TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	~~139~~ *	1
	ILLINOIS	CONTRACT NO.	62P67	

* 139 + 4 = 143 TOTAL SHEETS

P-91-185-09
D-91-206-19

STATE OF ILLINOIS **04-28-2023 LETTING ITEM 108**
DEPARTMENT OF TRANSPORTATION

SUBSURFACE UTILITY ENGINEERING (S.U.E.) UTILIZED ON THIS PROJECT

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROPOSED HIGHWAY PLANS

FAI ROUTE 80 (I-80)
SECTION 2021-151-B
PROJECT NHPP-S3A1 (548)
BRIDGE REPLACEMENT AND WIDENING
WILL COUNTY

C-91-034-22

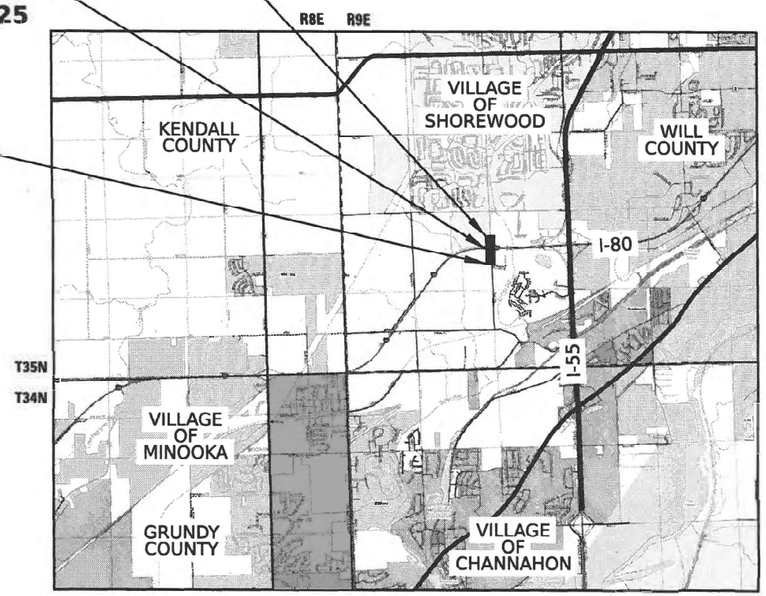
PROJECT IS LOCATED IN THE VILLAGE OF SHOREWOOD

POSTED SPEED = 30 MPH
DESIGN SPEED = 40 MPH

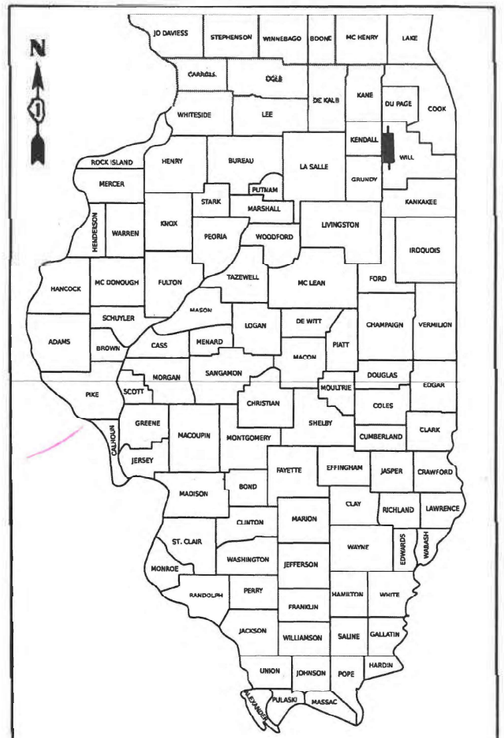
BEGIN PROJECT
STA. 20+00.00

RIVER ROAD OVER I-80
(S.N. 099-8304)
STA. 25+66.59 TO STA. 28+00.25

END PROJECT
STA. 33+00.00

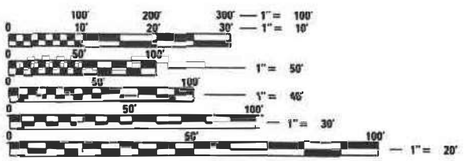


LOCATION MAP
SCALE: 1" = 5000'
GROSS LENGTH = 1300 FT. = 0.246 MILE
NET LENGTH = 1300 FT. = 0.246 MILE



LOCATION OF SECTION INDICATED THUS: –

FUNCTIONAL CLASSIFICATION:
LOCAL ROAD OR STREET
2016 ADT = 1,950
P.V. = 90.60% S.U. = 6.90% M.U. = 2.50%



~~FULL SIZE~~ PLANS HAVE BEEN ~~PREPARED~~ USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER: KENNETH PARK, P.E. (847) 705-4594
PROJECT MANAGER: SULEYMAN TULGAR, P.E. (847) 705-4212

CONTRACT NO. 62P67

STANTEC CONSULTING SERVICES INC.

DUSTIN J. BOOK 062-057930 LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

DATE: 01-27-2023
DUSTIN J. BOOK, P.E.
NO. 062-057930
EXP. DATE: 11-30-2023

SEAL AND SIGNATURE APPLY TO:
1 TO 23 & 107 TO 137

Stantec

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED January 13 20 25
Jose Rios LCDR
REGIONAL ENGINEER

March 24, 2023
ENGINEER OF DESIGN AND ENVIRONMENT

March 24, 2023
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

REV-SEP

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000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420401-13	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
515001-04	NAME PLATE FOR BRIDGES
542301-03	PRECAST REINFORCED CONCRETE FLARED END SECTION
601001-05	PIPE UNDERDRAINS
601101-02	CONCRETE HEADWALL FOR PIPE UNDERDRAIN
630001-12	STEEL PLATE BEAM GUARDRAIL
630116	BACK SIDE PROTECTION OF GUARDRAIL
630201-07	PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
630301-09	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631031-18	TRAFFIC BARRIER TERMINAL, TYPE 6
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 M) AWAY
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE
701011-04	OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701400-11	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-13	LANE CLOSURE, FREEWAY/EXPRESSWAY
701428-01	TRAFFIC CONTROL, SETUP AND REMOVAL, FREEWAY/EXPRESSWAY
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
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728001-01	TELESCOPING STEEL SIGN SUPPORT
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DISTRICT ONE STANDARD DETAILS

STD. NO.	TITLE
BD-51	BENCHING DETAIL FOR EMBANKMENT WIDENING
TC-09	TRAFFIC CONTROL DETAILS FOR FREEWAY SINGLE & MULTI-LANE WEAVE
TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
TC-11	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)
TC-12	MULTI-LANE FREEWAY PAVEMENT MARKING DETAILS
TC-13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
TC-17	TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES
TC-18	FREEWAY / EXPRESSWAY SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS ON FREEWAYS / EXPRESSWAYS
TC-21	DETOUR SIGNING FOR CLOSING STATE HIGHWAYS

COMMITMENTS

NO COMMITMENTS RECORDED

Stantec

USER NAME = aericksen	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/22/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, HIGHWAY STANDARDS AND COMMITMENTS

SCALE: | SHEET 1 OF 2 SHEETS | STA. | TO STA.

T.W.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	137	2
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

GENERAL NOTES

1. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
2. ALL PAVEMENT PATCHING LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
3. TEN (10) FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED EDGE OF PAVEMENTS TO EXISTING EDGE OF PAVEMENTS IN THE FIELD, UNLESS OTHERWISE SHOWN.
4. DRAINAGE ADJUSTMENT OR RECONSTRUCTION LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.
6. FRAMES AND GRATES ADJUSTMENT OF PRIVATE UTILITIES WITHIN THE LIMITS OF THE IMPROVEMENTS SHALL BE DONE BY THEIR RESPECTIVE OWNERS AND ARE NOT PART OF THIS CONTRACT.
7. STORM SEWER CONSTRUCTED UNDER THE ROADWAY SHALL BE BACKFILLED ACCORDING TO METHOD 1 OF ARTICLE 550.07 OF THE STANDARD SPECIFICATIONS.
8. THE CONTRACTOR SHALL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF PLATED STRUCTURES BY STATION AND OFFSET LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT.
9. THE CONTRACTOR SHALL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL DELIVER THE RECORD TO THE ENGINEER.
10. EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR ACCORDING TO ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.
11. FOR WORK OUTSIDE THE LIMITS OF BRIDGE APPROACH PAVEMENT, ALL REFERENCES IN THE HIGHWAY STANDARDS AND STANDARD SPECIFICATIONS FOR REINFORCEMENT, DOWEL BARS AND TIE BARS IN PAVEMENT, SHOULDERS, CURB, GUTTER, COMBINATION CURB AND GUTTER AND MEDIAN, AND CHAIR SUPPORTS FOR CRC PAVEMENT, SHALL BE EPOXY COATED, UNLESS NOTED ON THE PLAN.
12. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847)705-4151 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
13. THE ENGINEER SHALL CONTACT MS. REGINA COOPER, AREA TRAFFIC FIELD ENGINEER (or TECHNICIAN), AT (847) 705-4153 A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION OF ALL EMERGENCY SERVICES, SCHOOL DISTRICTS, I.D.O.T.'S COMMUNICATIONS CENTER, SPRINGFIELD TRUCK PERMIT SECTION AND OTHER AGENCIES AFFECTED BY THE CLOSURE. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR POSTING SIGNS THAT WILL INDICATE THE DATES THE CLOSURE WILL BE IN PLACE.
15. PAVEMENT MARKING TAPE, TYPE III SHALL BE USED FOR SHORT TERM PAVEMENT MARKINGS ON ALL FINAL SURFACES.
16. THE "ARTERIAL ROAD INFORMATION SIGN (TC-22)" IS APPLICABLE ONLY TO ARTERIAL ROADS AND SHALL NOT BE APPLIED TO EXPRESSWAYS/TOLLWAYS.
17. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS TO PERFORM WORK.
18. ALL ELEVATIONS IN THE PLANS ARE BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), UNLESS OTHERWISE NOTED. HORIZONTAL DATUM IS REFERENCED TO ILLINOIS STATE PLAN COORDINATE SYSTEM, EAST ZONE, NAD83 (2011).
19. THE IDOT HIGHWAY STANDARDS LATEST REVISION NUMBERS SHALL APPLY TO THIS PROJECT.
20. ALL ROADWAY WIDTHS AND RADII SHOWN ON THE PLANS ARE TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
21. THE THICKNESS OF THE HOT-MIX ASPHALT MIXTURE SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATION OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HOT-MIX ASPHALT MIXTURE IS PLACED.
22. CONTRACTOR SHALL NOT SCALE DIMENSIONS FROM THE CONTRACT PLANS FOR CONSTRUCTION PURPOSES.
23. COOPERATION BETWEEN CONTRACTORS SHALL BE IN ACCORDANCE WITH THE SPECIAL PROVISIONS.
24. THE COST OF FULL OR PARTIAL DEPTH SAW CUTS REQUIRED FOR REMOVAL ITEMS SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE UNIT PRICE OF THE ITEM.
25. WHEN ARTIFICIAL LIGHTING IS USED FOR NIGHT OPERATIONS THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC, AIR TRAFFIC AND ADJOINING PROPERTIES.
26. STANDARD BD 51 IS INCLUDED AS A TOKEN PROVISION IN ANTICIPATION OF ONSITE CONDITIONS AND STEEPER SIDE SLOPES WHICH WILL WARRANT THE BENCHING DETAIL.
27. IT IS ANTICIPATED THAT THIS CONTRACT WILL BE CONSTRUCTED CONCURRENTLY WITH OTHER ROADWAY PROJECTS IN THE SAME AREA. THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACTIVITIES WITHIN THIS CONTRACT THAT WILL REQUIRE MAINTENANCE OF TRAFFIC BELOW S.N. 099-8304, ALONG WB AND EB INTERSTATE 80, WITH IDOT CONTRACT NO. 62P71. COORDINATION EFFORTS HAVE BEEN MADE TO ACCOMMODATE THE REQUIRED MAINTENANCE OF TRAFFIC ALONG INTERSTATE 80 FOR THIS CONTRACT WITHIN THE MAINTENANCE OF TRAFFIC PLANS FOR IDOT CONTRACT NO. 62P71.
28. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT
29. THE CONTRACTOR SHALL USE CARE NEAR ANY AND ALL EXISTING ITEMS THAT WILL NOT BE REMOVED. ANY DAMAGE DONE TO EXISTING TEMS BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S OWN EXPENSE.
30. THE CONTRACTOR SHALL REQUEST AND GAIN APPROVAL FROM THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S EXPRESSWAY TRAFFIC OPERATIONS ENGINEER AT WWW.IDOT.COM TWENTY-FOUR (24) HOURS IN ADVANCE OF ALL DAILY LANE, RAMP, AND SHOULDER CLOSURES AND 7 DAYS IN ADVANCE OF ALL PERMANENT AND WEEKEND CLOSURES ON ALL FREEWAYS AND/OR EXPRESSWAYS IN DISTRICT ONE. THIS ADVANCE NOTIFICATION IS CALCULATED BASED ON A WORKWEEK OF MONDAY THROUGH FRIDAY AND SHALL NOT INCLUDE WEEKENDS OR HOLIDAYS.

LANDSCAPING GENERAL NOTES

1. VILLAGE WATER AND SEWER MAINS MAY BE LOCATED IN THE LANDSCAPE AREA.

   THE CONTRACTOR WILL NOT BE ALLOWED TO PROCEED WITH ANY PLANTING WORK UNTIL ALL UTILITY OWNERS FIELD LOCATE THEIR FACILITIES WHICH MAY INTERFERE WITH CONSTRUCTION OPERATIONS.

   THE ACTUAL LOCATION OF PROPOSED LANDSCAPING WILL BE ADJUSTED IN THE FIELD TO AVOID UTILITIES.
2. INTERSEEDING, CLASS 2A IS TO BE USED TO RENOVATE AREAS WHERE EXISTING TURF IS IN POOR CONDITION. EXACT LOCATIONS WILL BE DETERMINED DURING CONSTRUCTION BY THE ENGINEER.
3. UNDERBRUSH OR DEBRIS AT PLANTING LOCATIONS SHALL BE REMOVED AND DISPOSED OF ACCORDING TO SECTION 201 OF THE STANDARD SPECIFICATIONS. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT THE COSTS SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICES FOR THE CONSTRUCTION ITEMS INVOLVED, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
4. CONTRACTOR SHALL CONTACT THE ROADSIDE DEVELOPMENT UNIT AT (847) 705-4171 AT LEAST 2 WEEKS PRIOR TO FORESTRY WORK TO IDENTIFY AND MARK TREES TO SAVE WITHIN TREE REMOVAL AREAS.
5. SEEDING WILL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION.

DRAINAGE GENERAL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE ON THE JOB SITE DURING CONSTRUCTION.
2. DRAINAGE GRADES SHALL BE VERIFIED IN FIELD BY THE CONTRACTOR PRIOR TO THE INSTALLATION OF DRAINAGE ITEMS.
3. REMOVAL OF EXISTING PIPE UNDERDRAIN AND PIPE UNDERDRAIN OUTFALL STRUCTURES ARE INCLUDED IN THE PRICE OF EARTH EXCAVATION.
4. PIPE UNDERDRAINS SHALL BE INSTALLED ACCORDING TO SECTION 601 OF THE STANDARD SPECIFICATIONS AND STANDARD 601001-05. TOP OF PIPE UNDERDRAINS SHALL BE PLACED A MINIMUM OF 6" BELOW THE AGGREGATE SUBGRADE LAYER. THE COST OF MAKING PIPE UNDERDRAIN CONNECTIONS TO DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE COSTS OF THE PIPE UNDERDRAINS.
5. THE CONTRACTOR SHALL VERIFY THE EXISTING OUTLET STRUCTURE LOCATIONS AND INVERTS PRIOR TO STARTING UPSTREAM STORM SEWER CONNECTION AND CONSTRUCTION.
6. SEE DRAINAGE DETAIL SHEETS FOR DRAINAGE STRUCTURE OFFSET AND RIM ELEVATION LOCATION.
7. THE COST OF MAKING SEWER AND UNDERDRAIN CONNECTIONS TO DRAINAGE STRUCTURES AND BREAKING NEW HOLES INTO EXISTING OR PROPOSED DRAINAGE STRUCTURES SHALL BE CONSIDERED INCLUDED IN THE COST FOR DRAINAGE WORK.
8. PROPOSED RIM AND INVERT ELEVATIONS ARE BASED ON EXISTING THEORETICAL GRADES. ACTUAL FINAL GRADES ARE SUBJECT TO NOMINAL VARIATIONS. ADJUSTMENTS OF PROPOSED CASINGS TO FINAL GRADES IS INCLUDED IN THE COST OF THE RELATED DRAINAGE STRUCTURE. ADJUSTMENT OF THE PROPOSED PIPE INVERTS TO FINAL GRADES IS INCLUDED IN THE COST OF THE RELATED DRAINAGE PIPE.
9. SUFFICIENT DRAINAGE FACILITIES SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION TO FACILITATE SURFACE RUNOFF. WHEN ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DITCHES, GUTTERS OR DRAINAGE STRUCTURES SO THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, IT SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF THE CONSTRUCTION OPERATIONS ALL DRAINAGE STRUCTURE SO AFFECTED SHALL BE FREE FROM DIRT AND DEBRIS, THIS WORK SHALL BE CONSIDERED AS INCLUDED IN THE COST FOR THE DRAINAGE WORK. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PLAN THE OPERATIONS, WITH THE APPROVAL OF THE ENGINEER, SO AS TO UTILIZE THE FACILITIES PROVIDED TO PREVENT LOCAL FLOODING AND ENSURE PROPER SURFACE RUNOFF. ANY MINOR DITCH GRADING AND BULKHEADING AS DIRECTED BY THE ENGINEER, NECESSARY TO PROVIDE FOR THE INTERIM DRAINAGE WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.
10. DURING CONSTRUCTION OPERATIONS, IF ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES SUCH THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, THE MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKDAY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL UTILITY STRUCTURES SHALL BE FREE FROM DUST AND DEBRIS. THE WORK SPECIFIED ABOVE WILL NOT BE PAID SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE CONTRACT.

UTILITY GENERAL NOTES

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL JULIE AT 811, OR (800) 892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. SEVENTY-TWO (72) HOUR NOTIFICATION IS REQUIRED.

   IDOT FACILITIES ARE NOT LOCATED BY JULIE OR DIGGER. IDOT ELECTRICAL FACILITIES INCLUDING ROADWAY LIGHTING, FIBER OPTIC, ITS EQUIPMENT, TRAFFIC SIGNAL AND PUMP STATION FACILITIES ARE LOCATED BY THE DEPARTMENT'S ELECTRICAL MAINTENANCE CONTRACTOR. AS OF THE LETTING DATE, CONTACT THE MEADE ELECTRIC COMPANY AT 773-287-7672.
2. THE CONTRACTOR SHALL COORDINATE WORK WITH UTILITIES IN ADVANCE OF WORKING IN THE VICINITY OF THEIR FACILITIES, AND ALLOW SUFFICIENT TIME FOR THEM TO PERFORM ADJUSTMENTS TO THEIR FACILITIES IN ACCORDANCE WITH THE CONTRACTOR'S SCHEDULE. COORDINATION EFFORTS SHALL BE INCLUDED IN THE COST OF THE CONTRACT BID PRICE.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN IN THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER. THIS WORK WILL BE AT THE CONTRACTOR'S EXPENSE.
4. THE LOCATIONS OF PUBLIC OR PRIVATE UTILITIES SHOWN ON THE PLAN ARE APPROXIMATE AND THEIR ACCURACY IS NOT GUARANTEED. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND ELEVATION OF ALL UTILITIES. THE CONTRACTOR SHALL REPORT ANY ENCOUNTERED DISCREPANCIES TO THE ENGINEER AT ONCE. THE CONTRACTOR SHALL TAKE DUE CARE.

EARTHWORK GENERAL NOTES

1. THE CONTRACTOR SHALL ENSURE THAT EXPOSED AREAS HAVE ADEQUATE TEMPORARY SEEDING OR OTHER STABILIZATION PER THE NPDES AND 14 DAY RULE.
2. THE DEPARTMENT HAS NOT OBTAINED ANY PERMITS FOR OFFSITE BORROW OR WASTE USE (BWU) AREAS. PRIOR TO WORKING IN BWU AREAS, IF THE CONTRACTOR CHOOSES TO USE ACTIVITIES REQUIRING PERMITS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE PROPER PERMITS. IN ADDITION TO THE BORROW REVIEW (BDE 2289) AND USE/WASTE REVIEW (BDE 2290) SUBMITTALS, THE CONTRACTOR SHALL SUBMIT AN EROSION AND SEDIMENT CONTROL (ESC) PLAN FOR EVERY BWU SITE TO THE DEPARTMENT FOR ACCEPTANCE. GUIDELINES FOR ACCEPTABLE BWU PRACTICES CAN BE FOUND IN SECTION II.G.1 AND 2 OF THE SWPPP. THE COST OF ALL MATERIALS AND LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS TO PREPARE AND IMPLEMENT ESC PLANS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
3. AGGREGATE SUBGRADE IMPROVEMENT SHALL BE USED TO REPLACE ANY UNSUITABLE SOILS BELOW THE BOTTOM OF THE IMPROVED SUBGRADE LAYER THAT ARE ENCOUNTERED IN THE FIELD DURING CONSTRUCTION. THE NEED FOR REMOVAL AND REPLACEMENT SHALL BE DETERMINED BY THE GEOTECHNICAL ENGINEER OR SOILS INSPECTOR. ALL POTENTIALLY UNSTABLE SOILS SHALL BE TESTED WITH A CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.04 OF THE SSRBC AND THE UNDERCUT GUIDELINES IN THE IDOT SUBGRADE STABILITY MANUAL. ANY MATERIAL NOT NEEDED FOR UNDERCUT REPLACEMENT AT THE TIME OF CONSTRUCTION SHALL BE DELETED FROM THE CONTRACT WITH NO EXTRA COMPENSATION TO THE CONTRACTOR.
4. THE SUBGRADE STABILITY SHALL BE VERIFIED BY PROOF ROLLING WITH A FULLY LOADED TANDEM-AXLE TRUCK.
5. GEOTECHNICAL FABRIC FOR GROUND STABILIZATION AND/OR AGGREGATE SUBGRADE IMPROVEMENT (CU YD) HAVE BEEN PROVIDED FOR USE AT LOCATIONS INDICATED FOR SOILS THAT TEND TO BE UNSTABLE AND/OR UNSUITABLE. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH ABOVE ITEM WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE GEOTECHNICAL ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHOULD BE TESTED WITH A STATIC OR DYNAMIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.04 OF THE SSRBC AND IDOT SUBGRADE STABILITY MANUAL. IF UNSTABLE AND/OR UNSUITABLE SOILS ARE NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE TO THE CONTRACTOR.
6. ANY AGGREGATE SUBGRADE IMPROVEMENT CONTAMINATED AND/OR DAMAGED BY THE CONTRACTOR'S VEHICLES AND/OR EQUIPMENT IS TO BE REMOVED AND REPLACED AS DIRECTED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
7. THE AGGREGATE GRADATION FOR THE AGGREGATE SUBGRADE IMPROVEMENT 12" LOWER LIFT SHALL BE CS 1 OR RR 1.

Stantec

USER NAME = jstrouse	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 1/26/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

SCALE: | SHEET 2 OF 2 SHEETS | STA. | TO STA.

T.W.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	3
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

				CONSTRUCTION CODE			
				90% FEDERAL / 10% STATE			
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY	S.N. 099-8304	S.N. 099-W805	S.N. 099-W806
				0003	0010	0010	0010
				URBAN	URBAN	URBAN	URBAN
20100500	TREE REMOVAL, ACRES	ACRE	1.50	1.50			
20101000	TEMPORARY FENCE	FOOT	1,213	1,213			
20200100	EARTH EXCAVATION	CU YD	1,005	1,005			
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	275	275			
20400800	FURNISHED EXCAVATION	CU YD	4,195	4,195			
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	824	824			
21101505	TOPSOIL EXCAVATION AND PLACEMENT	CU YD	2,170	2,170			
25000210	SEEDING, CLASS 2A	ACRE	1.25	1.25			
25000312	SEEDING, CLASS 4A	ACRE	1.25	1.25			
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	225	225			
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	225	225			
25000750	MOWING	ACRE	2.50	2.50			
25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	10,398	10,398			
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	2,500	2,500			
28000305	TEMPORARY DITCH CHECKS	FOOT	140	140			
28000400	PERIMETER EROSION BARRIER	FOOT	4,163	4,163			
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	275	275			
30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	3,673	3,673			
31101400	SUBBASE GRANULAR MATERIAL, TYPE B 6"	SQ YD	690	690			
31101900	SUBBASE GRANULAR MATERIAL, TYPE C	TON	53	53			

* =SPECIALTY ITEMS

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transystcorp-pw1-hosted/Documents/Projects_2018/CH4401401180022/01-Stantec/CAD/Ck-02_62P67/04-Sheets/01-General/D162P67-sht-SOQ-001_V10.dgn

Stantec

USER NAME = jstrouse	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 1/26/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET 1 OF 6 SHEETS | STA. | TO STA.

T.W.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	4
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

REV-SEP

				CONSTRUCTION CODE			
				90% FEDERAL / 10% STATE			
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY 0003 URBAN	S.N. 099-8304 0010 URBAN	S.N. 099-W805 0010 URBAN	S.N. 099-W806 0010 URBAN
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	1,552	1,552			
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	156	156			
40604060	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N50	TON	155	155			
40800029	BITUMINOUS MATERIALS (TACK COAT)	POUND	1,088	1,088			
40701841	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 8"	SQ YD	2,416	2,416			
42000080	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB	SQ YD	94	94			
44000100	PAVEMENT REMOVAL	SQ YD	2,632	2,632			
48101500	AGGREGATE SHOULDERS, TYPE B 6"	SQ YD	762	762			
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	819	819			
50100300	REMOVAL OF EXISTING STRUCTURES NO. 1	EACH	1		1		
50104400	CONCRETE HEADWALL REMOVAL	EACH	4	4			
50157300	PROTECTIVE SHIELD	SQ YD	711		711		
50200100	STRUCTURE EXCAVATION	CU YD	690		298	198	194
50300225	CONCRETE STRUCTURES	CU YD	451.9		165.9	137	149
50300255	CONCRETE SUPERSTRUCTURE	CU YD	392.9		392.9		
50300260	BRIDGE DECK GROOVING	SQ YD	973		973		
50300300	PROTECTIVE COAT	SQ YD	2,558		1,776	375	407
50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	117		117		
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1		1		
50500505	STUD SHEAR CONNECTORS	EACH	8,720		6,860	884	976

* =SPECIALTY ITEMS

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/01-Stantec/CAD/Ch-02_62P67/04-Sheets/01-General/D162P67-snt-SOQ-002_V10.dgn

Stantec

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	DRAWN -	REVISED -
PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 1/26/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET 2 OF 6 SHEETS | STA. | TO STA.

T.W.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	5
		CONTRACT NO. 62P67		
		ILLINOIS | FED. AID PROJECT		

REV-SEP

				CONSTRUCTION CODE			
				90% FEDERAL / 10% STATE			
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY	S.N. 099-8304	S.N. 099-W805	S.N. 099-W806
				0003	0010	0010	0010
				URBAN	URBAN	URBAN	URBAN
50800105	REINFORCEMENT BARS	POUND	5,580		5,580		
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	215,130		176,100	19,720	19,310
50901735	BICYCLE RAILING, CURVED	FOOT	910		232	318	360
50901750	PARAPET RAILING	FOOT	292		292		
51100100	SLOPE WALL 4 INCH	SQ YD	510		510		
51201900	FURNISHING STEEL PILES HP14X89	FOOT	490		490		
51202305	DRIVING PILES	FOOT	490		490		
51204650	PILE SHOES	EACH	14		14		
51500100	NAME PLATES	EACH	3		1	1	1
51603000	DRILLED SHAFT IN SOIL	CU YD	4.4		4.4		
51604000	DRILLED SHAFT IN ROCK	CU YD	11.6		11.6		
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	7		7		
52100520	ANCHOR BOLTS, 1"	EACH	28		28		
52100540	ANCHOR BOLTS, 1 ½"	EACH	14		14		
52200020	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	351		351		
* 52200105	FURNISHING SOLDIER PILES (W SECTION)	FOOT	2,632			1,299	1,333
* 52200200	DRILLING AND SETTING SOLDIER PILES (IN SOIL)	CU FT	12,968			6,601	6,367
* 52200205	DRILLING AND SETTING SOLDIER PILES (IN ROCK)	CU FT	2,155			1,000	1,155
* 52200250	UNTREATED TIMBER LAGGING	SQ FT	6,331			3,051	3,280
54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH	2	2			

* =SPECIALTY ITEMS

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401140118002/01-Stantec/CAD/Ck-02_62P67/04-Sheets/01-General/D162P67-alt-SOQ-003_V10.dgn

Stantec

USER NAME = jstrouse	DESIGNED -	REVISED -
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PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 1/26/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET 3 OF 6 SHEETS | STA. | TO STA.

T.W.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	6
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

REV-SEP

				CONSTRUCTION CODE			
				90% FEDERAL / 10% STATE			
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY	S.N. 099-8304	S.N. 099-W805	S.N. 099-W806
				0003	0010	0010	0010
				URBAN	URBAN	URBAN	URBAN
54213675	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 30"	EACH	2	2			
542A2749	PIPE CULVERTS, CLASS A, TYPE 4 24"	FOOT	88	88			
542A2755	PIPE CULVERTS, CLASS A, TYPE 4 30"	FOOT	88	88			
55101200	STORM SEWER REMOVAL 24"	FOOT	86	86			
55101400	STORM SEWER REMOVAL 30"	FOOT	84	84			
58600101	GRANULAR BACKFILL FOR STRUCTURES	CU YD	195		195		
58700300	CONCRETE SEALER	SQ FT	2,381		2,381		
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	866		86	375	405
60100060	CONCRETE HEADWALLS FOR PIPE DRAINS	EACH	8	8			
60108200	PIPE UNDERDRAINS 6" (SPECIAL)	FOOT	189	189			
60108206	PIPE UNDERDRAINS, TYPE 2, 6"	FOOT	1,888	1,888			
60146304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	798		112	322	364
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	1,613	1,613			
* 63000035	BACK SIDE PROTECTION OF GUARDRAIL	FOOT	775	775			
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4			
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4			
63200310	GUARDRAIL REMOVAL	FOOT	1,463	1,463			
66500105	WOVEN WIRE FENCE, 4'	FOOT	340	340			
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	690	690			
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	2	2			

* =SPECIALTY ITEMS

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transystcorp-pw1-hosted/Documents/Projects_2018/CH4014018002/01-Stantec/CAD/Ck-02_62P67/04-Sheets/01-General/D162P67-att-SOQ-004_V10.dgn

Stantec

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET 4 OF 6 SHEETS | STA. | TO STA.

T.W.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	7
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

REV-SEP

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 90% FEDERAL / 10% STATE			
					ROADWAY	S.N. 099-8304	S.N. 099-W805	S.N. 099-W806
					0003	0010	0010	0010
					URBAN	URBAN	URBAN	URBAN
*	66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1	1			
*	66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1	1			
*	66901006	REGULATED SUBSTANCES MONITORING	CAL DA	9	9			
	67100100	MOBILIZATION	L SUM	1	1			
	70107025	CHANGEABLE MESSAGE SIGN	CAL DA	480	480			
	70301120	TEMPORARY PAVEMENT MARKING - LINE 4" - EPOXY	FOOT	1,900	1,900			
	70400100	TEMPORARY CONCRETE BARRIER	FOOT	775	775			
	70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	750	750			
	70600280	IMPACT ATTENUATORS, TEMPORARY (SEVERE USE,NARROW), TEST LEVEL 3	EACH	2	2			
	70600370	IMPACT ATTENUATORS, RELOCATE (SEVERE USE, NARROW), TEST LEVEL 3	EACH	2	2			
*	72000100	SIGN PANEL - TYPE 1	SQ FT	5	5			
*	72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	17	17			
*	72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4			
*	72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	14	14			
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	4,034	4,034			
*	78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	1,167	1,167			
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	34	34			
*	78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	16	16			
*	78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	50	50			
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	30	30			

* =SPECIALTY ITEMS

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH4014018002/01-Stantec/CAD/Clr.02_62P67/04-Sheets/01-General/D162P67-alt-SOQ-005_V10.dgn

Stantec

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET 5 OF 6 SHEETS | STA. | TO STA.

T.W.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	8
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

REV-SEP

				CONSTRUCTION CODE			
				90% FEDERAL / 10% STATE			
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY	S.N. 099-8304	S.N. 099-W805	S.N. 099-W806
				0003	0010	0010	0010
				URBAN	URBAN	URBAN	URBAN
78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	634	634			
Z0005216	HOT-MIX ASPHALT STABILIZATION 6" AT STEEL PLATE BEAM GUARD RAIL	SQ YD	207	207			
Z0013797	STABILIZED CONSTRUCTION ENTRANCE	SQ YD	160	160			
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1			
Z0022800	FENCE REMOVAL	FOOT	375	375			
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	188	188			
X0100027	TEMPORARY SOIL RETENTION SYSTEM (TO REMAIN IN PLACE)	SQ FT	677			370	307
X0327757	FOUNDATION CONSTRUCTION AT EXISTING OBSTRUCTIONS	EACH	3		3		
X1400316	GAS/OIL PIPELINE PROTECTION	L SUM	1	1			
X6700407	ENGINEER'S FIELD OFFICE, TYPE A (D1)	CAL MO	11	11			
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1			
X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	L SUM	1	1			
Ø 70076600	TRAINEES	HOUR	500	500			
Ø 70076604	TRAINEES - TRAINING PROGRAM GRADUATE	HOUR	500	500			

* =SPECIALTY ITEMS

Ø 0042

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH4014018002/01-Stantec/CAD/CR-02_62P67/04-Sheets/01-General/D162P67-alt-SOQ-006_V10.dgn

Stantec

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PLOT DATE = 1/26/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET 6 OF 6 SHEETS | STA. | TO STA.

T.W.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	9
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

REV-SEP

20100500	TREE REMOVAL, ACRES				
LOCATION	FROM STATION	FROM WIDTH (FT)	TO STATION	TO WIDTH (FT)	TOTAL (ACRE)
RIVER ROAD	21+83.7	12.4	23+38.0	19.4	0.06
RIVER ROAD	23+38.0	19.4	25+67.4	54.9	0.20
RIVER ROAD	25+67.4	54.9	25+80.9	55.4	0.02
RIVER ROAD	25+80.9	55.4	25+90.6	55.0	0.01
RIVER ROAD	25+90.6	55.0	26+10.9	0.0	0.01
RIVER ROAD	27+71.8	0.0	27+85.2	40.9	0.01
RIVER ROAD	27+85.2	40.9	28+01.3	40.7	0.02
RIVER ROAD	28+01.3	40.7	28+24.6	36.1	0.02
RIVER ROAD	28+24.6	36.1	28+25.8	55.8	0.00
RIVER ROAD	28+25.8	37.8	29+24.8	37.8	0.09
RIVER ROAD	29+24.8	37.8	31+63.6	17.7	0.15
RIVER ROAD	31+63.6	17.7	31+69.2	0.0	0.00
RIVER ROAD	21+62.2	15.6	23+06.0	22.0	0.06
RIVER ROAD	23+06.0	22.0	25+60.3	44.5	0.19
RIVER ROAD	25+60.3	44.5	25+64.1	71.2	0.01
RIVER ROAD	25+64.1	71.2	25+75.8	69.1	0.02
RIVER ROAD	25+75.8	44.5	25+96.0	47.2	0.02
RIVER ROAD	25+96.0	47.2	26+08.0	0.0	0.01
RIVER ROAD	27+66.3	20.0	27+74.4	37.3	0.01
RIVER ROAD	27+74.4	37.3	28+18.6	60.9	0.05
RIVER ROAD	28+18.6	60.9	28+66.5	57.9	0.07
RIVER ROAD	28+66.5	57.9	28+82.5	59.7	0.02
RIVER ROAD	28+82.5	59.7	29+15.5	55.7	0.04
RIVER ROAD	29+15.5	55.7	29+20.5	55.5	0.01
RIVER ROAD	29+20.5	55.5	31+00.2	17.6	0.15
RIVER ROAD	28+84.0	171.7	29+10.3	200.5	0.11
				PAY ITEM TOTAL =	1.50

30300001	AGGREGATE SUBGRADE IMPROVEMENT				
LOCATION	FROM STATION	FROM WIDTH (FT)	TO STATION	TO WIDTH (FT)	TOTAL (CU YD)
RIVER ROAD	20+00.0	30.0	25+27.6	30.0	146.6
RIVER ROAD	28+39.2	30.0	33+00.0	30.0	128.0
				PAY ITEM TOTAL =	275.0

30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"				
LOCATION	FROM STATION	FROM WIDTH (FT)	TO STATION	TO WIDTH (FT)	TOTAL (SQ YD)
RIVER ROAD	20+00.0	30.0	21+70.0	30.0	566.7
RIVER ROAD	21+70.0	30.0	22+50.0	34.0	284.4
RIVER ROAD	22+50.0	34.0	25+37.6	34.0	1086.5
RIVER ROAD	28+29.3	34.0	31+62.1	34.0	1257.2
RIVER ROAD	31+62.1	32.0	32+00.0	32.0	134.8
RIVER ROAD	32+00.0	32.0	32+80.0	30.0	275.6
RIVER ROAD	32+80.0	30.0	33+00.0	30.0	66.7
				PAY ITEM TOTAL =	3673

31101400	SUBBASE GRANULAR MATERIAL, TYPE B 6"				
LOCATION	FROM STATION	FROM WIDTH (FT)	TO STATION	TO WIDTH (FT)	TOTAL (SQ YD)
RIVER ROAD	22+50.0	10.0	25+37.6	10.0	319.6
RIVER ROAD	28+29.3	10.0	31+62.1	10.0	369.8
				PAY ITEM TOTAL =	690

40600275	BITUMINOUS MATERIALS (PRIME COAT)				
LOCATION	FROM STATION	FROM WIDTH (FT)	TO STATION	TO WIDTH (FT)	TOTAL (POUND)
RIVER ROAD	20+50.0	10.0	25+37.6	10.0	719.0
RIVER ROAD	28+29.3	10.0	31+62.1	10.0	832.0
				PAY ITEM TOTAL =	1552.0

40600290	BITUMINOUS MATERIALS (TACK COAT)				
LOCATION	FROM STATION	FROM WIDTH (FT)	TO STATION	TO WIDTH (FT)	TOTAL (POUND)
RIVER ROAD	22+50.0	10.0	25+37.6	10.0	71.9
RIVER ROAD	28+29.3	10.0	31+62.1	10.0	83.2
				PAY ITEM TOTAL =	156.0

40604060	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D" N50				
LOCATION	FROM STATION	FROM WIDTH (FT)	TO STATION	TO WIDTH (FT)	TOTAL (TON)
RIVER ROAD	22+50.0	10.0	25+37.6	10.0	71.6
RIVER ROAD	28+29.3	10.0	31+62.1	10.0	82.8
				PAY ITEM TOTAL =	155.0

42000080	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB				
LOCATION	FROM STATION	FROM WIDTH (FT)	TO STATION	TO WIDTH (FT)	TOTAL (SQ YD)
RIVER ROAD	25+27.6	42.0	25+37.6	42.0	46.7
RIVER ROAD	28+29.3	42.0	28+39.3	42.0	46.7
				PAY ITEM TOTAL =	94.0

44000100	PAVEMENT REMOVAL				
LOCATION	FROM STATION	FROM WIDTH (FT)	TO STATION	TO WIDTH (FT)	TOTAL (SQ YD)
RIVER ROAD	20+00.0	22.0	25+71.5	22.0	1397.0
RIVER ROAD	27+95.0	22.0	33+00.0	22.0	1234.5
				PAY ITEM TOTAL =	2632

LANDSCAPE SCHEDULE					25000210 SEEDING, CLASS 2A	25000312 SEEDING, CLASS 4A	25000400 NITROGEN FERTILIZER NUTRIENT	25000600 POTASSIUM FERTILIZER NUTRIENT	25000750 MOWING	25100635 HEAVY DUTY EROSION CONTROL BLANKET
LOCATION	FROM STATION	FROM WIDTH	TO STATION	TO WIDTH	(ACRE)	(ACRE)	(POUND)	(POUND)	(ACRE)	(SQ YD)
RIVER ROAD	20+00.0	8.0	26+11.0	42.7	0.28		25.2	25.2	0.28	1068.4
RIVER ROAD	20+00.0	13.3	21+84.6	21.8	0.06		5.4	5.4	0.06	251.6
RIVER ROAD	21+84.6	27.0	26+18.0	49.6	0.39		35.1	35.1	0.39	1715.1
RIVER ROAD	26+72.0	73.8	27+05.7	73.5	0.06		5.4	5.4	0.06	276.3
RIVER ROAD	27+52.3	322.3	27+75.7	322.3	0.12	0.19	27.90	27.90	0.19	958.0
RIVER ROAD	27+75.7	322.3	29+22.8	28.5		0.15	13.50	13.50	0.15	760.5
RIVER ROAD	27+93.6	150.0	29+10.3	150.0	0.34		30.60	30.60	0.34	2206.0
RIVER ROAD	28+00.0	80.6	29+32.0	73.0		0.19	17.10	17.10	0.19	828.0
RIVER ROAD	29+22.8	28.5	33+91.2	8.8		0.24	21.60	21.60	0.24	1291.4
RIVER ROAD	29+63.9	53.4	33+00.0	10.0		0.30	27.00	27.00	0.30	1042.1
				PAY ITEM TOTALS =	1.25	1.25	225	225	2.50	10398

48203029	HOT-MIX ASPHALT SHOULDERS, 8"				
LOCATION	FROM		TO		TOTAL
	STATION	OFFSET (FT)	STATION	OFFSET (FT)	(SQ YD)
RIVER ROAD	20+00.0	2.0	21+70.0	2.0	37.8
RIVER ROAD	21+70.0	2.0	22+50.0	4.0	26.7
RIVER ROAD	22+50.0	4.0	25+27.6	4.0	123.4
RIVER ROAD	28+39.4	4.0	32+00.0	4.0	160.3
RIVER ROAD	32+00.0	4.0	32+80.0	2.0	26.7
RIVER ROAD	32+80.0	2.0	33+00.0	2.0	4.4
RIVER ROAD	20+00.0	4.0	25+27.6	4.0	234.5
RIVER ROAD	28+39.3	4.0	33+00.0	4.0	204.8
PAY ITEM TOTAL =					819

50104400	CONCRETE HEADWALL REMOVAL			
LOCATION	STATION	OFFSET		TOTAL (UNITS)
RIVER ROAD	26+02.3	43.9 LT		1
RIVER ROAD	26+02.5	41.9 RT		1
RIVER ROAD	27+62.7	42.4 LT		1
RIVER ROAD	27+64.0	41.1 RT		1
PAY ITEM TOTAL =				4

54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"			
LOCATION	STATION	OFFSET		TOTAL (UNITS)
RIVER ROAD	25+94.9	48.8 RT		1
RIVER ROAD	25+95.1	51.2 LT		1
PAY ITEM TOTAL =				2

54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 30"			
LOCATION	STATION	OFFSET		TOTAL (UNITS)
RIVER ROAD	27+73.0	51.2 LT		1
RIVER ROAD	27+74.5	48.8 RT		1
PAY ITEM TOTAL =				2

6008206	PIPE UNDERDRAINS, TYPE 2, 6"				
LOCATION	FROM		TO		TOTAL
	STATION	OFFSET (FT)	STATION	OFFSET (FT)	(FOOT)
RIVER ROAD	20+06.9	11.0 LT	25+00.0	11.0 LT	493.1
RIVER ROAD	20+11.9	11.0 RT	25+00.0	11.0 RT	488.1
RIVER ROAD	28+39.3	11.0 LT	32+91.3	11.0 LT	452.0
RIVER ROAD	28+39.3	11.0 RT	32+93.3	11.0 RT	454.0
PAY ITEM TOTAL =					1888

63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS				
LOCATION	FROM		TO		TOTAL
	STATION	OFFSET (FT)	STATION	OFFSET (FT)	(FOOT)
RIVER ROAD	20+63.1	13.0 LT	25+00.6	15.5 LT	437.5
RIVER ROAD	20+90.7	13.0 RT	25+15.7	15.4 RT	425.0
RIVER ROAD	28+66.2	15.2 LT	33+41.2	15.1 LT	475.0
RIVER ROAD	28+66.2	15.3 RT	31+38.7	15.2 RT	275.0
PAY ITEM TOTAL =					1612.5

63000035	BACK SIDE PROTECTION OF GUARDRAIL				
LOCATION	FROM		TO		TOTAL
	STATION	OFFSET	STATION	OFFSET	(FEET)
RIVER ROAD	22+50.0	15.7 LT	25+37.6	15.2 LT	300.0
RIVER ROAD	28+66.2	15.5 LT	33+41.2	16.2 LT	475.0
PAY ITEM TOTAL =					775.0

63100085	TRAFFIC BARRIER TERMINAL, TYPE 6			
LOCATION	STATION	OFFSET		TOTAL (UNITS)
RIVER ROAD	25+00.6	15.0 LT		1
RIVER ROAD	25+15.7	15.0 RT		1
RIVER ROAD	28+29.3	15.0 LT		1
RIVER ROAD	28+14.3	15.0 RT		1
PAY ITEM TOTAL =				4

63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT			
LOCATION	STATION	OFFSET		TOTAL (UNITS)
RIVER ROAD	20+13.1	15.0 LT		1
RIVER ROAD	20+40.7	15.0 RT		1
RIVER ROAD	33+41.2	15.0 LT		1
RIVER ROAD	31+38.7	15.0 RT		1
PAY ITEM TOTAL =				4

63200310	GUARDRAIL REMOVAL				
LOCATION	FROM		TO		TOTAL
	STATION	OFFSET	STATION	OFFSET	(FEET)
RIVER ROAD	21+72.9	16.7 LT	25+75.3	14.8 LT	412.5
WESTBOUND	27+92.4	15.0 LT	31+08.1	15.9 LT	325.0
RIVER ROAD	21+85.9	15.4 RT	25+75.3	14.9 RT	400.0
RIVER ROAD	27+92.4	14.6 RT	31+06.9	15.7 RT	325.0
PAY ITEM TOTAL =					1462.5

66500105	WOVEN WIRE FENCE, 4'				
LOCATION	FROM		TO		TOTAL
	STATION	OFFSET (FT)	STATION	OFFSET (FT)	(FOOT)
RIVER ROAD	25+70.9	29.3 LT	25+83.8	63.5 LT	36.5
RIVER ROAD	25+83.8	63.5 LT	25+83.8	80.3 LT	16.8
RIVER ROAD	25+64.9	17.7 RT	25+58.7	65.5 RT	48.2
RIVER ROAD	25+58.7	65.5 RT	25+85.9	91.9 RT	37.9
RIVER ROAD	28+08.0	18.3 RT	29+22.7	73.1 RT	127.1
RIVER ROAD	28+33.3	29.6 LT	29+22.7	73.1 RT	136.2
PAY ITEM TOTAL =					340

Z0005216	HOT-MIX ASPHALT STABILIZATION 6" AT STEEL PLATE BEAM GUARDRAIL				
LOCATION	FROM		TO		TOTAL
	STATION	WIDTH (FT)	STATION	WIDTH (FT)	(SQ YD)
RIVER ROAD	22+50.0	3.0	25+37.6	3.0	95.9
RIVER ROAD	28+95.3	3.0	31+62.1	3.0	88.9
PAY ITEM TOTAL =					207

SIGN NAME	STATION	OFFSET	TYPE	SIGN DESIGNATION	DESCRIPTION	EXISTING PANEL DIMENSIONS			72400100 REMOVE SIGN PANEL ASSEMBLY - TYPE A	PROPOSED PLACEMENT		72000100 SIGN PANEL - TYPE 1	72800100 TELESCOPING STEEL SIGN SUPPORT	72501000 TERMINAL MARKER - DIRECT APPLIED
						WIDTH (FT)	HEIGHT (FT)	AREA (SF)	(SQ FT)	STATION	OFFSET	(SQ FT)	(FOOT)	(EACH)
1-NB-001-G	21+84.7	17.0 RT	PANEL	R2-1	SPEED LIMIT (30)	2.00	2.50	5.00	5.00	21+84.7	17.0 RT	5	14	
1-NB-003-G	21+75.2	13.1 LT	PANEL	OM-3L	EXISTING OBJECT MARKER	1.00	3.00	3.00	3.00	20+13.1	15.0 LT			1
1-NB-002-G	21+84.5	13.8 RT	PANEL	OM-3R	EXISTING OBJECT MARKER	1.00	3.00	3.00	3.00	20+40.7	15.0 RT			1
1-NB-004-G	31+06.3	15.0 RT	PANEL	OM-3R	EXISTING OBJECT MARKER	1.00	3.00	3.00	3.00	31+88.7	15.0 RT			1
1-NB-005-G	31+08.7	14.9 LT	PANEL	OM-3L	EXISTING OBJECT MARKER	1.00	3.00	3.00	3.00	33+91.1	15.0 LT			1
PAY ITEM TOTALS =									17			5	14	4

Stantec

USER NAME = dbook	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 1/26/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SCALE: | SHEET 2 OF 3 SHEETS | STA. | TO STA.

T.W.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	11
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

EARTHWORK SUMMARY			
PAY ITEM	DESCRIPTION	TOTAL (CU YD)	NOTES
20200100	EARTH EXCAVATION	1005	
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	275	SEE NOTE 1
20400800	FURNISHED EXCAVATION	4195	
21101505	TOPSOIL EXCAVATION AND PLACEMENT	2170	
66900200	NON-SPECIAL WASTE DISPOSAL	690	SEE NOTE 2

NOTE 1: THIS VOLUME IDENTIFIES AN ESTIMATED QUANTITY FOR THE REMOVAL OF UNSUITABLE MATERIALS AS DIRECTED BY THE ENGINEER. THE ESTIMATED QUANTITY PROVIDES FOR A 1-FOOT REMOVAL DEPTH OVER 25% OF THE PROPOSED PAVEMENT AREA.

NOTE 2: NON-SPECIAL WASTE DISPOSAL QUANTITY IS IDENTIFIED IN THE FINAL PRELIMINARY SITE INVESTIGATION (PSI) REPORT, JULY 27, 2022.

Z0022800	FENCE REMOVAL				
LOCATION	FROM		TO		TOTAL
	STATION	OFFSET (FT)	STATION	OFFSET (FT)	(FOOT)
RIVER ROAD	25+65.7	15.5 LT	25+83.3	63.5 LT	50.9
RIVER ROAD	25+83.1	63.5 LT	25+84.2	74.6 LT	11.2
RIVER ROAD	25+64.9	15.4 RT	25+60.0	62.7 RT	47.6
RIVER ROAD	25+60.2	62.7 RT	25+60.2	91.6 RT	28.9
RIVER ROAD	28+02.2	15.5 LT	28+99.1	59.1 LT	106.3
RIVER ROAD	28+01.6	15.4 RT	29+18.4	71.2 RT	129.4
				PAY ITEM TOTAL =	375

PAVEMENT MARKING SCHEDULE		78000200		78009004		78100100
		THERMOPLASTIC PAVEMENT MARKING - LINE 4"		MODIFIED URETHANE PAVEMENT MARKING - LINE 4"		RAISED REFLECTIVE PAVEMENT MARKER
FROM	TO	DOUBLE YELLOW CENTER LINE	WHITE EDGE LINE	DOUBLE YELLOW CENTER LINE	WHITE EDGE LINE	
STATION	STATION	(FOOT)	(FOOT)	(FOOT)	(FOOT)	(FOOT)
WESTBOUND LANES						
20+00.0	25+37.6	537.6	537.6			
20+00.0	25+37.6	537.6	537.6			
28+29.3	33+00.0	470.8	470.8			
28+29.3	33+00.0	470.8	470.8			
25+37.6	28+29.3			291.7	291.7	
25+37.6	28+29.3			291.7	291.7	
20+00.0	33+00.0					17.0
20+00.0	33+00.0					17.0
PAY ITEM TOTALS =		4034		1167		34

STATION	CROSS SECTION END AREAS		EARTH EXCAVATION	EXCAVATION USED FOR EMBANKMENT (ADJ. FOR SHRINKAGE)	EMBANK-MENT	EARTHWORK WASTE (+) OR SHORTAGE (-)	TOPSOIL CROSS SECTION END AREAS		TOPSOIL EXCAVATION	TOPSOIL USED FOR PLACEMENT (ADJ. FOR SHRINKAGE)	TOPSOIL PLACEMENT	TOPSOIL WASTE (+) OR SHORTAGE (-)
	CUT	FILL					CUT	FILL				
	(SQ FT)	(SQ FT)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(SQ FT)	(SQ FT)	(CU YD)	(CU YD)	(CU YD)	(CU YD)
20+00.0	16.4	2.2					6.0	5.0				
20+25.0	14.3	3.0	14.2	12.1	2.5	+10	15.9	7.6	10.2	8.7	5.9	+2.8
20+50.0	14.0	5.9	13.2	11.2	4.2	+7	19.2	4.7	16.3	13.9	5.8	+8.1
20+75.0	14.2	8.8	13.1	11.1	6.9	+4	22.4	7.5	19.3	16.4	5.7	+10.7
21+00.0	15.1	15.1	13.6	11.6	11.1	+0	25.3	9.2	22.1	18.8	7.8	+11.0
21+25.0	14.8	26.8	13.9	11.8	19.4	-8	28.0	11.0	24.7	21.0	9.4	+11.6
21+50.0	14.3	26.2	13.5	11.5	24.6	-13	28.7	11.5	26.3	22.4	10.5	+11.9
21+75.0	13.6	17.8	13.0	11.1	20.4	-9	29.5	12.8	27.0	23.0	11.3	+11.7
22+00.0	29.0	16.4	19.8	16.8	15.9	+1	34.4	13.5	29.6	25.2	12.2	+13.0
22+25.0	27.0	29.4	26.0	22.1	21.3	+1	37.3	13.6	33.2	28.2	12.6	+15.6
22+50.0	28.8	69.0	25.9	22.0	45.6	-24	39.6	13.2	35.6	30.3	12.4	+17.9
22+75.0	25.0	78.7	24.9	21.2	68.4	-47	42.4	15.7	38.0	32.3	13.4	+18.9
23+00.0	22.4	92.7	22.0	18.7	79.4	-61	45.2	17.6	40.6	34.5	15.5	+19.0
23+25.0	21.3	98.0	20.3	17.3	88.3	-71	47.8	19.3	43.1	36.6	17.1	+19.5
23+50.0	21.2	110.7	19.7	16.7	96.7	-80	49.5	20.3	45.1	38.3	18.4	+19.9
23+75.0	26.5	139.6	22.1	18.8	115.9	-97	54.5	23.5	48.2	41.0	20.4	+20.6
24+00.0	25.8	161.5	24.3	20.7	139.4	-119	58.3	26.0	52.3	44.5	23.0	+21.5
24+25.0	26.5	188.0	24.2	20.6	161.8	-141	62.4	28.8	55.9	47.5	25.4	+22.1
24+50.0	28.7	210.8	25.6	21.8	184.7	-163	66.5	31.5	59.7	50.7	28.0	+22.7
24+75.0	30.6	80.4	27.5	23.4	134.9	-112	70.6	37.1	63.5	54.0	31.8	+22.2
25+00.0	53.5	253.9	39.0	33.2	154.8	-122	74.5	40.0	67.2	57.1	35.7	+21.4
25+25.0	52.0	275.7	48.9	41.6	245.2	-204	78.2	39.9	70.7	60.1	37.0	+23.1
25+50.0	9.2	335.3	28.4	24.1	282.9	-259	84.3	42.8	75.3	64.0	38.3	+25.7
25+66.4	11.1	526.7	6.2	5.3	261.9	-257	89.1	44.9	52.7	44.8	26.7	+18.1
BRIDGE OMISSION												
28+02.3	12.1	627.7					97.3	52.7				
28+25.0	12.9	403.5	10.6	9.0	433.5	-424	69.7	34.2	70.2	59.7	36.6	+23.1
28+50.0	39.2	376.8	24.2	20.6	361.3	-341	86.0	44.9	72.1	61.3	36.6	+24.7
28+75.0	43.3	312.0	38.3	32.6	319.0	-286	85.7	44.7	79.5	67.6	41.5	+26.1
29+00.0	30.0	256.3	34.0	28.9	263.2	-234	83.4	43.2	78.3	66.6	40.8	+25.8
29+25.0	23.7	239.1	24.9	21.2	229.4	-208	81.3	42.0	76.3	64.9	39.5	+25.4
29+50.0	23.8	211.6	22.0	18.7	208.7	-190	78.5	40.1	74.0	62.9	38.0	+24.9
29+75.0	26.5	187.4	23.3	19.8	184.7	-165	74.1	37.3	70.7	60.1	35.8	+24.3
30+00.0	27.4	161.6	25.0	21.3	161.6	-140	69.6	34.1	66.6	56.6	33.1	+23.5
30+25.0	26.6	126.7	25.0	21.3	133.5	-112	64.6	31.1	62.2	52.9	30.2	+22.7
30+50.0	29.8	98.4	26.2	22.3	104.3	-82	61.2	28.7	58.3	49.6	27.8	+21.8
30+75.0	5.3	7.9	16.3	13.9	49.3	-35	58.5	9.4	55.5	47.2	17.7	+29.5
31+00.0	34.8	64.4	18.6	15.8	33.5	-18	53.1	23.3	51.7	43.9	15.2	+28.7
31+25.0	34.8	84.6	32.3	27.5	69.1	-42	51.7	22.4	48.6	41.3	21.2	+20.1
31+50.0	30.1	72.0	30.1	25.6	72.5	-47	47.0	19.3	45.7	38.8	19.3	+19.5
31+75.0	24.3	56.6	25.2	21.4	59.6	-38	42.9	16.5	41.7	35.4	16.6	+18.8
32+00.0	24.2	24.5	22.5	19.1	37.6	-18	38.7	10.4	37.8	32.1	12.5	+19.6
32+25.0	25.9	24.1	23.2	19.7	22.6	-3	33.8	16.4	33.6	28.6	12.5	+16.1
32+50.0	15.1	31.1	19.0	16.2	25.6	-9	30.3	15.1	29.7	25.2	14.7	+10.5
32+75.0	14.5	28.2	13.8	11.7	27.5	-16	26.8	13.1	26.5	22.5	13.1	+9.4
33+00.0	13.8	20.4	13.1	11.1	22.5	-11	23.2	10.8	23.2	19.7	11.1	+8.6
INTERSTATE 80 INTERIM SWALE GRADING												
306+00.0	11.6	4.4					20.2	27.4				
307+00.0	3.5	9.2	27.9	23.7	25.3	-2	18.9	26.5	72.3	61.5	99.9	-38.4
308+00.0	0.0	0.0	6.5	5.5	17.1	-12	0.0	0.0	35.0	29.8	49.1	-19.4
PAY ITEM TOTALS =			1005	855	5050	-4195			2170	1845	1090	755

EARTHWORK NOTES:

1. APPLIED SHRINKAGE FACTOR = 15%
2. ASSUMED A DEPTH OF 9" FOR THE EXISTING TOPSOIL AND 6" FOR PROPOSED TOPSOIL PLACEMENT
3. DISPOSAL OF EXCESS TOPSOIL WILL NOT BE PAID FOR SEPARATELY BUT IS INCLUDED IN THE PRICE FOR 'TOPSOIL EXCAVATION AND PLACEMENT.' SURPLUS TOPSOIL TO BE DISPOSED OF ACCORDING TO ARTICLE 202.03.
4. END AREA VALUES ARE MEASURED IN CROSS SECTIONS

MAINTENANCE OF TRAFFIC					70400100	70400125	70400200	70600280	70600370	78200011	78300200	X6420002
					TEMPORARY CONCRETE BARRIER	PINNING TEMPORARY CONCRETE BARRIER	RELOCATE TEMPORARY CONCRETE BARRIER	IMPACT ATTENUATORS, TEMPORARY (SEVERE USE,NARROW), TEST LEVEL 3	IMPACT ATTENUATORS, RELOCATE (SEVERE USE,NARROW), TEST LEVEL 3	BARRIER WALL REFLECTORS, TYPE C	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL (REFLECTORS ONLY)	FILLING EXISTING RUMBLE STRIP
LOCATION	FROM STATION	FROM OFFSET	TO STATION	TO OFFSET	(FOOT)	(EACH)	(FOOT)	(EACH)	(EACH)	(EACH)	(EACH)	(FOOT)
STAGE 1A												
EASTBOUND	297+97.9	43.5 RT	315+29.5	44.6 RT							44	
EASTBOUND	298+40.4	56.4 RT	314+70.0	57.8 RT								1630
EASTBOUND	301+80.4	26.9 RT	302+42.5	33.2 RT	62.5			1		6		
EASTBOUND	302+42.5	33.2 RT	307+30.0	34.2 RT	487.5					40		
WESTBOUND	301+42.1	29.2 LT	306+04.6	29.1 LT			462.5					
WESTBOUND	306+04.6	29.1 LT	306+67.0	24.8 LT			62.5	1				
STAGE 1B												
WESTBOUND	301+42.1	7.0 LT	305+25.0	4.7 LT		184	383.0					
WESTBOUND	305+25.0	4.7 LT	306+67.0	0.0 RT		68	142.0					
STAGE 2												
EASTBOUND	302+42.1	63.2 RT	303+04.3	57.6 RT	62.5				1	6		
EASTBOUND	303+04.3	57.6 RT	308+04.3	58.7 RT	500.0					40		
WESTBOUND	302+54.5	58.4 LT	306+04.5	58.6 LT	350.0					28		
WESTBOUND	306+04.5	58.6 LT	306+66.8	63.0 LT	62.5				1	6		
			PAY ITEM TOTALS =		1525.0	252	1050.0	2	2	126	44	1630

MAINTENANCE OF TRAFFIC PAVEMENT MARKING		70301120		70301125	78000200		78000300	78300202
		TEMPORARY PAVEMENT MARKING - LINE 4" - EPOXY		TEMPORARY PAVEMENT MARKING - LINE 5" - EPOXY	THERMOPLASTIC PAVEMENT MARKING - LINE 4"		THERMOPLASTIC PAVEMENT MARKING - LINE 5"	PAVEMENT MARKING REMOVAL - WATER BLASTING
FROM STATION	TO STATION	YELLOW LANE LINE (FOOT)	WHITE LANE LINE (FOOT)	WHITE SKIP DASH (FOOT)	YELLOW LANE LINE (FOOT)	WHITE LANE LINE (FOOT)	WHITE SKIP DASH (FOOT)	(SQ FT)
STAGE 1A - EXISTING PAVEMENT MARKING REMOVAL AND TEMPORARY PAVEMENT MARKING								
297+97.9	300+80.3	282.5	240.0	45.7				193.2
300+80.3	301+80.3	100.0	100.0	25.0				77.1
301+80.3	302+42.5	62.2	62.2	15.6				48.0
302+42.5	307+30.0	487.5	487.5	121.9				375.8
307+30.0	312+30.0	500.0	500.0	125.0				385.4
312+30.0	315+30.0	300.0	240.2	74.9				211.3
STAGE 1B - TEMPORARY PAVEMENT MARKING REMOVAL AND PAVEMENT MARKING								
297+97.9	300+80.3				282.5	240.0	45.7	193.2
300+80.3	301+80.3				100.0	100.0	25.0	77.1
301+80.3	302+42.5				62.2	62.2	15.6	48.0
302+42.5	307+30.0				487.5	487.5	121.9	375.8
307+30.0	312+30.0				500.0	500.0	125.0	385.4
312+30.0	315+30.0				300.0	240.2	74.9	211.3
PAY ITEM TOTALS =		3363		409	3363		409	2582

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:TRANSYSCORE-PW1-HOSTED/Documents/Projects_2018/CH401/401188022/01-Stantec/CAD/CR-02_62P67/04-Sheets/01-General/D162P67-sht-schedule-004_V10.dgn

Stantec

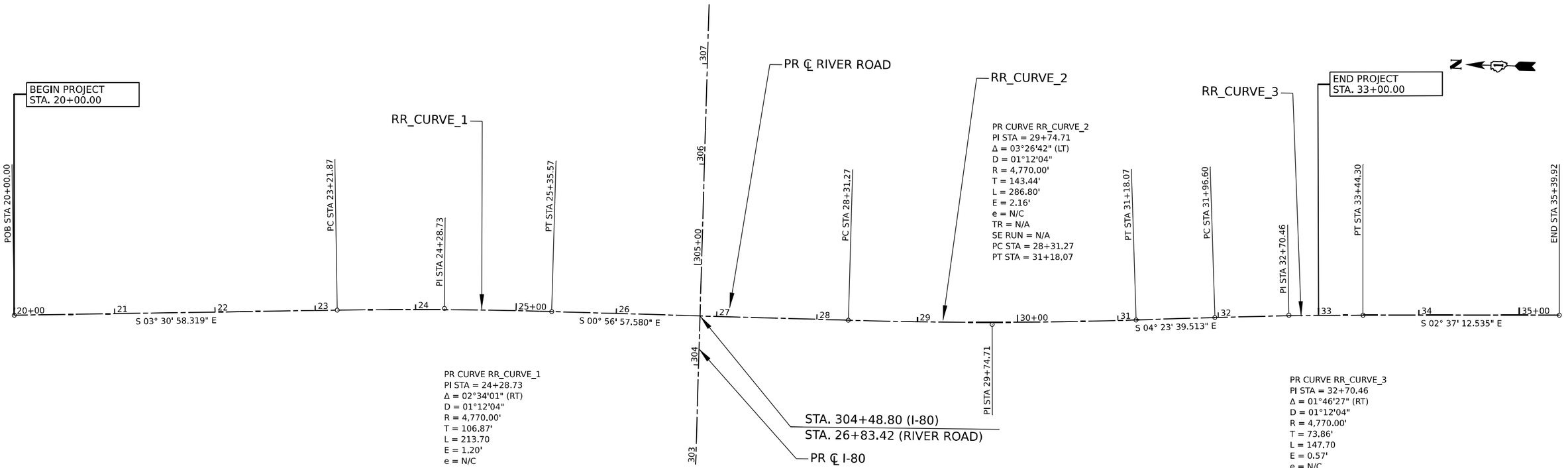
USER NAME = aericksen	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 3/21/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SCALE: | SHEET 4 OF 4 SHEETS | STA. | TO STA.

T.W.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	137	12A
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		



PR CURVE RR_CURVE_1
PI STA = 24+28.73
Δ = 02°34'01" (RT)
D = 01°12'04"
R = 4,770.00'
T = 106.87'
L = 213.70
E = 1.20'
e = N/C
TR = N/A
SE RUN = N/A
PC STA = 23+21.87
PT STA = 25+35.57

PR CURVE RR_CURVE_2
PI STA = 29+74.71
Δ = 03°26'42" (LT)
D = 01°12'04"
R = 4,770.00'
T = 143.44'
L = 286.80'
E = 2.16'
e = N/C
TR = N/A
SE RUN = N/A
PC STA = 28+31.27
PT STA = 31+18.07

PR CURVE RR_CURVE_3
PI STA = 32+70.46
Δ = 01°46'27" (RT)
D = 01°12'04"
R = 4,770.00'
T = 73.86'
L = 147.70
E = 0.57'
e = N/C
TR = N/A
SE RUN = N/A
PC STA = 31+96.60
PT STA = 33+44.30

ALIGNMENT COORDINATES - I-80			
	STATION	NORTHING	EASTING
POB	100+00.00	1,746,595.8341	999,489.2786
PC	161+94.06	1,746,806.7216	1,005,679.7467
PI	180+55.69	1,746,870.1039	1,007,540.2941
PT	196+62.08	1,748,367.7886	1,008,646.0042
PC	262+41.81	1,753,661.2030	1,012,554.0238
PI	281+45.14	1,755,192.4390	1,013,684.5040
PT	297+77.15	1,755,223.9736	1,015,587.5738
POT	332+87.50	1,755,282.1335	1,019,097.4381

ALIGNMENT COORDINATES - RIVER ROAD				
	STATION	NORTHING	EASTING	CURVE
POB	20+00.00	1,755,917.7140	1,016,228.6200	
PC	23+21.87	1,755,596.4520	1,016,248.3600	RR_CURVE_1
PI	24+28.73	1,755,489.7870	1,016,254.9150	RR_CURVE_1
PT	25+35.57	1,755,382.9350	1,013,256.6850	RR_CURVE_1
PC	28+31.27	1,755,087.2720	1,016,261.5840	RR_CURVE_2
PI	29+74.71	1,754,943.8470	1,016,263.9610	RR_CURVE_2
PT	31+18.07	1,754,800.8240	1,013,274.9520	RR_CURVE_2
PC	31+96.60	1,754,722.5250	1,016,280.9690	RR_CURVE_3
PI	32+70.46	1,754,648.8840	1,016,286.6280	RR_CURVE_3
PT	33+44.30	1,754,575.1040	1,016,290.0040	RR_CURVE_3
END	35+39.92	1,754,379.6980	1,016,298.9469	

BENCHMARKS				
NUMBER	ELEVATION	NORTHING	EASTING	DESCRIPTION
BM-1	600.47	1,746,709.6	1,001,129.7	Set 2" CWA aluminum disc in north side of westerly pier seat being the first pier west of Ridge Road for I-80 bridge over Ridge Road (FB626/PG32)
BM-2	619.10	1,746,597.7	1,002,645.6	Set 2" CWA aluminum disc in concrete base of light pole, east of Ridge Road & 675'± west of railroad on south side of eastbound I-80 (FB626/PG34)
BM-3	608.94	1,746,782.8	1,003,079.1	Set 2" CWA aluminum disc in concrete base of light pole, east of Ridge Road & 300'± west of railroad on north side of westbound I-80 (FB626/PG34)
BM-4	618.86	1,746,798.1	1,003,844.9	Set 2" CWA aluminum disc in concrete pier seat under Wabena Street bridge on north side of westbound I-80 (FB5626/PG26) (FB628/PG4)
BM-5	626.67	1,746,868.7	1,006,294.6	Set 2" CWA aluminum disc in easterly end of centerline median wall of I-80, approximately 2400'± east of Wabena Street & 215'± west of Will County GPS Monument 1006 (FB626/PG26) (FB628/PG4)
BM-6	615.33	1,747,393.7	1,007,602.6	Set 2" CWA aluminum disc in concrete end of drainage structure west of turnaround in center median of I-80 400'± west of mile marker 123,0 (FB626/PG26) (FB628/PG3)
BM-7	599.98	1,749,593.5	1,009,622.2	Set 2" CWA aluminum disc in concrete pier seat in southerly pier of Shepley Road bridge on south side of eastbound I-80 (FB626/PG26) (FB628/PG5)
BM-8	582.76	1,754,922.1	1,014,323.8	Set 2" CWA aluminum disc in north side of concrete base of overhead highway sign "Exit 126A" on south side of eastbound I-80, approximately 2000'± west of River Road. (FB626/PG27) (FB628/PG10)
BM-9	575.612	1,755,168.7	1,016,267.0	Set 2" CWA aluminum disc in concrete pier seat in southerly pier of River Road bridge on south side of eastbound I-80 (FB626/PG27) (FB628/PG10)
BM-10	568.745	1,755,191.6	1,017,829.8	Set 2" CWA aluminum disc at top of concrete parapet wall at SE corner of eastbound I-80 bridge over DuPage River (FB626/PG27) (FB628/PG11)

NOTE:

THE CONTRACTOR MUST TRANSFER BM-9 TO A PROTECTED LOCATION AND PROVIDE ELEVATION INFORMATION TO THE ENGINEER BEFORE STARTING DEMOLITION. THIS WORK IS INCLUDED IN THE CONTRACT PRICE FOR CONSTRUCTION LAYOUT.

NGS PRIMARY HORIZONTAL CONTROL MONUMENTS				
NGS ID	NORTHING	EASTING	ELEVATION	DESCRIPTION
PID-DH6200	1,743,515.7900	989,052.4900	N/A	GRUNDY COUNTY GIS 0304
PID-AE2473	1,730,878.1600	1,006,979.2900	N/A	WILL COUNTY GPS 1019
PID-AE2471	1,746,831.7400	1,006,506.5100	619.1510	WILL COUNTY GPS 1006
PID-MF1784	1,767,814.8900	1,026,441.6900	579.8650	JOLIPORT
PID-AE2571	1,764,272.0000	1,038,372.6700	628.6690	WILL COUNTY GPS 718
PID-AE2570	1,764,389.1600	1,053,254.6400	542.9050	WILL COUNTY GPS 716
PID-AE2569	1,764,641.7900	1,069,052.4900	660.4610	WILL COUNTY GPS 713

NGS PRIMARY VERTICAL CONTROL MONUMENTS				
NGS ID	NORTHING	EASTING	ELEVATION	DESCRIPTION
PID-DP5481	1,765,290.0500	1,003,576.0500	635.1600	WRI 026 (2" ORDER)
PID-DP5482	1,765,111.3100	998,366.3600	N/A	WRI 027 (2" ORDER)
PID-MF0081	N/A	N/A	619.1510	G 142 (1" ORDER)
PID-MF0071	1,766,431.0500	1,051,094.9800	579.8650	J142 (1" ORDER)
PID-MF0070	1,764,344.9900	1,049,387.4800	628.6690	K142 (1" ORDER)
PID-ME1923	N/A	N/A	703.3000	W 26 (2" ORDER)

NOTE:

ALL HORIZONTAL DATUM SHOWN HEREON IS REFERENCED TO ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD83(2011) GRID VALUES. ALL TARGET CONTROL COORDIANTES WERE DERIVED FROM DOUBLE 3 MINUTE RTK GPS OBSERVATIONS. COORDINATES ARE CONSTRAINED HOLDING THE PUBLISHED NAD83(2011) VALUES FOR NGS PRIMARY HORIZONTAL CONTROL MONUMENTS SHOWN BELOW.

ALL VERTICAL DATUM SHOWN HEREON IS REFERENCED TO NAVD88 BASED ON DIGITAL DIFFERENTIAL LEVELING METHODS. ALL ELEVATIONS ARE ESTABLISHED BY CLOSED LEVEL LOOPS GENERALLY HEADING IN THE EASTERLY DIRECTION FROM RIDGE ROAD TO US ROUTE 30. A TOTAL OF 0.04' OF ELEVATION ERROR WAS ADJUSTED AND BALANCED THROUGHOUT THE PROJECT CORRIDOR, COVERING APPROXIMATELY 35 MILES OF CLOSED LOOPS. ELEVATIONS ARE CONSTRAINED HOLDING THE PUBLISHED NAVD88 VALUES FOR NGS PRIMARY VERTICAL CONTROL MONUMENTS SHOWN BELOW.

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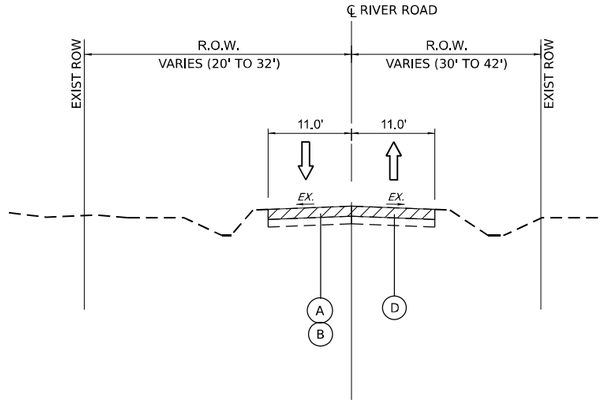
Stantec

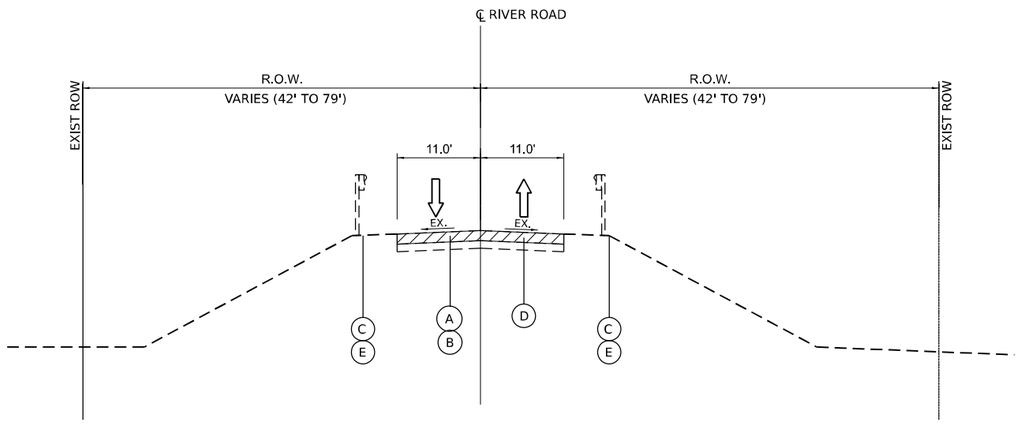
USER NAME = jstrouse	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ALIGNMENT, TIES, AND BENCHMARKS	
	DRAWN -	REVISED -			
PLOT SCALE = 200.000 ' / in.	CHECKED -	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.	
PLOT DATE = 1/26/2023	DATE -	REVISED -			

T.W.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	13
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		



EXISTING ROADWAY TYPICAL SECTION

(LOOKING SOUTH)
STA. 20+00.00 TO STA. 22+50.00
STA. 30+75.00 TO STA. 33+00.00



EXISTING ROADWAY TYPICAL SECTION

(LOOKING SOUTH)
STA. 22+50.00 TO STA. 25+66.59
STA. 27+99.25 TO STA. 30+75.00

(BRIDGE OMISSION: STA. 25+66.59 TO STA. 27+99.25)

LEGEND

EXISTING TYPICAL SECTION

- Ⓐ EXISTING HMA PAVEMENT, 7" & VARIES
- Ⓑ EXISTING SUB-BASE MATL, 8" & VARIES
- Ⓒ EXISTING GUARDRAIL
- Ⓓ PAVEMENT REMOVAL
- Ⓔ GUARDRAIL REMOVAL
- REMOVAL ITEM

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Stantec

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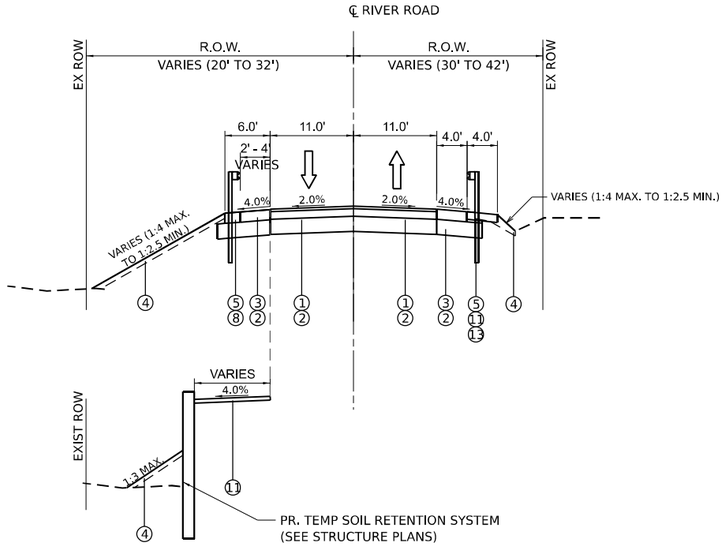
	DRAWN -	REVISED -	
PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 1/26/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

SCALE: | SHEET 1 OF 2 SHEETS | STA. | TO STA.

T.W.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	14
		CONTRACT NO. 62P67		
	ILLINOIS FED. AID PROJECT			



STA. 21+75.00 TO STA. 22+50.00
STA. 31+62.09 TO STA. 32+50.00

PROPOSED ROADWAY TYPICAL SECTION

(LOOKING SOUTH)

STA. 20+00.00 TO STA. 22+50.00
STA. 31+62.09 TO STA. 33+00.00

NOTE:
AGGREGATE SUBGRADE IMPROVEMENT 12" SHOULD EXTEND
1-FOOT BEYOND THE LIMITS OF THE HMA SHOULDER (RT AND LT)

LEGEND

PROPOSED TYPICAL SECTION

① HOT-MIX ASPHALT PAVEMENT (FULL DEPTH), 8"
HMA SURFACE COURSE, MIX "D", IL-9.5, N50 (2")
HMA BINDER COURSE, IL-19.0, N50 (6")

② AGGREGATE SUBGRADE IMPROVEMENT, 12"

③ HOT-MIX ASPHALT SHOULDERS, 8"

④ TOPSOIL EXCAVATION AND PLACEMENT (6" DEPTH)

⑤ STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS

⑥ HOT-MIX ASPHALT SURFACE COURSE IL-9.5,
MIX "D", N50 (4")

⑦ SUBBASE GRANULAR MATERIAL, TYPE B 6"

⑧ HOT-MIX ASPHALT STABILIZATION 6"
AT STEEL PLATE BEAM GUARDRAIL

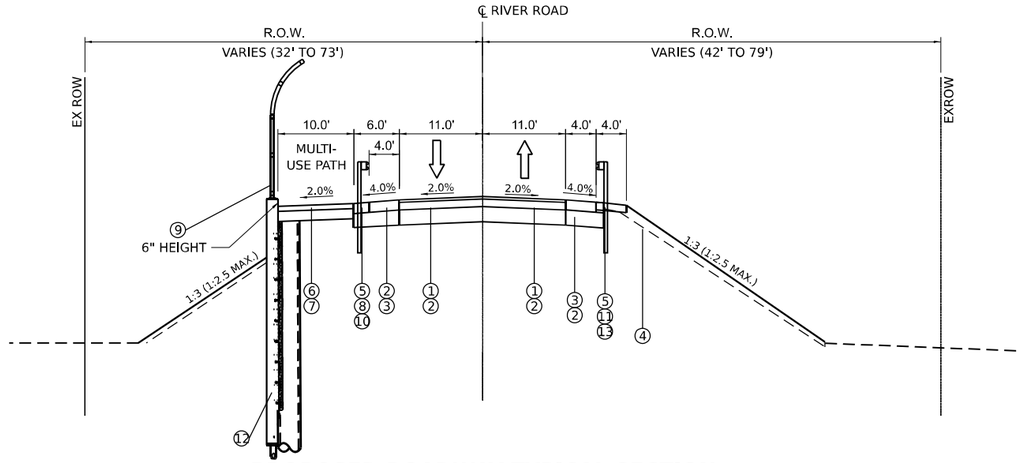
⑨ BICYCLE RAILING, CURVED

⑩ BACK SIDE PROTECTION OF GUARDRAIL

⑪ AGGREGATE SHOULDERS, TYPE B 6"

⑫ PROPOSED RETAINING WALL (SEE STRUCTURAL PLANS)

⑬ SUBBASE GRANULAR MATERIAL, TYPE C



PROPOSED ROADWAY TYPICAL SECTION

(LOOKING SOUTH)

STA. 22+50.00 TO STA. 25+37.59
STA. 28+29.25 TO STA. 31+62.09
(BRIDGE AND APPROACH SLAB OMISION: STA. 25+37.59 TO STA. 28+29.25)

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE TYPE	AIR VOIDS @ Ndes	QMP
HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 8"		
HMA SURFACE COURSE, MIX "D", IL-9.5, N50: 2"	4.0% @ 50 GYR	QC/QA
HMA BINDER COURSE, IL-19.0, N50: 6"	4.0% @ 50 GYR	QC/QA
HOT-MIX ASPHALT SHOULDERS 8"		
HMA SURFACE COURSE, MIX "D", IL-9.5, N50: 2"	4.0% @ 50 GYR	QC/QA
HMA BINDER COURSE, IL-19.0, N50: 6"	4.0% @ 50 GYR	QC/QA
HOT-MIX ASPHALT STABILIZATION 6" AT STEEL PLATE BEAM GUARDRAIL		
HMA BINDER COURSE, IL-19: 6"	4.0% @ 50 GYR	QC/QA
MULTI-USE PATH		
HMA SURFACE COURSE, IL-9,5, MIX "D",N50: 4" (IN 2 LIFTS)	4.0% @ 50 GYR	QC/QA
FILLING EXISTING RUMBLE STRIP		
HMA SURFACE COURSE, IL-9.5, MIX "D",N70: 2"	4.0% @ 70 GYR	QC/QA
QMP DESIGNATIONS: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA); QUALITY CONTROL FOR PERFORMANCE (QCP); PAY FOR PERFORMANCE (PFP).		

NOTES: THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/INCH.

THE "AC TYPE" FOR POLYMERIZED HMA MIXTURES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY RECLAIMED MATERIALS SPECIFICATIONS.

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Stantec

USER NAME = aericksen	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/21/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

SCALE: | SHEET 2 OF 2 SHEETS | STA. | TO STA.

T.W.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	137	15
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

TRAFFIC CONTROL GENERAL NOTES

1. THE MAINTENANCE OF TRAFFIC PLANS SHALL SERVE AS A GUIDE FOR THE SAFE DIVERSION OF TRAFFIC DURING EXECUTION OF THIS CONTRACT. THE CONTRACTOR MAY MODIFY THE MAINTENANCE OF TRAFFIC PLANS TO MEET CONSTRUCTION NEEDS, BUT NOT AT THE EXPENSE OF PUBLIC SAFETY OR CONVENIENCE. ANY CHANGES TO THE TRAFFIC CONTROL SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL.

2. THE REMOVAL OF EXISTING CONFLICTING PAVEMENT MARKING LINES WILL BE PAID FOR AS WILL BE PAID FOR AS PAVEMENT MARKING REMOVAL - WATER BLASTING.

3. THE CONTRACTOR SHALL REMOVE OR COVER ALL EXISTING SIGNS THAT CONFLICT WITH OR DO NOT APPLY TO THE REVISED TRAFFIC PATTERNS AND SHALL RESTORE THE SIGNS AT THE END OF CONSTRUCTION AS DIRECTED BY THE ENGINEER.

4. SIGNING FOR CONSTRUCTION ENTRANCES/EXITS SHALL BE IMPLEMENTED ACCORDING TO DISTRICT TRAFFIC CONTROL STANDARD TC-18 SIGNING AND FLAGGING OPERATIONS AT WORK ZONE OPENINGS.

5. TRAFFIC CONTROL AND PROTECTION SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 701 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

6. THE EXACT LOCATION OF ALL WARNING SIGNS AND BARRICADES SHALL BE STAKED IN THE FIELD BY THE CONTRACTOR FOR APPROVAL BY THE ENGINEER PRIOR TO INSTALLATION.

7. ALL WARNING SIGNS SHALL BE A MINIMUM OF 48" x 48" AND HAVE A BLACK LEGEND AND BORDER ON A FLORESCENT ORANGE REFLECTORIZED BACKGROUND.

8. ALL REQUIRED TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF CONSTRUCTION.

9. THE CONTRACTOR SHALL CONTACT THE EXPRESSWAY'S TRAFFIC CONTROL SUPERVISOR AT (847) 705-4155 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

   THE CONTRACTOR SHALL ALSO CONTACT THE IDOT ARTERIAL TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADRUGA@ILLINOIS.GOV 72 HOURS IN ADVANCE OF THE DETOUR.

10. THE CONTRACTOR SHALL REQUEST AND GAIN APPROVAL FROM THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S EXPRESSWAY TRAFFIC OPERATIONS ENGINEER AT WWW.IDOTLCS.COM TWENTY-FOUR (24) HOURS IN ADVANCE OF ALL DAILY LANE, RAMP, AND SHOULDER CLOSURES AND 7 DAYS IN ADVANCE OF ALL PERMANENT AND WEEKEND CLOSURES ON ALL FREEWAYS AND/OR EXPRESSWAYS IN DISTRICT ONE. THIS ADVANCE NOTIFICATION IS CALCULATED BASED ON A WORKWEEK OF MONDAY THROUGH FRIDAY AND SHALL NOT INCLUDE WEEKENDS OR HOLIDAYS.

11. ALL TEMPORARY INFORMATION SIGNS SHALL HAVE A BLACK LEGEND AND BORDER ON A FLUORESCENT ORANGE REFLECTORIZED BACKGROUND.

12. ALL TRAFFIC CONTROL DEVICES SHALL BE REMOVED, COVERED OR TURNED AWAY FROM TRAFFIC AS SOON AS THEY ARE NO LONGER NECESSARY.

13. THE FURNISHING, INSTALLATION, AND RELOCATION OF ALL TRAFFIC SIGNS ALONG THE EXPRESSWAY SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND THE STANDARD SPECIFICATIONS. THIS WORK SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS). ALL CONFLICTING TRAFFIC SIGNS SHALL BE COVERED AS DIRECTED BY THE ENGINEER.

14. ALL TEMPORARY PAVEMENT MARKINGS SHOWING DETERIORATION AFTER 7 DAYS SHALL BE REPLACED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER. SUFFICIENT QUANTITIES FOR ONE PLACEMENT AND ONE REPLACEMENT HAVE BEEN PROVIDED FOR EACH STAGE. ALL MARKINGS THAT REQUIRE REPLACEMENT AFTER THE FIRST REPLACEMENT SHALL BE REPLACED BY THE CONTRACTOR AT HIS/HER OWN EXPENSE.

15. ALL TRAFFIC CONTROL DEVICES SHALL BE REFLECTORIZED PRIOR TO INSTALLATION AND CLEANED AS SPECIFIED IN THE TRAFFIC CONTROL SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.

SUGGESTED SEQUENCE OF OPERATIONS

INTERSTATE 80 UNDER RIVER ROAD

THE CONTRACTOR WILL BE REQUIRED TO COMPLETE WORK WITHIN THE MAINLINE INTERSTATE 80 TO PERFORM THE WORK

THE SUGGESTED SEQUENCE OF OPERATIONS FOR INSIDE AND OUTSIDE SHOULDER CLOSURES HAVE BEEN PROVIDED FOR THE TRAFFIC CONTROL OF EASTBOUND AND WESTBOUND INTERSTATE 80 BENEATH S.N. 099-8304 (RIVER ROAD).

NIGHTLY LANE CLOSURES AND MAINTENANCE OF TRAFFIC REQUIRED ON MAINLINE I-80 REQUIRED TO COMPLETE THE CONTRACT WILL BE PAID FOR AS TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).

REMOVE SUPERSTRUCTURE AND DECK

1. INSTALL PROTECTIVE SHIELDING UNDERNEATH EXISTING S.N. 099-0177 AT LOCATIONS SHOWN IN THE STRUCTURAL PLANS DURING THE ALLOWABLE TEMPORARY NIGHTLY LANE CLOSURES FOR INTERSTATE 80 LISTED IN THE SPECIAL PROVISIONS.

2. REMOVE THE EXISTING S.N. 099-0177 SUPERSTRUCTURE AND BRIDGE DECK AS SHOWN IN THE STRUCTURAL PLANS.

CENTER PIER

1. FILL EXISTING RUMBLE STRIPS ON EASTBOUND INTERSTATE 80 OUTSIDE SHOULDER. PAID FOR AS FILLING EXISTING RUMBLE STRIP.

2. CLOSE EASTBOUND AND WESTBOUND INSIDE SHOULDERS. EASTBOUND TRAFFIC SHIFTED TO THE OUTSIDE SHOULDERS AS SHOWN ON THE STAGE 1A MOT PLANS. TRAFFIC CONTROL WILL BE PAID FOR AS TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).

3. STAGE 1A WESTBOUND TEMPORARY CONCRETE BARRIER IS TO BE RELOCATED FROM PLACEMENT IN CONTRACT 62N31. THE WESTBOUND TEMPORARY CONCRETE BARRIER IS TO BE UNPINNED AND RELOCATED FROM LOCATION A TO LOCATION B AS SHOWN ON PLANS. PAID FOR AS RELOCATE TEMPORARY CONCRETE BARRIER. STAGE 1A EASTBOUND TEMPORARY CONCRETE BARRIER IS PAID FOR AS TEMPORARY CONCRETE BARRIER.

4. REMOVE EXISTING S.N. 099-0177 CENTER PIER AS SHOWN IN THE STRUCTURAL PLANS

5. PERFORM CONSTRUCTION OF PROPOSED S.N. 099-8304 CENTER PIER AS SHOWN IN THE STRUCTURAL PLANS.

6. WORK SHALL BE PERFORMED WITHIN THE STAGE 1A AND 1B WORK ZONE EXCEPT FOR NIGHTLY LANE CLOSURES AND MAINTENANCE OF TRAFFIC REQUIRED ON MAINLINE I-80 NECESSARY TO PERFORM THE BRIDGE CONSTRUCTION AND DEMOLITION.

7. STAGE 1B IS TO BE COMPLETED PRIOR TO CLOSURE OF THE OUTSIDE SHOULDERS IN STAGE 2. TEMPORARY CONCRETE BARRIER RELOCATED IN STAGE 1A IS TO BE RESTORED TO THE ORIGINAL CONFIGURATION OF CONTRACT 62N31 IN STAGE 1B AS SHOWN ON PLANS. THE TEMPORARY CONCRETE BARRIER IS TO BE RELOCATED FROM LOCATION B TO LOCATION A AND PINNED (PINNING BOTH SIDES). PAID FOR AS RELOCATE TEMPORARY CONCRETE BARRIER AND PINNING TEMPORARY CONCRETE BARRIER.

SOUTH PIER AND ABUTMENT

1. CLOSE EASTBOUND INTERSTATE 80 OUTSIDE SHOULDERS AS SHOWN ON THE STAGE 2 MOT PLANS. TRAFFIC CONTROL WILL BE PAID FOR AS TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).

2. REMOVE EXISTING S.N. 099-0177 SOUTH PIER AND SOUTH ABUTMENT AS SHOWN IN THE STRUCTURAL PLANS.

3. PERFORM CONSTRUCTION OF PROPOSED S.N. 099-8304 SOUTH ABUTMENT, AND SLOPEWALL AS SHOWN IN THE STRUCTURAL PLANS.

4. INSTALL CULVERT PIPE CROSSING AND APPURTANCES AT THE SOUTH ABUTMENT AS SHOW IN THE PLANS.

5. WORK SHALL BE PERFORMED WITHIN STAGE 2 WORK ZONE EXCEPT FOR NIGHTLY LANE CLOSURES AND MAINTENANCE OF TRAFFIC REQUIRED ON MAINLINE I-80 NECESSARY TO PERFORM THE BRIDGE CONSTRUCTION AND DEMOLITION.

NORTH PIER AND ABUTMENT

1. CLOSE WESTBOUND OUTSIDE SHOULDERS AS SHOWN ON THE STAGE 2 MOT PLANS. TRAFFIC CONTROL WILL BE PAID FOR AS TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).

2. REMOVE EXISTING S.N. 099-0177 NORTH PIER AND NORTH ABUTMENT AS SHOWN IN THE STRUCTURAL PLANS.

3. PERFORM CONSTRUCTION OF PROPOSED S.N. 099-8304 NORTH ABUTMENT, AND SLOPEWALL AS SHOWN IN THE STRUCTURAL PLANS.

4. INSTALL CULVERT PIPE CROSSING AND APPURTANCES AT THE NORTH ABUTMENT AS SHOWIN THE PLANS.

5. WORK SHALL BE PERFORMED WITHIN THE CONTRACT 62P71 WORK ZONE EXCEPT FOR NIGHTLY LANE CLOSURES AND MAINTENANCE OF TRAFFIC REQUIRED ON MAINLINE I-80 NECESSARY TO PERFORM THE BRIDGE CONSTRUCTION AND DEMOLITION.

ERECT BEAMS

DURING THE ALLOWABLE TEMPORARY NIGHTLY LANE CLOSURE HOURS FOR I-80 LISTED IN THE SPECIAL PROVISIONS, UTILIZE FULL STOP 15 MINUTE CLOSURES TO ERECT PROPOSED S.N. 099-08304 BEAMS AT LOCATIONS SHOWN IN THE STRUCTURAL PLANS.

RIVER ROAD

THE CONTRACTOR WILL BE RESPONSIBLE FOR STAGING, MAINTENANCE OF TRAFFIC, AND THE DETOUR OF RIVER ROAD.

