

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED
REBUILD ILLINOIS FUNDING
PIATT COUNTY

BLUE RIDGE TOWNSHIP SECTION 24-02125-00-DR

LOCATION #1: TOWNSHIP ROAD 25 OVER GOOSE CREEK

LOCATION #2: TOWNSHIP ROAD 25 OVER TRIBUTARY TO GOOSE CREEK

LOCATION #3: TOWNSHIP ROAD 96 OVER TRIBUTARY TO GOOSE CREEK

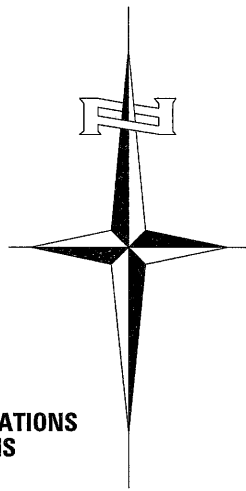
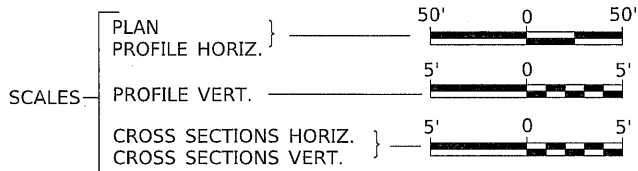
RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	24-02125-00-DR	PIATT	36	1

INDEX OF SHEETS

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HIGHWAY STANDARDS (INCLUDED IN PROPOSAL)

- 000001-08 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 001006 DECIMAL OF AN INCH AND OF A FOOT
- 280001-07 TEMPORARY EROSION CONTROL SYSTEMS
- 701901-10 TRAFFIC CONTROL DEVICES
- BLR 21-9 TYP. APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS



LOCATION #1:

CHICAP PIPELINE
CHICAGO, ILLINOIS

FRONTIER COMMUNICATIONS
BLOOMINGTON, ILLINOIS

AMEREN
COLLINSVILLE, ILLINOIS

LOCATION #2 & LOCATION #3:

FRONTIER COMMUNICATIONS
BLOOMINGTON, ILLINOIS

AMEREN
COLLINSVILLE, ILLINOIS

PROPOSED STRUCTURE
SINGLE 12'X6'X30' PRECAST CONCRETE
BOX CULVERT W/ PRECAST APRON
END SECTIONS. NO SKEW.

EXISTING STRUCTURE SN: N/A
SINGLE SPAN CONCRETE SLAB BRIDGE ON
CLOSED CONCRETE ABUTMENTS WITH
CONCRETE WINGWALLS, ~10' IN LENGTH,
NO SKEW.
(TO BE REMOVED)

LOCATION #1

NET LENGTH OF PROJECT = 150.00 FEET = 0.028 MILES

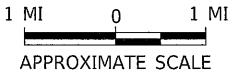
DESIGN CLASSIFICATION: MINOR COLLECTOR ROAD (NON-URBAN)
DESIGN ADT = 150 (2025)
DESIGN SPEED = 40 MPH

LOCATION #2

NET LENGTH OF PROJECT = 275.00 FEET = 0.052 MILES

DESIGN CLASSIFICATION: MINOR COLLECTOR ROAD (NON-URBAN)
DESIGN ADT = 150 (2025)
DESIGN SPEED = 40 MPH

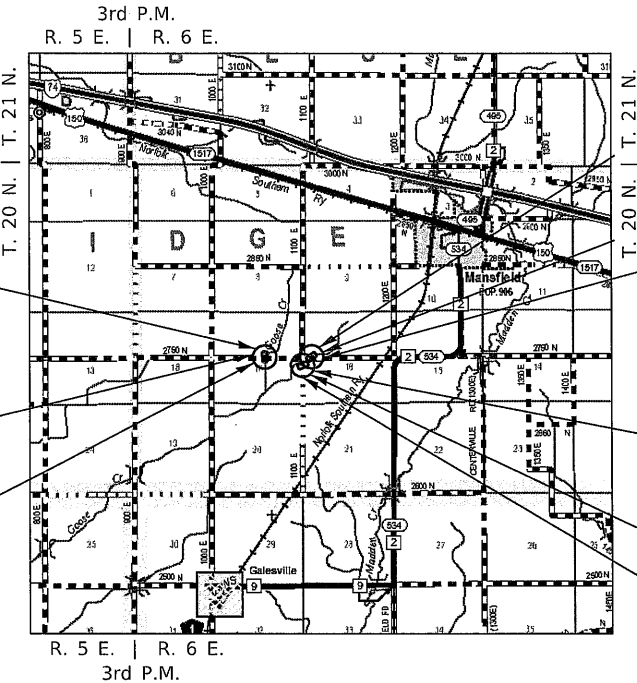
LOCATION MAP



LOCATION #3

NET LENGTH OF PROJECT = 90.00 FEET = 0.017 MILES

DESIGN CLASSIFICATION: LOCAL ROAD (NON-URBAN)
DESIGN ADT = 50 (2025)
DESIGN SPEED = NONE



PROPOSED STRUCTURE
SINGLE 10'X6'X72' PRECAST CONCRETE
BOX CULVERT W/ PRECAST TAPERED
END SECTIONS, SKEWED 55° LT. AH.

LOCATION #2

EXISTING STRUCTURE SN: N/A
SINGLE BARREL 66" CORRUGATED
METAL PIPE CULVERT, ~59'-7" IN
LENGTH, SKEWED 45° LT. AH.
(TO BE REMOVED)

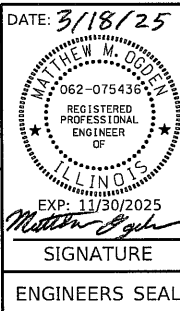
PROPOSED STRUCTURE
SINGLE 10'X6'X36' PRECAST CONCRETE
BOX CULVERT W/ PRECAST TAPERED
END SECTIONS, SKEWED 25° RT. AH.

LOCATION #3

EXISTING STRUCTURE SN: N/A
SINGLE SPAN CONCRETE THRU GIRDER/SLAB
BRIDGE ON CLOSED CONCRETE ABUTMENTS
WITH CONCRETE WINGWALLS, ~10'-0" IN
LENGTH, SKEWED 30° RT. AH.
(TO BE REMOVED)

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

CONTRACT NO.



APPROVED March 19, 2025
John Hannah
BLUE RIDGE ROAD DISTRICT
HIGHWAY COMMISSIONER

APPROVED March 19, 2025
PIATT COUNTY ENGINEER

PASSED March 20, 2025

Kensil A. Garnett
DISTRICT FIVE/ENGINEER OF
LOCAL ROADS & STREETS

Released For
Bid Based on
Limited Review March 20, 2025

Kensil A. Garnett
REGION THREE ENGINEER
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

THE REMOVAL OF EXISTING OIL & CHIP SURFACE AND GRAVEL OR CRUSHED STONE BASE COURSE WHICH MAY BE NECESSARY FOR THE CONSTRUCTION OF THE PROJECT SHALL BE REMOVED AS EARTH EXCAVATION AND NO COMPENSATION WILL BE ALLOWED FOR ADDITIONAL LABOR OR EQUIPMENT REQUIRED.

ALL WASTE OR UNDESIRABLE MATERIAL AS IDENTIFIED BY THE ENGINEER SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY AT THE CONTRACTOR'S EXPENSE.

ALL EXISTING PRIVATELY OWNED UTILITIES REQUIRING ADJUSTMENT WILL BE MADE BY THE UTILITY COMPANY INVOLVED. WHERE NO PROVISIONS HAVE BEEN MADE FOR ADJUSTMENTS ON THE PLANS, NO ADDITIONAL COMPENSATION WILL BE ALLOWED DUE TO DELAYS OR INCONVENIENCES CAUSED BY THE SAID UTILITY ADJUSTMENTS.

THE PROFILE GRADE ELEVATIONS SHOWN ON THE PLAN AND PROFILE SHEETS AND IN THE STATION CROSS SECTIONS ARE TO THE TOP OF THE FINISHED SURFACE.

ALL EXISTING DRAINAGE STRUCTURES NOT BEING REMOVED BY THE CONTRACTOR THAT ARE DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS SHALL BE INTERPRETED TO BE THE LATEST STANDARDS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION.

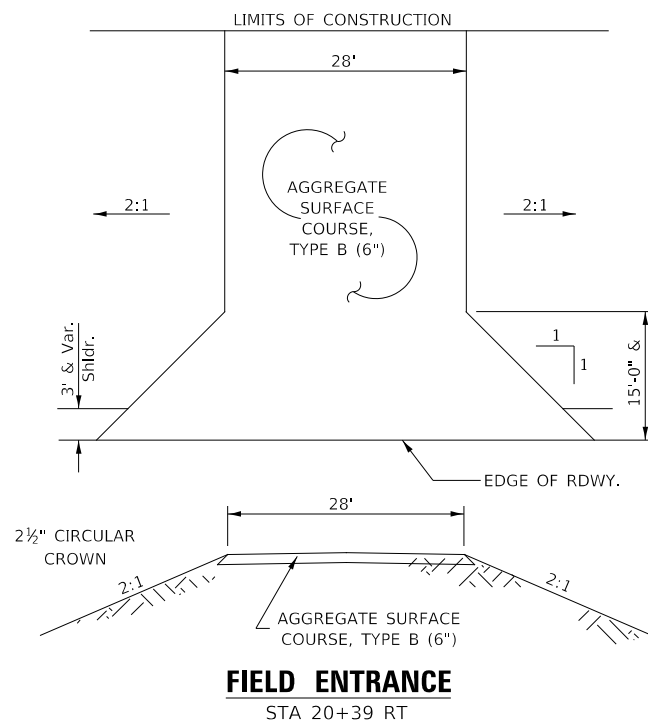
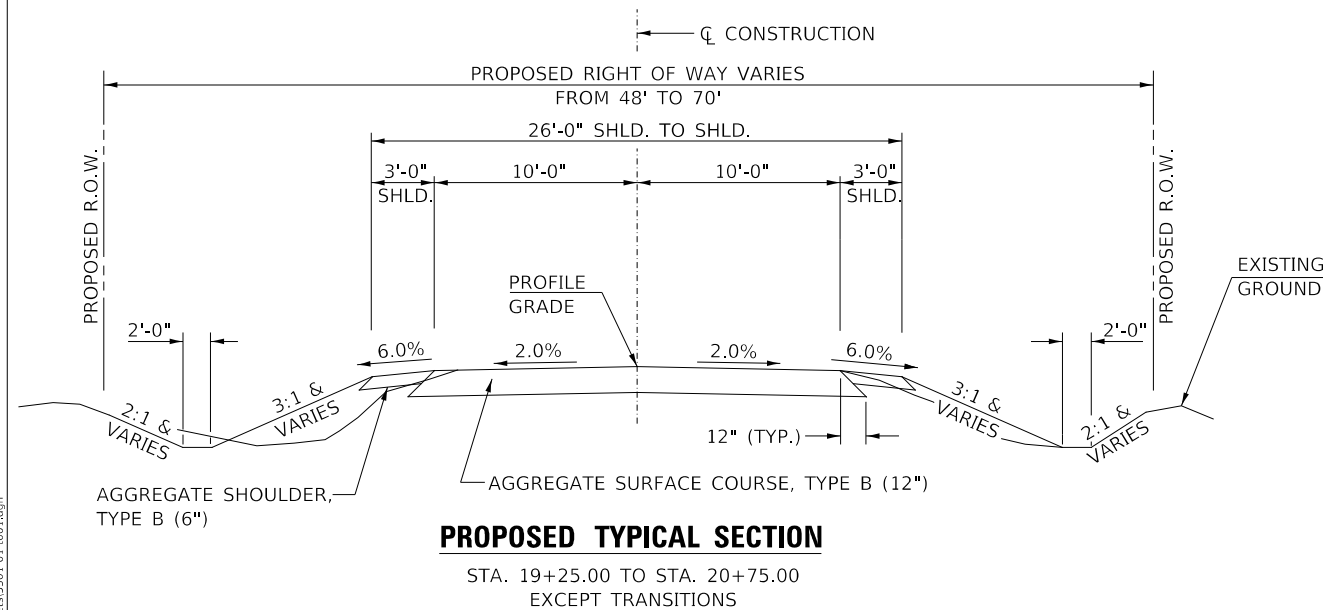
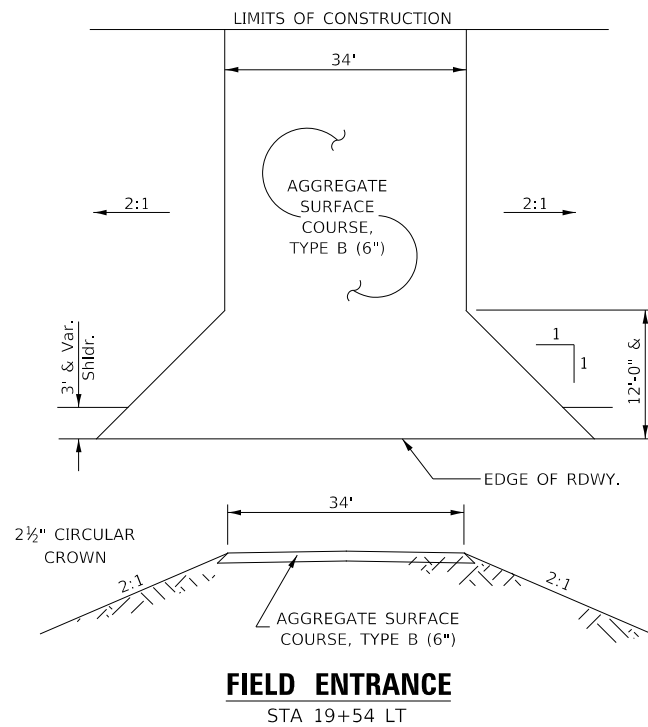
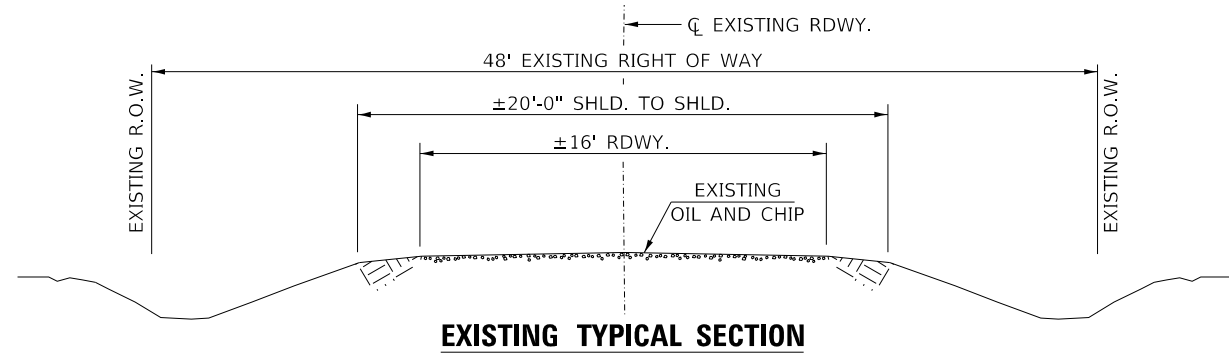
THE LOCATION OF UNDERGROUND UTILITIES SHOWN ON THE PLANS REPRESENTS THE BEST KNOWLEDGE OF THE COUNTY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS OF UNDERGROUND INSTALLATIONS BEFORE STARTING CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL INDEMNIFY THE COUNTY, ITS OFFICERS AND EMPLOYEES AGAINST ALL CLAIMS DUE TO DAMAGE TO CORPORATE OR PRIVATE PROPERTY RESULTING FROM HIS CONSTRUCTION OPERATIONS AS DESCRIBED IN ARTICLES 107.20 AND 107.26 OF THE STANDARD SPECIFICATIONS.

THE CONTRACTOR MAY BE REQUIRED TO CONDUCT SOME OF HIS GRADING AND TRENCHING OPERATIONS AROUND TRANSMISSION POLES AND UNDER TRANSMISSION LINES. THE ADDED COST OF SO DOING SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND PRESERVE PROPERTY MARKERS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR, OR AGENT, HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

THE FINAL SURFACE OF ALL DISTURBED/EMBANKMENT AREAS SHALL BE SEEDDED. THE TOP 4 INCHES OF THE SEEDED AREAS SHALL BE COHESIVE VEGETATION SUSTAINING SOIL SUBJECT TO THE APPROVAL OF THE ENGINEER. THE COST OF SHAPING THE SLOPES AND PROVIDING VEGETATION SUSTAINING SOIL WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION. TOPSOIL MAY BE STRIPPED AND STOCKPILED FROM THE SITE OR HAULED IN FROM AN ALTERNATE LOCATION AS APPROVED BY THE ENGINEER.

ALL ELEVATIONS SHOWN REFER TO U.S.G.S. MEAN SEA LEVEL DATUM.



USER NAME = jjoshi	DESIGNED - JJ	REVISED -
	DRAWN - JJ	REVISED -
PLOT SCALE = 5/8"=1'-0"	CHECKED - YP/MMO	REVISED -
PLOT DATE = 1/15/2025	DATE - 12/31/2024	REVISED -

**PIATT COUNTY
TOWNSHIP ROAD 25
OVER GOOSE CREEK**

GENERAL NOTES, TYPICAL SECTIONS, DETAILS – LOCATION #1

SCALE: NONE	SHEET 1 OF 1 SHEETS	STA. 19+25.00 TO STA. 20+75.00
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RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
TR 25	24-02125-00-DR		PIATT	36	2
		ILLINOIS			

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FILE NAME: V:\5301-1 - Location A - TR 25 Culvert over Goose Creek (Platt)\8 - CADD\2 - CADD Sheets\5301-01-r001.dgn

MODEL: Default
FILE NAME: W35301-1 - Location A - TR 25 Culvert over Goose Creek (Platt)8 - CADD02 - CADD Sheets(5301-0)-q001.dgn

SUMMARY OF QUANTITIES			
CODE NO.	ITEM	UNIT	QUANTITY
20200100	EARTH EXCAVATION	CU YD	280
① 20700220	POROUS GRANULAR EMBANKMENT	CU YD	130
28000305	TEMPORARY DITCH CHECKS	FOOT	48
28000400	PERIMETER EROSION BARRIER	FOOT	115
28000500	INLET AND PIPE PROTECTION	EACH	2
① 28100807	STONE DUMPED RIPRAP, CLASS A4	TON	60
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	258
48101200	AGGREGATE SHOULDERS, TYPE B	TON	26
① 50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50105220	PIPE CULVERT REMOVAL	FOOT	118
50200450	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR STRUCTURES	CU YD	20
54001001	BOX CULVERT END SECTIONS, CULVERT NO. 1	EACH	2
54011206	PRECAST CONCRETE BOX CULVERTS 12' X 6'	FOOT	30
542D0217	PIPE CULVERTS, CLASS D, TYPE 1 12"	FOOT	52
542D0223	PIPE CULVERTS, CLASS D, TYPE 1 18"	FOOT	56
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	55
① X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.1
① X5810103	MEMBRANE WATERPROOFING SYSTEM FOR BURIED STRUCTURES	SQ YD	55
① X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	0.33
① XX009301	FIELD TILE ADJUSTMENT	FOOT	100

① SEE SPECIAL PROVISIONS

40200800 - AGGREGATE SURFACE COURSE, TYPE B 140#/CF					
STATION TO STATION		THICKNESS	WIDTH	LENGTH	TON
19+25.00	19+75.00	1.00'	19.19' AVG.	50.00'	67
19+75.00	20+25.00	1.00'	21.00'	50.00'	74
20+25.00	20+75.00	1.00'	19.19' AVG.	50.00'	67
ENTR. - 19+54.00 LT		0.50'	34' & VAR.	20.00' & VAR.	26
ENTR. - 20+39.00 RT		0.50'	28' & VAR.	20.00' & VAR.	24
TOTAL					258

EARTHWORK SUMMARY			
STATION TO STATION	EARTH EXCAVATION	FILL	WASTE (SHORTAGE)
	CU YD		
19+00.00 - 19+93.00	156	17	100
FILL OVER CULVERT	-	20	(20)
20+07.00 - 20+75.00	124	9	84
TOTAL	280	46	164
USE	280	-	165

(@ 25% SHRINKAGE)

50105220 - PIPE CULVERT REMOVAL			
℄ STATION	SIZE	SIDE	FOOT
19+56	14"X20"	LEFT	77
20+37	12"	RIGHT	41
TOTAL			118

28000400 - PERIMETER EROSION BARRIER			
STATION TO STATION		SIDE	FOOT
19+25	19+80	LEFT	60
20+15	20+66	RIGHT	55
TOTAL			115

28000500 - INLET AND PIPE PROTECTION		
℄ STATION	SIDE	EACH
19+25	LEFT	1
20+66	RIGHT	1
TOTAL		2

542D0223 - PIPE CULVERTS, CLASS D, TYPE 1 18"		
℄ STATION	SIDE	FOOT
19+53	LEFT	56
TOTAL		56

542D0217 - PIPE CULVERTS, CLASS D, TYPE 1 12"		
℄ STATION	SIDE	FOOT
20+40	RIGHT	52
TOTAL		52

28000305 - TEMPORARY DITCH CHECKS		
STATION	SIDE	FOOT
19+85	LEFT	12
19+85	RIGHT	12
20+15	LEFT	12
20+15	RIGHT	12
TOTAL		48

48101200 - AGGREGATE SHOULDERS, TYPE B 140#/CF					
STATION TO STATION		SIDE	WIDTH	LENGTH	TON
19+25.00	19+75.00	LT	2.04' AVG.	50.00'	4
19+25.00	19+75.00	RT	2.23' AVG.	50.00'	4
19+75.00	20+25.00	LT	3.00'	50.00'	5
19+75.00	20+25.00	RT	3.00'	50.00'	5
20+25.00	20+75.00	LT	2.37' AVG.	50.00'	4
20+25.00	20+75.00	RT	2.20' AVG.	50.00'	4
TOTAL					26

	USER NAME = jjoshi	DESIGNED - JJ	REVISED - _____	PIATT COUNTY TOWNSHIP ROAD 25 OVER GOOSE CREEK	SUMMARY OF QUANTITIES, SCHEDULES OF QUANTITIES – LOCATION #1		RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - JJ	REVISED - _____				TR 25	24-02125-00-DR	PIATT	36	3
	PLOT SCALE = \$SCALE\$	CHECKED - YP/MMO	REVISED - _____								
	PLOT DATE = 1/15/2025	DATE - 11/12/2024	REVISED - _____				SCALE: NONE	SHEET 1 OF 1 SHEETS	STA. 19+25.00 TO STA. 20+75.00	ILLINOIS	

MODEL: Default
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USER NAME = jjoshi	DESIGNED - JJ	REVISED - _____
DRAWN - JJ	REVISED - _____	
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PLOT DATE = 1/15/2025	DATE - 12/31/2024	REVISED - _____

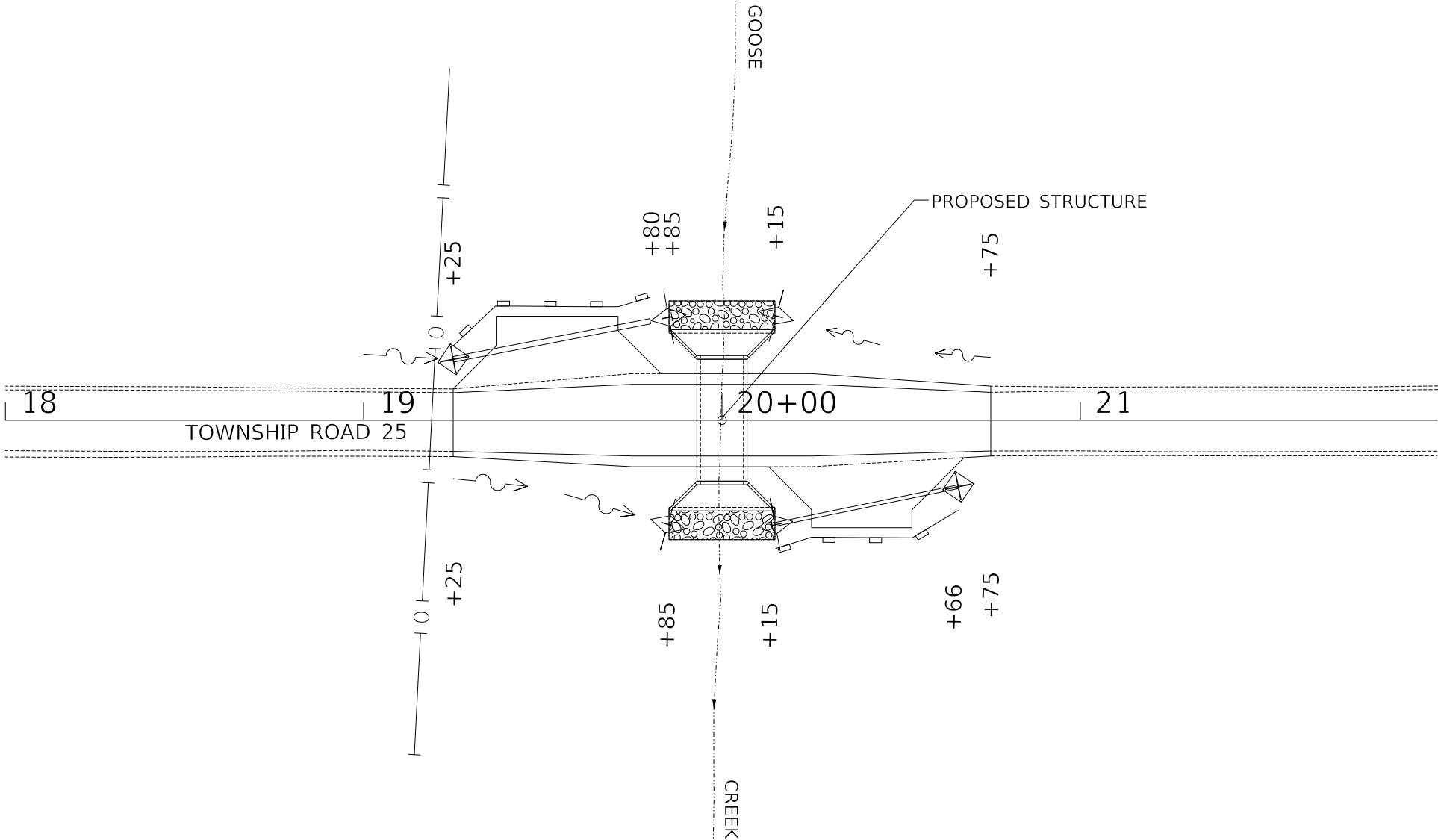
PIATT COUNTY
TOWNSHIP ROAD 25
OVER GOOSE CREEK

TRAFFIC CONTROL PLAN – LOCATION #1

SCALE: NONE SHEET 1 OF 1 SHEETS STA. 19+25.00 TO STA. 20+75.00

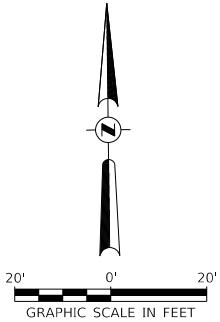
RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 25	24-02125-00-DR	PIATT	36	4
ILLINOIS				

T 20 N, R 6 E, 3rd PM
SECTION 17



LEGEND

- PERIMETER EROSION BARRIER
- TEMPORARY DITCH CHECK
- SPECIAL DITCH - FLOW LINE AND DIRECTION
- INLET & PIPE PROTECTION
- PROPOSED RIPRAP PLACEMENT
- BP HIGH PRESSURE PETROLEUM PIPELINE



T 20 N, R 6 E, 3rd PM
SECTION 17

PIATT COUNTY
TOWNSHIP ROAD 25
OVER GOOSE CREEK

EROSION CONTROL PLAN - LOCATION #1

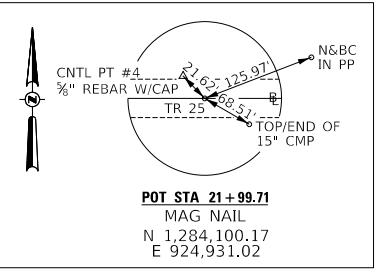
RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 25	24-02125-00-DR	PIATT	36	5





SCALE: 1"=20' SHEET 1 OF 1 SHEETS STA. 19+25.00 TO STA. 20+75.00

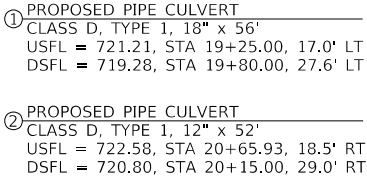
ILLINOIS

USER NAME = jjoshi	DESIGNED - JJ	REVISED - _____
	DRAWN - JJ	REVISED - _____
PLOT SCALE = \$SCALE\$	CHECKED - YP/MMO	REVISED - _____
PLOT DATE = 1/15/2025	DATE - 1/2/2025	REVISED - _____

PROFILE	SURVEYED _____	BY _____	DATE _____
	PLOTTED _____		
NOTE BOOK _____	GRADES CHECKED _____		
	R.M. NOTED _____		
NO. _____	STRUCTURE NOT AT'NS CHKD _____		

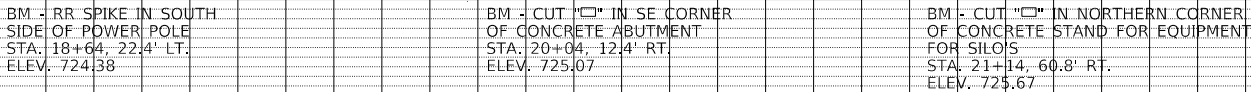
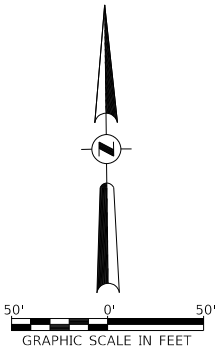


	TRANSITION TO OR FROM EXISTING TO PROPOSED TYPICAL PAVEMENT
	PROPOSED RIPRAP PLACEMENT
	SPECIAL DITCH WITH FLOW DIRECTION
	BP HIGH PRESSURE PETROLEUM PIPELINE



③ TWO FIELD TILES:
FIELD TILE - 12" DIAMETER
FIELD TILE - SIZE UNKNOWN

④ FIELD TILE - 8" DIAMETER



**PIATT COUNTY
TOWNSHIP ROAD 25
OVER GOOSE CREEK**

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 25	24-02125-00-DR	PIATT	36	6
	ILLINOIS			

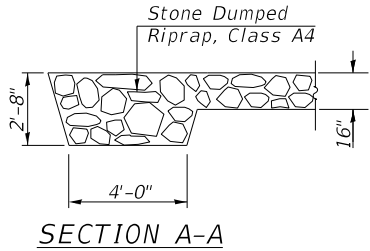
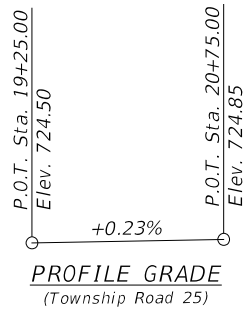
B.M.: RR Spike in Power Pole
Sta. 18+64, 22.4' Lt.
Elev. 724.38

Cut "□" in Northern Corner of Concrete
Stand for Equipment for Silo's
Sta. 21+14, 60.8' Rt.
Elev. 725.67

Existing Structure:
Single span concrete slab bridge on closed
concrete abutments with concrete wingwalls.
The bridge has no skew and is approximately
10 feet in length.

