

FOR INDEX OF SHEETS, SEE SHEET NO. 2
FOR LIST OF HIGHWAY STANDARDS, SEE SHEET NO. 2
PROJECT IS LOCATED IN THE VILLAGE OF MINOOKA

TRAFFIC DATA:

INTERSTATE 80
S.N. 032-9901 2021 ADT = 50,300

FUNCTIONAL CLASSIFICATION = INTERSTATE (I-80) (RURAL)

DESIGN SPEED = 75 MPH (ASSUMED)

POSTED SPEED = 70 MPH

P.V. 74.0 % S.U. 20.3 % M.U. 5.7 %

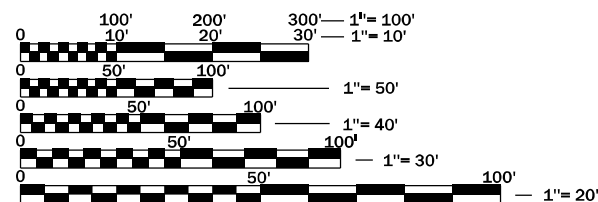
WABENA RD
S.N. 032-0065 2019 ADT = 3,550

FUNCTIONAL CLASSIFICATION = MAJOR COLLECTOR

DESIGN SPEED = 30 MPH (ASSUMED)

POSTED SPEED = 25 MPH

P.V. 100.0 % S.U. 0.0 % M.U. 0.0 %



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: DAVID ALEXANDER, P.E.
UNIT CHIEF: MOHAMED YOUSIF
DISTRICT 3 NO. (815) 434-6131
CONTRACT NO. 66295

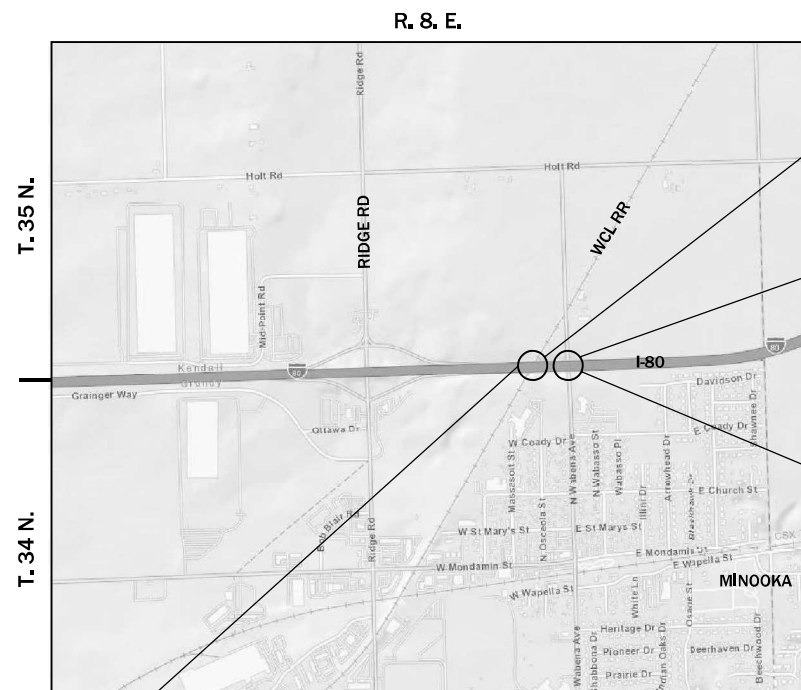
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

09-19-2025 LETTING ITEM 033

PROPOSED
HIGHWAY PLANS

F.A.I. 80 (I-80)
SECTION ((32, 47-4)VB, HBR-3)BR, BRR
PROJECT NHPP-FLHE(770)
STRUCTURE REPLACEMENT
& BRIDGE REPAIRS
GRUNDY COUNTY

C-93-125-02



BEGIN IMPROVEMENTS
STA 1727+89.68

SEWARD & AUX SABLE TOWNSHIP

LOCATION MAP

NOT TO SCALE

GROSS LENGTH = 1590.66 FT. = 0.30 MILES
NET LENGTH = 577.17 FT. = 0.11 MILES

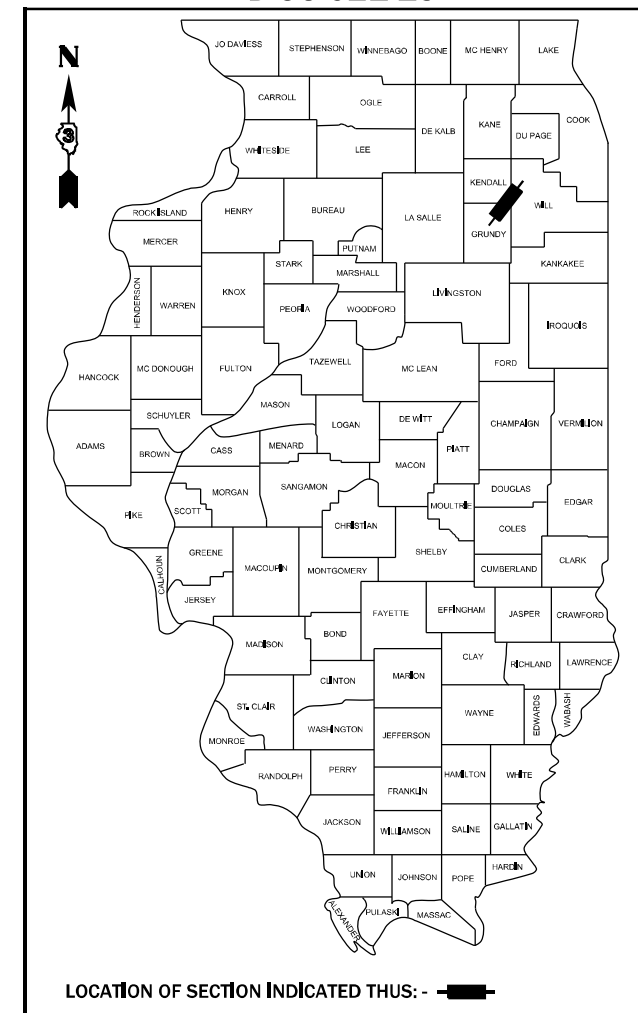
I-80
EX. S.N. 032-9901
PR. S.N. 032-9906
STA 1731+17.33

BRIDGE REPAIR
S.N. 032-0065
STA 1735+96.90

END IMPROVEMENTS
STA 1735+98.40

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	(32, 47-4)VB, HBR-3	GRUNDY/KENDALL	143	1
ILLINOIS			CONTRACT NO. 66295	

D-93-021-15



E LIN ENGINEERING, LTD.
Consulting Engineers
Westmont, Illinois

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
SUBMITTED February 4, 2025
Trisha Thompson REGIONAL ENGINEER
March 21, 2025
Scott A. Etk ENGINEER OF DESIGN AND ENVIRONMENT
March 21, 2025
Garry 5 DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

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HIGHWAY STANDARDS

000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420001-10	PAVEMENT JOINTS
421001-03	BAR REINFORCEMENT FOR CRC PAVEMENT
515001-04	NAME PLATE FOR BRIDGES
542411	SLOPED METAL END SECTIONS FOR PIPE CULVERTS
630001-13	STEEL PLATE BEAM GUARDRAIL
630201-07	PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
630301-09	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631011-10	TRAFFIC BARRIER TERMINAL, TYPE 2
631031-18	TRAFFIC BARRIER TERMINAL, TYPE 6
631033-09	TRAFFIC BARRIER TERMINAL, TYPE 6B
637006-05	CONCRETE BARRIER DOUBLE FACE, 44 in. (1120 mm) HEIGHT
701101-05	OFF-RD OPERATIONS, MULTILANE, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE
701106-02	OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 M) AWAY
701400-12	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-13	LANE CLOSURE, FREEWAY/EXPRESSWAY
701411-09	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS ≥ 45 MPH
701428-01	TRAFFIC CONTROL SETUP AND REMOVAL FREEWAY/EXPRESSWAY
701446-11	TWO LANE CLOSURE, FREEWAY/EXPRESSWAY
701901-10	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
725001-01	OBJECT AND TERMINAL MARKERS
780001-05	TYPICAL PAVEMENT MARKINGS
781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
BLR 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

DISTRICT STANDARDS

701-1	TOTAL INTERSTATE CLOSURE AT NIGHT - USE RAMPS FOR DETOUR
701-12	SMART WORK ZONE DETAIL
780-12	RAMP PAVEMENT MARKING
782-5	LINEAR DELINEATOR APPLICATION TO STANDARD GALVANIZED GUARDRAIL
782-6	LINEAR DELINEATOR PANELS FOR TEMPORARY CONCRETE BARRIER

GENERAL NOTES

THE CONTRACTOR SHALL USE CARE NEAR ANY AND ALL EXISTING ITEMS THAT WILL NOT BE REMOVED. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

BEFORE ORDERING PIPE CULVERTS OR PIPE DRAINS, THE CONTRACTOR SHALL CONSULT THE ENGINEER FOR EXACT LENGTHS.

SEEDING WILL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION. LOCATIONS TO BE SEEDED WILL BE DETERMINED BY THE ENGINEER.

ONLY THOSE TREES DESIGNATED BY THE ENGINEER OR LISTED IN THE TREE REMOVAL SCHEDULE SHALL BE REMOVED. THE CONTRACTOR SHALL PROTECT ALL REMAINING TREES FROM DAMAGE DUE TO HIS OPERATIONS.

THE FINISHED EARTHWORK SHALL HAVE A VEGETATION SUSTAINING SOIL COVERING THE TOP FOUR INCHES (100 MM) IN AREAS TO BE SEEDED OR SODDED. THE VEGETATION SUSTAINING SOIL REQUIRED SHALL BE INCLUDED IN THE COST OF TOPSOIL FURNISH AND PLACE, 4".

ALL ELEVATIONS REFERRING TO U.S.G.S. MEAN SEA LEVEL DATUM.

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 FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE CONTRACT.

ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS OR THE COPY INCLUDED IN THESE PLANS.

ALL DAMAGE TO DEPARTMENT OWNED UNDERGROUND FACILITIES, CAUSED BY THE CONTRACTOR SHALL BE REPAIRED TO THE SATISFACTION OF THE DEPARTMENT AT THE CONTRACTOR'S EXPENSE. THIS SHALL INCLUDE ALL TEMPORARY REPAIRS REQUIRED TO KEEP THE FACILITY OPERATIONAL WHILE MATERIAL IS BEING OBTAINED TO MAKE PERMANENT REPAIRS. SPLICING OF ELECTRIC CABLE WILL NOT BE ALLOWED. ELECTRIC CABLE SHALL BE REPLACED FROM POLE TO POLE OR CONTROLLER.

THE CONTRACTOR SHALL CONTACT J.U.L.I.E. AT LEAST 48 HOURS PRIOR TO EXCAVATION TO DETERMINE WHICH UTILITIES ARE IN THE AREA. KNOWN J.U.L.I.E. MEMBERS IN THE AREA INCLUDE AT&T, COMED, MEDIACOM, ONEOK, AND VISTRA KENDALL ENERGY. KNOWN NON-J.U.L.I.E. MEMBERS IN THE AREA INCLUDE IDOT & THE VILLAGE OF MINOOKA.

BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKINGS (AND RAISED REFLECTIVE PAVEMENT MARKERS) THAT CONFLICT WITH HIGHWAY STANDARDS 701400 AND 701401, IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR PROPOSED STRIPING AT THE COMPLETION OF THIS CONTRACT. EXACT LOCATIONS OF ALL PROPOSED PAVEMENT MARKINGS SHALL BE DIRECTED BY THE RESIDENT ENGINEER.

IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.

GENERAL NOTES CONT.

ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE DEPARTMENT.

THE CONTRACTOR SHALL MAINTAIN ALL ROADWAYS OPEN TO TRAFFIC AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLANS.

EXCEPT AS NOTED ON THE PLANS, PAVEMENT GRADES SHOWN ARE AT THE TOP OF PAVEMENT SURFACES.

COMMITMENTS

TREES OVER 3 INCH DIAMETER AT BREAST HEIGHT SHALL NOT BE CLEARED FROM APRIL 1ST TO SEPTEMBER 30TH.

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

NITROGEN	90 LBS/ACRE
PHOSPHORUS	90 LBS/ACRE
POTASSIUM	90 LBS/ACRE
SHORT TERM PAVEMENT MARKING	10 FT/100 FT OF APPLICATION
GRANULAR MATERIALS	2.05 TONS/CU YD
HMA RESURFACING	112 LBS/SQ YD/IN

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE
AS BUILT INFORMATION

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

SUPERVISING CONSTRUCTION FIELD ENGINEER

PREPARED BY: _____
DISTRICT STUDIES & PLANS ENGINEER

RESIDENT ENGINEER / TECHNICIAN

DATE: _____

START & END DATES
OF CONSTRUCTION:

EXAMINED BY: _____
DISTRICT CONSTRUCTION ENGINEER

INSPECTORS:

DISTRICT MATERIALS ENGINEER

DISTRICT OPERATIONS ENGINEER

 LIN ENGINEERING,LTD. Consulting Engineers Westmont, Illinois	USER NAME = 14nho	DESIGNED - JK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	W.C. RAILROAD OVER F.A.I. ROUTE 80 GENERAL NOTES	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - JK	REVISED -			80	(32, 47-4)VB, HBR-3	GRUNDY/KENDALL	143	2
	PLOT SCALE = 2.0000 ' / in.	CHECKED - ST	REVISED -			CONTRACT NO. 66295				
	PLOT DATE = 1/9/2025	DATE - 1/2025	REVISED -			SCALE: N.T.S.	SHEET 1 OF 1 SHEETS	STA. TO STA.	ILLINOIS	FED. AID PROJECT

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				90% FED 10% STATE	90% FED 10% STATE	90% FED 10% STATE
				ROADWAY	BRIDGE	BRIDGE
				0004	0010	0047
				URBAN	SN 032-9906	SN 032-0065
20100500	TREE REMOVAL , ACRES	ACRE	2.25	2.25		
20200100	EARTH EXCAVATION	CU YD	2,730	2,730		
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	1,843	1,843		
21101615	TOPSOIL FURNISH AND PLACE , 4"	SQ YD	5,913	5,913		
21400100	GRADING AND SHAPING DITCHES	FOOT	1,495	1,495		
25000210	SEEDING, CLASS 2A	ACRE	1.50	1.50		
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	130	130		
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	130	130		
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	130	130		
25100115	MULCH, METHOD 2	ACRE	0.50	0.50		
25100630	EROSION CONTROL BLANKET	SQ YD	3,342	3,342		
25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	1,175	1,175		
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	158	158		
28000305	TEMPORARY DITCH CHECKS	FOOT	141	141		

* SPECIALTY ITEM

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				90% FED 10% STATE	90% FED 10% STATE	90% FED 10% STATE
				ROADWAY	BRIDGE	BRIDGE
				0004	0010	0047
				URBAN	SN 032-9906	SN 032-0065
28000400	PERIMETER EROSION BARRIER	FOOT	1,497	1,497		
28000500	INLET AND PIPE PROTECTION	EACH	11	11		
28001100	TEMPORARY EROSION CONTROL BLANKET	SQ YD	2,285	2,285		
28100105	STONE RIPRAP, CLASS A3	SQ YD	12	12		
28200200	FILTER FABRIC	SQ YD	12	12		
30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	3,657	3,657		
31200500	STABILIZED SUBBASE - HOT-MIX ASPHALT, 4"	SQ YD	1,742	1,742		
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	144	144		
40604060	HOT-MIX ASPHALT SURFACE COURSE, 1L-9.5, MIX "D", N50	TON	13	13		
42100380	CONTINUOUSLY REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT 14"	SQ YD	1,742	1,742		
44000100	PAVEMENT REMOVAL	SQ YD	1,013	1,013		
44001980	CONCRETE BARRIER REMOVAL	FOOT	59	59		
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	96	96		
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1	

* SPECIALTY ITEM

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				90% FED 10% STATE	90% FED 10% STATE	90% FED 10% STATE
				ROADWAY	BRIDGE	BRIDGE
				0004	0010	0047
				URBAN	SN 032-9906	SN 032-0065
50102400	CONCRETE REMOVAL	CU YD	10.2			10.2
50157300	PROTECTIVE SHIELD	SQ YD	360			360
50200100	STRUCTURE EXCAVATION	CU YD	2,128		2,128	
50300225	CONCRETE STRUCTURES	CU YD	673.1		663.2	9.9
50300255	CONCRETE SUPERSTRUCTURE	CU YD	11.8			11.8
50300260	BRIDGE DECK GROOVING	SQ YD	482			482
50300300	PROTECTIVE COAT	SQ YD	695			695
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1		1	
50606701	CLEANING AND PAINTING STRUCTURAL STEEL , LOCATION 1	L SUM	1			1
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	87,650		85,770	1,880
50900207	STEEL RAILING, TYPE CO-10	FOOT	402			402
51100100	SLOPE WALL 4 INCH	SQ YD	177		177	
51201710	FURNISHING STEEL PILES HP12X84	FOOT	8,196		8,196	
51202305	DRIVING PILES	FOOT	8,196		8,196	

* SPECIALTY ITEM

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				90% FED 10% STATE	90% FED 10% STATE	90% FED 10% STATE
				ROADWAY	BRIDGE	BRIDGE
				0004	0010	0047
				URBAN	SN 032-9906	SN 032-0065
51203710	TEST PILE STEEL HP12X84	EACH	3		3	
51204650	PILE SHOES	EACH	219		219	
51500100	NAME PLATES	EACH	1		1	
52000110	PREFORMED JOINT STRIP SEAL	FOOT	116			116
52100400	STEEL BEARING ASSEMBLY	EACH	8		8	
52100530	ANCHOR BOLTS, 1 1/4"	EACH	40		40	
52200020	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	5,309		5,309	
58600101	GRANULAR BACKFILL FOR STRUCTURES	CU YD	264.0		264.0	
58700300	CONCRETE SEALER	SQ FT	3,451		1,939	1,512
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	262		262	
60108501	PIPE UNDERDRAINS, TYPE 3	FOOT	908	908		
60146304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	200		200	
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	900	900		
* 63000003	STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS	FOOT	600	600		

* SPECIALTY ITEM

				CONSTRUCT ION CODE		
				90% FED 10% STATE	90% FED 10% STATE	90% FED 10% STATE
				ROADWAY	BRIDGE	BRIDGE
				0004	0010	0047
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	URBAN	SN 032-9906	SN 032-0065
*	63100045	TRAFFIC BARRIER TERMINAL , TYPE 2	EACH	1	1	
*	63100089	TRAFFIC BARRIER TERMINAL , TYPE 6B	EACH	1	1	
*	63100119	TRAFFIC BARRIER TERMINAL , TYPE 14	EACH	4	4	
*	63100167	TRAFFIC BARRIER TERMINAL , TYPE 1 (SPECIAL) TANGENT	EACH	6	6	
	63200310	GUARDRAIL REMOVAL	FOOT	1,767	1,767	
	63700805	CONCRETE BARRIER TRANSITION	FOOT	59	59	
	63700900	CONCRETE BARRIER BASE	FOOT	59	59	
	67000400	ENGINEER'S FIELD OFFICE , TYPE A	CAL MO	18	18	
	67100100	MOBILIZATION	L SUM	1	1	
	70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	120	120	
	70107025	CHANGEABLE MESSAGE SIGN	CAL DA	30	30	
	70300100	SHORT TERM PAVEMENT MARKING	FOOT	3,423	3,423	
	70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	1,141	1,141	
	70307120	TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE	FOOT	22,379	22,379	

* SPECIALTY ITEM

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				90% FED 10% STATE	90% FED 10% STATE	90% FED 10% STATE
				ROADWAY	BRIDGE	BRIDGE
				0004	0010	0047
				URBAN	SN 032-9906	SN 032-0065
70307125	TEMPORARY PAVEMENT MARKING - LINE 5" - TYPE IV TAPE	FOOT	3,866	3,866		
70307130	TEMPORARY PAVEMENT MARKING - LINE 6" - TYPE IV TAPE	FOOT	3,474	3,474		
70307140	TEMPORARY PAVEMENT MARKING - LINE 8" - TYPE IV TAPE	FOOT	3,970	3,970		
70307160	TEMPORARY PAVEMENT MARKING - LINE 12" - TYPE IV TAPE	FOOT	540	540		
70400100	TEMPORARY CONCRETE BARRIER	FOOT	1,912.5	1,912.5		
70400125	PINNING TEMPORARY CONCRETE BARRIER	EACH	720	720		
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	2,250.0	2,250.0		
70600260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2	2		
70600332	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	6	6		
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	8	8		
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	241	241		
* 78004645	PREFORMED PLASTIC PAVEMENT MARKING, TYPE D - LINE 9"	FOOT	780	780		
* 78004655	PREFORMED PLASTIC PAVEMENT MARKING, TYPE D - LINE 11"	FOOT	1,205	1,205		
* 78005110	EPOXY PAVEMENT MARKING - LINE 4"	FOOT	7,386	7,386		

* SPECIALTY ITEM

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				90% FED 10% STATE	90% FED 10% STATE	90% FED 10% STATE
				ROADWAY	BRIDGE	BRIDGE
				0004	0010	0047
				URBAN	SN 032-9906	SN 032-0065
52318802	DRAINAGE SYSTEM FOR STRUCTURES	L SUM	1		1	
X5800110	MEMBRANE WATERPROOFING (SPECIAL)	SQ FT	4,235		4,235	
X6010001	CONNECTION OF EXISTING PIPE UNDERDRAIN	EACH	1	1		
X6350204	LINEAR DELINEATOR PANELS, 4 INCH	EACH	36	36		
X6350206	LINEAR DELINEATOR PANELS, 6 INCH	EACH	4	4		
X7010118	TEMPORARY RUMBLE STRIPS (SPECIAL)	EACH	56	56		
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	LSUM	1	1		
X7010239	CHANGEABLE MESSAGE SIGN, SPECIAL	CAL WK	23	23		
X7010410	SPEED DISPLAY TRAILER	CAL MO	12	12		
X7011800	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	LSUM	1	1		
* X7011858	REAL-TIME TRAFFIC CONTROL SENSOR UNIT	WEEK	23	23		
X7200202	ALTERNATE ROUTE SIGNING	LSUM	1	1		
X7830050	RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL	EACH	128	128		
* X8570002	SMART TRAFFIC MONITORING SYSTEM	CAL WK	23	23		

* SPECIALTY ITEM

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				90% FED 10% STATE	90% FED 10% STATE	90% FED 10% STATE
				ROADWAY	BRIDGE	BRIDGE
				0004	0010	0047
				URBAN	SN 032-9906	SN 032-0065
* X8570004	SMART TRAFFIC MONITORING DEVICE	CAL WK	23	23		
Z0002300	BALLAST	CU YD	350	350		
X4062952	HOT-MIX ASPHALT STABILIZATION 6" AT STEEL PLATE BEAM GUARD RAIL	SQ YD	488	488		
Z0006012	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/4 INCHES	SQ YD	510			510
Z0007101	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 1	L SUM	1			1
Z0010400	CLEANING BRIDGE SEATS	SQ FT	472			472
Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SQ YD	510			510
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	71			71
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1		
Z0016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	10			10
Z0041895	POLYMER CONCRETE	CU FT	2.4			2.4
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1		
Z0062456	TEMPORARY PAVEMENT	SQ YD	178	178		
Z0069700	SUB-BALLAST	CU YD	635	635		

* SPECIALTY ITEM

TREE REMOVAL , ACRES

FROM STATION	TO STATION	LT/RT	ACRE
1730+75.68	1731+73.11	RT	0.07
1730+97.18	1731+40.54	LT	0.06
1731+80.55	1732+50.00	LT	0.05
45+46.47	49+16.70	LT	0.17
51+70.34	52+56.27	LT	0.02
TOTAL FROM SINKHOLE REPAIRS			1.75
ROUNDED TOTAL			2.25

AGGREGATE SUBGRADE IMPROVEMENT 12"

FROM STATION	TO STATION	LT/RT	AREA (SQ YD)
1728+98.47	1734+32.62	RT	981.33
1730+57.29	1731+44.16	RT	132.53
1730+57.29	1731+44.16	LT	133.40
1731+02.18	1734+75.64	LT	595.28
44+99.00	48+39.00	LT/RT	907.00
51+13.00	54+53.00	LT/RT	907.00
ROUNDED TOTAL			3,657

GEOTECHNICAL FABRIC FOR GROUND STABILIZATION

FROM STATION	TO STATION	LT/RT	AREA (SQ YD)
1728+98.47	1734+32.62	RT	981.33
1730+57.29	1731+44.16	RT	132.53
1730+57.29	1731+44.16	LT	133.40
1731+02.18	1734+75.64	LT	595.28
ROUNDED TOTAL			1,843

HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT

FROM STATION	TO STATION	LT/RT	AREA (SQ YD)
613+69.62	613+99.62	LT/RT	68.34
616+00.37	616+30.37	LT/RT	75.06
ROUNDED TOTAL			144

HOT- MIX ASPHALT SURFACE COURSE ,
IL-9,5 , MIX "D" , N50

FROM STATION	TO STATION	LT/RT	TON
613+69.62	613+99.62	LT/RT	5.74
616+00.37	616+30.37	LT/RT	6.31
ROUNDED TOTAL			13

PAVEMENT REMOVAL

FROM STATION	TO STATION	LT/RT	AREA (SQ YD)
1727+89.68	1735+84.37	RT	482.84
1730+57.29	1731+44.16	RT	131.71
1730+57.29	1731+44.16	LT	134.50
1731+02.18	1733+70.92	LT	263.30
ROUNDED TOTAL			1,013

STABILIZED SUBBASE - HOT-MIX ASPHALT, 4"

FROM STATION	TO STATION	LT/RT	AREA (SQ YD)
1728+98.47	1734+32.62	RT	921.95
1730+57.29	1731+44.16	RT	132.53
1730+57.29	1731+44.16	LT	133.40
1731+02.18	1734+75.64	LT	553.79
ROUNDED TOTAL			1,742

AGGREGATE WEDGE SHOULDER, TYPE B

FROM STATION	TO STATION	LT/RT	TON
611+47.67	613+89.63	RT	22.85
611+68.50	613+90.29	LT	23.27
611+09.83	618+65.12	RT	22.46
611+10.39	618+79.50	LT	26.64
ROUNDED TOTAL			96

STEEL PLATE BEAM GUARDRAIL ,
TYPE A, 6 FOOT POSTS

FROM STATION	TO STATION	LT/RT	FOOT
1728+11.76	1735+48.00	RT	687.50
1731+90.00	1734+53.64	LT	212.50
ROUNDED TOTAL			900.0

STEEL PLATE BEAM GUARDRAIL ,
TYPE A, 9 FOOT POSTS

FROM STATION	TO STATION	LT/RT	FOOT
612+12.96	613+62.96	RT	150.00
612+38.59	613+63.59	LT	125.00
616+36.45	617+98.95	RT	150.00
616+37.00	618+11.99	LT	175.00
ROUNDED TOTAL			600.0

TRAFFIC BARRIER TERMINAL, TYPE 2

FROM STATION	TO STATION	LT/RT	EACH
1731+77.73	1731+90.00	LT	1
TOTAL			1

TRAFFIC BARRIER TERMINAL, TYPE 6B

FROM STATION	TO STATION	LT/RT	EACH
1735+48.00	1735+98.40	RT	1
TOTAL			1

TRAFFIC BARRIER TERMINAL, TYPE 14

FROM STATION	TO STATION	LT/RT	EACH
613+62.96	614+03.06	RT	1
613+63.59	614+03.69	LT	1
615+96.35	616+36.45	RT	1
615+96.90	616+37.00	LT	1
TOTAL			4

TRAFFIC BARRIER TERMINAL ,
TYPE 1 (SPECIAL) TANGENT

FROM STATION	TO STATION	LT/RT	EACH
1728+11.76	1728+61.74	RT	1
1734+02.73	1734+52.71	LT	1
611+87.95	612+12.96	RT	1
612+13.58	612+38.59	LT	1
617+98.95	618+23.97	RT	1
618+11.99	618+36.98	LT	1
TOTAL			6

GUARDRAIL REMOVAL

FROM STATION	TO STATION	LT/RT	FOOT
1728+27.00	1730+68.00	RT	241.78
1731+00.00	1735+84.37	RT	484.69
1731+67.00	1733+45.00	LT	177.93
612+16.46	614+25.20	RT	211.90
612+37.88	614+25.82	LT	188.00
615+73.94	617+99.67	RT	225.80
615+74.76	618+11.33	LT	236.60
ROUNDED TOTAL			1,767

CONCRETE BARRIER TRANSITION

FROM STATION	TO STATION	LT/RT	FOOT
1730+57.29	1731+03.33	LT/RT	46.03
1731+31.33	1731+44.16	LT/RT	12.84
ROUNDED TOTAL			59

CONCRETE BARRIER REMOVAL

FROM STATION	TO STATION	LT/RT	FOOT
1730+57.29	1731+03.33	LT/RT	46.03
1731+31.33	1731+44.16	LT/RT	12.84
ROUNDED TOTAL			59

PIPE UNDERDRAINS, TYPE 3

FROM STATION	TO STATION	LT/RT	FOOT
1728+98.47	1734+32.62	RT	534.15
1731+02.18	1734+75.64	LT	373.46
ROUNDED TOTAL			908

TOPSOIL FURNISH AND PLACE 4"

FROM STATION	TO STATION	LT/RT	AREA (SQ YD)
1727+89.68	1730+57.67	RT	720.86
1730+37.37	1735+83.40	RT	1,162.76
1730+97.18	1731+94.20	LT	407.43
1731+70.48	1734+85.64	LT	472.19
45+50.09	48+57.44	LT	929.55
45+50.09	46+75.00	RT	44.43
51+14.03	54+50.00	LT	81.45
51+57.42	51+98.86	RT	19.89
53+51.51	54+50.00	RT	36.21
TOTAL FROM SINKHOLE REPAIRS			2,038.00
ROUNDED TOTAL			5,913

CONCRETE BARRIER BASE

FROM STATION	TO STATION	LT/RT	FOOT
1730+57.29	1731+03.33	LT/RT	46.03
1731+31.33	1731+44.16	LT/RT	12.84
ROUNDED TOTAL			59

CONTINUOUSLY REINFORCED PORTLAND
CEMENT CONCRETE PAVEMENT 14"

FROM STATION	TO STATION	LT/RT	AREA (SQ YD)
1728+98.47	1734+32.62	RT	921.95
1730+57.29	1731+44.16	RT	132.53
1730+57.29	1731+44.16	LT	133.40
1731+02.18	1734+75.64	LT	553.79
ROUNDED TOTAL			1,742

TEMPORARY PAVEMENT MARKING -
LINE 4" - TYPE IV TAPE

FROM STATION	TO STATION	LT/RT	FOOT
STAGE 1			
1722+89.79	1735+34.27	RT	1,244.63
1722+89.79	1735+34.27	RT	1,244.59
1726+29.17	1736+09.26	LT	980.63
1726+29.17	1736+09.26	LT	980.22
STAGE 2			
1722+89.79	1739+98.12	RT	1,708.49
1722+89.79	1739+98.12	RT	1,708.45
1726+71.20	1740+73.05	LT	1,402.03
1726+71.20	1740+73.05	LT	1,401.96
STAGE 3			
1723+54.91	1742+31.23	RT	1,876.94
1723+54.91	1742+31.23	RT	1,876.35
1724+99.39	1742+50.73	LT	1,752.08
1724+99.39	1742+50.73	LT	1,751.28
STAGE 4			
1722+89.79	1735+34.27	RT	1,244.63
1722+89.79	1735+34.27	RT	1,244.59
1726+29.17	1736+09.26	LT	980.63
1726+29.17	1736+09.26	LT	980.63
ROUNDED TOTAL			22,379

TEMPORARY PAVEMENT MARKING -
LINE 5" - TYPE IV TAPE

FROM STATION	TO STATION	LT/RT	FOOT
STAGE 1			
1722+89.79	1735+34.27	RT	311.15
1726+67.78	1735+34.27	RT	216.63
1726+29.17	1736+09.26	LT	245.00
STAGE 2			
1722+89.79	1739+98.12	RT	424.44
1726+67.79	1739+98.12	RT	332.57
1726+71.20	1740+73.05	LT	345.91
STAGE 3			
1723+54.91	1742+31.23	RT	462.20
1729+57.67	1742+31.23	RT	318.41
1724+99.39	1742+50.73	LT	436.01
STAGE 4			
1722+89.79	1735+34.27	RT	311.15
1726+67.78	1735+34.27	RT	216.63
1726+29.17	1736+09.26	LT	245.00
ROUNDED TOTAL			3,866

TEMPORARY PAVEMENT MARKING -
LINE 6" - TYPE IV TAPE

FROM STATION	TO STATION	LT/RT	FOOT
STAGE 1			
1726+29.17	1732+80.77	LT	702.69
1732+80.77	1736+09.26	LT	82.13
STAGE 2			
1726+71.20	1732+80.84	LT	618.45
1732+80.84	1740+73.05	LT	198.08
STAGE 3			
1727+46.73	1736+95.79	LT	949.06
1736+95.79	1742+50.73	LT	138.76
STAGE 4			
1726+29.17	1732+80.77	LT	702.69
1732+80.77	1736+09.26	LT	82.13
ROUNDED TOTAL			3,474

TEMPORARY PAVEMENT MARKING -
LINE 8" - TYPE IV TAPE

FROM STATION	TO STATION	LT/RT	FOOT
STAGE 1			
1722+89.79	1726+67.78	RT	756.08
STAGE 2			
1722+89.79	1726+67.78	RT	756.08
STAGE 3			
1723+54.91	1729+57.67	RT	1,205.96
1724+99.39	1727+46.73	LT	495.08
STAGE 4			
1722+89.79	1726+67.78	RT	756.08
ROUNDED TOTAL			3,970

TEMPORARY PAVEMENT MARKING -
LINE 12" - TYPE IV TAPE

FROM STATION	TO STATION	LT/RT	FOOT
STAGE 1			
1722+89.79	1726+67.78	RT	123.93
STAGE 2			
1722+89.79	1726+67.78	RT	103.94
STAGE 3			
1723+54.91	1729+57.67	RT	134.41
1724+99.39	1727+46.73	LT	53.68
STAGE 4			
1722+89.79	1726+67.78	RT	123.93
ROUNDED TOTAL			540

EARTHWORK SCHEDULE

EARTH EXCAVATION	STRUCTURE EXCAVATION	STRUCTURE EXCAVATION FOR TEMP JUMP SPAN *	EARTH EXC. ADJ. FOR SHRINKAGE (25%)	EMBANKMENT	EARTHWORK BALANCE WASTE(+) OR SHORTAGE (-)
CU YD	CU YD	CU YD	CU YD	CU YD	CU YD
STAGE 1					
300		265	425	49	+376
STAGE 2					
	118		90		+90
STAGE 3					
2,095	2,010		3,080	100	+2,980
STAGE 4					
335		265	450	130	+320
TOTAL					
2,730	2,128	530	4,045	279	+3,766

* THE QUANTITY FOR STRUCTURE EXCAVATION FOR TEMPORARY JUMP SPAN
IS INCIDENTAL TO TEMPORARY JUMP SPAN AND WILL NOT BE PAID FOR SEPERATELY.

TEMPORARY CONCRETE BARRIER

FROM STATION	TO STATION	LT/RT	FOOT
STAGE 1			
1729+18.87	1731+56.14	RT	237.5
1730+07.30	1732+44.57	LT	237.5
STAGE 2			
1729+69.36	1736+20.00	RT	412.5
1730+49.33	1736+99.97	LT	412.5
STAGE 3			
1727+08.82	1738+99.01	RT	537.5
1730+52.21	1737+74.09	LT	75.0
ROUNDED TOTAL			1,912.5

RELOCATE TEMPORARY CONCRETE BARRIER

FROM STATION	TO STATION	LT/RT	FOOT
STAGE 2			
1729+69.36	1736+20.00	RT	237.5
1730+49.33	1736+99.97	LT	237.5
STAGE 3			
1727+08.82	1738+99.01	RT	650.0
1730+52.21	1737+74.09	LT	650.0
STAGE 4			
1729+18.87	1731+56.14	RT	237.5
1730+07.30	1732+44.57	LT	237.5
ROUNDED TOTAL			2,250.0

PINNING TEMPORARY CONCRETE BARRIER

FROM STATION	TO STATION	LT/RT	EACH
STAGE 1			
1729+68.79	1731+06.15	RT	76
1730+57.29	1731+94.57	LT	76
STAGE 2			
1729+69.36	1736+20.00	RT	208
1730+49.33	1736+99.97	LT	208
STAGE 4			
1729+68.79	1731+06.15	RT	76
1730+57.29	1731+94.57	LT	76
TOTAL			720

IMPACT ATTENUATORS,RELOCATE (FULLY
REDIRECTIVE,NARROW),TEST LEVEL 3

FROM STATION	LT/RT	EACH
STAGE 2		
1729+69.28	RT	1
1736+99.97	LT	1
STAGE 3		
1727+08.09	RT	1
1737+74.06	LT	1
STAGE 4		
1729+18.79	RT	1
1732+44.65	LT	1
TOTAL		6

EARTH EXCAVATION (SPECIAL)

FROM STATION	TO STATION	LT/RT	AREA (CU YD)
1736+34.50	1736+65.50	LT	405.0
ROUNDED TOTAL			405

TRENCH BACKFILL, SPECIAL

FROM STATION	TO STATION	LT/RT	AREA (CU YD)
1736+34.50	1736+65.50	LT	420.0
ROUNDED TOTAL			420

CONCRETE HEADWALL REMOVAL PARTIAL

FROM STATION	LT/RT	EACH
1733+80.50	LT	1
TOTAL		1

CONNECTION OF EXISTING PIPE UNDERDRAIN

FROM STATION	LT/RT	EACH
1746+63.00	LT	1
TOTAL		1

IMPACT ATTENUATORS,TEMPORARY (FULLY
REDIRECTIVE,NARROW),TEST LEVEL 3

FROM STATION	LT/RT	EACH
STAGE 1		
1729+18.79	RT	1
1732+44.65	LT	1
TOTAL		2

TERMINAL MARKERS - DIRECT APPLIED

FROM STATION	LT/RT	EACH
1728+11.76	RT	1
1731+77.73	LT	1
1734+53.64	LT	1
1735+98.40	RT	1
611+87.95	RT	1
612+13.58	LT	1
617+98.95	RT	1
618+11.99	LT	1
TOTAL		8

PAVEMENT MARKING SCHEDULE

FROM STATION	TO STATION	LT/RT	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	PREFORMED PLASTIC PAVEMENT MARKING, TY D		EPOXY PAVEMENT MARKING		MODIFIED URETHANE PAVEMENT MARKING LINE 4"	REPLACEMENT REFLECTOR	RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL	RAISED REFLECTIVE PAVEMENT MARKER	GROOVING FOR RECESSED PAVEMENT MARKING		
				LINE 9"	LINE 11"	LINE 4"	LINE 12"					5"	10"	12"
				FOOT	FOOT	FOOT	FOOT					FOOT	FOOT	FOOT
1722+89.79	1728+63.47	RT			1147.50		70.82							1,147.50
1722+89.79	1742+31.23	RT		437.84		3,882.88			44	44		1,941.44	437.84	
1724.99.39	1727+38.51	LT					15.20							
1724+99.39	1732+80.00	LT			962.28									962.28
1724+99.39	1742+50.73	LT		485.36		3,502.68			49	49		3,263.56	485.36	
1728+63.47	1742+31.23	RT		341.94					35	35		1,367.76	341.94	
1732+80.00	1742+50.73	LT			242.49									242.49
613+69.62	613+99.85	LT/RT	119.99											
613+69.62	616+30.38	LT/RT									14			
613+99.85	616+00.37	LT/RT						803.01						
616+00.37	619+30.38	LT/RT	120.02											
ROUNDED TOTAL			241	780	1,205	7,386	87	804	128	128	14	6,573	780	1,205

LINEAR DELINEATOR PANELS, 4 INCH

FROM STATION	TO STATION	LT/RT	EACH
1728+11.76	1735+98.40	RT	9
1731+77.73	1734+53.64	LT	3
612+12.96	613+62.96	RT	6
612+38.59	613+63.59	LT	5
616+36.45	617+98.95	RT	6
616+37.00	618+11.99	LT	7
TOTAL			36

LINEAR DELINEATOR PANELS, 6 INCH

FROM STATION	TO STATION	LT/RT	EACH
1730+57.29	1731+03.33	LT/RT	2
1731+31.33	1731+44.16	LT/RT	2
TOTAL			4

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

FROM STATION	TO STATION	LT/RT	AREA (SQ YD)
1727+89.68	1735+83.40	RT	346.82
1731+02.18	1731+42.88	LT	9.18
1731+77.21	1734+75.64	LT	131.71
TOTAL			488

TEMPORARY DITCH CHECKS

FROM STATION	LT/RT	FOOT
1728+15.00	RT	8.9
1729+15.00	RT	7.2
1730+15.00	RT	4.9
1732+50.00	LT	5.8
1732+75.00	RT	10.8
1733+75.00	RT	10.8
1734+25.00	LT	6.8
1734+75.00	RT	9.7
TOTAL FROM SINKHOLE REPAIRS		76.0
ROUNDED TOTAL		141

TEMPORARY PAVEMENT

FROM STATION	TO STATION	LT/RT	AREA (SQ YD)
1730+57.29	1731+06.14	RT/LT	177.27
ROUNDED TOTAL			178

PAVEMENT MARKING REMOVAL - WATER BLASTING

FROM STATION	TO STATION	LT/RT	SQ FT
4" REM			
1724+99.39	1742+50.73	LT	583.78
1724+99.39	1742+50.73	LT	583.78
1722+89.79	1742+31.23	RT	647.15
1722+89.79	1742+31.23	RT	647.15
613+69.62	613+99.85	LT	10.07
613+69.62	613+99.85	RT/LT	20.00
613+69.62	613+99.85	RT	9.92
613+99.85	616+00.37	LT	66.92
613+99.85	616+00.37	RT/LT	133.83
613+99.85	616+00.37	RT	66.91
616+00.37	619+30.38	LT	9.92
616+00.37	619+30.38	RT/LT	20.00
616+00.37	619+30.38	RT	10.08
5" REM			
1722+89.79	1742+31.23	RT	182.43
1728+63.47	1742+31.23	RT	142.48
1724+99.39	1742+50.73	LT	202.23
8" REM			
1724+99.39	1732+80.00	LT	641.52
1732+80.00	1742+50.73	LT	161.66
1722+89.79	1728+63.00	RT	765.00
12" REM			
1724+99.39	1732+80.00	LT	15.20
1722+89.79	1728+63.00	RT	70.82
ROUNDED TOTAL			4,991

STONE RIPRAP, CLASS A3

FROM STATION	TO STATION	LT/RT	AREA (SQ YD)
1732+26.00	1732+35.00	LT	6.00
1733+80.50	1733+89.50	LT	6.00
TOTAL			12

FILTER FABRIC

FROM STATION	TO STATION	LT/RT	AREA (SQ YD)
1732+26.00	1732+35.00	LT	6.00
1733+80.50	1733+89.50	LT	6.00
TOTAL			12

TEMPORARY EROSION CONTROL SEEDING

FROM STATION	TO STATION	LT/RT	POUND
STAGE 1			
45+00.00	54+60.00	LT/RT	48
TOTAL FROM SINKHOLE REPAIRS			110
TOTAL			158

TEMPORARY EROSION CONTROL BLANKET

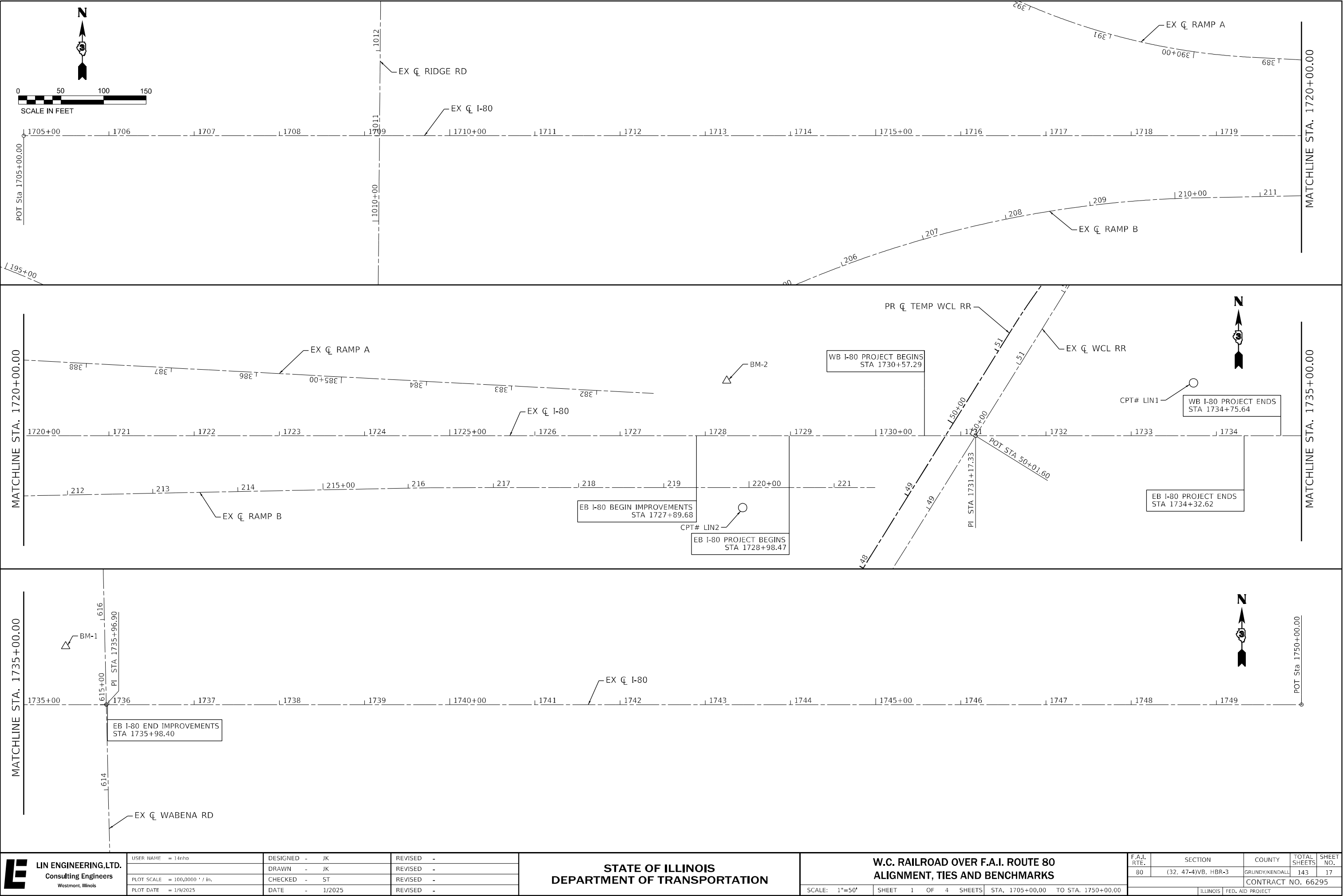
FROM STATION	TO STATION	LT/RT	AREA (SQ YD)
STAGE 1			
45+00.00	54+60.00	LT/RT	2,285.00
ROUNDED TOTAL			2,285

LANDSCAPING TABLE

FROM STATION	TO STATION	LT/RT	SEEDING, CLASS 2A	NITROGEN FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	MULCH, METHOD 2	EROSION CONTROL BLANKET	HEAVY DUTY EROSION CONTROL BLANKET	PERIMETER EROSION BARRIER	GRADING AND SHAPING DITCHES
			ACRE	POUND	POUND	POUND	ACRE	SQ YD	SQ YD	FOOT	FOOT
1727+89.68	1729+75.00	RT	0.04	3.94	3.94	3.94	0.04				
1729+75.00	1730+25.00	RT	0.09	7.65	7.65	7.65		411.63			
1730+25.00	1730+57.67	RT	0.02	1.85	1.85	1.85			99.68		
1730+37.37	1730+81.71	RT	0.01	1.03	1.03	1.03	0.01				
1730+67.00	1732+00.00	RT	0.11	9.54	9.54	9.54			513.16		
1730+97.18	1731+50.00	LT	0.07	5.97	5.97	5.97		321.13			
1731+50.00	1731+68.51	LT	0.01	0.82	0.82	0.82			44.29		
1731+54.08	1731+94.20	LT	0.01	0.78	0.78	0.78	0.01				
1731+70.49	1732+75.00	LT	0.06	5.55	5.55	5.55			298.41		
1731+80.42	1732+09.66	LT	0.01	0.49	0.49	0.49	0.01				
1732+00.00	1735+25.00	RT	0.12	10.61	10.61	10.61		570.48			
1732+25.00	1734+85.64	LT	0.04	3.25	3.25	3.25	0.04				
1735+25.00	1735+83.40	RT	0.00	0.45	0.45	0.45	0.00				
45+50.00	45+75.00	RT	0.00	0.19	0.19	0.19	0.00				
45+50.00	48+39.45	LT	0.15	13.43	13.43	13.43					
45+75.00	46+25.00	RT	0.00	0.20	0.20	0.20			10.64		
46+25.00	46+75.00	RT	0.00	0.45	0.45	0.45	0.00				
46+50.00	48+00.00	LT	0.04	3.87	3.87	3.87			208.04		
51+14.42	54+50.00	LT	0.16	14.75	14.75	14.75	0.16				
51+57.42	51+98.86	RT	0.00	0.67	0.67	0.67	0.00				
53+51.51	54+50.00	RT	0.01	0.37	0.37	0.37	0.01				
TOTAL FROM SINKHOLE REPAIRS			0.50	40	40	40		2,038.00		1,497.00	1,495.00
ROUNDED TOTAL			1.50	130	130	130	0.50	3,342	1,175	1,497	1,495

INLET AND PIPE PROTECTION

FROM STATION	LT/RT	EACH
1727+96.00	RT	1
1728+54.00	RT	1
1729+49.00	RT	1
1731+69.00	RT	1
1732+28.00	LT	1
1733+83.00	LT	1
TOTAL FROM SINKHOLE REPAIRS		5
TOTAL		11



Lin Engineering, Ltd.
Consulting Engineers
Westmont, Illinois

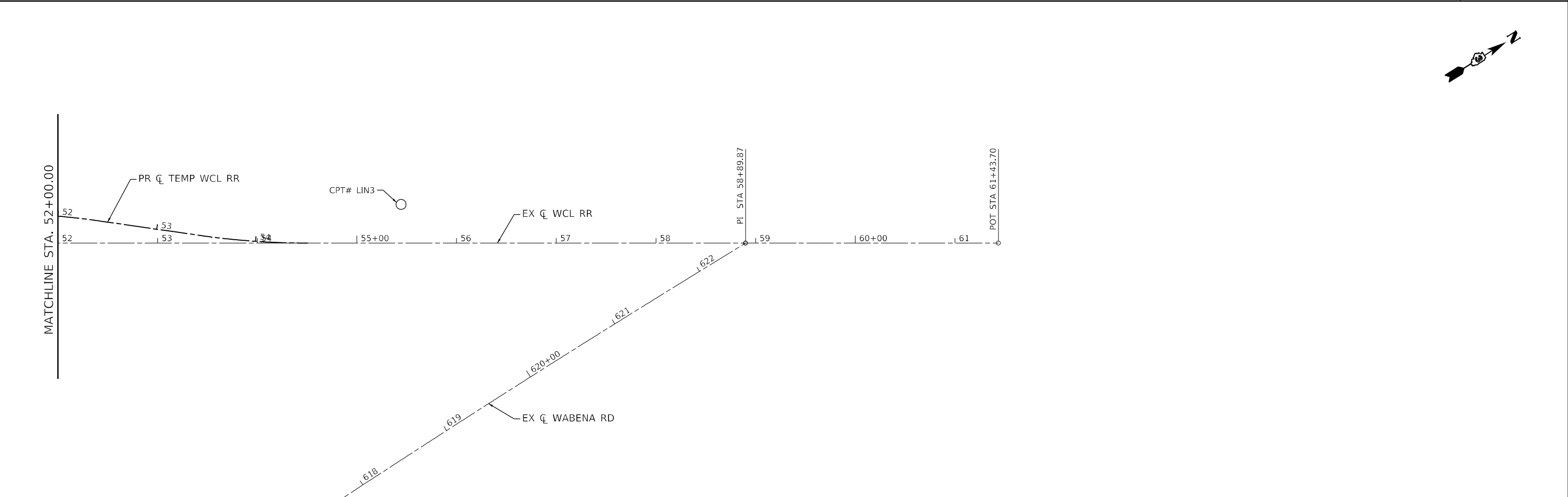
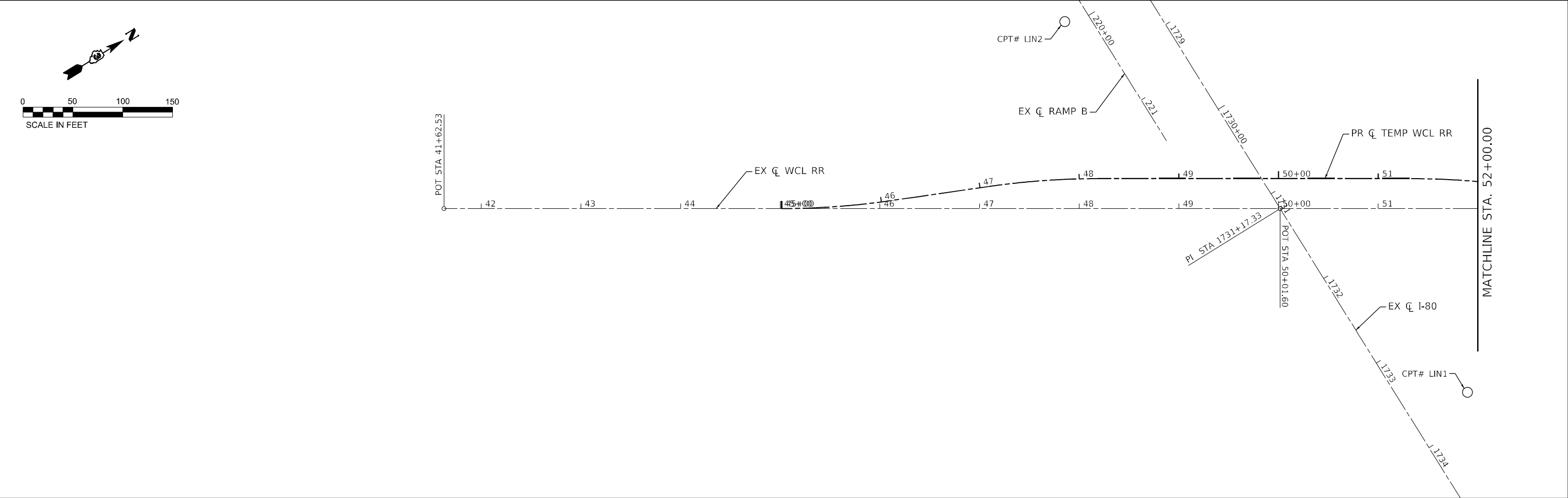
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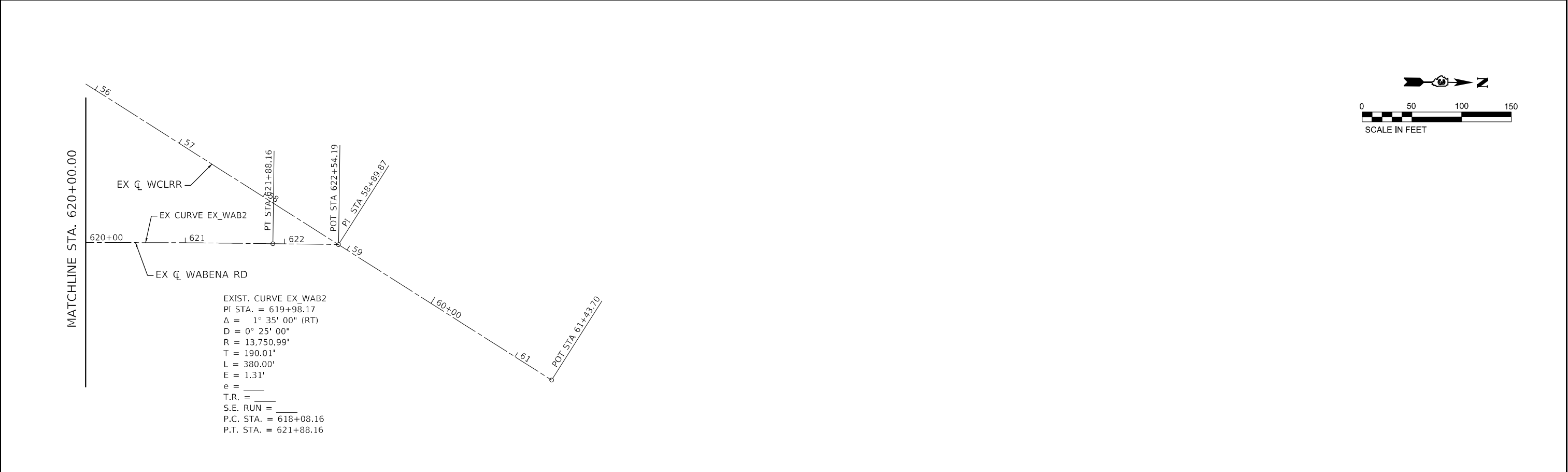
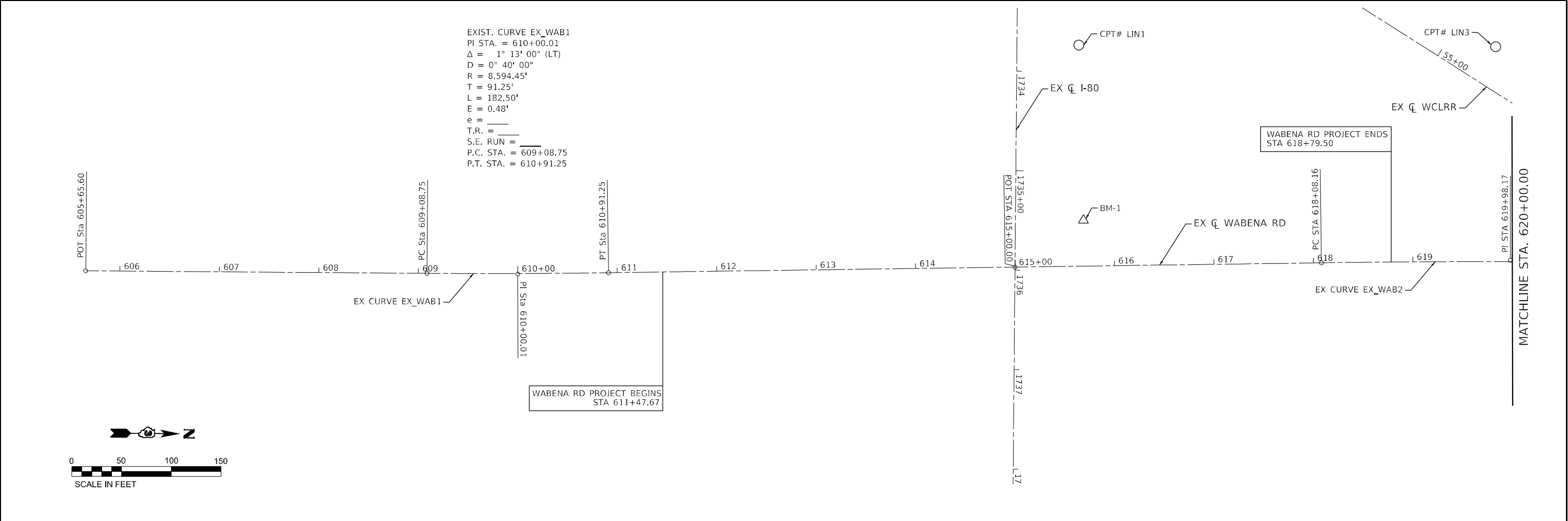
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**W.C. RAILROAD OVER F.A.I. ROUTE 80
ALIGNMENT, TIES AND BENCHMARKS**

SCALE: 1"=50' SHEET 1 OF 4 SHEETS STA. 1705+00.00 TO STA. 1750+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	(32, 47-4)VB, HBR-3	GRUNDY/KENDALL	143	17
CONTRACT NO. 66295				
ILLINOIS				FED. AID PROJECT





CONTROL POINTS						
CONTROL POINT #	NORTHING	EASTING	ELEVATION	STATION	OFFSET	DESCRIPTION
LIN1	1746799.154	1003626.933	611.051	1733+73.16	62.18 LT	⅝" REBAR W/ CAP SET NORTH OF I-80
LIN2	1746634.861	1003103.013	609.381	1728+43.95	84.32 RT	⅝" REBAR W/ CAP SET SOUTH OF I-80
LIN3	1747217.934	1003610.802	633.123	55+44.30	38.88 LT	⅝" REBAR W/ CAP SET WEST OF RAILROAD

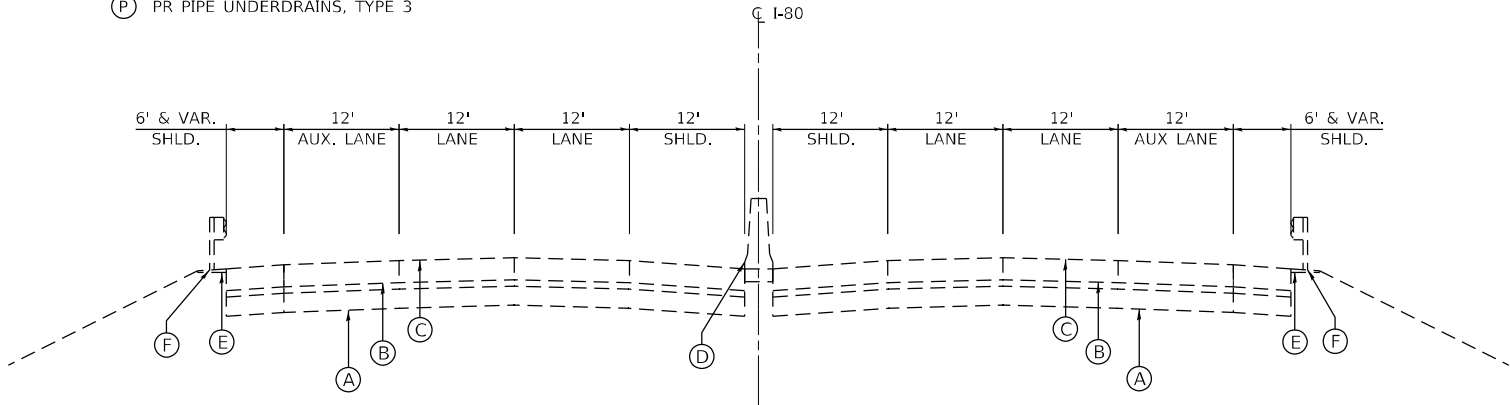
ALIGNMENT COORDINATES				
	ALIGNMENT	STATION	NORTHING	EASTING
POT	WCL RR	41+62.53	1746001.493	1002954.236
POT	TEMP WCL RR	50+01.60	1746743.354	1003347.394
POT	WCL RR	50+01.60	1746728.368	1003373.382
POT	WCL RR	61+43.70	1747717.759	1003943.906
POT	I-80	1705+00.00	1746639.972	1000757.549
PI	I-80	1731+17.33	1746728.368	1003373.382
PI	I-80	1735+96.90	1746744.565	1003852.683
POT	I-80	1750+00.00	1746791.952	1005254.982
POT	WABENA RD	605+65.60	1745811.230	1003896.296
PC	WABENA RD	609+08.75	1746154.168	1003884.174
PI	WABENA RD	610+00.01	1746245.365	1003880.951
PT	WABENA RD	610+91.25	1746336.473	1003875.792
POT	WABENA RD	615+00.00	1746744.565	1003852.683
PC	WABENA RD	618+08.16	1747052.230	1003835.261
PI	WABENA RD	619+98.17	1747241.938	1003824.519
PT	WABENA RD	621+88.16	1747431.871	1003819.022
POT	WABENA RD	622+54.19	1747497.875	1003817.112

CURVE DATA								
CURVE NO.	CURVE NAME	CENTERLINE	PC		PI		PT	
			NORTH	EAST	NORTH	EAST	NORTH	EAST
TEMP WCL RR CURVE-1	PROP. CURVE PTEMPRUNAROUN_1	TEMP WCL RR	1746294.768	1003123.350	1746342.350	1003150.788	1746393.366	1003171.142
TEMP WCL RR CURVE-2	PROP. CURVE PTEMPRUNAROUN_4	TEMP WCL RR	1746486.246	1003208.199	1746537.262	1003228.552	1746584.844	1003255.990
TEMP WCL RR CURVE-3	PROP. CURVE PTEMPRUNAROUN_9	TEMP WCL RR	1746857.319	1003413.110	1746904.901	1003440.548	1746948.072	1003474.506
TEMP WCL RR CURVE-4	PROP. CURVE PTEMPRUNAROUN_12	TEMP WCL RR	1747026.670	1003536.331	1747069.841	1003570.290	1747117.423	1003597.727
EX CURVE EX_WAB1	EXIST. CURVE EX_WAB1	WABENA RD	1746154.168	1003884.174	1746245.365	1003880.951	1746336.473	1003875.792
EX CURVE EX_WAB2	EXIST. CURVE EX_WAB2	WABENA RD	1747052.230	1003835.261	1747241.938	1003824.519	1747431.871	1003819.022