A SUGGESTED SEQUENCING OF OPERATIONS HAS NOT BEEN INCLUDED FOR THE RIVER ROAD CONSTRUCTION AS A FULL ROAD CLOSURE WILL BE UTILIZED DURING CONSTRUCTION AND TRAFFIC WILL BE DETOURED AS SHOWN IN THE DETOUR PLANS.

ESTABLISHING THE DETOUR ROUTE WILL BE PAID FOR AS TRAFFIC CONTROL AND PROTECTION, (SPECIAL).

Stantec

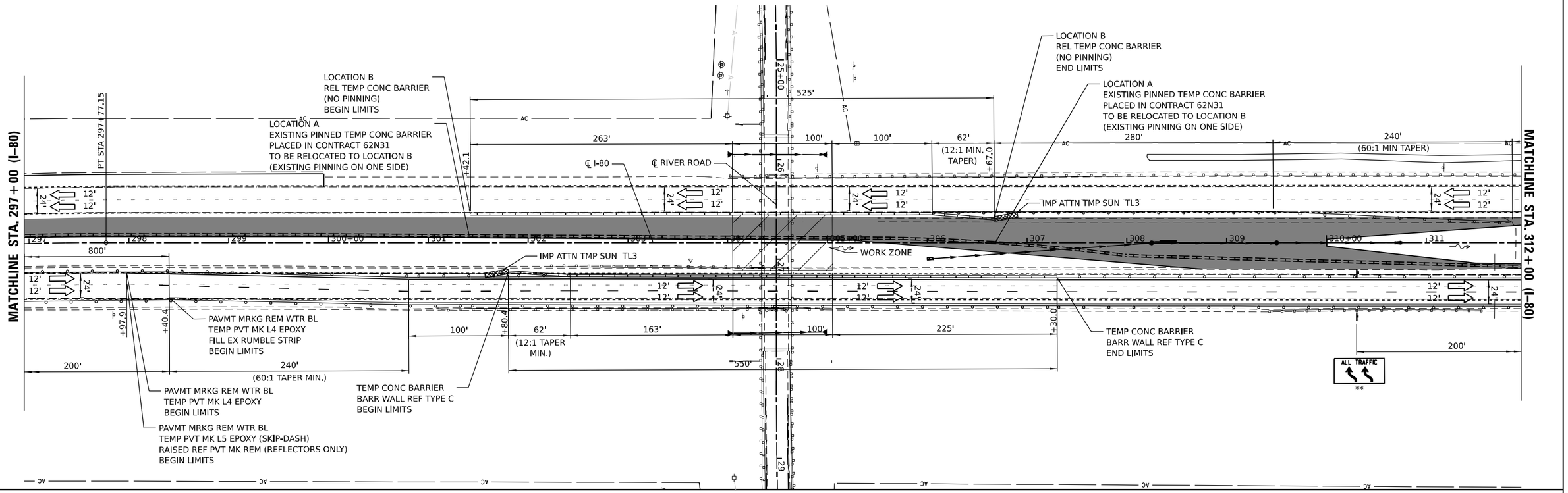
USER NAME = aericksen	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/21/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

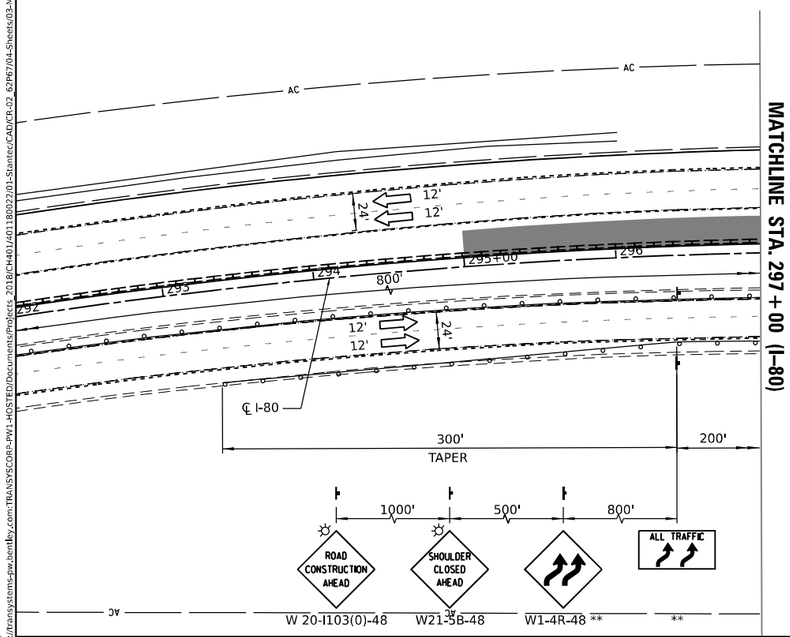
SUGGESTED TRAFFIC CONTROL PLAN GENERAL NOTES

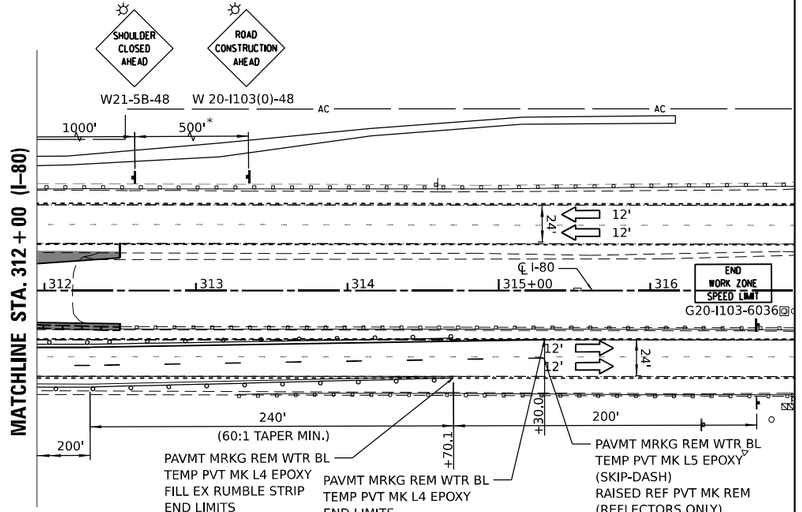
SCALE: | SHEET OF SHEETS | STA. | TO STA.

T.W.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	137	16
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		



STAGE 1A OPERATIONS (EB AND WB INSIDE SHOULDER CLOSURE)





NOTES:

PLACE DRUMS AT 50' CTRS IN TAPERS AND 100' CTRS. IN TANGENTS.

EXISTING CONFLICTING PAVEMENT MARKING LINES SHALL BE REMOVED.

RAISED REFLECTIVE PAVEMENT MARKER REMOVAL ON I-80 EASTBOUND SHALL ONLY REMOVE THE REFLECTORS. THE BASE CASTING SHALL REMAIN IN PLACE PER IDOT SPECIFICATION 783.03 (B).

TEMPORARY PAVEMENT MARKING LINE - EPOXY SHALL BE USED FOR THE EDGE AND LANE LINES THROUGH THE I-80 WORK ZONE. THERMOPLASTIC PAVEMENT MARKING - LINE SHALL BE USED TO RESTORE THE PERMANENT I-80 EDGE AND LANE LINES.

* INDICATES ADVANCED SIGNNING STANDARD FOR PERMANENT SHOULDER CLOSURE (TC-17) OFFEST DISTANCE HAS BEEN CHANGED (1,600' TO 500'). THE 1,600' OFFSET FALLS WITHIN THE I-80/I-55 INTERCHANGE RAMP TAPER, THE 500' OFFSET PLACES THE SIGN AT THE END OF THE RAMP TAPER.

** INDICATES ADVANCED SIGNS TO BE PLACED ON BOTH SIDES OF THE EB TRAVEL LANES

LEGEND

- WORK ZONE
- TEMPORARY CONCRETE BARRIER WALL
- DRUMS
- TEMP PAVEMENT INSTALLED IN CONTRACT 62N31
- DIRECTION OF TRAVEL / MOT LANE
- IMPACT ATTENUATOR (TEMPORARY) OF THE TYPE AND TEST LEVEL SPECIFIED
- SIGN ON PERMANENT SUPPORT

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:TRANSYSCORP-PW1-HOSTED/Documents/Projects - 2018/CH401/401180022/01-Stantec/CAD/CR-02_62P67/04-Sheets/03-MOT/D162P67-sht-MOT-RiverRoad-Stage1A.dgn

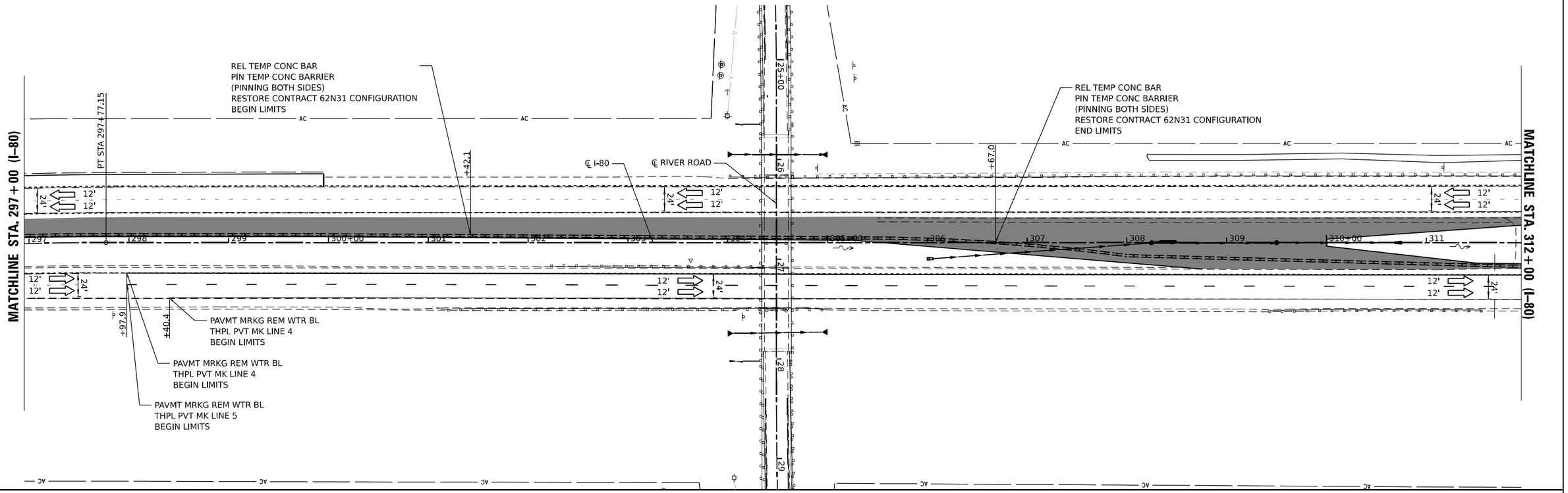
Stantec	USER NAME = aericksen	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 3/21/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

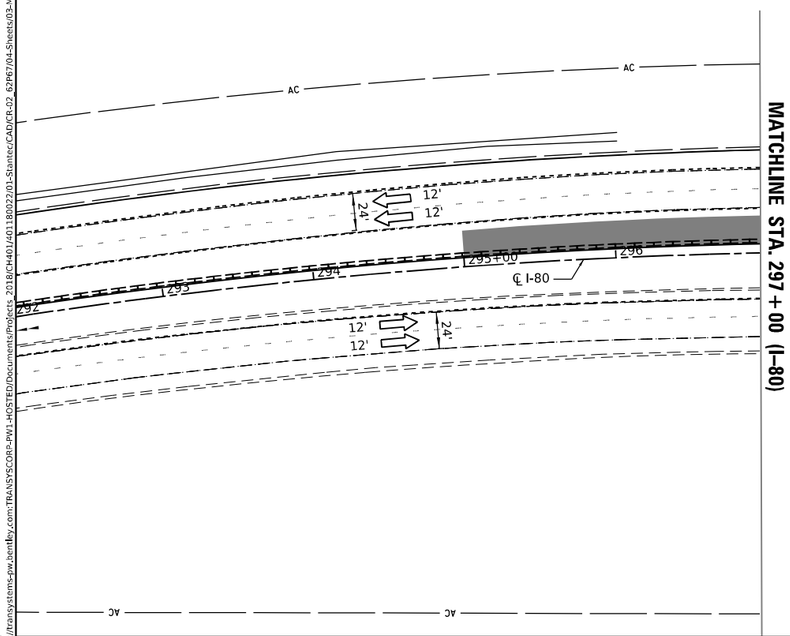
F.A.I ROUTE 80 UNDER RIVER ROAD
SUGGESTED MAINLINE SHOULDER CLOSURES

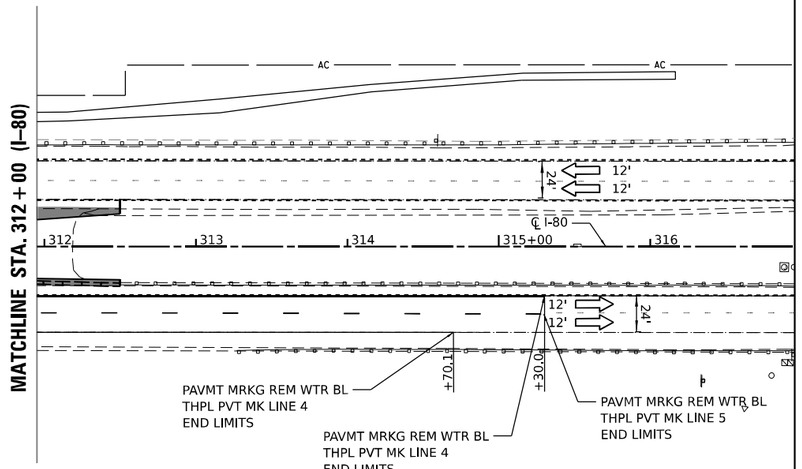
SCALE: | SHEET OF SHEETS | STA. TO STA.

T.W.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	137	16A
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		



STAGE 1B OPERATIONS (RELOCATE AND PINNING OF TEMPORARY CONCRETE BARRRIER AND EB PAVEMENT MARKING)





NOTES:

TEMPORARY CONCRETE BARRIER RELOCATED IN STAGE 1A IS TO BE RESTORED TO THE CONTRACT 62N31 CONFIGURATION AND PINNED ON BOTH SIDES OF THE TEMPORARY CONCRETE BARRIER.

TEMPORARY PAVEMENT MARKING LINES PLACED IN STAGE 1A SHALL BE REMOVED. (PAVMT MRKG REM WTR BL)

THERMOPLASTIC PAVEMENT MARKING - LINE SHALL BE USED TO RESTORE THE PERMANENT I-80 EDGE AND LANE LINES.

LEGEND

- WORK ZONE
- TEMPORARY CONCRETE BARRIER WALL
- DRUMS
- TEMP PAVEMENT INSTALLED IN CONTRACT 62N31
- DIRECTION OF TRAVEL / MOT LANE
- IMPACT ATTENUATOR (TEMPORARY) OF THE TYPE AND TEST LEVEL SPECIFIED
- SIGN ON PERMANENT SUPPORT

N

0 50 100 150

SCALE IN FEET

Stantec

USER NAME = aericksen	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 3/21/2023	DATE -	REVISED -

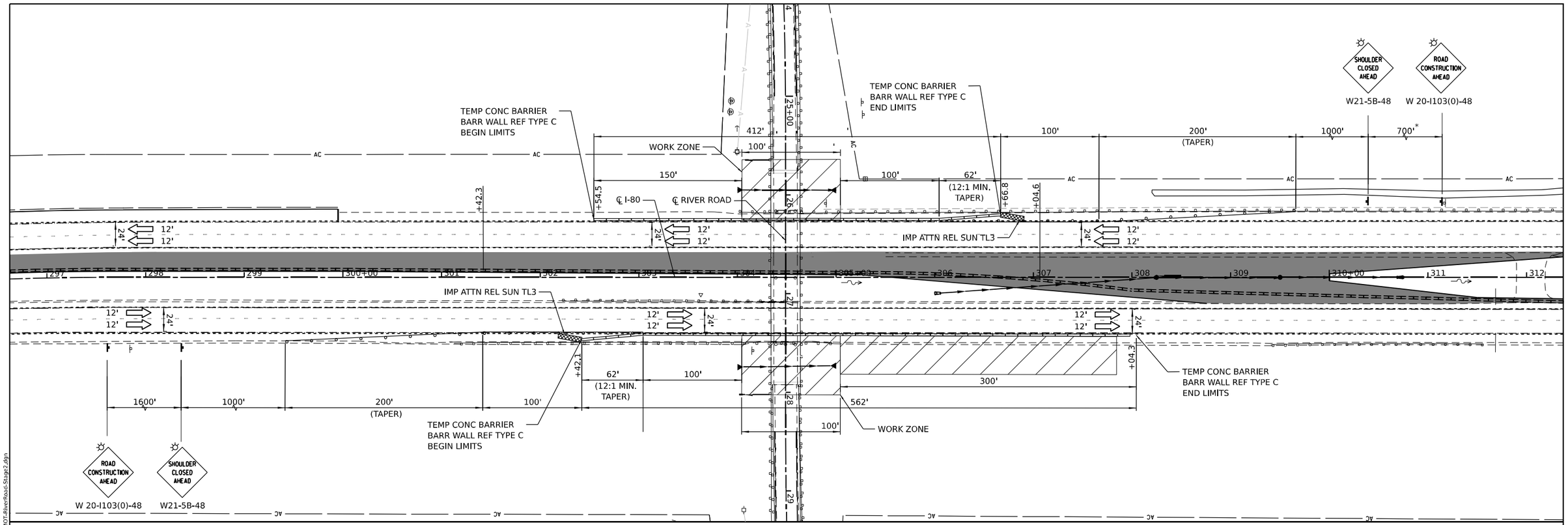
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I ROUTE 80 UNDER RIVER ROAD
SUGGESTED MAINLINE SHOULDER CLOSURES

SCALE: SHEET OF SHEETS STA. TO STA.

T.W.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	137	16B
		CONTRACT NO. 62P67		
	ILLINOIS FED. AID PROJECT			

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:TRANSYSCORP-PW1-HOSTED/Documents/Projects - 2018/CH401/401180022/01-Stantec/CAD/CR-02_62P67/04-Sheets/03-MOT/D162P67-sht-MOT-RiverRoad-Stage1B.dgn



STAGE 2 OPERATIONS (EB AND WB OUTSIDE SHOULDER CLOSURE)

NOTES:

PLACE DRUMS AT 50' CTRS IN TAPERS AND 100' CTRS. IN TANGENTS.

* INDICATES ADVANCED SIGNNING STANDARD FOR PERMANENT SHOULDER CLOSURE (TC-17) OFFEST DISTANCE HAS BEEN CHANGED (1,600' TO 700'). THE 1,600' OFFSET FALLS WITHIN THE I-80/I-55 INTERCHANGE RAMP TAPER, THE 700' OFFSET PLACES THE SIGN AT THE END OF THE RAMP TAPER.

LEGEND

- WORK ZONE
- TEMPORARY CONCRETE BARRIER WALL
- DRUMS
- TEMP PAVEMENT INSTALLED IN CONTRACT 62N31
- DIRECTION OF TRAVEL / MOT LANE
- IMPACT ATTENUATOR (TEMPORARY) OF THE TYPE AND TEST LEVEL SPECIFIED
- SIGN ON PERMANENT SUPPORT

N

0 50 100 150

SCALE IN FEET

Stantec

USER NAME = aericksen	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 3/21/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I ROUTE 80 UNDER RIVER ROAD
SUGGESTED MAINLINE SHOULDER CLOSURES

SCALE: | SHEET OF SHEETS | STA. TO STA.

T.W.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	137	16C
		CONTRACT NO. 62P67		
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
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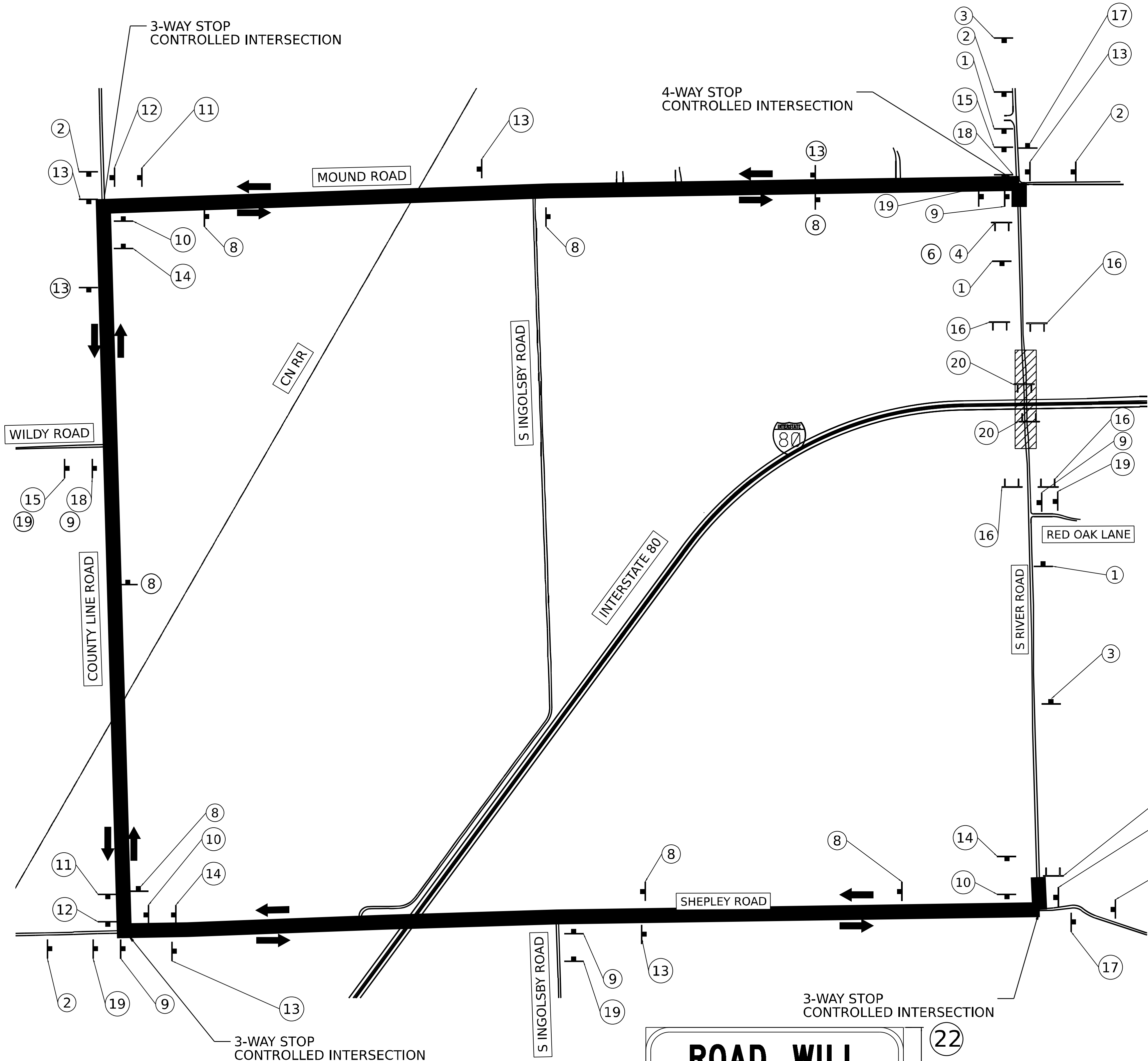

N

NOTES:

1. ALL DETOUR SIGNS SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND RIVER ROAD IS RE-OPENED TO TRAFFIC.
2. ALL SIGNAGE SHALL BE IN ACCORDANCE WITH THE LATEST ILLINOIS STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, "THE QUALITY STANDARD FOR WORK ZONETRAFFIC CONTROL DEVICES". THE DETAILS OF THESE PLANS, THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES". THE DETAILS OF THESE PLANS, THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES". THE SPECIAL PROVISIONS FOR "TRAFFIC CONTROL AND PROTECTION (ARTERIALS) (D1)". HIGHWAY STANDARD 701901, AND THE DISTRICT DETAIL TC-10 AND TC-21.
3. A PRE-CONSTRUCTION MEETING WITH THE CONTRACTOR SHALL BE HELD AT LEAST TWO WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT. THE ROAD SHALL NOT BE CLOSED UNTIL ALL DETOUR SIGNAGE IS IN PLACE.
4. ALL SIGNS SHOWN SHALL BE FURNISHED, ERECTED, AND MAINTAINED BY THE CONTRACTOR, AND SHALL BE POST-MOUNTEDIN THE GROUND PER ARTICLE 701.14 OF THE STANDARD SPECIFICATIONS AND STANDARD 701901.
5. APPROPRIATE IDOT TRAFFIC CONTROL STANDARDS SHALL BE USED TO INSTALL AND REMOVE TRAFFIC CONTROL AND PROTECTION DEVICES.

SCHEDULE OF DETOUR SIGNS

No.	Sign	Code
1	ROAD CLOSED 500 FT	W20-3-3636
2	DETOUR AHEAD	W20-3-3636
3	ROAD CLOSED AHEAD	W20-3-3636
4	DETOUR (right arrow)	M4-10R -4818
5	DETOUR (left arrow)	M4-10L -4818
6	BRIDGE OUT 1/2 MILES AHEAD LOCAL TRAFFIC ONLY	R11-3b-6030
7	ROAD CLOSED TO THRU TRAFFIC	R11-4 -6030
8	NORTH / RIVER RD. / DETOUR (up arrow)	M3-4-2412 / M4-8-2412 / M4-9-3024
9	NORTH / RIVER RD. / DETOUR (left arrow)	M3-4-2412 / M4-8-2412 / M4-9-3024
10	NORTH / RIVER RD. / DETOUR (right arrow)	M3-4-2412 / M4-8-2412 / M4-9-3024
11	SOUTH / RIVER RD. / DETOUR (left turn arrow)	M3-4-2412 / M4-8-2412 / M4-9-3024
12	SOUTH / RIVER RD. / DETOUR (left arrow)	M3-4-2412 / M4-8-2412 / M4-9-3024
13	SOUTH / RIVER RD. / DETOUR (up arrow)	M3-4-2412 / M4-8-2412 / M4-9-3024
14	NORTH / RIVER RD. / DETOUR (right turn arrow)	M3-4-2412 / M4-8-2412 / M4-9-3024
15	SOUTH / RIVER RD. / DETOUR (right turn arrow)	M3-4-2412 / M4-8-2412 / M4-9-3024
16	ROAD CLOSED	R11-2 -4830
17	END DETOUR	M4-8A
18	SOUTH / RIVER RD. / DETOUR (right arrow)	M3-4-2412 / M4-8-2412 / M4-9-3024
19	NORTH / RIVER RD. / DETOUR (left turn arrow)	M3-4-2412 / M4-8-2412 / M4-9-3024
20	BRIDGE OUT	R11-2 -4830
21	BRIDGE OUT 1 MILES AHEAD LOCAL TRAFFIC ONLY	R11-3B-6030

22

ROAD WILL BE CLOSED FROM MMM## THRU MMM

48"

66"

1. USE BLACK LETTERING ON ORANGE REFLECTORIZED BACKGROUND.
2. THE CONTRACTOR NEEDS TO PLACE SIGN 24 TWO WEEKS PRIOR TO THE CLOSURE.
3. SEE SPECIAL PROVISON FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.

LEGEND

- SIGN POST
- TYPE III BARRICADE W/ TYPE A FLASHERS
- DETOUR ROUTE
- DIRECTION OF TRAVEL
- CONSTRUCTION ZONE

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/01-Stantec/CAD/CR-02_62P67/04-Sheets/03-MOT/D162P67-sht-detour_V10.dgn

Stantec

USER NAME = jstrouse	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 1400.000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 1/26/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RIVER ROAD OVER I-80
DETOUR SIGNING PLAN

SCALE: SHEET OF SHEETS STA. TO STA.

T.W.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	17
		CONTRACT NO. 62P67		
		ILLINOIS FED. AID PROJECT		

WETLAND SITE 14C

WETLAND SITE 14A

342.6'

EX ROW

BEGIN PROJECT
STA. 20+00.00

END PROJECT
STA. 33+00.00

WB I-80

EB I-80

℄ I-80

PR ℄ RIVER ROAD

CONC HDWL REM

STA 25+84.26
OFF -74.55'

FENCE REMOVAL

TEMPORARY FENCE

GUARDRAIL REMOV

APPROXIMATE LIMITS OF
GAS/OIL PPLN PROTECTN

REMOV SIN PAN ASSY TA

LIMITS OF CONSTRUCTION

STA 25+60.29
OFF 62.72'

STORM SEWER REM 24

S.N. 099-8304
(SEE STRUCTURE PLANS)

STA 28+99.95
OFF -59.13'

STORM SEWER REM 30

STA 29+18.40
OFF 71.18'

NOTE:
TREE REMOVAL, ACRE EXTENDS OUTSIDE THE LIMITS CONSTRUCTION TO PROVIDE CONTRACTOR ACCESS TO THE TOPSOIL STOCKPILE. THE BALANCE OF TREE REMOVALS WILL BE PERFORMED IN CONTRACT 62P71.

0 50 100 150
SCALE IN FEET

REMOVAL LEGEND

- PAVEMENT REMOVAL
- TREE REMOVAL, ACRE
- TEMPORARY FENCE
- X — REMOVAL ITEM (EACH)
- REMOVAL ITEM (LINEAR FEET)
- R — REMOVAL ITEM (DRAINAGE)

MODEL: Default
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Stantec

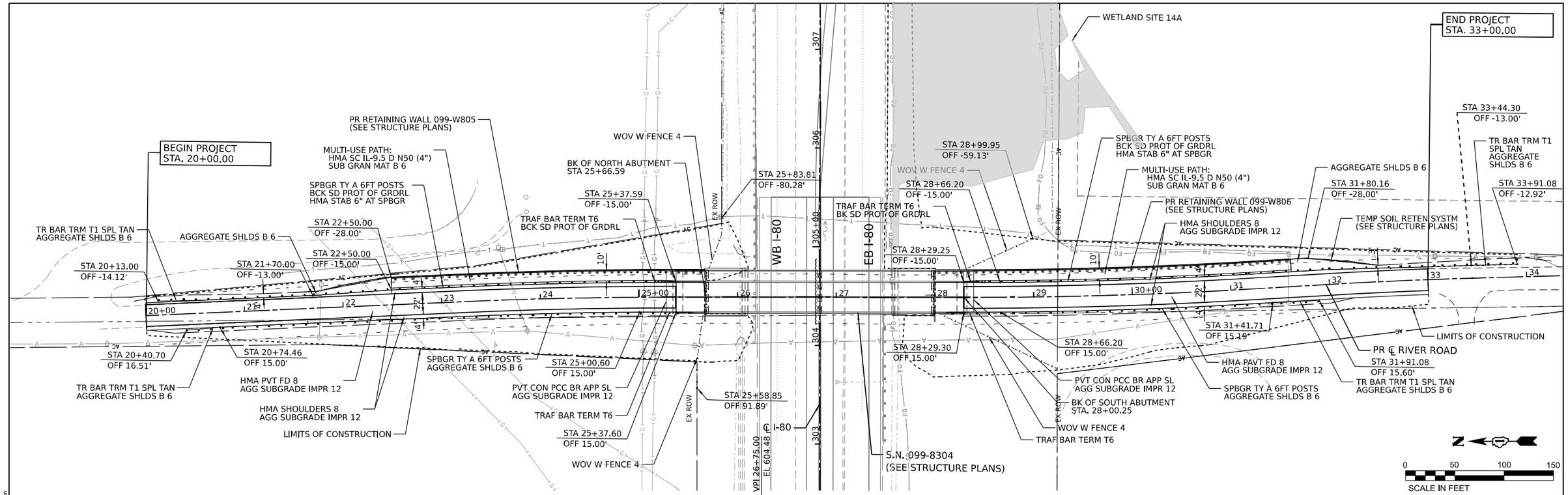
USER NAME = jstrouse	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 1/26/2023	DATE -	REVISED -	

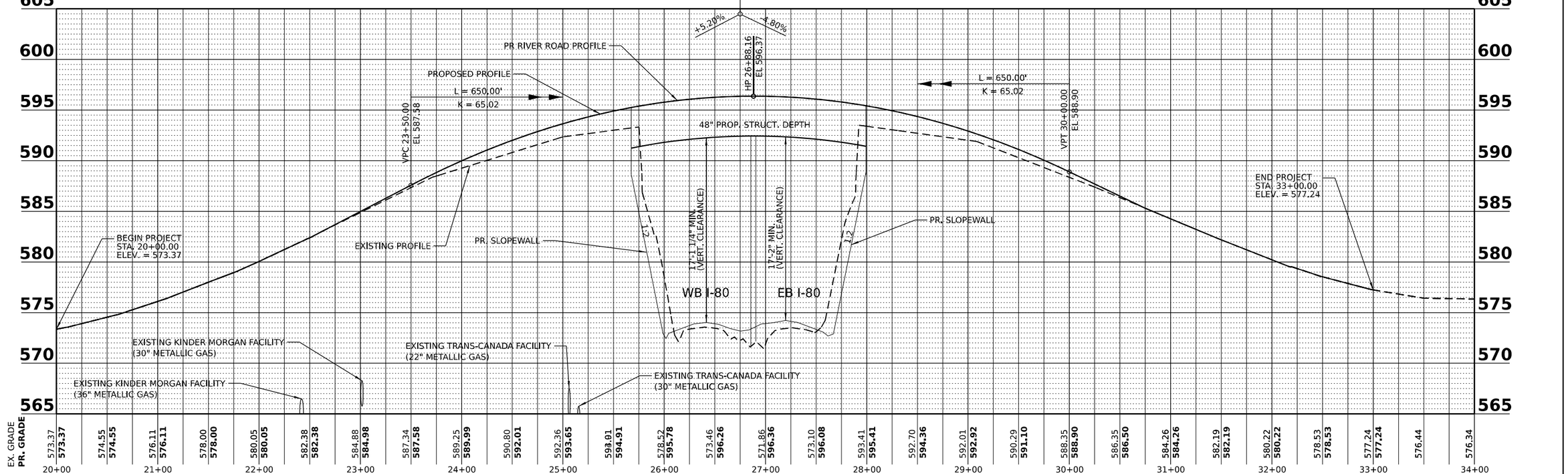
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY REMOVAL PLANS

SCALE: | SHEET OF SHEETS | STA. | TO STA.

T.W.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	18
		CONTRACT NO. 62P67		
		ILLINOIS	FED. AID PROJECT	





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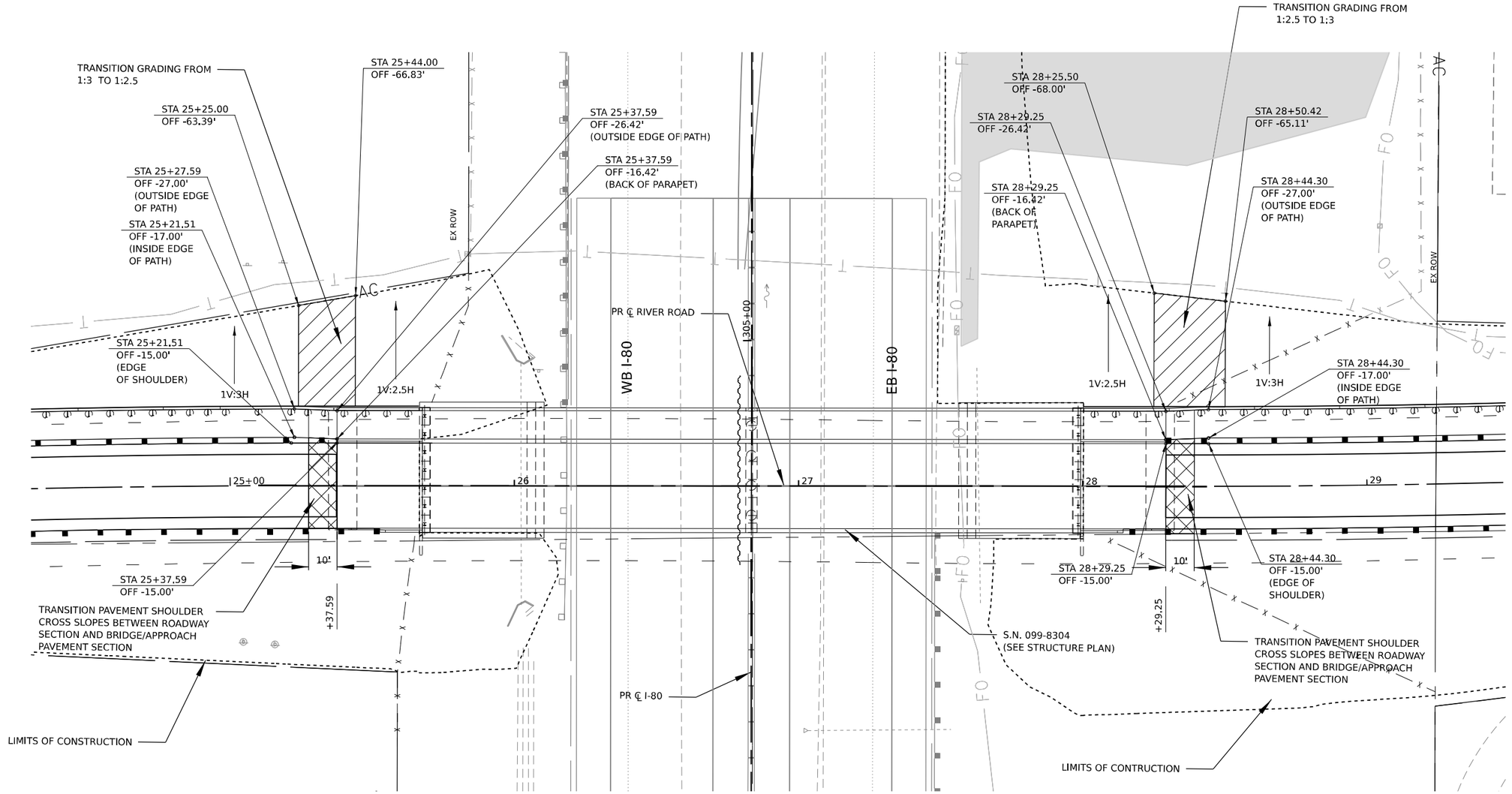
Stantec	USER NAME = jstrouse	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN -	REVISED -	
	PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -	
	PLOT DATE = 1/26/2023	DATE -	REVISED -	

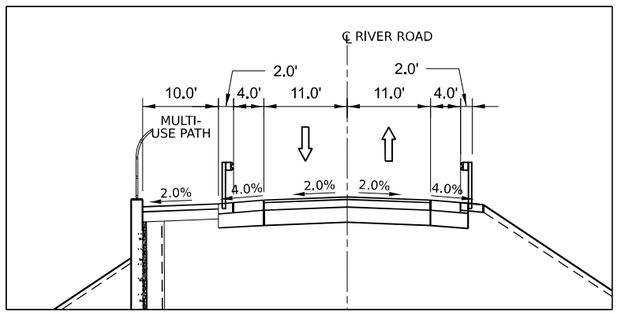
ROADWAY PLAN AND PROFILE

SCALE: | SHEET OF SHEETS | STA. TO STA.

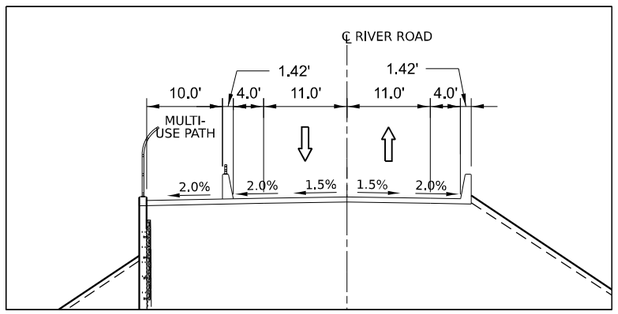
T.W.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	19
		CONTRACT NO. 62P67		
	ILLINOIS FED. AID PROJECT			



TRANSITION DETAIL (ROADWAY PAVEMENT AND BRIDGE APPROACH)



ROADWAY SECTION
STA. 25+27.59
STA. 28+39.25



BRIDGE APPROACH PAVEMENT SECTION
STA. 25+37.59
STA. 28+29.25

NOTES:

1. THE MULTI-USE PATH OFFSET TRANSITIONS OVER THE FINAL 16' OF ROADWAY PAVEMENT TO PROVIDE THE HORIZONTAL WIDTHS IDENTIFIED IN THE S.N. 099-8304 PLANS.

2. THE PAVEMENT AND SHOULDER CROSS SLOPES TRANSITION OVER THE FINAL 10' OF ROADWAY TO MATCH THE CROSS SLOPES IDENTIFIED IN THE S.N. 099-8304 PLANS.

MODEL: Default
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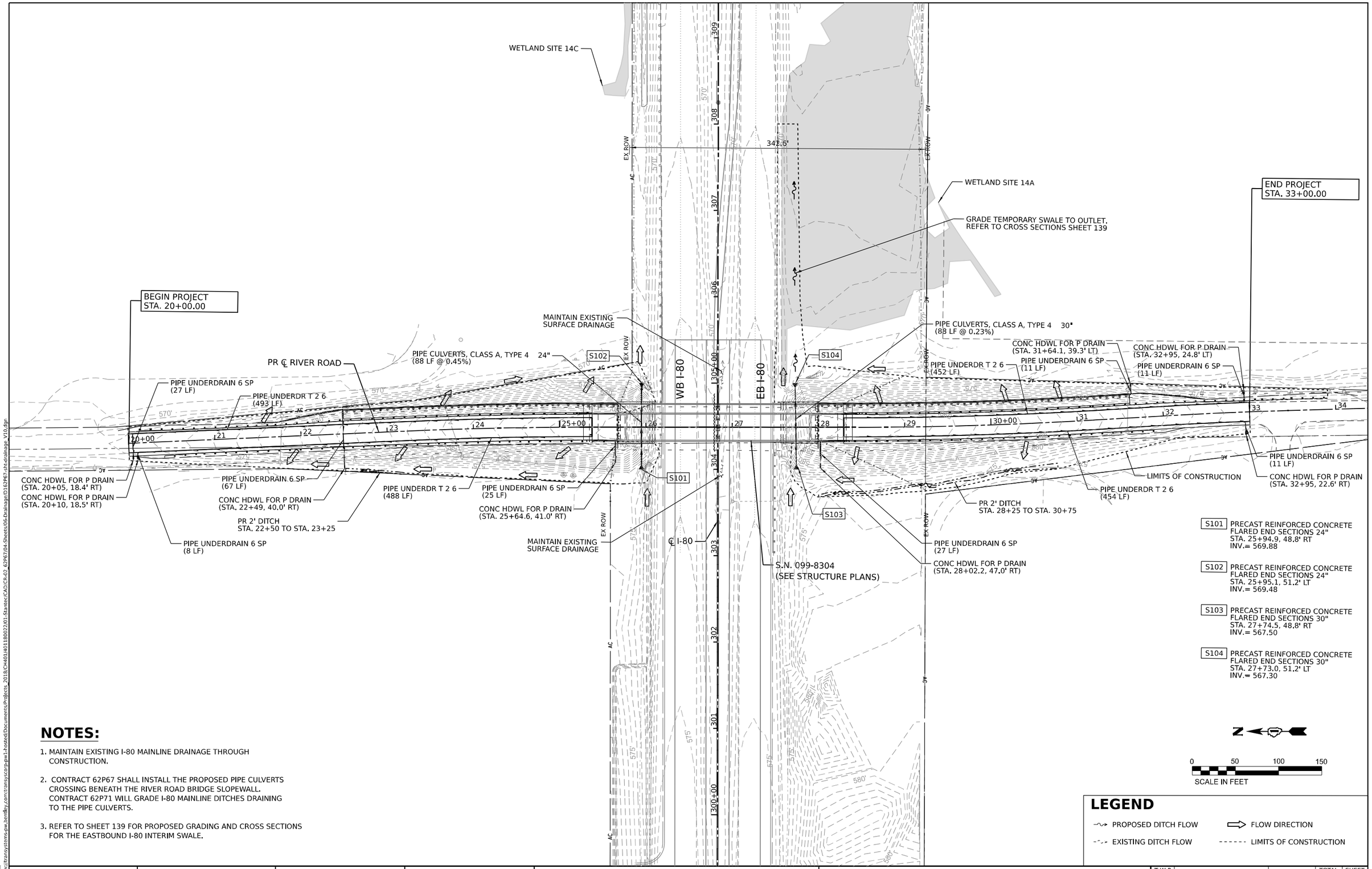
Stantec	USER NAME = jstrouse	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT/MULTI–USE PATH TRANSITION DETAILS
		DRAWN -	REVISED -		
	PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.
	PLOT DATE = 1/26/2023	DATE -	REVISED -		

T.W.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	20
		CONTRACT NO. 62P67		
		ILLINOIS FED. AID PROJECT		



NOTES:

1. MAINTAIN EXISTING I-80 MAINLINE DRAINAGE THROUGH CONSTRUCTION.
2. CONTRACT 62P67 SHALL INSTALL THE PROPOSED PIPE CULVERTS CROSSING BENEATH THE RIVER ROAD BRIDGE SLOPEWALL. CONTRACT 62P71 WILL GRADE I-80 MAINLINE DITCHES DRAINING TO THE PIPE CULVERTS.
3. REFER TO SHEET 139 FOR PROPOSED GRADING AND CROSS SECTIONS FOR THE EASTBOUND I-80 INTERIM SWALE.

LEGEND

- PROPOSED DITCH FLOW
- EXISTING DITCH FLOW
- FLOW DIRECTION
- LIMITS OF CONSTRUCTION

MODEL: Default
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Stantec

USER NAME = jstrouse	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 1/26/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAWING PLAN

SCALE: | SHEET OF SHEETS | STA. | TO STA.

T.W.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	21
		CONTRACT NO. 62P67		
	ILLINOIS FED. AID PROJECT			

WETLAND SITE 14C

TC-006 TEST HOLE
MEASURED DEPTH = 9.30'
UTILITY TOP ELEV. = 561.62

TC-003 TEST HOLE
MEASURED DEPTH = 8.00'
UTILITY TOP ELEV. =562.96

342.6'

30" STL IN 42" STL CASING
GAS MAIN
(TC ENERGY)

22"
GAS MAIN
(TC ENERGY)

WETLAND SITE 14A

END PROJECT
STA. 33+00.00

TEST HOLE 8
MEASURED DEPTH = 3.06'
UTILITY TOP ELEV. = 567.38

TEST HOLE 9
MEASURED DEPTH = 4.97'
UTILITY TOP ELEV. = 565,10

TEST HOLE 12
MEASURED DEPTH = 4.21'
UTILITY TOP ELEV. = 565.77
(SEE GENERAL NOTE)

TEST HOLE 13
MEASURED DEPTH = 2.56'
UTILITY TOP ELEV. = 567.55
(SEE GENERAL NOTE)

LIMITS OF CONSTRUCTION

BEGIN PROJECT
STA. 20+00.00

TELECOM CABLE CONFLICT
STA. 29+10 TO STA. 34+25, LT
(AT&T - ALBW-100)

POWER POLE
STA. 21+75, 25' LT
(COMED - CE LP 12kV)

LIMITS OF GAS/OIL PIPELINE PROTECTION
(SEE NOTE 1)

2" DBC
TELEPHONE
AT&T

2" DBC
TELEPHONE
AT&T

POWER POLE CONFLICT
STA. 31+57, 32' LT
(COMED - CE LP W/GUY 12kV)

WB I-80

EB I-80

EX ROW

AC

OV

20+00 21 22 23 24 25+00 26 27 28 29 30+00 31 32 33 34

305+00

PR ℄ RIVER ROAD

AERIAL ELECTRIC
(COMED)

POWER POLE
STA. 21+75, 29' RT
(COMED - CE LP 12kV)

TEST HOLE 10
MEASURED DEPTH = 5.45'
UTILITY TOP ELEV. = 568.39

TEST HOLE 11
MEASURED DEPTH = 4.76'
UTILITY TOP ELEV. = 569.19

POWER POLE
STA. 23+82, 29' RT
(COMED - CE LP 12kV)

POWER POLE
STA. 25+56, 46' RT
(COMED - CE LP 12kV)

AERIAL ELECTRIC
(COMED)

POWER POLE CONFLICT
STA. 31+57, 32' RT
(COMED - CE LP W/GUY 12kV)

POWER POLE
STA. 29+19, 43' RT
(COMED - CE LP W/F#7784 12kV)

℄ I-80

S.N. 099-8304
(SEE STRUCTURE PLANS)

22" METALLIC
GAS MAIN
(TC ENERGY)

30" METALLIC
GAS MAIN
(TC ENERGY)

2" CONDUIT
FIBER OPTIC
IDOT

36" STL IN 42" STL CASING
GAS MAIN
(KINDER MORGAN)

30" STL IN 34" STL CASING
GAS MAIN
(KINDER MORGAN)

KM-009 TEST HOLE
MEASURED DEPTH = 6.32'
UTILITY TOP ELEV. = 568.08

KM-012 TEST HOLE
MEASURED DEPTH =8.60'
UTILITY TOP ELEV. = 566.27

KM-005 TEST HOLE
MEASURED DEPTH =7,25'
UTILITY TOP ELEV. = 567.78

130+00

N

0 50 100 150
SCALE IN FEET

LEGEND

A — AERIAL	F0 — FIBER OPTIC
O — OIL	LIMITS OF CONSTRUCTION
T — TELEPHONE	DOUBLE HANDHOLE
G — GAS	HANDHOLE
E — ELECTRIC	JUNCTION BOX
	POWER POLE
	BORING HOLE LOCATION

NOTES:

1. DAYLIGHT TC ENERGY PIPELINES IN THE PRESENCE OF TC ENERGY FIELD REPRESENTATIVE. (APPROX. STA. 25+00 TO 25+25)

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transystems-pw-1-hosted/Documents/Projects_2018/CH401/401180022/01-Stantec/CAD/CHL-03_62P67/04-Sheets/07-Utilities/D162P67-sht-Utilities-001_V10.dgn

Stantec

USER NAME = jstrouse	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 1/26/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING UTILITY PLAN

SCALE: | SHEET OF SHEETS | STA. | TO STA.

T.W.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	22
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

EROSION CONTROL GENERAL NOTES

1. ALL ESC MEASURES WILL BE MAINTAINED IN ACCORDANCE WITH THE IDOT EROSION AND SEDIMENT CONTROL FIELD GUIDE FOR CONSTRUCTION INSPECTION FOUND ON THE CONSTRUCTION TAB AT: HTTP://WWW.IDOT.ILLINOIS.GOV/TRANSPORTATION-SYSTEM/ENVIRONMENT/EROSION-AND-SEDIMENT-CONTROL

2. THE CONTRACTOR WILL ASSUME RESPONSIBILITY FOR MAINTENANCE OF ALL SOIL EROSION CONTROL DURING CONSTRUCTION.

3. THE CONTRACTOR SHALL CHECK ALL ESC MEASURES WEEKLY AND AFTER EACH RAINFALL, 0.5 INCHES OR GREATER IN A 24-HOUR PERIOD, OR EQUIVALENT SNOWFALL. ADDITIONALLY, DURING WINTER MONTHS, ALL MEASURES SHOULD BE CHECKED BY THE CONTRACTOR AFTER EACH SIGNIFICANT SNOWMELT.

4. ANY LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES, WHICH OBSTRUCTS THE NATURAL FLOW OF WATER, SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. PRIOR TO ACCEPTANCE OF THE IMPROVEMENT, ALL DRAINAGE STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL.

5. TEMPORARY OR PERMANENT STABILIZATION SHALL BE INITIATED IMMEDIATELY UPON COMPLETION OF DISTURBANCE OR IF THE WORK AREA IS TO BE LEFT UNDISTURBED FOR 14 DAYS OR MORE.

6. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR PROLONG FINAL GRADING AND SHAPING SO THAT THE ENTIRE PROJECT CAN BE PERMANENTLY SEEDED AT ONE TIME.

7. EROSION CONTROL ITEMS ARE CONSIDERED TO BE A HIGH PRIORITY ON THIS CONTRACT. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE ENGINEER.

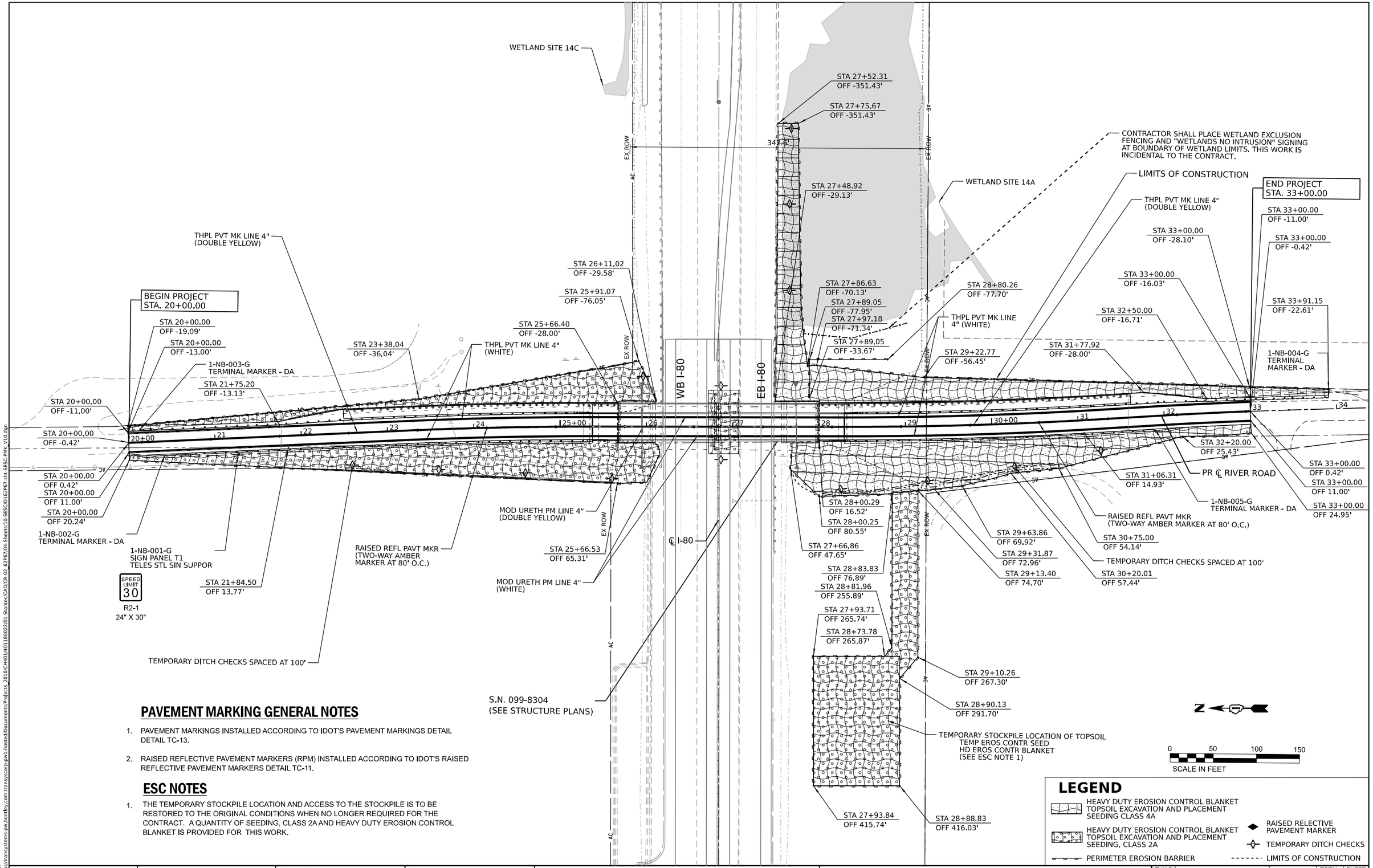
8. "WETLAND NO INTRUSION" SIGNAGE SHOULD ALSO BE PROVIDED AT THE BOUNDARY OF ALL UN-IMPACTED WETLANDS AND/OR WOUS. THE CONTRACTOR CAN BORROW THE SIGNS FROM THE BUREAU OF MAINTENANCE. INCLUDE TEMPORARY FENCING AND WETLAND SIGNAGE WITHIN THE EROSION AND SEDIMENT CONTROL STRATEGY, THIS WORK SHALL NOT BE PAID FOR SEPARATELY AND IS INCLUDED IN THE COSTS OF THE CONTRACT.

9. LOCATIONS OF STABILIZED CONSTRUCTION ENTRANCES/EXITS SHALL BE DETERMINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. THE INSTALLATION OF THE ENTRANCE/EXITS SHALL BE IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL OR AS DIRECTED BY THE ENGINEER.

   A PROVISIONAL QUANTITY FOR Z0013797 STABILIZED CONSTRUCTION ENTRANCE IS INCLUDED IN THE CONTRACT. ALL STABILIZED CONSTRUCTION ENTRANCE LOCATIONS MUST BE APPROVED BY THE ENGINEER.

Stantec	USER NAME = jstrouse	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EROSION AND SEDIMENT CONTROL NOTES
		DRAWN -	REVISED -		
	PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -		
	PLOT DATE = 1/26/2023	DATE -	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.

T.W.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	23
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		



PAVEMENT MARKING GENERAL NOTES

1. PAVEMENT MARKINGS INSTALLED ACCORDING TO IDOT'S PAVEMENT MARKINGS DETAIL DETAIL TC-13.
2. RAISED REFLECTIVE PAVEMENT MARKERS (RPM) INSTALLED ACCORDING TO IDOT'S RAISED REFLECTIVE PAVEMENT MARKERS DETAIL TC-11.

ESC NOTES

1. THE TEMPORARY STOCKPILE LOCATION AND ACCESS TO THE STOCKPILE IS TO BE RESTORED TO THE ORIGINAL CONDITIONS WHEN NO LONGER REQUIRED FOR THE CONTRACT. A QUANTITY OF SEEDING, CLASS 2A AND HEAVY DUTY EROSION CONTROL BLANKET IS PROVIDED FOR THIS WORK.

LEGEND

- HEAVY DUTY EROSION CONTROL BLANKET TOPSOIL EXCAVATION AND PLACEMENT SEEDING CLASS 4A
- HEAVY DUTY EROSION CONTROL BLANKET TOPSOIL EXCAVATION AND PLACEMENT SEEDING, CLASS 2A
- PERIMETER EROSION BARRIER
- RAISED RELECTIVE PAVEMENT MARKER
- TEMPORARY DITCH CHECKS
- LIMITS OF CONSTRUCTION

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Stantec

USER NAME = jstrouse	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 1/26/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION AND SEDIMENT CONTROL, PAVEMENT MARKING, AND SIGNING PLAN

SCALE: | SHEET OF SHEETS | STA. TO STA.

T.W.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	24
		CONTRACT NO. 62P67		
	ILLINOIS FED. AID PROJECT			

Benchmark: Set 2" CWA aluminum disc in concrete pier seat in southerly pier of River Road bridge on south side of eastbound I-80, Elev. 575.61.

Existing Structure: S.N. 099-0177 was originally constructed in 1959 as a four (4) span structure with no skew carrying northbound and southbound River Road over eastbound and westbound I-80 (F.A.I. Route 80; Section 99-1HB-1). The bridge has an overall length of approximately 219'-7" (back-to-back abutments), an overall width of 30'-0" (out-to-out superstructure), and consists of a 7"-thick reinforced concrete deck with no overlay. In Spans 1 and 4, the existing deck is supported by five (5) 42" PPC I-beams spaced at +/- 6'-8" centers, and in Spans 2 and 3, the deck is supported by six (6) 42" PPC I-beams at +/- 5'-4" center-to-center spacing. The substructure consists of reinforced concrete abutments on straight and battered steel piles and reinforced concrete piers with spread footings on rock.

Traffic: This structure will be removed and replaced. Traffic will be detoured during construction.

Salvage: Existing handrails shall be salvaged and provided to the Department.

DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

DESIGN STRESSES

FIELD UNITS

f'c = 4,000 psi (Superstructure)
f'c = 3,500 psi (Substructure)
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)

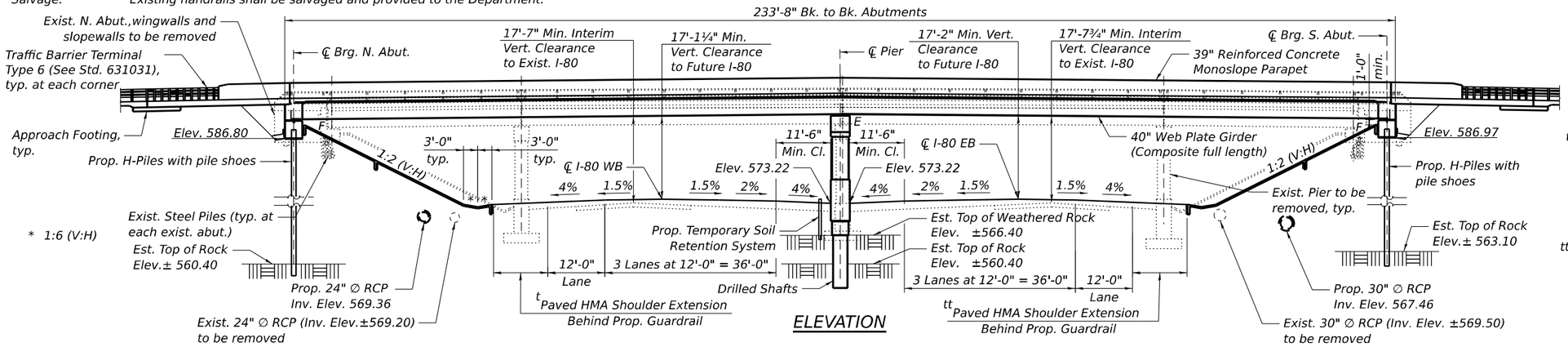
LOADING HL-93

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

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.068g
Design Spectral Acceleration at 0.2 sec. (SDS) = 0.127g
Soil Site Class = C

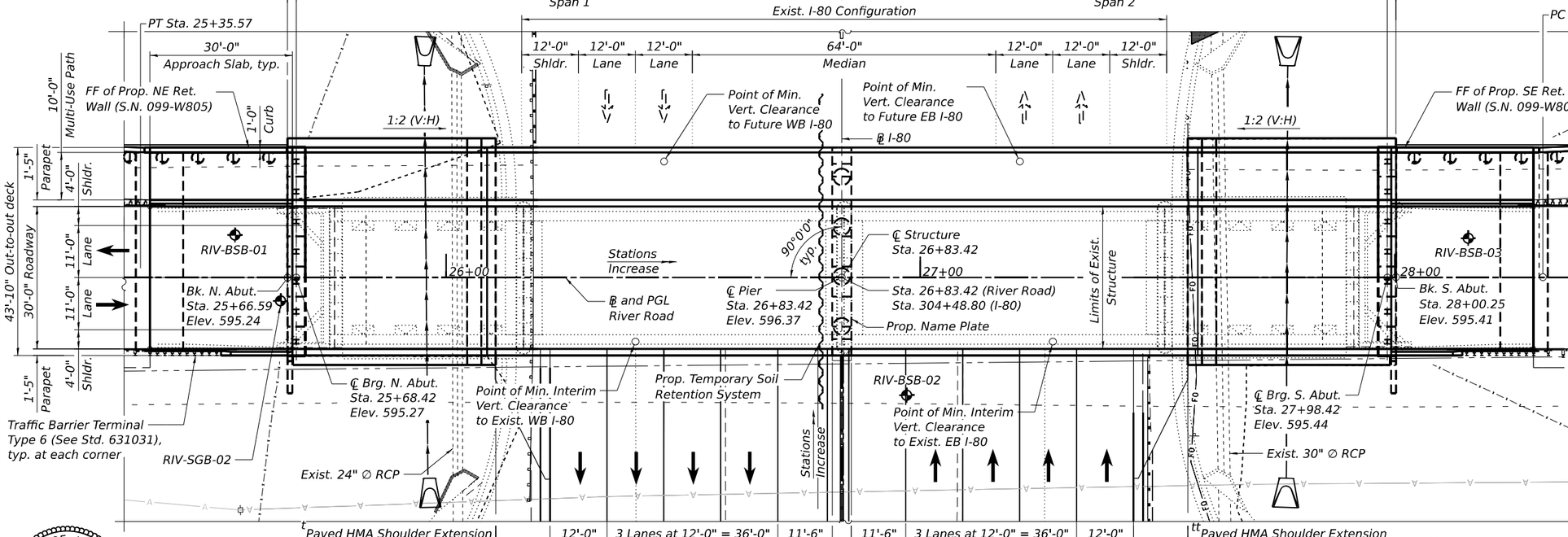
APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures



ELEVATION

t Width varies as follows:
Varies from 1'-0" stub-out at Sta. 304+06.13 to 10'-5½" at Sta. 304+27.39
10'-5½" from Sta. 304+27.39 to Sta. 304+81.22
Varies from 10'-5½" at Sta. 304+81.22 to 1'-0" stub-out at Sta. 305+02.30

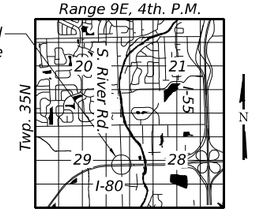
tt Width varies as follows:
Varies from 1'-0" stub-out at Sta. 304+06.47 to 10'-5½" at Sta. 304+27.39
10'-5½" from Sta. 304+27.39 to Sta. 304+81.22
Varies from 10'-5½" at Sta. 304+81.22 to 1'-0" stub-out at Sta. 305+01.80



PLAN

LEGEND

- Prop. RCP Culvert
- Exist. Fiber Optic
- Exist. Aerial Line
- Prop. Fence
- Soil Boring



LOCATION SKETCH

NOTES:

1. For General Notes, Index of Sheets, and Total Bill of Material, see Sheet S1-02.
2. For Profile Grade Lines and Curve Data, see Sheet S1-03.

STATE OF ILLINOIS
MOUSSA A. ISSA
081-005738
CHICAGO, ILLINOIS
LICENSED STRUCTURAL ENGINEER

Signed Moussa A. Issa
Dr. Moussa A. Issa, S.E. IL. Lic. No. 081-005738
Expires 11-30-2024

Date 1/27/2023 For Sheets S1-01 Thru S1-41.

GENERAL PLAN AND ELEVATION
RIVER ROAD OVER I-80
F.A.I. RTE. I-80
SEC. 2021-151-B
WILL COUNTY
STA. 26+83.42
STRUCTURE NO. 099-8304

HBM ENGINEERING GROUP, LLC

USER NAME =	DESIGNED - SK	REVISED -	
	CHECKED - MI, JJS, SK	REVISED -	
PLOT SCALE =	DRAWN - SK	REVISED -	
PLOT DATE =	CHECKED - MI, JJS, SK	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURE NO. 099-8304
SHEET S1-01 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	25
		CONTRACT NO. 62P67		
		ILLINOIS	FED. AID PROJECT	

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1/26/2023 8:00:03 AM

GENERAL NOTES:

1. Fasteners shall be ASTM F3125 Grade A325 Type 1, mechanically galvanized bolts. Bolts $^{7}/_{8}$ in. Ø, holes $^{15}/_{16}$ in. Ø, unless otherwise noted.

2. Calculated weight of Structural Steel = 31,580 lb (M270 Grade 36)
   = 458,570 lb (M270 Grade 50)

3. No field welding is permitted except as specified in the contract documents.

4. Reinforcement bars designated (E) shall be epoxy coated.

5. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

6. Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a a tolerance of 1/8 inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

7. Concrete sealer shall be applied to the designated areas of the piers.

8. The existing structural steel coating of the bearing assembly plates contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

9. All new structural steel shall be metallized. See Special Provision for "Metallizing of Structural Steel".

10. The metallized areas shall be painted with System 1. Exterior fascia and bottom of bottom flange areas shall be metallized and shop painted (System 3). See Special Provision for "Metallizing of Structural Steel". The color of the final finish coat of paint shall be Reddish Brown, Munsell No. 2.5YR 3/4.

11. Commonwealth Edison (ComEd) overhead power line and towers exist near, and cross, the proposed improvement. The Contractor shall coordinate with ComEd by providing detailed staging plans that indicate equipment type (such as crane boom heights) and placement for ComEd review/approval prior to construction activities.

12. The Contractor shall exercise extreme caution in drilling and setting the soldier piles under the Aerial Power Lines. The Contractor shall make necessary adjustments to the splice lengths of the HP Piles and to the auguring equipment to maintain adequate clearance to the Aerial Power Lines as specified in OSHA safety requirements. Lengths of HP Piles and any necessary splice details shall be approved by the Engineer prior to the start of work.

STATION 26+83.42
BUILT 20__ BY
STATE OF ILLINOIS
F.A.I. RTE. I-80
SECTION 2021-151-B
LOADING HL-93
STRUCTURE NO. 099-8304

NAME PLATE
See Std. 515001

INDEX OF SHEETS:

S1-01 General Plan & Elevation
S1-02 General Notes, Index of Sheets, Total Bill of Material
S1-03 Curve Data, Prof. Grade Lines, Misc. Sections & Details
S1-04 Substructure Layout
S1-05 Temporary Soil Retention System Details
S1-06 Existing Structure Removal Plan and Elevation
S1-07 Exist. Struct. Removal Sections & Details (Sheet 1 of 3)
S1-08 Exist. Struct. Removal Sections & Details (Sheet 2 of 3)
S1-09 Exist. Struct. Removal Sections & Details (Sheet 3 of 3)
S1-10 Top of Slab Elevations Layout
S1-11 Top of Slab Elevations (Sheet 1 of 2)
S1-12 Top of Slab Elevations (Sheet 2 of 2)
S1-13 Top of N. Approach Slab Layout & Tables
S1-14 Top of S. Approach Slab Layout & Tables
S1-15 Superstructure Plan and Cross Section
S1-16 Parapet Elevations
S1-17 Abutment Diaphragm Elevation and Details
S1-18 Deck Details, Bar Diagrams and Bill of Material
S1-19 North Approach Slab Plan
S1-20 North Approach Slab Sections and Details
S1-21 South Approach Slab Plan
S1-22 South Approach Slab Sections and Details
S1-23 Bicycle Railing, Curved & Parapet Railing
S1-24 Framing Plan
S1-25 Girder Moment and Reaction Tables
S1-26 Girder Elevation and Details
S1-27 Camber Diagram
S1-28 Structural Steel Details (Sheet 1 of 2)
S1-29 Structural Steel Details (Sheet 2 of 2)
S1-30 Bearing Details
S1-31 North Abutment Plan and Elevation
S1-32 North Abutment Sections and Details
S1-33 South Abutment Plan and Elevation
S1-34 South Abutment Sections and Details
S1-35 Pier Plan and Elevation
S1-36 Pier Sections & Details
S1-37 HP Pile Details
S1-38 Concrete Parapet Slipforming Option
S1-39 Boring Logs (Sheet 1 of 3)
S1-40 Boring Logs (Sheet 2 of 3)
S1-41 Boring Logs (Sheet 3 of 3)

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal Of Existing Structures No.1	Each	-	1	1
Protective Shield	Sq Yd	711	-	711
Structure Excavation	Cu Yd	-	298.0	298.0
Concrete Structures	Cu Yd	-	165.9	165.9
Concrete Superstructure	Cu Yd	392.9	-	392.9
Bridge Deck Grooving	Sq Yd	973	-	973
Protective Coat	Sq Yd	1,776	-	1,776
Concrete Superstructure (Approach Slab)	Cu Yd	117.0	-	117.0
Furnishing And Erecting Structural Steel	L Sum	1.0	-	1.0
Stud Shear Connectors	Each	6,860	-	6,860
Reinforcement Bars	Pound	-	5,580	5,580
Reinforcement Bars, Epoxy Coated	Pound	147,470	28,630	176,100
Bicycle Railing, Curved	Foot	232	-	232
Parapet Railing	Foot	292	-	292
Slope Wall 4 Inch	Sq Yd	-	510	510
Furnishing Steel Piles HP14X89	Foot	-	490	490
Driving Piles	Foot	-	490	490
Pile Shoes	Each	-	14	14
Name Plates	Each	1	-	1
Drilled Shaft In Soil	Cu Yd	-	4.4	4.4
Drilled Shaft In Rock	Cu Yd	-	11.6	11.6
Elastomeric Bearing Assembly, Type I	Each	7	-	7
Anchor Bolts, 1"	Each	28	-	28
Anchor Bolts, 1 1/2"	Each	14	-	14
Temporary Soil Retention System	Sq Ft	-	351	351
Granular Backfill For Structures	Cu Yd	-	195	195
Concrete Sealer	Sq Ft	-	2,381	2,381
Geocomposite Wall Drain	Sq Yd	-	86	86
Pipe Underdrains for Structures 4"	Foot	-	112	112
Foundation Construction At Existing Obstructions	Each	-	3	3

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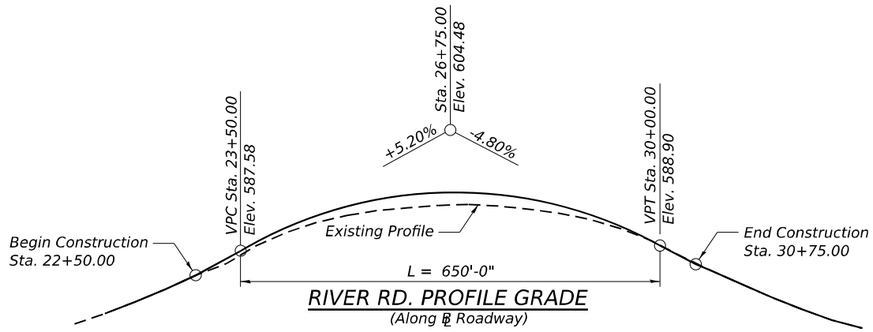
	CHECKED - MI, JJS, SK	REVISED -	
PLOT SCALE =	DRAWN - JMI	REVISED -	
PLOT DATE =	CHECKED - MI, JJS, SK	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

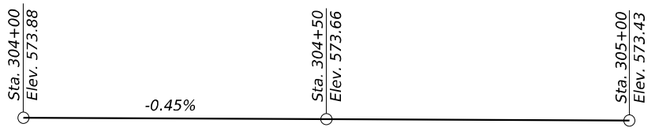
GENERAL NOTES, INDEX OF SHEETS, TOTAL BILL OF MATERIAL
STRUCTURE NO. 099-8304
SHEET S1-02 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	26
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

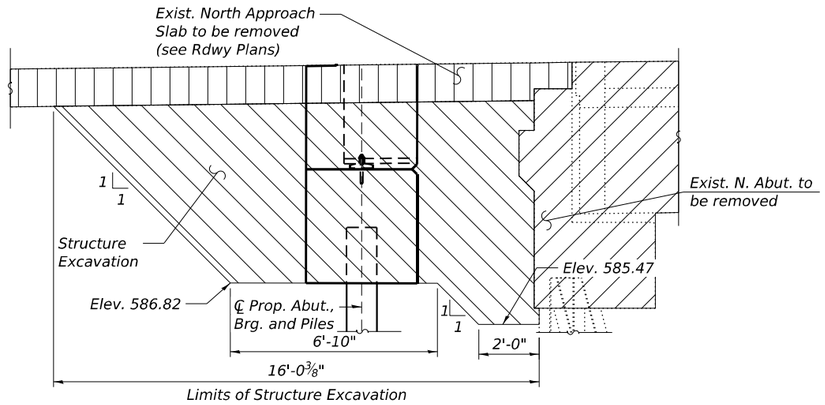


RIVER RD. PROFILE GRADE
(Along ℄ Roadway)

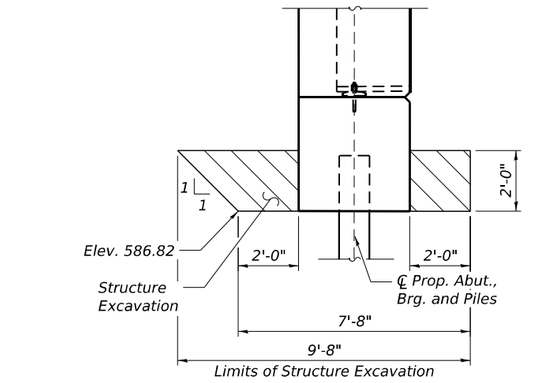
PR CURVE RR_CURVE_1	PR CURVE RR_CURVE_2
P.I. Sta. = 24+28.73	P.I. Sta. = 29+74.71
Δ = 02°34'01" (RT)	Δ = 03°26'42" (LT)
D = 01°12'04"	D = 01°12'04"
R = 4,770.00'	R = 4,770.00'
T = 106.87'	T = 143.44'
L = 213.70	L = 286.80
E = 1.20'	E = 2.16'
e = N.C.	e = N.C.
T.R. = N/A	T.R. = N/A
S.E. Run = N/A	S.E. Run = N/A
P.C. Sta. = 23+21.87	P.C. Sta. = 28+31.27
P.T. Sta. = 25+35.57	P.T. Sta. = 31+18.07



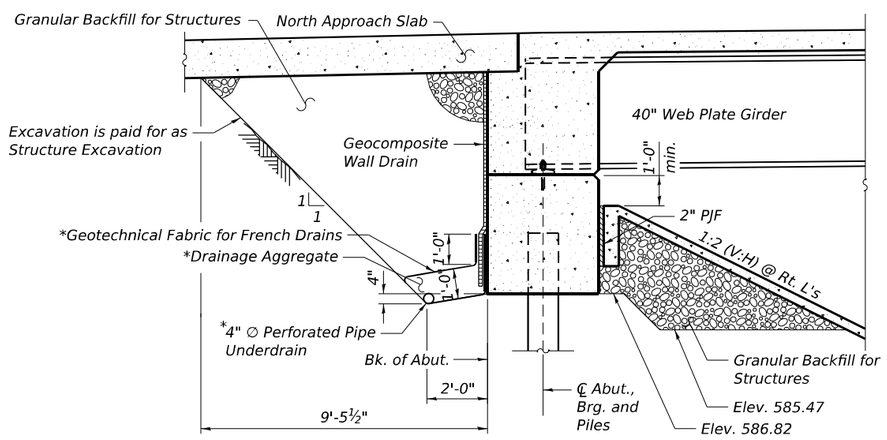
I-80 PROFILE GRADE
(Along ℄ Roadway)



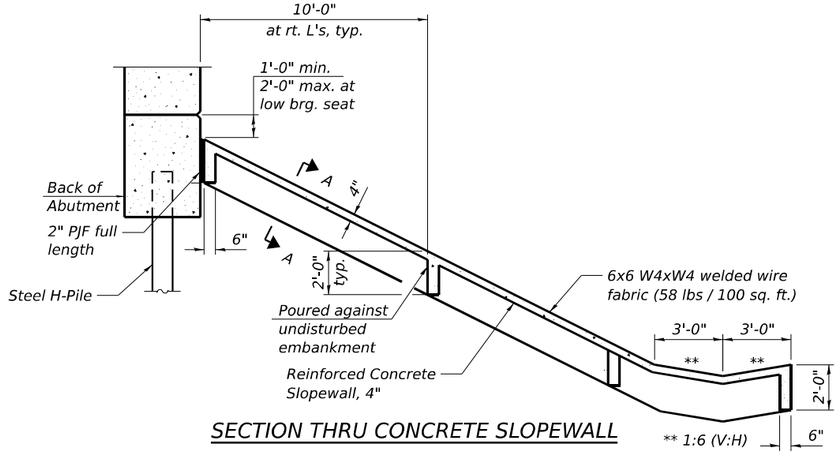
STRUCTURE EXCAVATION - NORTH ABUTMENT
(Section showing Excavation within the limits of existing abutment)
(Structure Excavation within the limits of existing abutment at South Abutment similar)



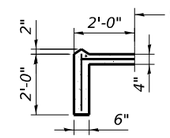
STRUCTURE EXCAVATION - NORTH ABUTMENT
(Section showing Excavation beyond the limits of existing abutment)
(Structure Excavation beyond the limits of existing abutment at South Abutment similar)



SECTION THRU INTEGRAL ABUTMENT
(North Abutment shown, South Abutment similar)
(Horiz. dim. @ Rt. ∠'s)



SECTION THRU CONCRETE SLOPEWALL



SECTION A-A

LEGEND
- Removal of Existing Structures No. 1
- Structure Excavation
- Approach Slab Removal

* Included in the Cost of Pipe Underdrain for Structures.

All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

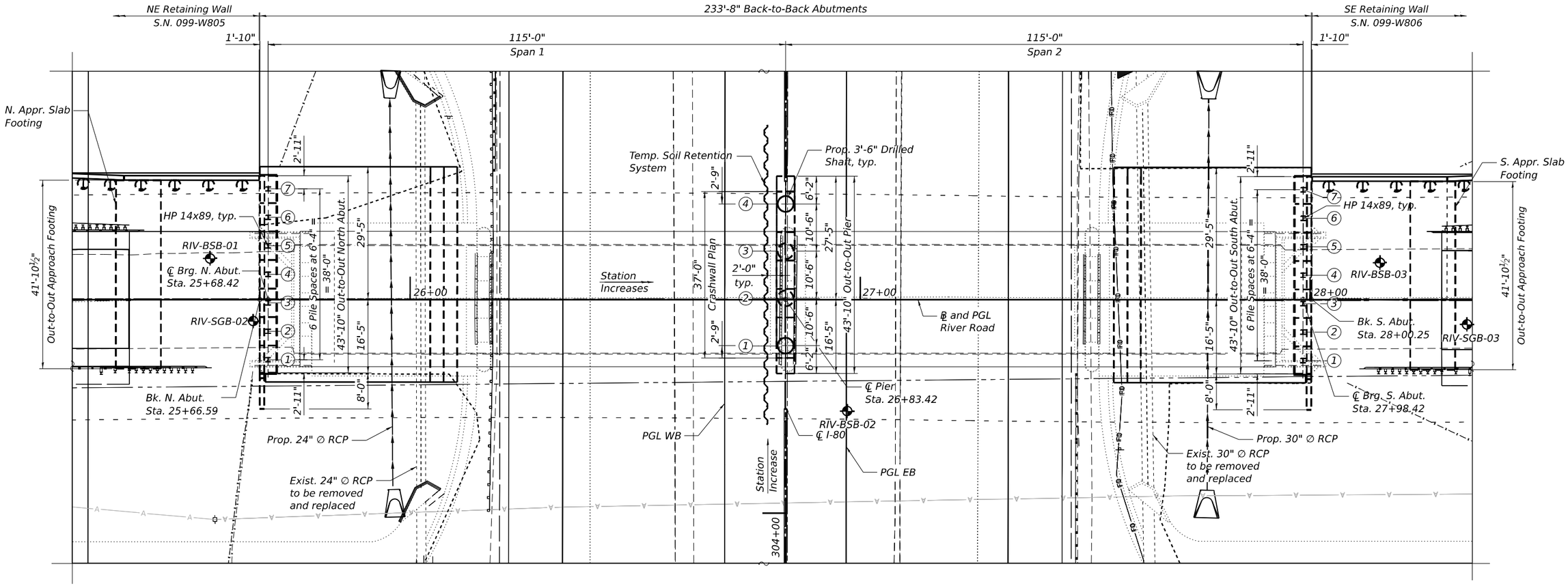
HBM ENGINEERING GROUP, LLC

USER NAME =	DESIGNED - EBK	REVISED -	
	CHECKED - MI, JJS, SK	REVISED -	
PLOT SCALE =	DRAWN - EBK	REVISED -	
PLOT DATE =	CHECKED - MI, JJS, SK	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CURVE DATA, PROF. GRADE LINES, MISC. SECTIONS & DETAILS
STRUCTURE NO. 099-8304
SHEET S1-03 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	27
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		



SUBSTRUCTURE LAYOUT

LEGEND

- Soil Boring
- Traffic Sign
- Exist. EOP / Shoulder
- Prop. EOP
- Aggregate Shoulder
- Exist. Fiber Optic
- Exist. Aerial Line
- Fence
- Exist. Guardrail
- Prop. Guardrail
- Exist. ROW
- Temporary Soil Retention System

NOTES:

1. The maximum allowable excavation slope is 1:2 (V:H) unless noted otherwise.
2. For Removal of Existing Structure, see Sheet S1-06 thru S1-09.
3. For existing approach slabs removal quantities, see Roadway plans.
4. For proposed Temporary Soil Retention System, see Sheet S1-05.
5. The Contractor shall field verify locations of existing underground utilities. The Contractor shall take precautions to protect existing utilities during construction of the bridge. Any damage to the existing utilities shall be the responsibility of the Contractor. The existing utilities in conflict with the bridge construction shall be abandoned or relocated according to directions given on the Civil Plans.

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1/26/2023 8:00:27 AM

HBM ENGINEERING GROUP, LLC

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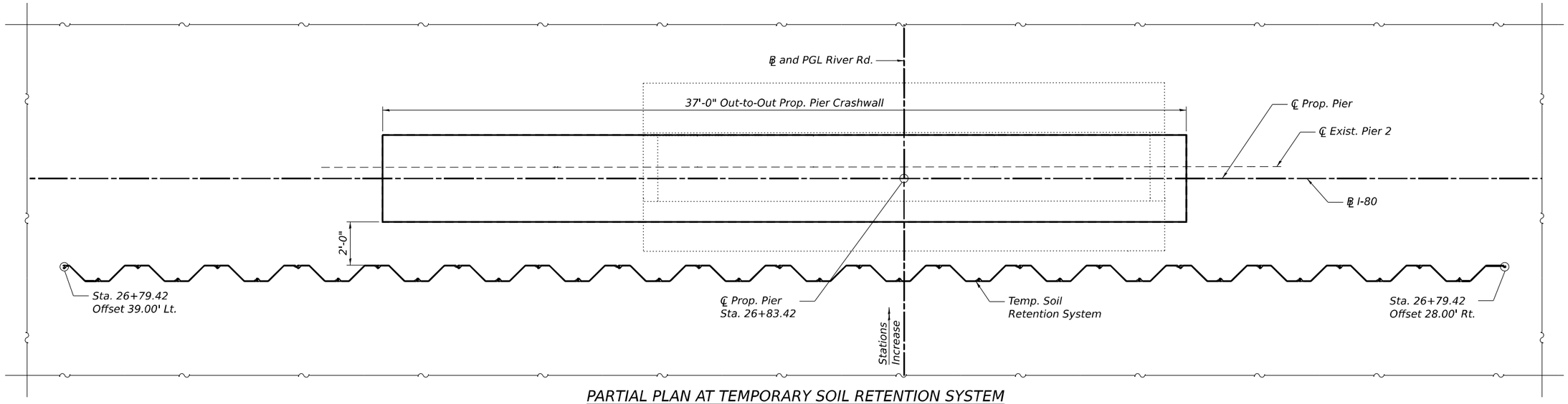
	CHECKED - MI, JJS, SK	REVISED -	
PLOT SCALE =	DRAWN - FL	REVISED -	
PLOT DATE =	CHECKED - MI, JJS, SK	REVISED -	

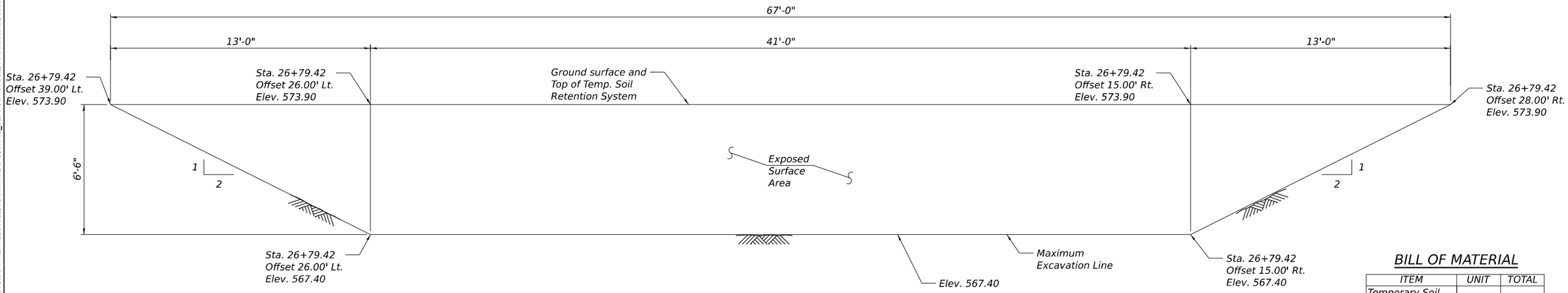
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBSTRUCTURE LAYOUT
STRUCTURE NO. 099-8304
SHEET S1-04 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	28
		CONTRACT NO. 62P67		
		ILLINOIS	FED. AID PROJECT	



PARTIAL PLAN AT TEMPORARY SOIL RETENTION SYSTEM



TEMPORARY SOIL RETENTION SYSTEM

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Temporary Soil Retention System	Sq Ft	351

NOTES:

1. A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

2. The Contractor shall field verify locations of existing underground utilities. The Contractor shall take precautions to protect existing utilities during construction of the bridge. Any damage to the existing utilities shall be the responsibility of the Contractor. The existing utilities in conflict with the bridge construction shall be abandoned or relocated according to the directions given on the Civil Plans.

3. The maximum allowable excavation slope is 1:2 (V:H).

LEGEND:

Temporary Soil Retention System

HBM ENGINEERING GROUP, LLC

USER NAME =	DESIGNED - JMI	REVISED -	
	CHECKED - MI, JJS, SK	REVISED -	
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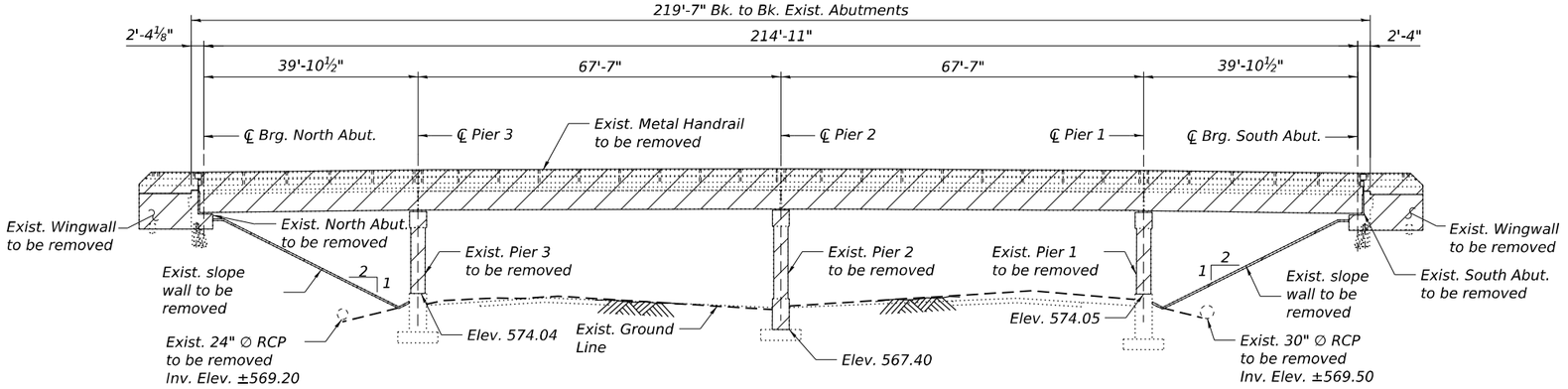
PLOT DATE =	CHECKED - MI, JJS, SK	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY SOIL RETENTION SYSTEM DETAILS
STRUCTURE NO. 099-8304
SHEET S1-05 OF S1-41 SHEETS

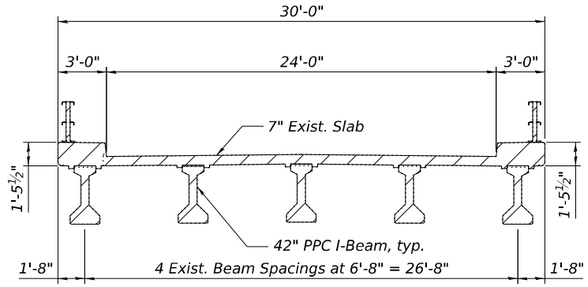
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	29
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		



REMOVAL ELEVATION

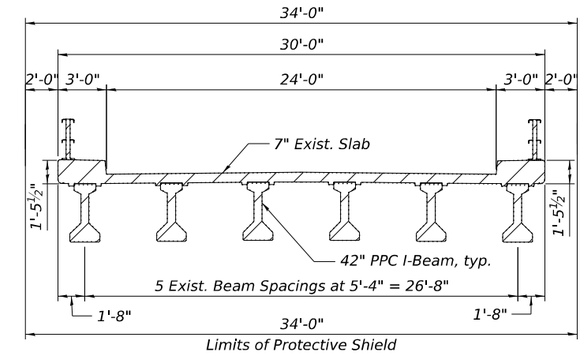
BILL OF MATERIAL

ITEM	UNIT	TOTAL
Removal Of Existing Structures No.1	Each	1.0
Protective Shield	Sq Yd	711



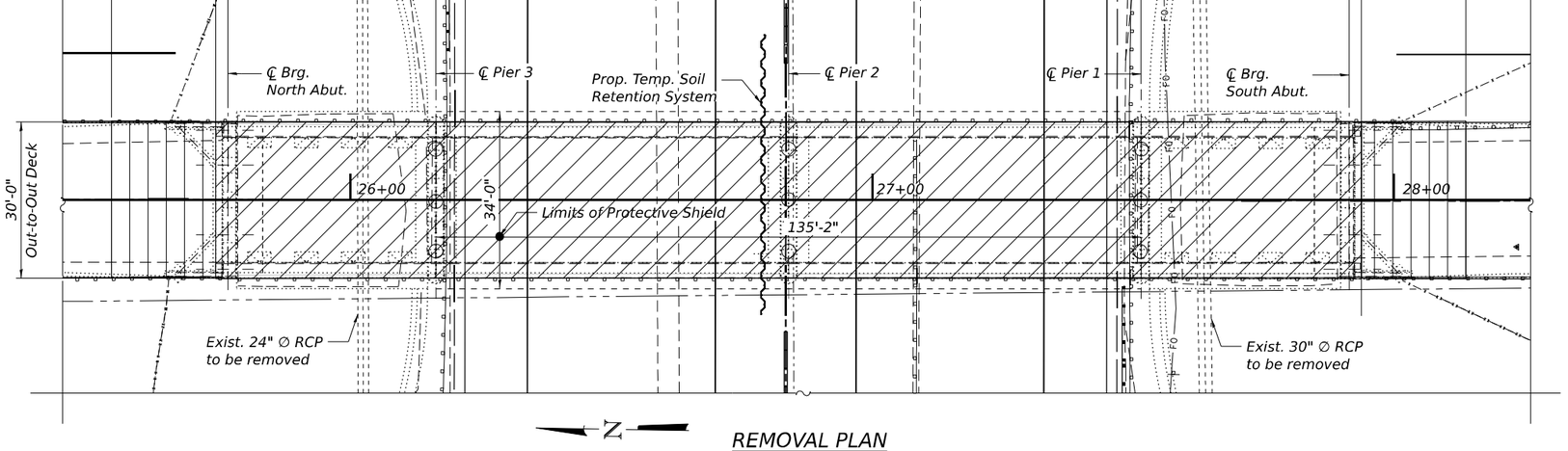
EXISTING CROSS SECTION

(Spans 1 and 4)



EXISTING CROSS SECTION

(Spans 2 and 3)



REMOVAL PLAN

NOTES:

1. Dimensions shown have been taken from historical design drawings and may not represent "as built" conditions. The Contractor must verify all dimensions in the field. Variation in the field dimensions shall not warrant additional compensation for Removal of Existing Structures No. 1.
2. For suggested stages of construction and sequencing requirements, see Roadway Plans and Special Provisions.
3. For substructure removal details, see Sheets S1-07 thru S1-09.
4. For approach slab removal, see Roadway Plans.
5. For Temporary Soil Retention System limits and details, see Sheet S1-05.
6. The Contractor shall take all necessary precautions to protect existing utilities, foundations and adjacent structures during removal/construction of the bridge.
7. The existing metal handrail removal, and removal of any chain link fence within the limits of construction, shall not be paid separately but shall be included in the cost of Removal of Existing Structures No. 1.
8. The Contractor shall salvage the existing metal handrails. The steel shall be transported and unloaded by the Contractor to the District Bridge Yard in Elk Grove Village at 1101 Biesterfield Road during the weekdays (Monday thru Friday) and between the hours of 8AM to 2PM. The Contractor shall notify John Bilski at the District Bridge Office 48 hours in advance of the delivery at (847) 956-1444 or (847) 946-6517. Cost included with Removal of Existing Structures No. 1.

