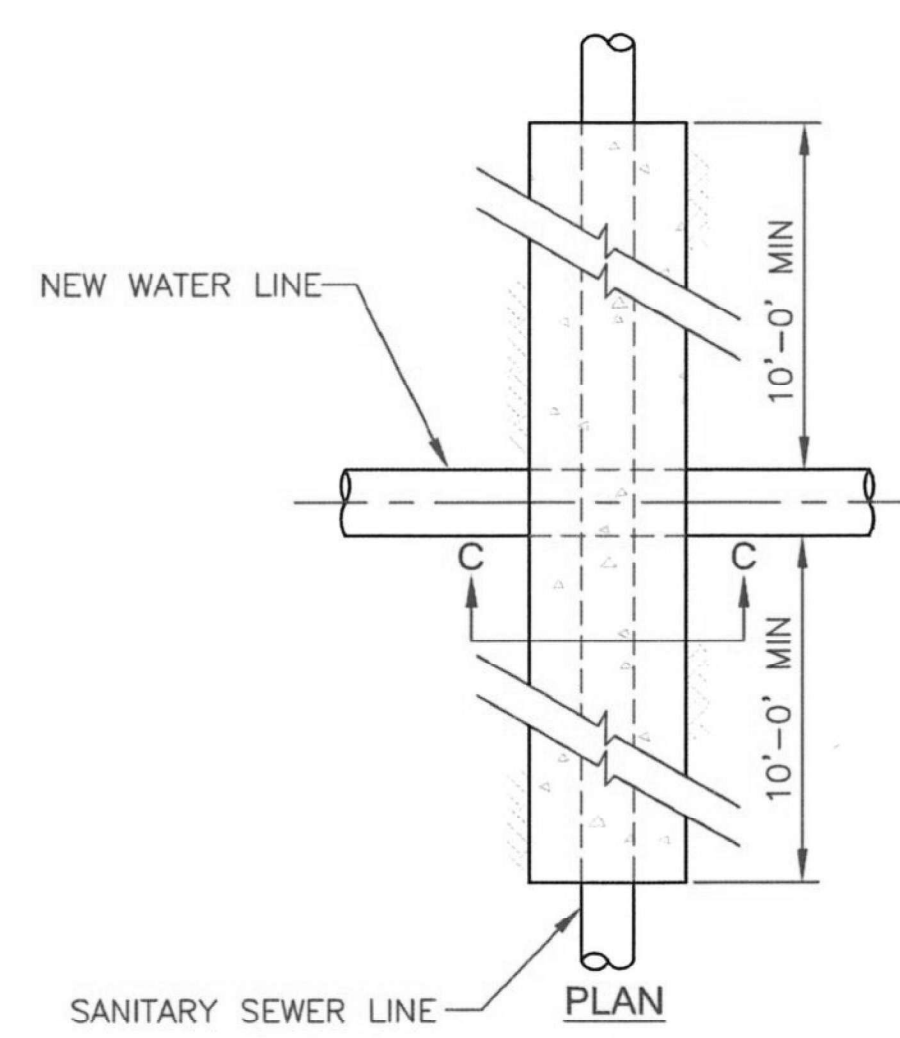


12" AND SMALLER CONCRETE THRUST COLLAR ON EXISTING DETAIL
NO SCALE

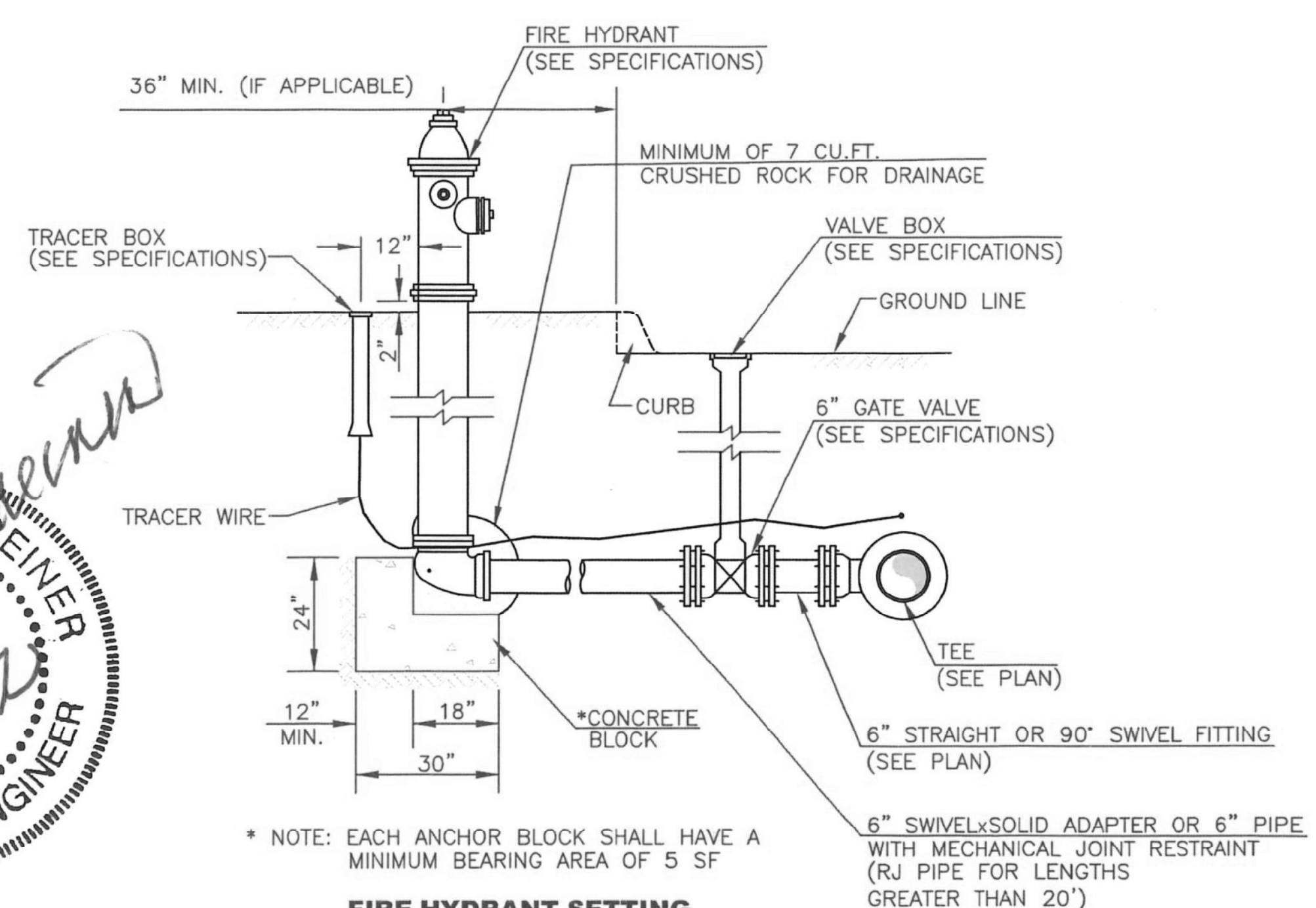
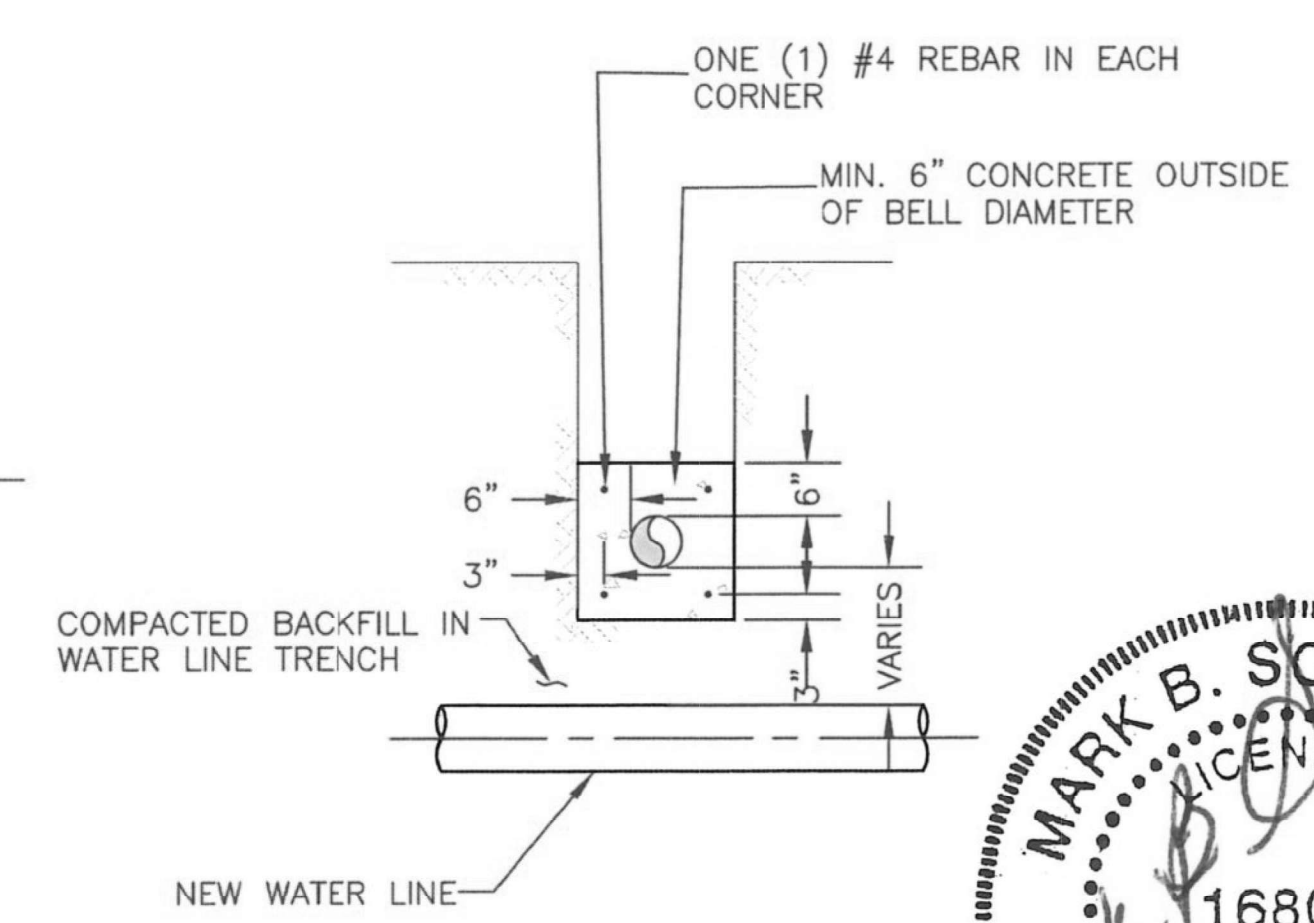


TYPICAL TRENCH & PIPE BEDDING DETAIL
NO SCALE

*NOTE: BEDDING DEPTH WHEN TRENCH BOTTOM IS NOT ROCK
**NOTE: ADDITIONAL BEDDING DEPTH WHEN TRENCH BOTTOM IS ROCK



CONCRETE ENCASEMENT SANITARY SEWER LINE CROSSING DETAIL
NO SCALE



FIRE HYDRANT SETTING
NO SCALE

NO.	DATE	REVISION	BY	APP'D
2	7/12/22	Updated Standard (add thrust collar detail)	MDB	MBS
1	6/9/17	Updated Standard	DHS	PB

EDITED BY: MDB
APP'D BY: MBS



SHAWNEE COUNTY, KANSAS
PUBLIC WORKS DEPARTMENT
1515 NW SALINE
TOPEKA, KS 66618
(785) 233-7702

TOPEKA
Public Works
ENGINEERING
620 SE MADISON ST. • 2nd Floor • TOPEKA, KS 66607
Phone: (785) 368-3842 • Fax: (785) 368-3881

STANDARD DETAILS

WATER DETAILS 2
(DT-024)

DATE: Dec. 2025
SHEET: 16 of 39
PROJ.: 841097.07



G:\Shared drives\231248\CADD\231248 Traffic Control 1.dwg 4/27/2026 - 2:40pm

Contractor shall begin work at the west end for Phase 1, followed by Phase 2 and Phase 3. Phase 1, 2, and 3 are all west of Station 115+05.05, which are areas that do not require RR permitting due to the available clearance to the Right-of-Way. Contractor must still adhere to Railroad clearance limitations as shown on Sheet 4 of the plan set. Phase 4, 5 and 6 require Railroad Permitting completion and City of Topeka Railroad Right-of-Way encroachment agreements. Phase 4, 5 and 6 will not commence until all agreements and permits are in place. These are in process and The City of Topeka anticipates them to be in place with no delay to the contractor. However, in the event of a delay of agreements/permitting, contractor shall receive a Stop Work order to establish the number of remaining contract days upon the completion of Phase 3, followed by a new Start Work order once permits and agreements are in place, along with 14 days additional time to the contract for re-mobilization. No additional costs will be added to the project in the event of a stop/start due to delay time.

LEGEND

- Construction Zone
- Sign - 1 Post
- Type II Barricade
- Type III Barricade
- Channelizer

SCALE IN FEET
 75 0 75 150
 PLAN: Lat. and Long.

NO.	DATE:	REVISION	BY:	APP'D

DRAWN BY: xx
 APP'D BY: xx

CFS ENGINEERS
 Cook, Flatt & Strobel Engineers
 2930 SW Woodside Drive
 Topeka, Kansas 66614
 785.272.4706

TOPEKA Public Works ENGINEERING
 620 SE MADISON ST. • 2nd Floor • TOPEKA, KS 66607
 Phone: (785) 368-3842 • Fax: (785) 368-3881

STREET IMPROVEMENT PROJECT
 No. 841097.07
 NW NORRIS ST.
 FROM NW WEST ST. TO NW WESTERN AVE.

TRAFFIC CONTROL PLAN
 Phase 1

DATE: Dec. 2025
 SHEET: 17 of 39
 PROJ.: 841087.07

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Contractor shall begin work at the west end for Phase 1, followed by Phase 2 and Phase 3. Phase 1, 2, and 3 are all west of Station 115+05.05, which are areas that do not require RR permitting due to the available clearance to the Right-of-Way. Contractor must still adhere to Railroad clearance limitations as shown on Sheet 4 of the plan set. Phase 4, 5 and 6 require Railroad Permitting completion and City of Topeka Railroad Right-of-Way encroachment agreements. Phase 4, 5 and 6 will not commence until all agreements and permits are in place. These are in process and The City of Topeka anticipates them to be in place with no delay to the contractor. However, in the event of a delay of agreements/permitting, contractor shall receive a Stop Work order to establish the number of remaining contract days upon the completion of Phase 3, followed by a new Start Work order once permits and agreements are in place, along with 14 days additional time to the contract for re-mobilization. No additional costs will be added to the project in the event of a stop/start due to delay time.

LEGEND

- Construction Zone
- Sign - 1 Post
- Type II Barricade
- Type III Barricade
- Channelizer

SCALE IN FEET
 75 0 75 150
 PLAN: Lat. and Long.

NO.	DATE:	REVISION	BY:	APP'D

DRAWN BY: xx
 APP'D BY: xx

CFS ENGINEERS
 Cook, Flatt & Strobel Engineers
 2930 SW Woodside Drive
 Topeka, Kansas 66614
 785.272.4706

TOPEKA Public Works ENGINEERING
 620 SE MADISON St. • 2nd Floor • TOPEKA, KS 66607
 Phone: (785) 368-3842 • Fax: (785) 368-3881

STREET IMPROVEMENT PROJECT
 No. 841097.07
 NW NORRIS ST.
 FROM NW WEST ST. TO NW WESTERN AVE.

TRAFFIC CONTROL PLAN
 Phase 2A and 2B

DATE: Dec. 2025
 SHEET: 18 of 39
 PROJ.: 841087.07



G:\Shared drives\231248\CADD\231248 Traffic Control 3.dwg 4/27/2026 - 2:40pm

Contractor shall begin work at the west end for Phase 1, followed by Phase 2 and Phase 3. Phase 1, 2, and 3 are all west of Station 115+05.05, which are areas that do not require RR permitting due to the available clearance to the Right-of-Way. Contractor must still adhere to Railroad clearance limitations as shown on Sheet 4 of the plan set. Phase 4, 5 and 6 require Railroad Permitting completion and City of Topeka Railroad Right-of-Way encroachment agreements. Phase 4, 5 and 6 will not commence until all agreements and permits are in place. These are in process and The City of Topeka anticipates them to be in place with no delay to the contractor. However, in the event of a delay of agreements/permitting, contractor shall receive a Stop Work order to establish the number of remaining contract days upon the completion of Phase 3, followed by a new Start Work order once permits and agreements are in place, along with 14 days additional time to the contract for re-mobilization. No additional costs will be added to the project in the event of a stop/start due to delay time.

LEGEND

- Construction Zone
- Sign - 1 Post
- Type II Barricade
- Type III Barricade
- Channelizer

SCALE IN FEET
 PLAN: Lat. and Long.

NO.	DATE:	REVISION	BY:	APP'D

DRAWN BY: **xx**
 APP'D BY: **xx**

CFS ENGINEERS
 Cook, Flatt & Strobel Engineers
 2930 SW Woodside Drive
 Topeka, Kansas 66614
 785.272.4706

TOPEKA Public Works ENGINEERING
 620 SE MADISON ST. • 2nd Floor • TOPEKA, KS 66607
 Phone: (785) 368-3842 • Fax: (785) 368-3881

STREET IMPROVEMENT PROJECT
 No. 841097.07
 NW NORRIS ST.
 FROM NW WEST ST. TO NW WESTERN AVE.

TRAFFIC CONTROL PLAN
 Phase 3

DATE: Dec. 2025
 SHEET: 19 of 39
 PROJ.: 841087.07



Contractor shall begin work at the west end for Phase 1, followed by Phase 2 and Phase 3. Phase 1, 2, and 3 are all west of Station 115+05.05, which are areas that do not require RR permitting due to the available clearance to the Right-of-Way. Contractor must still adhere to Railroad clearance limitations as shown on Sheet 4 of the plan set. Phase 4, 5 and 6 require Railroad Permitting completion and City of Topeka Railroad Right-of-Way encroachment agreements. Phase 4, 5 and 6 will not commence until all agreements and permits are in place. These are in process and The City of Topeka anticipates them to be in place with no delay to the contractor. However, in the event of a delay of agreements/permitting, contractor shall receive a Stop Work order to establish the number of remaining contract days upon the completion of Phase 3, followed by a new Start Work order once permits and agreements are in place, along with 14 days additional time to the contract for re-mobilization. No additional costs will be added to the project in the event of a stop/start due to delay time.

LEGEND

- Construction Zone
- Sign - 1 Post
- Type II Barricade
- Type III Barricade
- Channelizer

SCALE IN FEET
 PLAN: Lat. and Long.

NO.	DATE:	REVISION	BY:	APP'D

DRAWN BY: **xx**
 APP'D BY: **xx**

CFS ENGINEERS
 Cook, Flatt & Strobel Engineers
 2930 SW Woodside Drive
 Topeka, Kansas 66614
 785.272.4706

TOPEKA Public Works ENGINEERING
 620 SE MADISON ST. • 2nd Floor • TOPEKA, KS 66607
 Phone: (785) 368-3842 • Fax: (785) 368-3881

STREET IMPROVEMENT PROJECT
 No. 841097.07
 NW NORRIS ST.
 FROM NW WEST ST. TO NW WESTERN AVE.