Salvage: No Salvage.

Road to be closed to traffic
during construction.



DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications,
9th Edition

LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES

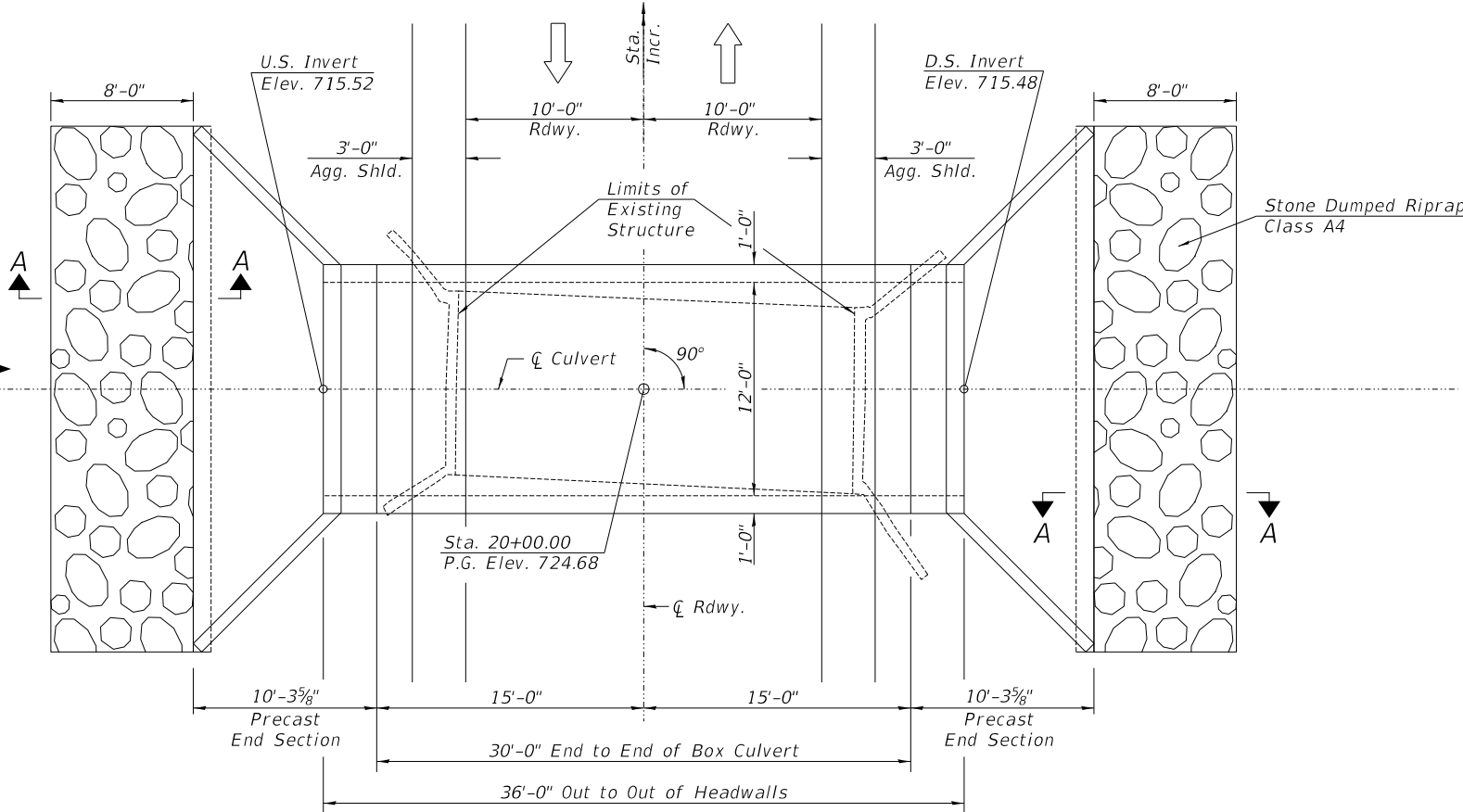
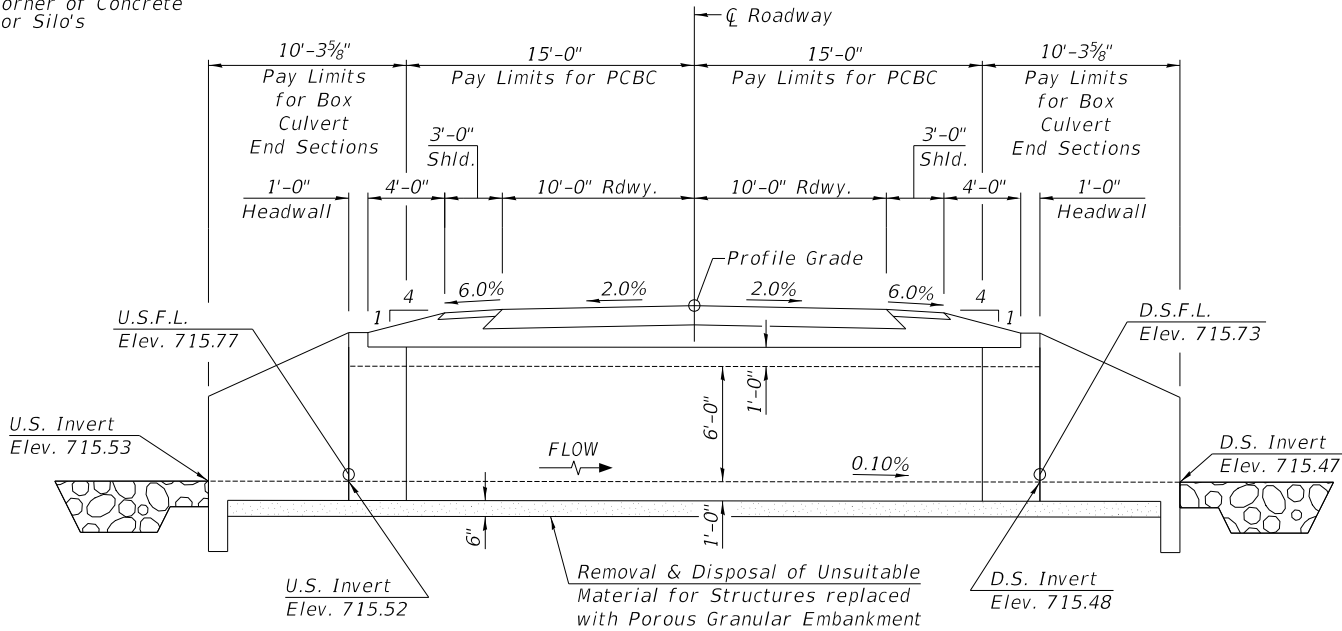
(PRECAST UNITS)

$f'_c = 5,000$ p.s.i.

$f_y = 65,000$ p.s.i. (Welded Wire Rein.)

(FIELD UNITS)

$f'_c = 3,500$ p.s.i.



GENERAL NOTES

The design fill heights for this box are 2.19 ft max. and 1.76 ft min. The precast box culvert sections shall conform to the requirements of ASTM C 1577.

Layout of stone riprap may be varied in the field to suit ground conditions as directed by the Engineer.

The required depth of removal and replacement of unsuitable materials may be adjusted by the Engineer to account for variable subsurface conditions.

Membrane Waterproofing System for Buried Structures shall be applied to the top surface of the top slab and shall extend down the sidewall a minimum of 1 foot below the top of the precast box culvert.

All excavation required for removal of the existing structure or construction of the culvert as shown in these plans and in accordance with the Standard Specifications shall be included in the cost of Precast Concrete Box Culverts 12' x 6'.

Stone Dumped Riprap, Class A4 has an application rate of 115 lb/cu ft.

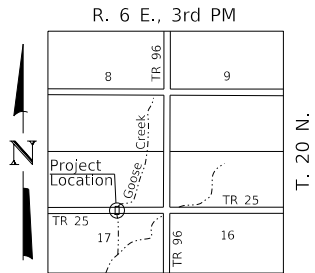
The 6 in. thick layer of porous granular embankment required for the precast concrete box culvert per Art. 540.06 of the Standard Specifications shall also apply to the end sections.

Drain holes shall be provided on exterior culvert walls for each precast box segment with a clear rise greater than 3 ft. The drain hole shall be located within 1/3 of the clear rise of the box culvert, shall not intercept the haunch, and shall conform to the requirements of Article 503.11 of the Standard Specification.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Removal & Disposal of Unsuitable Material for Structures	CU YD	20
① Porous Granular Embankment	CU YD	130
① Stone Dumped Riprap, Class A4	TON	60
① Removal of Existing Structures	EACH	1
Box Culvert End Sections, Culvert No. 1	EACH	2
Geocomposite Wall Drain	SQ YD	55
Precast Concrete Box Culverts 12' x 6'	FOOT	30
① Membrane Waterproofing System for Buried Structures	SQ YD	55

① See Special Provisions



USER NAME = jloshi	DESIGNED - JJ	REVISED - _____
	DRAWN - JJ	REVISED - _____
PLOT SCALE = \$SCALE\$	CHECKED - YP/MMO	REVISED - _____
PLOT DATE = 1/15/2025	DATE - 11/11/2024	REVISED - _____

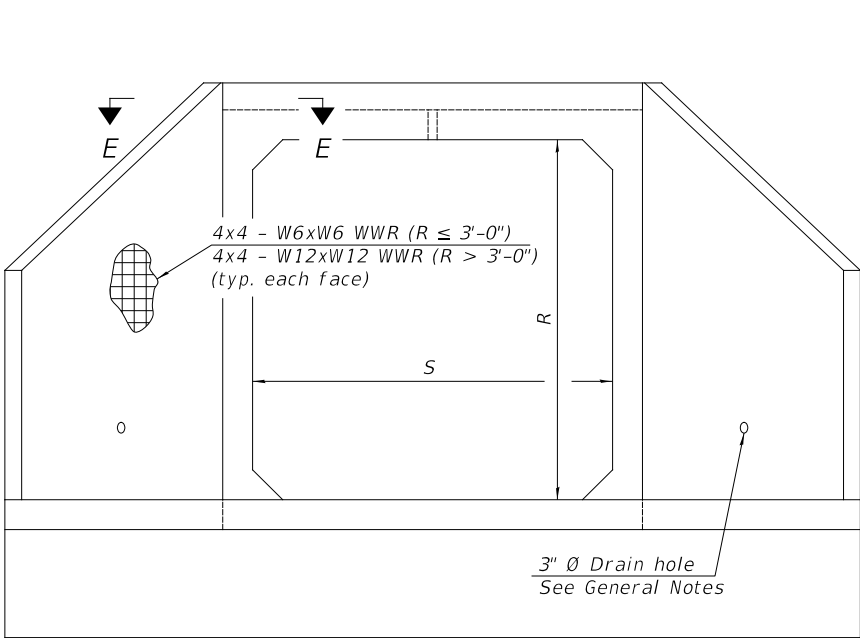
PIATT COUNTY
TOWNSHIP ROAD 25
OVER GOOSE CREEK

PRECAST CONCRETE BOX CULVERT AND DETAILS - LOCATION #1

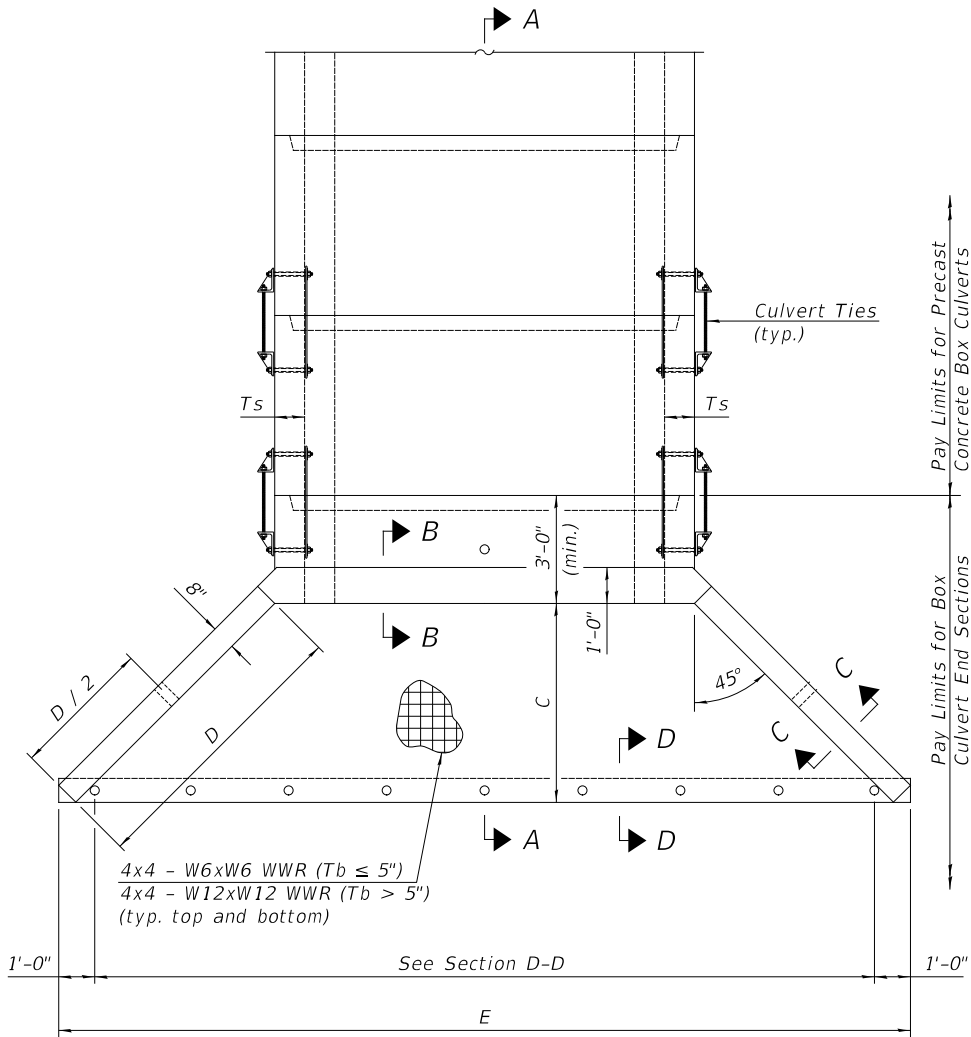
SCALE: NONE SHEET 1 OF 4 SHEETS

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 25	24-02125-00-DR	PIATT	36	7

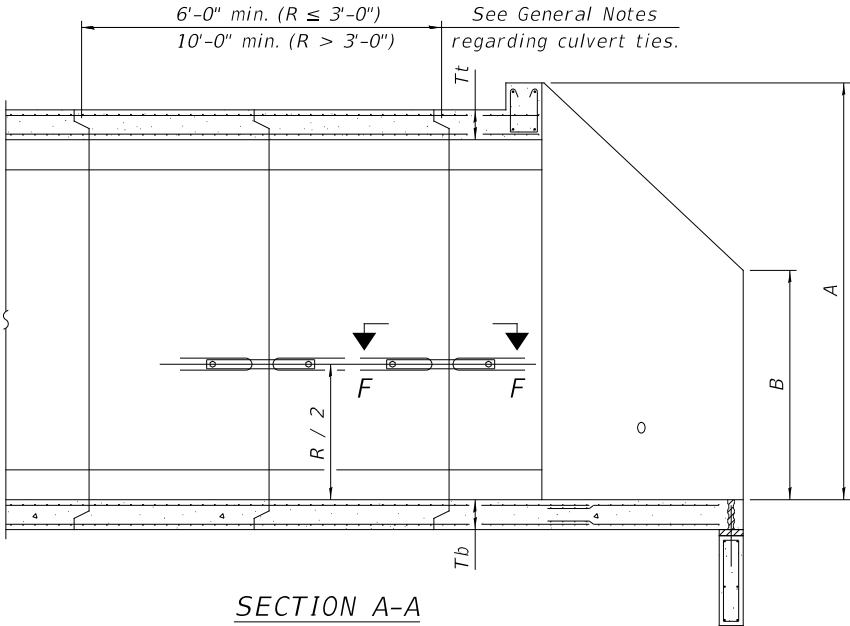
ILLINOIS



END VIEW



PLAN



SECTION A-A

GENERAL NOTES

Box Culvert End Sections shall be constructed according to the requirements of Section 540 of the Standard Specifications except as modified herein. End sections will be paid for at the contract unit price per each for Box Culvert End Sections.

The Contractor may furnish the end section as a single precast concrete piece or construct the end section in the field using cast-in-place (CIP) construction. For CIP construction, the bottom slab thickness shall be increased by 2" and the clear cover to the bottom mat of reinforcement shall be increased to 3".

Box section dimensions, materials, and reinforcement details for Box Culvert End Sections shall be according to the requirements for ASTM C 1577 as required for the design of the portion of the culvert within the limits of Precast Concrete Box Culverts except as modified herein.

The number of culvert ties shall be sufficient to engage the minimum length of culvert barrel shown within the pay limits for Precast Concrete Box Culverts and will be dependent upon the length of box culvert segments furnished by the Contractor. Culvert ties are not required for box culverts having a rise (R) less than or equal to 3 ft and a span (S) greater than or equal to 10 ft.

All costs associated with furnishing and installing or constructing the toewall and culvert ties will not be measured for payment but shall be included in the unit price for Box Culvert End Sections of the culvert number specified.

Shop drawings that detail slab thickness and reinforcement layout for the Box Culvert End Sections shall be provided to the Engineer for review and approval. Reinforcement bars not detailed herein shall be detailed with a clear distance at the end of the reinforcement not less than 1/2" nor more than 2". For the precast option, it shall be the Contractor's responsibility for determining a method of handling and a construction procedure shall be included on the shop drawings. The Contractor shall determine and detail in the shop drawings any necessary strengthening or stiffening provisions necessary to handle the precast segment. Any required modifications shall be at no extra charge.

The Contractor may use reinforcement bars in lieu of welded wire reinforcement (WWR). Reinforcement bars shall be limited to the sizes of #3 through #5 bars, a maximum spacing of the lesser of 8" or the member thickness, and shall result in an area of reinforcement equal to or greater than that provided by the WWR. Minimum lap lengths detailed herein are applicable to WWR and reinforcement bars.

Reinforcement (circumferential and longitudinal) in the culvert barrel portion of the end section being lapped with reinforcement from the wingwalls or bottom slab of the end section shall not be less than that required by ASTM C 1577 for the design fill height or the reinforcement detailed for the end section, whichever is greater.

One drain hole shall be provided in each wingwall for end sections of box culverts having an opening with a clear rise greater than 3 ft. The drain hole shall be located within the lower 1/3 of the clear rise of the box culvert and shall conform to the requirements of Article 503.11 of the Standard Specifications.

APRON END SECTION DIMENSIONS

Span (S)	Rise (R)	Tt	Tb	Ts	A	B	C	D	E	Concrete Cu. Yd.	Culvert Ties Required
3'-0"	2'-0"	7"	6"	4"	3'-4"	2'-2"	2'-10 ⁵ / ₈ "	4'-1"	10'-4 ⁵ / ₈ "	2.8	Yes
3'-0"	2'-0"	4"	4"	4"	3'-1"	2'-1"	2'-7 ⁷ / ₈ "	3'-9"	9'-11"	2.3	Yes
3'-0"	3'-0"	7"	6"	4"	4'-4"	2'-8"	3'-10 ⁵ / ₈ "	5'-6"	12'-4 ⁵ / ₈ "	3.7	Yes
3'-0"	3'-0"	4"	4"	4"	4'-1"	2'-7"	3'-7 ⁷ / ₈ "	5'-2"	11'-11"	3.1	Yes
4'-0"	2'-0"	7.5"	6"	5"	3'-4 ¹ / ₂ "	2'-2 ¹ / ₂ "	2'-11 ³ / ₈ "	4'-2"	11'-8"	3.3	Yes
4'-0"	2'-0"	5"	5"	5"	3'-2"	2'-1"	2'-8 ¹ / ₂ "	3'-10"	11'-2 ³ / ₈ "	2.8	Yes
4'-0"	3'-0"	7.5"	6"	5"	4'-4 ¹ / ₂ "	2'-8 ¹ / ₂ "	3'-11 ³ / ₈ "	5'-7"	13'-8 ¹ / ₈ "	4.2	Yes
4'-0"	3'-0"	5"	5"	5"	4'-2"	2'-7"	3'-8 ¹ / ₂ "	5'-3"	13'-2 ³ / ₈ "	3.7	Yes
4'-0"	4'-0"	7.5"	6"	5"	5'-4 ¹ / ₂ "	3'-2 ¹ / ₂ "	4'-11 ³ / ₈ "	7'-0"	15'-8 ¹ / ₈ "	5.3	Yes
4'-0"	4'-0"	5"	5"	5"	5'-2"	3'-1"	4'-8 ⁵ / ₈ "	6'-8"	15'-2 ¹ / ₂ "	4.7	Yes
5'-0"	2'-0"	8"	7"	6"	3'-5"	2'-3"	2'-11 ³ / ₈ "	4'-2"	12'-10"	3.9	Yes
5'-0"	2'-0"	6"	6"	6"	3'-3"	2'-2"	2'-10"	4'-0"	12'-7 ¹ / ₄ "	3.5	Yes
5'-0"	3'-0"	8"	7"	6"	4'-5"	2'-9"	3'-11 ³ / ₈ "	5'-7"	14'-10 ¹ / ₈ "	4.9	Yes
5'-0"	3'-0"	6"	6"	6"	4'-3"	2'-8"	3'-10"	5'-5"	14'-7 ¹ / ₄ "	4.5	Yes
5'-0"	4'-0"	8"	7"	6"	5'-5"	3'-3"	4'-11 ³ / ₈ "	7'-0"	16'-10 ¹ / ₈ "	6.1	Yes
5'-0"	4'-0"	6"	6"	6"	5'-3"	3'-2"	4'-9 ¹ / ₄ "	6'-9"	16'-5 ¹ / ₈ "	5.5	Yes
5'-0"	5'-0"	8"	7"	6"	6'-5"	3'-9"	5'-11 ³ / ₈ "	8'-5"	18'-10 ¹ / ₈ "	7.4	Yes
5'-0"	5'-0"	6"	6"	6"	6'-3"	3'-8"	5'-9 ¹ / ₄ "	8'-2"	18'-5 ⁷ / ₈ "	6.8	Yes
6'-0"	2'-0"	8"	7"	7"	3'-5"	2'-3"	2'-11 ³ / ₈ "	4'-2"	14'-0"	4.3	Yes
6'-0"	2'-0"	7"	7"	7"	3'-4"	2'-2"	2'-10 ⁵ / ₈ "	4'-1"	13'-10 ⁵ / ₈ "	4.2	Yes
6'-0"	3'-0"	8"	7"	7"	4'-5"	2'-9"	3'-11 ³ / ₈ "	5'-7"	16'-0 ¹ / ₈ "	5.4	Yes
6'-0"	3'-0"	7"	7"	7"	4'-4"	2'-8"	3'-10 ⁵ / ₈ "	5'-6"	15'-10 ⁵ / ₈ "	5.2	Yes
6'-0"	4'-0"	8"	7"	7"	5'-5"	3'-3"	4'-11 ³ / ₈ "	7'-0"	18'-0 ¹ / ₈ "	6.5	Yes
6'-0"	4'-0"	7"	7"	7"	5'-4"	3'-2"	4'-10 ³ / ₄ "	6'-11"	17'-10 ³ / ₄ "	6.5	Yes
6'-0"	5'-0"	8"	7"	7"	6'-5"	3'-9"	5'-11 ³ / ₈ "	8'-5"	20'-0 ¹ / ₈ "	8.0	Yes
6'-0"	5'-0"	7"	7"	7"	6'-4"	3'-8"	5'-10 ³ / ₄ "	8'-4"	19'-10 ³ / ₄ "	7.8	Yes
6'-0"	6'-0"	8"	7"	7"	7'-5"	4'-3"	6'-11 ¹ / ₂ "	9'-10"	22'-0 ¹ / ₄ "	9.5	Yes
6'-0"	6'-0"	7"	7"	7"	7'-4"	4'-2"	6'-10 ³ / ₄ "	9'-9"	21'-10 ³ / ₄ "	9.3	Yes
7'-0"	2'-0"	8"	8"	8"	3'-5"	2'-3"	2'-11 ³ / ₈ "	4'-2"	15'-2"	4.9	Yes
7'-0"	3'-0"	8"	8"	8"	4'-5"	2'-9"	3'-11 ³ / ₈ "	5'-7"	17'-2 ¹ / ₈ "	6.1	Yes
7'-0"	4'-0"	8"	8"	8"	5'-5"	3'-3"	4'-11 ³ / ₈ "	7'-0"	19'-2 ¹ / ₈ "	7.4	Yes
7'-0"	5'-0"	8"	8"	8"	6'-5"	3'-9"	5'-11 ³ / ₈ "	8'-5"	21'-2 ¹ / ₈ "	8.9	Yes
7'-0"	6'-0"	8"	8"	8"	7'-5"	4'-3"	6'-11 ¹ / ₂ "	9'-10"	23'-2 ¹ / ₄ "	10.6	Yes
8'-0"	2'-0"	8"	8"	8"	3'-5"	2'-3"	2'-11 ³ / ₈ "	4'-2"	16'-2"	5.3	Yes
8'-0"	3'-0"	8"	8"	8"	4'-5"	2'-9"	3'-11 ³ / ₈ "	5'-7"	18'-2 ¹ / ₈ "	6.5	Yes
8'-0"	4'-0"	8"	8"	8"	5'-5"	3'-3"	4'-11 ³ / ₈ "	7'-0"	20'-2 ¹ / ₈ "	7.8	Yes
8'-0"	5'-0"	8"	8"	8"	6'-5"	3'-9"	5'-11 ³ / ₈ "	8'-5"	22'-2 ¹ / ₈ "	9.3	Yes
8'-0"	6'-0"	8"	8"	8"	7'-5"	4'-3"	6'-11 ¹ / ₂ "	9'-10"	24'-2 ¹ / ₄ "	11.0	Yes
9'-0"	2'-0"	9"	9"	9"	3'-6"	2'-3"	3'-0 ³ / ₄ "	4'-4"	17'-6 ⁷ / ₈ "	6.2	Yes
9'-0"	3'-0"	9"	9"	9"	4'-6"	2'-9"	4'-0 ³ / ₄ "	5'-9"	19'-6 ⁷ / ₈ "	7.5	Yes
9'-0"	4'-0"	9"	9"	9"	5'-6"	3'-3"	5'-0 ³ / ₄ "	7'-2"	21'-6 ⁷ / ₈ "	9.0	Yes
9'-0"	5'-0"	9"	9"	9"	6'-6"	3'-9"	6'-0 ⁷ / ₈ "	8'-7"	23'-7"	10.6	Yes
9'-0"	6'-0"	9"	9"	9"	7'-6"	4'-3"	7'-0 ¹ / ₈ "	9'-11"	25'-5 ⁵ / ₈ "	12.4	Yes
10'-0"	2'-0"	10"	10"	10"	3'-7"	2'-4"	3'-1 ¹ / ₂ "	4'-5"	18'-10 ¹ / ₄ "	7.1	No
10'-0"	3'-0"	10"	10"	10"	4'-7"	2'-10"	4'-1 ¹ / ₂ "	5'-10"	20'-10 ¹ / ₄ "	8.6	No
10'-0"	4'-0"	10"	10"	10"	5'-7"	3'-4"	5'-1 ¹ / ₂ "	7'-3"	22'-10 ³ / ₈ "	10.2	Yes
10'-0"	5'-0"	10"	10"	10"	6'-7"	3'-10"	6'-1 ¹ / ₂ "	8'-8"	24'-10 ³ / ₈ "	12.0	Yes
10'-0"	6'-0"	10"	10"	10"	7'-7"	4'-4"	7'-1 ¹ / ₂ "	10'-1"	26'-10 ³ / ₈ "	13.9	Yes
11'-0"	2'-0"	11"	11"	11"	3'-8"	2'-4"	3'-2 ⁷ / ₈ "	4'-7"	20'-3 ¹ / ₈ "	8.2	No
11'-0"	3'-0"	11"	11"	11"	4'-8"	2'-10"	4'-2 ⁷ / ₈ "	6'-0"	22'-3 ¹ / ₈ "	9.8	No
11'-0"	4'-0"	11"	11"	11"	5'-8"	3'-4"	5'-2 ¹ / ₄ "	7'-4"	24'-1 ³ / ₄ "	11.5	Yes
11'-0"	5'-0"	11"	11"	11"	6'-8"	3'-10"	6'-2 ¹ / ₄ "	8'-9"	26'-1 ³ / ₄ "	13.3	Yes
11'-0"	6'-0"	11"	11"	11"	7'-8"	4'-4"	7'-2 ¹ / ₄ "	10'-2"	28'-1 ⁷ / ₈ "	15.5	Yes
12'-0"	2'-0"	12"	12"	12"	3'-9"	2'-5"	3'-3 ⁵ / ₈ "	4'-8"	21'-6 ¹ / ₂ "	9.3	No
12'-0"	3'-0"	12"	12"	12"	4'-9"	2'-11"	4'-3 ⁵ / ₈ "	6'-1"	23'-6 ¹ / ₂ "	11.1	No
12'-0"	4'-0"	12"	12"	12"	5'-9"	3'-5"	5'-3 ⁵ / ₈ "	7'-6"	25'-6 ⁵ / ₈ "	13.0	Yes
12'-0"	5'-0"	12"	12"	12"	6'-9"	3'-11"	6'-3 ⁵ / ₈ "	8'-11"	27'-6 ⁵ / ₈ "	14.1	Yes
12'-0"	6'-0"	12"	12"	12"	7'-9"	4'-5"	7'-3 ⁵ / ₈ "	10'-4"	29'-6 ⁵ / ₈ "	17.4	Yes

Note:

Two sets of apron end section dimensions are shown above for some box culvert sizes due to the top and bottom slabs having different thicknesses per ASTM C 1577 for design fill heights less than 2 ft.