LEGEND

- Removal of Existing Structures No. 1
- Approach Slab Removal
- FO – Fiber Optic
- Protective Shield
- Existing Fence
- Existing Shoulder/EOP

HBM ENGINEERING GROUP, LLC

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE REMOVAL PLAN AND ELEVATION
STRUCTURE NO. 099-8304
SHEET S1-06 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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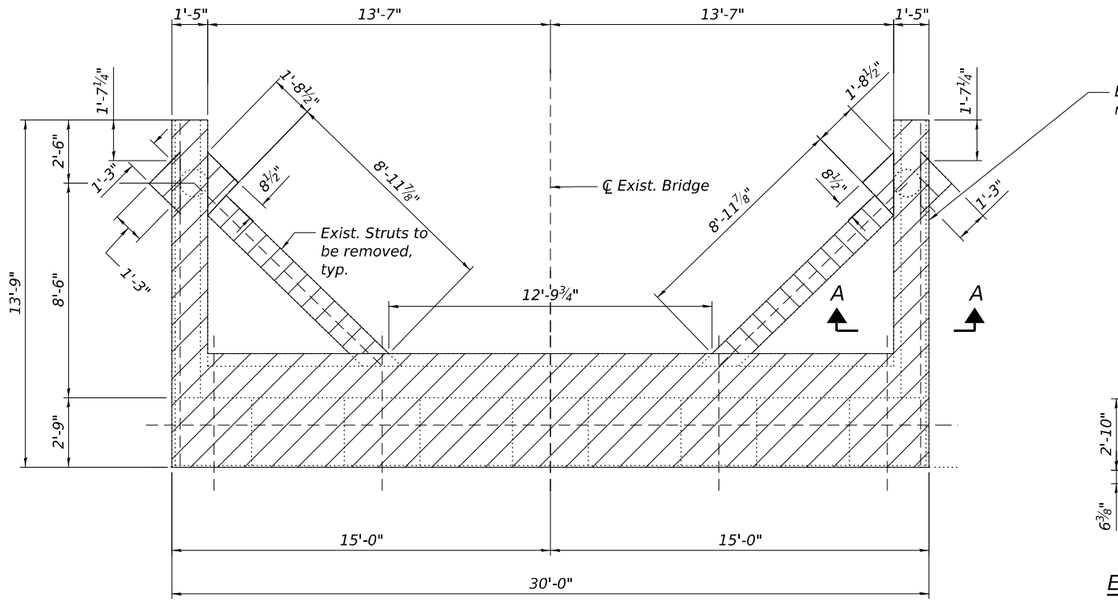
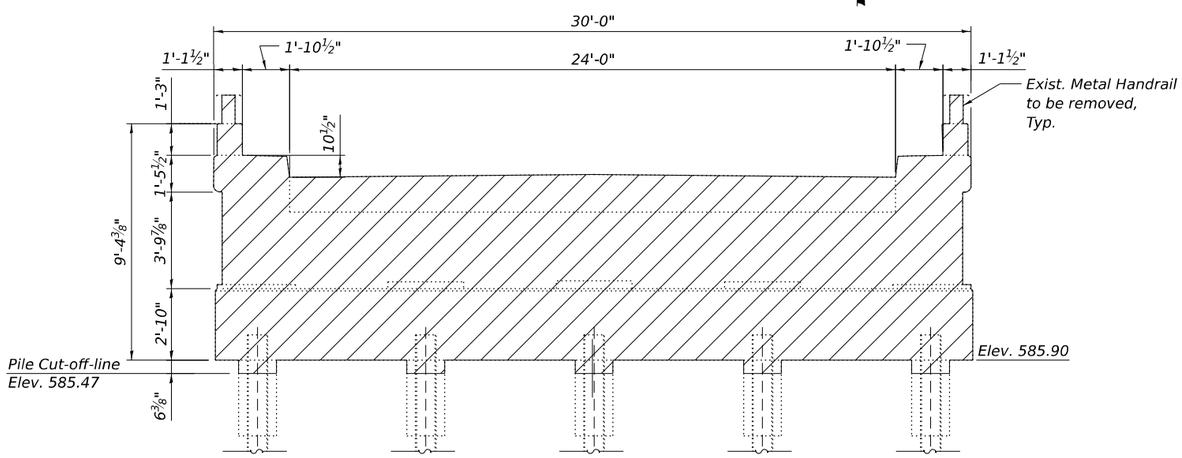
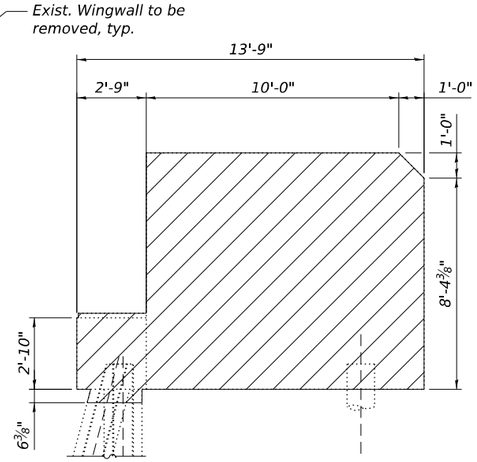
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		



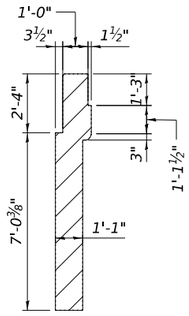
PLAN - NORTH ABUTMENT REMOVAL



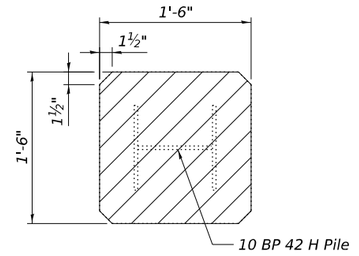
ELEVATION - NORTH ABUTMENT REMOVAL



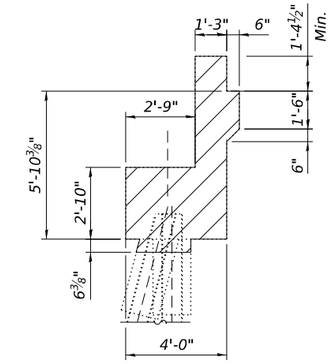
ELEVATION - TYPICAL WINGWALL REMOVAL



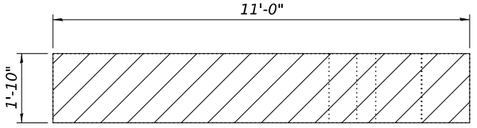
SECTION A-A



SECTION THRU PILE ENCASEMENT



SECTION THRU NORTH ABUTMENT



SECTION THRU TIE BEAM

NOTES:

1. For additional notes, see Sheet S1-06.
2. Existing Creosoted Timber Piles, and Pile encasement concrete removals shall not be paid separately but shall be included in the cost of Removal of Existing Structures No. 1.

LEGEND

Removal of Existing Structures No. 1

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PLOT DATE =	CHECKED - MI, JJS, SK	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXIST. STRUCT. REMOVAL SECTIONS & DETAILS (SHEET 1 OF 3)
STRUCTURE NO. 099-8304
SHEET S1-07 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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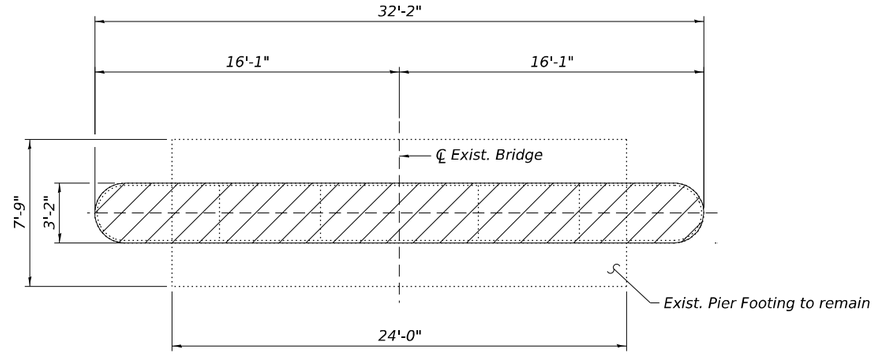
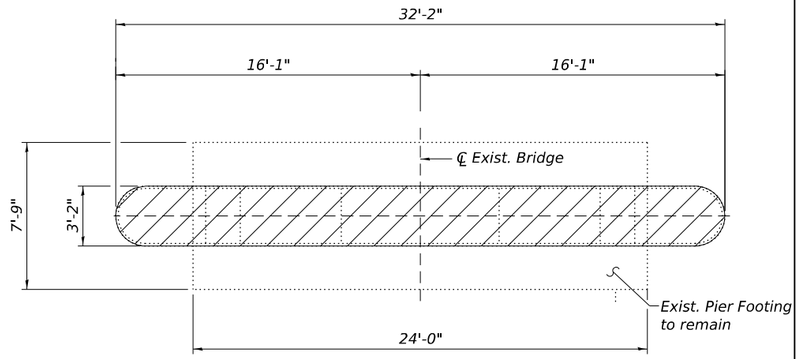
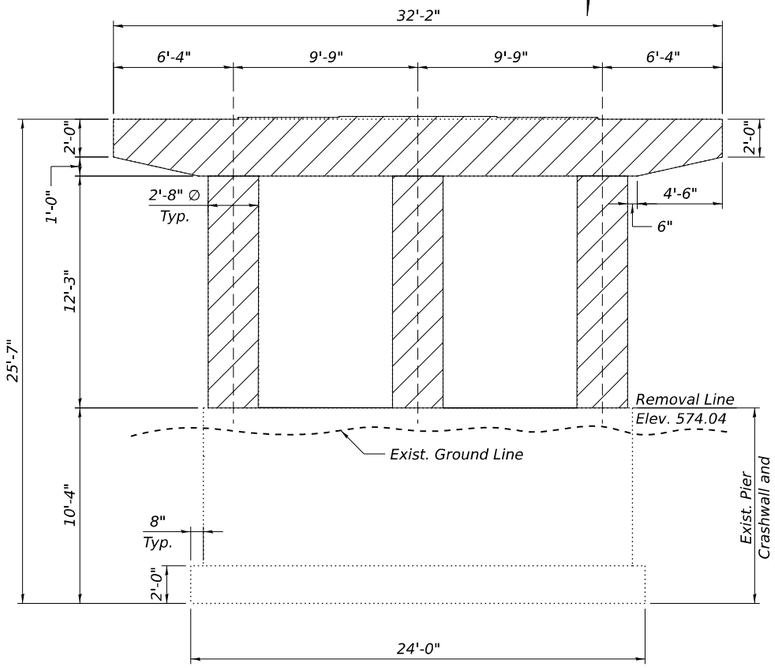
		CONTRACT NO. 62P67		
		ILLINOIS	FED. AID PROJECT	



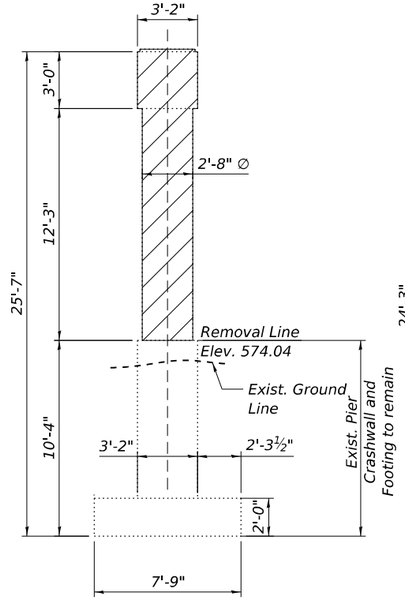
PLAN - PIER 1 REMOVAL



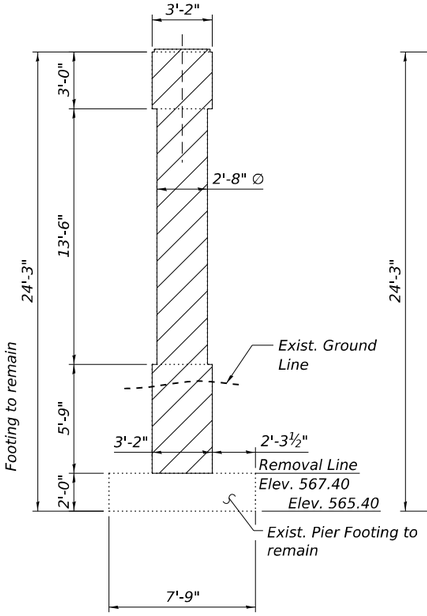
PLAN - PIER 2 REMOVAL



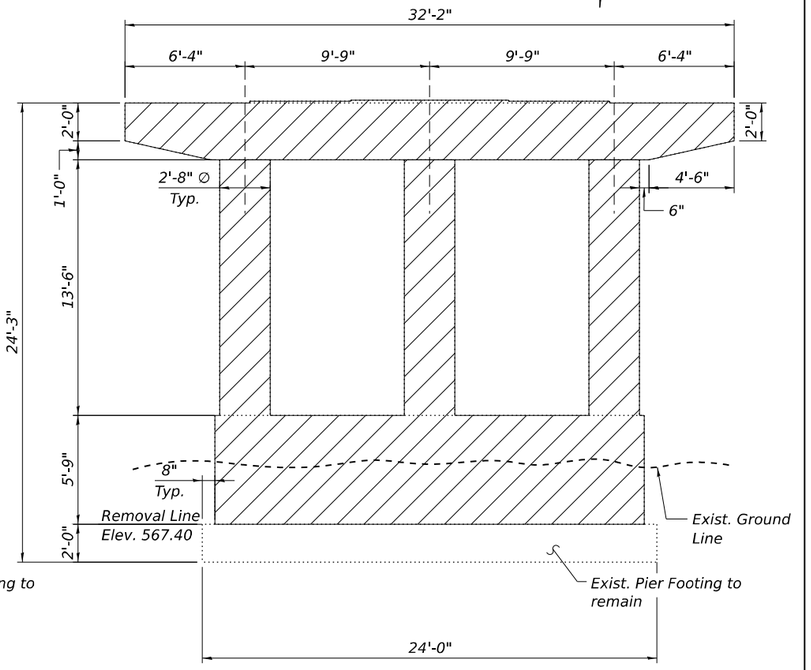
ELEVATION - PIER 1 REMOVAL



SIDE ELEVATION - PIER 1



SIDE ELEVATION - PIER 2



ELEVATION - PIER 2 REMOVAL

NOTE:

1. For additional notes, see Sheet S1-06.

LEGEND

Removal of Existing Structures No. 1

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1/26/2023 8:00:54 AM

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXIST. STRUCT. REMOVAL SECTIONS & DETAILS (SHEET 2 OF 3)
STRUCTURE NO. 099-8304
SHEET S1-08 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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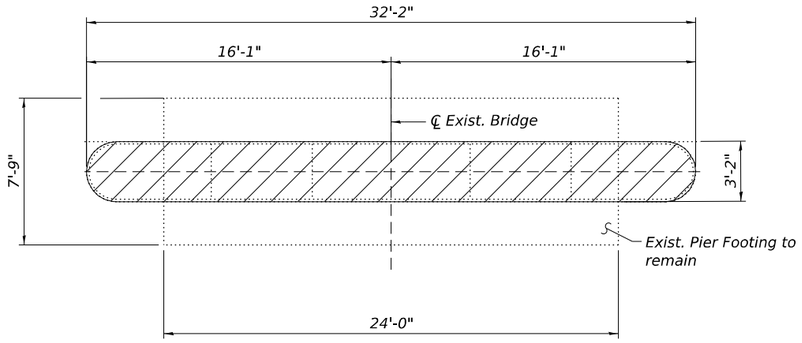
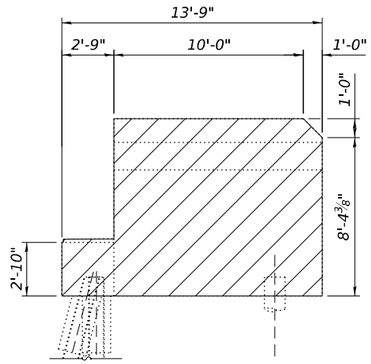
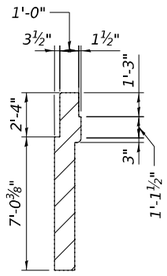
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		



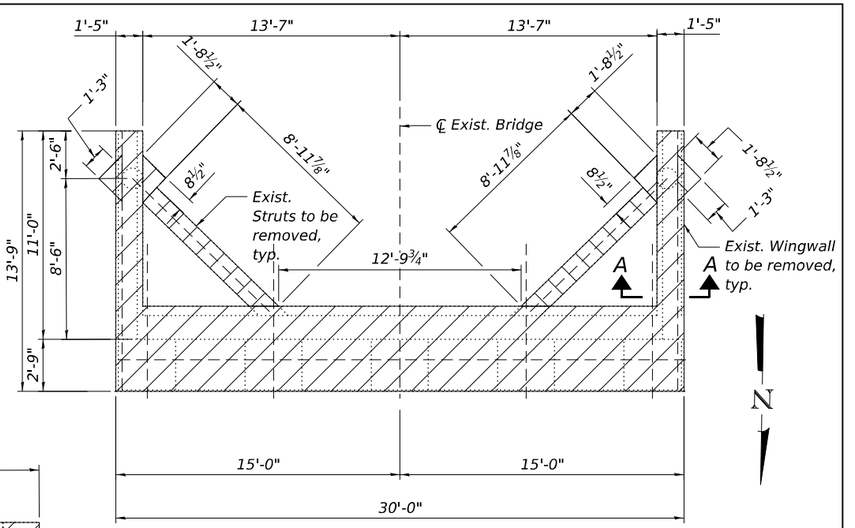
PLAN - PIER 3 REMOVAL



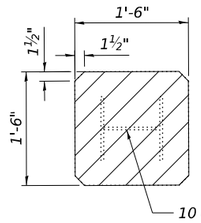
ELEVATION - TYPICAL WINGWALL REMOVAL



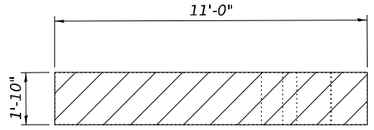
SECTION A-A



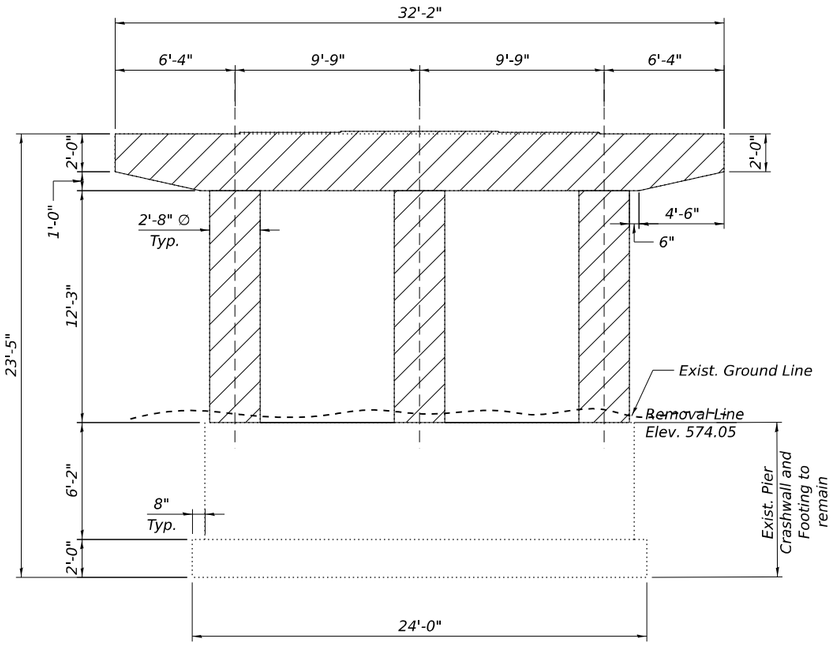
PLAN - SOUTH ABUTMENT REMOVAL



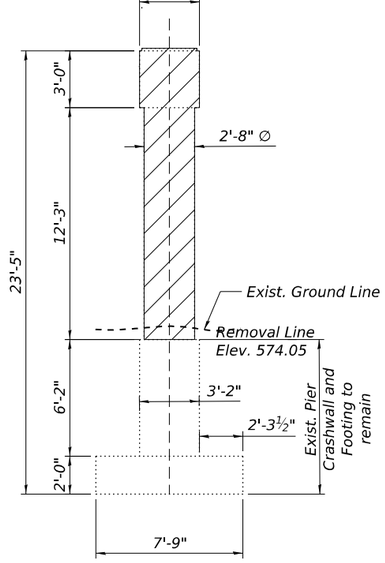
SECTION THRU PILE ENCASEMENT



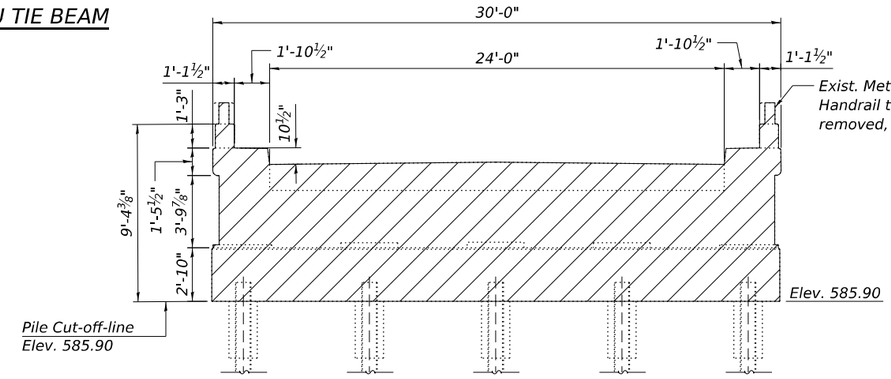
SECTION THRU TIE BEAM



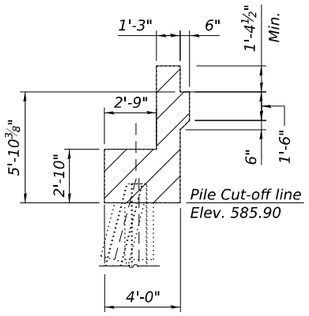
ELEVATION - PIER 3 REMOVAL



SIDE ELEVATION - PIER 3



ELEVATION - SOUTH ABUTMENT REMOVAL



SECTION THRU SOUTH ABUTMENT

NOTES:

1. For additional notes, see Sheet S1-06.
2. Existing Creosoted Timer Piles, Steel Pile, and Pile encasement concrete shall not be paid separately but shall be included in the cost of Removal of Existing Structures No. 1.

LEGEND

Removal of Existing Structures No. 1

HBM ENGINEERING GROUP, LLC

USER NAME =	DESIGNED - FL	REVISED -	
	CHECKED - MI, JJS, SK	REVISED -	
PLOT SCALE =	DRAWN - FL	REVISED -	
PLOT DATE =	CHECKED - MI, JJS, SK	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXIST. STRUCT. REMOVAL SECTIONS & DETAILS (SHEET 3 OF 3)
STRUCTURE NO. 099-8304
SHEET S1-09 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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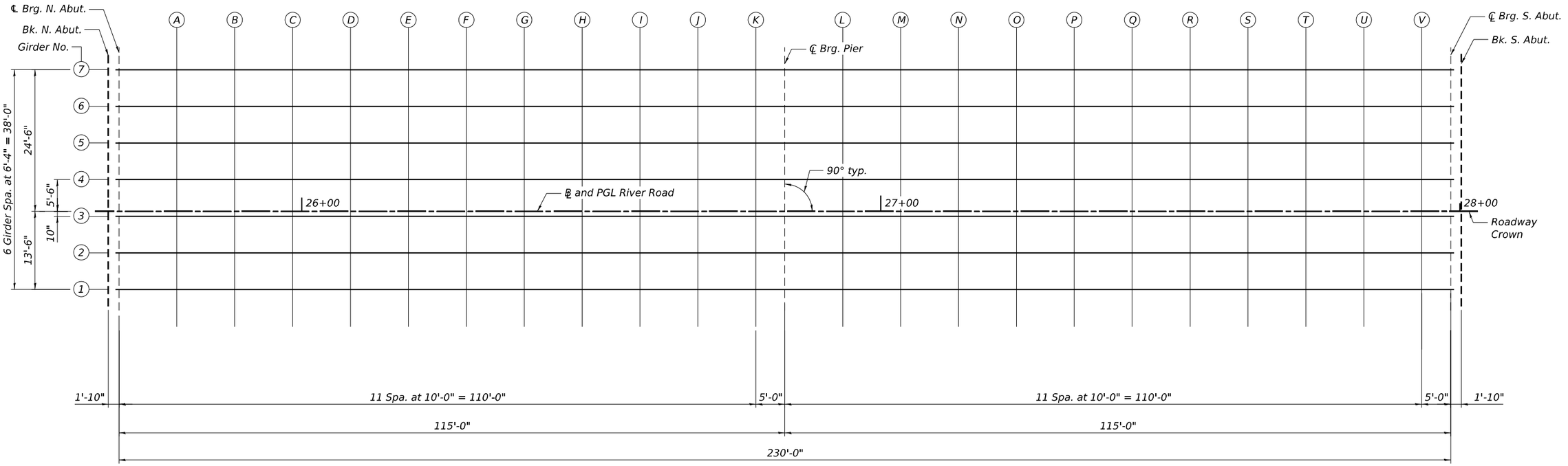
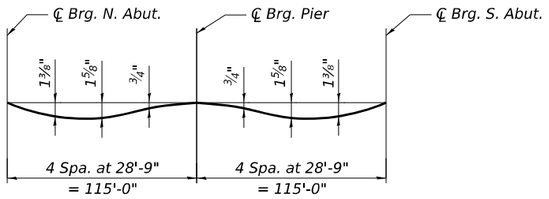
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		



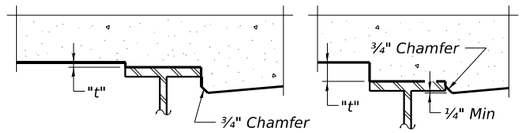
PLAN



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only).

Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on Sheets S1-11 and S1-12.



At Minimum Fillet *At Maximum Fillet*

To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown above. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on Sheets S1-11 and S1-12, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

HBM ENGINEERING GROUP, LLC

USER NAME =	DESIGNED - AMS	REVISED -	
	CHECKED - MI, LAB	REVISED -	
PLOT SCALE =	DRAWN - AMS	REVISED -	
PLOT DATE =	CHECKED - MI, LAB	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS LAYOUT
STRUCTURE NO. 099-8304
SHEET S1-10 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	34
		CONTRACT NO. 62P67		
		ILLINOIS	FED. AID PROJECT	

GIRDER 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. N. ABUT.	25+66.59	13.50'	595.02	595.02
CL. BRG. N. ABUT.	25+68.42	13.50'	595.06	595.06
A	25+78.42	13.50'	595.23	595.29
B	25+88.42	13.50'	595.39	595.50
C	25+98.42	13.50'	595.54	595.67
D	26+08.42	13.50'	595.67	595.82
E	26+18.42	13.50'	595.79	595.93
F	26+28.42	13.50'	595.89	596.02
G	26+38.42	13.50'	595.97	596.08
H	26+48.42	13.50'	596.04	596.12
I	26+58.42	13.50'	596.09	596.14
J	26+68.42	13.50'	596.13	596.15
K	26+78.42	13.50'	596.15	596.15
CL. BRG. PIER	26+83.42	13.50'	596.16	596.16
L	26+93.42	13.50'	596.16	596.17
M	27+03.42	13.50'	596.14	596.18
N	27+13.42	13.50'	596.11	596.18
O	27+23.42	13.50'	596.07	596.17
P	27+33.42	13.50'	596.00	596.13
Q	27+43.42	13.50'	595.93	596.07
R	27+53.42	13.50'	595.83	595.98
S	27+63.42	13.50'	595.73	595.86
T	27+73.42	13.50'	595.60	595.71
U	27+83.42	13.50'	595.46	595.53
V	27+93.42	13.50'	595.31	595.33
CL. BRG. S. ABUT.	27+98.42	13.50'	595.23	595.23
BK. S. ABUT.	28+00.25	13.50'	595.20	595.20

GIRDER 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. N. ABUT.	25+66.59	7.17'	595.13	595.13
CL. BRG. N. ABUT.	25+68.42	7.17'	595.16	595.16
A	25+78.42	7.17'	595.34	595.40
B	25+88.42	7.17'	595.50	595.60
C	25+98.42	7.17'	595.65	595.77
D	26+08.42	7.17'	595.78	595.92
E	26+18.42	7.17'	595.89	596.03
F	26+28.42	7.17'	595.99	596.12
G	26+38.42	7.17'	596.08	596.18
H	26+48.42	7.17'	596.15	596.22
I	26+58.42	7.17'	596.20	596.24
J	26+68.42	7.17'	596.24	596.25
K	26+78.42	7.17'	596.26	596.26
CL. BRG. PIER	26+83.42	7.17'	596.27	596.27
L	26+93.42	7.17'	596.27	596.28
M	27+03.42	7.17'	596.25	596.29
N	27+13.42	7.17'	596.22	596.29
O	27+23.42	7.17'	596.17	596.27
P	27+33.42	7.17'	596.11	596.23
Q	27+43.42	7.17'	596.03	596.17
R	27+53.42	7.17'	595.94	596.08
S	27+63.42	7.17'	595.83	595.96
T	27+73.42	7.17'	595.71	595.81
U	27+83.42	7.17'	595.57	595.64
V	27+93.42	7.17'	595.42	595.43
CL. BRG. S. ABUT.	27+98.42	7.17'	595.34	595.34
BK. S. ABUT.	28+00.25	7.17'	595.30	595.30

GIRDER 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. N. ABUT.	25+66.59	0.83'	595.23	595.23
CL. BRG. N. ABUT.	25+68.42	0.83'	595.26	595.26
A	25+78.42	0.83'	595.44	595.49
B	25+88.42	0.83'	595.60	595.69
C	25+98.42	0.83'	595.74	595.86
D	26+08.42	0.83'	595.87	596.01
E	26+18.42	0.83'	595.99	596.12
F	26+28.42	0.83'	596.09	596.21
G	26+38.42	0.83'	596.17	596.27
H	26+48.42	0.83'	596.24	596.31
I	26+58.42	0.83'	596.29	596.34
J	26+68.42	0.83'	596.33	596.35
K	26+78.42	0.83'	596.36	596.36
CL. BRG. PIER	26+83.42	0.83'	596.36	596.36
L	26+93.42	0.83'	596.36	596.37
M	27+03.42	0.83'	596.35	596.38
N	27+13.42	0.83'	596.31	596.38
O	27+23.42	0.83'	596.27	596.36
P	27+33.42	0.83'	596.21	596.33
Q	27+43.42	0.83'	596.13	596.26
R	27+53.42	0.83'	596.04	596.17
S	27+63.42	0.83'	595.93	596.05
T	27+73.42	0.83'	595.81	595.90
U	27+83.42	0.83'	595.67	595.73
V	27+93.42	0.83'	595.51	595.53
CL. BRG. S. ABUT.	27+98.42	0.83'	595.43	595.43
BK. S. ABUT.	28+00.25	0.83'	595.40	595.40

℄ AND PGL RIVER ROAD

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. N. ABUT.	25+66.59	0.00'	595.24	595.24
CL. BRG. N. ABUT.	25+68.42	0.00'	595.27	595.27
A	25+78.42	0.00'	595.45	595.50
B	25+88.42	0.00'	595.61	595.70
C	25+98.42	0.00'	595.76	595.88
D	26+08.42	0.00'	595.89	596.02
E	26+18.42	0.00'	596.00	596.14
F	26+28.42	0.00'	596.10	596.22
G	26+38.42	0.00'	596.18	596.29
H	26+48.42	0.00'	596.25	596.33
I	26+58.42	0.00'	596.31	596.35
J	26+68.42	0.00'	596.35	596.36
K	26+78.42	0.00'	596.37	596.37
CL. BRG. PIER	26+83.42	0.00'	596.37	596.37
L	26+93.42	0.00'	596.37	596.38
M	27+03.42	0.00'	596.36	596.39
N	27+13.42	0.00'	596.33	596.39
O	27+23.42	0.00'	596.28	596.38
P	27+33.42	0.00'	596.22	596.34
Q	27+43.42	0.00'	596.14	596.28
R	27+53.42	0.00'	596.05	596.19
S	27+63.42	0.00'	595.94	596.07
T	27+73.42	0.00'	595.82	595.92
U	27+83.42	0.00'	595.68	595.74
V	27+93.42	0.00'	595.53	595.54
CL. BRG. S. ABUT.	27+98.42	0.00'	595.44	595.44
BK. S. ABUT.	28+00.25	0.00'	595.41	595.41

GIRDER 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. N. ABUT.	25+66.59	-5.50'	595.16	595.16
CL. BRG. N. ABUT.	25+68.42	-5.50'	595.19	595.19
A	25+78.42	-5.50'	595.37	595.42
B	25+88.42	-5.50'	595.53	595.62
C	25+98.42	-5.50'	595.67	595.79
D	26+08.42	-5.50'	595.80	595.94
E	26+18.42	-5.50'	595.92	596.05
F	26+28.42	-5.50'	596.02	596.14
G	26+38.42	-5.50'	596.10	596.20
H	26+48.42	-5.50'	596.17	596.24
I	26+58.42	-5.50'	596.22	596.27
J	26+68.42	-5.50'	596.26	596.28
K	26+78.42	-5.50'	596.29	596.29
CL. BRG. PIER	26+83.42	-5.50'	596.29	596.29
L	26+93.42	-5.50'	596.29	596.30
M	27+03.42	-5.50'	596.28	596.31
N	27+13.42	-5.50'	596.24	596.31
O	27+23.42	-5.50'	596.20	596.29
P	27+33.42	-5.50'	596.14	596.26
Q	27+43.42	-5.50'	596.06	596.19
R	27+53.42	-5.50'	595.97	596.10
S	27+63.42	-5.50'	595.86	595.98
T	27+73.42	-5.50'	595.74	595.83
U	27+83.42	-5.50'	595.60	595.66
V	27+93.42	-5.50'	595.44	595.46
CL. BRG. S. ABUT.	27+98.42	-5.50'	595.36	595.36
BK. S. ABUT.	28+00.25	-5.50'	595.33	595.33

HBM ENGINEERING GROUP, LLC

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	CHECKED - MI, LAB	REVISED -
PLOT SCALE =	DRAWN - AMS	REVISED -
PLOT DATE =	CHECKED - MI, LAB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS (SHEET 1 OF 2)
STRUCTURE NO. 099-8304
SHEET S1-11 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	35
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

GIRDER 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. N. ABUT.	25+66.59	-11.83'	595.06	595.06
CL. BRG. N. ABUT.	25+68.42	-11.83'	595.09	595.09
A	25+78.42	-11.83'	595.27	595.32
B	25+88.42	-11.83'	595.43	595.53
C	25+98.42	-11.83'	595.57	595.70
D	26+08.42	-11.83'	595.70	595.84
E	26+18.42	-11.83'	595.82	595.96
F	26+28.42	-11.83'	595.92	596.05
G	26+38.42	-11.83'	596.00	596.11
H	26+48.42	-11.83'	596.07	596.15
I	26+58.42	-11.83'	596.13	596.17
J	26+68.42	-11.83'	596.16	596.18
K	26+78.42	-11.83'	596.19	596.19
CL. BRG. PIER	26+83.42	-11.83'	596.19	596.19
L	26+93.42	-11.83'	596.19	596.20
M	27+03.42	-11.83'	596.18	596.21
N	27+13.42	-11.83'	596.15	596.21
O	27+23.42	-11.83'	596.10	596.20
P	27+33.42	-11.83'	596.04	596.16
Q	27+43.42	-11.83'	595.96	596.10
R	27+53.42	-11.83'	595.87	596.01
S	27+63.42	-11.83'	595.76	595.89
T	27+73.42	-11.83'	595.64	595.74
U	27+83.42	-11.83'	595.50	595.56
V	27+93.42	-11.83'	595.34	595.36
CL. BRG. S. ABUT.	27+98.42	-11.83'	595.26	595.26
BK. S. ABUT.	28+00.25	-11.83'	595.23	595.23

GIRDER 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. N. ABUT.	25+66.59	-18.17'	594.93	594.93
CL. BRG. N. ABUT.	25+68.42	-18.17'	594.96	594.96
A	25+78.42	-18.17'	595.14	595.20
B	25+88.42	-18.17'	595.30	595.40
C	25+98.42	-18.17'	595.45	595.58
D	26+08.42	-18.17'	595.58	595.72
E	26+18.42	-18.17'	595.69	595.84
F	26+28.42	-18.17'	595.79	595.92
G	26+38.42	-18.17'	595.88	595.99
H	26+48.42	-18.17'	595.95	596.02
I	26+58.42	-18.17'	596.00	596.04
J	26+68.42	-18.17'	596.04	596.05
K	26+78.42	-18.17'	596.06	596.06
CL. BRG. PIER	26+83.42	-18.17'	596.07	596.07
L	26+93.42	-18.17'	596.07	596.08
M	27+03.42	-18.17'	596.05	596.09
N	27+13.42	-18.17'	596.02	596.09
O	27+23.42	-18.17'	595.97	596.07
P	27+33.42	-18.17'	595.91	596.04
Q	27+43.42	-18.17'	595.83	595.98
R	27+53.42	-18.17'	595.74	595.89
S	27+63.42	-18.17'	595.63	595.77
T	27+73.42	-18.17'	595.51	595.62
U	27+83.42	-18.17'	595.37	595.44
V	27+93.42	-18.17'	595.22	595.23
CL. BRG. S. ABUT.	27+98.42	-18.17'	595.13	595.13
BK. S. ABUT.	28+00.25	-18.17'	595.10	595.10

GIRDER 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. N. ABUT.	25+66.59	-24.50'	594.80	594.80
CL. BRG. N. ABUT.	25+68.42	-24.50'	594.84	594.84
A	25+78.42	-24.50'	595.01	595.08
B	25+88.42	-24.50'	595.17	595.28
C	25+98.42	-24.50'	595.32	595.46
D	26+08.42	-24.50'	595.45	595.60
E	26+18.42	-24.50'	595.57	595.72
F	26+28.42	-24.50'	595.67	595.80
G	26+38.42	-24.50'	595.75	595.86
H	26+48.42	-24.50'	595.82	595.90
I	26+58.42	-24.50'	595.87	595.92
J	26+68.42	-24.50'	595.91	595.93
K	26+78.42	-24.50'	595.93	595.93
CL. BRG. PIER	26+83.42	-24.50'	595.94	595.94
L	26+93.42	-24.50'	595.94	595.95
M	27+03.42	-24.50'	595.92	595.96
N	27+13.42	-24.50'	595.89	595.97
O	27+23.42	-24.50'	595.85	595.95
P	27+33.42	-24.50'	595.78	595.92
Q	27+43.42	-24.50'	595.71	595.86
R	27+53.42	-24.50'	595.61	595.76
S	27+63.42	-24.50'	595.51	595.64
T	27+73.42	-24.50'	595.38	595.49
U	27+83.42	-24.50'	595.24	595.31
V	27+93.42	-24.50'	595.09	595.11
CL. BRG. S. ABUT.	27+98.42	-24.50'	595.01	595.01
BK. S. ABUT.	28+00.25	-24.50'	594.98	594.98

HBM ENGINEERING GROUP, LLC

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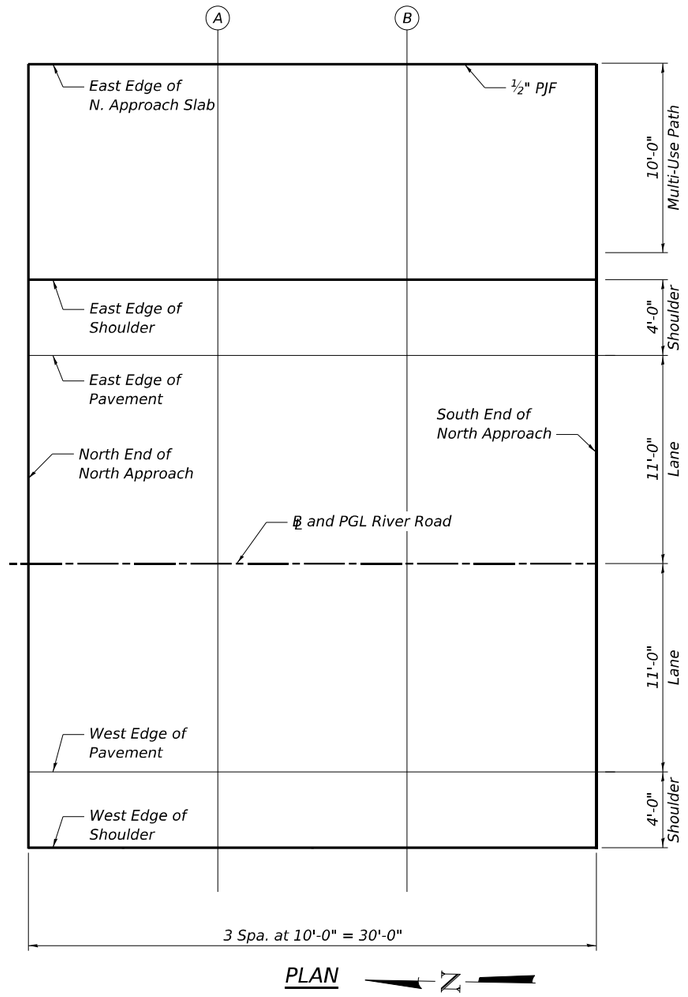
PLOT DATE =	CHECKED - MI, LAB	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS (SHEET 2 OF 2)
STRUCTURE NO. 099-8304
SHEET S1-12 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	36
		CONTRACT NO. 62P67		
		ILLINOIS	FED. AID PROJECT	



PLAN

WEST EDGE OF SHOULDER

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS
N. End of N. Approach	25+37.59	15.00'	594.39
A	25+47.59	15.00'	594.61
B	25+57.59	15.00'	594.82
S. End of N. Approach	25+67.59	15.00'	595.01

WEST EDGE OF PAVEMENT

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS
N. End of N. Approach	25+37.59	11.00'	594.47
A	25+47.59	11.00'	594.69
B	25+57.59	11.00'	594.90
S. End of N. Approach	25+67.59	11.00'	595.09

℄ AND PGL RIVER ROAD

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS
N. End of N. Approach	25+37.59	0.00'	594.63
A	25+47.59	0.00'	594.85
B	25+57.59	0.00'	595.06
S. End of N. Approach	25+67.59	0.00'	595.26

EAST EDGE OF PAVEMENT

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS
N. End of N. Approach	25+37.59	-11.00'	594.47
A	25+47.59	-11.00'	594.69
B	25+57.59	-11.00'	594.90
S. End of N. Approach	25+67.59	-11.00'	595.09

EAST EDGE OF SHOULDER

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS
N. End of N. Approach	25+37.59	-15.00'	594.39
A	25+47.59	-15.00'	594.61
B	25+57.59	-15.00'	594.82
S. End of N. Approach	25+67.59	-15.00'	595.01

EAST EDGE OF NORTH APPROACH SLAB

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS
N. End of N. Approach	25+37.59	-26.42'	594.16
A	25+47.59	-26.42'	594.38
B	25+57.59	-26.42'	594.59
S. End of N. Approach	25+67.59	-26.42'	594.78

HBM ENGINEERING GROUP, LLC

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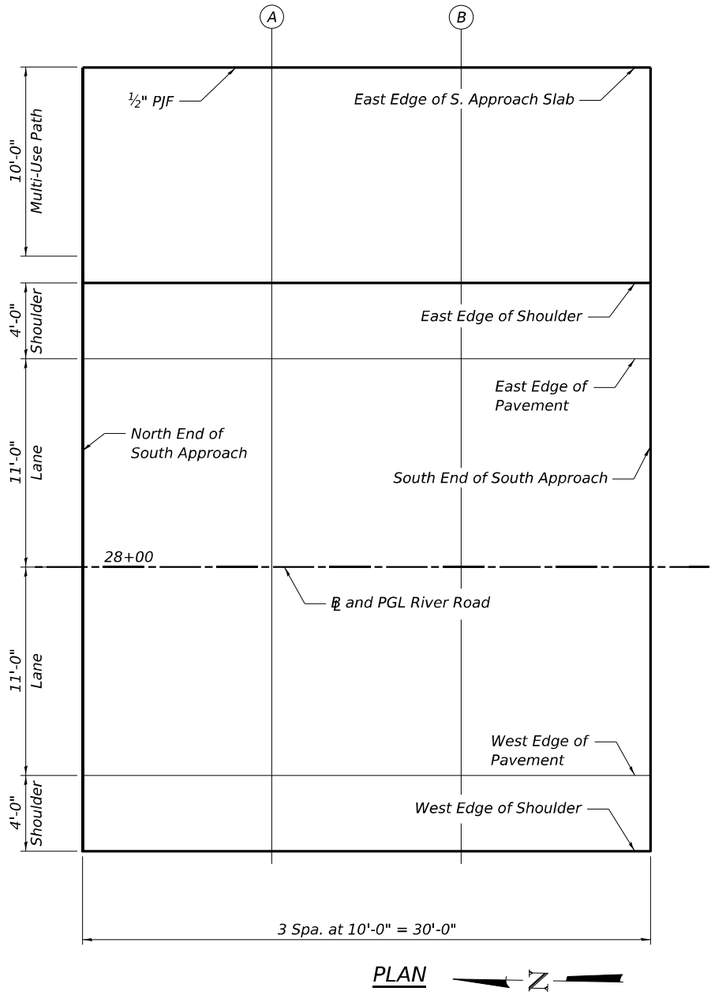
PLOT DATE =	CHECKED - MI, LAB	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF N. APPROACH SLAB LAYOUT & TABLES
STRUCTURE NO. 099-8304
SHEET S1-13 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	37
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		



PLAN

WEST EDGE OF SHOULDER

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS
N. End of S. Approach	27+99.25	15.00'	595.18
A	28+09.25	15.00'	595.01
B	28+19.25	15.00'	594.81
S. End of S. Approach	28+29.25	15.00'	594.60

WEST EDGE OF PAVEMENT

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS
N. End of S. Approach	27+99.25	11.00'	595.26
A	28+09.25	11.00'	595.09
B	28+19.25	11.00'	594.89
S. End of S. Approach	28+29.25	11.00'	594.68

℄ AND PGL RIVER ROAD

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS
N. End of S. Approach	27+99.25	0.00'	595.43
A	28+09.25	0.00'	595.25
B	28+19.25	0.00'	595.06
S. End of S. Approach	28+29.25	0.00'	594.85

EAST EDGE OF PAVEMENT

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS
N. End of S. Approach	27+99.25	-11.00'	595.26
A	28+09.25	-11.00'	595.09
B	28+19.25	-11.00'	594.89
S. End of S. Approach	28+29.25	-11.00'	594.68

EAST EDGE OF SHOULDER

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS
N. End of S. Approach	27+99.25	-15.00'	595.18
A	28+09.25	-15.00'	595.01
B	28+19.25	-15.00'	594.81
S. End of S. Approach	28+29.25	-15.00'	594.60

EAST EDGE OF SOUTH APPROACH SLAB

LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATIONS
N. End of S. Approach	27+99.25	-26.42'	594.96
A	28+09.25	-26.42'	594.78
B	28+19.25	-26.42'	594.58
S. End of S. Approach	28+29.25	-26.42'	594.37

HBM ENGINEERING GROUP, LLC

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PLOT SCALE =	DRAWN - AMS	REVISED -	
PLOT DATE =	CHECKED - MI, LAB	REVISED -	

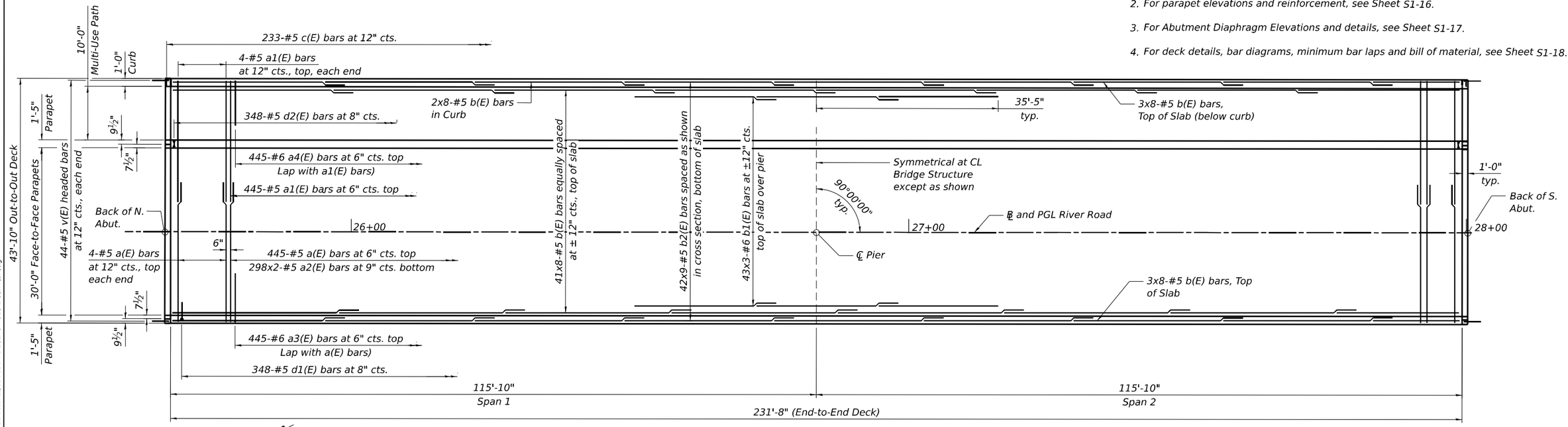
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF S. APPROACH SLAB LAYOUT & TABLES
STRUCTURE NO. 099-8304
SHEET S1-14 OF S1-41 SHEETS

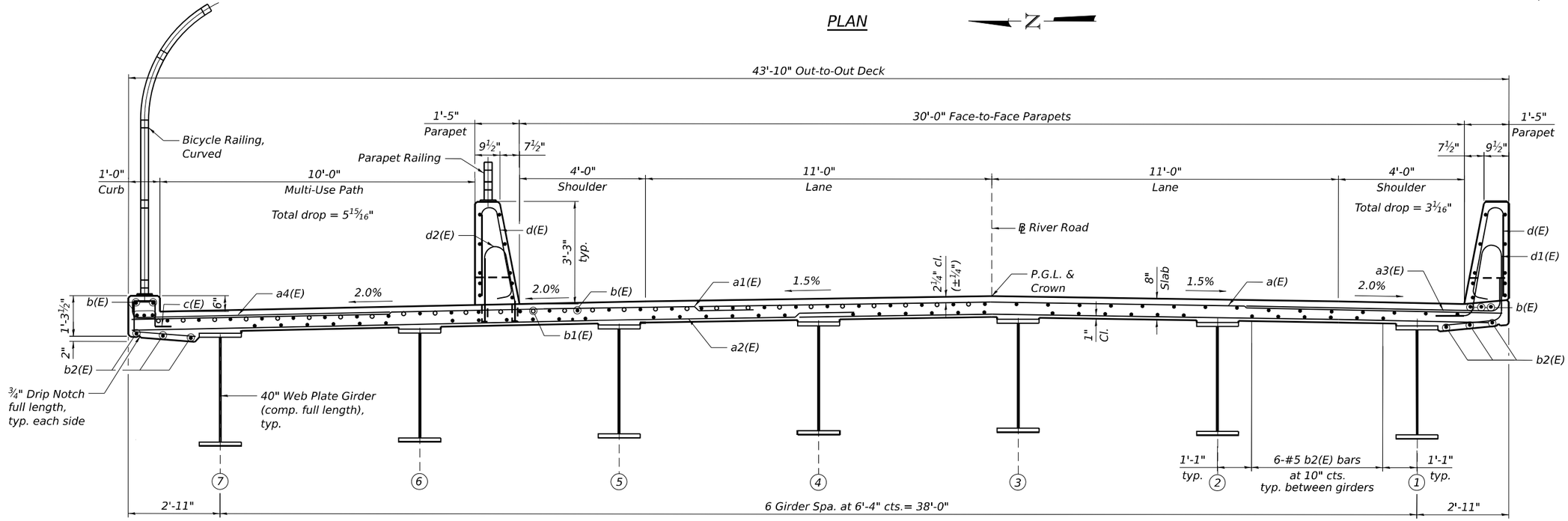
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	38
		CONTRACT NO. 62P67		
	ILLINOIS FED. AID PROJECT			

NOTES:

1. Bars indicated thus 42 x 9 - #5 etc. indicates 42 lines of bars with 9 lengths per line.
2. For parapet elevations and reinforcement, see Sheet S1-16.
3. For Abutment Diaphragm Elevations and details, see Sheet S1-17.
4. For deck details, bar diagrams, minimum bar laps and bill of material, see Sheet S1-18.



PLAN



NEAR PIER — NEAR MIDSPAN

CROSS SECTION

(Looking Upstation)

HBM ENGINEERING GROUP, LLC

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	CHECKED - MI, JJS, SK	REVISED -	
PLOT SCALE =	DRAWN - JMI	REVISED -	
PLOT DATE =	CHECKED - MI, JJS, SK	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE PLAN AND CROSS SECTION
STRUCTURE NO. 099-8304
SHEET S1-15 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	39
		CONTRACT NO. 62P67		
	ILLINOIS FED. AID PROJECT			

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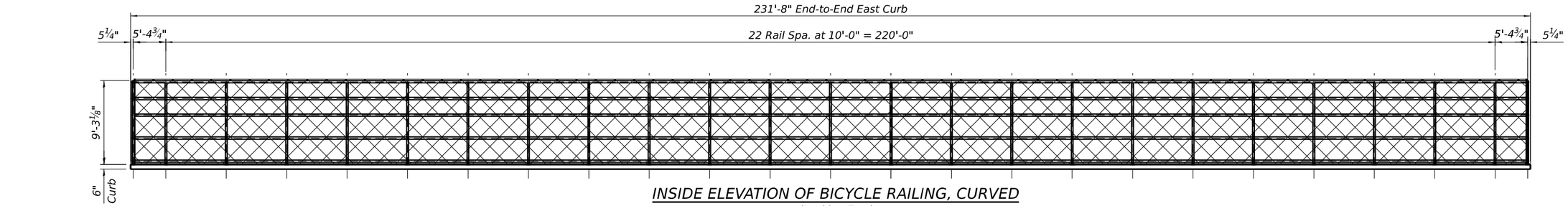
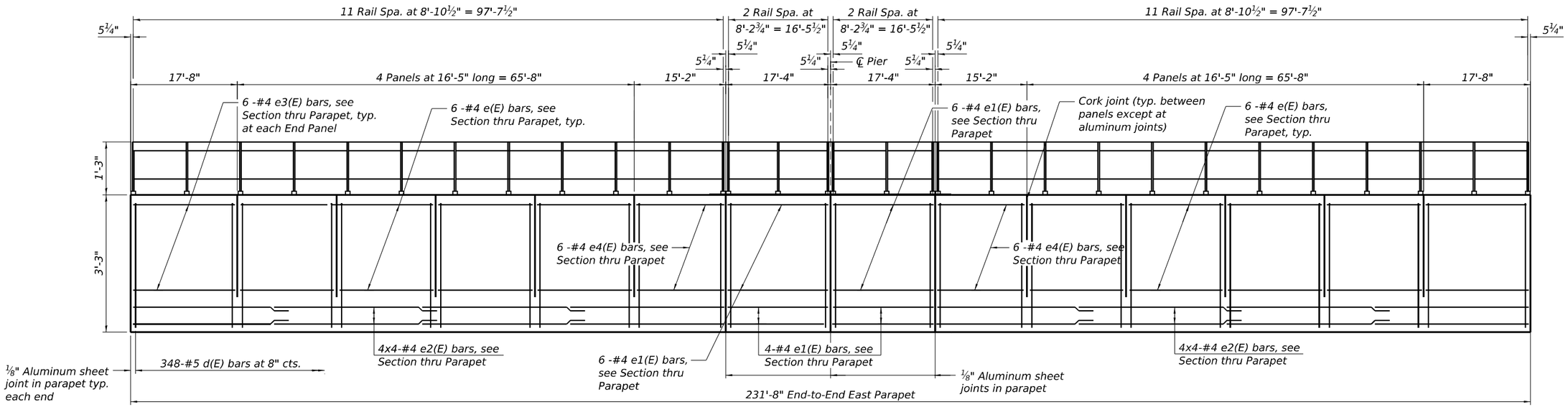


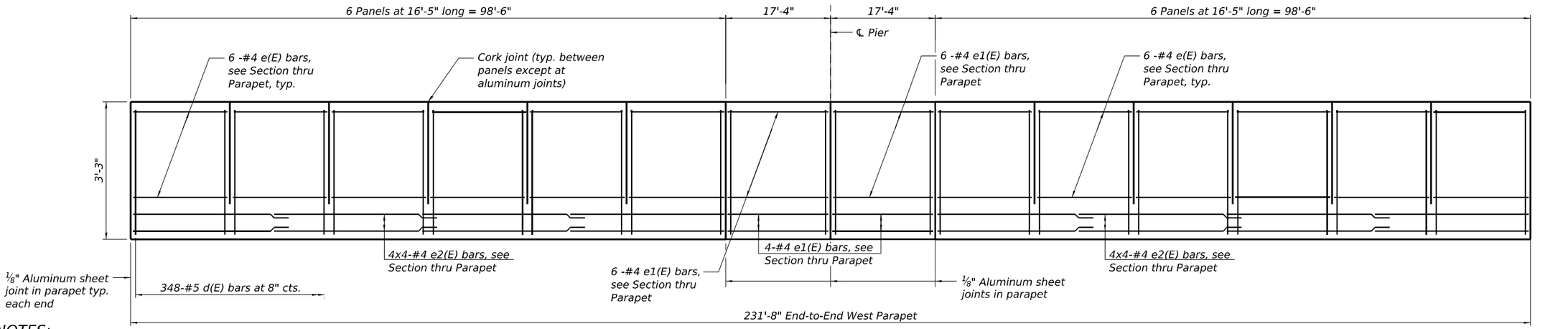
INSIDE ELEVATION OF BICYCLE RAILING, CURVED

(Looking East)



INSIDE ELEVATION OF EAST PARAPET

(Looking East)



INSIDE ELEVATION OF WEST PARAPET

(Looking West)

NOTES:

1. For notes, see Sheet S1-18.
2. For Sections thru Parapet, parapet joint details, bar diagrams and Bill of Material, see Sheet S1-18.
3. For bicycle railing and parapet railing details, see Sheet S1-23.

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	CHECKED - MI, JJS, SK	REVISED -	
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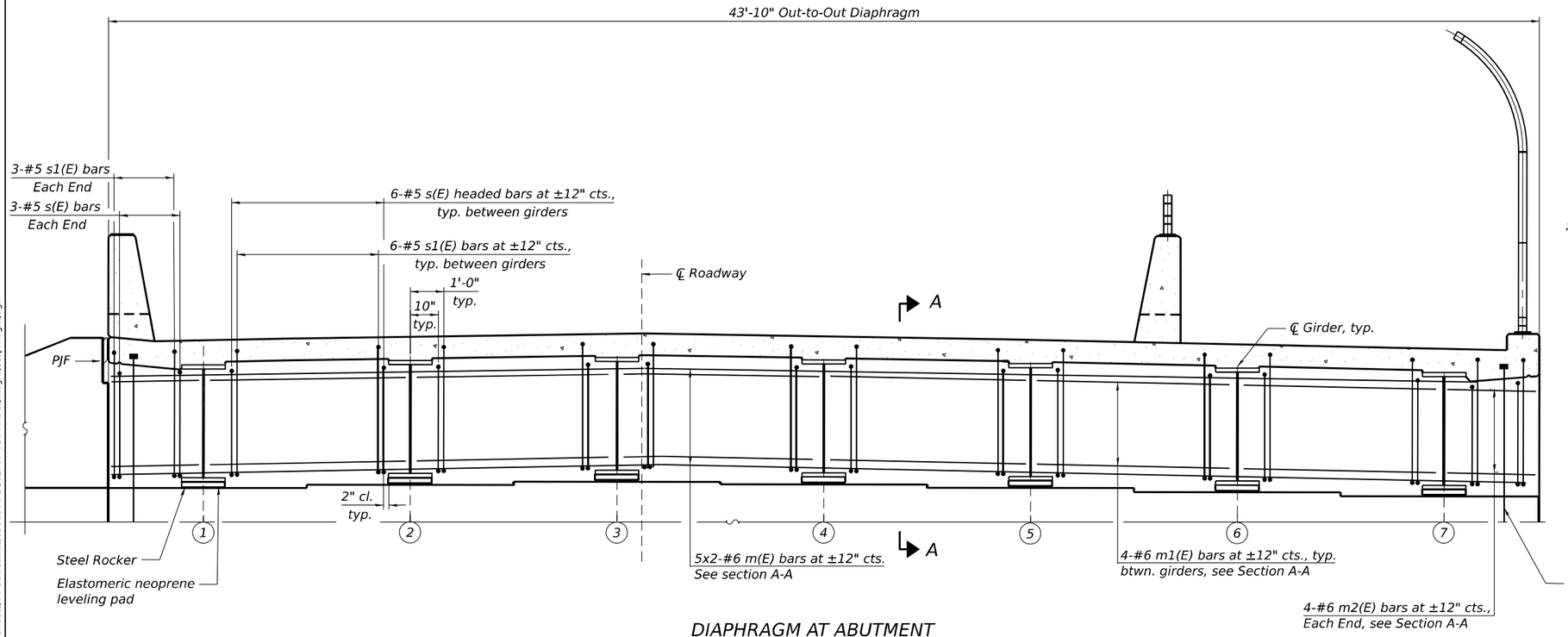
PLOT DATE =	CHECKED - MI, JJS, SK	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

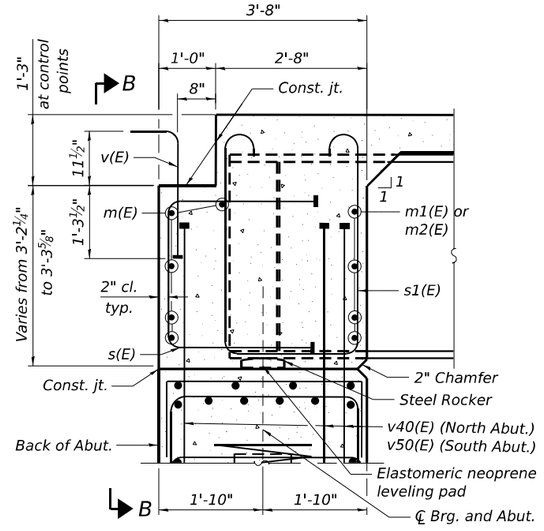
PARAPET ELEVATIONS
STRUCTURE NO. 099-8304
SHEET S1-16 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	40
		CONTRACT NO. 62P67		
		ILLINOIS	FED. AID PROJECT	

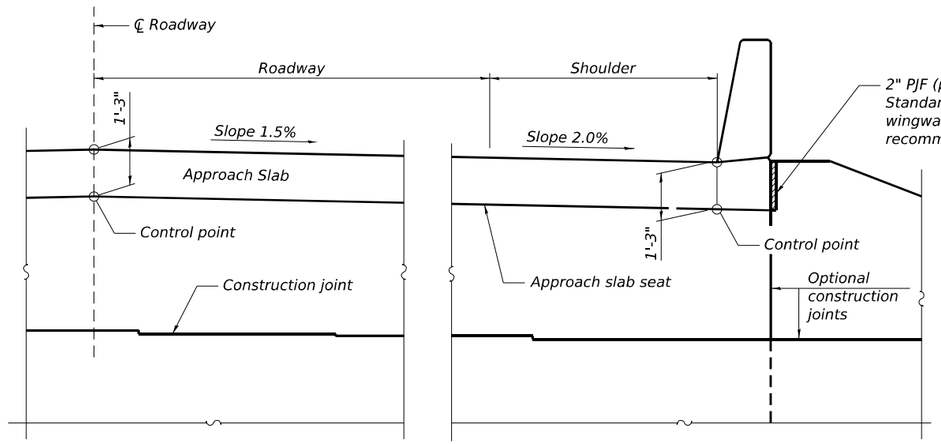


DIAPHRAGM AT ABUTMENT

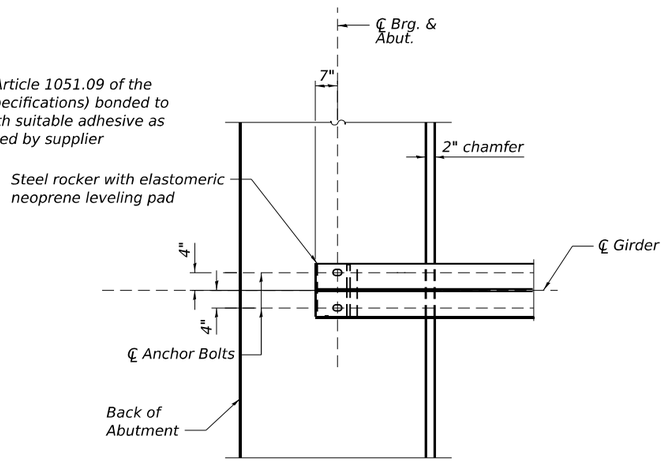
(North Abutment shown, South Abutment opposite hand)



SECTION A-A



VIEW B-B



PLAN AT ABUTMENT

(Showing bottom flange of girder)

NOTES:

1. For Superstructure details, bar diagrams and Bill of Materials, see Sheet S1-18.
2. For bearing details, see Sheet S1-30.
3. The approach slab seat shall have a constant slope determined from the control points shown.
4. The s(E), s1(E), and v(E) bars are placed parallel to girders and spaced at right angles to girders.
5. For v40(E) bars and details, see Sheets S1-31 and S1-32.
6. For v50(E) bars and details, see Sheets S1-33 and S1-34.

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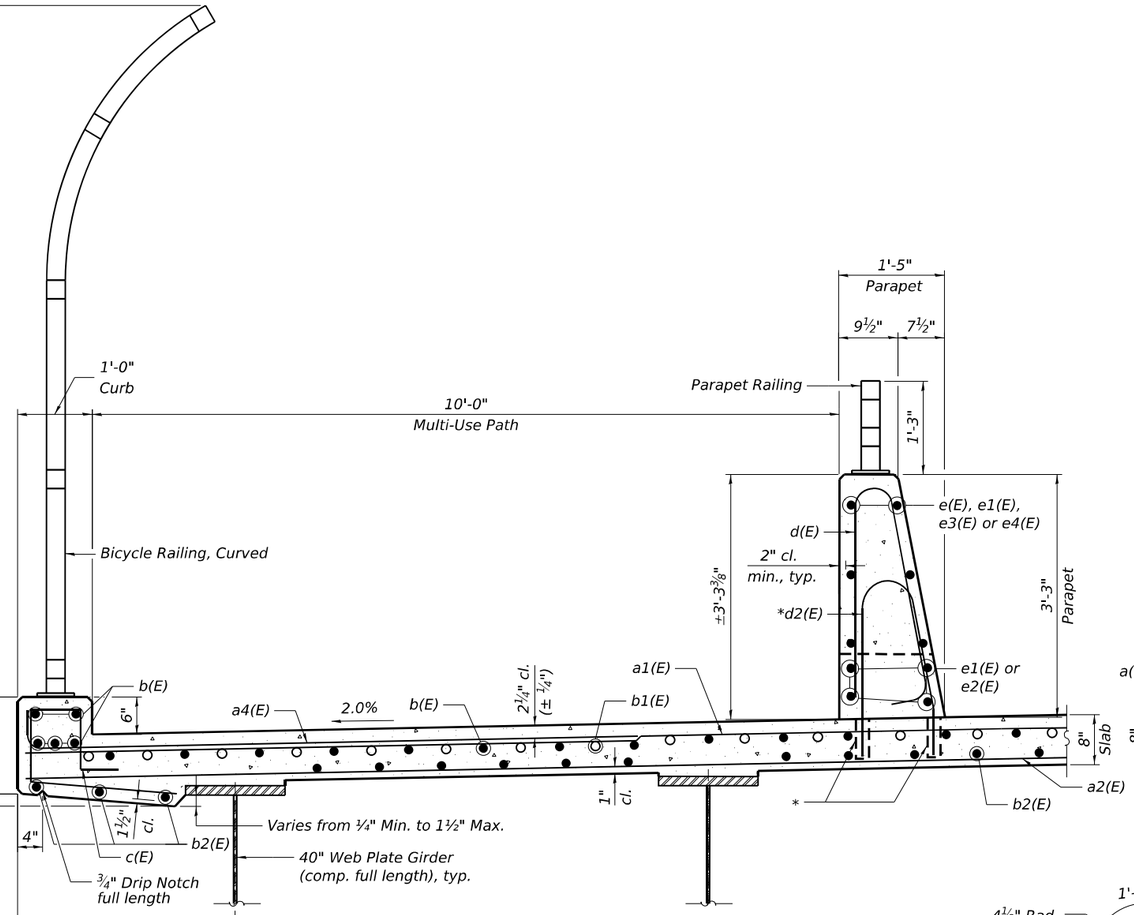
PLOT DATE =	CHECKED - MI, JJS, SK	REVISED -	

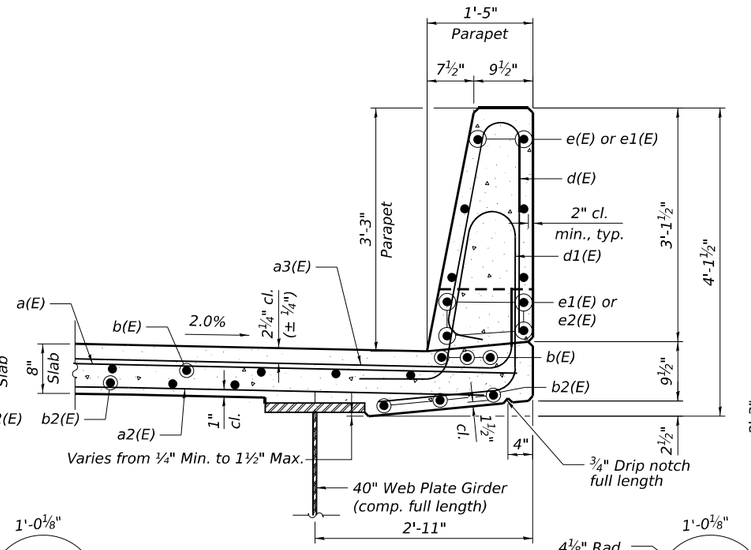
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ABUTMENT DIAPHRAGM ELEVATION AND DETAILS
STRUCTURE NO. 099-8304
SHEET S1-17 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	41
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

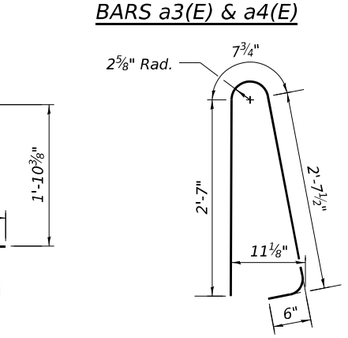


SECTION THRU PARAPET
(Near Pier)

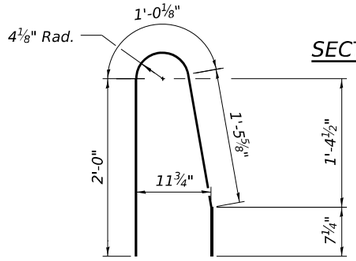


SECTION THRU PARAPET
(Near Midspan)

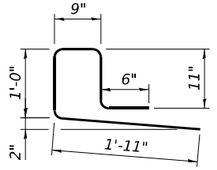
BAR v(E)
(Headed)



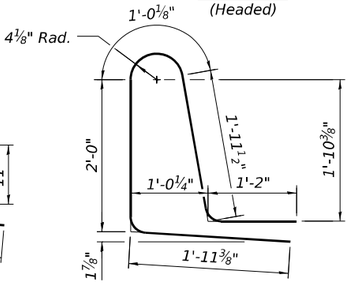
BARS a3(E) & a4(E)



BAR d2(E)



BAR c(E)



BAR d1(E)

BAR d(E)

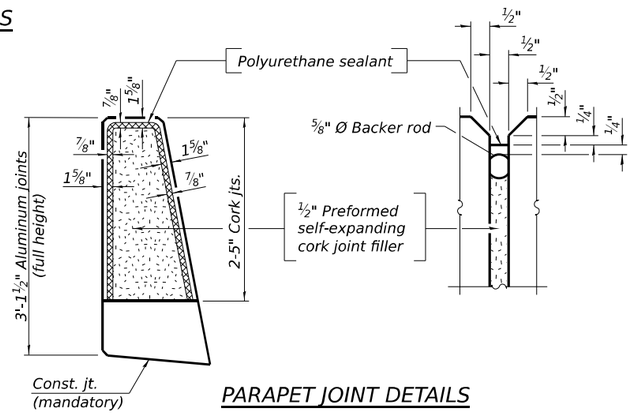
*Drill and set #5 d2(E) bar according to Article 509.06 of the Standard Specifications. Drilled holes shall be roughened or scored per manufacturer's recommendations. Maximum depth of the hole shall not exceed 6". Contractor shall take all necessary precautions to prevent drilled hole interference with deck reinforcement bars. Locate longitudinal bars to miss drilled locations. Locate drilled holes to miss transverse bars in deck.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	453	#5	26'-8"	
a1(E)	453	#5	20'-4"	
a2(E)	596	#5	23'-6"	
a3(E)	445	#6	8'-4"	
a4(E)	445	#6	7'-10"	
b(E)	392	#5	32'-0"	
b1(E)	129	#6	26'-0"	
b2(E)	378	#5	28'-10"	
c(E)	233	#5	5'-1"	
d(E)	696	#5	6'-5"	
d1(E)	348	#5	8'-1"	
d2(E)	348	#5	5'-1"	
e(E)	144	#4	16'-1"	
e1(E)	40	#4	17'-0"	
e2(E)	64	#4	26'-5"	
e3(E)	12	#4	17'-4"	
e4(E)	12	#4	14'-10"	
m(E)	20	#6	23'-7"	
m1(E)	48	#6	6'-0"	
m2(E)	16	#6	2'-7"	
s(E)	84	#5	7'-10"	
s1(E)	84	#5	11'-8"	
v(E)	88	#5	3'-1"	
Concrete Superstructure		Cu Yd	380.9	
Bridge Deck Grooving		Sq Yd	773	
Protective Coat		Sq Yd	1,462	
Reinforcement Bars, Epoxy Coated		Pound	94,370	

MINIMUM BAR LAPS

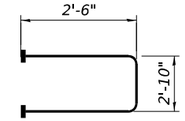
#4 bar = 2'-5"
#5 bar = 3'-6"
#6 bar = 3'-7"



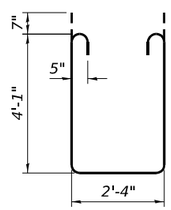
PARAPET JOINT DETAILS

NOTES:

1. The ⅛" aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.
2. The polyurethane sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.
3. Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.
4. Protective coat shall be applied to the top and inside faces of curb (and west parapet, all faces of east parapet) and top of deck.



BAR s(E)
(Headed)



BAR s1(E)

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1/26/2023 8:02:19 AM

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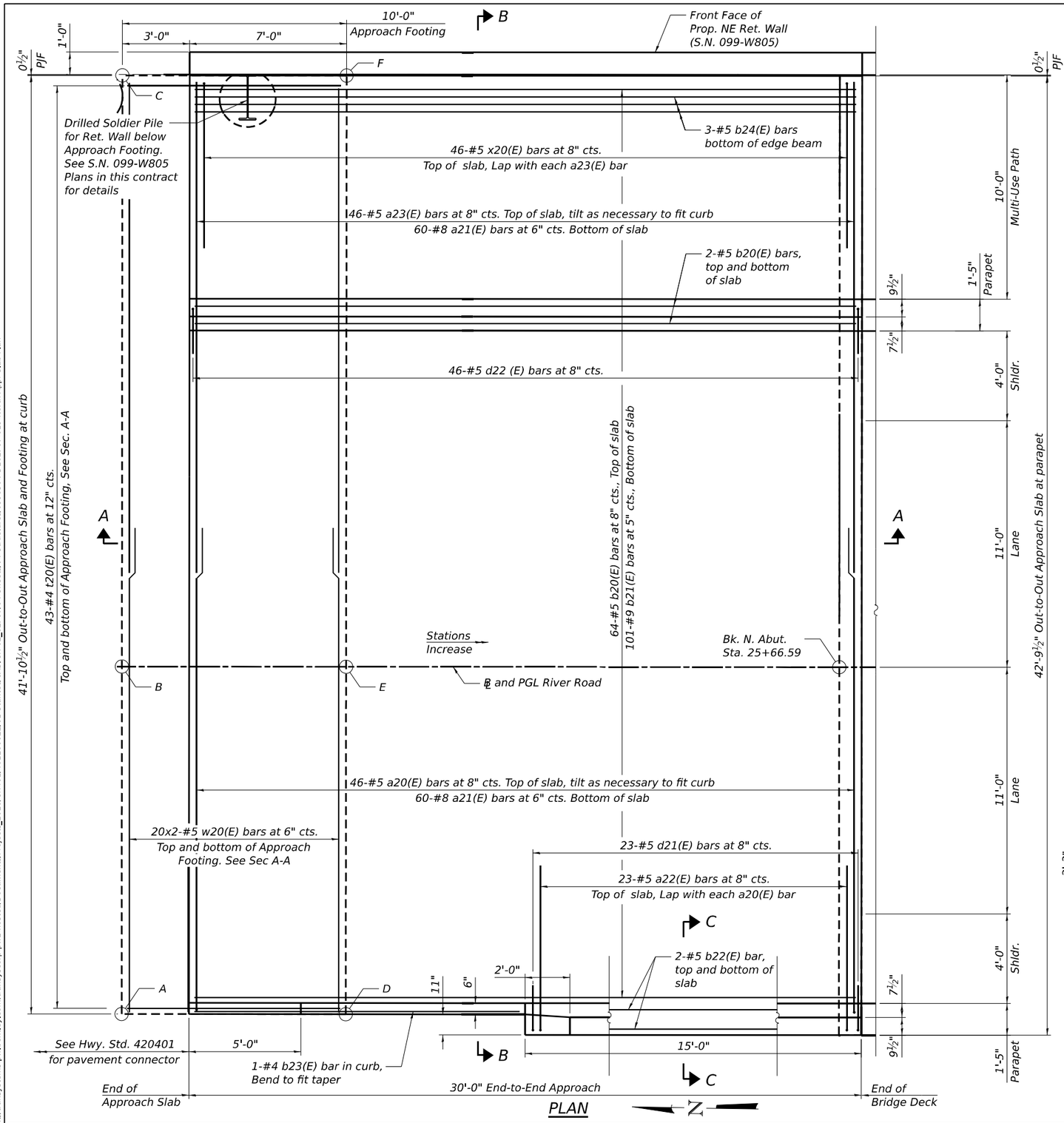
PLOT DATE =	CHECKED - MI, JJS, SK	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK DETAILS, BAR DIAGRAMS AND BILL OF MATERIAL
STRUCTURE NO. 099-8304
SHEET S1-18 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	42
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		



PLAN

NOTE:

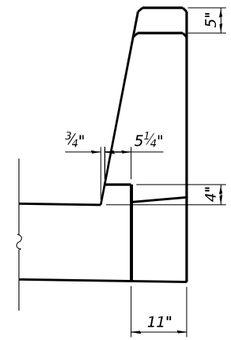
1. For Sections A-A, B-B, C-C, Notes, Bill of Material and Inside Elevation of East Parapet, see Sheet S1-20.

TOP AND BOTTOM ELEVATIONS FOR NORTH APPROACH FOOTING

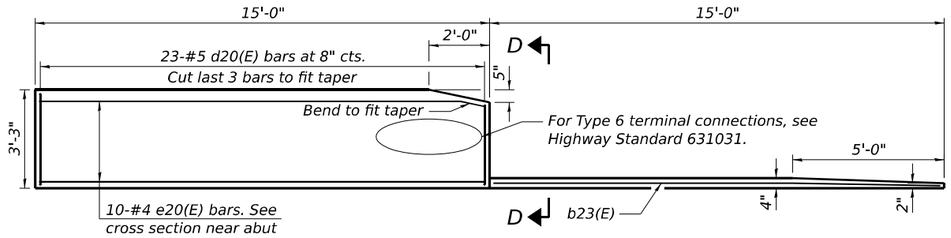
Point/Location	Top	Bottom
A - NW	593.06	592.22
B - N CL	593.31	592.48
C - NE	592.84	592.01
D - SW	593.28	592.45
E - S CL	593.54	592.71
F - SE	593.07	592.24

MINIMUM BAR LAP

#5 = 3'-6"
#8 = 4'-9"



VIEW D-D



INSIDE ELEVATION OF WEST PARAPET AND CURB

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1/26/2023 8:02:22 AM

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PLOT DATE =	CHECKED - MI, JJS, SK	REVISED -	

STATE OF ILLINOIS
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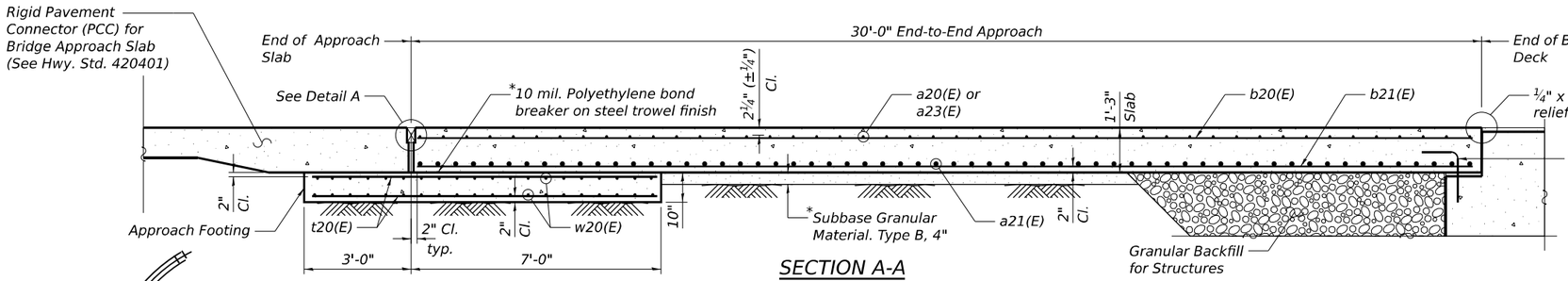
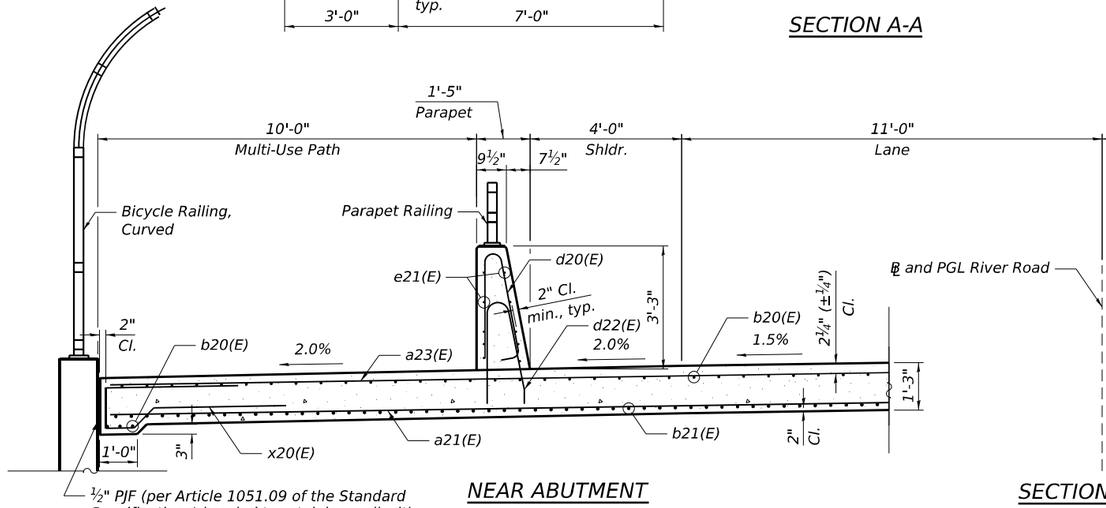
NORTH APPROACH SLAB PLAN
STRUCTURE NO. 099-8304
SHEET S1-19 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	43
		CONTRACT NO. 62P67		
		ILLINOIS	FED. AID PROJECT	



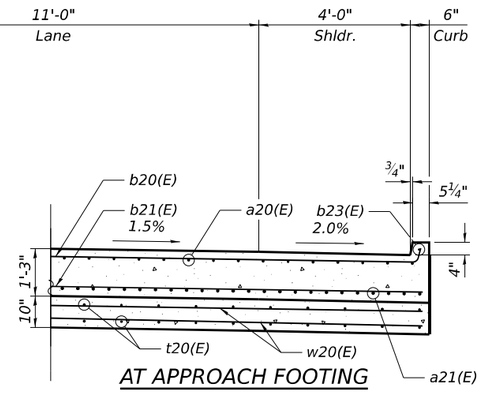
SECTION A-A



NEAR ABUTMENT

SECTION B-B

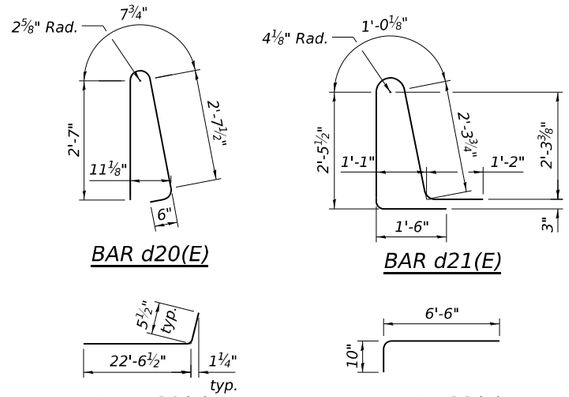
(Looking Upstation)



AT APPROACH FOOTING

NORTH APPROACH BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a20(E)	46	#5	23'-0"	
a21(E)	120	#8	23'-7"	
a22(E)	23	#5	7'-4"	
a23(E)	46	#5	22'-8"	
b20(E)	71	#5	29'-8"	
b21(E)	101	#9	29'-8"	
b22(E)	4	#5	14'-8"	
b23(E)	1	#4	14'-8"	
d20(E)	69	#5	6'-5"	
d21(E)	23	#5	8'-6"	
d22(E)	46	#5	6'-2"	
e20(E)	10	#4	14'-8"	
e21(E)	10	#4	29'-8"	
t20(E)	86	#4	9'-8"	
w20(E)	80	#5	22'-8"	
x20(E)	46	#5	9'-7"	
Concrete Structures			Cu Yd	13.0
Concrete Superstructure			Cu Yd	6.0
Bridge Deck Grooving			Sq Yd	100
Protective Coat			Sq Yd	157
Concrete Superstructure (Approach Slab)			Cu Yd	58.5
Reinforcement Bars, Epoxy Coated			Pound	26,550

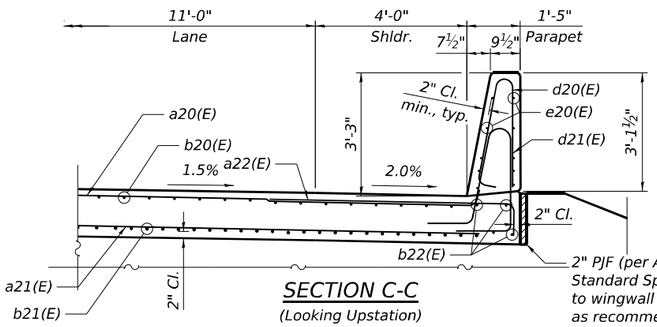


BAR d20(E)

BAR d21(E)

BAR a20(E)

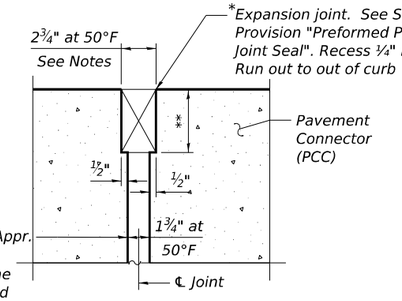
BAR a22(E)



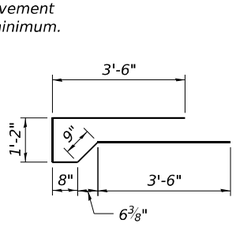
SECTION C-C

(Looking Upstation)

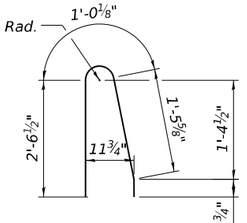
2" PJF (per Article 1051.09 of the Standard Specifications) bonded to wingwall with suitable adhesive as recommended by supplier



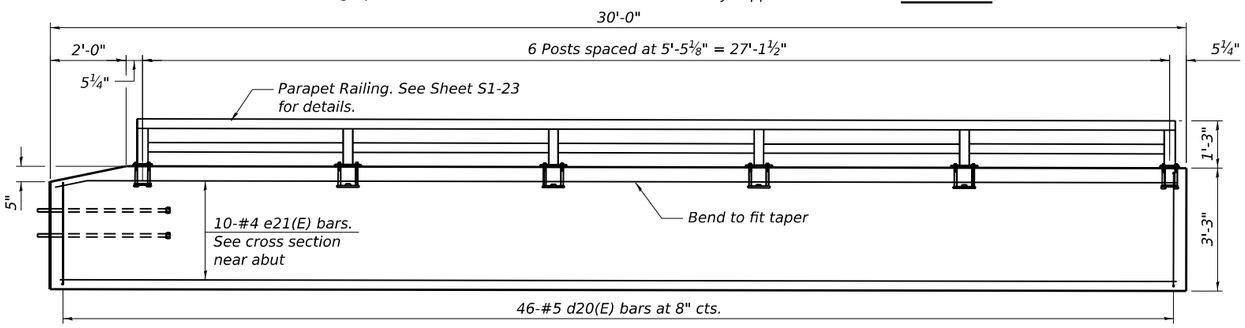
DETAIL A



BAR x20(E)



BAR d22(E)



INSIDE ELEVATION OF EAST PARAPET

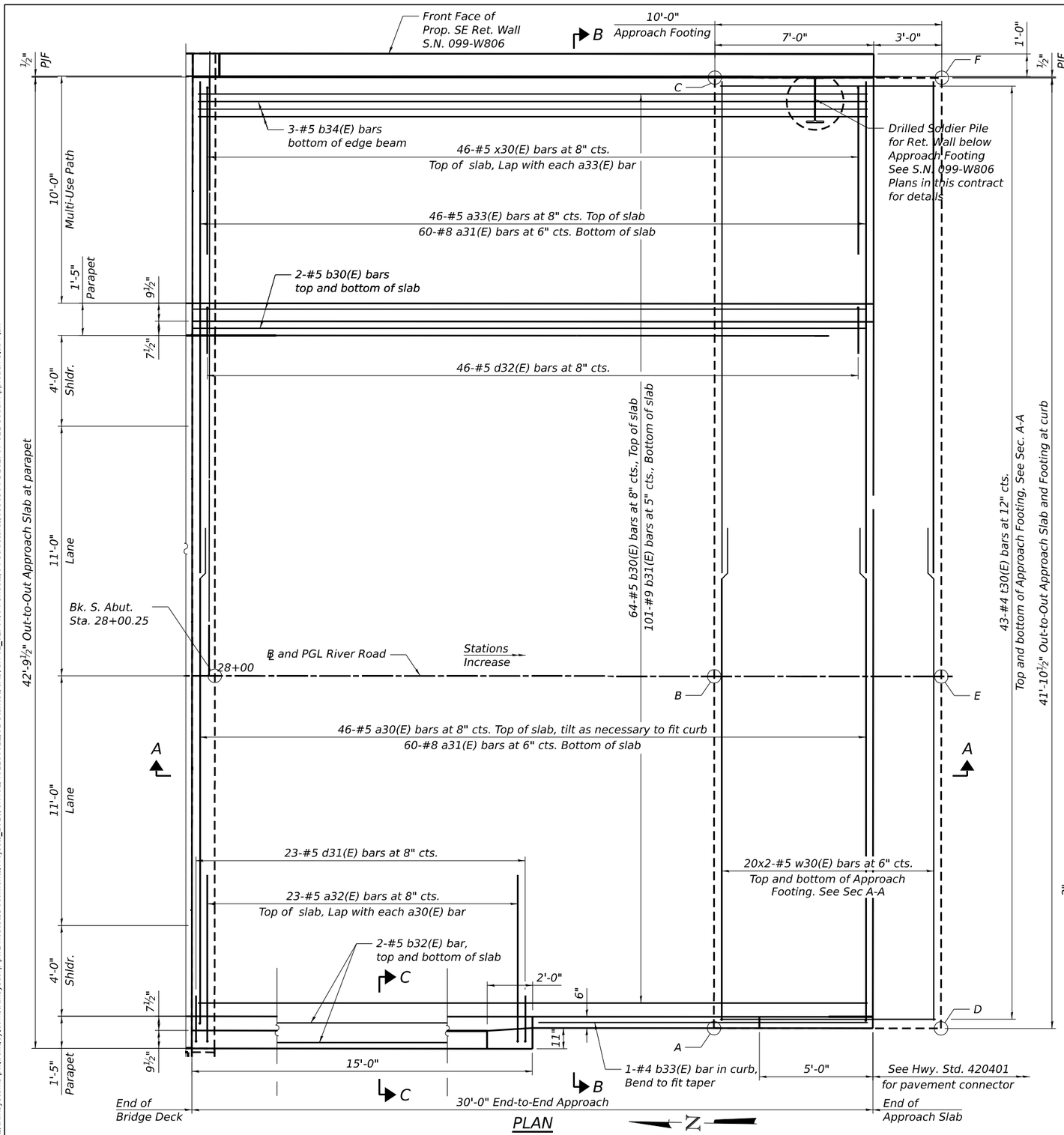
* Cost included with Concrete Superstructure (Approach Slab).

** Per manufacturer recommendations

*** Drill and set #5 d32(E) bar according to Article 509.06 of the Standard Specifications. Drilled holes shall be roughened or scored per manufacturer's recommendations. Maximum depth of the hole shall not exceed 1'-1". Contractor shall take all necessary precautions to prevent drilled hole interference with approach slab reinforcement bars. Locate longitudinal bars to miss drilled locations. Locate drilled holes to miss transverse bars in approach slab.

NOTES:

1. The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications. However, since this detail is for jointless structures, the length of bridge used to calculate the adjustment shall be equal to half the total bridge length plus the length of the bridge approach slab.
2. Parapet concrete shall be paid for as Concrete Superstructure.
3. Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
4. Approach footing concrete shall be paid for as Concrete Structures.
5. The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
6. Cost of excavation for approach footing included with Concrete Structures.
7. For Granular Backfill for Structures and drainage treatment details, see sheet S1-03.



PLAN

NOTE:

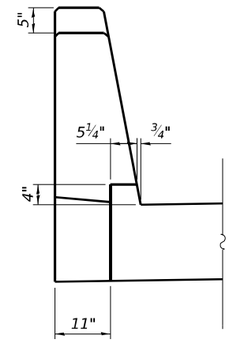
1. For Sections A-A, B-B, C-C, Notes, Bill of Material and Inside Elevation of East Parapet, see Sheet S1-22.