TRAFFIC CONTROL PLAN
 Phase 4 and 5

DATE: Dec. 2025
 SHEET: 20 of 39
 PROJ.: 841097.07



Contractor shall begin work at the west end for Phase 1, followed by Phase 2 and Phase 3. Phase 1, 2, and 3 are all west of Station 115+05.05, which are areas that do not require RR permitting due to the available clearance to the Right-of-Way. Contractor must still adhere to Railroad clearance limitations as shown on Sheet 4 of the plan set. Phase 4, 5 and 6 require Railroad Permitting completion and City of Topeka Railroad Right-of-Way encroachment agreements. Phase 4, 5 and 6 will not commence until all agreements and permits are in place. These are in process and The City of Topeka anticipates them to be in place with no delay to the contractor. However, in the event of a delay of agreements/permitting, contractor shall receive a Stop Work order to establish the number of remaining contract days upon the completion of Phase 3, followed by a new Start Work order once permits and agreements are in place, along with 14 days additional time to the contract for re-mobilization. No additional costs will be added to the project in the event of a stop/start due to delay time.

LEGEND

- Construction Zone
- Sign - 1 Post
- Type II Barricade
- Type III Barricade
- Channelizer

SCALE IN FEET
 75 0 75 150
 PLAN: Lat. and Long.

NO.	DATE:	REVISION	BY:	APP'D

DRAWN BY: **xx**
 APP'D BY: **xx**

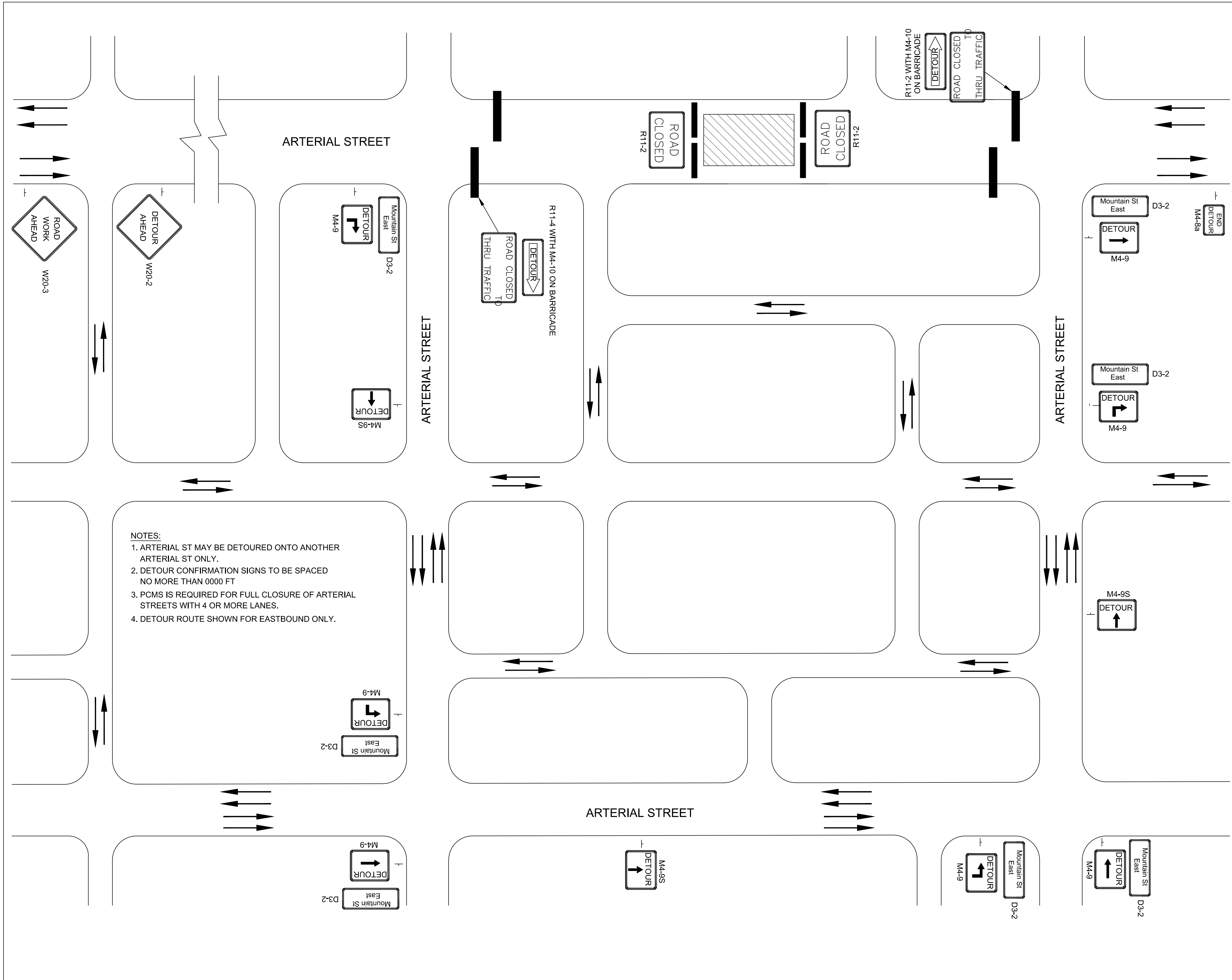
CFS ENGINEERS
 Cook, Flatt & Strobel Engineers
 2930 SW Woodside Drive
 Topeka, Kansas 66614
 785.272.4706

TOPEKA Public Works ENGINEERING
 620 SE MADISON ST. • 2nd Floor • TOPEKA, KS 66607
 Phone: (785) 368-3842 • Fax: (785) 368-3881

STREET IMPROVEMENT PROJECT
 No. 841097.07
 NW NORRIS ST.
 FROM NW WEST ST. TO NW WESTERN AVE.

TRAFFIC CONTROL PLAN
 Phase 6

DATE: Dec. 2025
 SHEET: 21 of 39
 PROJ.: 841087.07



GENERAL NOTES:

72-HOUR NOTICE TO CITY IS REQUIRED BEFORE WORK IS STARTED. CONTACT 785-368-3842 FOR TRAFFIC DISRUPTION PERMIT.

72-HOUR NOTICE IS REQUIRED IF TRAFFIC SIGNALS ARE TO BE MODIFIED AS PART OF TRAFFIC CONTROL. CONTACT 785-368-3913.

ALL SIGNS SHALL TO BE REMOVED, COVERED, OR TURNED AWAY FROM TRAFFIC WHEN NOT IN USE.

ALL WORKERS SHALL WEAR HIGH VISIBILITY APPAREL MEETING ANSI 107-2015 CLASS 2 OR 3.

FOR OPERATIONS OF LESS THAN 60 MINUTES, ALL SIGNS AND CHANNELIZING DEVICES MAY BE ELIMINATED IF A VEHICLE WITH HIGH INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS IS USED. VEHICLE WARNING FLASHERS SHALL NOT BE USED IN LIEU OF ROTATING FLASHING BEACONS LONGER THAN 15 MINUTES.

FORMULAS FOR DETERMINING TAPER LENGTH

SPEED (S)	TAPER LENGTH (L) IN FEET
40 MPH OR LESS	$L = \frac{WS^2}{60}$
45 MPH OR MORE	$L = WS$

WHERE: L = TAPER LENGTH IN FEET
 W = WIDTH OF LANE OR OFFSET IN FEET
 S = POSTED SPEED LIMIT PRIOR TO WORK STARTING

SPEED LIMIT	TAPER (L) 12' LANE	SIGN SPACING (X)	BUFFER SPACE
20mph	80'	100'	115'
25mph	125'	100'	155'
30mph	180'	100'	200'
35mph	245'	100'	250'
40mph	320'	100'	305'
45mph	540'	350'	360'

TABLE 118 A (1)

EXCEPT AS NOTED (DOWNSTREAM TAPER, FLAGGER OPERATIONS, YIELD OPERATION), SPACE CHANNELIZER @ SPEED LIMIT. IF SPEED LIMIT IS 40mph SET DEVICES AT 40'.

LEGEND

- = SIGN
- ◁◁◁◁ = ARROW PANEL BOARD
- █ = TYPE III BARRICADE
- ▨ = WORK SPACE
- = CHANNELIZING DEVICES
- ⏏ = FLAGGER

NO.	DATE:	REVISION	BY:	APP'D
1	10/30/20	MAJOR REVISION	SU	KRE

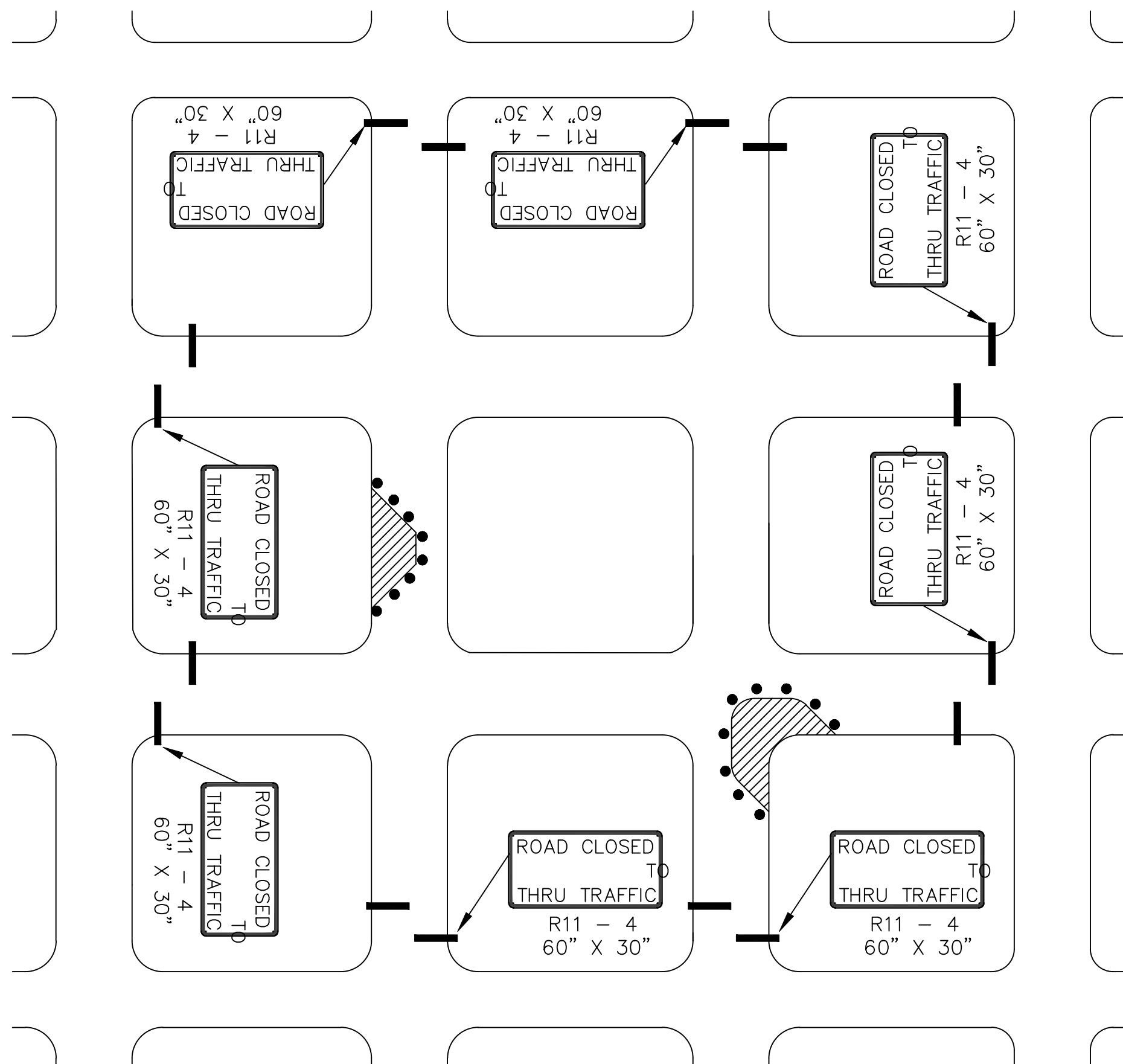
DRAWN BY: Shoeb Uddin
 APP'D BY: Kristi Ericksen