BENCHMARK LIST						
BM #	NORTHING	EASTING	ELEVATION	STATION	OFFSET	DESCRIPTION
BM 1	1746811.279	1003802.684	615.462	1735+49.18	68.36 LT	CHISELED SQUARE ON CENTER OF WEST HEADWALL OF CULVERT UNDER WABENA RD ON NORTH SIDE OF I-80
BM 2	1746783.225	1003079.229	609.798	1728+25.19	64.76 LT	SOUTH BOLT OF 1ST LARGE LIGHT TOWER WEST OF RR BRIDGE ON NORTH SIDE OF I-80

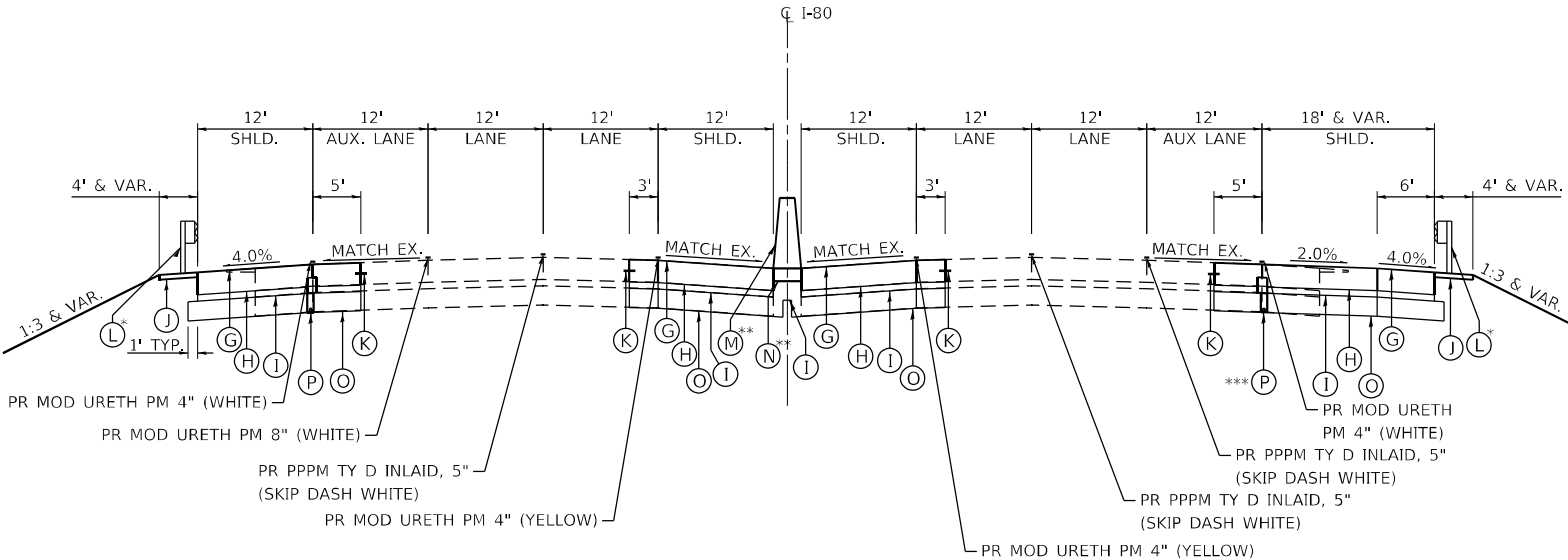
LEGEND

- (A) EX SUB-BASE MATL., 12"
- (B) EX HMA/BAM STABILIZED SUBBASE, 6"
- (C) EX CONT. REINFORCED PCC PAVEMENT 13¾"
- (D) EX CONCRETE BARRIER
- (E) EX AGG WEDGE SHOULDER, TY B
- (F) EX GUARDRAIL
- (G) PR CONT. REINFORCED PCC PAVEMENT, 14"
- (H) PR STABILIZED SUBBASE - HMA, 4"
- (I) PR AGG SUBGRADE IMPROVEMENT, 12"
- (J) PR HMA STABILIZATION 6" AT SPBGR
- (K) PR TIE BARS - INCIDENTAL TO PR PCC PVMT
- (L) PR GUARDRAIL
- (M) PR CONC BARRIER TRANSITION
- (N) PR CONC BARRIER BASE
- (O) PR GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
- (P) PR PIPE UNDERDRAINS, TYPE 3



EXISTING TYPICAL SECTION

I-80 UNDER WCL RR
(LOOKING EAST)
STA 1728+98.47 TO 1734+32.62 RT
STA 1731+02.18 TO 1734+75.64 LT



PROPOSED TYPICAL SECTION

*LIMITS OF PR GUARDRAIL
STA 1728+11.76 TO STA 1735+98.40 RT
STA 1731+77.73 TO STA 1734+53.64 LT

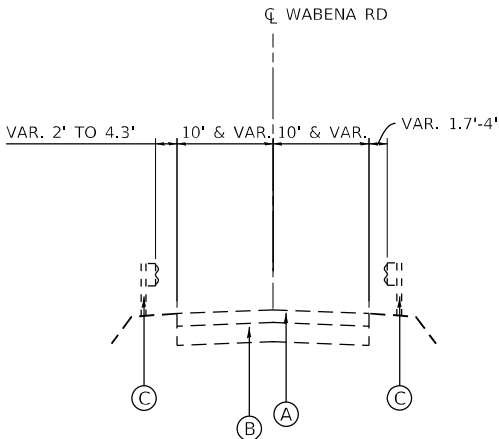
** LIMITS OF PR CONC BARRIER TRANSITION
STA 1730+57.29 TO STA 1731+44.16

I-80 UNDER WCL RR
(LOOKING EAST)
STA 1728+98.47 TO 1734+32.62 RT
STA 1731+02.18 TO 1734+75.64 LT

***LIMITS OF PR UNDERDRAINS
STA 1728+98.47 TO 1731+32.62

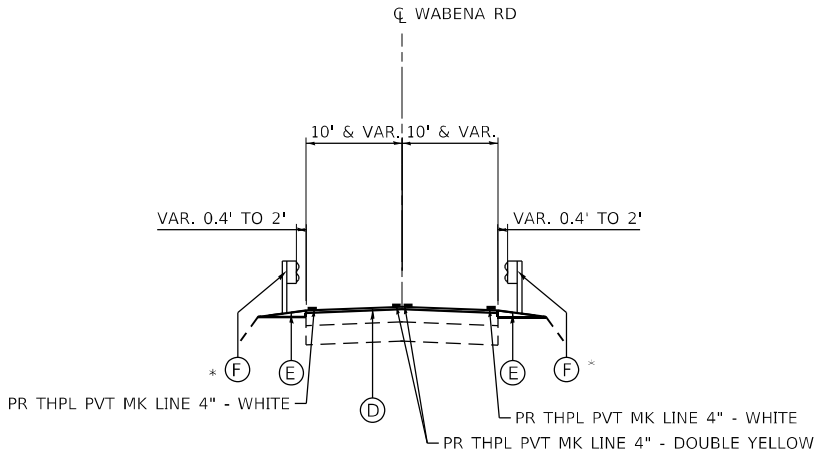
LEGEND

- (A) EXISTING HMA PAVEMENT, 8"
- (B) EXISTING AGGREGATE SUBGRADE IMPROVEMENT, 12"
- (C) EXISTING GUARDRAIL
- (D) PROPOSED HMA BUTT JOINT
PROPOSED HMA SC IL-9.5 D N50, 1.5"
- (E) PROPOSED AGGREGATE WEDGE SHOULDERS, TYPE B
- (F) PROPOSED STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FT POSTS



EXISTING TYPICAL SECTION

WABENA RD
LOOKING NORTH
STA 613+69.62 TO STA 613+99.62
STA 616+00.37 TO STA 616+30.38



PROPOSED TYPICAL SECTION

* LIMITS OF PR GUARDRAIL
STA 611+87.95 TO STA 614+03.06 RT
STA 612+13.58 TO STA 614+03.35 LT
STA 615+96.35 TO STA 618+23.97 RT
STA 615+96.90 TO STA 618+36.98 LT

WABENA RD
LOOKING NORTH
STA 613+69.62 TO STA 613+99.62
STA 616+00.37 TO STA 616+30.38



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DATE -	1/2025

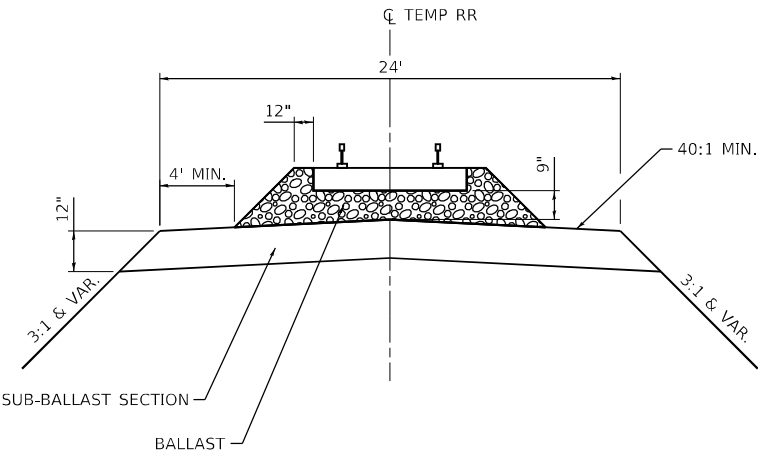
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

W.C. RAILROAD OVER F.A.I. ROUTE 80
WABENA RD & I-80 TYPICAL SECTIONS

SCALE: N.T.S. SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	(32, 47-4)VB, HBR-3	GRUNDY/KENDALL	143	21
CONTRACT NO. 66295				
ILLINOIS FED. AID PROJECT				



TEMPORARY RAILROAD TYPICAL SECTION

MAINTENANCE OF TRAFFIC GENERAL NOTES

1. THE MAINTENANCE OF TRAFFIC PLANS SHALL SERVE AS A GUIDE FOR THE SAFE DIVERSION OF TRAFFIC DURING THE 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 PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
2. THE REMOVAL OF ALL TEMPORARY PAVEMENT MARKING TAPE WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT FOR SHORT TERM PAVEMENT MARKING REMOVAL.
3. TEMPORARY PAVEMENT MARKING TAPE, TYPE IV SHALL BE USED FOR ANY SHORT TERM PAVEMENT MARKINGS ON FINAL SURFACES.
4. 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.
5. FOR STABILIZATION, ANY REQUIRED TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF EIGHT SAND BAGS PER BARRICADE.
6. EXISTING SIGNS WITHIN THE LIMITS OF TRAFFIC CONTROL WHICH ARE OBSTRUCTED BY OR OTHERWISE INTERFERED WITH BY CONSTRUCTION OPERATIONS OF DESIGNATED TRAFFIC CONTROL, SHALL BE COVERED OR REMOVED BY THE CONTRACTOR UNLESS SPECIFIED IN THE PLANS OR WHEN DIRECTED BY THE ENGINEER. THIS WORK SHALL BE AS SPECIFIED IN ARTICLE 107.25 OF THE STANDARD SPECIFICATIONS.
7. SEE STRUCTURAL PLANS FOR BRIDGE RECONSTRUCTION INFORMATION.
8. EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH TEMPORARY MARKINGS SHALL BE REMOVED. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT FOR PAVEMENT MARKING REMOVAL - WATER BLASTING.
9. EXISTING RAISED REFLECTIVE PAVEMENT MARKER REFLECTORS THAT CONFLICT WITH THE REVISED TRAFFIC PATTERNS, SHALL BE REMOVED FROM THE EXISTING CASTINGS LOCATED IN THE PAVEMENT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL.
- 10.CHANGEABLE MESSAGE BOARDS WILL BE PLACED 2 WEEKS PRIOR TO START OF WORK, AT LOCATIONS DETERMINED BY THE ENGINEER, FOR ADVANCED WARNING.
- 11.DETOUR PLANS INCLUDED IN THIS CONTRACT SHALL SERVE AS A GUIDE FOR THE DIVERSION OF TRAFFIC DURING 15 MINUTE FULL STOP CLOSURES ALONG WB & EB I-80 REQUIRED TO CONSTRUCT S.N. 032-9006. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR TRAFFIC CONTROL AND PROTECTION (SPECIAL).
- 12.DURING THE 15 MINUTE FULL STOP CLOSURES ALONG WB & EB I-80 REQUIRED TO CONSTRUCT S.N. 032-9006, THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF BRISBIN ROAD AND US ROUTE 6 SHALL BE SET TO YELLOW FLASHING MODE AND FLAGGERS UTILIZED AT THE INTERSECTION FOR THE DURATION OF THE FULL CLOSURE TO AVOID TRAFFIC QUEUEING ALONG BRISBIN ROAD. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR TRAFFIC CONTROL AND PROTECTION (SPECIAL).
- 13.ALL DRUMS, VERTICAL PANELS, AND BARRICADES ADJACENT TO THE EDGE OF THE TRAVELED WAY SHALL BE EQUIPPED WITH MONO-DIRECTIONAL STEADY BURNING LIGHTS.
- 14.ALL SIGNS DESIGNATED AS ORANGE SHALL BE CONSTRUCTED OF FLUORESCENT ORANGE SHEETING WITH BLACK LETTERING.

SUGGESTED SEQUENCE OF OPERATIONS

STAGE 1

1. INSTALL TRAFFIC CONTROL DEVICES AND TEMPORARY PAVEMENT MARKINGS AS SHOWN IN THE STAGE 1 STAGING PLANS.
2. SHIFT WB & EB I-80 TRAFFIC ONTO THE OUTSIDE SHOULDERS. CLOSE THE WB & EB INSIDE SHOULDERS AND LANE 1 AS SHOWN IN THE STAGE 1 STAGING PLANS.
3. CLOSE WABENA ROAD TO TRAFFIC AT S.N. 032-0065 AS SHOWN IN THE WABENA ROAD CLOSURE PLAN.
4. CONSTRUCT TEMPORARY MEDIAN PIER AND TEMPORARY ABUTMENTS FOR TEMPORARY RUNAROUND STRUCTURE AS SHOWN IN THE STAGE 1 STAGING AND STRUCTURAL PLANS.
5. DURING THE ALLOWABLE TEMPORARY LANE CLOSURE HOURS FOR I-80 LISTED IN THE KEEPING ROADS OPEN TO TRAFFIC SPECIAL PROVISION, UTILIZE FULL STOP 15 MIN CLOSURES TO ERECT S.N. 032-9906 BEAMS AT LOCATIONS SHOWN IN THE STRUCTURAL PLANS.
6. DURING THE ALLOWABLE TEMPORARY NIGHTLY LANE CLOSURE HOURS FOR I-80 LISTED IN THE KEEPING ROADS OPEN TO TRAFFIC SPECIAL PROVISION, INSTALL PROTECTIVE SHIELDING UNDERNEATH S.N. 032-0065 AT LOCATIONS SHOWN IN THE STRUCTURAL PLANS.
7. CONSTRUCT TEMPORARY PAVEMENT AT LOCATIONS SHOWN IN THE STAGING PLANS.

STAGE 2

1. BEFORE BEGINNING ANY WORK ON REMOVAL OF THE EXISTING STRUCTURE, AND ONCE CONSTRUCTION OF TEMPORARY RUNAROUND STRUCTURE IS COMPLETED, TRAIN TRAFFIC SHALL BE SHIFTED ONTO THE TEMPORARY RUNAROUND STRUCTURE AS SHOWN ON THE PLANS.
2. INSTALL TRAFFIC CONTROL DEVICES AND TEMPORARY PAVEMENT MARKINGS AS SHOWN IN THE STAGE 2 STAGING PLANS.
3. SHIFT WB & EB I-80 TRAFFIC ONTO THE OUTSIDE SHOULDERS. CLOSE THE WB & EB INSIDE SHOULDERS AND LANE 1 AS SHOWN IN THE STAGE 2 STAGING PLANS.
4. PERFORM MEDIAN PIER RECONSTRUCTION AS SHOWN IN THE STAGE 2 STAGING AND STRUCTURAL PLANS.
5. PERFORM ROADWAY AND STRUCTURAL IMPROVEMENTS ON WABENA ROAD AND S.N. 032-0065.
6. REMOVE EXISTING PAVEMENT AND MEDIAN CONCRETE BARRIER WALL AND CONSTRUCT PROPOSED PAVEMENT AND MEDIAN CONCRETE BARRIER TRANSITION AT LOCATIONS SHOWN IN THE STAGING AND ROADWAY PLANS.

STAGE 3

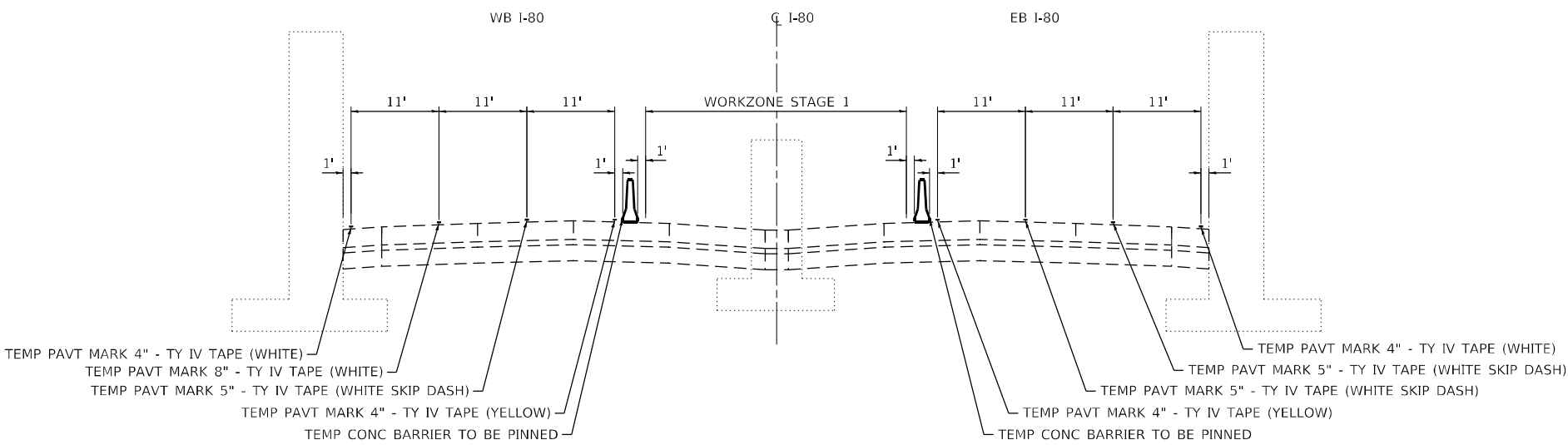
1. INSTALL TRAFFIC CONTROL DEVICES AND TEMPORARY PAVEMENT MARKINGS AS SHOWN IN THE STAGE 3 STAGING PLANS.
2. SHIFT WB & EB I-80 TRAFFIC ONTO THE INSIDE SHOULDERS. CLOSE THE WB & EB OUTSIDE SHOULDERS AND LANE 3 AS SHOWN IN THE STAGE 3 STAGING PLANS.
3. PERFORM OUTSIDE ABUTMENT RECONSTRUCTION AS SHOWN IN THE STAGE 3 STAGING AND STRUCTURAL PLANS.
4. CONTINUE ROADWAY AND STRUCTURAL IMPROVEMENTS ON WABENA ROAD AND S.N. 032-0065.
5. DURING THE ALLOWABLE TEMPORARY LANE CLOSURE HOURS FOR I-80 LISTED IN THE KEEPING ROADS OPEN TO TRAFFIC SPECIAL PROVISION, UTILIZE FULL STOP 15 MIN CLOSURES TO ERECT S.N. 032-9906 AT LOCATIONS SHOWN IN THE STRUCTURAL PLANS.
6. REMOVE EXISTING PAVEMENT AND GUARDRAIL AND CONSTRUCT PROPOSED PAVEMENT, PAVEMENT WIDENING, AND GUARDRAIL AT LOCATIONS SHOWN IN THE STAGING AND ROADWAY PLANS.

STAGE 4

1. INSTALL TRAFFIC CONTROL DEVICES AND TEMPORARY PAVEMENT MARKINGS AS SHOWN IN THE STAGE 4 STAGING PLANS.
2. SHIFT WB & EB I-80 TRAFFIC ONTO THE OUTSIDE SHOULDERS. CLOSE THE WB & EB INSIDE SHOULDERS AND LANE 1 AS SHOWN IN THE STAGE 4 STAGING PLANS.
3. REMOVE TEMPORARY MEDIAN PIER AND TEMPORARY ABUTMENTS FOR TEMPORARY RUNAROUND STRUCTURE AS SHOWN IN THE STAGE 4 STAGING AND STRUCTURAL PLANS.
4. REMOVE TEMPORARY PAVEMENT AND CONSTRUCT PROPOSED PAVEMENT AND MEDIAN CONCRETE BARRIER TRANSITION AT LOCATIONS SHOWN IN THE STAGING AND ROADWAY PLANS.
5. DURING THE ALLOWABLE TEMPORARY NIGHTLY LANE CLOSURE HOURS FOR I-80 LISTED IN THE KEEPING ROADS OPEN TO TRAFFIC SPECIAL PROVISION, REMOVE PROTECTIVE SHIELDING UNDERNEATH S.N. 032-0065 AT THE LOCATIONS SHOWN IN THE STRUCTURAL PLANS ONCE THE IMPROVEMENTS AT S.N. 032-0065 ARE COMPLETED.

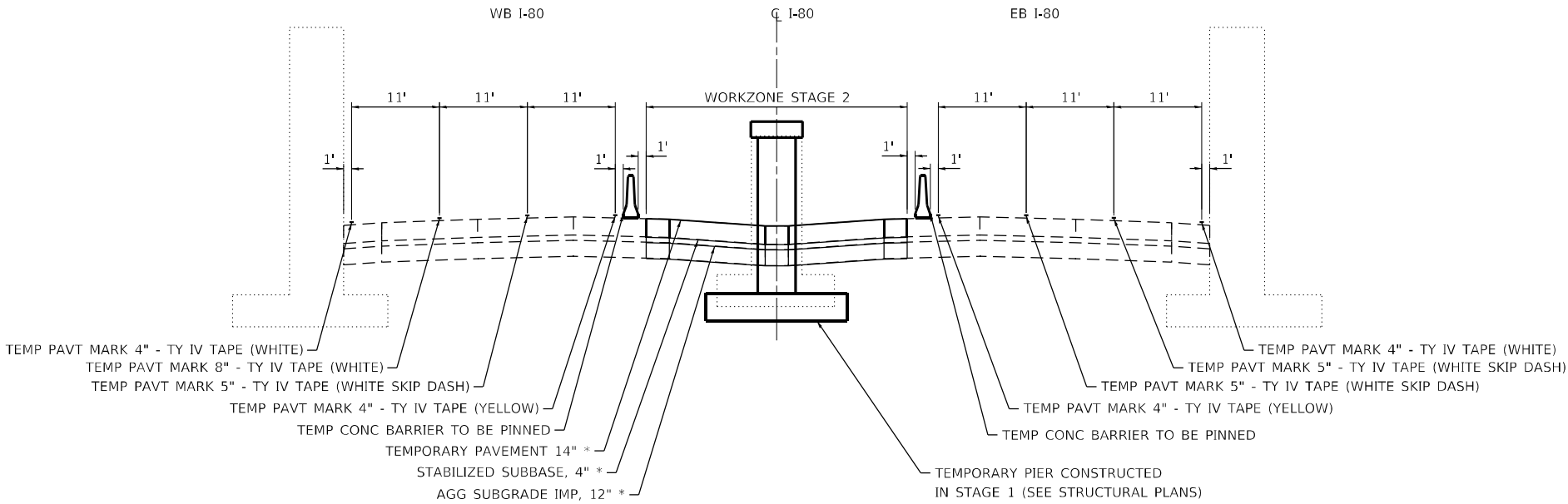
POST-STAGE

1. PLACE PERMANENT PAVEMENT MARKINGS ALONG I-80 & WABENA ROAD AT THE LOCATIONS SHOWN IN THE PLANS UTILIZING APPLICABLE HIGHWAY & DISTRICT STANDARDS DURING THE ALLOWABLE LANE CLOSURE HOURS LISTED IN THE KEEPING ROADS OPEN TO TRAFFIC SPECIAL PROVISION.



STAGE 1 TYPICAL SECTION

I-80 UNDER WCL RR
(LOOKING EAST)



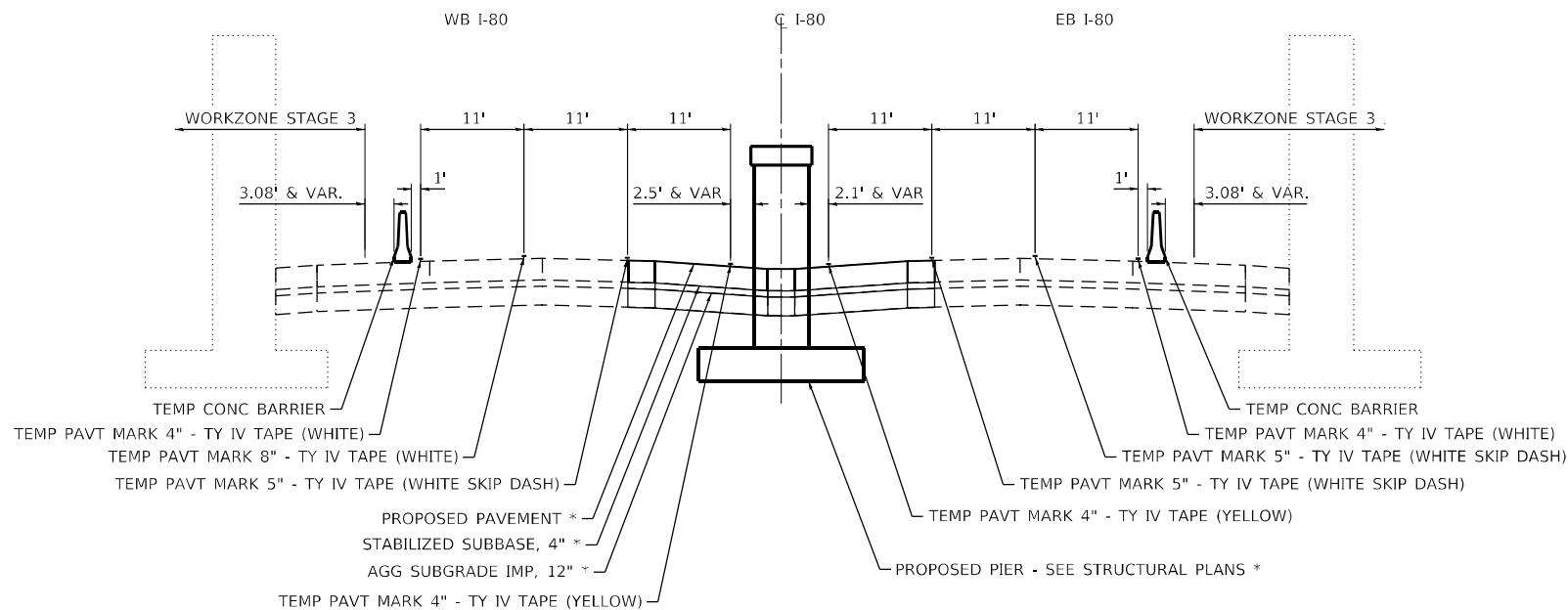
STAGE 2 TYPICAL SECTION

I-80 UNDER WCL RR & WABENA RD
(LOOKING EAST)

*LIMITS OF IMPROVEMENTS

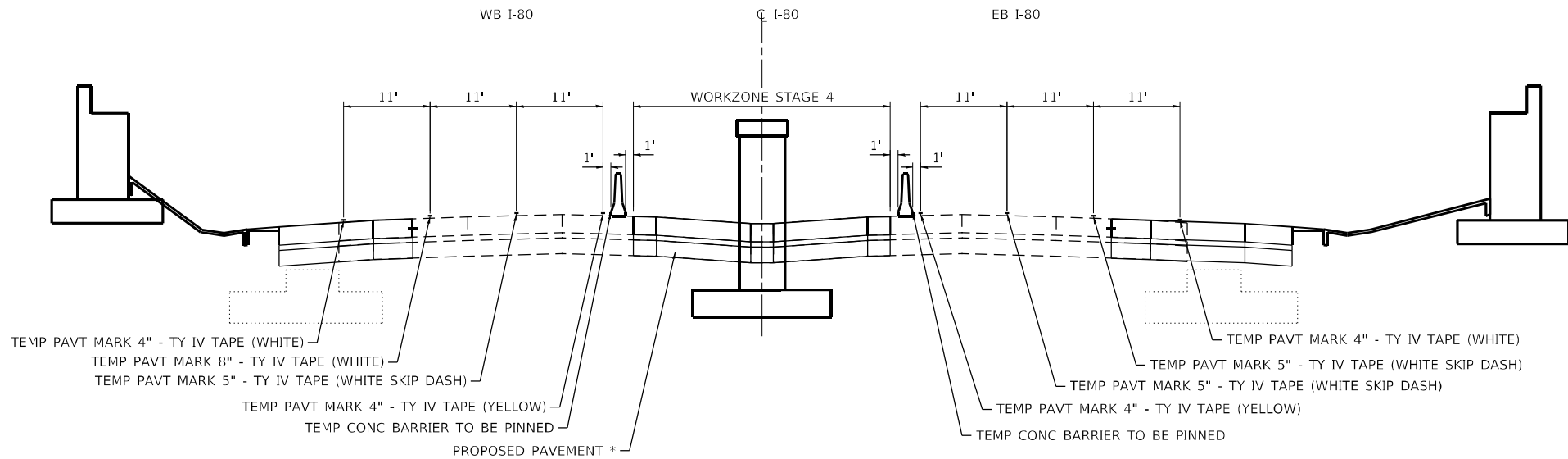
TEMPORARY PAVEMENT
STA 1730+57.29 TO 1731+06.14

TEMPORARY PIER
1730+67.49 TO 1730+96.49



STAGE 3 TYPICAL SECTION

I-80 UNDER WCL RR & WABENA RD
(LOOKING EAST)



STAGE 4 TYPICAL SECTION

I-80 UNDER WCL RR
(LOOKING EAST)

*LIMITS OF IMPROVEMENTS

TEMPORARY PAVEMENT (CONSTRUCTED IN STAGE 2)
STA 1730+57.29 TO 1731+06.14

PERMANENT PAVEMENT (CONSTRUCTED IN STAGE 2)
STA 1731+06.14 TO STA 1731+44.16

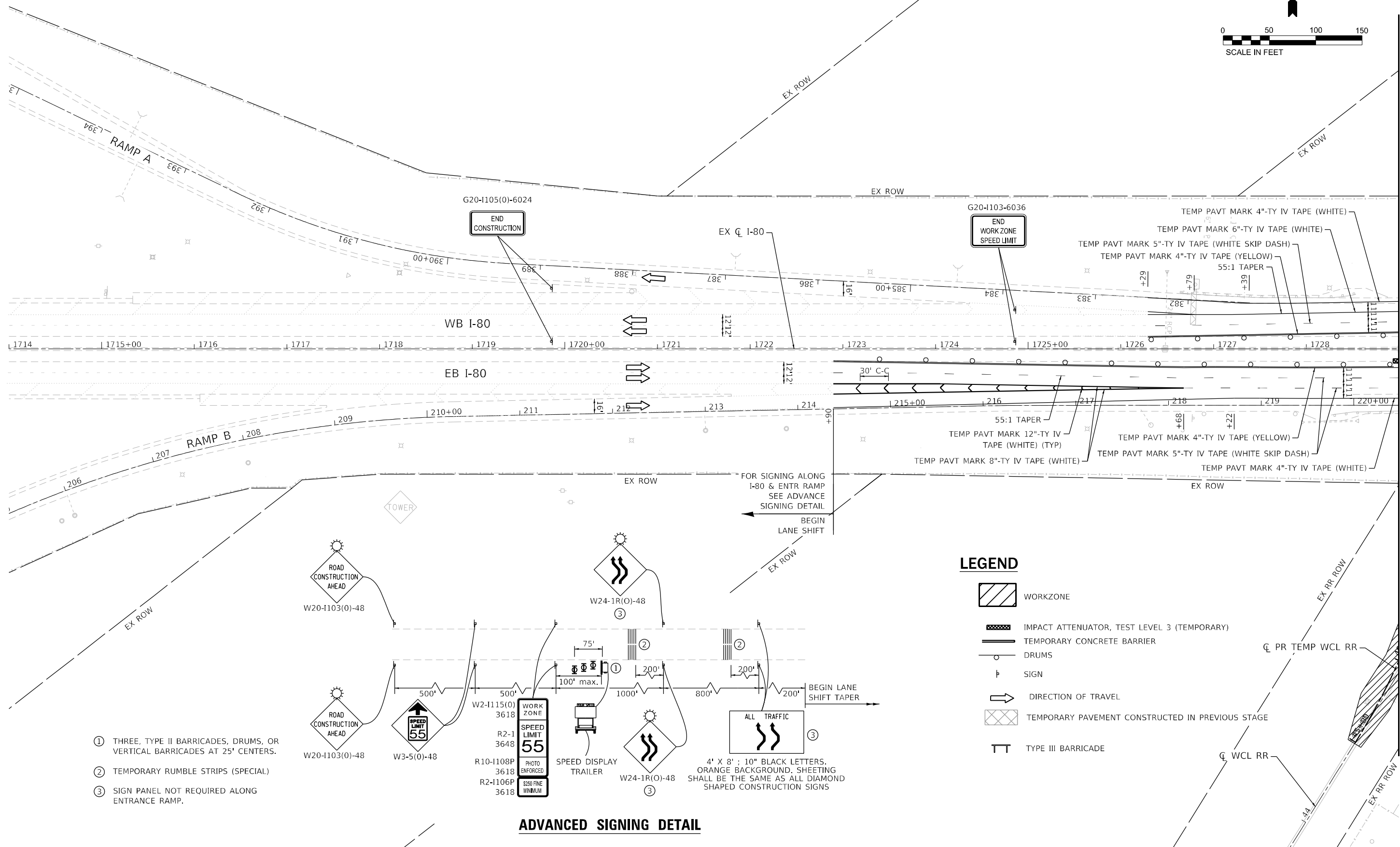
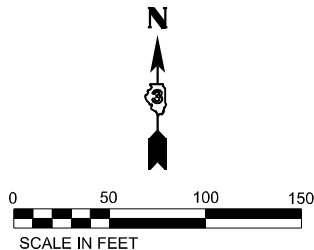
TEMPORARY PIER (CONSTRUCTED IN STAGE 1)
1730+67.49 TO 1730+96.49

PERMANENT PIER (CONSTRUCTED IN STAGE 2)
STA 1731+06.14 TO STA 1731+44.16

*LIMITS OF IMPROVEMENTS

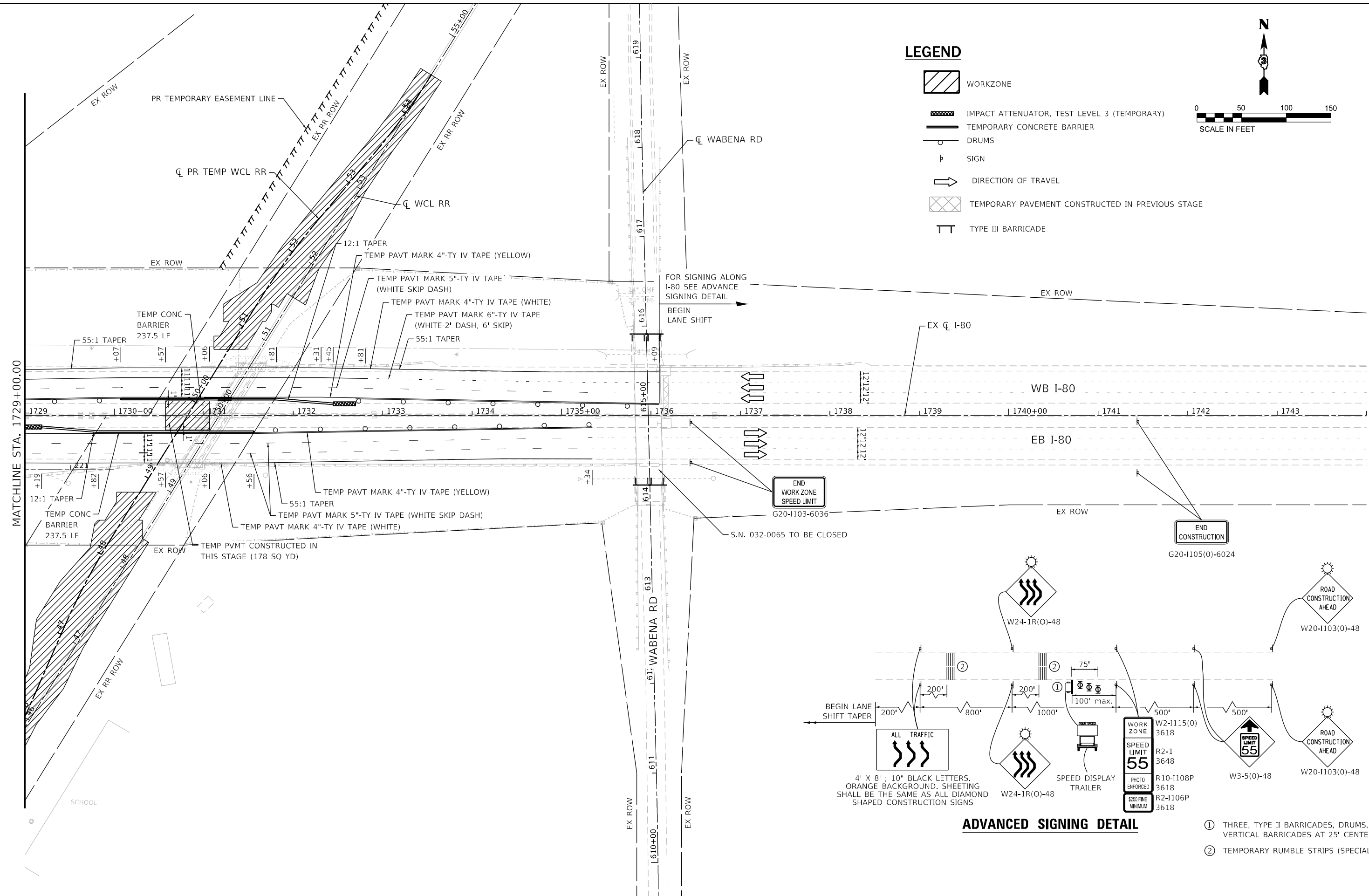
PERMANENT PAVEMENT (CONSTRUCTED IN STAGE 2)
STA 1728+98.47 TO 1734+32.62 RT

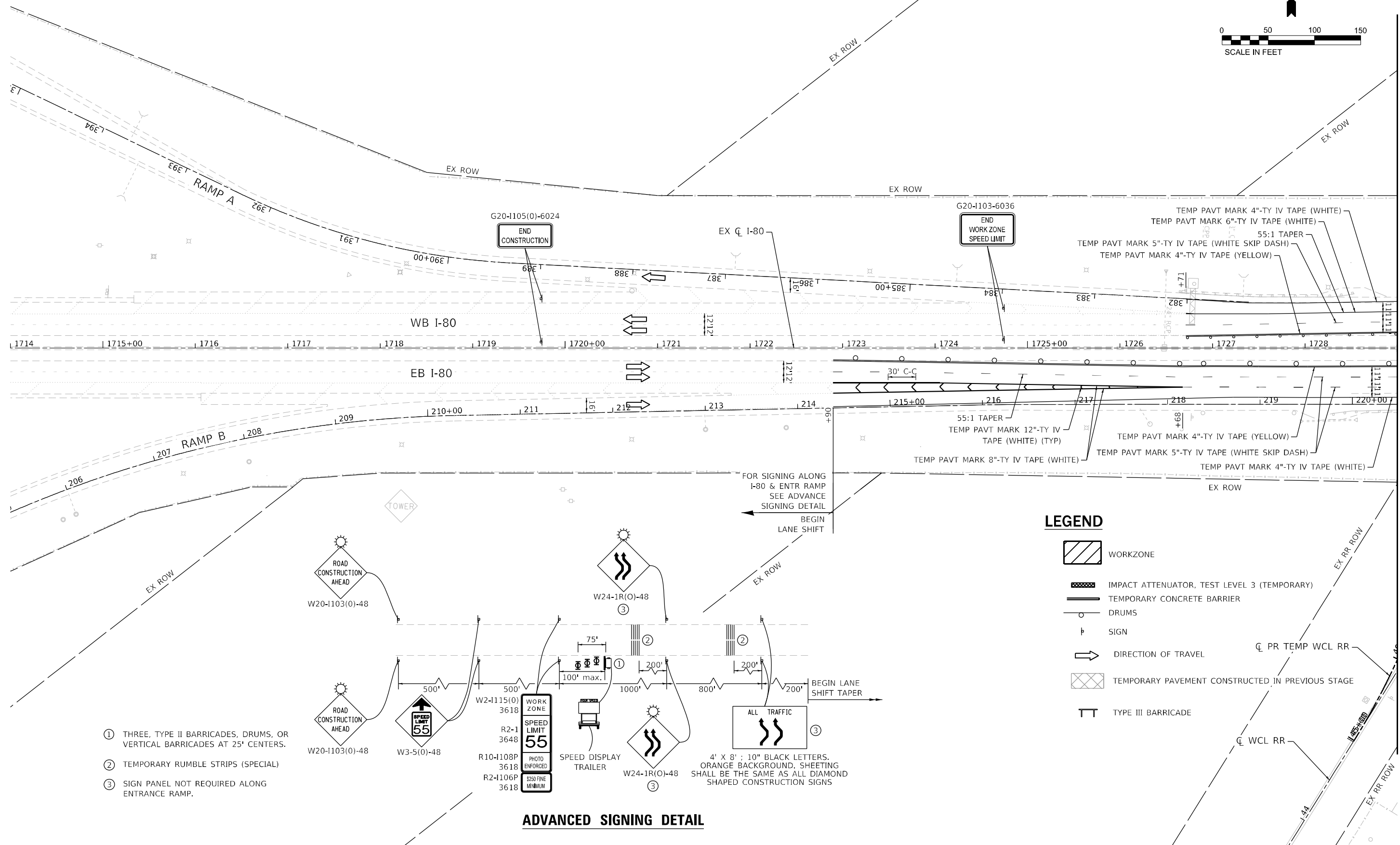
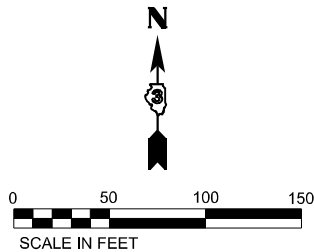
PERMANENT PAVEMENT (CONSTRUCTED IN THIS STAGE)
STA 1731+02.18 TO 1734+74.64 LT



- ① THREE, TYPE II BARRICADES, DRUMS, OR VERTICAL BARRICADES AT 25' CENTERS.
- ② TEMPORARY RUMBLE STRIPS (SPECIAL)
- ③ SIGN PANEL NOT REQUIRED ALONG ENTRANCE RAMP.

ADVANCED SIGNING DETAIL





- ① THREE, TYPE II BARRICADES, DRUMS, OR VERTICAL BARRICADES AT 25' CENTERS.
- ② TEMPORARY RUMBLE STRIPS (SPECIAL)
- ③ SIGN PANEL NOT REQUIRED ALONG ENTRANCE RAMP.

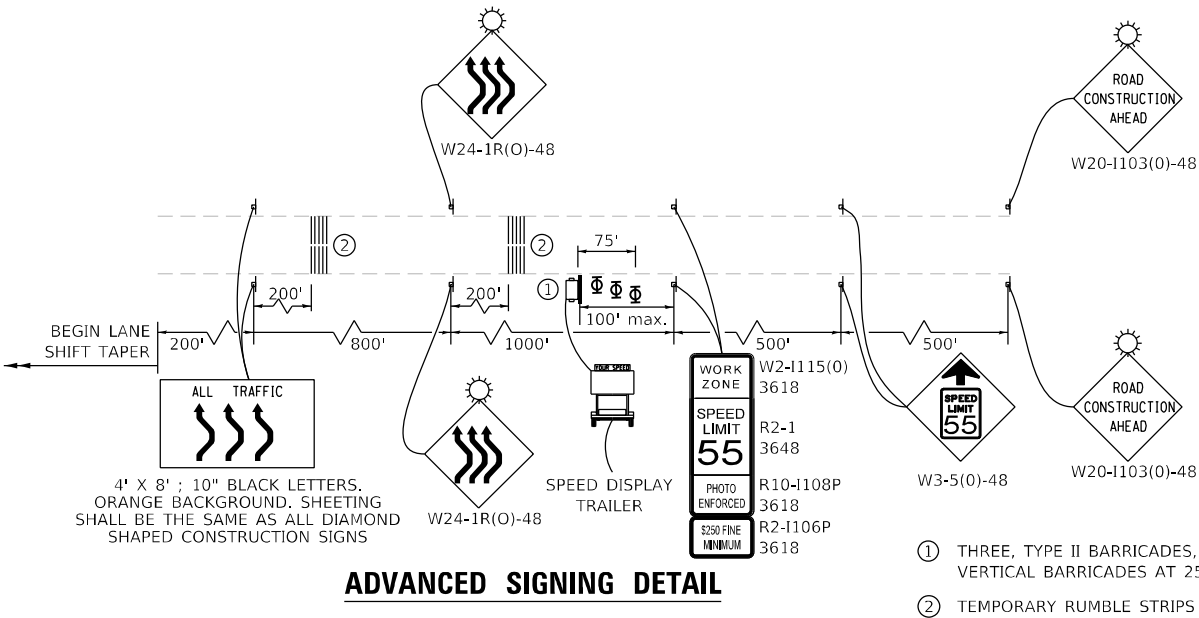
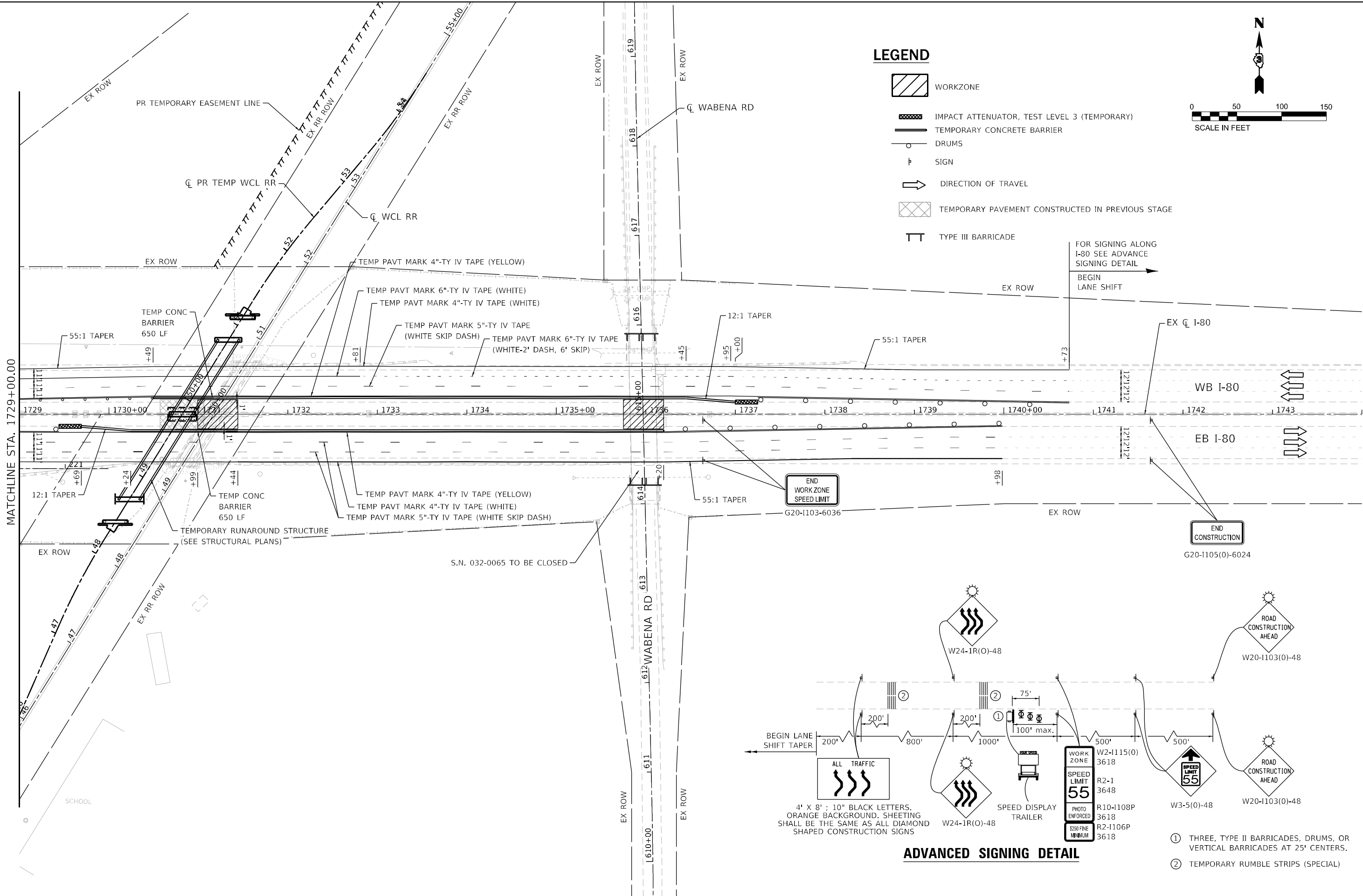
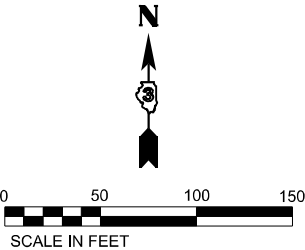
ADVANCED SIGNING DETAIL

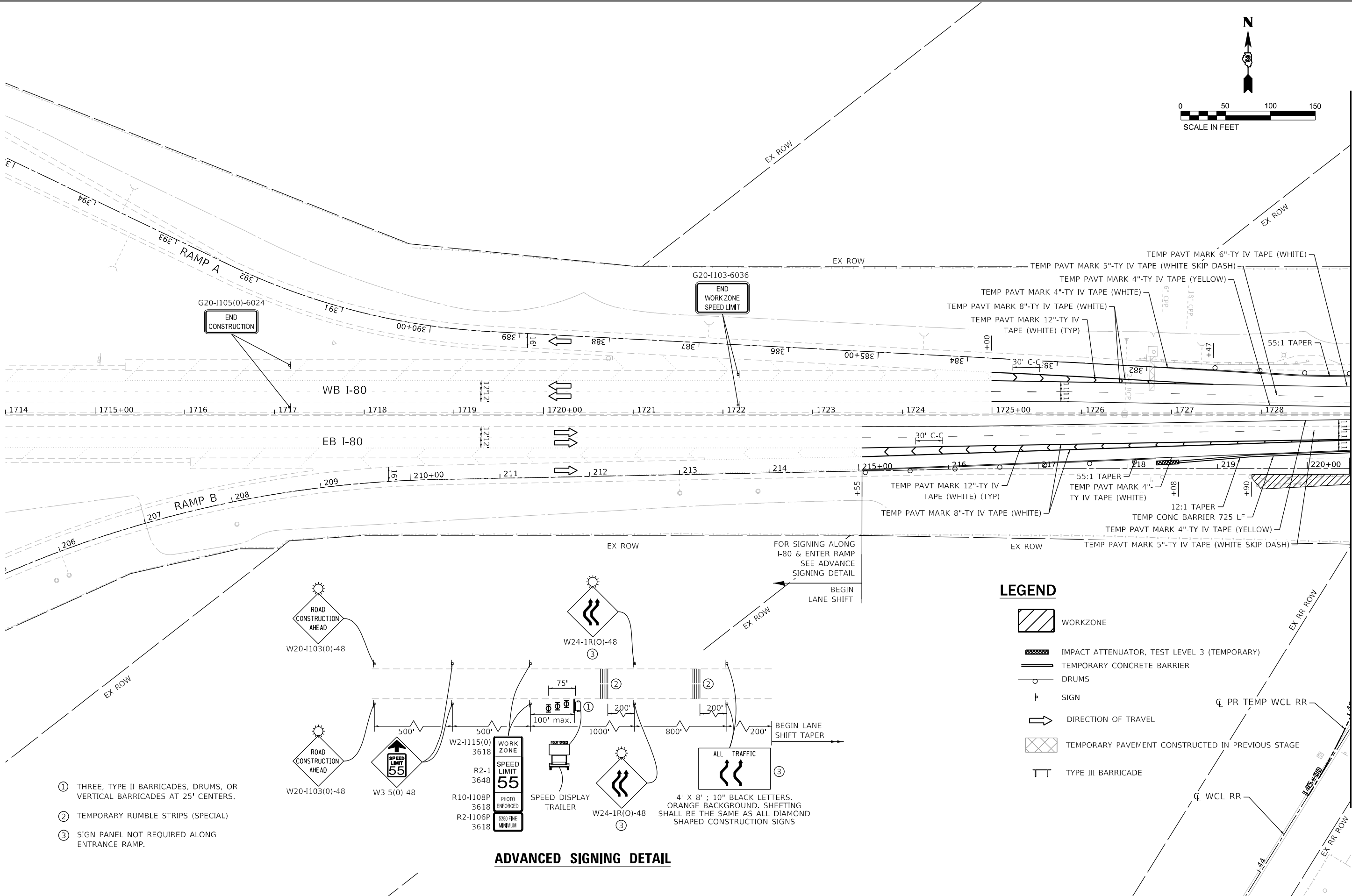
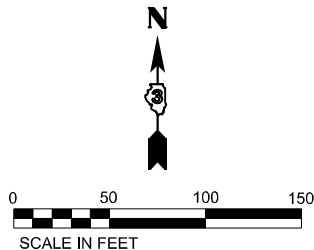
LEGEND

- WORKZONE
- IMPACT ATTENUATOR, TEST LEVEL 3 (TEMPORARY)
- TEMPORARY CONCRETE BARRIER
- DRUMS
- SIGN
- DIRECTION OF TRAVEL
- TEMPORARY PAVEMENT CONSTRUCTED IN PREVIOUS STAGE
- TYPE III BARRICADE

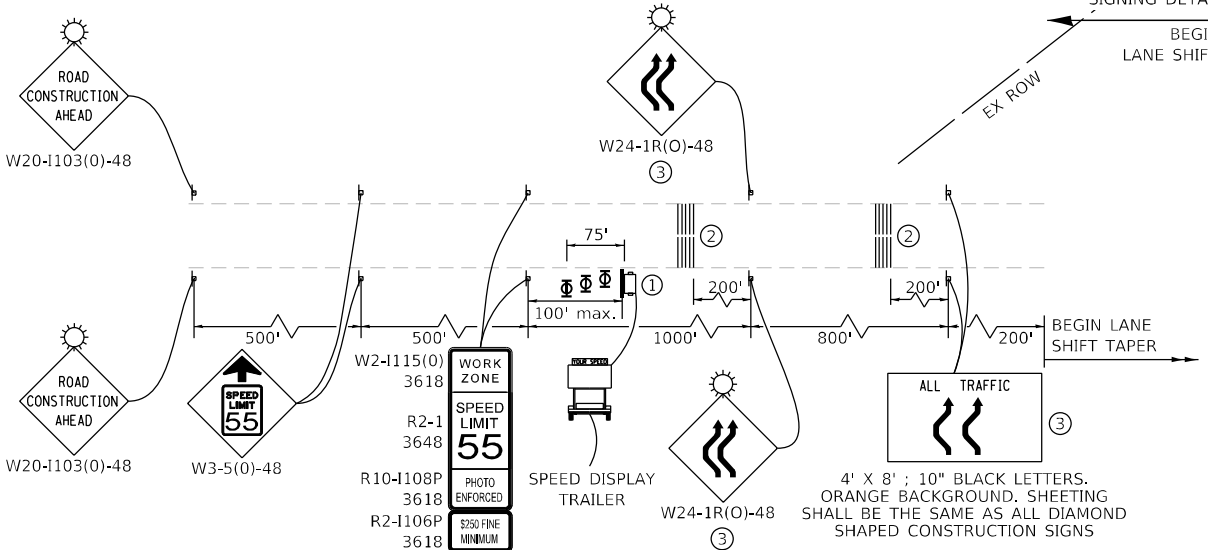
LEGEND

- WORKZONE
- IMPACT ATTENUATOR, TEST LEVEL 3 (TEMPORARY)
- TEMPORARY CONCRETE BARRIER
- DRUMS
- SIGN
- DIRECTION OF TRAVEL
- TEMPORARY PAVEMENT CONSTRUCTED IN PREVIOUS STAGE
- TYPE III BARRICADE





- ① THREE, TYPE II BARRICADES, DRUMS, OR VERTICAL BARRICADES AT 25' CENTERS.
- ② TEMPORARY RUMBLE STRIPS (SPECIAL)
- ③ SIGN PANEL NOT REQUIRED ALONG ENTRANCE RAMP.



ADVANCED SIGNING DETAIL

LEGEND



WORKZONE



IMPACT ATTENUATOR, TEST LEVEL 3 (TEMPORARY)



TEMPORARY CONCRETE BARRIER



DRUMS



SIGN



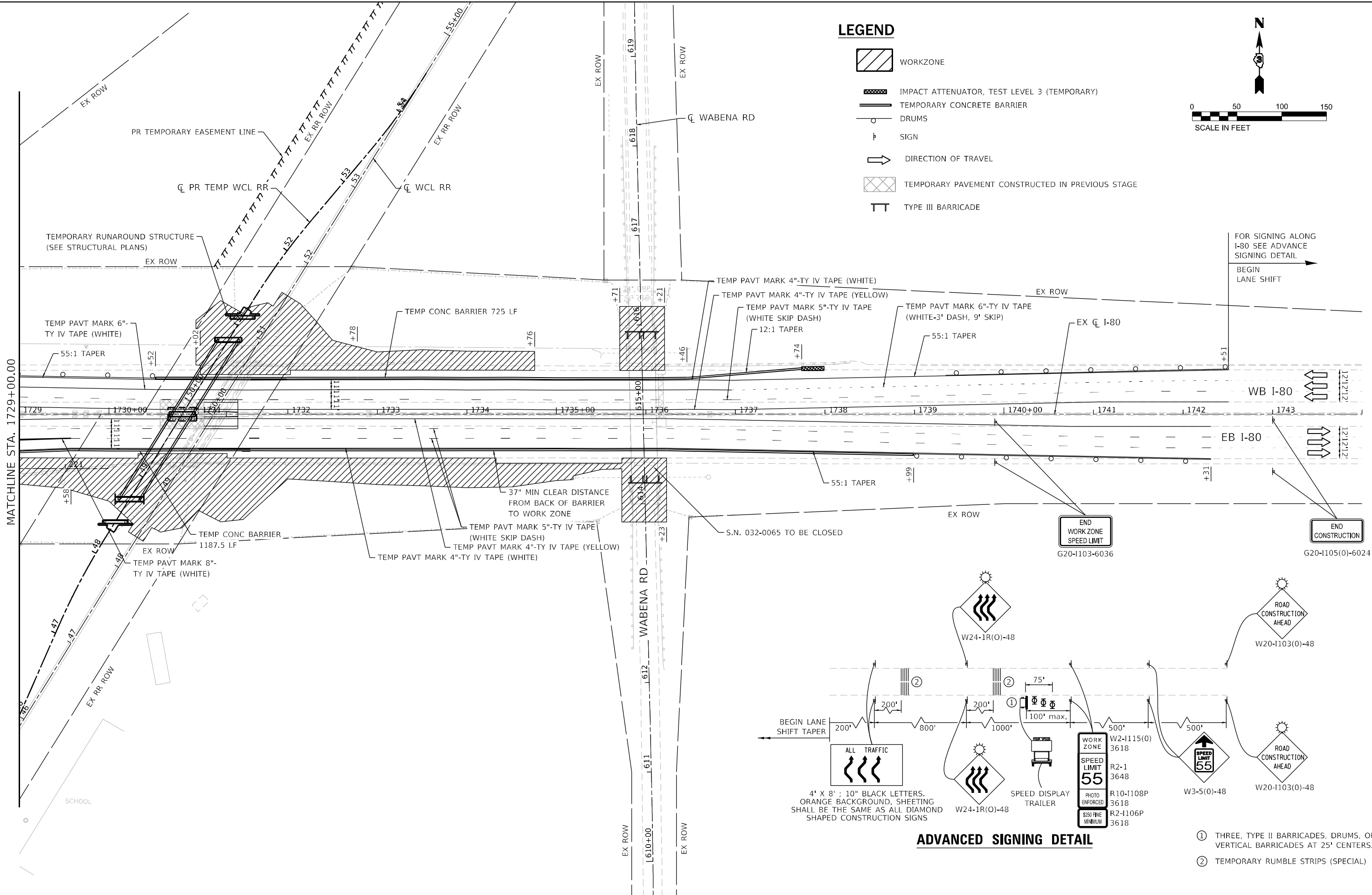
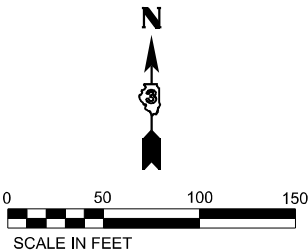
DIRECTION OF TRAVEL



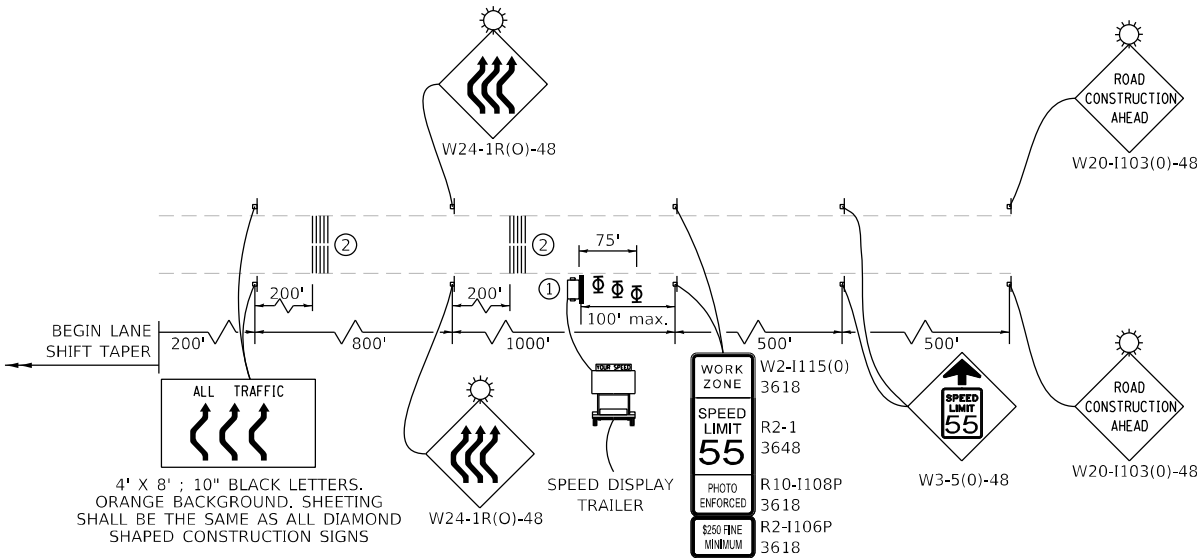
TEMPORARY PAVEMENT CONSTRUCTED IN PREVIOUS STAGE



TYPE III BARRICADE

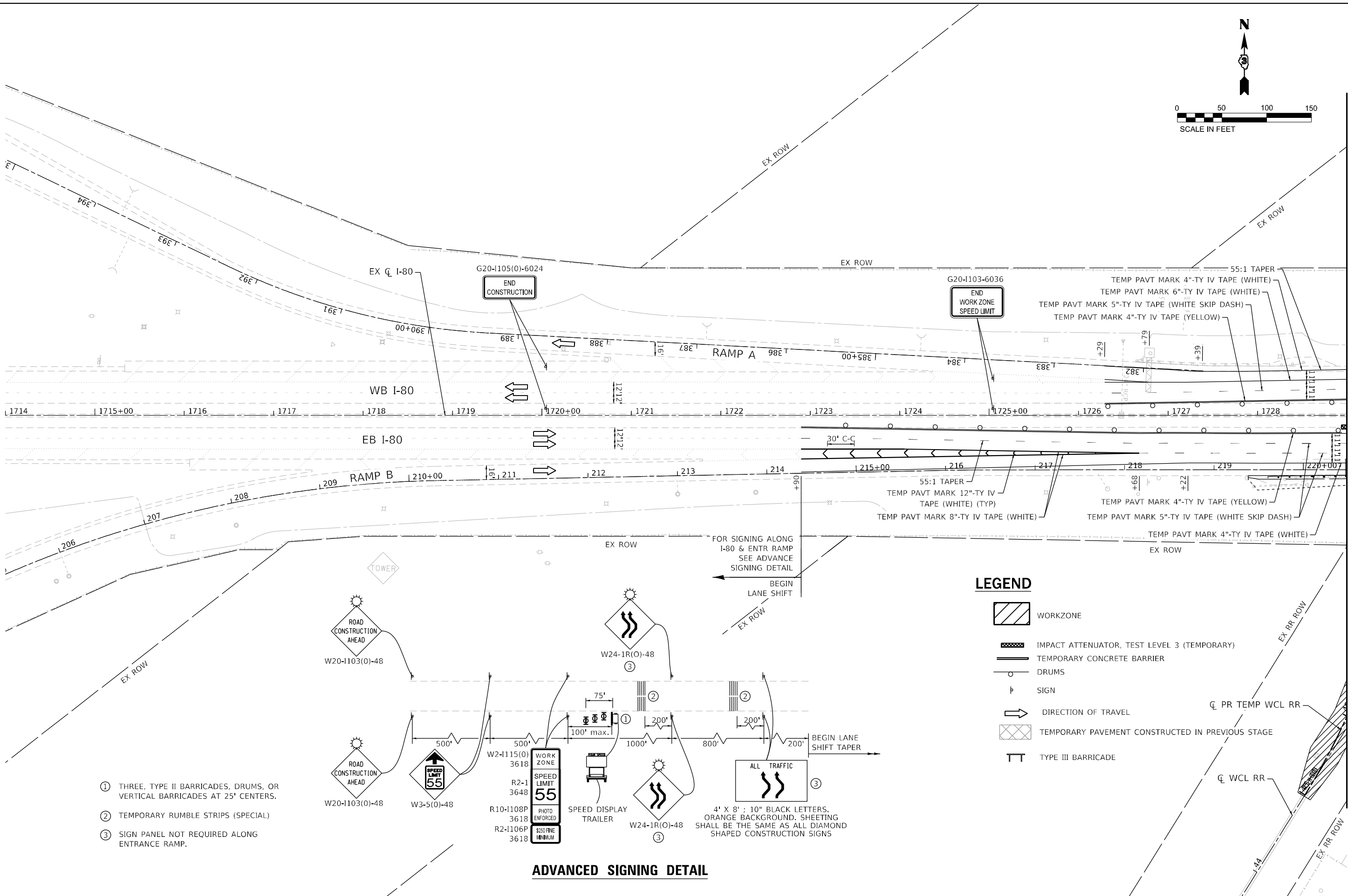
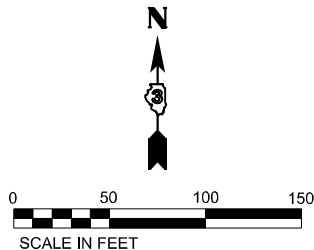


ADVANCED SIGNING DETAIL



- ① THREE, TYPE II BARRICADES, DRUMS, OR VERTICAL BARRICADES AT 25' CENTERS.
- ② TEMPORARY RUMBLE STRIPS (SPECIAL)

	USER NAME = l4nho		DESIGNED - RC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	W.C. RAILROAD OVER F.A.I. ROUTE 80 MAINTENANCE OF TRAFFIC PLAN - STAGE 3		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN - RC		CHECKED - ST	REVISED -		SCALE: 1"=50'		80	(32, 47-4)VB, HBR-3	GRUNDY/KENDALL	143	31
	PLOT SCALE = 100,000' / in.		DATE - 1/2025	REVISED -		SHEET 9 OF 11 SHEETS		CONTRACT NO. 66295				
	PLOT DATE = 1/9/2025					STA. 1729+00.00 TO STA. 1744+00.00		ILLINOIS FED. AID PROJECT				

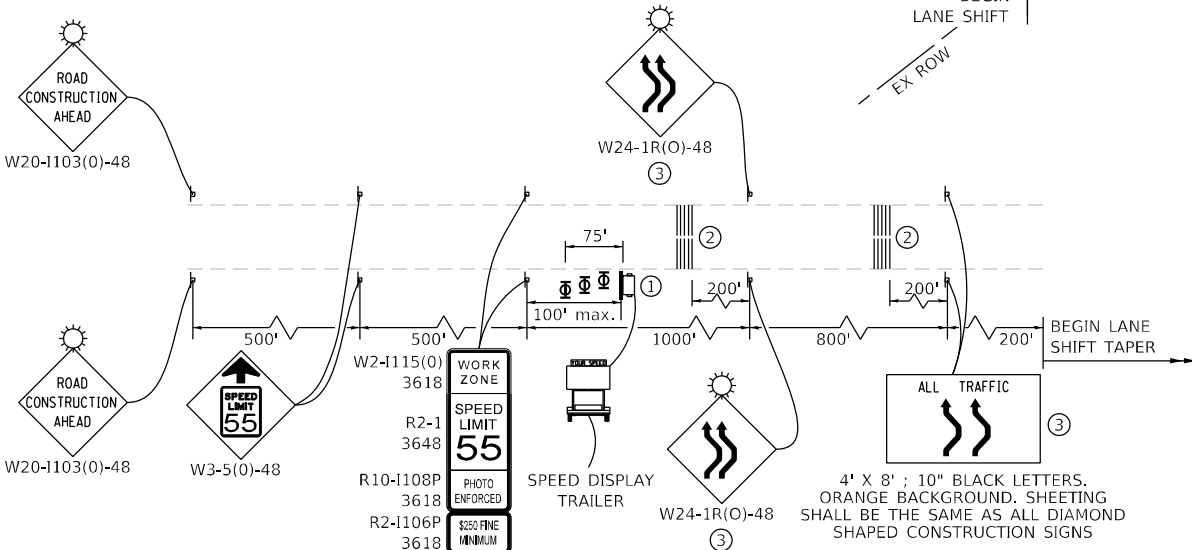


- ① THREE, TYPE II BARRICADES, DRUMS, OR VERTICAL BARRICADES AT 25' CENTERS.
- ② TEMPORARY RUMBLE STRIPS (SPECIAL)
- ③ SIGN PANEL NOT REQUIRED ALONG ENTRANCE RAMP.