TOP AND BOTTOM ELEVATIONS FOR SOUTH APPROACH FOOTING

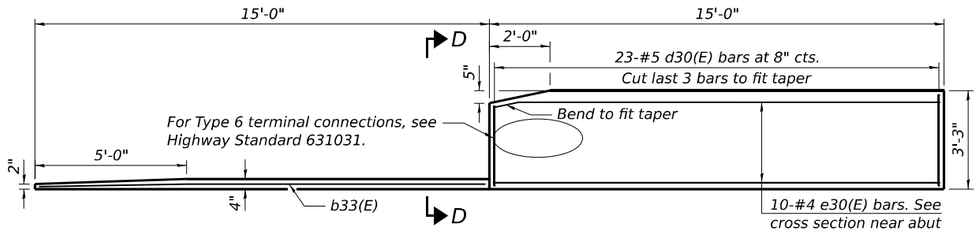
Point/Location	Top	Bottom
A - NW	593.49	592.66
B - N CL	593.75	592.91
C - NE	593.28	592.44
D - SW	593.28	592.44
E - S CL	593.53	592.70
F - SE	593.06	592.23

MINIMUM BAR LAP

#5 = 3'-6"
#8 = 4'-9"



VIEW D-D



INSIDE ELEVATION OF WEST PARAPET AND CURB

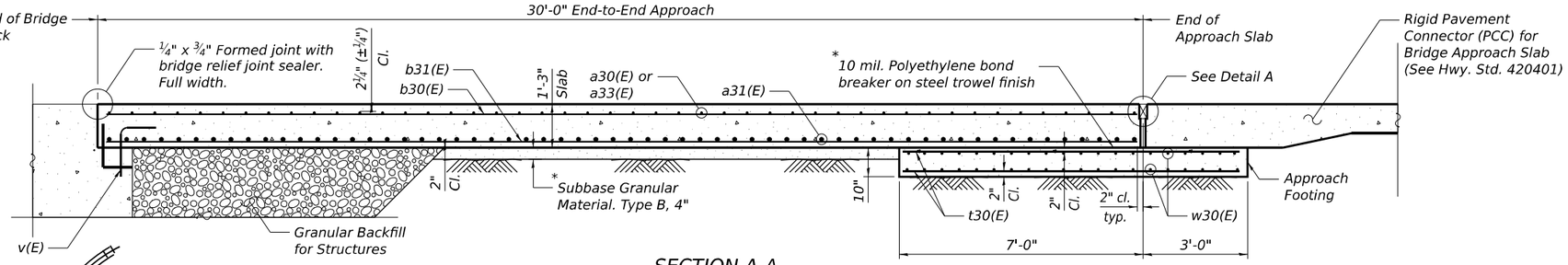
HBM ENGINEERING GROUP, LLC

USER NAME =	DESIGNED - EBK	REVISED -	
	CHECKED - MI, JJS, SK	REVISED -	
PLOT SCALE =	DRAWN - EBK	REVISED -	
PLOT DATE =	CHECKED - MI, JJS, SK	REVISED -	

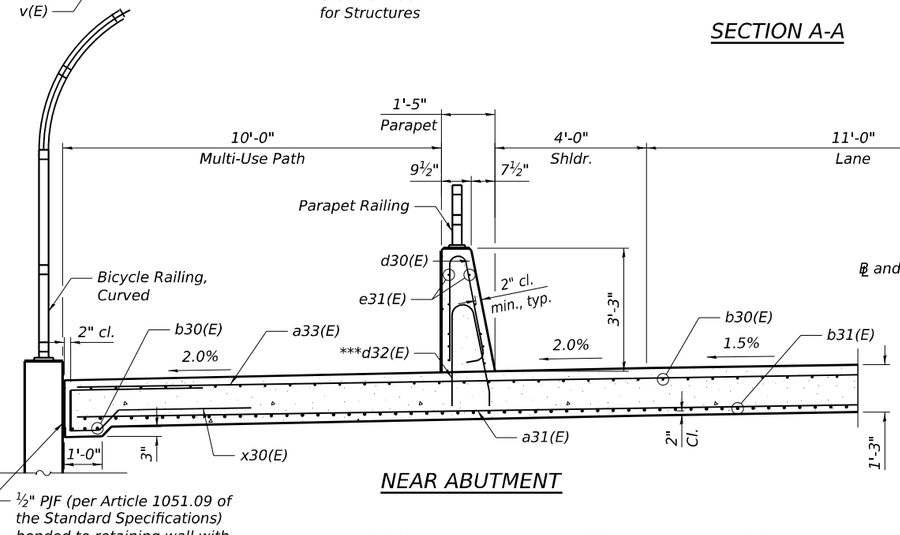
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH APPROACH SLAB PLAN
STRUCTURE NO. 099-8304
SHEET S1-21 OF S1-41 SHEETS

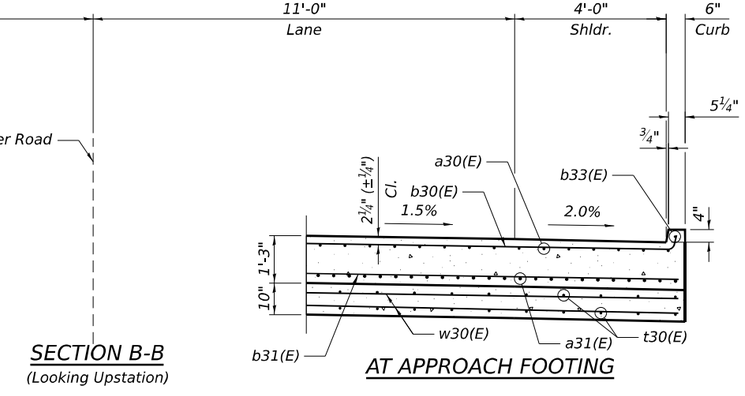
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	45
		CONTRACT NO. 62P67		
		ILLINOIS	FED. AID PROJECT	



SECTION A-A



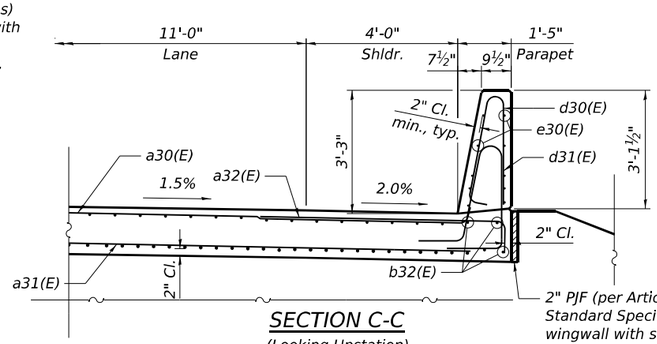
NEAR ABUTMENT



SECTION B-B

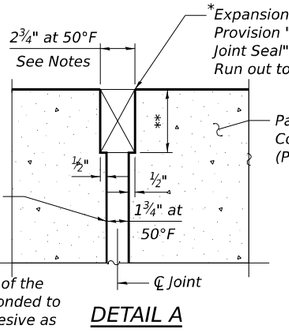
(Looking Upstation)

AT APPROACH FOOTING

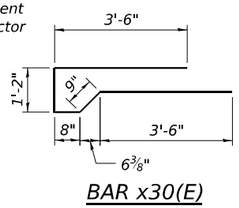


SECTION C-C

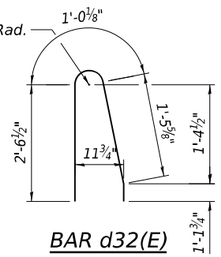
(Looking Upstation)



DETAIL A



BAR x30(E)



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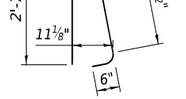

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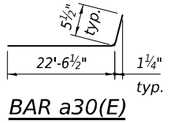

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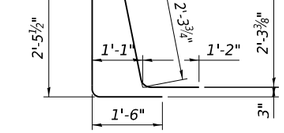
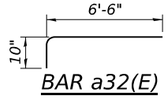
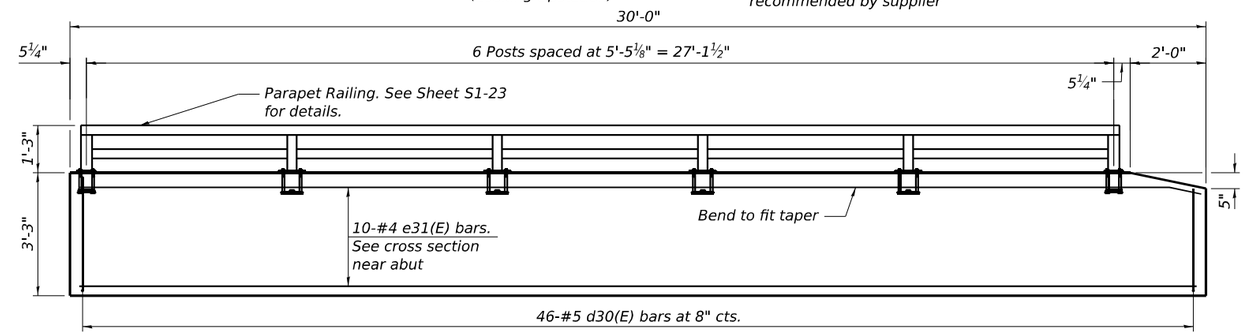


BAR d31(E)



BAR a32(E)



INSIDE ELEVATION OF EAST PARAPET

SOUTH APPROACH BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a30(E)	46	#5	23'-0"	
a31(E)	120	#8	23'-7"	
a32(E)	23	#5	7'-4"	
a33(E)	46	#5	22'-8"	
b30(E)	71	#5	29'-8"	
b31(E)	101	#9	29'-8"	
b32(E)	4	#5	14'-8"	
b33(E)	1	#4	14'-8"	
d30(E)	69	#5	6'-5"	
d31(E)	23	#5	8'-6"	
d32(E)	46	#5	6'-2"	
e30(E)	10	#4	14'-8"	
e31(E)	10	#4	29'-8"	
t30(E)	86	#4	9'-8"	
w30(E)	80	#5	22'-8"	
x30(E)	46	#5	9'-7"	
Concrete Structures		Cu Yd	13.0	
Concrete Superstructure		Cu Yd	6.0	
Bridge Deck Grooving		Sq Yd	100	
Protective Coat		Sq Yd	157	
Concrete Superstructure (Approach Slab)		Cu Yd	58.5	
Reinforcement Bars, Epoxy Coated		Pound	26,550	

* Cost included with Concrete Superstructure (Approach Slab).

** Per manufacturer recommendations

*** Drill and set #5 d32(E) bar according to Article 509.06 of the Standard Specifications. Drilled holes shall be roughened or scored per manufacturer's recommendations. Maximum depth of the hole shall not exceed 1'-1". Contractor shall take all necessary precautions to prevent drilled hole interference with approach slab reinforcement bars. Locate longitudinal bars to miss drilled locations. Locate drilled holes to miss transverse bars in approach slab.

NOTES:

1. The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications. However, since this detail is for jointless structures, the length of bridge used to calculate the adjustment shall be equal to half the total bridge length plus the length of the bridge approach slab.
2. Parapet concrete shall be paid for as Concrete Superstructure.
3. Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
4. Approach footing concrete shall be paid for as Concrete Structures.
5. The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
6. Cost of excavation for approach footing included with Concrete Structures.
7. For Granular Backfill for Structures and drainage treatment details, see sheet S1-03.

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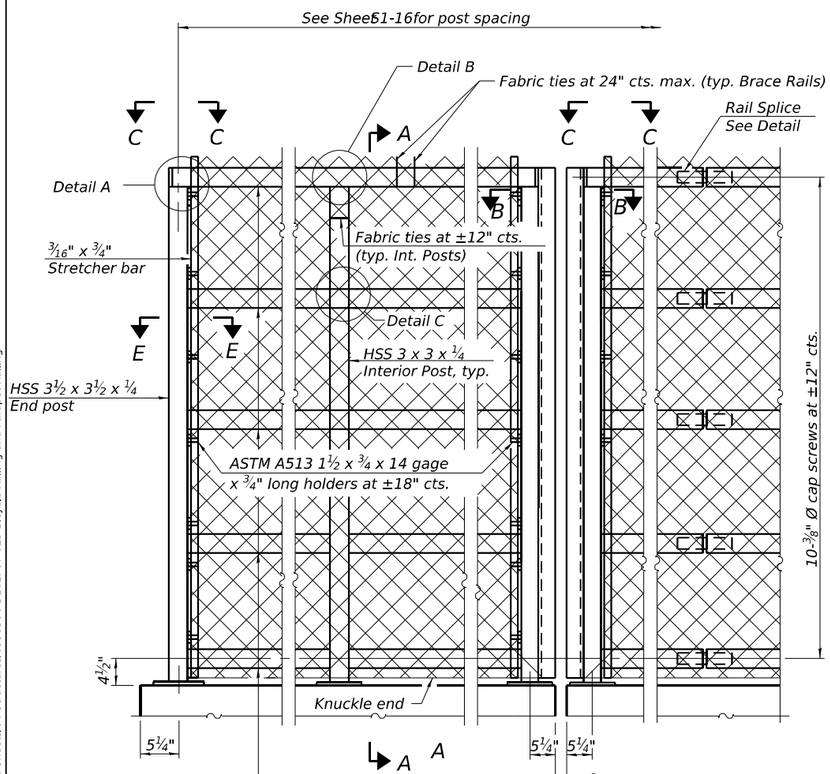
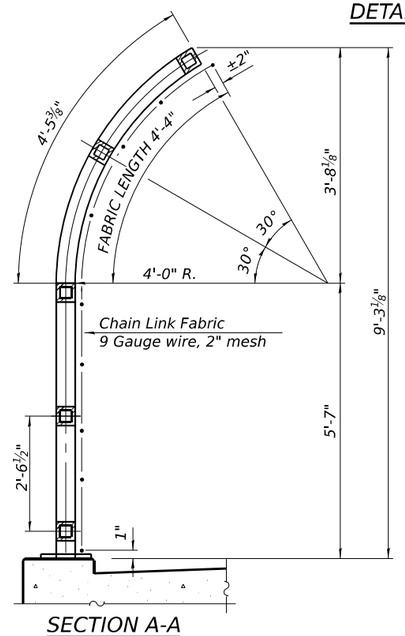
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH APPROACH SLAB SECTIONS AND DETAILS
STRUCTURE NO. 099-8304
SHEET S1-22 OF S1-41 SHEETS

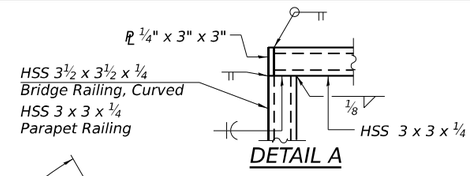
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	46
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		



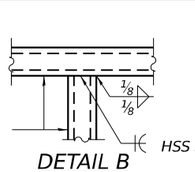
ELEVATION



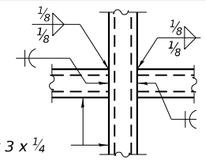
SECTION A-A



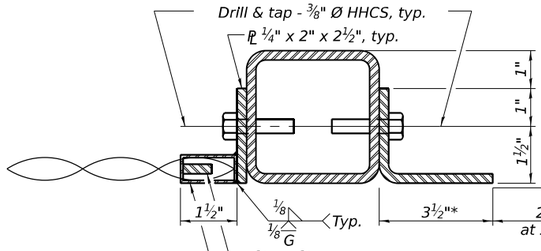
DETAIL A



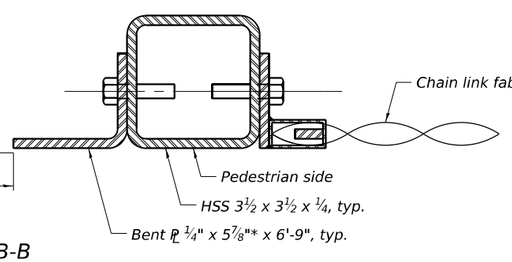
DETAIL B



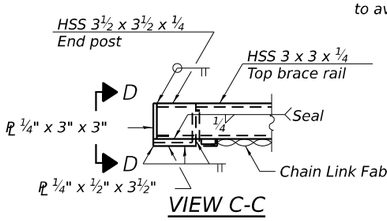
DETAIL C



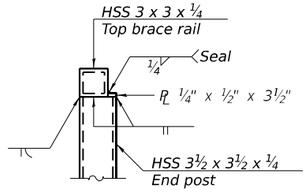
SECTION B-B



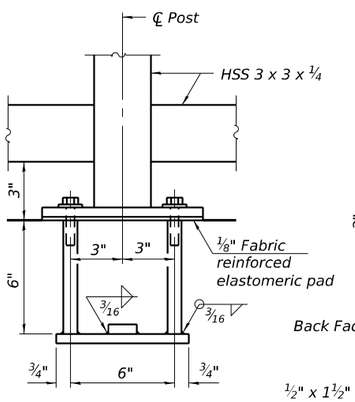
* Assume 3/8" radius. Dimensions may need to be modified for larger joints to avoid gaps greater than 6".

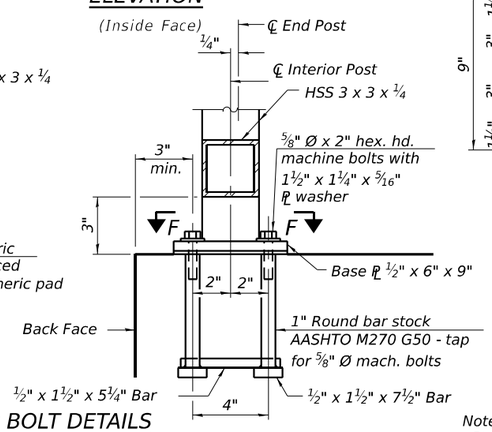


VIEW C-C



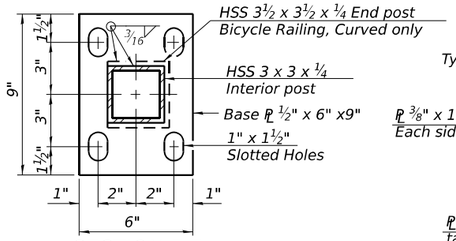
VIEW D-D



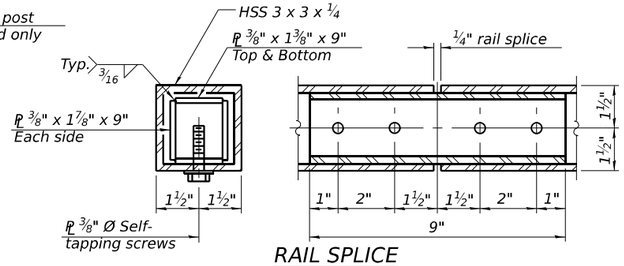


ANCHOR BOLT DETAILS

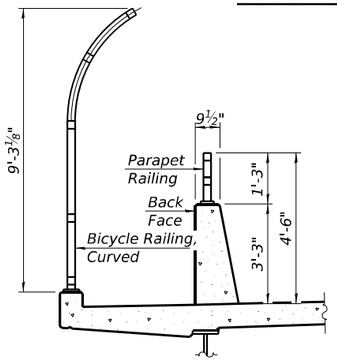
In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" Ø anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.



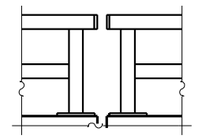
SECTION F-F



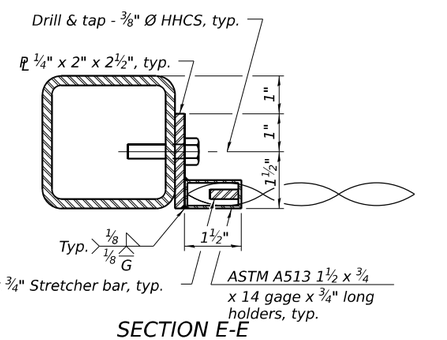
RAIL SPLICE



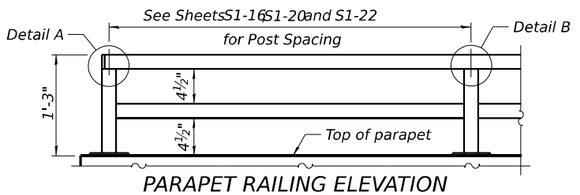
SECTION THRU DECK



PARAPET RAILING ELEVATION AT EXPANSION JOINT



SECTION E-E



PARAPET RAILING ELEVATION

(Inside face of rail)

RAILING CRITERIA

NCHRP 350 Test Level	4
Railing Weight (plf)	25
Bicycle Railing Weight (plf)	50
Max Post Spacing	10'-0''

Notes:

Place reinforcement bars to miss anchor rod locations.

All HSS tubing used for the Parapet Railing shall be CVN tested according to Article 1006.34(b) of the Standard Specifications.

CVN testing is not required for the HSS tubing used in the Bicycle Railing Curved.

All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifcations.

This work will be paid for at the unit cost per foot of Bicycle Railing, Curved.

BILL OF MATERIAL

Item	Unit	Quantity
Bicycle Railing, Curved	Foot	232
Parapet Railing	Foot	292

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STATE OF ILLINOIS
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BICYCLE RAILING, CURVED & PARAPET RAILING
STRUCTURE NO. 099-8304
SHEET S1-23 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	47
		CONTRACT NO. 62P67		
		ILLINOIS	FED. AID PROJECT	

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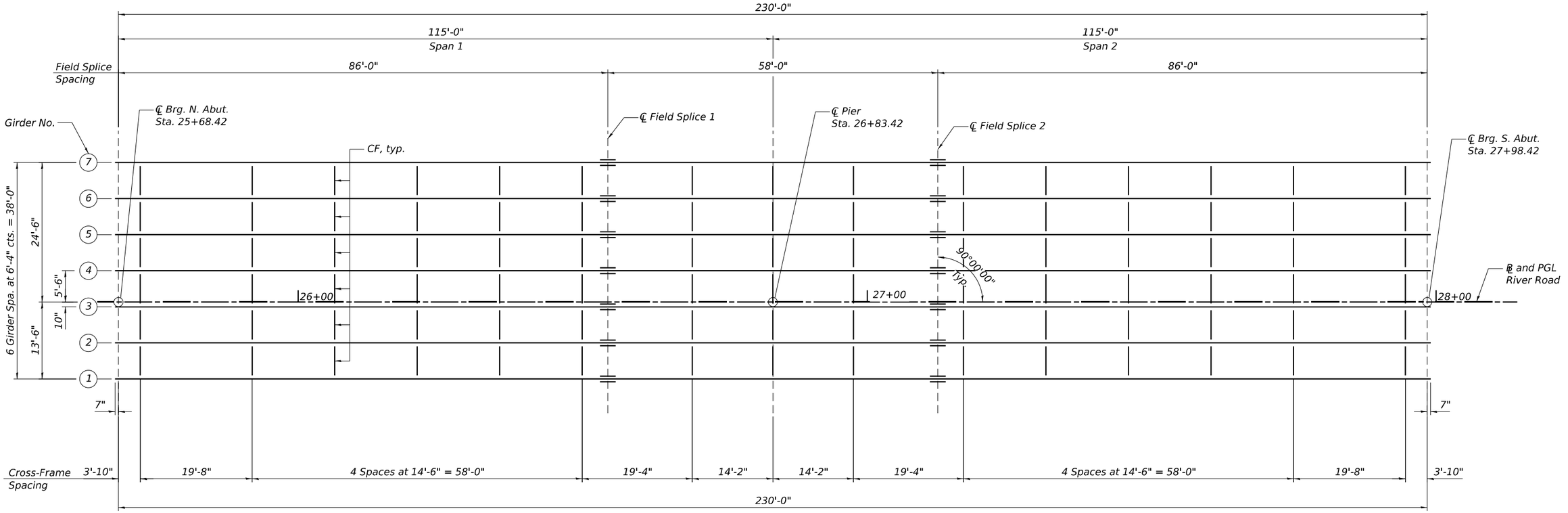

FRAMING PLAN

NOTES:

1. For Girder Elevation, see Sheet S1-26.
2. For Camber Diagram, see Sheet S1-27.
3. For moment and reaction tables, see Sheet S1-25.
4. For girder bolted field splice details, see Sheet S1-28.
5. For cross frames, see Sheet S1-29.
6. All structural steel for the girders, bearing stiffeners and splice plates shall be AASHTO M270 Grade 50.
   All structural steel for cross frames, connection plates and fill plates may be AASHTO M270 Grade 36.
7. For Top of Web Elevation table, see Sheet S1-27.

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DEPARTMENT OF TRANSPORTATION

FRAMING PLAN
STRUCTURE NO. 099-8304
SHEET S1-24 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	48
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

INTERIOR GIRDER 6 MOMENT TABLE			
		0.4 Sp. 1 or 0.6 Sp. 2	Pier
I_S	(in^4)	24,529	35,455
$I_C(n)$	(in^4)	50,888	-
$I_C(3n)$	(in^4)	37,977	-
$I_C(cr)$	(in^4)	-	39,862
S_S	(in^3)	1,206	1,700
$S_C(n)$	(in^3)	1,488	-
$S_C(3n)$	(in^3)	1,384	-
$S_C(cr)$	(in^3)	-	1,765
DC1	(k/ft)	0.959	1.047
M_{DC1}	('k)	826	-1,775
DC2	(k/ft)	0.275	0.275
M_{DC2}	('k)	239	-493
DW	(k/ft)	0.317	0.317
M_{DW}	('k)	275	-568
LLDF		0.515	0.530
M_{LL+IM}	('k)	1,384	-1,600
f_f (Strength I)	(ksi)	-	-
$M_u + \frac{1}{3} f_f S_{xc}$	('k)	4,166	-6,487
$\varnothing_f M_n$	('k)	6,937	7,803
f_S DC1	(ksi)	8.22	-12.53
f_S DC2	(ksi)	2.07	-3.35
f_S DW	(ksi)	2.38	-3.86
f_S (LL+IM)	(ksi)	11.16	-10.88
f_f (Service II)	(ksi)	-	-
$f_S + f_f/2$ (Service II)	(ksi)	27.19	-33.88
$0.95R_hF_{yf}$	(ksi)	47.5	47.5
$f_S + f_f/3$ (Total)(Strength I)	(ksi)	-	-
$\varnothing_f F_n$	(ksi)	-	-
V_f	(k)	28.69	29.25

EXTERIOR GIRDER 7 MOMENT TABLE			
		0.4 Sp. 1 or 0.6 Sp. 2	Pier
I_S	(in^4)	24,529	35,455
$I_C(n)$	(in^4)	50,376	-
$I_C(3n)$	(in^4)	37,584	-
$I_C(cr)$	(in^4)	-	39,862
S_S	(in^3)	1,206	1,700
$S_C(n)$	(in^3)	1,485	-
$S_C(3n)$	(in^3)	1,380	-
$S_C(cr)$	(in^3)	-	1,765
DC1	(k/ft)	1.085	1.173
M_{DC1}	('k)	944	-2,024
DC2	(k/ft)	0.200	0.200
M_{DC2}	('k)	201	-411
DW	(k/ft)	0.304	0.304
M_{DW}	('k)	265	-545
LLDF		0.621	0.621
M_{LL+IM}	('k)	1,670	-1,877
f_f (Strength I)	(ksi)	-	-
$M_u + \frac{1}{3} f_f S_{xc}$	('k)	4,751	-7,146
$\varnothing_f M_n$	('k)	6,904	7,804
f_S DC1	(ksi)	9.39	-14.29
f_S DC2	(ksi)	1.75	-2.79
f_S DW	(ksi)	2.30	-3.71
f_S (LL+IM)	(ksi)	13.49	-12.76
f_f (Service II)	(ksi)	-	-
$f_S + f_f/2$ (Service II)	(ksi)	30.99	-37.38
$0.95R_hF_{yf}$	(ksi)	47.5	47.5
$f_S + f_f/3$ (Total)(Strength I)	(ksi)	-	-
$\varnothing_f F_n$	(ksi)	-	-
V_f	(k)	28.81	29.37

GIRDER 6 REACTION TABLE					
		Abut.		Pier	
		Interior	Exterior	Interior	Exterior
LLDF		0.695	-	0.695	-
OCF		-	-	-	-
R_{DC1}	(k)	40.87	-	145.55	-
R_{DC2}	(k)	11.53	-	40.20	-
R_{DW}	(k)	13.27	-	46.29	-
R_{LL}	(k)	67.06	-	134.38	-
R_{Im}	(k)	14.82	-	25.09	-
R_{Total}	(k)	147.55	-	391.51	-

GIRDER 7 REACTION TABLE					
		Abut.		Pier	
		Interior	Exterior	Interior	Exterior
LLDF		-	0.621	-	0.621
OCF		-	-	-	-
R_{DC1}	(k)	-	46.56	-	165.63
R_{DC2}	(k)	-	9.40	-	32.59
R_{DW}	(k)	-	12.75	-	44.47
R_{LL}	(k)	-	59.94	-	120.11
R_{Im}	(k)	-	13.25	-	22.43
R_{Total}	(k)	-	141.90	-	385.23

I_S, S_S: Non-composite moment of inertia and section modulus of the steel section used for computing f_S (Total-Strength I, and Service II) due to non-composite dead loads (in^4 and in^3).

$I_C(n)$, $S_C(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_S (Total-Strength I, and Service II) in uncracked sections due to short-term composite live loads (in^4 and in^3).

$I_C(3n)$, $S_C(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_S (Total-Strength I, and Service II) in uncracked sections, due to long-term composite (superimposed) dead loads (in^4 and in^3).

$I_C(cr)$, $S_C(cr)$: Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing f_S (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (in^4 and in^3).

DC1: Un-factored non-composite dead load (kips/ft.).

M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).

DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).

M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).

M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

M_{LL+IM}: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

M_u(Strength I): Factored design moment (kip-ft.).
$1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_{LL+IM}$

$\varnothing_f M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft).

f_S DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).
M_{DC1} / S_{NC}

f_S DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).
$M_{DC2} / S_C(3n)$ or $M_{DC2} / S_C(cr)$ as applicable.

f_S DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).
$M_{DW} / S_C(3n)$ or $M_{DW} / S_C(cr)$ as applicable.

f_S (LL+IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live load plus impact loads as calculated below (ksi).
$M_{LL+IM} / S_C(n)$ or $M_{LL+IM} / S_C(cr)$ as applicable.

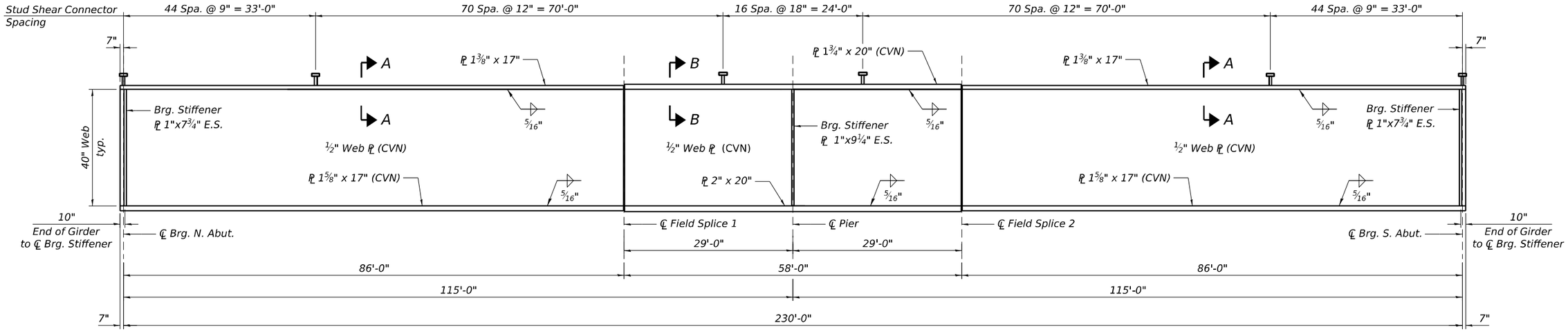
f_S (Service II): Sum of stresses as computed below (ksi).
$f_{SDC1} + f_{SDC2} + f_{SDW} + 1.3 f_S (LL + IM)$

$0.95R_hF_{yf}$: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

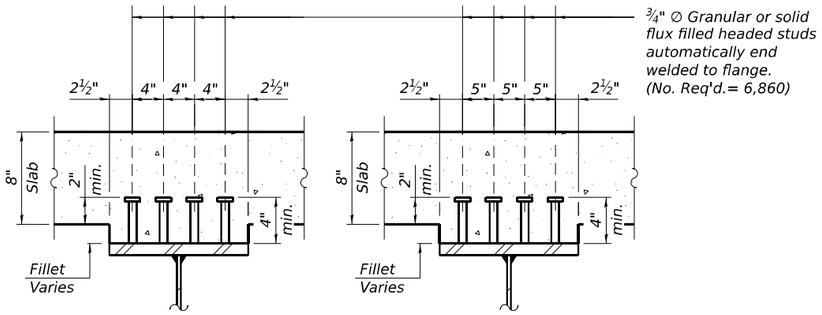
f_S(Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
$1.25 (f_{SDC1} + f_{SDC2}) + 1.5 f_{SDW} + 1.75 f_S (LL + IM)$

$\varnothing_f F_n$: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).

V_f: Maximum factored shear range in span computed according to Article 6.10.10.

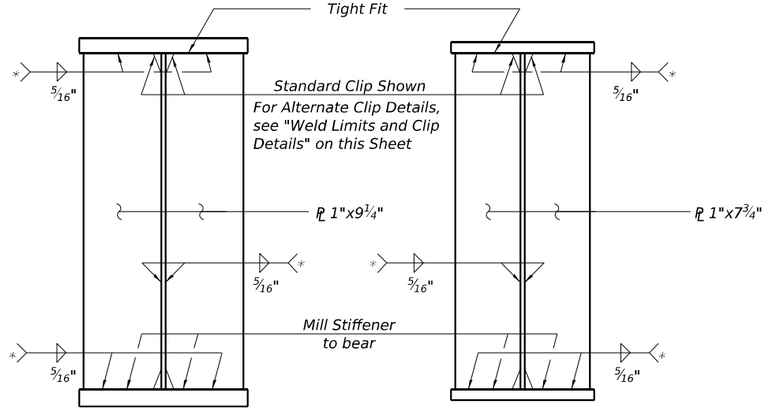


GIRDER ELEVATION



SECTION A-A

SECTION B-B



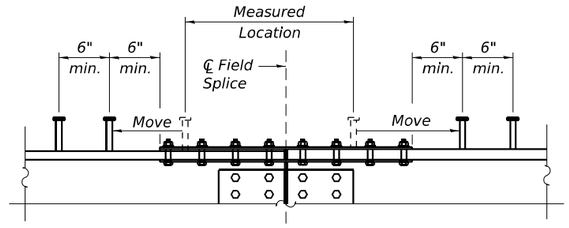
SECTION AT PIER

SECTION AT ABUTMENT

* Terminate ¼" (±⅛") from the end of plate intersects.

WELD LIMITS AND CLIP DETAILS

** Stop welds ¼" (±⅛") from edges as shown. Typical.



SHEAR CONNECTOR DETAIL AT SPLICES

DO NOT place shear connectors on splice plates. Move row of studs to 6" beyond nearest edge of splice plate from measured location.

NOTES:

1. "CVN" denotes Charpy-V-Notch Impact Energy Requirements, Zone 2.

LEGEND:

E.S. Each Side

MODEL: Default
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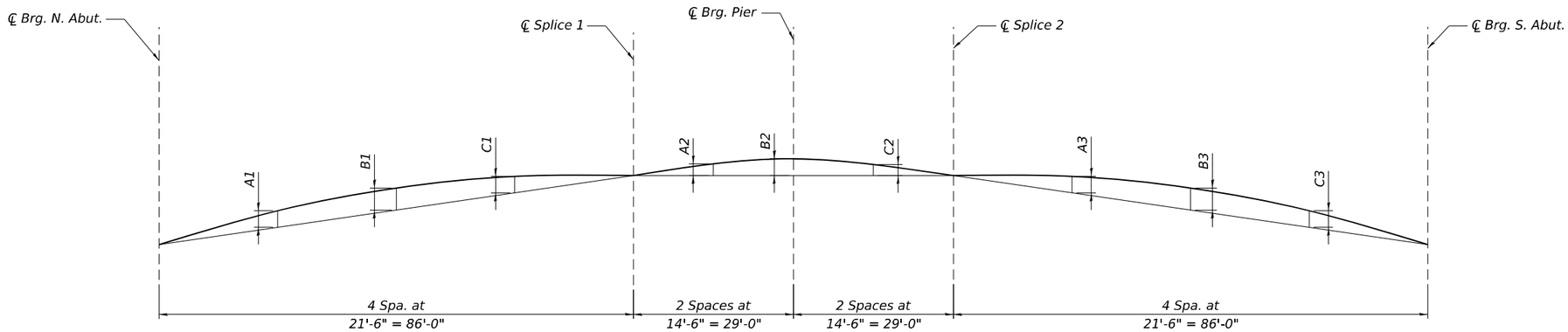
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GIRDER ELEVATION AND DETAILS
STRUCTURE NO. 099-8304
SHEET S1-26 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	50
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		



CAMBER DIAGRAM

CAMBER ORDINATES

Girders	A1	B1	C1	A2	B2	C2	A3	B3	C3
1-7	2 3/4"	4"	3"	3/4"	1"	3/4"	2 3/4"	3 3/4"	2 1/2"

TOP OF WEB ELEVATIONS

(For Fabrication Only)

Girder	CL. BRG. N. ABUT.	CL. SPLICE 1	CL. BRG. PIER	CL. SPLICE 2	CL. BRG. S. ABUT.
1	594.16	595.07	595.25	595.12	594.33
2	594.27	595.18	595.36	595.22	594.44
3	594.36	595.28	595.45	595.32	594.53
4	594.29	595.21	595.38	595.25	594.46
5	594.19	595.11	595.28	595.15	594.37
6	594.07	594.98	595.15	595.02	594.24
7	593.94	594.85	595.03	594.90	594.11

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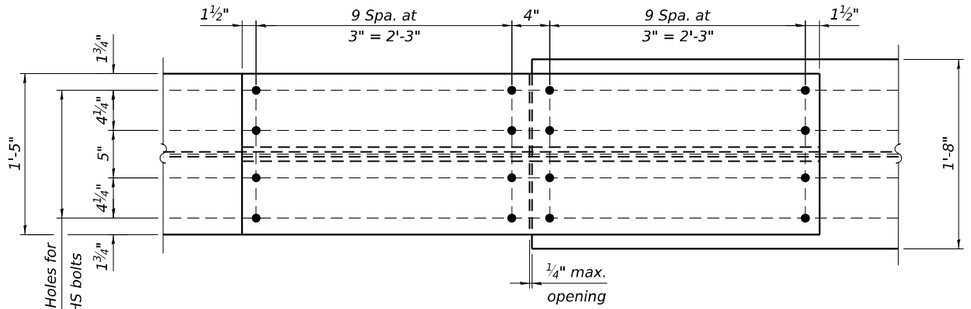
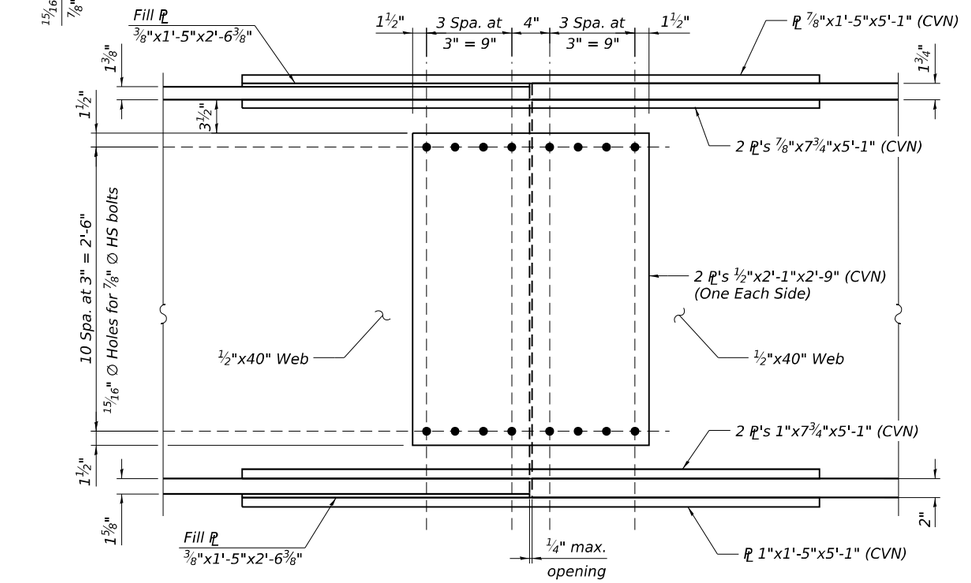
CAMBER DIAGRAM
STRUCTURE NO. 099-8304
SHEET S1-27 OF S1-41 SHEETS

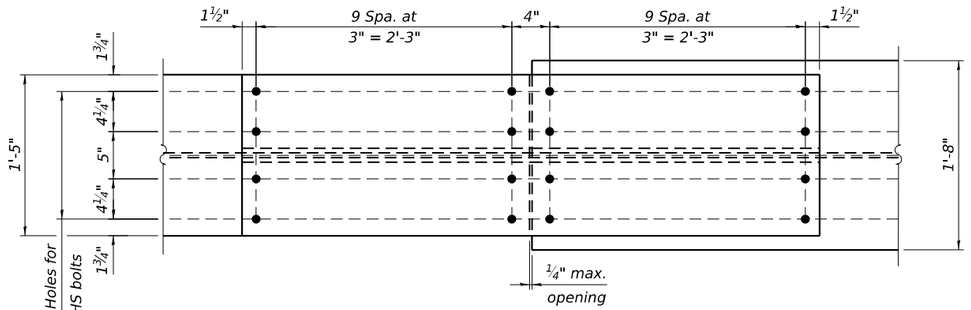
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	51
		CONTRACT NO. 62P67		
		ILLINOIS	FED. AID PROJECT	



TOP FLANGE SPLICE



WEB SPLICE



BOTTOM FLANGE SPLICE

SPLICES 1 AND 2
(GIRDERS 1 THRU 7)

(Splice 1 Shown; Splice 2 Opposite Hand)
(14 Required)

NOTES:

1. See Sheet S1-24 for girder framing plan.
2. "CVN" denotes Charpy-V-Notch Impact Energy Requirements, Zone 2.
3. Use 7/8" ∅ H.S. bolts with 15/16" ∅ holes for all splice connections.
4. For Shear Connector Detail at Splices, see Sheet S1-26.

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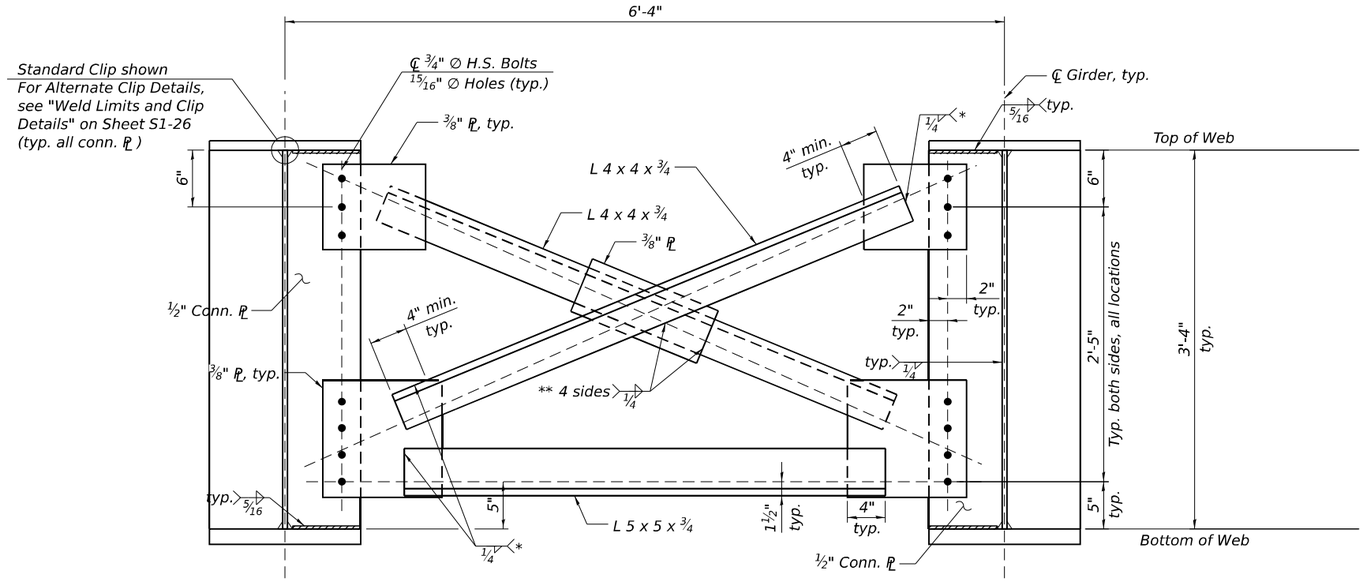
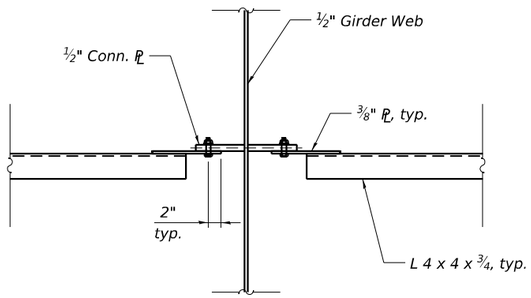
STRUCTURAL STEEL DETAILS (SHEET 1 OF 2)
STRUCTURE NO. 099-8304
SHEET S1-28 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	52
		CONTRACT NO. 62P67		
		ILLINOIS	FED. AID PROJECT	



INTERIOR CROSS FRAME (CF)

(84 Required)



INTERIOR CROSS FRAME PLAN

* *Fillet weld angles along 3 sides on one face of gusset plate; however if cross-frames are galvanized, weld all-around.*

** *If cross-frames are galvanized, weld all-around.*

NOTES:

1. *All cross frames shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames at supports may be temporarily disconnected to install bearing anchor rods.*

2. *Provide 15/16" ∅ Holes for ¾" ∅ High Strength bolts. Two hardened washers required for each set of oversized holes (typical all cross frame connections).*

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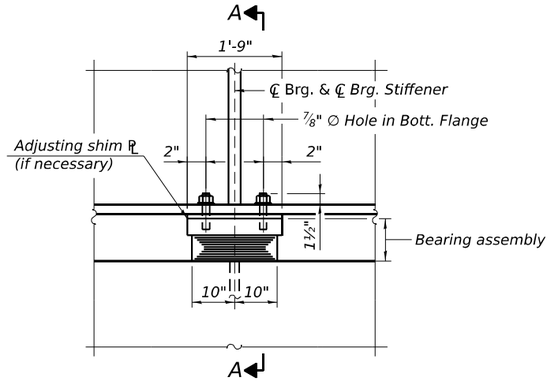
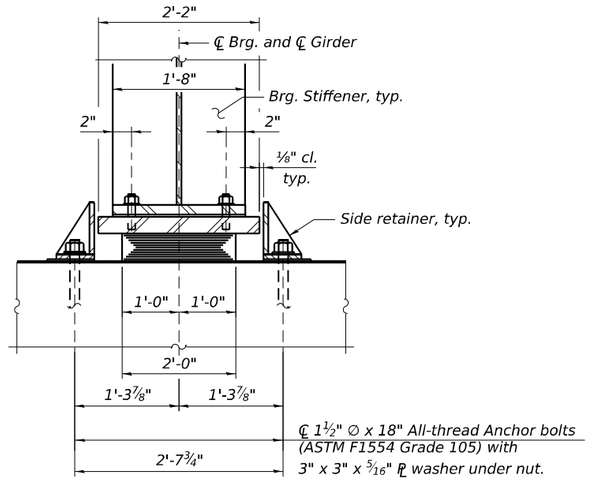
STRUCTURAL STEEL DETAILS (SHEET 2 OF 2)
STRUCTURE NO. 099-8304
SHEET S1-29 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	53
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		



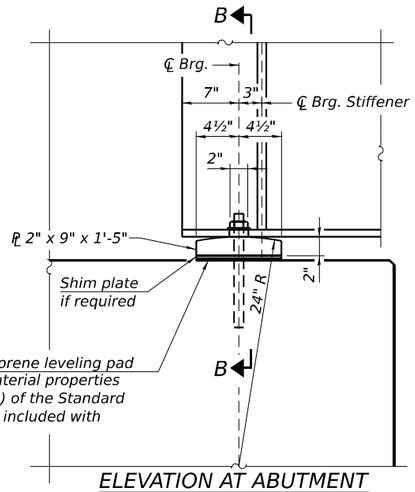
ELEVATION AT PIER



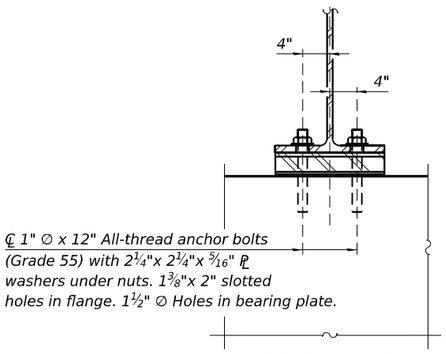
SECTION A-A

TYPE I ELASTOMERIC EXP. BRG.

(At Pier)
(7 Required)



ELEVATION AT ABUTMENT



SECTION B-B

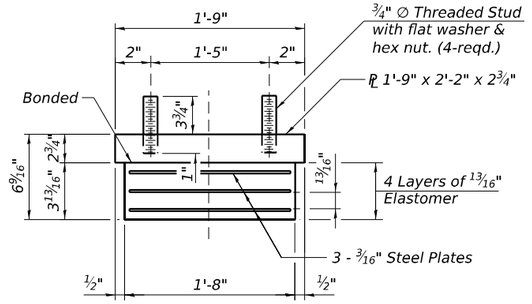
SHIM PLATE TABLE

(For Pier)

Girder	Pier
1	-
2	-
3	-
4	-
5	-
6	-
7	¼"

FIXED BEARING - INTEGRAL ABUTMENT

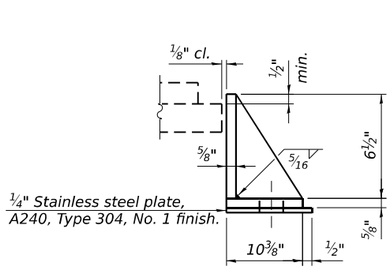
(14 Required)

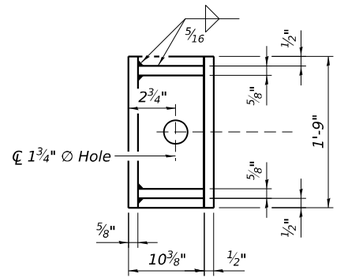


BEARING ASSEMBLY

(At Pier)

Note:
Shim plates shall not be placed under bearing assembly.





SIDE RETAINER

(At Pier)

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

NOTES:

1. Side retainers, stainless steel plates and shim plates shall be included in the cost of Elastomeric Bearing Assembly, Type I.
2. The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M270 Grade 50.
3. All bearing plates, side retainers, shim plates, anchor bolts, nuts and washers shall be galvanized according to AASHTO M111 or M232 as applicable.
4. Anchor bolts at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.
5. Two ⅛ in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details. See shim plate table.
6. Cost of steel plates for Fixed Bearings shall be included with Furnishing and Erecting Structural Steel.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	7
Anchor Bolts, 1"	Each	28
Anchor Bolts, 1 1/2"	Each	14

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BEARING DETAILS
STRUCTURE NO. 099-8304
SHEET S1-30 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	54
		CONTRACT NO. 62P67		
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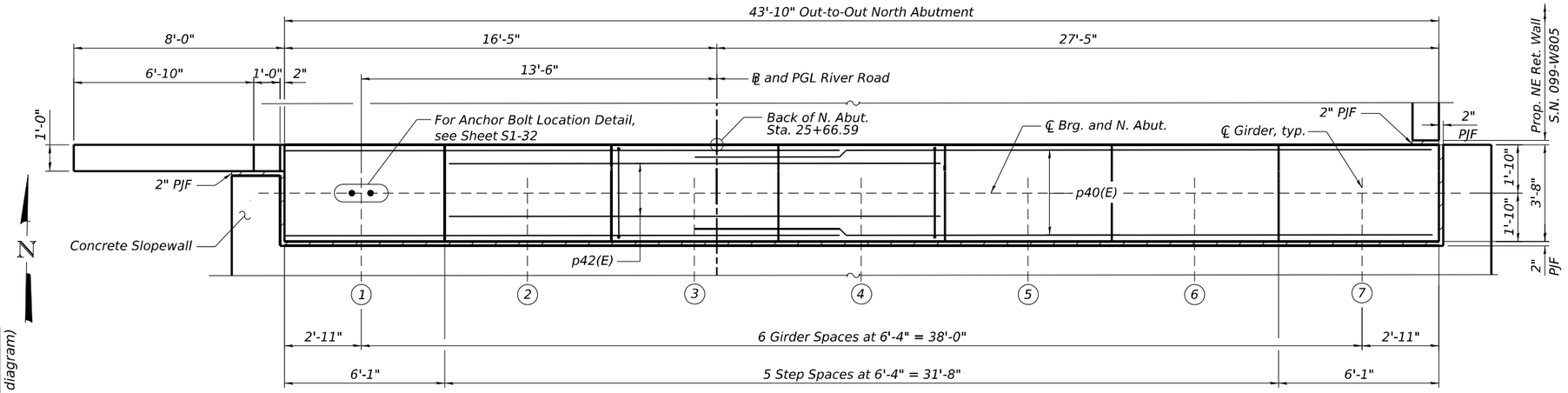
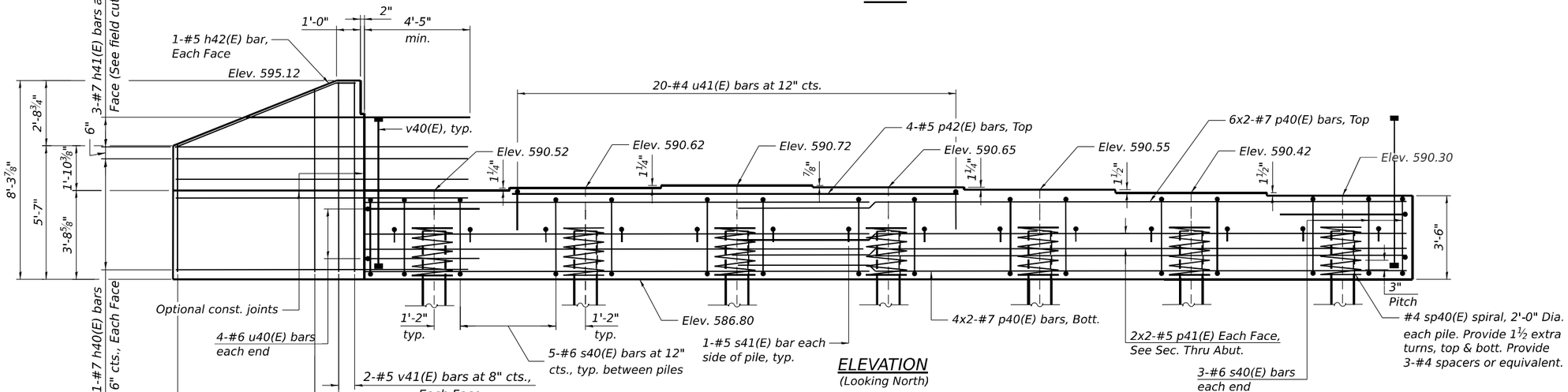


PLAN



ELEVATION
(Looking North)

PILE LAYOUT

PILE DATA

Type: HP 14x89 with pile shoes
Nominal Required Bearing: 419 Kips
Factored Resistance Available: 388 Kips
Est. Length: 36 Feet
No. Production Piles: 7
No. Test Piles: 0

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NORTH ABUTMENT PLAN AND ELEVATION
STRUCTURE NO. 099-8304
SHEET S1-31 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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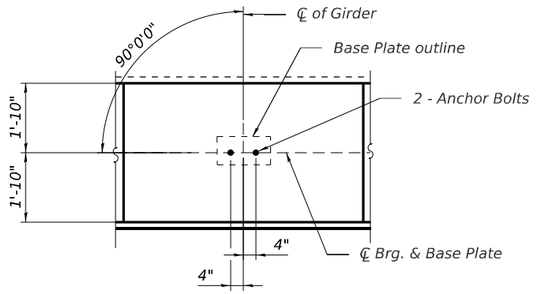
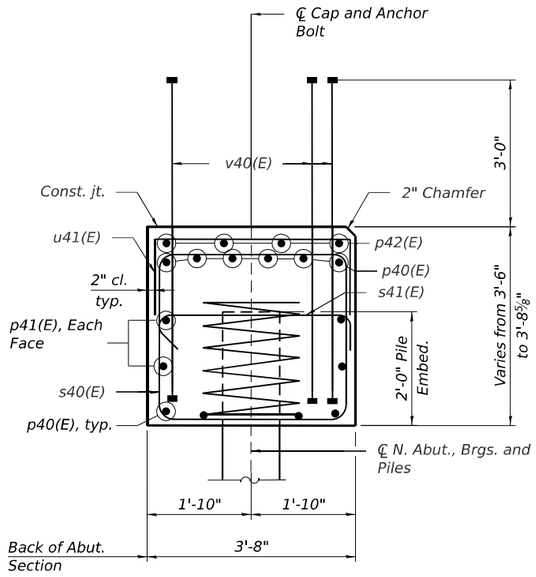
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		



ANCHOR BOLT LOCATION DETAIL



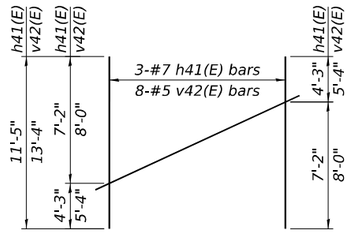
SEC. THRU ABUT.

MINIMUM BAR LAP

#7 bar = 4'-5"
#5 bar = 3'-2"

NOTES:

1. Piles shall be driven though 30" diameter precored holes extending to Elevation 576.66 according to Article 512.09 (c) of the Standard Specifications except that the void space outside of the pile shall be filled with bentonite according to the manufacturer's recommendations to achieve a Qu of 1.5 tsf.
2. For diaphragm details, see Sheet S1-17.
3. For details of piles, see Sheet S1-37.
4. Bars noted thus, 4x2-#7 indicates 4 lines of #7 bars with 2 lengths per line.
5. Pour steps monolithically with cap.
6. Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.
7. Space reinforcement in cap to miss anchor bolts.



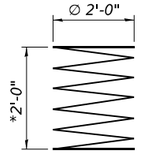
FIELD CUTTING DIAGRAM

Order h41(E) and v42(E) full length. Cut as shown and use remainder of bars in opposite face.

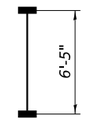
BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
	h40(E)	22	#7	12'-3"	
	h41(E)	6	#7	11'-5"	
	h42(E)	2	#5	8'-3"	
	p40(E)	20	#7	24'-0"	
	p41(E)	8	#5	23'-4"	
	p42(E)	4	#5	18'-8"	
	s40(E)	36	#6	14'-4"	
	s41(E)	14	#5	4'-4"	
*	sp40(E)	7	#4	2'-0"	
	u40(E)	8	#6	11'-10"	
	u41(E)	20	#4	5'-4"	
	v40(E)	107	#8	6'-5"	
	v41(E)	4	#5	8'-0"	
	v42(E)	8	#5	13'-4"	
	Structure Excavation			Cu Yd	92.0
	Concrete Structures			Cu Yd	24.5
	Reinforcement Bars, Epoxy Coated			Pound	5,010
	Furnishing Steel Piles HP14X89			Foot	252
	Driving Piles			Foot	252
	Pile Shoes			Each	7
	Concrete Sealer			Sq Ft	236
	Geocomposite Wall Drain			Sq Yd	43
	Granular Backfill For Structures			Cu Yd	99
	Pipe Underdrains for Structures 4"			Foot	56

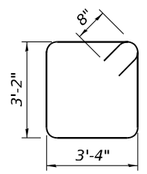
*Length is height of spiral.



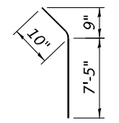
BAR sp40(E)



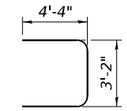
BAR v40(E)
(Headed)



BAR s40(E)



BAR h42(E)



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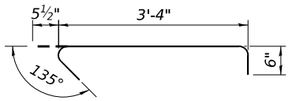
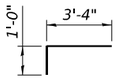


BAR s41(E)



BAR u41(E)

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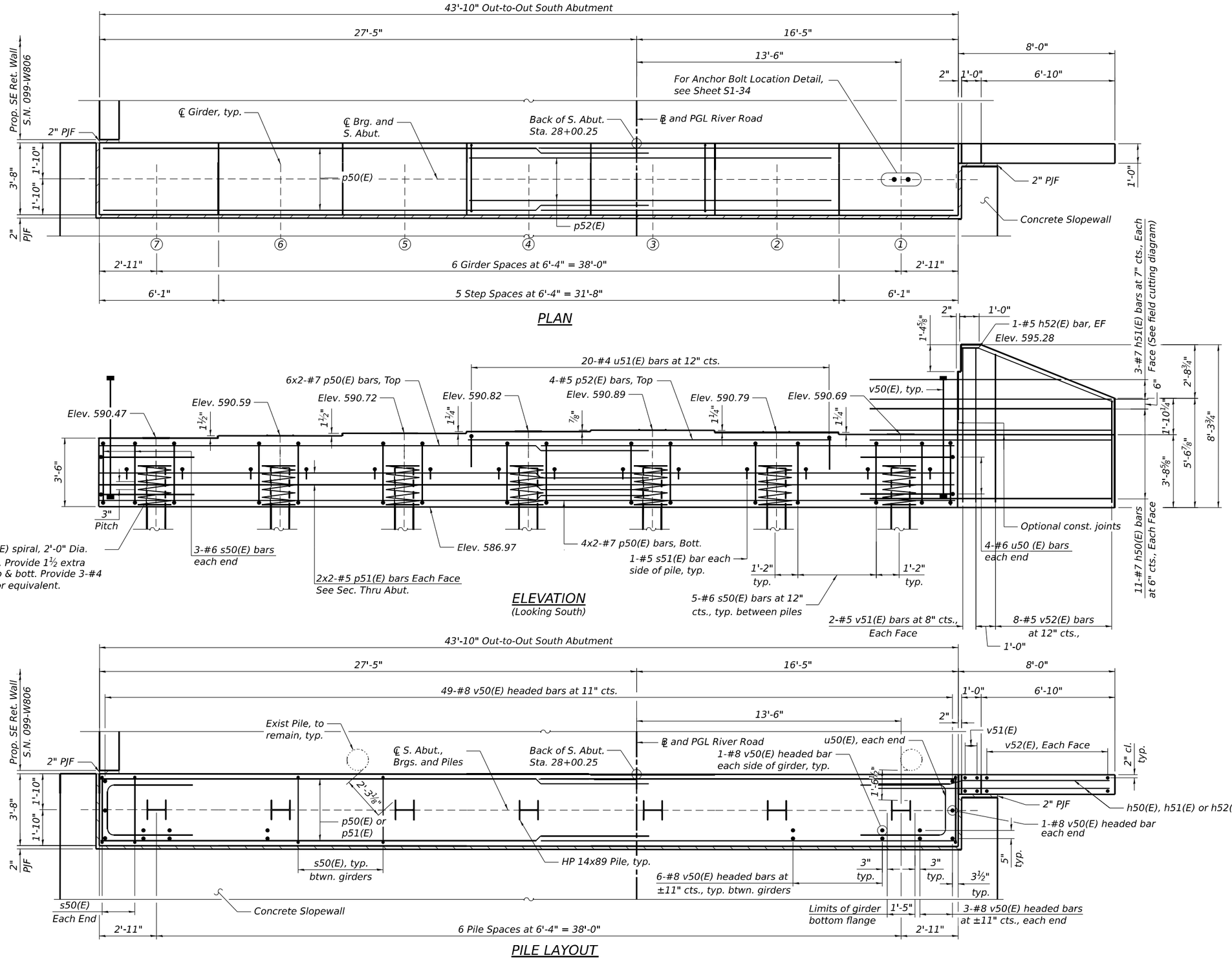
NORTH ABUTMENT SECTIONS AND DETAILS
STRUCTURE NO. 099-8304
SHEET S1-32 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	56
		CONTRACT NO. 62P67		
		ILLINOIS	FED. AID PROJECT	



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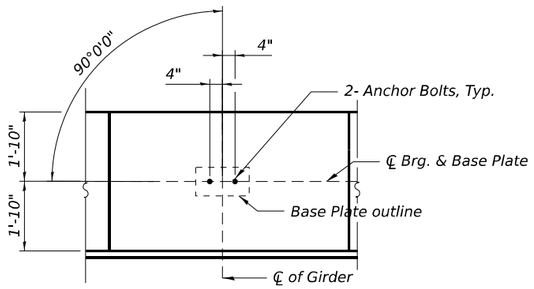
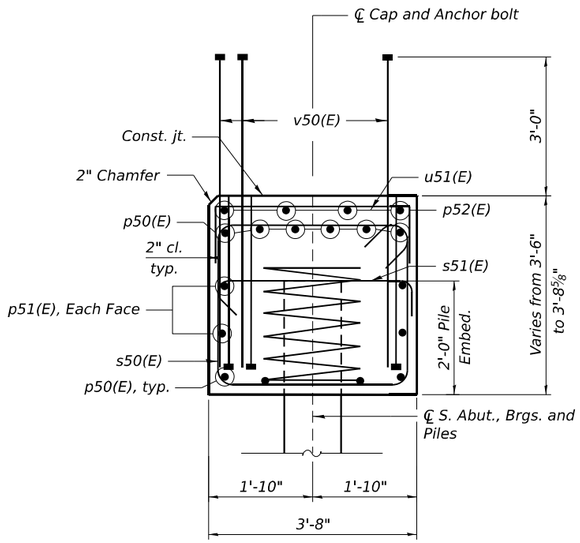
SOUTH ABUTMENT PLAN AND ELEVATION
STRUCTURE NO. 099-8304
SHEET S1-33 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	57
		CONTRACT NO. 62P67		
	ILLINOIS FED. AID PROJECT			



ANCHOR BOLT LOCATION DETAIL



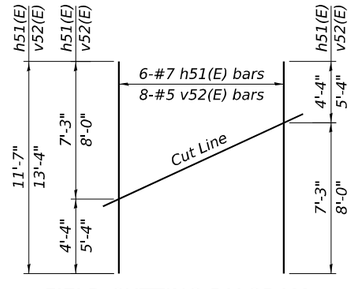
SEC. THRU ABUT.

MINIMUM BAR LAP

#7 bar = 4'-5"
#5 bar = 3'-2"

NOTES:

1. Piles shall be driven though 30" diameter precored holes extending to Elevation 576.66 according to Article 512.09 (c) of the Standard Specifications except that the void space outside of the pile shall be filled with bentonite according to the manufacturer's recommendations to achieve a Qu of 1.5 tsf.
2. For diaphragm details, see Sheet S1-17.
3. For details of piles, see Sheet S1-37.
4. Bars noted thus, 4x2-#7 indicates 4 lines of #7 bars with 2 lengths per line.
5. Pour steps monolithically with cap.
6. Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.
7. Space reinforcement in cap to miss anchor bolts.



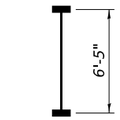
FIELD CUTTING DIAGRAM

Order h51(E) and v52(E) full length. Cut as shown and use remainder of bars in opposite face.

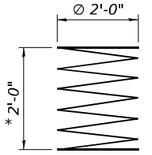
BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
	h50(E)	22	#7	12'-3"	
	h51(E)	6	#7	11'-7"	
	h52(E)	2	#5	8'-3"	
	p50(E)	20	#7	24'-0"	
	p51(E)	8	#5	23'-4"	
	p52(E)	4	#5	18'-8"	
	s50(E)	36	#6	14'-4"	
	s51(E)	14	#5	4'-4"	
*	sp50(E)	7	#4	2'-0"	
	u50(E)	8	#6	11'-10"	
	u51(E)	20	#4	5'-4"	
	v50(E)	107	#8	6'-5"	
	v51(E)	4	#5	8'-0"	
	v52(E)	8	#5	13'-4"	
	Structure Excavation		Cu Yd	83.8	
	Concrete Structures		Cu Yd	24.5	
	Reinforcement Bars, Epoxy Coated		Pound	4,930	
	Furnishing Steel Piles HP14X89		Foot	238	
	Driving Piles		Foot	238	
	Pile Shoes		Each	7	
	Concrete Sealer		Sq Ft	236	
	Geocomposite Wall		Sq Yd	43	
	Granular Backfill For Structures		Cu Yd	96	
	Pipe Underdrains for Structures 4"		Foot	56	

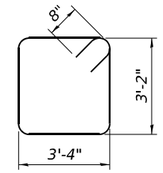
*Length is height of spiral



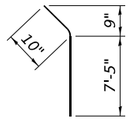
BAR v50(E)
(Headed)



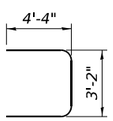
BAR sp50(E)



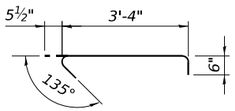
BAR s50(E)



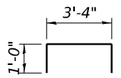
BAR h52(E)



BAR u50(E)



BAR s51(E)



BAR u51(E)

MODEL: Default
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3/14/2023 9:31:48 AM

HBM ENGINEERING GROUP, LLC

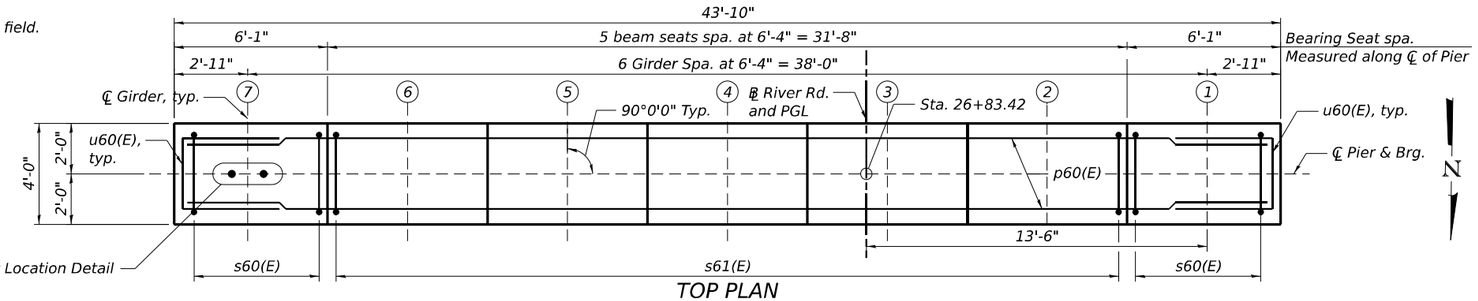
USER NAME =	DESIGNED - JMI	REVISED -	
	CHECKED - MI, JJS, SK	REVISED -	
PLOT SCALE =	DRAWN - JMI	REVISED -	
PLOT DATE =	CHECKED - MI, JJS, SK	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

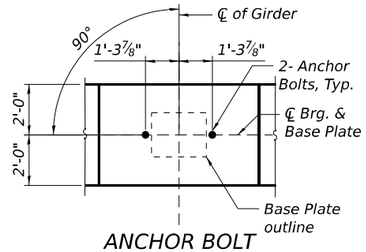
SOUTH ABUTMENT SECTION AND DETAILS
STRUCTURE NO. 099-8304
SHEET S1-34 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	58
		CONTRACT NO. 62P67		
		ILLINOIS	FED. AID PROJECT	

*Cut bars to fit in field.



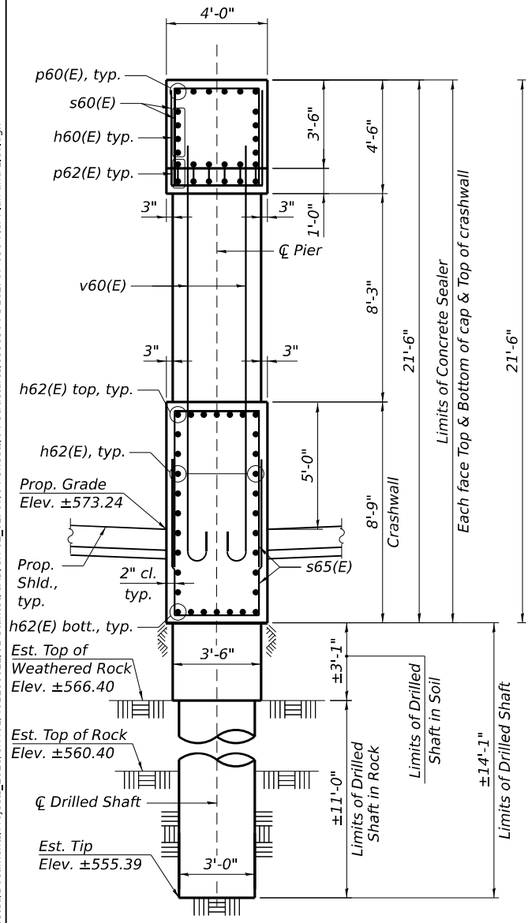
TOP PLAN



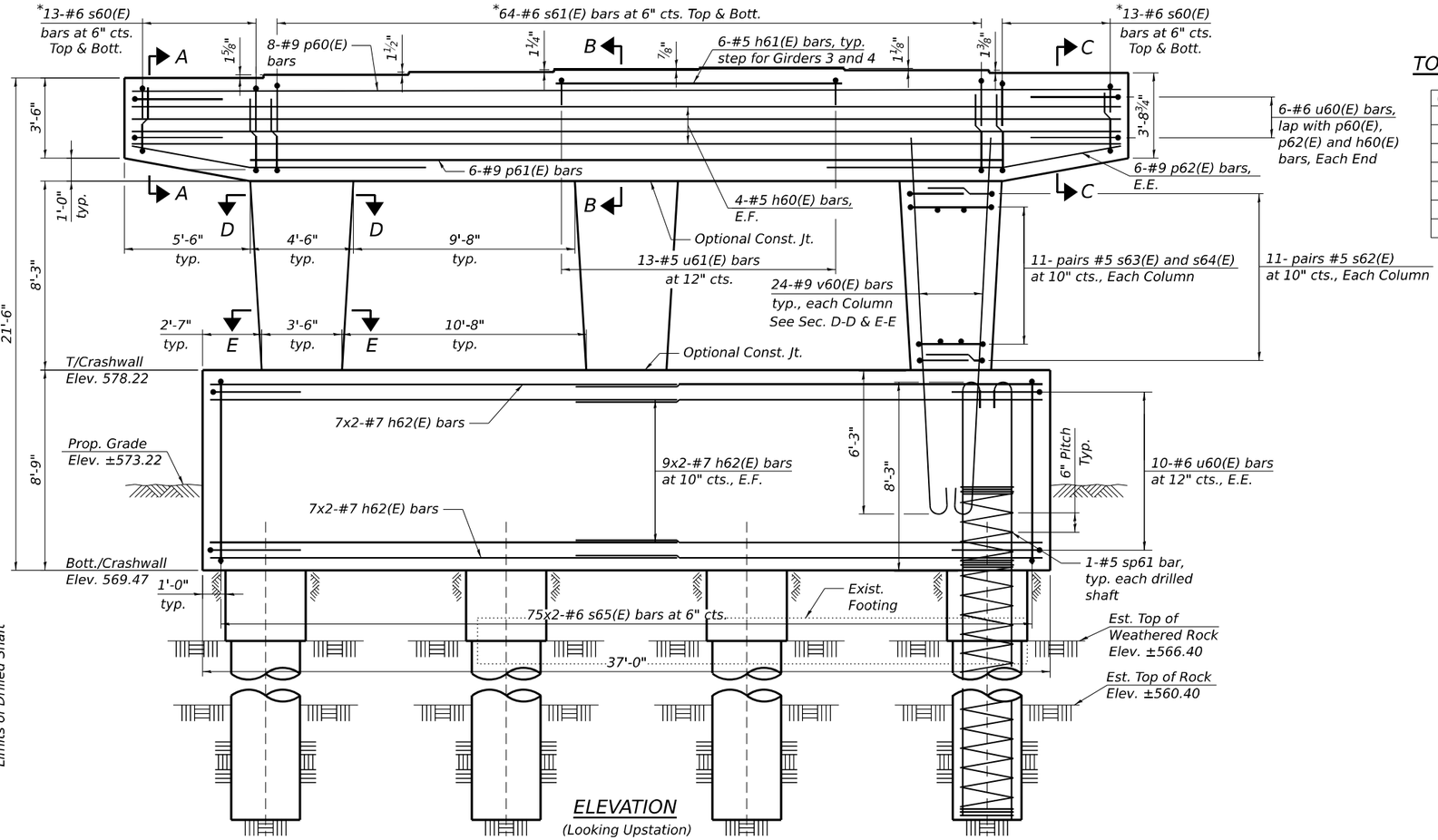
ANCHOR BOLT LOCATION DETAIL

TOP OF SEAT ELEVATION

Girder No.	Seat Elevation
1	591.20
2	591.31
3	591.40
4	591.33
5	591.23
6	591.11
7	590.96

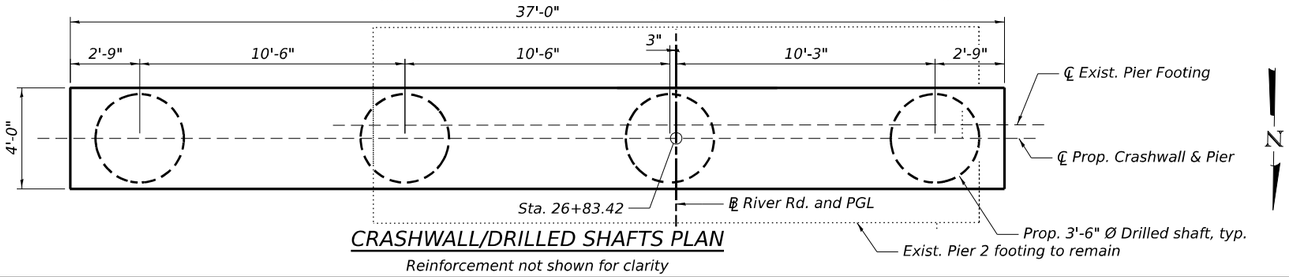


END VIEW



ELEVATION

(Looking Upstation)



CRASHWALL/DRILLED SHAFTS PLAN

Reinforcement not shown for clarity

NOTES:

1. For Anchor Bolt Details, see this sheet.
2. For details of drilled shafts, Minimum Bar Laps Table and Sections A-A thru E-E, see Sheet S1-36.
3. Bars indicated thus 7x2-#9 etc. indicates 7 lines of bars with 2 lengths per line.
4. Pour steps monolithically with cap.
5. Apply concrete sealer to all exposed concrete surfaces of the pier.
6. Space reinforcement in cap to miss anchor bolts.

LEGEND

E.E.	Each End
E.F.	Each Face

HBM ENGINEERING GROUP, LLC

USER NAME =	DESIGNED - CP	REVISED -	
	CHECKED - MI, JJS, SK	REVISED -	
PLOT SCALE =	DRAWN - CP	REVISED -	
PLOT DATE =	CHECKED - MI, JJS, SK	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER PLAN AND ELEVATION
STRUCTURE NO. 099-8304
SHEET S1-35 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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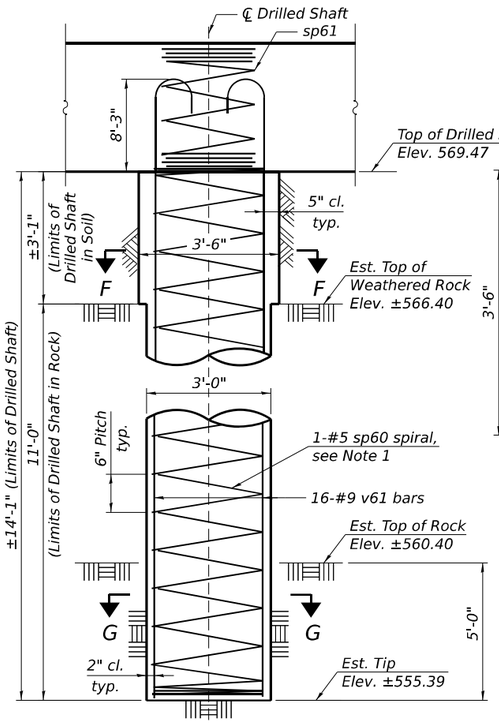
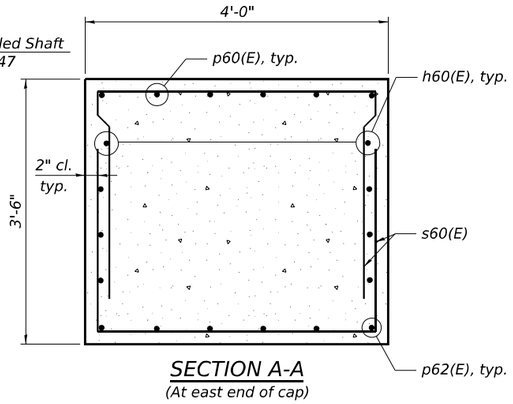
		CONTRACT NO. 62P67		
	ILLINOIS FED. AID PROJECT			



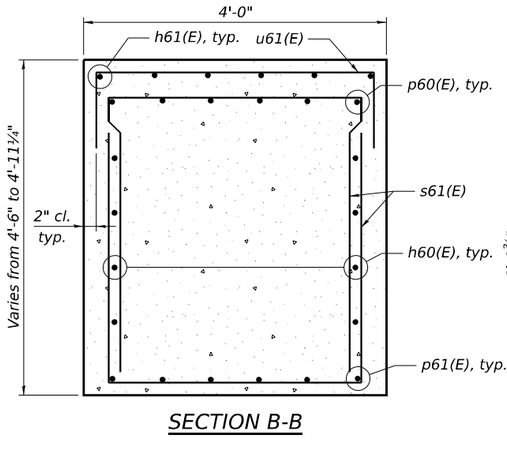
DRILLED SHAFT

(sp61 not shown for clarity)

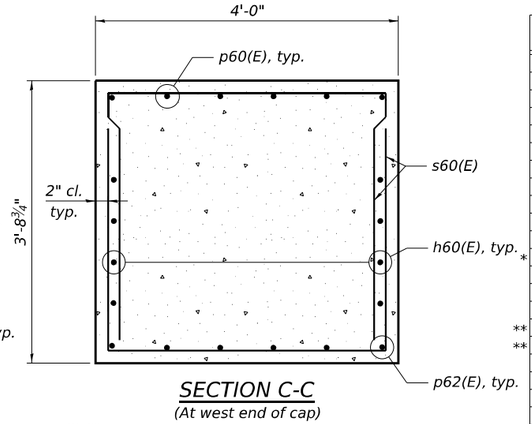


SECTION A-A

(At east end of cap)

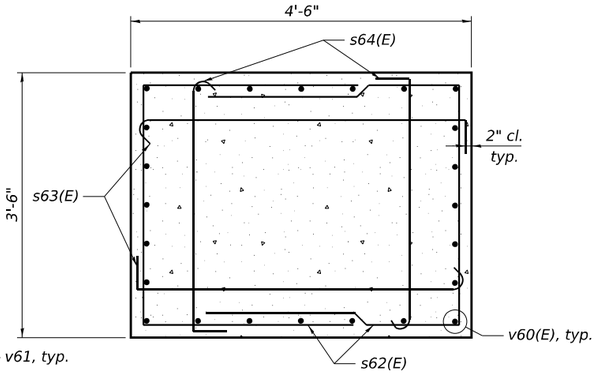


SECTION B-B



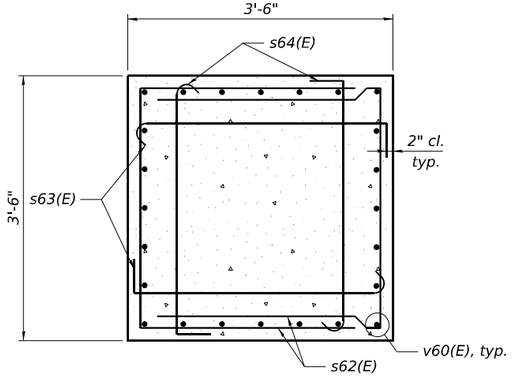
SECTION C-C

(At west end of cap)

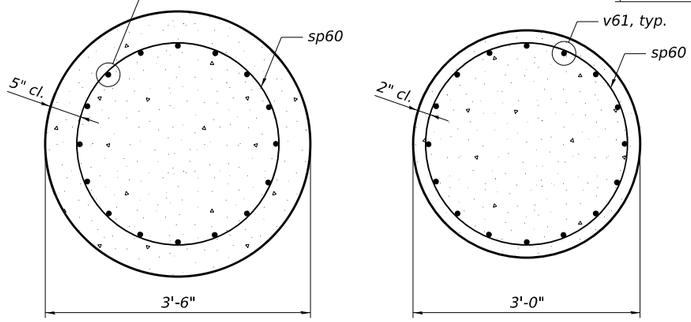


SECTION D-D

(At Top of Column)



SECTION E-E



SECTION F-F

SECTION G-G

NOTES:

1. #5 sp60 spiral, each drilled shaft
   (a) Provide 1½ extra turns, shop welded together per AWS D1.4 top and bottom. Extend spiral 3" into pier cap. Provide 4-#4 spacers or equivalent.
   (b) When splicing spiral reinforcement is necessary, the spiral shall be provided with 1½ extra turns at the ends to be spliced. These additional turns shall either be welded together according to AWS D1.4 or shall both terminate with a 135° standard hook.
   (c) Spirals are measured vertically.
2. The quantities and detailing are based on the estimated elevations shown on the plans. The actual elevations may differ at each shaft and corresponding adjustments shall be made to the drilled shaft and reinforcement quantities and payment limits.

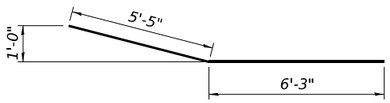
PIER BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
	h60(E)	8	#5	43'-6"	
	h61(E)	6	#5	12'-4"	
	h62(E)	64	#7	20'-7"	
	p60(E)	8	#9	43'-6"	
	p61(E)	6	#9	31'-8"	
	p62(E)	12	#9	11'-8"	
	s60(E)	52	#6	12'-0"	
	s61(E)	128	#6	12'-10"	
	s62(E)	66	#5	10'-0"	
*	s63(E)	66	#5	5'-6"	
	s64(E)	66	#5	4'-6"	
	s65(E)	150	#6	16'-0"	
**	sp60	4	#5	14'-1"	
**	sp61	4	#5	2'-0"	
	u60(E)	32	#6	11'-4"	
	u61(E)	13	#5	5'-8"	
	v60(E)	72	#9	17'-4"	
	v61	64	#9	23'-7"	

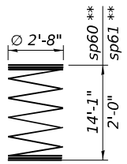
Structure Excavation	Cu Yd	122.2
Concrete Structures	Cu Yd	90.9
Reinforcement Bars	Pound	5,580
Reinforcement Bars, Epoxy Coated	Pound	18,690
Drilled Shaft In Soil	Cu Yd	4.4
Drilled Shaft In Rock	Cu Yd	11.6
Concrete Sealer	Sq Ft	1,909
Foundation Construction At Existing Obstructions	Each	3

** Length is height of spiral

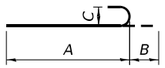
Minimum Bar Laps	
Bar	Lap
#5	3'-2"
#6	3'-10"
#7	4'-5"
#9	6'-3"



BAR p62(E)



BAR sp60 & sp61

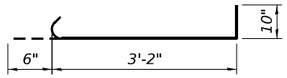


BARS

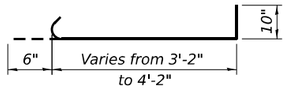
See Table 1

TABLE 1

Bar	A	B	C
v60(E)	16'-1"	1'-3"	11¾"
v61	22'-4"	1'-3"	11¾"

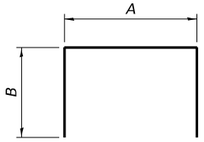


BAR s64(E)



*Order bars full length. Bend and cut to fit in field.

BAR s63(E)

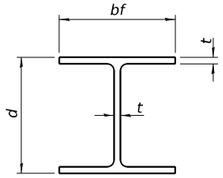


BARS

See Table 2

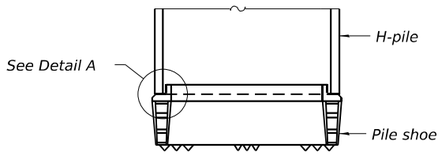
TABLE 2

Bar	A	B
s60(E)	3'-8"	4'-2"
s61(E)	3'-8"	4'-7"
s62(E)	3'-8"	3'-2"
s65(E)	3'-8"	6'-2"
u60(E)	3'-8"	3'-10"
u61(E)	3'-8"	1'-0"

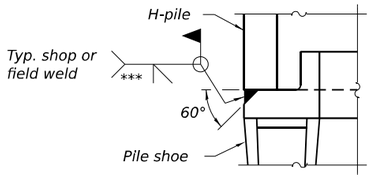


STEEL PILE TABLE

Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14x117	14¼"	14⅞"	13/16"	30"
x102	14"	14¾"	11/16"	30"
x89	13⅞"	14¾"	⅝"	30"
x73	13⅝"	14⅝"	½"	30"
HP 12x84	12¼"	12¼"	11/16"	24"
x74	12⅛"	12¼"	⅝"	24"
x63	12"	12⅛"	½"	24"
x53	11¾"	12"	7/16"	24"
HP 10x57	10"	10¼"	9/16"	24"
x42	9¾"	10⅛"	7/16"	24"
HP 8x36	8"	8⅛"	7/16"	18"



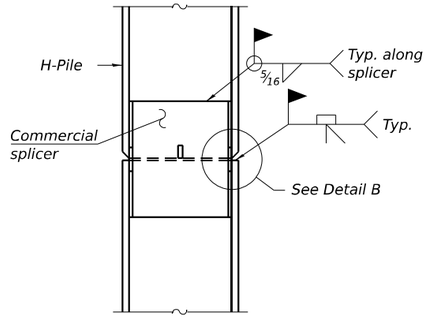
ELEVATION



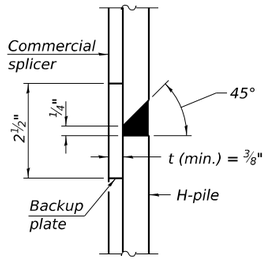
DETAIL A

SHOE ATTACHMENT

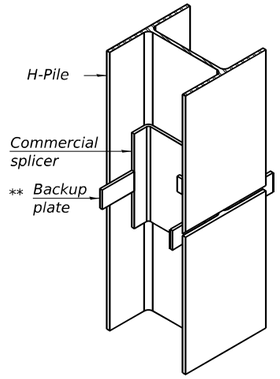
Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.



ELEVATION

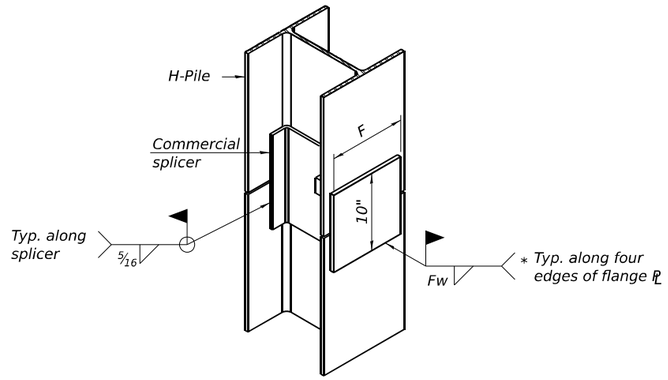


DETAIL "B"



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



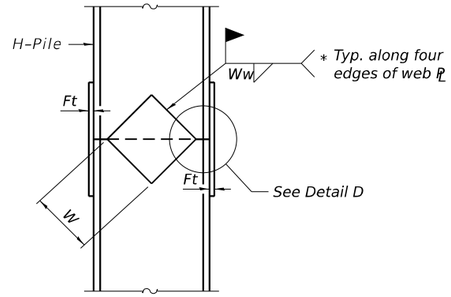
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

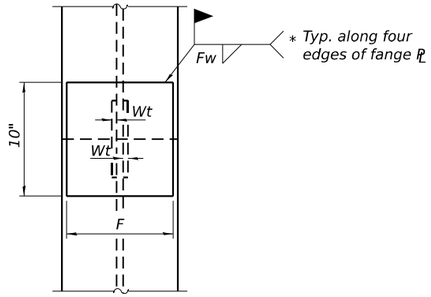
* *Interrupt welds ¼" from end of web and/or each flange.*

** *Remove portions of backup plates that extend outside the flanges.*

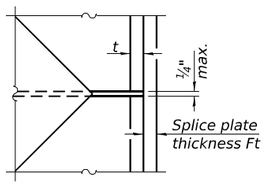
*** *Weld size per pile shoe manufacturer (5/16" min.).*



ELEVATION



END VIEW



DETAIL D

Designation	F	Ft	Fw	W	Wt	Ww
HP 14x117	12½"	1"	⅞"	7¾"	⅝"	½"
x102	12½"	⅞"	¾"	7¾"	⅝"	½"
x89	12½"	¾"	11/16"	7¾"	⅝"	½"
x73	12½"	⅝"	9/16"	7¾"	⅝"	½"
HP 12x84	10"	⅞"	11/16"	6½"	⅝"	½"
x74	10"	⅞"	11/16"	6½"	⅝"	½"
x63	10"	⅝"	½"	6½"	½"	⅜"
x53	10"	⅝"	½"	6½"	½"	⅜"
HP 10x57	8"	¾"	9/16"	5¼"	½"	⅜"
x42	8"	⅝"	9/16"	5¼"	½"	⅜"
HP 8x36	7"	⅝"	7/16"	4¼"	½"	⅜"

WELDED PLATE FIELD SPLICE

F-HP 1-1-2020

HBM ENGINEERING GROUP, LLC

USER NAME =	DESIGNED - EBK	REVISED -	
	CHECKED - MI, JJS, SK	REVISED -	
PLOT SCALE =	DRAWN - EBK	REVISED -	
PLOT DATE =	CHECKED - MI, JJS, SK	REVISED -	

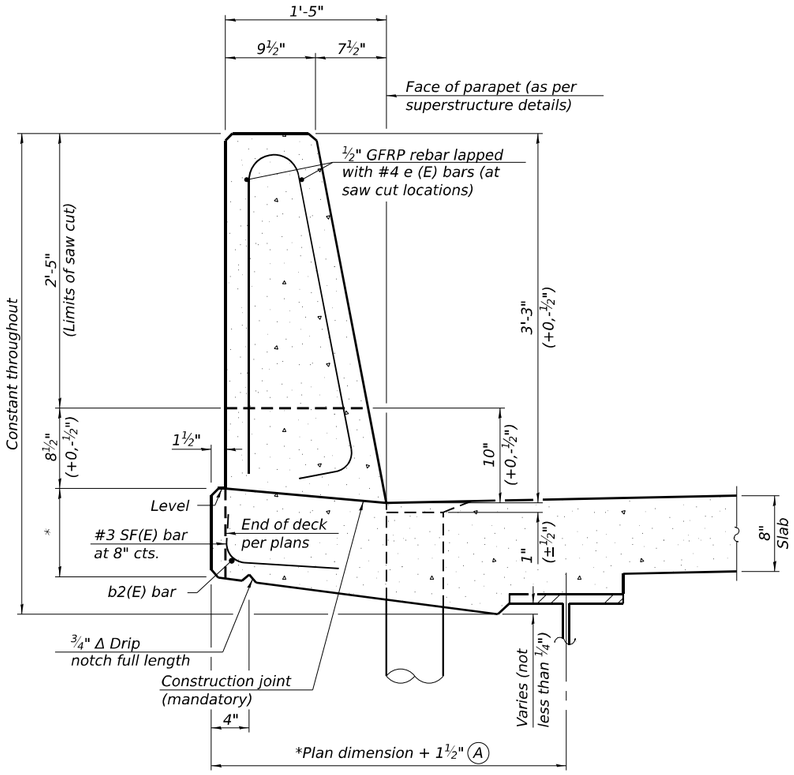
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HP PILE DETAILS
STRUCTURE NO. 099-8304
SHEET S1-37 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	61
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

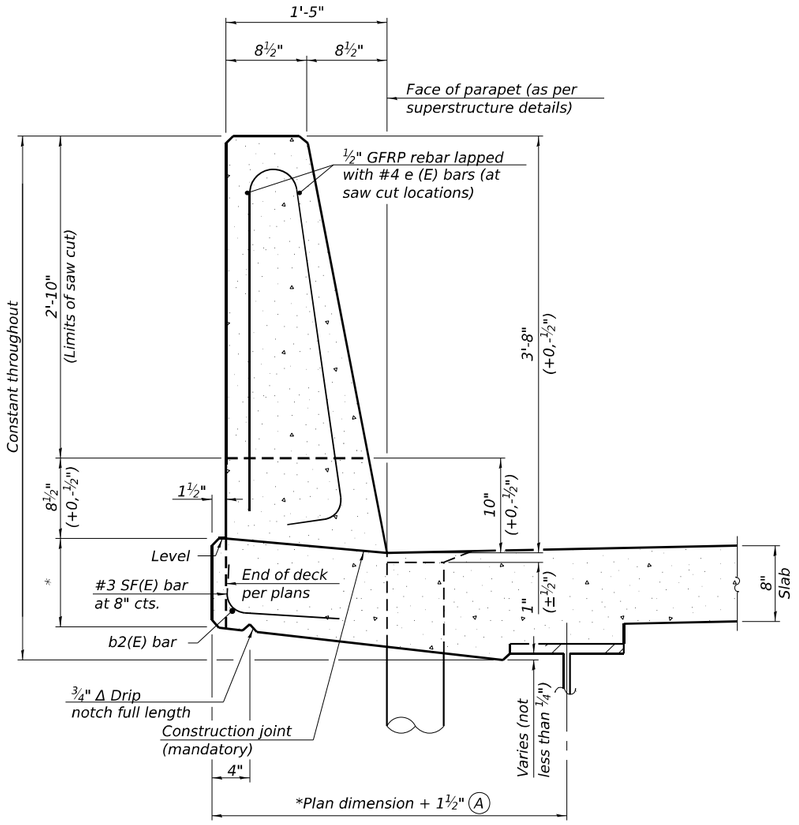
MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/01-Stantec/CAD/CR-02_62P67/04-Sheets/04-Structures/0998304-D162P67-038-HP Pile Details

1/26/2023 8:04:08 AM



39" CONSTANT-SLOPE PARAPET SECTION

(Showing dimensions, d(E), and ½" Ø GFRP rebar)



44" CONSTANT-SLOPE PARAPET SECTION

(Showing dimensions, d(E), and ½" Ø GFRP rebar)

*See Superstructure Details.