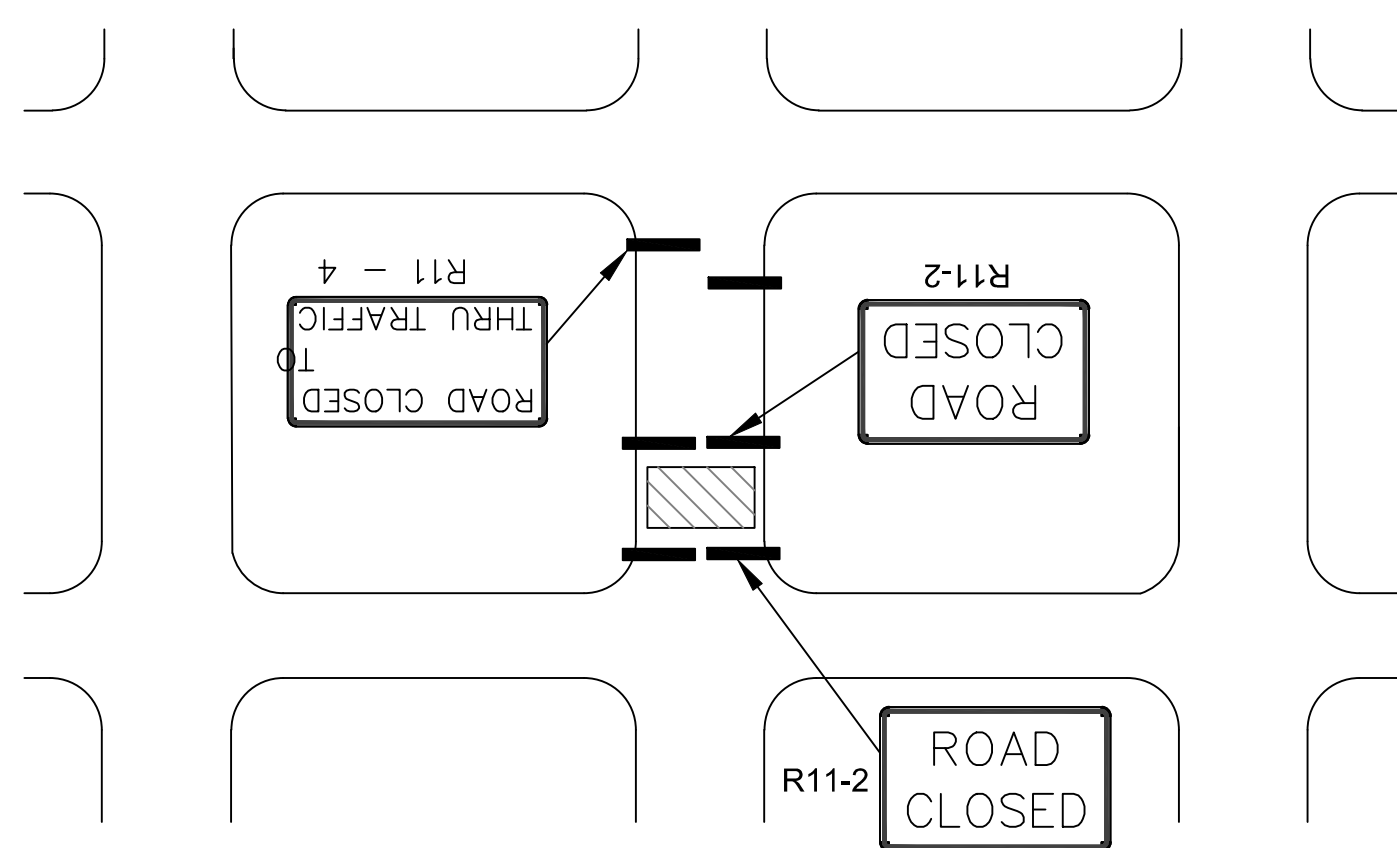
**STANDARD DETAILS
 DT - 118 A**

**TRAFFIC CONTROL
 Arterial Street Closure**

DATE: Dec. 2025
 SHEET: 13 of 39
 PROJ.: 841097.07

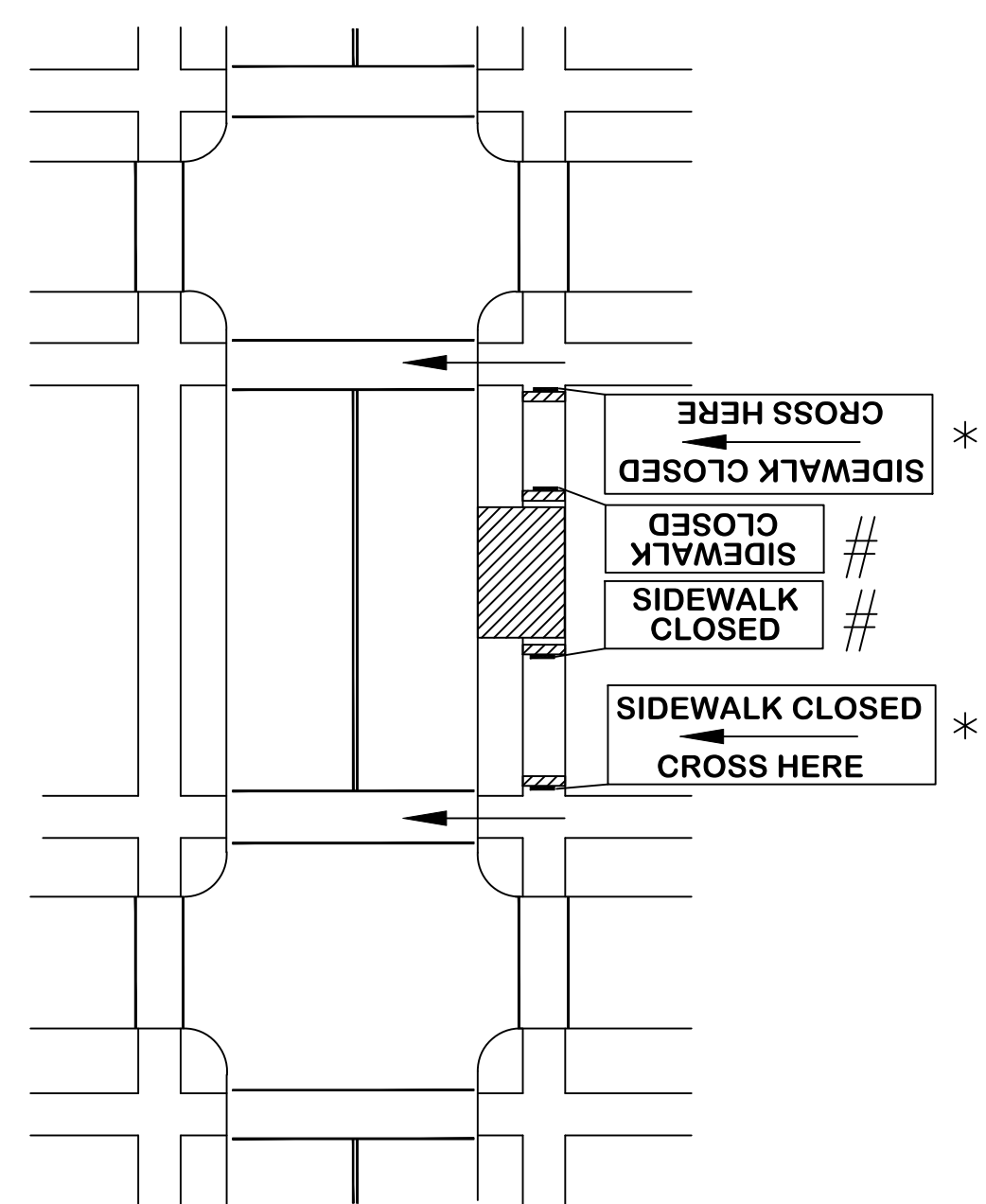


**FIGURE - 118 B (1)
CONSTRUCTION WORK ON RESIDENTIAL / LOCAL STREETS**

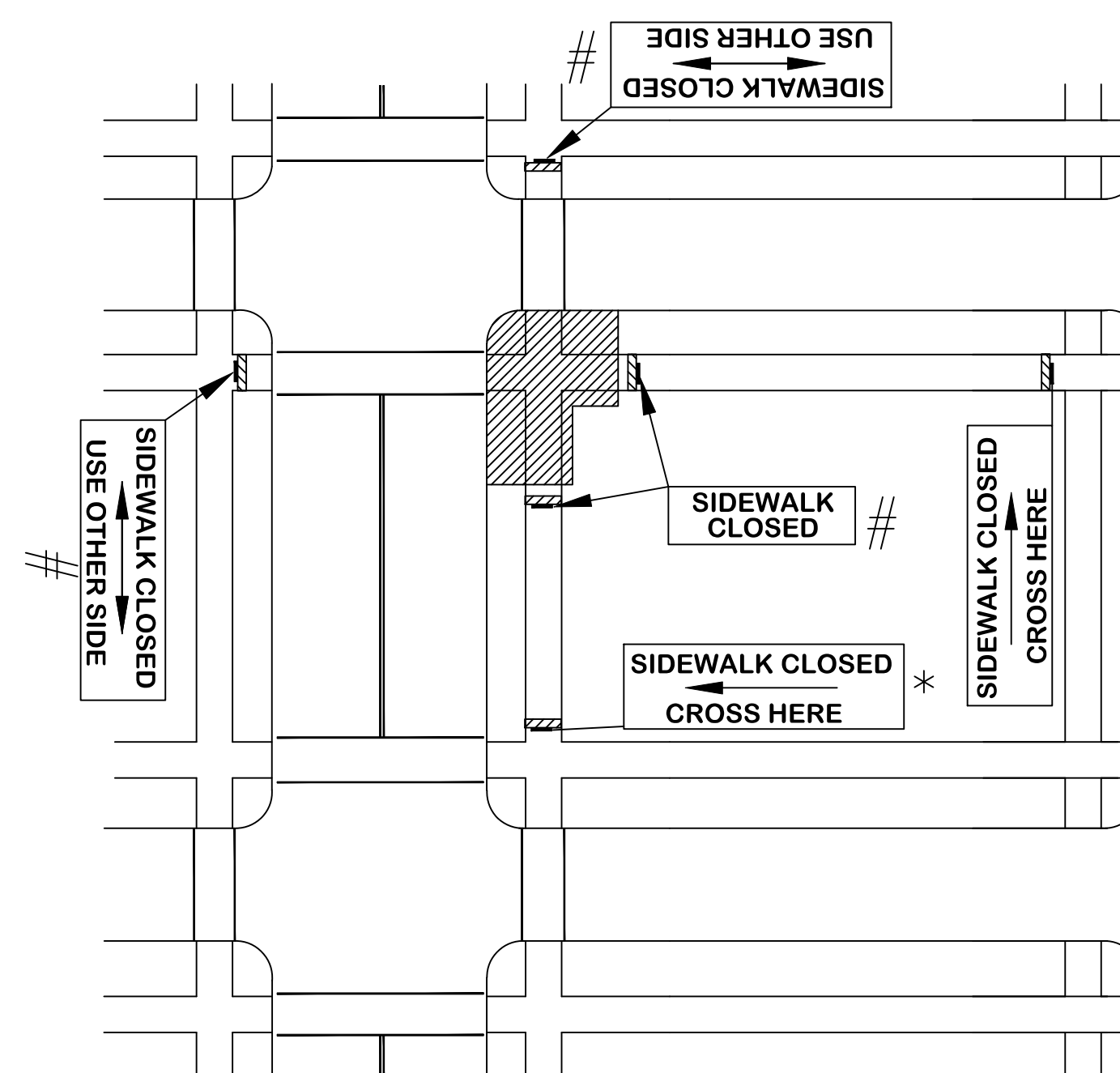


Need for Detour will be determined by the Engineer. Collector Streets cannot be detoured onto local or residential streets.

**FIGURE - 118 B (2)
CLOSURE OF RESIDENTIAL / LOCAL STREETS**



**FIGURE - 118 B (3)
MID-BLOCK SIDEWALK CLOSURE
WITH PEDESTRIAN DETOUR**



**FIGURE - 118 B (4)
CORNER SIDEWALK CLOSURE
WITH PEDESTRIAN DETOUR**

* ADVANCE SIGNS TO BE PLACED ON TYPE I OR TYPE II BARRICADES OR POST MOUNTED. PLACEMENT SHALL BE SUCH THAT SO THAT AT LEAST 48" OF SIDEWALK IS AVAILABLE FOR PEDESTRIAN USE.
SIGNS TO BE PLACED ON CONTINUOUS DETECTABLE DEVICES.

LEGEND	
— = SIGN	◀◀◀◀ = ARROW PANEL BOARD
— = TYPE III BARRICADE	▨ = WORK SPACE
○ = CHANNELIZING DEVICES	⏏ = FLAGGER

NO.	DATE:	REVISION	BY:	APP'D
1	10/20/30	MAJOR REVISION	SU	KRE

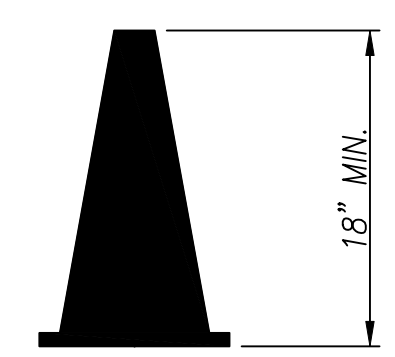
DRAWN BY: Shoeb Uddin
APPD BY: Kristi Ericksen



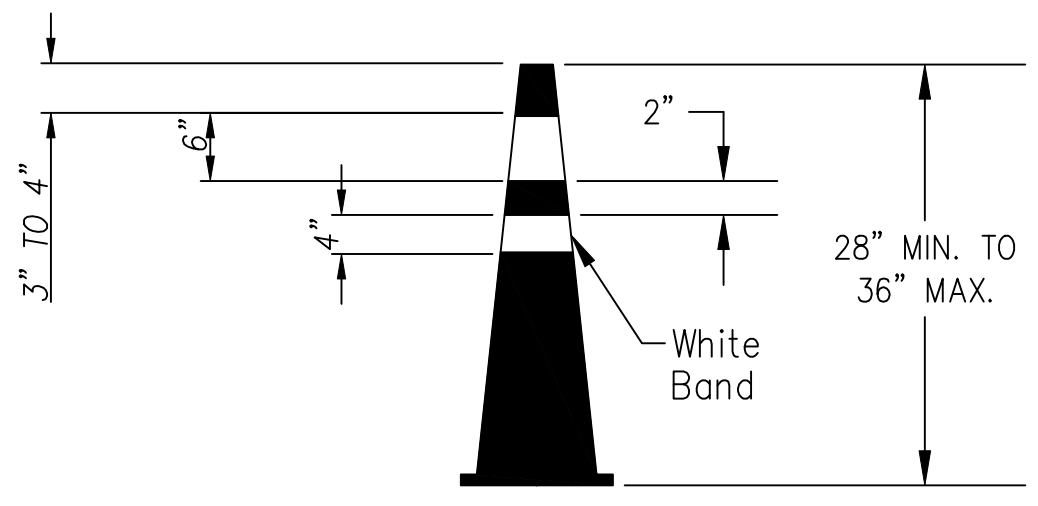
STANDARD DETAILS
DT - 118 B

TRAFFIC CONTROL
LOCAL STREET / SIDEWALK CLOSURES

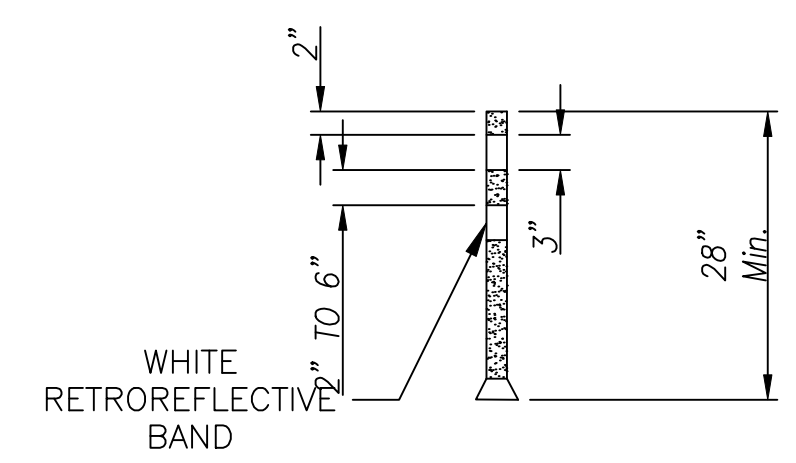
DATE: Dec. 2025
SHEET: 23 of 39
PROJ.: 841097.07



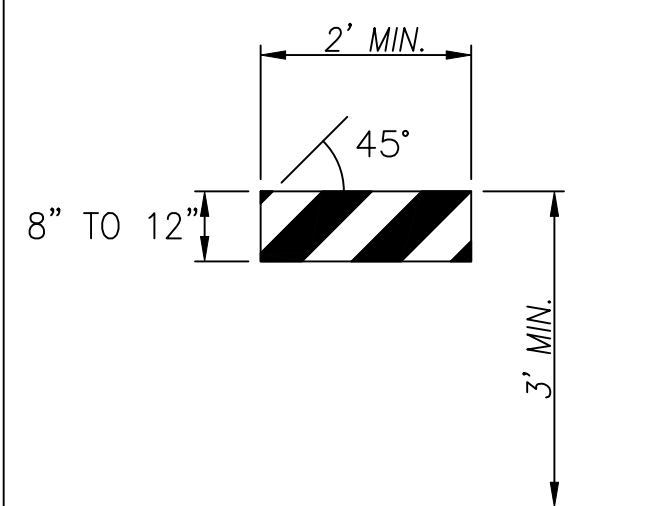
CONES
DAY TIME USE ONLY
(≤ 40 MPH)