LEGEND

- WORKZONE
- IMPACT ATTENUATOR, TEST LEVEL 3 (TEMPORARY)
- TEMPORARY CONCRETE BARRIER
- DRUMS
- SIGN
- DIRECTION OF TRAVEL
- TEMPORARY PAVEMENT CONSTRUCTED IN PREVIOUS STAGE
- TYPE III BARRICADE

ADVANCED SIGNING DETAIL



4' X 8' : 10" BLACK LETTERS.
ORANGE BACKGROUND. SHEETING
SHALL BE THE SAME AS ALL DIAMOND
SHAPED CONSTRUCTION SIGNS

SIGN LEGEND

- 1

DETOUR

M4-8 36X18 (OR)

OR

ALT

M4-1a (BL) 36X18 (SEE NOTE 4)
- 2

EAST

M3-1 (BL) 36X18
- 3

WEST

M3-2 (BL) 36X18
- 4

M6-2R (3021) (OR)
- 5

M5-1R (3021) (OR)
- 5A

M5-2R (3021) (OR)
- 6

M6-1L (3021) (OR)
- 7

M6-1R (3021) (OR)
- 8

M6-3R (3021) (OR)
- 9

M6-3L (3021) (OR)
- 10

M1-1 (BL) 36X36
- 11

DETOUR AHEAD

W20-2-48X48 (OR)
- 12

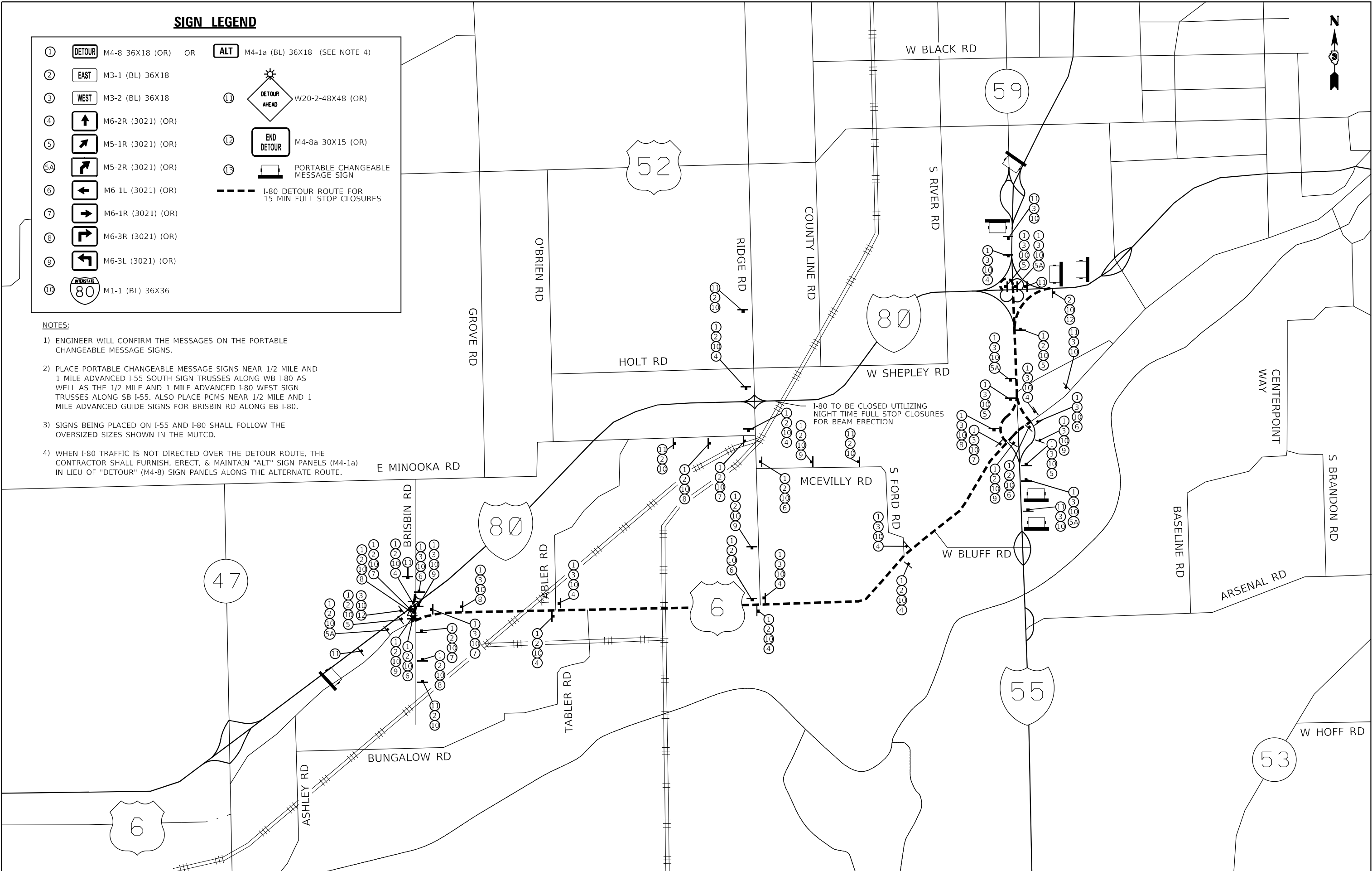
END DETOUR

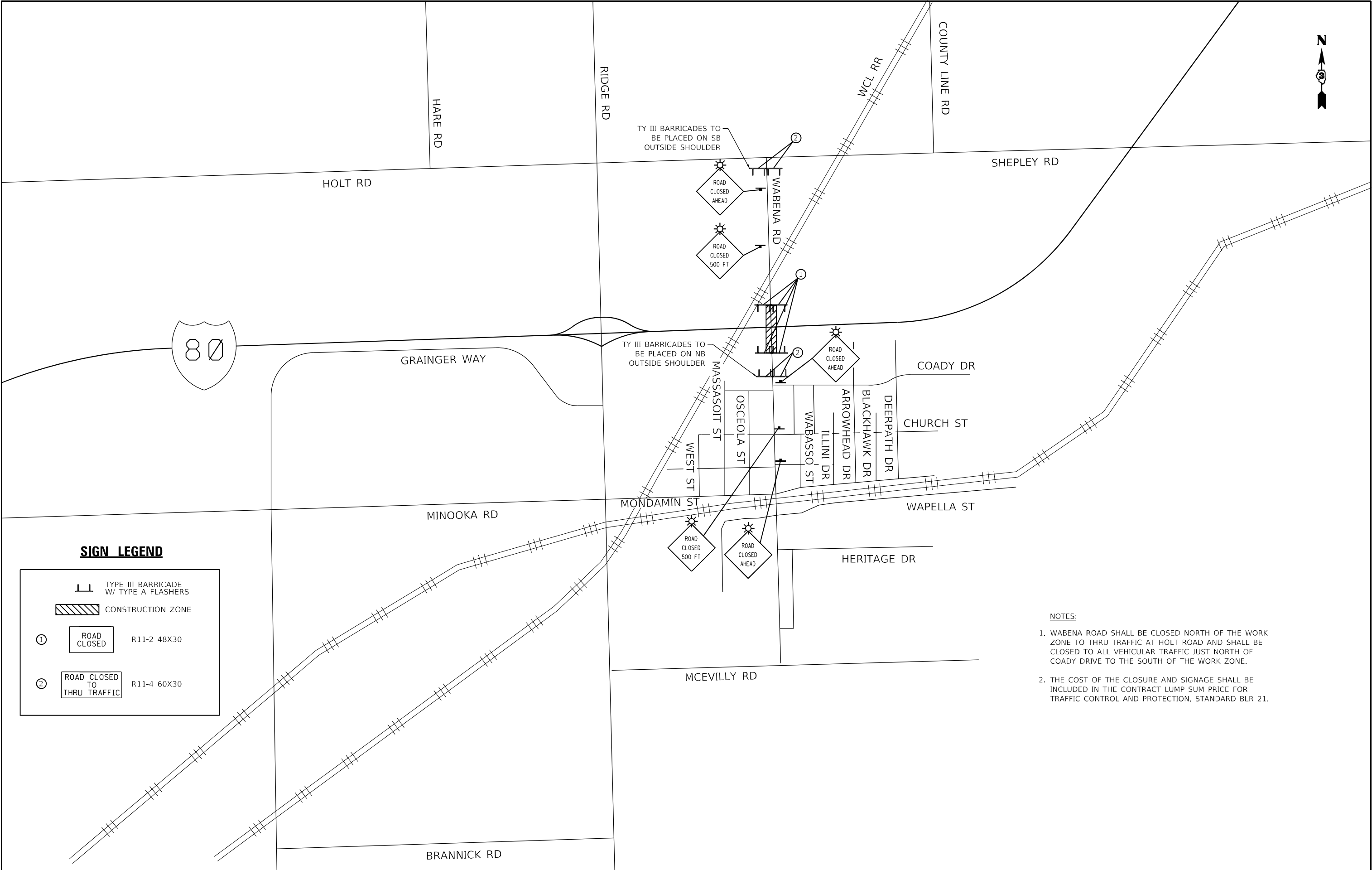
M4-8a 30X15 (OR)
- 13

PORTABLE CHANGEABLE MESSAGE SIGN
- I-80 DETOUR ROUTE FOR 15 MIN FULL STOP CLOSURES

NOTES:

- 1) ENGINEER WILL CONFIRM THE MESSAGES ON THE PORTABLE CHANGEABLE MESSAGE SIGNS.
- 2) PLACE PORTABLE CHANGEABLE MESSAGE SIGNS NEAR 1/2 MILE AND 1 MILE ADVANCED I-55 SOUTH SIGN TRUSSES ALONG WB I-80 AS WELL AS THE 1/2 MILE AND 1 MILE ADVANCED I-80 WEST SIGN TRUSSES ALONG SB I-55. ALSO PLACE PCMS NEAR 1/2 MILE AND 1 MILE ADVANCED GUIDE SIGNS FOR BRISBIN RD ALONG EB I-80.
- 3) SIGNS BEING PLACED ON I-55 AND I-80 SHALL FOLLOW THE OVERSIZED SIZES SHOWN IN THE MUTCD.
- 4) WHEN I-80 TRAFFIC IS NOT DIRECTED OVER THE DETOUR ROUTE, THE CONTRACTOR SHALL FURNISH, ERECT, & MAINTAIN "ALT" SIGN PANELS (M4-1a) IN LIEU OF "DETOUR" (M4-8) SIGN PANELS ALONG THE ALTERNATE ROUTE.





SIGN LEGEND

 TYPE III BARRICADE
W/ TYPE A FLASHERS

 CONSTRUCTION ZONE

①

ROAD
CLOSED

R11-2 48X30

②

ROAD CLOSED
TO
THRU TRAFFIC

R11-4 60X30

NOTES:

1. WABENA ROAD SHALL BE CLOSED NORTH OF THE WORK ZONE TO THRU TRAFFIC AT HOLT ROAD AND SHALL BE CLOSED TO ALL VEHICULAR TRAFFIC JUST NORTH OF COADY DRIVE TO THE SOUTH OF THE WORK ZONE.
2. THE COST OF THE CLOSURE AND SIGNAGE SHALL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE FOR TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21.

FINAL SURVEY NO.	SURVEYED NOTE BOOK	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED NOTE BOOK	BY	DATE

MODEL Revised Prelim XSC Sheets 11-08-22
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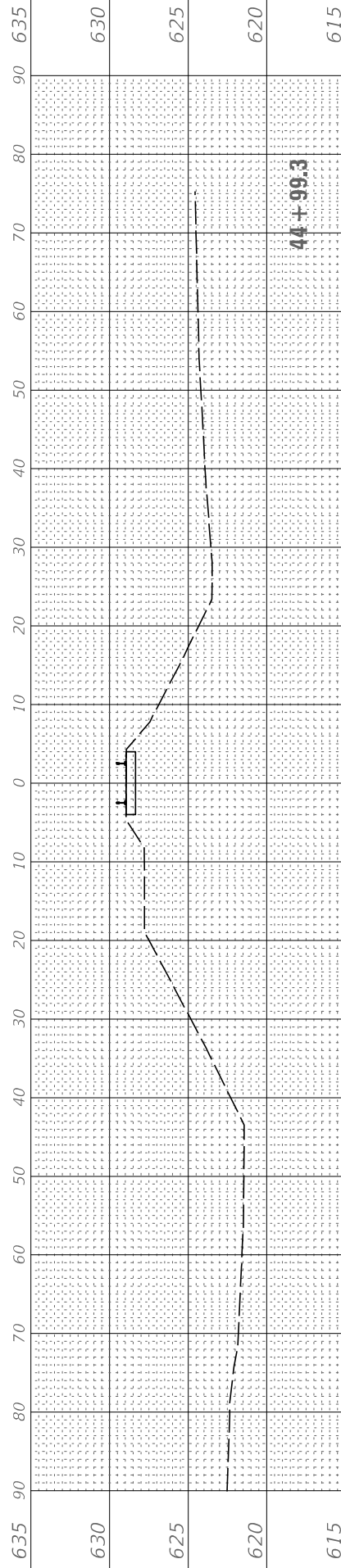
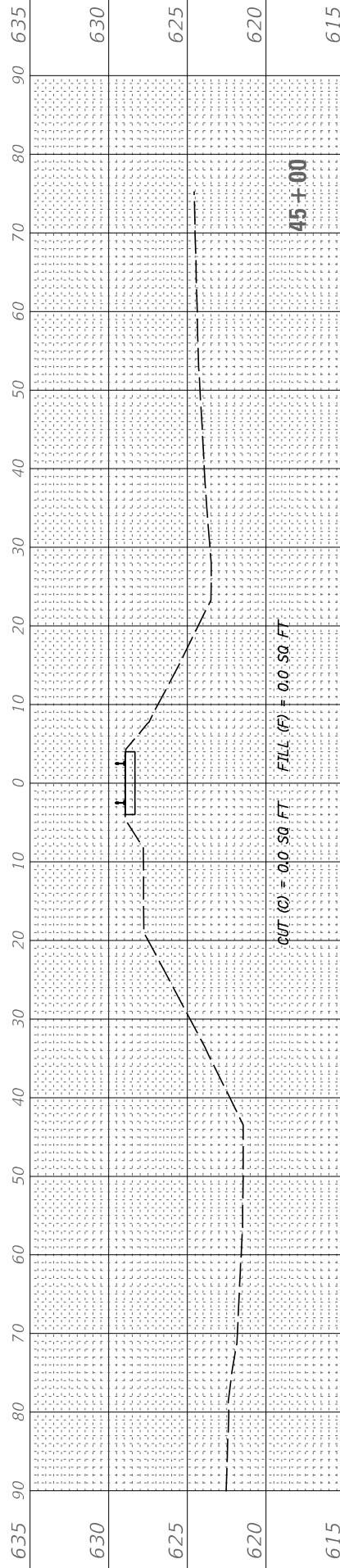
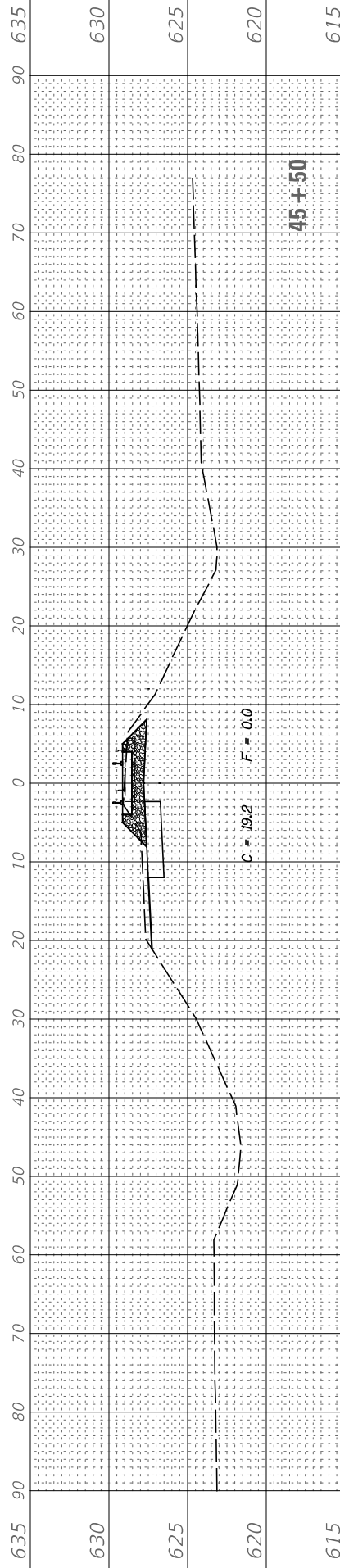
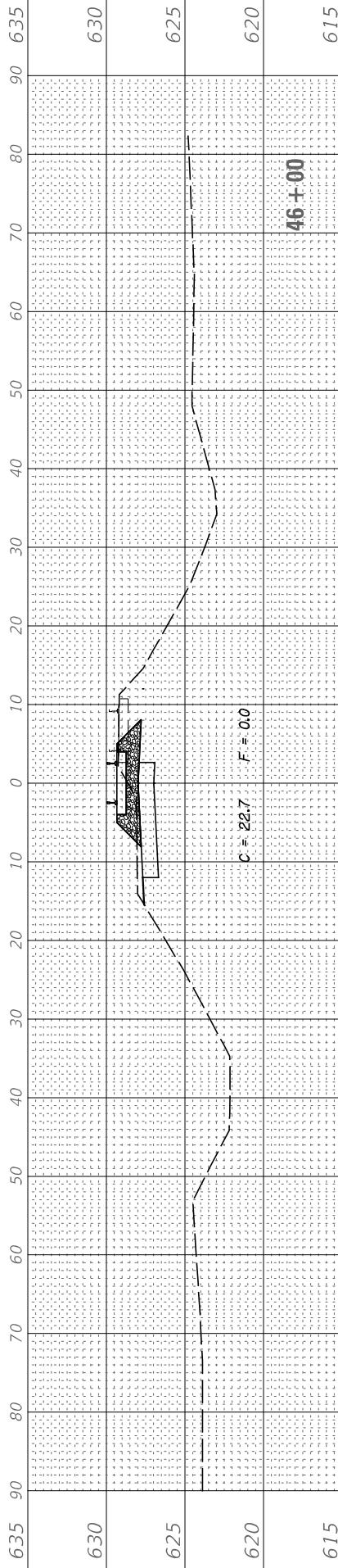
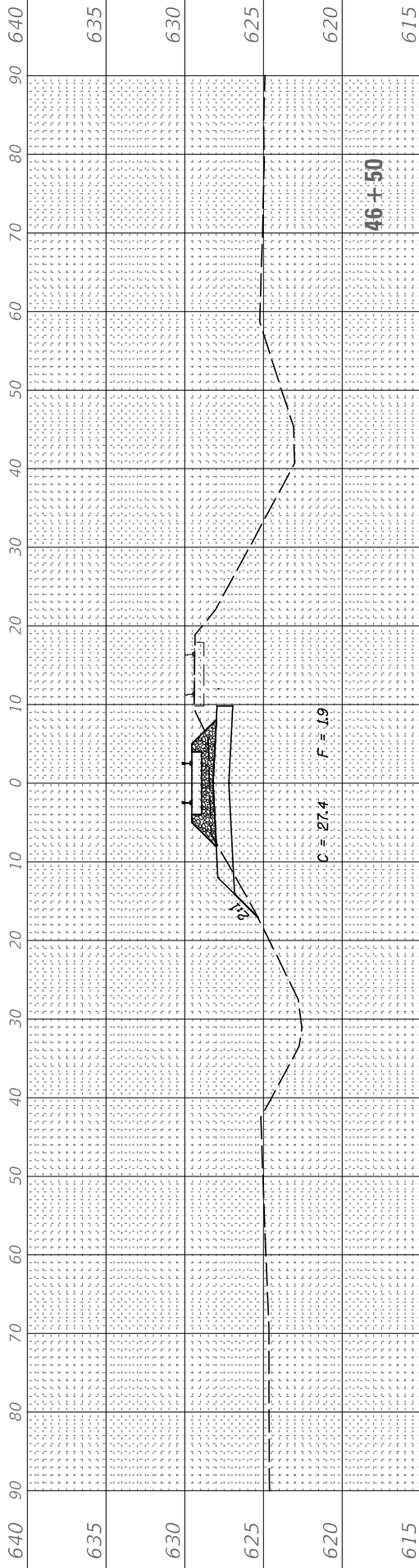
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	DRAWN - BJW	REVISED -
PLOT SCALE = 20,0000' * / in.	CHECKED - WLP	REVISED -
PLOT DATE = 11/16/2023	DATE - 11/16/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: H=10' V=5' SHEET 1 OF 6 SHEETS STA. 44+99.3 TO STA. 47+00

TEMPORARY RUNAROUND
CROSS SECTIONS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	(32, 47-4)VB, HBR-3	GRUNDY	143	36
CONTRACT NO. 66295				
ILLINOIS FED. AID PROJECT				

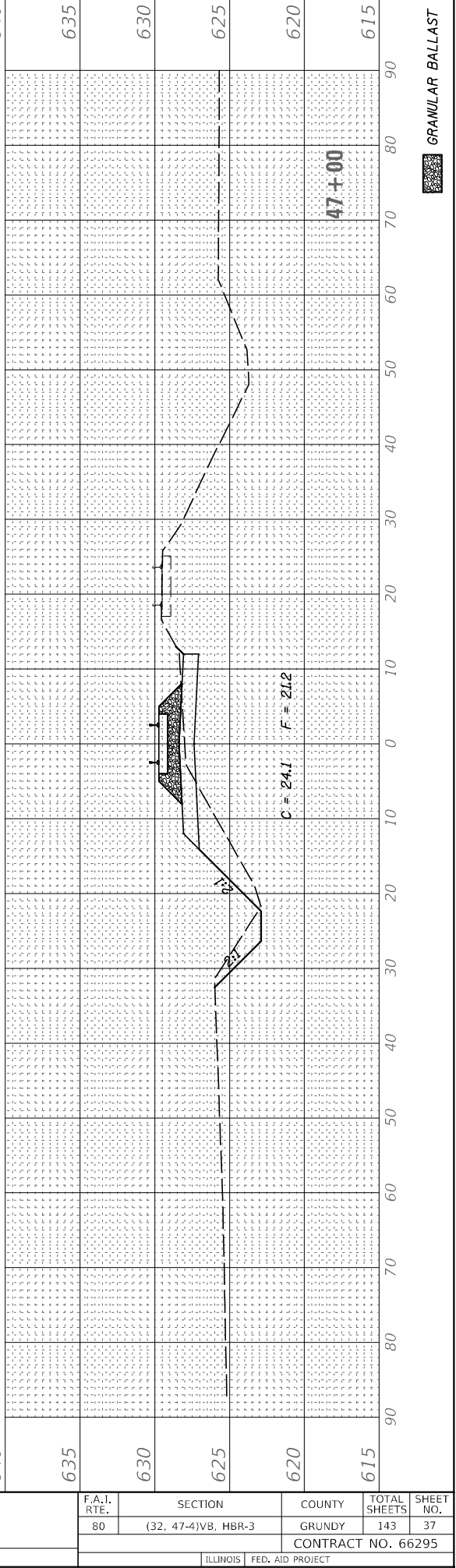
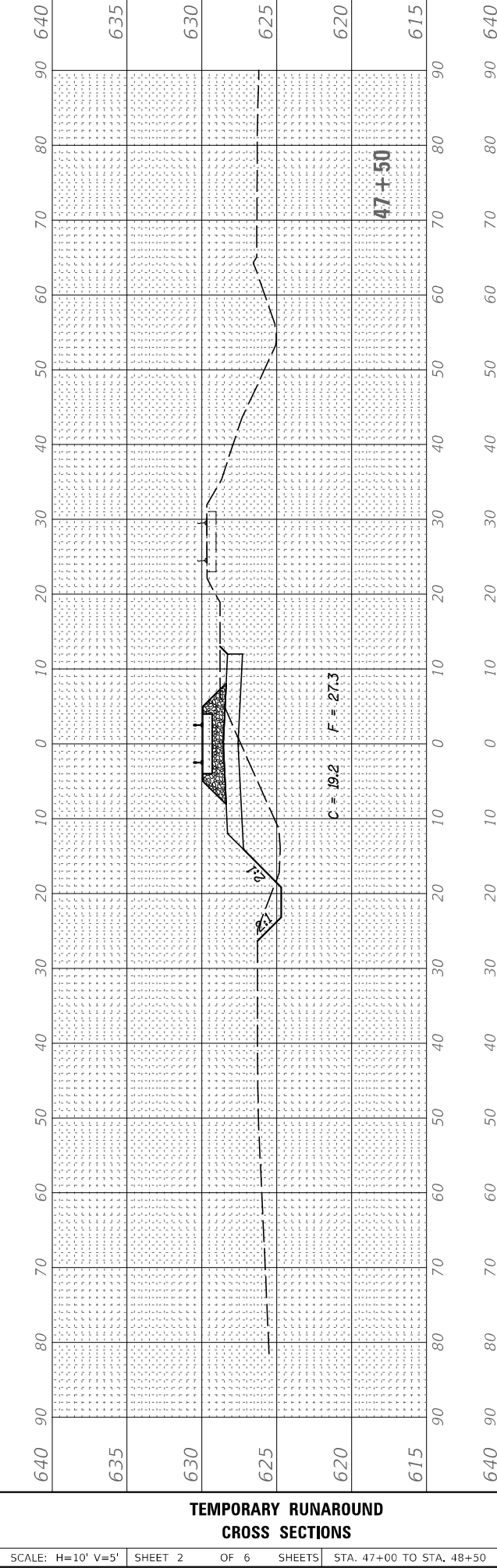
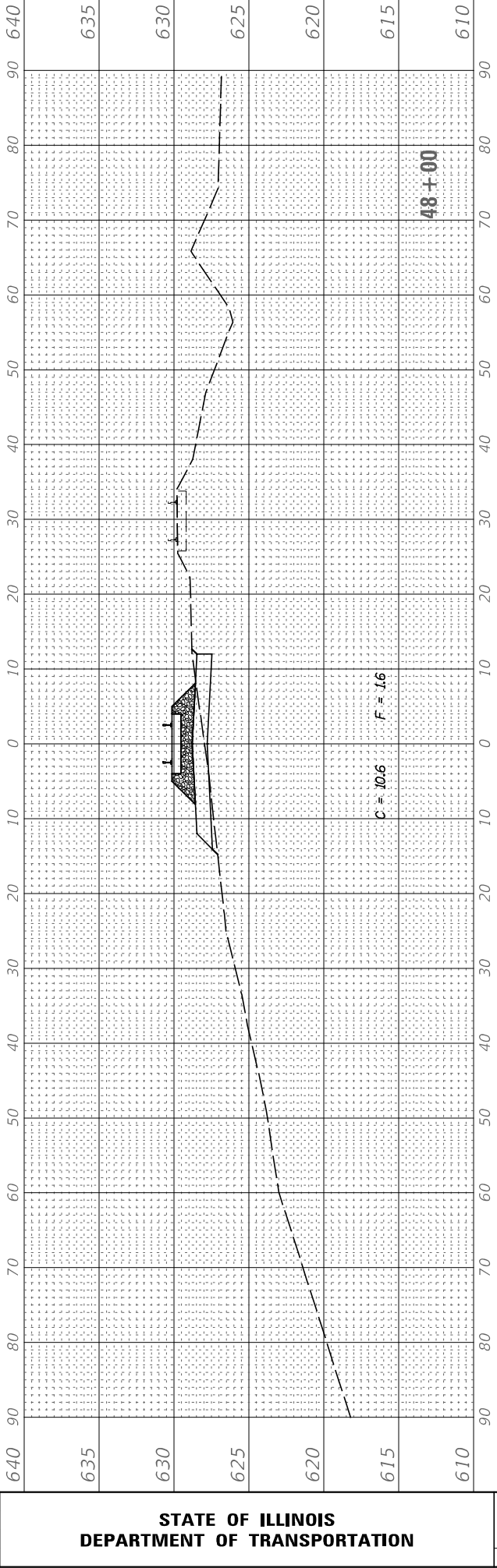
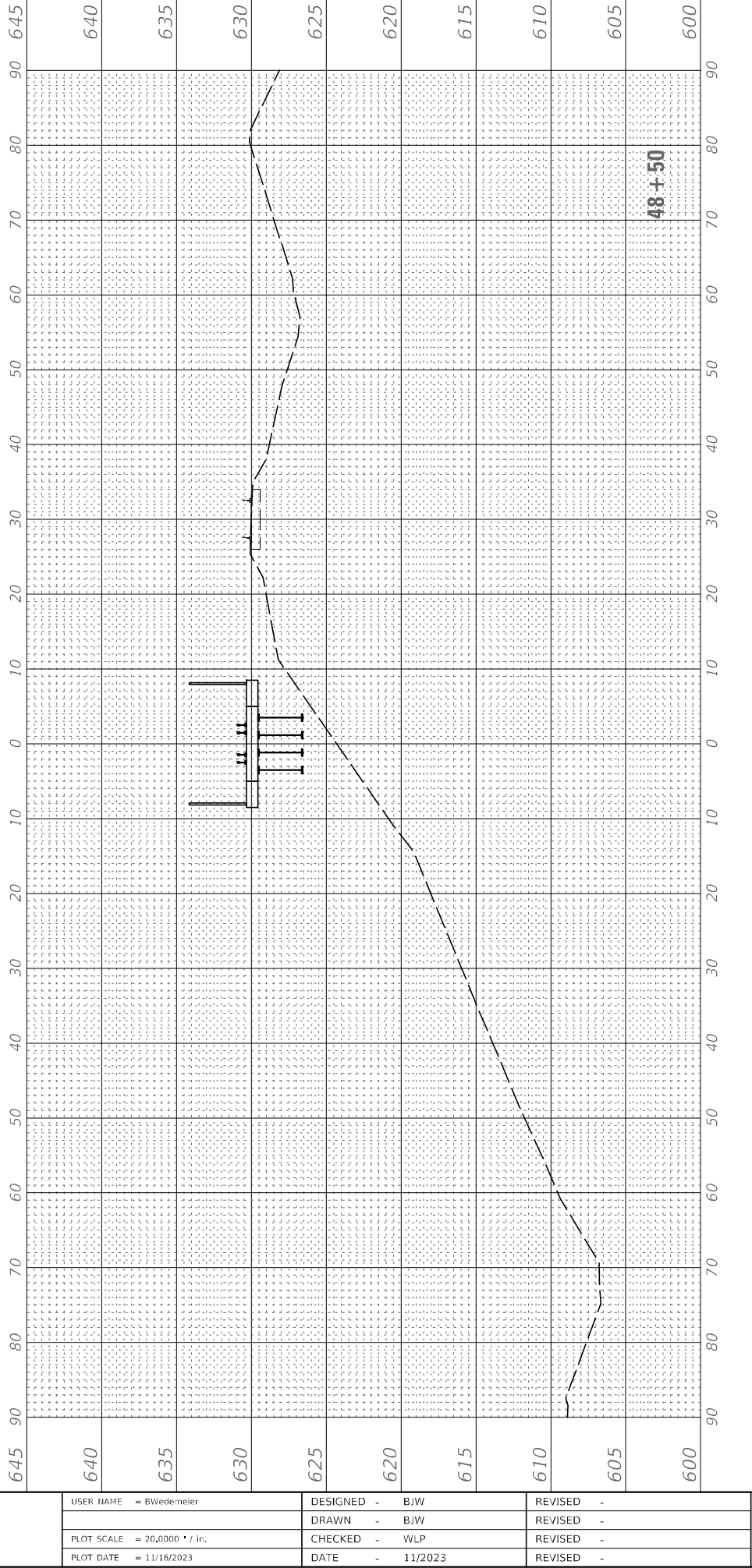


GRANULAR BALLAST

FINAL SURVEY NO.	SURVEYED NOTE BOOK	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED NOTE BOOK	BY	DATE

MODEL Revised Preliml XSC Sheets 11-08-22
FILE NAME: V:\335204 CMTB over 430\CA\CA\CA00 Drawings\335204\335204.dgn



GRANULAR BALLAST

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY RUNAROUND
CROSS SECTIONS

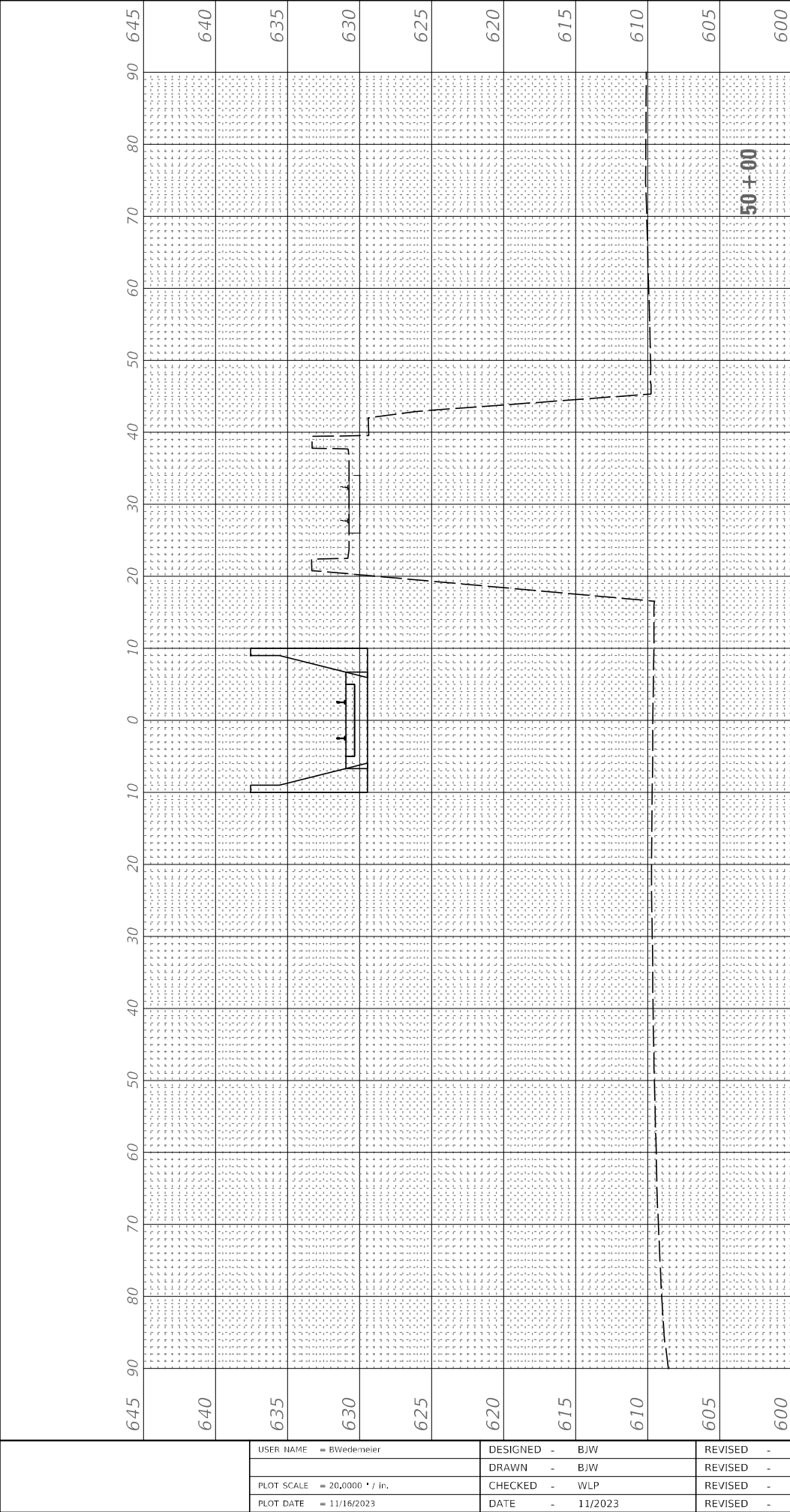
SCALE: H=10' V=5' SHEET 2 OF 6 SHEETS STA. 47+00 TO STA. 48+50

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	(32, 47-4)VB, HBR-3	GRUNDY	143	37
CONTRACT NO. 66295				
ILLINOIS FED. AID PROJECT				

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

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

MODEL Revised Prefinal XSC Sheets 11-08-22
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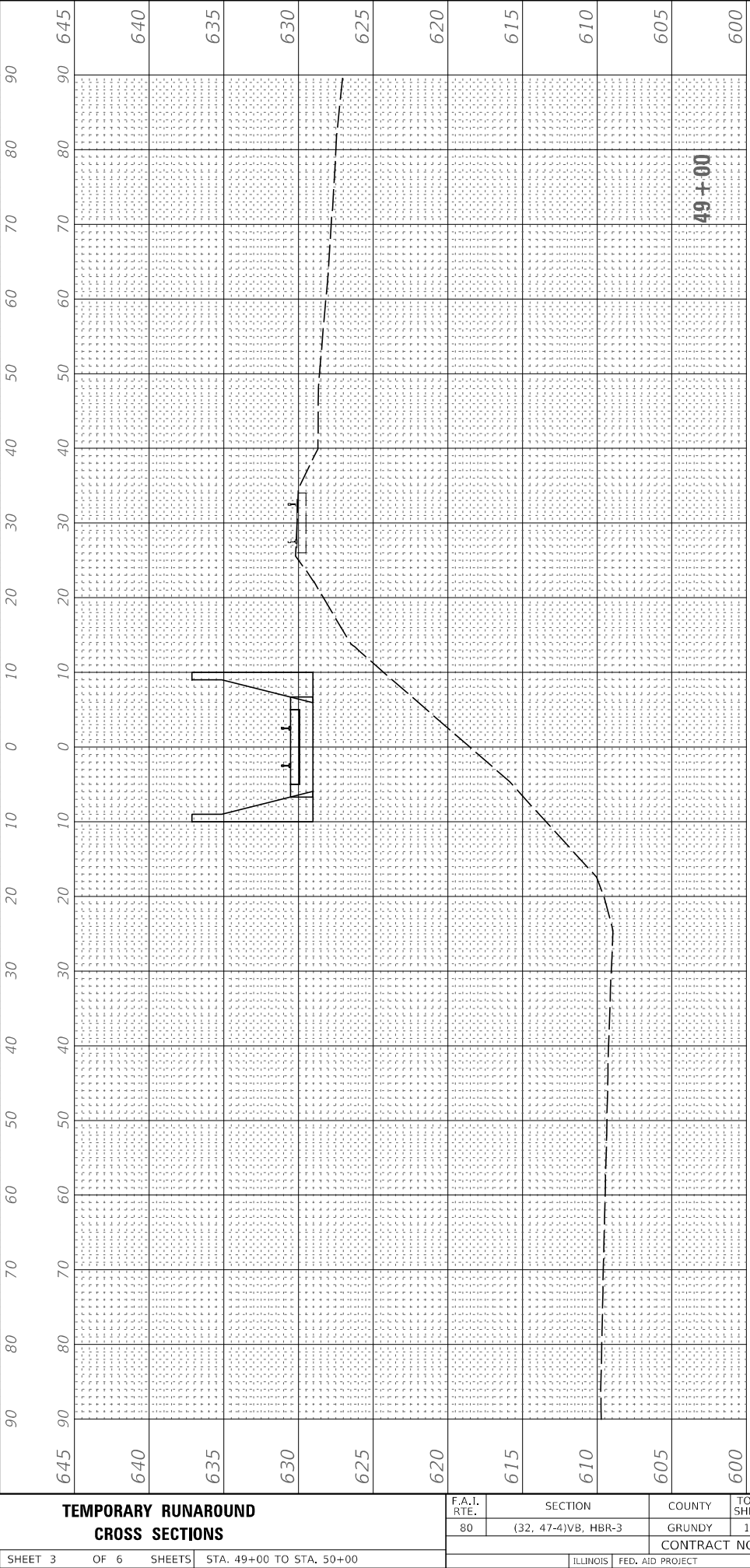
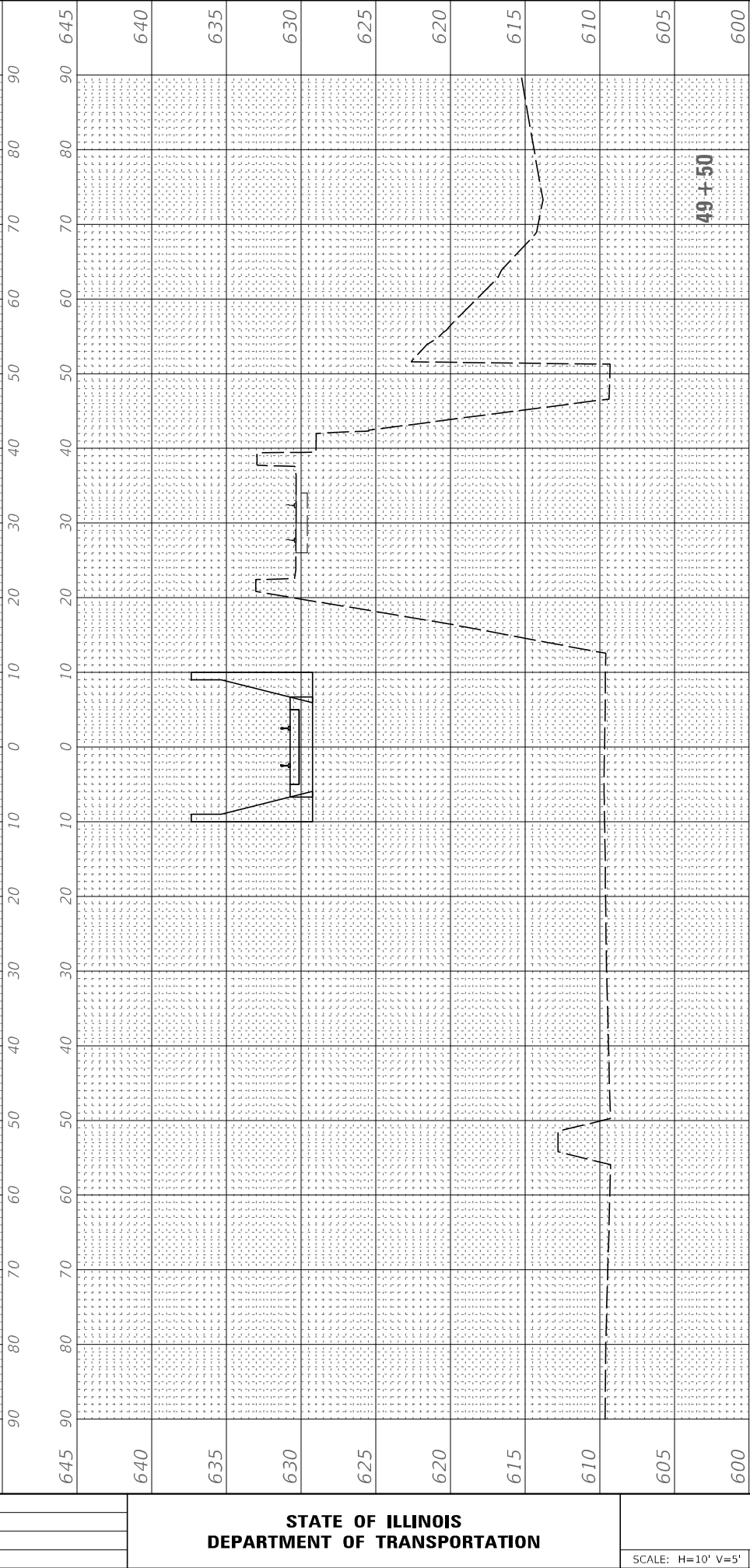
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PLOT DATE = 11/16/2023	DATE - 11/16/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: H=10' V=5' SHEET 3 OF 6 SHEETS STA. 49+00 TO STA. 50+00

TEMPORARY RUNAROUND
CROSS SECTIONS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	(32, 47-4)VB, HBR-3	GRUNDY	143	38
CONTRACT NO. 66295				
ILLINOIS		FED. AID PROJECT		



GRANULAR BALLAST

FINAL SURVEY NO.	SURVEYED NOTE BOOK	BY	DATE

ORIGINAL SURVEY NO.	SURVEYED NOTE BOOK	BY	DATE

MODEL Revised Prelim XSC Sheets 11-08-22
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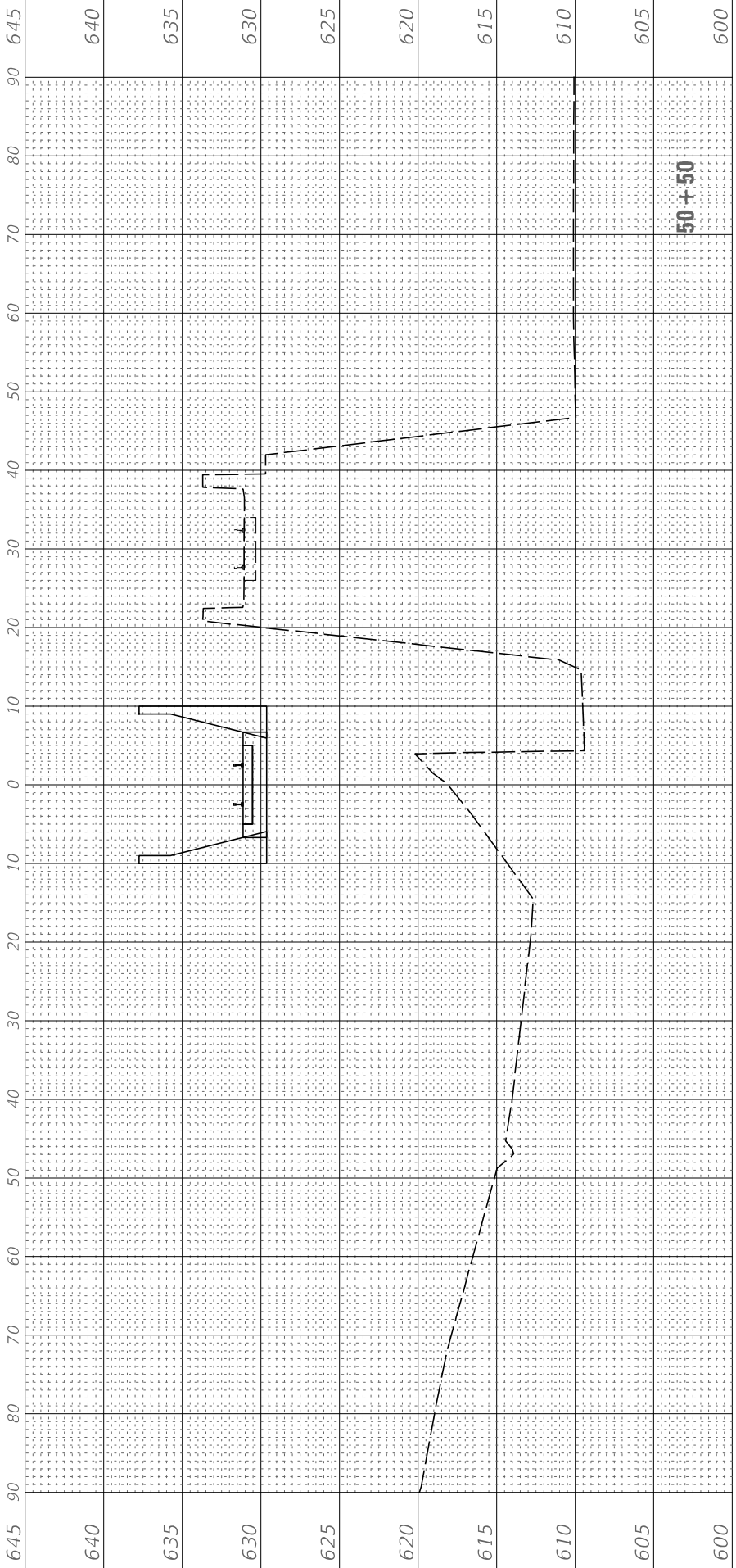
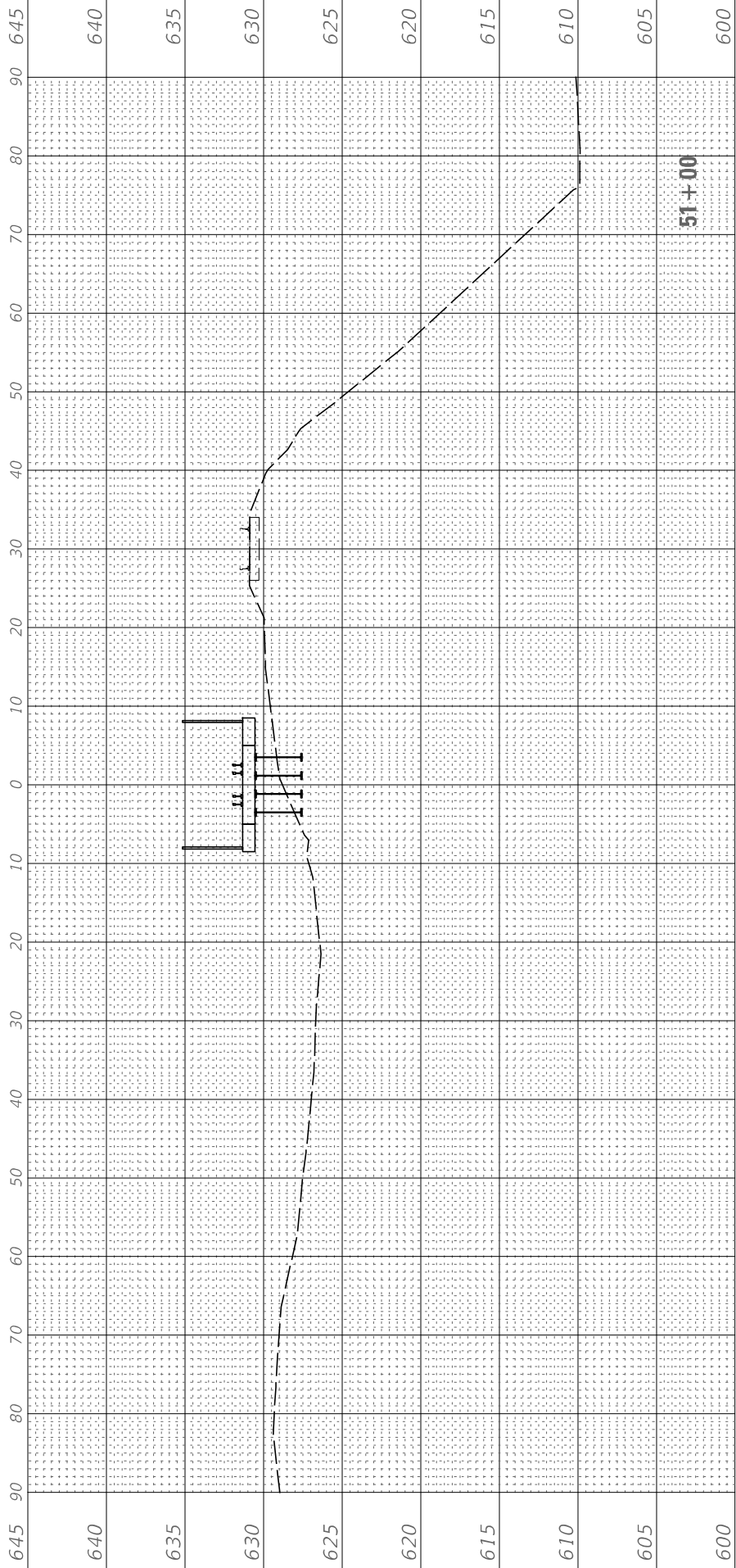
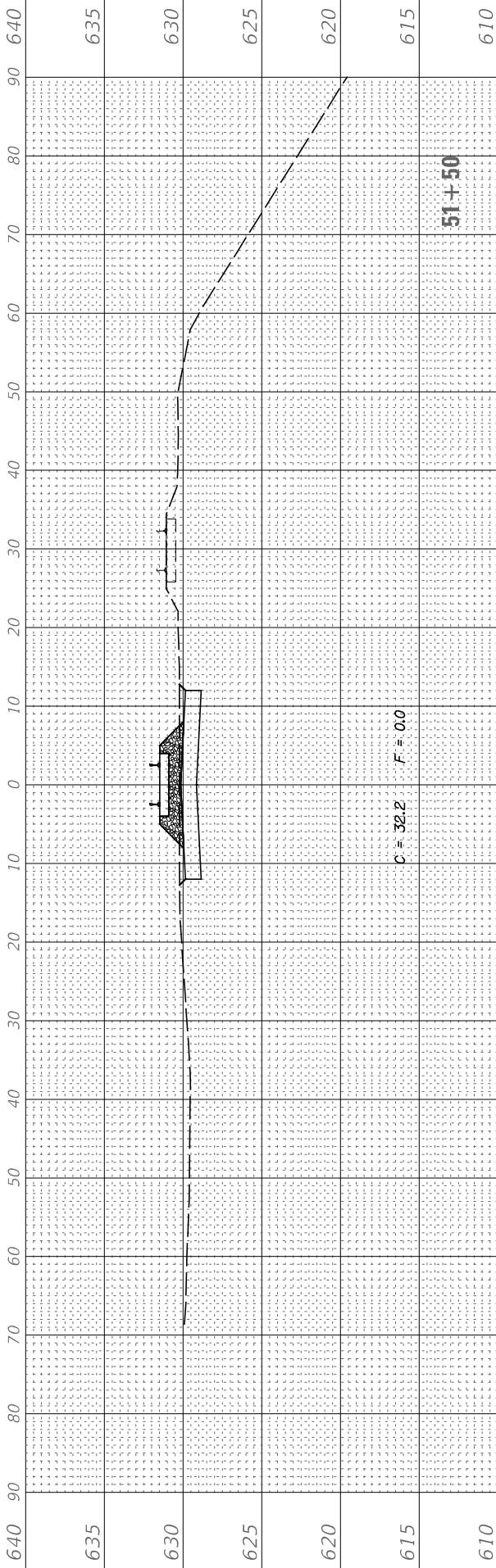
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PLOT DATE	= 11/16/2023	DATE	- 11/16/2023	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: H=10' V=5' SHEET 4 OF 6 SHEETS STA. 50+50 TO STA. 51+50

TEMPORARY RUNAROUND
CROSS SECTIONS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	(32, 47-4)VB, HBR-3	GRUNDY	143	39
CONTRACT NO. 66295				
ILLINOIS FED. AID PROJECT				



GRANULAR BALLAST

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

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

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PLOT DATE	= 11/16/2023	DATE	- 11/16/2023	REVISED	-