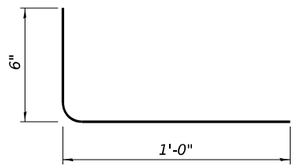
Notes:

All dimensions shall remain the same as shown on superstructure details, except dimension A which is to be revised as shown. Additional concrete needed to revise dimension A = 0.00348 cu. yds./ft. for 39" and 44" parapets.

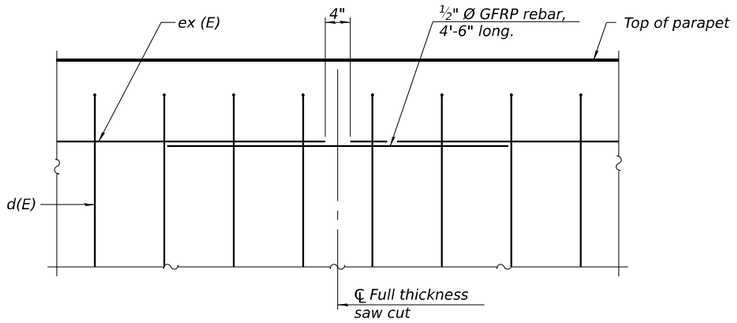
Place full depth aluminum sheets as shown on superstructure details.

Replace all cork joint filler locations with a full thickness saw cut.

Steel superstructure shown. Other superstructure types similar.



SF(E) BAR



GFRP REBAR STIFFENING DETAIL

(Place as shown in parapet section at each parapet joint location.)

SFP 39-44 11-1-2022

USER NAME =	DESIGNED - CP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	CHECKED - MI, JJS, SK	REVISED -	
PLOT SCALE =	DRAWN - CP	REVISED -	
PLOT DATE =	CHECKED - MI, JJS, SK	REVISED -	

CONCRETE PARAPET SLIPFORMING OPTION
STRUCTURE NO. 099-8304
SHEET S1-38 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	62
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/01-Stantec/CAD/CR-02_62P67/04-Sheets/04-Structures/0998304-D162P67-038A-Concrete parapet Slipforming Option
1/26/2023 8:04:10 AM

Wang Engineering
wangeng@wangeng.com
1145 N MAin Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

BORING LOG RIV-BSB-01

WEI Job No.: 255-39-01

Client: Stantec
Project: I-80 Reconstruction, Ridge Road to Houbolt Road
Location: Will County, Illinois

Datum: NAVD88
Elevation: 592.99 ft
North: 1755364.55 ft
East: 1016267.85 ft
Station: 25+55.5
Offset: 9.0 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	592.7	4-inch thick ASPHALT --PAVEMENT--						
	590.9	White and gray SANDY GRAVEL; damp --AGGREGATE BASE--			1	8 4 5	3.00 P	17
		Very stiff to hard, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --FILL-- --RDR 2--	5		2	3 4 4	2.50 P	14
					3	2 3 7	> 4.50 P	15
			10		4	3 4 6	4.25 P	15
					5	3 4 6	3.50 P	15
			15		6	3 6 4	3.62 B	14
		--brown, black and gray--			7	4 7 6	3.36 B	20
			20		8	3 7 7	4.00 P	14
	571.4	Very stiff, black SILTY CLAY; damp			9	4 4 7	3.50 P	28
	570.0	--Buried TOPSOIL-- Stiff, gray SILTY LOAM to SILTY CLAY LOAM, trace gravel; damp --RDR 2--	25		10	4 4 7	1.80 B	25

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	567.5	--L_L(%)=37, P_L(%)=20-- --%Gravel=0.4-- --%Sand=9.6-- --%Silt=71.3-- --%Clay=18.7-- --A-6 (15)--			11	6 27 33	NP	11
	566.6	Brown SILTY LOAM to LOAM, little gravel; moist			12	50/1"	NP	4
	564.5	Very dense, brown SANDY GRAVEL; damp --RDR 2--	30					
		Very dense, brown weathered dolostone fragments; damp to saturated						
	560.0	--Weathered BEDROCK-- --slow hard drilling; possible bedrock at 30 feet--						
		Strong, light bluish gray, very poor quality, DOLOSTONE; Very closely to closely spaced, highly weathered, horizontal and vertical JOINTS, with <0.05 inch opening, slicken to slightly rough walls, and <0.2 inch thick clay infill.	35		13	C O R E		
		--RUN 1: 33.0 to 39.0 feet-- --Recovery: 76%-- --RQD: 0%--	40		14	C O R E		
		--RUN 2: 39.0 to 42.0 feet-- --Recovery: 51%-- --RQD: 0%--						
	551.0	Boring terminated at 42.00 ft	45					
			50					

GENERAL NOTES

Begin Drilling: 11-17-2021 Complete Drilling: 11-17-2021
Drilling Contractor: Wang Testing Services Drill Rig: 20D50T [80%]
Driller: RH&JD Logger: M. Rojo Checked by: C. Marin
Drilling Method: 3.25" ID HSA; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: ▽ 30.00 ft
At Completion of Drilling: ▼ core wash 3ft
Time After Drilling: NA
Depth to Water: ▼ NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

Wang Engineering
wangeng@wangeng.com
1145 N MAin Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

BORING LOG RIV-BSB-02

WEI Job No.: 255-39-01

Client: Stantec
Project: I-80 Reconstruction, Ridge Road to Houbolt Road
Location: Will County, Illinois

Datum: NAVD 88
Elevation: 571.35 ft
North: 1755220.91 ft
East: 1016234.58 ft
Station: 26+97.1
Offset: 24.8 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	570.4	12-inch thick, brown SILTY LOAM, little gravel; damp --FILL--			1	3 3 5	2.54 B	13
		Very stiff, brown CLAY LOAM, trace gravel; damp to moist						
	568.4	--FILL-- --RDR 2--			2	4 7 7	0NP	12
		Medium dense, brown LOAM; damp	5					
	565.0	--FILL-- --RDR 2--						
		--wet spoon recovery--			3	22 15 44	NP	11
		Very dense, light brown to white SILT, trace gravel; dry to damp						
	563.6	--FILL-- --RDR 2--			4	50/5"	NP	6
		Very dense, gray GRAVEL --Weathered BEDROCK-- --RDR 4-- --slow hard drilling--	10					
	560.4	Strong, light grayish gray, very poor to fair quality, DOLOSTONE; closely spaced, highly to slightly weathered, horizontal and oblique joints, with <0.05 inch opening, slightly rough walls, and 0 - 0.2 inch thick clay and sand infill.			5	50/2" C O R E	NR	
		--RUN 1: 11.0 to 21.0 feet-- --Recovery: 84%-- --RQD: 8%--	15		6	C O R E		
		--Qu=5,994 psi--	20					
		--RUN 2: 21.0 to 27.0 feet-- --Recovery: 100%-- --RQD: 58%--	25		7			

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	544.4	Boring terminated at 27.00 ft						
			30					
			35					
			40					
			45					
			50					

GENERAL NOTES

Begin Drilling: 11-22-2021 Complete Drilling: 11-22-2021
Drilling Contractor: Wang Testing Services Drill Rig: 21GeoA[96%]
Driller: JS&MG Logger: A. Scifers Checked by: C. Marin
Drilling Method: 2.25" ID HSA; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: ▽ 6.00 ft
At Completion of Drilling: ▼ mud in borehole
Time After Drilling: NA
Depth to Water: ▼ NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 2553901.GPJ WANGENG.GDT 12/16/21

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/01-Stantec/CAD/CR-02_62P67/04-Sheets/04-Structures/0998304-D162P67-039-Boring Logs 1

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HBM ENGINEERING GROUP, LLC

USER NAME =	DESIGNED - FL	REVISED -	
	CHECKED - MI, JJS, SK	REVISED -	
PLOT SCALE =	DRAWN - FL	REVISED -	
PLOT DATE =	CHECKED - MI, JJS, SK	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS (SHEET 1 OF 3)
STRUCTURE NO. 099-8304
SHEET S1-39 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	63
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

Wang Engineering
wangeng@wangeng.com
1145 N MAin Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

BORING LOG RIV-BSB-03

WEI Job No.: 255-39-01

Client: Stantec
Project: I-80 Reconstruction, Ridge Road to Houbolt Road
Location: Will County, Illinois

Datum: NAVD 88
Elevation: 593.11 ft
North: 1755103.18 ft
East: 1016269.75 ft
Station: 28+15.5
Offset: 8.3 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	592.8	4-inch thick ASPHALT --PAVEMENT--						
	591.4	White and gray SANDY GRAVEL; damp --AGGREGATE BASE--			1	5 4 4	1.50 P	15
		Stiff to hard, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --FILL-- --RDR 2-3--	5		2	2 2 3	1.00 P	18
		--L_L(%)=35, P_L(%)=19-- --%Gravel=0.8-- --%Sand=5.6-- --%Silt=59.9-- --%Clay=33.7-- --A-6 (15)--			3	2 3 9	2.50 P	18
			10		4	4 4 5	> 4.50 P	18
					5	3 4 4	3.50 P	16
			15		6	4 6 7	4.00 P	21
		--rig chatter; possible cobbles--			7	4 4 5	4.00 P	15
	573.7	Very stiff, black and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --Buried TOPSOIL-- --RDR 2--	20		8	3 5 6	2.50 P	26
	570.1				9	3 6 7	3.50 P	21
		Medium dense, brown and gray SILTY LOAM, trace gravel --RDR 2-- --L_L(%)=21, P_L(%)=14--	25		10	9 6 6	NP	12
	567.6	--%Gravel=11.2-- --%Sand=25.4-- --%Silt=55.9-- --%Clay=7.5-- --A-4 (2)--			11	50/1"	NP	12
	565.6	--rig chatter; possible cobbles--						
		Very dense, brown and reddish brown SANDY GRAVEL; wet --RDR 3--	30		12	50/3"	NP	6
	563.1	--rig chatter, 27.5 ft; possible cobbles--		CORE				
		Very dense, brown and reddish brown, weathered dolostone fragments; saturated --Weathered BEDROCK--						
		Strong, light greenish gray, very poor to poor quality, DOLOSTONE; Moderately to closely spaced, highly weathered, horizontal and vertical JOINTS, with <0.05 inch opening, slicken to slightly rough walls, and <0.2 inch thick clay infill.	35		13			
		--RUN 1: 30.0 to 40.0 feet-- --Recovery: 90%-- --RQD: 8%-- --Qu=6,081 psi--						
			40		14			
		--RUN 2: 40.0 to 44.5 feet-- --Recovery: 81%-- --RQD: 26%--						
	548.6	Boring terminated at 44.50 ft	45					
			50					

GENERAL NOTES

Begin Drilling: 11-16-2021 Complete Drilling: 11-16-2021
Drilling Contractor: Wang Testing Services Drill Rig: 20D50T [80%]
Driller: RH&JD Logger: M. Rojo Checked by: C. Marin
Drilling Method: 2.25" ID HSA; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: ▽ 26.00 ft
At Completion of Drilling: ▼ core wash 2.5ft
Time After Drilling: NA
Depth to Water: ▼ NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

Wang Engineering
wangeng@wangeng.com
1145 N MAin Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

BORING LOG RIV-SGB-02

WEI Job No.: 255-39-01

Client: Stantec
Project: I-80 Reconstruction, Ridge Road to Houbolt Road
Location: Will County, Illinois

Datum: NAVD 88
Elevation: 593.27 ft
North: 1755353.25 ft
East: 1016252.19 ft
Station: 25+65.1
Offset: 4.9 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	592.3	11-inch thick ASPHALT --PAVEMENT--						
	592.3	1-inch, gray and white SANDY GRAVEL --AGGREGATE BASE--			1	5 4 4 3	4.00 P	16
		Very stiff to hard, brown and gray SILTY CLAY to CLAY LOAM, trace gravel; damp --FILL-- --RDR 2--	5		2	3 3 3 4	3.00 P	19
					3	2 2 3 3	3.50 P	17
					4	4 5 12 10	> 4.50 P	14
			10		5	10 7 9 9	> 4.50 P	17
					6	7 8 10	> 4.50 P	18
		--black; trace organic matter-- --FILL--	15		7	6 7 5	3.25 P	29
					8	9 9 10	NR	
			20		9	6 6 7	> 4.50 P	14
	572.8	Very stiff, black SILTY CLAY, trace organic matter; damp --Buried TOPSOIL--			10	8 11 9	3.50 P	46
	571.9	Stiff to very stiff, brown and gray SILTY CLAY, trace gravel; damp to moist --RDR 2--	25		11	8 6 7	1.50 P	21
	568.3	Boring terminated at 25.00 ft						

GENERAL NOTES

Begin Drilling: 11-19-2021 Complete Drilling: 11-19-2021
Drilling Contractor: Wang Testing Services Drill Rig: 20CME55T[81%]
Driller: RR&AG Logger: M. Rojo Checked by: C. Marin
Drilling Method: 3.25" ID HSA; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: ▽ 25.00 ft
At Completion of Drilling: ▼ DRY
Time After Drilling: NA
Depth to Water: ▼ NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

HBM ENGINEERING GROUP, LLC

USER NAME =	DESIGNED - FL	REVISED -	
	CHECKED - MI, JJS, SK	REVISED -	
PLOT SCALE =	DRAWN - FL	REVISED -	
PLOT DATE =	CHECKED - MI, JJS, SK	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS (SHEET 2 OF 3)
STRUCTURE NO. 099-8304
SHEET S1-40 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	64
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

Wang Engineering
wangeng@wangeng.com
1145 N MAin Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

BORING LOG RIV-SGB-03

WEI Job No.: 255-39-01

Client: **Stantec**
Project: **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 592.36 ft
North: 1755053.60 ft
East: 1016257.18 ft
Station: 28+64.8
Offset: 5.4 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	591.8	7-inch thick ASPHALT --PAVEMENT--						
	591.1	Gray and white SANDY GRAVEL; damp --AGGREGATE BASE--			1	8 7 8	> 4.50 P	13
		Very stiff to hard, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --FILL-- --RDR 2--	5		2	10 11 11 11	> 4.50 P	14
					3	6 7 9 7	> 4.50 P	17
					4	7 6 6 5	3.28 B	17
			10		5	5 7 6 7	> 4.50 P	17
					6	3 5 8	NA	18
			15		7	5 6 8	> 4.50 P	18
					8	4 5 7	> 4.50 P	16
			20		9	9 10 9	NA	18
	571.9	Medium dense, brown and gray LOAM, trace gravel; moist --FILL-- --RDR 2--			10	4 7 8	NP	15
	569.4	Very dense, brown SILTY LOAM, trace gravel; wet to saturated --RDR 2--			11	7 9 60/3"	NP	11
	567.4	Boring terminated at 24.75 ft	25					

GENERAL NOTES

Begin Drilling: **11-22-2021** Complete Drilling: **11-22-2021**
Drilling Contractor: **Wang Testing Services** Drill Rig: **20CME55T[81%]**
Driller: **RR&AG** Logger: **M. Rojo** Checked by: **C. Marin**
Drilling Method: **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling: **24.00 ft**
At Completion of Drilling: **DRY**
Time After Drilling: **NA**
Depth to Water: **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 2553901.GPJ WANGENG.GDT 12/16/21

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/01-Stantec/CAD/CR-02_62P67/04-Sheets/04-Structures/0998304-D162P67-041-Boring Logs 3
1/26/2023 8:04:24 AM

HBM ENGINEERING GROUP, LLC

USER NAME =	DESIGNED - FL	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING LOGS (SHEET 3 OF 3) STRUCTURE NO. 099-8304
	CHECKED - MI, JJS, SK	REVISED -		
PLOT SCALE =	DRAWN - FL	REVISED -		
PLOT DATE =	CHECKED - MI, JJS, SK	REVISED -		SHEET S1-41 OF S1-41 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	65
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

Benchmark: Set 2" CWA Aluminum disc in concrete pier seat in southerly pier of River Road bridge on south side of eastbound I-80, Elev. 575.61.

Existing Structure: None.

Traffic Control: Traffic will be detoured during construction.

Salvage: None

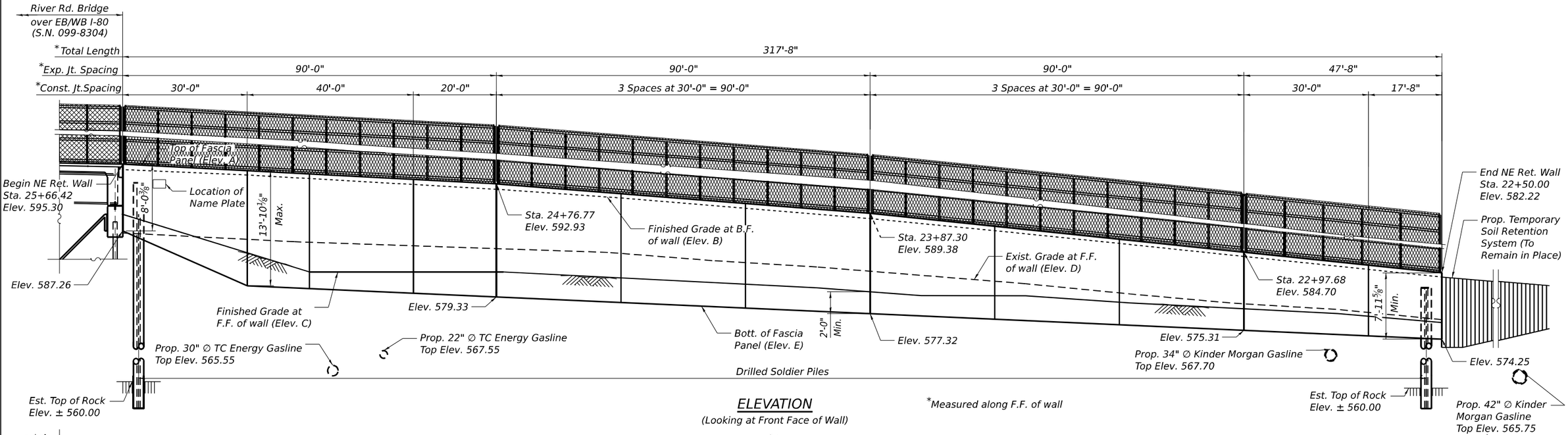
DESIGN STRESSES

FIELD UNITS

f 'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50) Soldier Piles

DESIGN SPECIFICATIONS

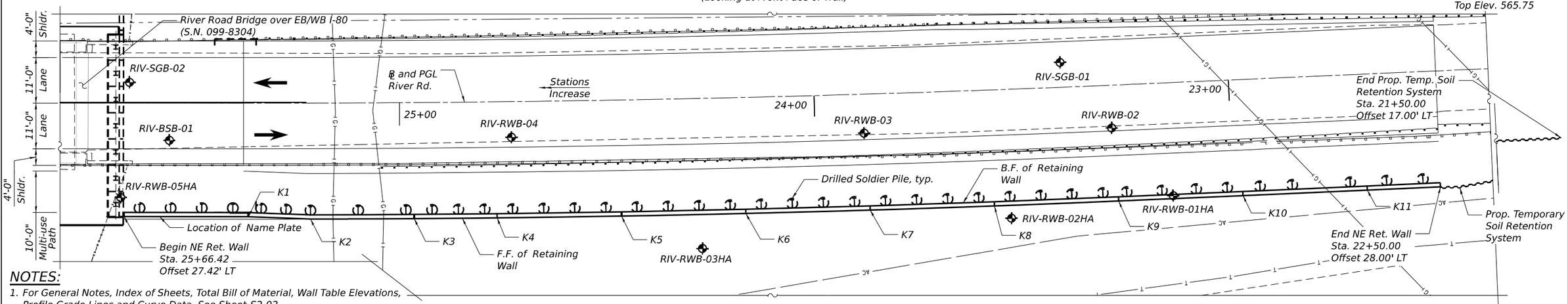
2020 AASHTO LRFD Bridge Design Specifications, 9th Edition



ELEVATION

(Looking at Front Face of Wall)

*Measured along F.F. of wall



PLAN

NOTES:

1. For General Notes, Index of Sheets, Total Bill of Material, Wall Table Elevations, Profile Grade Lines and Curve Data, See Sheet S2-02.
2. Stations and offsets are measured from the ℄ of River Rd. to the front face of the cast-in-place concrete facing.
3. "K1" denotes wall Kink Point - Number 1. See Wall Elevations Table on Sheet S2-02 for kink point stations and offsets.
4. See Civil Plans for Pipe Underdrain outlet details.
5. Space soldier piles to miss existing TC Energy and Kinder Morgan gas lines. If deviations from proposed pile spacing are required to avoid these gas lines (or other utilities), the Engineer of Record shall be contacted for re-evaluation of the proposed wall and further dispostion.

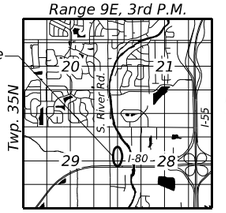
LEGEND:

- Soil Boring
- Prop. Fence
- ROW
- Prop. Guardrail
- Exist. Guardrail
- Exist. Gas Line
- Exist. Telephone Line
- Prop. Temporary Soil Retention System
- F.F. Front Face
- B.F. Back Face

STATE OF ILLINOIS — MOUSSA A. ISSA 081-005738 CHICAGO, ILLINOIS — LICENSED STRUCTURAL ENGINEER

Signed Moussa A. Issa
Dr. Moussa A. Issa, S.E. IL. Lic. No. 081-005738
Expires 11-30-2024
Date 1/27/2023 For Sheets S2-01 Thru S2-16

Structure Location



LOCATION SKETCH

GENERAL PLAN & ELEVATION
NORTHEAST RETAINING WALL
ALONG RIVER ROAD
F.A.I. RTE. I-80
SECTION 2021-151-B
WILL COUNTY
STA. 22+50.00 TO STA. 25+66.42
STRUCTURE NO. 099-W805

HBM ENGINEERING GROUP, LLC

USER NAME =	DESIGNED - MAA, SK	REVISED -	
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURE NO. 099-W805

SHEET S2-01 OF S2-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	66
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

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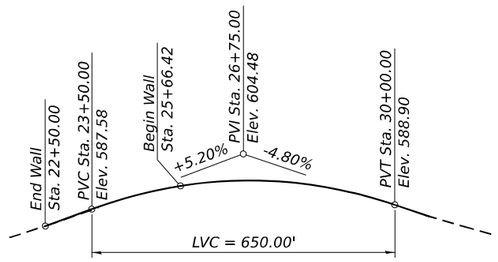
GENERAL NOTES:

1. Reinforcement bars designated (E) shall be epoxy coated.
2. Protective Coat shall be applied to exposed surfaces of the panels.
3. Wall to be built along straight chords between construction and expansion joints.
4. Soldier piles shall be cleaned and given one shop coat of Inorganic Zinc Rich Primer. Cost included with Furnishing Soldier Piles (W Section).
5. The Contractor shall field-verify locations of existing underground utilities and shall take all necessary precautions to protect existing utilities during construction of the wall. Any damage to the existing utilities shall be the responsibility of the Contractor. The existing utilities in conflict with retaining wall construction shall be protected, abandoned or relocated based on the results of coordination with the pertinent utility companies and according to directions given on the Civil Plans.
6. Any storage of construction equipment and material behind wall is not allowed.
7. Earth excavation in front of wall shall be gradual and no more than 4'-0" of earth shall be excavated at a time in front of the wall. The elevation difference between adjacent excavated areas in front of wall shall not vary more than 6'-0" over a distance of 50'-0" as measured along the length of the wall.
8. A layer of weathered bedrock is present at the project site as indicated in the soil boring logs. The Contractor shall provide a method to ensure the soldier piles achieve at least the plan tip elevations.
9. Commonwealth Edison (ComEd) overhead power line and towers exist near, and cross, the proposed improvement. The Contractor shall coordinate with ComEd by providing detailed staging plans that indicate equipment type (such as crane boom heights) and placement for ComEd review/approval prior to construction activities.
10. The Contractor shall exercise extreme caution in drilling and setting the soldier piles under Aerial Power Lines. The Contractor is responsible to coordinate with utilities to shield, insulate, deenergize or provide other means of protection against these lines if required. The Contractor shall make necessary adjustments to the lengths of the soldier piles and to the auguring equipment to maintain adequate clearance to the Aerial Power Lines as specified in OSHA safety requirements. Lengths of soldier piles and any necessary splice details shall be approved by the Engineer prior to the start of work.



PROFILE GRADE
(Along ℄ River Road)

PR CURVE
RR CURVE 1

P.I. Sta. = 24+28.73
Δ = 02°34'01" (RT)
D = 01°12'04"
R = 4,770.00'
T = 106.87'
L = 213.70'
E = 1.20'
e = N.C.
T.R. = N/A
S.E. Run = N/A
P.C. Sta. = 23+21.87
P.T. Sta. = 25+35.57

INDEX OF SHEETS

S2-01 General Plan & Elevation
S2-02 General Notes, Index of Sheets & Total BOM
S2-03 Plan and Elevation (Sheet 1 of 4)
S2-04 Plan and Elevation (Sheet 2 of 4)
S2-05 Plan and Elevation (Sheet 3 of 4)
S2-06 Plan and Elevation (Sheet 4 of 4)
S2-07 Wall Cross Sections and Details (Sheet 1 of 3)
S2-08 Wall Cross Sections and Details (Sheet 2 of 3)
S2-09 Wall Cross Sections and Details (Sheet 3 of 3)
S2-10 Bicycle Railing, Curved and Parapet Railing
S2-11 Temporary Soil Retention System
S2-12 Boring Logs (Sheet 1 of 5)
S2-13 Boring Logs (Sheet 2 of 5)
S2-14 Boring Logs (Sheet 3 of 5)
S2-15 Boring Logs (Sheet 4 of 5)
S2-16 Boring Logs (Sheet 5 of 5)

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structure Excavation	Cu Yd	198
Concrete Structures	Cu Yd	137
Protective Coat	Sq Yd	375
Stud Shear Connectors	Each	884
Reinforcement Bars, Epoxy Coated	Pound	19,720
Bicycle Railing, Curved	Foot	318
Name Plates	Each	1
Furnishing Soldier Piles (W Section)	Foot	1,299
Drilling And Setting Soldier Piles (In Soil)	Cu Ft	6,601
Drilling And Setting Soldier Piles (In Rock)	Cu Ft	1,000
Untreated Timber Lagging	Sq Ft	3,051
Geocomposite Wall Drain	Sq Yd	375
Pipe Underdrains for Structures 4"	Foot	322
Temporary Soil Retention System (To Remain In Place)	Sq Ft	370

WALL ELEVATIONS TABLE

Location	Station	Offset (Lt.)	Elevation A	Elevation B	Elevation C	Elevation D	Elevation E
Begin Wall	25+66.42	27.42'	595.30	594.65	589.28	587.03	587.26
K1	25+36.42	27.42'	594.51	594.01	584.65	586.26	580.66
K2	25+21.53	28.00'	594.11	593.58	582.34	585.92	580.33
K3	24+96.66	28.00'	593.45	592.88	582.34	585.53	579.77
K4	24+76.77	28.00'	592.93	592.28	582.34	585.16	579.33
K5	24+46.95	28.00'	591.75	591.24	581.57	584.57	578.66
K6	24+17.12	28.00'	590.57	590.06	580.82	583.46	577.99
K7	23+87.30	28.00'	589.38	588.75	579.94	582.43	577.32
K8	23+57.47	28.00'	587.82	587.30	579.47	581.23	576.65
K9	23+27.65	28.00'	586.26	585.76	578.69	579.81	575.98
K10	22+97.68	28.00'	584.70	584.20	577.85	578.49	575.31
K11	22+67.67	28.00'	583.14	582.64	577.00	577.45	574.64
End Wall	22+50.00	28.00'	582.22	581.72	576.25	576.60	574.25

Elev. A = Top of Fascia Panel
Elev. B = Finished Grade at B.F. of Wall
Elev. C = Finished Grade at F.F. of Wall
Elev. D = Existing Grade at F.F. of Wall
Elev. E = Bottom of Fascia Panel

SUGGESTED SEQUENCE OF CONSTRUCTION:

1. Locate all existing utilities that are to remain. In particular, the TC Energy pipelines at the south end of the retaining wall shall be daylighted in the presence of a TC Energy Field representative. The Contractor shall coordinate any required improvements to, or removals of, existing utilities with utility owner(s) and IDOT.
2. Install North Abutment steel piles for adjacent River Road Bridge over EB/WB I-80 (SN 099-8304). The construction of the North Abutment concrete and wingwall may be performed at any time following pile installation.
3. Install Drilled Soldier Piles throughout the full length of proposed retaining wall, and install Temporary Soil Retention System (To Remain In Place) at the north end.
4. Excavate for proposed NE Retaining Wall (SN 099-W805) as required and install untreated timber lagging for drilled soldier piles from top down as excavation proceeds. Untreated timber lagging shall also be installed parallel to the wall panel between the Temporary Soil Retention System (To Remain In Place) and the first adjacent soldier pile.
5. Install Geocomposite Wall Drain, pipe underdrain for structures and associated drainage elements.
6. Construct reinforced concrete facing for proposed NE Retaining Wall (SN 099-W805).
7. Construct approach slab and roadway pavement.
8. Backfill to proposed grade at front face of retaining wall, apply protective coat, and install Bicycle Railing, Curved.

STATION 22+50.00 TO STATION 25+66.42
BUILT BY
STATE OF ILLINOIS
F.A.I. RTE. I-80 SEC. 2021-151-B
LOADING HL-93
STRUCTURE NO. 099-W805

NAME PLATE
See Std. 515001

HBM ENGINEERING GROUP, LLC

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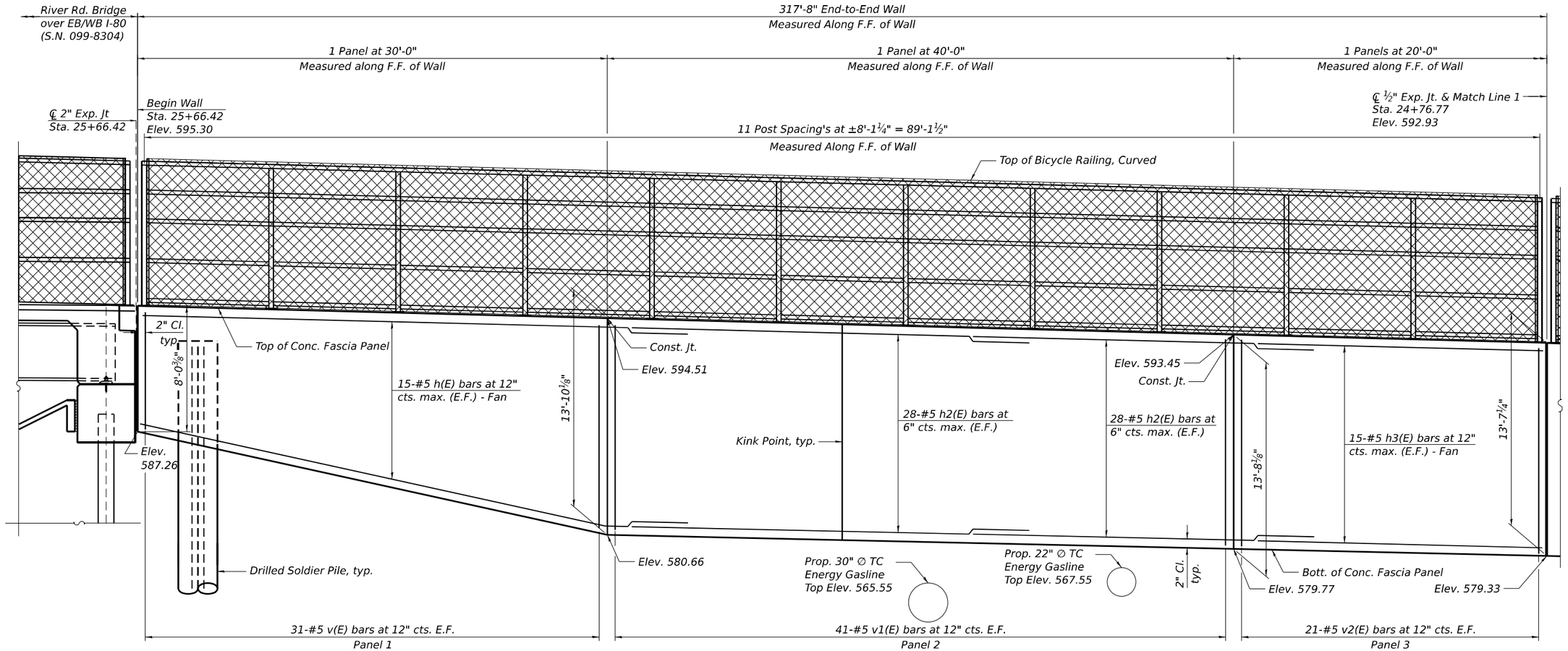
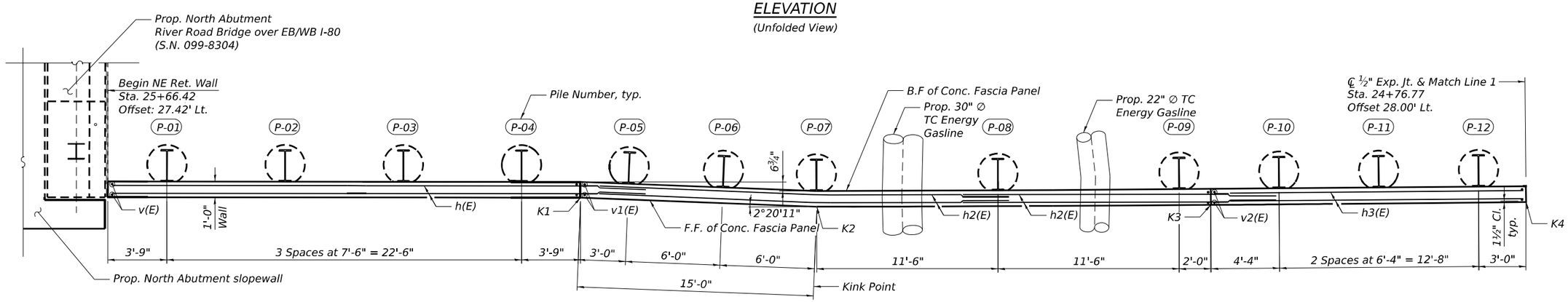
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, INDEX OF SHEETS & TOTAL BOM
STRUCTURE NO. 099-W805
SHEET S2-02 OF S2-16 SHEETS

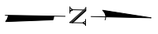
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	67
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		



ELEVATION
(Unfolded View)



PLAN



NOTES:

1. All dimensions are along the F.F of wall
2. For typical wall cross sections and details, see Sheets S2-07 thru S2-09.
3. For soldier pile layout, minimum bar laps, sections, details, and Bill of Material, see Sheet S2-09.
4. Stations and Offsets are measured along the F.F. of the wall from ℄ River Road.

LEGEND

E.F. - Each Face
F.F. - Front Face
B.F. - Back Face

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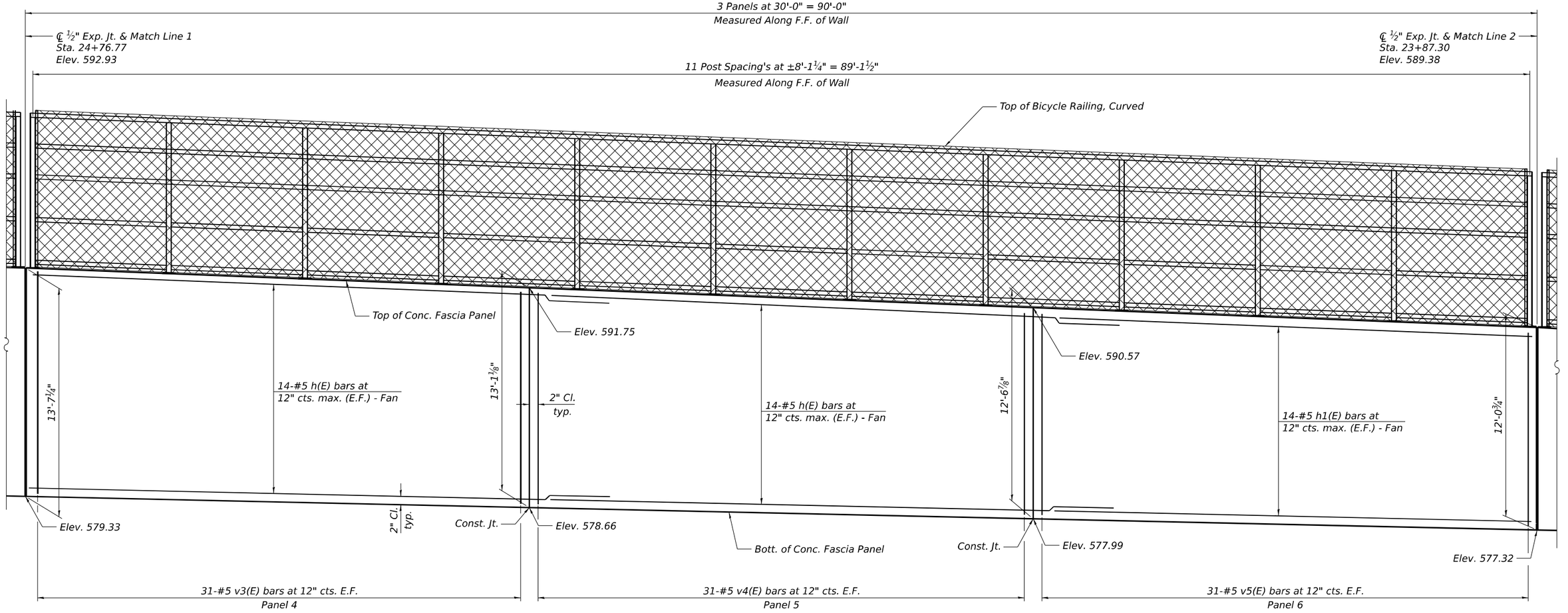
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

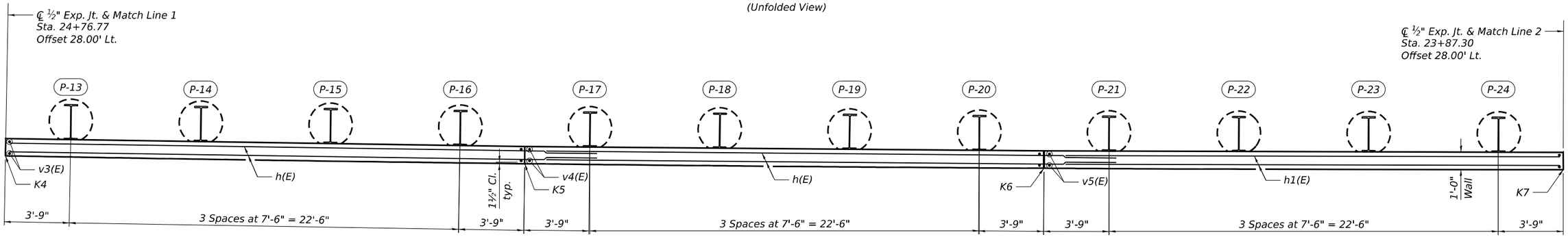
PLAN AND ELEVATION (SHEET 1 OF 4)
STRUCTURE NO. 099-W805
SHEET S2-03 OF S2-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	68
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

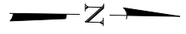


ELEVATION

(Unfolded View)



PLAN



LEGEND

E.F. - Each Face
F.F. - Front Face
B.F. - Back Face

NOTE:

1. For Notes, see Sheet S2-03.

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STATE OF ILLINOIS
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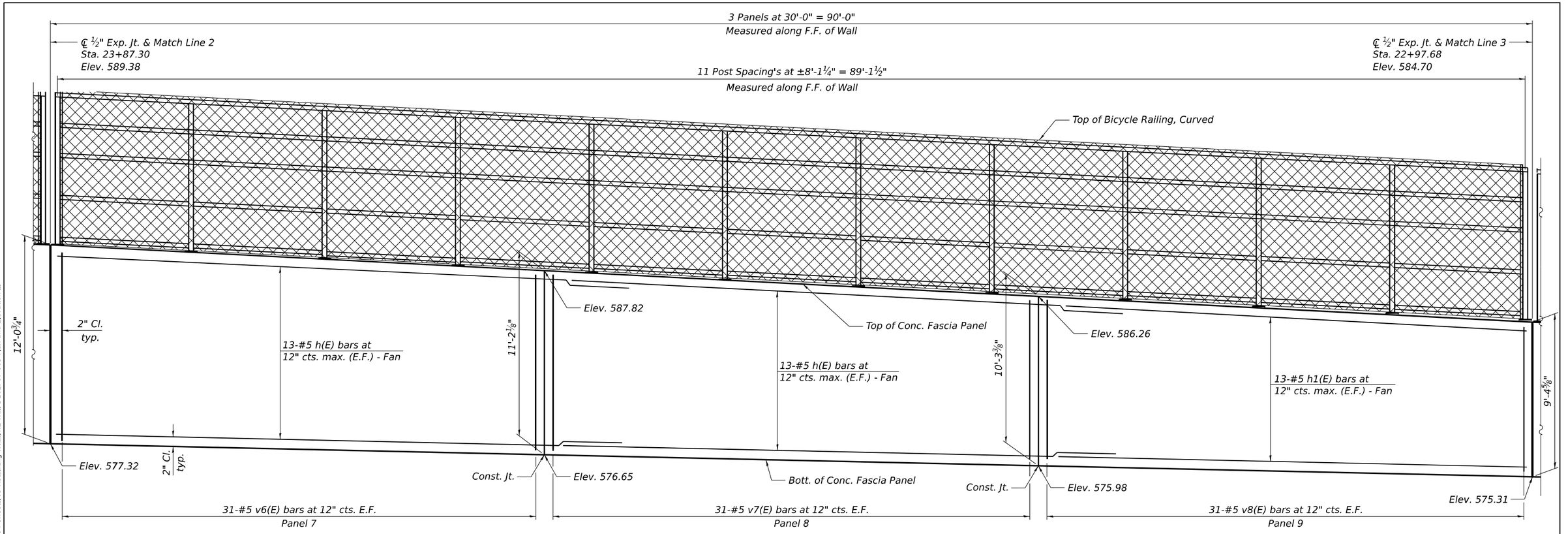
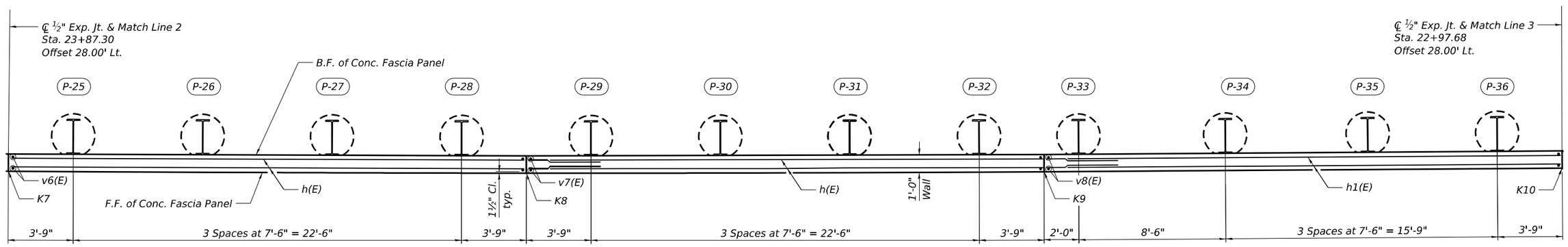
PLAN AND ELEVATION (SHEET 2 OF 4)
STRUCTURE NO. 099-W805
SHEET S2-04 OF S2-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	69
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		



ELEVATION

(Unfolded View)



PLAN

NOTE:

1. For Notes, see Sheet S2-03.

LEGEND

E.F. - Each Face
F.F. - Front Face
B.F. - Back Face

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PLAN AND ELEVATION (SHEET 3 OF 4)
STRUCTURE NO. 099-W805
SHEET S2-05 OF S2-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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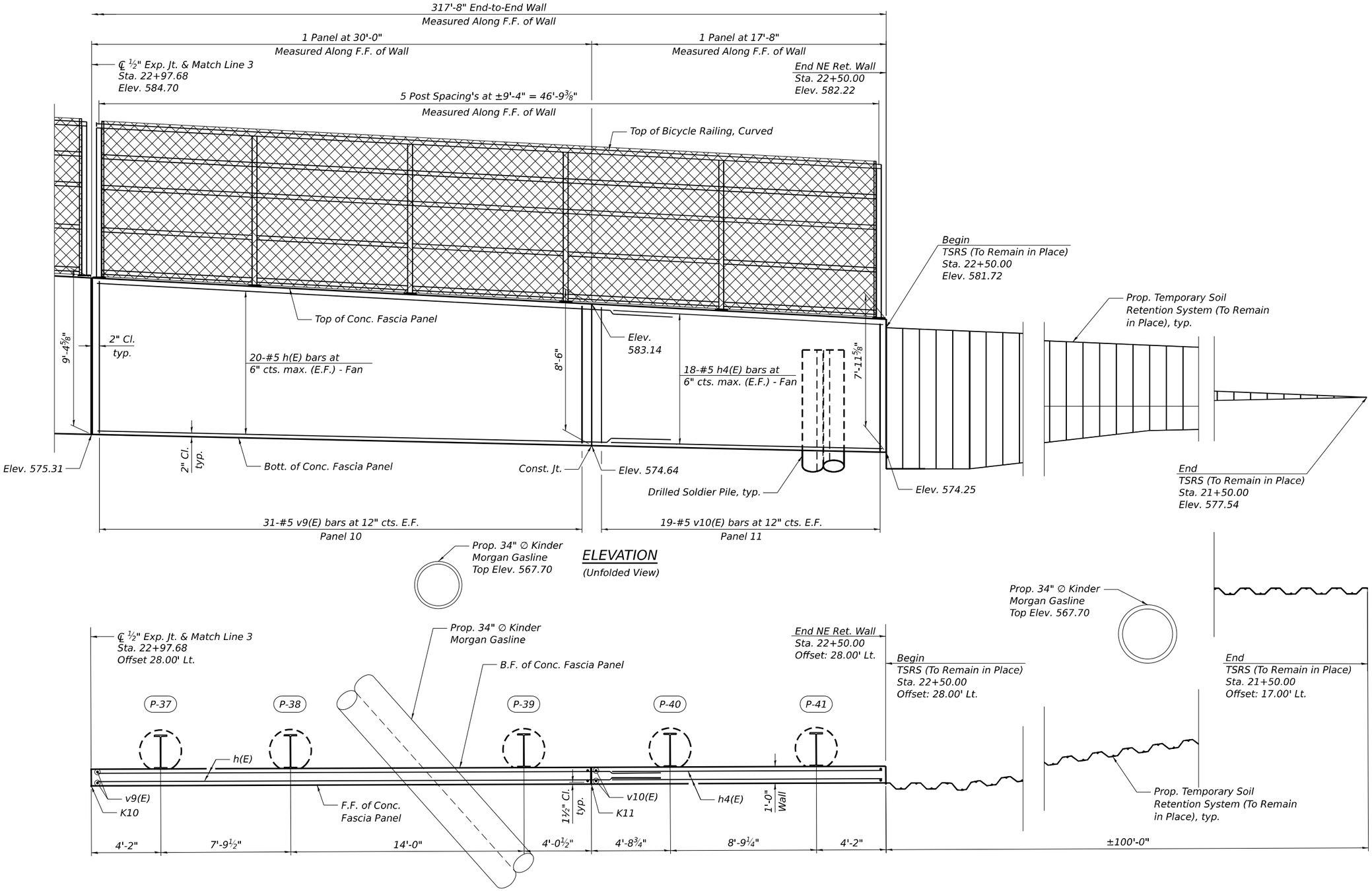
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

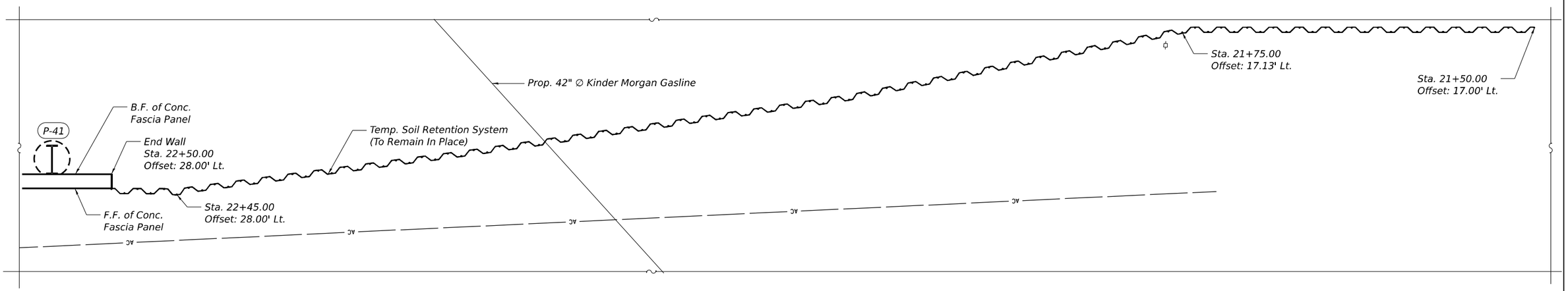


NOTE:

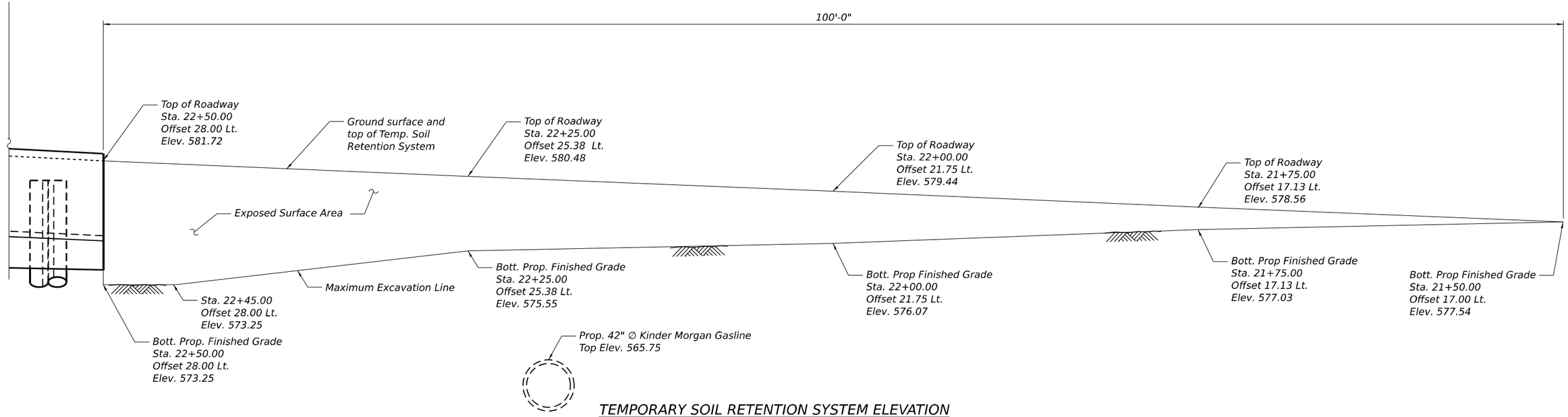
1. For Notes, see Sheet S2-03.

LEGEND

E.F. - Each Face
F.F. - Front Face
B.F. - Back Face



PARTIAL PLAN AT TEMPORARY SOIL RETENTION SYSTEM



TEMPORARY SOIL RETENTION SYSTEM ELEVATION

NOTES:

1. The Temporary Soil Retention System at the north end of proposed retaining wall shall be installed to the limits shown and shall remain in place until such time as remaining portions of the Multi-Use Path are constructed. The Contractor shall submit a soil retention system design, including all necessary plan details and calculations, for review and acceptance by the Engineer. See Special Provision for Temporary Soil Retention System (To Remain in Place).

2. A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

3. The maximum allowable excavation slope is 1:2 (V:H).

LEGEND:

- Temporary Soil Retention System (To Remain In Place)
- AC — ROW
- Exist. Gas Line

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Temporary Soil Retention System (To Remain In Place)	Sq Ft	370

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY SOIL RETENTION SYSTEM DETAILS
STRUCTURE NO. 099-W805

SHEET S2-11 OF S2-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	76
		CONTRACT NO. 62P67		
		ILLINOIS	FED. AID PROJECT	

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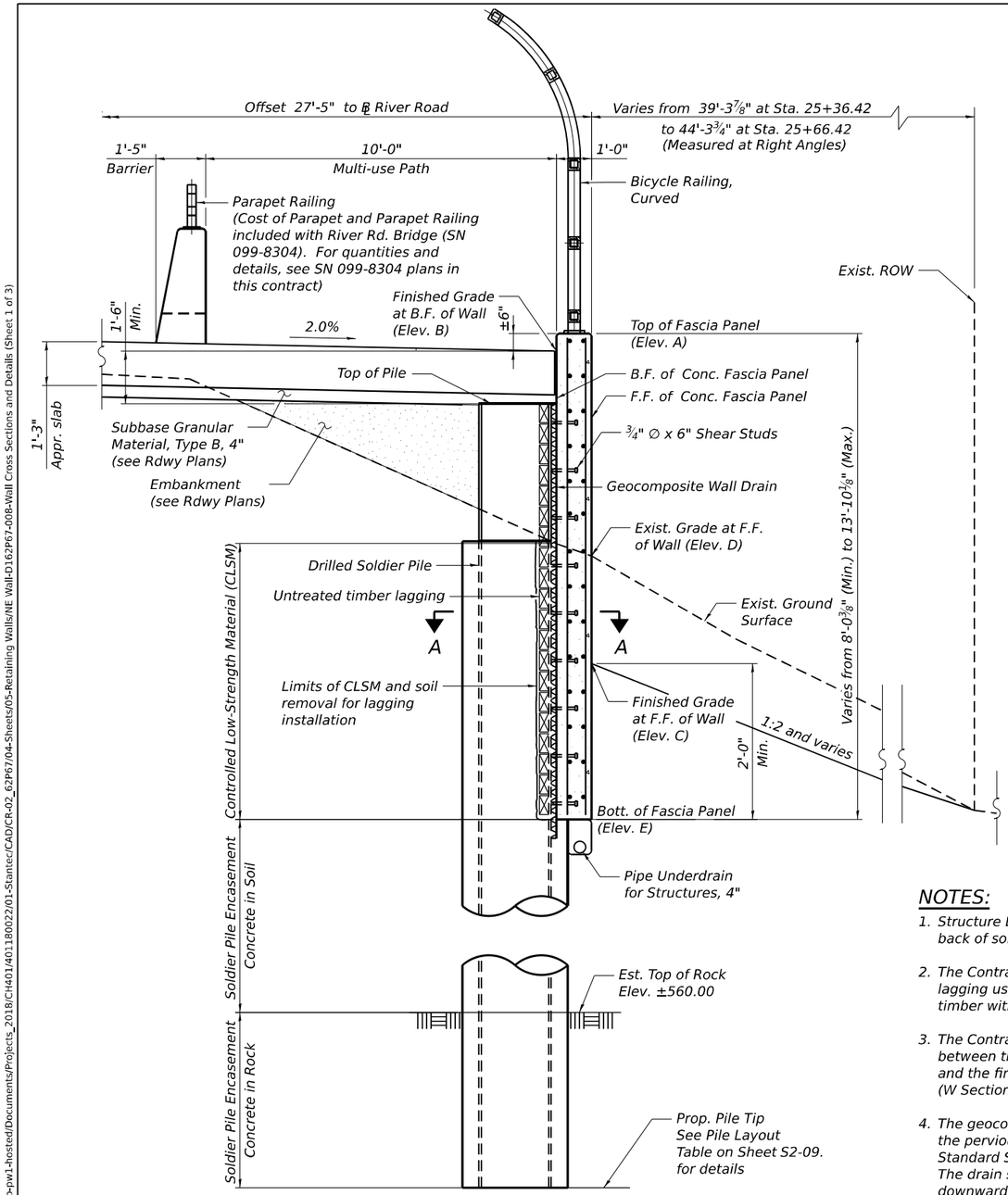
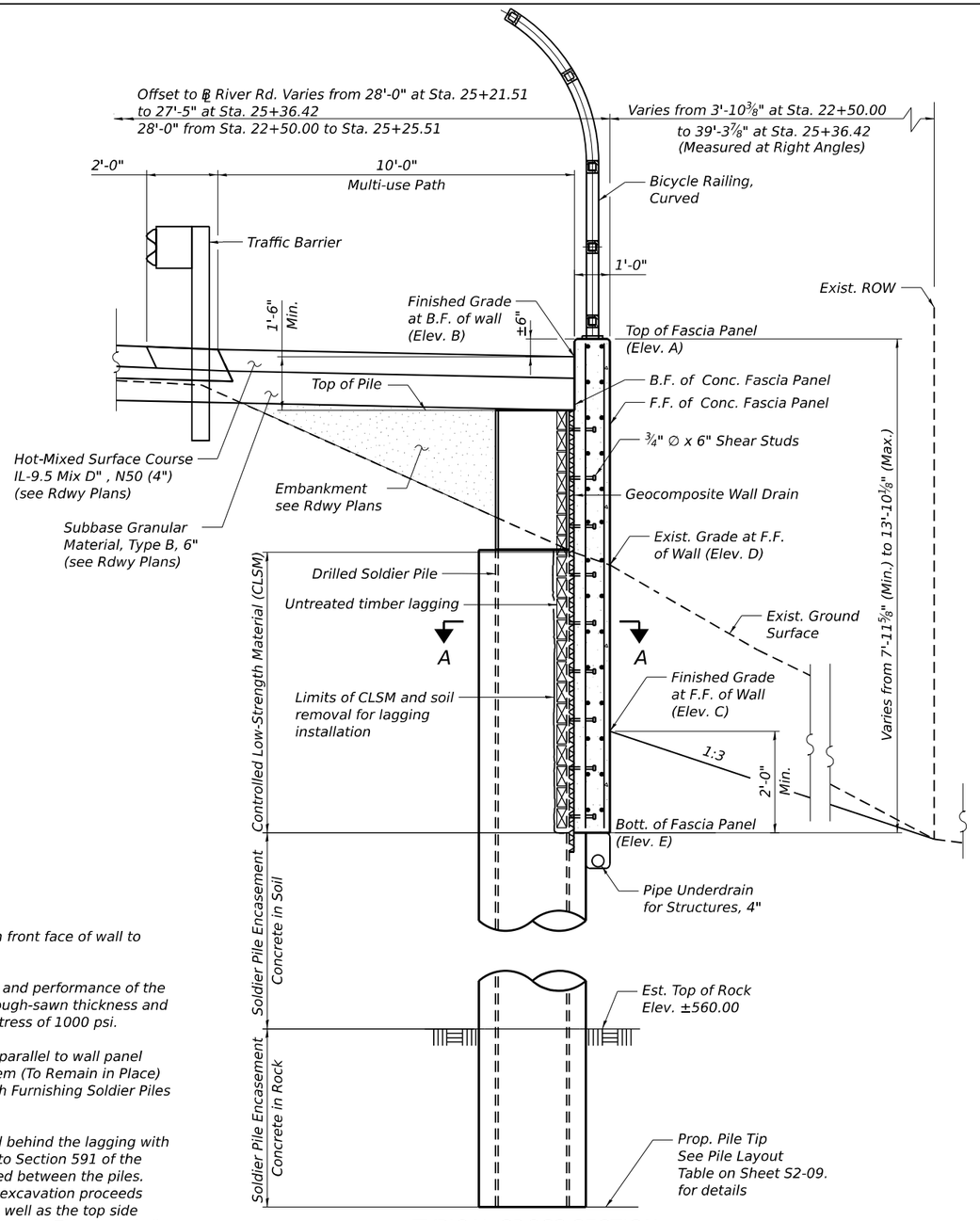


TYPICAL CROSS SECTION

(Looking North)

(Sta. 25+36.42 to Sta. 25+66.42)



TYPICAL CROSS SECTION

(Looking North)

(Sta. 22+50.00 to Sta. 25+36.42)

NOTES:

1. Structure Excavation is measured 2'-0" from front face of wall to back of soldier pile timber lagging.
2. The Contractor is responsible for the design and performance of the lagging using no less than a 3 in. nominal rough-sawn thickness and timber with a minimum allowable bending stress of 1000 psi.
3. The Contractor shall provide Wood Lagging parallel to wall panel between the Temporary Soil Retention System (To Remain in Place) and the first adjacent pile, cost included with Furnishing Soldier Piles (W Section).
4. The geocomposite wall drain shall be placed behind the lagging with the pervious side toward the soil according to Section 591 of the Standard Specifications and shall be centered between the piles. The drain shall be installed in stages as the excavation proceeds downward making sure that drain splices as well as the top side edges are covered as required to protect the drain. Thickness shall not be greater than ⅞".
5. Stud shear connectors shall be ¾" ∅ x 6" granular or solid flux filled headed studs, conforming to Article 1006.32 of the Standard Specifications, automatically end welded to the front flange of the soldier piles.
6. For Shear Stud Detail, see Sheet S2-09.
7. For Section A-A, see Sheet S2-08.

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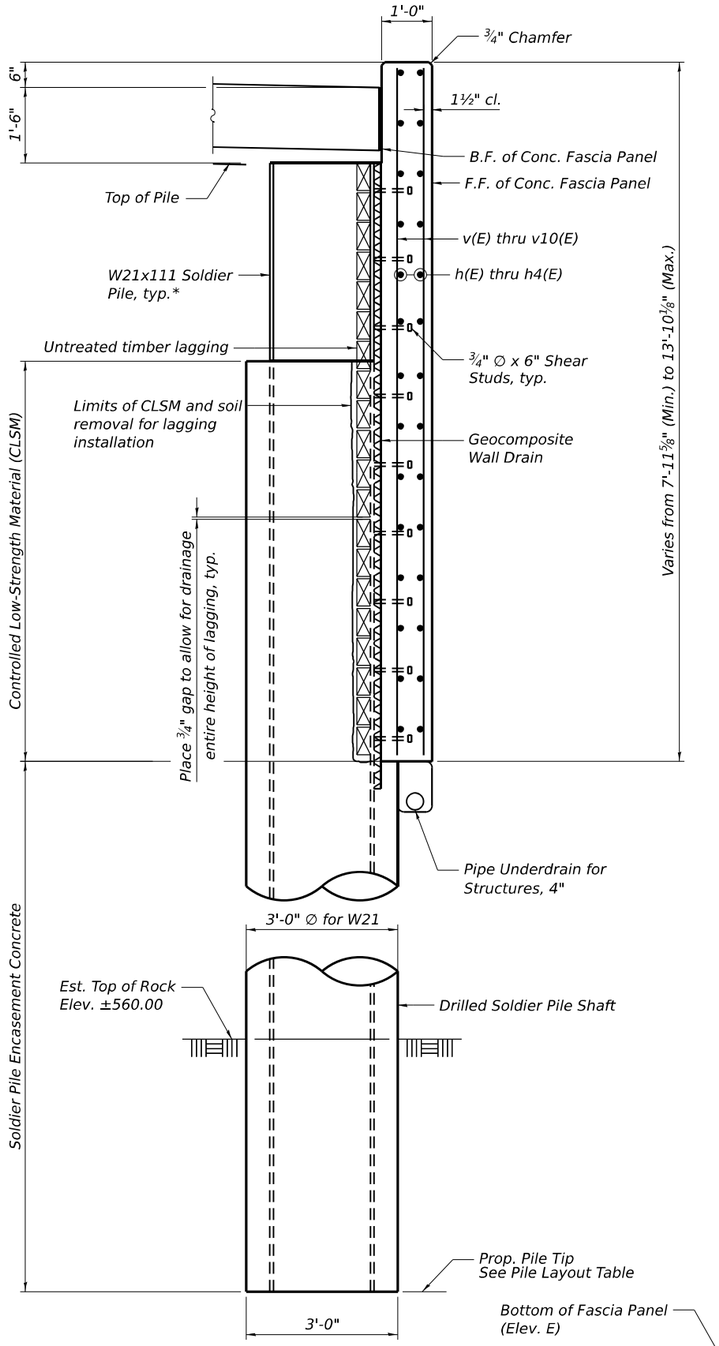
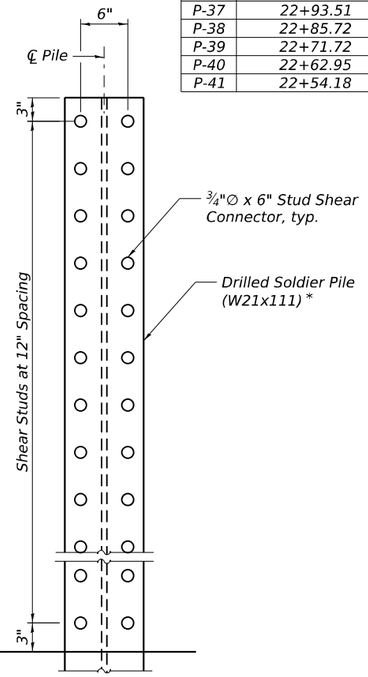
WALL CROSS SECTIONS AND DETAILS (SHEET 1 OF 3)
STRUCTURE NO. 099-W805

SHEET S2-07 OF S2-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	72
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		



TYPICAL SOLDIER PILE WALL CROSS SECTION



SHEAR STUD DETAIL

NOTE:

1. For Notes, see Sheets S2-03 and S2-07.

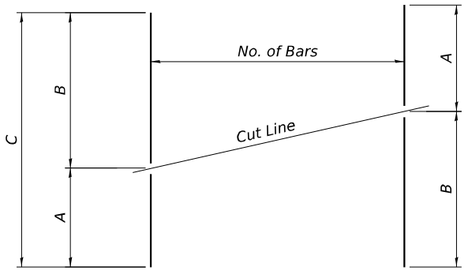
PILE LAYOUT

Pile	Station at Working Point	Offset	Top of Pile Elevation	Top of Encasement/ Bottom of CLSM	Section	Pile Tip Elevation	Pile Length	Top of Wall
P-01	25+62.67	25.52' Lt.	593.53	586.44	W21x111	557.00	36.53	595.20
P-02	25+55.17	25.52' Lt.	593.34	584.79	W21x111	556.81	36.53	595.00
P-03	25+47.67	25.52' Lt.	593.14	583.14	W21x111	556.61	36.53	594.81
P-04	25+40.17	25.52' Lt.	592.94	581.49	W21x111	556.41	36.53	594.61
P-05	25+32.61	25.67' Lt.	592.74	580.60	W21x111	557.00	35.74	594.41
P-06	25+25.16	25.96' Lt.	592.54	580.46	W21x111	556.80	35.74	594.21
P-07	25+18.54	26.07' Lt.	592.37	580.33	W21x147	556.63	35.74	594.03
P-08	25+09.33	26.07' Lt.	592.12	580.07	W21x147	556.38	35.74	593.79
P-09	25+00.14	26.06' Lt.	591.87	579.82	W21x147	556.13	35.74	593.54
P-10	24+95.42	26.08' Lt.	591.75	579.68	W21x111	557.00	34.75	593.42
P-11	24+87.96	26.09' Lt.	591.56	579.53	W21x111	556.81	34.75	593.22
P-12	24+80.50	26.10' Lt.	591.36	579.39	W21x111	556.61	34.75	593.03
P-13	24+73.05	26.10' Lt.	591.12	579.33	W21x111	557.00	34.12	592.78
P-14	24+65.58	26.08' Lt.	590.82	579.08	W21x111	556.70	34.12	592.49
P-15	24+58.13	26.08' Lt.	590.53	578.91	W21x111	556.41	34.12	592.19
P-16	24+50.67	26.10' Lt.	590.23	578.74	W21x111	556.11	34.12	591.90
P-17	24+43.22	26.10' Lt.	589.94	578.57	W21x111	557.00	32.94	591.60
P-18	24+35.78	26.09' Lt.	589.64	578.41	W21x111	556.70	32.94	591.31
P-19	24+28.30	26.08' Lt.	589.35	578.24	W21x111	556.41	32.94	591.01
P-20	24+20.85	26.10' Lt.	589.05	578.07	W21x111	556.11	32.94	590.72
P-21	24+13.40	26.10' Lt.	588.75	577.90	W21x111	557.00	31.75	590.42
P-22	24+05.93	26.09' Lt.	588.46	577.74	W21x111	556.71	31.75	590.12
P-23	23+98.48	26.09' Lt.	588.16	577.57	W21x111	556.41	31.75	589.83
P-24	23+91.02	26.10' Lt.	587.86	577.40	W21x111	556.11	31.75	589.53
P-25	23+83.57	26.10' Lt.	587.52	577.24	W21x111	557.00	30.52	589.18
P-26	23+76.11	26.09' Lt.	587.13	577.07	W21x111	556.61	30.52	588.79
P-27	23+68.66	26.09' Lt.	586.74	576.90	W21x111	556.22	30.52	588.41
P-28	23+61.20	26.10' Lt.	586.35	576.73	W21x111	555.83	30.52	588.02
P-29	23+53.74	26.10' Lt.	585.96	576.57	W21x111	557.00	28.96	587.62
P-30	23+46.29	26.09' Lt.	585.57	576.40	W21x111	556.61	28.96	587.24
P-31	23+38.85	26.09' Lt.	585.18	576.23	W21x111	556.22	28.96	586.85
P-32	23+31.39	26.10' Lt.	584.79	576.07	W21x111	555.83	28.96	586.46
P-33	23+25.66	26.11' Lt.	584.49	575.90	W21x111	557.00	27.49	586.16
P-34	23+17.18	26.10' Lt.	584.05	575.73	W21x111	556.56	27.49	585.72
P-35	23+08.93	26.11' Lt.	583.62	575.56	W21x111	556.13	27.49	585.29
P-36	23+01.43	26.11' Lt.	583.23	575.40	W21x111	555.74	27.49	584.90
P-37	22+93.51	26.11' Lt.	582.82	575.22	W21x111	557.00	25.82	584.48
P-38	22+85.72	26.08' Lt.	582.41	575.05	W21x147	556.59	25.82	584.08
P-39	22+71.72	26.08' Lt.	581.68	574.73	W21x147	555.86	25.82	583.35
P-40	22+62.95	26.11' Lt.	581.23	574.54	W21x111	557.00	24.23	582.89
P-41	22+54.18	26.11' Lt.	580.77	574.64	W21x111	556.54	24.23	582.44

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	178	#5	33'-9"	———
h1(E)	54	#5	29'-8"	———
h2(E)	112	#5	23'-10"	———
h3(E)	30	#5	19'-8"	———
h4(E)	36	#5	17'-4"	———
v(E)	31	#5	21'-2"	———
v1(E)	41	#5	26'-10"	———
v2(E)	21	#5	26'-7"	———
v3(E)	31	#5	26'-0"	———
v4(E)	31	#5	25'-0"	———
v5(E)	31	#5	24'-0"	———
v6(E)	31	#5	22'-7"	———
v7(E)	31	#5	20'-9"	———
v8(E)	31	#5	19'-0"	———
v9(E)	31	#5	17'-3"	———
v10(E)	19	#5	15'-10"	———

Structure Excavation	Cu Yd	198
Concrete Structures	Cu Yd	137
Protective Coat	Sq Yd	375
Stud Shear Connectors	Each	884
Reinforcement Bars, Epoxy Coated	Pound	19,720
Furnishing Soldier Piles (W Section)	Foot	1,299
Drilling And Setting Soldier Piles (In Soil)	Cu Ft	6,601
Drilling And Setting Soldier Piles (In Rock)	Cu Ft	1,000
Untreated Timber Lagging	Sq Ft	3,051
Geocomposite Wall Drain	Sq Yd	375
Pipe Underdrains for Structures 4"	Foot	322

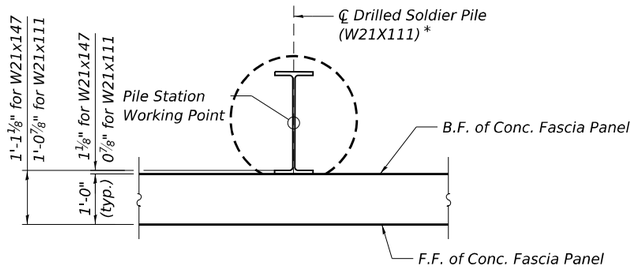


SERIES OF BAR CUTTING DIAGRAM

See table for dimensions. Make all cuts normal to bar axis

BAR TABLE SCHEDULE

Bar	No. of Sets Req'd	Bar No.	No. of Bars Per Set	A	B	C
v(E)	1	#5	31	7'-8"	13'-6"	21'-2"
v1(E)	1	#5	41	13'-6"	13'-4"	26'-10"
v2(E)	1	#5	21	13'-4"	13'-3"	26'-7"
v3(E)	1	#5	31	13'-3"	12'-9"	26'-0"
v4(E)	1	#5	31	12'-9"	12'-3"	25'-0"
v5(E)	1	#5	31	12'-3"	11'-9"	24'-0"
v6(E)	1	#5	31	11'-9"	10'-10"	22'-7"
v7(E)	1	#5	31	10'-10"	9'-11"	20'-9"
v8(E)	1	#5	31	9'-11"	9'-1"	19'-0"
v9(E)	1	#5	31	9'-1"	8'-2"	17'-3"
v10(E)	1	#5	19	8'-2"	7'-8"	15'-10"



SOLDIER PILE WORKING POINT

* Piles P-07 through P-09 and Piles P-38 through P-39 are W21x147

Minimum Bar Lap	
Bar	Lap
#5	3'-9"

LEGEND

F.F.	Front Face
B.F.	Back Face

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3/14/2023 4:02:52 PM

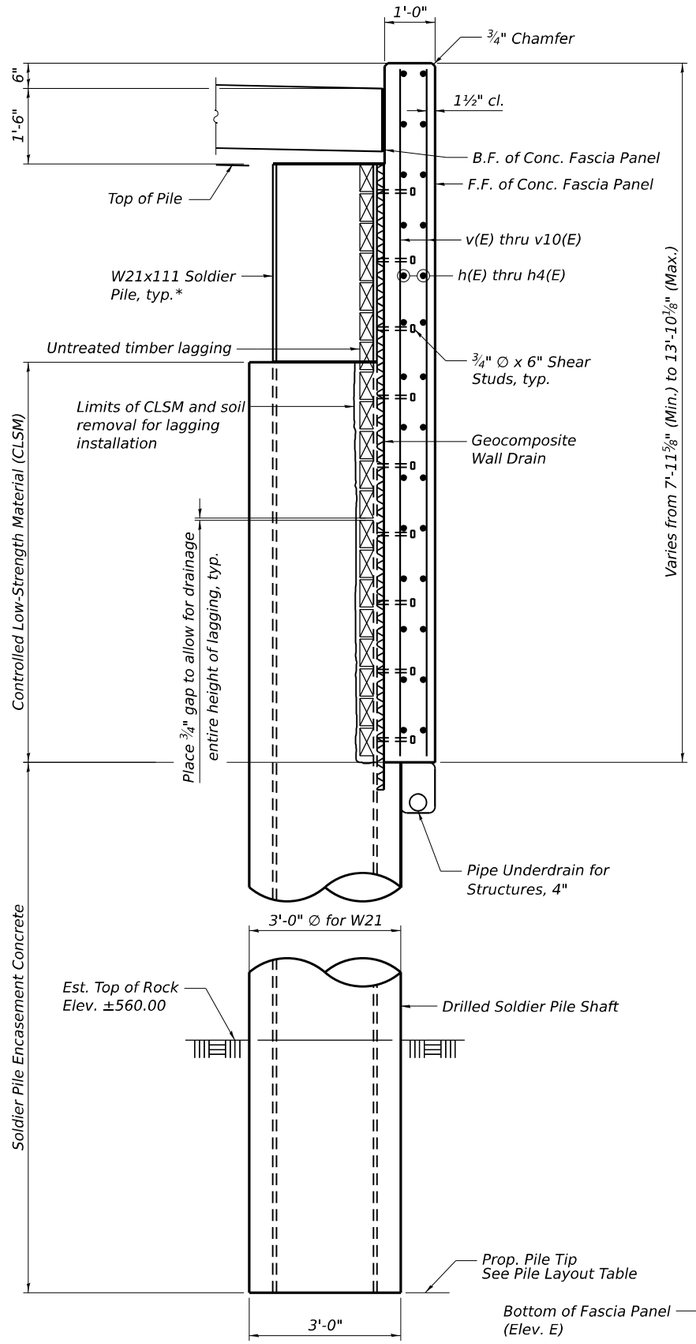
HBM ENGINEERING GROUP, LLC

USER NAME =	DESIGNED - MAA, SK	REVISED -	
	CHECKED - MAI, JJS	REVISED -	
PLOT SCALE =	DRAWN - FL	REVISED -	
PLOT DATE =	CHECKED - MAI, JJS	REVISED -	

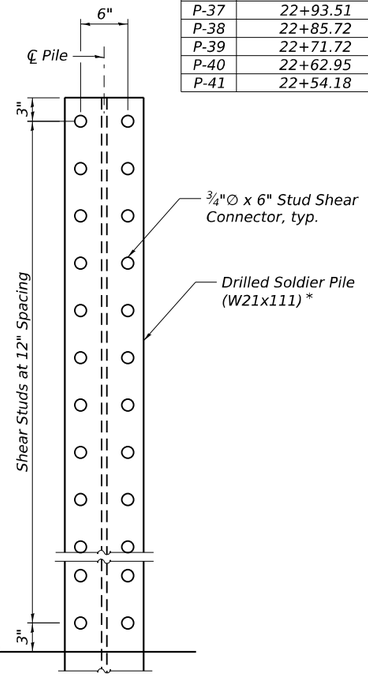
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WALL CROSS SECTIONS AND DETAILS (SHEET 3 OF 3)
STRUCTURE NO. 099-W805
SHEET S2-09 OF S2-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	74
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		



TYPICAL SOLDIER PILE WALL CROSS SECTION



SHEAR STUD DETAIL

NOTE:

1. For Notes, see Sheets S2-03 and S2-07.

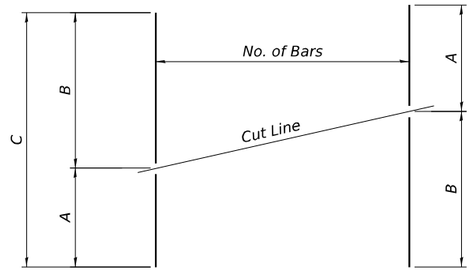
PILE LAYOUT

Pile	Station at Working Point	Offset	Top of Pile Elevation	Top of Encasement/ Bottom of CLSM	Section	Auger Diameter	Pile Tip Elevation	Pile Length
P-01	25+62.67	25.52' Lt.	593.53	586.44	W21x111	2'-6"	557.00	36.53
P-02	25+55.17	25.52' Lt.	593.34	584.79	W21x111	2'-6"	556.81	36.53
P-03	25+47.67	25.52' Lt.	593.14	583.14	W21x111	2'-6"	556.61	36.53
P-04	25+40.17	25.52' Lt.	592.94	581.49	W21x111	2'-6"	556.41	36.53
P-05	25+32.61	25.67' Lt.	592.74	580.60	W21x111	2'-6"	557.00	35.74
P-06	25+25.16	25.96' Lt.	592.54	580.46	W21x111	2'-6"	556.80	35.74
P-07	25+18.54	26.07' Lt.	592.37	580.33	W21x147	2'-6"	556.63	35.74
P-08	25+09.33	26.07' Lt.	592.12	580.07	W21x147	2'-6"	556.38	35.74
P-09	25+00.14	26.06' Lt.	591.87	579.82	W21x147	2'-6"	556.13	35.74
P-10	24+95.42	26.08' Lt.	591.75	579.68	W21x111	2'-6"	557.00	34.75
P-11	24+87.96	26.09' Lt.	591.56	579.53	W21x111	2'-6"	556.81	34.75
P-12	24+80.50	26.10' Lt.	591.36	579.39	W21x111	2'-6"	556.61	34.75
P-13	24+73.05	26.10' Lt.	591.12	579.33	W21x111	2'-6"	557.00	34.12
P-14	24+65.58	26.08' Lt.	590.82	579.08	W21x111	2'-6"	556.70	34.12
P-15	24+58.13	26.08' Lt.	590.53	578.91	W21x111	2'-6"	556.41	34.12
P-16	24+50.67	26.10' Lt.	590.23	578.74	W21x111	2'-6"	556.11	34.12
P-17	24+43.22	26.10' Lt.	589.94	578.57	W21x111	2'-6"	557.00	32.94
P-18	24+35.78	26.09' Lt.	589.64	578.41	W21x111	2'-6"	556.70	32.94
P-19	24+28.30	26.08' Lt.	589.35	578.24	W21x111	2'-6"	556.41	32.94
P-20	24+20.85	26.10' Lt.	589.05	578.07	W21x111	2'-6"	556.11	32.94
P-21	24+13.40	26.10' Lt.	588.75	577.90	W21x111	2'-6"	557.00	31.75
P-22	24+05.93	26.09' Lt.	588.46	577.74	W21x111	2'-6"	556.71	31.75
P-23	23+98.48	26.09' Lt.	588.16	577.57	W21x111	2'-6"	556.41	31.75
P-24	23+91.02	26.10' Lt.	587.86	577.40	W21x111	2'-6"	556.11	31.75
P-25	23+83.57	26.10' Lt.	587.52	577.24	W21x111	2'-6"	557.00	30.52
P-26	23+76.11	26.09' Lt.	587.13	577.07	W21x111	2'-6"	556.61	30.52
P-27	23+68.66	26.09' Lt.	586.74	576.90	W21x111	2'-6"	556.22	30.52
P-28	23+61.20	26.10' Lt.	586.35	576.73	W21x111	2'-6"	555.83	30.52
P-29	23+53.74	26.10' Lt.	585.96	576.57	W21x111	2'-6"	557.00	28.96
P-30	23+46.29	26.09' Lt.	585.57	576.40	W21x111	2'-6"	556.61	28.96
P-31	23+38.85	26.09' Lt.	585.18	576.23	W21x111	2'-6"	556.22	28.96
P-32	23+31.39	26.10' Lt.	584.79	576.07	W21x111	2'-6"	555.83	28.96
P-33	23+25.66	26.11' Lt.	584.49	575.90	W21x111	2'-6"	557.00	27.49
P-34	23+17.18	26.10' Lt.	584.05	575.73	W21x111	2'-6"	556.56	27.49
P-35	23+08.93	26.11' Lt.	583.62	575.56	W21x111	2'-6"	556.13	27.49
P-36	23+01.43	26.11' Lt.	583.23	575.40	W21x111	2'-6"	555.74	27.49
P-37	22+93.51	26.11' Lt.	582.82	575.22	W21x111	2'-6"	557.00	25.82
P-38	22+85.72	26.08' Lt.	582.41	575.05	W21x147	2'-6"	556.59	25.82
P-39	22+71.72	26.08' Lt.	581.68	574.73	W21x147	2'-6"	555.86	25.82
P-40	22+62.95	26.11' Lt.	581.23	574.54	W21x111	2'-6"	557.00	24.23
P-41	22+54.18	26.11' Lt.	580.77	574.64	W21x111	2'-6"	556.54	24.23

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	178	#5	33'-9"	
h1(E)	54	#5	29'-8"	
h2(E)	112	#5	23'-10"	
h3(E)	30	#5	19'-8"	
h4(E)	36	#5	17'-4"	
v(E)	31	#5	21'-2"	
v1(E)	41	#5	26'-10"	
v2(E)	21	#5	26'-7"	
v3(E)	31	#5	26'-0"	
v4(E)	31	#5	25'-0"	
v5(E)	31	#5	24'-0"	
v6(E)	31	#5	22'-7"	
v7(E)	31	#5	20'-9"	
v8(E)	31	#5	19'-0"	
v9(E)	31	#5	17'-3"	
v10(E)	19	#5	15'-10"	

Structure Excavation	Cu Yd	198
Concrete Structures	Cu Yd	137
Protective Coat	Sq Yd	375
Stud Shear Connectors	Each	884
Reinforcement Bars, Epoxy Coated	Pound	19,720
Furnishing Soldier Piles (W Section)	Foot	1,299
Drilling And Setting Soldier Piles (In Soil)	Cu Ft	5,150
Drilling And Setting Soldier Piles (In Rock)	Cu Ft	1,000
Untreated Timber Lagging	Sq Ft	3,051
Geocomposite Wall Drain	Sq Yd	375
Pipe Underdrains for Structures 4"	Foot	322

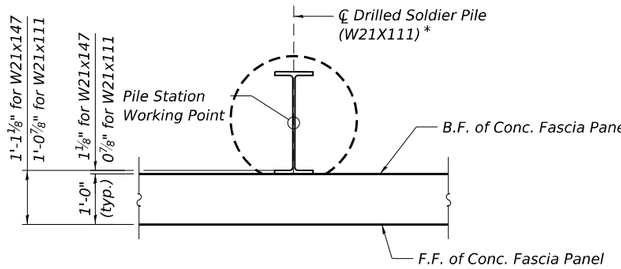


SERIES OF BAR CUTTING DIAGRAM

See table for dimensions. Make all cuts normal to bar axis

BAR TABLE SCHEDULE

Bar	No. of Sets Req'd	Bar No.	No. of Bars Per Set	A	B	C
v(E)	1	#5	31	7'-8"	13'-6"	21'-2"
v1(E)	1	#5	41	13'-6"	13'-4"	26'-10"
v2(E)	1	#5	21	13'-4"	13'-3"	26'-7"
v3(E)	1	#5	31	13'-3"	12'-9"	26'-0"
v4(E)	1	#5	31	12'-9"	12'-3"	25'-0"
v5(E)	1	#5	31	12'-3"	11'-9"	24'-0"
v6(E)	1	#5	31	11'-9"	10'-10"	22'-7"
v7(E)	1	#5	31	10'-10"	9'-11"	20'-9"
v8(E)	1	#5	31	9'-11"	9'-1"	19'-0"
v9(E)	1	#5	31	9'-1"	8'-2"	17'-3"
v10(E)	1	#5	19	8'-2"	7'-8"	15'-10"



SOLDIER PILE WORKING POINT

* Piles P-07 through P-09 and Piles P-38 through P-39 are W21x147

Minimum Bar Lap	
Bar	Lap
#5	3'-9"

LEGEND

F.F.	Front Face
B.F.	Back Face

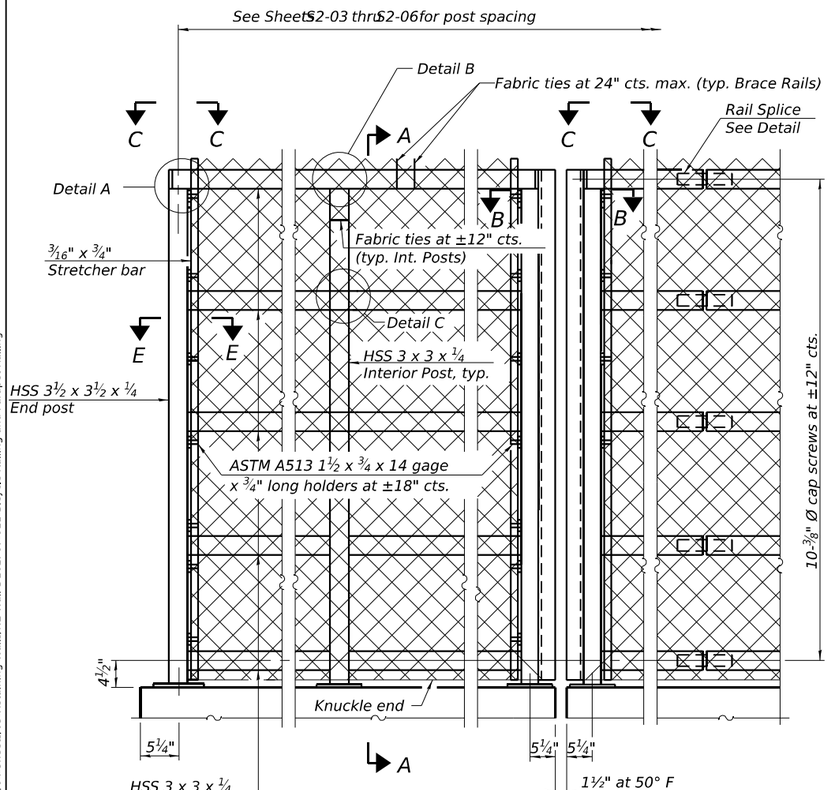
HBM ENGINEERING GROUP, LLC

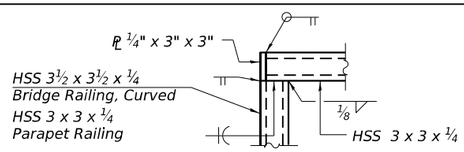
USER NAME =	DESIGNED - MAA, SK	REVISED -	
	CHECKED - MAI, JJS	REVISED -	
PLOT SCALE =	DRAWN - FL	REVISED -	
PLOT DATE =	CHECKED - MAI, JJS	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

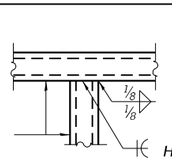
WALL CROSS SECTIONS AND DETAILS (SHEET 3 OF 3)
STRUCTURE NO. 099-W805
SHEET S2-09 OF S2-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	74
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

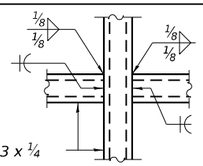




DETAIL A



DETAIL B



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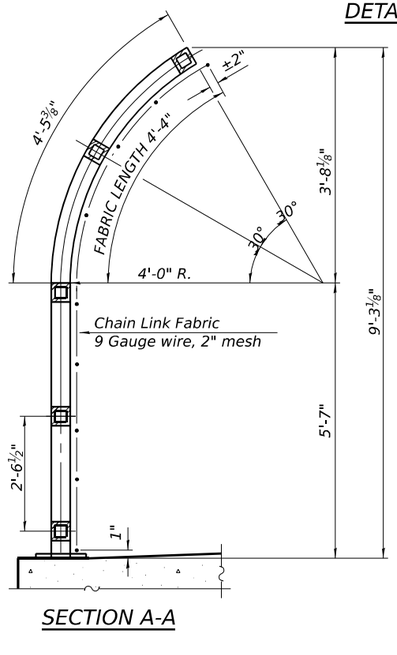

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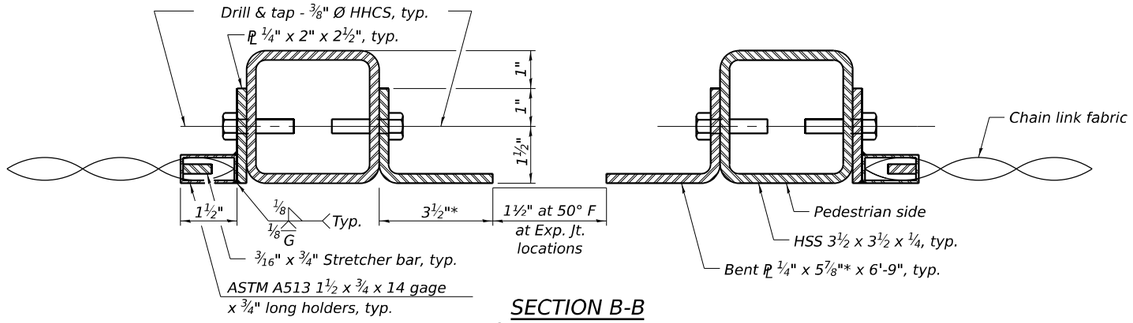
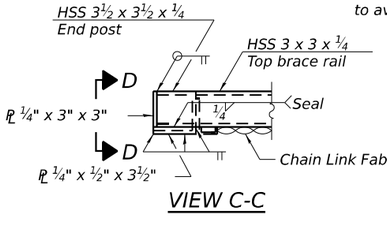
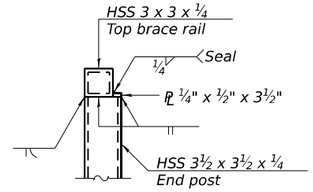


SECTION B-B

* Assume 3/8" radius. Dimensions may need to be modified for larger joints to avoid gaps greater than 6".