(Sheet 1 of 2)

SCB-AES

5-15-2023

USER NAME = jloshi	DESIGNED - JJ	REVISED - _____
	DRAWN - JJ	REVISED - _____
PLOT SCALE = \$SCALE\$	CHECKED - YP/MMO	REVISED - _____
PLOT DATE = 1/15/2025	DATE - 11/11/2024	REVISED - _____

PIATT COUNTY
TOWNSHIP ROAD 25
OVER GOOSE CREEK

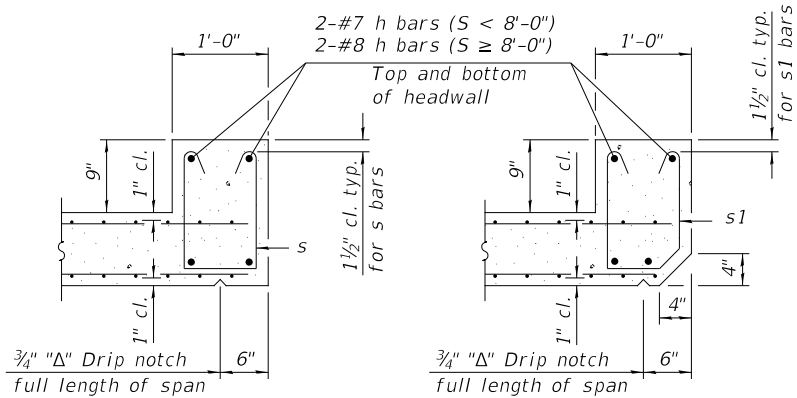
PRECAST CONCRETE BOX CULVERT APRON END SECTION
DETAILS - LOCATION #1

SCALE: NONE SHEET 2 OF 4 SHEETS

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 25	24-02125-00-DR	PIATT	36	8
	ILLINOIS			

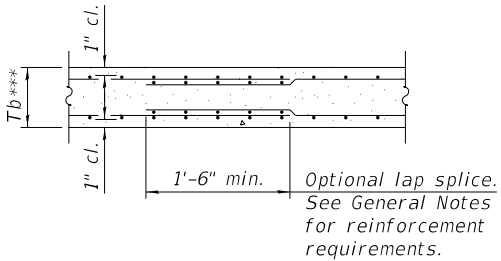
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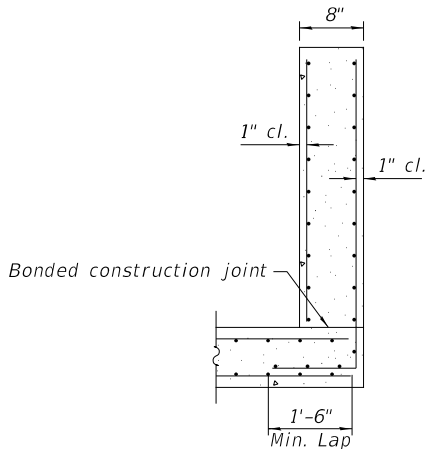
SECTION B-B
(Top slab at downstream end)

SECTION B-B
(Top slab at upstream end)

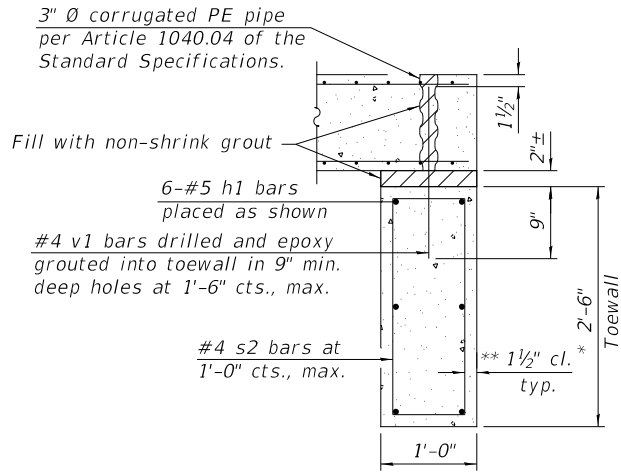


SECTION B-B
(Bottom Slab)

*** This dimension shall be increased by 2" for CIP construction.



SECTION C-C



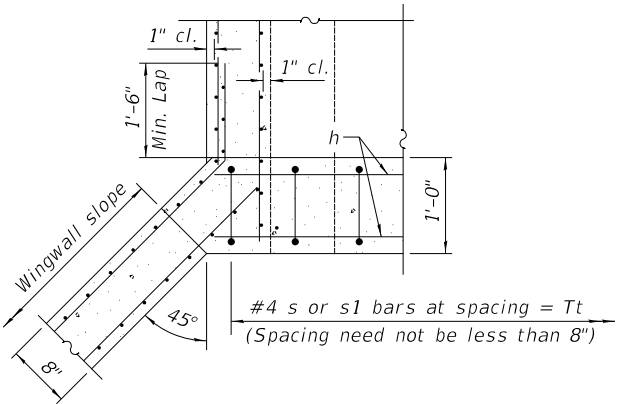
SECTION D-D

TOEWALL CONSTRUCTION SEQUENCE

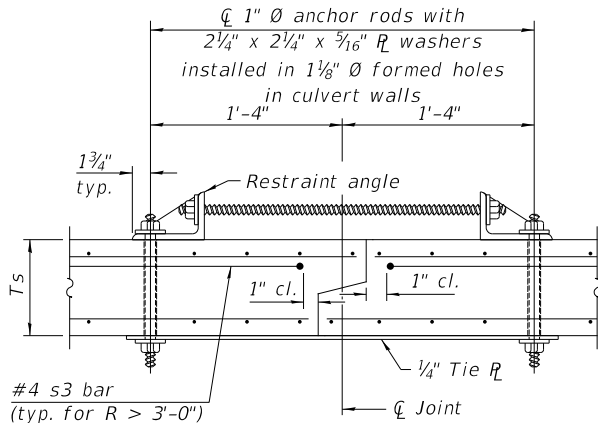
1. Perform excavation and construct toewall.
2. Backfill accordingly and place bedding for precast box culvert end sections.
3. Set precast box culvert end section.
4. Drill and epoxy grout reinforcement in toewall in accordance with Section 584 of the Standard Specifications.
5. Pressure grout voids using non-shrink grout conforming to Section 1024 of the Standard Specifications.

* The Contractor may furnish a precast or cast-in-place toewall. The Contractor shall be responsible for the strength and stability of the precast toewall during handling. Additional lifting points may be required depending upon the length of the toewall or the Contractor may need to modify the design of the toewall for the proposed handling method.

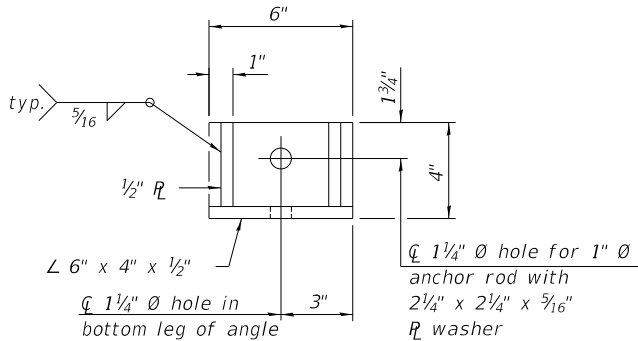
** If soil conditions permit, the sides of the toewall may be poured directly against the soil. The clear cover on the sides of the toewall shall be increased to 3" by increasing the thickness of the toewall.



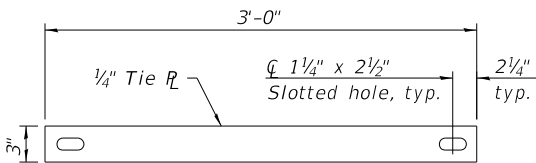
SECTION E-E



SECTION F-F
(Showing culvert tie details)



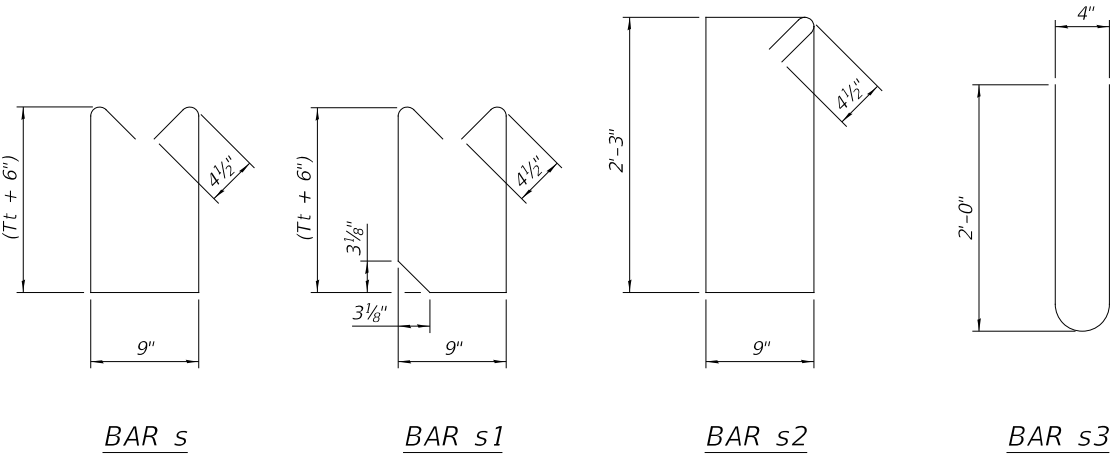
RESTRAINT ANGLE DETAIL



TIE PLATE DETAIL

Notes:

1" diameter anchor rods for the culvert ties shall conform to the requirements of ASTM F1554, Grade 105. Structural steel for the tie plate and restraint angle shall conform to the requirements of Article 1006.04 of the Standard Specifications. All components of the culvert tie detail shall be galvanized according to the requirements of AASHTO M 111 or M 232 as applicable. 2 1/4"x2 1/4"x5/16" plate washers shall be provided under each nut required for the anchor rods. Anchor rods connecting precast sections shall be brought to a snug tight condition followed by an additional 1/2 turn on one of the nuts for anchor rods installed in the walls. Match marks shall be provided on the bolt and nut to verify relative rotation between the bolt and the nut. Holes in the walls for the culvert tie assembly may be drilled using core bits in lieu of using formed holes.



BAR s

BAR s1

BAR s2

BAR s3

SCB-AES

5-13-2023

(Sheet 2 of 2)

**PIATT COUNTY
TOWNSHIP ROAD 25
OVER GOOSE CREEK**

**PRECAST CONCRETE BOX CULVERT APRON END SECTION
DETAILS - LOCATION #1**

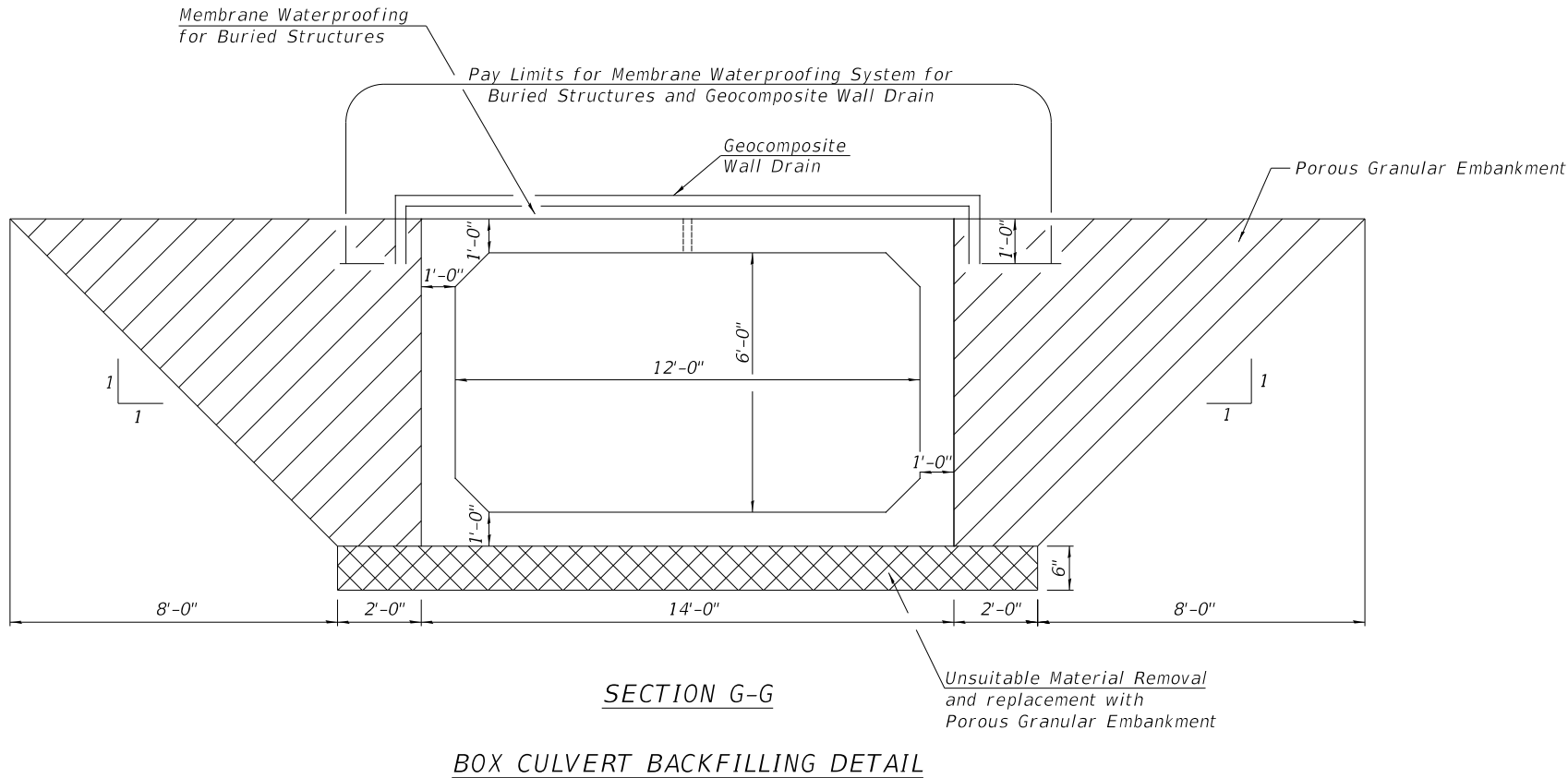
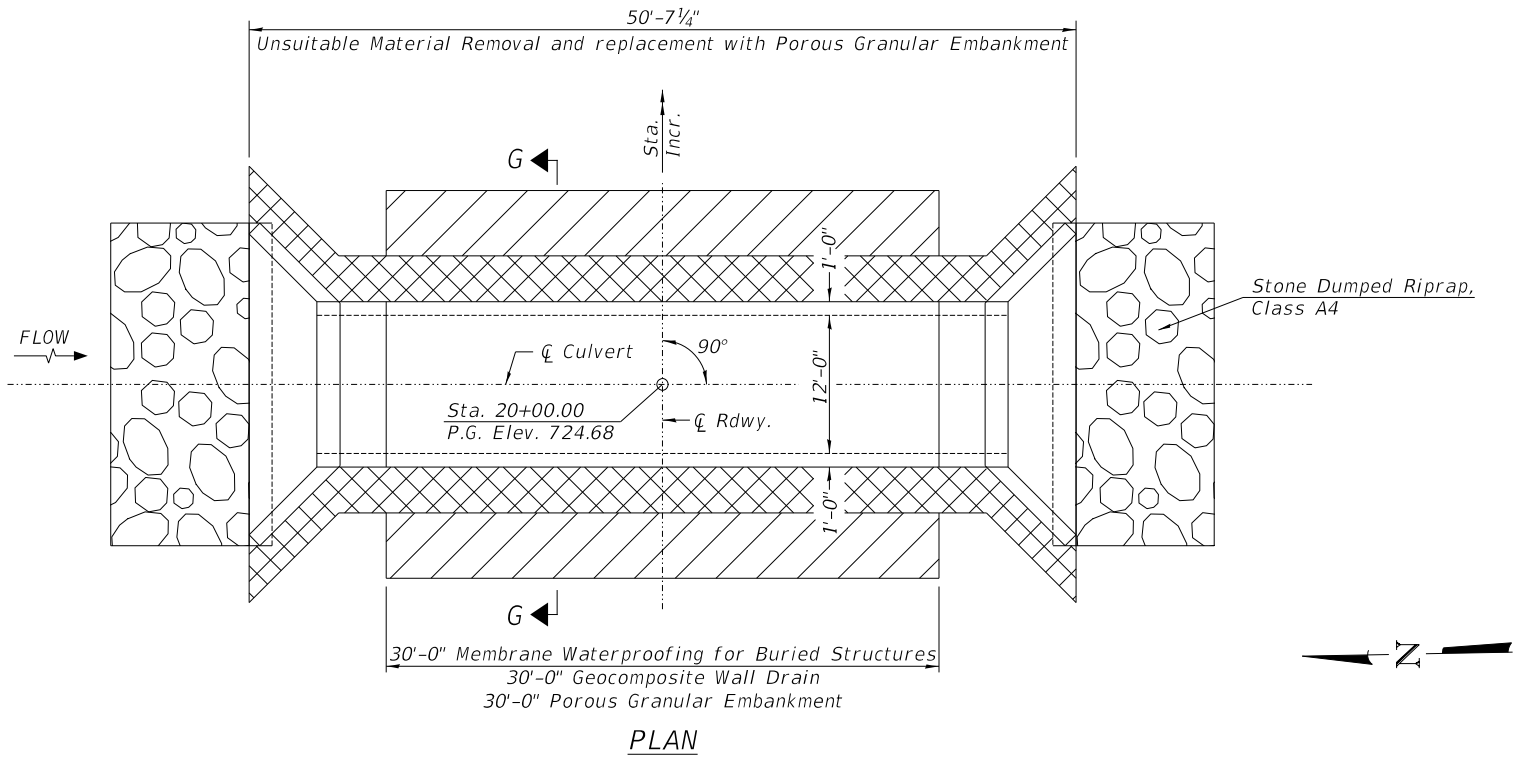
RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 25	24-02125-00-DR	PIATT	36	9



SCALE: NONE SHEET 3 OF 4 SHEETS

ILLINOIS

MODEL:
FILE NAME:

5301-01-c003.dgn

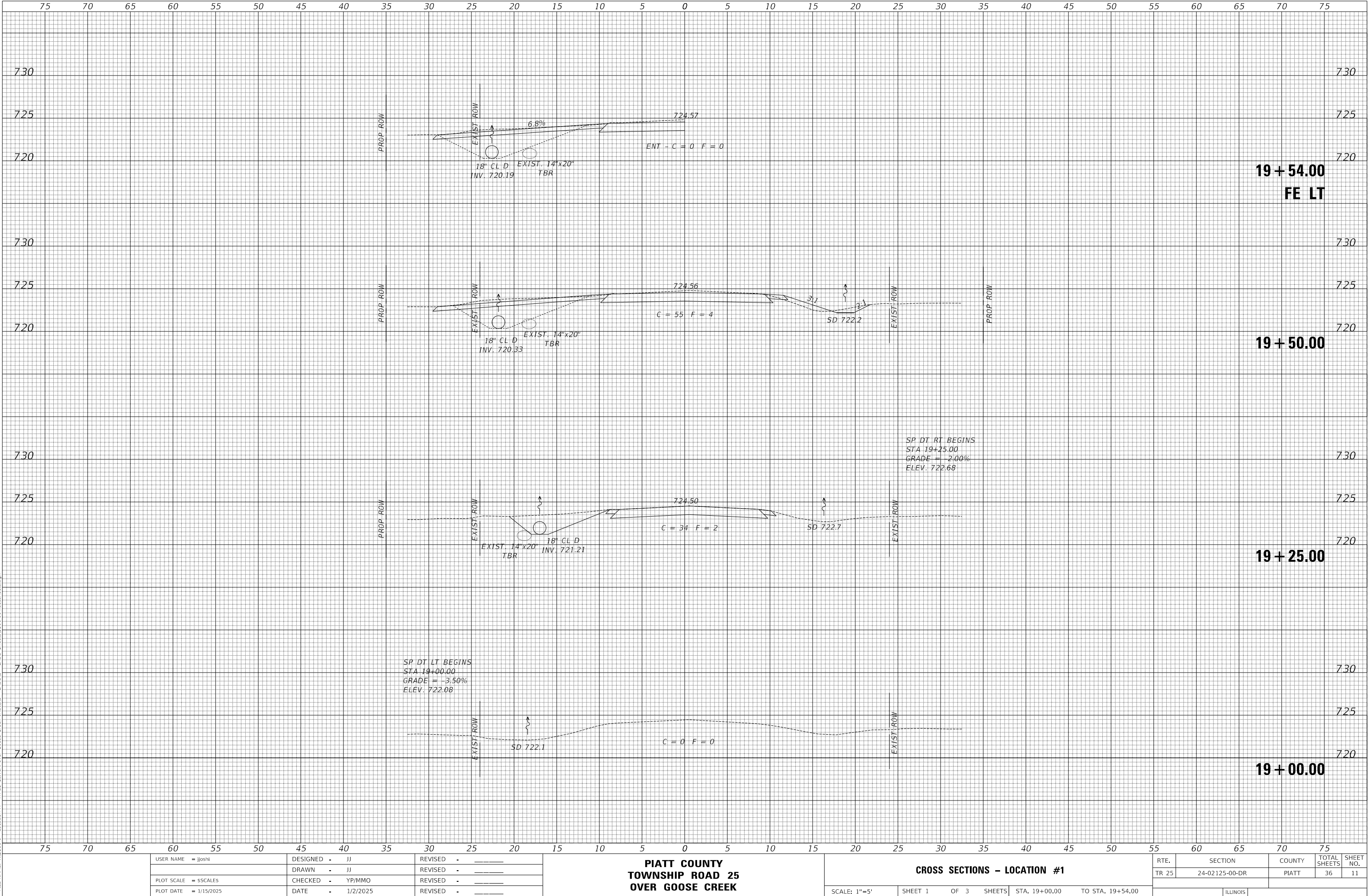


-  Porous Granular Embankment
-  Unsuitable Material Removal and replacement with Porous Granular Embankment

FINAL	SURVEYED	DATE
SURVEY	PLOTTED	BY
NOTE BOOK	TEMPLATE	
NO.	AREAS CHECKED	

ORIGINAL	SURVEYED	DATE
SURVEY	PLOTTED	BY
NOTE BOOK	TEMPLATE	
NO.	AREAS CHECKED	

MODEL: Default
FILE NAME: V:\3301-1 - Location A - TR 25 Culvert over Goose Creek (Plot)8 - CADD2 - CADD2 - CADD2 Sheets\3301-01-xsec\sheet1.dgn



USER NAME = jjoshi	DESIGNED - JJ	REVISED - _____
	DRAWN - JJ	REVISED - _____
PLOT SCALE = 5/5	CHECKED - YP/MMO	REVISED - _____
PLOT DATE = 1/15/2025	DATE - 1/2/2025	REVISED - _____

**PIATT COUNTY
TOWNSHIP ROAD 25
OVER GOOSE CREEK**

CROSS SECTIONS - LOCATION #1

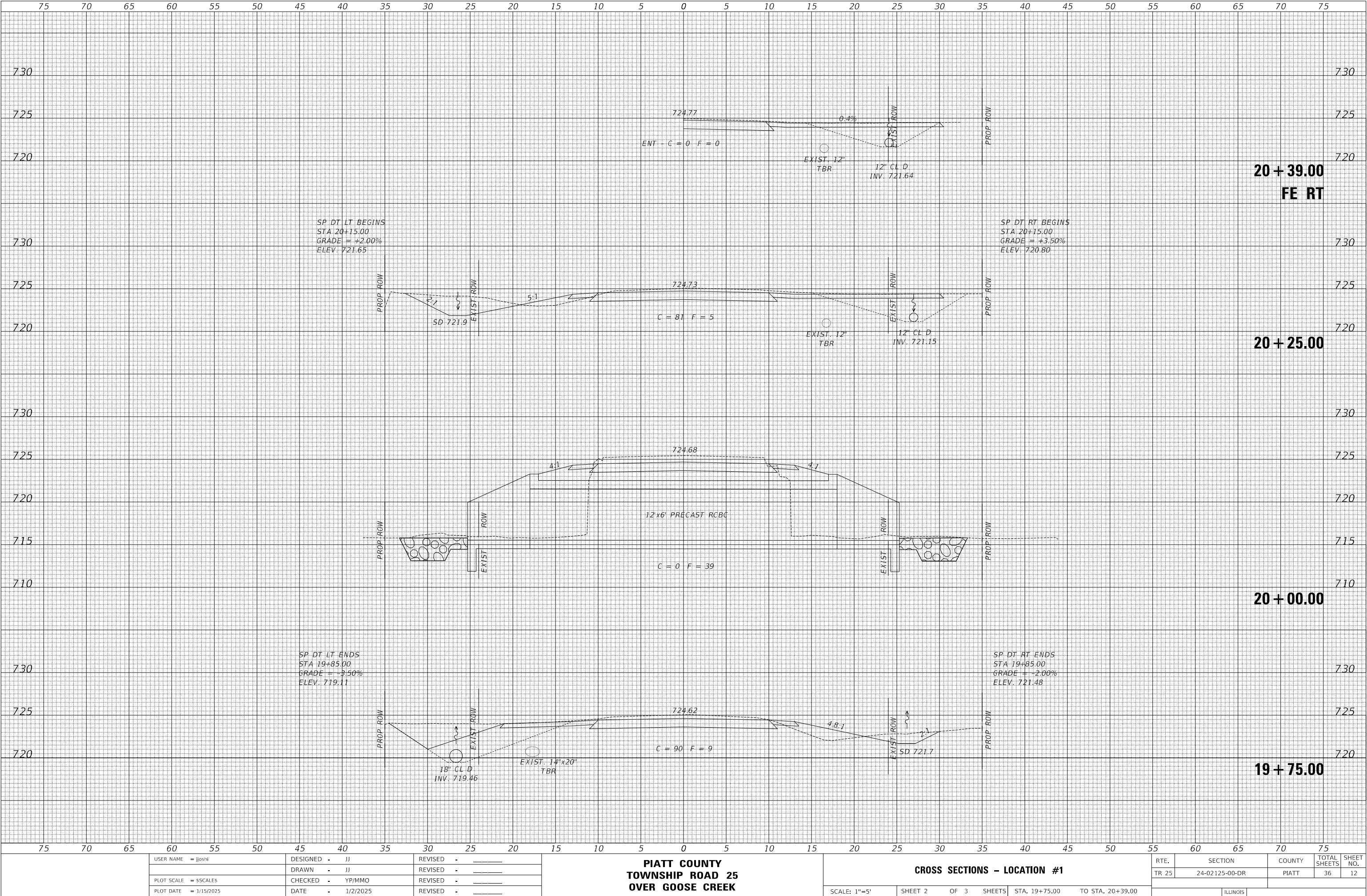
SCALE: 1"=5' SHEET 1 OF 3 SHEETS STA. 19+00.00 TO STA. 19+54.00

RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 25	24-02125-00-DR	PIATT	36	11
ILLINOIS				

FINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE

MODEL: Default
FILE NAME: V15301-1 - Location A - TR 25 Culvert over Goose Creek (Plat)8 - CADD2 - CADD2 - CADD2 Sheets(5301-01) sheet1.dgn



USER NAME = jjoshi	DESIGNED - JJ	REVISED - _____
	DRAWN - JJ	REVISED - _____
PLOT SCALE = 5' = 1"	CHECKED - YP/MMO	REVISED - _____
PLOT DATE = 1/15/2025	DATE - 1/2/2025	REVISED - _____

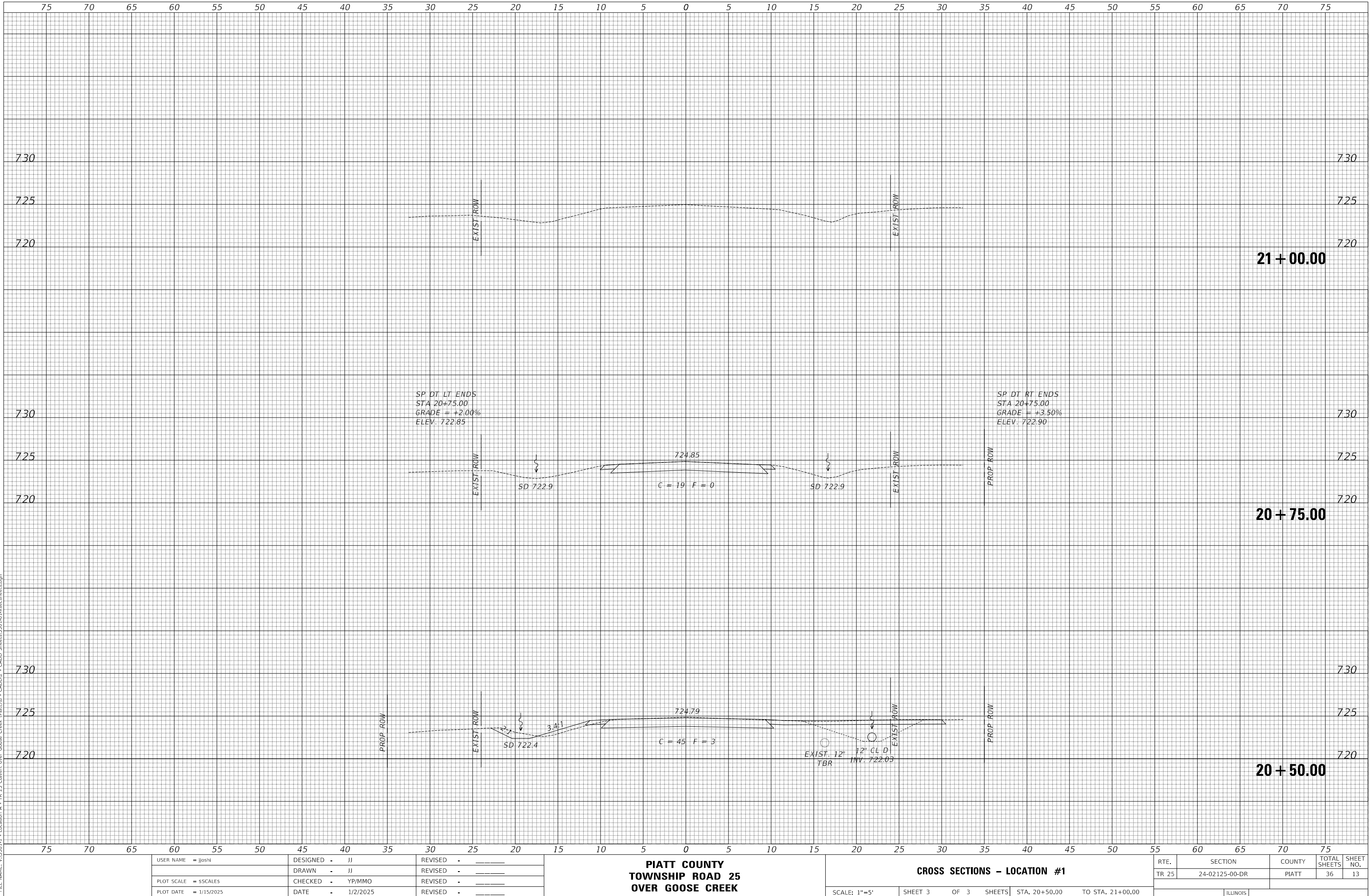
PIATT COUNTY
TOWNSHIP ROAD 25
OVER GOOSE CREEK

CROSS SECTIONS - LOCATION #1

SCALE: 1"=5' SHEET 2 OF 3 SHEETS STA. 19+75.00 TO STA. 20+39.00

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 25	24-02125-00-DR	PIATT	36	12
ILLINOIS				

ORIGINAL SURVEY	SURVEYED _____	BY _____	DATE _____
	PLOTTED _____		
	TEMPLATE _____		
	AREAS _____		
NO. _____	AREAS CHECKED _____		



GENERAL NOTES

THE REMOVAL OF EXISTING OIL & CHIP SURFACE AND GRAVEL OR CRUSHED STONE BASE COURSE WHICH MAY BE NECESSARY FOR THE CONSTRUCTION OF THE PROJECT SHALL BE REMOVED AS EARTH EXCAVATION AND NO COMPENSATION WILL BE ALLOWED FOR ADDITIONAL LABOR OR EQUIPMENT REQUIRED.

ALL WASTE OR UNDESIRABLE MATERIAL AS IDENTIFIED BY THE ENGINEER SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY AT THE CONTRACTOR'S EXPENSE.

ALL EXISTING PRIVATELY OWNED UTILITIES REQUIRING ADJUSTMENT WILL BE MADE BY THE UTILITY COMPANY INVOLVED. WHERE NO PROVISIONS HAVE BEEN MADE FOR ADJUSTMENTS ON THE PLANS, NO ADDITIONAL COMPENSATION WILL BE ALLOWED DUE TO DELAYS OR INCONVENIENCES CAUSED BY THE SAID UTILITY ADJUSTMENTS.