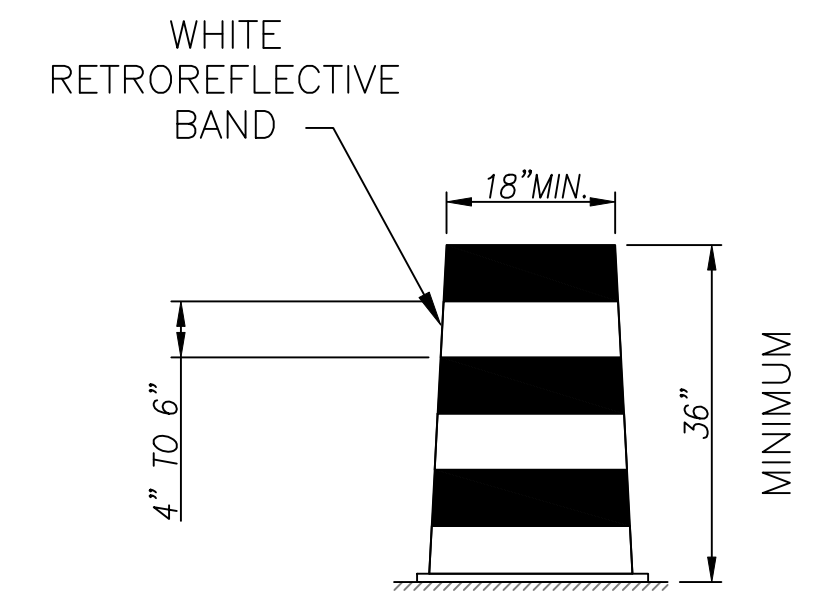
CONES
FLUORESCENT ORANGE CONE
w/ WHITE RETROREFLECTIVE BANDS



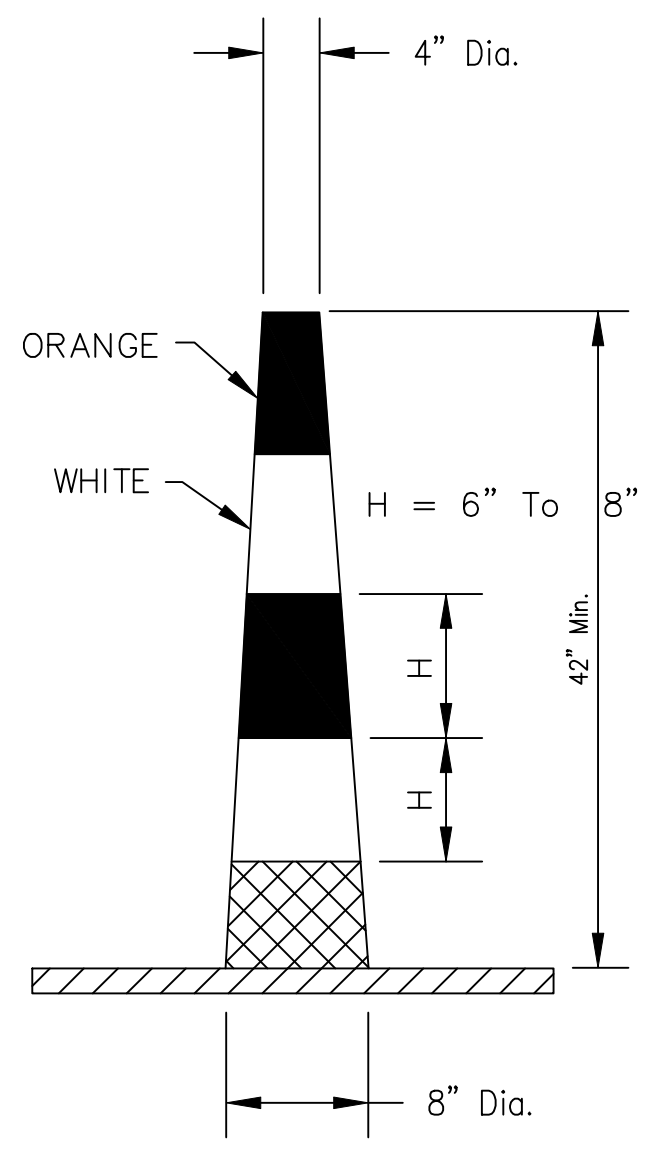
TUBULAR MARKERS



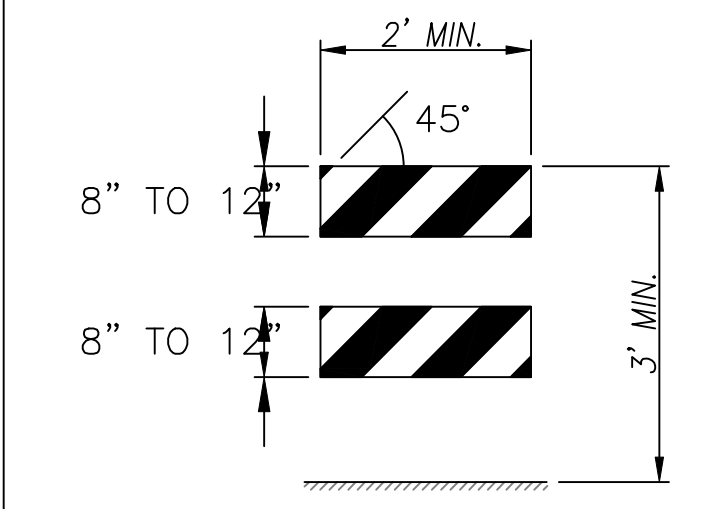
TYPE I BARRICADE



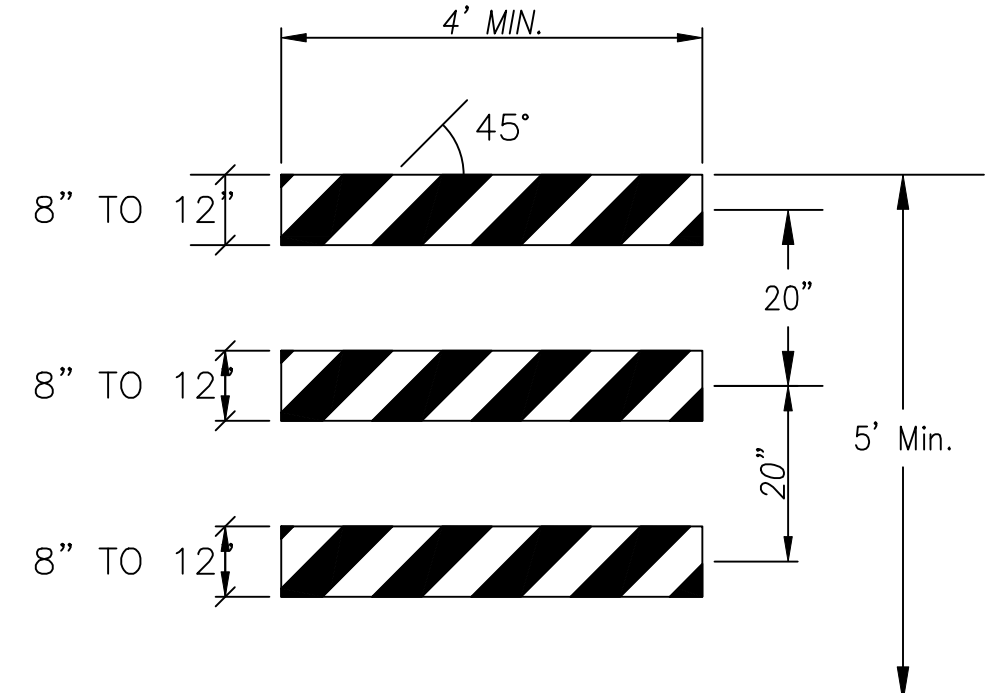
DRUM



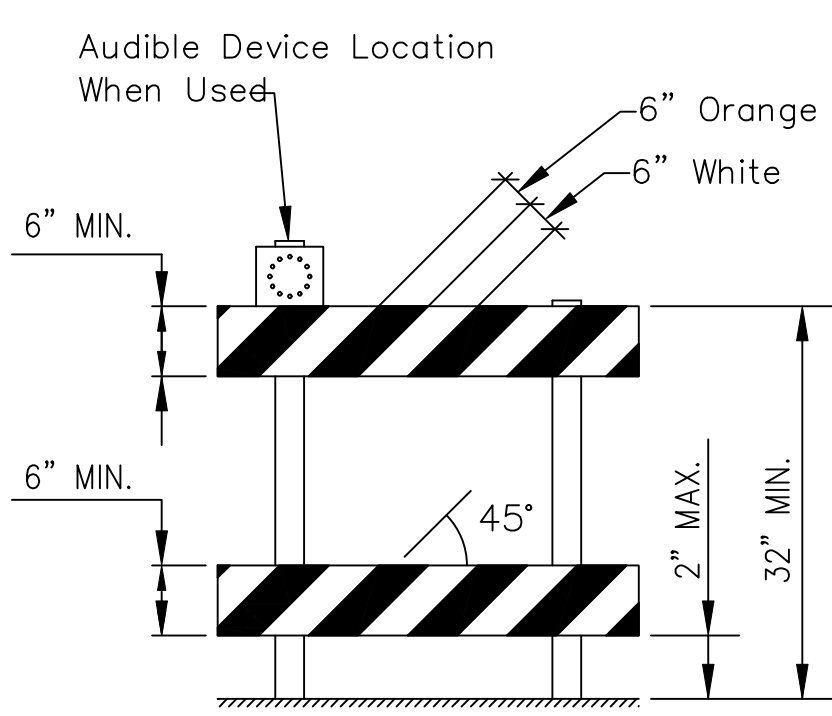
CONICAL DELENEATOR



TYPE II BARRICADE

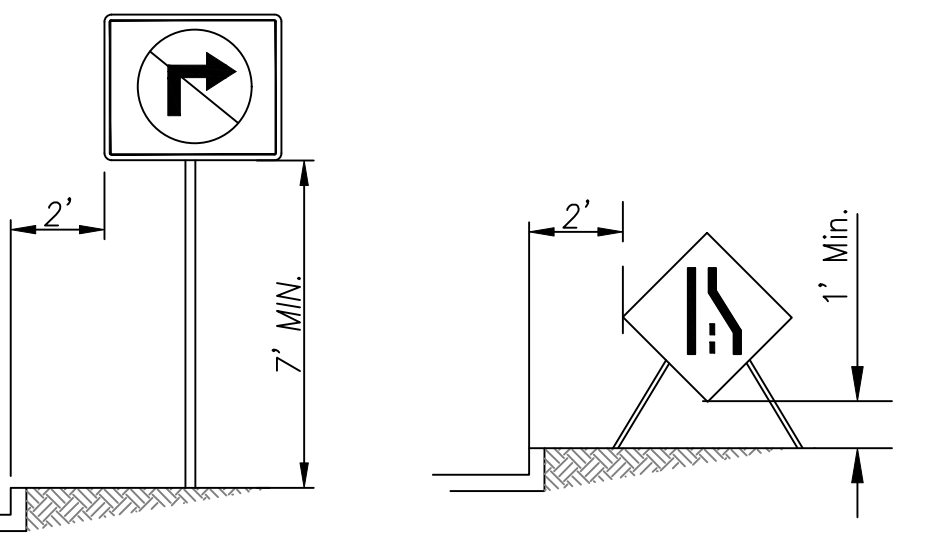


TYPE III BARRICADE

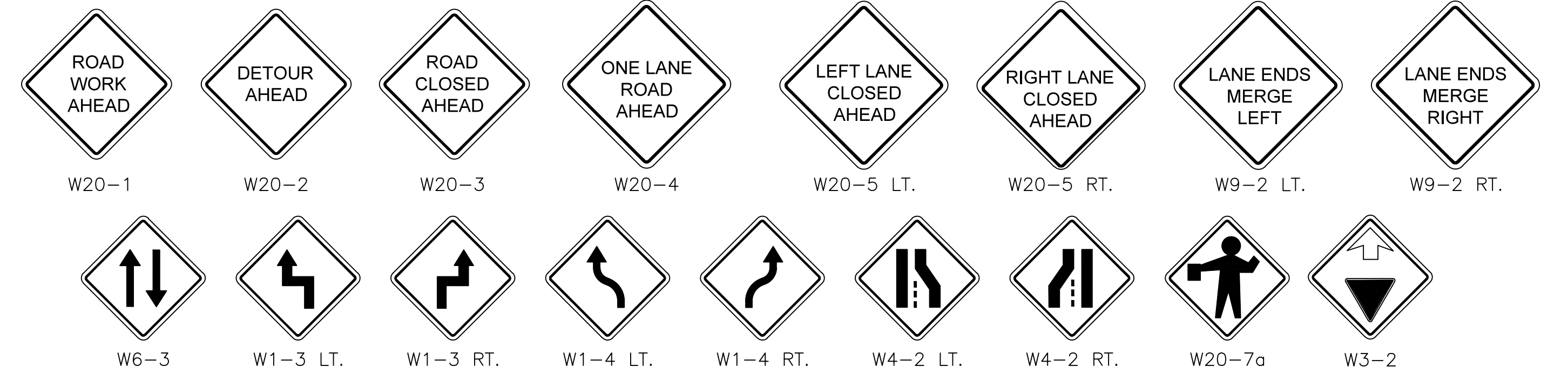


DETECTABLE PEDESTRIAN BARRICADE/CHANNELIZER

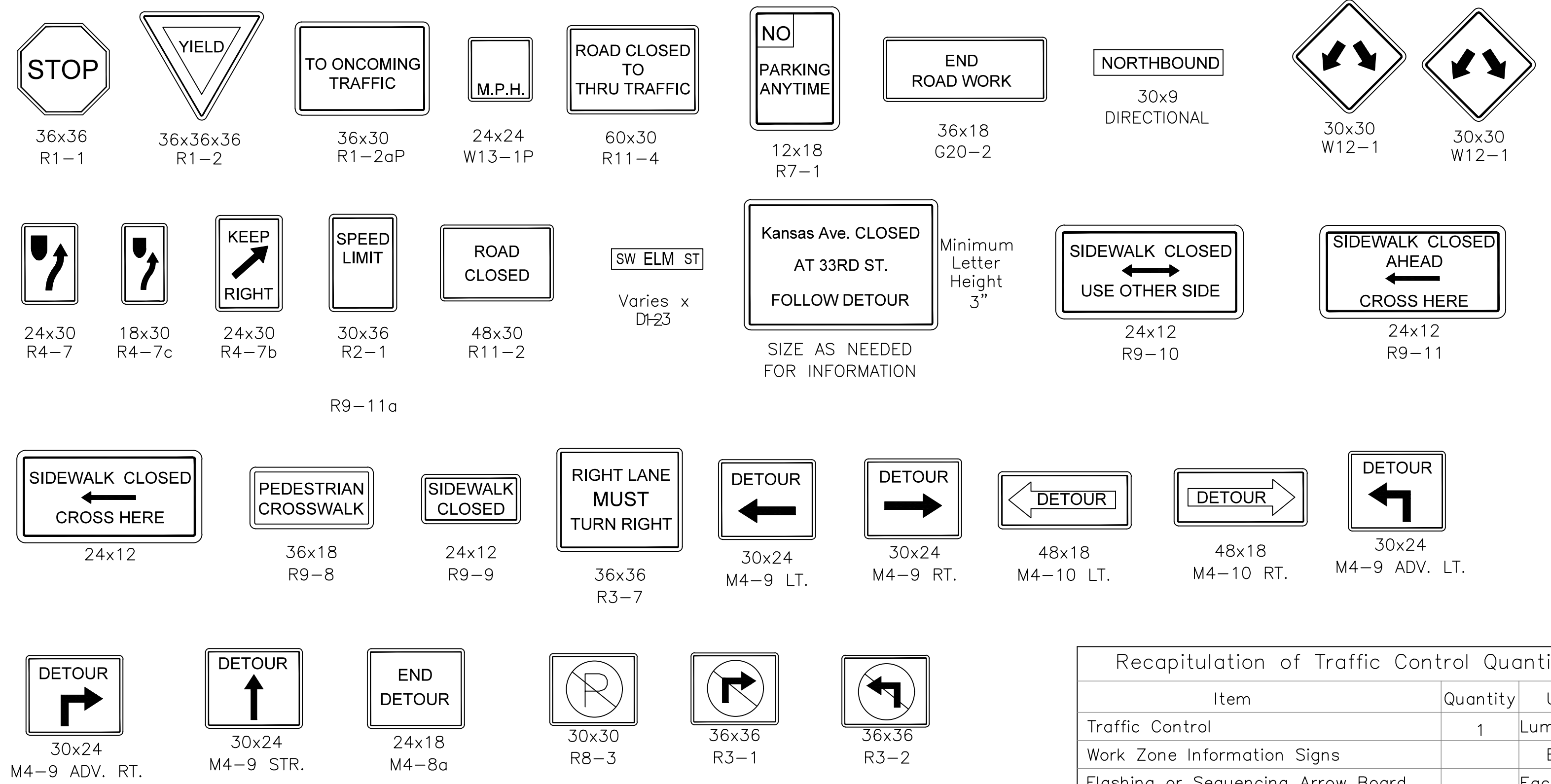
- NOTES:**
- Barricades (Type 2 or 3) shall be used to close the entire width of the pathway.
 - Do not use warning lights on pedestrian barricades or on audible devices.
 - Upper rail shall be continuously smooth.
 - Adjacent sections of barricades shall be interlocked together, and shall have the same base color (orange or yellow).
 - Stripes are optional. As an alternate, the top rail may be orange and the bottom rail may be white.



HEIGHT AND LOCATION OF SIGNS



UNLESS OTHERWISE NOTED ALL WARNING SIGNS SHALL BE 36"x36"



Minimum Size:
Refer to Table 6F-1 of the most recent edition of MUTCD for minimum sizes of all Traffic Control Signs.

TYPICAL TRAFFIC CONTROL SIGNS USED IN CITY PROJECTS

Recapitulation of Traffic Control Quantities			
Item	Quantity	Unit	
Traffic Control	1	Lump Sum	
Work Zone Information Signs		Each	
Flashing or Sequencing Arrow Board		Each Week	
Portable Changeable Message Sign		Each Week	
Temporary Traffic Signal		Lump Sum	
Temporary Pavement Marking (*)(**)(***)		LF	
Surface Drop off Treatment		LF	

(*) Type Pavement Marking: Type I, Type II, Masking
(**) Color
(***) Width

⊠ ALL DEVICES LISTED ARE APPROXIMATE. ACTUAL DEVICES REQUIRED SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED SUBSIDIARY TO THE BID ITEM "TRAFFIC CONTROL - LUMP SUM"

NO.	DATE:	REVISION	BY:	APP'D
1	10/30/20	MAJOR REVISION	SU	KRE

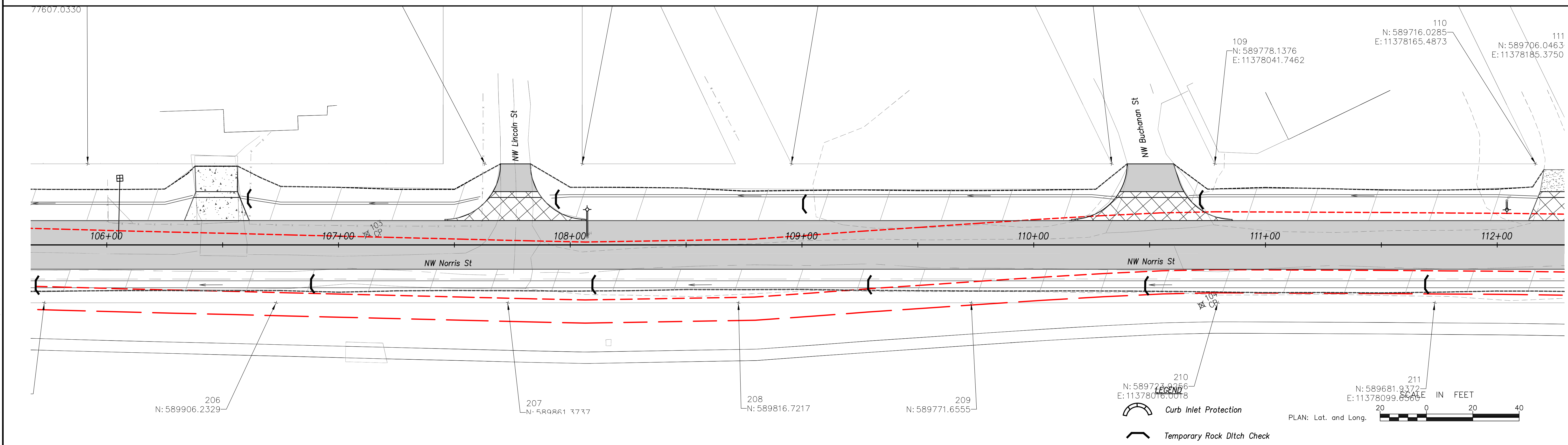
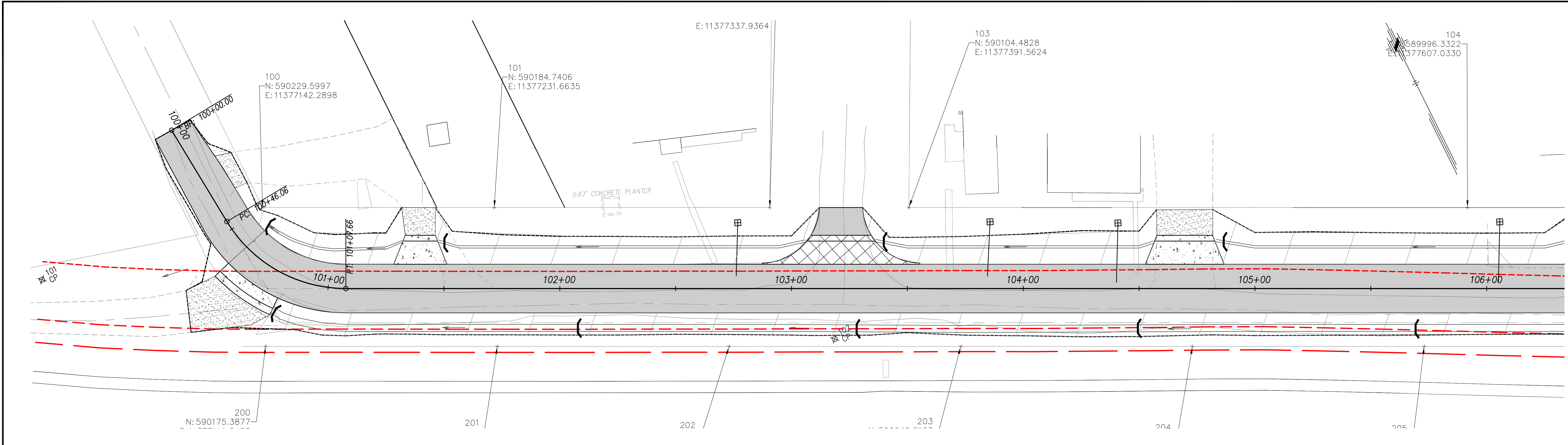
DRAWN BY: Shoeb Uddin
APP'D BY: Kristi Ericksen



STANDARD DETAILS
DT - 121A

TRAFFIC CONTROL DEVICES AND RECAP OF QUANTITIES

DATE: Dec. 2025
SHEET: 24 of 39
PROJ.: 841097.07



LEGEND

Curb Inlet Protection

Temporary Rock Ditch Check

PLAN: Lat. and Long.

G:\Shared drives\231248\CADD\231248 Erosion Control.dwg 4/27/2026 - 2:41pm

NO.	DATE:	REVISION	BY:	APP'D

DRAWN BY: xx
APP'D BY: xx

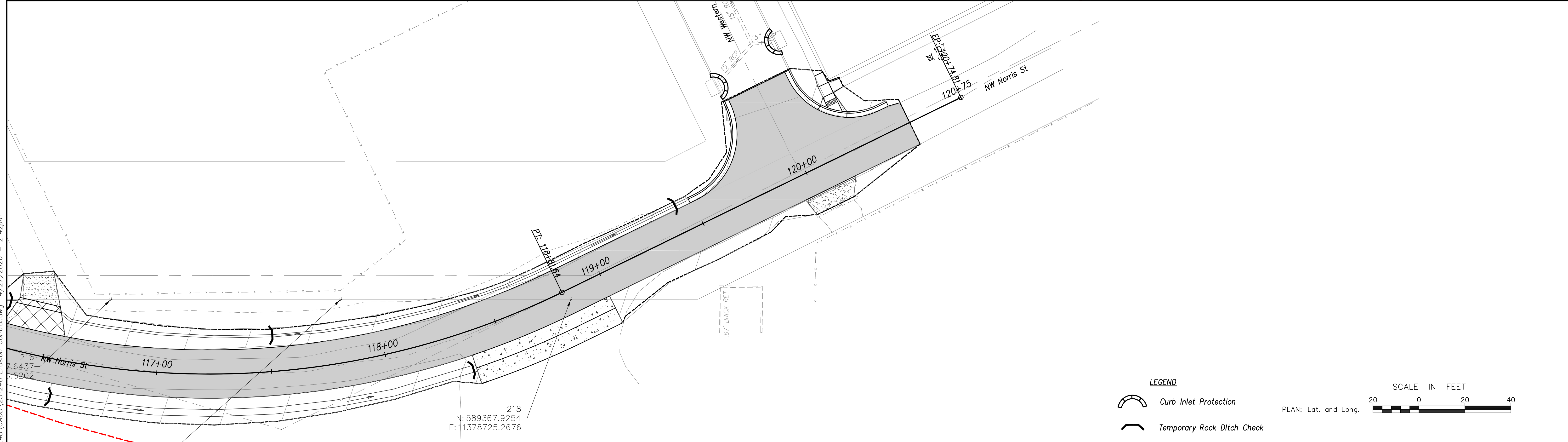
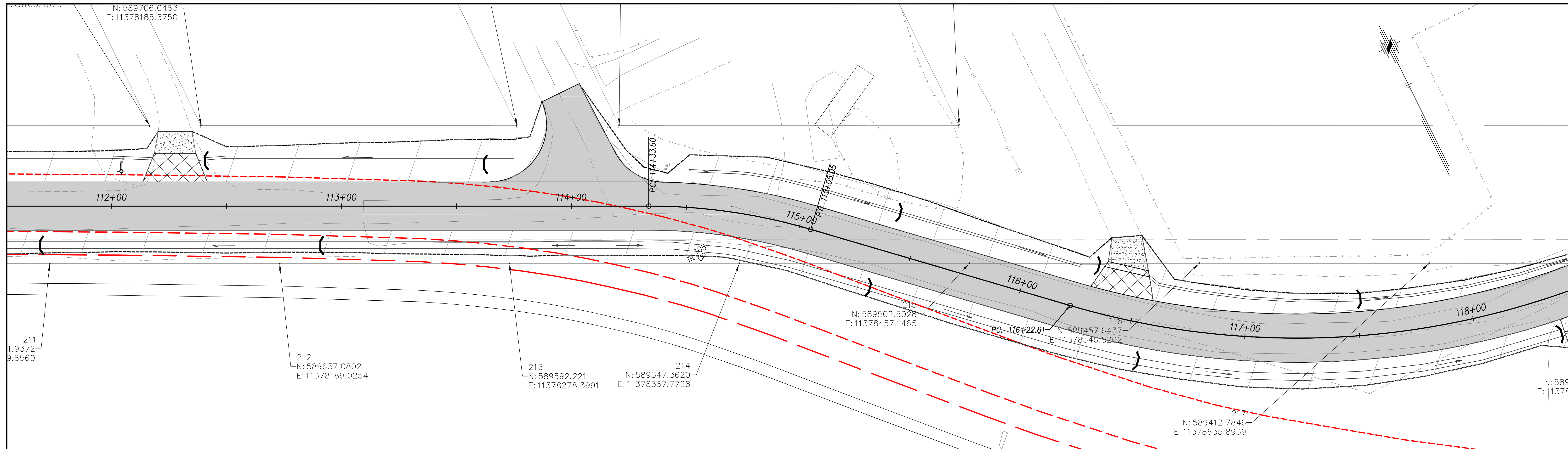
CFS ENGINEERS
Cook, Flatt & Strobel Engineers
2930 SW Woodside Drive
Topeka, Kansas 66614
785.272.4706

TOPEKA Public Works ENGINEERING
620 SE MADISON ST. • 2nd Floor • TOPEKA, KS 66607
Phone: (785) 368-3842 • Fax: (785) 368-3881



STREET IMPROVEMENT PROJECT
No. 841097.07
NW NORRIS ST.
FROM NW WEST ST. TO NW WESTERN AVE.

EROSION CONTROL PLAN
Sta. 100+00.00 to Sta. 112+00.00


DATE: Dec. 2025
SHEET: 26 of 39
PROJ.: 841087.07



LEGEND

-  Curb Inlet Protection
-  Temporary Rock Ditch Check

SCALE IN FEET



PLAN: Lat. and Long.