VIEW C-C



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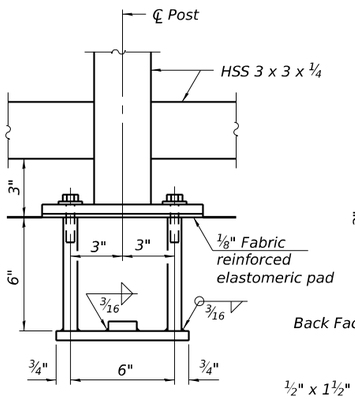
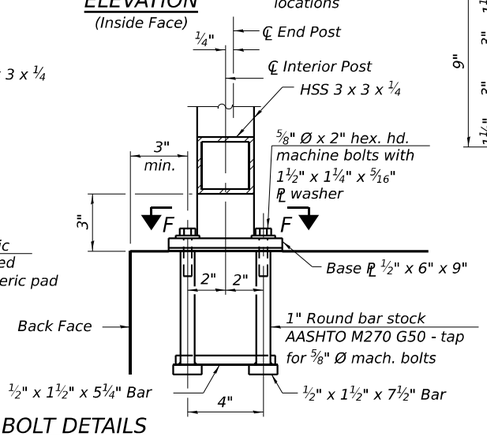
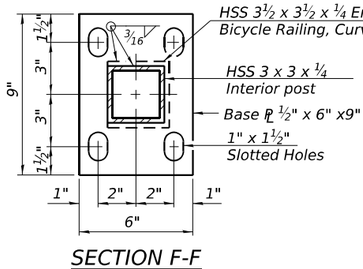
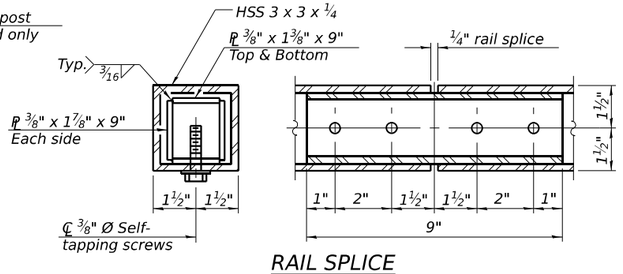


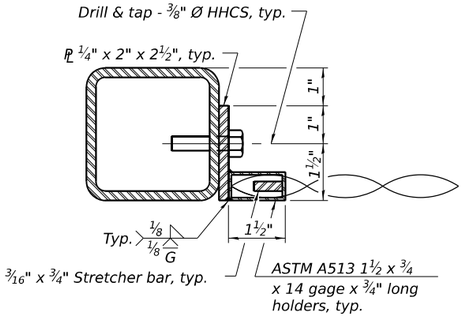




SECTION F-F



RAIL SPLICE



SECTION E-E

ANCHOR BOLT DETAILS

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" Ø anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

RAILING CRITERIA

NCHRP 350 Test Level	4
Railing Weight (plf)	25
Bicycle Railing Weight (plf)	50
Max Post Spacing	10'-0''

Notes:

Place reinforcement bars to miss anchor rod locations.

All HSS tubing used for the Parapet Railing shall be CVN tested according to Article 1006.34(b) of the Standard Specifications.

CVN testing is not required for the HSS tubing used in the Bicycle Railing Curved.

All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifcations.

This work will be paid for at the unit cost per foot of Bicycle Railing, Curved.

BILL OF MATERIAL

Item	Unit	Quantity
Bicycle Railing, Curved	Foot	318

MODEL: Default
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1/26/2023 8:11:34 AM

HBM ENGINEERING GROUP, LLC

USER NAME = | PLOT SCALE = | PLOT DATE =
DESIGNED - CP | CHECKED - MAI, JJS | DRAWN - CP | CHECKED - MAI, JJS
REVISED - | REVISED - | REVISED - | REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BICYCLE RAILING, CURVED & PARAPET RAILING
STRUCTURE NO. 099-W805
SHEET S2-10 OF S2-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	75
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

Wang Engineering
wangeng@wangeng.com
1145 N MAin Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

BORING LOG RIV-BSB-01

WEI Job No.: 255-39-01

Client: Stantec
Project: I-80 Reconstruction, Ridge Road to Houbolt Road
Location: Will County, Illinois

Datum: NAVD88
Elevation: 592.99 ft
North: 1755364.55 ft
East: 1016267.85 ft
Station: 25+55.5
Offset: 9.0 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	592.74	4 inch thick ASPHALT --PAVEMENT--						
	590.9	White and gray SANDY GRAVEL; damp --AGGREGATE BASE--						
		Very stiff to hard, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --FILL-- --RDR 2--	5		1	8 4 5	3.00 P	17
					2	3 4 4	2.50 P	14
					3	2 3 7	> 4.50 P	15
			10		4	3 4 6	4.25 P	15
					5	3 4 6	3.50 P	15
			15		6	3 6 4	3.62 B	14
		--brown, black and gray--			7	4 7 6	3.36 B	20
			20		8	3 7 7	4.00 P	14
	571.4	Very stiff, black SILTY CLAY; damp			9	4 4 7	3.50 P	28
	570.0	--Buried TOPSOIL-- Stiff, gray SILTY LOAM to SILTY CLAY LOAM, trace gravel; damp --RDR 2--	25		10	4 4 7	1.80 B	25

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	567.5	L_L(%)=37, P_I(%)=20-- --%Gravel=0.4-- --%Sand=9.6-- --%Silt=71.3-- --%Clay=18.7-- A 6 (15)--						
	566.6	Brown SILTY LOAM to LOAM, little gravel; moist			11	6 27 33	NP	11
	564.6	Very dense, brown SANDY GRAVEL; damp --RDR 2--	30		12	50/1"	NP	4
		Very dense, brown weathered dolostone fragments; damp to saturated						
	560.0	--Weathered BEDROCK-- --slow hard drilling; possible bedrock at 30 feet--				CORE		
		Strong, light bluish gray, very poor quality, DOLOSTONE; Very closely to closely spaced, highly weathered, horizontal and vertical JOINTS, with <0.05 inch opening, slicken to slightly rough walls, and <0.2 inch thick clay infill.	35		13			
		--RUN 1: 33.0 to 39.0 feet-- --Recovery: 76%-- --RQD: 0%-- --RUN 2: 39.0 to 42.0 feet-- --Recovery: 51%-- --RQD: 0%--	40		14	CORE		
	551.0	Boring terminated at 42.00 ft	45					
			50					

GENERAL NOTES

Begin Drilling: 11-17-2021 Complete Drilling: 11-17-2021
Drilling Contractor: Wang Testing Services Drill Rig: 20D50T [80%]
Driller: RH&JD Logger: M. Rojo Checked by: C. Marin
Drilling Method: 3.25" ID HSA; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: ▽ 30.00 ft
At Completion of Drilling: ▼ core wash 3ft
Time After Drilling: NA
Depth to Water: ▼ NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

Wang Engineering
wangeng@wangeng.com
1145 N MAin Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

BORING LOG RIV-RWB-01HA

WEI Job No.: 255-39-01

Client: Stantec
Project: I-80 Reconstruction, Ridge Road to Houbolt Road
Location: Will County, Illinois

Datum: NAVD88
Elevation: 580.42 ft
North: 1755605.33 ft
East: 1016273.97 ft
Station: 23+14.5
Offset: 27.3 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	588.3	1-inch thick, brown SANDY GRAVEL --FILL--						
		Very stiff to hard, brown and gray CL AY LOAMto SILTY CLAY LOAM, trace gravel; damp --FILL--			1	PUSH	> 4.50 P	15
					2	PUSH	> 4.50 P	13
			5		3	PUSH	3.50 P	18
					4	PUSH	> 4.50 P	13
					5	PUSH	4.00 P	15
			10		6	PUSH	> 4.50 P	18
					7	PUSH	3.00 P	16
			15		8	PUSH	> 4.50 P	17
	564.4	Boring terminated at 16.00 ft						
			20					
			25					

GENERAL NOTES

Begin Drilling: 12-02-2021 Complete Drilling: 12-02-2021
Drilling Contractor: Wang Testing Services Drill Rig: Geoprobe HA
Driller: RH&AG Logger: M. Rojo Checked by: C. Marin
Drilling Method: 1" ID HSA; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: ▽ DRY
At Completion of Drilling: ▼ DRY
Time After Drilling: NA
Depth to Water: ▼ NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 2553901.GPJ WANGENG.GDT 12/13/21

HBM ENGINEERING GROUP, LLC

USER NAME =	DESIGNED - MAA, SK	REVISED -	
	CHECKED - MAI, JJS	REVISED -	
PLOT SCALE =	DRAWN - FL	REVISED -	
PLOT DATE =	CHECKED - MAI, JJS	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS (SHEET 1 OF 5)
STRUCTURE NO. 099-W805
SHEET S2-12 OF S2-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	77
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

Wang Engineering
wangeng@wangeng.com
1145 N MAin Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

BORING LOG RIV-RWB-02

WEI Job No.: 255-39-01

Client: Stantec
Project: I-80 Reconstruction, Ridge Road to Houbolt Road
Location: Will County, Illinois

Datum: NAVD 88
Elevation: 586.01 ft
North: 1755590.26 ft
East: 1016257.77 ft
Station: 23+28.6
Offset: 10.3 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	586.4	7 inch thick ASPHALT --PAVEMENT--						
	586.1	4-inch thick, gray and white SANDY GRAVEL --BASE COURSE--						
		Very stiff to hard, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --FILL-- --RDR 2--	0		1	6 12 10	> 4.50 P	13
			5		2	6 7 8	> 4.50 P	16
					3	4 5 0	4.02 B	16
			10		4	5 6 7	> 4.50 P	16
					5	4 7 9	4.00 P	14
			15		6	5 7 6	4.25 P	10
	570.5	Very stiff, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --RDR 2-- --L_L(%)=39, P_I(%)=15-- --%Gravel=2.8-- --%Sand=8.8-- --%Silt=60.5-- --%Clay=28.0-- --A-6 (21)--			7	4 6 12	2.79 B	26
	568.0		20		8	2 2 3	NP	16
	564.9	Loose to very dense, brown and gray SILTY LOAM to LOAM, trace gravel; moist --RDR 2--			9	50/1"	NP	16
	562.5	--Rig chatter-- --RDR 3-- --Weathered BEDROCK--	25			C O R		
	552.5	Strong, light grayish gray, very poor quality, DOLOSTONE; Closely spaced, slightly weathered, horizontal and vertical joints, with <0.05 inch opening, slightly rough walls, and <0.2 inch thick clay infill. --RUN 1: 23.5 to 33.5 feet-- --Recovery: 100%-- --RQD: 7%--	30		10	E		
		Boring terminated at 33.50 ft	35					
			40					
			45					
			50					

GENERAL NOTES

Begin Drilling: 11-22-2021 Complete Drilling: 11-22-2021
Drilling Contractor: Wang Testing Services Drill Rig: 20CME55T[81%]
Driller: RR&AG Logger: M. Rojo Checked by: C. Marin
Drilling Method: 2.25" ID HSA; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: 19.00 ft
At Completion of Drilling: core wash 12ft
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 255390!.GPJ WANGENG.GDT 12/13/21

Wang Engineering
wangeng@wangeng.com
1145 N MAin Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

BORING LOG RIV-RWB-02HA

WEI Job No.: 255-39-01

Client: Stantec
Project: I-80 Reconstruction, Ridge Road to Houbolt Road
Location: Will County, Illinois

Datum: NAVD88
Elevation: 580.28 ft
North: 1755566.55 ft
East: 1016280.01 ft
Station: 23+53.5
Offset: 31.1 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	580.2	1-inch thick, brown SANDY GRAVEL --FILL--						
		Very stiff to hard, brown and gray SILTY CLAY LOAM, trace gravel; damp --FILL--	0		1	PUSH	> 4.50 P	16
					2	PUSH	> 4.50 P	17
			5		3	PUSH	NR	
					4	PUSH	3.50 P	16
					5	PUSH	4.25 P	17
			10		6	PUSH	3.00 P	16
					7	PUSH	> 4.50 P	15
			15		8	PUSH	> 4.50 P	16
	564.3	Boring terminated at 16.00 ft						
			20					
			25					

GENERAL NOTES

Begin Drilling: 12-02-2021 Complete Drilling: 12-02-2021
Drilling Contractor: Wang Testing Services Drill Rig: Geoprobe HA
Driller: RH&AG Logger: M. Rojo Checked by: C. Marin
Drilling Method: 1" ID HSA; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: DRY
At Completion of Drilling: DRY
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 255390!.GPJ WANGENG.GDT 12/13/21

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/01-Stantec/CAD/CR-02_62P67/04-Sheets/05-Retaining Walls/NE Wall-D162P67-013-Boring Logs (Sheet 2 of 5)

1/26/2023 8:11:41 AM

HBM ENGINEERING GROUP, LLC

USER NAME =	DESIGNED - MAA, SK	REVISED -	
	CHECKED - MAI, JJS	REVISED -	
PLOT SCALE =	DRAWN - FL	REVISED -	
PLOT DATE =	CHECKED - MAI, JJS	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS (SHEET 2 OF 5)
STRUCTURE NO. 099-W805
SHEET S2-13 OF S2-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	78
		CONTRACT NO. 62P67		
		ILLINOIS	FED. AID PROJECT	

Wang Engineering
wangeng@wangeng.com
1145 N MAin Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

BORING LOG RIV-RWB-03

WEI Job No.: 255-39-01

Client: Stantec
Project: I-80 Reconstruction, Ridge Road to Houbolt Road
Location: Will County, Illinois

Datum: NAVD 88
Elevation: 588.66 ft
North: 1755530.59 ft
East: 1016260.22 ft
Station: 23+88.2
Offset: 9.4 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	587.7	11 inch thick ASPHALT --PAVEMENT--						
		Stiff to hard, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --FILL-- --RDR 2--			1	6 8 9	7.63 S	14
			5		2	5 8 8	7.54 S	13
					3	4 6 6	> 4.50 P	16
			10		4	3 5 6	> 4.50 P	14
					5	3 5 6	> 4.50 P	14
			15		6	4 5 6	> 4.50 P	19
					7	4 7 8	> 4.50 P	16
	569.2				8	3 5 10	1.89 B	23
	568.2	Stiff (1.50P), black SILTY CLAY to SILTY CLAY LOAM, trace gravel and organic matter; damp --BURIED TOPSOIL--	20					
		Medium dense, brown SILTY LOAM, trace gravel; saturated --RDR 2--			9	5 4 8	NP	16
	565.2	--AUGER REFUSAL-- Boring terminated at 23.50 ft	25					

GENERAL NOTES

Begin Drilling: 11-18-2021 Complete Drilling: 11-18-2021
Drilling Contractor: Wang Testing Services Drill Rig: 20CME55T[81%]
Driller: RR&AG Logger: D. You Checked by: C. Marin
Drilling Method: 2.25" ID HSA; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: 22.00 ft
At Completion of Drilling: DRY
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 255390!.GPJ WANGENG.GDT 12/13/21

Wang Engineering
wangeng@wangeng.com
1145 N MAin Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

BORING LOG RIV-RWB-03HA

WEI Job No.: 255-39-01

Client: Stantec
Project: I-80 Reconstruction, Ridge Road to Houbolt Road
Location: Will County, Illinois

Datum: NAVD88
Elevation: 579.35 ft
North: 1755492.34 ft
East: 1016288.92 ft
Station: 24+27.7
Offset: 36.2 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	579.3	1-inch thick, brown SANDY GRAVEL --FILL--			1	PUSH	> 4.50 P	16
		Very stiff to hard, gray and brown SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --FILL--			2	PUSH	3.00 P	18
			5		3	PUSH	4.00 P	17
					4	PUSH	> 4.50 P	17
					5	PUSH	> 4.50 P	14
			10		6	PUSH	2.50 P	19
					7	PUSH	2.50 P	16
			15		8	PUSH	2.50 P	20
	563.4	Boring terminated at 16.00 ft						
			20					
			25					

GENERAL NOTES

Begin Drilling: 12-01-2021 Complete Drilling: 12-01-2021
Drilling Contractor: Wang Testing Services Drill Rig: Geoprobe HA
Driller: RH&AG Logger: M. Rojo Checked by: C. Marin
Drilling Method: 1" ID HSA; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: DRY
At Completion of Drilling: DRY
Time After Drilling: NA
Depth to Water: NA

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WANGENGINC 255390!.GPJ WANGENG.GDT 12/13/21

HBM ENGINEERING GROUP, LLC

USER NAME =	DESIGNED - MAA, SK	REVISED -	
	CHECKED - MAI, JJS	REVISED -	
PLOT SCALE =	DRAWN - FL	REVISED -	
PLOT DATE =	CHECKED - MAI, JJS	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS (SHEET 3 OF 5)
STRUCTURE NO. 099-W805
SHEET S2-14 OF S2-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	79
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

Wang Engineering
wangeng@wangeng.com
1145 N MAin Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

BORING LOG RIV-RWB-04

WEI Job No.: 255-39-01

Client: Stantec
Project: I-80 Reconstruction, Ridge Road to Houbolt Road
Location: Will County, Illinois

Datum: NAVD 88
Elevation: 591.16 ft
North: 1755445.63 ft
East: 1016263.17 ft
Station: 24+73.1
Offset: 8.6 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	590.5	8 inch thick ASPHALT --PAVEMENT--						
	590.0	White and gray SANDY GRAVEL; damp --BASE COURSE--			1	5 8 10	4.50 P	17
		Very stiff to hard, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --FILL-- --RDR 2--	5		2	7 7 8	4.50 P	15
					3	5 5 0	4.50 P	17
			10		4	4 4 5	3.61 B	15
					5	5 5 7	4.50 P	18
			15		6	5 6 9	4.00 P	15
					7	5 9 10	2.46 S	13
	571.7		20		8	5 8 7	4.25 P	17
	570.7	Very stiff, black SILTY CLAY --BURIED TOPSOIL--						
		Very stiff, brown and gray SILTY CLAY, trace gravel; damp to moist --RDR 2--			9	6 7 7	3.61 B	26
	568.2	Very dense, brown SILTY LOAM to LOAM, trace gravel; saturated --RDR 2--			10	4 8 50/6"	NP	15
	566.3		25					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		Very dense, brown, white, and gray SANDY GRAVEL; damp --Weathered BEDROCK-- --RDR 3--			11	66/1"	NP	3
					12	60/4"	NP	4
	561.2	Strong, light grayish gray, very poor quality, DOLOSTONE; very closely spaced, moderately weathered, horizontal, oblique, and vertical joints, with <0.05 inch opening, slightly rough walls, and <0.2 inch thick clay infill. --RUN 1: 30.0 to 40.0 feet-- --Recovery: 95%-- --RQD: 4%--	30	CORE				
			35		13			
	551.2	Boring terminated at 40.00 ft	40					
			45					
			50					

GENERAL NOTES

Begin Drilling: 11-19-2021 Complete Drilling: 11-19-2021
Drilling Contractor: Wang Testing Services Drill Rig: 20CME55T[81%]
Driller: RH&JD Logger: M. Rojo Checked by: C. Marin
Drilling Method: 2.25" ID HSA; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: 24.00 ft
At Completion of Drilling: core wash 10ft
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 255390I.GPJ WANGENG.GDT 12/13/21

Wang Engineering
wangeng@wangeng.com
1145 N MAin Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

BORING LOG RIV-RWB-05HA

WEI Job No.: 255-39-01

Client: Stantec
Project: I-80 Reconstruction, Ridge Road to Houbolt Road
Location: Will County, Illinois

Datum: NAVD88
Elevation: 589.19 ft
North: 1755351.72 ft
East: 1016279.92 ft
Station: 25+67.2
Offset: 22.8 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	589.1	11-inch thick, brown SANDY GRAVEL --FILL--			1	PUSH	3.00 P	18
		Very stiff to hard, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --FILL-- --trace wood fragments-- --L_L(%)=32, P_I(%)=15-- --%Gravel=3.5-- --%Sand=8.0-- --%Silt=58.2-- --%Clay=30.3-- --A-6 (14)--			2	PUSH	2.00 P	18
			5		3	PUSH	4.50 P	15
					4	PUSH	4.25 P	15
			10		5	PUSH	4.00 P	20
					6	PUSH	3.50 P	16
					7	PUSH	4.50 P	13
			15		8	PUSH	2.00 P	17
	573.2	Boring terminated at 16.00 ft						
			20					
			25					

GENERAL NOTES

Begin Drilling: 12-01-2021 Complete Drilling: 12-01-2021
Drilling Contractor: Wang Testing Services Drill Rig: Geoprobe HA
Driller: RH&AG Logger: M. Rojo Checked by: C. Marin
Drilling Method: 1" ID HSA; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: DRY
At Completion of Drilling: DRY
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 255390I.GPJ WANGENG.GDT 12/13/21

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/01-Stantec/CAD/CR-02_62P67/04-Sheets/05-Retaining Walls/NE Wall-D162P67-015-Boring Logs (Sheet 4 of 5).

1/26/2023 8:11:50 AM

HBM ENGINEERING GROUP, LLC

USER NAME =	DESIGNED - MAA, SK	REVISED -	
	CHECKED - MAI, JJS	REVISED -	
PLOT SCALE =	DRAWN - FL	REVISED -	
PLOT DATE =	CHECKED - MAI, JJS	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS (SHEET 4 OF 5)
STRUCTURE NO. 099-W805
SHEET S2-15 OF S2-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	80
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

Wang Engineering

wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

BORING LOG RIV-SGB-01

WEI Job No.: 255-39-01

Client: **Stantec**
Project: **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 589.67 ft
North: 1755577.56 ft
East: 1016242.15 ft
Station: 23+40.4
Offset: 6.0 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	589.3	5 inch thick ASPHALT						
		--PAVEMENT--						
	588.5	Gray and white SANDY GRAVEL; damp						
		--BASE COURSE--						
		Very stiff to hard, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp						
		--FILL--						
		--RDR 2--						
					1	5 6 8 10	> 4.50 P	17
					2	8 8 9 8	> 4.50 P	14
			5					
					3	6 7 7 7	3.61 B	15
					4	5 6 8 10	4.18 B	13
			10		5	6 7 10 9	> 4.50 P	16
					6	5 6 7	> 4.50 P	13
					7	6 12 10	4.00 P	15
			15					
	574.2	Very stiff (2.00P), black SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp						
	573.5	--BURIED TOPSOIL--						
		Stiff, bluish gray SILTY CLAY, trace gravel; moist						
		--RDR 2--			8	5 6 7	1.50 P	26
	571.7	Loose to very dense, brown and gray SILTY LOAM to LOAM, trace gravel; damp to moist						
		--RDR 2--			9	6 4 4	NP	15
			20					
					10	50/1"	NP	13
	566.7	Very dense, white and gray SANDY GRAVEL; damp						
		--RDR 3--			11	19 60/2"	NP	6
		--rig chatter; possible cobbles--						
	564.7		25					
		Boring terminated at 25.00 ft						
			30					

GENERAL NOTES

Begin Drilling: **11-22-2021** Complete Drilling: **11-22-2021**
Drilling Contractor: **Wang Testing Services** Drill Rig: **20CME55T[81%]**
Driller: **RR&AG** Logger: **M. Rojo** Checked by: **C. Marin**
Drilling Method: **2.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling: **19.00 ft**
At Completion of Drilling: **DRY**
Time After Drilling: **NA**
Depth to Water: **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 255390!.GPJ WANGENG.GDT 12/15/21

Wang Engineering

wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

BORING LOG RIV-SGB-02

WEI Job No.: 255-39-01

Client: **Stantec**
Project: **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 593.27 ft
North: 1755353.25 ft
East: 1016252.19 ft
Station: 25+65.1
Offset: 4.9 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		11-inch thick ASPHALT						
		--PAVEMENT--						
	592.3							
	592.3	1-inch, gray and white SANDY GRAVEL						
		--AGGREGATE BASE--						
		Very stiff to hard, brown and gray SILTY CLAY LOAM, trace gravel; damp						
		--FILL--						
		--RDR 2--						
		--L_L(%)=30, P_I(%)=16--						
		%Gravel=2.9						
		--%Sand=10.6--						
		--%Silt=61.4--						
		--%Clay=25.0--						
		--A-6 (11)--						
					1	5 4 4 3	4.00 P	16
					2	3 3 3 4	3.00 P	19
			5					
					3	2 2 3 3	3.50 P	17
					4	4 5 12 10	> 4.50 P	14
			10		5	10 7 9 9	> 4.50 P	17
					6	7 8 10	> 4.50 P	18
		--black; trace organic matter--			7	6 7 5	3.25 P	29
			15					
		--FILL--						
					8	9 9 10	NR	
			20		9	6 6 7	> 4.50 P	14
	572.8	Very stiff, black SILTY CLAY, trace organic matter; damp						
	571.9	--Buried TOPSOIL--						
		Stiff to very stiff, brown and gray SILTY CLAY, trace gravel; damp to moist						
		--RDR 2--			10	8 11 9	3.50 P	46
					11	8 6 7	1.50 P	21
	568.3		25					
		Boring terminated at 25.00 ft						
			30					

GENERAL NOTES

Begin Drilling: **11-19-2021** Complete Drilling: **11-19-2021**
Drilling Contractor: **Wang Testing Services** Drill Rig: **20CME55T[81%]**
Driller: **RR&AG** Logger: **M. Rojo** Checked by: **C. Marin**
Drilling Method: **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling: **25.00 ft**
At Completion of Drilling: **DRY**
Time After Drilling: **NA**
Depth to Water: **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 255390!.GPJ WANGENG.GDT 12/15/21

HBM ENGINEERING GROUP, LLC

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	CHECKED - MAI, JJS	REVISED -	
PLOT SCALE =	DRAWN - FL	REVISED -	
PLOT DATE =	CHECKED - MAI, JJS	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS (SHEET 5 OF 5)
STRUCTURE NO. 099-W805
SHEET S2-16 OF S2-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	81
		CONTRACT NO. 62P67		
	ILLINOIS FED. AID PROJECT			

Benchmark: Set 2" CWA Aluminum disc in concrete pier seat in southerly pier of River Road bridge on south side of eastbound I-80, Elev. 575.61.

Existing Structure: None.

Traffic Control: Traffic will be detoured during construction.

Salvage: None.

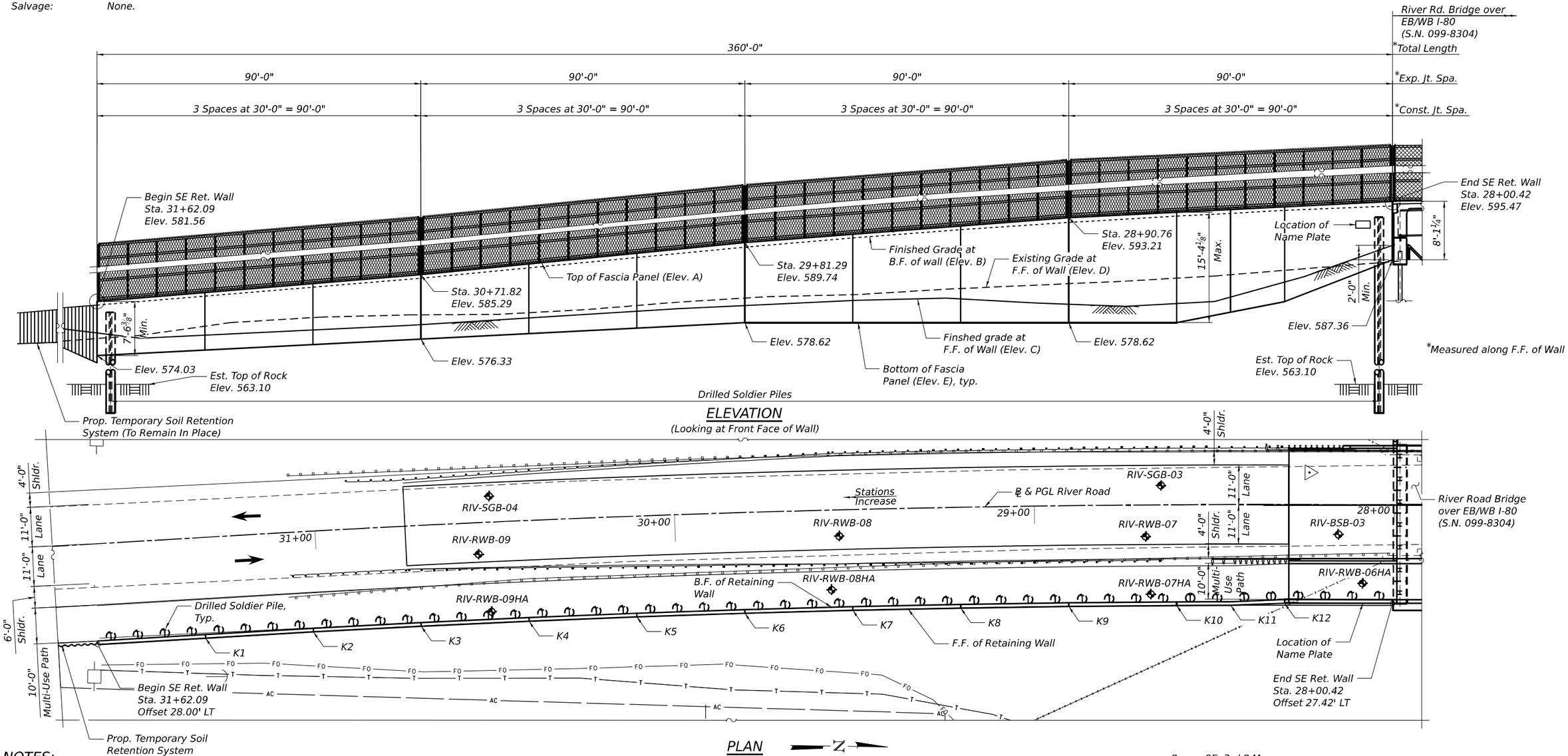
DESIGN STRESSES

FIELD UNITS

f 'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50) Soldier Piles

DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition



ELEVATION

(Looking at Front Face of Wall)

PLAN

NOTES:

1. For General Notes, Index of Sheets, Total Bill of Material, Wall Table Elevations, Profile Grade Line and Curve Data, See Sheet S3-02.
2. Stations and offsets are measured from the ℄ of River Road to the front face of the cast-in-place concrete facing.
3. "K1" denotes wall Kink Point - Number 1. See Wall Elevations Table on Sheet S3-02 for kink point stations and offsets.
4. See Civil Plans for Pipe Underdrain outlet details.

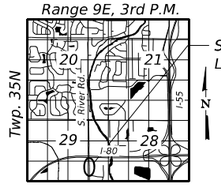
LEGEND:

- Soil Boring
- Exist. Aerial Line
- Prop. Fence
- Exist. Guardrail
- Prop. Guardrail
- Exist. ROW
- Exist. Telephone Line
- Exist. Fiber Optic Line
- Prop. Temporary Soil Retention System
- F.F. Front Face
- B.F. Back Face

STATE OF ILLINOIS — MOUSSA A ISSA 081-005738 CHICAGO, ILLINOIS — LICENSED STRUCTURAL ENGINEER

Signed Moussa A. Issa
Dr. Moussa A. Issa, S.E. IL. Lic. No. 081-005738
Expires 11-30-2024
Date 1/27/2023 For Sheets S3-01 Thru S3-16

Range 9E, 3rd P.M.



Structure Location

LOCATION SKETCH

GENERAL PLAN & ELEVATION SOUTHEAST RETAINING WALL ALONG RIVER ROAD F.A.I. RTE. I-80 SECTION 2021-151-B WILL COUNTY STA. 28+00.42 TO STA. 31+62.09 STRUCTURE NO. 099-W806

HBM ENGINEERING GROUP, LLC

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	CHECKED - MAI, JJS	REVISED -	
PLOT SCALE =	DRAWN - JMI	REVISED -	
PLOT DATE =	CHECKED - MAI, JJS	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURE NO. 099-W806

SHEET S3-01 OF S3-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	82
		CONTRACT NO. 62P67		
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
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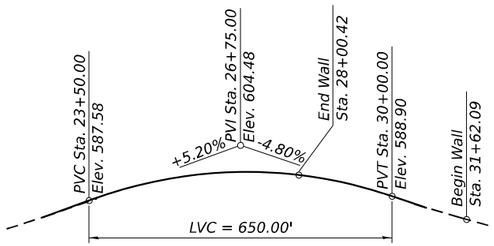
GENERAL NOTES:

1. Reinforcement bars designated (E) shall be epoxy coated.
2. Protective Coat shall be applied to exposed surfaces of the panels.
3. Wall to be built along straight cords between construction and expansion joints.
4. Soldier piles shall be cleaned and given one shop coat of Inorganic Zinc Rich Primer. Cost included with Furnishing Soldier Piles (W Section).
5. The Contractor shall field-verify locations of existing underground utilities and shall take all necessary precautions to protect existing utilities during construction of the wall. Any damage to the existing utilities shall be the responsibility of the Contractor. The existing utilities in conflict with retaining wall construction shall be protected, abandoned or relocated based on the results of coordination with the pertinent utility companies and according to directions given on the Civil Plans.
6. Any storage of construction equipment and material behind wall is not allowed.
7. Earth excavation in front of wall shall be gradual and no more than 4'-0" of earth shall be excavated at a time in front of the wall. The elevation difference between adjacent excavated areas in front of wall shall not vary more than 6'-0" over a distance of 50'-0" as measured along the length of the wall.
8. A layer of weathered bedrock is present at the project site at the project site as indicated in the soil Boring Logs. The Contractor shall provide a method to ensure the soldier piles achieve at least the plan tip elevation.
9. Commonwealth Edison (ComEd) overhead power line and towers exist near, and cross, the proposed improvement. The Contractor shall coordinate with ComEd by providing detailed staging plans that indicate equipment type (such as crane boom heights) and placement for ComEd review/approval prior to construction activities.
10. The Contractor shall exercise extreme caution in drilling and setting the soldier piles under Aerial Power Lines. The Contractor is responsible to coordinate with utilities to shield, insulate, deenergize or provide other means of protection against these lines if required. The Contractor shall make necessary adjustments to the lengths of the soldier piles and to the auguring equipment to maintain adequate clearance to the Aerial Power Lines as specified in OSHA safety requirements. Lengths of soldier piles and any necessary splice details shall be approved by the Engineer prior to the start of work.



PROFILE GRADE

(Along ℄ River Road)

PR CURVE
RR CURVE 2

P.I. Sta. = 29+74.71
Δ = 03°26'42" (LT)
D = 01°12'04"
R = 4,770.00'
T = 143.44'
L = 286.80'
E = 2.16'
e = N.C.
T.R. = N/A
S.E. Run = N/A
P.C. Sta. = 28+31.27
P.T. Sta. = 31+18.07

INDEX OF SHEETS

S3-01 General Plan & Elevation
S3-02 General Notes, Index of Sheets & Total BOM
S3-03 Plan and Elevation (Sheet 1 of 4)
S3-04 Plan and Elevation (Sheet 2 of 4)
S3-05 Plan and Elevation (Sheet 3 of 4)
S3-06 Plan and Elevation (Sheet 4 of 4)
S3-07 Wall Cross Sections and Details (Sheet 1 of 3)
S3-08 Wall Cross Sections and Details (Sheet 2 of 3)
S3-09 Wall Cross Sections and Details (Sheet 3 of 3)
S3-10 Bicycle Railing, Curved & Parapet Railing
S3-11 Temporary Soil Retention System Details
S3-12 Boring Logs (Sheet 1 of 5)
S3-13 Boring Logs (Sheet 2 of 5)
S3-14 Boring Logs (Sheet 3 of 5)
S3-15 Boring Logs (Sheet 4 of 5)
S3-16 Boring Logs (Sheet 5 of 5)

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structure Excavation	Cu Yd	194
Concrete Structures	Cu Yd	149
Protective Coat	Sq Yd	407
Stud Shear Connectors	Each	976
Reinforcement Bars, Epoxy Coated	Pound	19,310
Bicycle Railing, Curved	Foot	360
Name Plates	Each	1
Furnishing Soldier Piles (W Section)	Foot	1,333
Drilling And Setting Soldier Piles (In Soil)	Cu Ft	6,367
Drilling And Setting Soldier Piles (In Rock)	Cu Ft	1,155
Untreated Timber Lagging	Sq Ft	3,280
Geocomposite Wall Drain	Sq Yd	405
Pipe Underdrains for Structures 4"	Foot	364
Temporary Soil Retention System (To Remain In Place)	Sq Ft	307

WALL ELEVATIONS TABLE

Location	Station	Offset	Elevation A	Elevation B	Elevation C	Elevation D	Elevation E
Begin Wall	31+62.09	28.00' Lt.	581.56	581.06	577.18	576.40	574.03
K1	31+32.09	28.00' Lt.	582.80	582.27	576.88	578.12	574.80
K2	31+02.00	28.00' Lt.	584.05	583.52	577.62	579.32	575.56
K3	30+71.82	28.00' Lt.	585.29	584.79	578.33	579.71	576.33
K4	30+41.64	28.00' Lt.	586.78	586.24	579.23	580.00	577.09
K5	30+11.47	28.00' Lt.	588.26	587.69	580.16	581.00	577.86
K6	29+81.29	28.00' Lt.	589.74	589.11	581.02	582.03	578.62
K7	29+51.11	28.00' Lt.	590.90	590.40	581.69	582.50	578.62
K8	29+20.93	28.00' Lt.	592.06	591.55	581.91	583.37	578.62
K9	28+90.76	28.00' Lt.	593.21	592.56	581.17	584.04	578.62
K10	28+60.58	28.00' Lt.	593.97	593.43	581.28	584.80	578.62
K11	28+45.49	28.00' Lt.	594.34	593.80	582.18	585.28	580.08
K12	28+30.42	27.42' Lt.	594.72	594.22	584.26	585.88	581.53
End Wall	28+00.42	27.42' Lt.	595.47	594.82	589.36	587.09	587.36

Elev. A = Top of Fascia Panel
Elev. B = Finished Grade at B.F. of Wall
Elev. C = Finished Grade at F.F. of Wall
Elev. D = Existing Grade at F.F. of Wall
Elev. E = Bottom of Fascia Panel

SUGGESTED SEQUENCE OF CONSTRUCTION:

1. Locate existing utilities that are to remain. The Contractor shall coordinate any required improvements to, or removals of, existing utilities with utility owner(s) and IDOT.
2. Install South Abutment steel piles for adjacent River Road Bridge over EB/WB I-80 (SN 099-8304). The construction of the South Abutment concrete and wingwall may be performed at any time following pile installation.
3. Install Drilled Soldier Piles throughout the full length of proposed retaining wall, and install Temporary Soil Retention System (To Remain In Place) at the south end.
4. Excavate for proposed SE Retaining Wall (SN 099-W806) as required and install untreated timber lagging for drilled soldier piles from top down as excavation proceeds. Untreated timber lagging shall also be installed parallel to the wall panel between the Temporary Soil Retention System (To Remain In Place) and the first adjacent soldier pile.
5. Install Geocomposite Wall Drain, pipe underdrain for structures and associated drainage elements.
6. Construct reinforced concrete facing for proposed SE Retaining Wall (SN 099-W806).
7. Construct approach slab and roadway pavement.
8. Backfill to proposed grade at front face of retaining wall, apply protective coat, and install Bicycle Railing, Curved.

STATION 28+00.42 TO STATION 31+62.09
BUILT 20-- BY
STATE OF ILLINOIS
F.A.I. RTE. I-80 SEC. 2021-151-B
LOADING HL-93
STRUCTURE NO. 099-W806

NAME PLATE

See Std. 515001

HBM ENGINEERING GROUP, LLC

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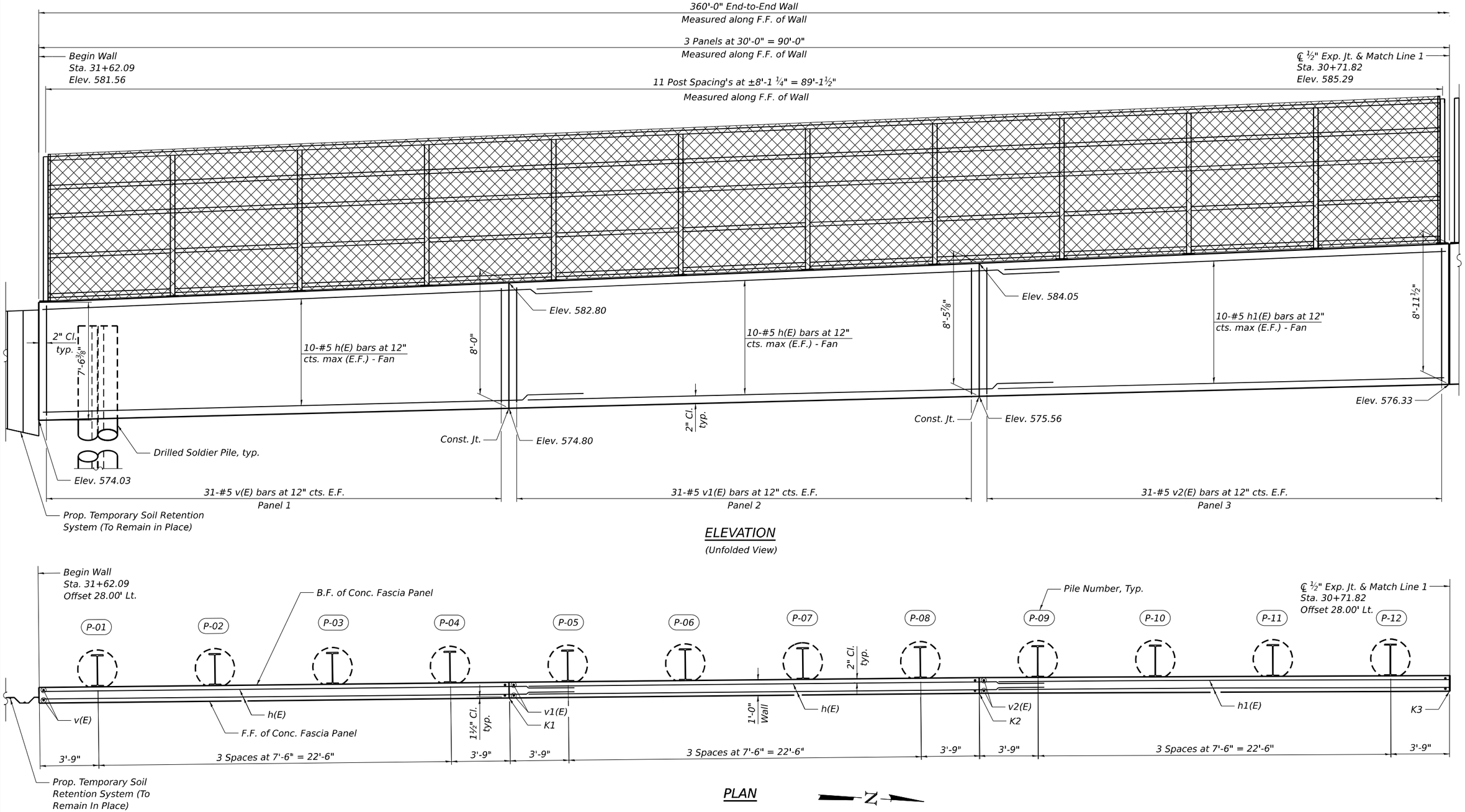
PLOT DATE =	CHECKED - MAI, JJS	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, INDEX OF SHEETS & TOTAL BOM
STRUCTURE NO. 099-W806
SHEET S3-02 OF S3-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	83
		CONTRACT NO. 62P67		
		ILLINOIS	FED. AID PROJECT	



NOTES:

1. All dimensions are along the F.F. of wall.
2. For typical wall cross sections and details, see Sheets S3-07 thru S3-09.
3. For soldier pile layout, minimum bar laps, sections, details, and Bill of Material, see Sheet S3-09.
4. Stations and offsets are measured along the F.F. of the wall from ℄ River Road.

LEGEND

E.F. - Each Face
F.F. - Front Face
B.F. - Back Face

HBM ENGINEERING GROUP, LLC

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND ELEVATION (SHEET 1 OF 4)
STRUCTURE NO. 099-W806
SHEET S3-03 OF S3-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	84
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

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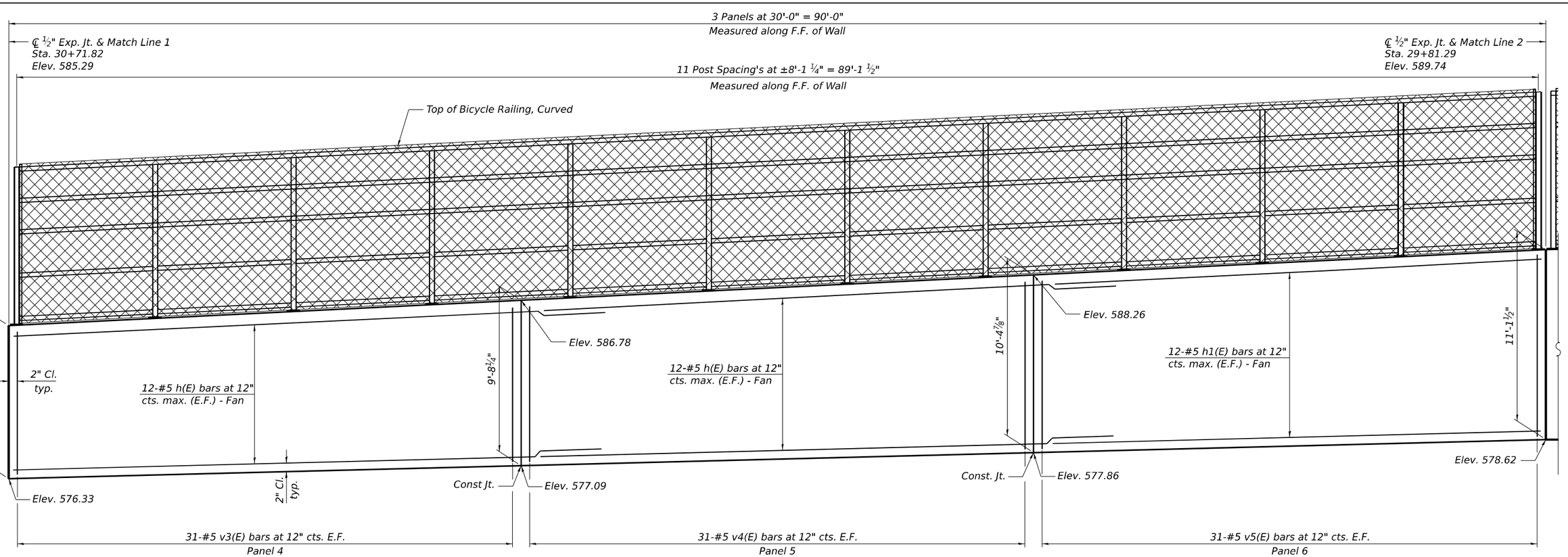
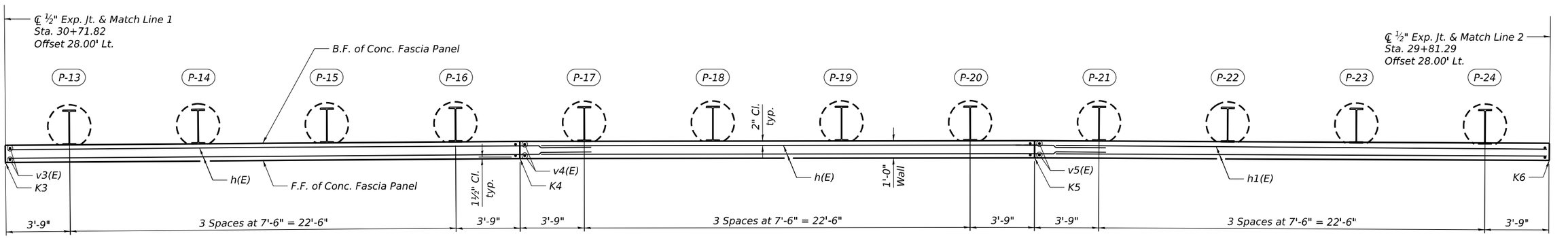


ELEVATION

(Unfolded View)



NOTE:

1. For Notes, see Sheet S3-03.

PLAN

LEGEND

E.F. - Each Face
F.F. - Front Face
B.F. - Back Face

MODEL: Default
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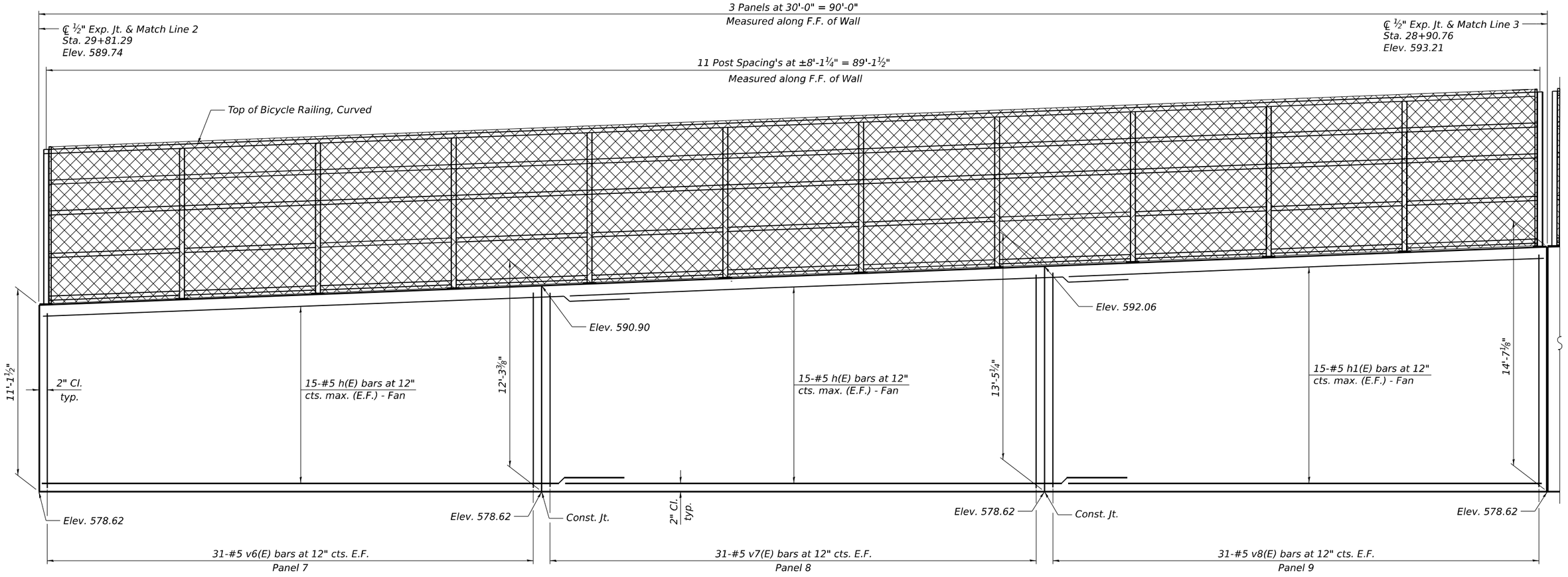
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

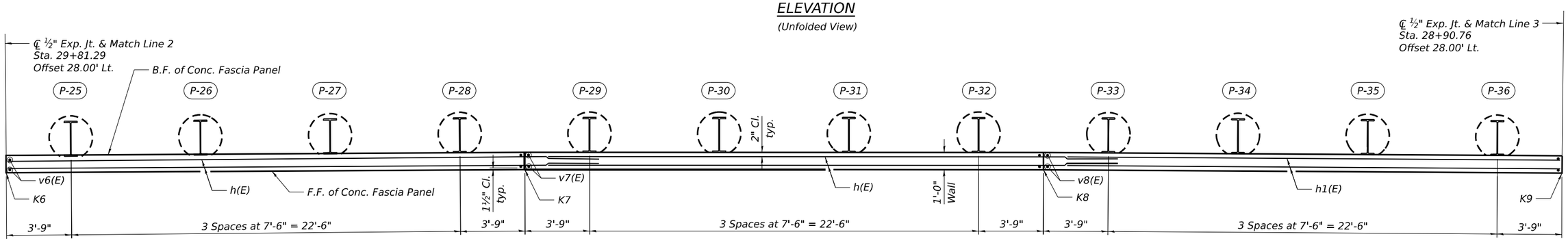
PLAN AND ELEVATION (SHEET 2 OF 4)
STRUCTURE NO. 099-W806
SHEET S3-04 OF S3-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	85
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

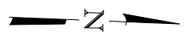


ELEVATION

(Unfolded View)



PLAN



NOTE:

1. For Notes, see Sheet S3-03.

LEGEND

E.F. - Each Face
F.F. - Front Face
B.F. - Back Face

MODEL: Default
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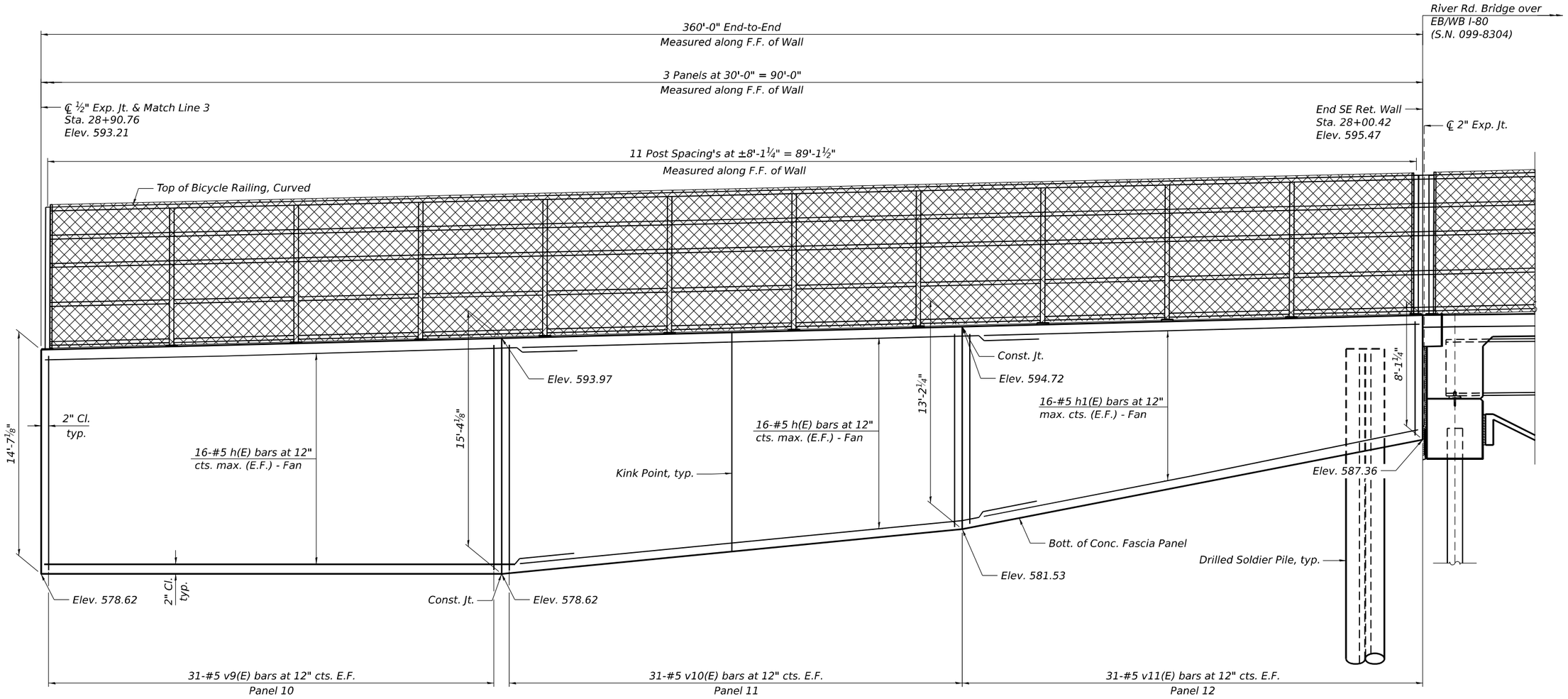
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

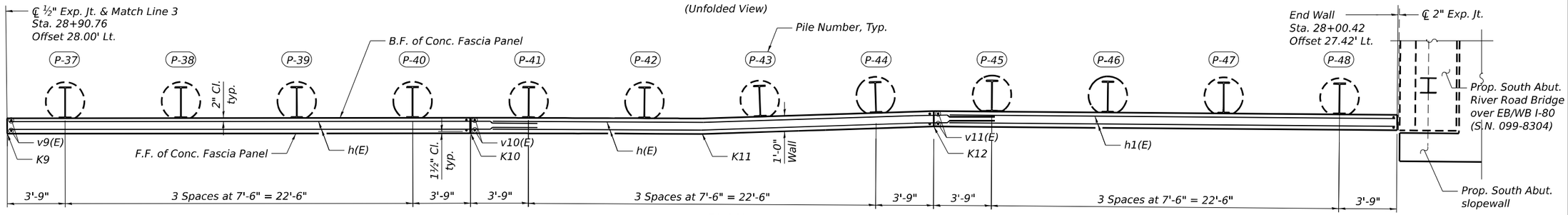
PLAN AND ELEVATION (SHEET 3 OF 4)
STRUCTURE NO. 099-W806
SHEET S3-05 OF S3-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	86
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		



ELEVATION

(Unfolded View)



PLAN

NOTE:

1. For Notes, see Sheet S3-03.

LEGEND

E.F. - Each Face
F.F. - Front Face
B.F. - Back Face

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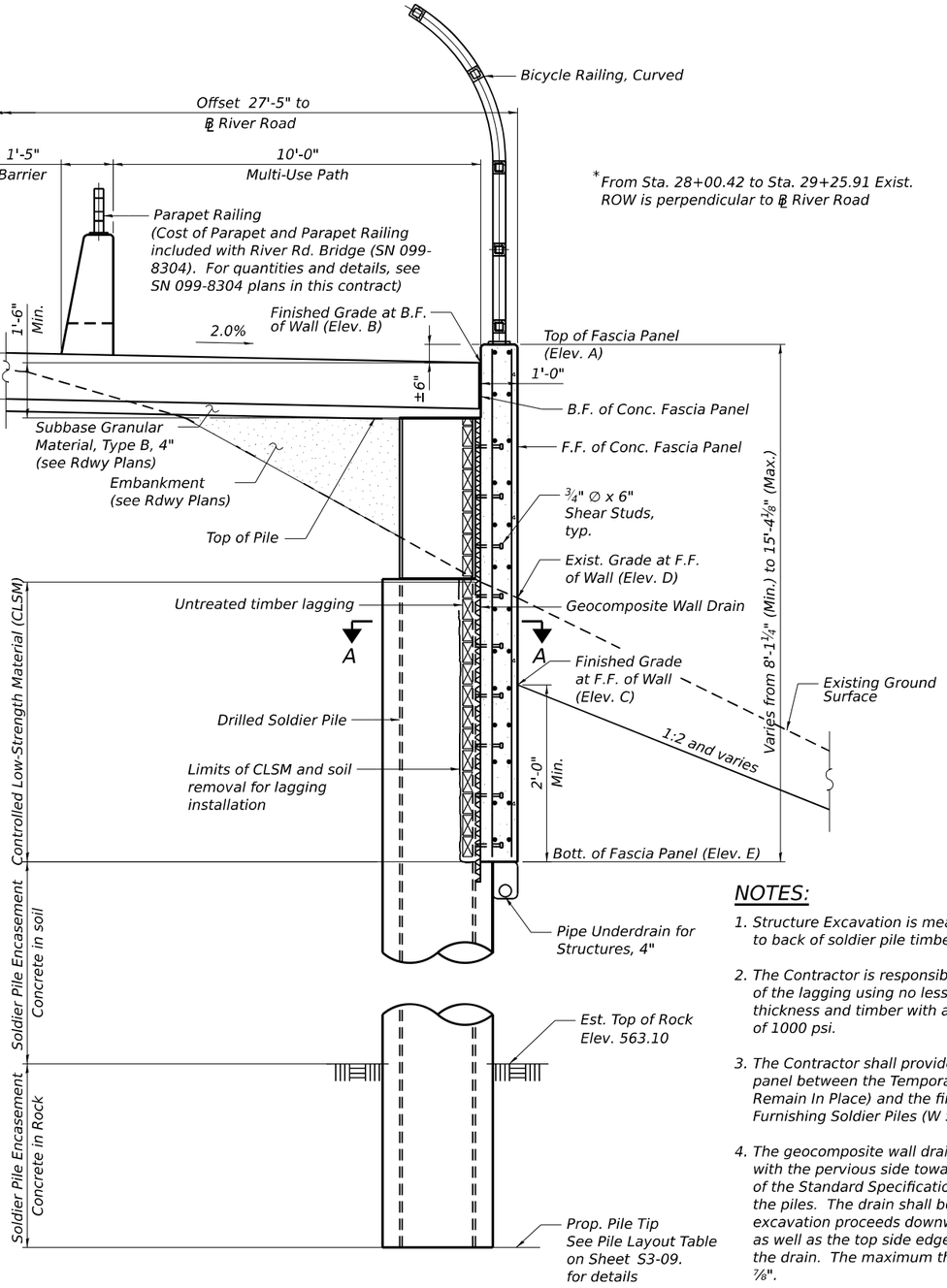
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND ELEVATION (SHEET 4 OF 4)
STRUCTURE NO. 099-W806
SHEET S3-06 OF S3-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	87
		CONTRACT NO. 62P67		
		ILLINOIS	FED. AID PROJECT	

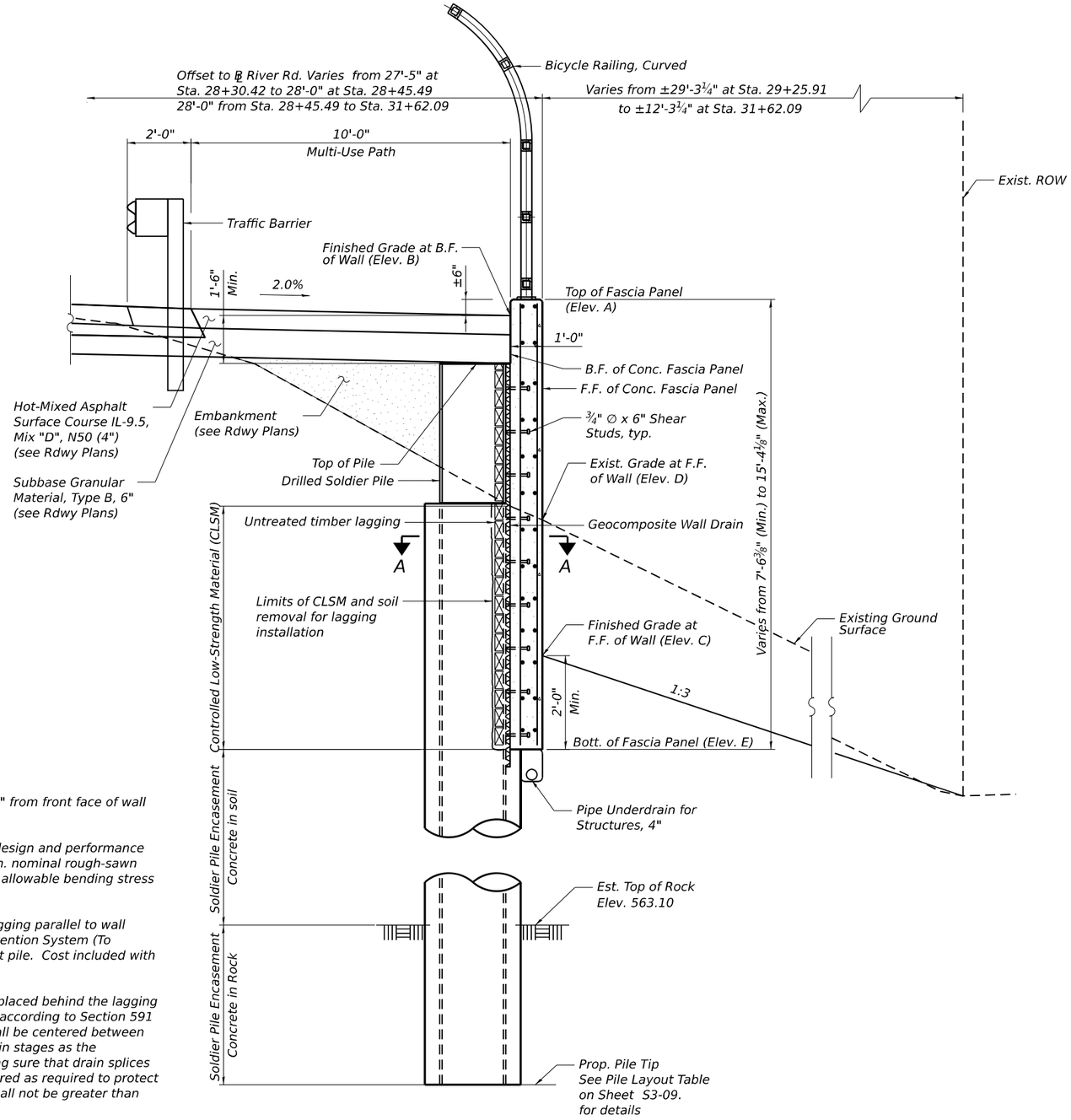


TYPICAL CROSS SECTION

(Looking North)
(Sta. 28+00.42 to 28+30.42)

NOTES:

1. Structure Excavation is measured 2'-0" from front face of wall to back of soldier pile timber lagging.
2. The Contractor is responsible for the design and performance of the lagging using no less than a 3 in. nominal rough-sawn thickness and timber with a minimum allowable bending stress of 1000 psi.
3. The Contractor shall provide Wood Lagging parallel to wall panel between the Temporary Soil Retention System (To Remain In Place) and the first adjacent pile. Cost included with Furnishing Soldier Piles (W Section).
4. The geocomposite wall drain shall be placed behind the lagging with the pervious side toward the soil according to Section 591 of the Standard Specifications and shall be centered between the piles. The drain shall be installed in stages as the excavation proceeds downward making sure that drain splices as well as the top side edges are covered as required to protect the drain. The maximum thickness shall not be greater than ⅞".
5. Stud shear connectors shall be ¾" ∅ x 6" granular or solid flux filled headed studs, conforming to Article 1006.32 of the Standard Specifications, automatically end welded to the front flange of the soldier piles.
6. For Shear Stud Detail, see Sheet S3-09.
7. For Section A-A, see Sheet S3-08.



TYPICAL CROSS SECTION

(Looking North)
(Sta. 28+30.42 to 31+62.09)

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1/26/2023 8:17:14 AM

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USER NAME =	DESIGNED - MAA, SK	REVISED -	
	CHECKED - MAI, JJS	REVISED -	
PLOT SCALE =	DRAWN - JMI	REVISED -	
PLOT DATE =	CHECKED - MAI, JJS	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WALL CROSS SECTIONS AND DETAILS (SHEET 1 OF 3)
STRUCTURE NO. 099-W806
SHEET S3-07 OF S3-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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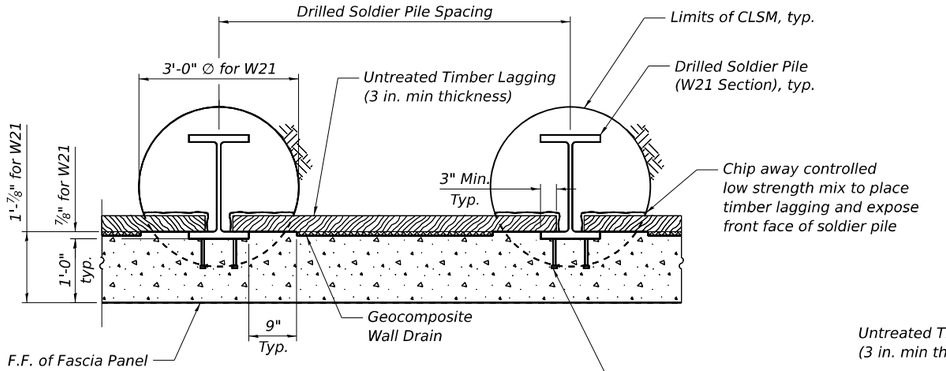
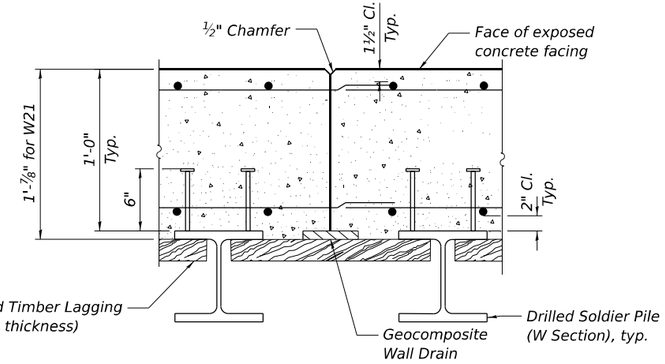
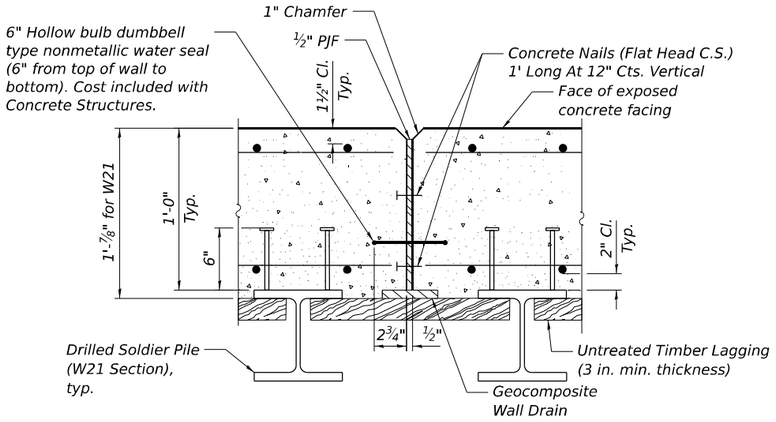
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		



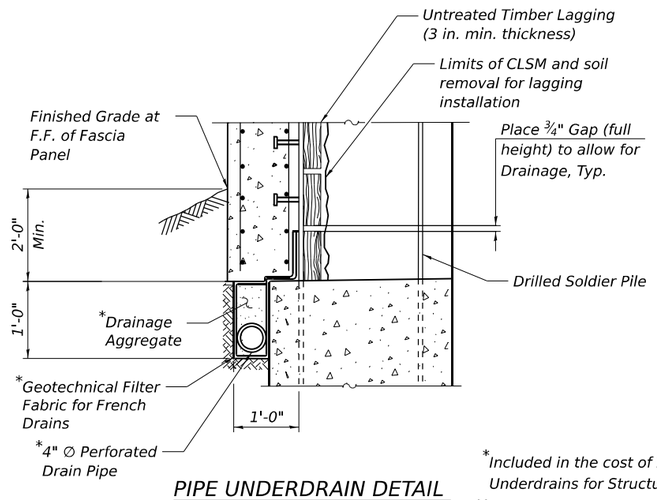
SECTION A-A



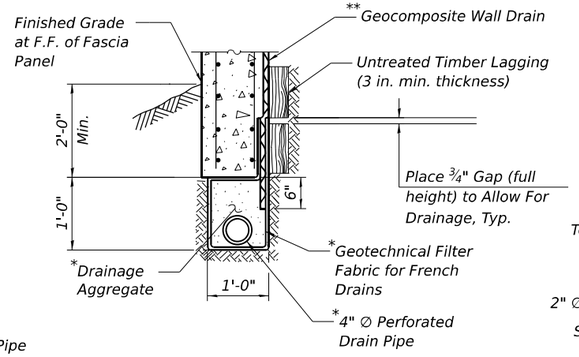
CONSTRUCTION JOINT DETAILS



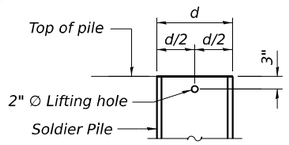
EXPANSION JOINT DETAILS



PIPE UNDERDRAIN DETAIL AT SOLDIER PILE



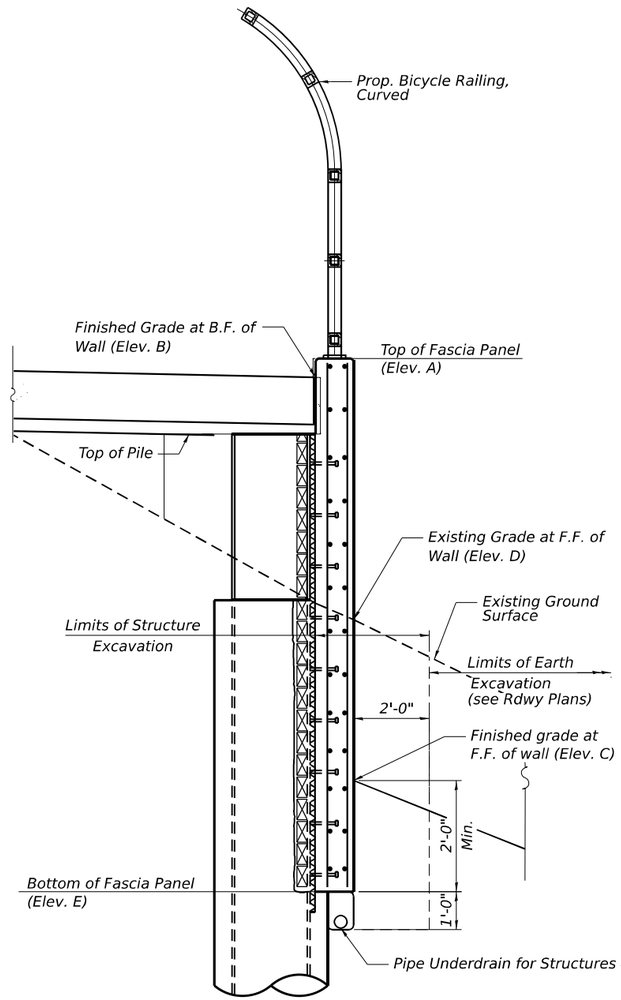
PIPE UNDERDRAIN DETAIL BETWEEN SOLDIER PILES

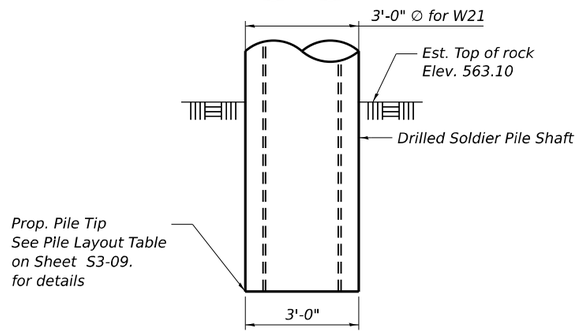


LIFTING HOLE DETAIL

*Included in the cost of Pipe Underdrains for Structures, 4"

**Maximum thickness for Geocomposite wall Drain is ⅞"





STRUCTURE EXCAVATION

(Looking North)

LEGEND

F.F. - Front Face
B.F. - Back Face

HBM ENGINEERING GROUP, LLC

USER NAME =	DESIGNED - MAA, SK	REVISED -	
	CHECKED - MAI, JJS	REVISED -	
PLOT SCALE =	DRAWN - JMI	REVISED -	
PLOT DATE =	CHECKED - MAI, JJS	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WALL CROSS SECTIONS AND DETAILS (SHEET 2 OF 3)
STRUCTURE NO. 099-W806
SHEET S3-08 OF S3-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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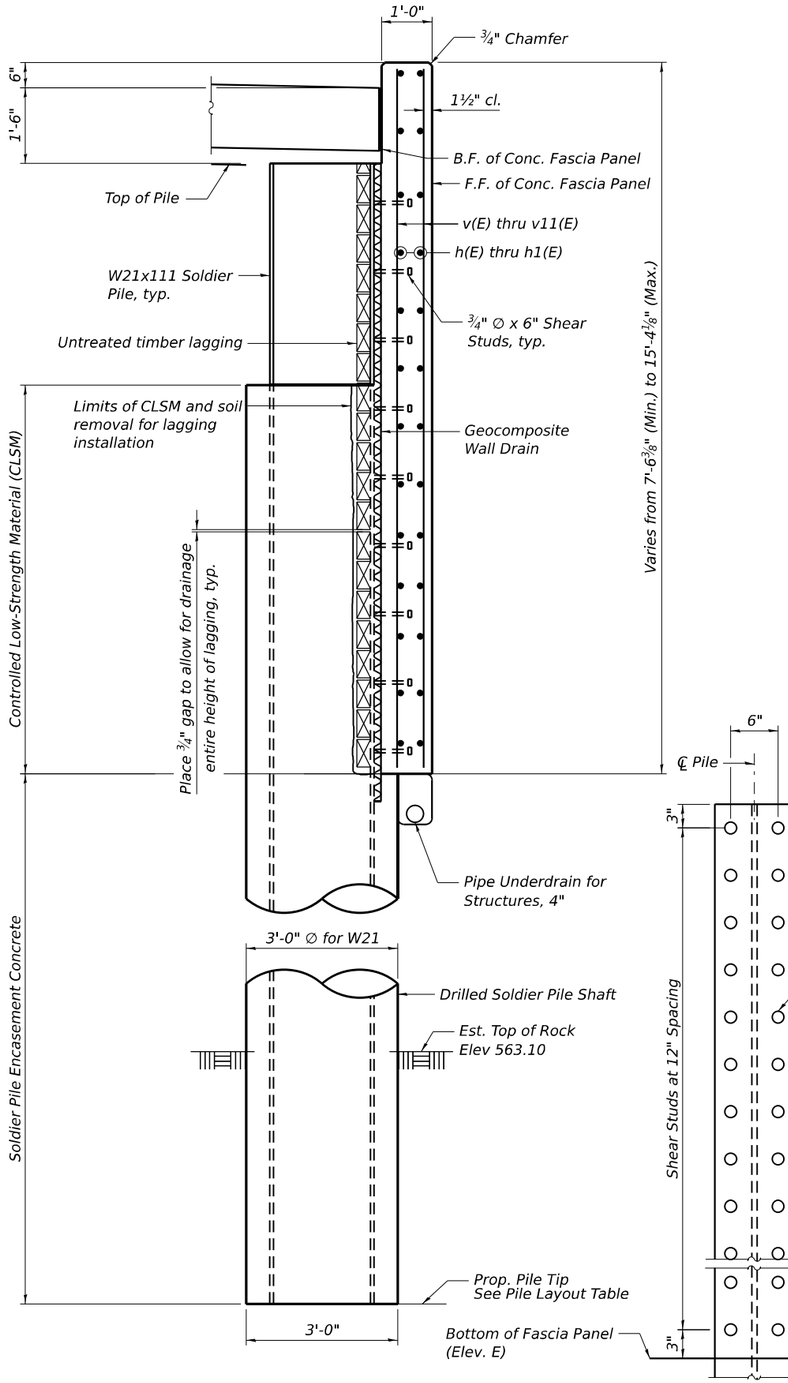
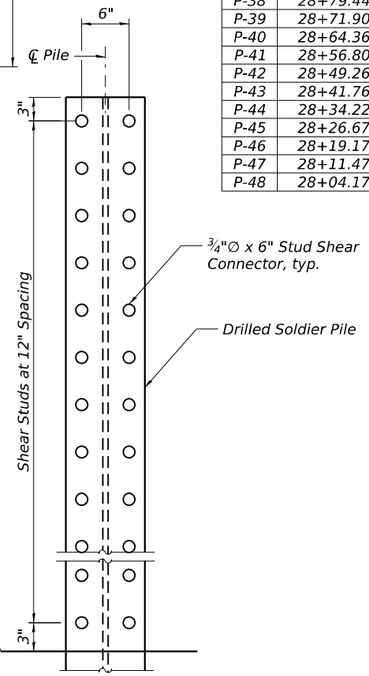
		CONTRACT NO. 62P67		
		ILLINOIS	FED. AID PROJECT	



TYPICAL SOLDIER PILE WALL CROSS SECTION

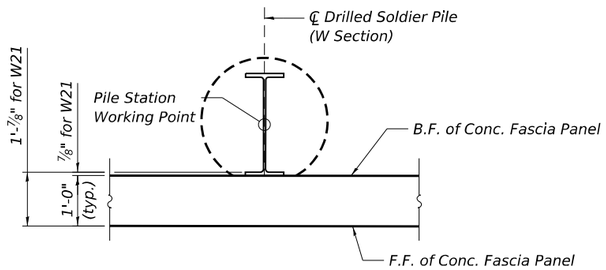


SHEAR STUD DETAIL

PILE LAYOUT

Pile	Station at Working Point	Offset	Top of Pile Elevation	Top of Encasement/ Bottom of CLSM	Section	Pile Tip Elevation	Pile Length	Top of Wall
P-01	31+58.34	26.09' Lt.	580.05	574.03	W21x111	559.17	20.88	581.72
P-02	31+50.84	26.09' Lt.	580.36	574.32	W21x111	559.48	20.88	582.03
P-03	31+43.34	26.09' Lt.	580.67	574.51	W21x111	559.79	20.88	582.34
P-04	31+35.84	26.11' Lt.	580.98	574.70	W21x111	560.10	20.88	582.65
P-05	31+28.33	26.11' Lt.	581.29	574.89	W21x111	559.16	22.13	582.96
P-06	31+20.83	26.12' Lt.	581.60	575.08	W21x111	559.47	22.13	583.27
P-07	31+13.30	26.12' Lt.	581.91	575.28	W21x111	559.78	22.13	583.58
P-08	31+05.76	26.11' Lt.	582.23	575.47	W21x111	560.10	22.13	583.89
P-09	30+98.23	26.12' Lt.	582.54	575.66	W21x111	559.17	23.37	584.20
P-10	30+90.69	26.13' Lt.	582.85	575.85	W21x111	559.48	23.37	584.51
P-11	30+83.15	26.13' Lt.	583.16	576.04	W21x111	559.79	23.37	584.82
P-12	30+75.60	26.12' Lt.	583.47	576.23	W21x111	560.10	23.37	585.13
P-13	30+68.05	26.12' Lt.	583.81	576.42	W21x111	558.98	24.83	585.48
P-14	30+60.50	26.13' Lt.	584.18	576.61	W21x111	559.35	24.83	585.85
P-15	30+52.95	26.13' Lt.	584.55	576.80	W21x111	559.72	24.83	586.22
P-16	30+45.41	26.12' Lt.	584.93	577.00	W21x111	560.10	24.83	586.59
P-17	30+37.87	26.12' Lt.	585.30	577.19	W21x111	558.99	26.31	586.96
P-18	30+30.33	26.13' Lt.	585.67	577.38	W21x111	559.36	26.31	587.33
P-19	30+22.79	26.13' Lt.	586.04	577.57	W21x111	559.73	26.31	587.70
P-20	30+15.24	26.12' Lt.	586.41	577.76	W21x111	560.10	26.31	588.08
P-21	30+07.69	26.12' Lt.	586.78	577.95	W21x111	558.99	27.79	588.45
P-22	30+00.15	26.15' Lt.	587.15	578.14	W21x111	559.36	27.79	588.82
P-23	29+92.60	26.18' Lt.	587.52	578.33	W21x111	559.73	27.79	589.19
P-24	29+85.06	26.18' Lt.	587.89	578.52	W21x111	560.10	27.79	589.56
P-25	29+77.51	26.19' Lt.	588.22	578.62	W21x111	559.23	28.99	589.89
P-26	29+69.97	26.18' Lt.	588.51	578.62	W21x111	559.52	28.99	590.18
P-27	29+62.43	26.19' Lt.	588.80	578.62	W21x111	559.81	28.99	590.46
P-28	29+54.89	26.12' Lt.	589.09	578.62	W21x111	560.10	28.99	590.75
P-29	29+47.34	26.12' Lt.	589.38	578.62	W21x111	559.23	30.15	591.04
P-30	29+39.80	26.12' Lt.	589.67	578.62	W21x111	559.52	30.15	591.33
P-31	29+32.25	26.13' Lt.	589.96	578.62	W21x111	559.81	30.15	591.62
P-32	29+24.71	26.12' Lt.	590.25	578.62	W21x111	560.10	30.15	591.91
P-33	29+17.16	26.12' Lt.	590.54	578.62	W21x111	559.24	31.30	592.20
P-34	29+09.62	26.13' Lt.	590.82	578.62	W21x111	559.52	31.30	592.49
P-35	29+02.08	26.13' Lt.	591.11	578.62	W21x111	559.81	31.30	592.78
P-36	28+94.54	26.12' Lt.	591.40	578.62	W21x111	560.10	31.30	593.07
P-37	28+86.98	26.12' Lt.	591.64	578.62	W21x111	559.53	32.11	593.31
P-38	28+79.44	26.13' Lt.	591.83	578.62	W21x111	559.72	32.11	593.50
P-39	28+71.90	26.13' Lt.	592.02	578.62	W21x111	559.91	32.11	593.68
P-40	28+64.36	26.12' Lt.	592.21	578.62	W21x111	560.10	32.11	593.87
P-41	28+56.80	26.11' Lt.	592.40	578.98	W21x111	560.06	32.34	594.06
P-42	28+49.26	26.11' Lt.	592.44	579.71	W21x111	560.10	32.34	594.11
P-43	28+41.76	25.97' Lt.	592.31	580.44	W21x111	559.97	32.34	593.97
P-44	28+34.22	25.67' Lt.	592.31	581.17	W21x111	559.97	32.34	593.98
P-45	28+26.67	25.52' Lt.	593.15	582.26	W21x111	560.10	33.05	594.81
P-46	28+19.17	25.52' Lt.	593.06	583.72	W21x111	560.01	33.05	594.72
P-47	28+11.47	25.52' Lt.	593.06	585.18	W21x111	560.01	33.05	594.73
P-48	28+04.17	25.52' Lt.	593.06	586.63	W21x111	560.01	33.05	594.73

Minimum Bar Lap	
Bar	Lap
#5	3'-9"



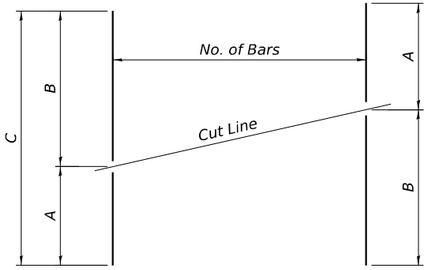
SOLDIER PILE WORKING POINT

NOTE:

1. For Notes, see Sheets S3-03 and S3-07.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	212	#5	33'-9"	
h1(E)	106	#5	29'-8"	
v(E)	31	#5	14'-10"	
v1(E)	31	#5	15'-10"	
v2(E)	31	#5	16'-9"	
v3(E)	31	#5	17'-11"	
v4(E)	31	#5	19'-5"	
v5(E)	31	#5	20'-10"	
v6(E)	31	#5	22'-8"	
v7(E)	31	#5	25'-0"	
v8(E)	31	#5	27'-4"	
v9(E)	31	#5	29'-3"	
v10(E)	31	#5	27'-10"	
v11(E)	31	#5	20'-7"	
Structure Excavation			Cu Yd	194
Concrete Structures			Cu Yd	149
Protective Coat			Sq Yd	407
Stud Shear Connectors			Each	976
Reinforcement Bars, Epoxy Coated			Pound	19,310
Furnishing Soldier Piles (W Section)			Foot	1,333
Drilling And Setting Soldier Piles (In Soil)			Cu Ft	6,367
Drilling And Setting Soldier Piles (In Rock)			Cu Ft	1,155
Untreated Timber Lagging			Sq Ft	3,280
Geocomposite Wall Drain			Sq Yd	405
Pipe Underdrains for Structures 4"			Foot	364



SERIES OF BAR CUTTING DIAGRAM

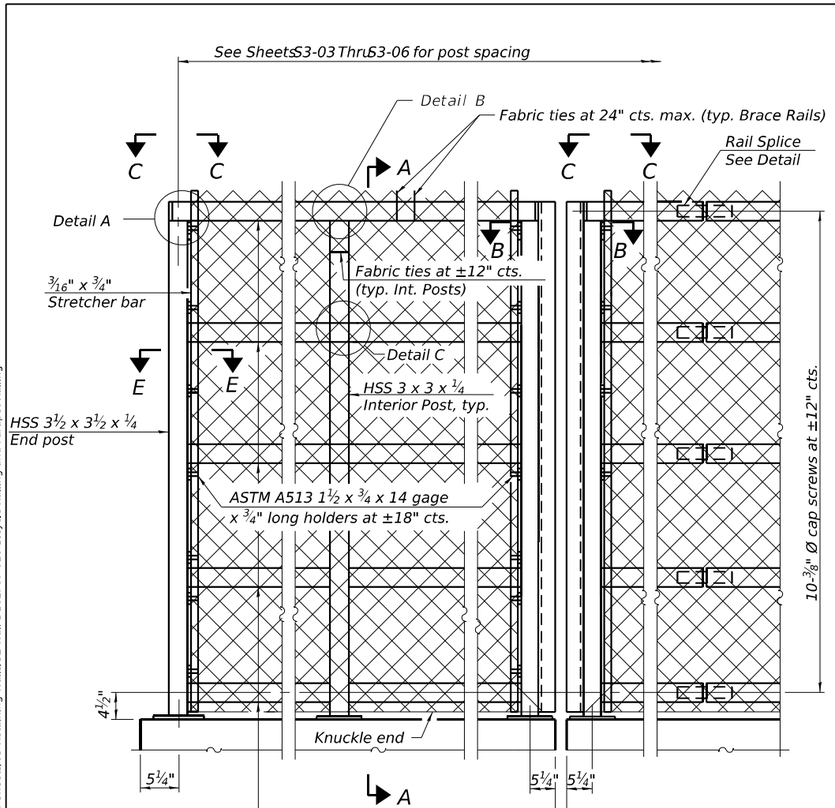
See table for dimensions. Make all cuts normal to bar axis

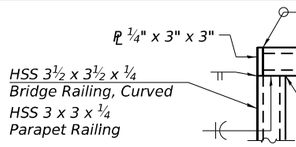
BAR TABLE SCHEDULE

Bar	No. of Sets Req'd	Bar No.	No. of Bars Per Set	A	B	C
v(E)	1	#5	31	7'-2"	7'-8"	14'-10"
v1(E)	1	#5	31	7'-8"	8'-2"	15'-10"
v2(E)	1	#5	31	8'-2"	8'-7"	16'-9"
v3(E)	1	#5	31	8'-7"	9'-4"	17'-11"
v4(E)	1	#5	31	9'-4"	10'-1"	19'-5"
v5(E)	1	#5	31	10'-1"	10'-9"	20'-10"
v6(E)	1	#5	31	10'-9"	11'-11"	22'-8"
v7(E)	1	#5	31	11'-11"	13'-1"	25'-0"
v8(E)	1	#5	31	13'-1"	14'-3"	27'-4"
v9(E)	1	#5	31	14'-3"	15'-0"	29'-3"
v10(E)	1	#5	31	15'-0"	12'-10"	27'-10"
v11(E)	1	#5	31	12'-10"	7'-9"	20'-7"

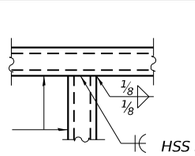
LEGEND

F.F. - Front Face
B.F. - Back Face

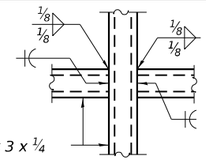




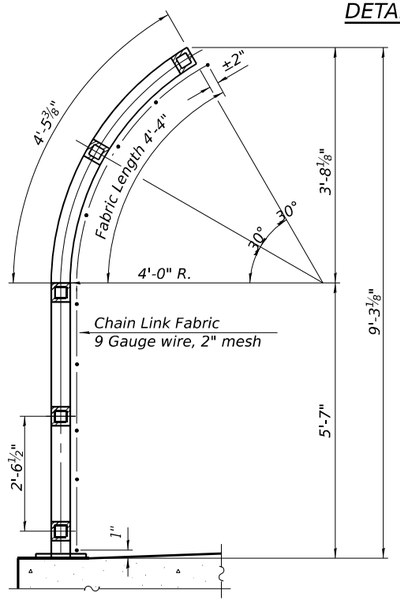
DETAIL A



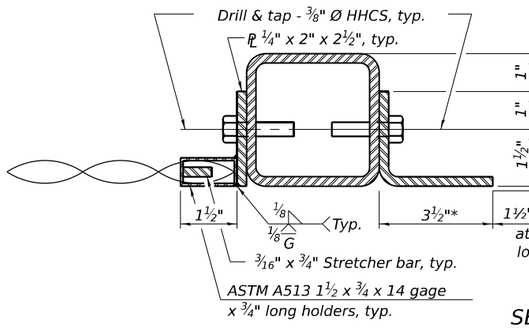
DETAIL B



DETAIL C

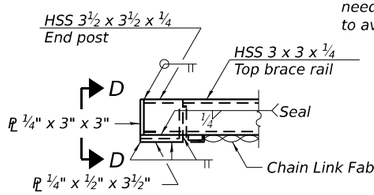


SECTION A-A

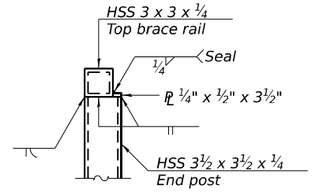


SECTION B-B

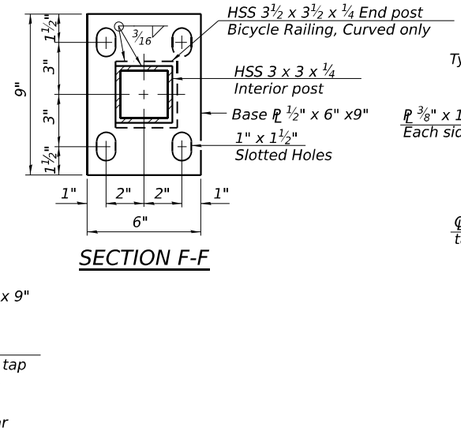
* Assume 3/8" radius. Dimensions may need to be modified for larger joints to avoid gaps greater than 6".



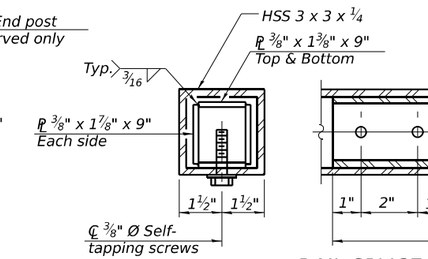
VIEW C-C



VIEW D-D

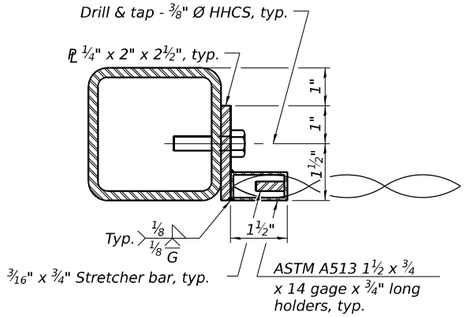


SECTION F-F

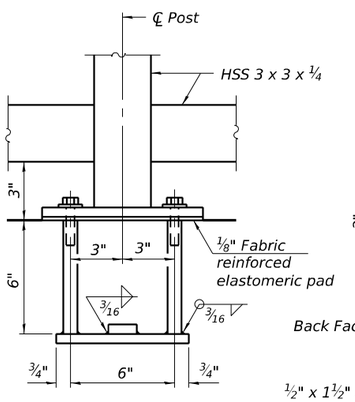


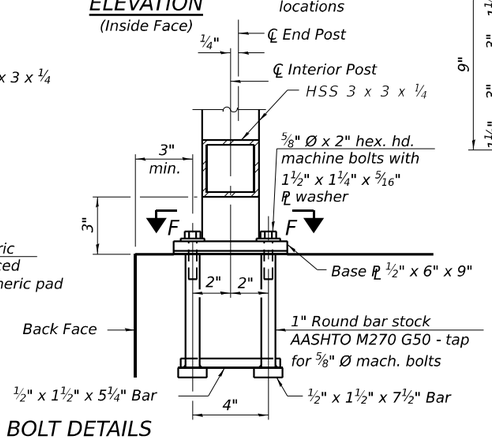
1/4" rail splice

RAIL SPLICE



SECTION E-E





ANCHOR BOLT DETAILS

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" Ø anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

RAILING CRITERIA

NCHRP 350 Test Level	4
Railing Weight (plf)	25
Bicycle Railing Weight (plf)	50
Max Post Spacing	10'-0''

Notes:
Place reinforcement bars to miss anchor rod locations.
All HSS tubing used for the Parapet Railing shall be CVN tested according to Article 1006.34(b) of the Standard Specifications.
CVN testing is not required for the HSS tubing used in the Bicycle Railing, Curved.
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
This work will be paid for at the unit cost per foot of Bicycle Railing, Curved.