THE PROFILE GRADE ELEVATIONS SHOWN ON THE PLAN AND PROFILE SHEETS AND IN THE STATION CROSS SECTIONS ARE TO THE TOP OF THE FINISHED SURFACE.

ALL EXISTING DRAINAGE STRUCTURES NOT BEING REMOVED BY THE CONTRACTOR THAT ARE DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS SHALL BE INTERPRETED TO BE THE LATEST STANDARDS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION.

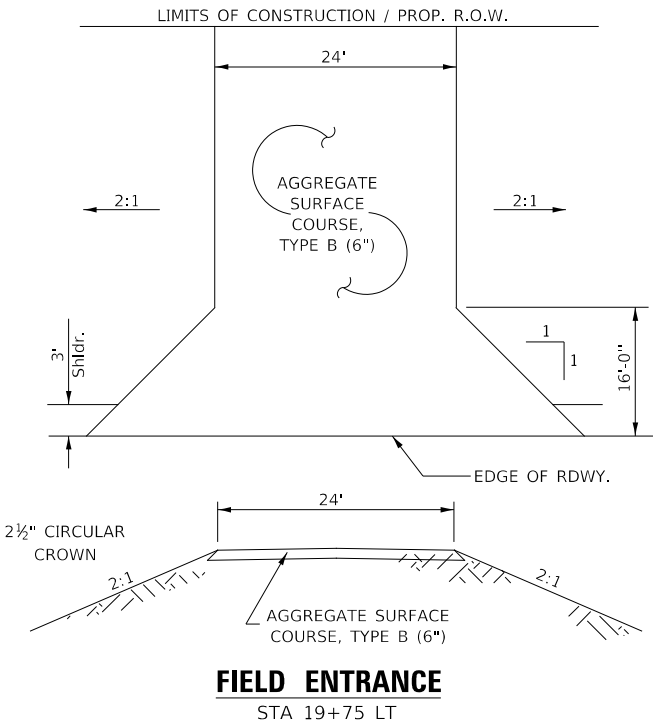
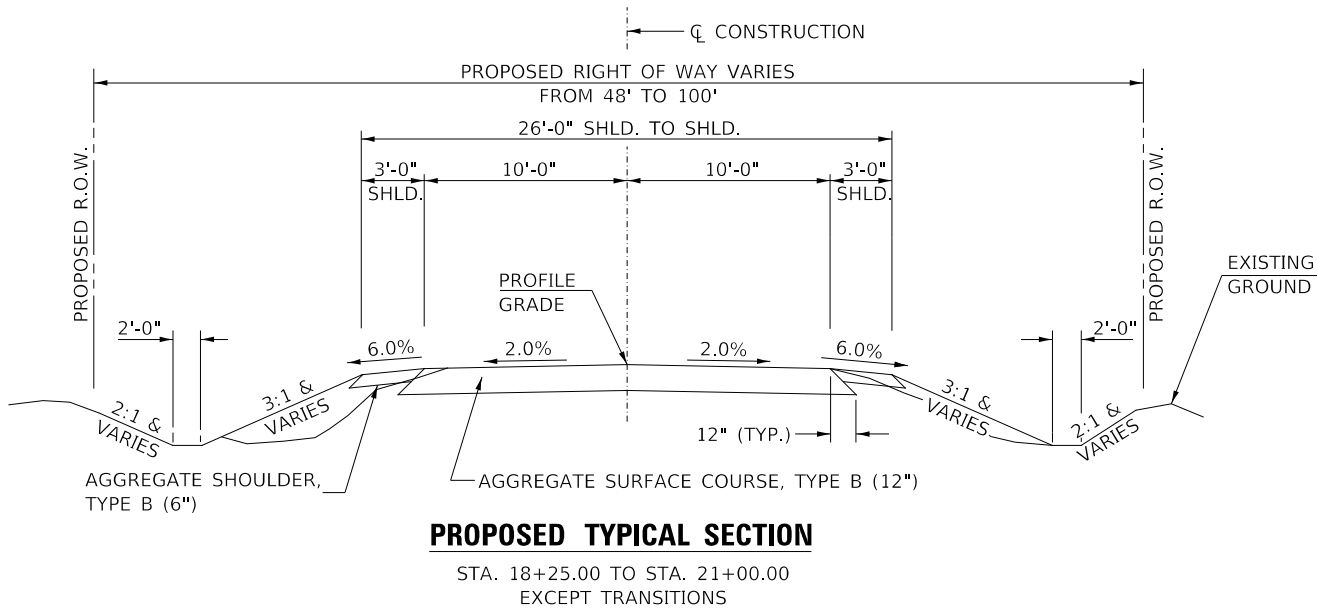
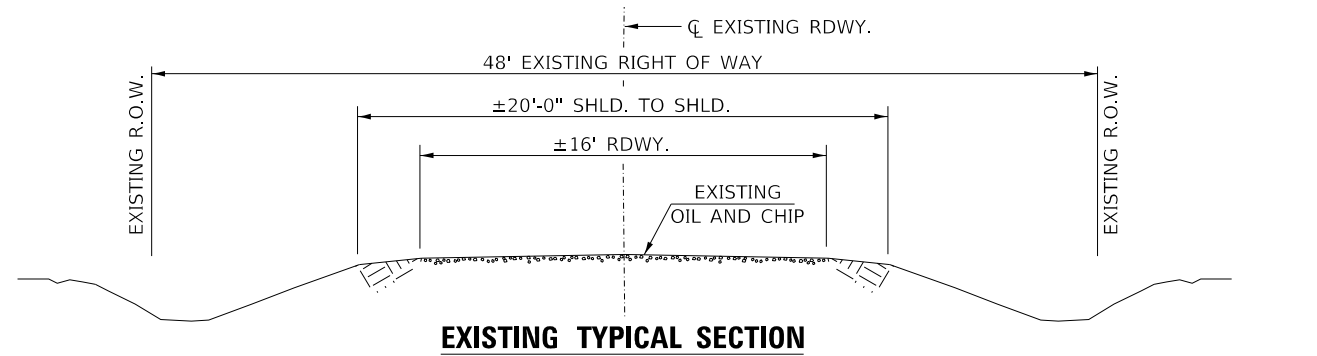
THE LOCATION OF UNDERGROUND UTILITIES SHOWN ON THE PLANS REPRESENTS THE BEST KNOWLEDGE OF THE COUNTY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS OF UNDERGROUND INSTALLATIONS BEFORE STARTING CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL INDEMNIFY THE COUNTY, ITS OFFICERS AND EMPLOYEES AGAINST ALL CLAIMS DUE TO DAMAGE TO CORPORATE OR PRIVATE PROPERTY RESULTING FROM HIS CONSTRUCTION OPERATIONS AS DESCRIBED IN ARTICLES 107.20 AND 107.26 OF THE STANDARD SPECIFICATIONS.

THE CONTRACTOR MAY BE REQUIRED TO CONDUCT SOME OF HIS GRADING AND TRENCHING OPERATIONS AROUND TRANSMISSION POLES AND UNDER TRANSMISSION LINES. THE ADDED COST OF SO DOING SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND PRESERVE PROPERTY MARKERS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR, OR AGENT, HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

THE FINAL SURFACE OF ALL DISTURBED/EMBANKMENT AREAS SHALL BE SEEDED. THE TOP 4 INCHES OF THE SEEDED AREAS SHALL BE COHESIVE VEGETATION SUSTAINING SOIL SUBJECT TO THE APPROVAL OF THE ENGINEER. THE COST OF SHAPING THE SLOPES AND PROVIDING VEGETATION SUSTAINING SOIL WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION. TOPSOIL MAY BE STRIPPED AND STOCKPILED FROM THE SITE OR HAULED IN FROM AN ALTERNATE LOCATION AS APPROVED BY THE ENGINEER.

ALL ELEVATIONS SHOWN REFER TO U.S.G.S. MEAN SEA LEVEL DATUM.



MODEL: Default
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USER NAME = jjoshi	DESIGNED - JJ	REVISED -
DRAWN - JJ	REVISED -	
PLOT SCALE = \$SCALE\$	CHECKED - YP/MMO	REVISED -
PLOT DATE = 1/15/2025	DATE - 1/3/2024	REVISED -

PIATT COUNTY
TOWNSHIP ROAD 25
OVER TRIBUTARY TO GOOSE CREEK

GENERAL NOTES, TYPICAL SECTIONS, DETAILS - LOCATION #2

RTe.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 25	24-02125-00-DR	PIATT	36	14

SCALE: NONE SHEET 1 OF 1 SHEETS STA. 18+25.00 TO STA. 21+00.00

ILLINOIS

MODEL: Default
FILE NAME: V:\S3012 - Location B - TR 25 Culvert over Tributary to Goose Creek (Piatt)B - CADD12 - CADD Sheets\S301-02-q001.dgn

SUMMARY OF QUANTITIES			
CODE NO.	ITEM	UNIT	QUANTITY
20200100	EARTH EXCAVATION	CU YD	300
① 20700220	POROUS GRANULAR EMBANKMENT	CU YD	275
28000305	TEMPORARY DITCH CHECKS	FOOT	36
28000400	PERIMETER EROSION BARRIER	FOOT	245
28000500	INLET AND PIPE PROTECTION	EACH	1
① 28100807	STONE DUMPED RIPRAP, CLASS A4	TON	50
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	418
48101200	AGGREGATE SHOULDERS, TYPE B	TON	54
50105220	PIPE CULVERT REMOVAL	FOOT	172
50200450	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR STRUCTURES	CU YD	35
54001002	BOX CULVERT END SECTIONS, CULVERT NO. 2	EACH	2
54011006	PRECAST CONCRETE BOX CULVERTS 10' X 6'	FOOT	72
542D0229	PIPE CULVERTS, CLASS D, TYPE 1 24"	FOOT	54
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	110
① X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.2
① X5810103	MEMBRANE WATERPROOFING SYSTEM FOR BURIED STRUCTURES	SQ YD	110
① X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	0.33
① XX009301	FIELD TILE ADJUSTMENT	FOOT	100

① SEE SPECIAL PROVISIONS

EARTHWORK SUMMARY			
STATION TO STATION	EARTH EXCAVATION	FILL	WASTE (SHORTAGE)
	CU YD		
18+25.00 - 19+90.00	204	73	80
FILL OVER CULVERT	-	25	(25)
20+10.00 - 21+00.00	94	36	35
TOTAL	298	134	90
USE	300	-	90

(@ 25% SHRINKAGE)

50105220 - PIPE CULVERT REMOVAL			
℥ STATION	SIZE	SIDE	FOOT
19+87	12"	LEFT	73
20+00	66"	LEFT/RIGHT	60
20+63	12"	LEFT	39
TOTAL			172

542D0229 - PIPE CULVERTS, CLASS D, TYPE 1 24"		
℥ STATION	SIDE	FOOT
19+25	LEFT/RIGHT	54
TOTAL		54

28000400 - PERIMETER EROSION BARRIER			
STATION TO STATION		SIDE	FOOT
18+25	19+66	RIGHT	140
19+25	20+28	LEFT	105
TOTAL			245

28000305 - TEMPORARY DITCH CHECKS		
STATION	SIDE	FOOT
18+75	LEFT	12
19+70	RIGHT	12
20+62	LEFT	12
TOTAL		36

28000500 - INLET AND PIPE PROTECTION		
℥ STATION	SIDE	EACH
19+25	LEFT	1
TOTAL		1

40200800 - AGGREGATE SURFACE COURSE, TYPE B 140#/CF					
STATION TO STATION		THICKNESS	WIDTH	LENGTH	TON
18+25.00	18+75.00	1.00'	19.60' AVG.	50.00'	69
18+75.00	20+50.00	1.00'	21.00'	175.00'	257
20+50.00	21+00.00	1.00'	19.47' AVG.	50.00'	68
ENTR. - 19+75.00 LT		0.50'	24' & VAR.	22.00'	24
TOTAL					418

48101200 - AGGREGATE SHOULDERS, TYPE B 140#/CF					
STATION TO STATION		SIDE	WIDTH	LENGTH	TON
18+25.00	18+75.00	LT	2.24' AVG.	50.00'	4
18+25.00	18+75.00	RT	3.76' AVG.	50.00'	7
18+75.00	20+50.00	LT	3.00'	175.00'	18
18+75.00	20+50.00	RT	3.00'	175.00'	18
20+50.00	21+00.00	LT	1.94' AVG.	50.00'	3
20+50.00	21+00.00	RT	2.12' AVG.	50.00'	4
TOTAL					54

	USER NAME = jjoshi	DESIGNED - JJ	REVISED -	PIATT COUNTY TOWNSHIP ROAD 25 OVER TRIBUTARY TO GOOSE CREEK	SUMMARY OF QUANTITIES, SCHEDULES OF QUANTITIES – LOCATION #2		RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - JJ	REVISED -				TR 25	24-02125-00-DR	PIATT	36	15
	PLOT SCALE = \$SCALE\$	CHECKED - YP/MMO	REVISED -								
	PLOT DATE = 1/15/2025	DATE - 11/14/2024	REVISED -								
SCALE: NONE		SHEET 1 OF 1	SHEETS	STA. 18+25.00	TO STA. 21+00.00		ILLINOIS				

MODEL: Default
FILE NAME: V:\S3012 - Location B - TR 25 Culvert over Tributary to Goose Creek (Platt)\8 - CADD\2 - CADD Sheets\S301-02-4001.dgn

1

ROAD CLOSED
½ MILE AHEAD
LOCAL TRAFFIC ONLY
R11-3

ROAD CLOSED
½ MILE AHEAD
LOCAL TRAFFIC ONLY

2

ROAD CLOSED
1 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3

ROAD CLOSED
1 MILES AHEAD
LOCAL TRAFFIC ONLY

3

ROAD CLOSED
1½ MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3

ROAD CLOSED
1½ MILES AHEAD
LOCAL TRAFFIC ONLY

4

ROAD CLOSED
AHEAD
W20-3


ROAD CLOSED
AHEAD

5

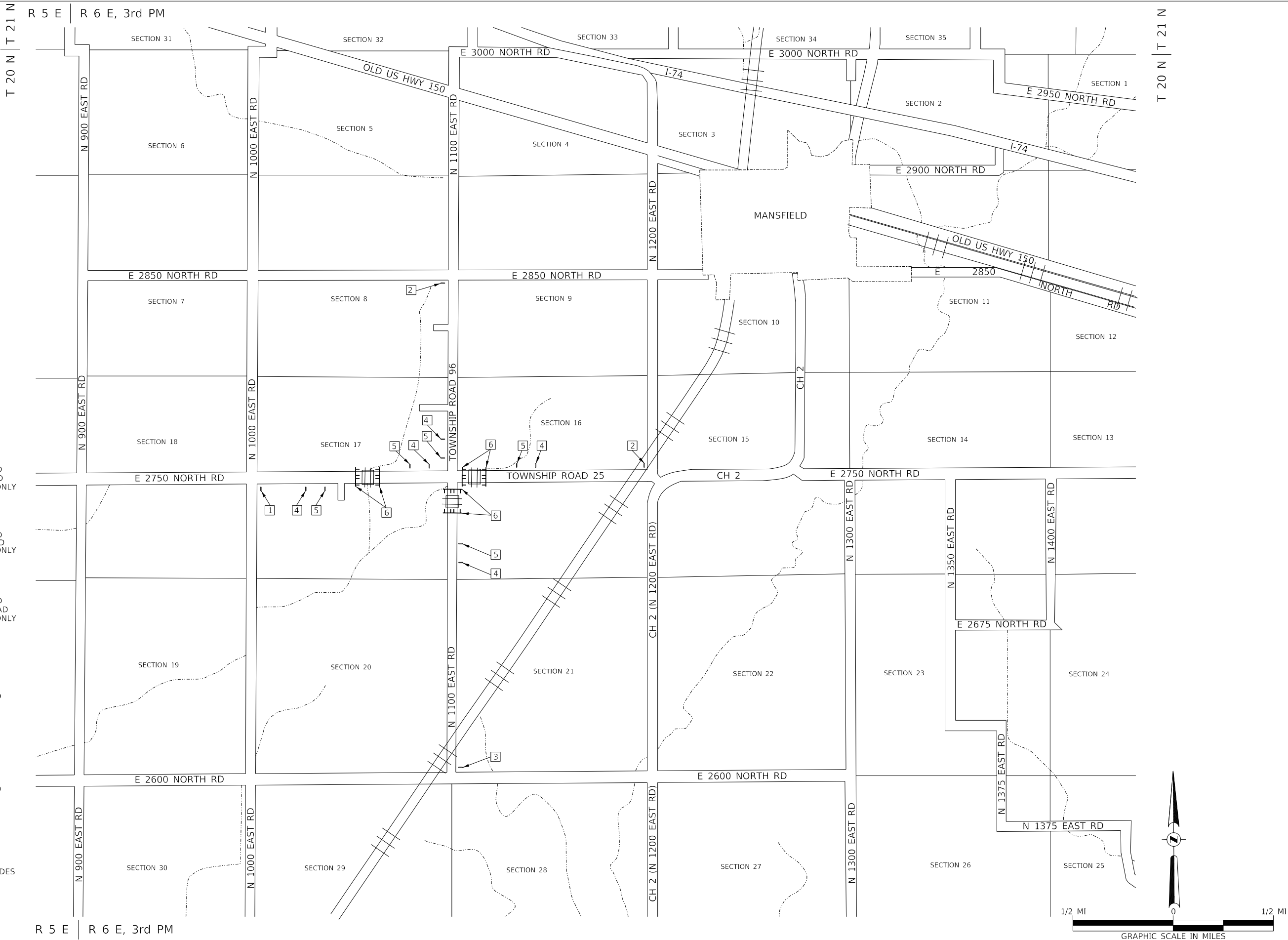
ROAD CLOSED
500 FT
W20-3

ROAD CLOSED
500 FT

6

TYPE III BARRICADES

SEE STANDARD BLR 21
AND SPECIAL PROVISIONS



USER NAME = jjoshi	DESIGNED - JJ	REVISED - _____
DRAWN - JJ	REVIS	REVIS
PLOT SCALE = \$SCALES	CHECKED - YP/MMO	REVIS
PLOT DATE = 1/15/2025	DATE - 12/31/2024	REVIS

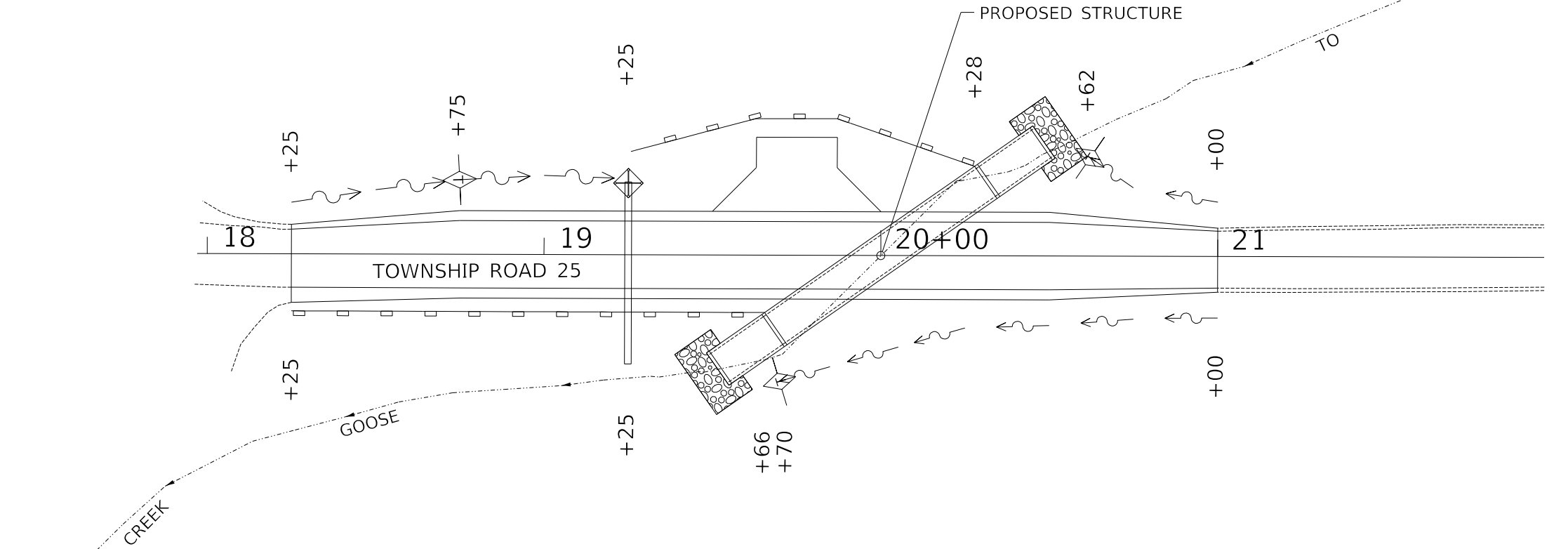
PIATT COUNTY
TOWNSHIP ROAD 25
OVER TRIBUTARY TO GOOSE CREEK

TRAFFIC CONTROL PLAN - LOCATION #2

SCALE: NONE SHEET 1 OF 1 SHEETS STA. 18+25.00 TO STA. 21+00.00

RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 25	24-02125-00-DR	PIATT	36	16
ILLINOIS				

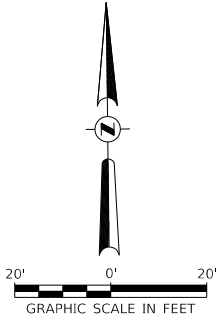
T 20 N, R 6 E, 3rd PM
SECTION 16



LEGEND

- PERIMETER EROSION BARRIER
- TEMPORARY DITCH CHECK
- SPECIAL DITCH - FLOW LINE AND DIRECTION
- INLET & PIPE PROTECTION
- PROPOSED RIPRAP PLACEMENT

T 20 N, R 6 E, 3rd PM
SECTION 16



MODEL: Default
FILE NAME: V:\S3012 - Location B - TR 25 Culvert over Tributary to Goose Creek (Platt)\8 - CADD12 - CADD Sheets\S301-02-001.dgn

USER NAME = jjoshi	DESIGNED - JJ	REVISED - _____
DRAWN - JJ	REVISD - _____	
PLOT SCALE = \$SCALE\$	CHECKED - YP/MMO	REVISED - _____
PLOT DATE = 1/15/2025	DATE - 11/13/2024	REVISED - _____

PIATT COUNTY
TOWNSHIP ROAD 25
OVER TRIBUTARY TO GOOSE CREEK

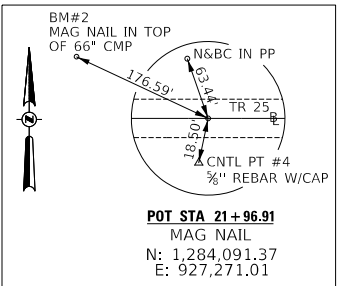
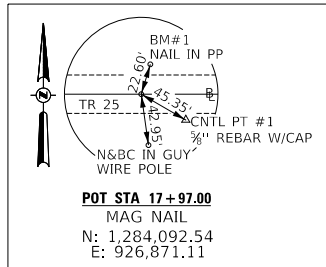
EROSION CONTROL PLAN - LOCATION #2

SCALE: 1"=20' SHEET 1 OF 1 SHEETS STA. 18+25.00 TO STA. 21+00.00

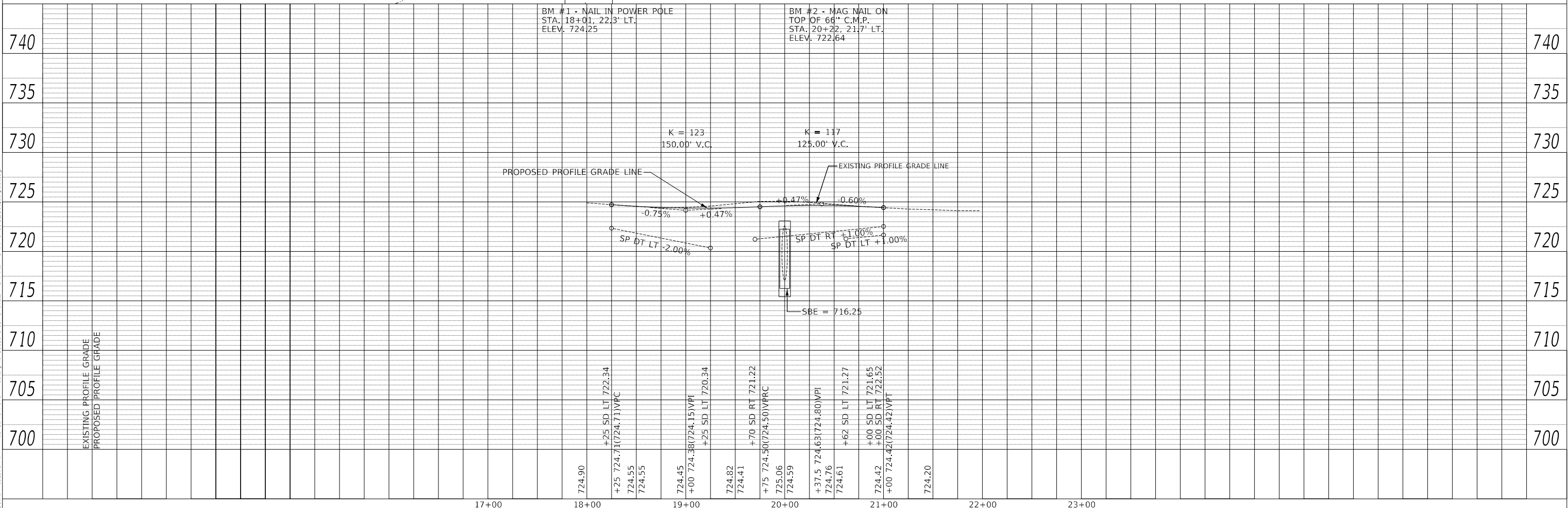
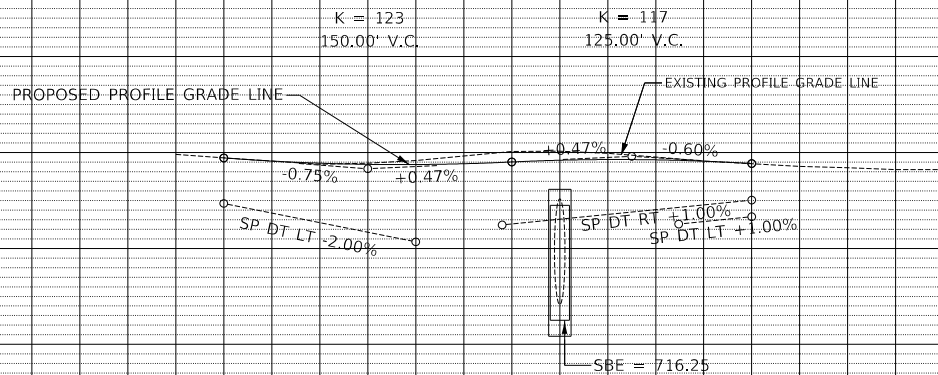
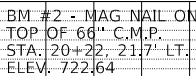
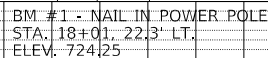
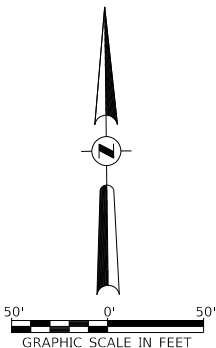
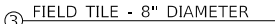
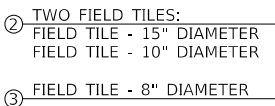
RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 25	24-02125-00-DR	PIATT	36	17
		ILLINOIS		

PLAN	SURVEYED _____	BY _____	DATE _____
	PLOTTED _____		
NOTE BOOK	ALIGNMENT CHECKED _____		
	RT. OF WAY CHECKED _____		
NO. _____	CADD FILE NAME _____		

PROFILE	SURVEYED _____	BY _____	DATE _____
	PLOTTED _____		
NOTE BOOK	GRADES CHECKED _____		
	B.M. NOTED _____		
NO. _____	STRUCTURE NOTATIONS CHKD _____		



LEGEND



USER NAME = M0gden	DESIGNED - LBK/JJ	REVISED - _____
	DRAWN - LBK/JJ	REVISED - _____
PLOT SCALE = \$SCALE\$	CHECKED - MMO/YP	REVISED - _____
PLOT DATE = 2/28/2025	DATE - 11/12/2024	REVISED - _____

**PIATT COUNTY
TOWNSHIP ROAD 25
OVER TRIBUTARY TO GOOSE CREEK**

PLAN AND PROFILE – LOCATION #2				
SCALE: 1"=50'	SHEET 1	OF 1	SHEETS	STA. 18+25.00 TO STA. 21+00.00

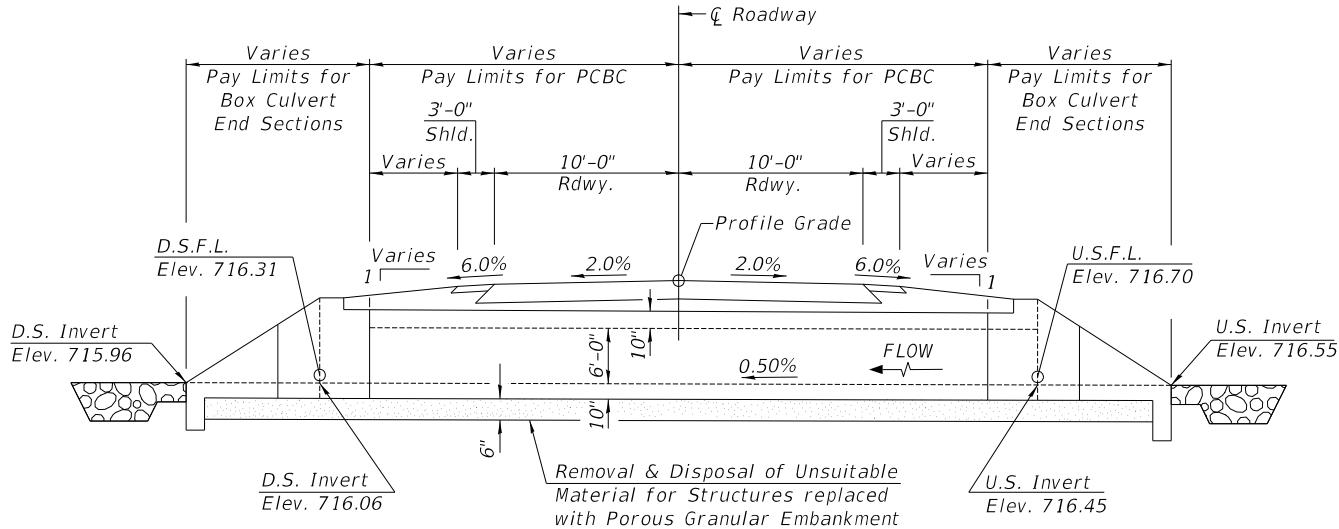
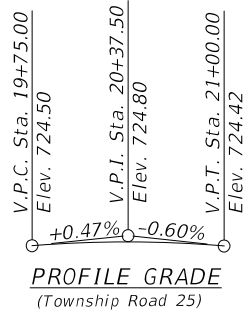
RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 25	24-02125-00-DR	PIATT	36	18
	ILLINOIS			

B.M.: Nail in Power Pole
Sta. 18+01, 22.3' Lt.
Elev. 724.25

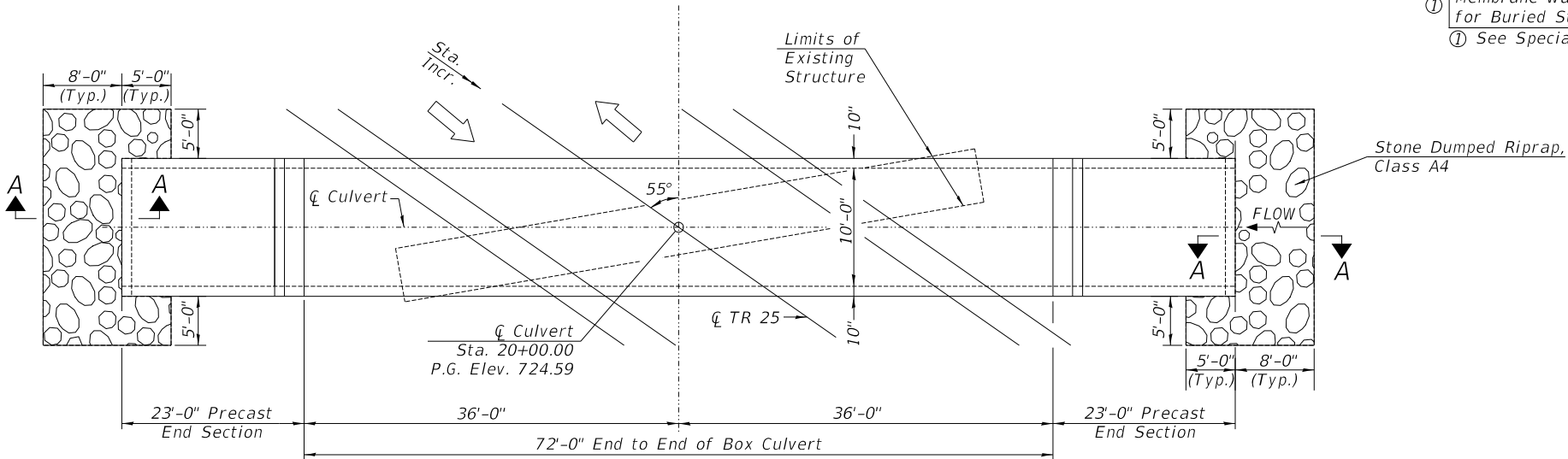
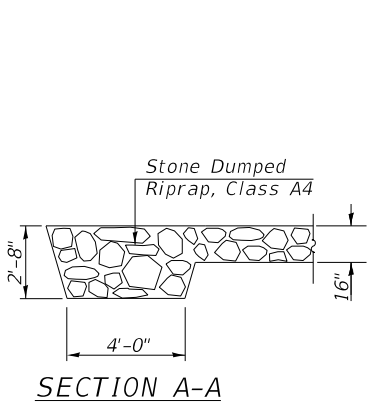
Existing Structure:
Single barrel 66" corrugated metal
pipe culvert. The structure is 59'-7"
in length and is skewed at 45° Lt. Ah.