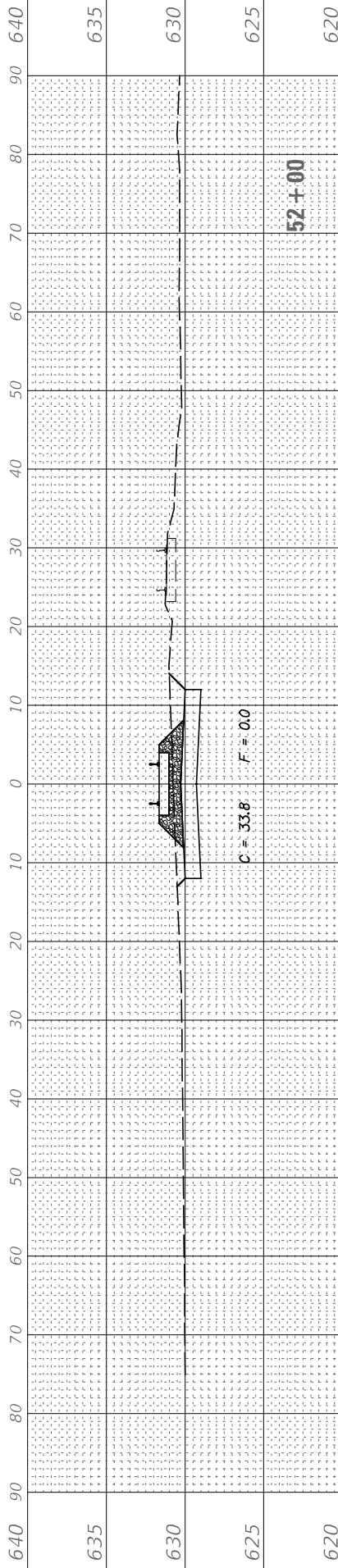
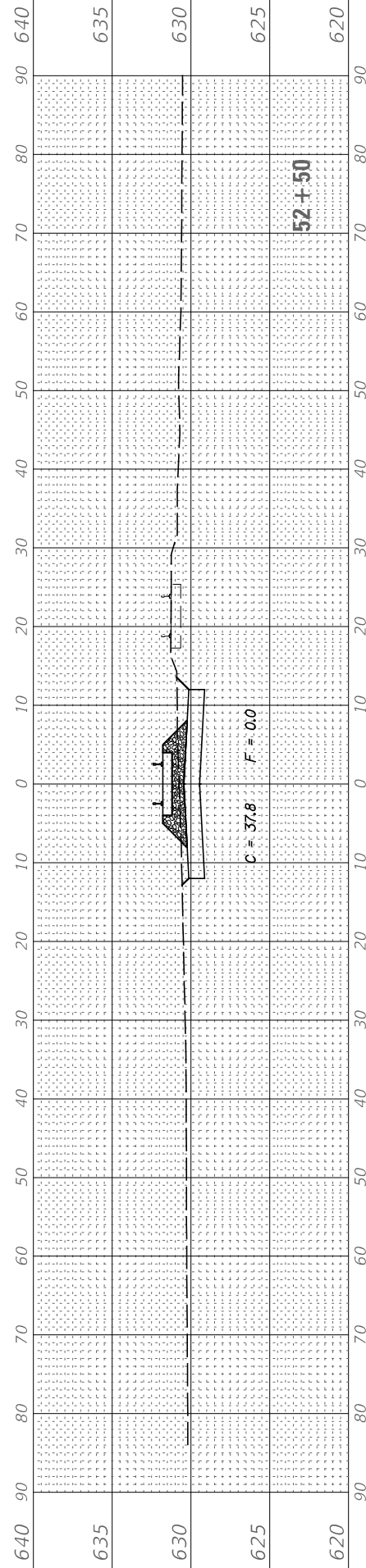
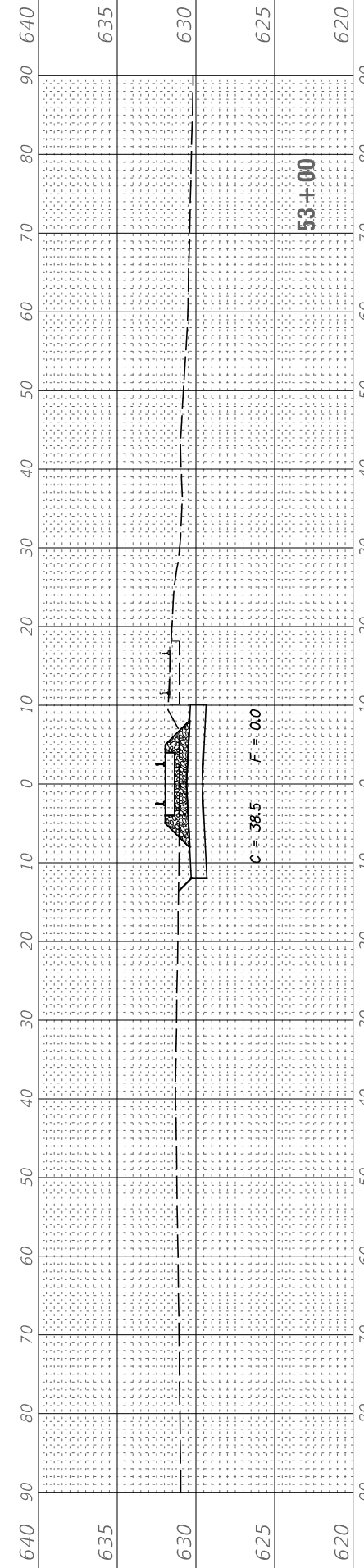
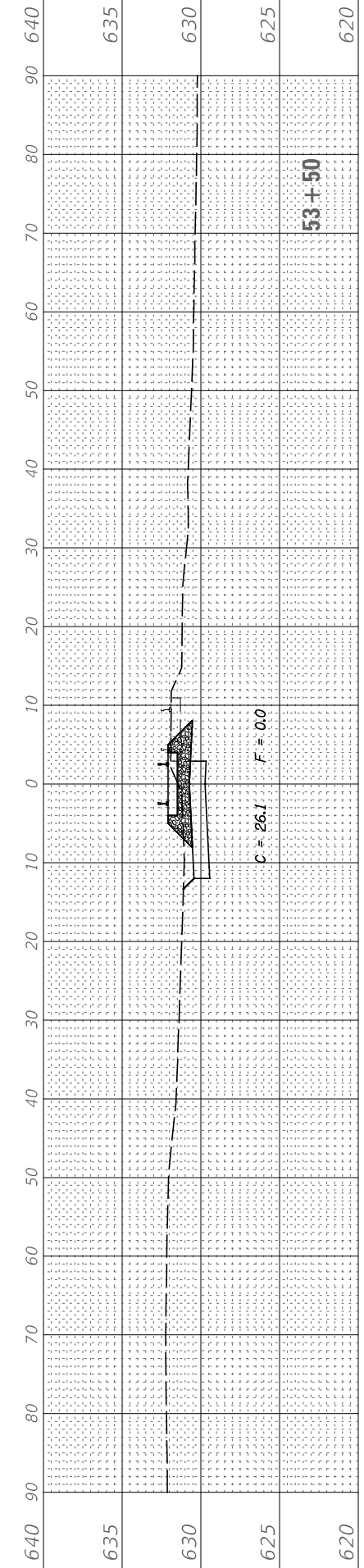
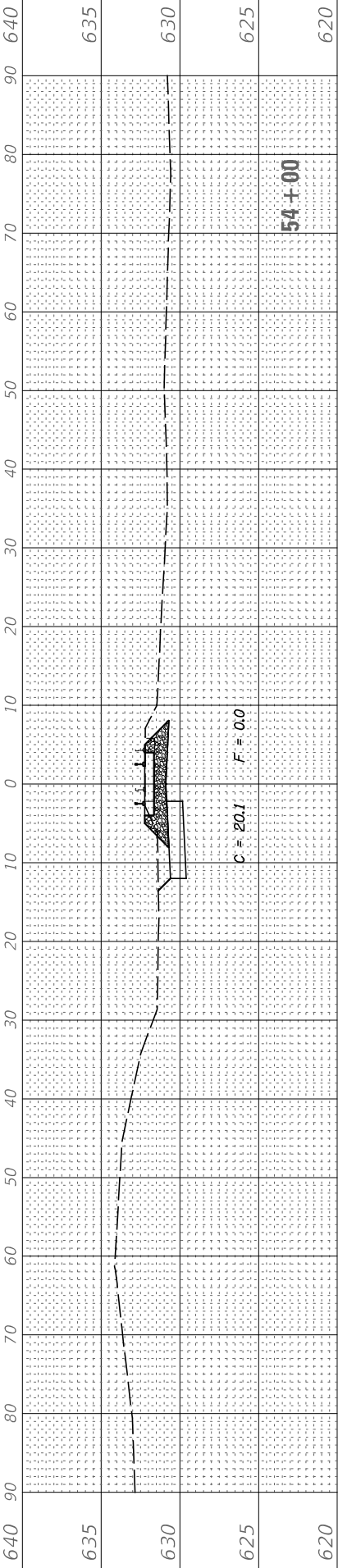
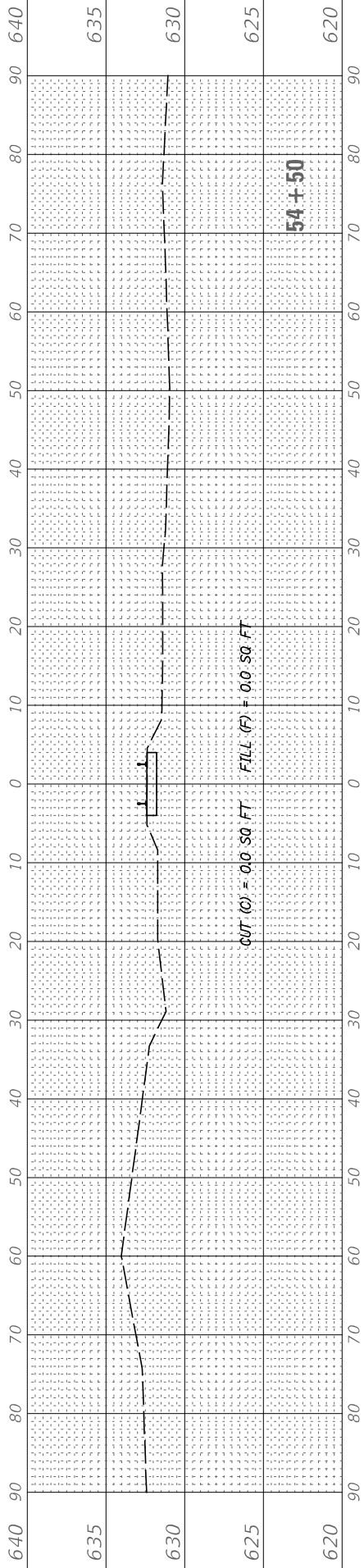
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: H=10' V=5' SHEET 5 OF 6 SHEETS STA. 52+00 TO STA. 54+50

TEMPORARY RUNAROUND
CROSS SECTIONS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	(32, 47-4)VB, HBR-3	GRUNDY	143	40
CONTRACT NO. 66295				
ILLINOIS FED. AID PROJECT				

GRANULAR BALLAST



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

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

MODEL Revised Prefinal XSC Sheets 11-08-22
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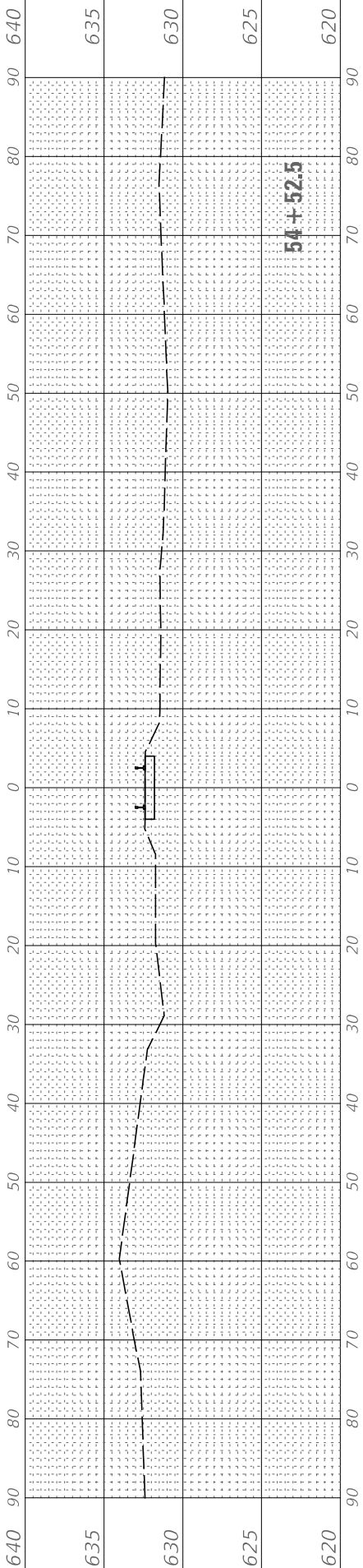
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PLOT DATE = 11/16/2023	DATE - 11/16/2023	REVISED -

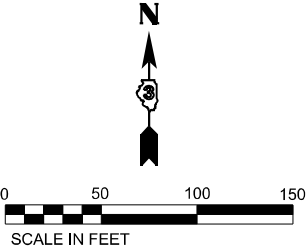
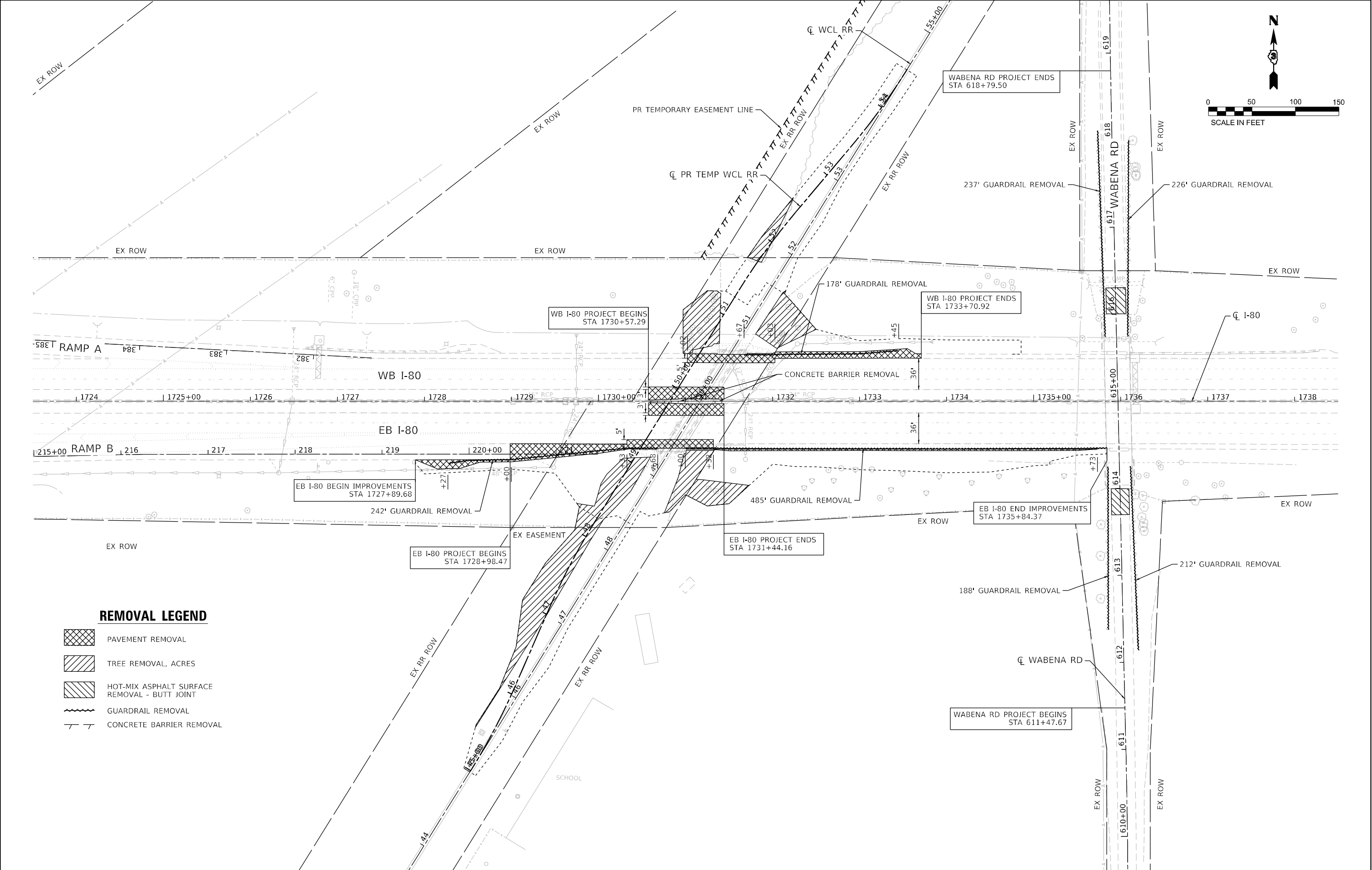
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY RUNAROUND
CROSS SECTIONS

SCALE: H=10' V=5' SHEET 6 OF 6 SHEETS STA.

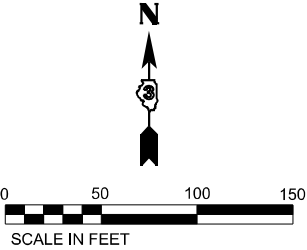
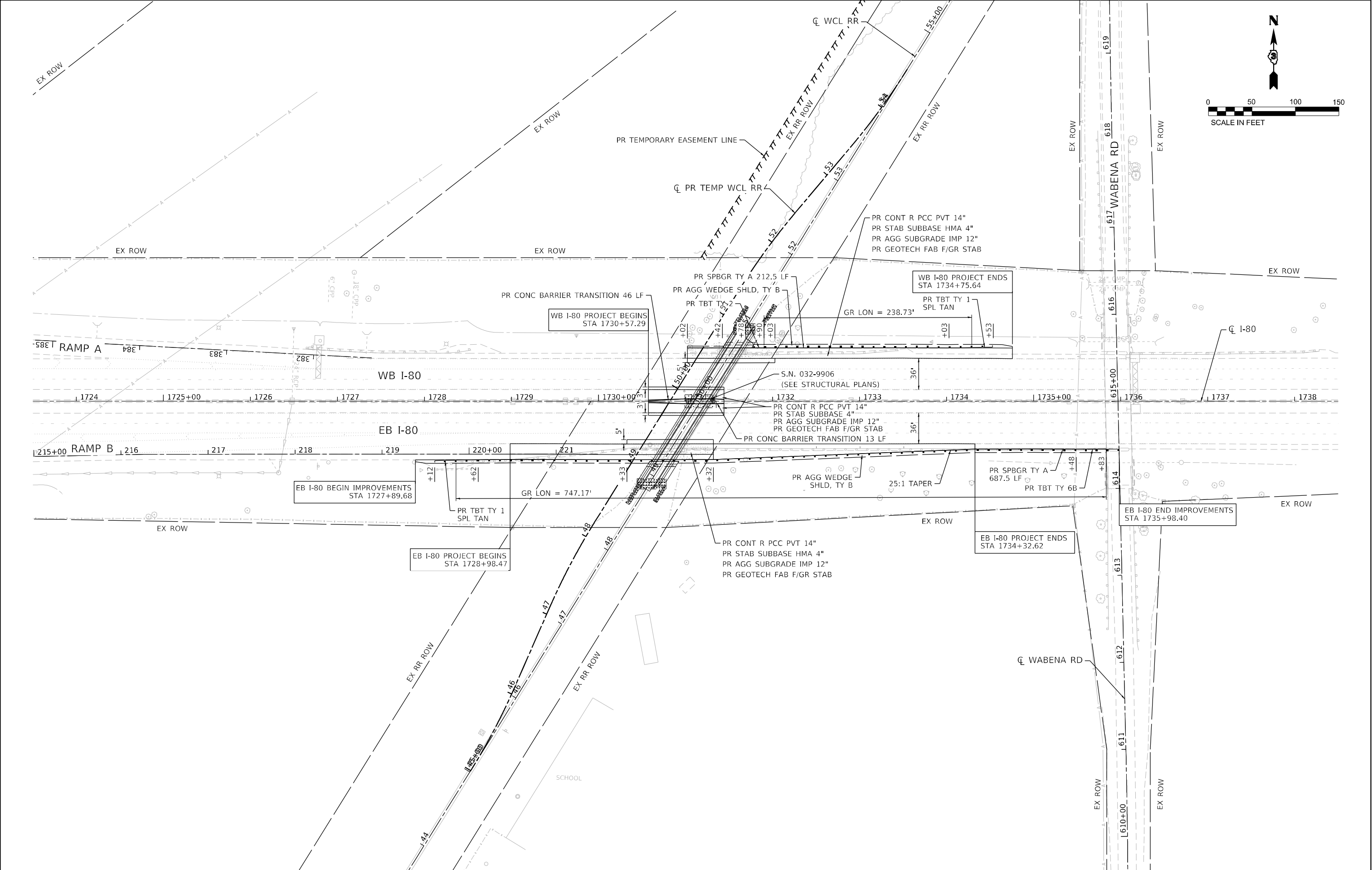
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	(32, 47-4)VB, HBR-3	GRUNDY	143	41
CONTRACT NO. 66295				
ILLINOIS		FED. AID PROJECT		



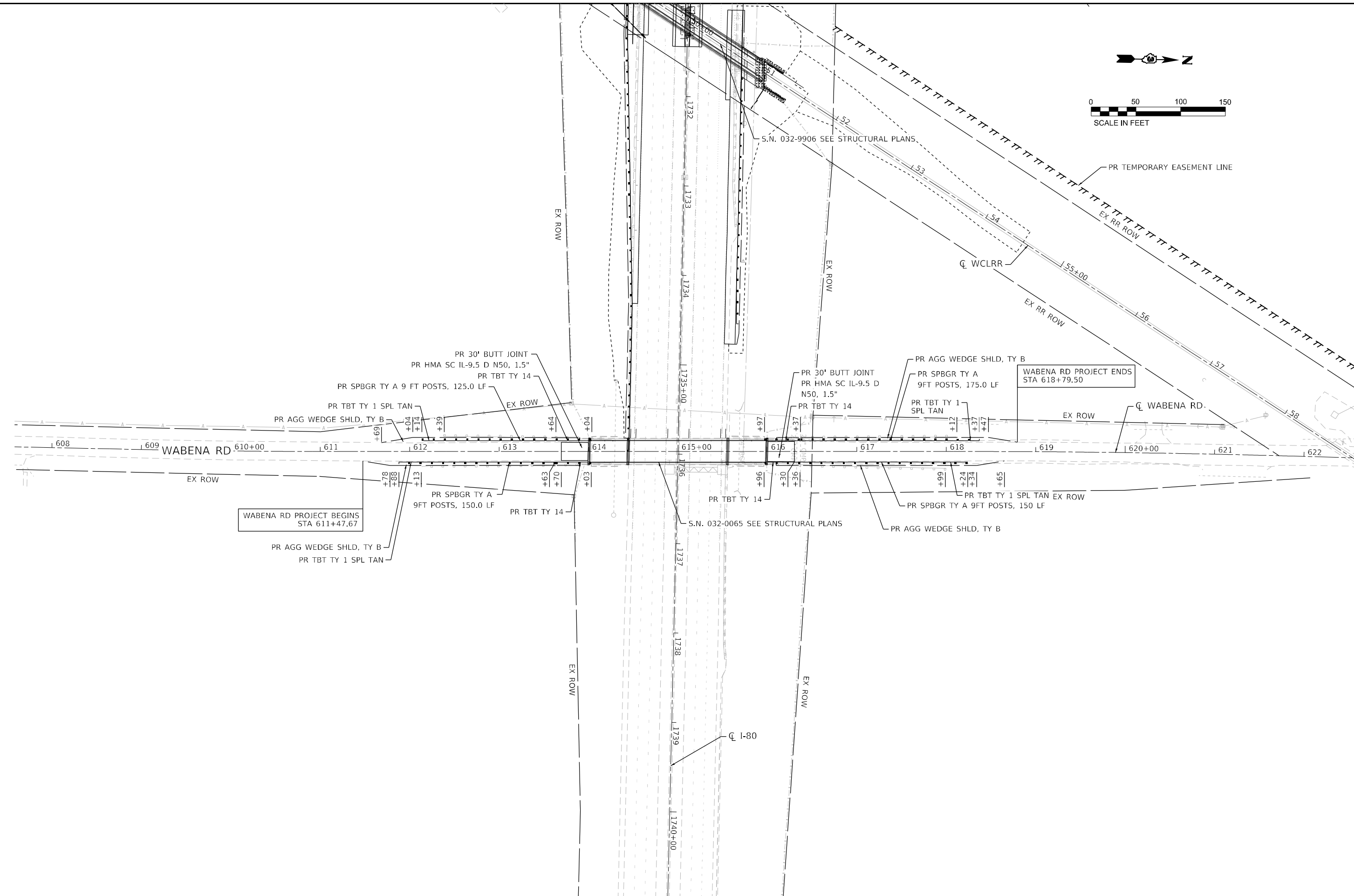
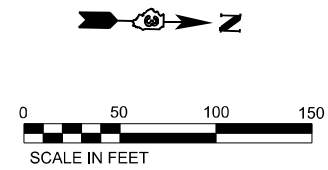


REMOVAL LEGEND

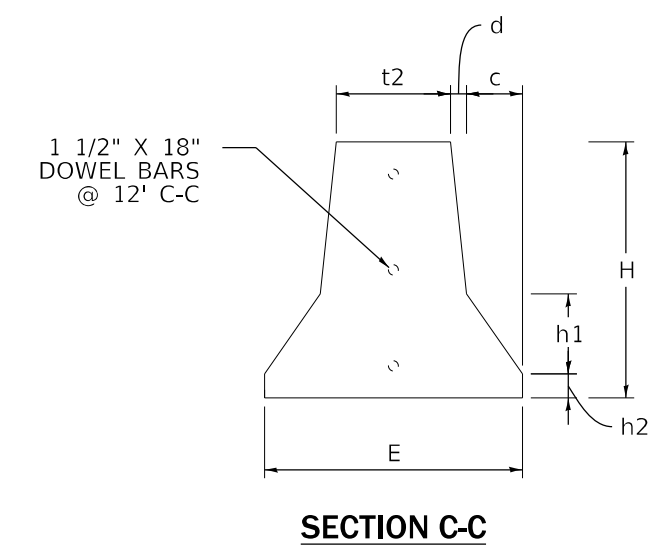
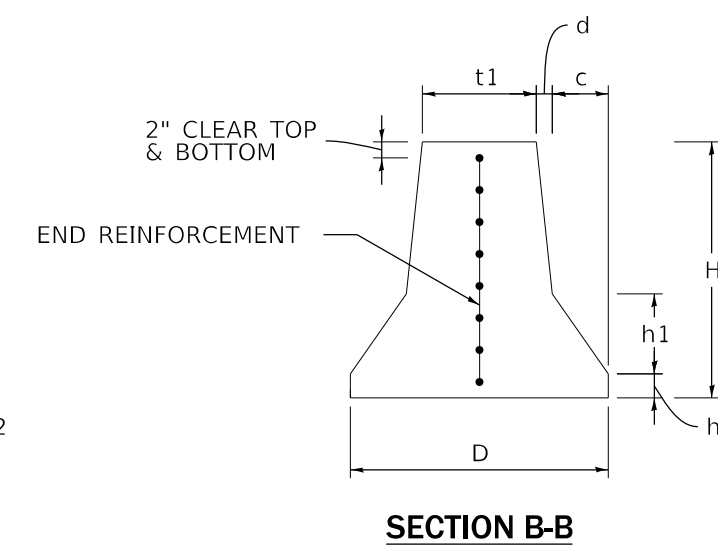
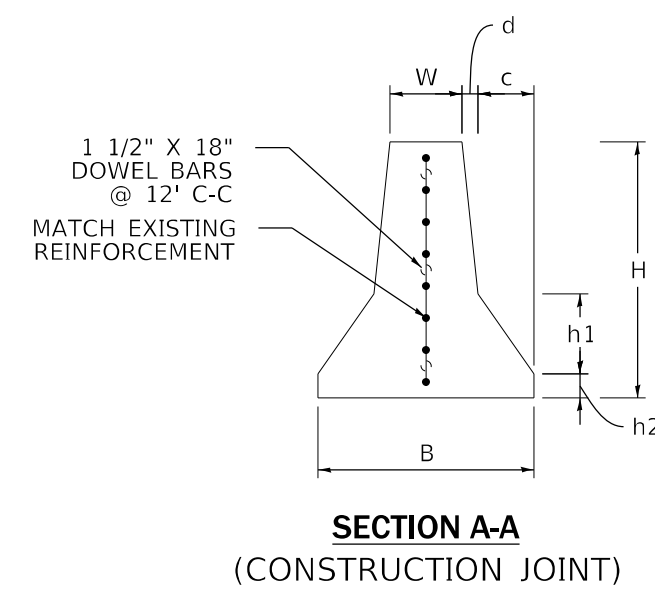
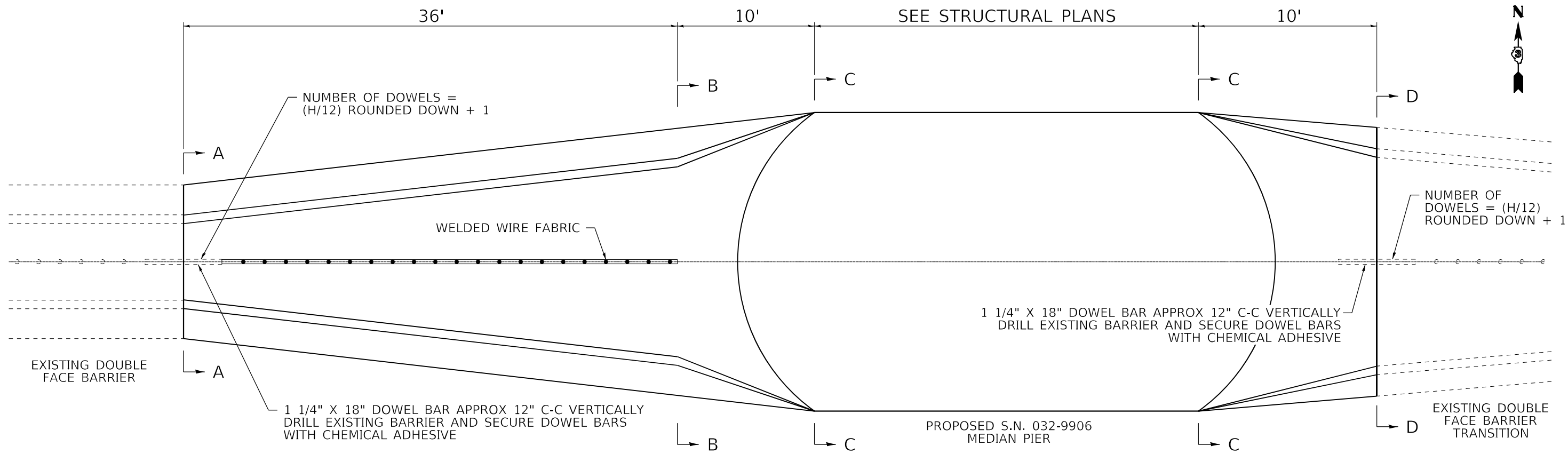
- PAVEMENT REMOVAL
- TREE REMOVAL, ACRES
- HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT
- GUARDRAIL REMOVAL
- CONCRETE BARRIER REMOVAL



 LIN ENGINEERING, LTD. Consulting Engineers Westmont, Illinois	USER NAME = l4nho	DESIGNED - RC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	W.C. RAILROAD OVER F.A.I. ROUTE 80 ROADWAY PLAN				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100,000' / in.	DRAWN - RC	REVISED -						80	(32, 47-4)VB, HBR-3	GRUNDY/KENDALL	143	43
	PLOT DATE = 1/9/2025	CHECKED - ST	REVISED -						CONTRACT NO. 66295				
		DATE - 1/2025	REVISED -						ILLINOIS FED. AID PROJECT				
					SCALE: 1"=50'	SHEET 1 OF 1 SHEETS	STA. 1723+50.00 TO STA. 1738+50.00						



LIN ENGINEERING,LTD. Consulting Engineers Westmont, Illinois	USER NAME = l4nho		DESIGNED - NH		REVISED -		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	W.C. RAILROAD OVER F.A.I. ROUTE 80 WABENA RD ROADWAY PLAN					F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100,0000 ' / in.		DRAWN - NH		REVISED -			80	(32, 47-4)VB, HBR-3	GRUNDY/KENDALL	143	44					
	PLOT DATE = 1/9/2025		CHECKED - ST		REVISED -			CONTRACT NO. 66295									
			DATE - 1/2025		REVISED -			ILLINOIS FED. AID PROJECT									
								SCALE: 1"=50'	SHEET 1 OF 1 SHEETS	STA. 611+47.67 TO STA. 618+79.50							



LIMITS OF PR CONC BARRIER TRANSITION
STA 1730+57.29 TO STA 1731+44.16

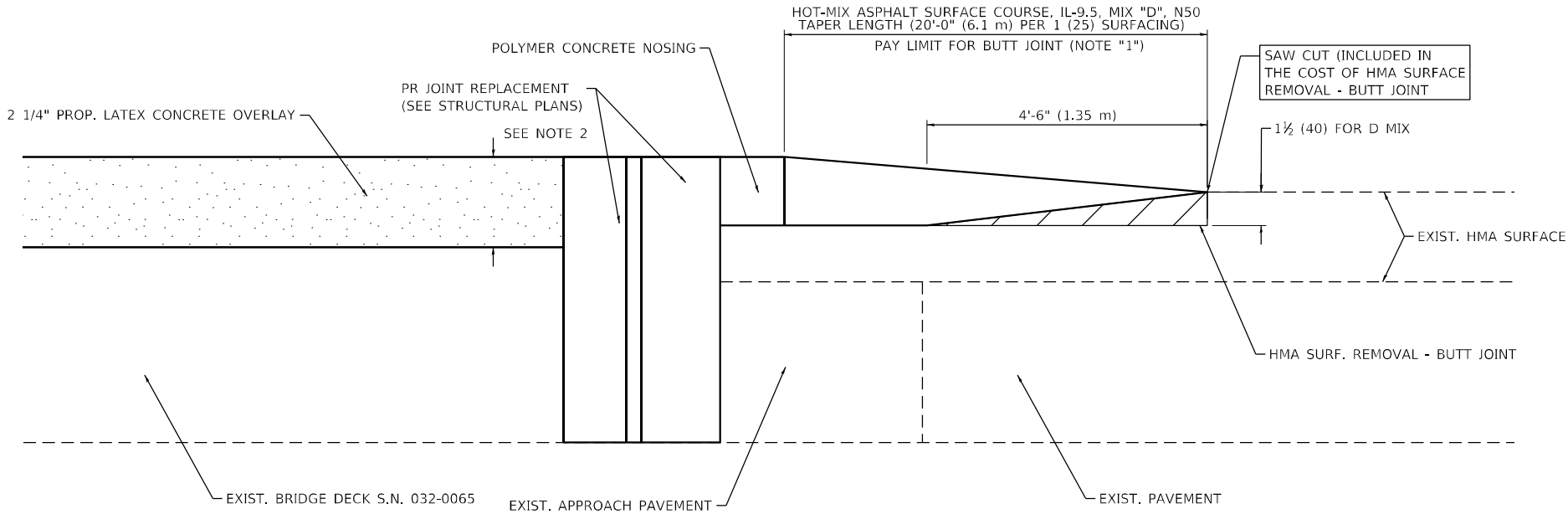
TRANSITION FROM EXISTING DOUBLE FACE BARRIER TO PROPOSED S.N. 032-9906 MEDIAN PIER

NOTES:

CONTRACTOR TO VERIFY HEIGHT AND WIDTH OF EX MEDIAN CONC BARRIER AT REMOVAL LIMITS PRIOR TO BEGINNING ANY WORK.

THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR CONCRETE BARRIER TRANSITION.

FOUNDATION ANCHORING SHALL BE ACCORDING TO HIGHWAY STANDARD 637006. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT INCLUDED IN THE CONTRACT UNIT PRICE PER FOOT FOR CONCRETE BARRIER TRANSITION.



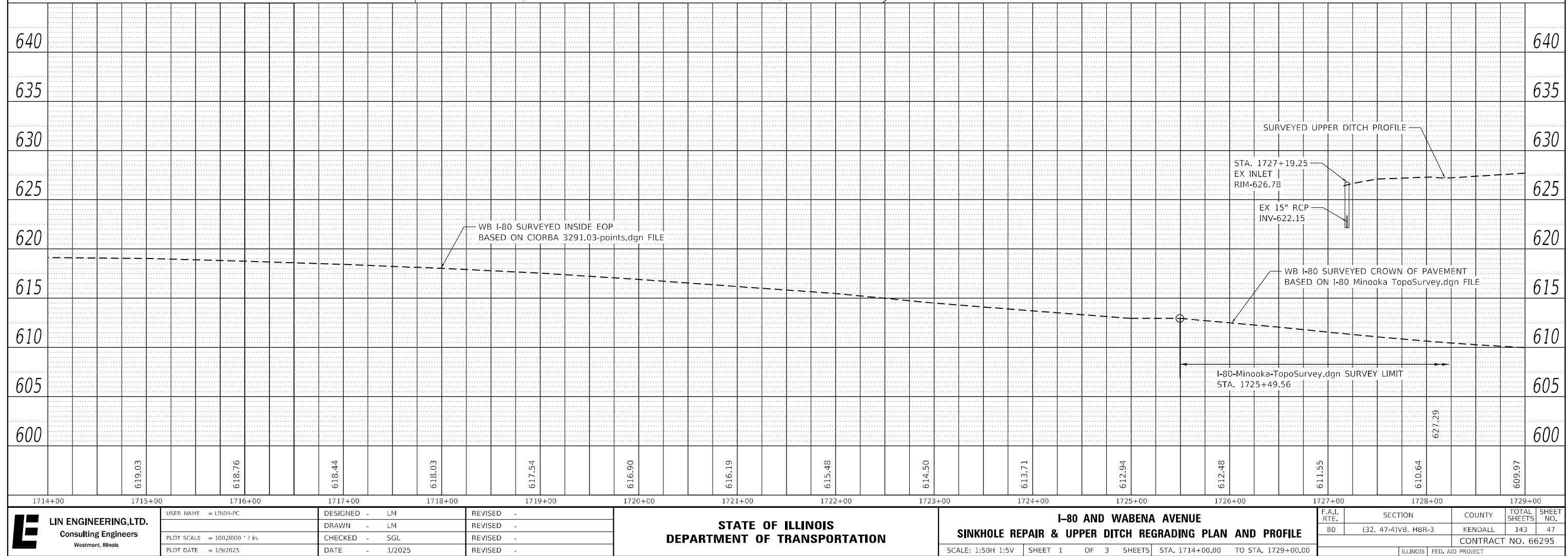
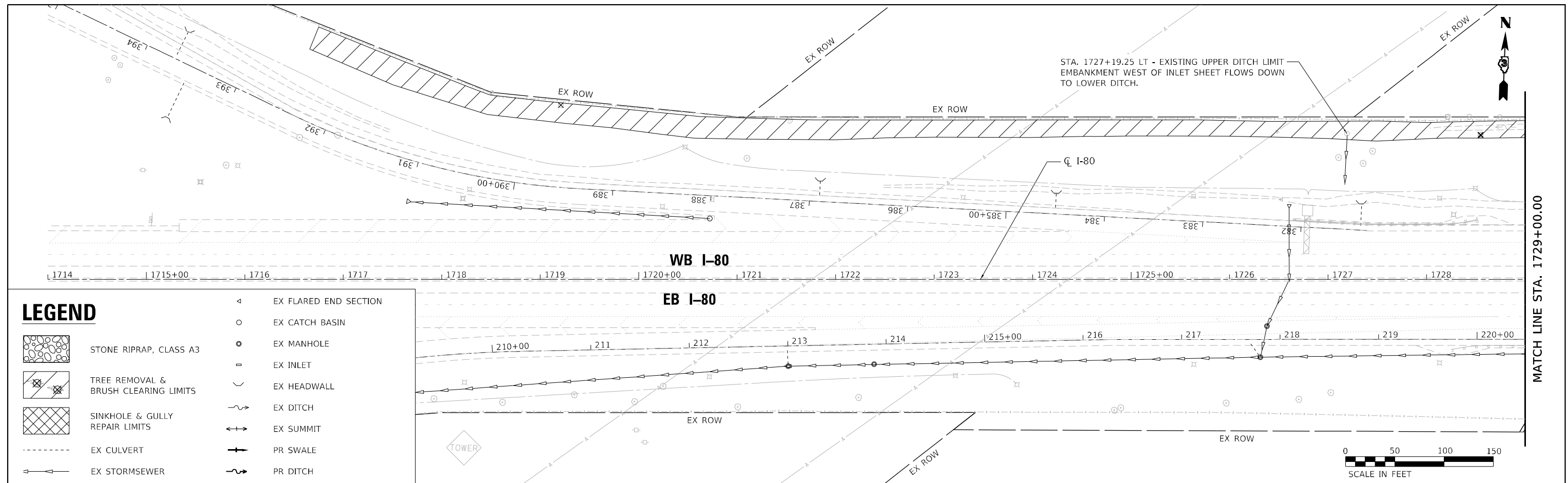
**BUTT JOINT AND HMA TAPER
FOR SCARIFICATION AND RESURFACING**

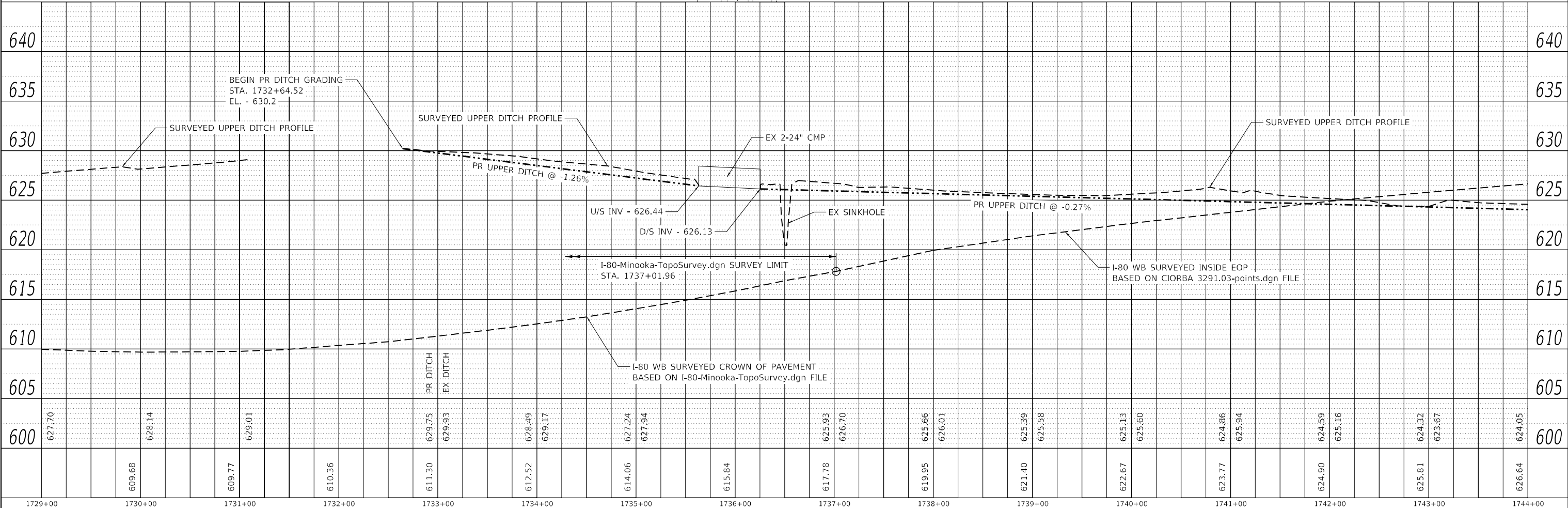
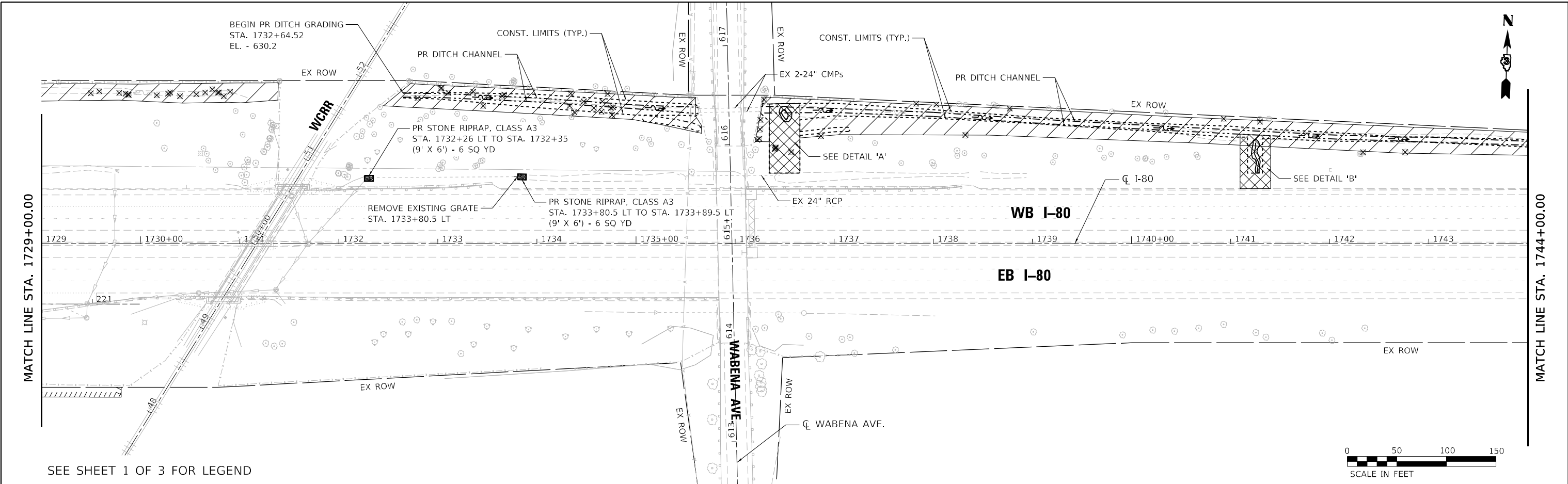
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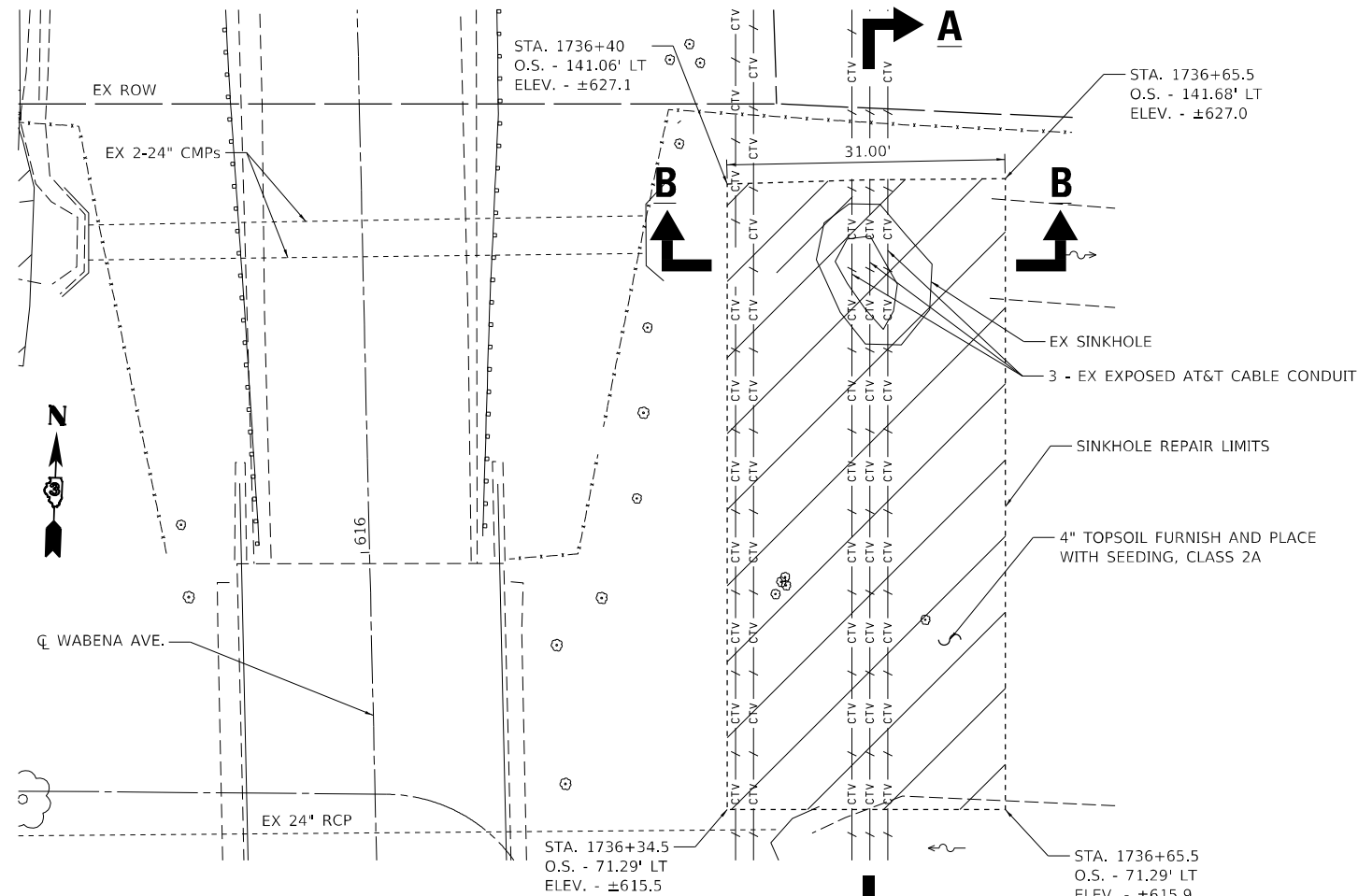
1. THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
2. SEE BRIDGE PLANS FOR SCARIFICATION THICKNESS.
3. SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

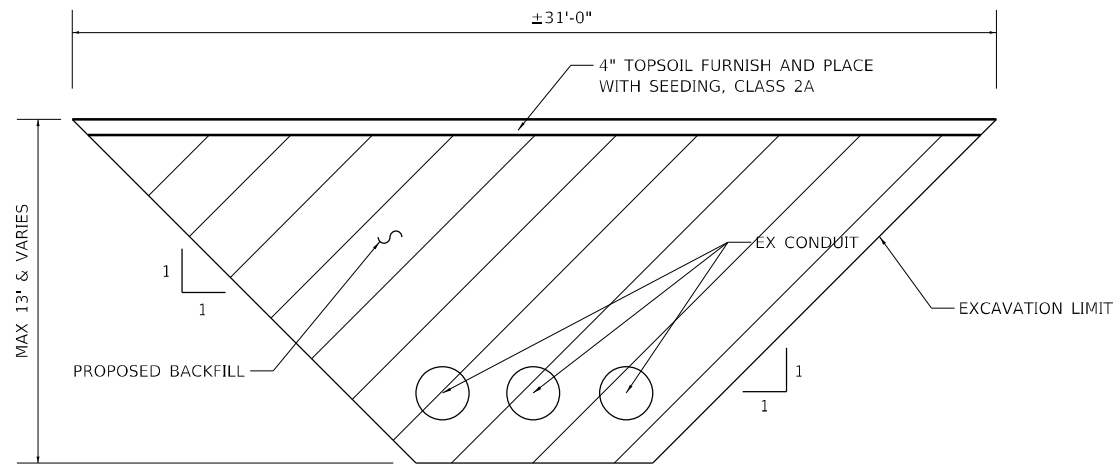
 LIN ENGINEERING,LTD. Consulting Engineers Westmont, Illinois	USER NAME = 14nho	DESIGNED - NH	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BUTT JOINT AND HMA TAPER DETAILS			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 2,0000 ' / in.	DRAWN - NH	REVISED -					80	(32, 47-4)VB, HBR-3	GRUNDY/KENDALL	143	46
	PLOT DATE = 1/9/2025	CHECKED - ST	REVISED -		SCALE: N.T.S. SHEET 1 OF 1 SHEETS STA. TO STA.			CONTRACT NO. 66295				
		DATE - 1/2025	REVISED -					ILLINOIS FED. AID PROJECT				



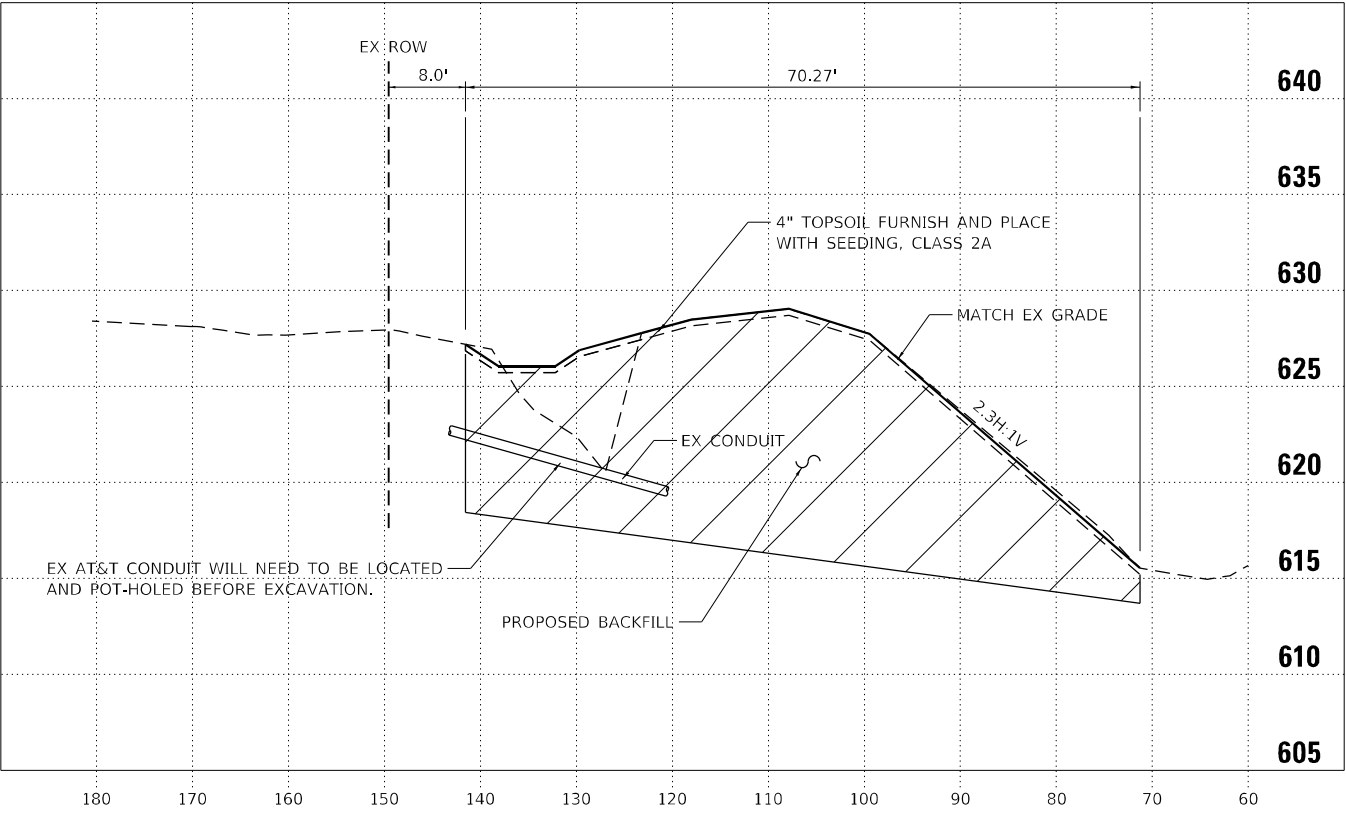




DETAIL 'A'
(PLAN VIEW)



SECTION B-B
(LOOKING NORTH)
N.T.S.



STATIONING - DISTANCE FROM EX CL OF I-80

0 10 20 30
SCALE IN FEET

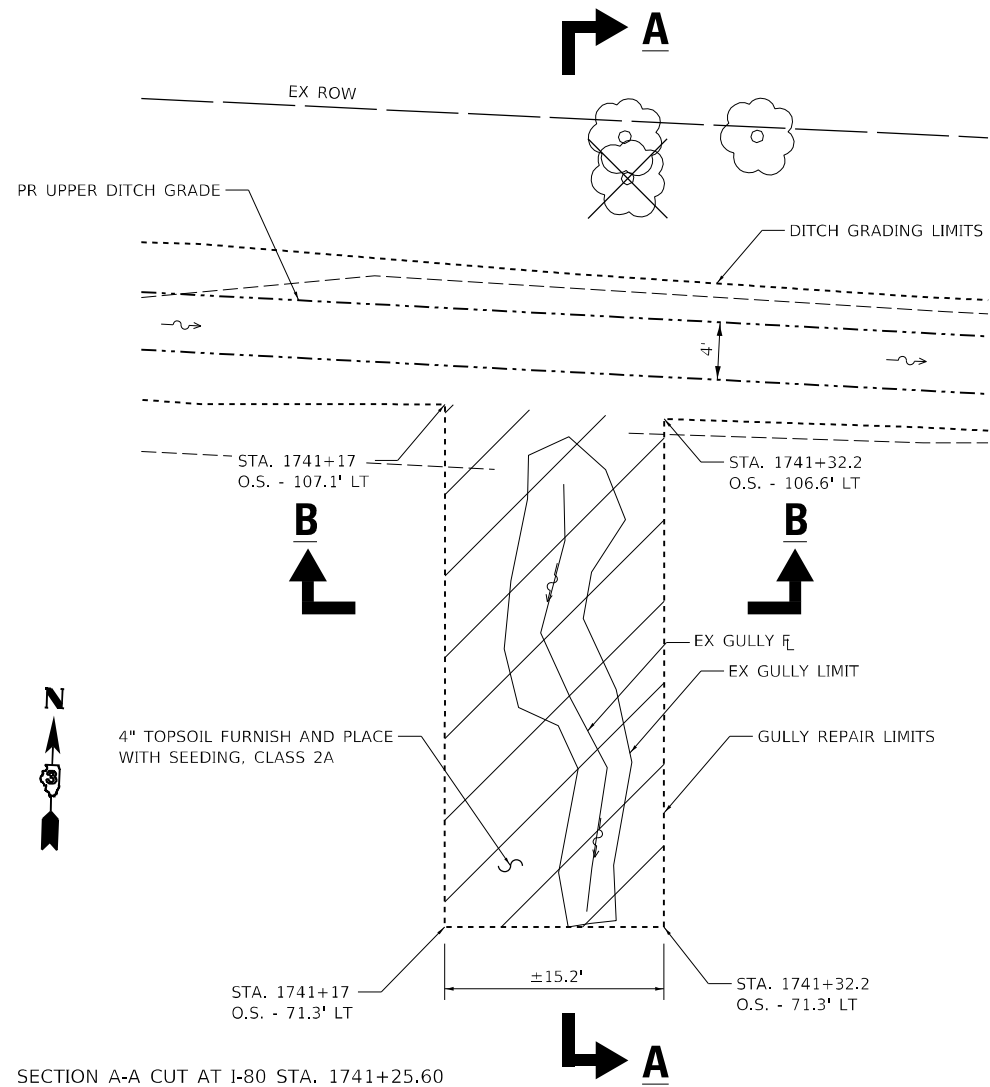
SECTION A-A
(LOOKING EAST)

SINKHOLE & GULLY REPAIR /DITCH GRADING QUANTITIES

PAY ITEM	DESCRIPTION	UNIT	QUANTITY
20100500	TREE REMOVAL, ACRES	ACRE	1.75
20200100	EARTH EXCAVATION	CU YD	335
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	2,038
21400100	GRADING AND SHAPING DITCHES	FOOT	1,495
28100105	STONE RIPRAP, CLASS A3	SQ YD	12
28200200	FILTER FABRIC	SQ YD	12
X0321962	CONNECTION OF EXISTING PIPE UNDERDRAIN	EACH	1
X2020410	EARTH EXCAVATION (SPECIAL)	CU YD	405
X2080250	TRENCH BACKFILL, SPECIAL	CU YD	420
X5012610	CONCRETE HEADWALL REMOVAL PARTIAL	EACH	1

NOTES:

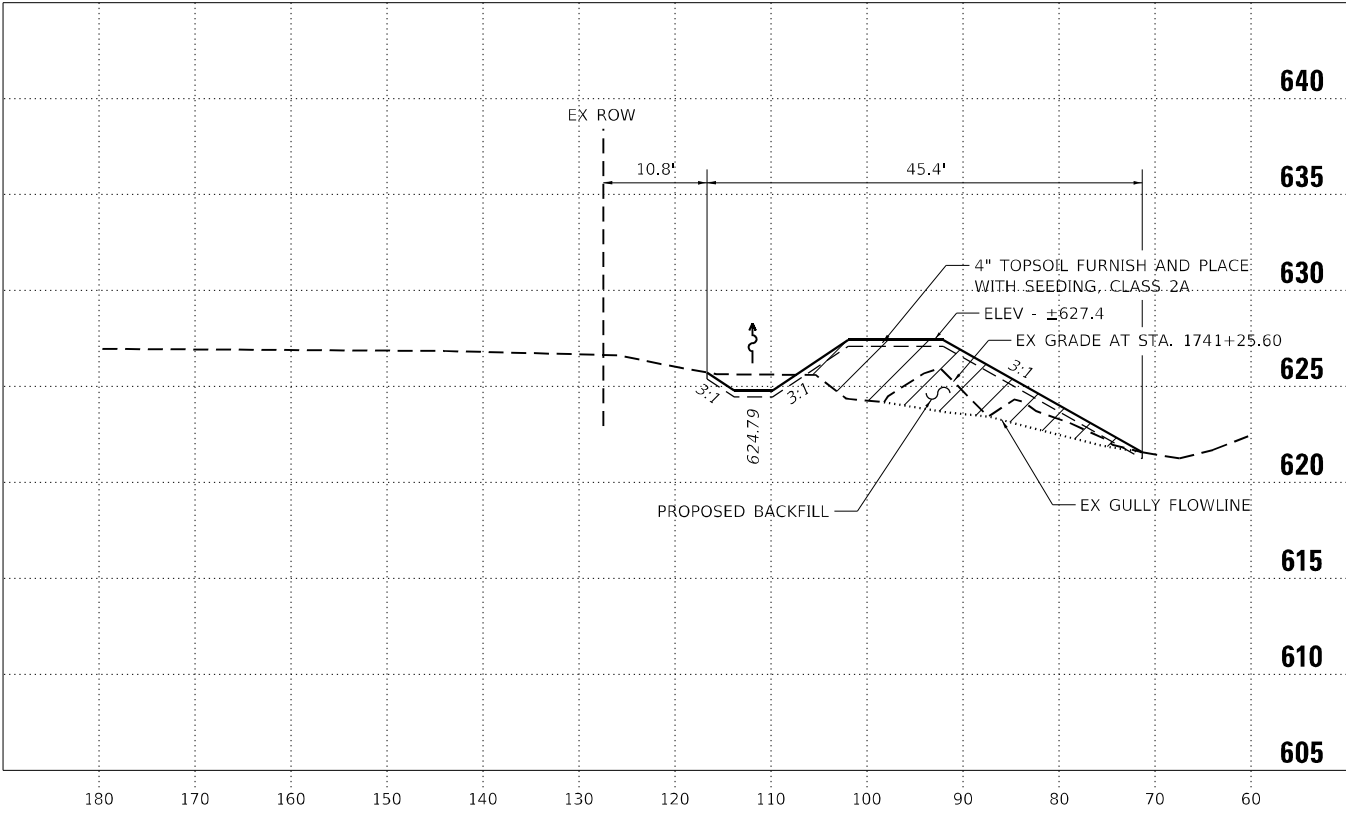
- X2020410 EARTH EXCAVATION (SPECIAL) INCLUDES LOCATING EXISTING FIBER AND EXCAVATING TRENCH ACCORDING TO MEANS AND METHODS OF UTILITY OWNER.
- X2080250 TRENCH BACKFILL, SPECIAL COVERS THE BACKFILLING OF THE FIBER LINES UNDER THE SINKHOLE ACCORDING TO THE MEANS AND METHODS OF THE UTILITY OWNER.
- SINKHOLE REPAIR WORK SHALL BE PERFORMED BY THE UTILITY OWNER, PER THE PROVISIONS OF THE UTILITY PERMIT, AT THE OWNER'S EXPENSE.



SECTION A-A CUT AT I-80 STA. 1741+25.60

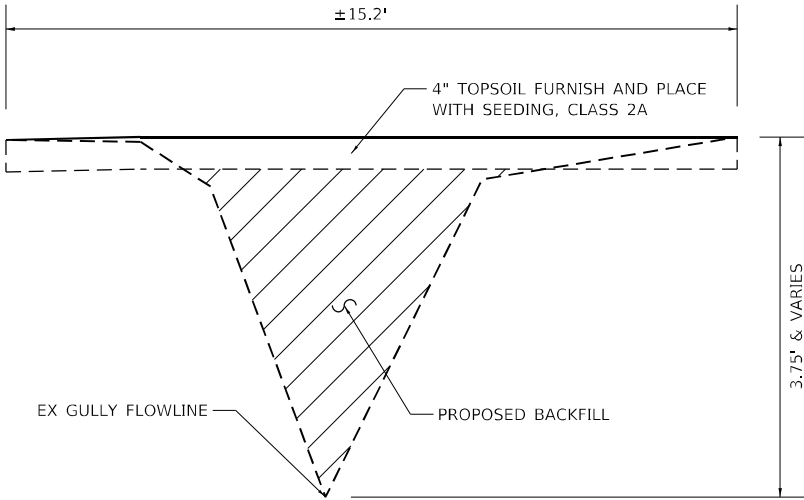
DETAIL 'B'
(PLAN VIEW)

- NOTES:
- 1. SUITABLE EARTH THAT IS EXCAVATED FOR THE PROPOSED DITCH SHALL BE PLACED AS FILL IN THE GULLY EMBANKMENT IN LIFTS AND COMPACTED ACCORDING TO SECTION 205.
 - 2. SEE SHEET 49 OF 135 FOR THE EARTH EXCAVATION AND TOPSOIL FURNISH AND PLACE, 4" SUMMARY OF QUANTITIES.