BILL OF MATERIAL

Item	Unit	Quantity
Bicycle Railing, Curved	Foot	360

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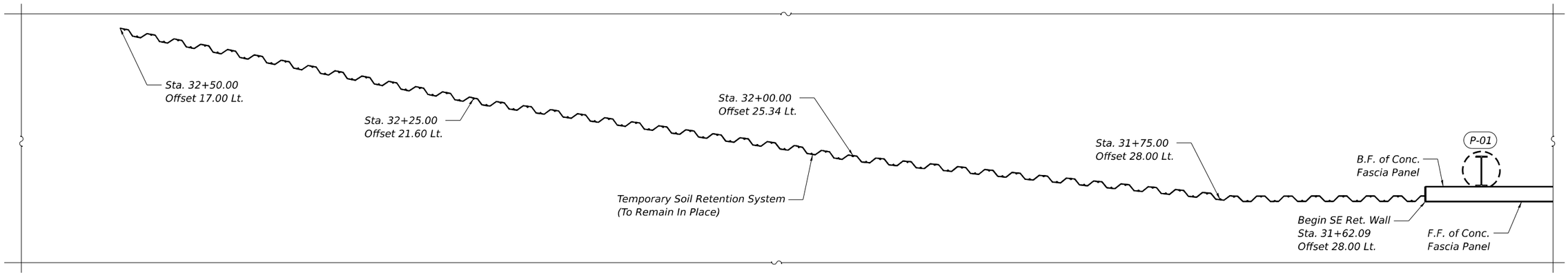
HBM ENGINEERING GROUP, LLC

USER NAME = | DESIGNED - MAA, SK | REVISED -
PLOT SCALE = | CHECKED - MAI, JJS | REVISED -
PLOT DATE = | DRAWN - CP | REVISED -
CHECKED - MAI, JJS | REVISED -

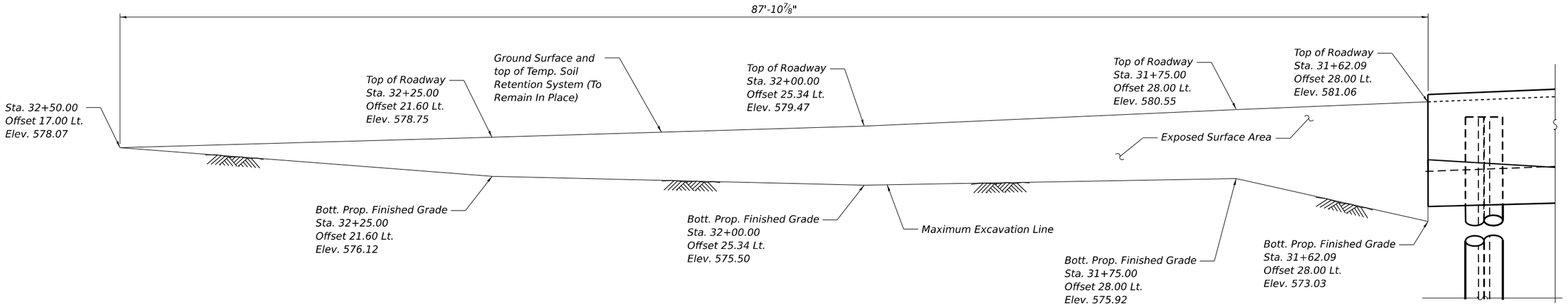
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BICYCLE RAILING, CURVED & PARAPET RAILING
STRUCTURE NO. 099-W806
SHEET S3-10 OF S3-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	91
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		



PARTIAL PLAN AT TEMPORARY SOIL RETENTION SYSTEM



TEMPORARY SOIL RETENTION SYSTEM ELEVATION

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Temporary Soil Retention System (To Remain In Place)	Sq Ft	307

NOTES:

1. A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

2. The Temporary Soil Retention System at the south end of proposed retaining wall shall be installed to the limits shown and shall remain in place until such time as remaining portions of the Multi-Use Path are constructed. The Contractor shall submit a soil retention system design, including all necessary plan details and calculations, for review and acceptance by the Engineer. See Special Provision for Temporary Soil Retention System (To Remain in Place).

3. The maximum allowable excavation slope is 1:2 (V:H).

LEGEND

Temporary Soil Retention System
(To remain in place)

HBM ENGINEERING GROUP, LLC

USER NAME =	DESIGNED - MAA, SK	REVISED -	
	CHECKED - MAI, JJS	REVISED -	
PLOT SCALE =	DRAWN - JMI	REVISED -	
PLOT DATE =	CHECKED - MAI, JJS	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY SOIL RETENTION SYSTEM DETAILS
STRUCTURE NO. 099-W806
SHEET S3-11 OF S3-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	92
		CONTRACT NO. 62P67		
	ILLINOIS FED. AID PROJECT			

Wang Engineering
wangeng@wangeng.com
1145 N MAin Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

BORING LOG RIV-BSB-03

WEI Job No.: 255-39-01

Client: Stantec
Project: I-80 Reconstruction, Ridge Road to Houbolt Road
Location: Will County, Illinois

Datum: NAVD 88
Elevation: 593.11 ft
North: 1755103.18 ft
East: 1016269.75 ft
Station: 28+15.5
Offset: 8.3 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	592.8	4-inch thick ASPHALT --PAVEMENT--						
	591.4	White and gray SANDY GRAVEL; damp --AGGREGATE BASE--			1	5 4 4	1.50 P	15
		Stiff to hard, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --FILL-- --RDR 2-3--	5		2	2 2 3	1.00 P	18
		--L_L(%)=35, P_L(%)=19-- --%Gravel=0.8-- --%Sand=5.6-- --%Silt=59.9-- --%Clay=33.7-- --A-6 (15)--			3	2 3 9	2.50 P	18
			10		4	4 4 5	> 4.50 P	18
					5	3 4 4	3.50 P	16
			15		6	4 6 7	4.00 P	21
		--rig chatter; possible cobbles--			7	4 4 5	4.00 P	15
	573.7		20		8	3 5 6	2.50 P	26
		Very stiff, black and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --Buried TOPSOIL-- --RDR 2--			9	3 6 7	3.50 P	21
	570.1	Medium dense, brown and gray SILTY LOAM, trace gravel --RDR 2-- --L_L(%)=21, P_L(%)=14--	25		10	9 6 6	NP	12

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	567.6	--%Gravel=11.2-- --%Sand=25.4-- --%Silt=55.9-- --%Clay=7.5-- --A-4 (2)--			11	50/1"	NP	12
	565.6	--rig chatter; possible cobbles-- Very dense, brown and reddish brown SANDY GRAVEL; wet --RDR 3--	30		12	50/3"	NP	6
	563.1	--rig chatter, 27.5 ft; possible cobbles-- Very dense, brown and reddish brown, weathered dolostone fragments; saturated --Weathered BEDROCK--				CORE		
		Strong, light greenish gray, very poor to poor quality, DOLOSTONE; Moderately to closely spaced, highly weathered, horizontal and vertical JOINTS, with <0.05 inch opening, slicken to slightly rough walls, and <0.2 inch thick clay infill. --RUN 1: 30.0 to 40.0 feet-- --Recovery: 90%-- --RQD: 8%-- --Qu=6,081 psi--	35		13			
		--RUN 2: 40.0 to 44.5 feet-- --Recovery: 81%-- --RQD: 26%--	40		14	CORE		
	548.6	Boring terminated at 44.50 ft	45					
			50					

GENERAL NOTES

Begin Drilling: 11-16-2021 Complete Drilling: 11-16-2021
Drilling Contractor: Wang Testing Services Drill Rig: 20D50T [80%]
Driller: RH&JD Logger: M. Rojo Checked by: C. Marin
Drilling Method: 2.25" ID HSA; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: ▽ 26.00 ft
At Completion of Drilling: ▼ core wash 2.5ft
Time After Drilling: NA
Depth to Water: ▽ NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

Wang Engineering
wangeng@wangeng.com
1145 N MAin Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

BORING LOG RIV-RWB-06HA

WEI Job No.: 255-39-01

Client: Stantec
Project: I-80 Reconstruction, Ridge Road to Houbolt Road
Location: Will County, Illinois

Datum: NAVD88
Elevation: 589.34 ft
North: 1755110.12 ft
East: 1016283.21 ft
Station: 28+08.8
Offset: 21.9 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	589.2	Brown SANDY GRAVEL --FILL--			1	PUSH	> 4.50 P	14
		Stiff to hard, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --FILL--			2	PUSH	1.25 P	18
			5		3	PUSH	> 4.50 P	17
		--L_L(%)=38, P_L(%)=16-- --%Gravel=1.8-- --%Sand=19.5-- --%Silt=52.1-- --%Clay=26.6-- --A-6 (16)--			4	PUSH	2.50 P	21
			10		5	PUSH	3.50 P	15
					6	PUSH	3.00 P	16
			15		7	PUSH	3.00 P	11
					8	PUSH	3.50 P	17
	573.3	Boring terminated at 16.00 ft						
			20					
			25					

GENERAL NOTES

Begin Drilling: 11-30-2021 Complete Drilling: 12-01-2021
Drilling Contractor: Wang Testing Services Drill Rig: Geoprobe HA
Driller: RH&AG Logger: M. Rojo Checked by: C. Marin
Drilling Method: 1" ID HSA; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: ▽ DRY
At Completion of Drilling: ▼ DRY
Time After Drilling: NA
Depth to Water: ▽ NA

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WANGENGINC 2553901.GPJ WANGENG.GDT 12/13/21

MODEL: Default
FILE NAME: pw://transystems-pw.bentley.com:transystemscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/01-Stantec/CAD/CR-02_62P67/04-Sheets/05-Retaining Walls/SE Wall-D162P67-011-Boring Logs (Sheet 1 of 5)

1/26/2023 8:18:18 AM

HBM ENGINEERING GROUP, LLC

USER NAME =	DESIGNED - MAA, SK	REVISED -	
	CHECKED - MAI, JJS	REVISED -	
PLOT SCALE =	DRAWN - JMI	REVISED -	
PLOT DATE =	CHECKED - MAI, JJS	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS (SHEET 1 OF 5)
STRUCTURE NO. 099-W806
SHEET S3-12 OF S3-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	93
		CONTRACT NO. 62P67		
	ILLINOIS FED. AID PROJECT			

Wang Engineering
wangeng@wangeng.com
1145 N MAin Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

BORING LOG RIV-RWB-07

WEI Job No.: 255-39-01

Client: Stantec
Project: I-80 Reconstruction, Ridge Road to Houbolt Road
Location: Will County, Illinois

Datum: NAVD 88
Elevation: 592.50 ft
North: 1755049.72 ft
East: 1016271.73 ft
Station: 28+69.1
Offset: 8.8 LT

Elevation (ft)	Depth (ft)	SOIL AND ROCK DESCRIPTION	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
591.6		11-inch thick ASPHALT --PAVEMENT--					
591.2		Medium dense, tan SANDY GRAVEL; damp --BASE COURSE--					
		Stiff to hard, brown and black SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --FILL-- --RDR 2--		1	6 4 6	2.00 P	11
	5			2	5 8 9	7.71 B	15
				3	5 6 8	4.43 B	17
	10			4	4 5 6	4.26 B	15
				5	3 6 7	4.67 B	15
	15			6	5 6 7	2.95 B	14
				7	4 6 6	2.87 B	14
	20			8	4 6 9	1.97 B	16
				9	6 6 11	5.49 B	20
568.3	25	Very dense, brown SILTY LOAM,		10	7 7 50/4"	2.05 B	21
567.0		trace gravel; damp --RDR 2--		11	50/1"	NP	2
	30	Very dense, tan WEATHERED BEDROCK; damp	CORE	12			
564.5		Strong, light grayish gray, very poor quality, DOLOSTONE; very closely spaced, moderately weathered, horizontal, oblique, and vertical joints, with <0.05 inch opening, slightly rough walls, and <0.2 inch thick sand infill. --RUN 1: 28.0 to 31.5 feet-- --Recovery: 86%-- --RQD: 0%-- --RUN 2: 31.5 to 39.5 feet-- --Recovery: 94%-- --RQD: 0%--					
	35			13			
553.0	40	Boring terminated at 39.50 ft					
	45						
	50						

GENERAL NOTES

Begin Drilling: 11-18-2021 Complete Drilling: 11-18-2021
Drilling Contractor: Wang Testing Services Drill Rig: 20CME55T[81%]
Driller: RR&AG Logger: D. You Checked by: C. Marin
Drilling Method: 2.25" ID HSA; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: DRY
At Completion of Drilling: core wash 7ft
Time After Drilling: NA
Depth to Water: NA

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Wang Engineering
wangeng@wangeng.com
1145 N MAin Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

BORING LOG RIV-RWB-07HA

WEI Job No.: 255-39-01

Client: Stantec
Project: I-80 Reconstruction, Ridge Road to Houbolt Road
Location: Will County, Illinois

Datum: NAVD88
Elevation: 586.01 ft
North: 1755051.25 ft
East: 1016287.66 ft
Station: 28+67.8
Offset: 24.8 LT

Elevation (ft)	Depth (ft)	SOIL AND ROCK DESCRIPTION	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
585.9		Brown SANDY GRAVEL --FILL--					
		Very stiff to hard, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --FILL--		1	PUSH	4.50 P	16
				2	PUSH	4.50 P	15
	5			3	PUSH	4.50 P	15
				4	PUSH	4.00 P	18
				5	PUSH	3.25 P	18
	10			6	PUSH	4.50 P	17
				7	PUSH	2.50 P	17
572.0		Stiff, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; moist to wet		8	PUSH	1.00 P	23
570.0	15	Boring terminated at 16.00 ft					
	20						
	25						

GENERAL NOTES

Begin Drilling: 11-30-2021 Complete Drilling: 11-30-2021
Drilling Contractor: Wang Testing Services Drill Rig: Geoprobe HA
Driller: RH&AG Logger: M. Rojo Checked by: C. Marin
Drilling Method: 1" ID HSA; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: 16.00 ft
At Completion of Drilling: 16.00 ft
Time After Drilling: NA
Depth to Water: NA

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Wang Engineering
wangeng@wangeng.com
1145 N MAin Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

BORING LOG RIV-RWB-08

WEI Job No.: 255-39-01

Client: Stantec
Project: I-80 Reconstruction, Ridge Road to Houbolt Road
Location: Will County, Illinois

Datum: NAVD88
Elevation: 590.05 ft
North: 1754964.53 ft
East: 1016273.57 ft
Station: 29+54.4
Offset: 7.3 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	589.5	7-inch thick ASPHALT --PAVEMENT--						
	588.7	White and gray SANDY GRAVEL; damp --BASE COURSE--			1	13 10 8	> 4.50 P	14
		Hard, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --FILL-- --RDR 2--	5		2	9 10 11	> 4.50 P	13
					3	7 7 12	4.26 B	17
			10		4	4 5 8	> 4.50 P	13
					5	4 7 8	> 4.50 P	15
			15		6	4 5 6	> 4.50 P	16
	573.3				7	4 6 7	4.00 P	25
	572.1	Hard, black SILTY CLAY to SILTY CLAY LOAM, trace gravel and organic matter --BURIED TOPSOIL--						
		Hard, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp to moist --RDR 2--	20		8	3 4 4	4.00 P	26
	569.6							
	568.9	--L_L(%)=44, P_L(%)=15-- --%Gravel=2.2-- --%Sand=8.5-- --%Silt=60.6-- --%Clay=28.6-- --A-7-6 (26)--			9	10 10 50/0"	NP	7
	567.1	Brown and gray SILTY LOAM to	25					
		LOAM; wet --RDR 2--						
		Very dense, brown SANDY GRAVEL; saturated --AUGER REFUSAL--	30					
		Boring terminated at 23.00 ft						
			35					
			40					
			45					
			50					

GENERAL NOTES

Begin Drilling: 11-17-2021 Complete Drilling: 11-17-2021
Drilling Contractor: Wang Testing Services Drill Rig: 20D50T [80%]
Driller: RH&JD Logger: M. Rojo Checked by: C. Marin
Drilling Method: 3.25" ID HSA; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: 22.00 ft
At Completion of Drilling: DRY
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

Wang Engineering
wangeng@wangeng.com
1145 N MAin Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

BORING LOG RIV-RWB-08HA

WEI Job No.: 255-39-01

Client: Stantec
Project: I-80 Reconstruction, Ridge Road to Houbolt Road
Location: Will County, Illinois

Datum: NGVD
Elevation: 585.18 ft
North: 1754962.78 ft
East: 1016288.59 ft
Station: 29+56.9
Offset: 22.2 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		Very stiff to hard, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --FILL-- --RDR 2--			1	PUSH	> 4.50 P	15
					2	PUSH	> 4.50 P	16
			5		3	PUSH	> 4.50 P	14
					4	PUSH	> 4.50 P	16
			10		5	PUSH	> 4.50 P	16
					6	PUSH	> 4.50 P	15
					7	PUSH	> 4.50 P	15
	571.2							
		Very stiff, black and gray CLAY to SILTY CLAY; damp	15		8	PUSH	3.00 P	24
	569.2	Boring terminated at 16.00 ft						
			20					
			25					

GENERAL NOTES

Begin Drilling: 11-29-2021 Complete Drilling: 11-29-2021
Drilling Contractor: Wang Testing Services Drill Rig: Geoprobe HA
Driller: RH&AG Logger: M. Rojo Checked by: C. Marin
Drilling Method: 1" ID HSA; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: DRY
At Completion of Drilling: DRY
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

HBM ENGINEERING GROUP, LLC

USER NAME =	DESIGNED - MAA, SK	REVISED -	
	CHECKED - MAI, JJS	REVISED -	
PLOT SCALE =	DRAWN - JMI	REVISED -	
PLOT DATE =	CHECKED - MAI, JJS	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS (SHEET 3 OF 5)
STRUCTURE NO. 099-W806
SHEET S3-14 OF S3-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	95
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

Wang Engineering
wangeng@wangeng.com
1145 N MAin Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

BORING LOG RIV-RWB-09

WEI Job No.: 255-39-01

Client: **Stantec**
Project: **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 585.93 ft
North: 1754864.40 ft
East: 1016280.92 ft
Station: 30+54.9
Offset: 8.8 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	585.3	7-inch thick ASPHALT --PAVEMENT--						
	584.7	White and gray SANDY GRAVEL; damp --BASE COURSE--			1	7 9 8	> 4.50 P	12
		Very stiff to hard, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --FILL-- --RDR 2--	5		2	3 6 8	> 4.50 P	10
					3	3 4 4	3.25 P	15
	577.9							
	577.2	Very stiff, black SILTY CLAY to SILTY CLAY LOAM, trace gravel and organic matter --BURIED TOPSOIL--	10		4	4 5 5	2.50 P	26
		Very stiff to hard (>4.50P), brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --RDR 2--			5	5 5 7	3.50 P	14
	572.9	Stiff, bluish gray and brown SILTY CLAY, trace gravel; moist --RDR 2--	15		6	3 3 3	1.50 P	27
	570.4	Medium dense, brown SILTY LOAM, trace gravel; saturated --RDR 2-- --L_L(%)=19, P_L(%)=14-- --%Gravel=13.7-- --%Sand=24.6-- --%Silt=54.3-- --%Clay=7.4-- --A-4 (0)--			7	4 4 19	NP	15
	567.9		20		8	60/1"	NP	14
	565.4	Very dense, brown GRAVEL; saturated --RDR 2-3-- --rig chatter; possible cobbles--			9	11 50/1"	NP	14
	562.4	Very dense, white and gray SILTY LOAM, trace gravel --RDR 3--						
		White and gray WEATHERED	25	C O R				

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		BEDROCK --auger refusal at 23.5 feet--						
		Strong, light grayish gray, very poor quality, DOLOSTONE; Closely spaced, moderately weathered, horizontal and vertical joints, with <0.05 inch opening, slightly rough walls, and no infill. --RUN 1: 23.5 to 33.5 feet-- --Recovery: 91%-- --RQD: 12%--	30		10			
	552.4	Boring terminated at 33.50 ft	35					
			40					
			45					
			50					

GENERAL NOTES

Begin Drilling: **11-23-2021** Complete Drilling: **11-23-2021**
Drilling Contractor: **Wang Testing Services** Drill Rig: **20CME55T[81%]**
Driller: **RH&AG** Logger: **M. Rojo** Checked by: **C. Marin**
Drilling Method: **3.25" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling: **17.00 ft**
At Completion of Drilling: **core wash 13ft**
Time After Drilling: **NA**
Depth to Water: **NA**

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Wang Engineering
wangeng@wangeng.com
1145 N MAin Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

BORING LOG RIV-RWB-09HA

WEI Job No.: 255-39-01

Client: **Stantec**
Project: **I-80 Reconstruction, Ridge Road to Houbolt Road**
Location: **Will County, Illinois**

Datum: NAVD88
Elevation: 580.31 ft
North: 1754868.40 ft
East: 1016296.74 ft
Station: 30+52.0
Offset: 24.9 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		Very stiff, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --FILL-- --RDR 2--			1	PUSH	3.50 P	22
					2	PUSH	2.50 P	19
			5		3	PUSH	3.00 P	18
					4	PUSH	3.50 P	13
	570.5		10		5	PUSH	2.50 P	17
	570.3	Black SILTY CLAY to SILTY CLAY LOAM, trace gravel --BURIED TOPSOIL--			6	PUSH	1.50 P	29
	568.6	Stiff, bluish-green gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --RDR 2--			7	PUSH	1.50 P	14
	566.4	Stiff, brown and gray SILTY LOAM to SILTY CLAY LOAM, trace gravel; damp --RDR 2--	15		8		NP	13
		Brown SANDY GRAVEL; wet --Weathered BEDROCK-- --spoon refusal--						
	565.8	Boring terminated at 14.50 ft	20					
			25					

GENERAL NOTES

Begin Drilling: **11-29-2021** Complete Drilling: **11-29-2021**
Drilling Contractor: **Wang Testing Services** Drill Rig: **Geoprobe HA**
Driller: **RH&AG** Logger: **M. Rojo** Checked by: **C. Marin**
Drilling Method: **1" ID HSA; boring backfilled upon completion**

WATER LEVEL DATA

While Drilling: **14.00 ft**
At Completion of Drilling: **12.00 ft**
Time After Drilling: **NA**
Depth to Water: **NA**

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 2553901.GPJ WANGENG.GDT 12/13/21

HBM ENGINEERING GROUP, LLC

USER NAME =	DESIGNED - MAA, SK	REVISED -	
	CHECKED - MAI, JJS	REVISED -	
PLOT SCALE =	DRAWN - JMI	REVISED -	
PLOT DATE =	CHECKED - MAI, JJS	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS (SHEET 4 OF 5)
STRUCTURE NO. 099-W806
SHEET S3-15 OF S3-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	96
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

Wang Engineering
wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

BORING LOG RIV-SGB-03

WEI Job No.: 255-39-01

Client: Stantec
Project: I-80 Reconstruction, Ridge Road to Houbolt Road
Location: Will County, Illinois

Datum: NAVD 88
Elevation: 592.36 ft
North: 1755053.60 ft
East: 1016257.18 ft
Station: 28+64.8
Offset: 5.4 RT

Depth (ft)	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	591.8	7-inch thick ASPHALT --PAVEMENT--					
	591.1	Gray and white SANDY GRAVEL; damp --AGGREGATE BASE--					
		Very stiff to hard, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --FILL-- --RDR 2--					
				1	8 7 7 8	> 4.50 P	13
				2	10 11 11 11	> 4.50 P	14
5				3	6 7 9 7	> 4.50 P	17
				4	7 6 6 5	3.28 B	17
				5	5 7 6 7	> 4.50 P	17
10				6	3 5 8	NA	18
				7	5 6 8	> 4.50 P	18
15							
	571.9	Medium dense, brown and gray LOAM, trace gravel; moist --FILL-- --RDR 2--					
	569.4	Very dense, brown SILTY LOAM, trace gravel; wet to saturated --RDR 2--					
	567.4	Boring terminated at 24.75 ft					
20				8	4 5 7	> 4.50 P	16
				9	9 10 9	NA	18
				10	4 7 8	NP	15
				11	7 9 60/3"	NP	11
25							
30							

GENERAL NOTES

Begin Drilling: 11-22-2021 Complete Drilling: 11-22-2021
Drilling Contractor: Wang Testing Services Drill Rig: 20CME55T[81%]
Driller: RR&AG Logger: M. Rojo Checked by: C. Marin
Drilling Method: 2.25" ID HSA; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: 24.00 ft
At Completion of Drilling: DRY
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

Wang Engineering
wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: (630) 953-9928
Fax: (630) 953-9938

BORING LOG RIV-SGB-04

WEI Job No.: 255-39-01

Client: Stantec
Project: I-80 Reconstruction, Ridge Road to Houbolt Road
Location: Will County, Illinois

Datum: NAVD 88
Elevation: 586.14 ft
North: 1754867.01 ft
East: 1016264.92 ft
Station: 30+51.3
Offset: 7.2 RT

Depth (ft)	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	585.6	7-inch thick ASPHALT --PAVEMENT--					
		Medium dense, gray and white SANDY GRAVEL					
	584.5	--BASE COURSE--					
		Stiff to hard, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --FILL-- --RDR 2--					
				1	13 7 6 7	> 4.50 P	14
				2	4 7 10 11	> 4.50 P	12
5		--L_L(%)=29, P_L(%)=15-- --%Gravel=5.5-- --%Sand=15.8-- --%Silt=55.6-- --%Clay=23.0-- --A-6 (9)--		3	7 8 7 9	> 4.50 P	15
				4	5 8 9 10	2.05 B	16
10				5	20 21 11 9	1.50 P	16
	573.9	Stiff, gray and brown SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp to moist --RDR 2--		6	10 13 11	NA	15
				7	3 2 9	1.50 P	24
15							
	570.6	Very dense, brown SILTY LOAM to SILTY CLAY LOAM; moist --RDR 2--					
	569.6	Very dense, brown and gray GRAVEL to SANDY GRAVEL; moist to saturated --RDR 2--					
				8	5 50/6"	NP	15
				9	50/4"	NP	15
	566.1	Boring terminated at 20.00 ft					
20							
25							
30							

GENERAL NOTES

Begin Drilling: 11-23-2021 Complete Drilling: 11-23-2021
Drilling Contractor: Wang Testing Services Drill Rig: 20CME55T[81%]
Driller: RR&AG Logger: M. Rojo Checked by: C. Marin
Drilling Method: 2.25" ID HSA; boring backfilled upon completion

WATER LEVEL DATA

While Drilling: 19.00 ft
At Completion of Drilling: DRY
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

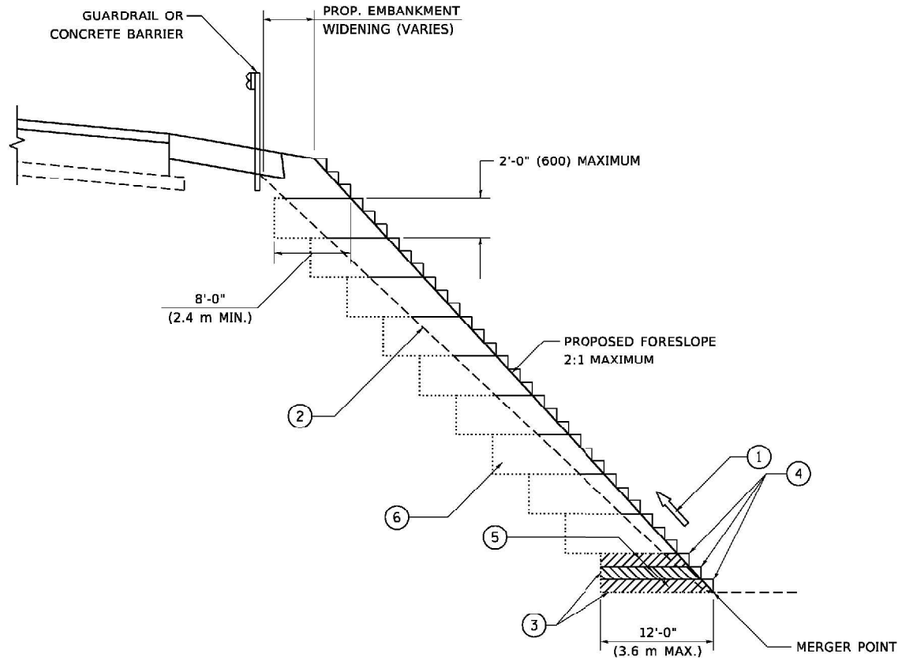
HBM ENGINEERING GROUP, LLC

USER NAME =	DESIGNED - MAA, SK	REVISED -	
	CHECKED - MAI, JJS	REVISED -	
PLOT SCALE =	DRAWN - JMI	REVISED -	
PLOT DATE =	CHECKED - MAI, JJS	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS (SHEET 5 OF 5)
STRUCTURE NO. 099-W806
SHEET S3-16 OF S3-16 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2021-151-B	WILL	139	97
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		



TYPICAL BENCHING DETAIL FOR EMBANKMENT

NOTES:

1. CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
2. EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
3. BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
4. TRIM TO FINAL SLOPE.
5. EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
6. EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
7. SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m).

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

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	DRAWN - CADD	REVISED -	
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PLOT DATE = 3/27/2019	DATE - 06-16-04	REVISED -	

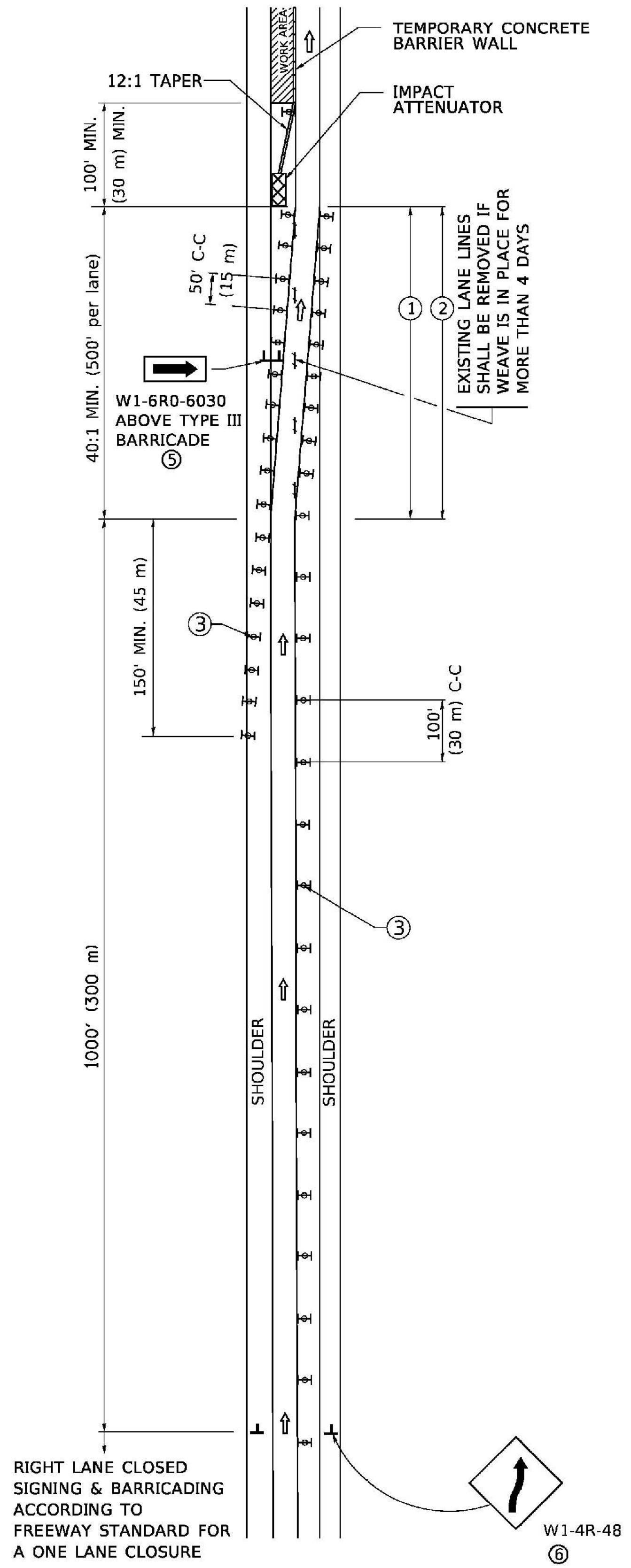
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BENCHING DETAIL
FOR EMBANKMENT WIDENING

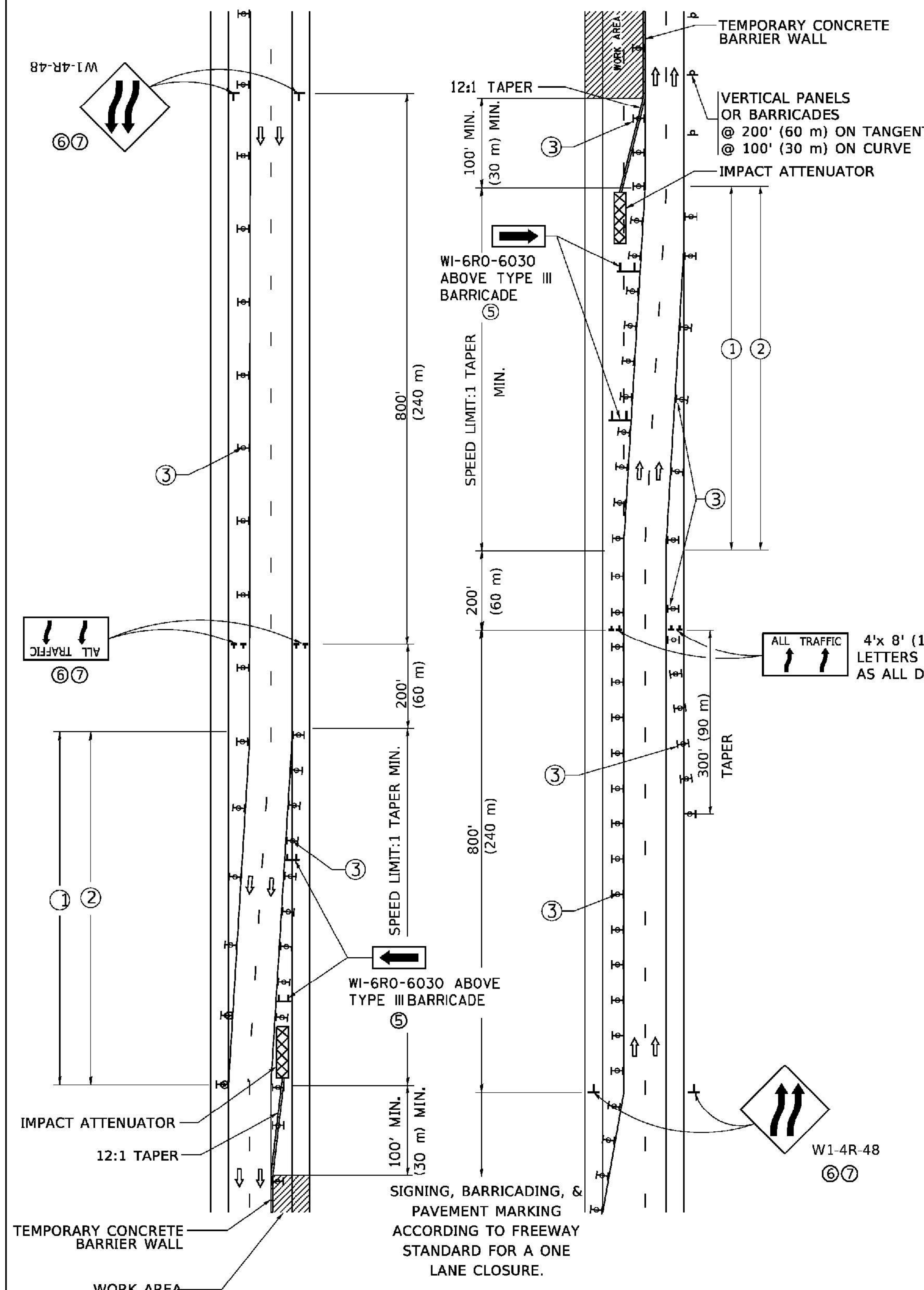
SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	98
	BD-51	CONTRACT NO. 62P67		
	ILLINOIS FED. AID PROJECT			

SINGLE LANE WEAVE



MULTI-LANE WEAVE



GENERAL NOTES:

① EXISTING CONFLICTING PAVEMENT MARKING LINES SHALL BE REMOVED. PAVEMENT MARKING REMOVAL SHALL NOT BE REQUIRED FOR SINGLE LANE WEAVES UNDER 4 DAYS IN DURATION.

② CONTINOUS REFLECTIVE TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND FOR 300' (90 m) ALONG SIDE THE WORK AREA WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS. THE LEFT EDGE LINE SHALL BE YELLOW AND THE RIGHT EDGE LINE SHALL BE WHITE. FOR MULTI-LANE WEAVES LANE LINES SHALL BE 5 INCH, 10'-30' (3 m-9 m) SKIP DASH, WHITE.

③ PLASTIC DRUMS WITH STEADY BURN LIGHTS AT 50' (15 m) C-C SPACING IN TAPERS AND 100' (30 m) C-C SPACING IN TANGENTS.

④ ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.

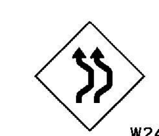
⑤ TYPE III BARRICADES MAY BE OMMITTED FOR SINGLE-LANE WEAVES UNDER 24-HOURS IN DURATION. W1-6 SIGNS WILL STILL BE REQUIRED. IF THE WIDTH OF OFFSET IS LESS THAN 6' THEN THE TYPE III BARRICADE WITH ATTACHED ARROW SIGN PANEL CAN BE ELIMINATED IN THE TAPER AREAS.

⑥ WHEN THE LENGTH OF THE SHIFTED SEGMENT (DISTANCE BETWEEN WEAVE POINTS) IS LESS THAN 1500', DOUBLE REVERSE CURVE SIGNS (W24-1) SHOULD BE USED INSTEAD OF THE REVERSE CURVE (W1-4) SIGNS. ARROWS ON THE 4'X8' "ALL TRAFFIC" SIGNS SHALL BE THE SAME SHAPE.

⑦ THE NUMBER OF ARROWS ON THESE SIGNS SHALL MATCH THE NUMBER OF LANES OPEN TO TRAFFIC.

SYMBOLS

- ⇧ DIRECTION OF TRAFFIC
- WORK AREA
- ⊢ SIGN ON PORTABLE OR PERMANENT SUPPORT
- TYPE II BARRICADE OR DRUM WITH MONO-DIRECTIONAL STEADY BURNING LIGHT
- TEMPORARY CONCRETE BARRIER WALL
- IMPACT ATTENUATOR



W24-1-48
⑦

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

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PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - S.P.B. 12-09	
PLOT DATE = 3/4/2019	DATE - 02-87	REVISED - M.D. 06-13	

TRAFFIC CONTROL DETAILS FOR FREEWAY SINGLE & MULTI-LANE WEAVE

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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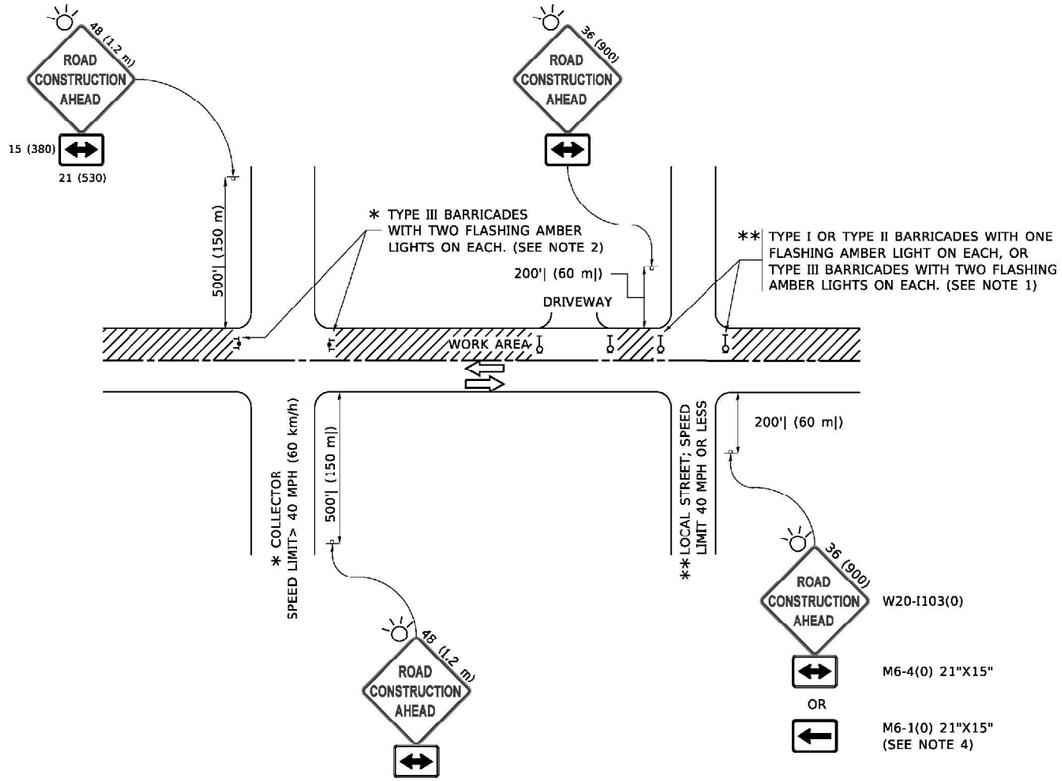
	TC-09	CONTRACT NO. 62P67		
		ILLINOIS	FED. AID PROJECT	



NOTES:

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
   a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
   a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in inches (millimeters) unless otherwise shown.

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PLOT SCALE = 50.0000 ' / In.	CHECKED -	REVISED - A. SCHUETZE 07-01-13	
PLOT DATE = 3/4/2019	DATE - 06-89	REVISED - A. SCHUETZE 09-15-16	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	100
	TC-10	CONTRACT NO.62P67		
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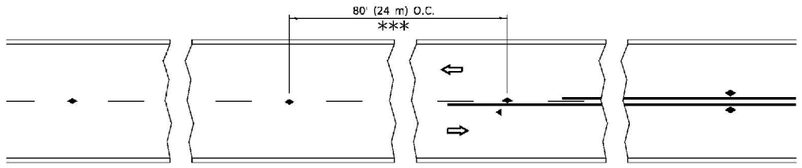
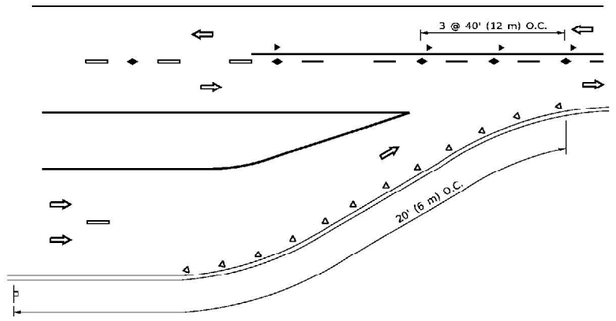


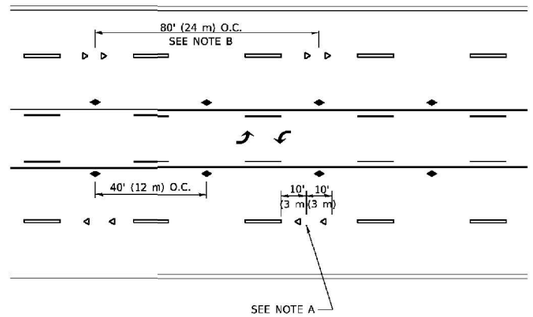
*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

TWO–LANE/TWO–WAY

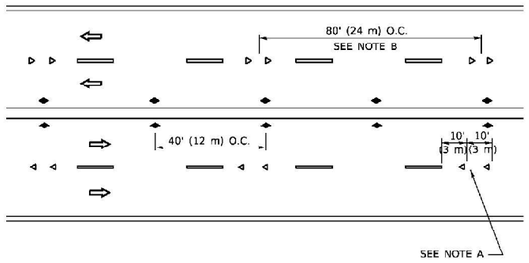
SEE FIGURE 3B-14 MUTCD



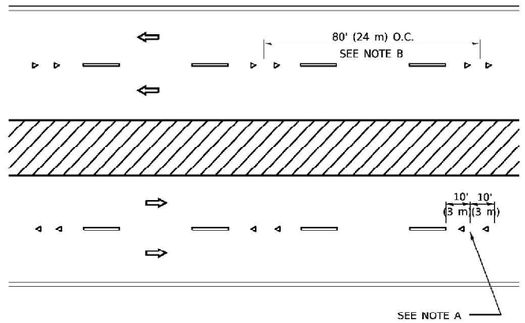
LANE REDUCTION TRANSITION



TWO–WAY LEFT TURN



MULTI–LANE/UNDIVIDED



MULTI–LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.
4. MARKERS ARE TO BE USED ADJACENT TO BOTH SOLID WHITE LINES IN DUAL LEFT TURN LANES

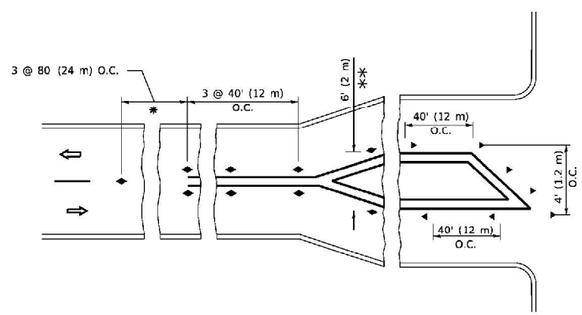
SYMBOLS

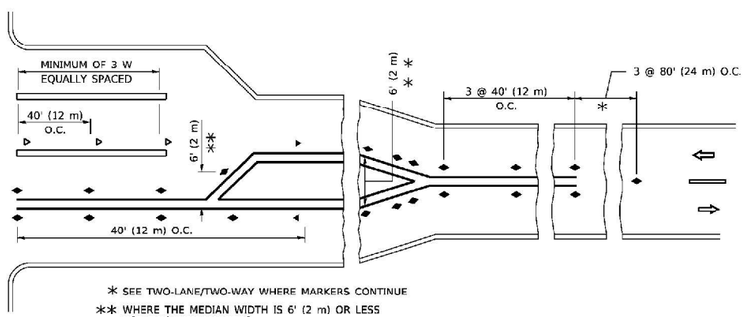
- YELLOW STRIPE
- WHITE STRIPE
- ONE-WAY AMBER MARKER
- ONE-WAY CRYSTAL MARKER (W/O)
- TWO-WAY AMBER MARKER

LANE MARKER NOTES

A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.





* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE

** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

TURN LANES

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.

All dimensions are in inches (millimeters) unless otherwise shown.

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	DRAWN -	REVISED - T. RAMMACHER 01-06-00	
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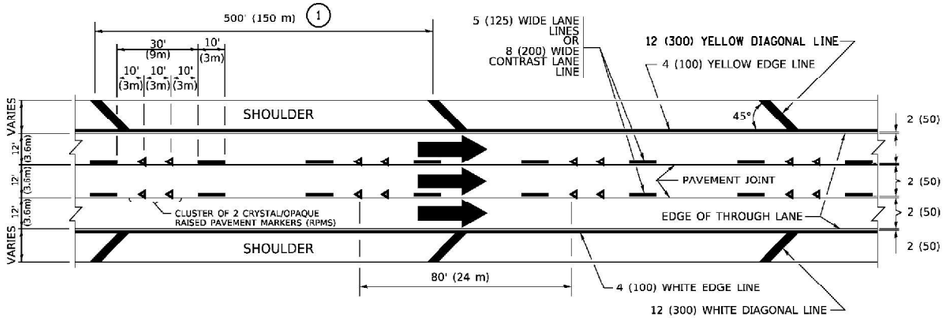
PLOT DATE = 3/4/2019	DATE -	REVISED - C. JUCIUS 07-01-13	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL APPLICATIONS
RAISED REFLECTIVE PAVEMENT MARKERS (SNOW–PLOW RESISTANT)

SCALE: NONE | SHEET 1 OF 1 SHEETS | STA. | TO STA.

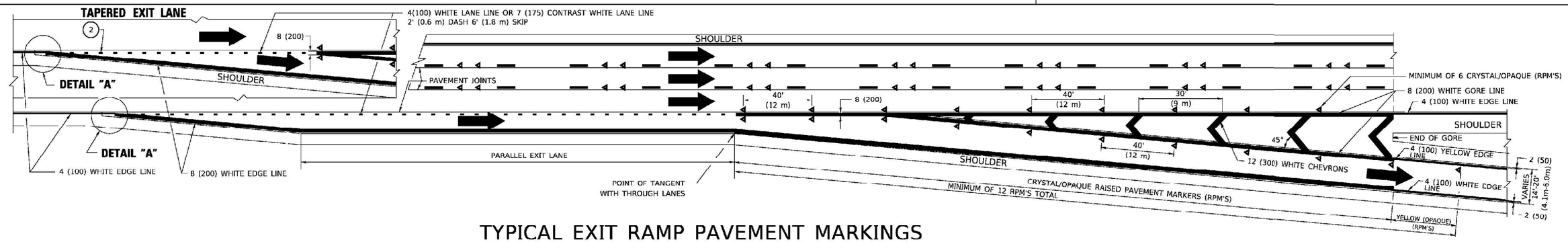
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	101
	TC-11	CONTRACT NO. 62P67		
	ILLINOIS FED. AID PROJECT			



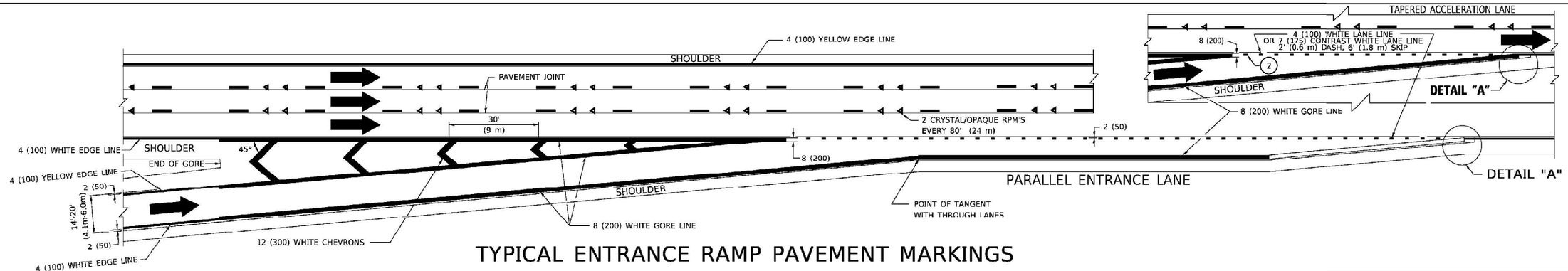
TYPICAL EDGE LINES & LANE LINES

PAVEMENT MARKING MATERIALS

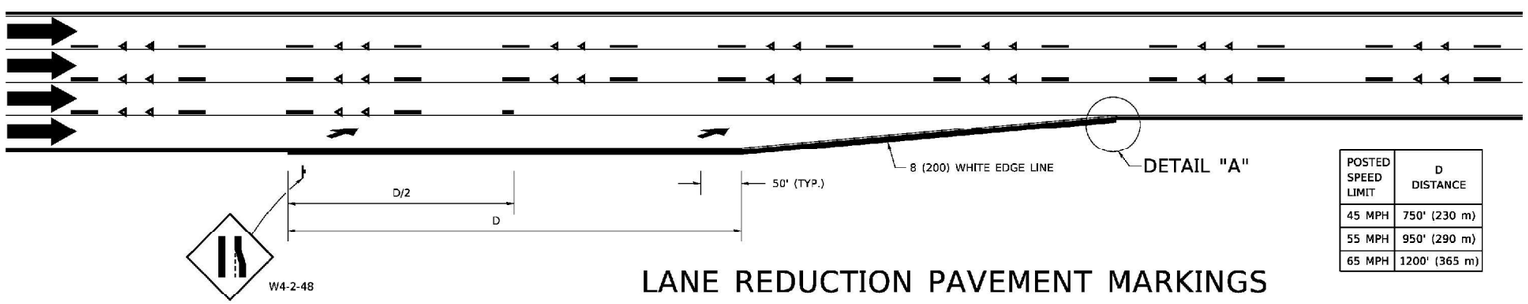
1. THERMOPLASTIC PAVEMENT MARKING LINE SHALL BE USED FOR ALL EDGE LINES, GORE LINES, AND DIAGONAL LINES ON HMA PAVEMENTS.
2. POLYUREA OR MODIFIED URETHANE PAVEMENT MARKING LINE SHALL BE USED FOR ALL EDGE LINES, GORE LINES, AND DIAGONAL LINES ON PCC PAVEMENTS.
3. PREFORMED PLASTIC PAVEMENT MARKING LINE TYPE B, INLAID OR GROOVE IN, SHALL BE USED FOR ALL LANE LINES ON HMA PAVEMENTS.
4. CONTRAST PREFORMED PLASTIC PAVEMENT MARKING LINE TYPE B, GROOVE IN, SHALL BE USED FOR ALL LANE LINES ON PCC PAVEMENT.



TYPICAL EXIT RAMP PAVEMENT MARKINGS

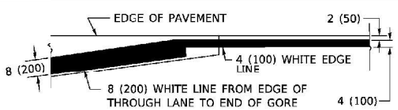


TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS



POSTED SPEED LIMIT	D DISTANCE
45 MPH	750' (230 m)
55 MPH	950' (290 m)
65 MPH	1200' (365 m)

LANE REDUCTION PAVEMENT MARKINGS



DETAIL "A"

NOTES:

1. THE DIAGONAL LINES SHALL BE SPACED AT 40' (12 m) C-C ACROSS ALL STRUCTURES WHICH ARE 500' (150 m) OR LESS IN LENGTH. THE DIAGONAL LINES ARE NOT REQUIRED ON SHOULDERS WHICH ARE 6' (1.8 m) OR LESS IN WIDTH.
2. 4" (2' DASH, 6' SKIP) MARKING ON TAPERED ENTRANCE AND EXIT RAMP SHALL BE OMITTED ON TANGENT SECTIONS.

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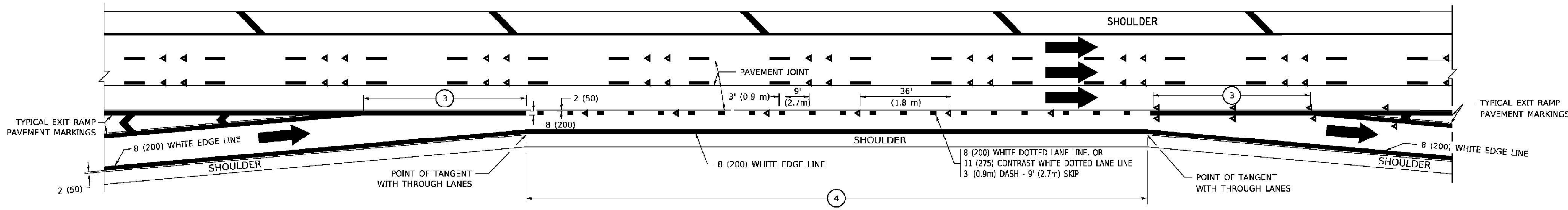
PLOT SCALE = 50.0000 ' / In.	CHECKED -	REVISED - M.D. 05-13	
PLOT DATE = 3/4/2019	DATE - 01-90	REVISED - M.D. 09-17	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

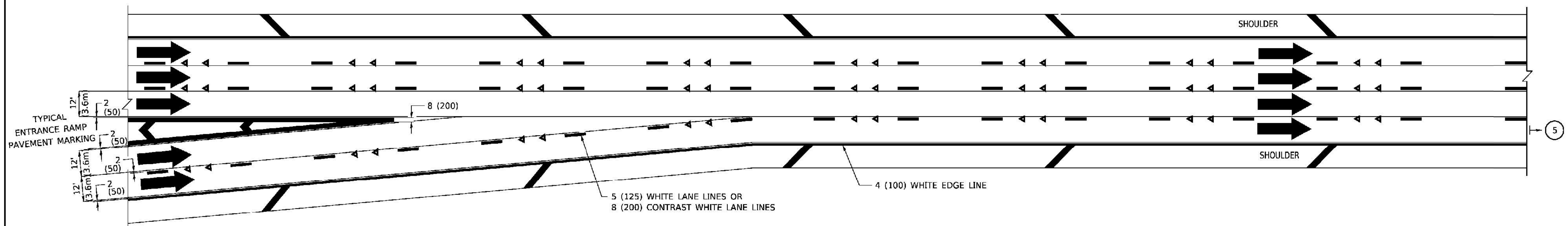
MULTI-LANE FREEWAY
PAVEMENT MARKING DETAILS

SCALE: NONE | SHEET 1 OF 2 SHEETS | STA. | TO STA.

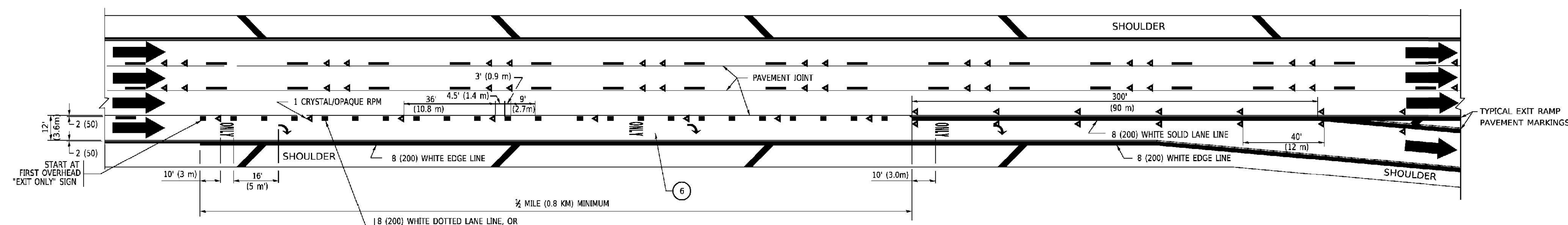
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	102
	TC-12	CONTRACT NO. 62P67		
	ILLINOIS FED. AID PROJECT			



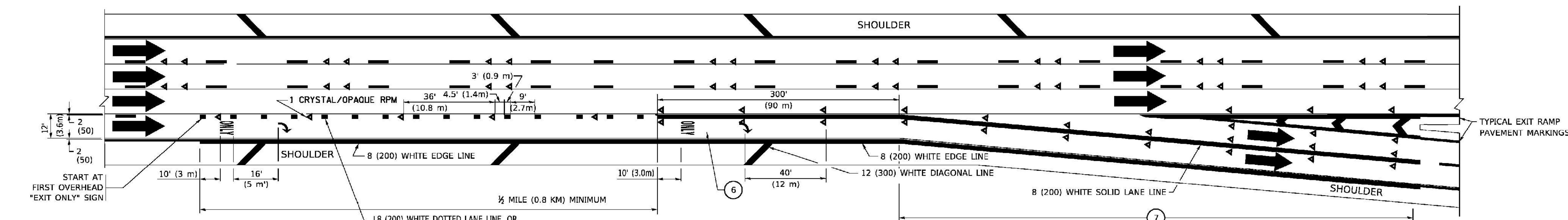
AUXILIARY LANE MARKINGS



TWO LANE ENTRANCE RAMP WITH MERGE MARKINGS



EXIT ONLY LANE MARKINGS



EXIT ONLY WITH OPTION LANE MARKINGS

NOTES:

3. OMIT WHEN LENGTH OF AUXILIARY LANE IS LESS THAN 500' (150 m).
4. 8-INCH WIDE DOTTED LANE LINE MARKINGS SHALL BE USED WHEN THE LENGTH OF THE AUXILIARY LANE IS 2 MILES OR LESS.
5. FOR TWO-LANE ENTRANCE RAMP, IF RIGHT LANE ENDS, USE TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS.
6. ONLY AND ARROWS EQUALLY SPACED, 500' (150 m) MAXIMUM SPACING. FULL SIZE LETTERS AND ARROW SHALL BE USED..
7. CONTINUE 8" SOLID LANE LINE THROUGH EXIT TO END OF PAVED GORE.

MODEL: Default
FILE NAME: pw:\\IL084EBDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Dist%c22x34\CAD\Data\CADsheets\tc12.dgn

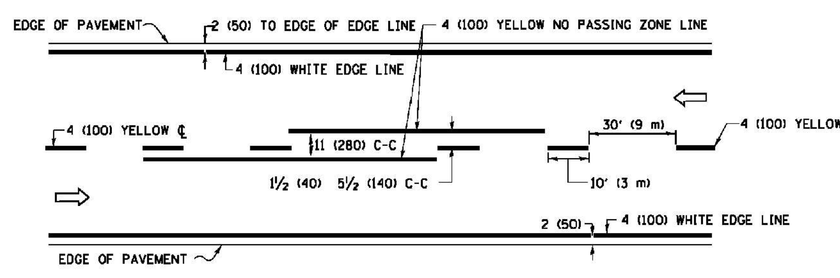
USER NAME = footemj	DESIGNED - D.W.S.	REVISED - J.A.F. 02-06	
	DRAWN -	REVISED - S.P.B. 01-07	
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - S.P.B. 01-10	
PLOT DATE = 3/4/2019	DATE - 01-90	REVISED - M.D. 09-17	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

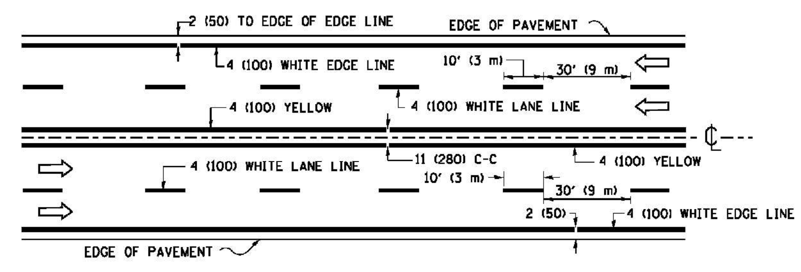
MULTI–LANE FREEWAY
PAVEMENT MARKING DETAILS

SCALE: NONE | SHEET 2 OF 2 SHEETS | STA. TO STA.

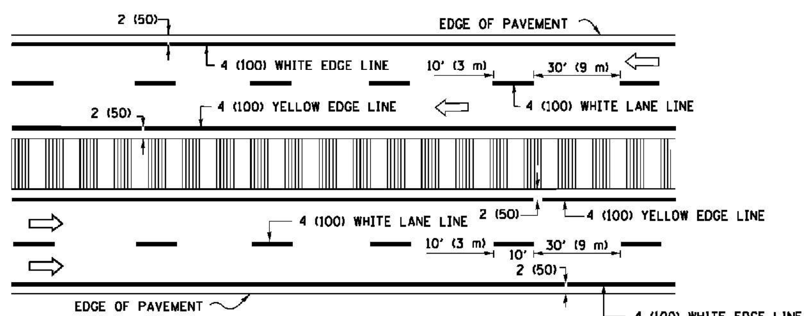
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	103
	TC–12	CONTRACT NO. 62P67		
	ILLINOIS FED. AID PROJECT			



2-LANE ROADWAY

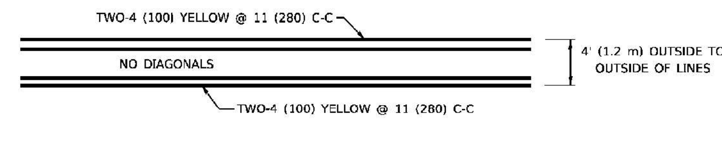


MULTI-LANE UNDIVIDED

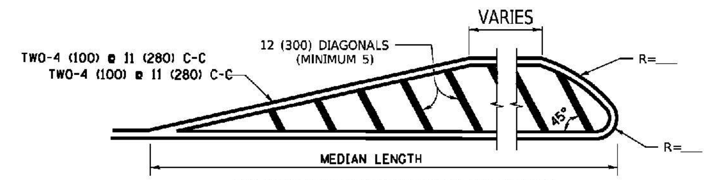


MULTI-LANE DIVIDED
WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING



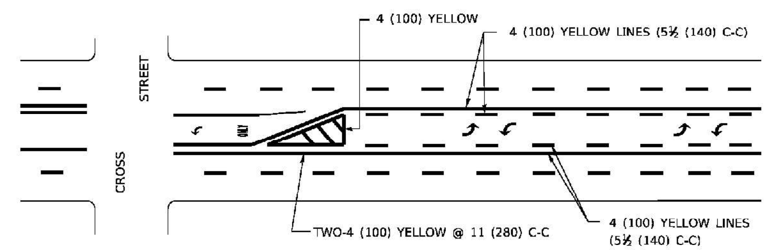
4' (1.2 m) WIDE MEDIANS ONLY



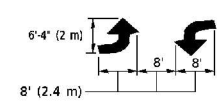
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

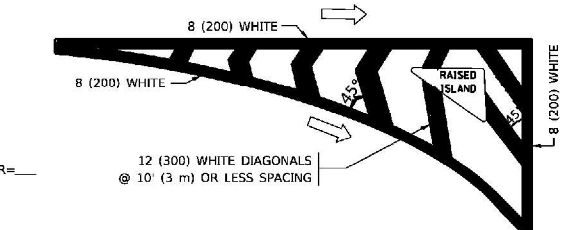


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.

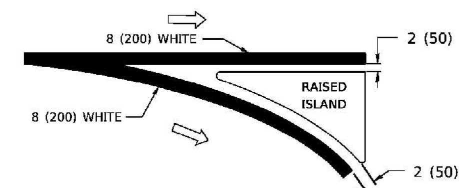


MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

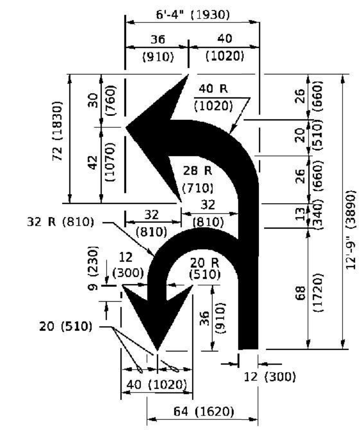


ISLAND OFFSET FROM PAVEMENT EDGE

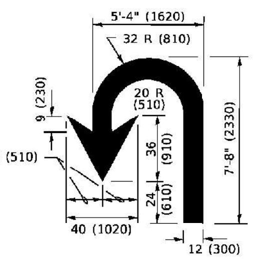


ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

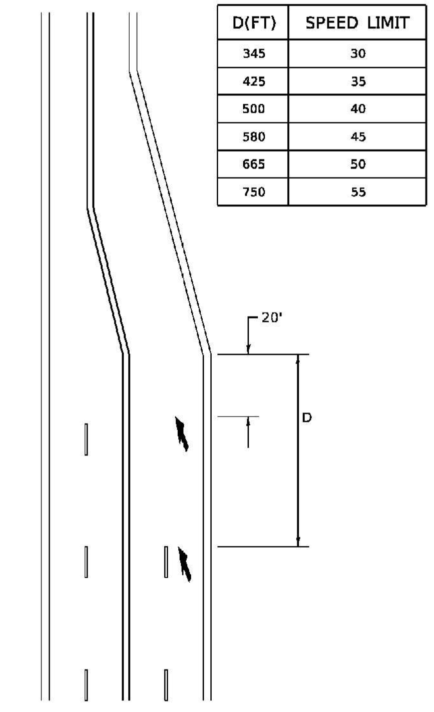


COMBINATION LEFT AND U-TURN



U-TURN

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55



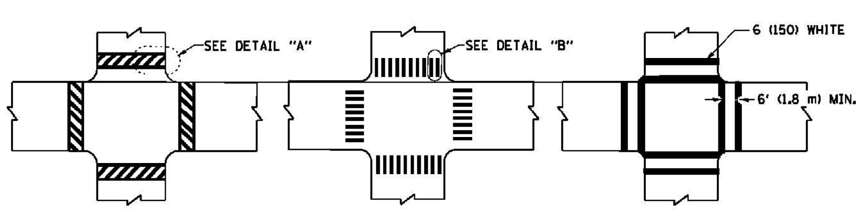
LANE REDUCTION TRANSITION

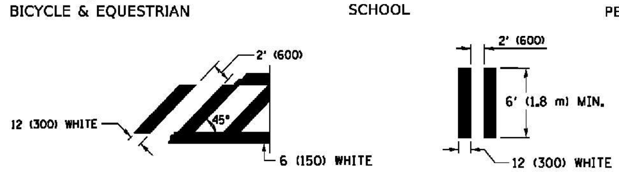
* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m^2) EACH "X"=54.0 SQ. FT. (5.0 m^2)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in inches (millimeters) unless otherwise shown.

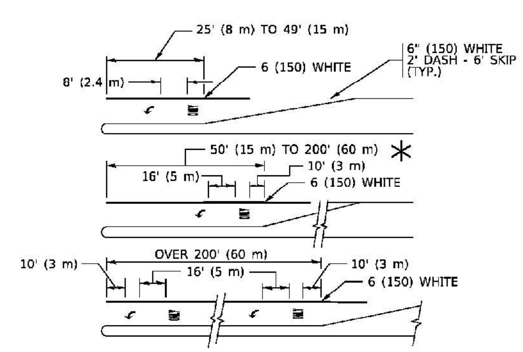




DETAIL "A" DETAIL "B"

TYPICAL CROSSWALK MARKING

* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
↰ AREA = 15.6 SQ. FT. (1.5 m^2) ONLY AREA = 20.8 SQ. FT. (1.9 m^2)

* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

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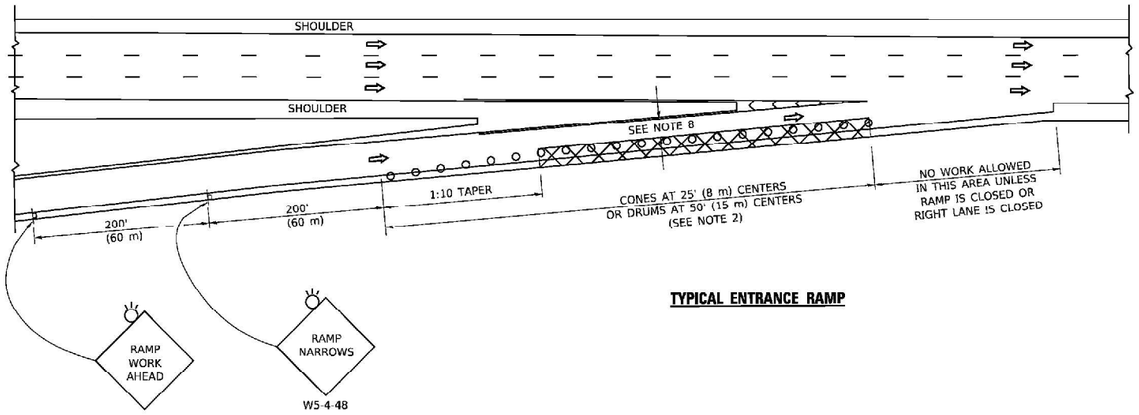
USER NAME = footemj	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN -	REVISED - C. JUCIUS 07-01-13	
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - C. JUCIUS 12-21-15	
PLOT DATE = 3/4/2019	DATE - 03-19-90	REVISED - C. JUCIUS 04-12-16	

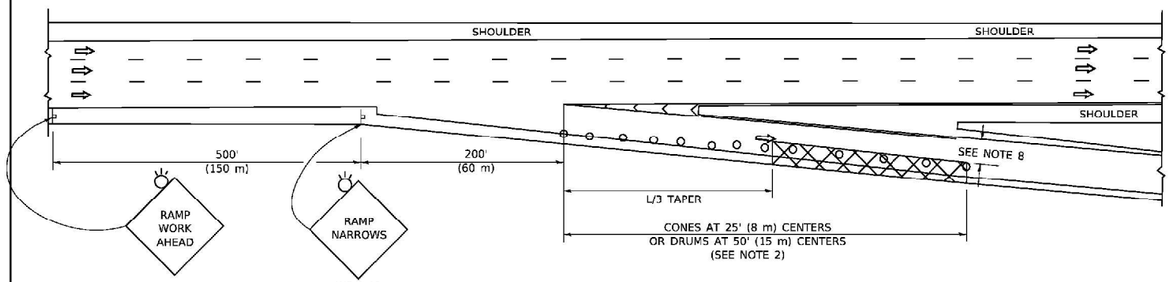
DISTRICT ONE
TYPICAL PAVEMENT MARKINGS
SCALE: NONE SHEET 1 OF 2 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	104
	TC-13	CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

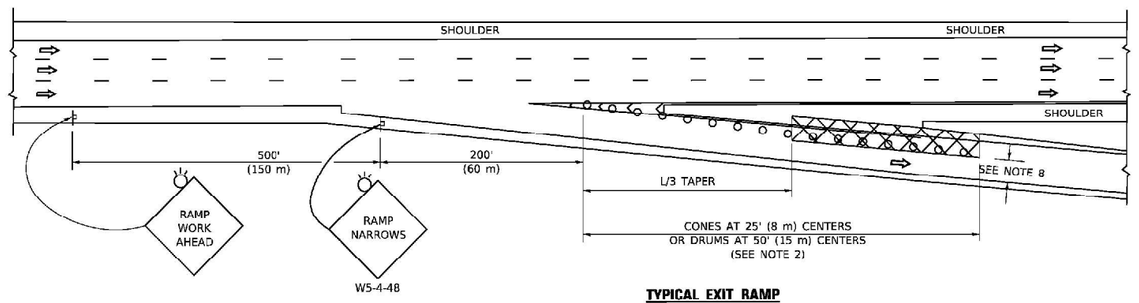
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP

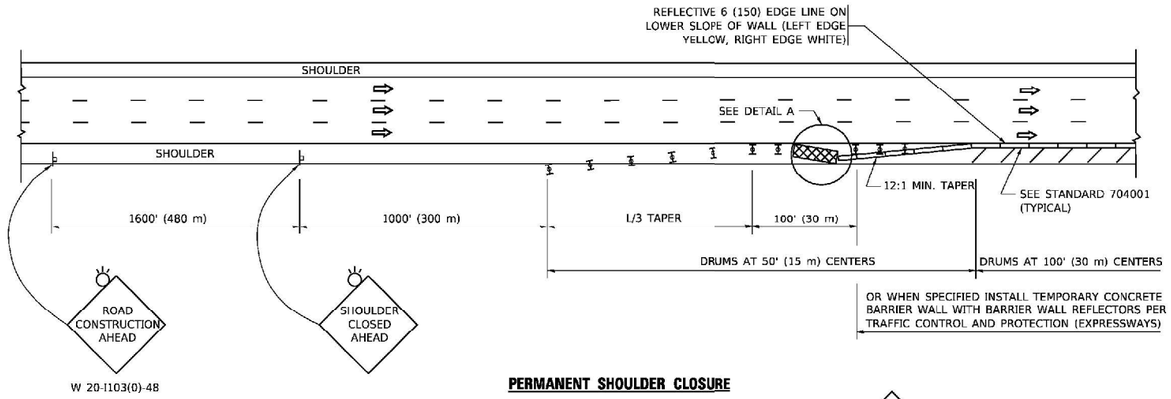


TYPICAL EXIT RAMP

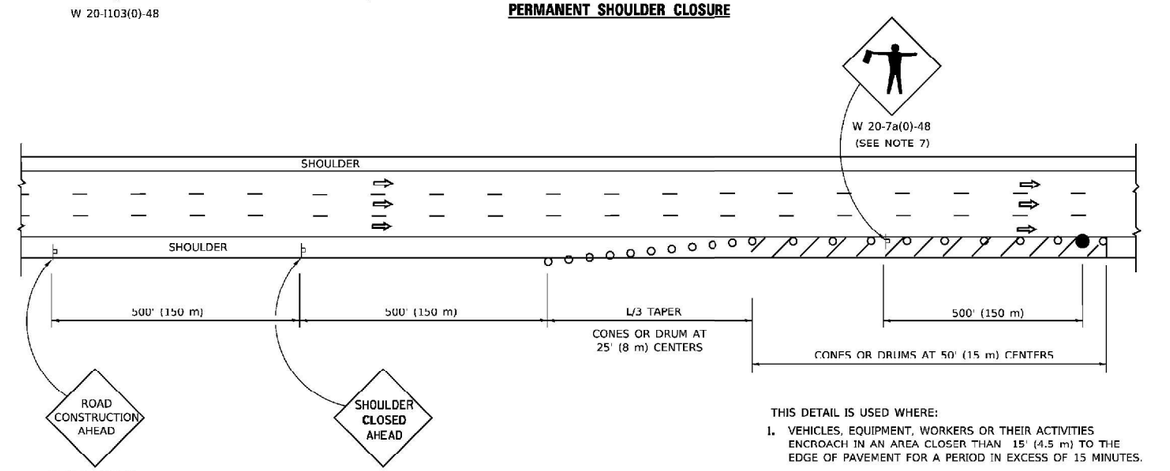


TYPICAL EXIT RAMP

SHOULDER CLOSURE DETAILS



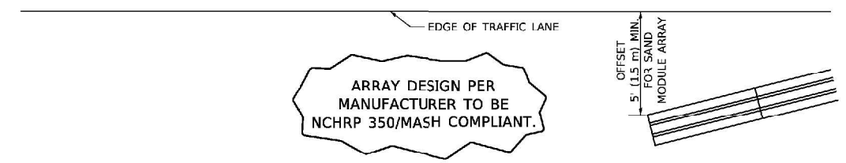
PERMANENT SHOULDER CLOSURE



THIS DETAIL IS USED WHERE:

1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH IN AN AREA CLOSER THAN 15' (4.5 m) TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.

DAYTIME SHOULDER CLOSURE



DETAIL "A"
IMPACT ATTENTUATOR, TEMPORARY
(SEE NOTE 5)

SYMBOLS

- ACTIVE WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE OR DRUM
- CONE, DRUM OR BARRICADE
- IMPACT ATTENUATOR OF TYPE AND TEST LEVEL SPECIFIED

GENERAL NOTES:

1. THE "L" DISTANCE EQUALS:

SPEED LIMIT	FORMULAS	
45 mph (80 km/h) OR GREATER:	METRIC	ENGLISH
	L=0.65(WXS)	L=(WXS)

W = WIDTH OF OFFSET IN FEET (METERS)
S = NORMAL POSTED SPEED MPH (KM/H)

2. TYPE II BARRICADES OR DRUMS ARE REQUIRED FOR ALL NIGHTIME CLOSURES. TYPE II BARRICADES OR DRUMS WITH MONODIRECTIONAL STEADY BURN LIGHTS ARE REQUIRED FOR DELINEATING OBSTICLES, EXCAVATIONS, OR HAZARDS EXCEEDING 100 FT (30m) IN LENGTH AT NIGHT.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.
5. THE IMPACT ATTENTUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS PROTECTED BY OR IS TIED INTO THE EXISTING GUARDRAIL. IF OFFSET IS LESS THAN 5 FEET USE NARROW USE TYPE DEVICE TO MEET NCHRP350/MASH.
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.
7. THE FLAGGER AND FLAGGER SIGN ARE REQUIRED AT THE ABOVE WORK SITES WHEN:
   a. FOUR OR MORE WORK VEHICLES ENTER THE TRAFFIC LANES IN A ONE HOUR PERIOD.
   b. THE WORK AVTIVITY REQUIRES FREQUENT ENCROACHMENT INTO THE LANE OPEN TO TRAFFIC.

   THE FLAGGER SHALL BE STATIONED APPROXIMATELY 100' (30 m) TO 200' (60 m) IN ADVANCE OF THE WORKERS.
8. 12' MIN. WIDTH TANGENT SECTION
   16' MIN. WIDTH CURVE SECTION.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

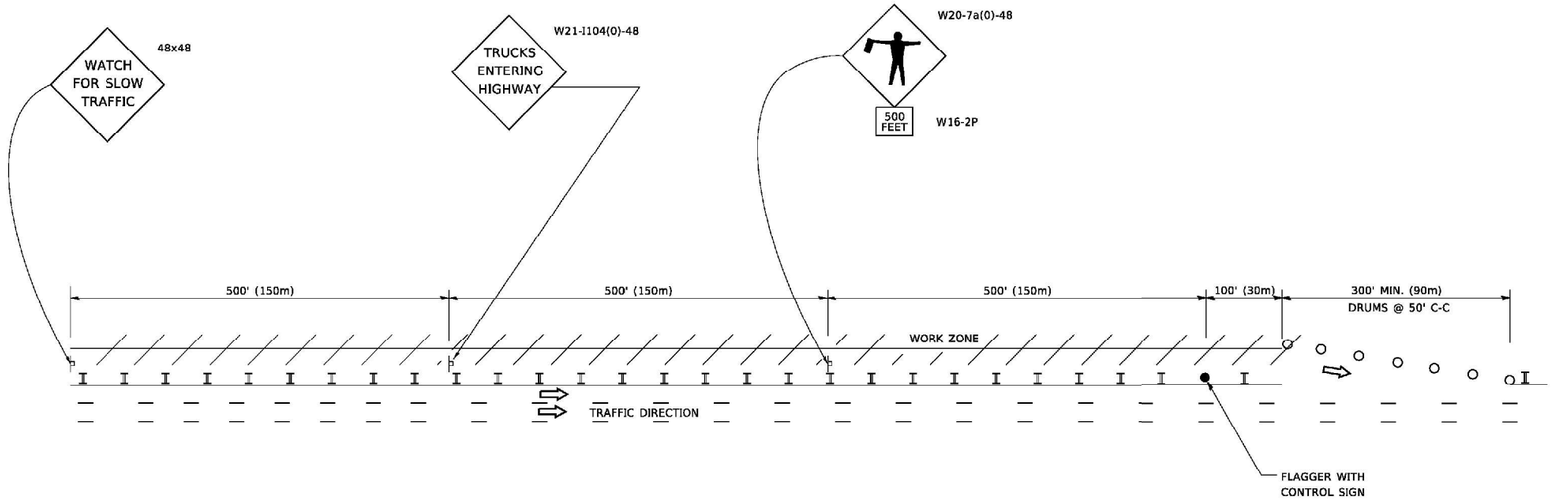
MODEL Default
FILE NAME pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Dist\5x22x34\CAD\Data\CAD\sheet\tc17.dgn

USER NAME = footemj	DESIGNED -		REVISED - S.P.B. 01-07	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES**
	DRAWN -	D.W.S.	REVISED - S.P.B. 12-09		
PLOT SCALE = 50.0000 ' / In.	CHECKED -		REVISED - M.D. 06-13		
PLOT DATE = 3/4/2019	DATE -	11-96	REVISED - M.D. 01-18		SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

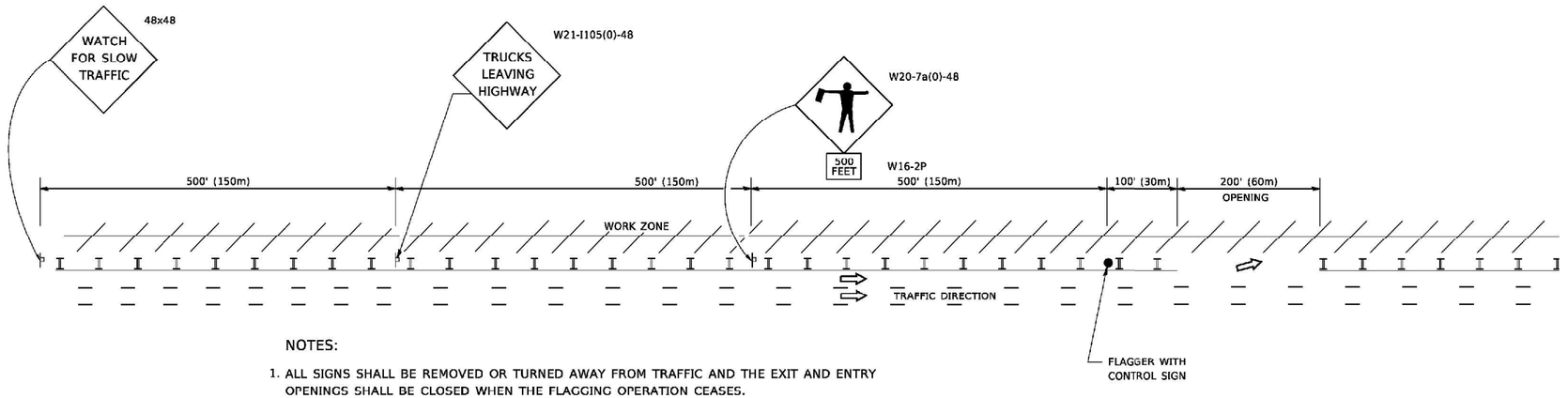
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	105
	TC-17	CONTRACT NO. 62P67		
	ILLINOIS FED. AID PROJECT			

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



WORK ZONE ENTRY OPENING



NOTES:

1. ALL SIGNS SHALL BE REMOVED OR TURNED AWAY FROM TRAFFIC AND THE EXIT AND ENTRY OPENINGS SHALL BE CLOSED WHEN THE FLAGGING OPERATION CEASES. NON OPERATING EQUIPMENT SHALL COMPLY WITH ARTICLE 701.11
2. WORK ZONE OPENINGS SHALL BE A MINIMUM OF ONE HALF MILE APART AND A MINIMUM OF ONE QUARTER MILE FROM ALL ENTRANCE AND EXIT RAMPS.
3. EXITING THE WORK ZONE AT ANY PLACE OTHER THAN AT A WORK ZONE EXIT OPENING WILL BE PROHIBITED.
4. ALL VEHICLES SHALL ENTER THE WORK ZONE AT ENTRY OPENINGS, USING THEIR TURN SIGNALS TO WARN MOTORISTS
5. FLAGGERS SHALL NOT STOP TRAFFIC OR DIRECT TRAFFIC INTO AN ADJACENT LANE.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

MODEL: Default
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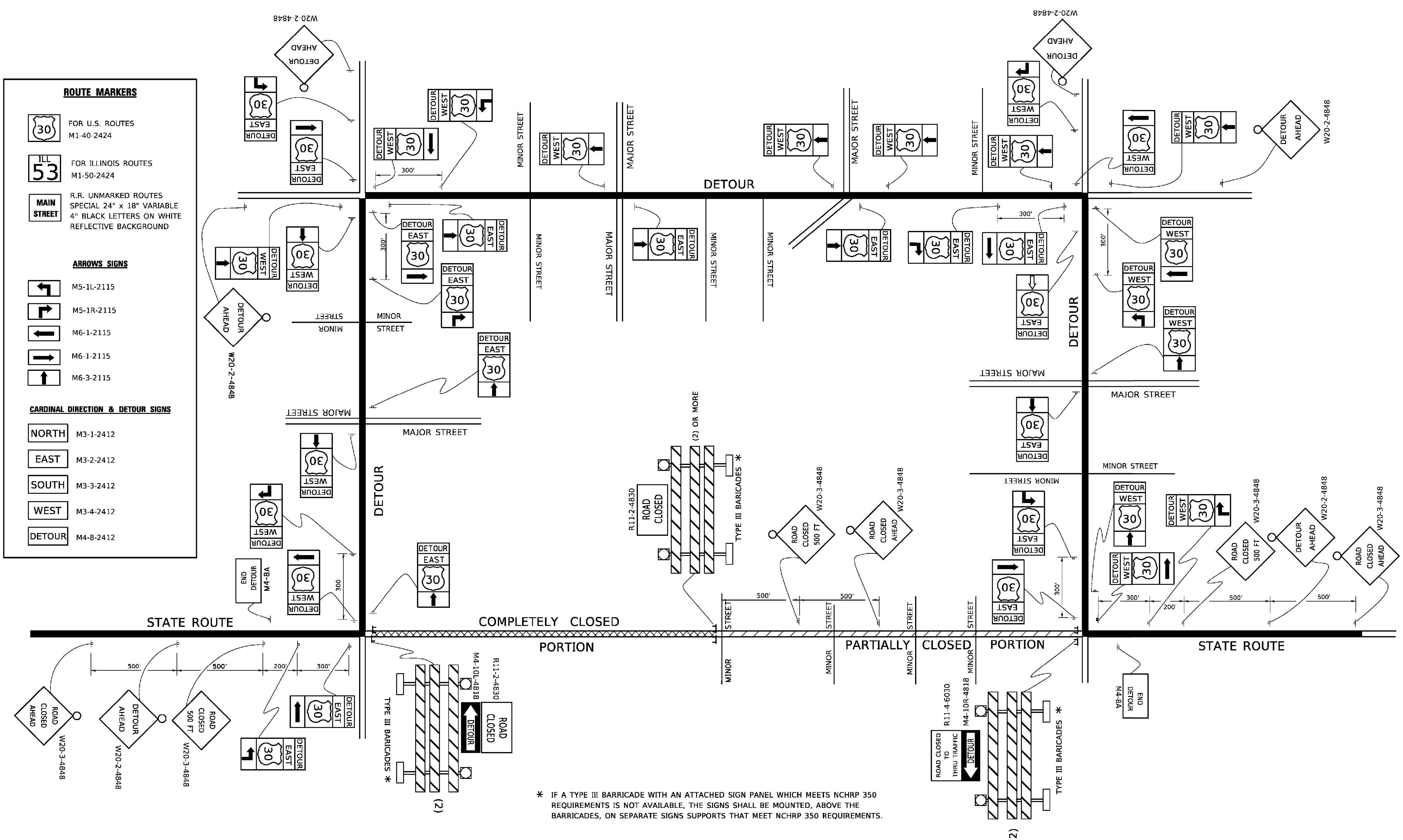
USER NAME = footemj	DESIGNED -	REVISED - J.A.F. 02-06	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**FREEWAY /EXPRESSWAY SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS ON FREEWAYS /EXPRESSWAYS**	
	DRAWN -	REVISED - S.P.B. 01-07			
PLOT SCALE = 50.0000 ' / In.	CHECKED -	REVISED - S.P.B. 12-09			
PLOT DATE = 3/4/2019	DATE -	REVISED - M.D.06-13		SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.	

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	106
	TC-18	CONTRACT NO. 62P67		
	ILLINOIS FED. AID PROJECT			



* IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 REQUIREMENTS.

USER NAME = footemj	DESIGNED -	REVISED - 10-18-02	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETOUR SIGNING FOR CLOSING STATE HIGHWAYS	F.A. RTE. 056	SECTION 2021-151-B	COUNTY WILL	TOTAL SHEETS 139 / SHEET NO. 107
	DRAWN	REVISED - R. BORO 09-14-09				TC-21	CONTRACT NO. 62P67	
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -					ILLINOIS FED. AID PROJECT	
PLOT DATE = 3/4/2019	DATE -	REVISED -		SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.				