Salvage: No Salvage.

Road to be closed to traffic
during construction.



LONGITUDINAL SECTION
(Dimensions are at Rt. L's to ∇ Roadway)



PLAN

DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications,
9th Edition

LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES

(PRECAST UNITS)
 $f'_c = 5,000$ p.s.i.
 $f_y = 65,000$ p.s.i. (Welded Wire Rein.)

(FIELD UNITS)
 $f'_c = 3,500$ p.s.i.

GENERAL NOTES

The design fill heights for this box are 1.52 ft max. and 1.01 ft min. The precast box culvert sections shall conform to the requirements of ASTM C 1577.

Layout of stone riprap may be varied in the field to suit ground conditions as directed by the Engineer.

The required depth of removal and replacement of unsuitable materials may be adjusted by the Engineer to account for variable subsurface conditions.

Membrane Waterproofing System for Buried Structures shall be applied to the top surface of the top slab and shall extend down the sidewall a minimum of 1 foot below the top of the precast box culvert.

All excavation required for removal of the existing structure or construction of the culvert as shown in these plans and in accordance with the Standard Specifications shall be included in the cost of Precast Concrete Box Culverts 10' x 6'.

Stone Dumped Riprap, Class A4 has an application rate of 115 lb/cu ft.

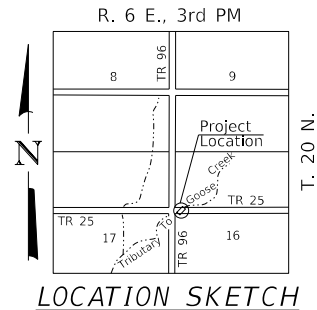
The 6 in. thick layer of porous granular embankment required for the precast concrete box culvert per Art. 540.06 of the Standard Specifications shall also apply to the end sections.

Drain holes shall be provided on exterior culvert walls for each precast box segment with a clear rise greater than 3 ft. The drain hole shall be located within 1/3 of the clear rise of the box culvert, shall not intercept the haunch, and shall conform to the requirements of Article 503.11 of the Standard Specification.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Removal & Disposal of Unsuitable Material for Structures	CU YD	35
① Porous Granular Embankment	CU YD	275
① Stone Dumped Riprap, Class A4	TON	50
Pipe Culvert Removal	FOOT	60
Box Culvert End Sections, Culvert No. 2	EACH	2
Geocomposite Wall Drain	SQ YD	110
Precast Concrete Box Culverts 10' x 6'	FOOT	72
① Membrane Waterproofing System for Buried Structures	SQ YD	110

① See Special Provisions



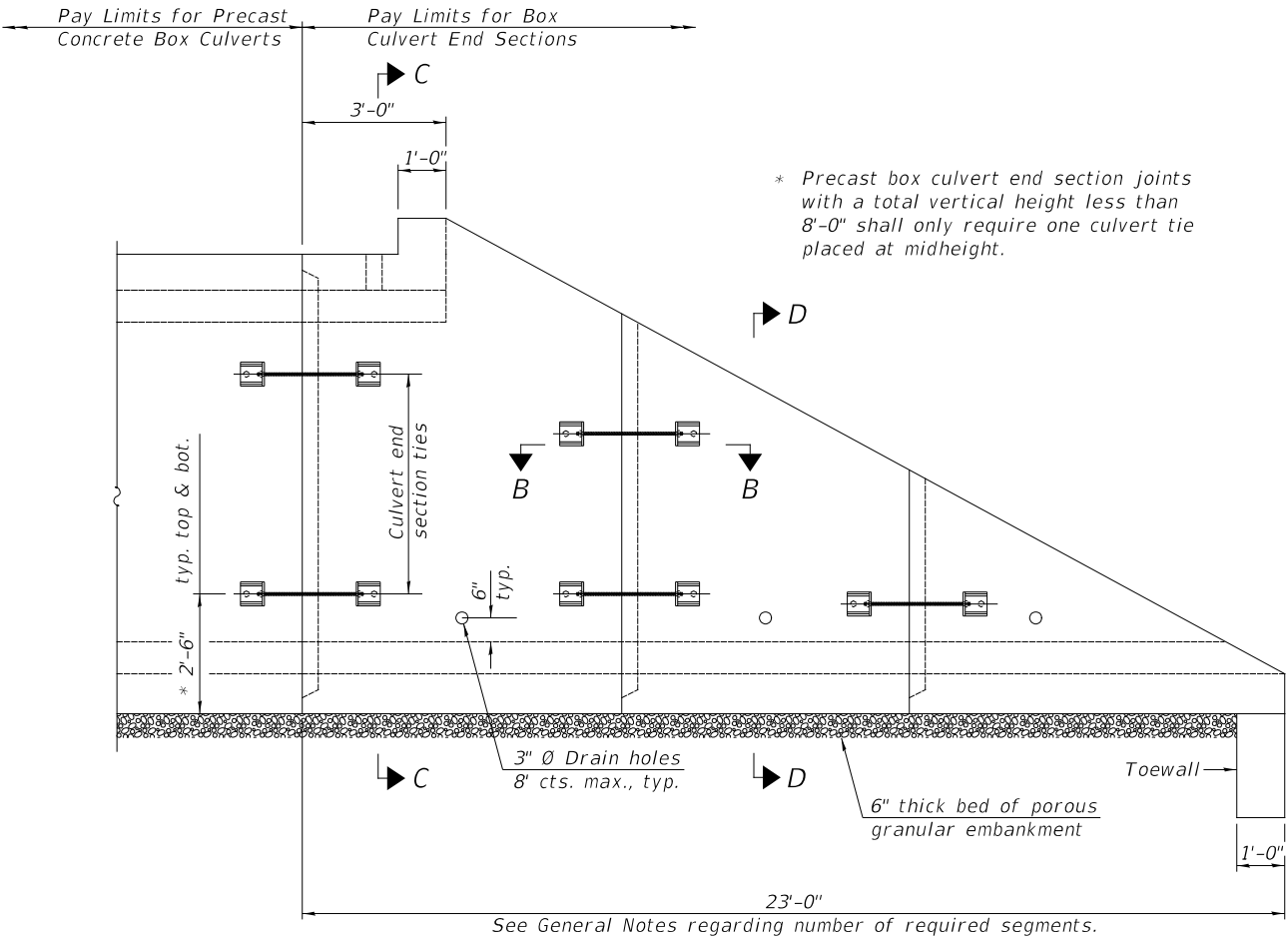
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	DRAWN - JJ	REVISED - _____
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PLOT DATE = 1/15/2025	DATE - 11/12/2024	REVISED - _____

**PIATT COUNTY
TOWNSHIP ROAD 25
OVER TRIBUTARY TO GOOSE CREEK**

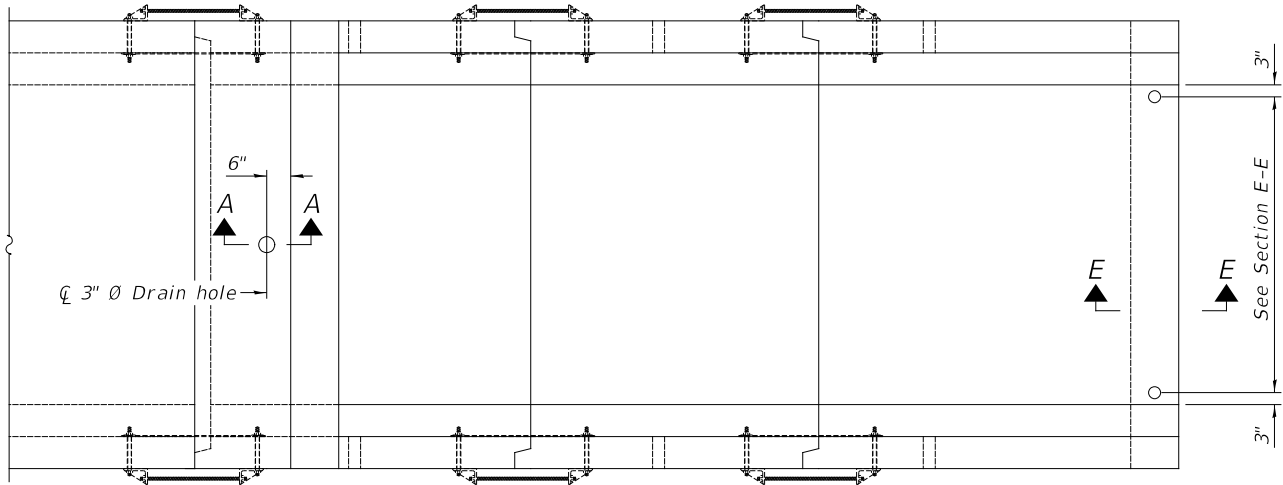
PRECAST CONCRETE BOX CULVERT AND DETAILS - LOCATION #2

SCALE: NONE SHEET 1 OF 4 SHEETS

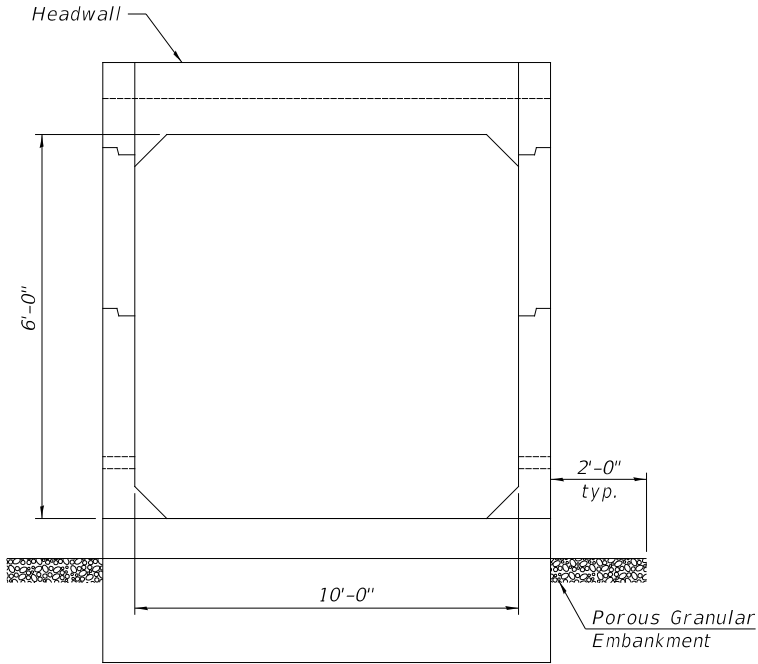
RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 25	24-02125-00-DR	PIATT	36	19
		ILLINOIS		



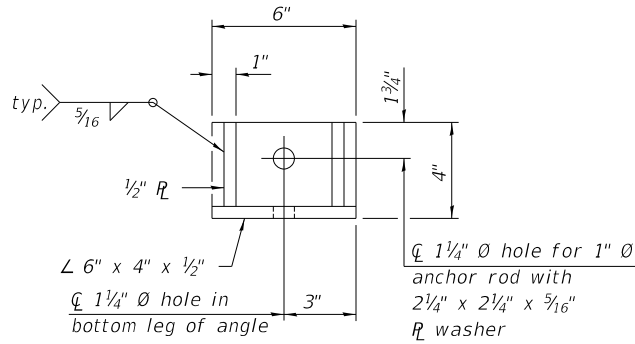
ELEVATION



PLAN



END VIEW



RESTRAINT ANGLE DETAIL

12" x 12" x 6" block of CA5, CA7, or CA11 coarse aggregate placed over drain opening. Block of aggregate shall be completely wrapped in nonwoven geotextile fabric.

Provide a double layer of 12" x 12" nonwoven geotextile fabric centered over the drain hole. Fabric shall be sealed to the concrete with mastic.

3" Ø PVC drain cast with the concrete (Adjust location to clear reinforcement).

1/2" Square foam blockout around PVC drain (to be removed with formwork)

SECTION A-A

(All costs associated with furnishing and constructing the above drain detail will not be measured for payment but shall be included in the contract unit price for the associated work.)

(Sheet 1 of 2)

MODEL:
FILE NAME:

5301-02-c002.dgn

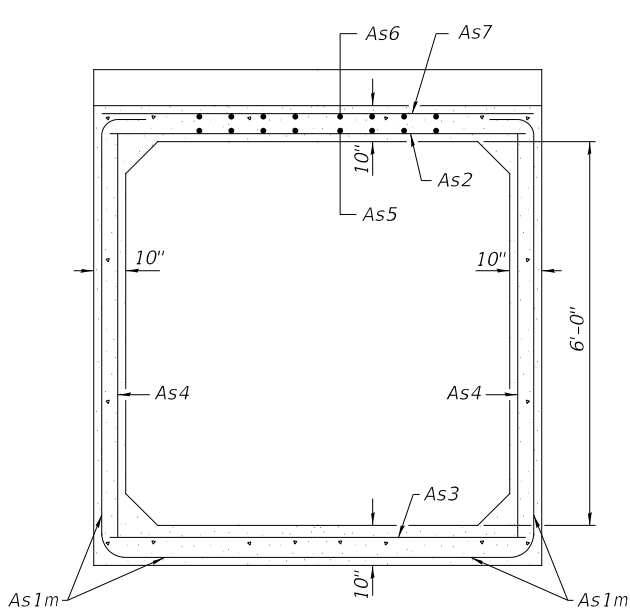
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	DRAWN - JJ	REVISED - _____
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PLOT DATE = 1/15/2025	DATE - 11/12/2024	REVISED - _____

PIATT COUNTY
TOWNSHIP ROAD 25
OVER TRIBUTARY TO GOOSE CREEK

PRECAST BOX CULVERT TAPERED END SECTION
DETAILS - LOCATION #2

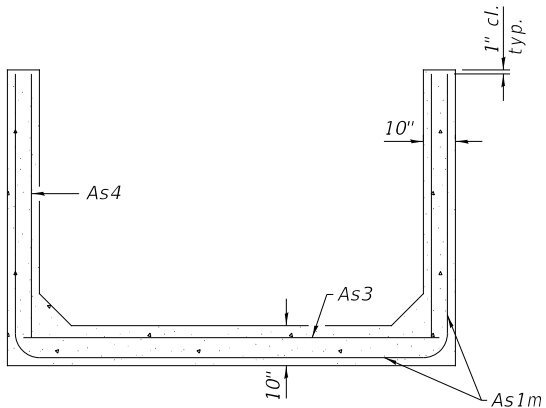
SCALE: NONE SHEET 2 OF 4 SHEETS

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 25	24-02125-00-DR	PIATT	36	20
ILLINOIS				

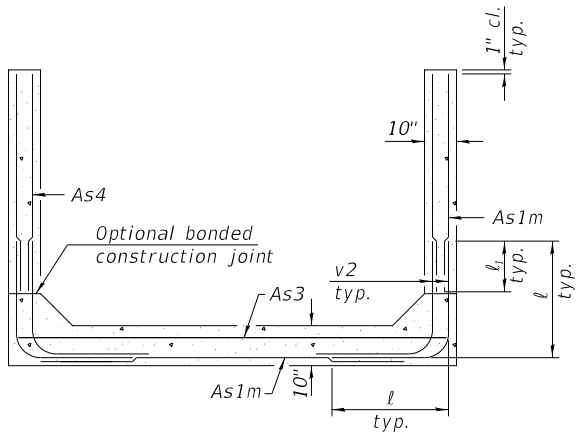


(Design Earth Cover < 2 ft)

SECTION C-C



SECTION D-D



ALTERNATE SECTION D-D

As1m REINFORCEMENT												
(in. ² / ft)												
Rise (ft)	2	3	4	5	6	7	8	9	10	11	12	
Ts (in.)												
4	0.19	0.17										
5	0.26	0.21	0.18									
6	0.22	0.26	0.23	0.22								
7	0.25	0.33	0.59	0.27	0.28							
8	0.40	0.35	0.43	0.39	0.36	0.34	0.40					
9	0.44	0.39	0.35	0.43	0.40	0.37	0.36	0.48				
10	0.48	0.42	0.38	0.47	0.44	0.41	0.38	0.42	0.56			
11	0.52	0.45	0.54	0.50	0.46	0.44	0.41	0.46	0.50	0.65		
12	0.55	0.49	0.58	0.54	0.50	0.48	0.45	0.46	0.46	0.61	0.75	

(As1m reinforcement based upon welded wire reinforcement conforming to AASHTO M 55 or M 221).

l₁ DIMENSION

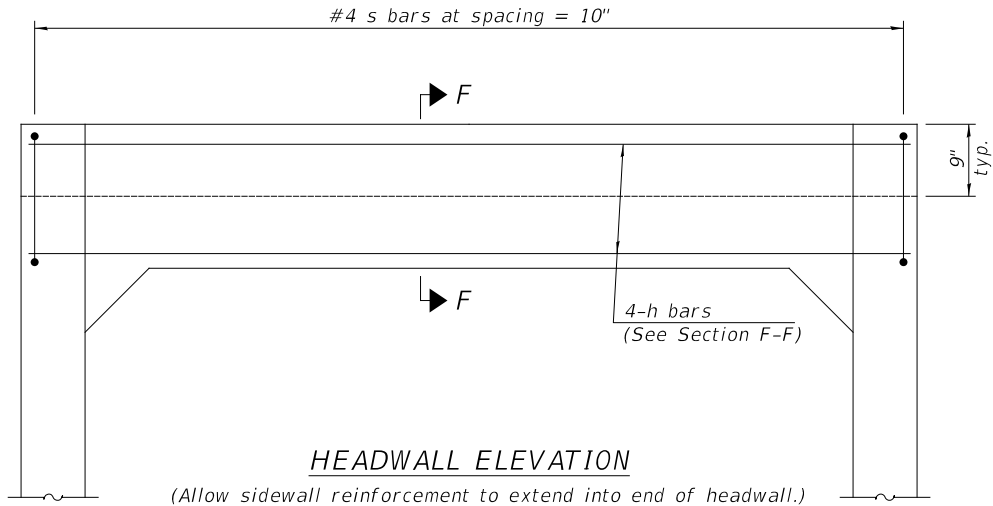
- #3 bar = 2'-0"
- #4 bar = 2'-8"
- #5 bar = 3'-4"
- #6 bar = 3'-11"

Notes:

Alternate Section D-D is provided to allow the Contractor the option of casting the bottom slab of the end section first followed by construction of the sidewalls using conventional forming methods. Shop drawings that detail slab thickness and reinforcement layout shall be submitted to the Engineer for review and approval when using Alternate Section D-D.

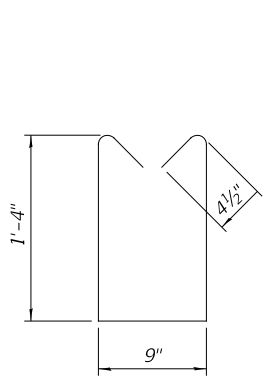
The size and spacing of the v2 bars shall provide a minimum reinforcement area along each face of the walls (in.²/ft.) equal to 1.10*(As1m). v2 bars may consist of #3 thru #6 size reinforcement bars and the longitudinal spacing shall not exceed the lesser of the wall thickness or 8 inches.

Bonded construction joints shall be prepared according to Article 503.09 of the Standard Specifications.

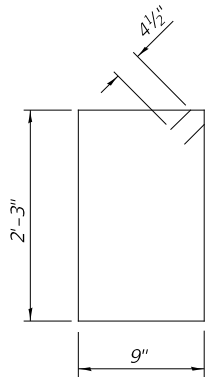


(Allow sidewall reinforcement to extend into end of headwall.)

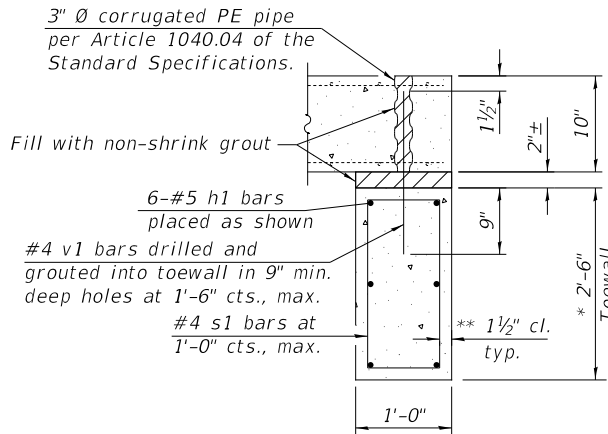
HEADWALL ELEVATION



BAR s



BAR s1



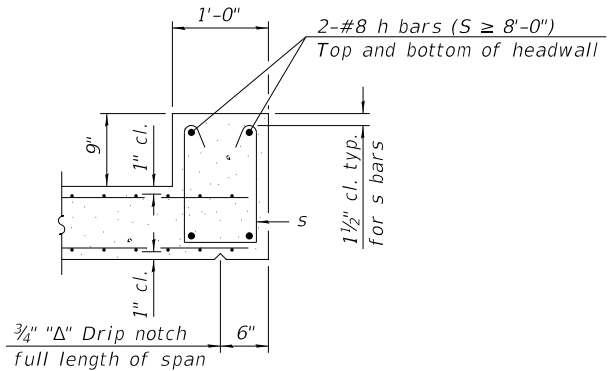
SECTION E-E

TOEWALL CONSTRUCTION SEQUENCE

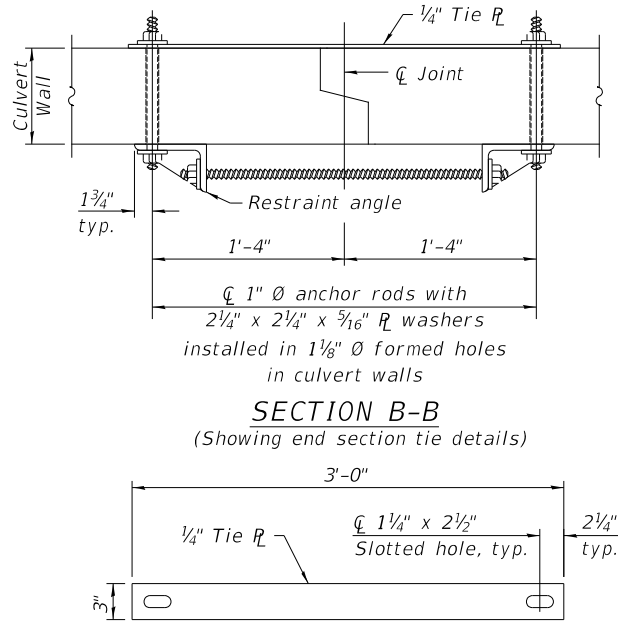
1. Perform excavation and construct toewall.
2. Backfill according to the applicable paragraphs of Article 502.10 of the Standard Specifications and place bedding for precast box culvert end sections.
3. Set precast box culvert end section.
4. Drill and epoxy grout reinforcement in toewall in accordance with Section 584 of the Standard Specifications.
5. Pressure grout voids using non-shrink grout conforming to Section 1024 of the Standard Specifications.

* The Contractor may furnish a precast or cast-in-place toewall. The Contractor shall be responsible for the strength and stability of the precast toewall during handling. Additional lifting points may be required depending upon the length of the toewall or the Contractor may need to modify the design of the toewall for the proposed handling the method.

** If soil conditions permit, the sides of the toewall may be poured directly against the soil. The clear cover on the sides of the toewall shall be increased to 3 inch by increasing the thickness of the toewall.



SECTION F-F



SECTION B-B

(Showing end section tie details)

TIE PLATE DETAIL

(Sheet 2 of 2)

MODEL:
FILE NAME:

5301-02-c003.dgn

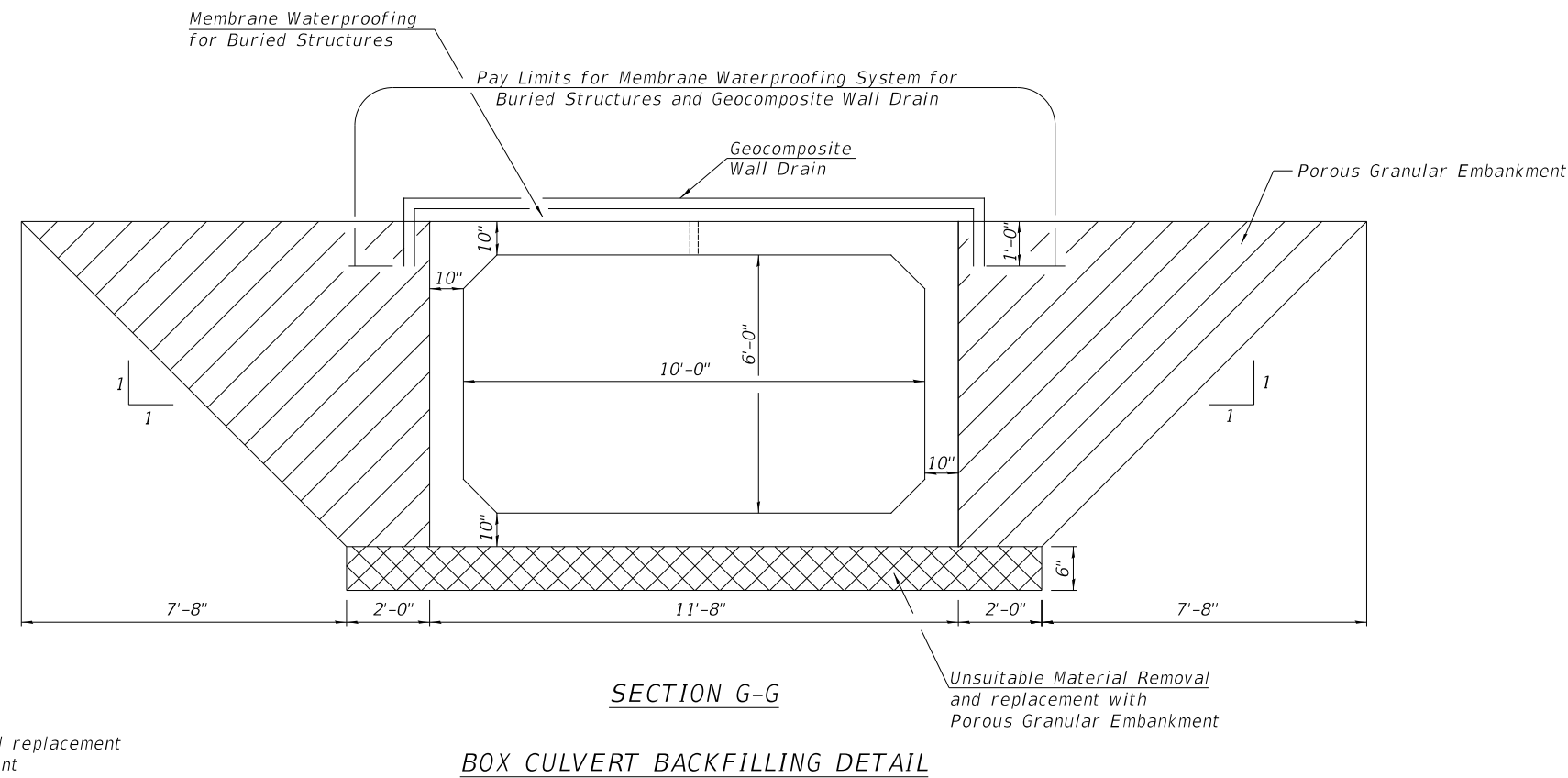
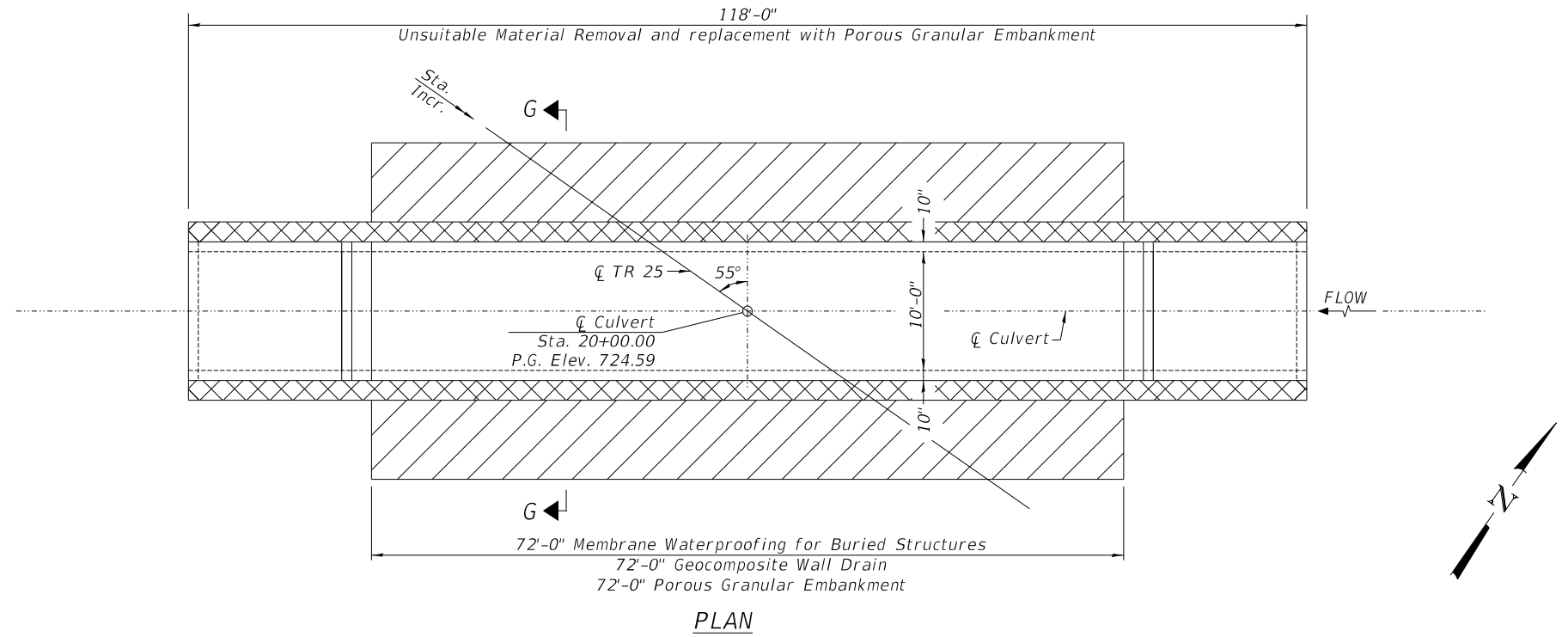
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