NO.	DATE:	REVISION	BY:	APP'D

DRAWN BY: xx
 APP'D BY: xx

CFS ENGINEERS
 Cook, Flatt & Strobel Engineers
 2930 SW Woodside Drive
 Topeka, Kansas 66614
 785.272.4706

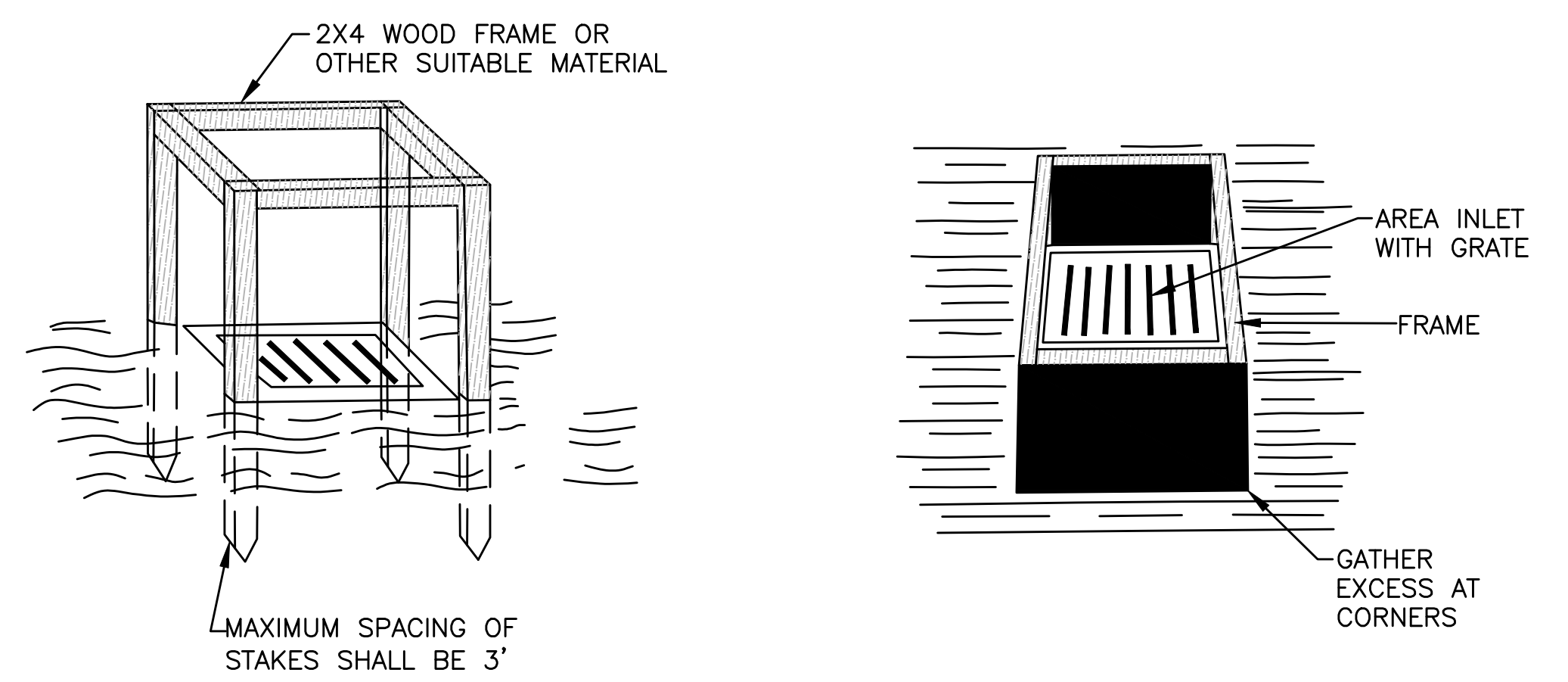
TOPEKA Public Works ENGINEERING
 620 SE MADISON ST. • 2nd Floor • TOPEKA, KS 66607
 Phone: (785) 368-3842 • Fax: (785) 368-3881

STREET IMPROVEMENT PROJECT
 No. 841097.07
 NW NORRIS ST.
 FROM NW WEST ST. TO NW WESTERN AVE.

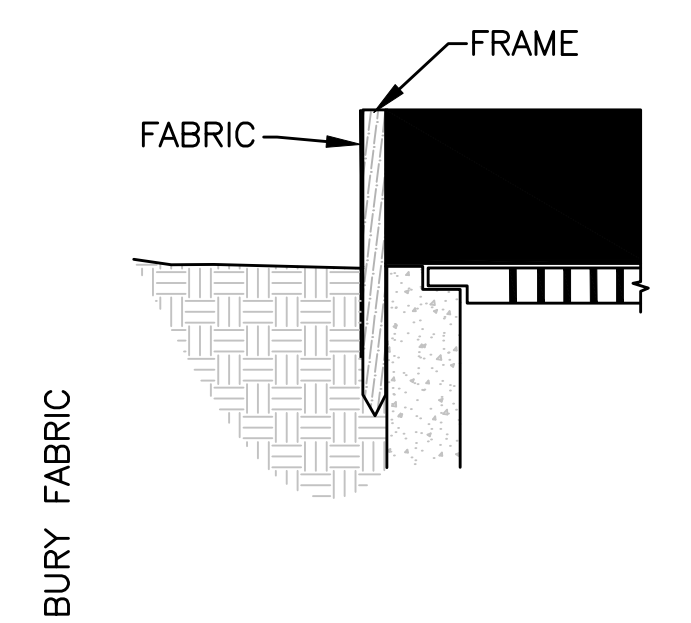
EROSION CONTROL PLAN
 Sta. 112+00.00 to Sta. 120+75.00

DATE: Dec. 2025
 SHEET: 27 of 39
 PROJ.: 841087.07

G:\Shared drives\231248\CADD\231248 Erosion Control.dwg 4/27/2026 - 2:42pm



TOP VIEWS



PROFILE VIEW

NOTES:

1. BASE OF FABRIC SHALL BE BURIED AT LEAST 1' BELOW GROUND SURFACE AND BACKFILLED WITH CRUSHED STONE OR COMPACTED MATERIAL.
2. WIRE MESH FENCE MAY BE USED TO SUPPORT FABRIC. TOP OF FENCE SHOULD BE LEVEL WITH FRAME AND BOTTOM BURIED 6" BELOW GROUND.
3. MAY BE NECESSARY TO BUILD A TEMPORARY DIKE ON DOWN-SLOPE SIDE OF STRUCTURE TO PREVENT BYPASS FLOW.
4. STRAW BALES OR GRAVEL FILLED FILTER BAGS MAY BE USED IN LIEU OF FABRIC. IF STRAW BALES ARE USED, TWO 4' (MINIMUM) LONG, 2" X 2" HARDWOOD STAKES SHALL BE DRIVEN THROUGH EACH BALE AND SET BACK 12" TO 24" FROM INLET. IF FILTER BAGS ARE USED, PLACE BAGS SUCH THAT NO GAPS ARE EVIDENT.

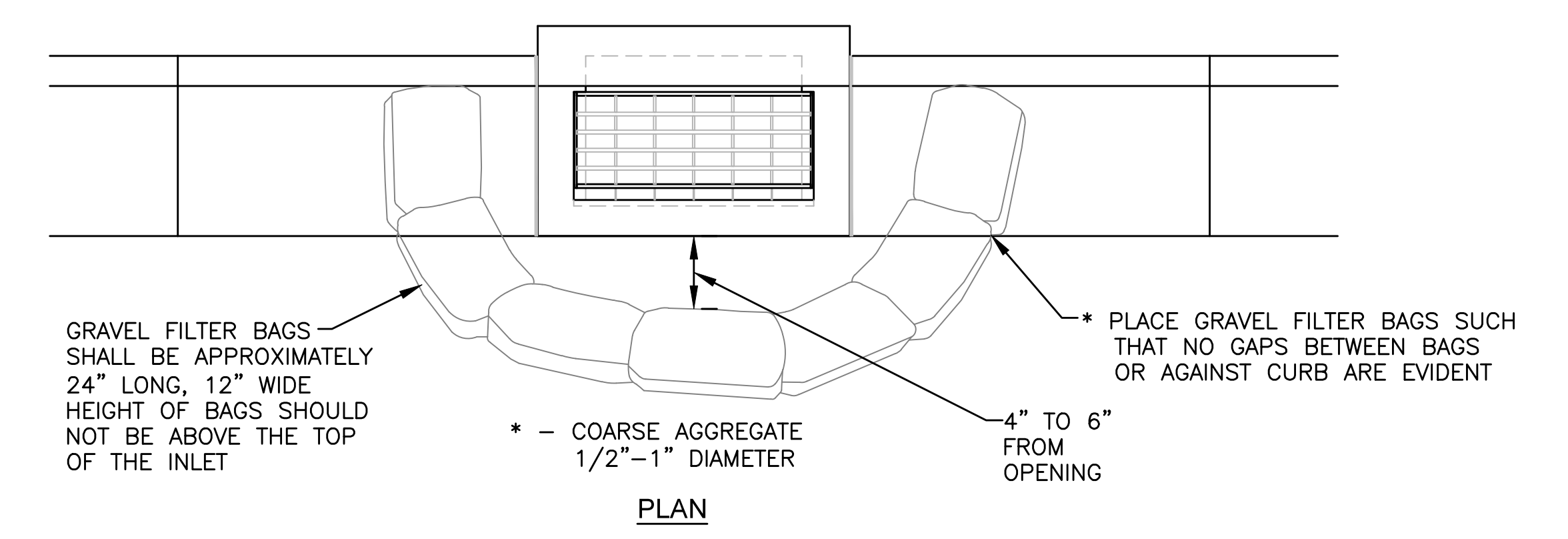
AREA INLET PROTECTION

GENERAL NOTES:

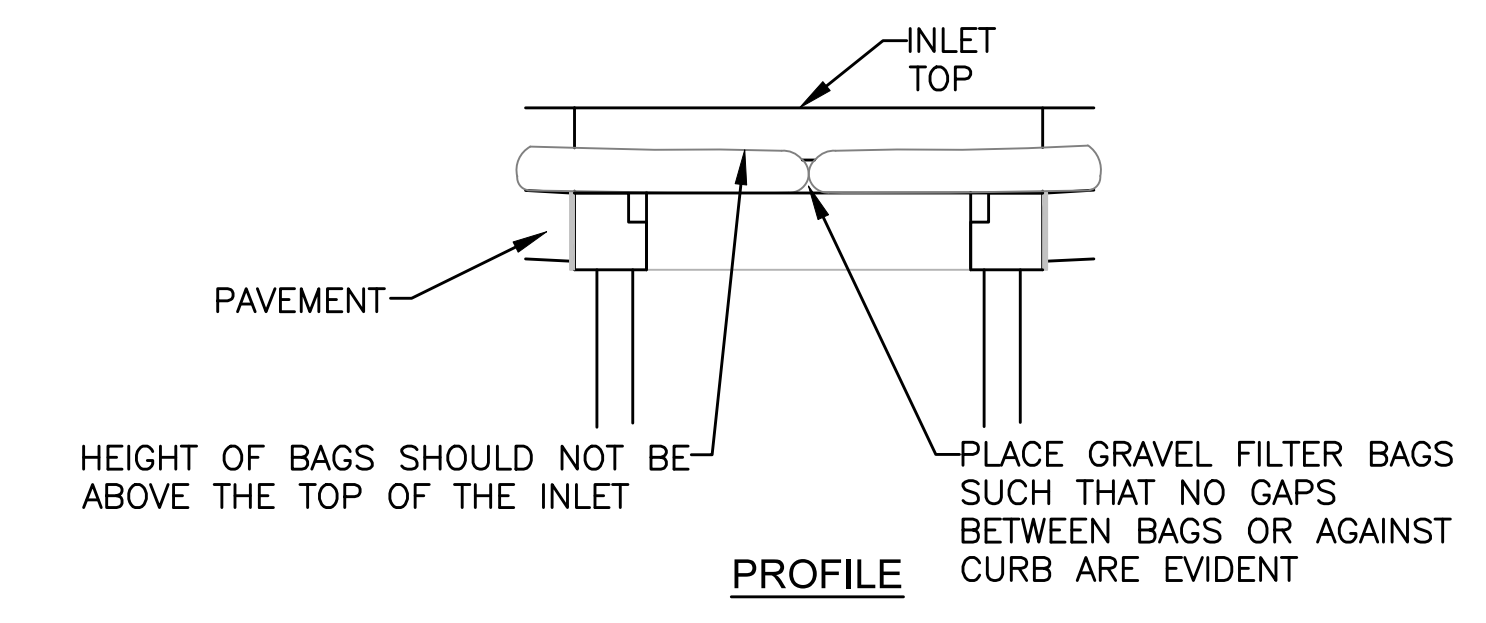
1. ANY EROSION AND SEDIMENT CONTROL MEASURES INTENDED TO CONTROL EROSION OF AN EARTH DISTURBANCE OPERATION SHALL BE INSTALLED BEFORE ANY EARTH DISTURBANCE OPERATIONS TAKE PLACE.
2. THE CONTRACTOR SHALL INSPECT THE LAND DISTURBANCE SITE AFTER EACH SIGNIFICANT RAINFALL EVENT WITHIN A 24-HOUR PERIOD AND ASSURE THAT ALL EROSION AND SEDIMENT CONTROL MEASURES ARE IN WORKING CONDITION PRIOR TO ANY FORECASTED RAINFALL. SEDIMENT REMOVAL AND ALL NECESSARY REPAIRS SHALL BE MADE TO MAINTAIN THE INTEGRITY OF THE EROSION AND SEDIMENT CONTROL MEASURES. SEDIMENT SHALL BE REMOVED ONCE IT REACHES HALF OF THE INSTALLED HEIGHT OF MEASURE.
3. THE CONTRACTOR SHALL MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES DURING ALL PHASES OF CONSTRUCTION UNTIL OWNER ACCEPTS WORK AS COMPLETE. THE CONTRACTOR SHALL PROVIDE TEMPORARY SEEDING, BERMS, SILT FENCE, SEDIMENT TRAPS OR OTHER MEANS TO PREVENT SEDIMENT FROM REACHING STREAMS, PUBLIC RIGHT-OF-WAY OR ADJACENT PROPERTY.
4. SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED ONCE 70 PERCENT OF THE PERMANENT COVER IS ESTABLISHED.
5. THE CONTRACTOR SHALL TEMPORARILY SEED AND MULCH ALL DISTURBED AREAS IF THERE HAS BEEN NO CONSTRUCTION ACTIVITY ON THEM FOR A PERIOD OF 14 CALENDAR DAYS. IF THE ENGINEER DETERMINES THAT A SITE HAS A POTENTIAL FOR EROSION, STABILIZATION OF SOIL MAY BE REQUIRED. TEMPORARY SEED MIXTURE SHALL BE APPROVED BY THE ENGINEER OR AS FOLLOWS:

TYPE:	APPLICATION RATE:	
	WINTER WHEAT	120 LBS PER ACRE
	RYEGRASS	75 LBS PER ACRE

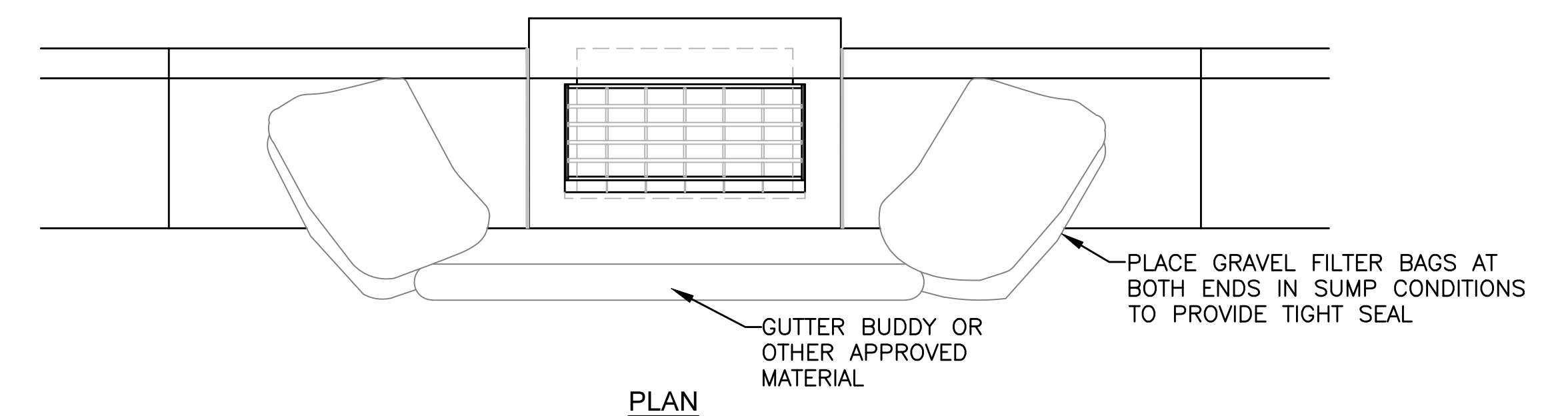
REPAIRS AND RESEEDING SHALL BE PERFORMED BY THE CONTRACTOR AT THE DIRECTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER. IF VEGETATIVE MEASURES ARE NOT EFFECTIVE, NON-VEGETATIVE OPTION MAY BE REQUIRED.



PLAN



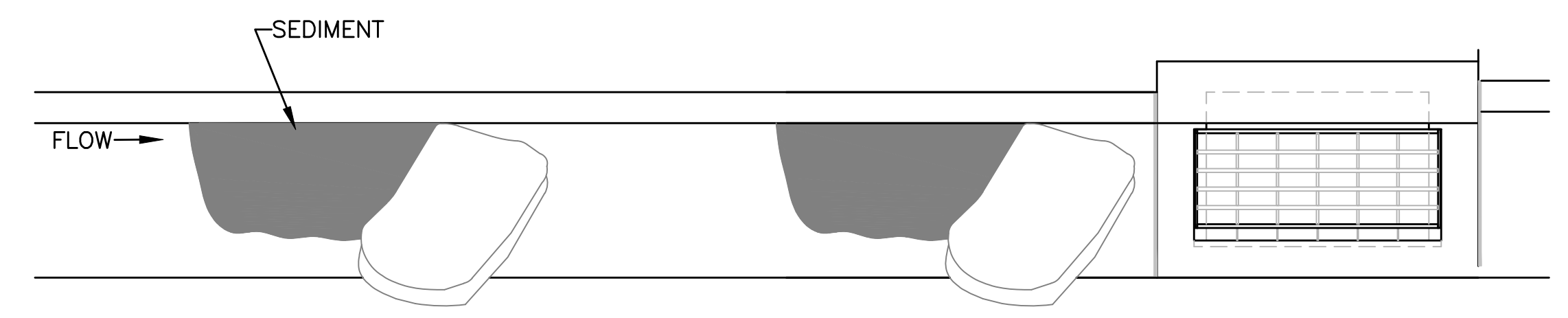
PROFILE



PLAN

SUMP CONDITIONS

NOTE:
DO NOT BLOCK INLET OPENING - STORMWATER MUST BE ALLOWED TO FLOW TO DRAIN AND NOT BYPASS TO DOWNSTREAM.



PLAN

IN GRADE CONDITIONS

NOTES:

1. OTHER APPROVED CURB INLET SEDIMENT FILTERS MAY BE USED.
2. IMMEDIATELY FOLLOWING INLET CONSTRUCTION AND PRIOR TO CONSTRUCTION OF CURB AND INLET THROAT, PROTECT INLET OPENING AROUND PERIMETER. SEE AREA INLET DETAIL THIS PAGE.
3. CONTRACTOR TO CLEAN OUT SEDIMENT AFTER EACH SIGNIFICANT RAINFALL EVENT.
4. DURING CONSTRUCTION GRAVEL FILTER BAGS SHALL BE REPLACED PRIOR TO DEGRADATION.
5. ANY SEDIMENT OR GRAVEL DEPOSITED IN INLET SHALL BE REMOVED PROMPTLY.