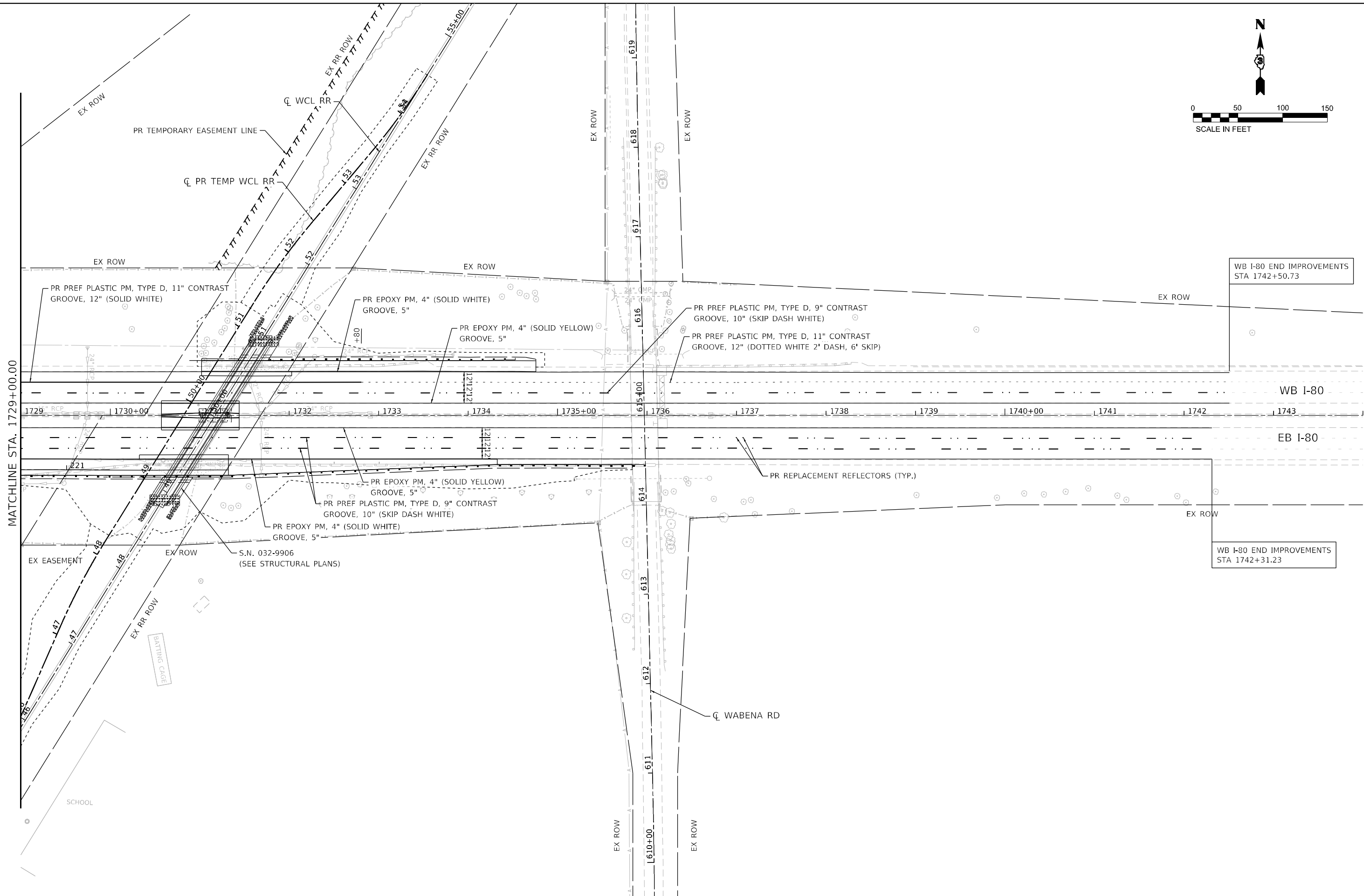
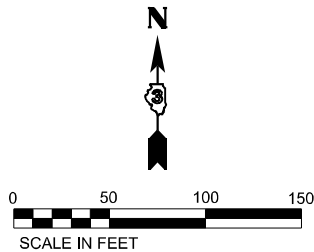
STATIONING - DISTANCE FROM EX C OF I-80

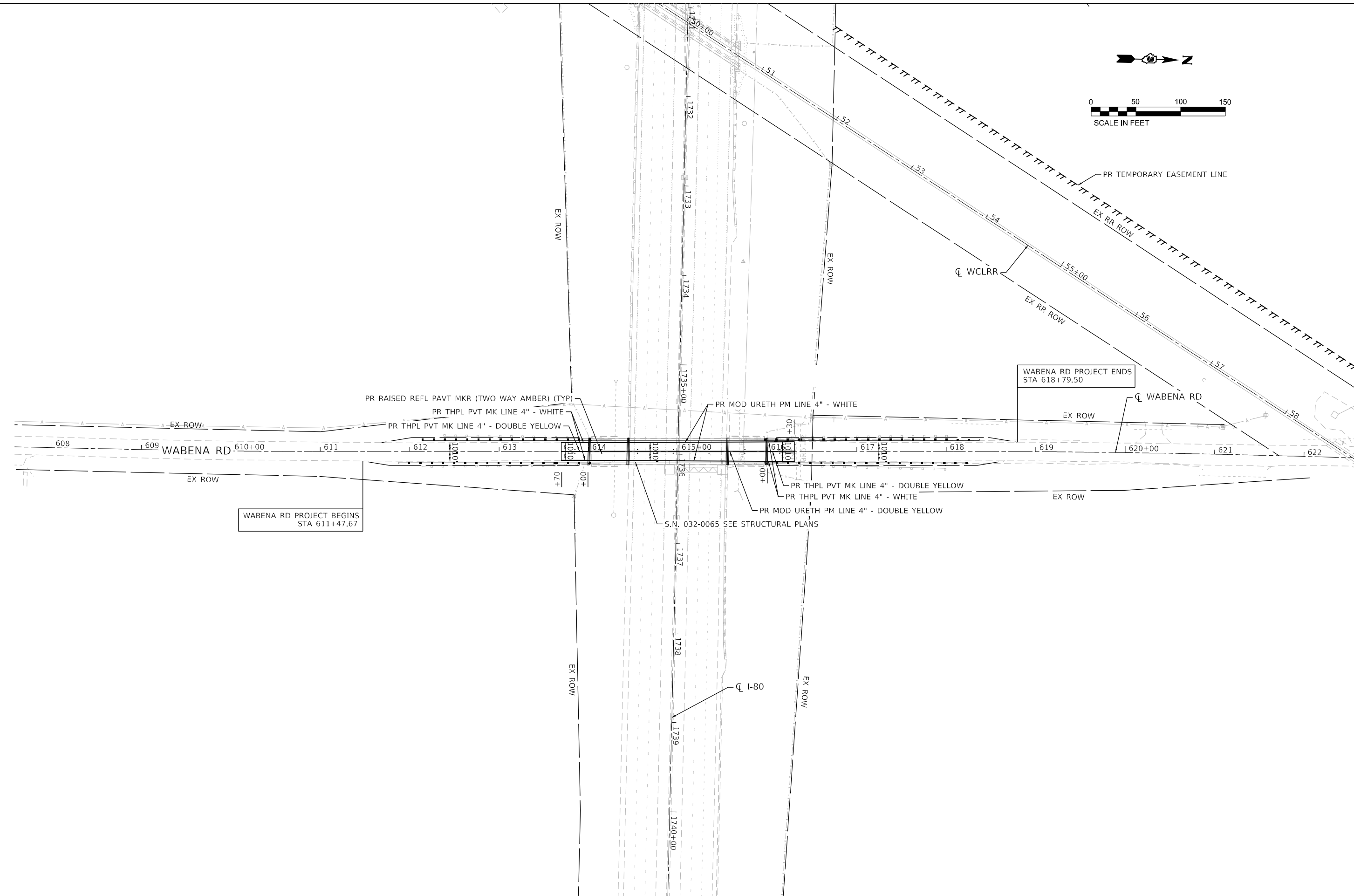
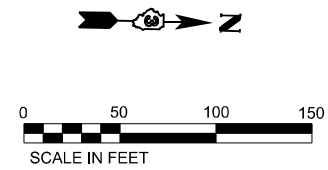
SECTION A-A
(LOOKING EAST)

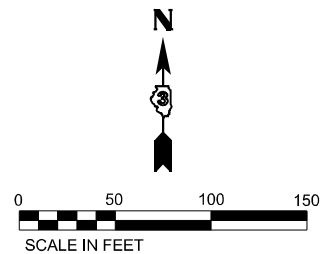
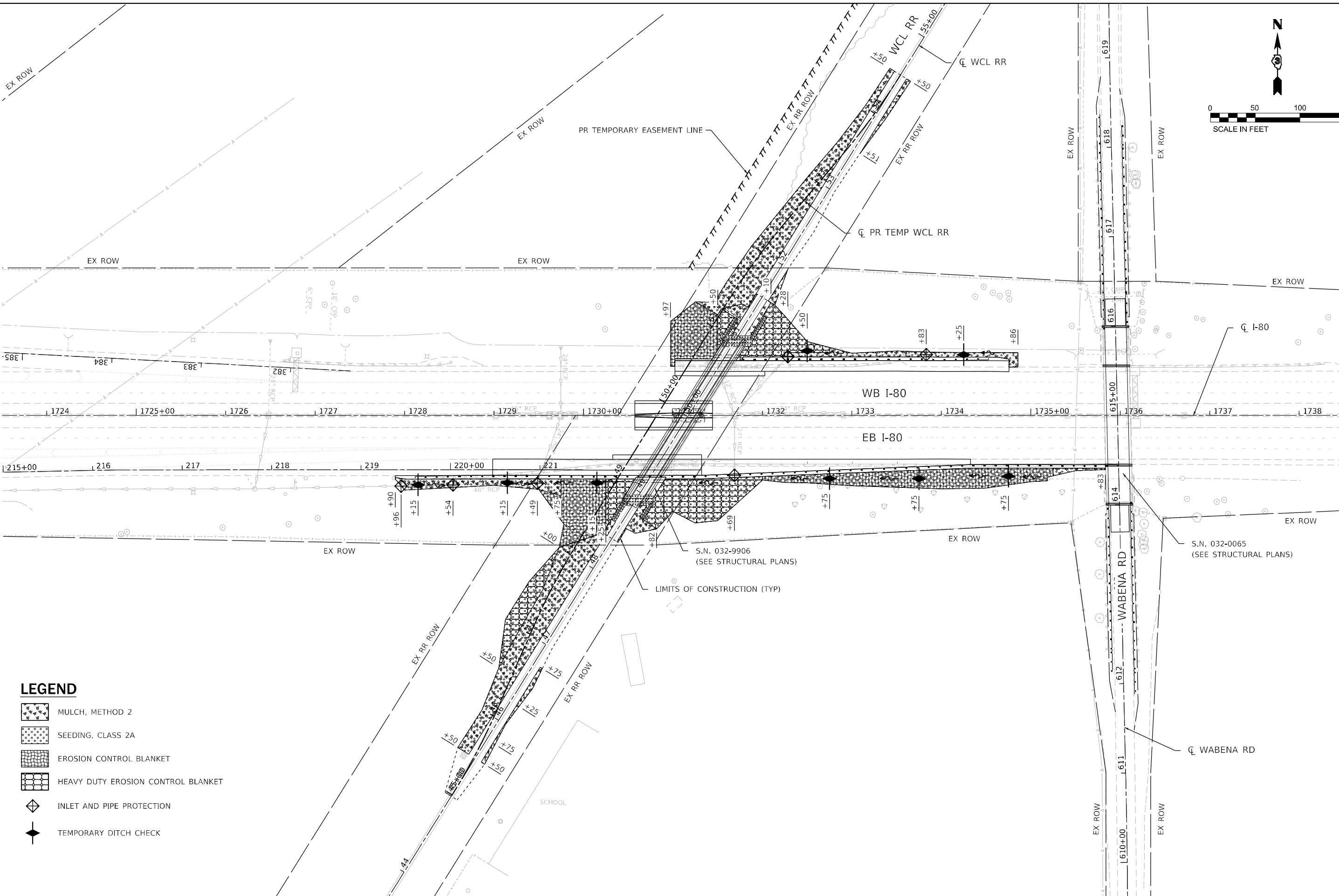


SECTION B-B
(LOOKING NORTH)
N.T.S.







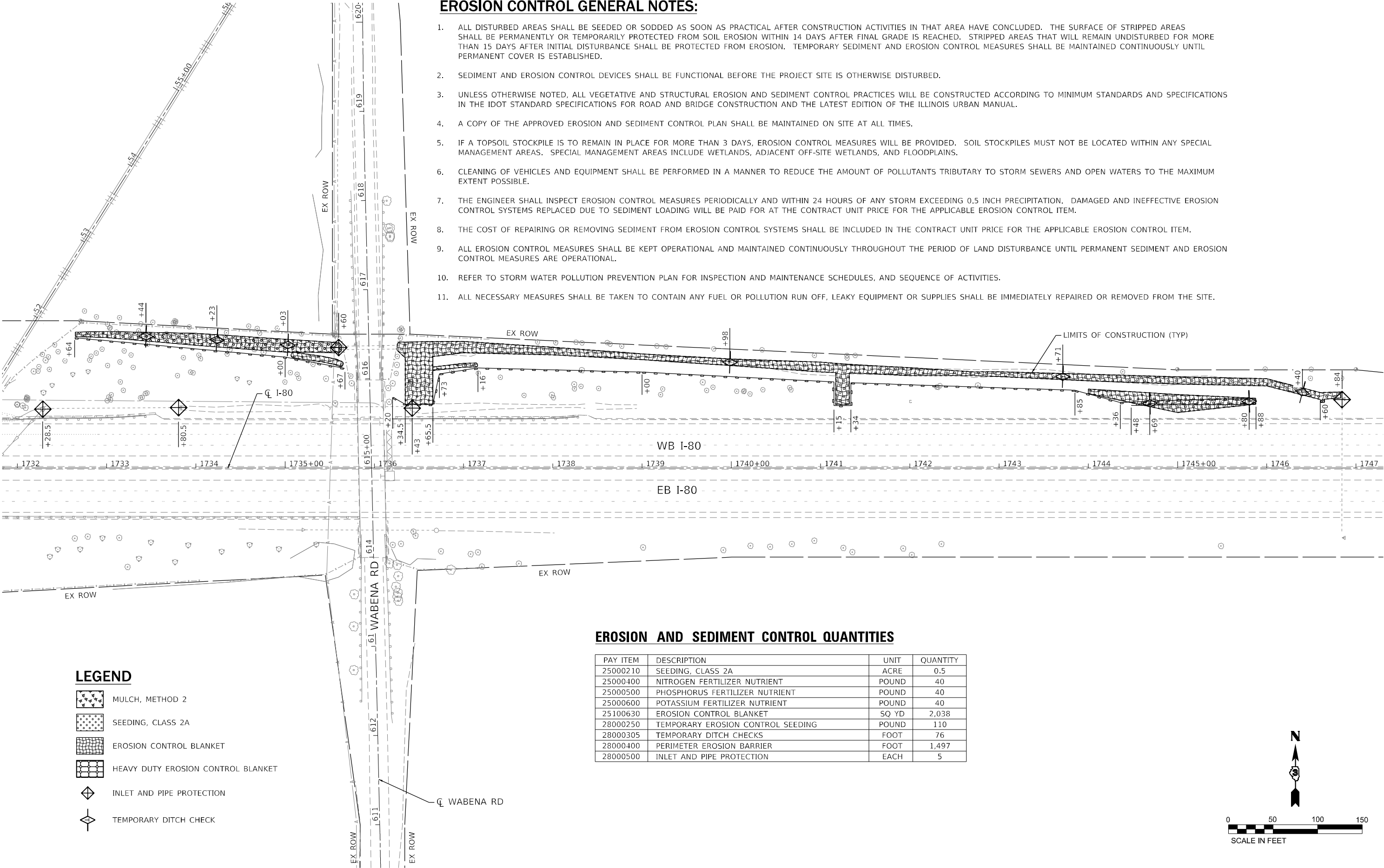


LEGEND

- MULCH, METHOD 2
- SEEDING, CLASS 2A
- EROSION CONTROL BLANKET
- HEAVY DUTY EROSION CONTROL BLANKET
- INLET AND PIPE PROTECTION
- TEMPORARY DITCH CHECK

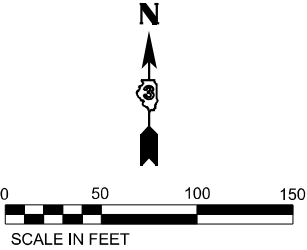
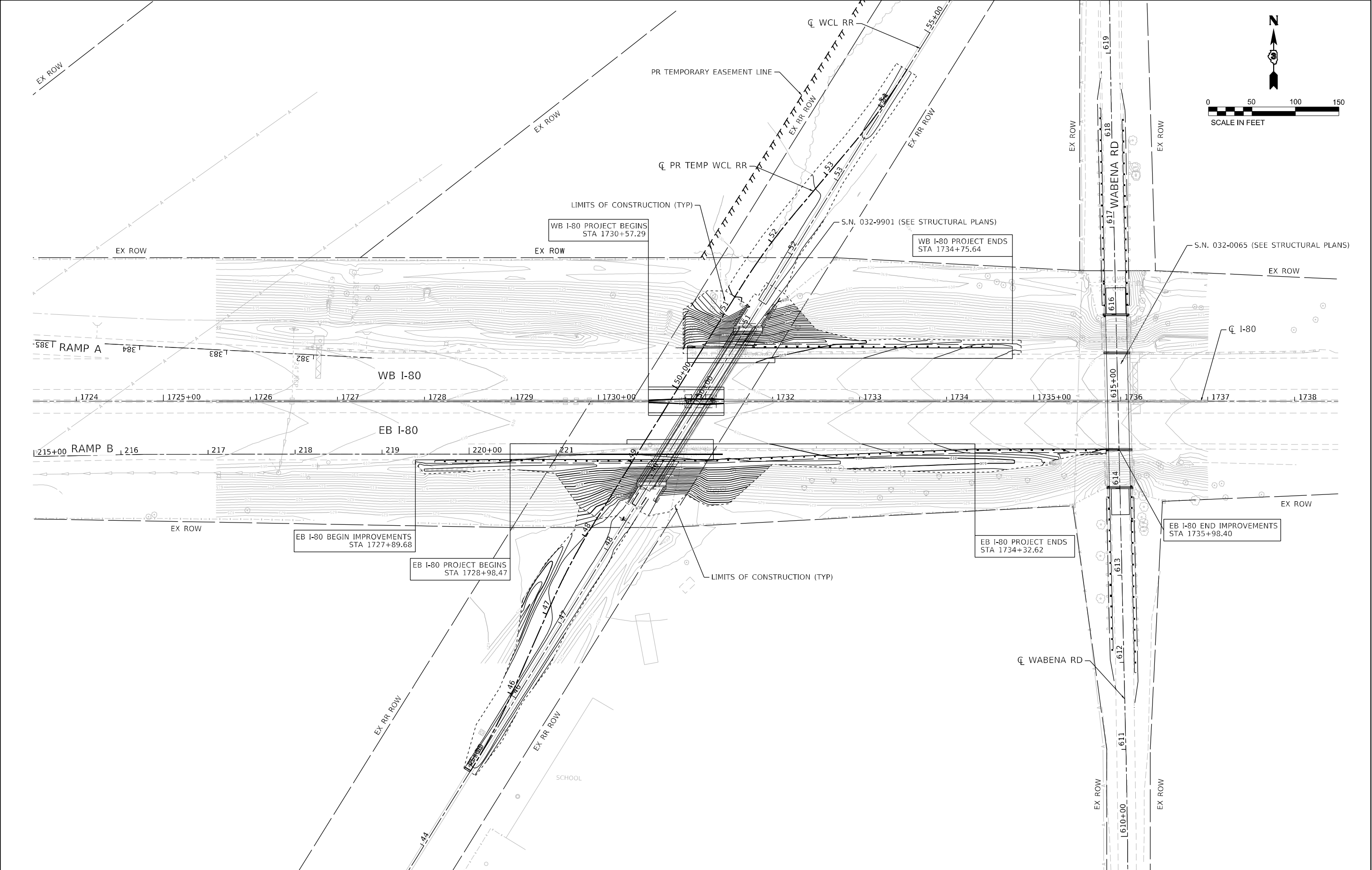
EROSION CONTROL GENERAL NOTES:

1. ALL DISTURBED AREAS SHALL BE SEEDED OR SODDED AS SOON AS PRACTICAL AFTER CONSTRUCTION ACTIVITIES IN THAT AREA HAVE CONCLUDED. THE SURFACE OF STRIPPED AREAS SHALL BE PERMANENTLY OR TEMPORARILY PROTECTED FROM SOIL EROSION WITHIN 14 DAYS AFTER FINAL GRADE IS REACHED. STRIPPED AREAS THAT WILL REMAIN UNDISTURBED FOR MORE THAN 15 DAYS AFTER INITIAL DISTURBANCE SHALL BE PROTECTED FROM EROSION. TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED CONTINUOUSLY UNTIL PERMANENT COVER IS ESTABLISHED.
2. SEDIMENT AND EROSION CONTROL DEVICES SHALL BE FUNCTIONAL BEFORE THE PROJECT SITE IS OTHERWISE DISTURBED.
3. UNLESS OTHERWISE NOTED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS IN THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE LATEST EDITION OF THE ILLINOIS URBAN MANUAL.
4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON SITE AT ALL TIMES.
5. IF A TOPSOIL STOCKPILE IS TO REMAIN IN PLACE FOR MORE THAN 3 DAYS, EROSION CONTROL MEASURES WILL BE PROVIDED. SOIL STOCKPILES MUST NOT BE LOCATED WITHIN ANY SPECIAL MANAGEMENT AREAS. SPECIAL MANAGEMENT AREAS INCLUDE WETLANDS, ADJACENT OFF-SITE WETLANDS, AND FLOODPLAINS.
6. CLEANING OF VEHICLES AND EQUIPMENT SHALL BE PERFORMED IN A MANNER TO REDUCE THE AMOUNT OF POLLUTANTS TRIBUTARY TO STORM SEWERS AND OPEN WATERS TO THE MAXIMUM EXTENT POSSIBLE.
7. THE ENGINEER SHALL INSPECT EROSION CONTROL MEASURES PERIODICALLY AND WITHIN 24 HOURS OF ANY STORM EXCEEDING 0.5 INCH PRECIPITATION. DAMAGED AND INEFFECTIVE EROSION CONTROL SYSTEMS REPLACED DUE TO SEDIMENT LOADING WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE APPLICABLE EROSION CONTROL ITEM.
8. THE COST OF REPAIRING OR REMOVING SEDIMENT FROM EROSION CONTROL SYSTEMS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE APPLICABLE EROSION CONTROL ITEM.
9. ALL EROSION CONTROL MEASURES SHALL BE KEPT OPERATIONAL AND MAINTAINED CONTINUOUSLY THROUGHOUT THE PERIOD OF LAND DISTURBANCE UNTIL PERMANENT SEDIMENT AND EROSION CONTROL MEASURES ARE OPERATIONAL.
10. REFER TO STORM WATER POLLUTION PREVENTION PLAN FOR INSPECTION AND MAINTENANCE SCHEDULES, AND SEQUENCE OF ACTIVITIES.
11. ALL NECESSARY MEASURES SHALL BE TAKEN TO CONTAIN ANY FUEL OR POLLUTION RUN OFF, LEAKY EQUIPMENT OR SUPPLIES SHALL BE IMMEDIATELY REPAIRED OR REMOVED FROM THE SITE.



EROSION AND SEDIMENT CONTROL QUANTITIES

PAY ITEM	DESCRIPTION	UNIT	QUANTITY
25000210	SEEDING, CLASS 2A	ACRE	0.5
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	40
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	40
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	40
25100630	EROSION CONTROL BLANKET	SQ YD	2,038
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	110
28000305	TEMPORARY DITCH CHECKS	FOOT	76
28000400	PERIMETER EROSION BARRIER	FOOT	1,497
28000500	INLET AND PIPE PROTECTION	EACH	5



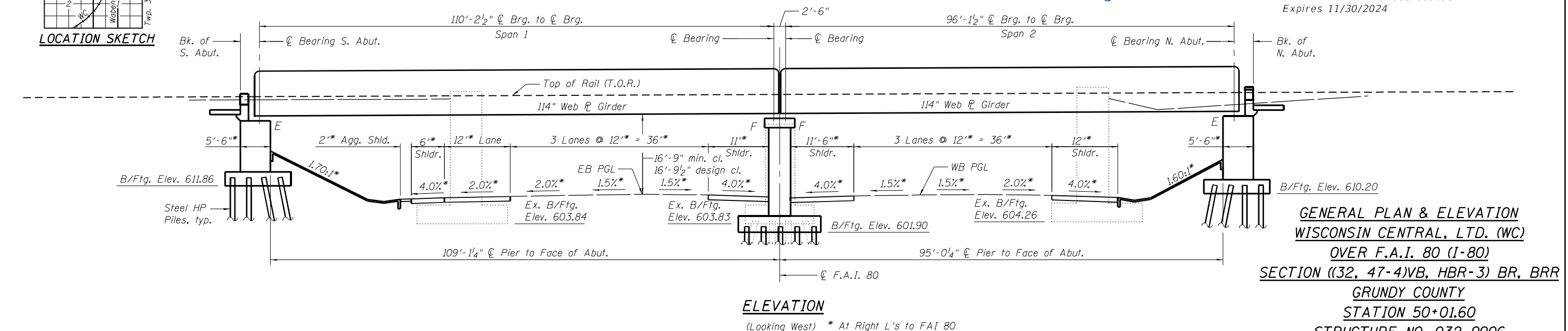
LIN ENGINEERING, LTD. Consulting Engineers Westmont, Illinois	USER NAME = 14nho	DESIGNED - JK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	W.C. RAILROAD OVER F.A.I. ROUTE 80 GRADING PLAN				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 100,0000 ' / in.	DRAWN - JK	REVISED -		80	(32, 47-4)VB, HBR-3	GRUNDY/KENDALL	143	57				
	PLOT DATE = 1/9/2025	CHECKED - ST	REVISED -		CONTRACT NO. 66295								
		DATE - 1/2025	REVISED -		ILLINOIS FED. AID PROJECT								
					SCALE: 1"=50'	SHEET 1 OF 1 SHEETS	STA. 1723+50.00 TO STA. 1738+50.00						

[illegible]

APPROVED
For Structural Adequacy Only

Engineer of Bridges & Structures

Michael T. Haley 01/10/2025
 Michael T. Haley Date
 Licensed Structural Engineer
 State of Illinois No. 081-005991
 Expires 11/30/2024



GENERAL PLAN & ELEVATION
WISCONSIN CENTRAL, LTD. (WC)
OVER F.A.I. 80 (I-80)
SECTION ((32, 47-4)VB, HBR-3) BR, BRR
GRUNDY COUNTY
STATION 50+01.60
STRUCTURE NO. 032-9906

DESIGN SPECIFICATIONS

American Railway Engineering and Maintenance-of-Way Association (AREMA)
Manual for Railway Engineering, 2019
CN Guidelines for Design of Railway Structures (2006)

LOADING

LIVE LOAD: Cooper E90 (E90 as based on 90 kip Axles) or Alternate Live Load Plus Impact for rolling equipment without hammer blow. Service Load Design

DEAD LOAD: Includes additional 12 inches of Future Ballast

WALKWAY LIVE LOAD: 100 psf

DESIGN STRESSES

FIELD UNITS

f'c = 3500 psi
fy = 60,000 psi (Reinforcement)
fs = 27,500 psi (AASHTO M270/ASTM A709, Grade 50)

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 3.9%
Site Coefficient (S) = 1.2

CONSTRUCTION SEQUENCE

- 1) Construct Temporary Runaround
- 2) Shift RR Traffic to Temporary Runaround Alignment
- 3) Remove Existing Superstructure and Substructure
- 4) Excavate and Construct New Abutments and Pier
- 5) Jack "Temporary" Superstructure into Final Alignment on New Substructure
- 6) Remove remaining runaround including temporary substructure

GENERAL NOTES

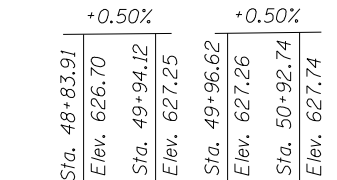
1. Except as otherwise specified, fasteners shall be ASTM F3125 Grade A325 Type 1 hot dip galvanized bolts. Bolts 7/8 in. ϕ , holes 15/16 in. ϕ , unless otherwise noted. See special provision for "Metallizing of Structural Steel".
2. Calculated weight of Structural Steel** = 844,309 lbs.
AASHTO M270 Gr. 50 (ASTM A709 Gr. 50) = 844,141 lbs.
AASHTO M169 Gr. 1015 (ASTM A108 Gr. 1015) = 168 lbs. (Headed studs)
FRACTURE CRITICAL MATERIAL (F.C.M.) to conform to AREMA Section 1.14 of Chapter 15.
**Jump Span and Temp. Steel Bents weight excluded.
3. All structural steel shall be AASHTO M270 Grade 50 and shall be metallized. See special provision for "Metallizing of Structural Steel".
4. No field welding is permitted except as specified in the contract documents.
5. Reinforcement bars designated (E) shall be epoxy coated.
6. 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.
7. Bearing seat surfaces shall be constructed or adjusted to their designated elevations within a tolerance of 1/8 inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
8. Concrete Sealer shall be applied to the exposed surfaces of backwalls, top of bridge seats and face of steps, and exposed faces of abutments and cap and exposed wall of piers.
9. Load carrying components designated "CVN" shall conform to the Impact Testing Requirements, Zone 3.
10. Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.
11. Granular Backfill for Structures shall be compacted according to Article 207.03 of the Standard Specifications.
12. Care shall be taken when removing the existing superstructure, asbestos is present. (See Sheet #5 of 20 on existing plans: "Unsaturated 12 lbs. asbestos paper").

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		2,128	2,128
Concrete Structures	Cu. Yd.		663.2	663.2
Furnishing and Erecting Structural Steel	L. Sum	1		1
Reinforcement Bars, Epoxy Coated	Pound		85,770	85,770
Pipe Handrail, Special	Foot	213		213
Slope Wall 4 Inch	Sq. Yd.		177	177
Furnishing Steel Piles	Foot		8,196	8,196
HP 12x84	Foot		8,196	8,196
Driving Piles	Foot		8,196	8,196
Test Pile Steel HP 12x84	Each		3	3
Pile Shoes	Each		219	219
Temporary Soil Retention System	Sq. Ft.		5,309	5,309
Name Plates	Each		1	1
Anchor Bolts, 1 1/4"	Each		40	40
Membrane Waterproofing (Special)	Sq. Ft.	4,235		4,235
Concrete Sealer	Sq. Ft.		1,939	1,939
Pipe Underdrains for Structures, 4"	Foot		200	200
Steel Grate Walkway	Foot	213		213
Temporary Jump Span	L. Sum	1		1
Drainage System for Structures	L. Sum	1		1
Bridge Roll-in	L. Sum	1		1
Granular Backfill for Structures	Cu. Yd.		264	264
Temporary Substructures	L. Sum		1	1
Geocomposite Wall Drain	Sq. Yd.		262	262
Asbestos Waterproofing Removal	Sq. Ft.	2,300		2,300
Steel Bearing Assembly	Each		8	8

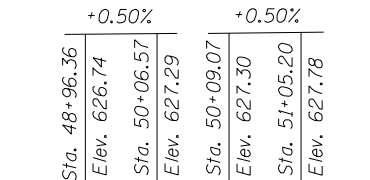
INDEX OF DRAWINGS

Sheet No.	Sheet Title
1.	General Plan & Elevation
2.	General Data
3.	Sequence of Construction - Stage I & Notes
4.	Sequence of Construction - Stage II & Notes
5.	Sequence of Construction - Stage III & Notes
6.	Temporary Soil Retention System
7.	Temporary Runaround Plan and Elevation
8.	Jump Span Details
9.	Jump Span Details
10.	Jump Span Bearings
11.	Temporary Abutments
12.	Temporary Bent Details
13.	Temporary Bent Cap Details
14.	Temporary Pier
15.	Roll-In Details
16.	Deck Cross Section
17.	Framing Plan - Span 1
18.	Framing Plan - Span 2
19.	End Framing Plan & Steel Details
20.	Steel Details
21.	Girder Elevation (Span 1)
22.	Girder Elevation (Span 2)
23.	Misc. Structural Steel Details
24.	Misc. Structural Steel Details
25.	Deck Plate
26.	Deck Plate Details
27.	Upper Deck Plate
28.	Upper Deck Plate
29.	Walkway
30.	Walkway
31.	Handrail Details
32.-36.	Bearing Details
37.	Deck Drainage
38.-41.	South Abutment
41.-45.	North Abutment
46.	Pier
47.	HP Pile Details
48.	Boring Log
49.	Boring Log

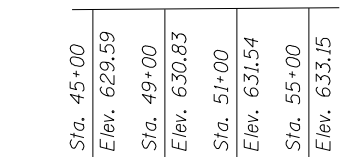


WEST GIRDER
BOTTOM STEEL ELEV.
WISCONSIN CENTRAL, LTD.

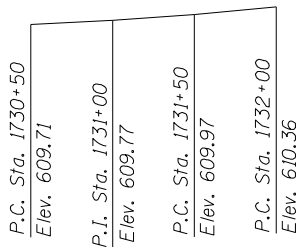
Note:
Girder Elevations are given at underside of bottom flange $\overline{\text{E}}$.



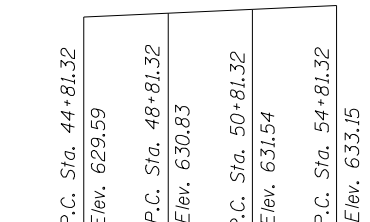
EAST GIRDER
BOTTOM STEEL ELEV.
WISCONSIN CENTRAL, LTD.



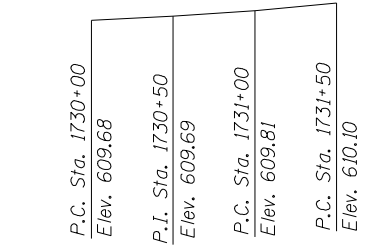
PROFILE GRADE
WISCONSIN CENTRAL, LTD.
Final Alignment



WB PROFILE GRADE
F.A.I. RTE. 80



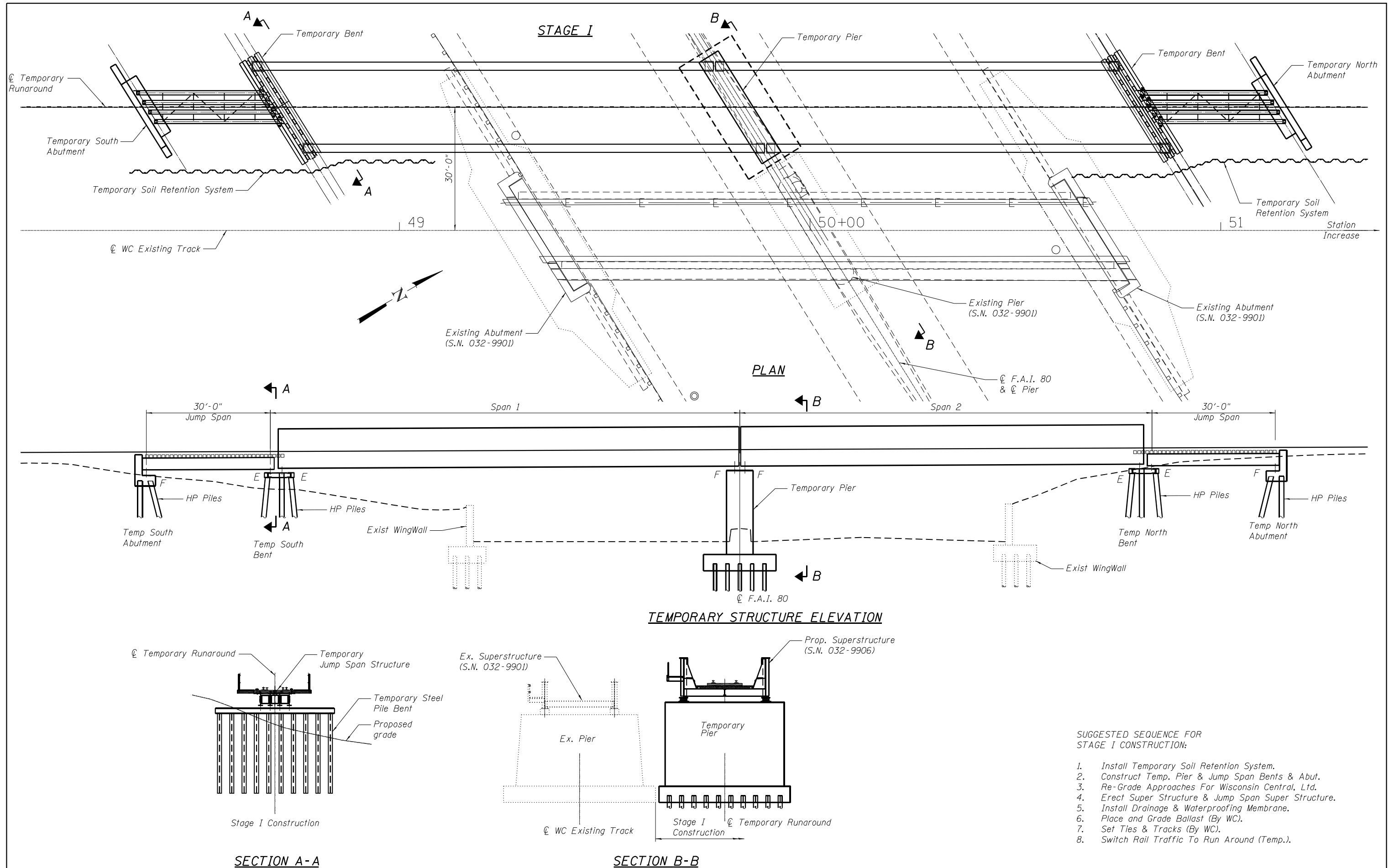
PROFILE GRADE
WISCONSIN CENTRAL, LTD.
Temporary Runaround

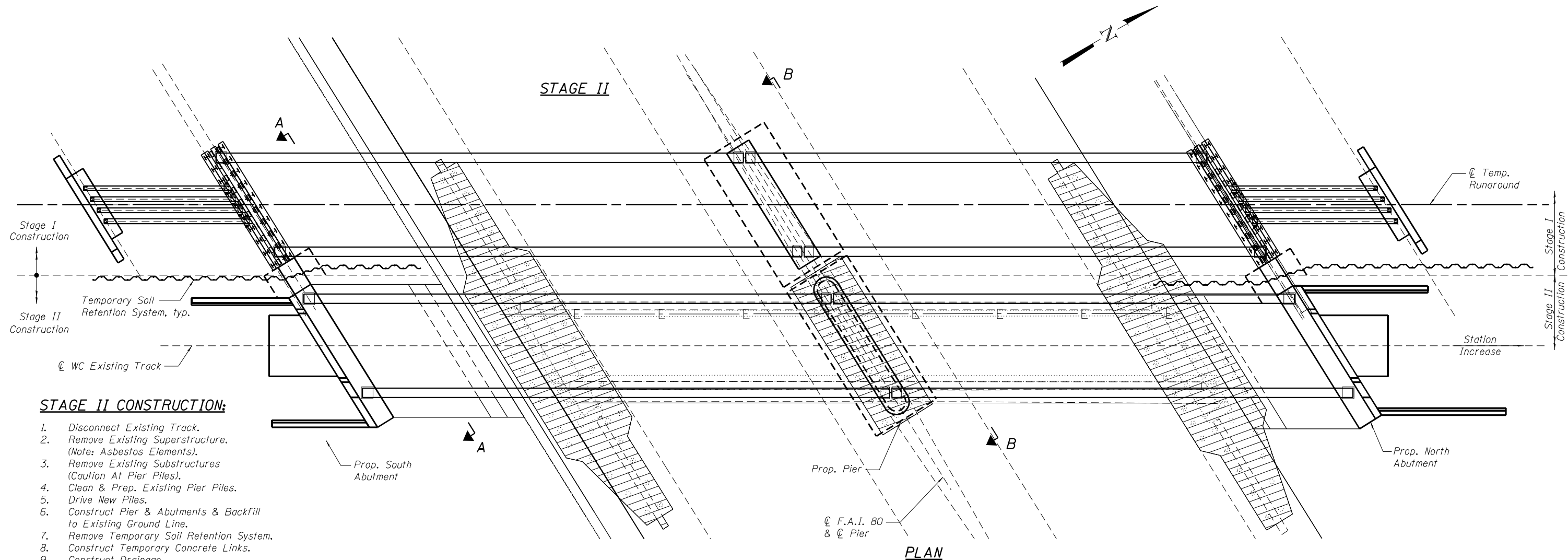


EB PROFILE GRADE
F.A.I. RTE. 80

WISCONSIN CENTRAL, LTD.
BUILT 20__ BY
STATE OF ILLINOIS
F.A.I. RT. 80 SEC. (32, 47-4)VB, HBR-3
STA. 50+01.60 LOADING COOPER E90
STRUCTURE NO. 032-9906

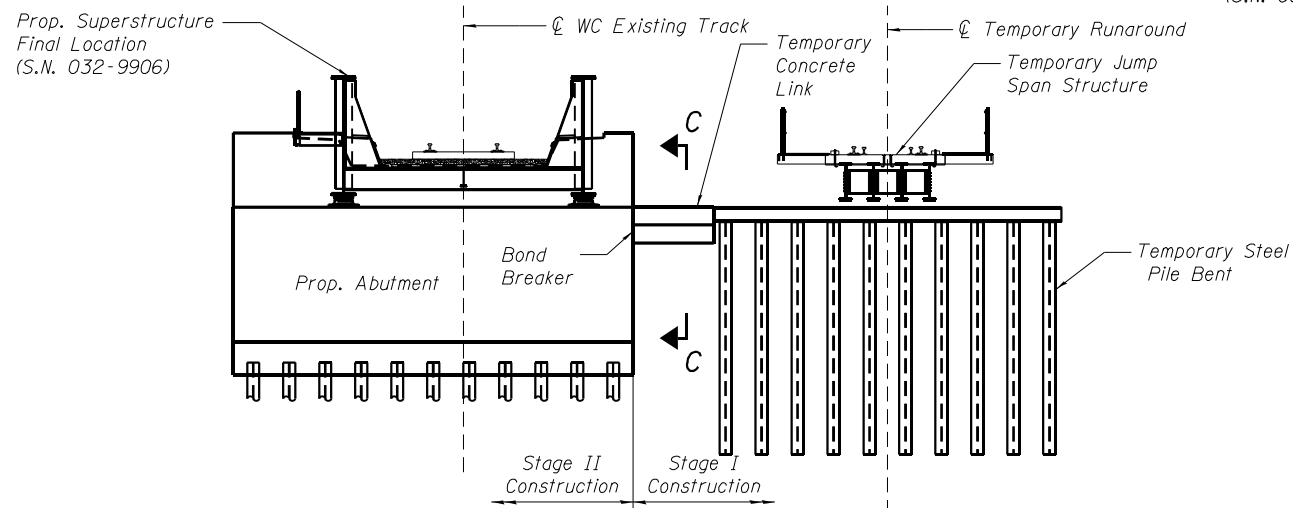
NAME PLATE
See Std. 515001





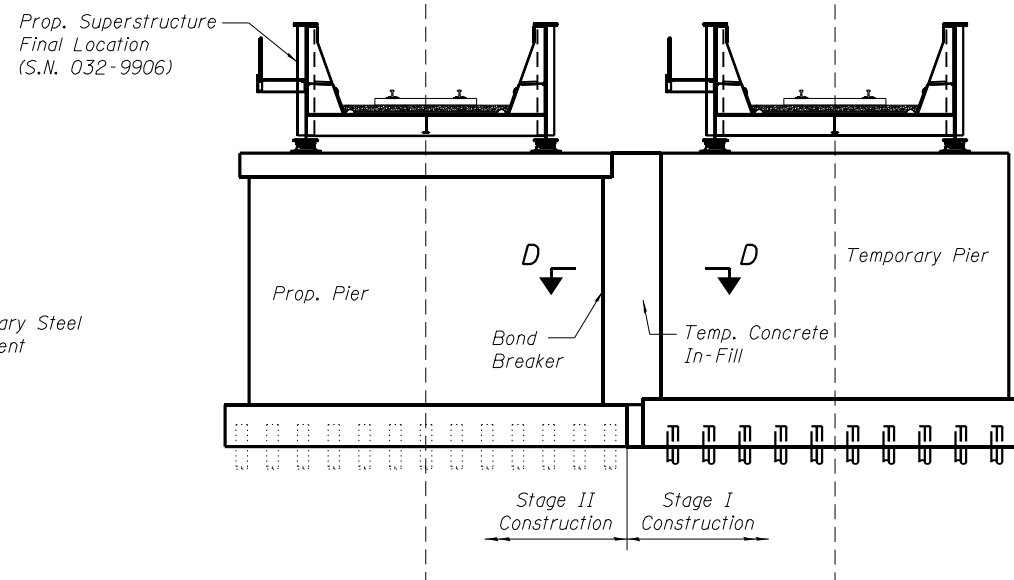
PLAN

- Existing Structure Removal, Paid for as "Removal of Existing Structures".



SECTION A-A

See Sheet 15 for Section C-C

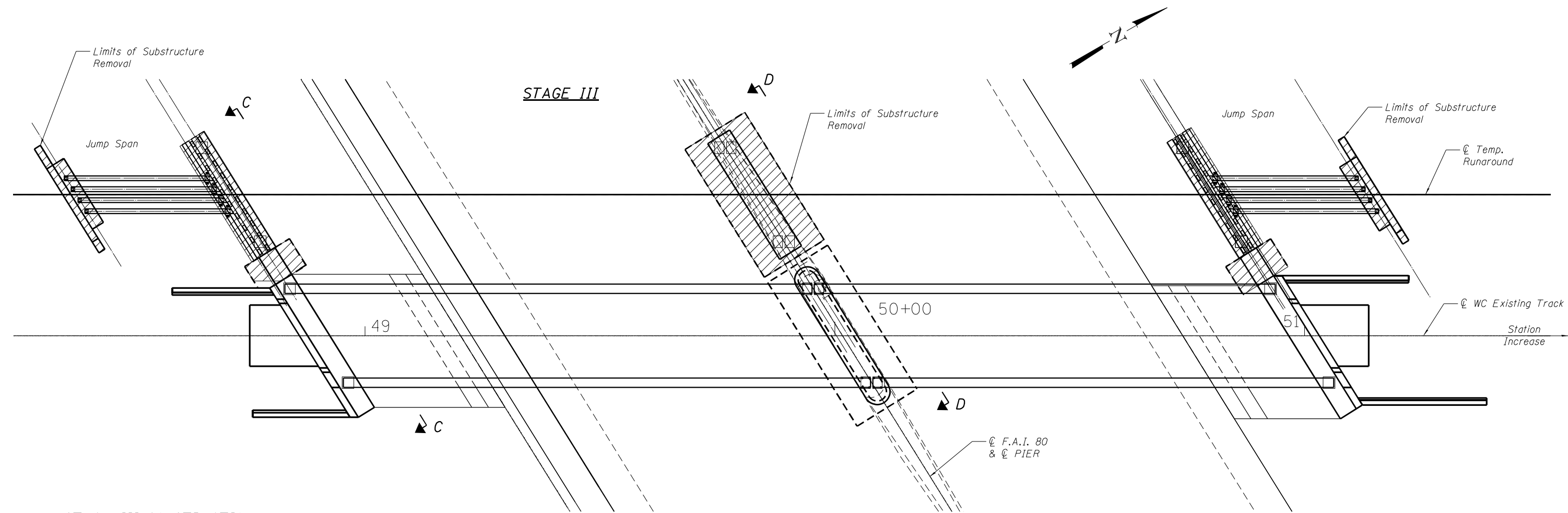


SECTION B-B

See Sheet 15 for Section D-D

Note:
Existing Piles at the proposed pier are to be reused with the construction of the new pier.

ORIGINAL:		UPDATED:			DESIGNED - ZJH	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SEQUENCE OF CONSTRUCTION – STAGE II & NOTES STRUCTURE NO. 032-9906		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
 DLZ Illinois, Inc.  LIN ENGINEERING LTD. Consulting Engineers Serving M.E.C.s				CHECKED - PRD MTH	REVISED	SHEET NO. 4 OF 49 SHEETS		80	((32, 47-4)VD, HBR-3) BR, BR	GRUNDY	143	61		
				DRAWN - BAE	REVISED			CONTRACT NO. 66295						
				CHECKED - ZJH MTH	REVISED			ILLINOIS FED. AID PROJECT						
				DATE - 03/25/22										

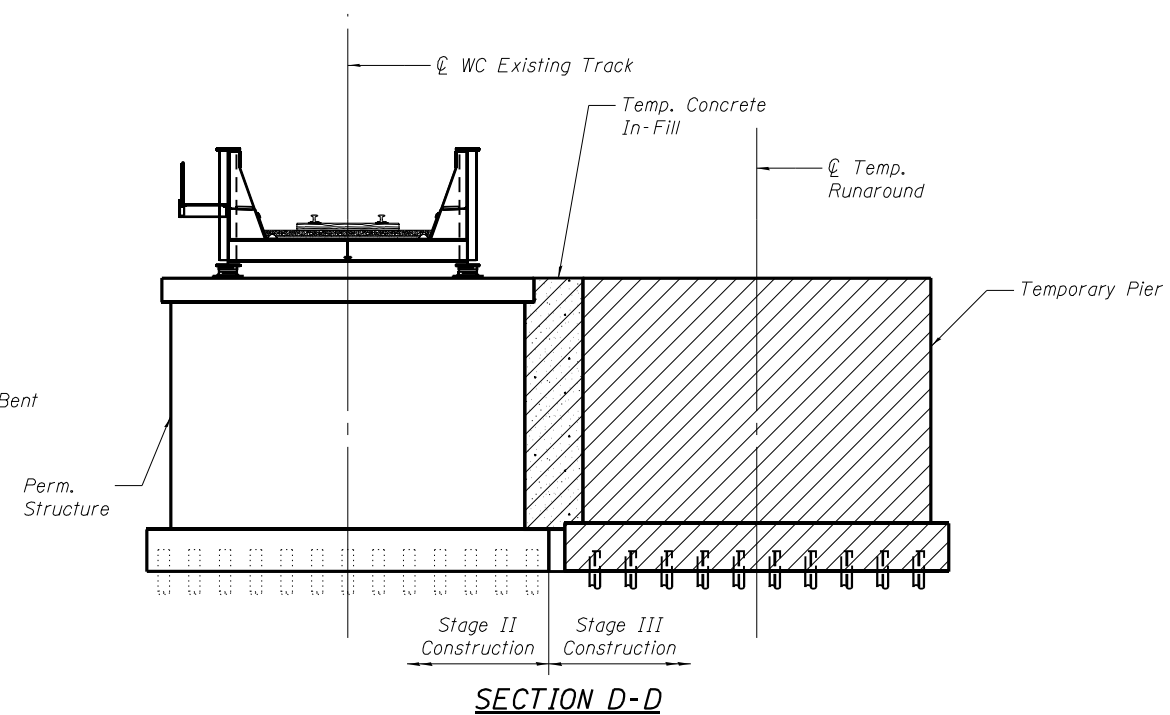
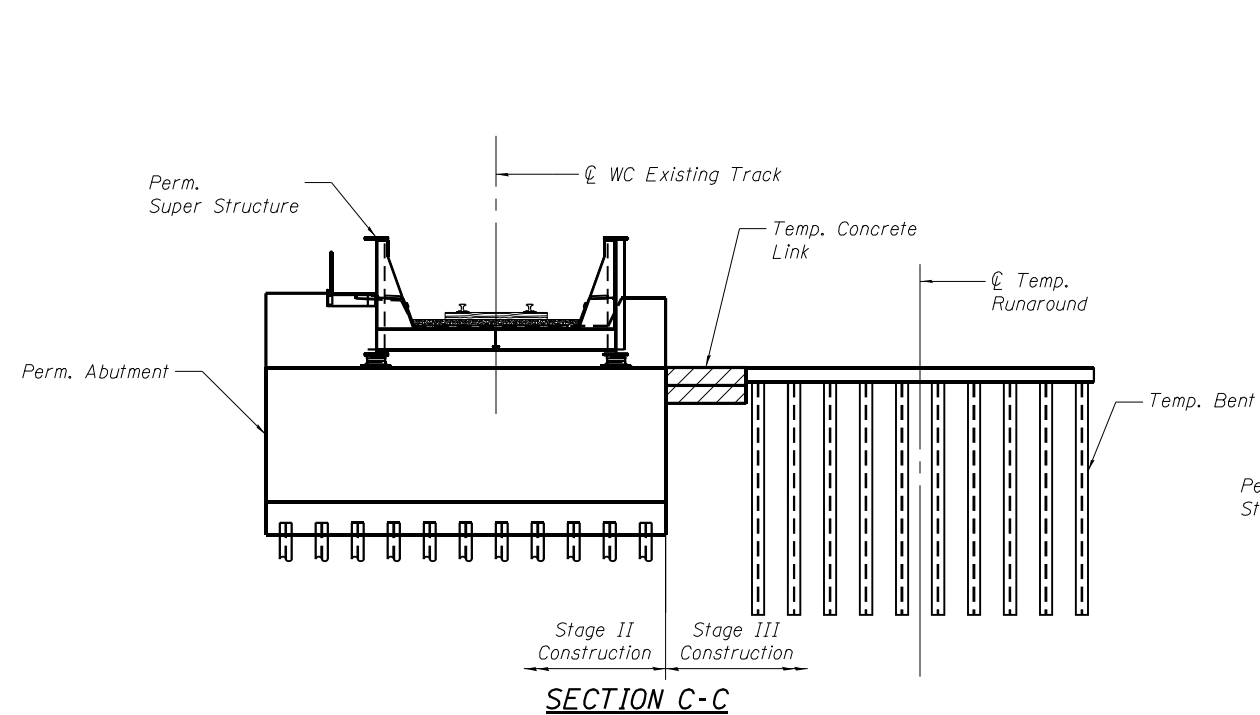


STAGE III CONSTRUCTION

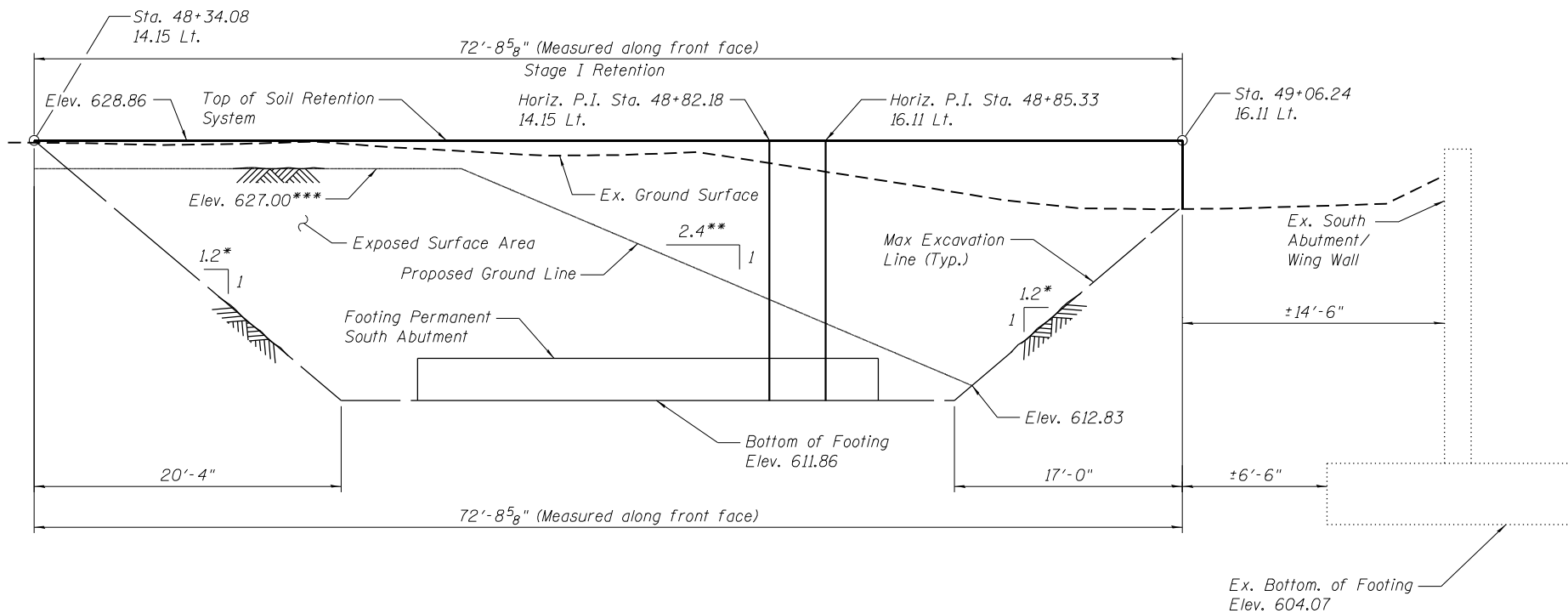
1. Remove Jump Span.
2. Remove Existing Temp. Substructures.
3. Perform Final Grading.
4. Clean Up.

PLAN

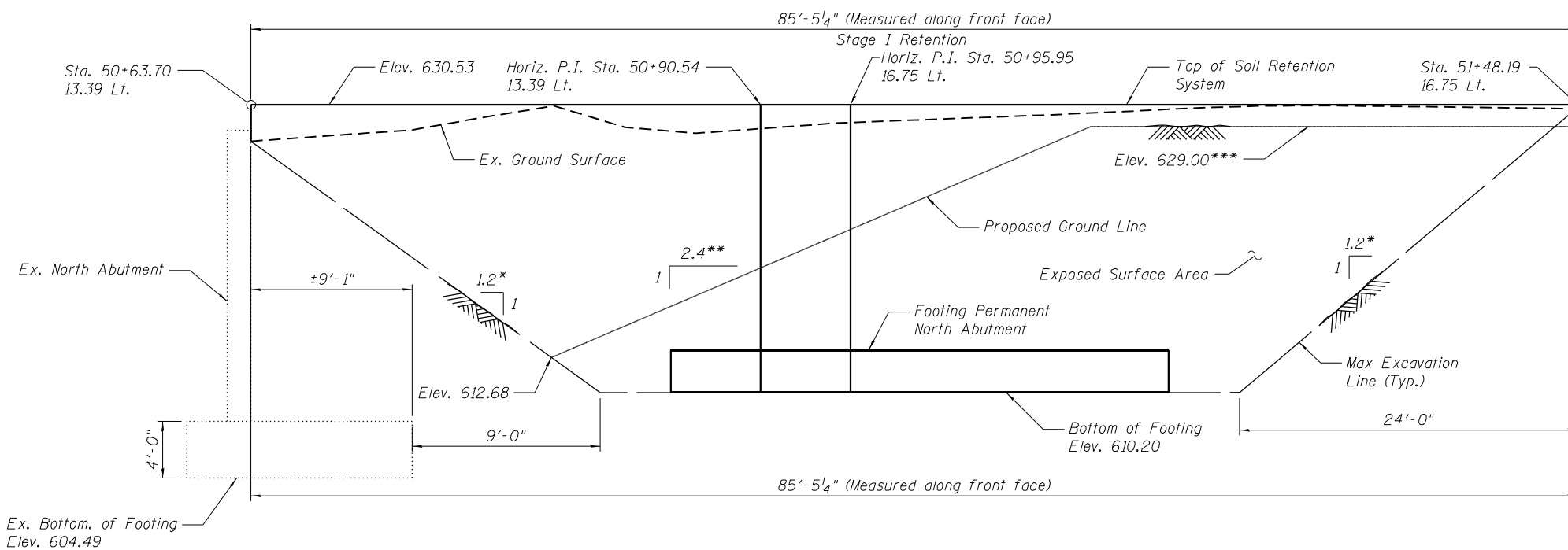
- Structure Removal. Cost included with Temporary Jump Span.



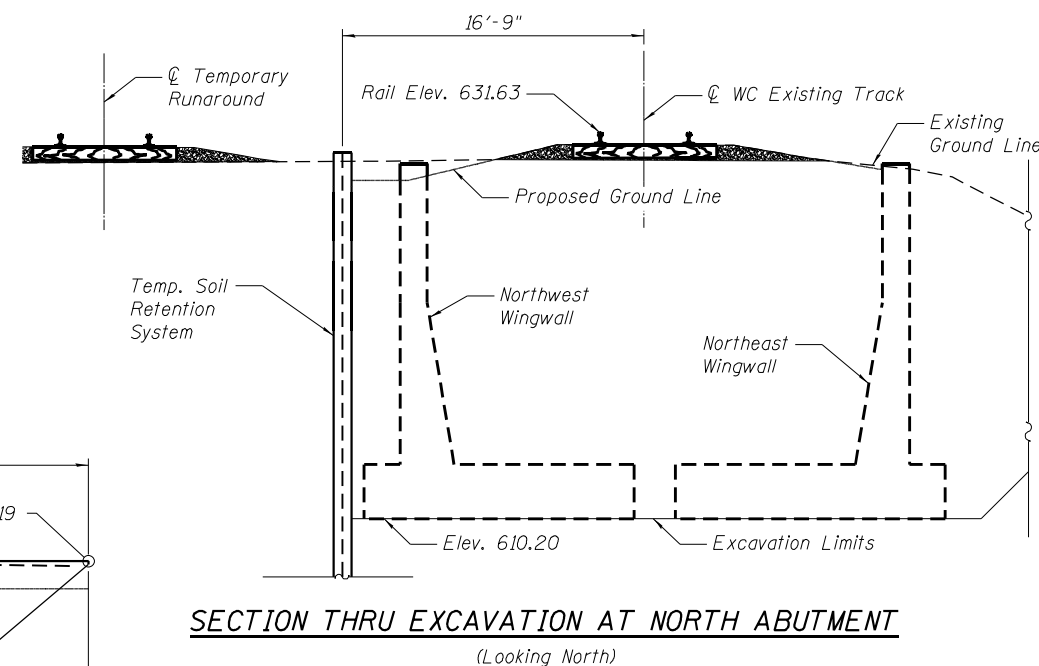
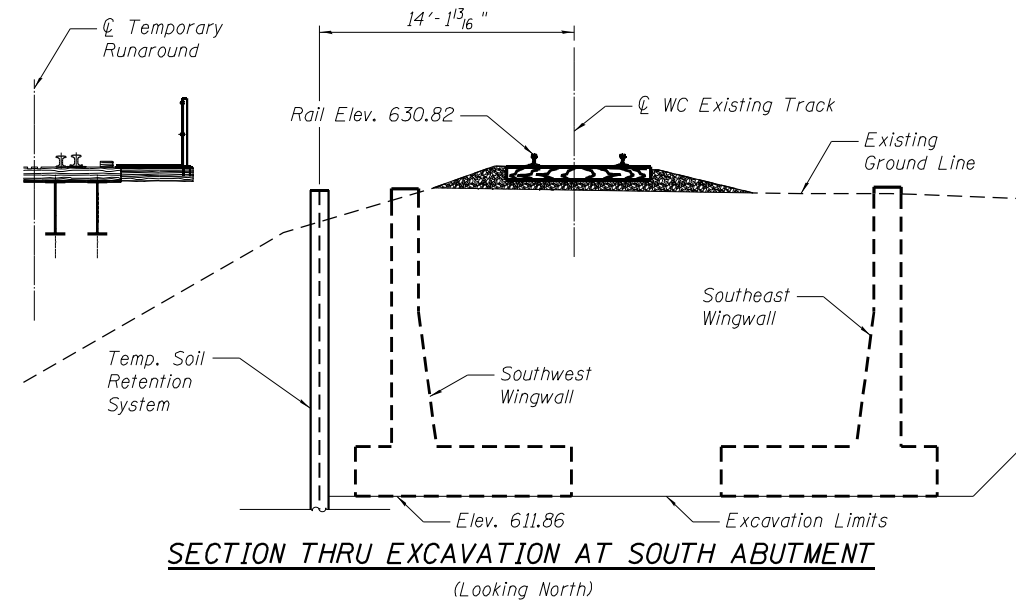
ORIGINAL:  DLZ Illinois, Inc.  LIN ENGINEERING LTD. Consulting Engineers Springfield, MO	UPDATED:	DESIGNED - ZJH	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SEQUENCE OF CONSTRUCTION – STAGE III & NOTES STRUCTURE NO. 032-9906	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - PRD MTH	REVISED							
		DRAWN - BAE	REVISED			80	((32, 47-4)VB, HBR-3) BR, BRR	GRUNDY	143	62
		CHECKED - ZJH MTH	REVISED			CONTRACT NO. 66295				
	DATE - 03/25/22					SHEET NO. 5 OF 49 SHEETS		ILLINOIS FED. AID PROJECT		



TEMPORARY SOIL RETENTION SYSTEM @ SOUTH ABUTMENT DETAIL
(Stations and Offsets given along front face)



TEMPORARY SOIL RETENTION SYSTEM @ NORTH ABUTMENT DETAIL
(Stations and Offsets given along front face)

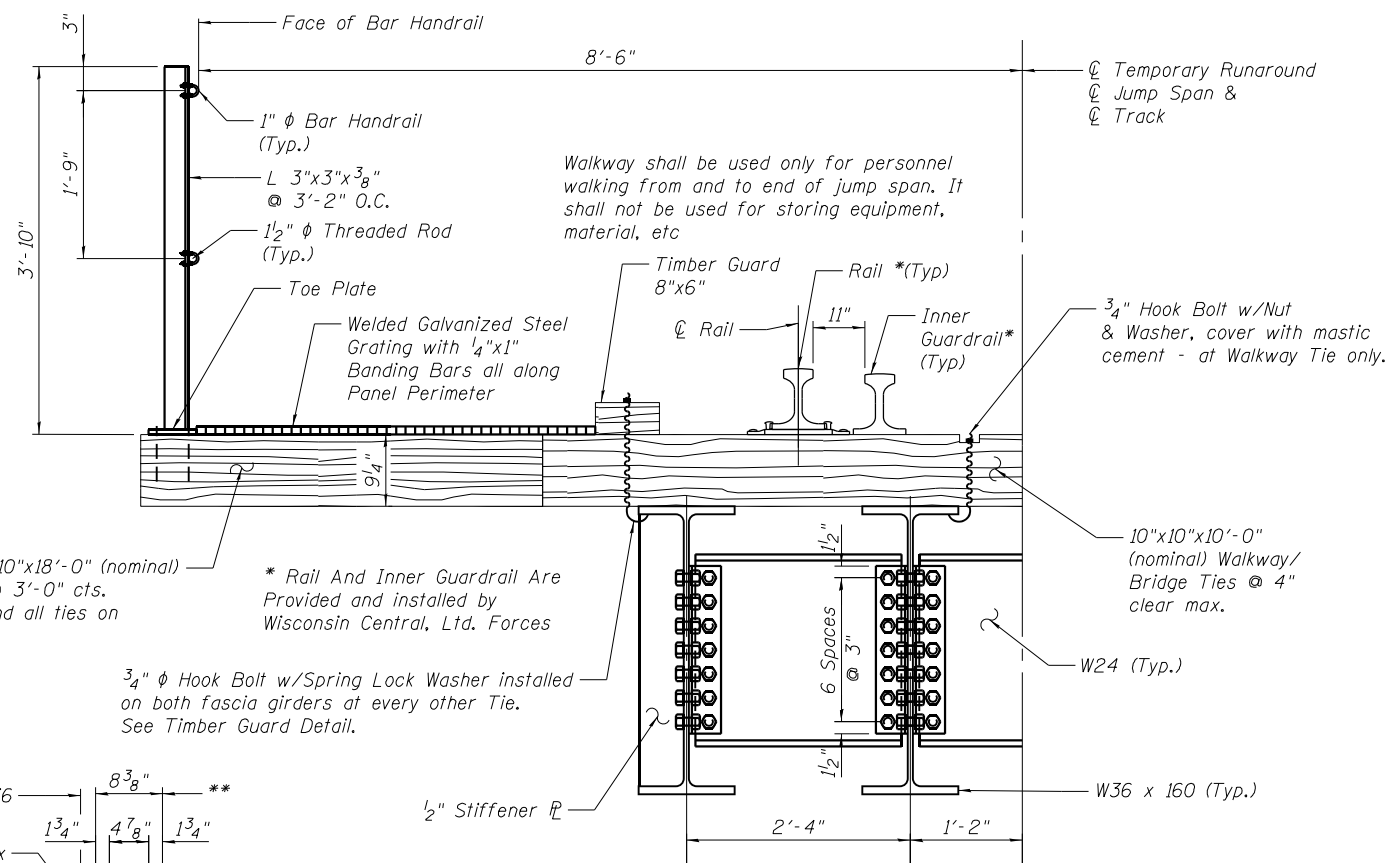


NOTES:

- 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.) Contractor to Cut Piling for Concrete Links & Roll-In.
- 3.) Maximum embedment depths from the bottom of footing are 7'-5" (North Abutment) and 9'-5" (South Abutment).