PIATT COUNTY
TOWNSHIP ROAD 25
OVER TRIBUTARY TO GOOSE CREEK

PRECAST BOX CULVERT TAPERED END SECTION
DETAILS - LOCATION #2

SCALE: NONE SHEET 3 OF 4 SHEETS

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 25	24-02125-00-DR	PIATT	36	21
ILLINOIS				



-  Porous Granular Embankment
-  Unsuitable Material Removal and replacement with Porous Granular Embankment

USER NAME = jloshi	DESIGNED - JJ	REVISED - _____
	DRAWN - JJ	REVISED - _____
PLOT SCALE = \$SCALE\$	CHECKED - YP/MMO	REVISED - _____
PLOT DATE = 1/15/2025	DATE - 11/12/2024	REVISED - _____

**PIATT COUNTY
TOWNSHIP ROAD 25
OVER TRIBUTARY TO GOOSE CREEK**

**BACKFILL AND MEMBRANE WATERPROOFING SYSTEM
DETAILS - LOCATION #2**

SCALE: NONE SHEET 4 OF 4 SHEETS

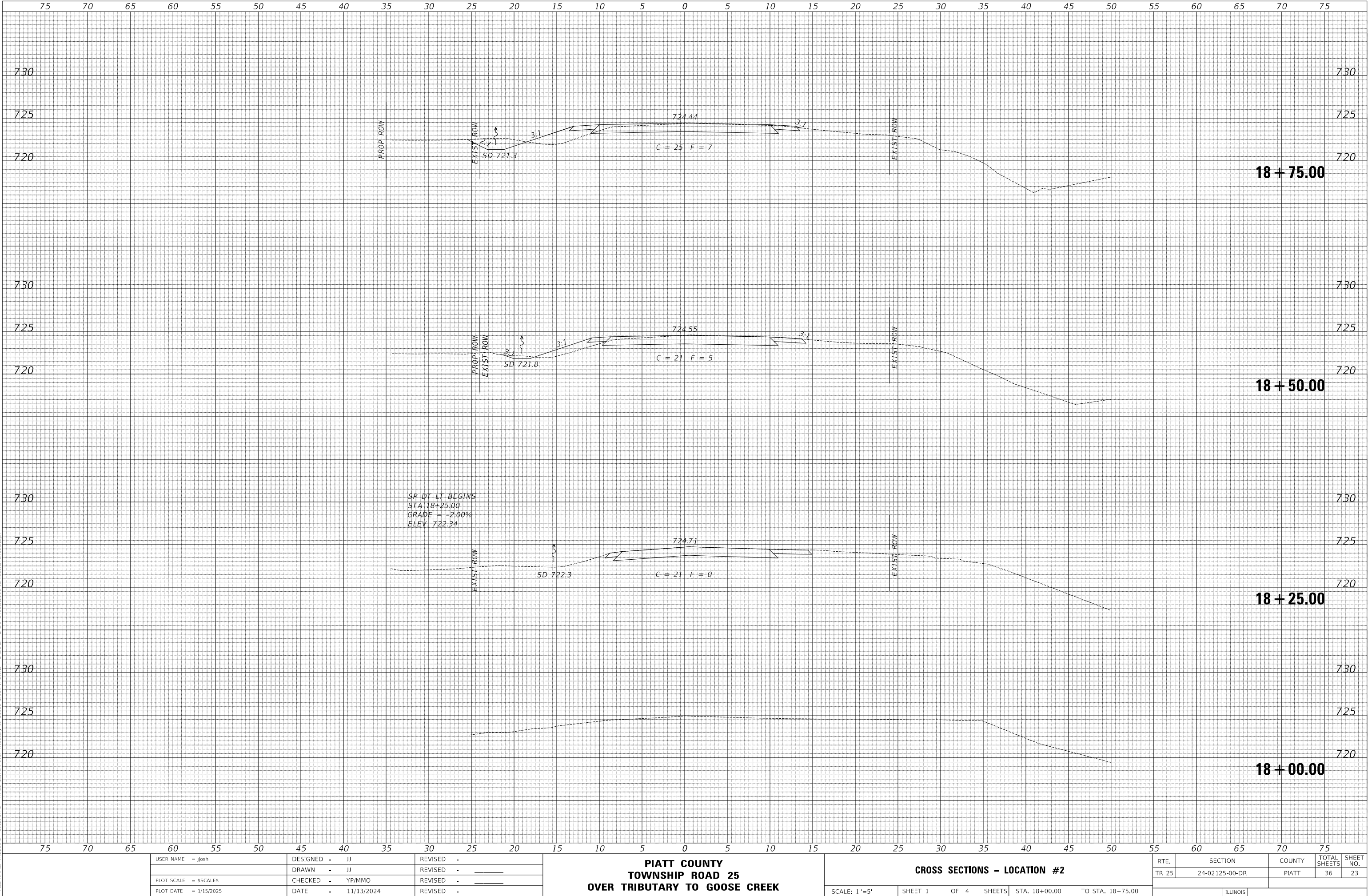
RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 25	24-02125-00-DR	PIATT	36	22

ILLINOIS

FINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE
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ORIGINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE
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MODEL: Default
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DRAWN - JJ	REVISD - _____	
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PLOT DATE = 1/15/2025	DATE - 11/13/2024	REVISED - _____

**PIATT COUNTY
TOWNSHIP ROAD 25
OVER TRIBUTARY TO GOOSE CREEK**

CROSS SECTIONS - LOCATION #2

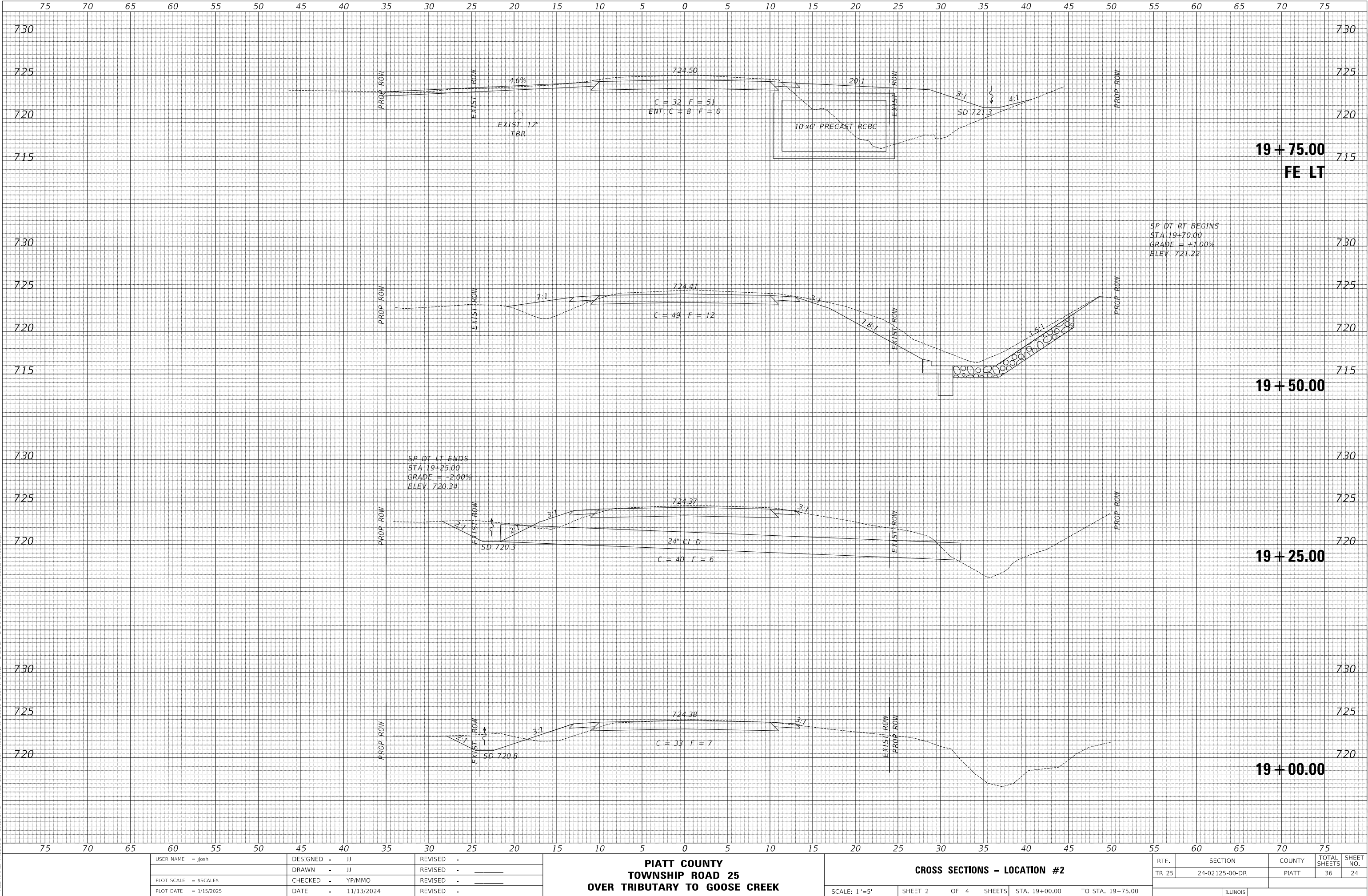
SCALE: 1"=5' SHEET 1 OF 4 SHEETS STA. 18+00.00 TO STA. 18+75.00

RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 25	24-02125-00-DR	PIATT	36	23
ILLINOIS				

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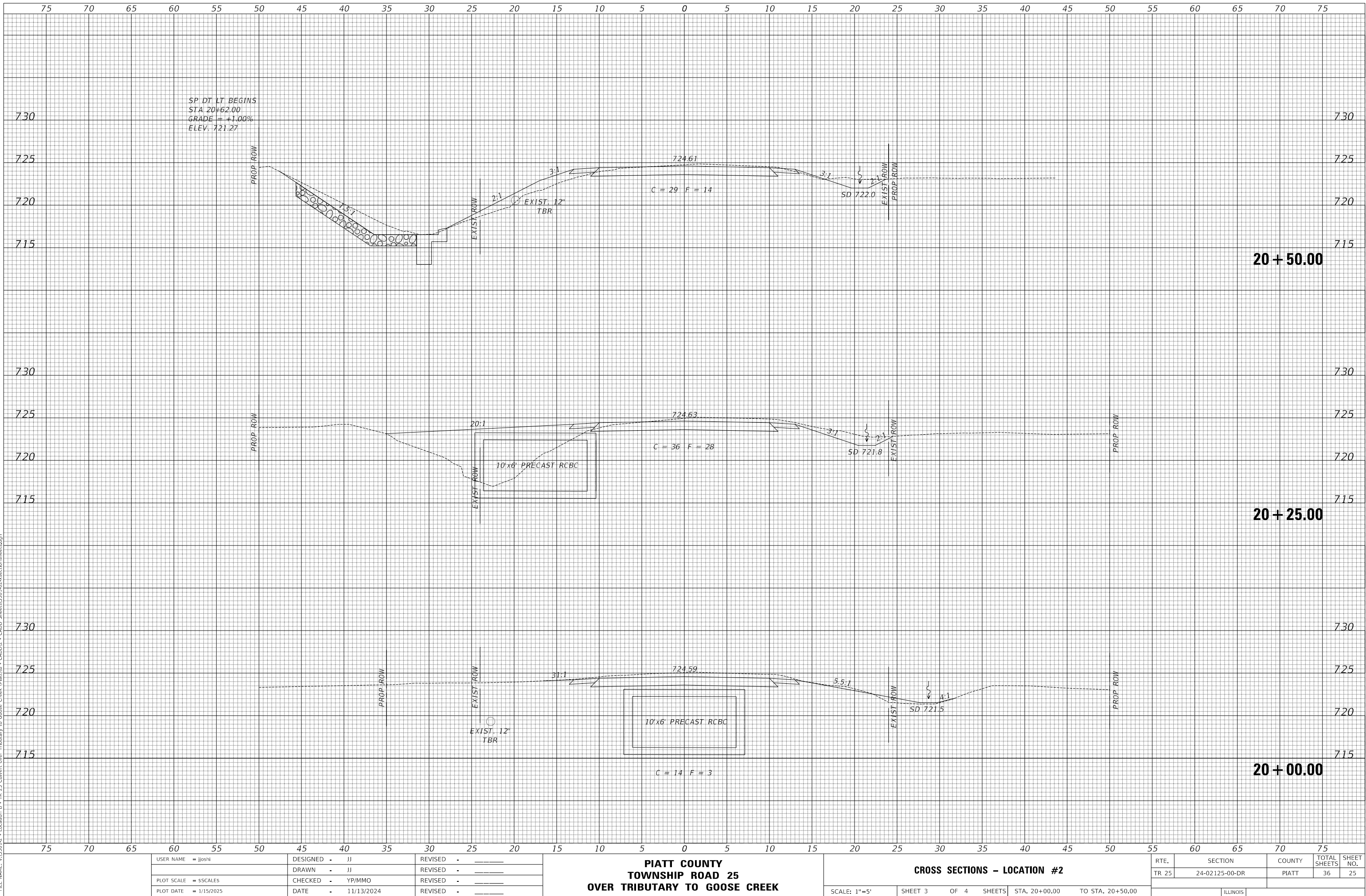
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FINAL SURVEY	SURVEYED _____	BY _____	DATE _____
	PLOTTED _____		
NOTE BOOK	TEMPLATE _____		
	AREAS _____		
NO. _____	AREAS CHECKED _____		

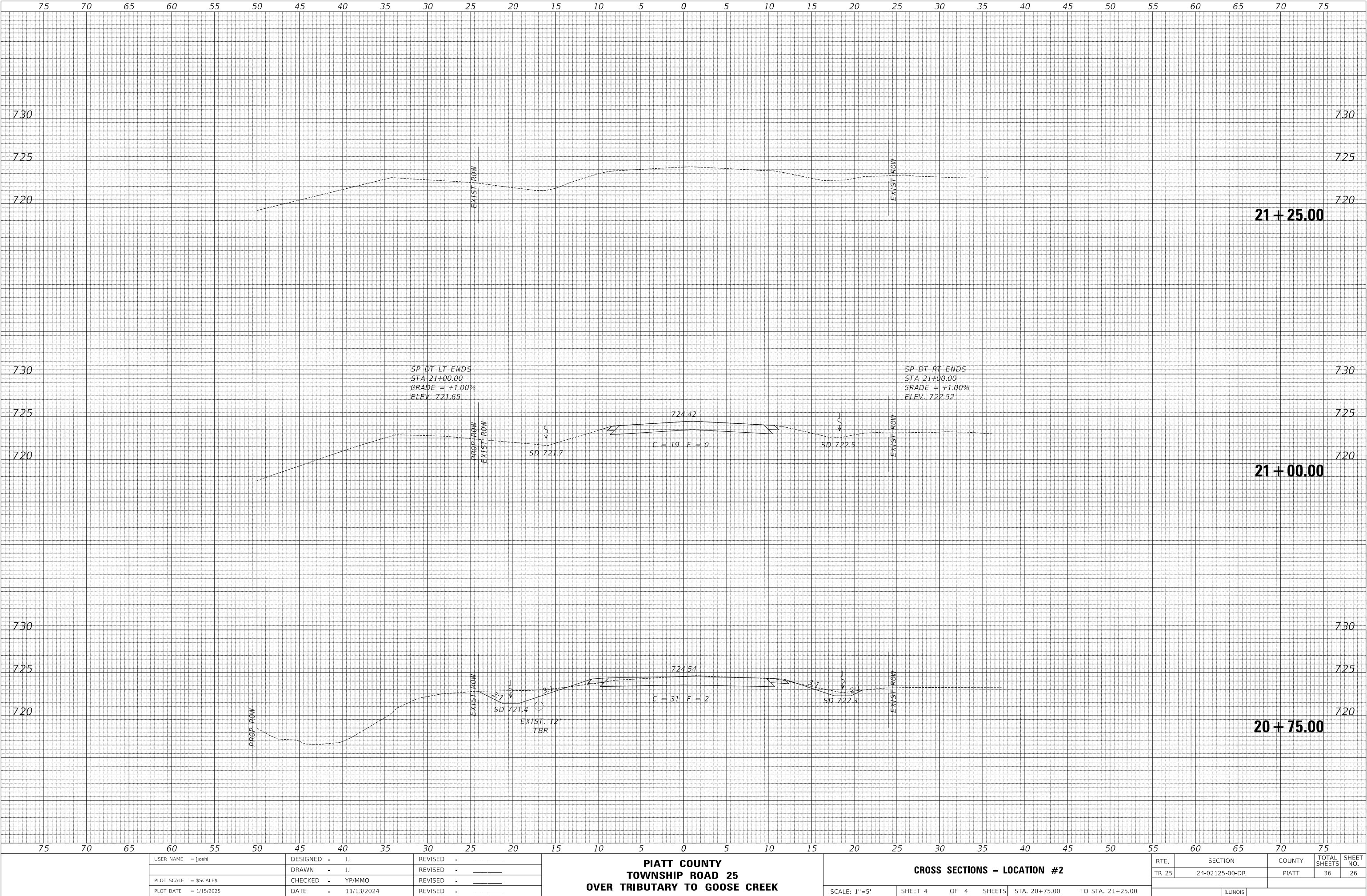
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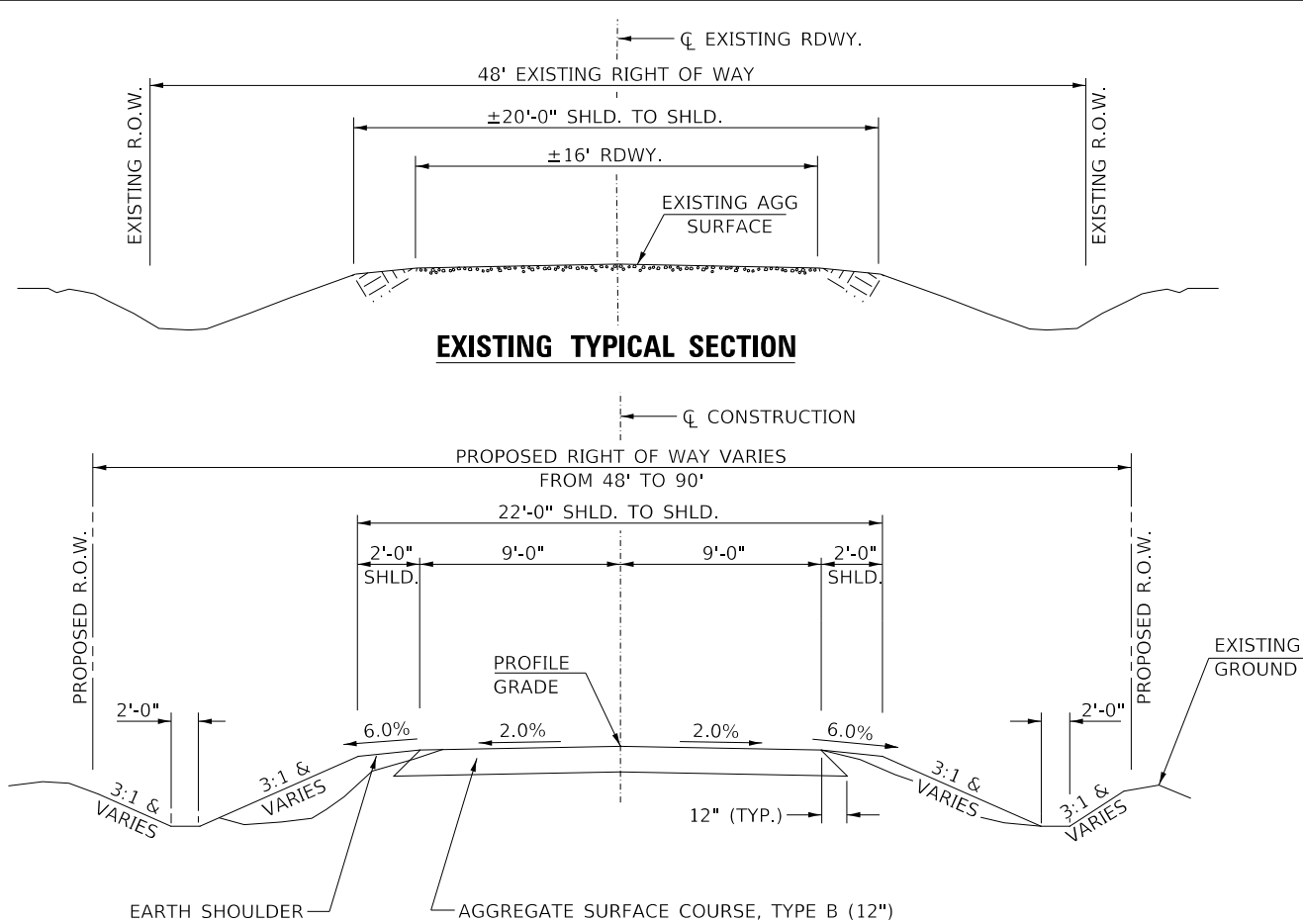
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MODEL: Default
FILE NAME: V:\S301\3 - Location C - TR 96 Culvert over Tributary to Goose Creek (Platt)\8 - CADD\2 - CADD Sheets\301-03-001.dgn



PROPOSED TYPICAL SECTION

STA. 19+50.00 TO STA. 20+40.00
EXCEPT TRANSITIONS

SUMMARY OF QUANTITIES			
CODE NO.	ITEM	UNIT	QUANTITY
20200100	EARTH EXCAVATION	CU YD	60
① 20400800	FURNISHED EXCAVATION	CU YD	15
① 20700220	POROUS GRANULAR EMBANKMENT	CU YD	140
28000305	TEMPORARY DITCH CHECKS	FOOT	24
28000400	PERIMETER EROSION BARRIER	FOOT	85
① 28100807	STONE DUMPED RIPRAP, CLASS A4	TON	50
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	122
① 50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50200450	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR STRUCTURES	CU YD	25
54001003	BOX CULVERT END SECTIONS, CULVERT NO. 3	EACH	2
54011006	PRECAST CONCRETE BOX CULVERTS 10' X 6'	FOOT	36
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	55
① X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.1
① X5810103	MEMBRANE WATERPROOFING SYSTEM FOR BURIED STRUCTURES	SQ YD	55
① X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	0.33
① XX009301	FIELD TILE ADJUSTMENT	FOOT	100

① SEE SPECIAL PROVISIONS

EARTHWORK SUMMARY

STATION TO STATION	EARTH EXCAVATION	FILL	WASTE (SHORTAGE)
19+50.00 - 19+88.55	34	23	3
FILL OVER CULVERT	-	12	(12)
20+01.42 - 20+40.00	27	27	(7)
TOTAL	61	62	(16)
USE	60	-	(15)*

(@ 25% SHRINKAGE)

*EXCAVATION FOR REMOVAL OF THE EXISTING STRUCTURE AND CONSTRUCTION OF THE CULVERT ARE NOT INCLUDED INTO FURNISHED EXCAVATION BUT SUITABLE MATERIAL FROM EXCAVATION FOR CONSTRUCTION OF THE CULVERT MAY BE USED AS EMBANKMENT.

40200800 - AGGREGATE SURFACE COURSE, TYPE B 140#/CF

STATION TO STATION		THICKNESS	WIDTH	LENGTH	TON
19+50.00	19+75.00	1.00'	17.24' AVG.	25.00'	30
19+75.00	20+25.00	1.00'	19.00'	50.00'	67
20+25.00	20+40.00	1.00'	23.97' AVG.	15.00'	25
TOTAL					122

28000400 - PERIMETER EROSION BARRIER

STATION TO STATION		SIDE	FOOT
19+50	19+81	LEFT	35
20+08	20+40	RIGHT	35
20+25	20+40	LEFT	15
TOTAL			85

28000305 - TEMPORARY DITCH CHECKS

STATION	SIDE	FOOT
19+95	RIGHT	12
19+95	LEFT	12
TOTAL		24

GENERAL NOTES

THE REMOVAL OF EXISTING AGGREGATE SURFACE AND GRAVEL OR CRUSHED STONE BASE COURSE WHICH MAY BE NECESSARY FOR THE CONSTRUCTION OF THE PROJECT SHALL BE REMOVED AS EARTH EXCAVATION AND NO COMPENSATION WILL BE ALLOWED FOR ADDITIONAL LABOR OR EQUIPMENT REQUIRED.

ALL WASTE OR UNDESIRABLE MATERIAL AS IDENTIFIED BY THE ENGINEER SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY AT THE CONTRACTOR'S EXPENSE.

ALL EXISTING PRIVATELY OWNED UTILITIES REQUIRING ADJUSTMENT WILL BE MADE BY THE UTILITY COMPANY INVOLVED. WHERE NO PROVISIONS HAVE BEEN MADE FOR ADJUSTMENTS ON THE PLANS, NO ADDITIONAL COMPENSATION WILL BE ALLOWED DUE TO DELAYS OR INCONVENIENCES CAUSED BY THE SAID UTILITY ADJUSTMENTS.

THE PROFILE GRADE ELEVATIONS SHOWN ON THE PLAN AND PROFILE SHEETS AND IN THE STATION CROSS SECTIONS ARE TO THE TOP OF THE FINISHED SURFACE.

ALL EXISTING DRAINAGE STRUCTURES NOT BEING REMOVED BY THE CONTRACTOR THAT ARE DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS SHALL BE INTERPRETED TO BE THE LATEST STANDARDS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION.

THE LOCATION OF UNDERGROUND UTILITIES SHOWN ON THE PLANS REPRESENTS THE BEST KNOWLEDGE OF THE COUNTY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS OF UNDERGROUND INSTALLATIONS BEFORE STARTING CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL INDEMNIFY THE COUNTY, ITS OFFICERS AND EMPLOYEES AGAINST ALL CLAIMS DUE TO DAMAGE TO CORPORATE OR PRIVATE PROPERTY RESULTING FROM HIS CONSTRUCTION OPERATIONS AS DESCRIBED IN ARTICLES 107.20 AND 107.26 OF THE STANDARD SPECIFICATIONS.

THE CONTRACTOR MAY BE REQUIRED TO CONDUCT SOME OF HIS GRADING AND TRENCHING OPERATIONS AROUND TRANSMISSION POLES AND UNDER TRANSMISSION LINES. THE ADDED COST OF SO DOING SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND PRESERVE PROPERTY MARKERS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR, OR AGENT, HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

THE FINAL SURFACE OF ALL DISTURBED/EMBANKMENT AREAS SHALL BE SEEDDED. THE TOP 4 INCHES OF THE SEEDDED AREAS SHALL BE COHESIVE VEGETATION SUSTAINING SOIL SUBJECT TO THE APPROVAL OF THE ENGINEER. THE COST OF SHAPING THE SLOPES AND PROVIDING VEGETATION SUSTAINING SOIL WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION. TOPSOIL MAY BE STRIPPED AND STOCKPILED FROM THE SITE OR HAULED IN FROM AN ALTERNATE LOCATION AS APPROVED BY THE ENGINEER.

ALL ELEVATIONS SHOWN REFER TO U.S.G.S. MEAN SEA LEVEL DATUM.