CURB INLET SEDIMENT PROTECTION

NO.	DATE:	REVISION	BY:	APP'D
2	May 2015	Added & Updated Notes	DHS	JDH
1	March 2013	Revised Notes	DHS	JDH

DRAWN BY: DHS
APP'D BY: JDH



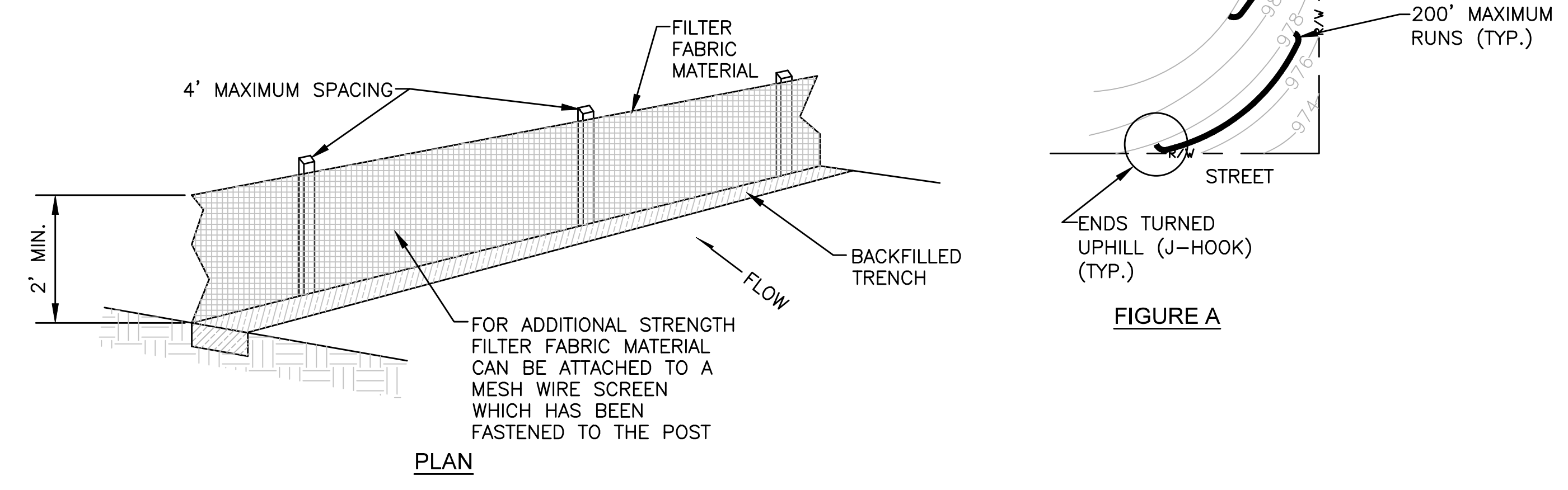
SHAWNEE COUNTY, KANSAS
PUBLIC WORKS DEPARTMENT
COUNTY ENGINEER
1515 NW SALINE
TOPEKA, KS 66618
(785) 233-7702



STANDARD DETAILS

EROSION & POLLUTION CONTROL
INLET PROTECTION AND GENERAL NOTES
(DT-020)

DATE: March 2025
SHEET: 26 of 76
PROJ.: 841091.06
501107.03
281250.19



TEMPORARY ROCK DITCH CHECK SPACING	
DITCH @ SLOPE (%)	SPACING INTERVAL (FEET)
5.0	60
6.0	50
7.0	43
8.0	36
9.0	33
10.0	29

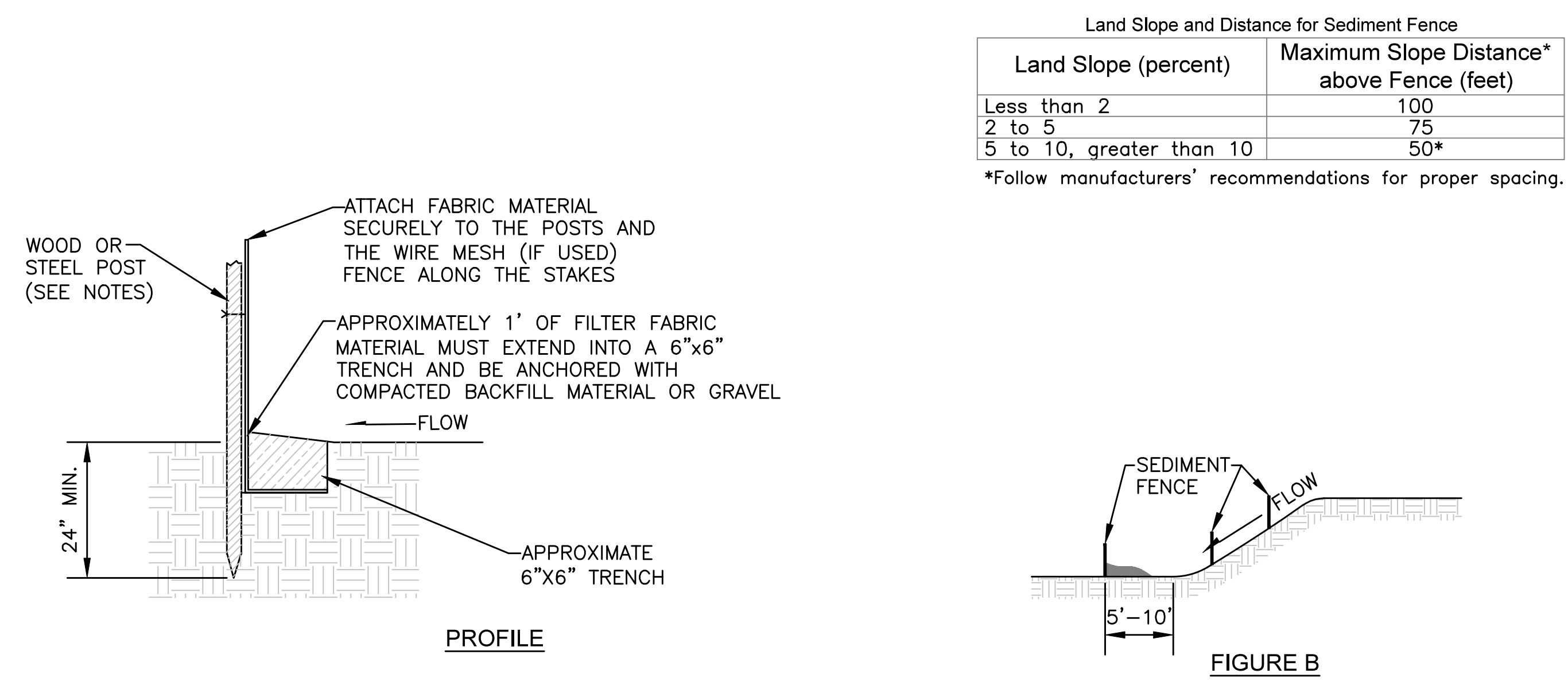
THIS SPACING IS TO BE USED FOR ROCK DITCH CHECKS ONLY.

ROCK DITCH CHECK

NOTES:

- ROCK SHALL BE CLEAN AGGREGATE, D50 = 6".
- PLACE ROCK IN SUCH A MANNER THAT WATER WILL FLOW OVER, NOT AROUND DITCH CHECK.
- DO NOT USE ROCK DITCH CHECKS IN CLEAR ZONE.
- AGGREGATE EXCAVATED ON SITE MAY BE USED AS AN ALTERNATE TO THE 6" ROCK, IF APPROVED BY THE ENGINEER.

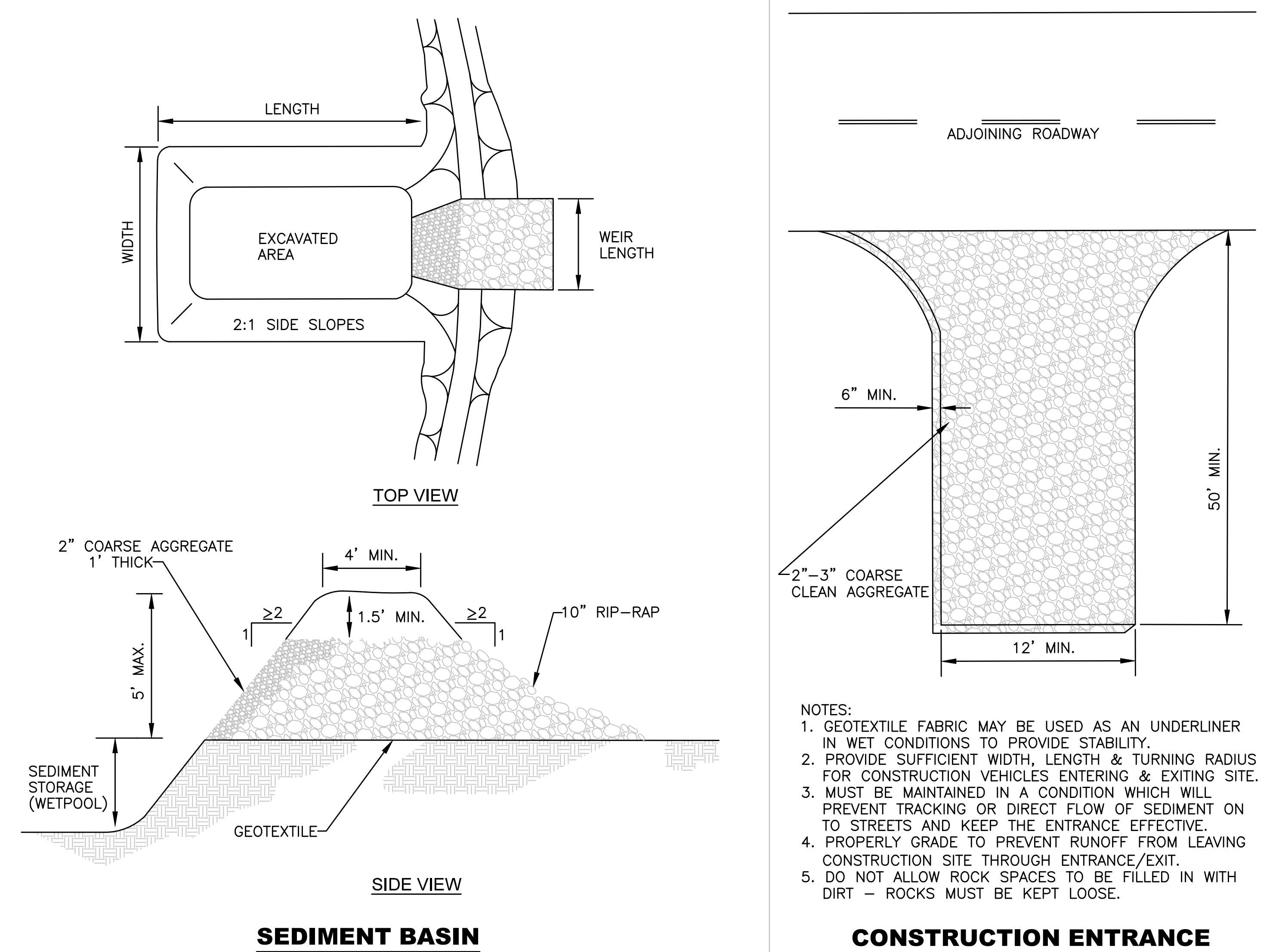
PLACE ROCK UP SLOPE OF BANKS TO ALLOW FLOW OVER CENTER OF CHECK DAM TO PREVENT SCOUR



SILT FENCE

NOTES:

- THE USE OF HAY/STRAW BALES IS THE CONTRACTOR'S OPTION. IF HAY BALES ARE USED PLACE TIGHTLY TOGETHER WITH 2"x2"x4' (MIN.) LENGTH WOOD STAKES IN OUTER 1/3 SECTIONS OF BALES. BALES SHOULD BE EMBEDDED INTO THE SOIL A MINIMUM OF 6" WITHIN A MAXIMUM DRAINAGE AREA OF 1 ACRE OR LESS.
- THE SEDIMENT FENCES SHALL BE PLACED ALONG CONTOUR LINES, WITH A SHORT SECTION TURNED UPGRADE (J-HOOK) AT EACH END OF THE BARRIERS TO HOLD WATER AND SEDIMENT (SEE FIGURE A).
- AREAS THAT CONTAIN LARGER CONCENTRATIONS OF WATER SHALL BE LIMITED TO LENGTHS OF SILT FENCES TO NO LONGER THAN 200' (SEE FIGURE A). LIMIT TO 1/4 ACRE PER 100' OF FENCE. FURTHER RESTRICT AREA BY LAND SLOPE TABLE ABOVE.
- AREAS SHOULD BE BROKEN UP WITH INTERIOR SEDIMENT FENCE TO MINIMIZE WATER CONCENTRATIONS AND LONG SLOPES (SEE FIGURE B).
- SEDIMENT FENCES INSTALLED AT TOE OF SLOPE SHALL BE PLACED 5' TO 10' AWAY (DOWNSTREAM) TO CREATE SEDIMENT STORAGE (SEE FIGURE B).
- DEPTH OF WATER CONCENTRATIONS SHOULD NOT EXCEED 1.5' AT ANY POINT ALONG THE FENCE.
- PLACE SILT FENCE ONLY WHERE OVERLAND OR SHEET FLOW DISCHARGES OCCUR.
- SILT FENCES SHOULD NOT BE USED IN CONCENTRATED FLOW CHANNELS, OR AS INLET PROTECTION DEVICES IF FLOODING CONDITIONS COULD OCCUR.
- DO NOT USE HAY OR STRAW BALES WITH WIRE TIES.
- WHEN SEDIMENT REACHES 1/2 HEIGHT OF SILT FENCE OR SIMILAR CONTROL MEASURE, THE CONTRACTOR SHALL REMOVE THE SEDIMENT.



NOTES:

- GEOTEXTILE FABRIC MAY BE USED AS AN UNDERLINER IN WET CONDITIONS TO PROVIDE STABILITY.
- PROVIDE SUFFICIENT WIDTH, LENGTH & TURNING RADIUS FOR CONSTRUCTION VEHICLES ENTERING & EXITING SITE.
- MUST BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR DIRECT FLOW OF SEDIMENT ON TO STREETS AND KEEP THE ENTRANCE EFFECTIVE.
- PROPERLY GRADE TO PREVENT RUNOFF FROM LEAVING CONSTRUCTION SITE THROUGH ENTRANCE/EXIT.
- DO NOT ALLOW ROCK SPACES TO BE FILLED IN WITH DIRT - ROCKS MUST BE KEPT LOOSE.

NO.	DATE:	REVISION	BY:	APP'D
3	May 2015	Updated Notes & Added Rock Ditch Check	DHS	JDH
2	March 2013	Repl. Sed. Trap & Added Land Slope Table	DHS	JDH
1	Dec. 2009	Modified Stake Depth & Spacing	DHS	JDH

DRAWN BY: DHS
APP'D BY: JDH



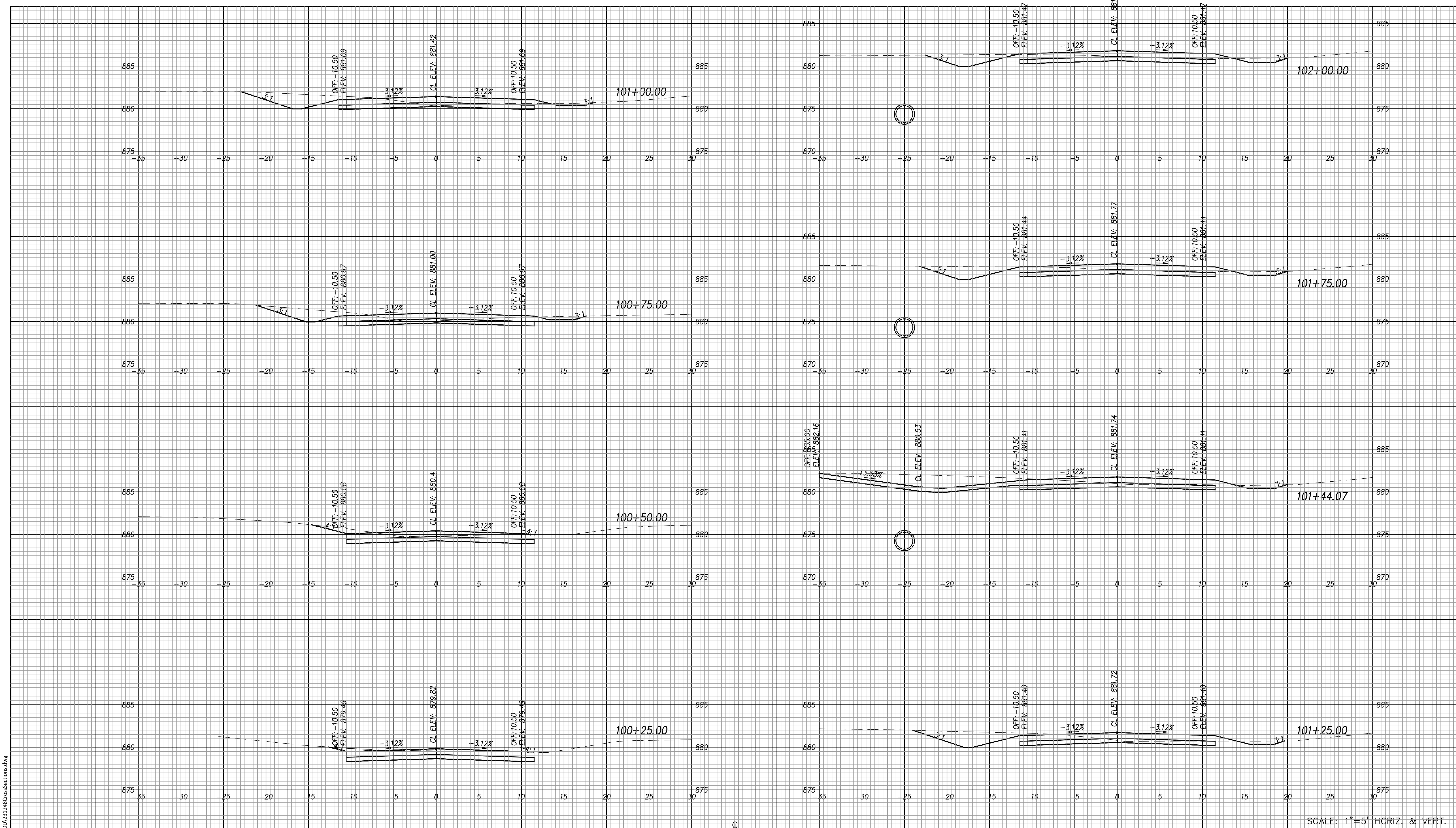
SHAWNEE COUNTY, KANSAS
PUBLIC WORKS DEPARTMENT
COUNTY ENGINEER
1515 NW SALINE
TOPEKA, KS 66618
(785) 233-7702



STANDARD DETAILS

EROSION & POLLUTION CONTROL
SILT FENCE, SEDIMENT BASIN,
CONSTRUCTION ENTRANCE,
AND ROCK DITCH CHECK
(DT-021)

DATE: March 2025
SHEET: 27 of 76
PROJ.: 841091.06
501107.03
281250.19



SCALE: 1"=5' HORIZ. & VERT.