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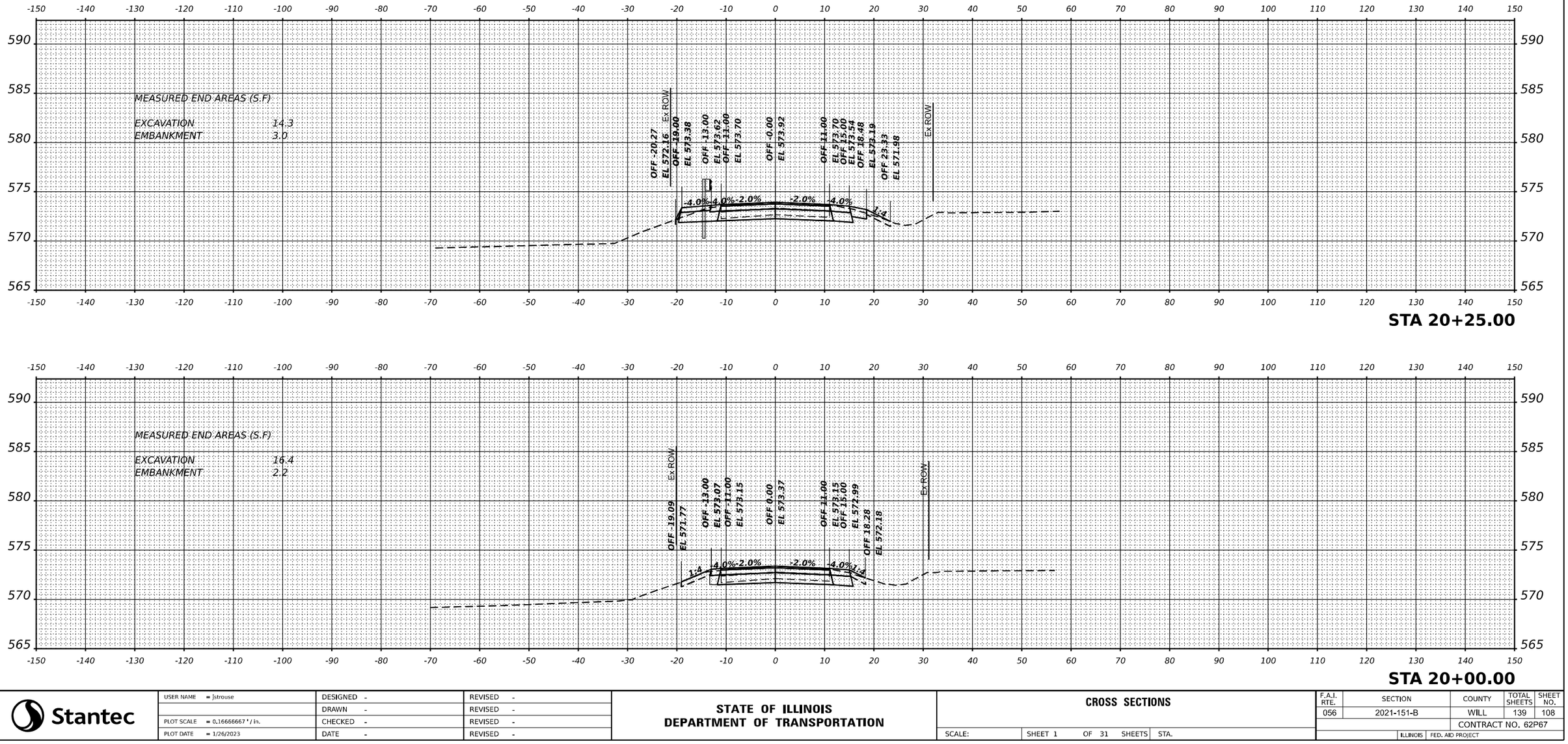
FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE



ORIGINAL SURVEY	NOTE BOOK	NO.
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PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

MODEL: PrCL_V10 - 20+00.00
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Stantec

USER NAME = jstrouse	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 1/26/2023	DATE -	REVISED -	

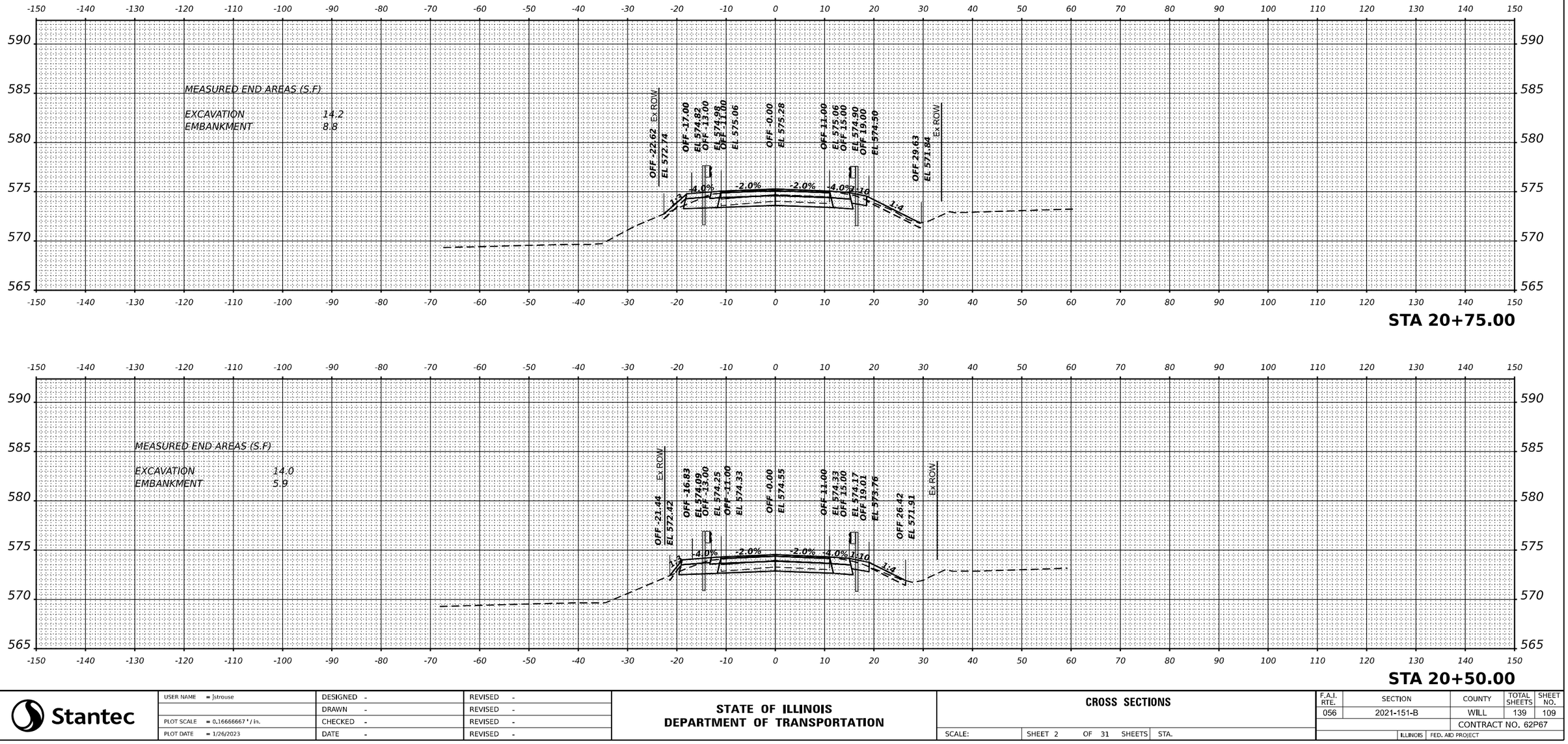
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: | SHEET 1 OF 31 SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	108
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

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



STA 20+75.00

STA 20+50.00

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

MODEL: PrCL_V10 - 20+50.00
FILE NAME: pw://transystems-pw.bentley.com:transystcorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/01-Stantec/CAD/CH-02_62P67/04-Sheets/13-Cross Sections/D162p67-xsc-alignment_v10.dgn

Stantec

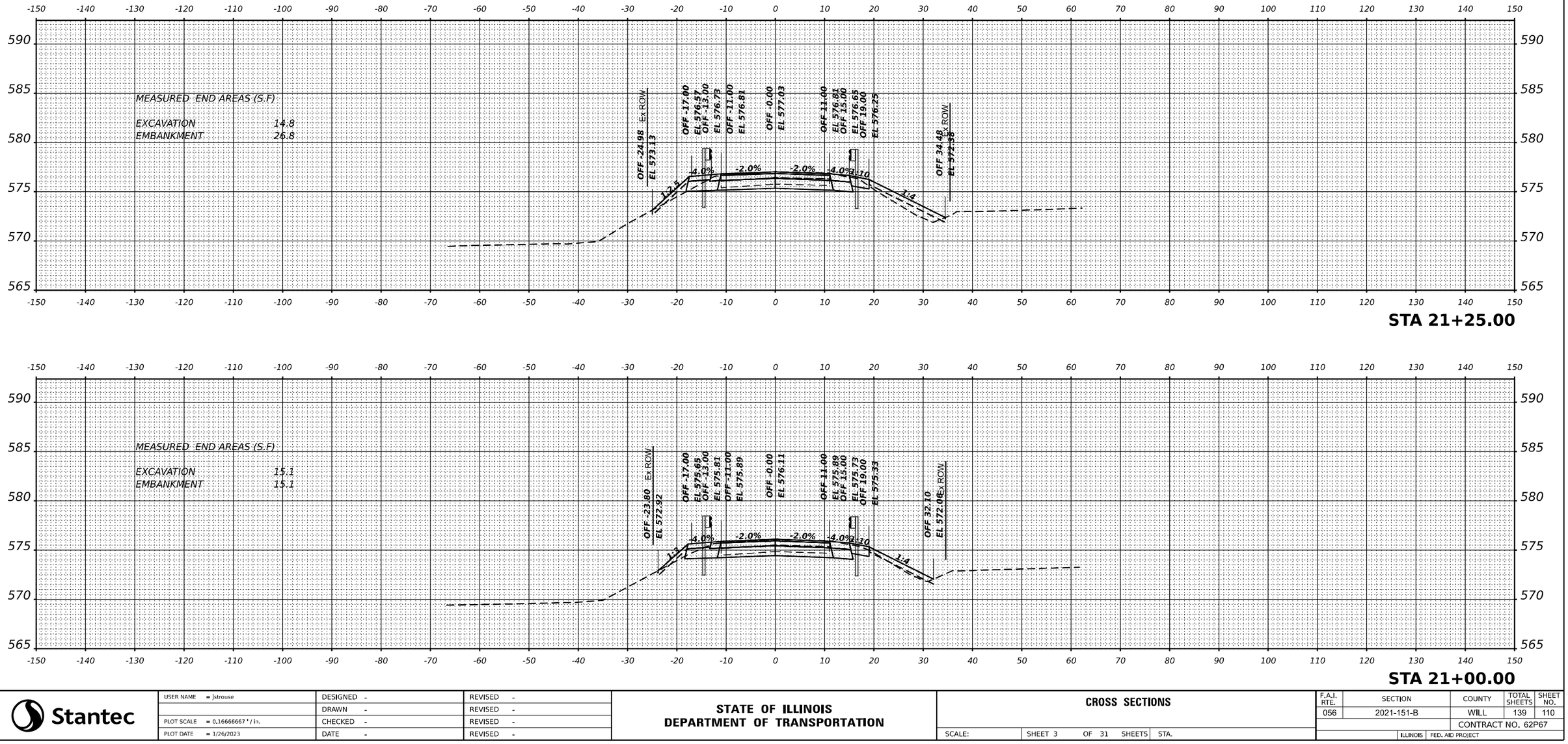
USER NAME = jstrouse	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -
PLOT DATE = 1/26/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: | SHEET 2 OF 31 SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	109
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		



Stantec	USER NAME = jstrouse	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 1/26/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: | SHEET 3 OF 31 SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	110
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

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

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

MODEL: PrCL_V10 - 21+00.00
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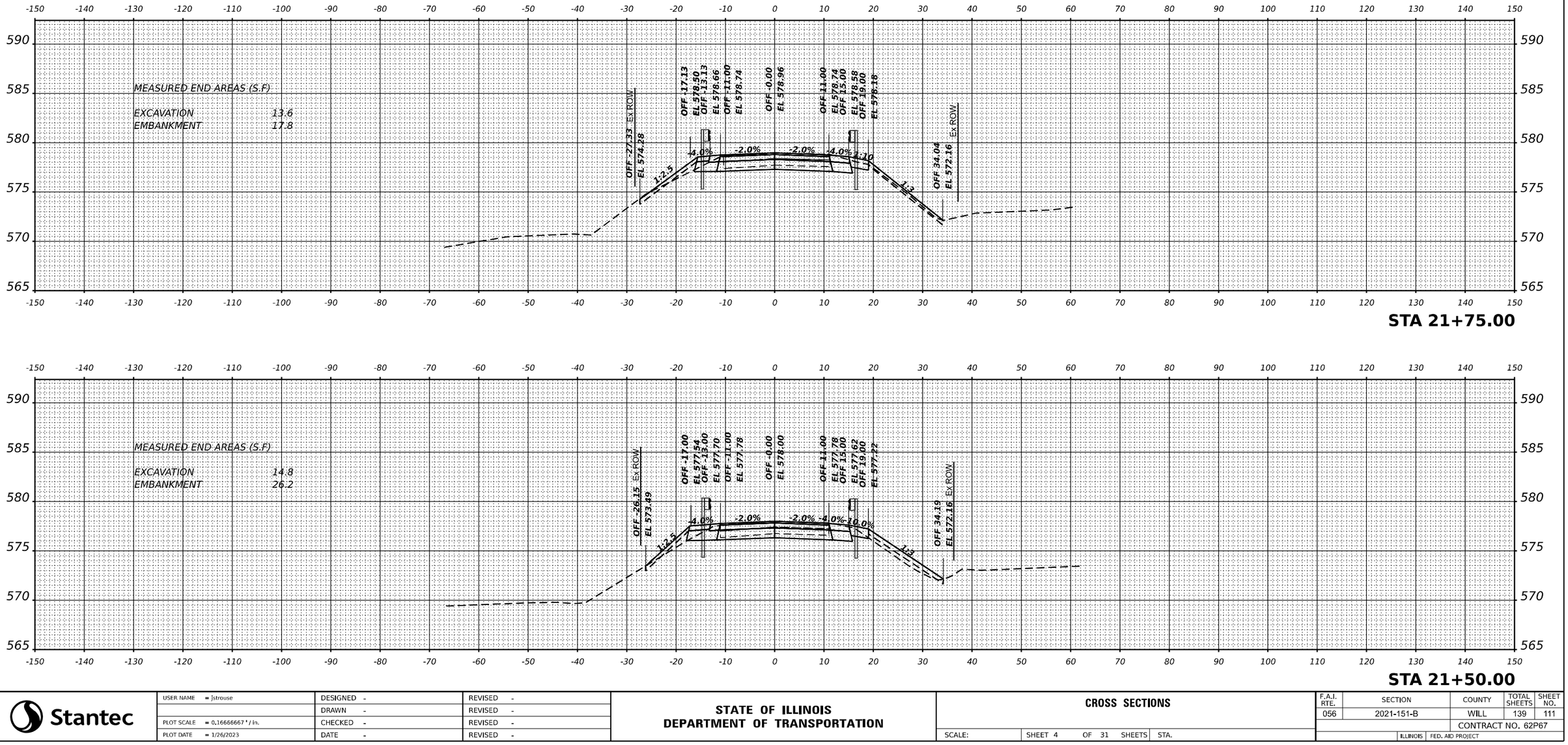

Stantec	USER NAME = jstrouse	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS
		DRAWN -	REVISED -		
	PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -		SCALE: SHEET 4 OF 31 SHEETS STA.
	PLOT DATE = 1/26/2023	DATE -	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	111
		CONTRACT NO. 62P67		
	ILLINOIS FED. AID PROJECT			

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

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

MODEL: PrCL_V10 - 21+50.00
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FINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

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

MODEL: PrCL_V10 - 22+00.00-1 [Sheet]
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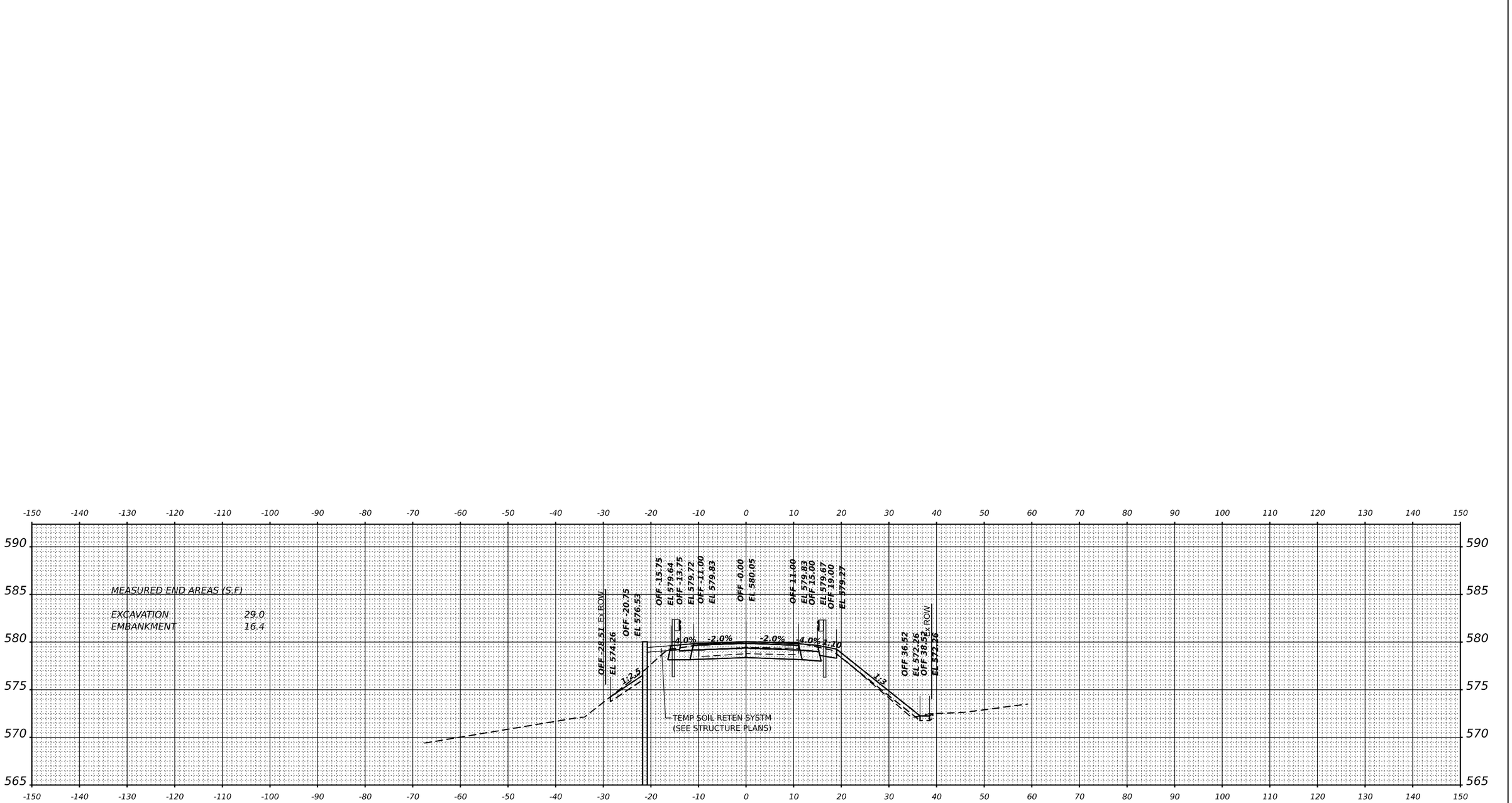


STA 22+00.00

Stantec

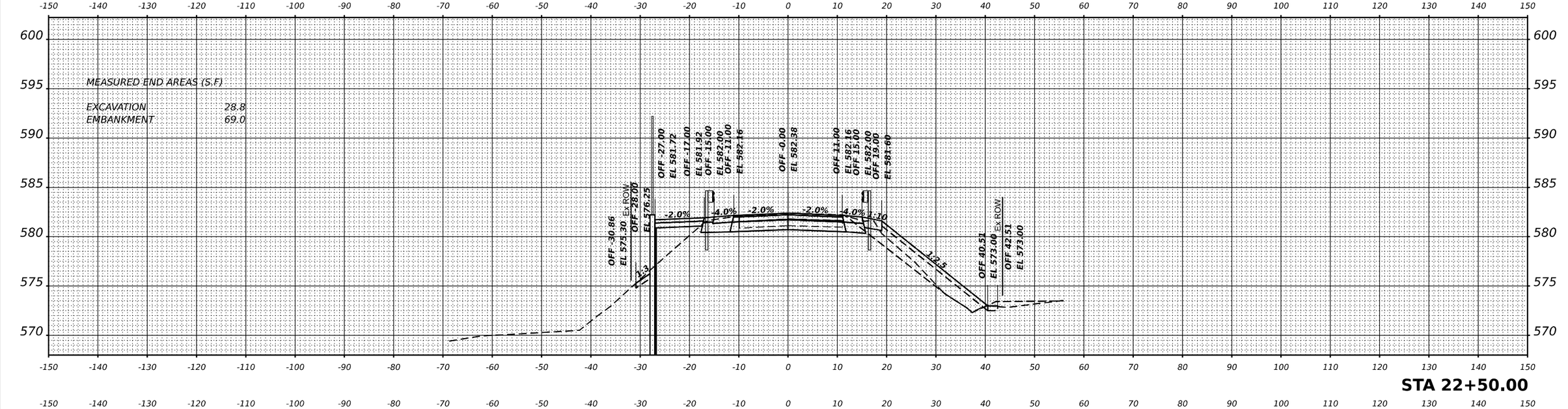
USER NAME = jstrouse	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 1/26/2023	DATE -	REVISED -	

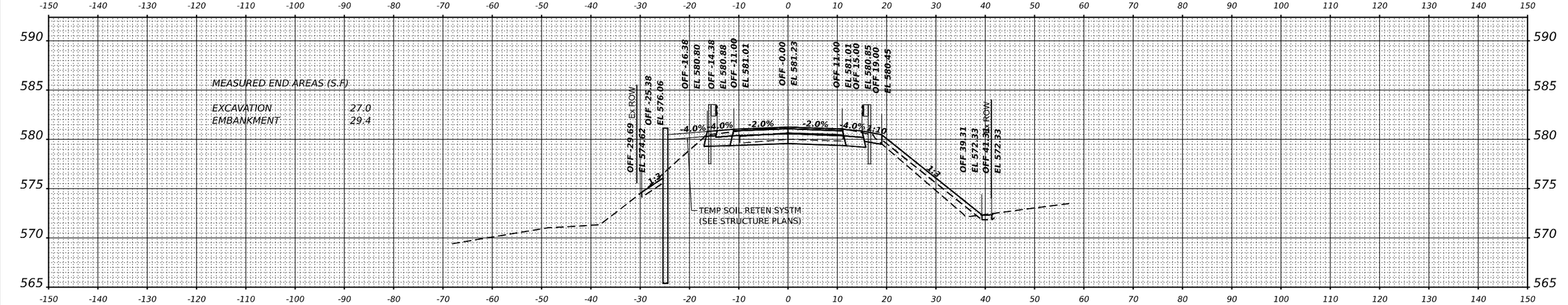
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: | SHEET 6 OF 31 SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	112
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		





FINAL SURVEY	NOTE BOOK	NO.
ORIGINAL SURVEY	NOTE BOOK	NO.

SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

DATE	BY

MODEL: PrCL_V10 - 22+00.00 [Sheet]
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Stantec

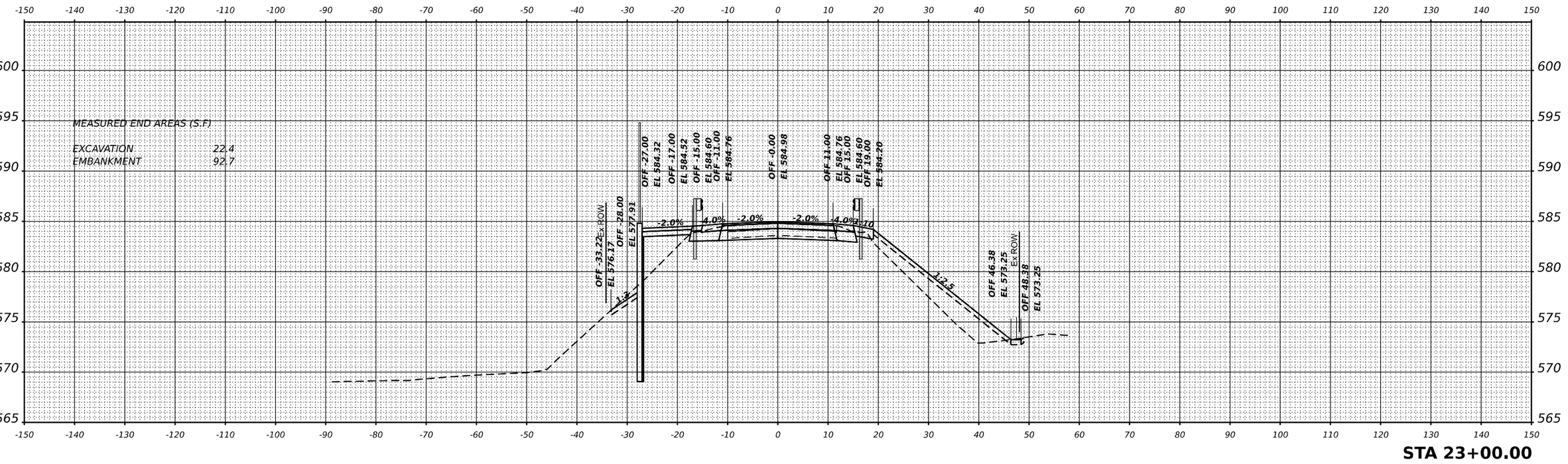
USER NAME = jstrouse	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 1/26/2023	DATE -	REVISED -	

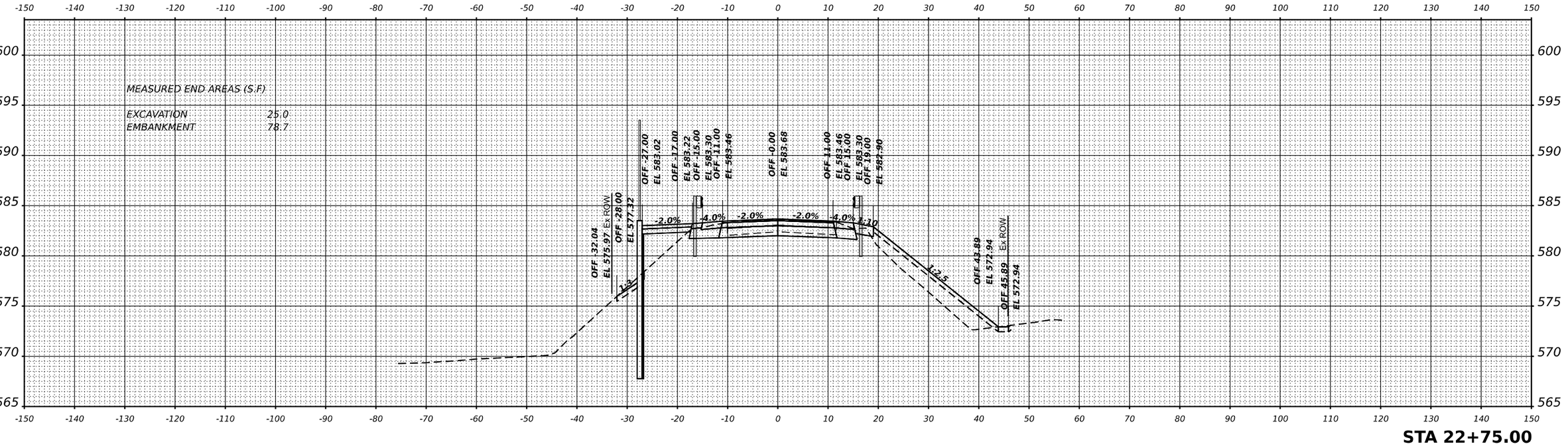
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: | SHEET 5 OF 31 SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	113
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		





Stantec	USER NAME = jstrouse	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS
		DRAWN -	REVISED -		
	PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -		SCALE: SHEET 7 OF 31 SHEETS STA.
	PLOT DATE = 1/26/2023	DATE -	REVISED -		

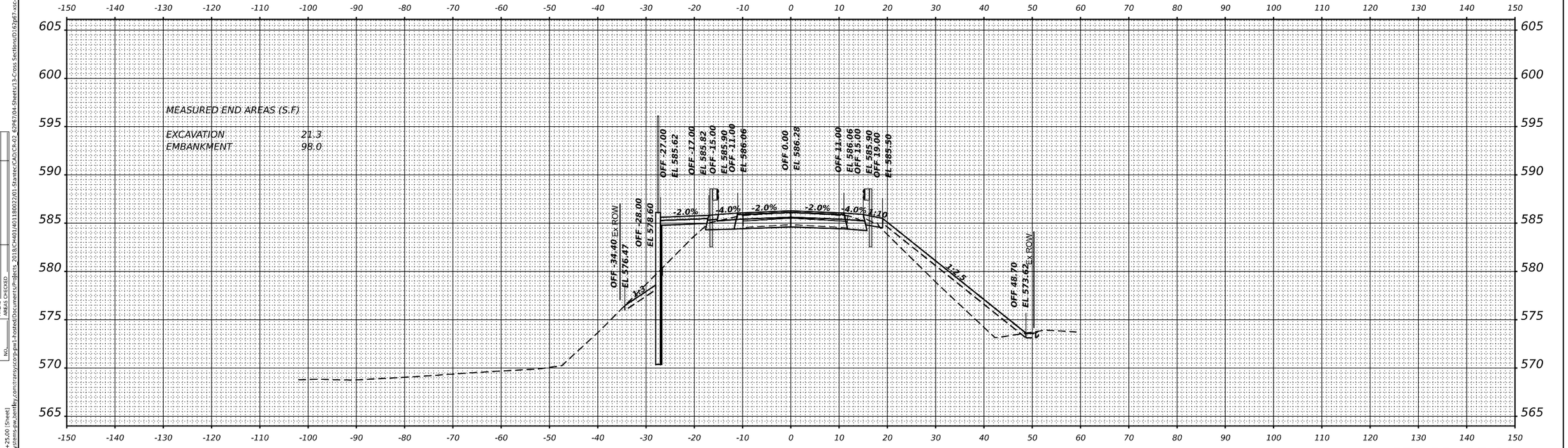
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	114
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

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

MODEL: PrCL_V10 - 22+75.00 (Sheet)
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/01-Stantec/CAD/CH-02_62P67/04-Sheets/13-Cross Sections/D.62p67-xsc-allgnment_v10.dgn

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

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



STA 23+25.00

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Stantec

USER NAME = jstrouse	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666667 ' / In.	CHECKED -	REVISED -	
PLOT DATE = 1/26/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: | SHEET 8 OF 31 SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	115
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

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

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

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-150 -140 -130 -120 -110 -100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

605 600 595 590 585 580 575 570 565

MEASURED END AREAS (S.F)

EXCAVATION 21.2
EMBANKMENT 110.7

OFF -27.00
EL 586.92
OFF -17.00
EL 587.12
OFF 15.00
EL 587.20
OFF -11.00
EL 587.36
OFF -0.00
EL 587.58
OFF 11.00
EL 587.36
OFF 15.00
EL 587.20
OFF 19.00
EL 586.80
OFF -28.00
EL 579.46
OFF -36.63
EL 576.59
Ex ROW
OFF 50.98
EL 574.01
Ex ROW
-2.0%
-4.0%
-2.0%
-2.0%
-4.0%
-10.0%
4:1
1:2.5

STA 23+50.00

Stantec

USER NAME = jstrouse	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 1/26/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

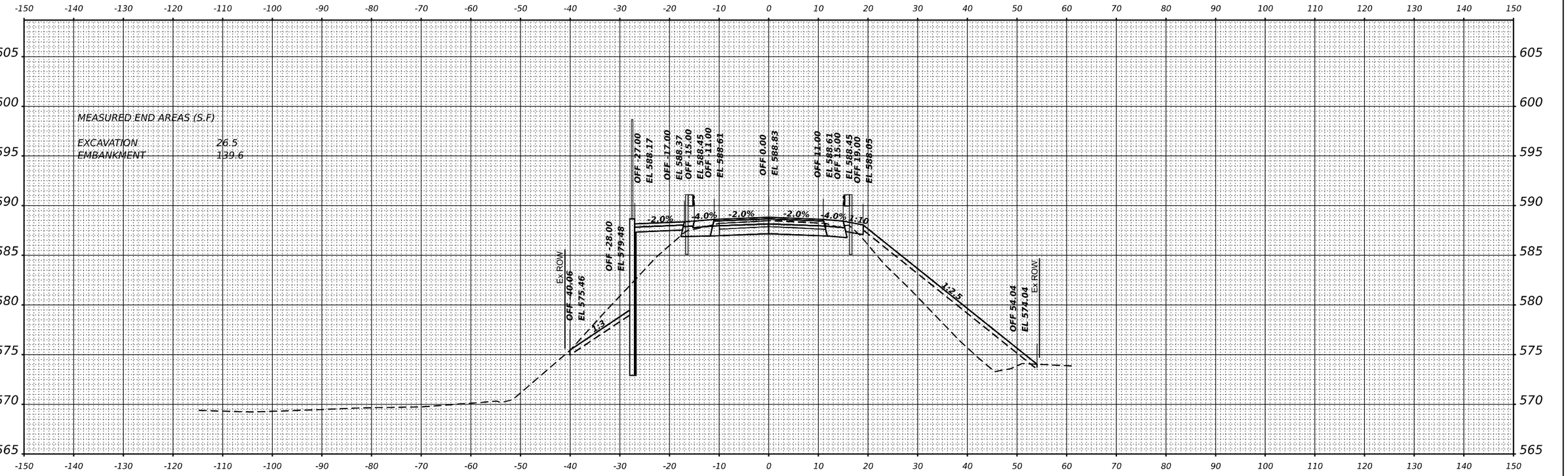
CROSS SECTIONS

SCALE: | SHEET 9 OF 31 SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	116
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

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

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



STA 23+75.00

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Stantec

USER NAME = jstrouse	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 1/26/2023	DATE -	REVISED -	

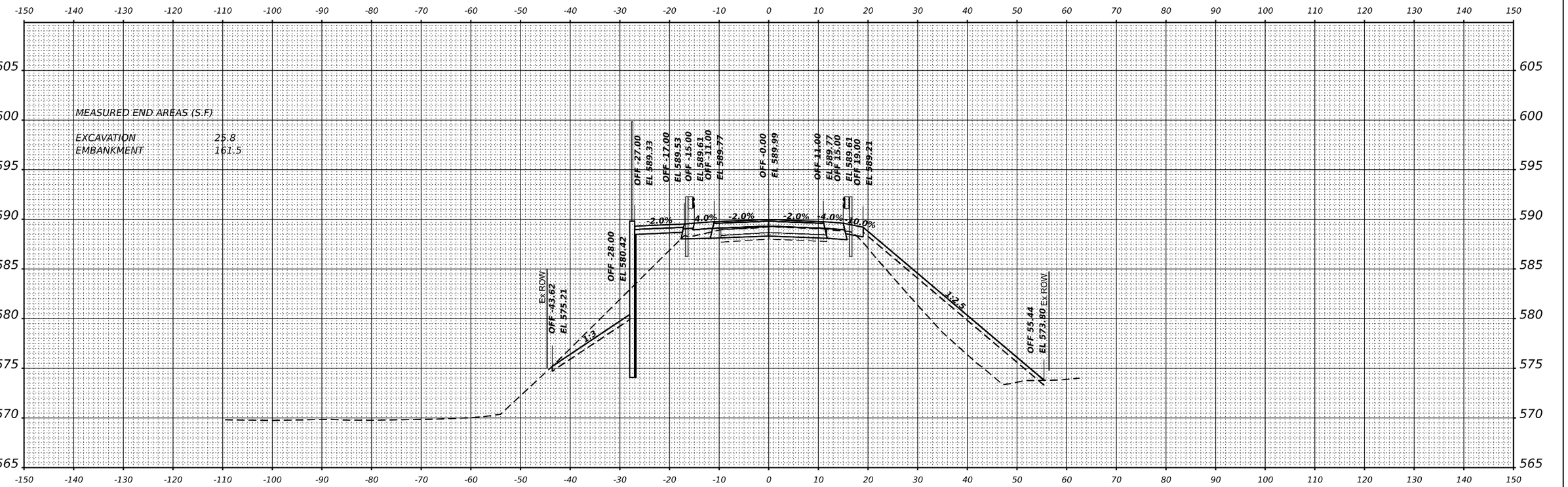
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: | SHEET 10 OF 31 SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	117
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

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



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	DRAWN -	REVISED -	
PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 1/26/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: | SHEET 11 OF 31 SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	118
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

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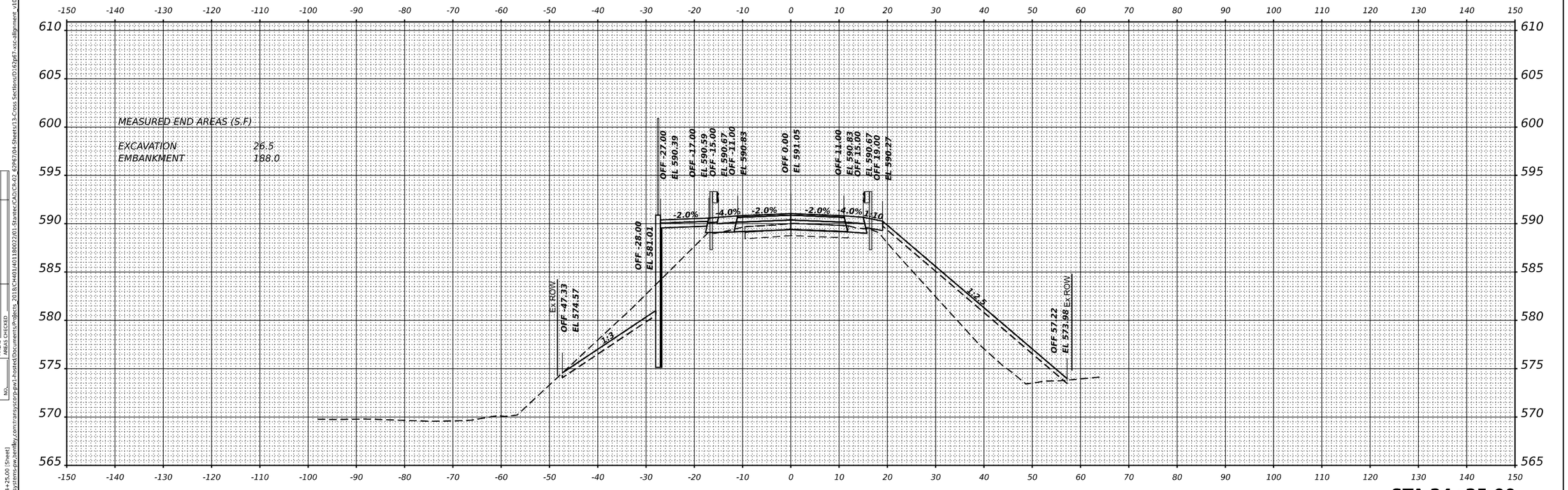
FINAL SURVEY				
NOTE BOOK	SURVEYED			
NO.	PLOTTED			
	TEMPLATE			
	AREAS			
	AREAS CHECKED			

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



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Stantec

USER NAME = jstrouse	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 1/26/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

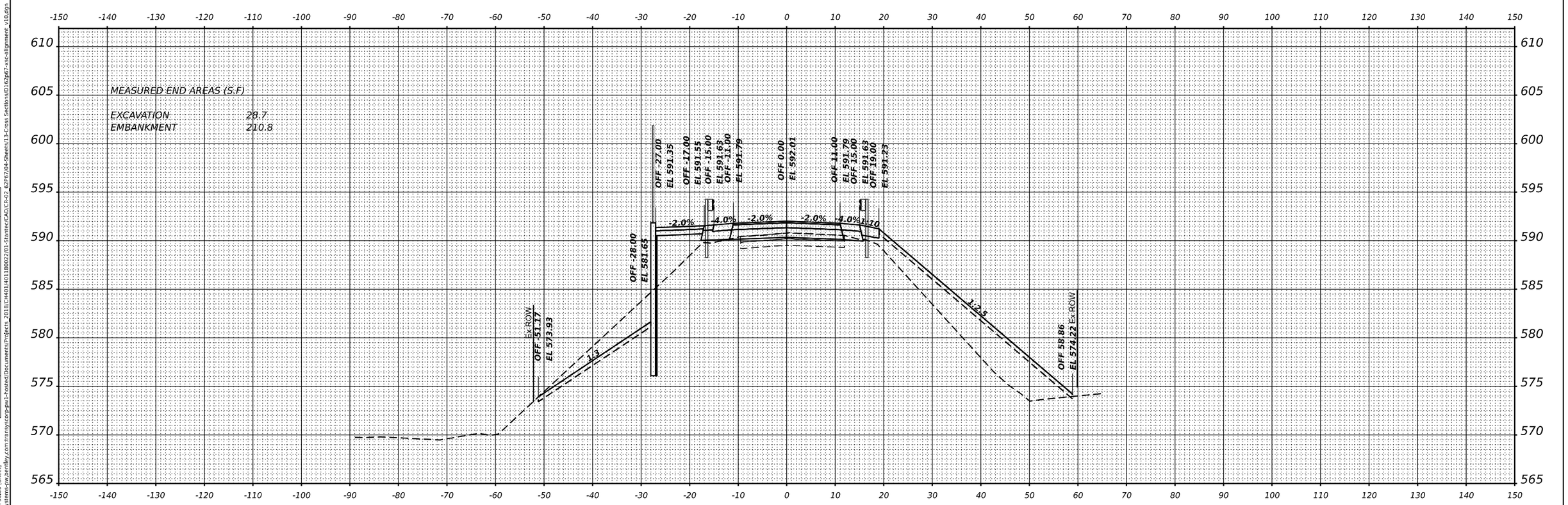
CROSS SECTIONS

SCALE: | SHEET 12 OF 31 SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	119
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

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

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



STA 24+50.00

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Stantec

USER NAME = jstrouse	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 1/26/2023	DATE -	REVISED -	

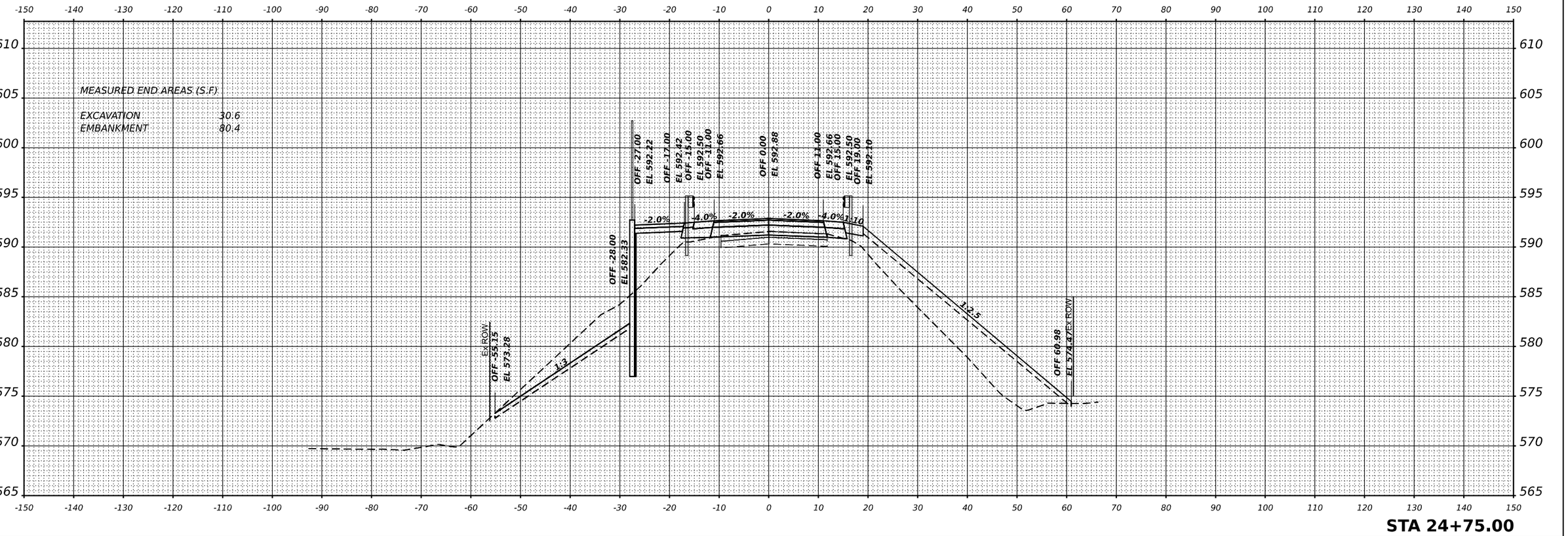
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: | SHEET 13 OF 31 SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	120
		CONTRACT NO. 62P67		
		ILLINOIS	FED. AID PROJECT	

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



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

MODEL: PrCL_V10 - 24+75.00 [Sheet]
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Stantec

USER NAME = jstrouse	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 1/26/2023	DATE -	REVISED -	

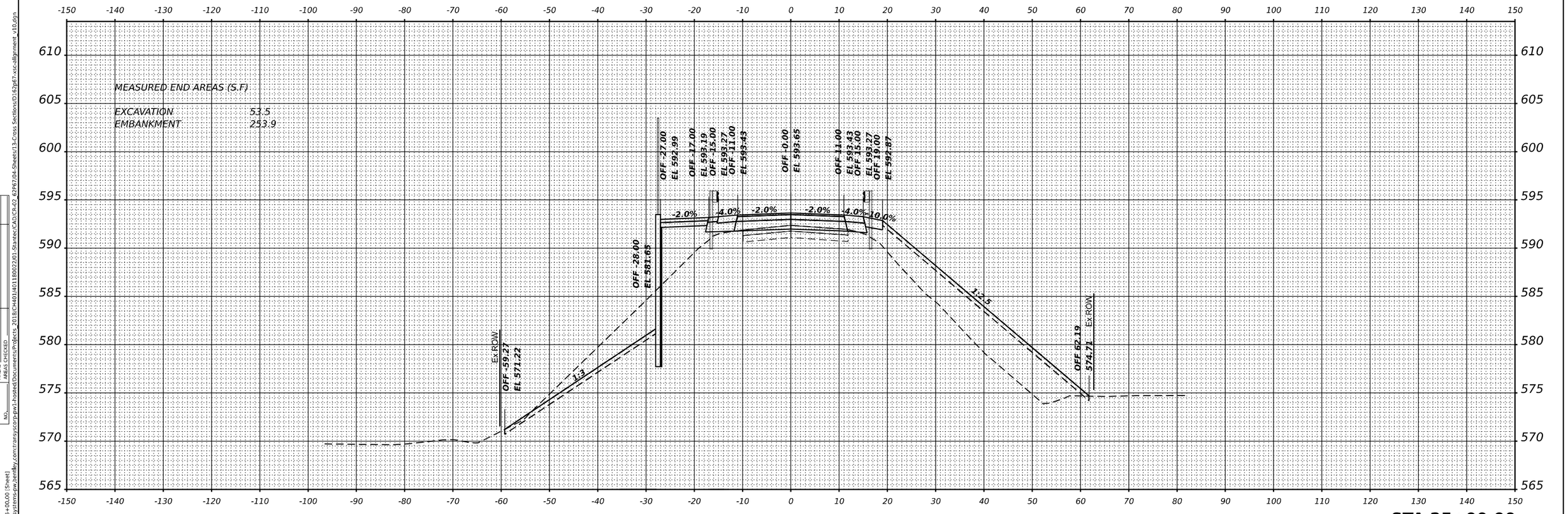
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: | SHEET 14 OF 31 SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	121
		CONTRACT NO. 62P67		
		ILLINOIS	FED. AID PROJECT	

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



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Stantec

USER NAME = jstrouse	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 1/26/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

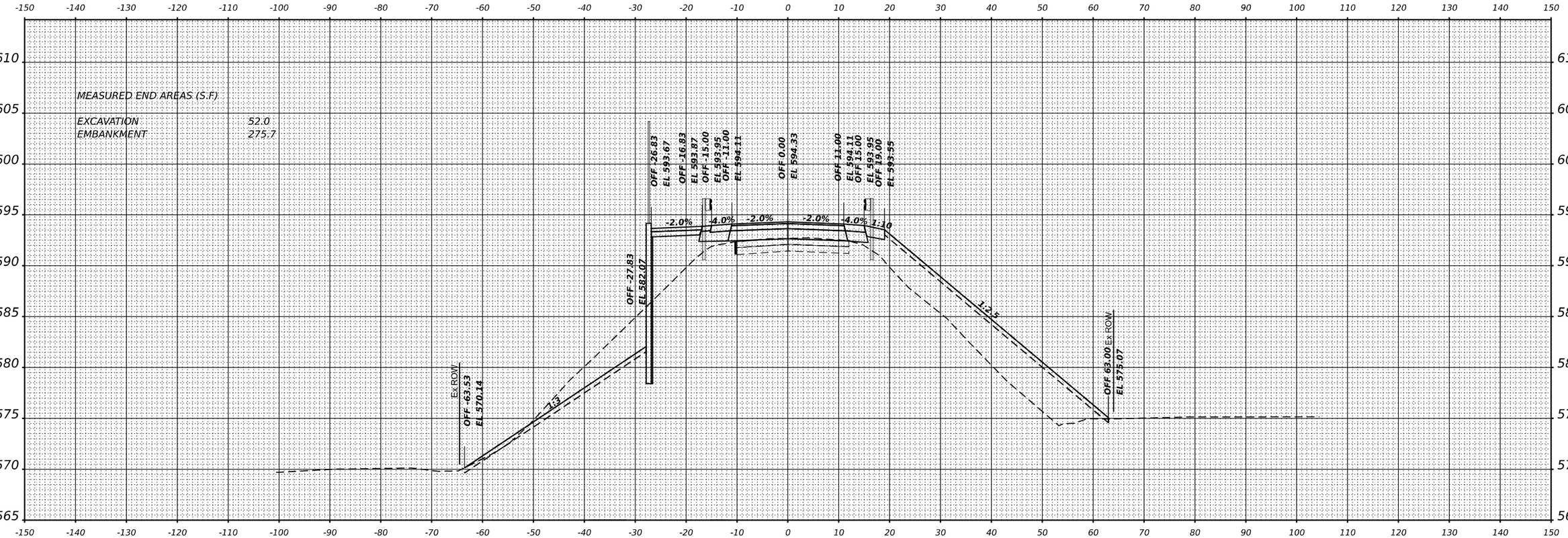
SCALE: | SHEET 15 OF 31 SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	122
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

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

MEASURED END AREAS (S.F)

EXCAVATION	*52.0*
EMBANKMENT	*275.7*



STA 25+25.00

USER NAME = jstrouse	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 1/26/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

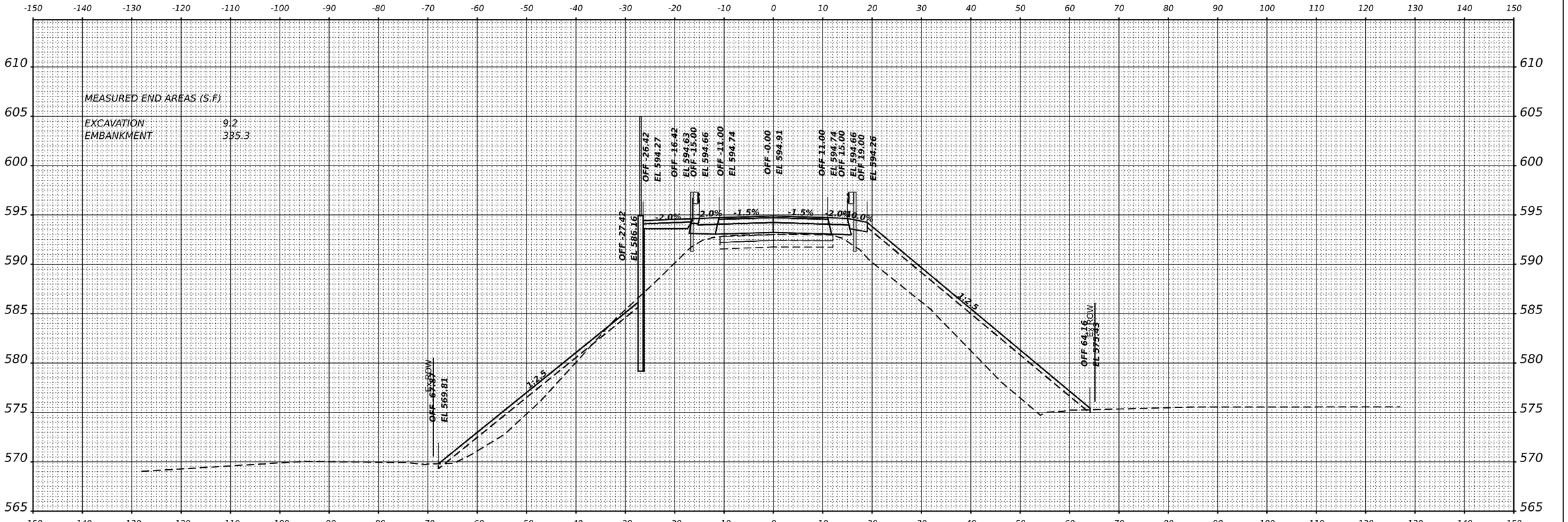
CROSS SECTIONS

SCALE: | SHEET 16 OF 31 SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	123
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

MODEL: PrCL_V10 - 25+25.00 [Sheet]
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/01-Stantec/CAD/CR-02_62P67/04-Sheets/13-Cross Sections/D162p67-xsc-alignment_v10.dgn

BRIDGE OMISSION STA. 25+67.59 TO STA. 27+99.25



STA 25+50.00

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

MODEL: PrCL_V10 - 25+50.00 [Sheet]
FILE NAME: pw://transystems-pw.bentley.com:transyscorp-pw1-hosted/Documents/Projects_2018/CH401/401180022/01-Stantec/CAD/CR-02_62P67/04-Sheets/13-Cross Sections/D162p67-xscr-alignment_v10.dgn

Stantec

USER NAME = jstrouse	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 1/26/2023	DATE -	REVISED -	

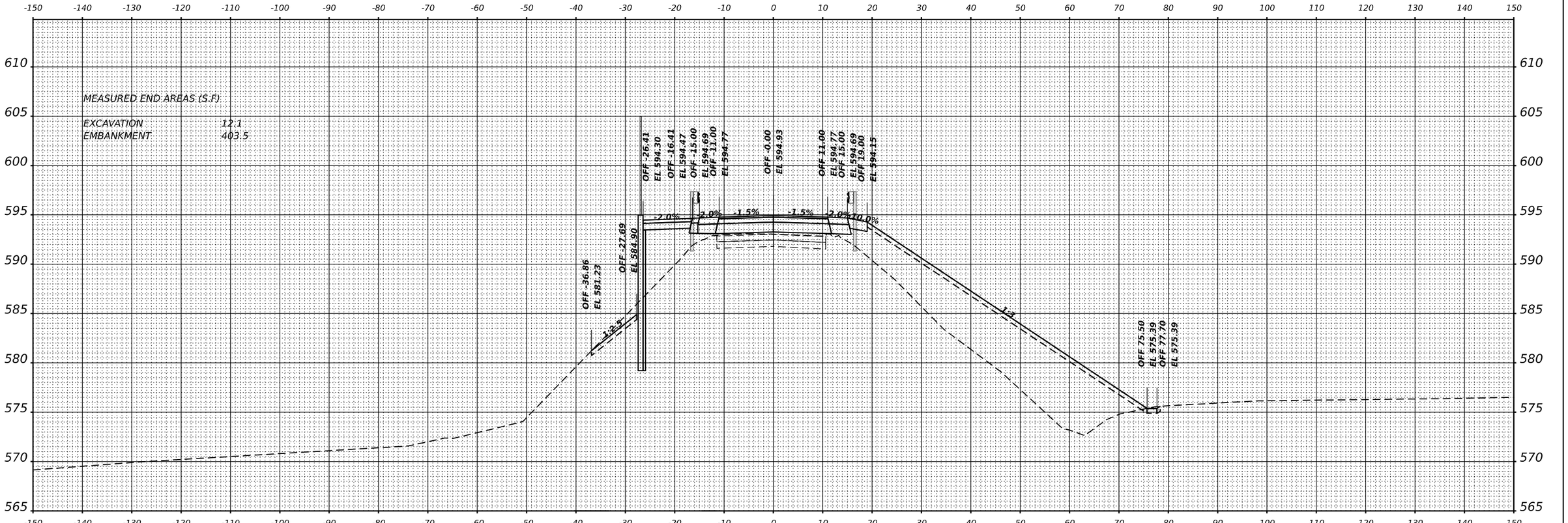
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: | SHEET 17 OF 31 SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	124
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

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



STA 28+25.00

Stantec	USER NAME = jstrouse	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 1/26/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: | SHEET 18 OF 31 SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	125
		CONTRACT NO. 62P67		
		ILLINOIS	FED. AID PROJECT	

MODEL: PrCL_V10 - 28+25.00 [Sheet]
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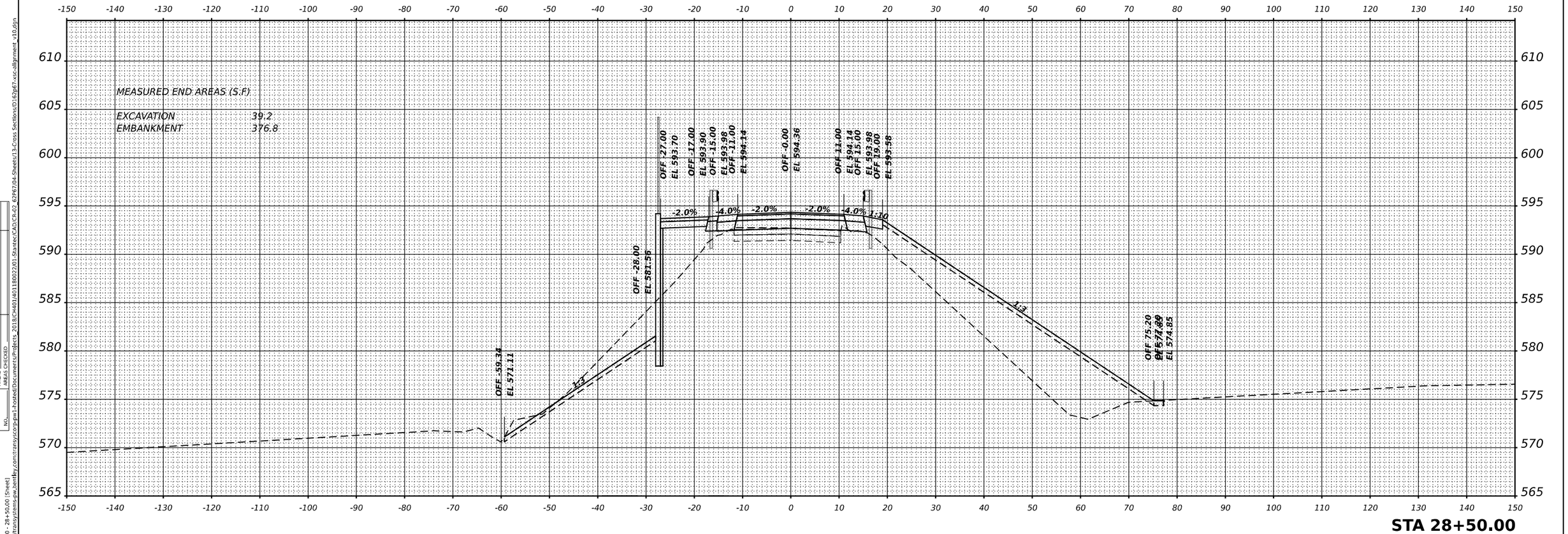
FINAL SURVEY		BY	DATE
ORIGINAL SURVEY	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		



STA 28+50.00

USER NAME = jstrouse	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 1/26/2023	DATE -	REVISED -	

Stantec

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: | SHEET 19 OF 31 SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	126
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

MODEL: PrCL_V10 - 28+50.00 [Sheet]
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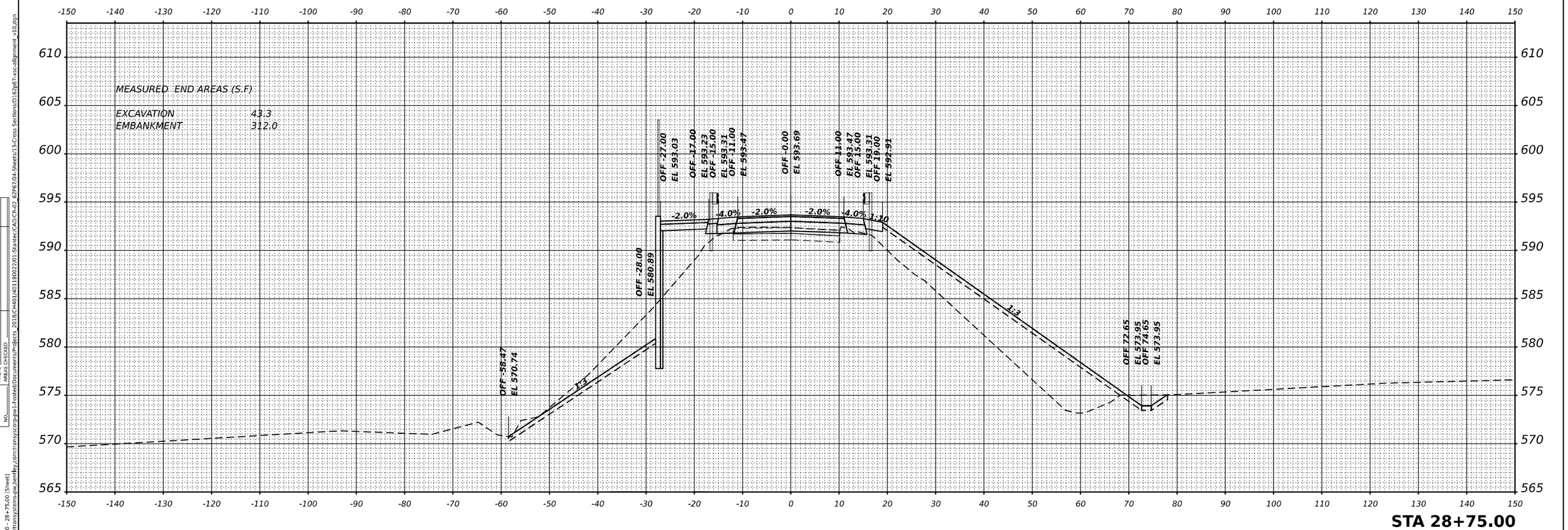
FINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		



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

Stantec

USER NAME = jstrouse	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 1/26/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: | SHEET 20 OF 31 SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	127
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

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

MEASURED END AREAS (S.F)

EXCAVATION	30.0
EMBANKMENT	256.3

OFF -57.47
EL 571.52
1:3
OFF -28.00
EL 581.34
OFF -27.00
EL 592.26
OFF -17.00
EL 592.46
OFF -15.00
EL 592.54
OFF -11.00
EL 592.70
OFF -0.00
EL 592.92
OFF 11.00
EL 592.70
OFF 15.00
EL 592.54
OFF 19.00
EL 592.14
-2.0%
-4.0%
-2.0%
-2.0%
-4.0%
2:1
1:3
OFF 68.80
EL 573.70
OFF 70.80
EL 573.70

STA 29+00.00

MODEL: PrCL_V10 - 29+00.00 [Sheet]
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Stantec

USER NAME = jstrouse	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 1/26/2023	DATE -	REVISED -	

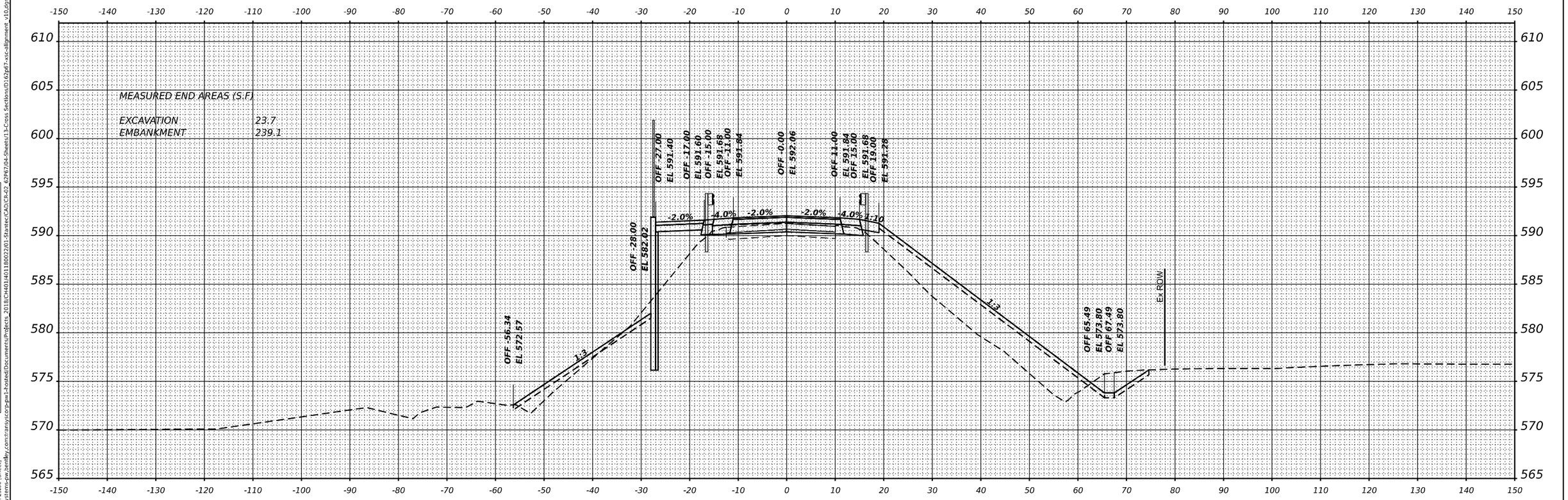
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: | SHEET 21 OF 31 SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	128
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

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



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

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Stantec

USER NAME = jstrouse	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -
PLOT DATE = 1/26/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

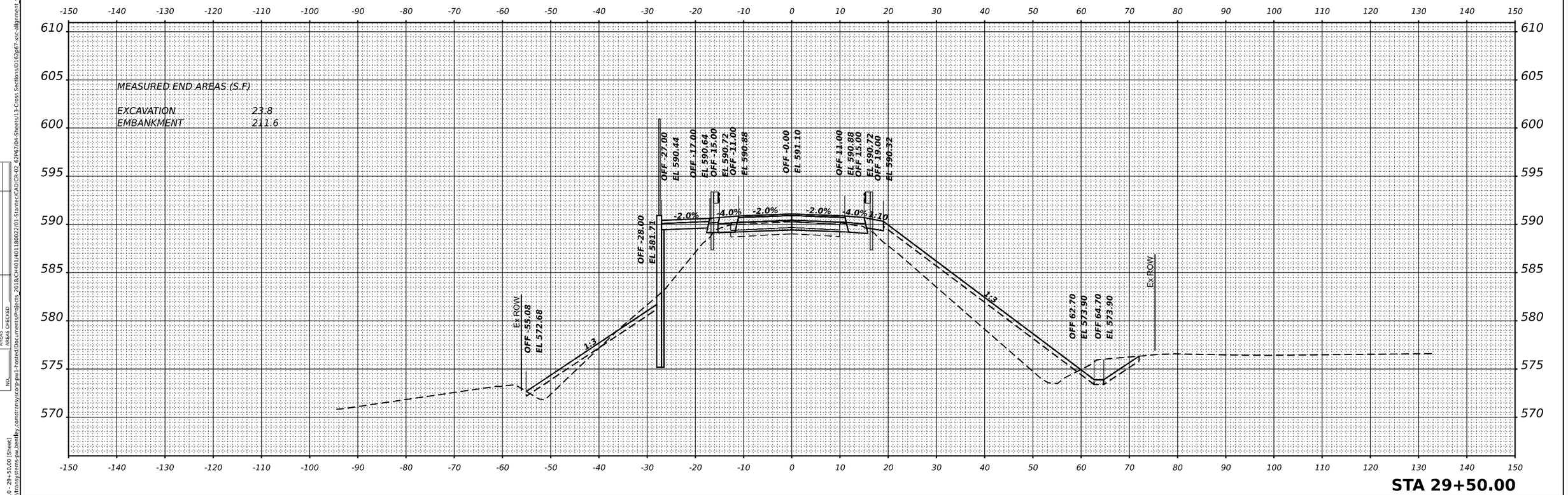
CROSS SECTIONS

SCALE: | SHEET 22 OF 31 SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	129
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

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

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



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Stantec

USER NAME = jstrouse	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 1/26/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: | SHEET 23 OF 31 SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	130
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

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

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

MEASURED END AREAS (S.F)

EXCAVATION 26.5
EMBANKMENT 187.4

EX ROW
OFF -53.69
EL 572.62
1:3
OFF -26.00
EL 581.18
OFF -27.00
EL 589.29
OFF -17.00
EL 589.59
OFF -15.00
EL 589.67
OFF -11.00
EL 589.83
OFF -0.00
EL 590.05
OFF 11.00
EL 589.83
OFF 15.00
EL 589.67
OFF 19.00
EL 589.27
-2.0%
4.0%
-2.0%
-2.0%
4.0%
3.10
1:3
OFF 58.78
EL 574.01
OFF 60.78
EL 574.01
Ex ROW

STA 29+75.00

MODEL: PrCL_V10 - 29+75.00 (Sheet)
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Stantec

USER NAME = jstrouse	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 1/26/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

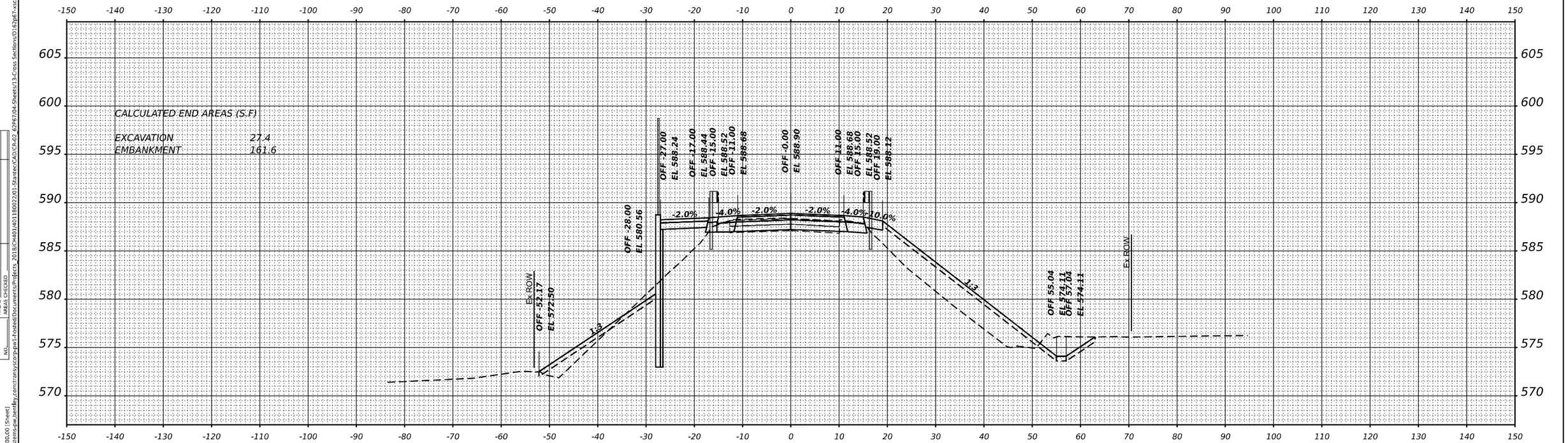
CROSS SECTIONS

SCALE: | SHEET 24 OF 31 SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	131
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

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

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



STA 30+00.00

Stantec

USER NAME = jstrouse	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 1/26/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: | SHEET 25 OF 31 SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	132
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

MODEL: PrCL_V10 - 30+00.00 (Sheet)
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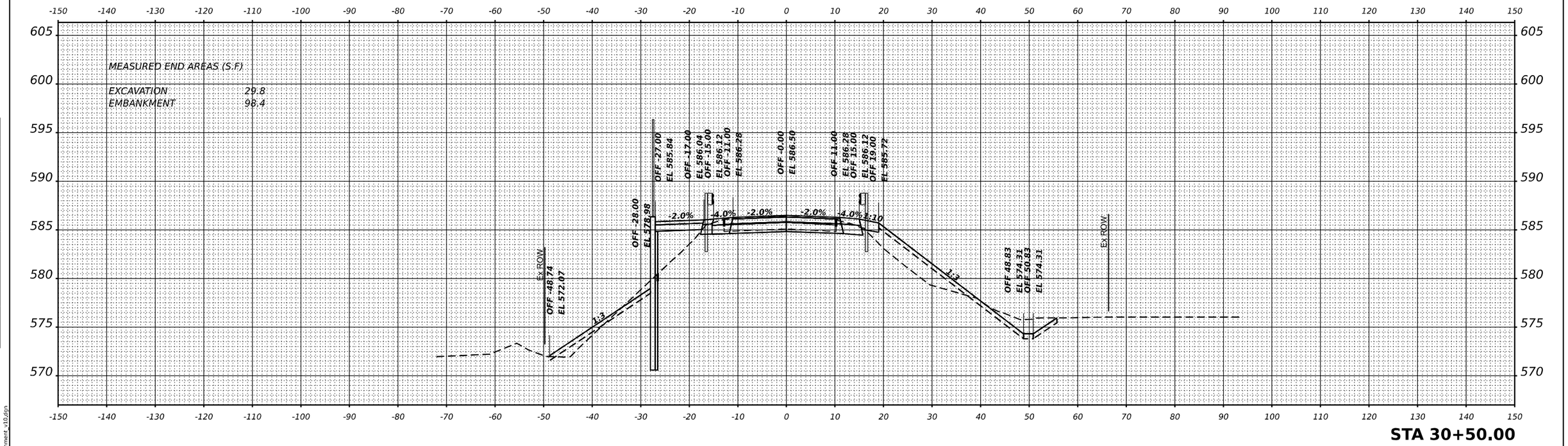

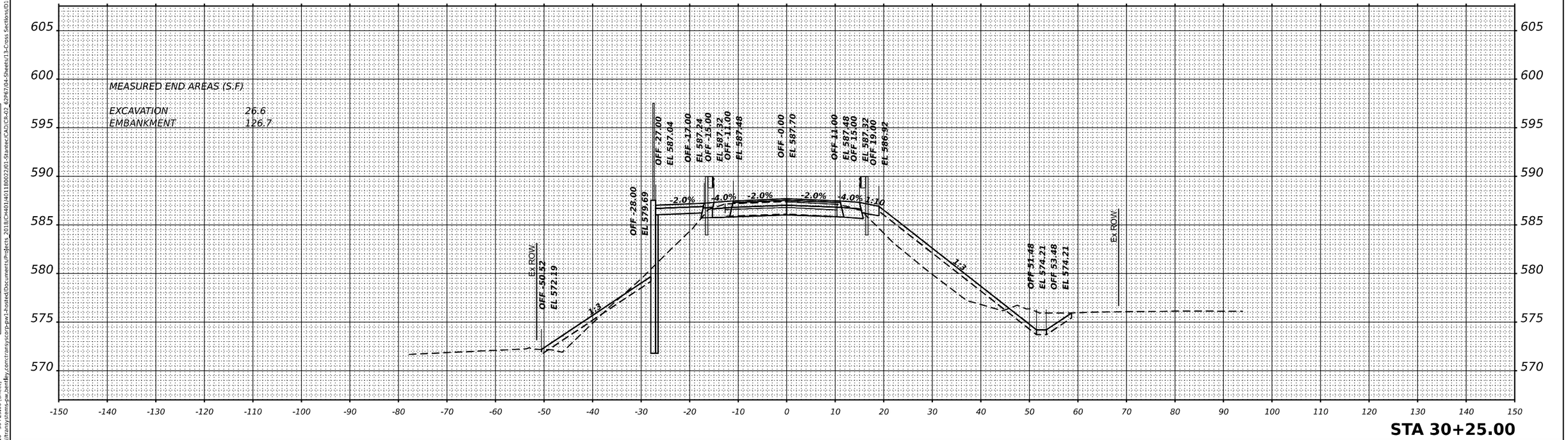

Stantec	USER NAME = jstrouse	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS
		DRAWN -	REVISED -		
	PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -		SCALE: SHEET 26 OF 31 SHEETS STA.
	PLOT DATE = 1/26/2023	DATE -	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	133
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		

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

MODEL: PrCL_V10 - 30+25.00 (Sheet)
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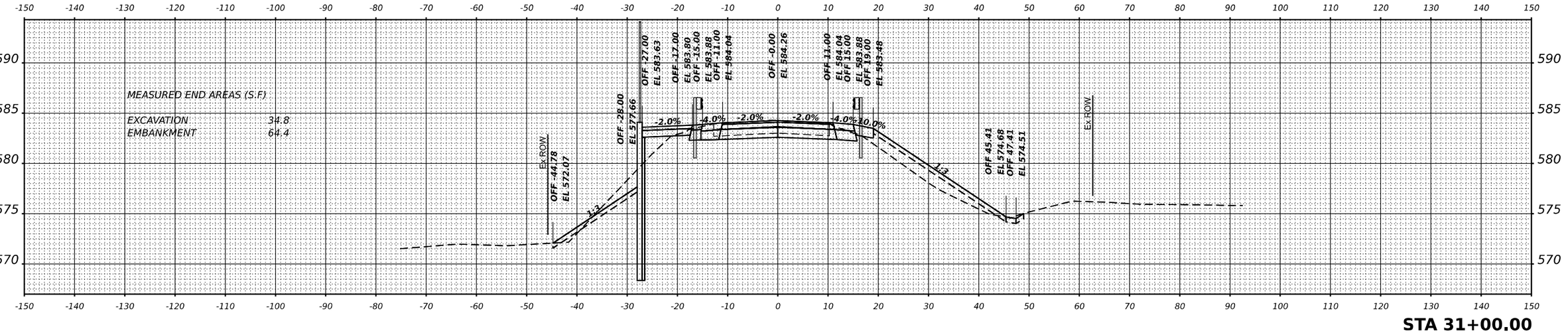

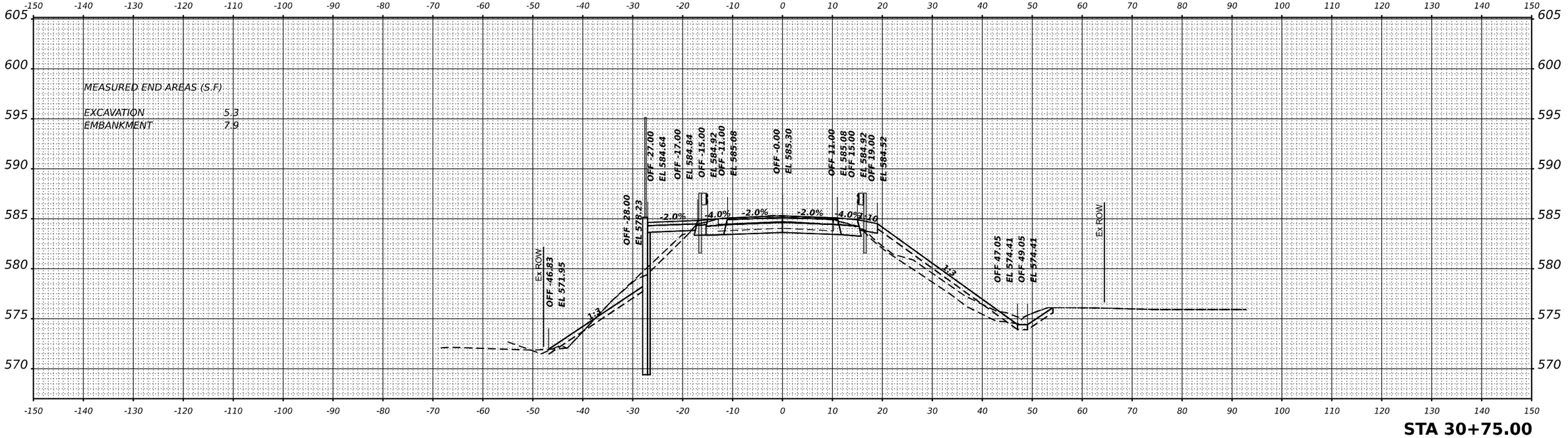

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

MODEL: PrCL_V10 - 30+75.00 (Sheet)
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Stantec

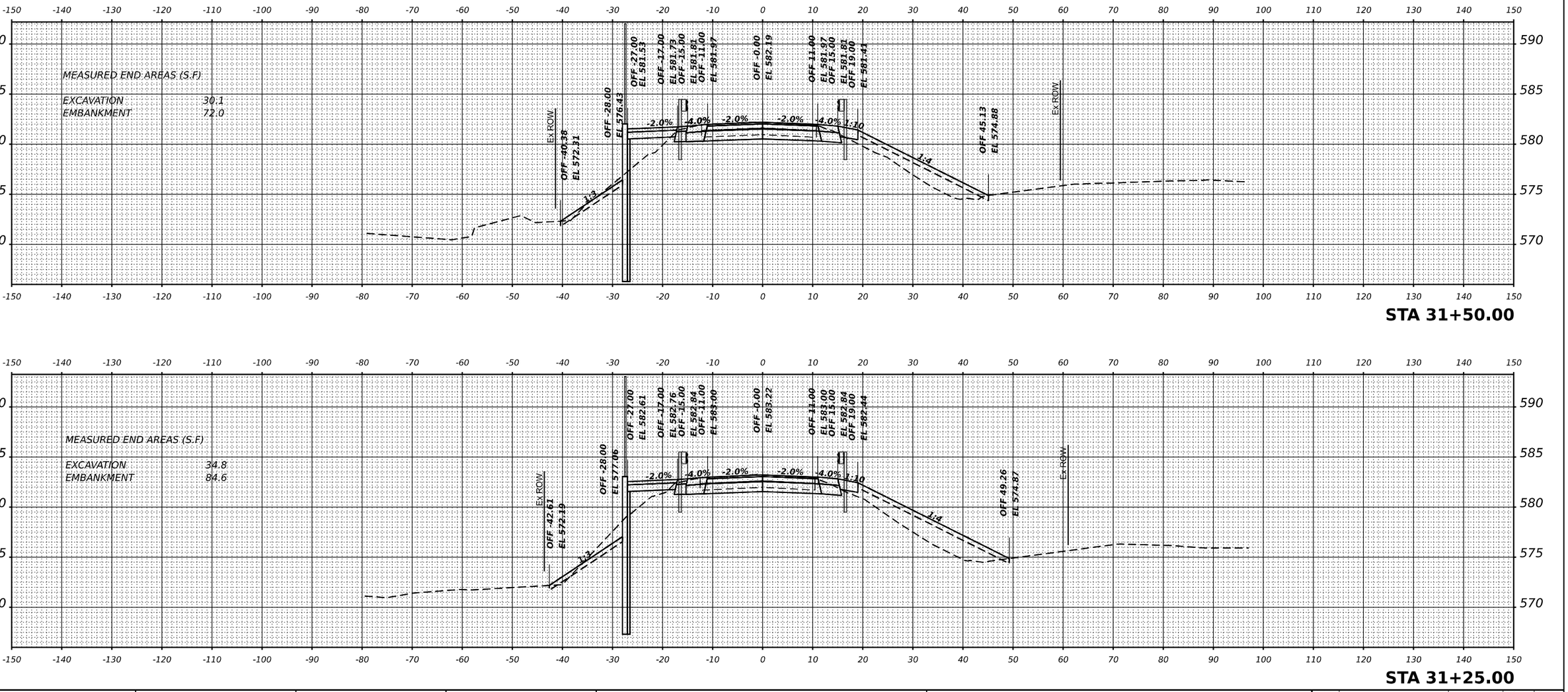
USER NAME = jstrouse	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -
PLOT DATE = 1/26/2023	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: | SHEET 27 OF 31 SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	134
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		



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

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

MODEL: PrCL_V10 - 31+25.00 [Sheet]
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Stantec

USER NAME = jstrouse	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 1/26/2023	DATE -	REVISED -	

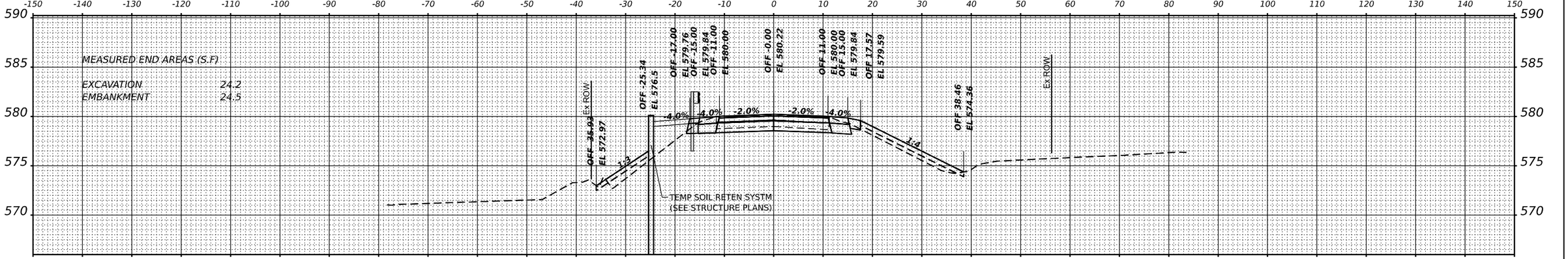
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

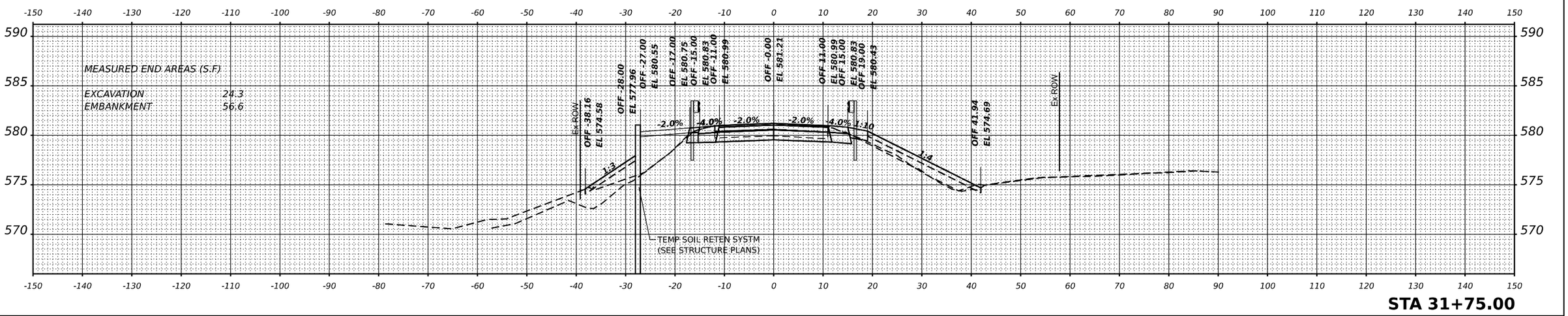
SCALE: | SHEET 28 OF 31 SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	135
		CONTRACT NO. 62P67		
		ILLINOIS	FED. AID PROJECT	

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



STA 32+00.00



STA 31+75.00

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

MODEL: PrCL_V10 - 31+75.00 (Sheet)
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Stantec

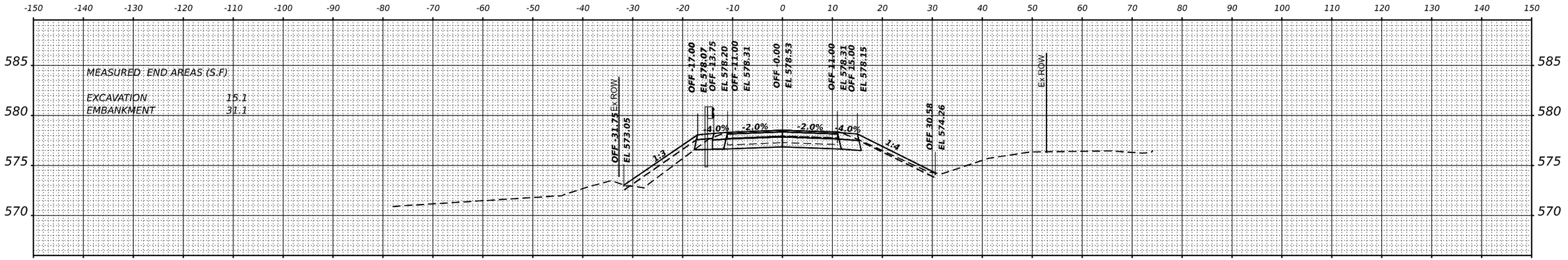
USER NAME = jstrouse	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 1/26/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

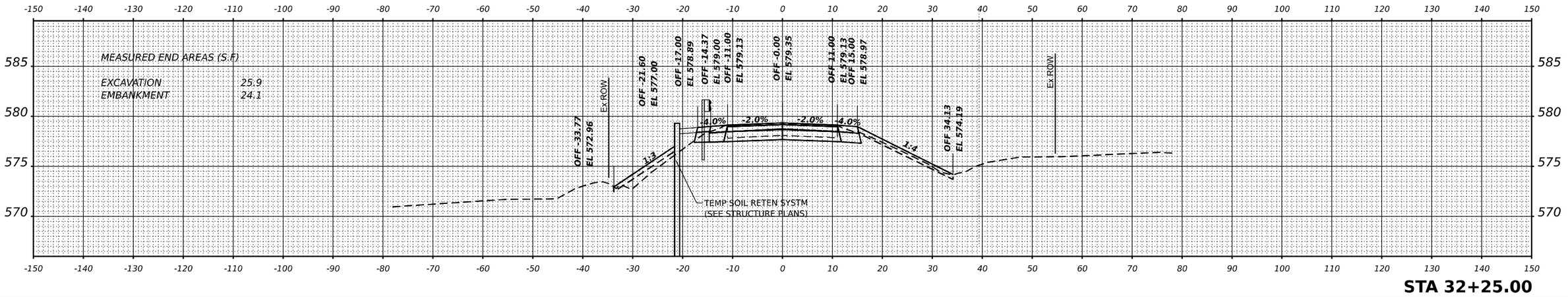
CROSS SECTIONS

SCALE: | SHEET 29 OF 31 SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	136
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		



STA 32+50.00



STA 32+25.00

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

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

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Stantec

USER NAME = jstrouse	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
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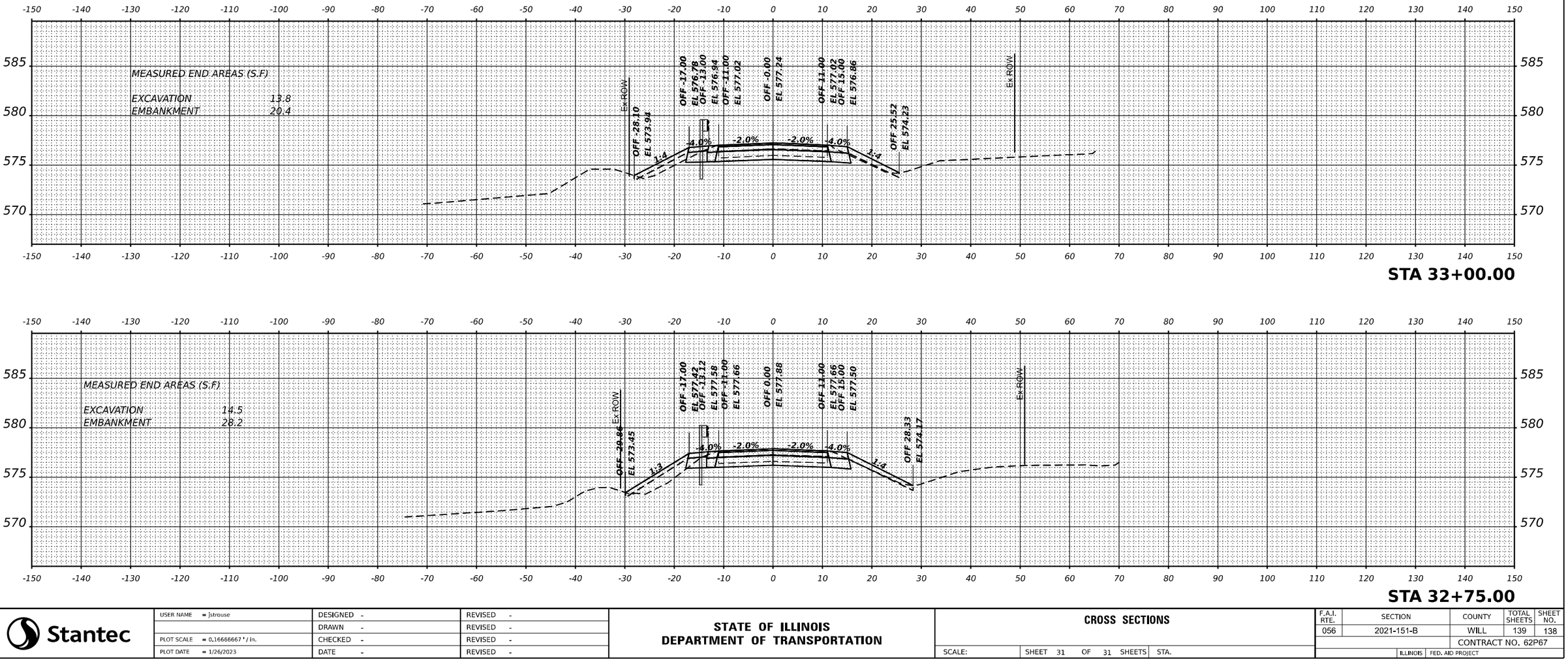
PLOT DATE = 1/26/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: | SHEET 30 OF 31 SHEETS | STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	137
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		



STA 33+00.00

STA 32+75.00

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

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

MODEL: PrCL_V10 - 32+75.00
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Stantec

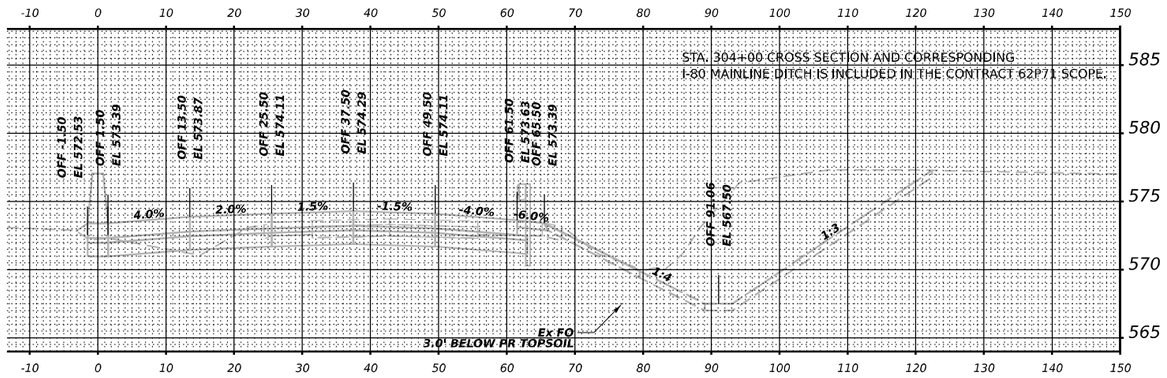
USER NAME = jstrouse	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 0.16666667 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 1/26/2023	DATE -	REVISED -	

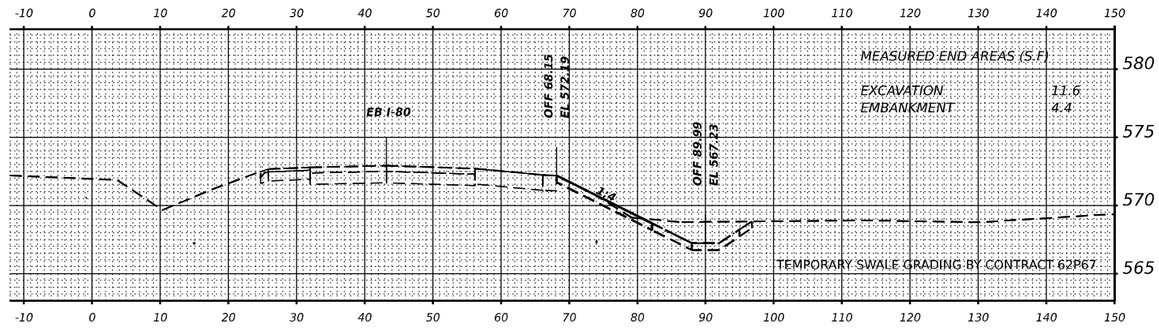
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

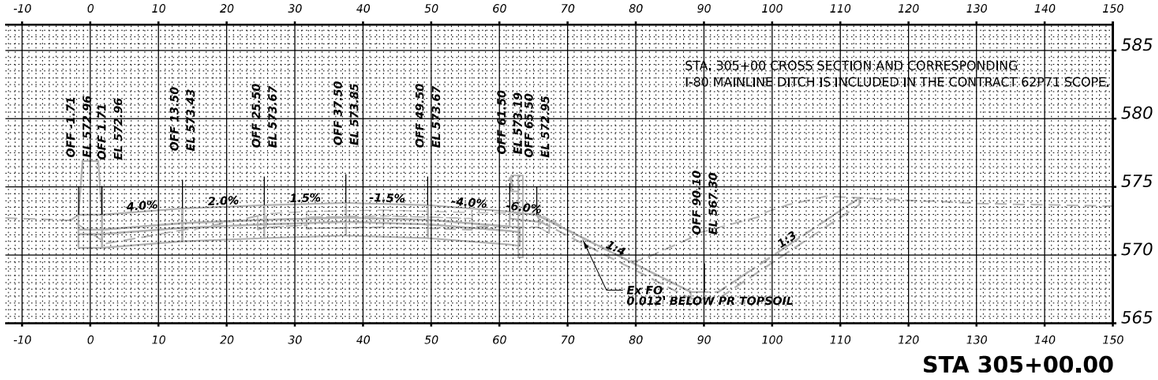
CROSS SECTIONS

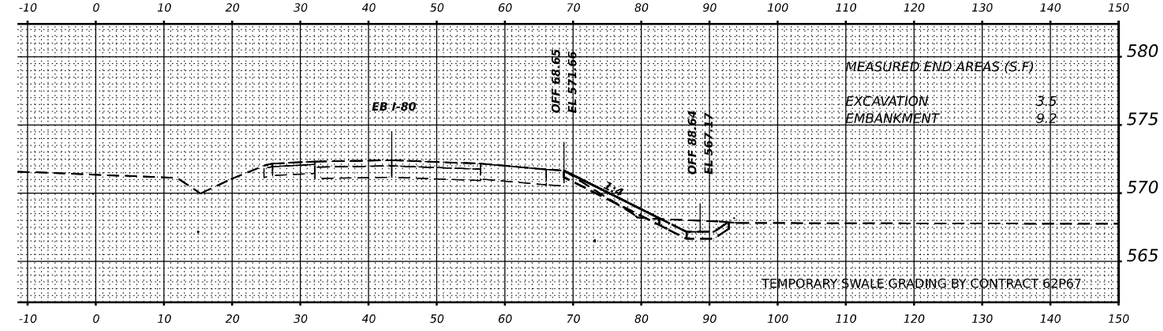
SCALE: | SHEET 31 OF 31 SHEETS | STA.

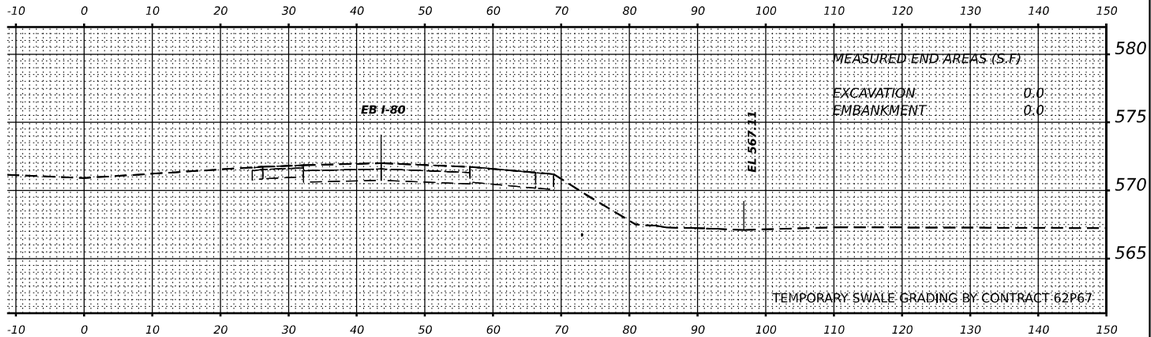
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	138
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		











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Stantec

USER NAME = jstrouse	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -	
PLOT DATE = 1/26/2023	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: | SHEET OF SHEETS | STA. | TO STA.

T.W.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
056	2021-151-B	WILL	139	139
		CONTRACT NO. 62P67		
	ILLINOIS	FED. AID PROJECT		