USER NAME = jjoshi	DESIGNED - JJ	REVISED -
	DRAWN - JJ	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - YP/MMO	REVISED -
PLOT DATE = 1/15/2025	DATE - 11/14/2024	REVISED -

**PIATT COUNTY
TOWNSHIP ROAD 96
OVER TRIBUTARY TO GOOSE CREEK**

**GENERAL NOTES, TYPICAL SECTIONS, SUMMARY OF QUANTITIES,
SCHEDULES OF QUANTITIES – LOCATION #3**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. 19+50.00 TO STA. 20+40.00

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 96	24-02125-00-DR	PIATT	36	27
		ILLINOIS		

MODEL: Default
FILE NAME: V:\S301\3 - Location C - TR 96 Culvert over Tributary to Goose Creek (Platt)\8 - CADD\2 - CADD Sheets\301-03-H001.dgn

1

ROAD CLOSED
½ MILE AHEAD
LOCAL TRAFFIC ONLY
R11-3

ROAD CLOSED
½ MILE AHEAD
LOCAL TRAFFIC ONLY

2

ROAD CLOSED
1 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3

ROAD CLOSED
1 MILES AHEAD
LOCAL TRAFFIC ONLY

3

ROAD CLOSED
1½ MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3

ROAD CLOSED
1½ MILES AHEAD
LOCAL TRAFFIC ONLY

4

ROAD CLOSED
AHEAD
W20-3


ROAD CLOSED
AHEAD

5

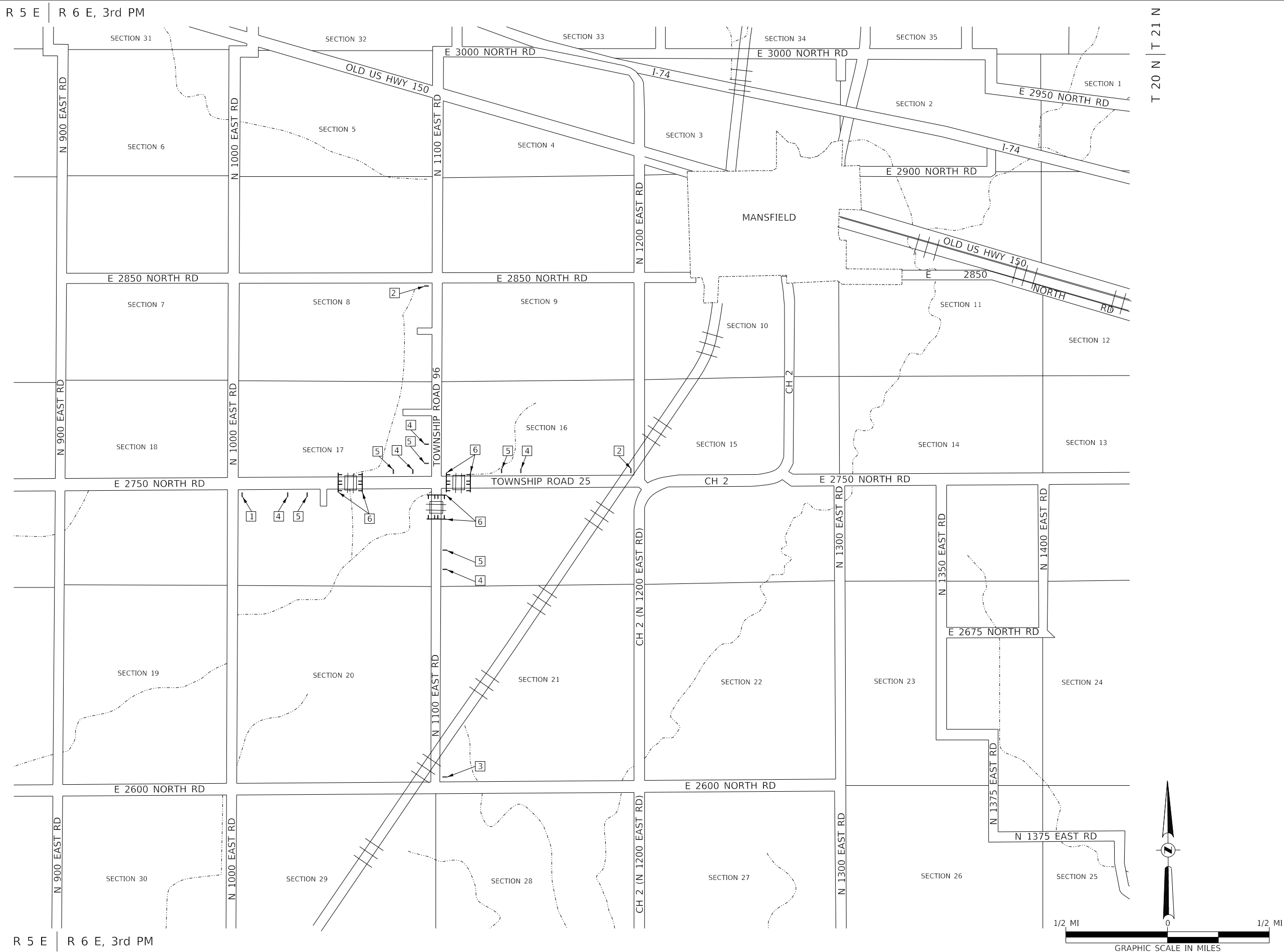
ROAD CLOSED
500 FT
W20-3

ROAD CLOSED
500 FT

6

TYPE III BARRICADES

SEE STANDARD BLR 21
AND SPECIAL PROVISIONS



USER NAME = jjoshi	DESIGNED - JJ	REVISED - _____
DRAWN - JJ	REVIS	REVIS
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PIATT COUNTY
TOWNSHIP ROAD 96
OVER TRIBUTARY TO GOOSE CREEK





TRAFFIC CONTROL PLAN - LOCATION #3

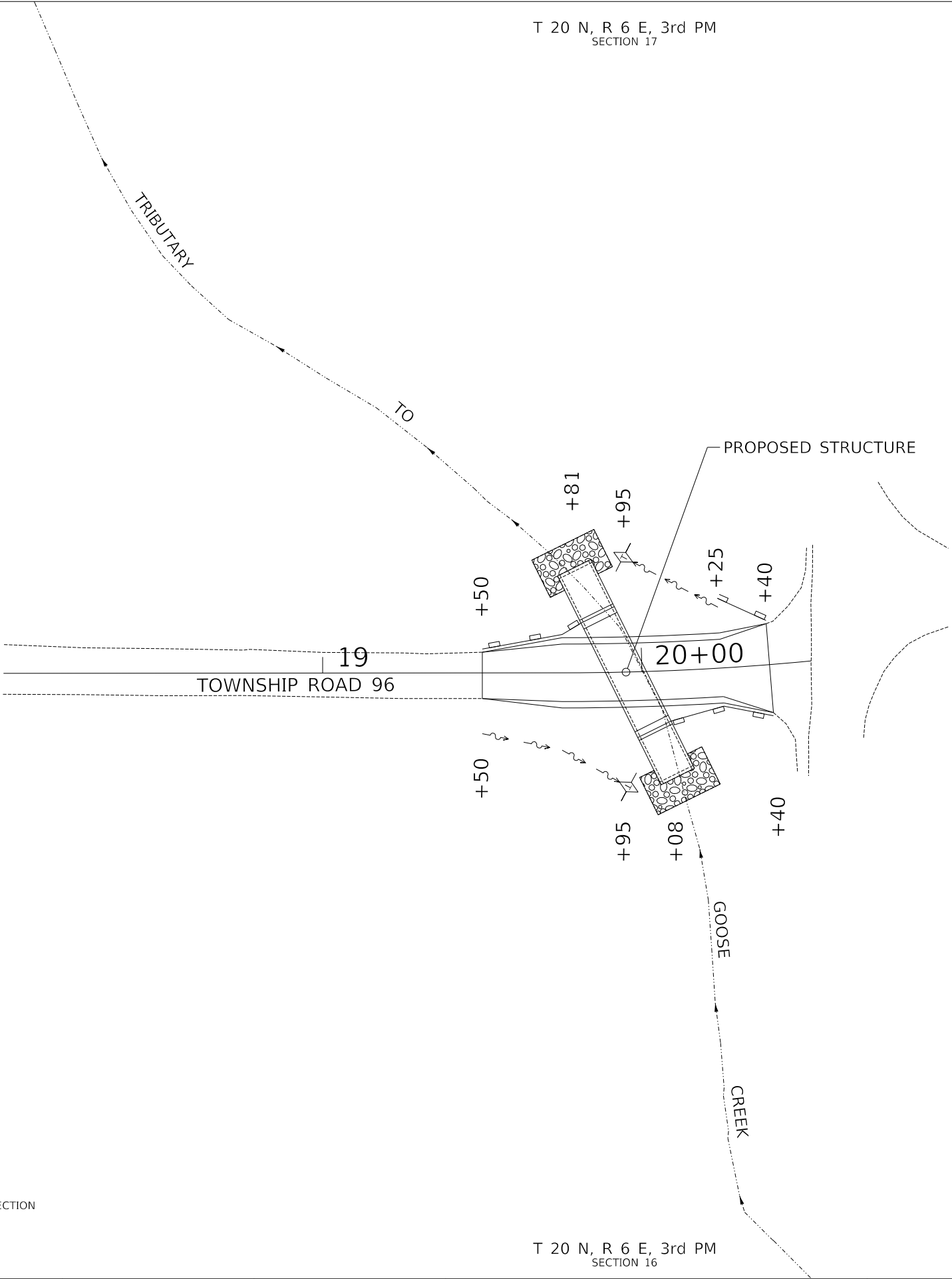
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RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 96	24-02125-00-DR	PIATT	36	28
ILLINOIS				

MODEL: Default
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LEGEND

- 
- PERIMETER EROSION BARRIER
- 
- TEMPORARY DITCH CHECK
- 
- SPECIAL DITCH - FLOW LINE AND DIRECTION
- 
- PROPOSED RIPRAP PLACEMENT



T 20 N, R 6 E, 3rd PM
SECTION 17

T 20 N, R 6 E, 3rd PM
SECTION 16

PIATT COUNTY
TOWNSHIP ROAD 96
OVER TRIBUTARY TO GOOSE CREEK

EROSION CONTROL PLAN - LOCATION #3

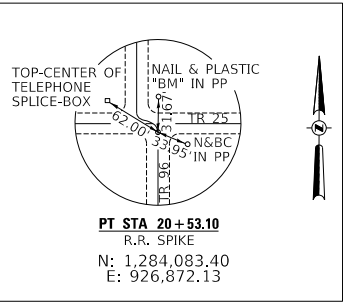
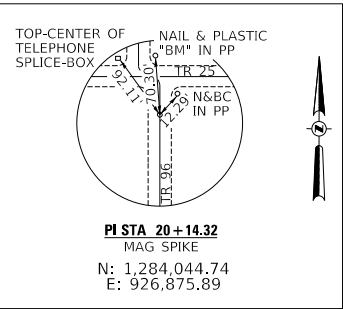
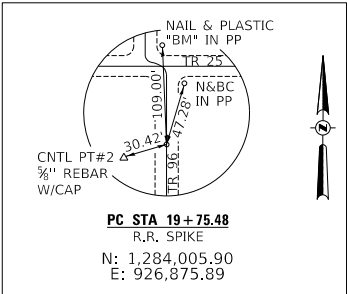
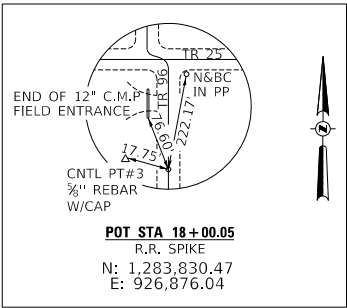
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RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 96	24-02125-00-DR	PIATT	36	29
		ILLINOIS		

PLAN	BY			DATE
	SURVEYED _____	_____	_____	_____
NOTE BOOK	PLOTTED _____	_____	_____	_____
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	RT. OF WAY CHECKED _____	_____	_____	_____
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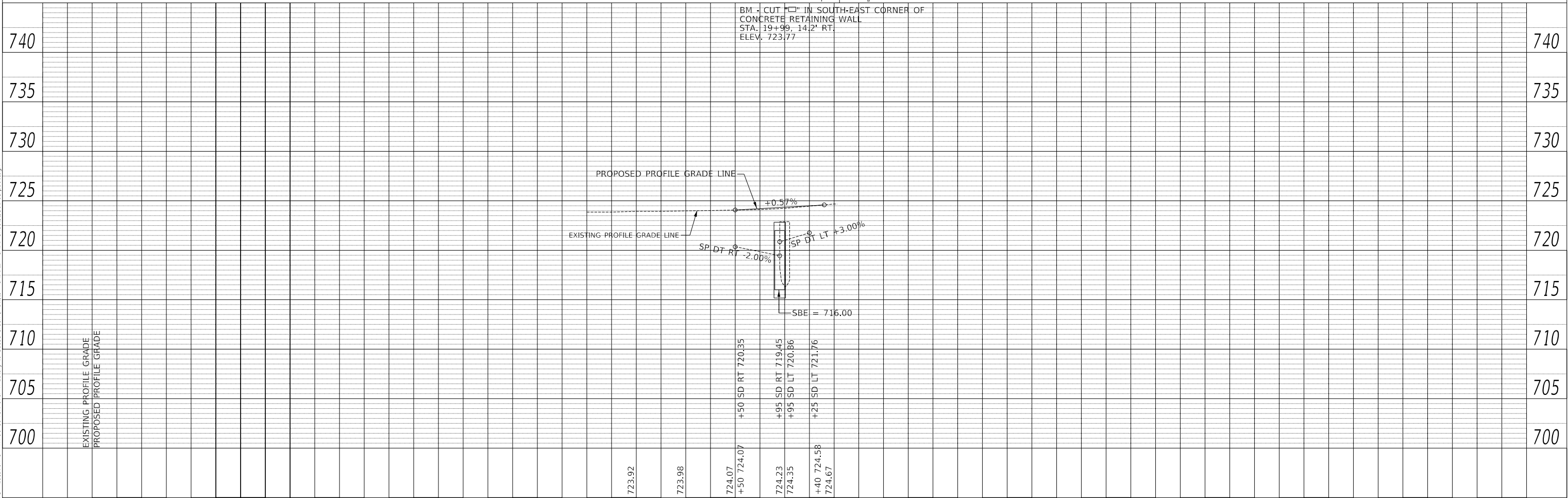
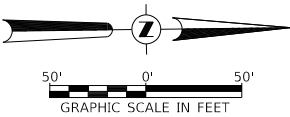
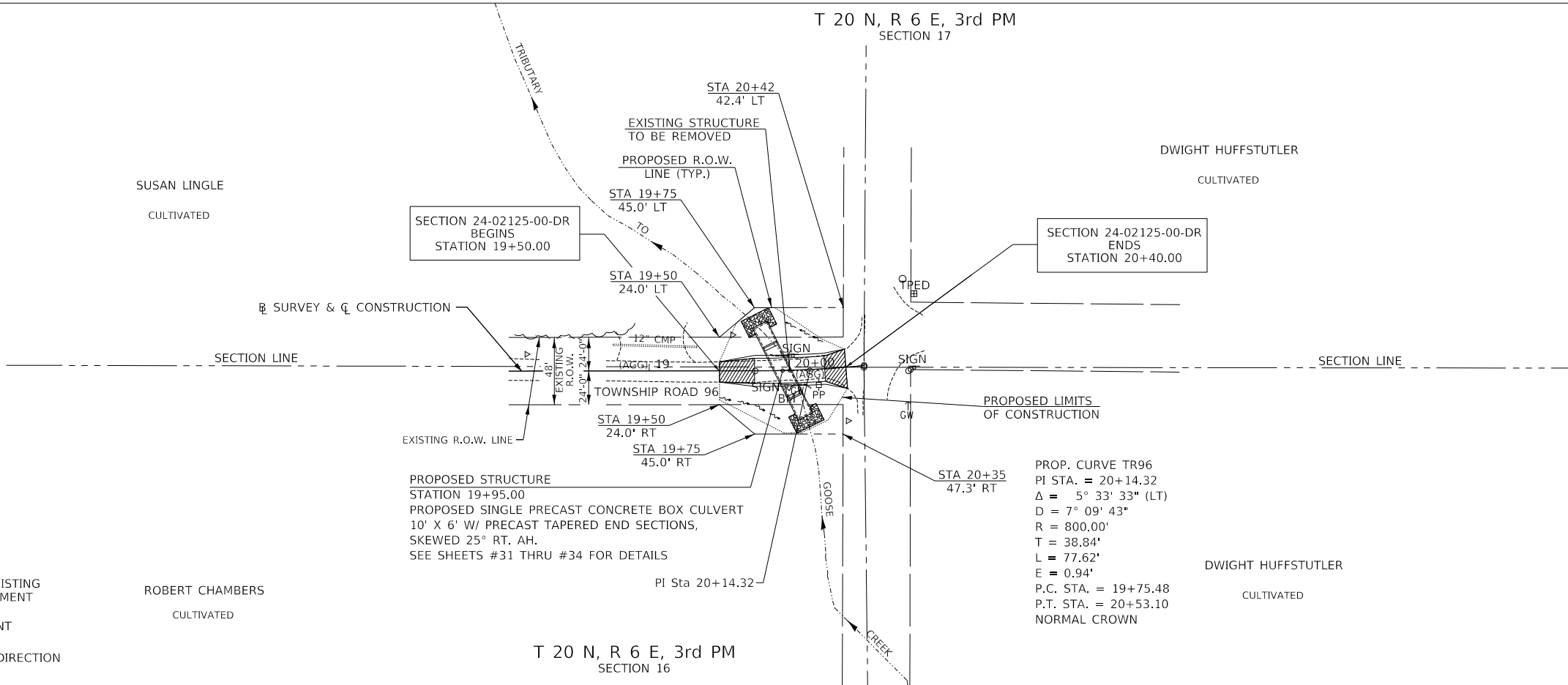
PROFILE	SURVEYED _____		BY _____	DATE _____
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NOTE BOOK	GRADES CHECKED _____			
NO. _____	B.M. NOTED _____			
	STRUCTURE NOTATIONS CHNGD _____			

Default V:\5201-3 - Location C - TR 96 Culvert over Tributary to Goose Creek (Platt)08 - CADD12 - CADD12 - CADD Sheets\5301-03-01-01.dgn



LEGEND

- TRANSITION TO OR FROM EXISTING TO PROPOSED TYPICAL PAVEMENT
- PROPOSED RIPRAP PLACEMENT
- SPECIAL DITCH WITH FLOW DIRECTION



USER NAME = MOgden	DESIGNED - LBK/JJ	REVISED - _____
	DRAWN - LBK/JJ	REVISED - _____
PLOT SCALE = \$SCALE\$	CHECKED - YP/MMO	REVISED - _____
PLOT DATE = 1/16/2025	DATE - 11/14/2024	REVISED - _____

PIATT COUNTY
TOWNSHIP ROAD 96
OVER TRIBUTARY TO GOOSE CREEK

PLAN AND PROFILE - LOCATION #3			
SCALE: 1"=50'	SHEET 1 OF 1 SHEETS	STA. 19+50.00 TO STA. 20+40.00	

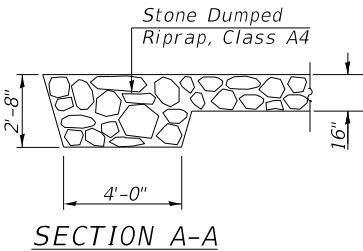
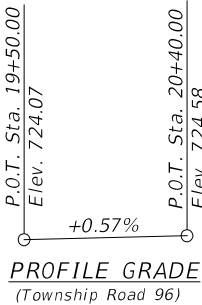
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 96	24-02125-00-DR	PIATT	36	30
ILLINOIS				

B.M.: Cut "□" in South-East Corner of Concrete Retaining Wall.
Sta. 19+99, 14.2' Rt.
Elev. 723.77

Existing Structure:
Single span concrete thru girder/slab bridge on closed concrete abutment with concrete wingwalls. The structure is 10 feet in length and skewed at 30° Rt. Ah.

Salvage: No Salvage.

Road to be closed to traffic during construction.



DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

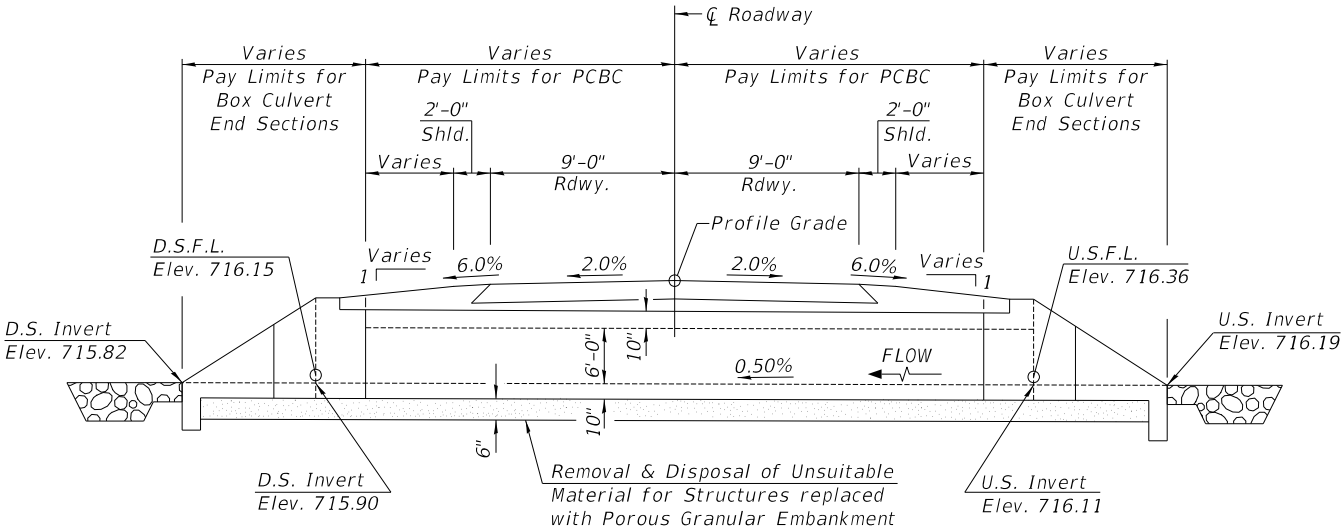
LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

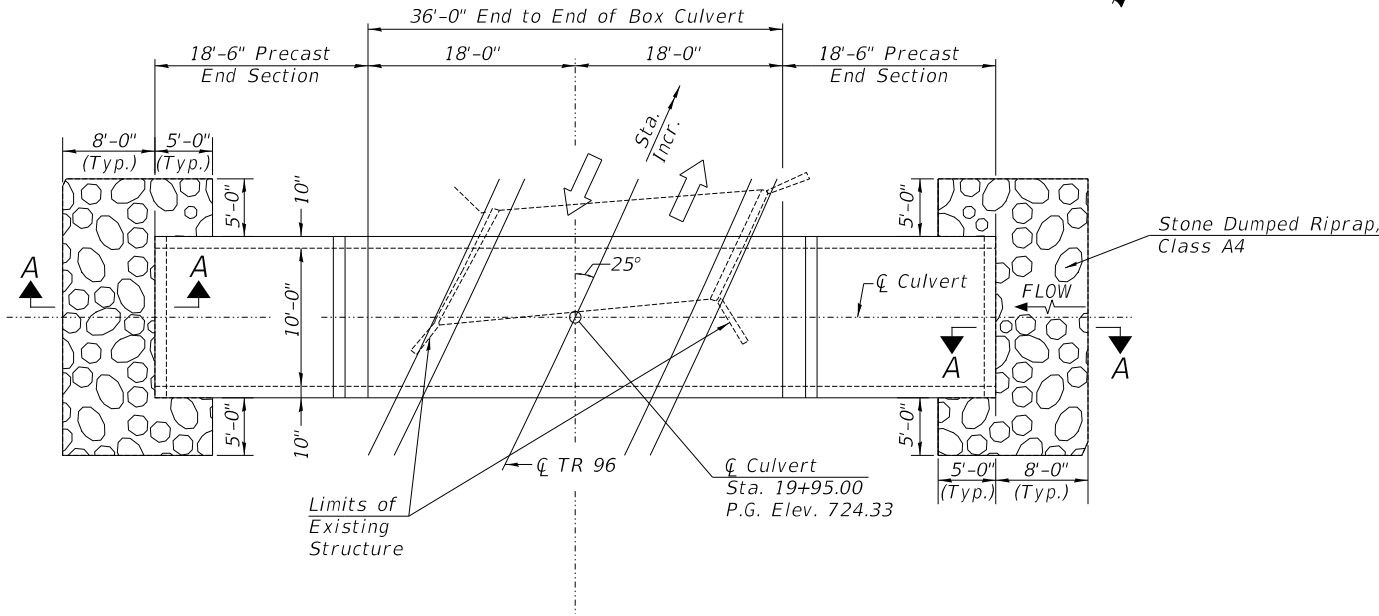
DESIGN STRESSES

(PRECAST UNITS)
f'c = 5,000 p.s.i.
fy = 65,000 p.s.i. (Welded Wire Rein.)

(FIELD UNITS)
f'c = 3,500 p.s.i.



LONGITUDINAL SECTION
(Dimensions are at Rt. L's to ☐ Roadway)



PLAN

GENERAL NOTES

The design fill heights for this box are 1.53 ft max. and 1.15 ft min. The precast box culvert sections shall conform to the requirements of ASTM C 1577.

Layout of stone riprap may be varied in the field to suit ground conditions as directed by the Engineer.

The required depth of removal and replacement of unsuitable materials may be adjusted by the Engineer to account for variable subsurface conditions.

Membrane Waterproofing System for Buried Structures shall be applied to the top surface of the top slab and shall extend down the sidewall a minimum of 1 foot below the top of the precast box culvert.

All excavation required for removal of the existing structure or construction of the culvert as shown in these plans and in accordance with the Standard Specifications shall be included in the cost of Precast Concrete Box Culverts 10' x 6'.

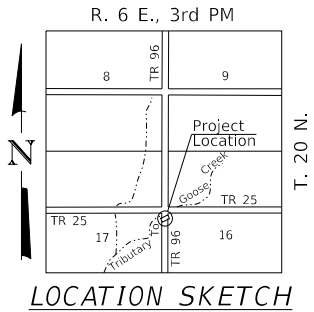
Stone Dumped Riprap, Class A4 has an application rate of 115 lb/cu ft.

The 6 in. thick layer of porous granular embankment required for the precast concrete box culvert per Art. 540.06 of the Standard Specifications shall also apply to the end sections.

Drain holes shall be provided on exterior culvert walls for each precast box segment with a clear rise greater than 3 ft. The drain hole shall be located within 1/3 of the clear rise of the box culvert, shall not intercept the haunch, and shall conform to the requirements of Article 503.11 of the Standard Specification.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Removal & Disposal of Unsuitable Material for Structures	CU YD	25
① Porous Granular Embankment	CU YD	140
① Stone Dumped Riprap, Class A4	TON	50
① Removal of Existing Structures	EACH	1
Box Culvert End Sections, Culvert No. 3	EACH	2
Geocomposite Wall Drain	SQ YD	55
Precast Concrete Box Culverts 10' x 6'	FOOT	36
① Membrane Waterproofing System for Buried Structures	SQ YD	55
① See Special Provisions		



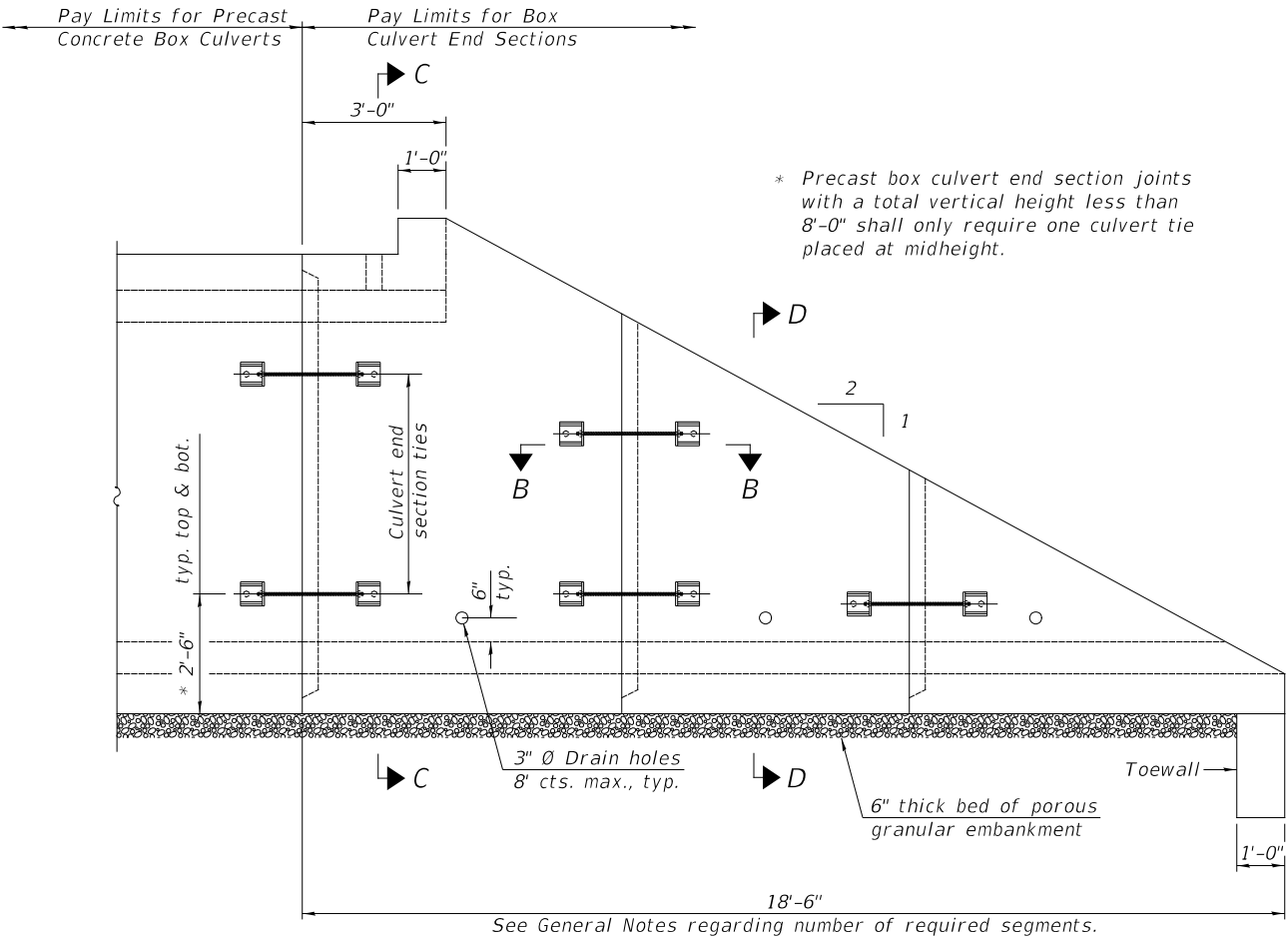
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PLOT DATE = 1/15/2025	DATE - 11/14/2024	REVISED - _____

PIATT COUNTY
TOWNSHIP ROAD 96
OVER TRIBUTARY TO GOOSE CREEK

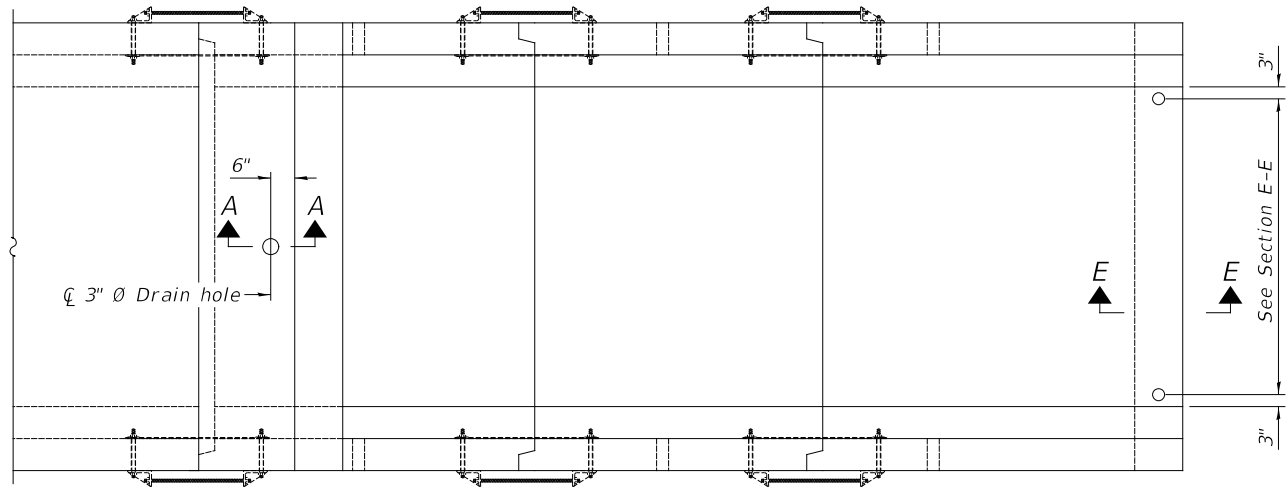
PRECAST CONCRETE BOX CULVERT AND DETAILS – LOCATION #3

SCALE: NONE SHEET 1 OF 4 SHEETS

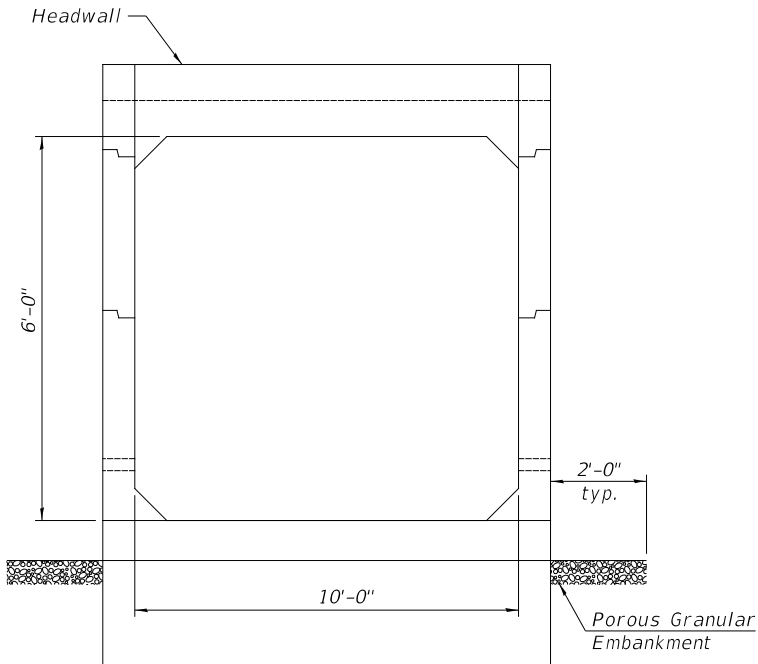
RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 96	24-02125-00-DR	PIATT	36	31
		ILLINOIS		



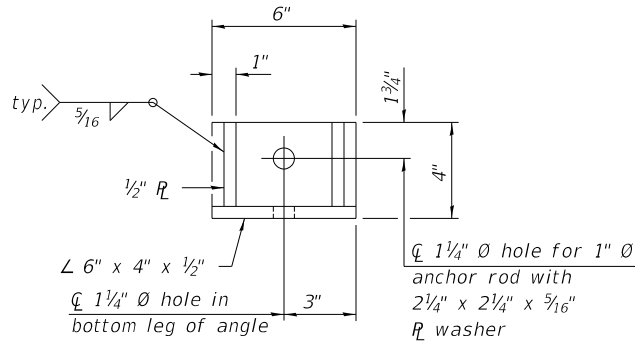
ELEVATION



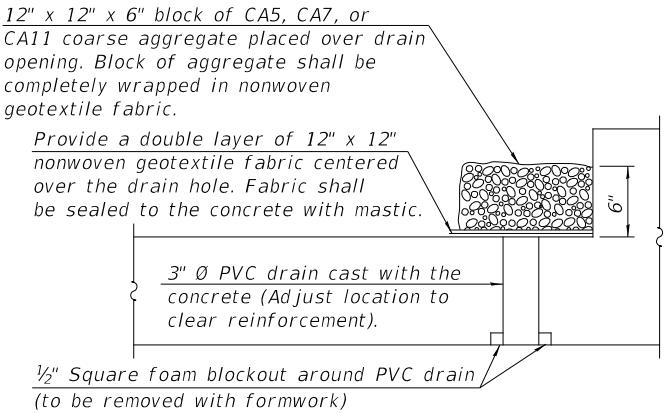
PLAN



END VIEW



RESTRAINT ANGLE DETAIL



SECTION A-A

(All costs associated with furnishing and constructing the above drain detail will not be measured for payment but shall be included in the contract unit price for the associated work.)