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NO.	DATE:	REVISION	BY:	APP'D

DRAWN BY: ATP
 APP'D BY: MJM

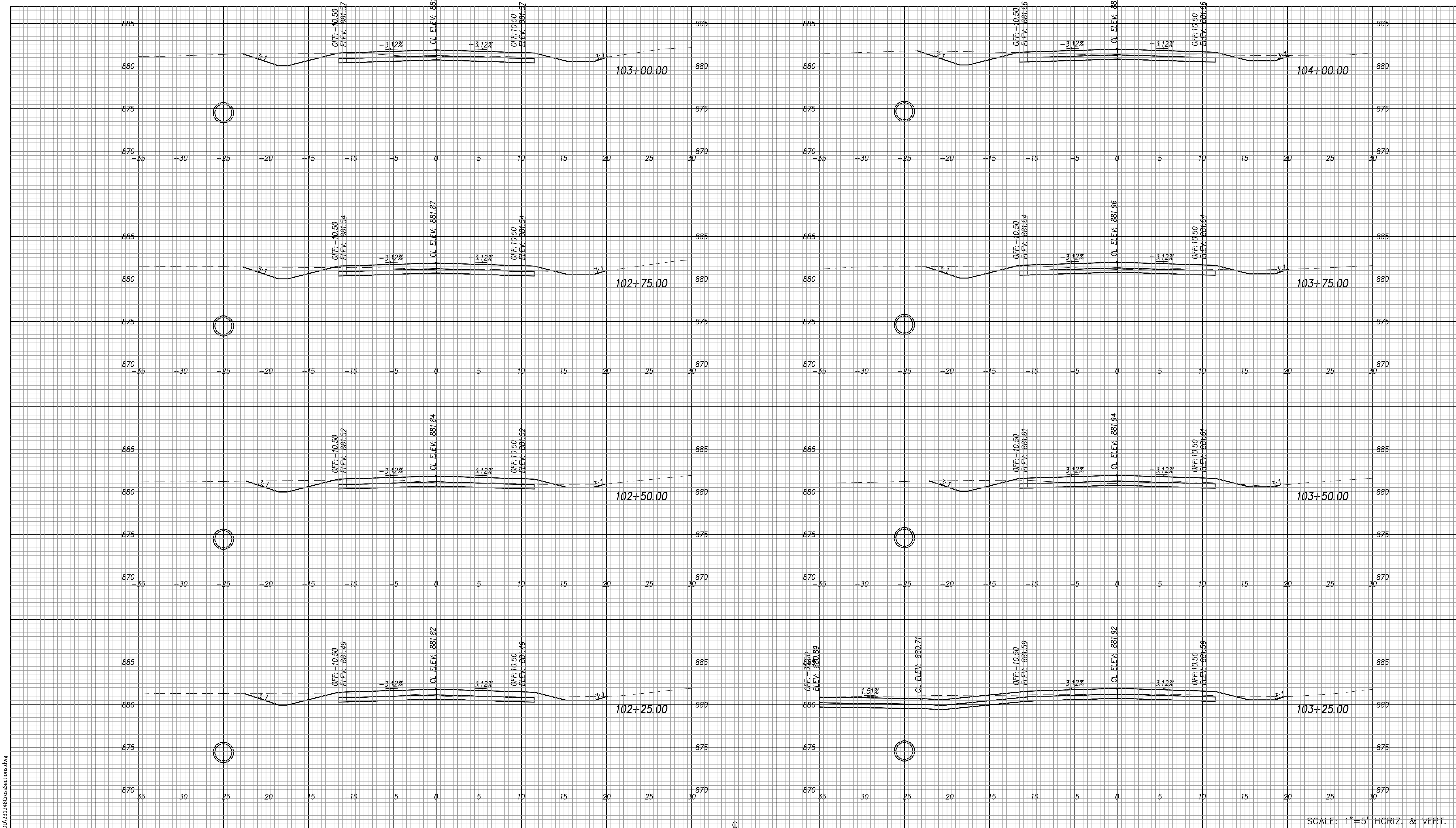
CFS
ENGINEERS
 Cook, Flatt & Strobel Engineers
 2930 SW Woodside Drive
 Topeka, Kansas 66614
 785.272.4706

TOPEKA
Public Works
ENGINEERING
 620 SE MADISON ST. • 2nd Floor • TOPEKA, KS 66607
 Phone: (785) 368-3842 • Fax: (785) 368-3881

STREET IMPROVEMENT PROJECT
 No. T-841097.07
 NW NORRIS ST.
 FROM NW WEST ST. TO NW WESTERN AVE.

CROSS SECTIONS
 Sta. 100+00.00 to Sta. 102+00.00

DATE: Sept. 2025
 SHEET: 30 of 39
 PROJ.: 841097.07



SCALE: 1"=5' HORIZ. & VERT.

G:\Shared drives\131248\CADD\231248\CrossSections.dwg

NO.	DATE:	REVISION	BY:	APP'D
-	-	-	-	-

DRAWN BY: ATP
 APP'D BY: MJM

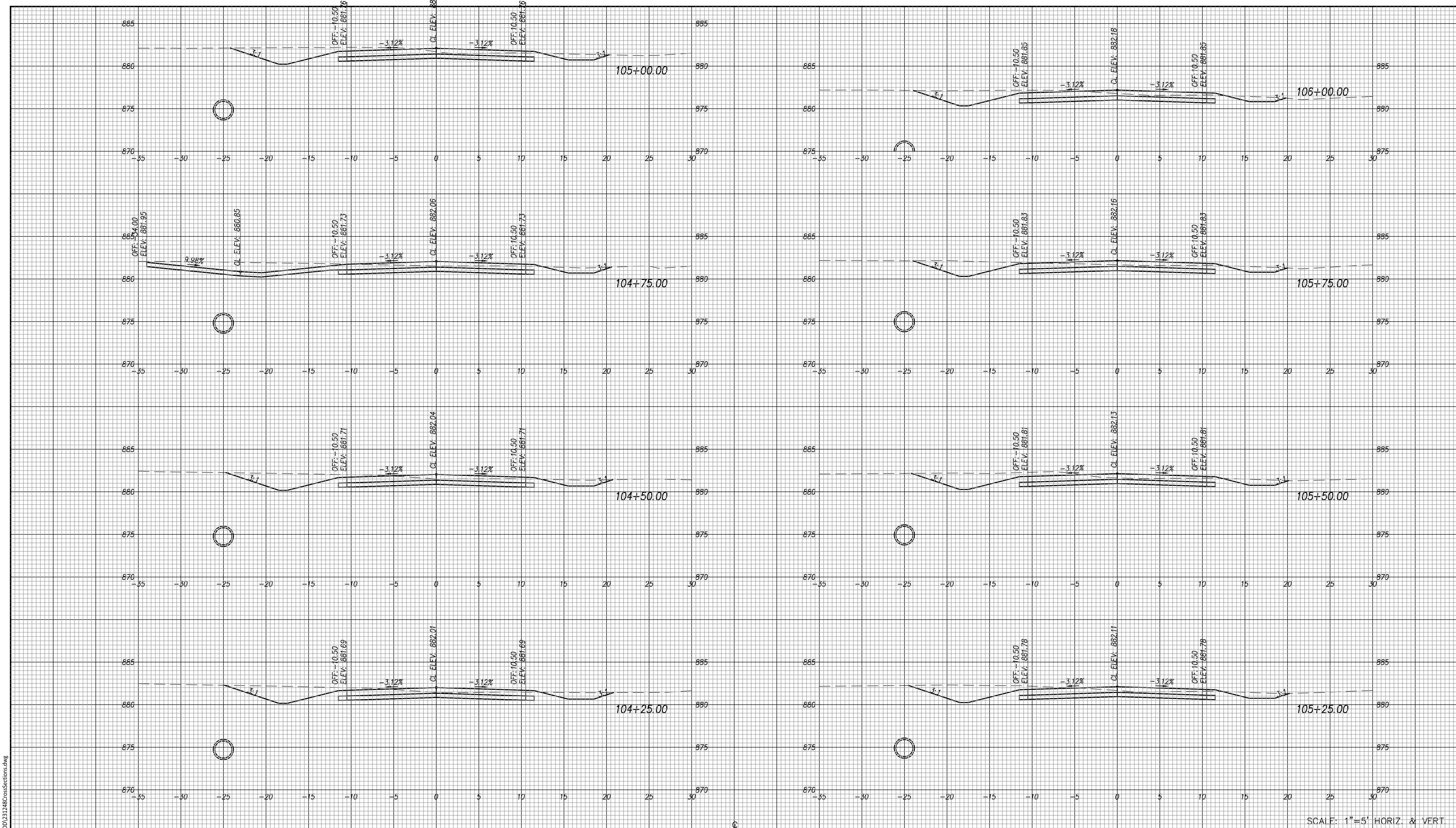
CFS
ENGINEERS
 Cook, Flatt & Strobel Engineers
 2930 SW Woodside Drive
 Topeka, Kansas 66614
 785.272.4708

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Public Works
ENGINEERING
 620 SE MADISON St. • 2nd Floor • TOPEKA, KS 66607
 Phone: (785) 368-3842 • Fax: (785) 368-3881

STREET IMPROVEMENT PROJECT
 No. T-841097.07
 NW NORRIS ST.
 FROM NW WEST ST. TO NW WESTERN AVE.

CROSS SECTIONS
 Sta. 102+25.00 to Sta. 104+00.00

DATE: Sept. 2025
 SHEET: 31 of 39
 PROJ.: 841097.07



SCALE: 1"=5' HORIZ. & VERT.

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NO.	DATE:	REVISION	BY:	APP'D
-	-	-	-	-

DRAWN BY: ATP
 APP'D BY: MJM

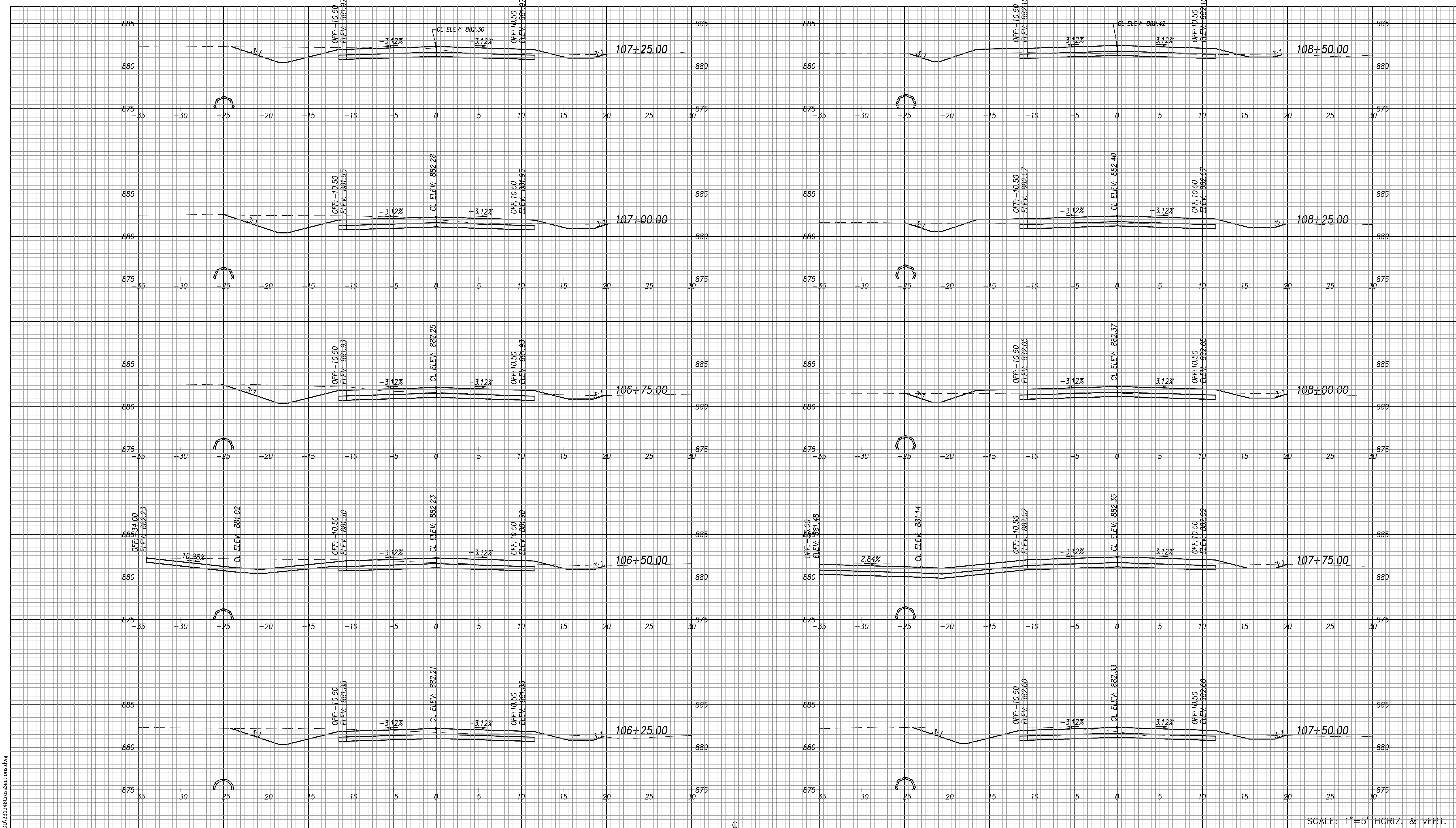
CFS
ENGINEERS
 Cook, Flatt & Strobel Engineers
 2930 SW Woodside Drive
 Topeka, Kansas 66614
 785.272.4708

TOPEKA
Public Works
ENGINEERING
 620 SE MADISON St. • 2nd Floor • TOPEKA, KS 66607
 Phone: (785) 368-3842 • Fax: (785) 368-3881

STREET IMPROVEMENT PROJECT
 No. T-841097.07
 NW NORRIS ST.
 FROM NW WEST ST. TO NW WESTERN AVE.

CROSS SECTIONS
 Sta. 104+25.00 to Sta. 106+00.00

DATE: Sept. 2025
 SHEET: 32 of 39
 PROJ.: 841097.07



SCALE: 1"=5' HORIZ. & VERT.

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NO.	DATE:	REVISION	BY:	APP'D

DRAWN BY: ATP
 APP'D BY: MJM

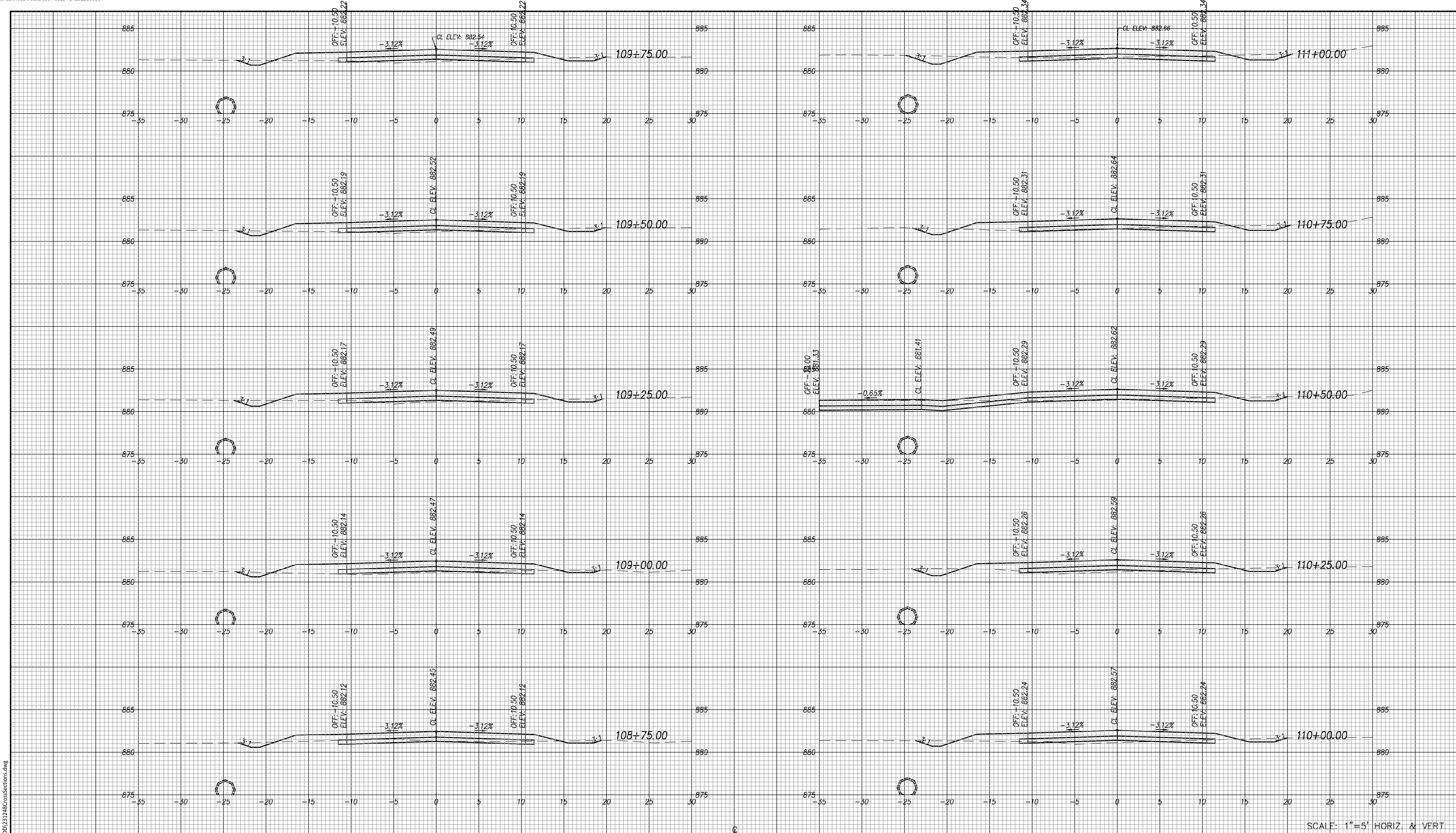
CFS
ENGINEERS
 Cook, Flatt & Strobel Engineers
 2930 SW Woodside Drive
 Topeka, Kansas 66614
 785.272.4706

TOPEKA
Public Works
ENGINEERING
 620 SE MADISON St. • 2nd Floor • TOPEKA, KS 66607
 Phone: (785) 368-3842 • Fax: (785) 368-3881

STREET IMPROVEMENT PROJECT
 No. T-841097.07
 NW NORRIS ST.
 FROM NW WEST ST. TO NW WESTERN AVE.

CROSS SECTIONS
 Sta. 106+25.00 to Sta. 108+50.00

DATE: Sept. 2025
 SHEET: 33 of 39
 PROJ.: 841097.07



SCALE: 1"=5' HORIZ. & VERT.

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NO.	DATE:	REVISION	BY:	APP'D
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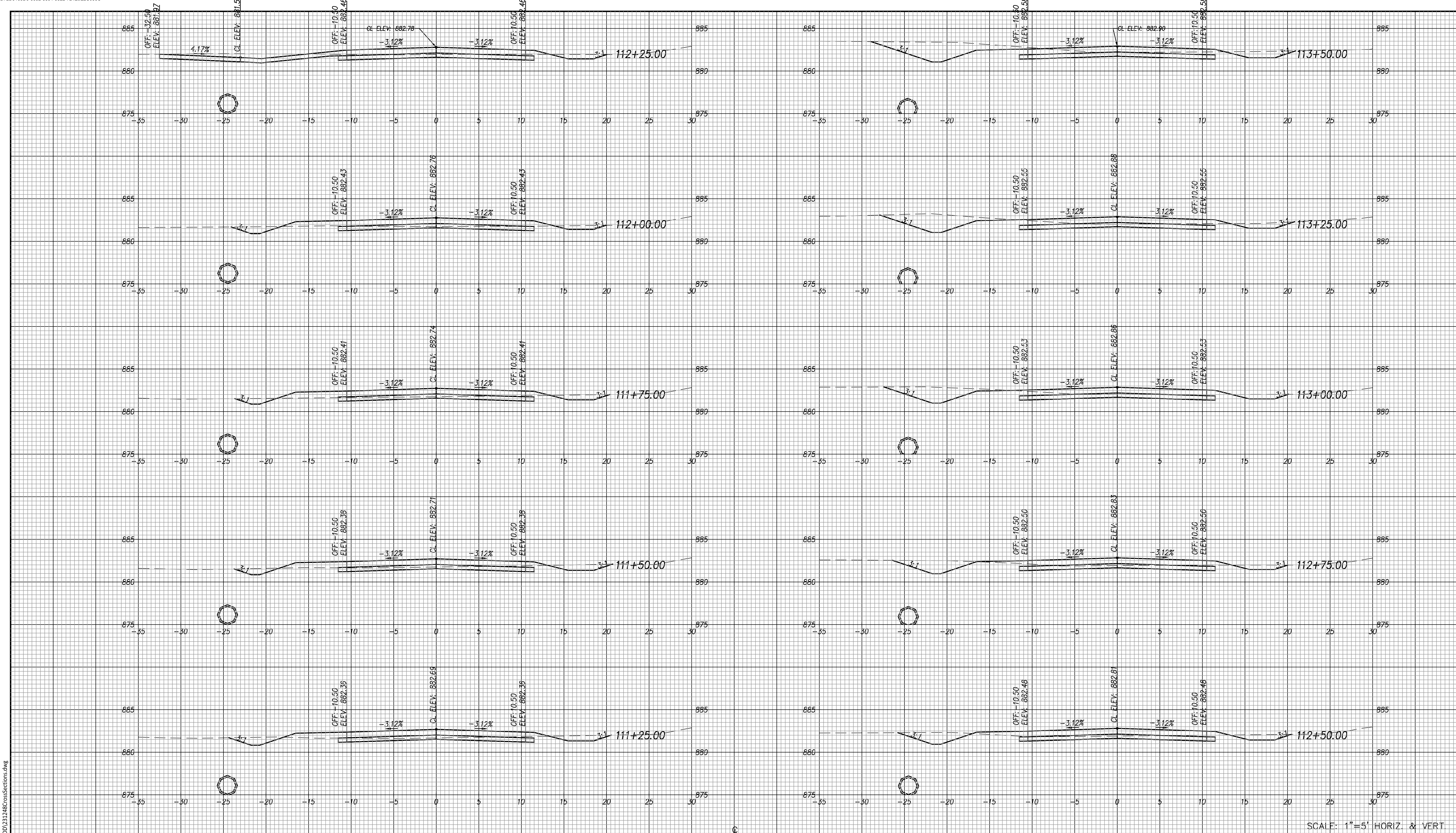
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ENGINEERS
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 2930 SW Woodside Drive
 Topeka, Kansas 66614
 785.272.4706

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Public Works
ENGINEERING
 620 SE MADISON St. • 2nd Floor • TOPEKA, KS 66607
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STREET IMPROVEMENT PROJECT
 No. T-841097.07
 NW NORRIS ST.
 FROM NW WEST ST. TO NW WESTERN AVE.