* 1:1 at Right L to FAI 80
** 2:1 at Right L to FAI 80
*** Estimated Final Grade, Final Grading by WC.

ORIGINAL:		UPDATED:																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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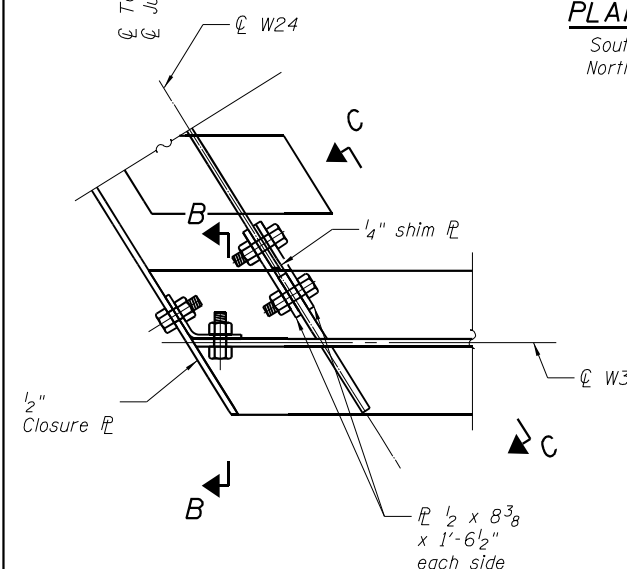
South Jump Span Shown
North Jump Span Similiar

10"x10"x14'-0" or 10"x10"x18'-0" (nominal)
Walkway/Bridge Ties @ 3'-0" cts.
outside of abutment and all ties on
temporary abutment.

* Rail And Inner Guardrail Are Provided and installed by Wisconsin Central, Ltd. Forces

$\frac{3}{4}$ " ϕ Hook Bolt w/Spring Lock Washer installed
on both fascia girders at every other Tie.
See Timber Guard Detail.

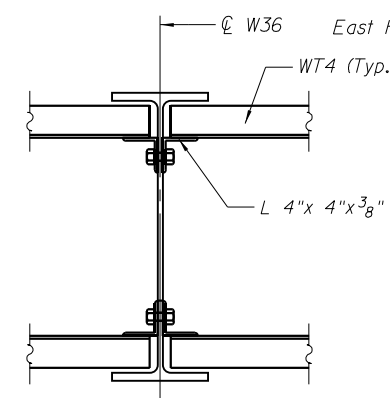
*Looking Back Station;
East Half Shown, West Half Similiar*



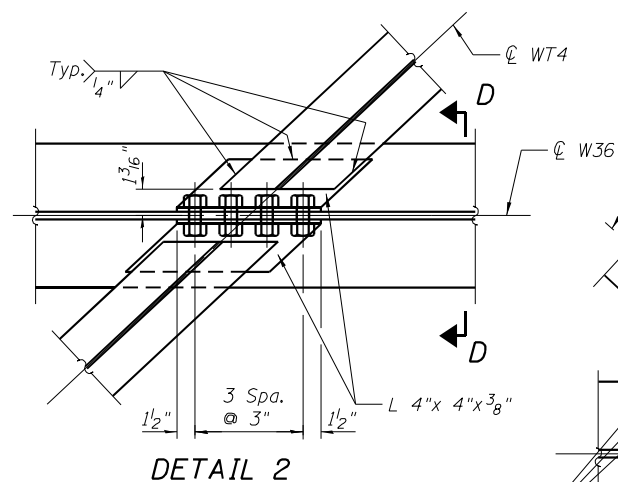
Technical drawing of a composite beam section. The drawing shows a central W36 web and W24 flanges. Key components and dimensions include:

- W36 Web & W24 Flanges:** Indicated by dimension lines and labels.
- W24x104:** Label for the main beam section.
- Stiffeners:**
 - $\frac{1}{2}$ " Stiffener (typ.)
 - Clip (1" horiz. x 2" vert.) (typ.)
- Gussets:**
 - $\frac{3}{8}$ " Gusset (Typ.)
 - WT4 (Typ.)
- Dimensions:**
 - Overall height: 13'4"
 - Web thickness: 1 1/2"
 - Flange thickness: 1 1/2"
 - Flange width: 3"
 - Stiffener spacing: 6 Spa. @ 3"
 - Stiffener width: 1 1/2"
 - Stiffener height: 1 1/2"
 - Stiffener spacing: 1'3/4"
- Other Labels:**
 - L 4"x 4"x 3/8"
 - L 4"x 4"x 3/8" x 0'-9"
 - 1"φ Bolts

*** Dimensions measured along C W24 diaphragm*

[illegible]

TIMBER GUARD DETAIL



Technical drawing of a column base plate showing top and side views with dimensions and component labels.

Top View Dimensions:

- Overall width: 1' - 0 3/4" (typ.)
- Overall height: 3 1/8"
- Left side width: 1 1/2"
- Right side width: 1 1/2"
- Central vertical spacing: 3 Spa. @ 3"
- Bottom horizontal spacing: 2 Spa. @ 3"
- Bottom horizontal spacing: 2 Spa. @ 3"
- Bottom horizontal spacing: 1 1/2"
- Bottom horizontal spacing: 1 1/2"

Side View Dimensions:

- Overall height: 3 1/2"
- Overall width: 3 Spa. @ 9 5/8"

Component Labels:

- W24 (Top flange)
- WT4 (Top flange)
- W36 (Bottom flange)
- L 4"x 4"x 3/8" (Top flange)
- L 4"x 4"x 3/8" (Bottom flange)
- 3/8"x12"x2'-8" Gusset PL (3/8"x12"x1'-4" Gusset PL @ Sim)
- WT4 (Top flange)
- L 4"x 4"x 3/8" x 0'-9" (Top flange)
- W36 (Bottom flange)

Notes:

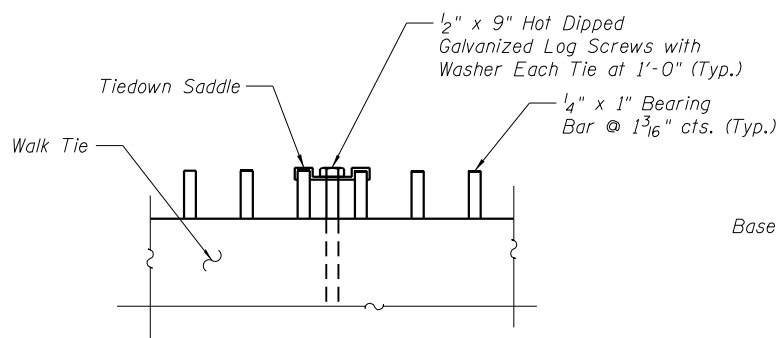
- Typ. 1/4" (Typ. 1/4")
- 1' - 0 3/4" (typ.)
- 3 1/8"
- 3 Spa. @ 3"
- 2 Spa. @ 3"
- 2 Spa. @ 3"
- 1 1/2"
- 1 1/2"
- 3 1/2"
- 3 Spa. @ 9 5/8"

Technical drawing of a bent plate connection. The drawing shows a vertical assembly with a central bent plate. Key dimensions and components are labeled:

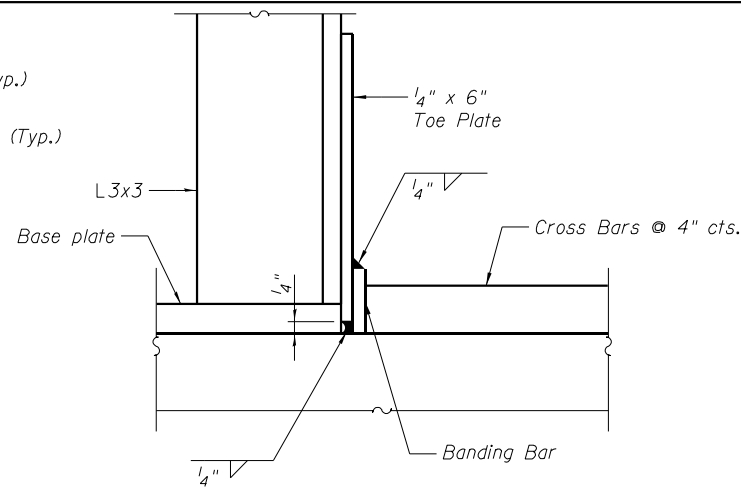
- Top flange width: $3\frac{1}{2}"$
- Top plate thickness: $1\frac{1}{2}"$
- Central hole: $\varnothing W36$
- Three horizontal plates spaced at $9\frac{5}{8}"$
- 1" $\varnothing$ Bolts
- $\frac{1}{2}"$ Closure $\bar{P}$
- $\frac{3}{8}" \times 8"$ Bent $\bar{P}$
- Bottom dimension: $2"$

SECTION B-B

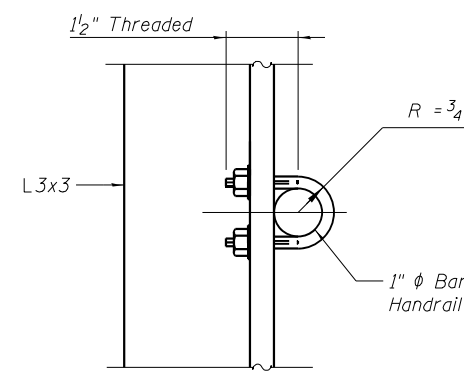
ORIGINAL:  DLZ DLZ Illinois, Inc.	UPDATED:		DESIGNED - ZJH	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	JUMP SPAN DETAILS STRUCTURE NO. 032-9906	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	 LIN ENGINEERING, LTD. Consulting Engineers Springfield, Illinois		CHECKED - PRD MTH	REVISED			80	((32, 47-4)/VB, HBR-3) BR, BRR	GRUNDY	143	65
			DRAWN - BAE	REVISED			CONTRACT NO. 66295				
		DATE - 03/25/22	CHECKED - ZJH MTH	REVISED			SHEET NO. 8 OF 49 SHEETS				



WALKWAY GRATING ATTACHMENT



WALKWAY TOE PLATE DETAIL



SECTIONAL PLAN
WALKWAY HANDRAIL ATTACHMENT

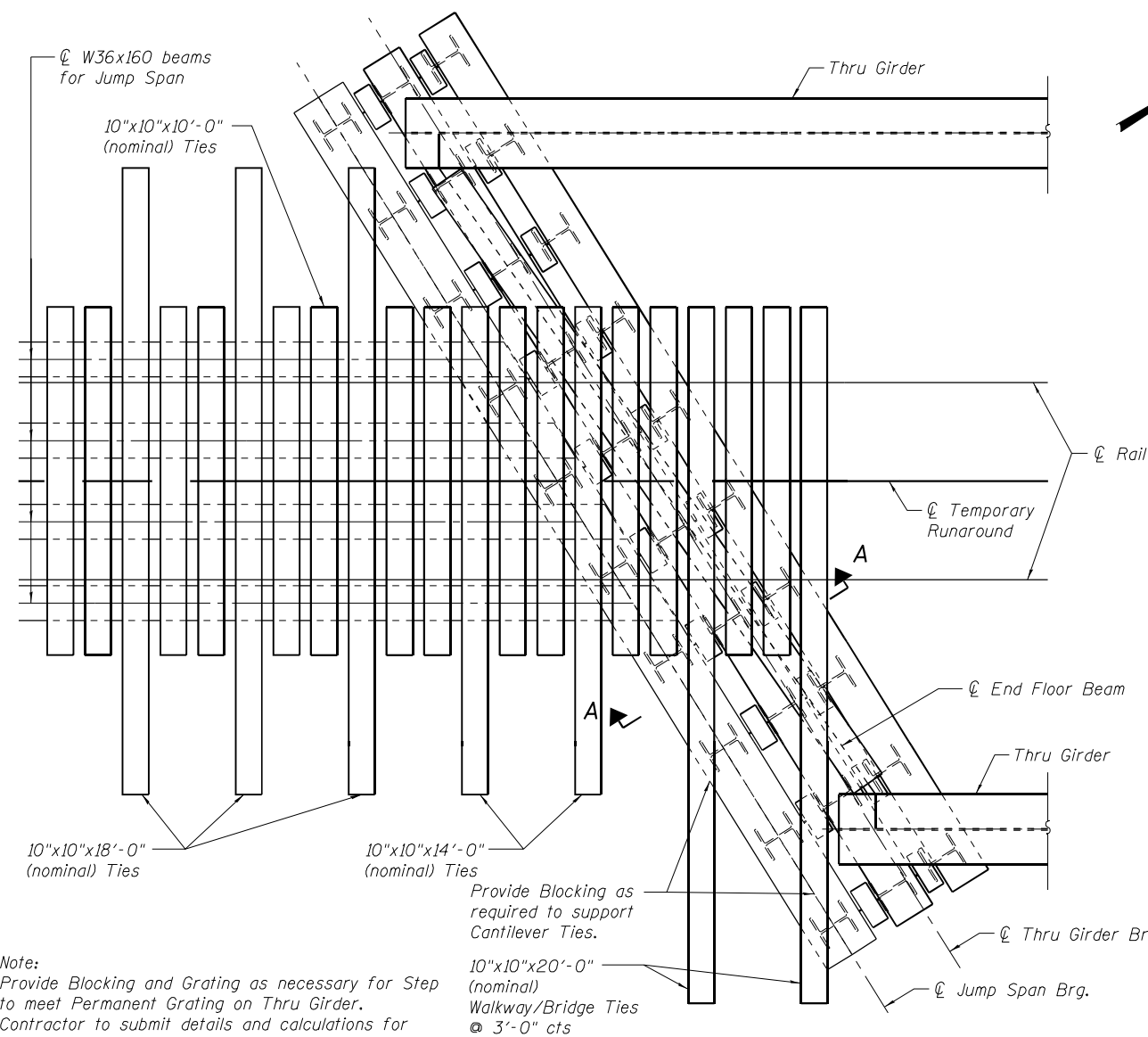
JUMP SPAN
BILL OF MATERIAL *

Steel Bearing Assembly	Each	16
Furnishing and Erecting Structural Steel ***	L. Sum	1
Walkway Grating	Foot	164
Timber Guards	Foot	156
Handrail	Foot	164
Ties **	Foot	81

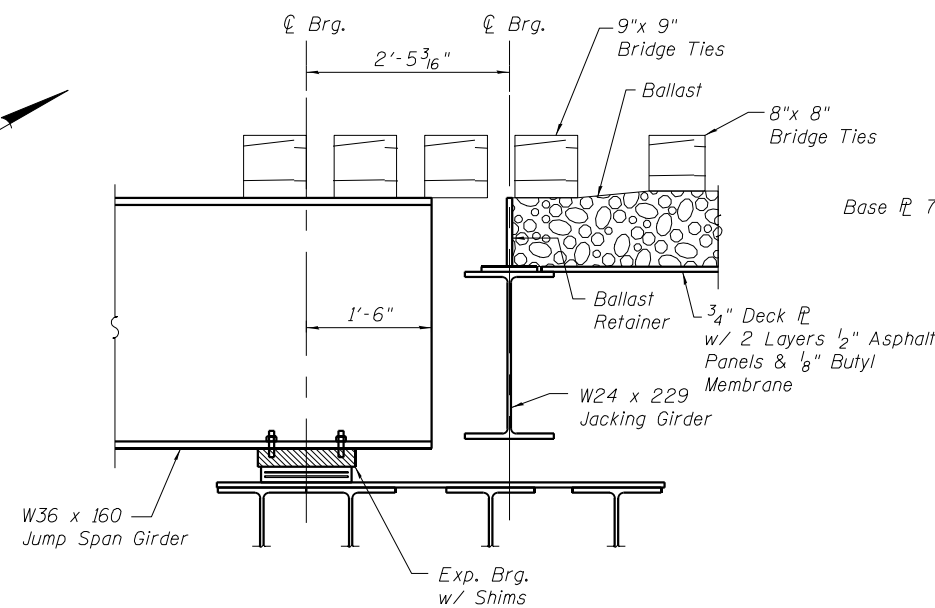
* All items in this Bill of Materials are included in the lump sum cost of "TEMPORARY JUMP SPAN". Quantities include material for both north and south Jump Spans.

** Ties are measured along centerline of track and include all ties of the sizes as indicated on the plans necessary for a complete operational system acceptable to the Wisconsin Central, Ltd.

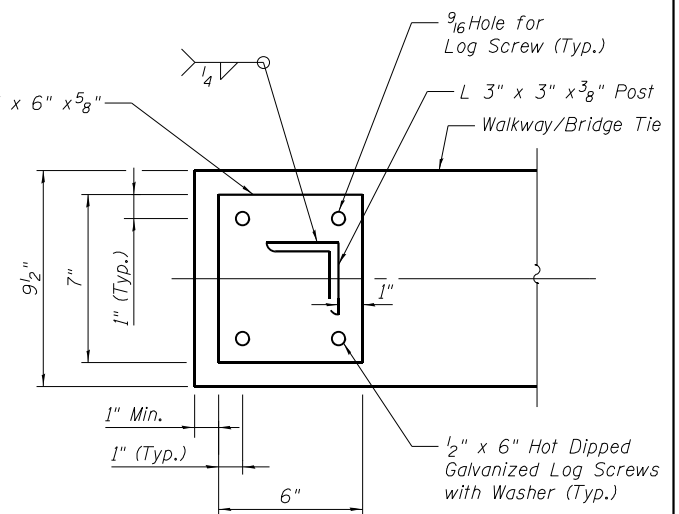
*** Calculated weight of structural steel 57,490 pounds.



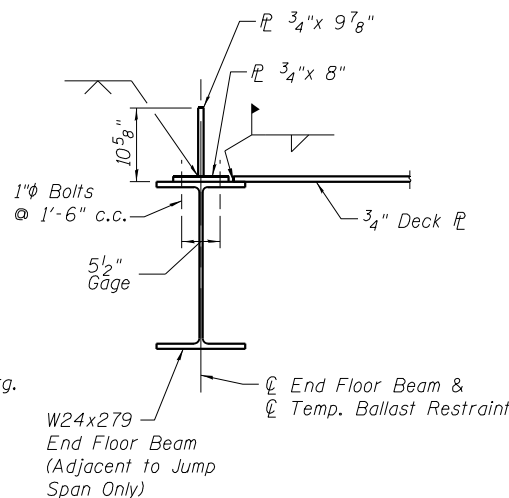
PARTIAL PLAN



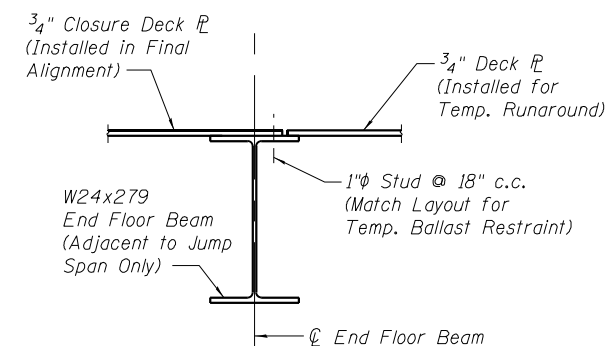
SECTION A-A



WALKWAY BASE PLATE DETAIL



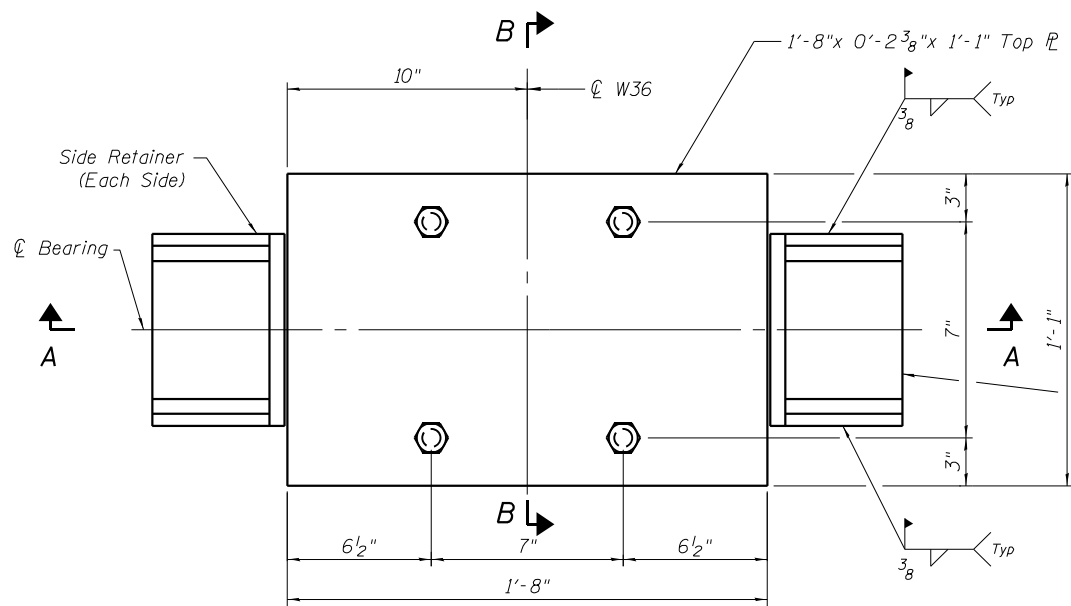
BALLAST RETAINER DETAIL



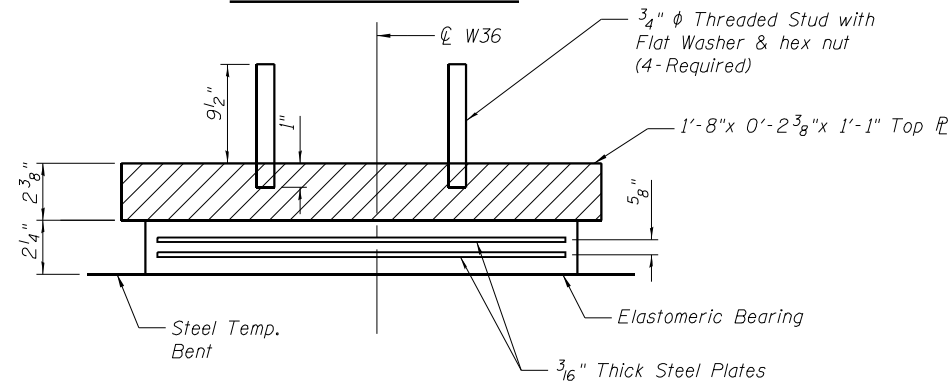
CLOSURE DECK DETAIL
(After Roll-in Complete)

Notes:

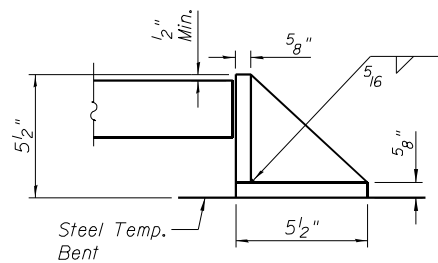
1. Cost of Walkway posts, and handrail included in cost of Temporary Jump Span.
2. Ballast, Asphalt Panels and Butyl Rubber Membrane not shown for clarity.
3. Temporary Ballast Restraint shall be removed prior to Roll-in.



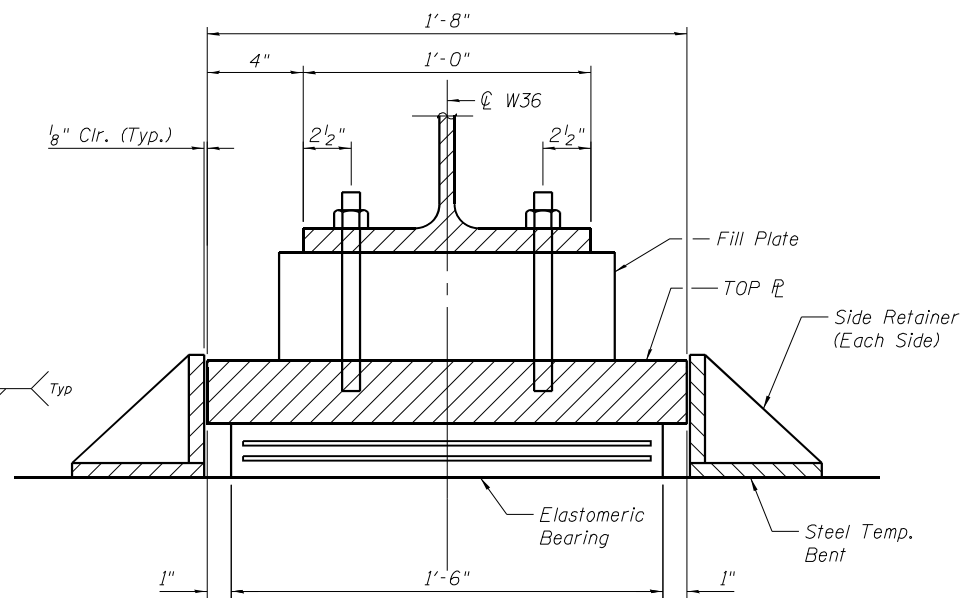
**PLAN VIEW
EXPANSION BEARING**



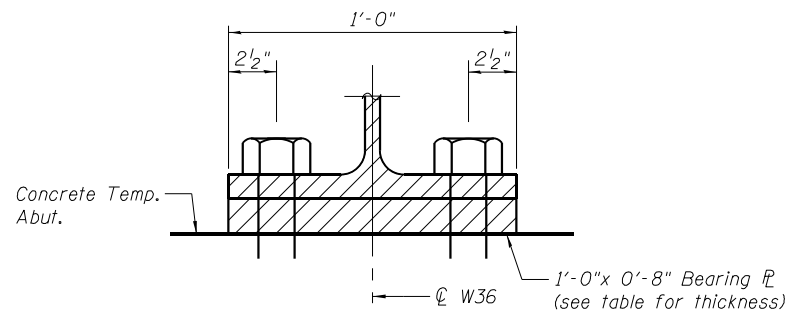
TOP PLATE DETAIL



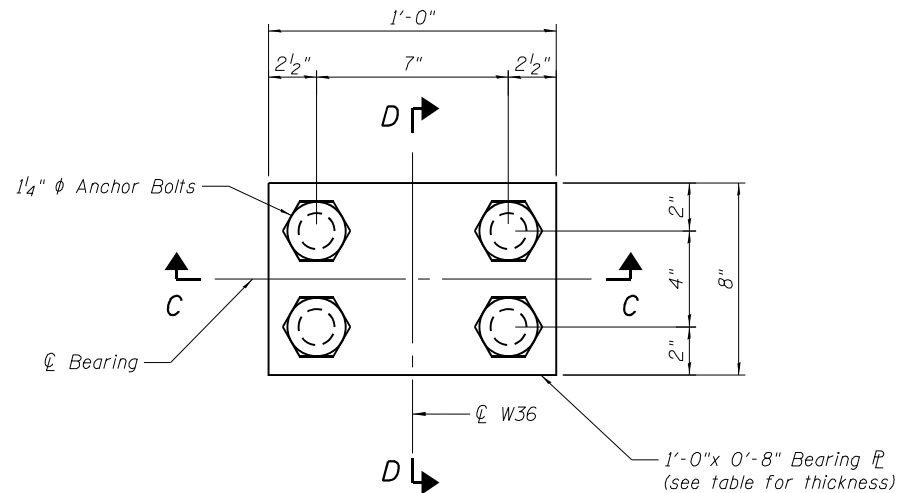
SIDE RETAINER



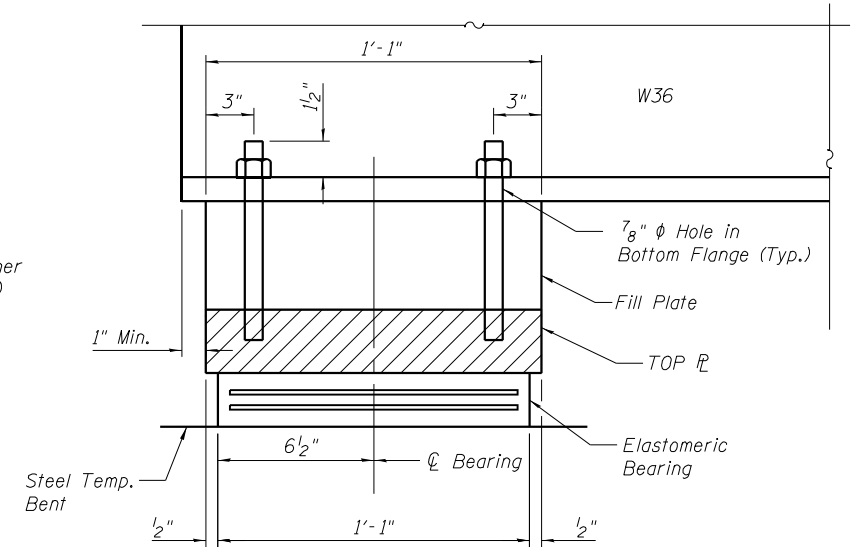
SECTION A-A



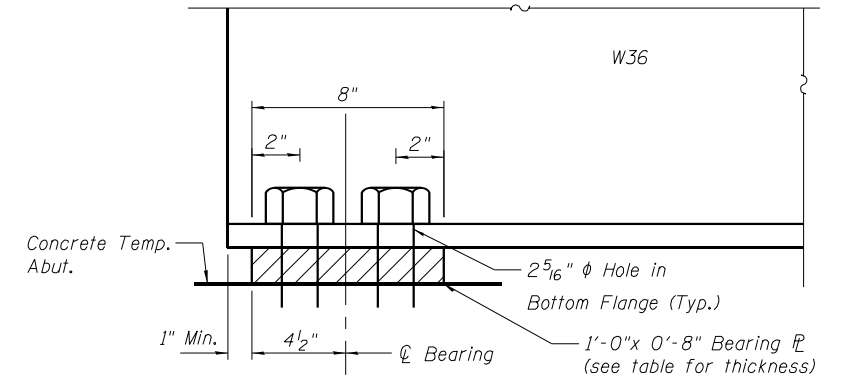
SECTION C-C



**PLAN VIEW
FIXED BEARING**



SECTION B-B



SECTION D-D

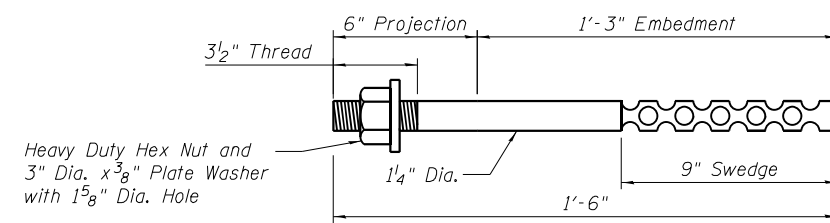
BEARING LOCATION	Beam			
	1	2	3	4
South Temp. Abutment	1 1/2"	1 1/2"	1 5/8"	1 3/4"
North Temp. Abutment	1 1/2"	1 1/2"	1 5/8"	1 5/8"

FIXED BEARING PLATE THICKNESSES

BEARING LOCATION	Fill Plate			
	1	2	3	4
South Temp. Bent	6 1/2"	6 5/8"	6 5/8"	6 3/4"
North Temp. Bent	7 1/4"	7 1/4"	7 3/8"	7 3/8"

Notes:

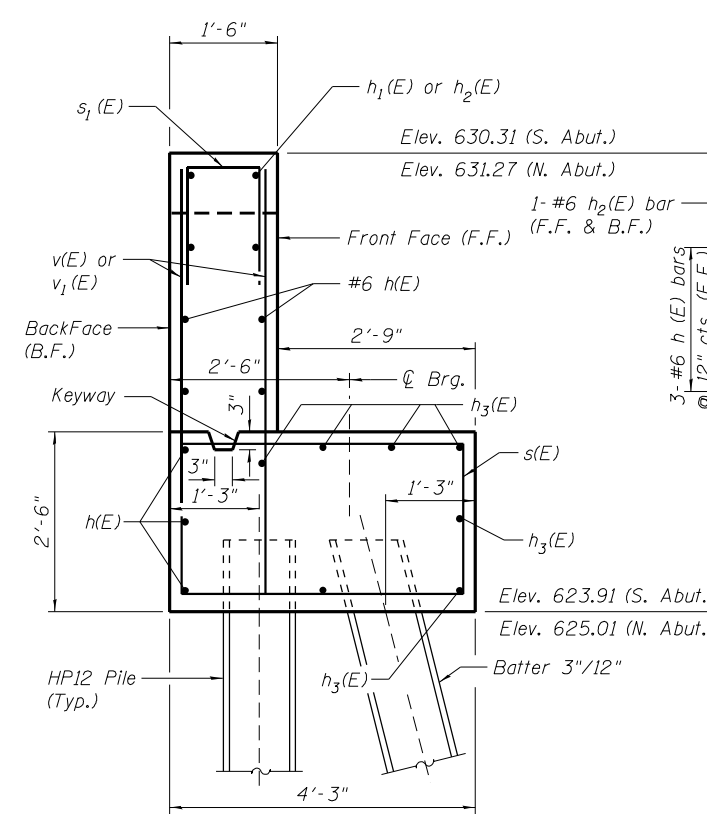
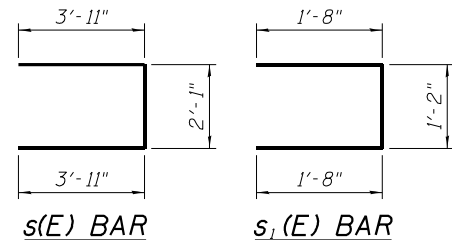
- All Structural Steel Bearing Plates shall be flat rolled steel plates with all surfaces smooth and free from warp and all edges smooth, straight and vertical.
- All plate cuts shall be machine or machine flame cuts.
- Material for Jump Span Bearings Cost included with Temporary Jump Span.
- For Bill of Material see "Jump Span Details", sheet 9.



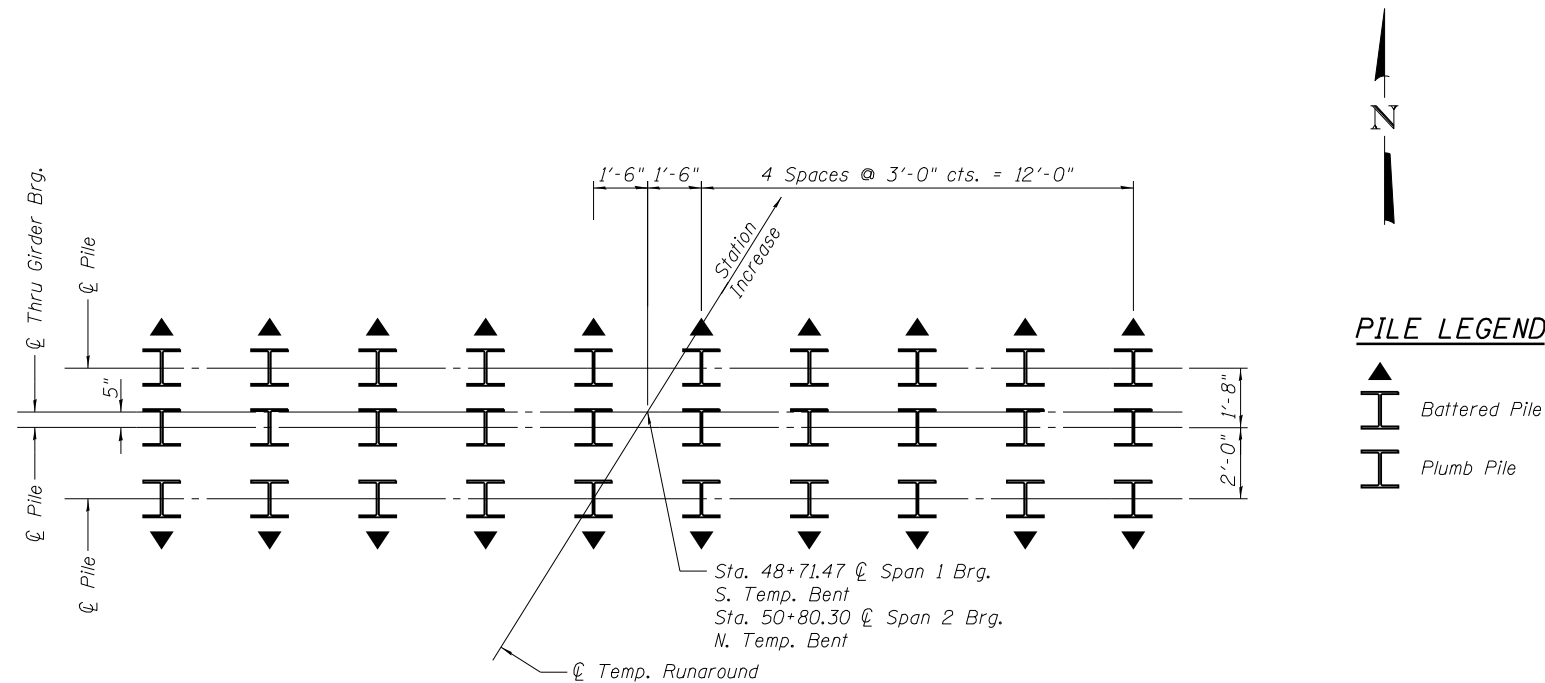
ANCHOR BOLT DETAIL

Bar	No.	Size	Length	Shape
h (E)	18	#6	25'-8"	—
h_1 (E)	4	#6	2'-4"	—
h_2 (E)	8	#6	4'-8"	—
h_3 (E)	14	#6	15'-8"	—
s (E)	26	#5	9'-11"	⌋
s_1 (E)	52	#5	4'-6"	⌋
v (E)	32	#6	6'-0"	—
v_1 (E)	72	#6	5'-2"	—
Structure Excavation			Cu. Yd.	75
Concrete Structures			Cu. Yd.	25.0
Reinforcement Bars, Epoxy Coated			Pound	2,460
Furnishing Steel Piles, HP12X84			Foot	560
Driving Piles			Foot	560
Test Pile, Steel HP12X84			Each	2
Pile Shoes			Each	16

All items in this Bill of Material are included in the lump sum cost of "TEMPORARY SUBSTRUCTURES"

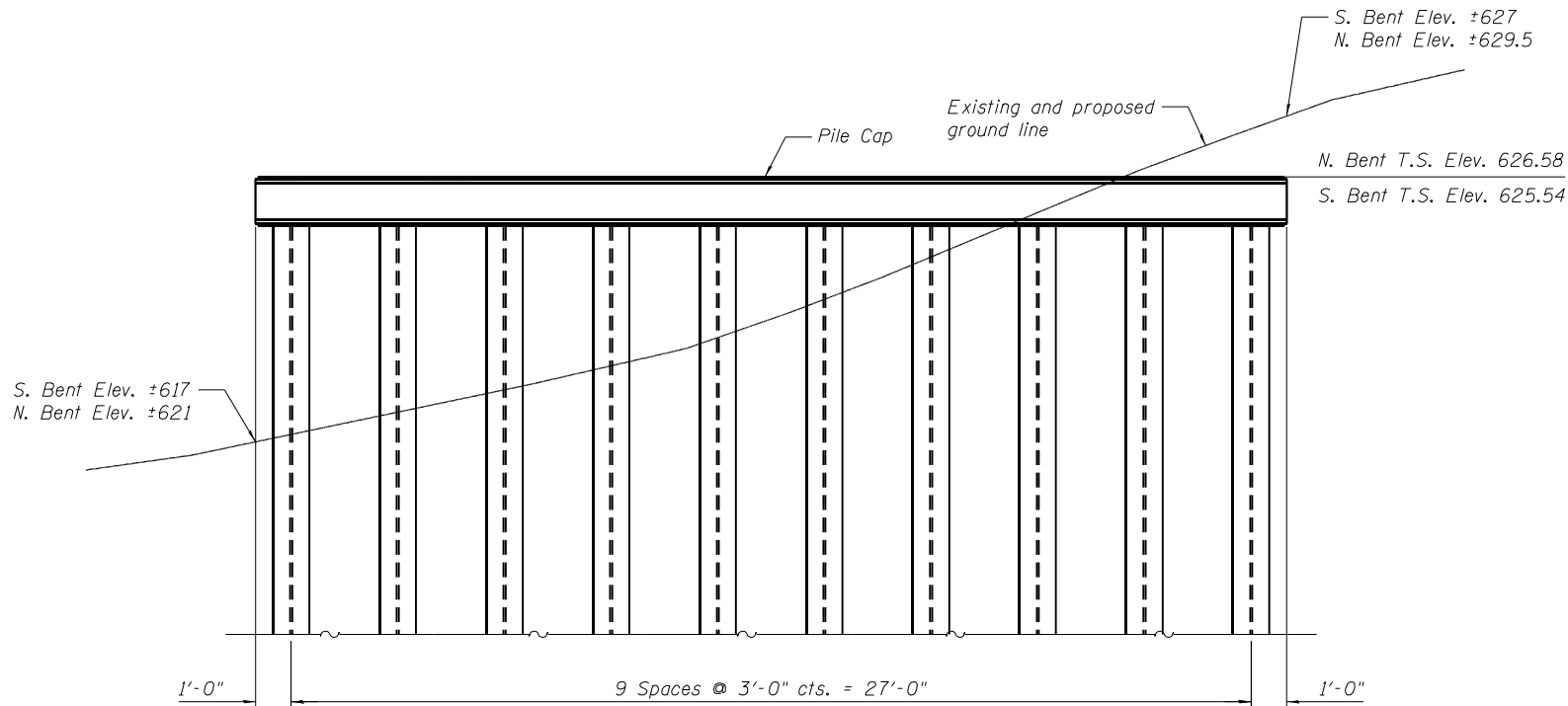


Notes:
For HP Pile Details, see sheet 47 of 49.



PILE PLAN

Dimensions shown at top of piles.
South Temporary Bent shown.
North Temporary Bent Similar.



ELEVATION

(Looking North)

TEMPORARY BENT
BILL OF MATERIAL *

Structure Excavation	Cu. Yd.	23.8
Furnishing Steel Piles, HP12X84	Foot	3451
Driving Piles	Foot	3451
Test Pile, Steel HP12X84	Each	2
Pile Shoes	Each	60

* Quantities include both the North & South Temporary Bents. The Temporary quantity includes 45,150 lbs. of structural steel, total for two spans. This quantity is not included in the quantity shown for structural steel shown in General Note number 2 on the General Data sheet (Sheet 2).

All items in this Bill of Material are included in the lump sum cost of "TEMPORARY SUBSTRUCTURES"

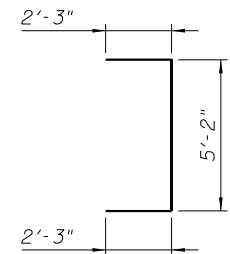
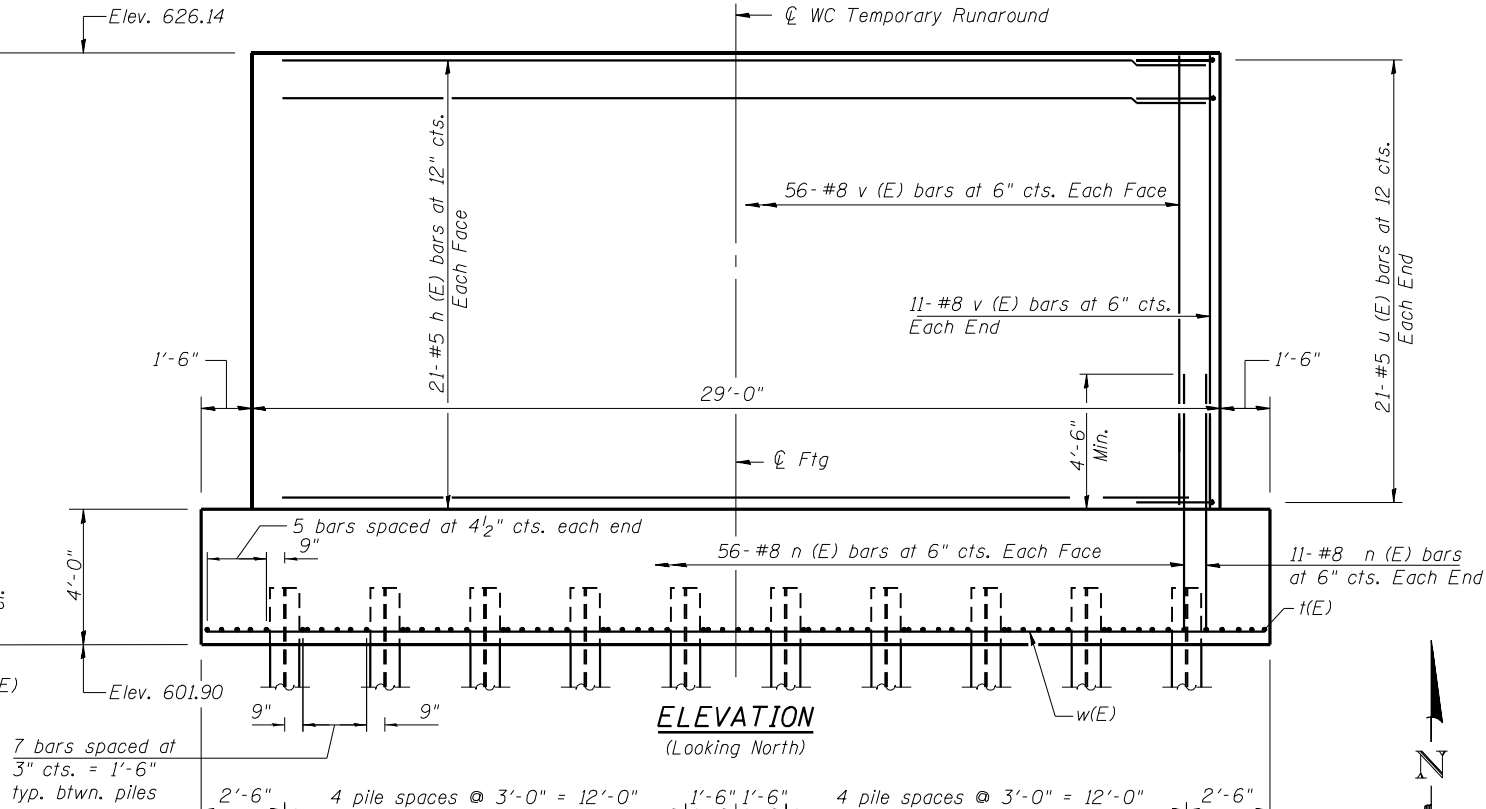
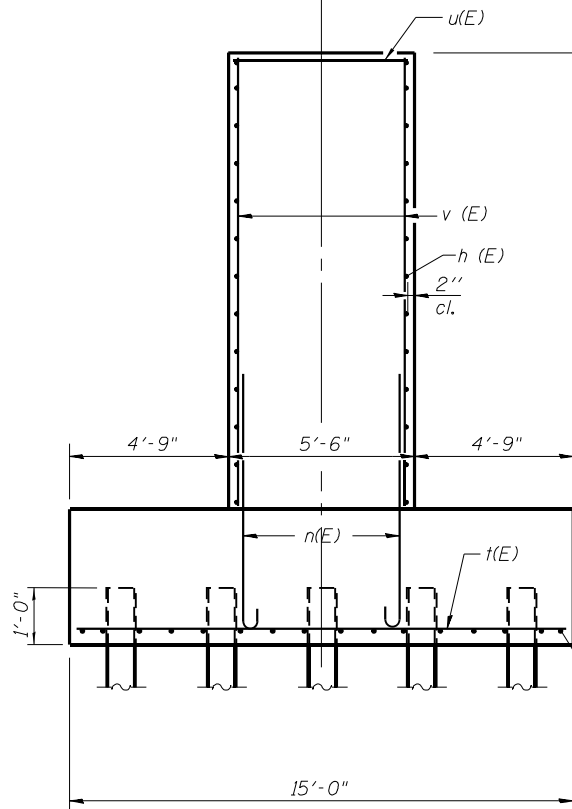
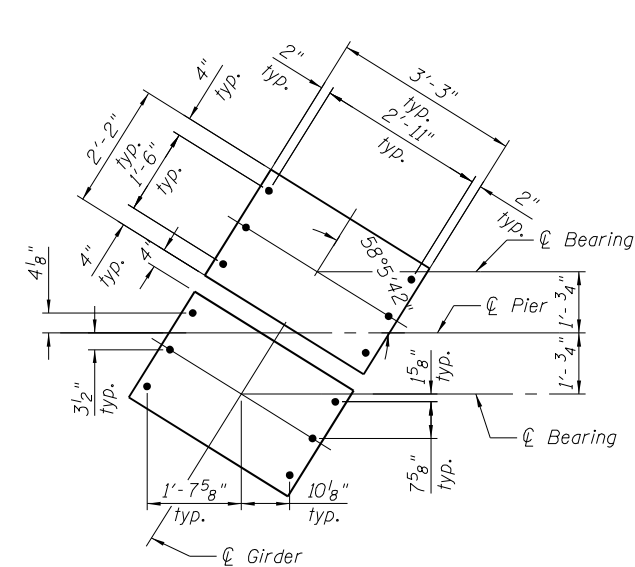
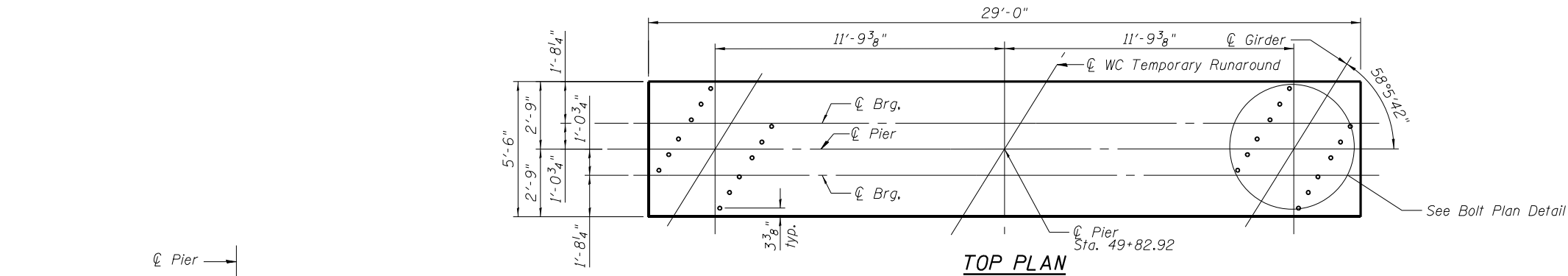
SOUTH TEMP. PILE DATA

Type: HP 12 x 84 with Pile Shoes
Nominal Required Bearing: 318 kips
Allowable Resistance Available: 106 kips
Est. Embedment Length: 52 ft.
Est. Total Length: 58 ft.
No. Production Piles: 29
No. Test Piles: 1

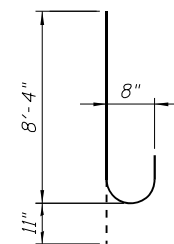
NORTH TEMP. PILE DATA

Type: HP 12 x 84 with Pile Shoes
Nominal Required Bearing: 292 kips
Allowable Resistance Available: 97 kips
Est. Embedment Length: 55 ft.
Est. Total Length: 61 ft.
Production Piles: 29
No. Test Piles: 1

Notes:
For HP Pile Details see sheet 47 of 49.



BAR u (E)



BAR n (E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h (E)	42	#5	28'-8"	
n (E)	134	#8	9'-3"	
u (E)	62	#5	9'-8"	
t (E)	73	#9	14'-8"	
v (E)	134	#8	20'-0"	
w (E)	16	#8	31'-8"	
Structure Excavation				Cu. Yd. 190.0
Concrete Structures				Cu. Yd. 188.7
Reinforcement Bars, Epoxy Coated				Pound 17,370
Furnishing Steel Piles HP12x84				Foot 2,793
Driving Piles				Foot 2,793
Test Pile, Steel HP12x84				Each 1
Pile Shoes				Each 50
Anchor Bolts, 1 1/4"				Each 24

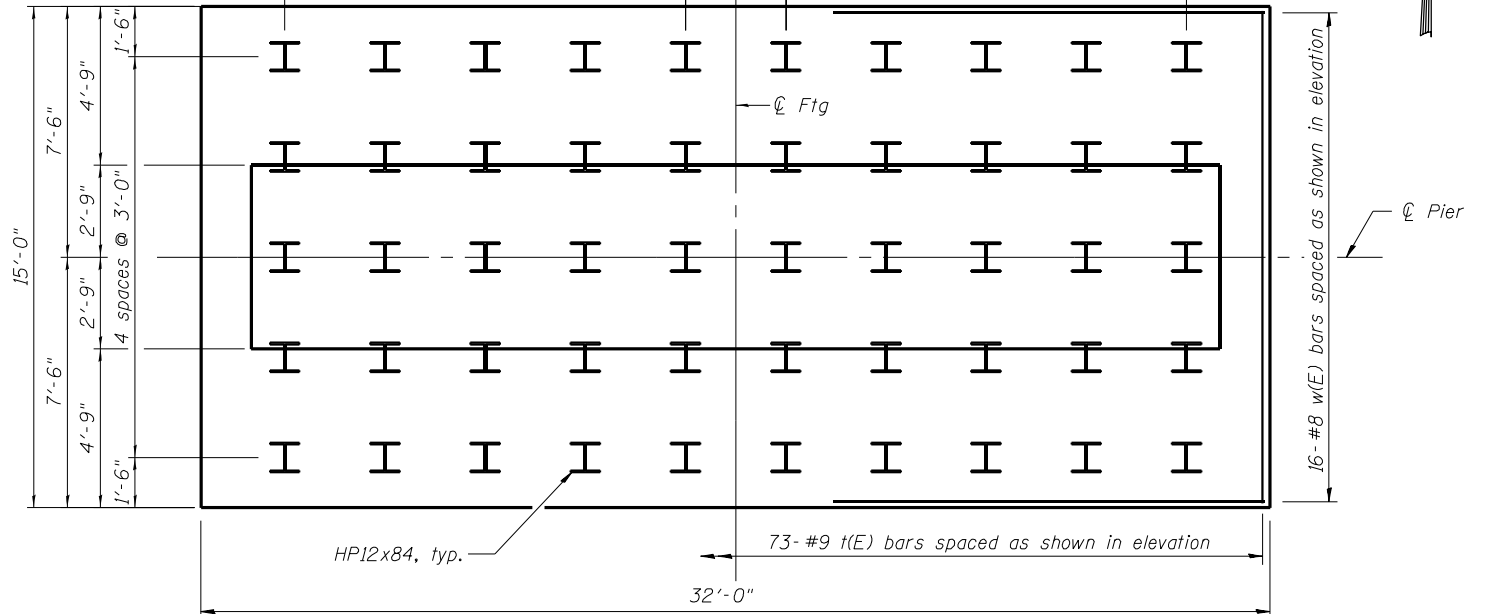
All items in this Bill of Materials are included in the lump sum cost of "TEMPORARY SUBSTRUCTURES"

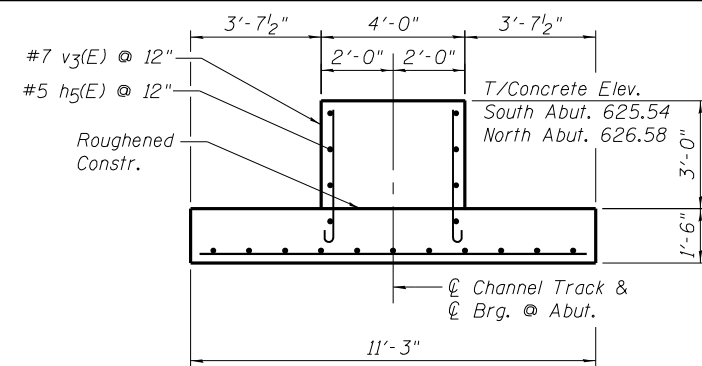
Notes:
Space reinforcement in cap to miss anchor bolts.
For details of HP piles, see sheet 47 of 49.
Coordinate anchor bolt removal with track for Roll-in process.
For Bearing details see sheets 32-36 of 49.

PILE DATA

Type: HP12x84 with Pile Shoes
Nominal Required Bearing: 339 Kips
Factored Resistance Available: 113 Kips
Est. Length: 56 ft
No. Production Piles: 49
No. Test Piles: 1

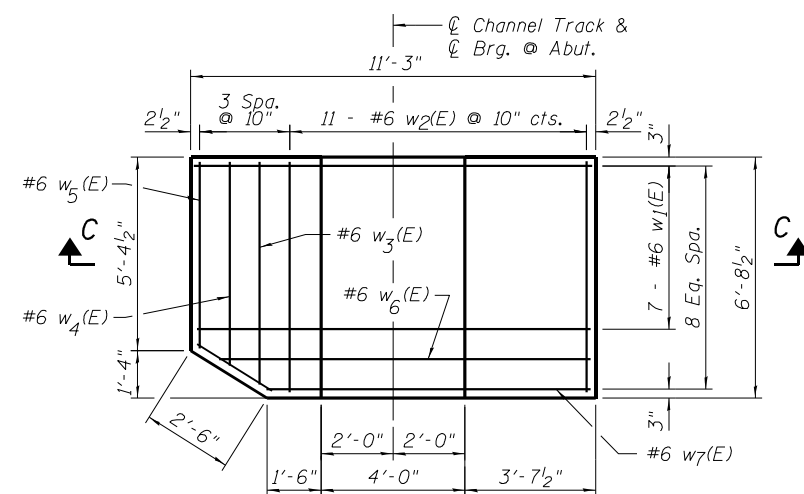
FOOTING PLAN



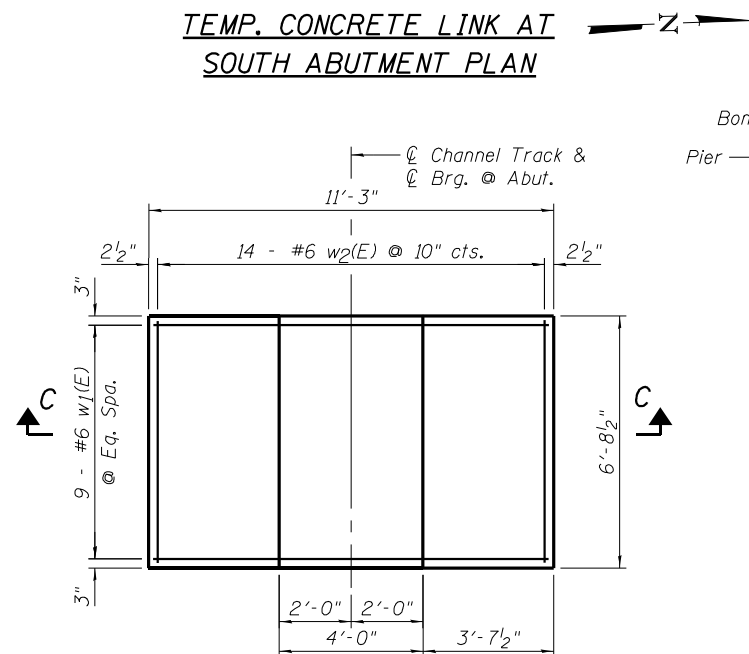


SECTION C-C

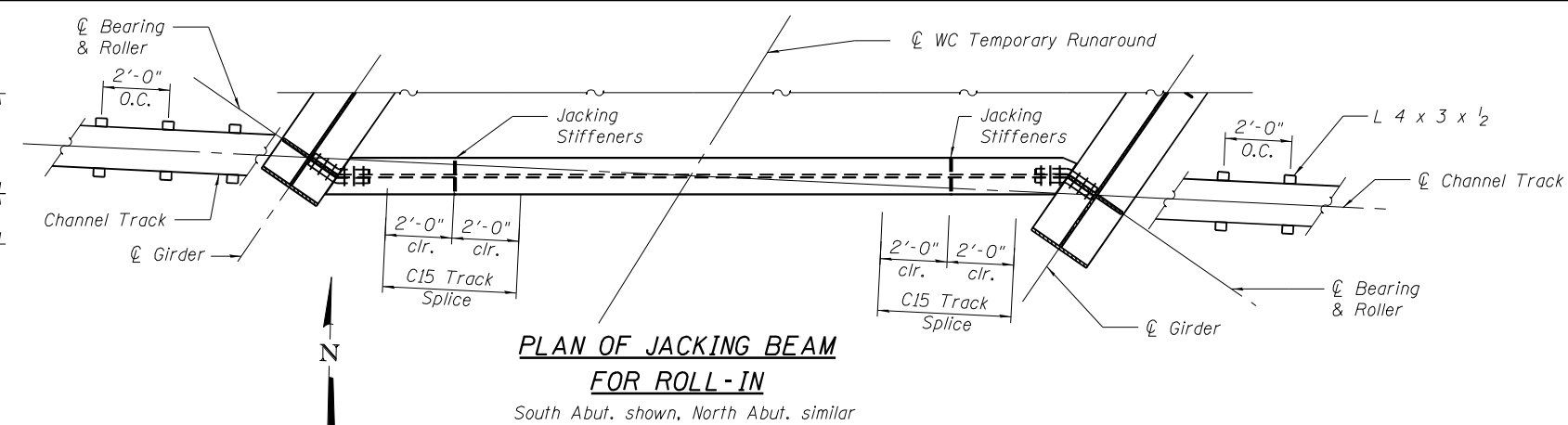
(See Sheet 4 - Sequence of Construction - Stage II)
Maximum Applied Service Bearing Pressure = $Q_{max} = 1.7 \text{ tsf}$.