(Sheet 1 of 2)

MODEL:
FILE NAME:

5301-03-c002.dgn

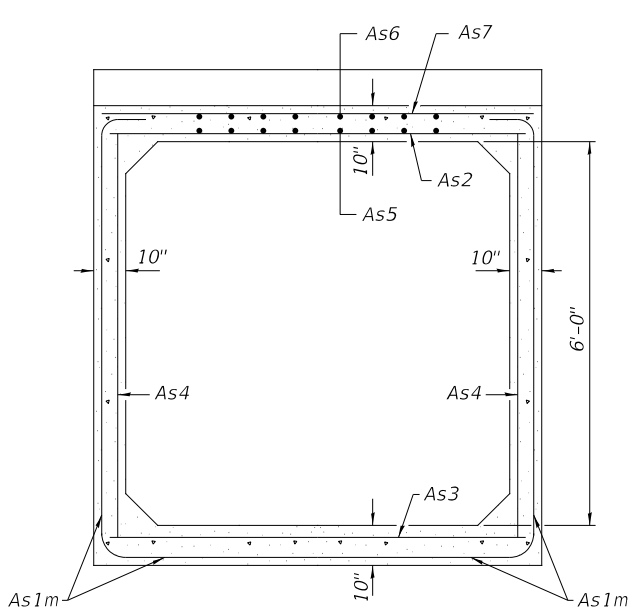
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	DRAWN - JJ	REVISED - _____
PLOT SCALE = \$SCALES	CHECKED - YP/MMO	REVISED - _____
PLOT DATE = 1/15/2025	DATE - 11/14/2024	REVISED - _____

PIATT COUNTY
TOWNSHIP ROAD 96
OVER TRIBUTARY TO GOOSE CREEK

PRECAST BOX CULVERT TAPERED END SECTION
DETAILS - LOCATION #3

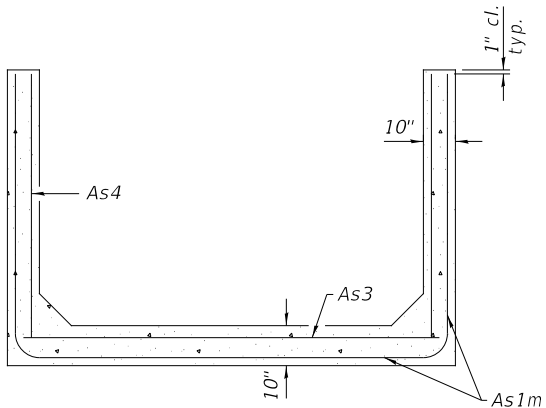
SCALE: NONE SHEET 2 OF 4 SHEETS

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 96	24-02125-00-DR	PIATT	36	32
		ILLINOIS		

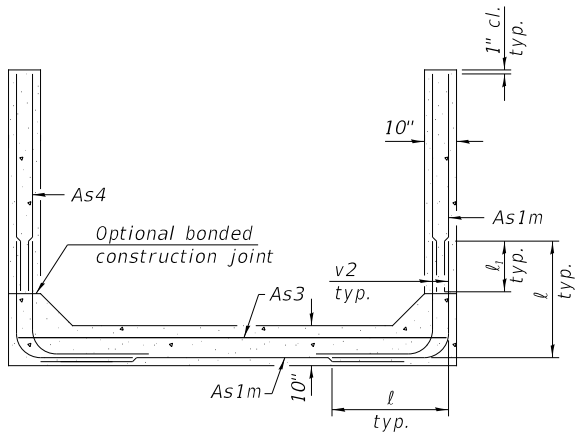


(Design Earth Cover < 2 ft)

SECTION C-C



SECTION D-D



ALTERNATE SECTION D-D

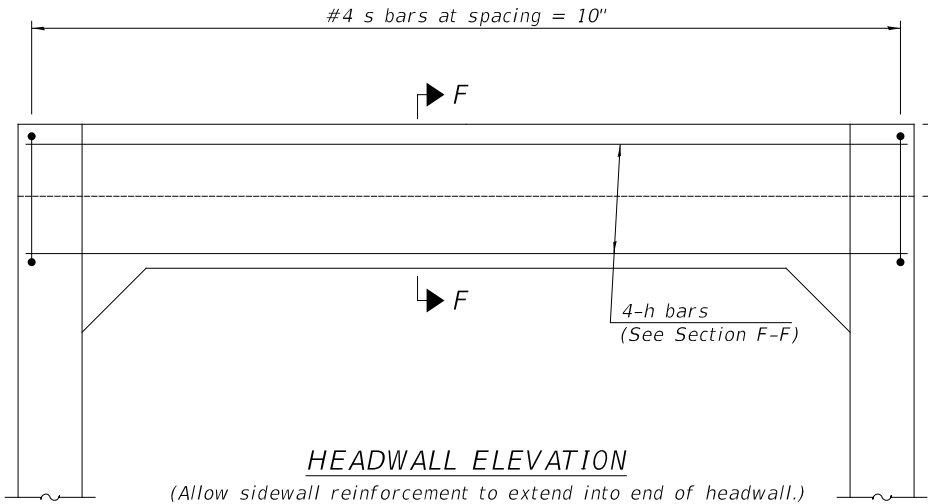
As1m REINFORCEMENT												
(in. ² / ft)												
Rise (ft)	2	3	4	5	6	7	8	9	10	11	12	
Ts (in.)												
4	0.19	0.17										
5	0.26	0.21	0.18									
6	0.22	0.26	0.23	0.22								
7	0.25	0.33	0.59	0.27	0.28							
8	0.40	0.35	0.43	0.39	0.36	0.34	0.40					
9	0.44	0.39	0.35	0.43	0.40	0.37	0.36	0.48				
10	0.48	0.42	0.38	0.47	0.44	0.41	0.38	0.42	0.56			
11	0.52	0.45	0.54	0.50	0.46	0.44	0.41	0.46	0.50	0.65		
12	0.55	0.49	0.58	0.54	0.50	0.48	0.45	0.46	0.46	0.61	0.75	

(As1m reinforcement based upon welded wire reinforcement conforming to AASHTO M 55 or M 221).

l_t DIMENSION

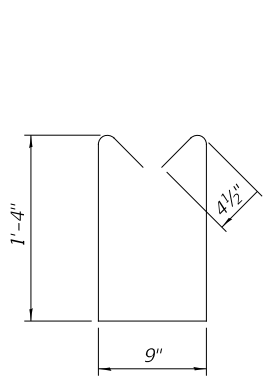
- #3 bar = 2'-0"
- #4 bar = 2'-8"
- #5 bar = 3'-4"
- #6 bar = 3'-11"

Notes:
Alternate Section D-D is provided to allow the Contractor the option of casting the bottom slab of the end section first followed by construction of the sidewalls using conventional forming methods. Shop drawings that detail slab thickness and reinforcement layout shall be submitted to the Engineer for review and approval when using Alternate Section D-D.
The size and spacing of the v2 bars shall provide a minimum reinforcement area along each face of the walls (in.²/ft.) equal to 1.10*(As1m). v2 bars may consist of #3 thru #6 size reinforcement bars and the longitudinal spacing shall not exceed the lesser of the wall thickness or 8 inches.
Bonded construction joints shall be prepared according to Article 503.09 of the Standard Specifications.

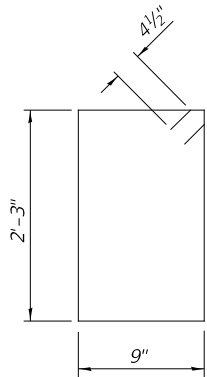


(Allow sidewall reinforcement to extend into end of headwall.)

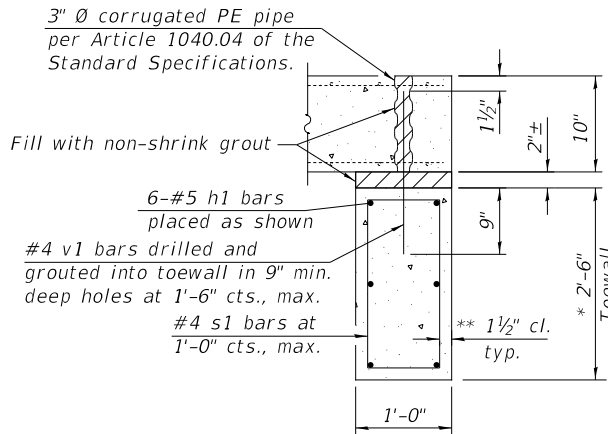
HEADWALL ELEVATION



BAR s



BAR s1



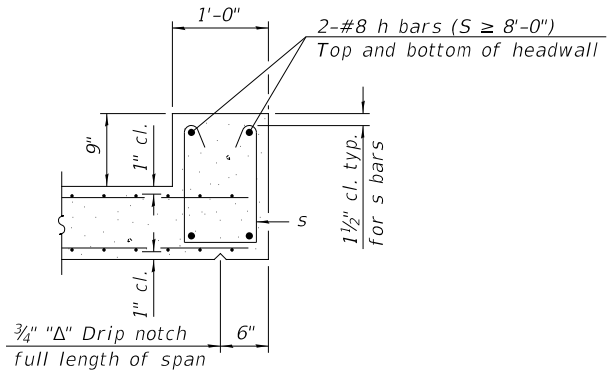
SECTION E-E

TOEWALL CONSTRUCTION SEQUENCE

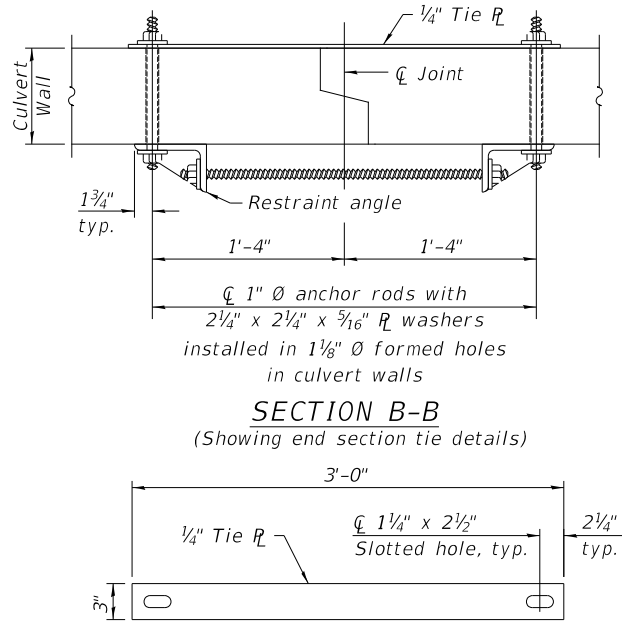
1. Perform excavation and construct toewall.
2. Backfill according to the applicable paragraphs of Article 502.10 of the Standard Specifications and place bedding for precast box culvert end sections.
3. Set precast box culvert end section.
4. Drill and epoxy grout reinforcement in toewall in accordance with Section 584 of the Standard Specifications.
5. Pressure grout voids using non-shrink grout conforming to Section 1024 of the Standard Specifications.

* The Contractor may furnish a precast or cast-in-place toewall. The Contractor shall be responsible for the strength and stability of the precast toewall during handling. Additional lifting points may be required depending upon the length of the toewall or the Contractor may need to modify the design of the toewall for the proposed handling the method.

** If soil conditions permit, the sides of the toewall may be poured directly against the soil. The clear cover on the sides of the toewall shall be increased to 3" by increasing the thickness of the toewall.



SECTION F-F



SECTION B-B

(Showing end section tie details)

TIE PLATE DETAIL

(Sheet 2 of 2)

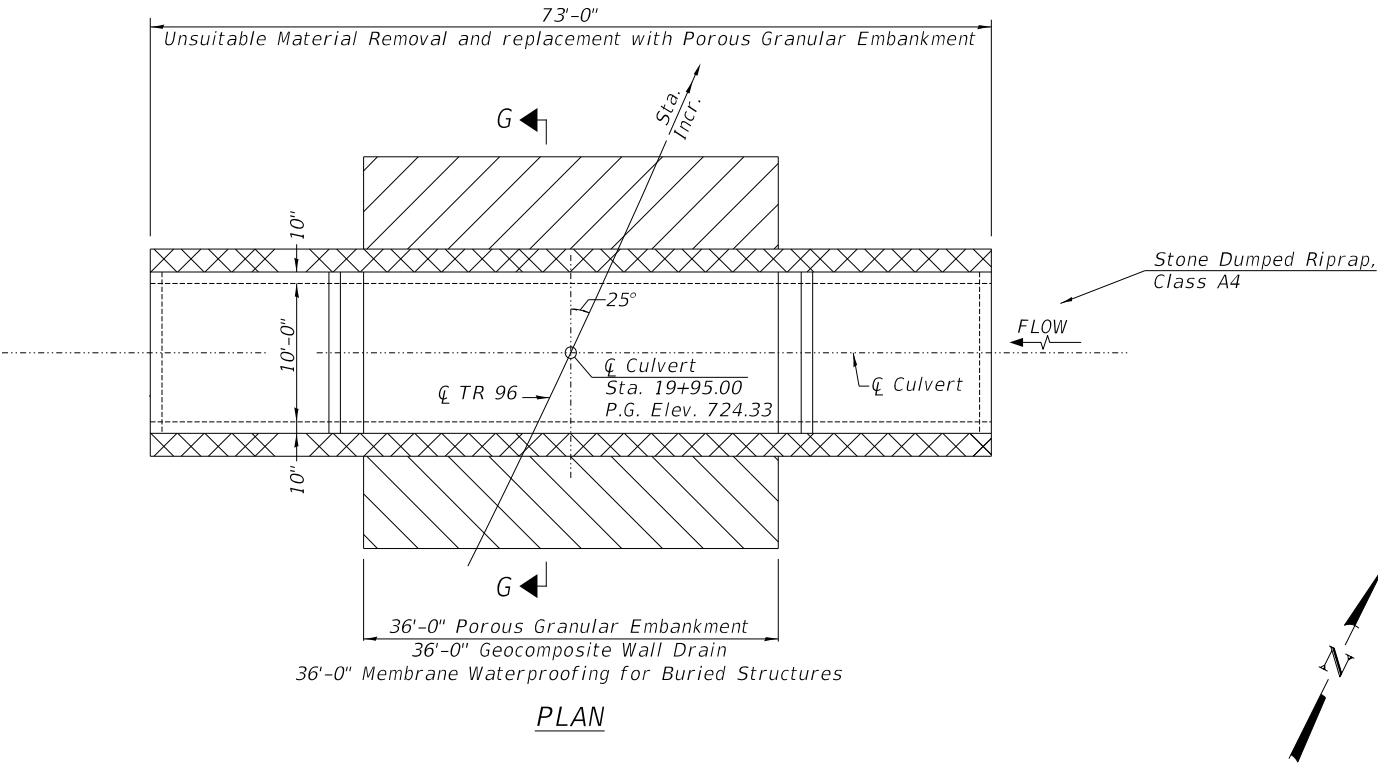
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	DRAWN - JJ	REVISED - _____
PLOT SCALE = \$SCALE\$	CHECKED - YP/MMO	REVISED - _____
PLOT DATE = 1/15/2025	DATE - 11/14/2024	REVISED - _____

**PIATT COUNTY
TOWNSHIP ROAD 96
OVER TRIBUTARY TO GOOSE CREEK**

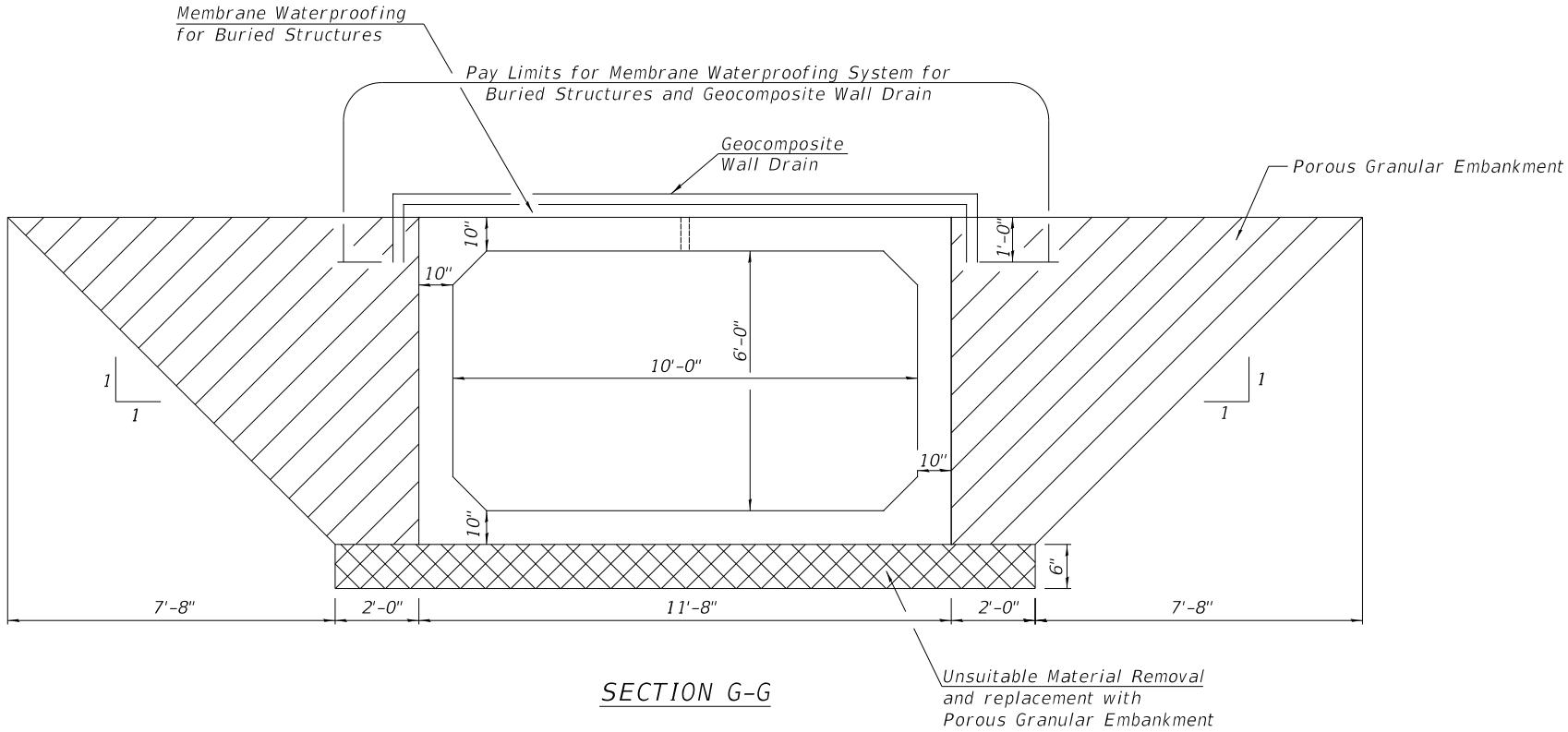
**PRECAST BOX CULVERT TAPERED END SECTION
DETAILS - LOCATION #3**

SCALE: NONE SHEET 3 OF 4 SHEETS

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 96	24-02125-00-DR	PIATT	36	33
		ILLINOIS		





PLAN

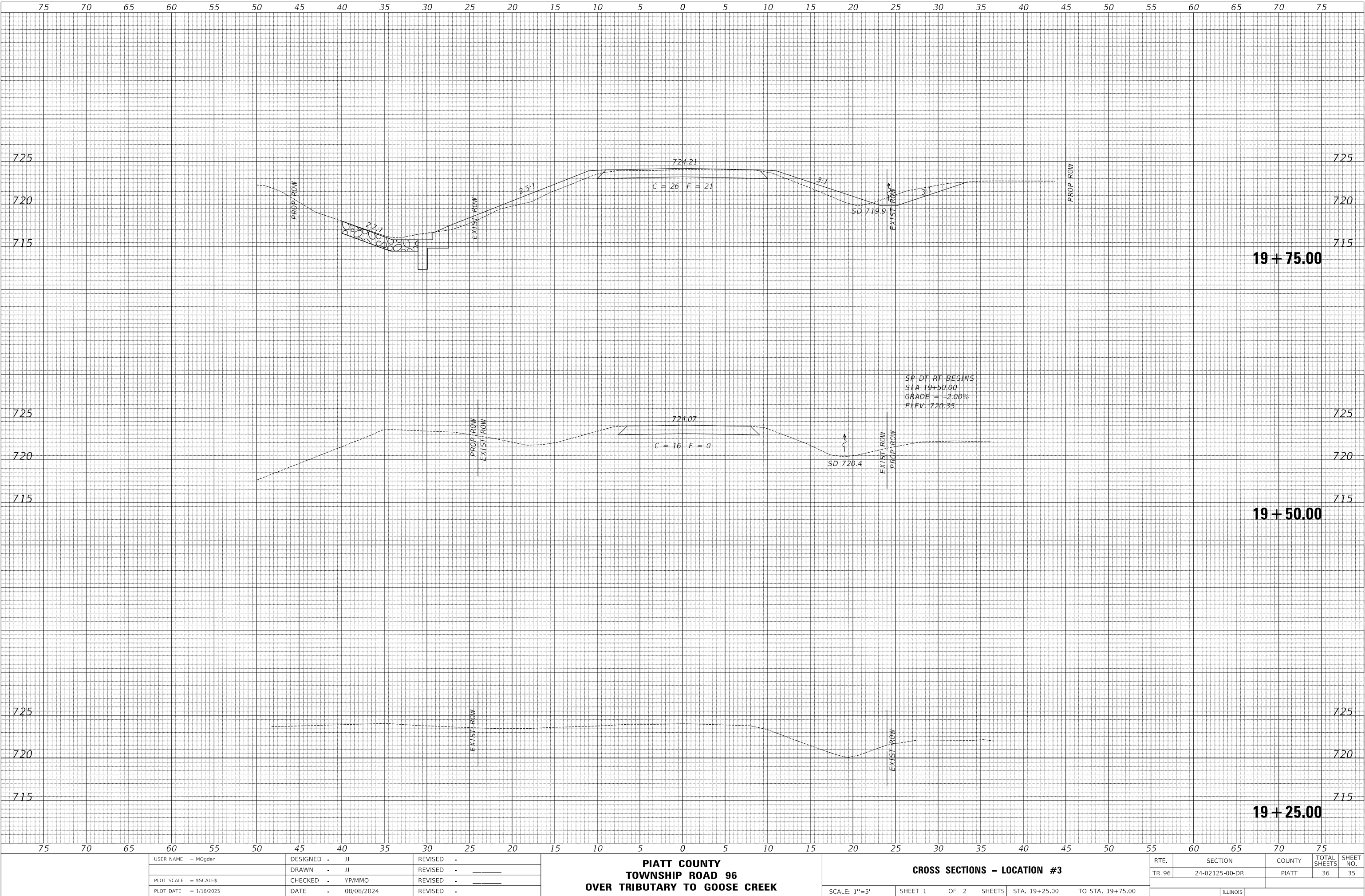


SECTION G-G

BOX CULVERT BACKFILLING DETAIL

-  Porous Granular Embankment
-  Unsuitable Material Removal and replacement with Porous Granular Embankment

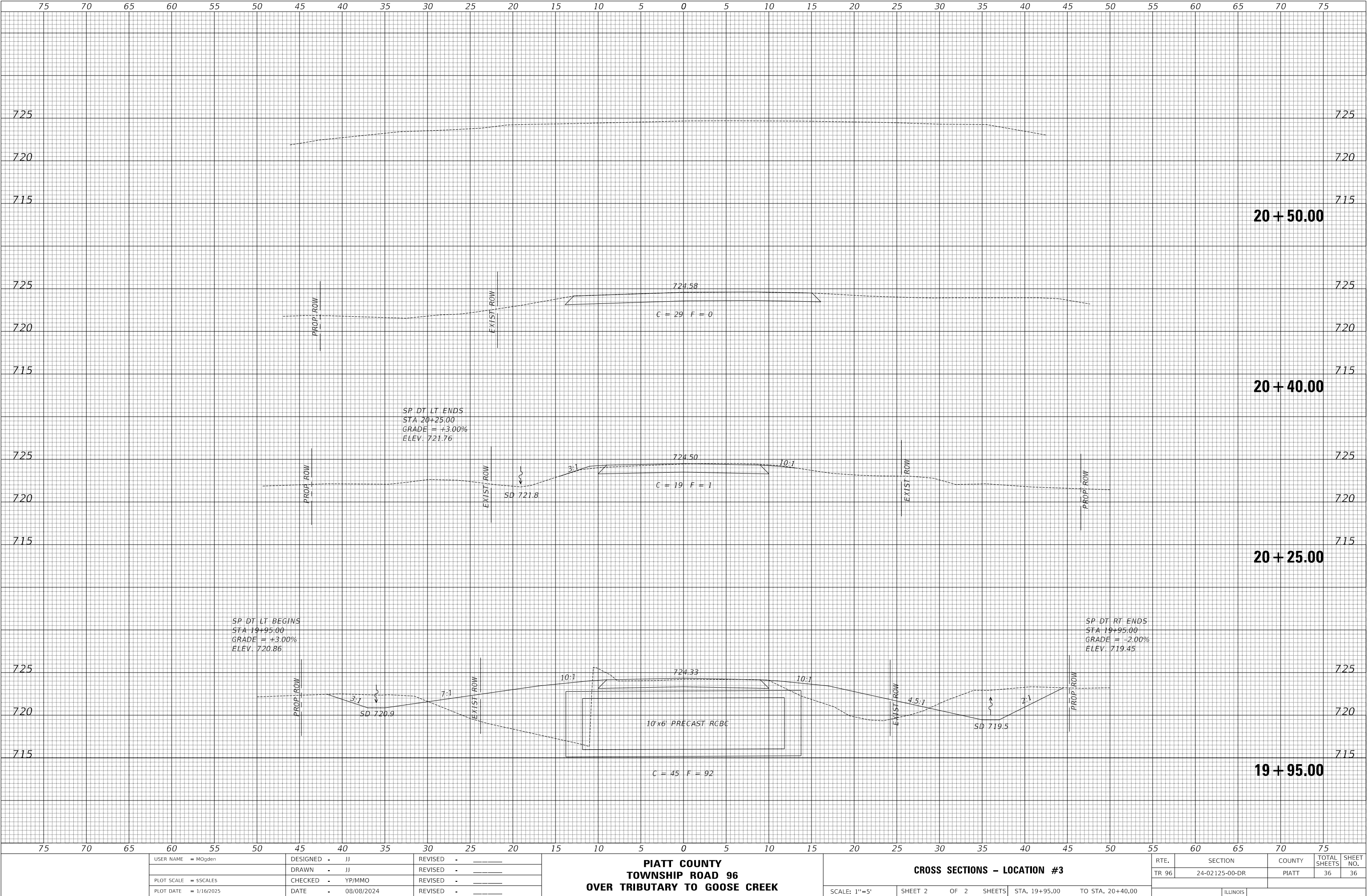
ORIGINAL SURVEY	SURVEYED _____	BY _____	DATE _____
	PLOTTED _____		
	TEMPLATE _____		
	AREAS _____		
NO. _____	AREAS CHECKED _____		



FINAL	SURVEYED	BY	DATE
SURVEY	PLOTTED		
NOTE BOOK	TEMPLATE		
NO.	AREAS CHECKED		

ORIGINAL	SURVEYED	BY	DATE
SURVEY	PLOTTED		
NOTE BOOK	TEMPLATE		
NO.	AREAS CHECKED		

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USER NAME = MOgden	DESIGNED - JJ	REVISED - _____
	DRAWN - JJ	REVISED - _____
PLOT SCALE = \$SCALE\$	CHECKED - YP/MMO	REVISED - _____
PLOT DATE = 1/16/2025	DATE - 08/08/2024	REVISED - _____

**PIATT COUNTY
TOWNSHIP ROAD 96
OVER TRIBUTARY TO GOOSE CREEK**

CROSS SECTIONS - LOCATION #3

SCALE: 1"=5' SHEET 2 OF 2 SHEETS STA. 19+95.00 TO STA. 20+40.00

RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 96	24-02125-00-DR	PIATT	36	36
ILLINOIS				