CROSS SECTIONS
 Sta. 108+75.00 to Sta. 111+00.00

DATE: Sept. 2025
 SHEET: 34 of 39
 PROJ.: 841097.07



SCALE: 1"=5' HORIZ. & VERT.

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NO.	DATE:	REVISION	BY:	APP'D

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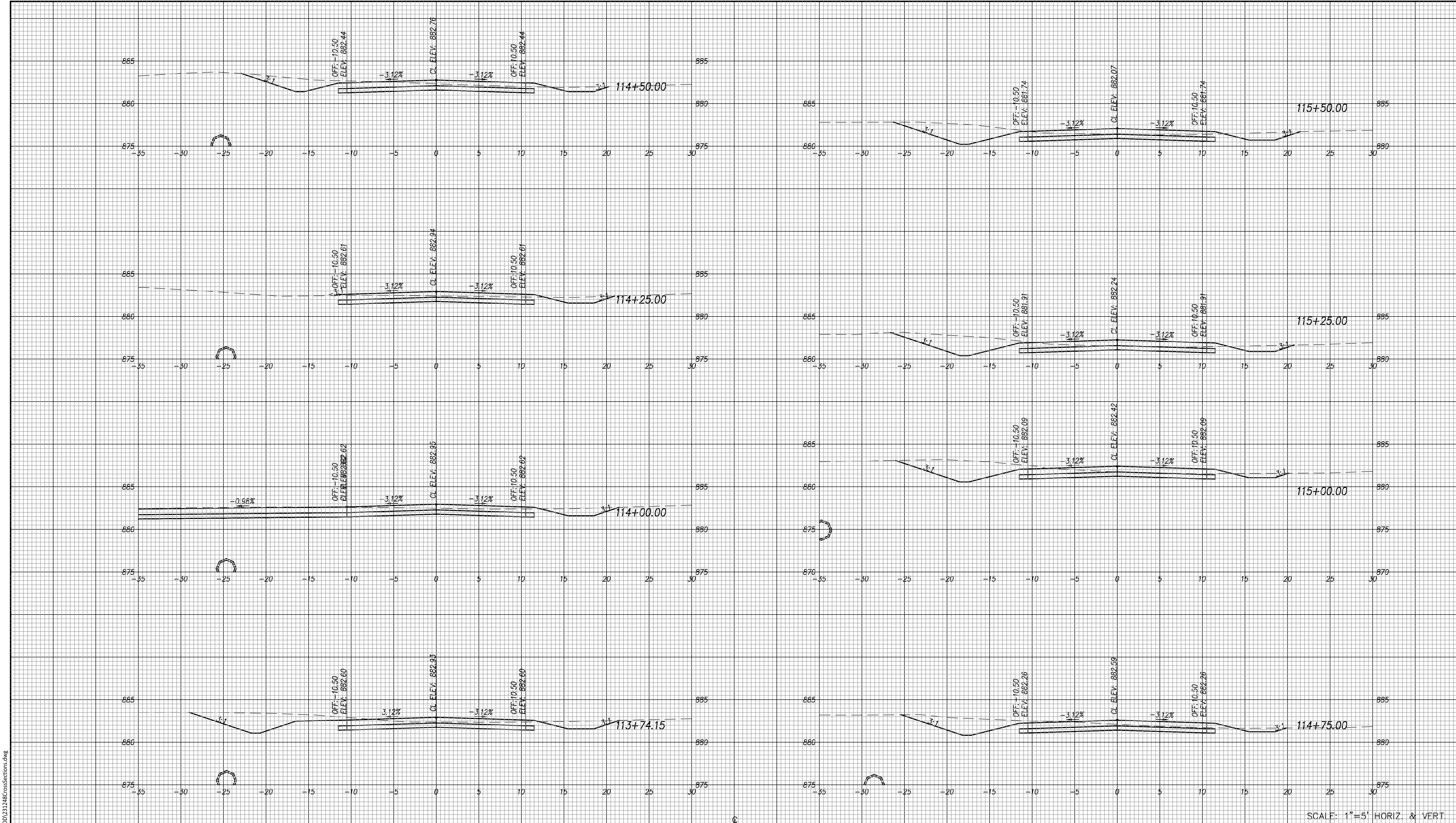
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 2930 SW Woodside Drive
 Topeka, Kansas 66614
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Public Works
ENGINEERING
 620 SE MADISON St. • 2nd Floor • TOPEKA, KS 66607
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STREET IMPROVEMENT PROJECT
 No. T-841097.07
 NW NORRIS ST.
 FROM NW WEST ST. TO NW WESTERN AVE.

CROSS SECTIONS
 Sta. 111+25.00 to Sta. 113+50.00

DATE: Sept. 2025
 SHEET: 35 of 39
 PROJ.: 841097.07



SCALE: 1"=5' HORIZ. & VERT.

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NO.	DATE:	REVISION	BY:	APP'D

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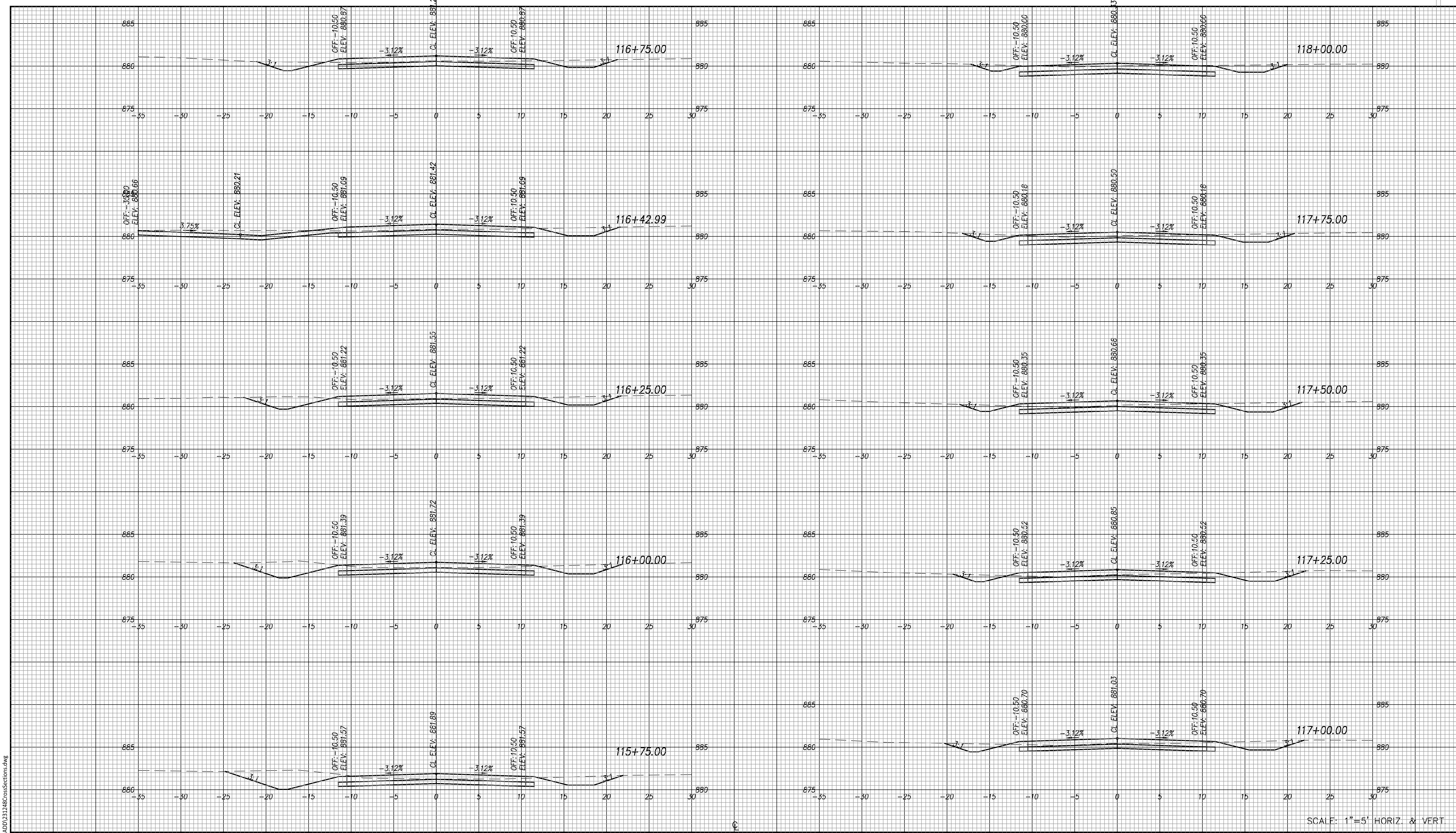
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ENGINEERS
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 Topeka, Kansas 66614
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STREET IMPROVEMENT PROJECT
 No. T-841097.07
 NW NORRIS ST.
 FROM NW WEST ST. TO NW WESTERN AVE.

CROSS SECTIONS
 Sta. 113+75.00 to Sta. 115+50.00

DATE: Sept. 2025
 SHEET: 36 of 39
 PROJ.: 841097.07



SCALE: 1"=5' HORIZ. & VERT.

NO.	DATE:	REVISION	BY:	APP'D
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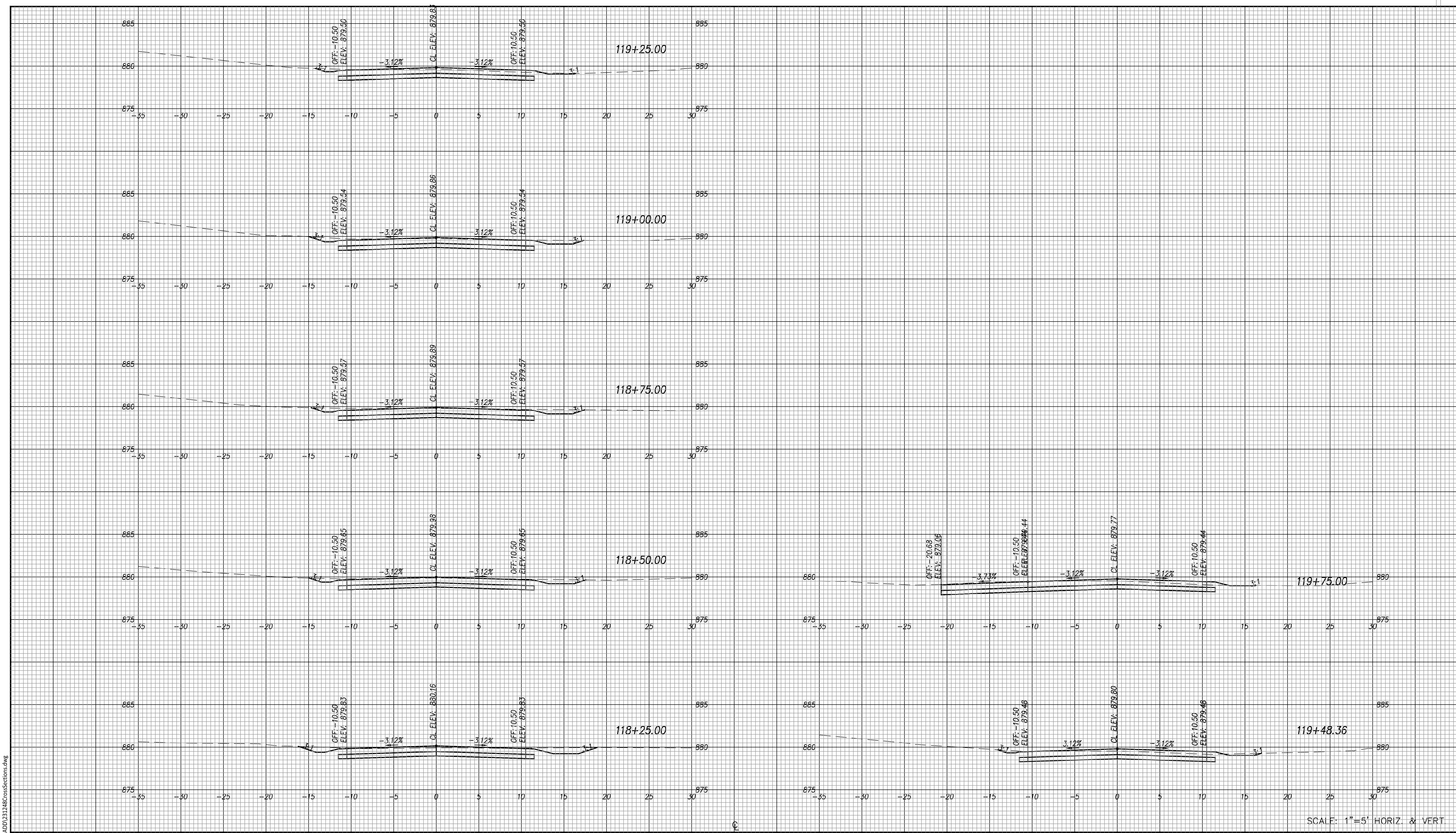
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STREET IMPROVEMENT PROJECT
 No. T-841097.07
 NW NORRIS ST.
 FROM NW WEST ST. TO NW WESTERN AVE.

CROSS SECTIONS
 Sta. 115+75.00 to Sta. 118+00.00

DATE: Sept. 2025
 SHEET: 37 of 39
 PROJ.: 841097.07

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SCALE: 1"=5' HORIZ. & VERT.

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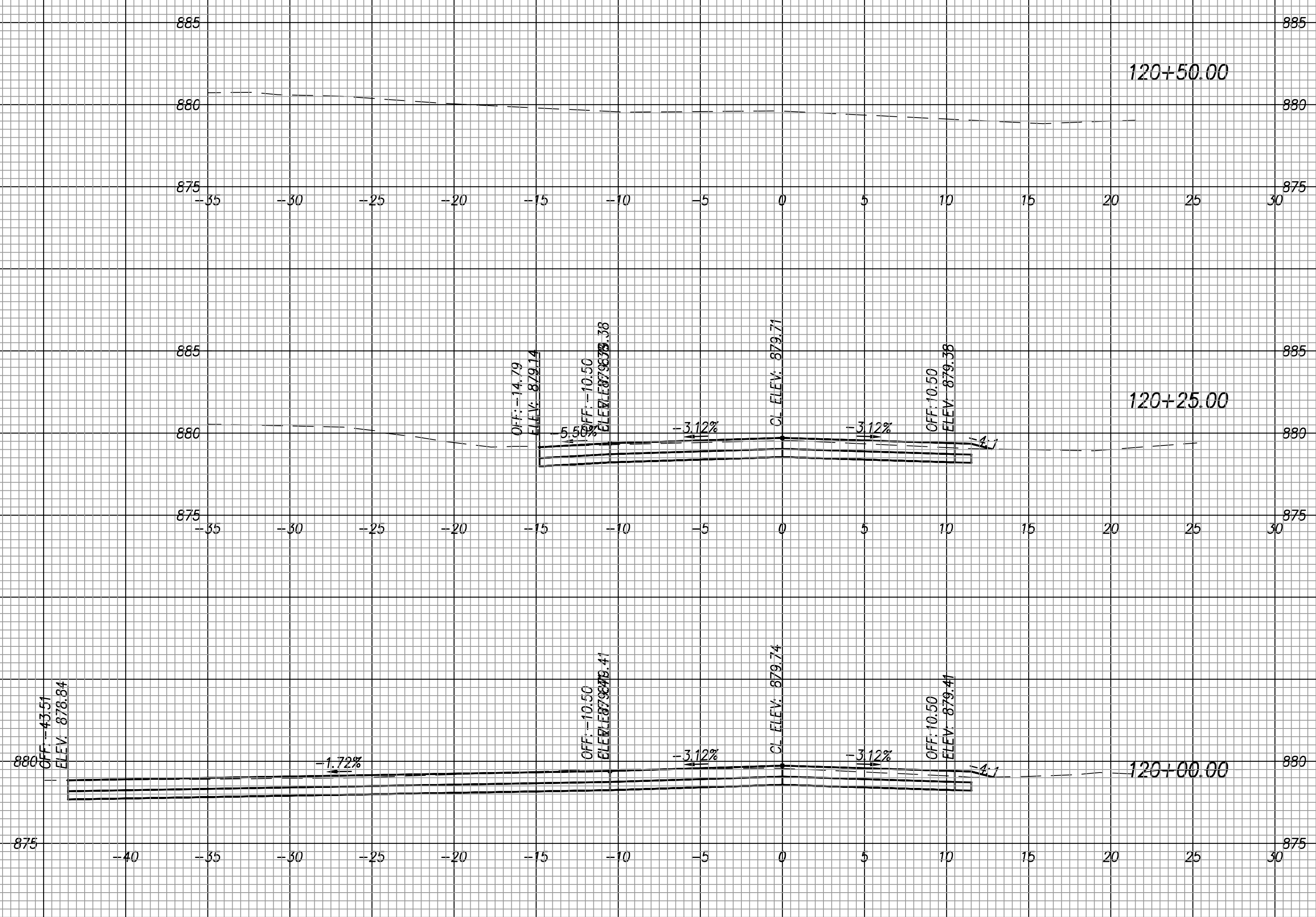
620 SE MADISON St. • 2nd Floor • TOPEKA, KS 66607
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STREET IMPROVEMENT PROJECT
No. T-841097.07
NW NORRIS ST.
FROM NW WEST ST. TO NW WESTERN AVE.

CROSS SECTIONS
Sta. 118+25.00 to Sta. 119+75.00

DATE: Sept. 2025
SHEET: 38 of 39
PROJ.: 841097.07

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SCALE: 1"=5' HORIZ. & VERT.

NO.	DATE:	REVISION	BY:	APP'D
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STREET IMPROVEMENT PROJECT
No. T-841097.07
NW NORRIS ST.
FROM NW WEST ST. TO NW WESTERN AVE.

CROSS SECTIONS
Sta. 120+00.00 to Sta. 120+50.00

DATE: Sept. 2025
SHEET: 39 of 39
PROJ.: 841097.07