TEMP. CONCRETE LINK AT SOUTH ABUTMENT PLAN

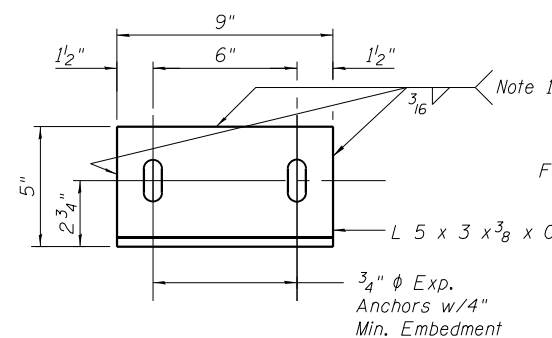


TEMP. CONCRETE LINK AT NORTH ABUTMENT PLAN



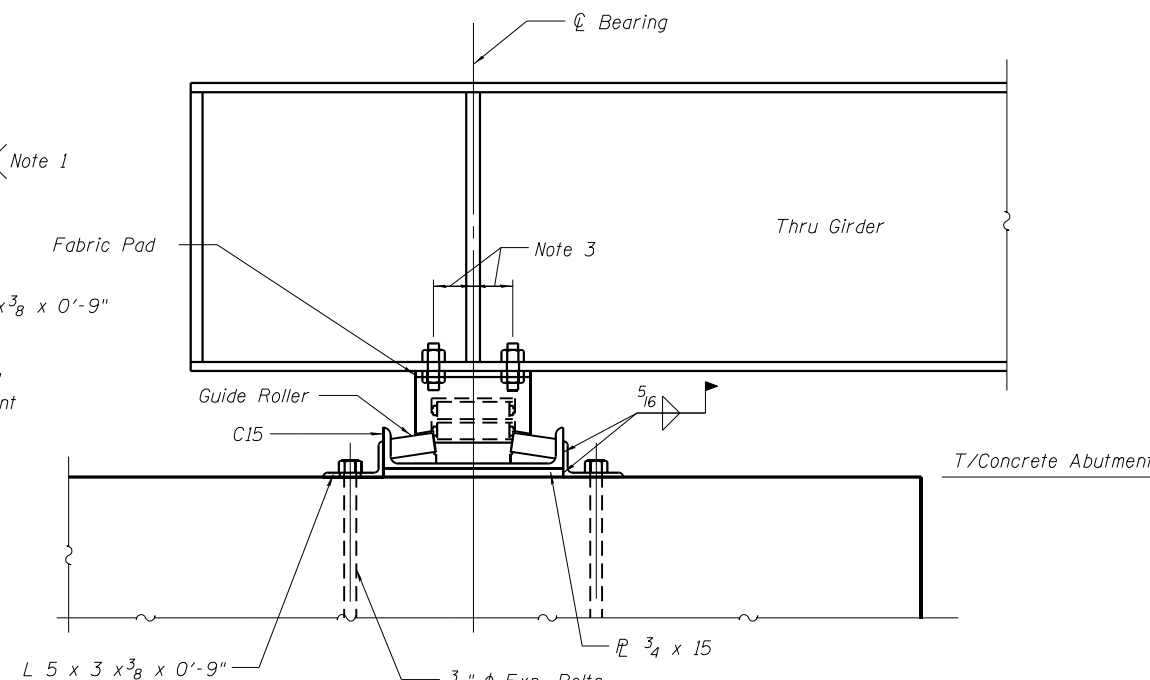
PLAN OF JACKING BEAM FOR ROLL-IN

South Abut. shown, North Abut. similar

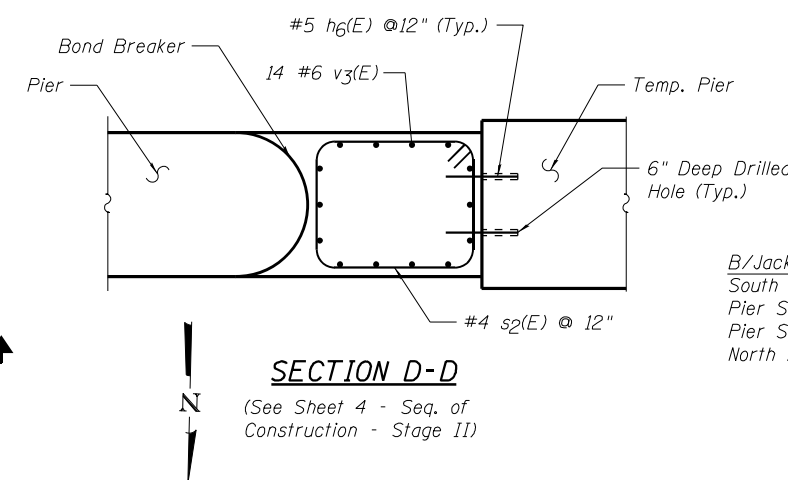


DETAIL OF GUIDE ANGLE

Note:
1. Weld required on Temporary Bent Only.



ROLLER DETAIL

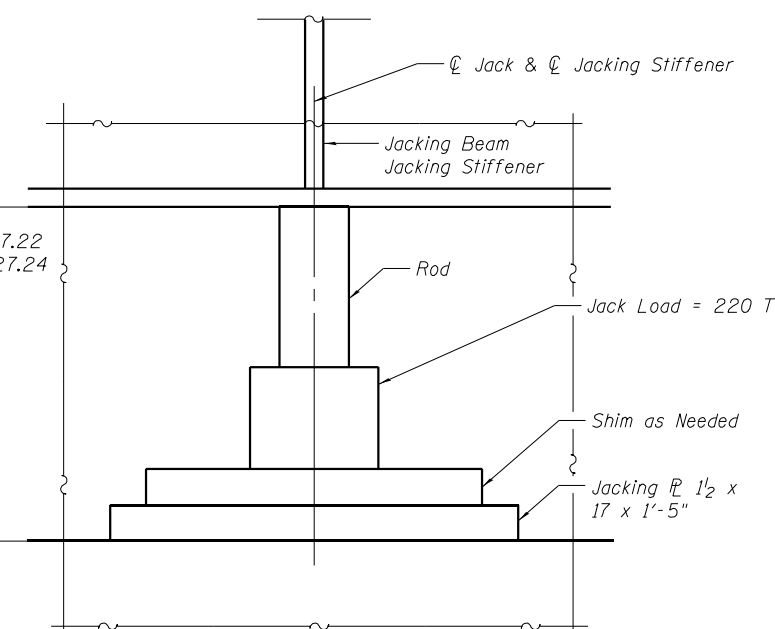


SECTION D-D

(See Sheet 4 - Seq. of Construction - Stage II)

B/Jacking Beam Elev.
South Abut. ±626.67
Pier Span 1 Brg. ±627.22
Pier Span 2 Brg. ±627.24
North Abut. ±627.72

T/Concrete Elev.
South Abut. 625.54
Pier 626.15
North Abut. 626.58

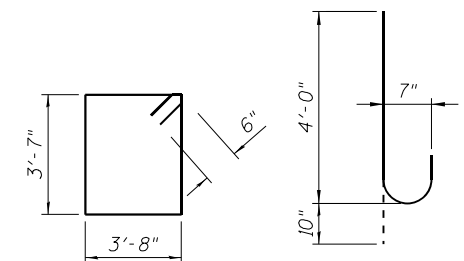


DETAIL OF JACK

BILL OF MATERIAL *

Bar	No.	Size	Length	Shape
h5(E)	12	#5	6'-4"	—
h6(E)	42	#5	2'-6"	—
s2(E)	21	#4	15'-6"	□
v3(E)	28	#7	4'-10"	—
w1(E)	16	#6	10'-11"	—
w2(E)	25	#6	6'-4"	—
w3(E)	1	#6	6'-2"	—
w4(E)	1	#6	5'-7"	—
w5(E)	1	#6	5'-2"	—
w6(E)	1	#6	10'-5"	—
w7(E)	1	#6	9'-2"	—
Rollers			Each	8
C15x33.9 Track			Foot	276
3/4" x 15" Plate			Foot	276
Guide Clips			Each	280
Concrete Structures			Cu. Yd.	25.9
Holes Drilled			Each	6
Expansion Bolts, 3/4"			Each	560
Reinforcement Bars, Epoxy Coated			Pound	1,240

* All items in this Bill of Materials are included in the lump sum cost of "BRIDGE ROLL-IN"



BAR s2(E)

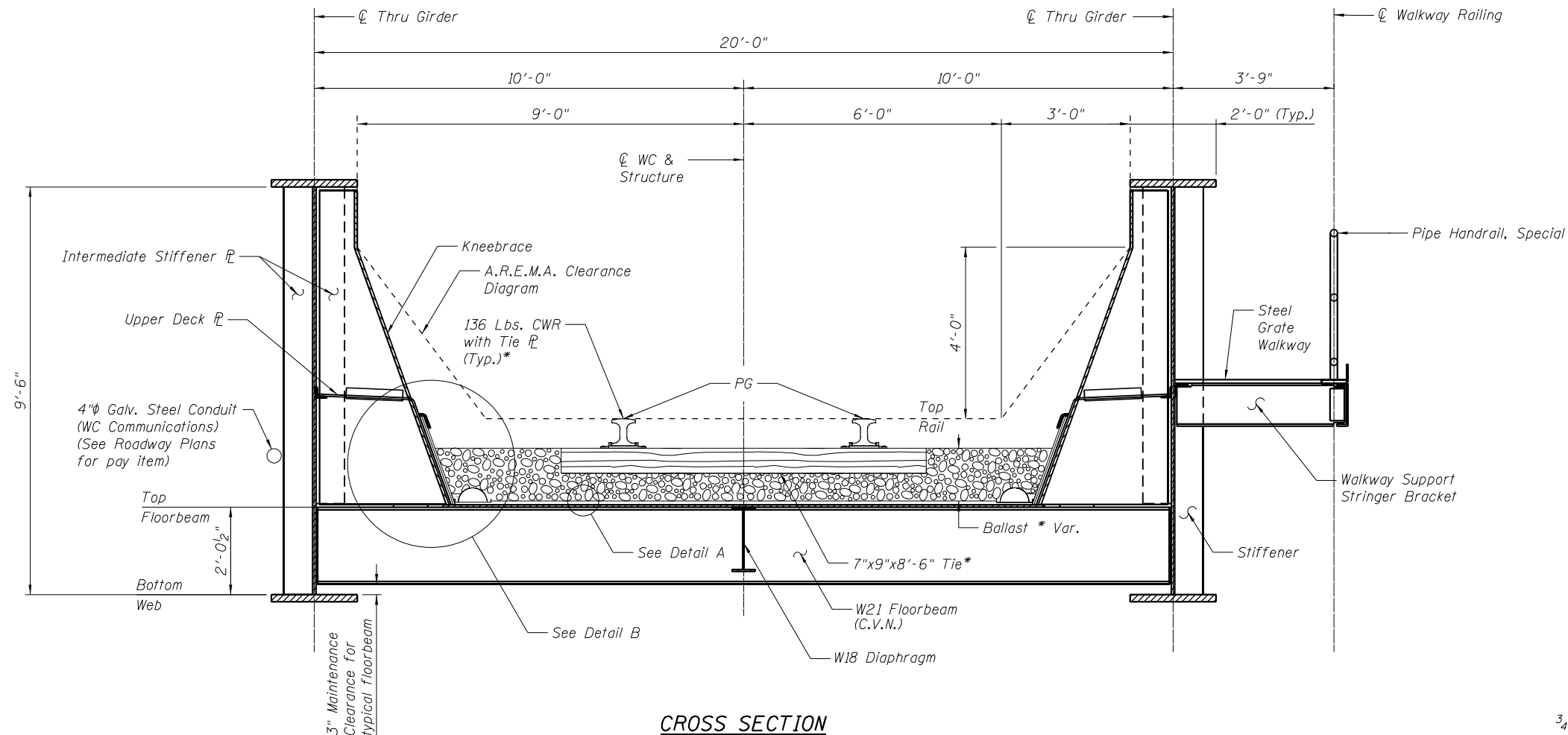
BAR v3(E)

BRIDGE ROLL-IN SEQUENCE

1. Lay C15 track at unobstructed locations.
2. Place jack and raise structure.
3. Remove bearings and replace with rollers
4. Install C15 track at bearing locations. (this may require removal of anchor bolts.)
5. Lower bridge/rollers onto track.
6. Remove Jacks and install track splices.
7. Roll bridge from temporary runaround location to proposed bridge location.
8. Clear jacking locations of C15 track.
9. Jack bridge, remove rollers, channels, etc.
10. Install permanent bearing components.
11. Lower bridge and make final connections.

Notes:

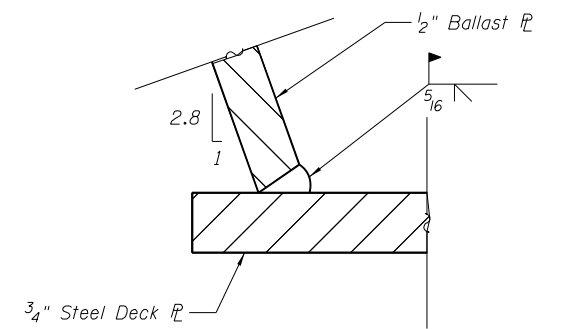
1. During the Roll-in process Span 1 and Span 2 shall be moved as a unit, such that both ends move at the same rate.
2. Coordinate anchor bolt install/removal with roll-in track installation.
3. Holes in top plate of Roller to match hole layout for bearings. Use oversized holes in top plate of Roller.
4. The duration of roll-in work shall not exceed 12 hours.



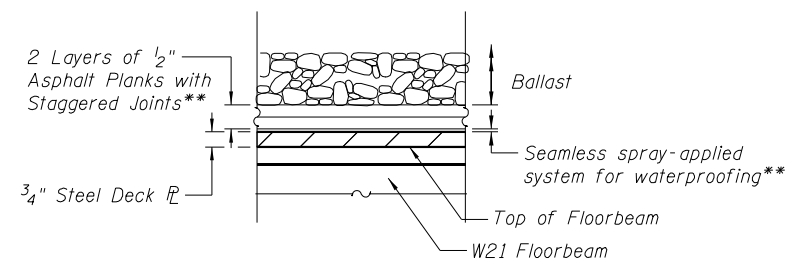
CROSS SECTION

(Looking North)

* Improvements by Others (WC)

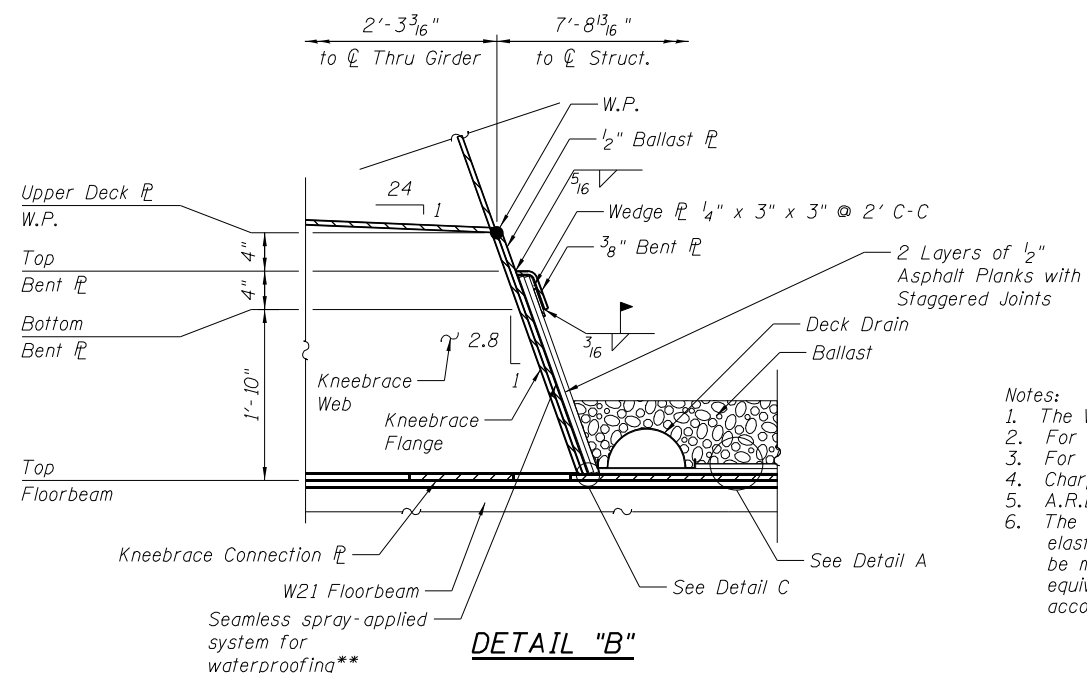


DETAIL "C"



DETAIL "A"

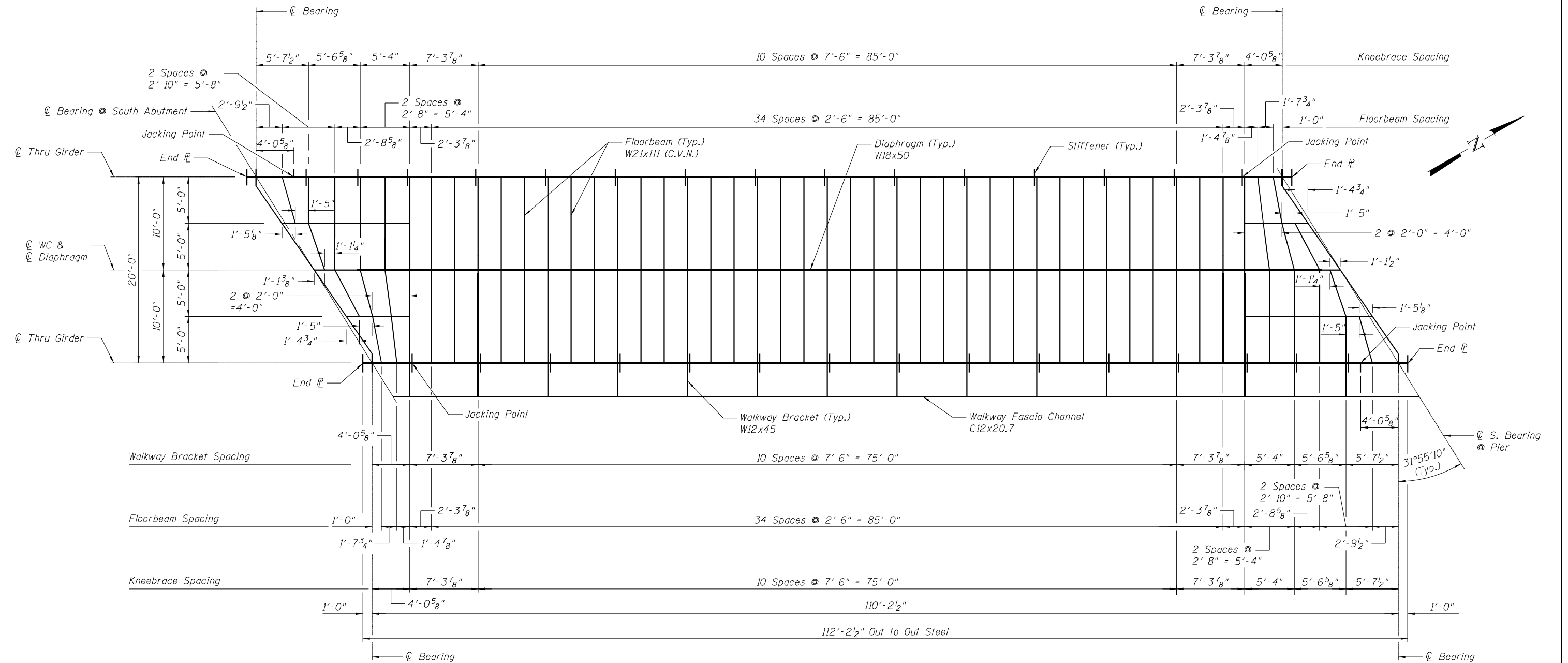
** Included in the cost of Membrane Waterproofing (Special)



DETAIL "B"

Notes:

1. The Wisconsin Central, Ltd. shall install all Ballast.
2. For Girder Flange Thicknesses, see Sheets 21 & 22 of 49.
3. For Walkway Details, see Sheets 29-31 of 49.
4. Charpy V-Notch (C.V.N.), see General Notes.
5. A.R.E.M.A. - American Railway Engineering And Maintenance-of-Way Association.
6. The seamless spray-applied system for waterproofing shall be a two-component elastomer or methyl methacrylate resin membrane. The spray-applied system shall be manufactured by Bridge Preservation, GCP Applied Technologies, or an approved equivalent. The spray-applied system and the asphalt planks shall be installed according to the waterproofing manufacturer's recommendations.

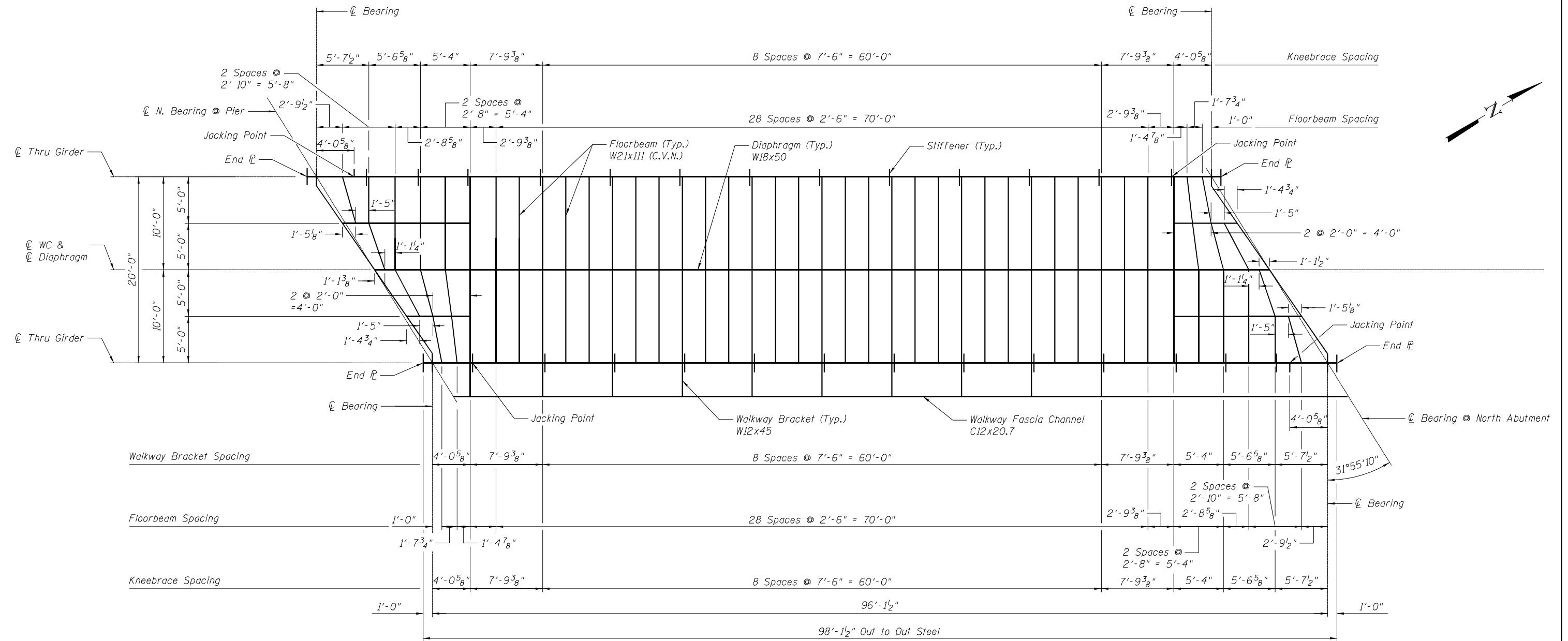


FRAMING PLAN - SPAN 1

SPAN 1 MOMENT TABLE				
Description		Thru Girder	Typical Floorbeam	End Floorbeam
Moment of Inertia, Gross	(in) ⁴	494,062	2,670	9,600
Moment of Inertia, Net	(in) ⁴	477,030	2,614	9,447
Section Modulus, Gross	(in) ³	8,321	249	718
Section Modulus, Net	(in) ³	7,954	243	708
Dead Load	(k/ft)	4.00	1.09	1.16
Moment Dead Load	(k-ft)	6.075	54	268
Moment Live Load	(k-ft)	8,848	216	740
Moment Impact	(k-ft)	2,268	76	352
Moment Total	(k-ft)	17,191	346	1,360
Flexural Stress Dead Load	(ksi)	9.17	2.67	4.54
Flexural Stress Live Load	(ksi)	13.35	10.67	12.54
Flexural Stress Impact	(ksi)	3.42	3.75	5.97
Flexural Stress Total	(ksi)	25.9	17.1	23.1
Allowable Flexural Stress	(ksi)	27.5	27.5	27.5
Ratio of Flexural Stress to Allowable		0.94	0.62	0.84
Max. Fatigue Stress Range (Cat. B)	(ksi)	14.55	9.72	11.62
Allowable Fatigue Stress Range	(ksi)	18.00	16.00	16.00
Ratio of Fatigue Stress to Allowable		0.81	0.61	0.73
Deflection Live Load + Impact	(in)	1.70	0.27	0.39
Ratio of Span Length to Deflection		778	889	725

SPAN 1 REACTION TABLE				
Description		Thru Girder	Typical Floorbeam	End Floorbeam
Reaction Dead Load	(k)	220	9.2	40.0
Reaction Live Load	(k)	343	28.8	84.5
Reaction Impact	(k)	88	11.5	41.5
Reaction Total	(k)	651	49.5	166.0
Shear Stress Dead Load	(ksi)	2.21	0.85	2.04
Shear Stress Live Load	(ksi)	3.44	2.65	4.31
Shear Stress Impact	(ksi)	0.88	1.06	2.11
Shear Stress Total	(ksi)	6.53	4.55	8.46
Allowable Shear Stress	(ksi)	17.5	17.5	17.5
Ratio of Shear Stress to Allowable		0.37	0.26	0.48

- Notes:
- For Floorbeam and Diaphragm sizes not typical see sheets 19 & 20 of 49.
 - Floor beams and diaphragm members shall conform to AASHTO M270, Gr. 50.
 - Charpy V-Notch (C.V.N.), see General Notes.

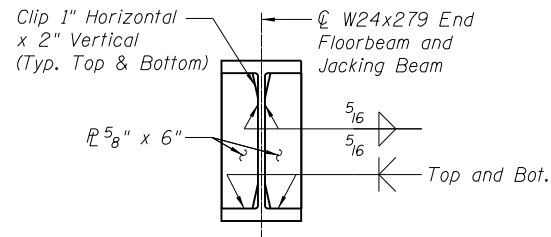
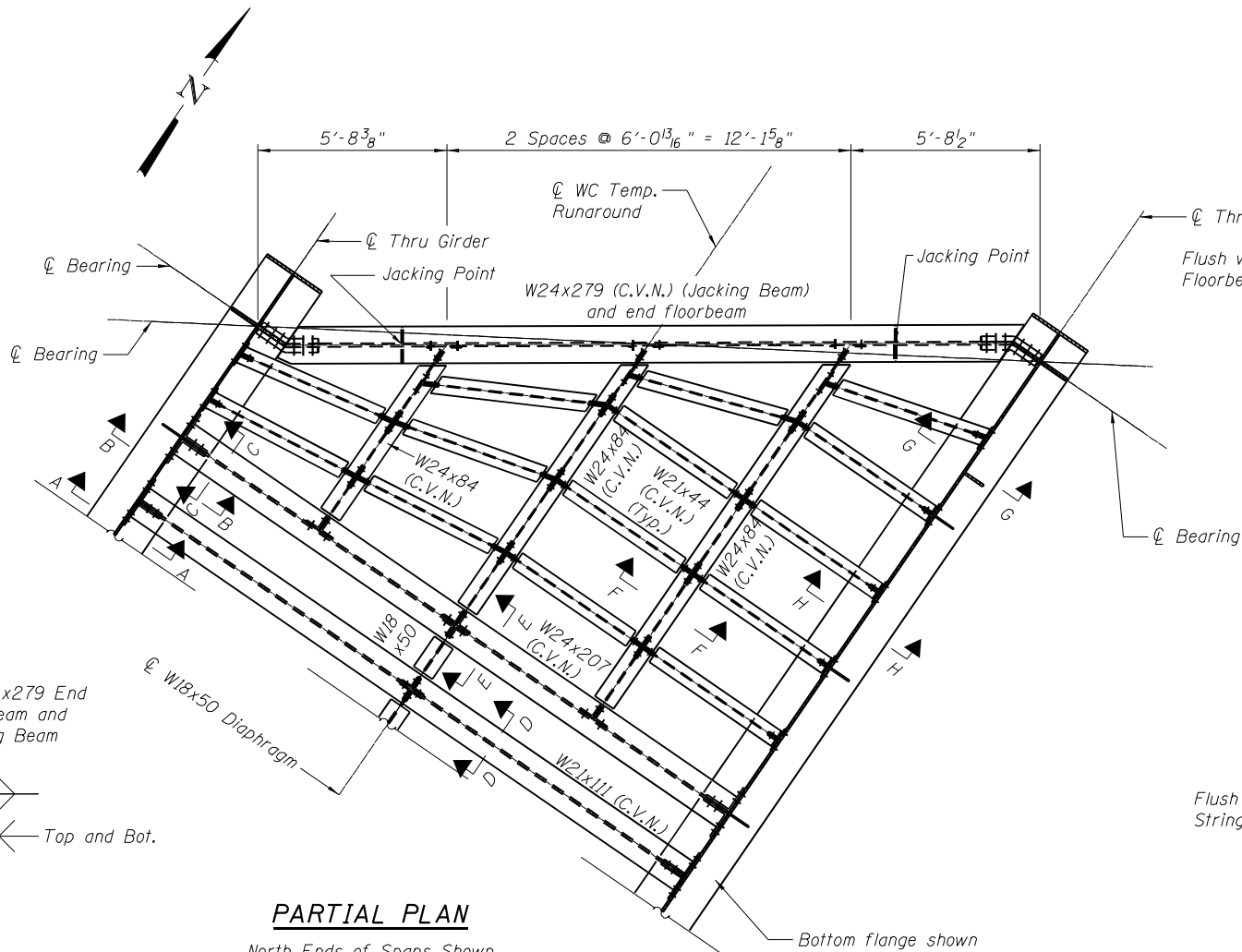


FRAMING PLAN - SPAN 2

SPAN 2 MOMENT TABLE				
Description		Thru Girder	Typical Floorbeam	End Floorbeam
Moment of Inertia, Gross	(in) ⁴	389,410	2,670	9,600
Moment of Inertia, Net	(in) ⁴	372,519	2,614	9,447
Section Modulus, Gross	(in) ³	6,628	249	718
Section Modulus, Net	(in) ³	6,274	243	708
Dead Load	(k/ft)	3.90	1.09	1.16
Moment Dead Load	(k-ft)	4,501	54	268
Moment Live Load	(k-ft)	6,863	216	740
Moment Impact	(k-ft)	1,857	76	352
Moment Total	(k-ft)	13,221	346	1,360
Flexural Stress Dead Load	(ksi)	8.61	2.67	4.54
Flexural Stress Live Load	(ksi)	13.13	10.67	12.54
Flexural Stress Impact	(ksi)	3.55	3.75	5.97
Flexural Stress Total	(ksi)	25.3	17.1	23.1
Allowable Flexural Stress	(ksi)	27.5	27.5	27.5
Ratio of Flexural Stress to Allowable		0.92	0.62	0.84
Max. Fatigue Stress Range (Cat. B)	(ksi)	14.37	9.72	11.62
Allowable Fatigue Stress Range	(ksi)	18.00	16.00	16.00
Ratio of Fatigue Stress to Allowable		0.80	0.61	0.73
Deflection Live Load + Impact	(in)	1.28	0.27	0.39
Ratio of Span Length to Deflection		901	889	725

SPAN 2 REACTION TABLE				
Description		Thru Girder	Typical Floorbeam	End Floorbeam
Reaction Dead Load	(k)	187	9.2	40.0
Reaction Live Load	(k)	309	28.8	84.5
Reaction Impact	(k)	84	11.5	41.5
Reaction Total	(k)	580	49.5	166.0
Shear Stress Dead Load	(ksi)	1.87	0.85	2.04
Shear Stress Live Load	(ksi)	3.10	2.65	4.31
Shear Stress Impact	(ksi)	0.84	1.06	2.11
Shear Stress Total	(ksi)	5.81	4.55	8.46
Allowable Shear Stress	(ksi)	17.5	17.5	17.5
Ratio of Shear Stress to Allowable		0.33	0.26	0.48

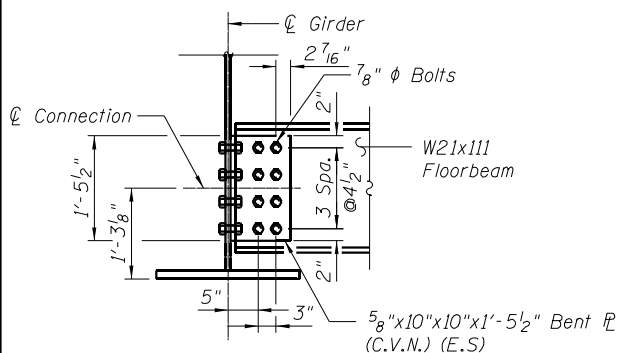
- Notes:
- For Floorbeam and Diaphragm sizes not typical see sheets 19 & 20 of 49.
 - Floor beams and diaphragm members shall conform to AASHTO M270, Gr. 50.
 - Charpy V-Notch (C.V.N.), see General Notes.



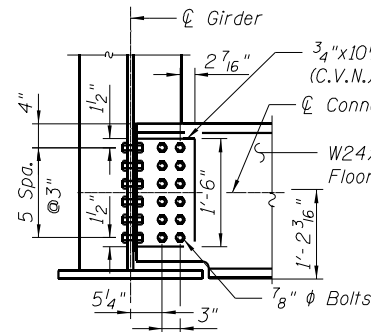
**JACKING BEAM
STIFFENER**

PARTIAL PLAN

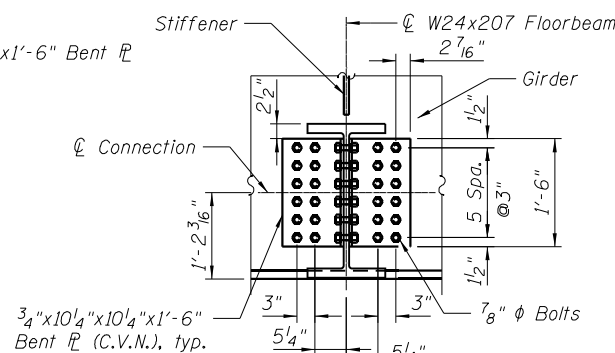
North Ends of Spans Shown
South Ends of Spans Similar



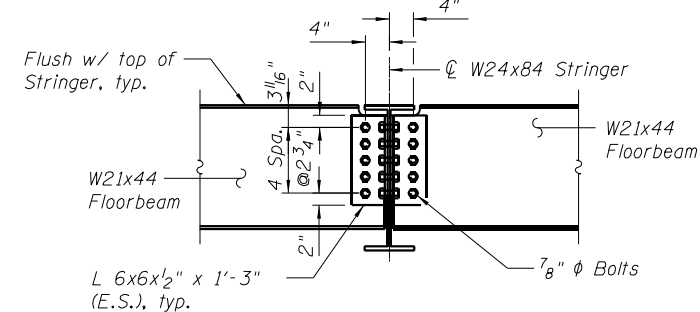
SECTION A-A



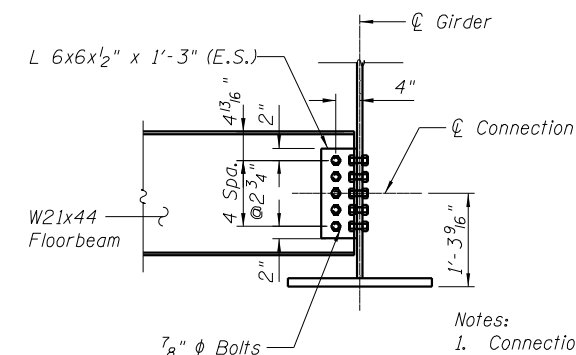
SECTION B-B



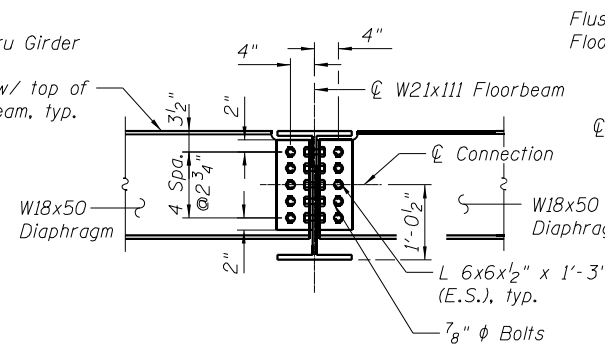
SECTION C-C



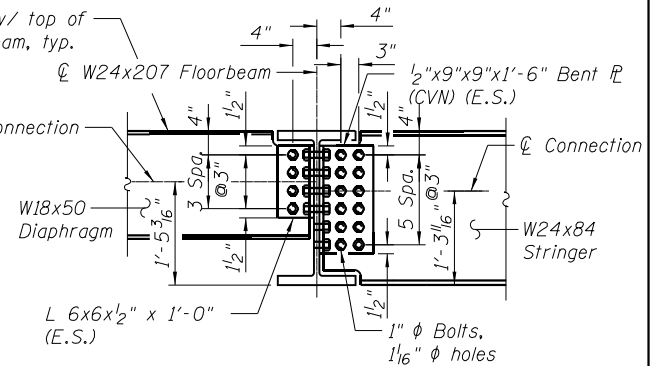
SECTION F-F



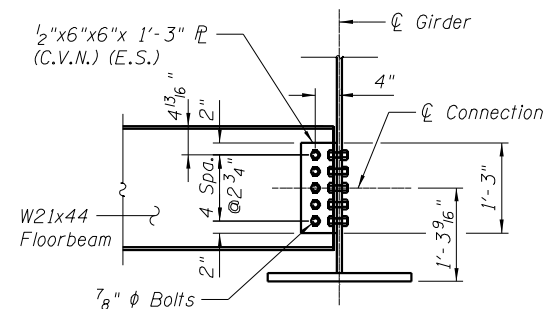
SECTION H-H



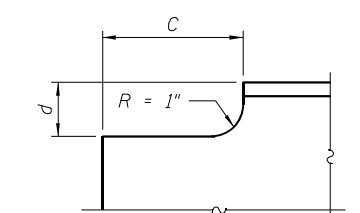
SECTION D-D



SECTION E-E



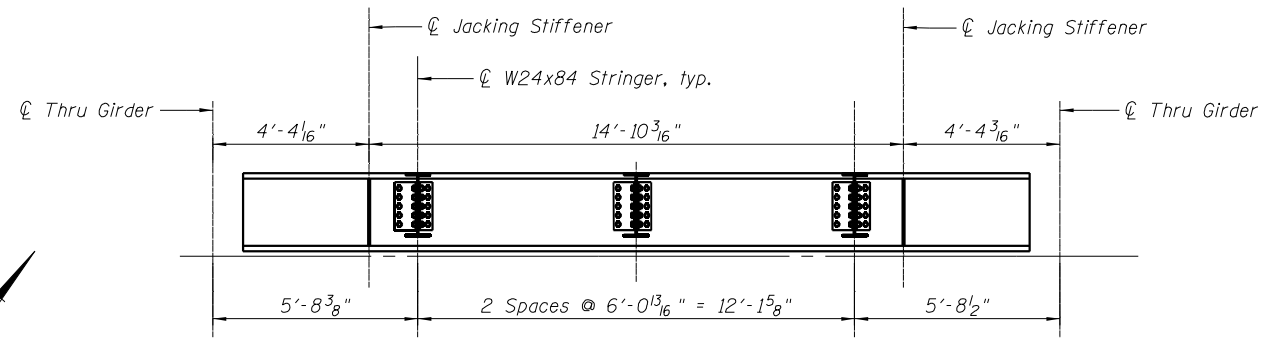
SECTION G-G



Section	Coped Beam	"c"	"d"
B-B	W24x207	1'-0"	2 3/4"
D-D	W18x50	6 3/8"	1 1/2"
E-E	W18x50	6 1/4"	2 1/2"
E-E	W24x84	6 1/4"	2 1/2"
F-F	W21x44	4 3/8"	1 11/16"

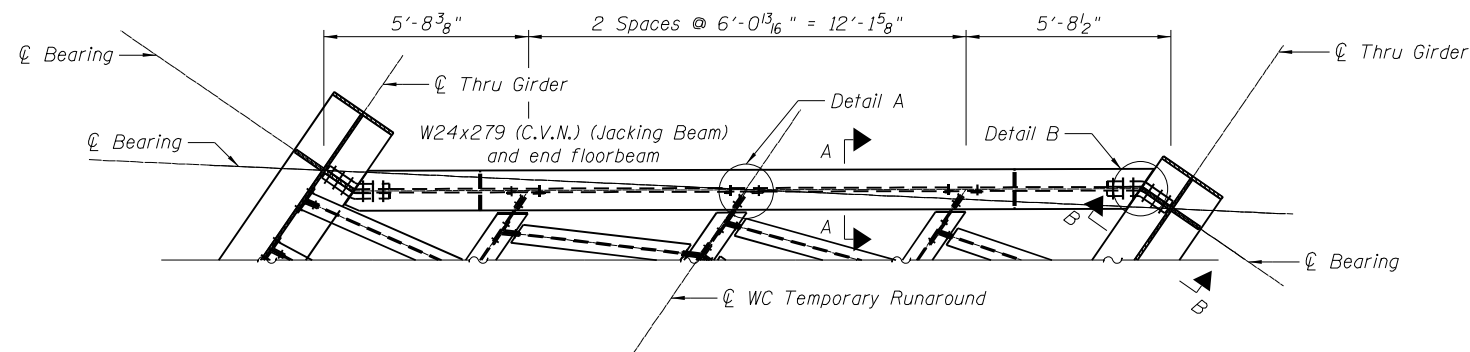
COPING DETAILS

- Notes:
1. Connection plates and angles shall conform to AASHTO M270, Gr. 50.
 2. Contractor may elect to fabricate angles from steel plates (C.V.N.) if stock angles are not available in specified materials.
 3. Charpy V-Notch (C.V.N.), see General Notes.
 4. "E.S." indicates "each side".



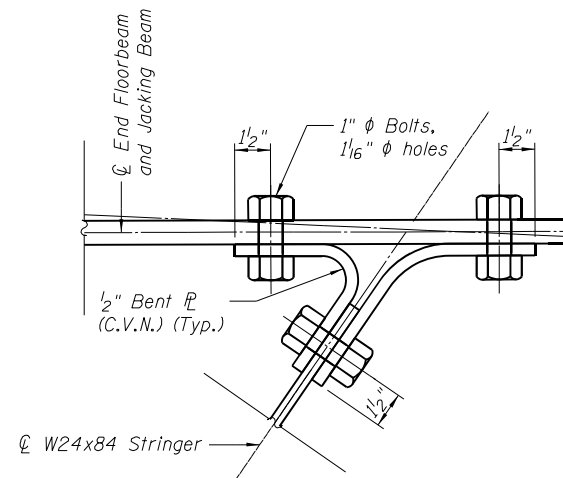
JACKING BEAM ELEVATION

End Floorbeam

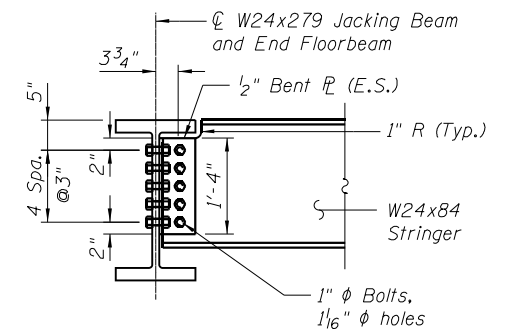


PARTIAL PLAN

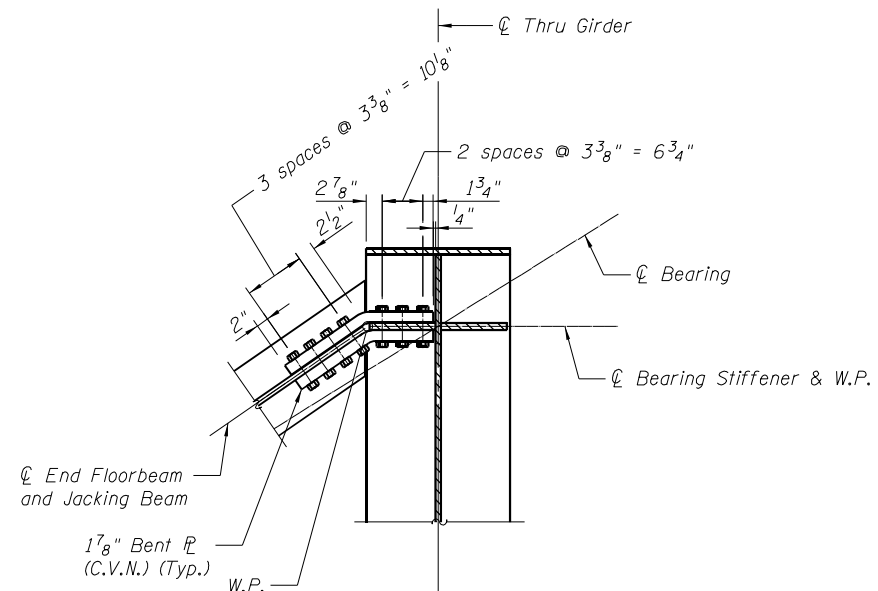
North Ends of Spans Shown
South Ends of Spans Similiar



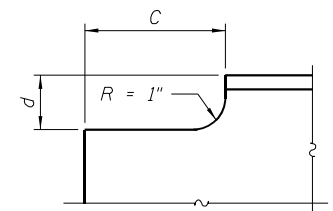
DETAIL "A"



SECTION A-A

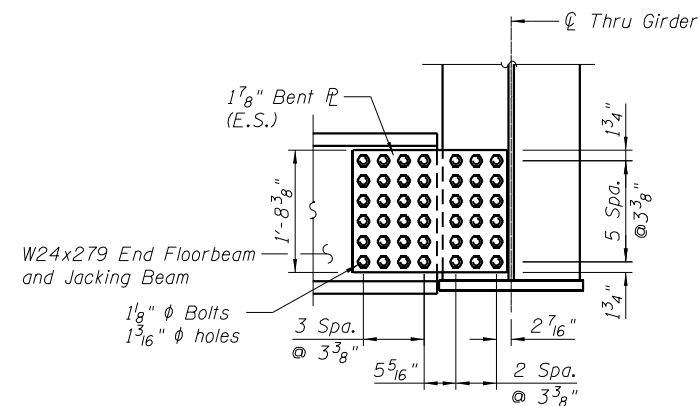


DETAIL "B" PLAN



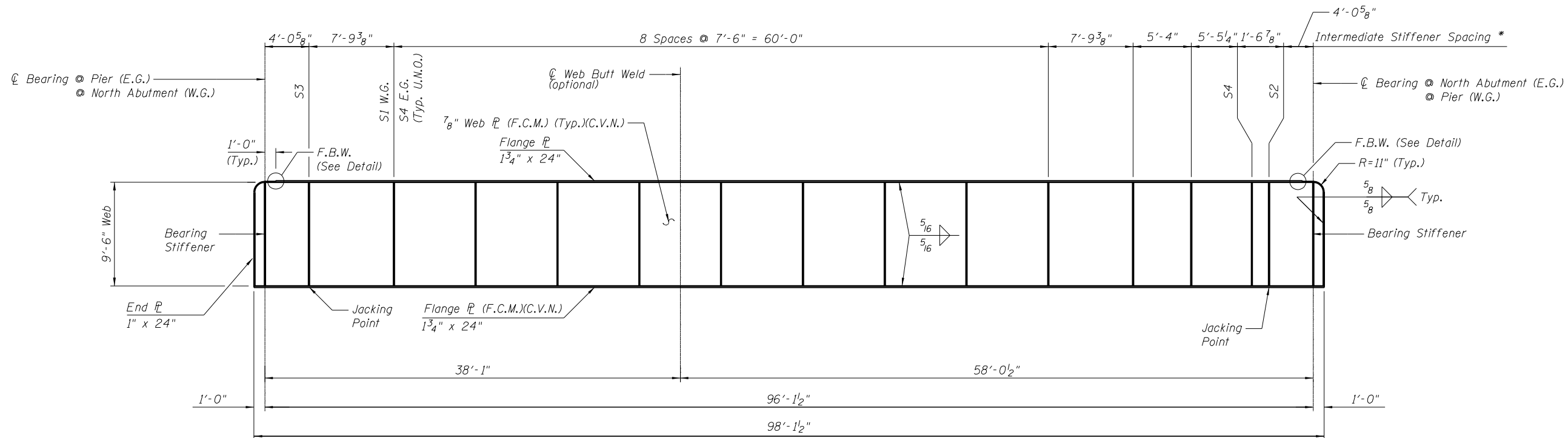
Section	Coped Beam	"c"	"d"
A-A	W24x84	6 3/8"	3"

COPING DETAIL



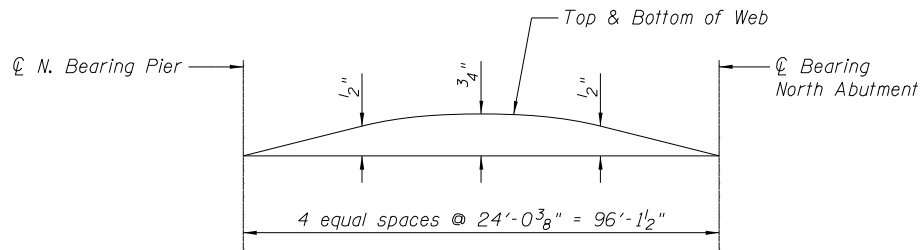
SECTION B-B

- Notes:
1. Connection plates and angles shall conform to AASHTO M270, Gr. 50.
 2. Contractor may elect to fabricate angles from steel plates if stock angles are not available in specified materials.
 3. Charpy V-Notch (C.V.N.), see General Notes.
 4. "E.S." indicates "each side".



SPAN 2 THRU GIRDER ELEVATION

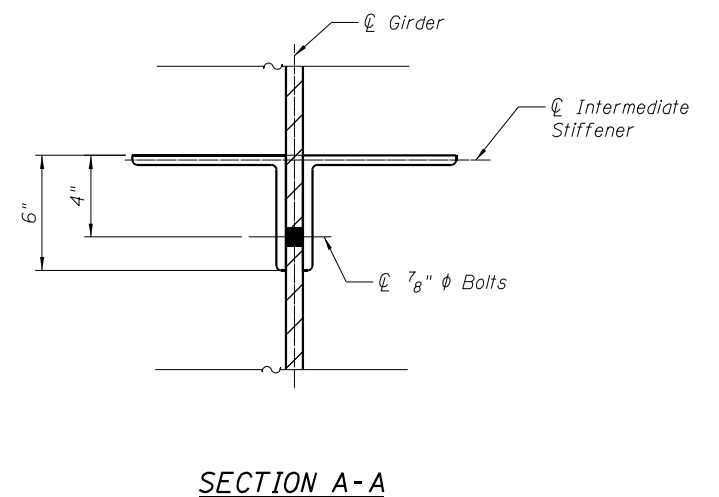
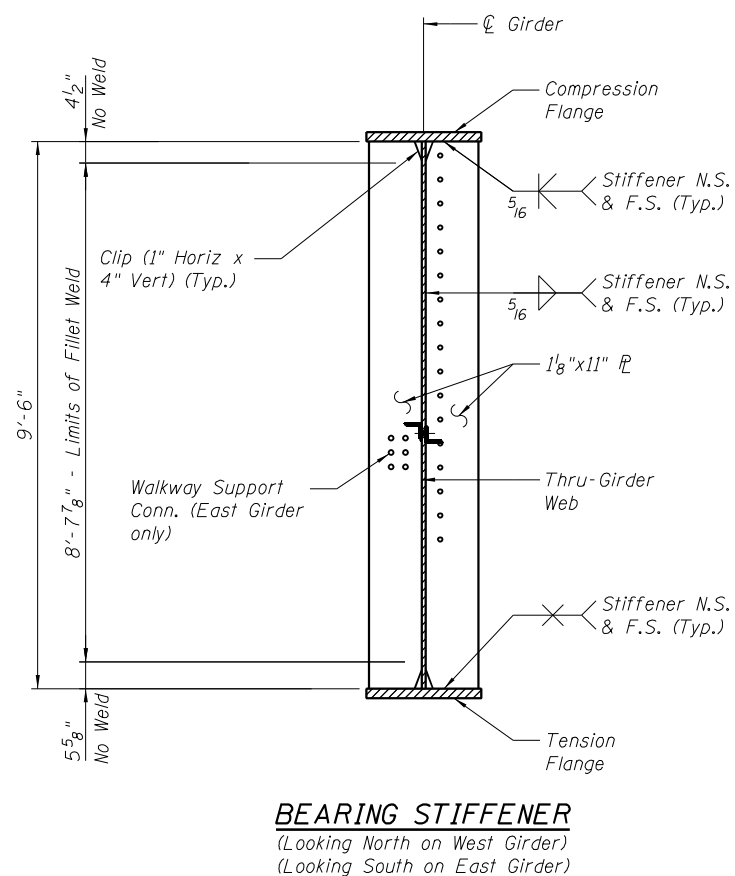
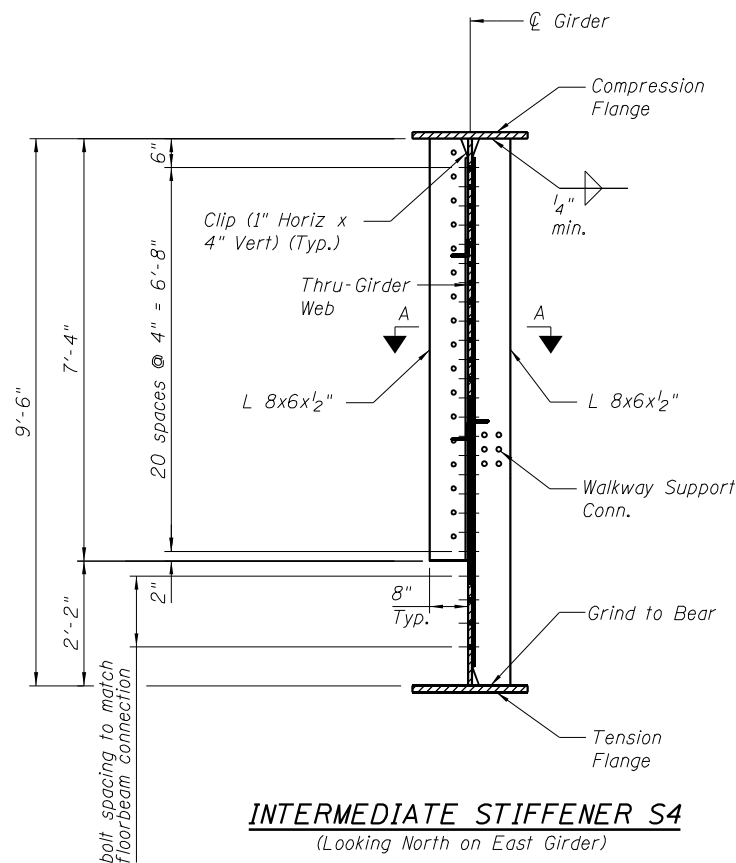
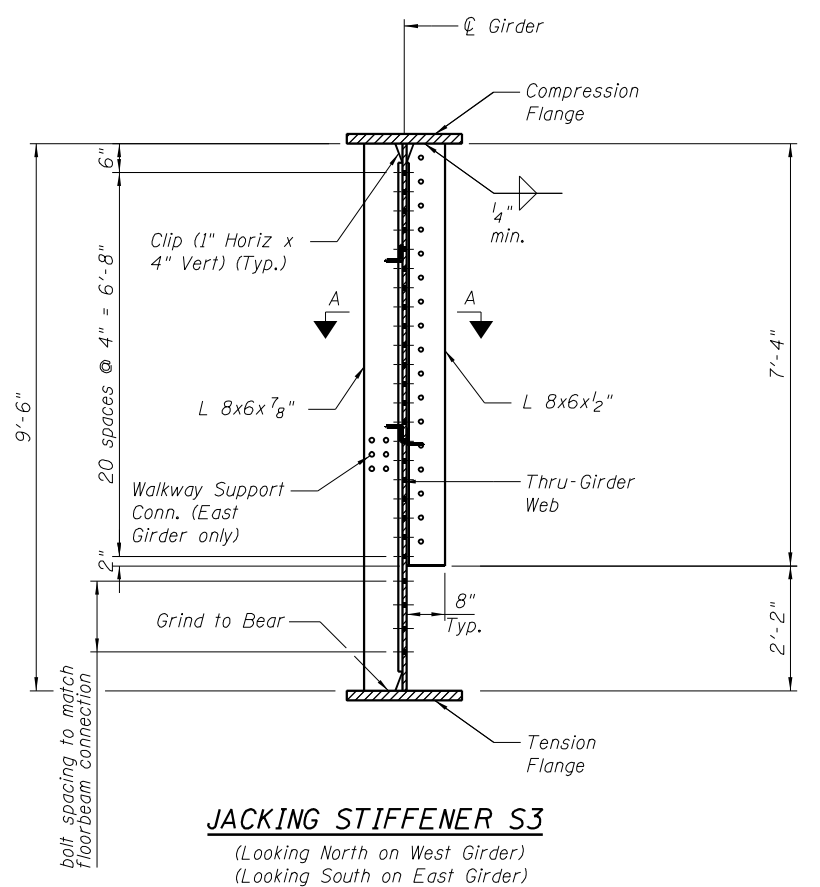
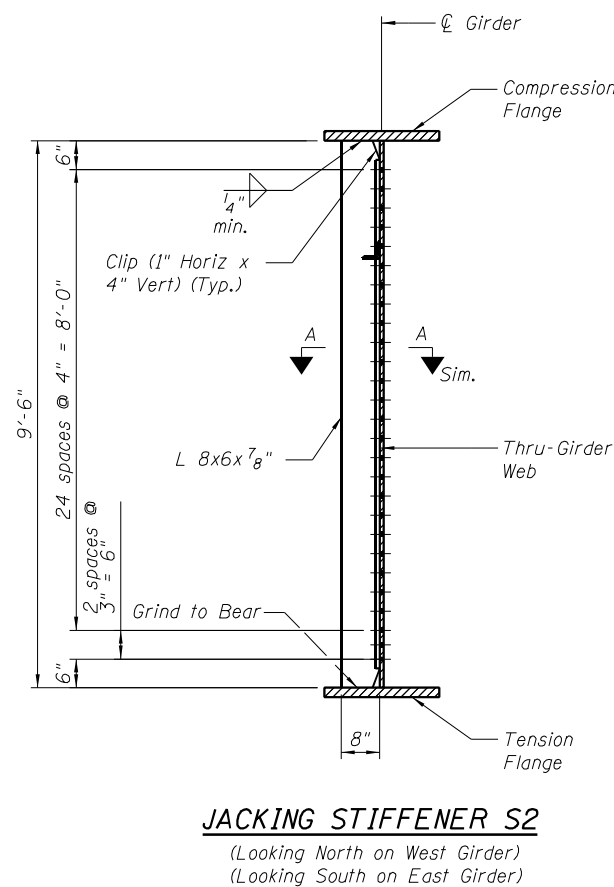
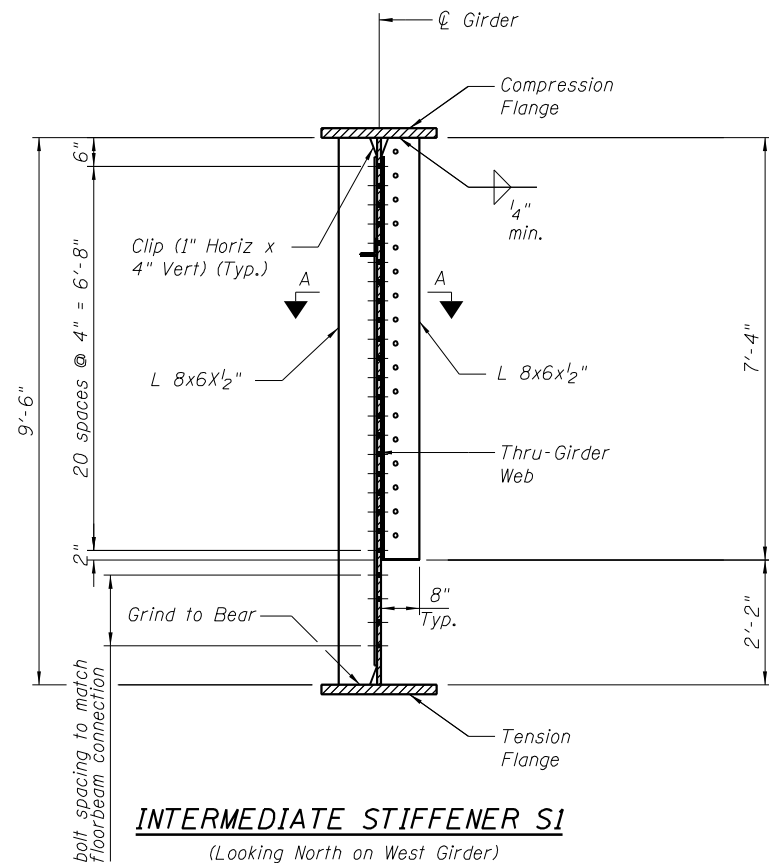
* Stiffener Spacing Measured to C Kneebrace
East Girder (E.G.) Shown
West Girder (W.G.) Opposite of Shown



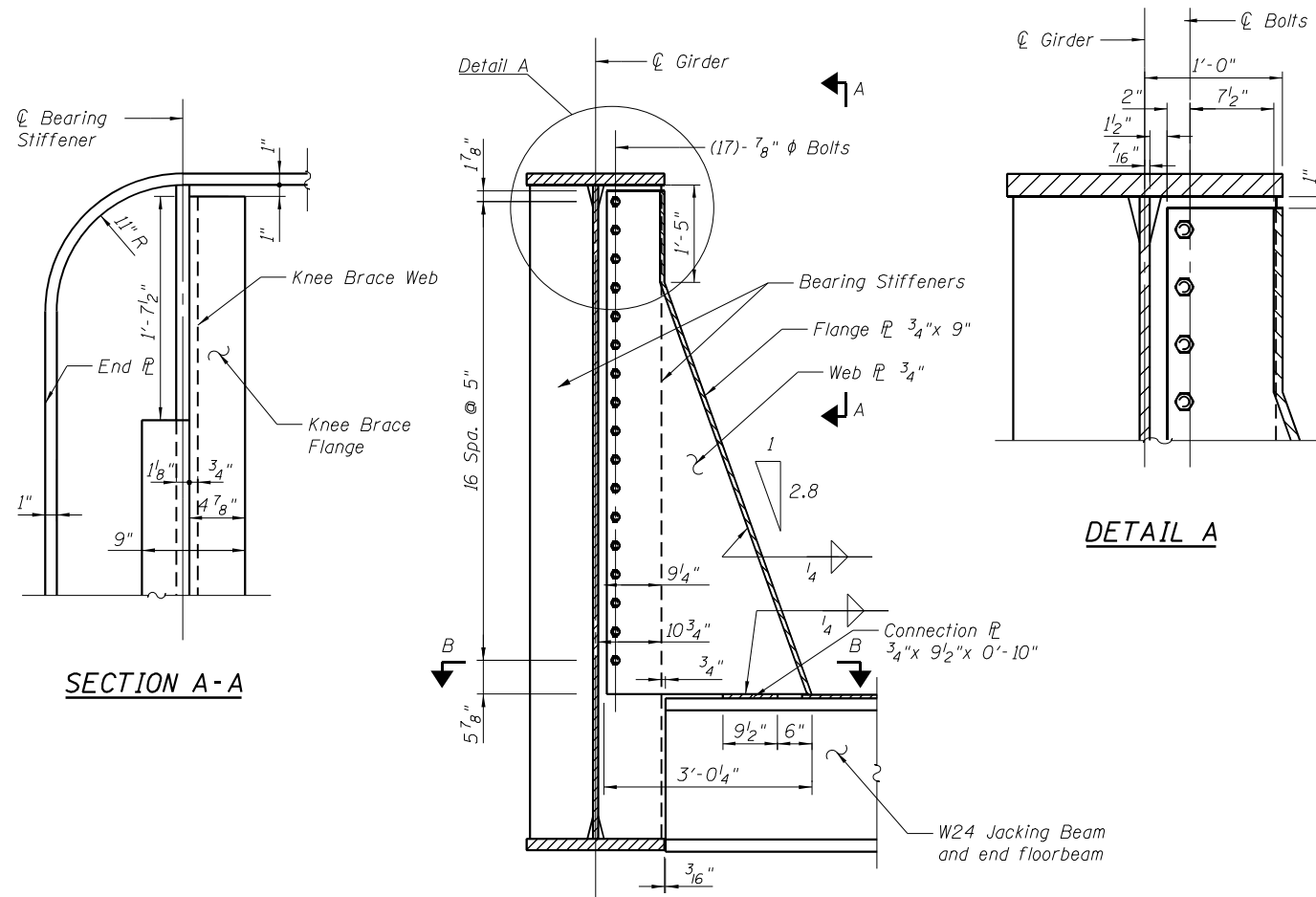
CAMBER DIAGRAM

- Notes:
1. Girder flanges and webs shall conform to AASHTO M270, Gr. 50, Unless otherwise noted.
 2. Fracture Critical Member (F.C.M.)
 3. For Stiffener (S1 thru S4) and Bearing Stiffener Details, see "Misc. Structural Steel Details" drawing, Sheet 23 of 49.
 4. For Walkway Details, see "Walkway" drawings, Sheets 29-31 of 49.
 5. Charpy V-Notch (C.V.N.), see General Notes.
 6. For Kneebrace Details, see sheet 24 of 49.

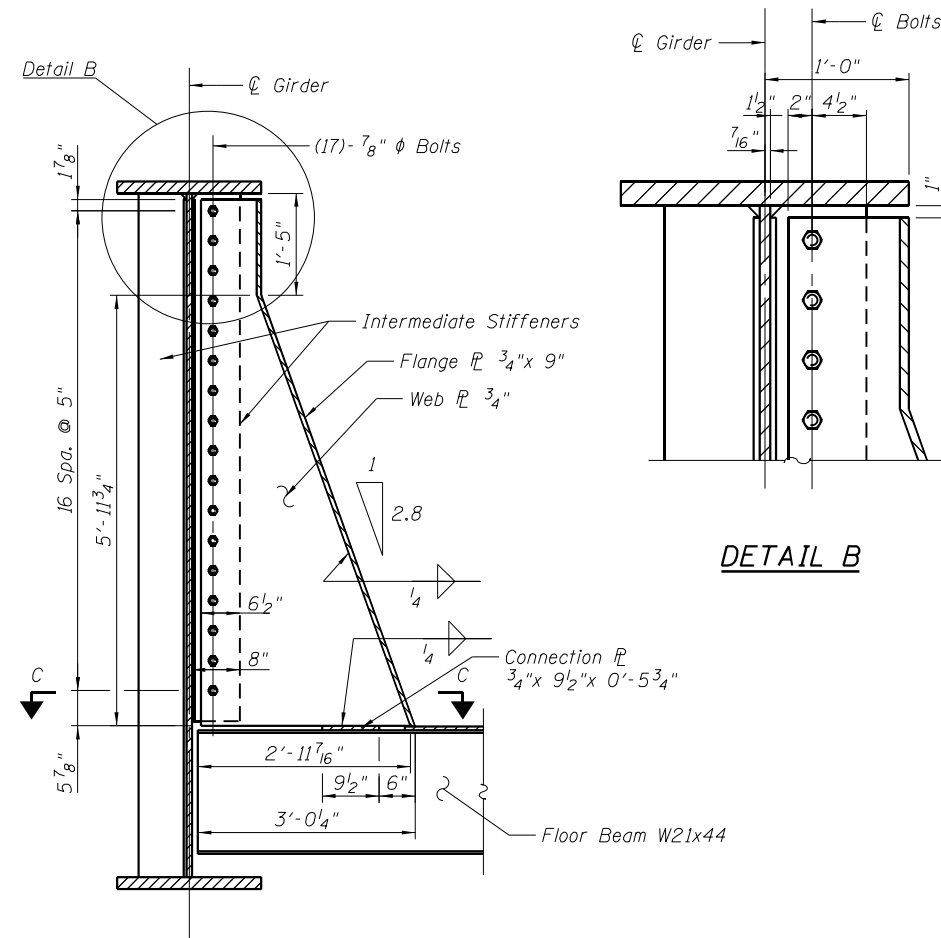
ORIGINAL: DLZ DLZ Illinois, Inc.	UPDATED: E UN ENGINEERING LTD. Consulting Engineers Springfield, MO	DESIGNED - ZJH	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GIRDER ELEVATION (SPAN 2) STRUCTURE NO. 032-9906	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - PRD JCZ	REVISED			80	((32, 47-4)VD, HBR-3) BR, BRR	GRUNDY	143	79
		DRAWN - BAE	REVISED			CONTRACT NO. 66295				
		DATE - 03/25/22	CHECKED - PRD JCZ			ILLINOIS FED. AID PROJECT				



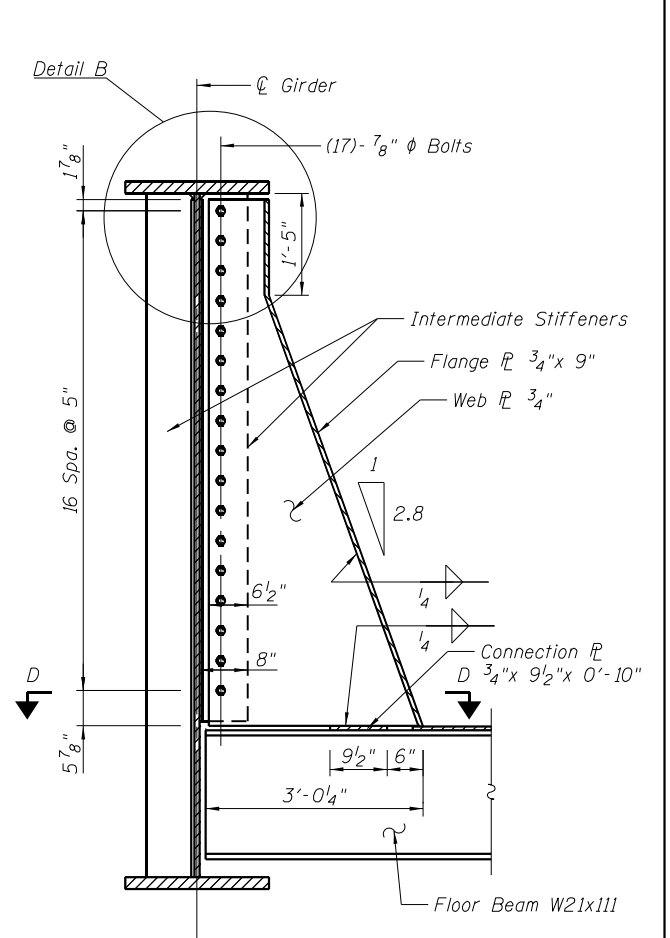
Notes:
All structural steel plates and angles shall conform to AASHTO M270, Gr. 50.
See Sheet 31 of 49 for Walkway Support Connection.
Work this sheet with sheet 24 of 49.



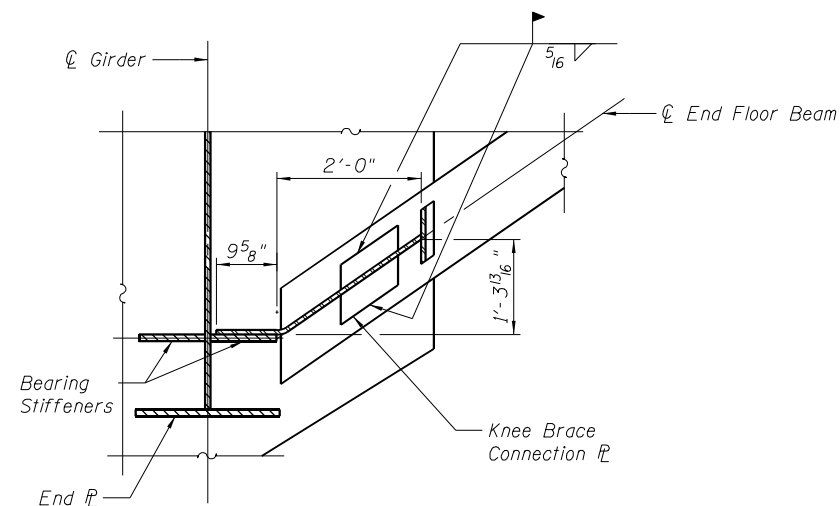
KNEEBRACE AT BEARING STIFFENER



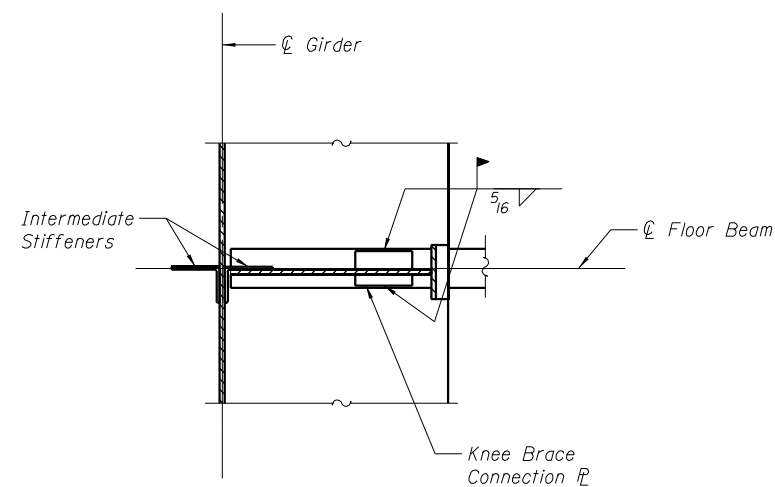
KNEEBRACE AT W21x44 FLOOR BEAM



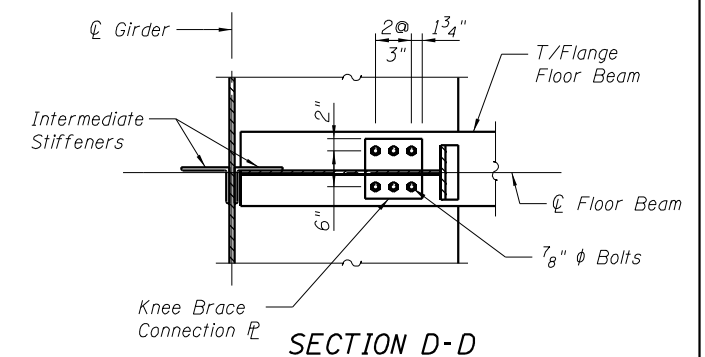
KNEEBRACE AT TYPICAL W21x111 FLOOR BEAM



SECTION B-B

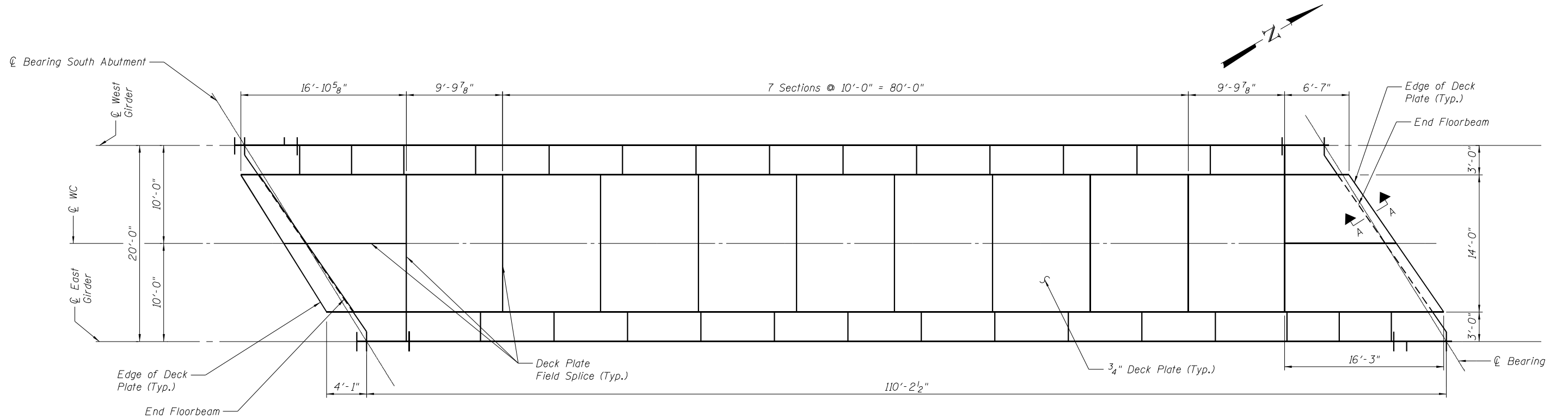


SECTION C-C

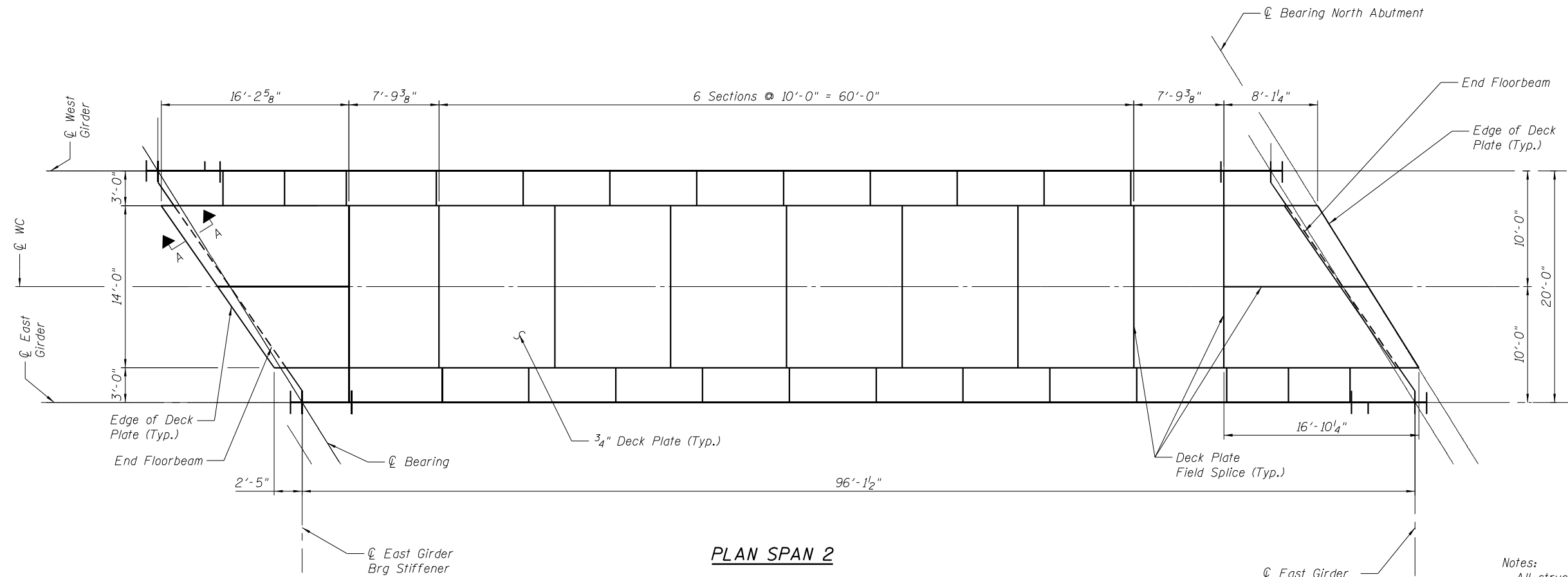


SECTION D-D

Notes:
All structural steel plates shall conform to AASHTO M270, Gr. 50.
Work this sheet with sheet 23 of 49.



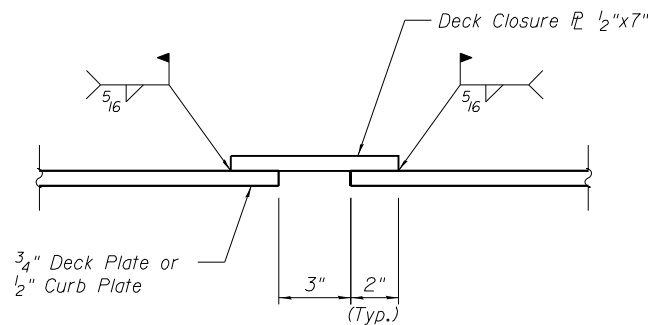
PLAN SPAN 1



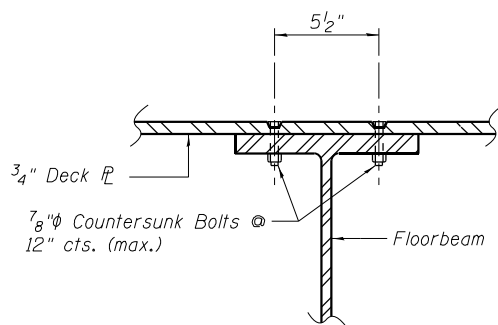
PLAN SPAN 2

Notes:
All structural steel deck plate shall conform to AASHTO M270, Gr. 50.
See Sheet 26 of 49 for Section A-A.

ORIGINAL:  DLZ Illinois, Inc.	UPDATED:  LIN ENGINEERING LTD. Consulting Engineers Springfield, Illinois	DESIGNED - ZJH	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DECK PLATE STRUCTURE NO. 032-9906	F.A.I. RTE. 80	SECTION ((32, 47-4)VB, HBR-3) BR, BRR	COUNTY GRUNDY	TOTAL SHEETS 143	SHEET NO. 82
		CHECKED - PRD JCZ	REVISED							
		DRAWN - BAE	REVISED							
		CHECKED - ZJH JCZ	REVISED							
DATE - 03/25/22					SHEET NO. 25 OF 49 SHEETS		CONTRACT NO. 66295			

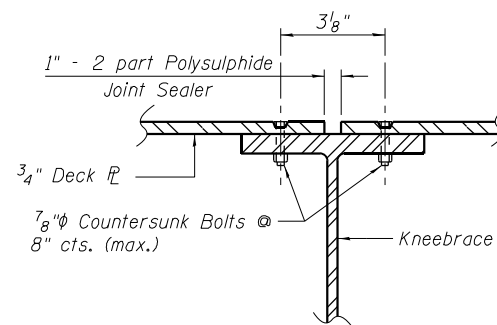


SECTION A-A

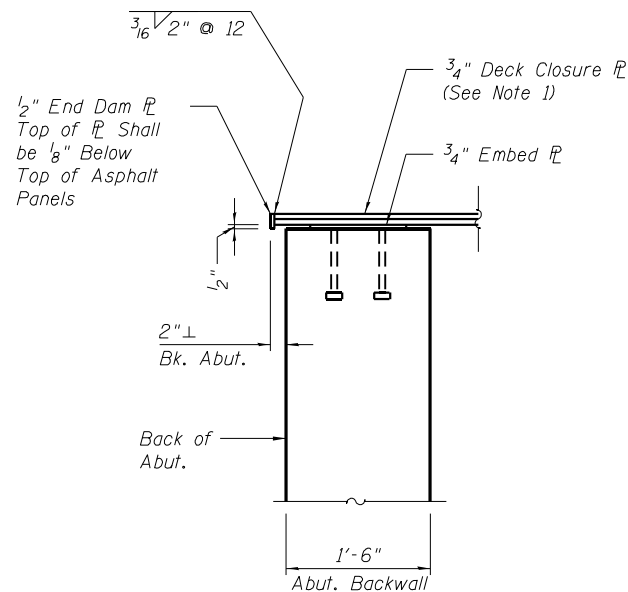


**SECTION THRU FLOOR BEAM
AT DECK PLATE CONNECTION**

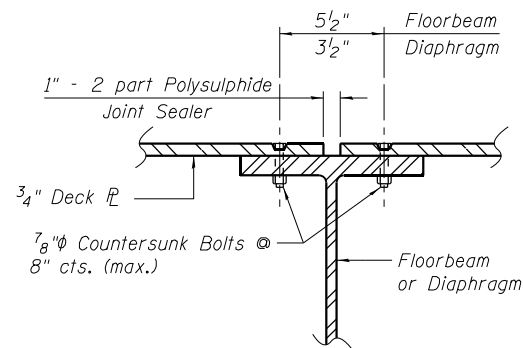
The deck plate shall be connected to at least every other floor beam, resulting in an average longitudinal spacing of 5'-0" for the deck plate connections.



**SECTION THRU KNEEBRACE AT
BALLAST PLATE FIELD SPLICE**



SECTION M-M

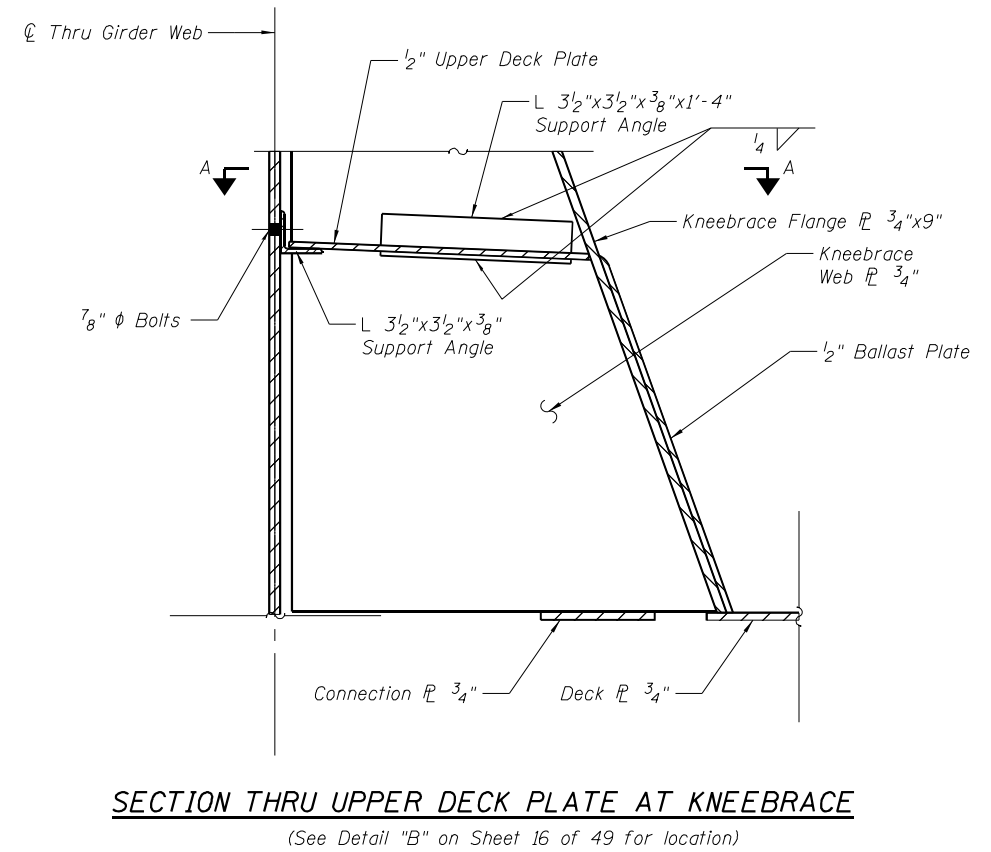
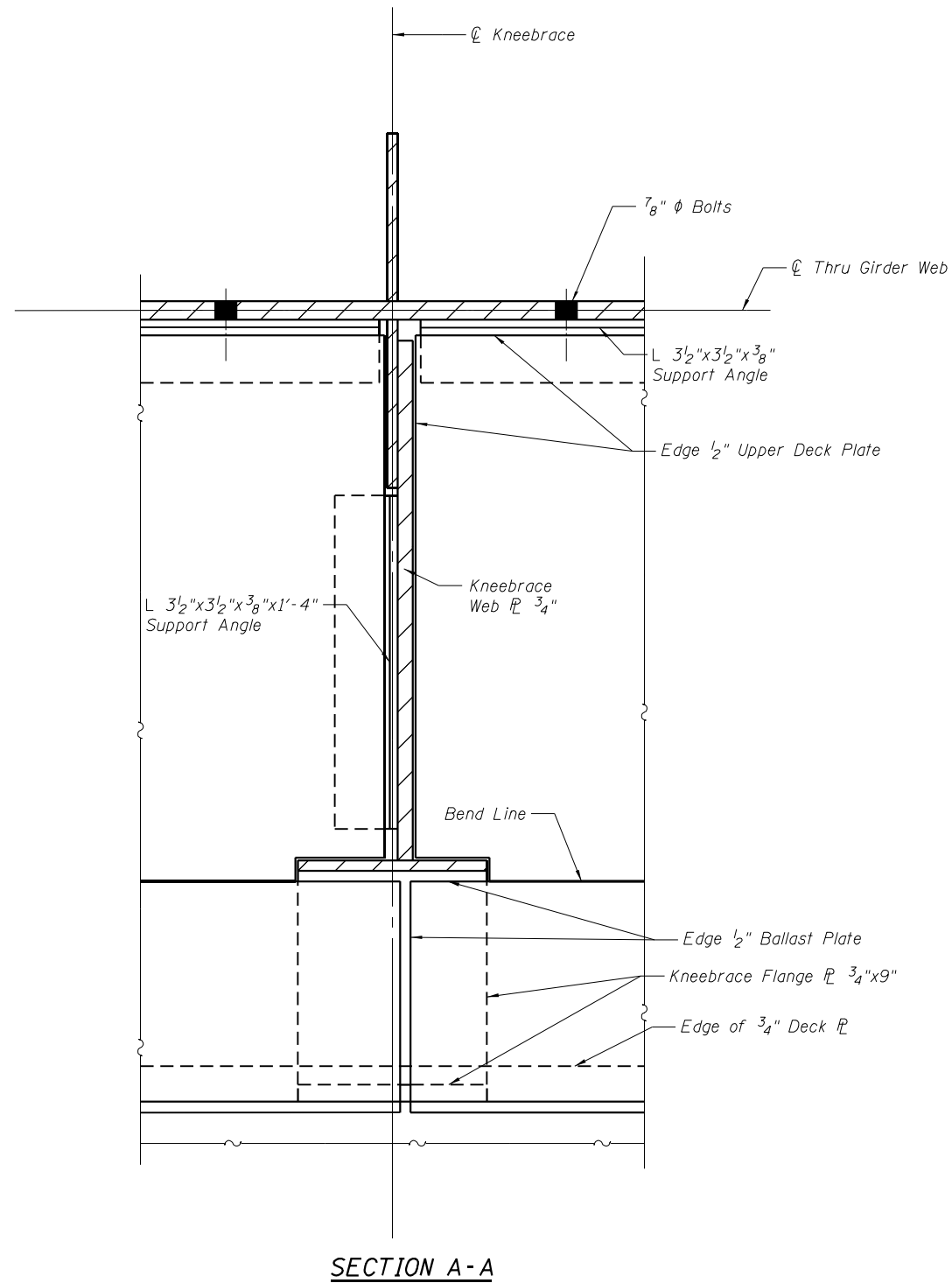


**SECTION THRU FLOOR BEAM OR DIAPHRAGM
AT DECK PLATE FIELD SPLICE**

Notes:

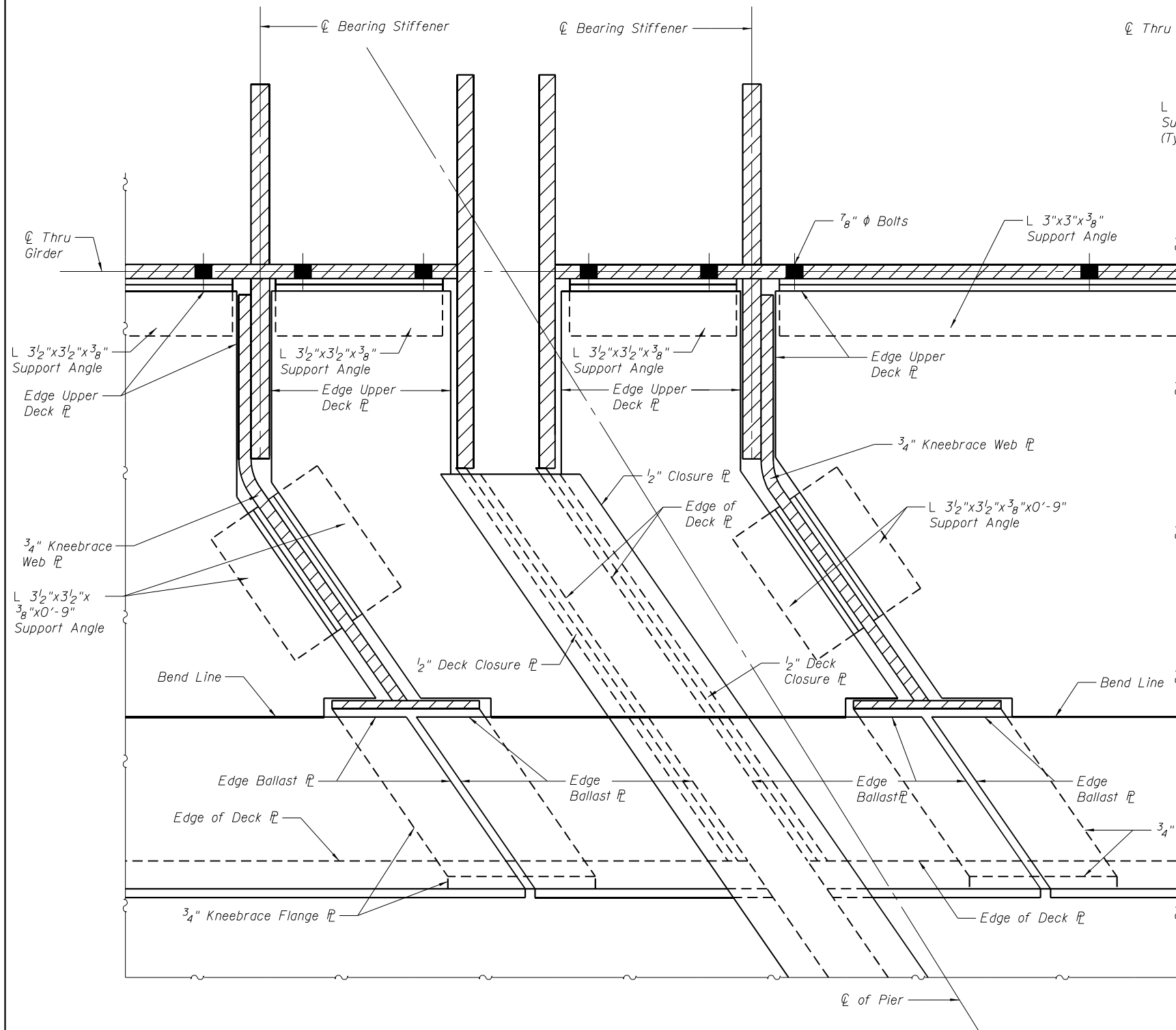
Contractor to Use Extreme Care in welding Deck Closure PL.
Contractor shall submit method of welding to Engineer for Review.
All structural steel plates and angles shall conform to AASHTO M270, Gr. 50.
See Sheet 25 of 49 for location of Section A-A.
See Sheets 38 of 49 and 42 of 49 for location of Section M-M.

ORIGINAL:  DLZ Illinois, Inc.	UPDATED:  UN ENGINEERING LTD. Consulting Engineers Springfield, Illinois	DESIGNED - ZJH	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DECK PLATE DETAILS STRUCTURE NO. 032-9906					F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - PRD JCZ	REVISED		80	((32, 47-4)VB, HBR-3) BR, BRR	GRUNDY	143	83					
		DRAWN - BAE	REVISED		CONTRACT NO. 66295									
		DATE - 03/25/22	CHECKED - ZJH JCZ		ILLINOIS FED. AID PROJECT									
		SHEET NO. 26 OF 49 SHEETS												

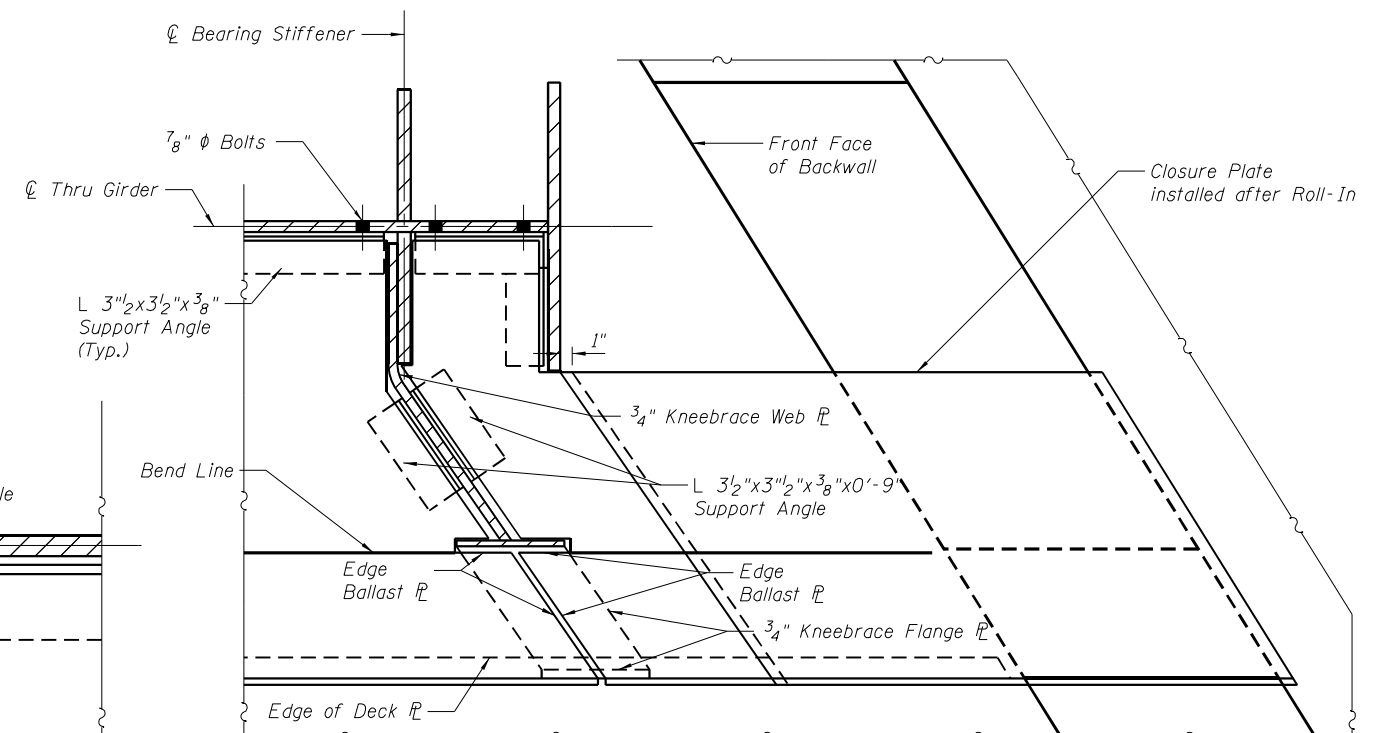


Notes:
Support angles shall conform to AASHTO M270, Gr. 50.
See Sheets 29-30 of 49 for details of support angle connection
to the Thru Girder Web.

ORIGINAL:		UPDATED:		DESIGNED - ZJH		REVISED		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION				UPPER DECK PLATE STRUCTURE NO. 032-9906				F.A.I. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
 DLZ Illinois, Inc.		 UN ENGINEERING LTD. Consulting Engineers Springfield, MO		CHECKED - PRD JCZ		REVISED						80	((32, 47-4)VB, HBR-3) BR, BRR		GRUNDY	143	84				
				DRAWN - BAE		REVISED						CONTRACT NO. 66295									
				DATE - 03/25/22		CHECKED - ZJH JCZ						REVISED		ILLINOIS FED. AID PROJECT							
SHEET NO. 27 OF 49 SHEETS																					

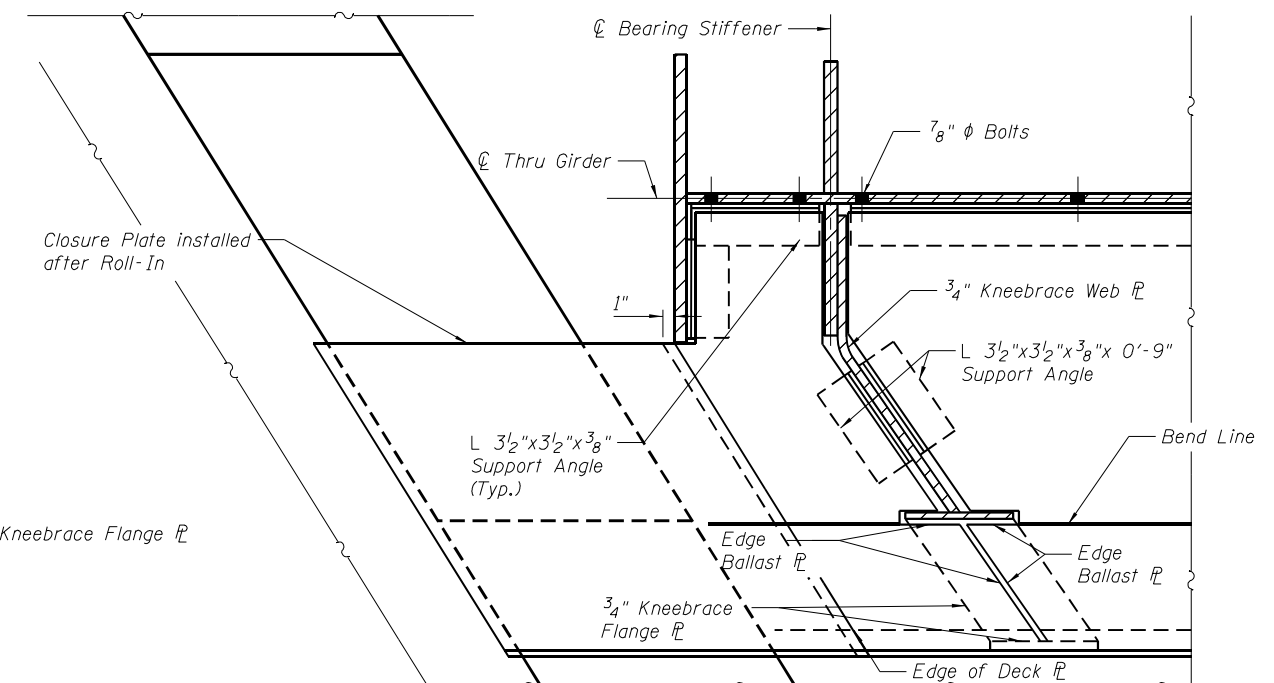


UPPER DECK PLATE AT PIER PLAN



UPPER DECK PLATE AT WEST GIRDER AND NORTH ABUTMENT PLAN

East Girder at South Abutment Similar

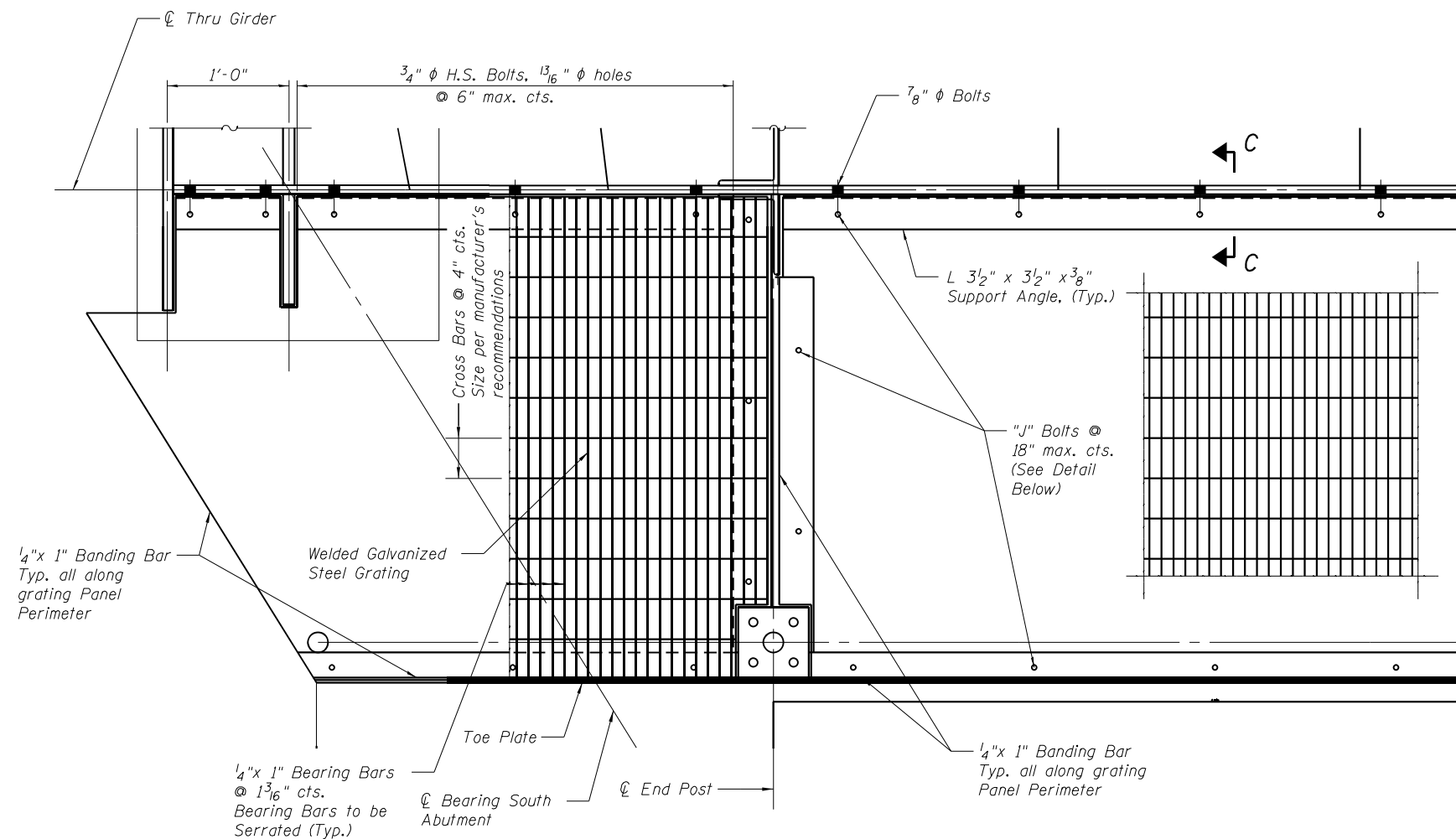


UPPER DECK PLATE AT WEST GIRDER AND SOUTH ABUTMENT PLAN

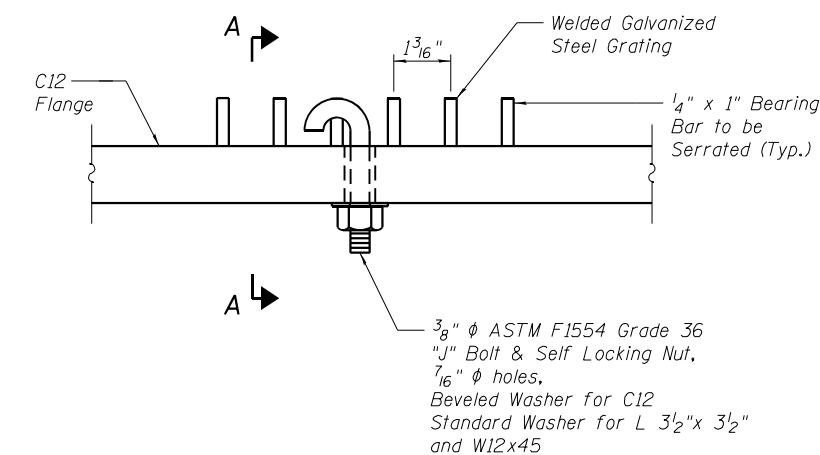
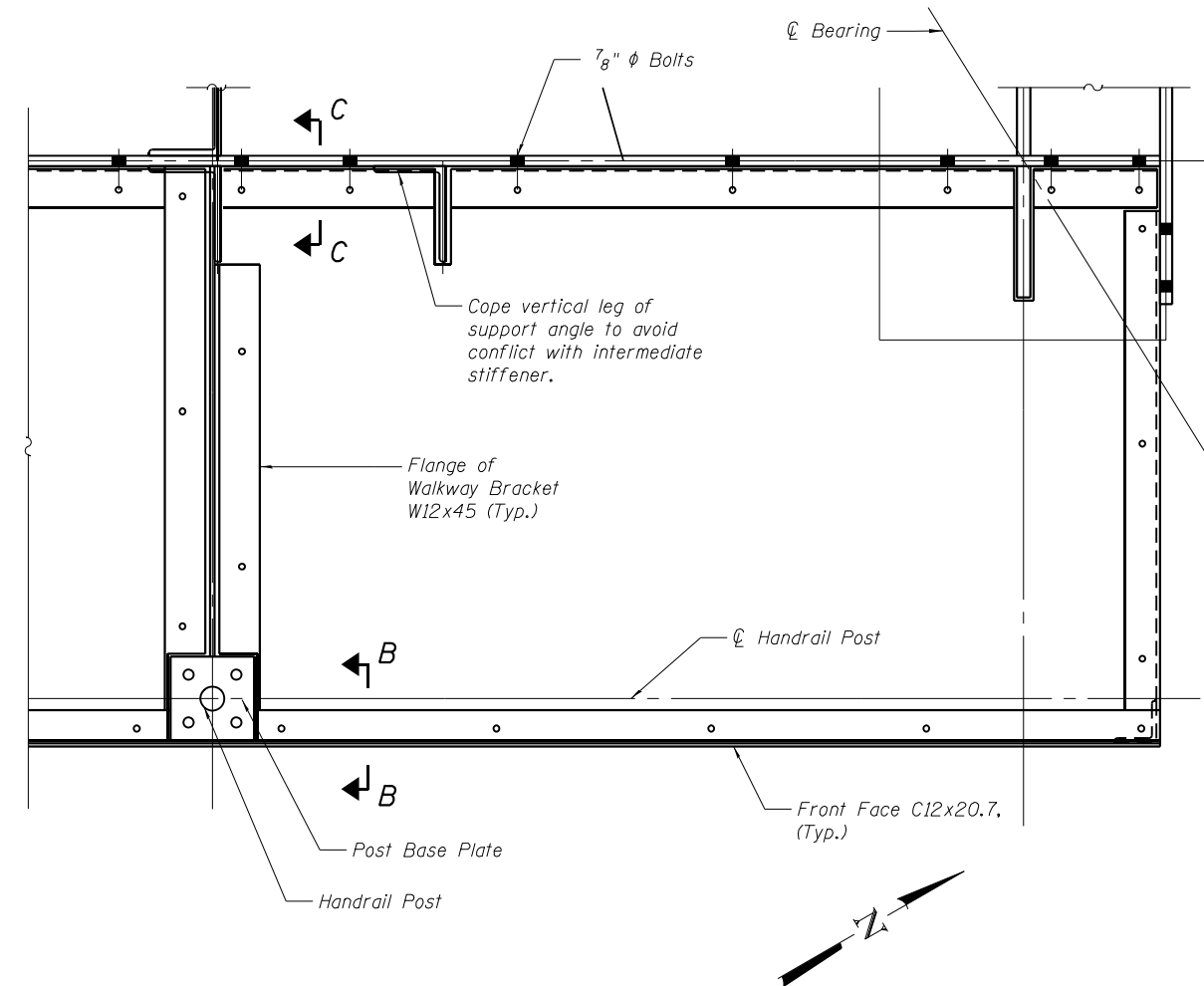
East Girder at North Abutment Similar

Notes:
Support angles shall conform to AASHTO M270, Gr. 50.
See sheet 27 of 49 for details of support angle connection to stiffener or kneebrace web plates.
See Sheets 29-30 of 49 for details of support angle connection to the Thru Girder Web.

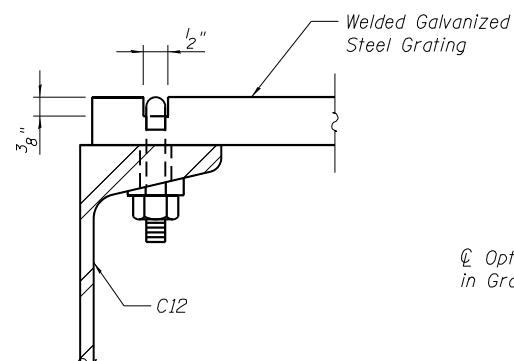
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WALKWAY PLAN - SOUTH SPAN

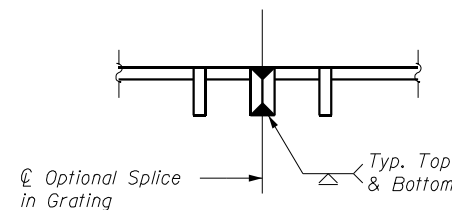


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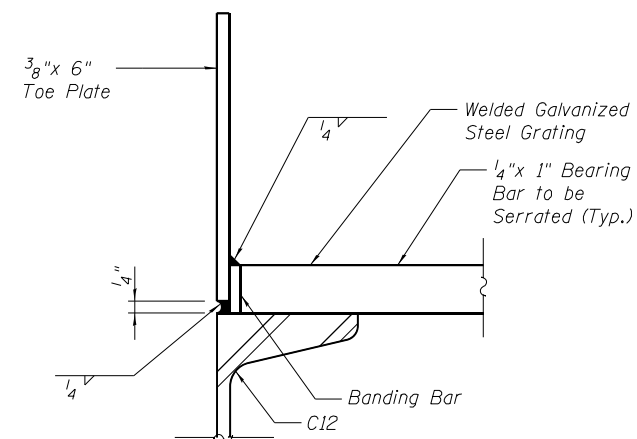


SECTION A-A

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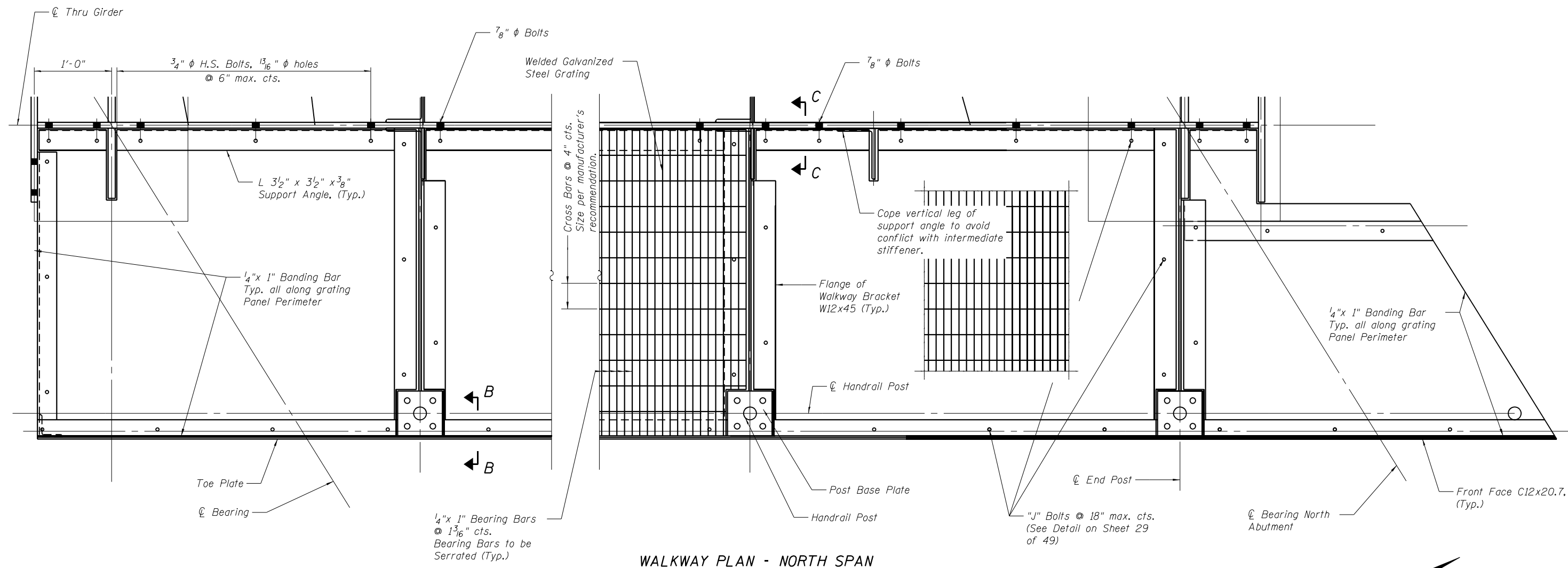


OPTIONAL SPLICE IN GRATING

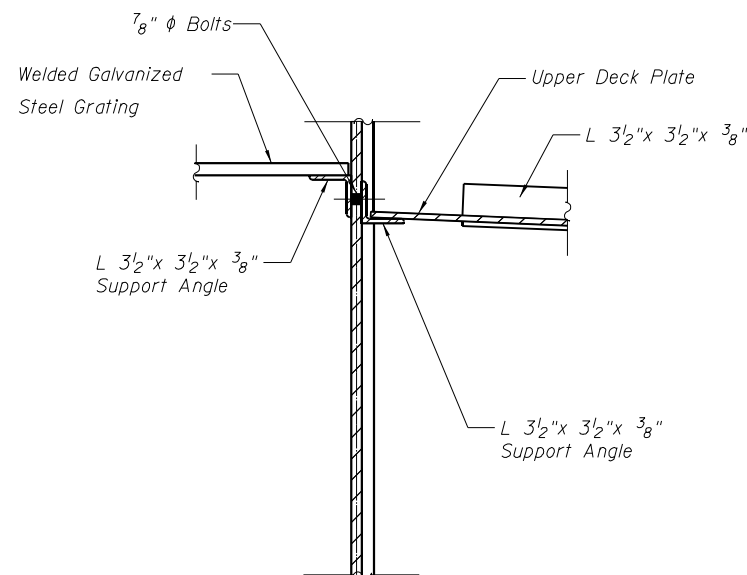


SECTION B-B

Notes:
See sheet 30 of 49 for Walkway Notes.
See sheet 31 of 49 for Handrail Details.
See sheet 30 of 49 for Section C-C.



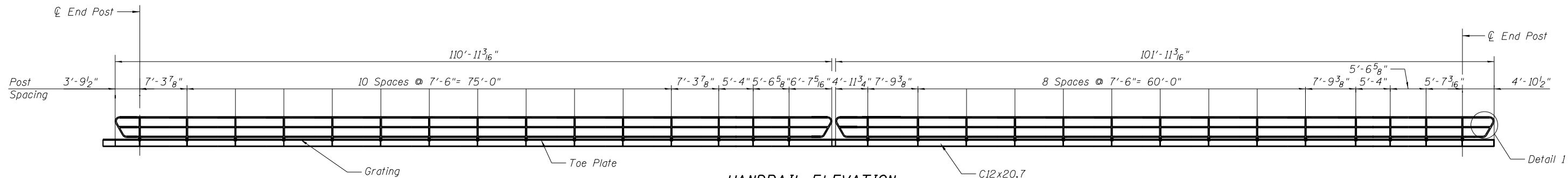
WALKWAY PLAN - NORTH SPAN



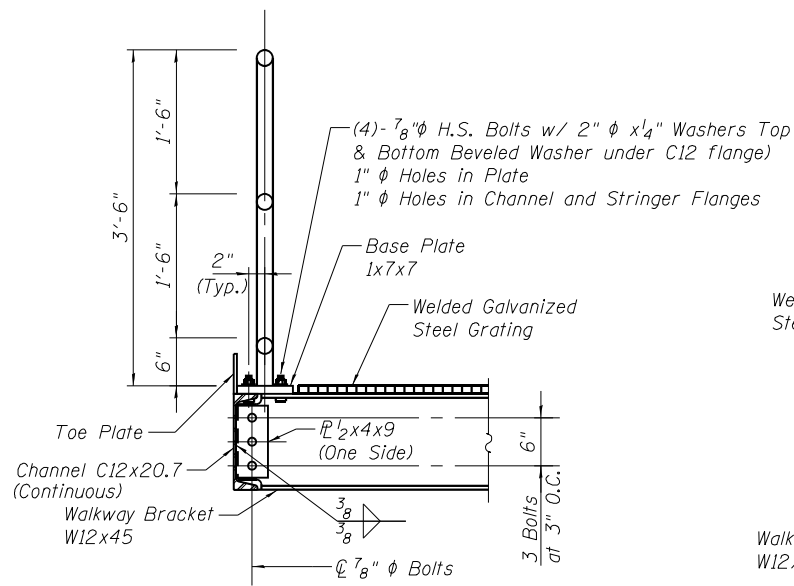
SECTION C-C

Notes:
 All walkway support steel, including angles, channels, and wide flange beams, shall conform to AASHTO M270, Gr. 50.
 For Handrail Details see sheet 31 of 49 "Handrail Details."
 The welded galvanized steel grating, banding bars, toe plates, and "J" bolts will be paid for as Steel Grate Walkway. All other steel members and their connections that support the walkway will be paid for as Furnishing and Erecting Structural Steel.
 See sheet 29 of 49 for Section B-B.

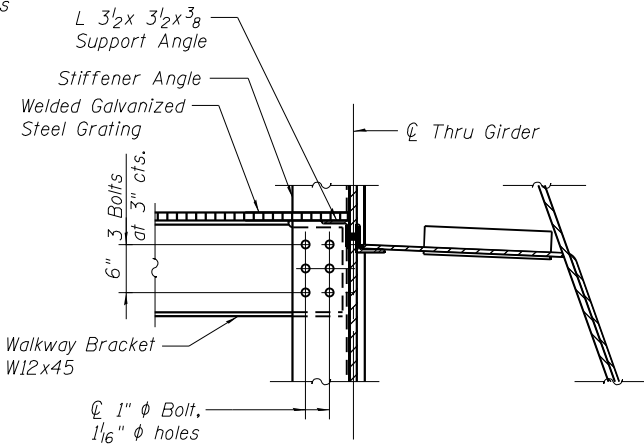
ORIGINAL: DLZ Illinois, Inc.	UPDATED: UN ENGINEERING LTD. Consulting Engineers Springfield, MO	DESIGNED - ZJH	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WALKWAY STRUCTURE NO. 032-9906	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - PRD JCZ	REVISED			80	((32, 47-4)VD, HBR-3) BR, BRR	GRUNDY	143	87
		DRAWN - BAE	REVISED			CONTRACT NO. 66295				
		DATE - 03/25/22	CHECKED - ZJH JCZ			ILLINOIS FED. AID PROJECT				



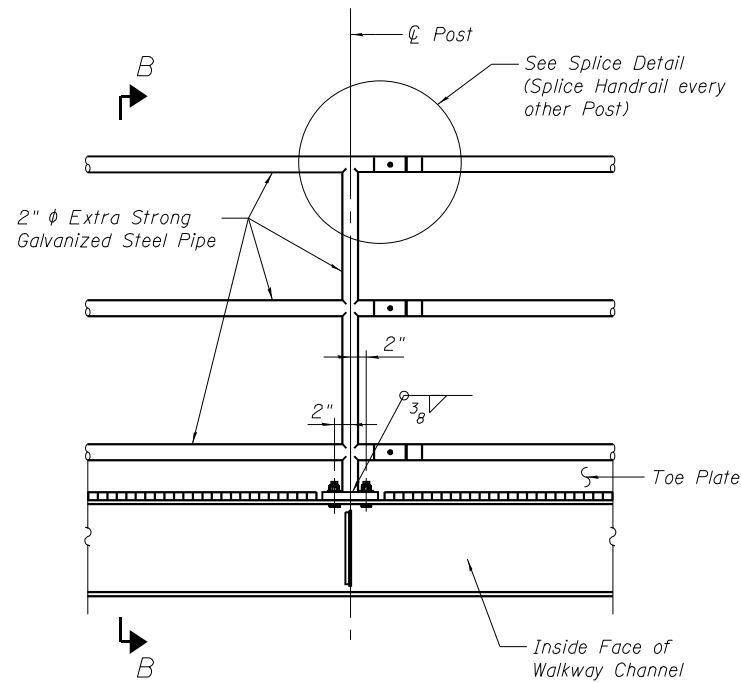
HANDRAIL ELEVATION



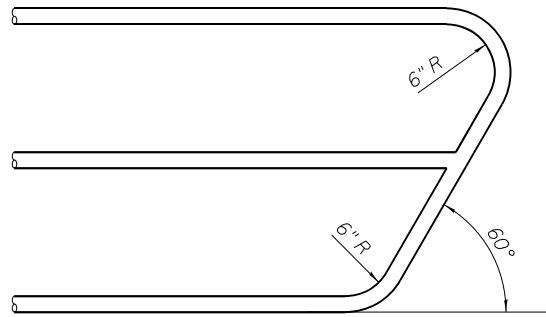
SECTION B-B



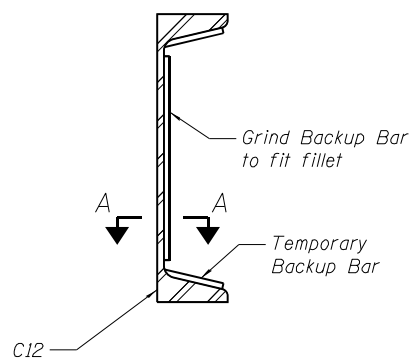
SECTION C-C



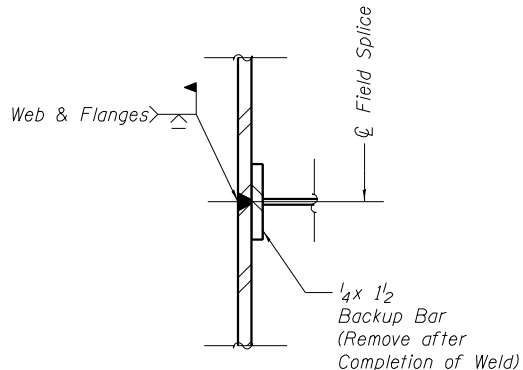
TYPICAL POST



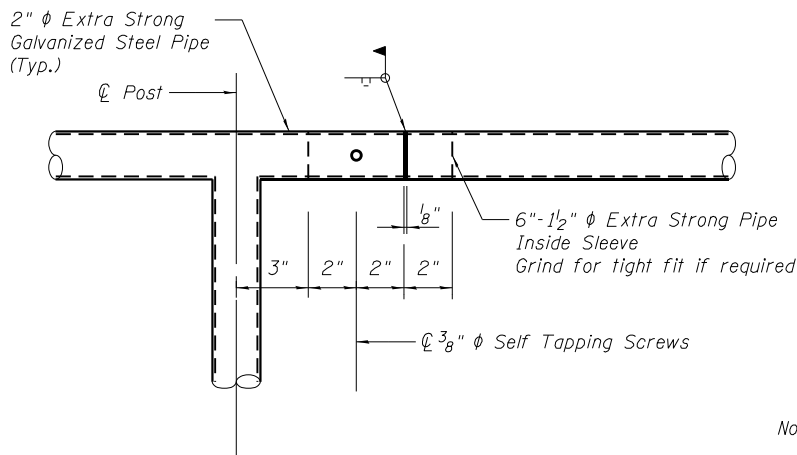
DETAIL 1



CHANNEL SPICE
(Location Optional)

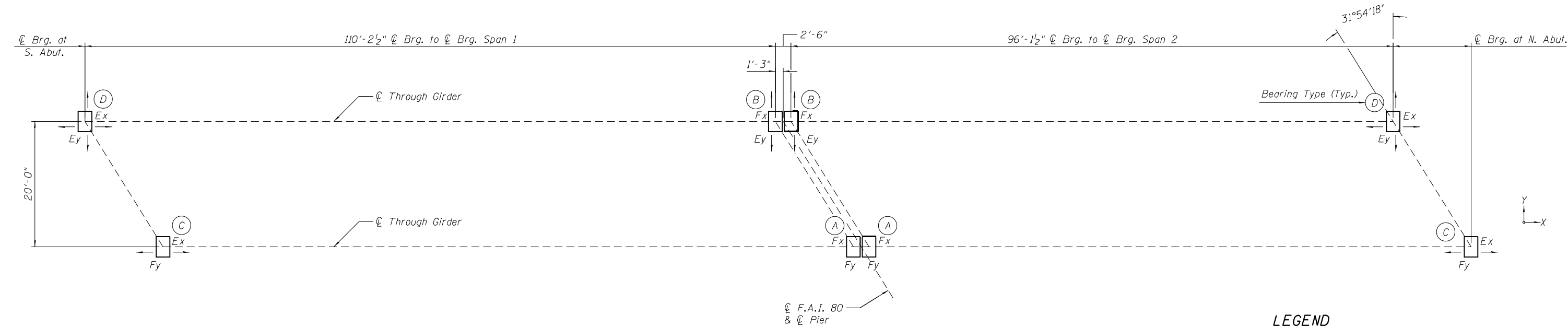


SECTION A-A



SPICE DETAIL

Notes:
Handrail pipe shall conform to ASTM A500, Grade B.
The handrail pipes, posts, base plates, and base plate fasteners will be paid for as Pipe Handrail, Special.



BEARING KEY PLAN

LEGEND

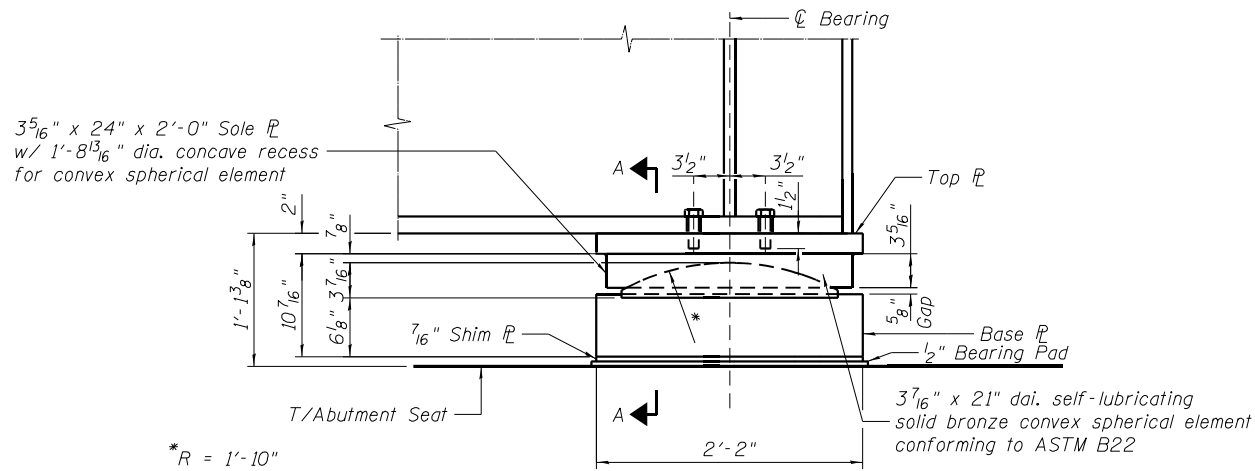
F-Fixed Bearing
E-Expansion Bearing

BEARING SERVICE LOADS

$V_D = 221$ Kips/Bearing
 $V_{L+I} = 431$ Kips/Bearing
 $V_{TOT} = 652$ Kips/Bearing
 $H_{MIN} = 24$ Kips/Bearing

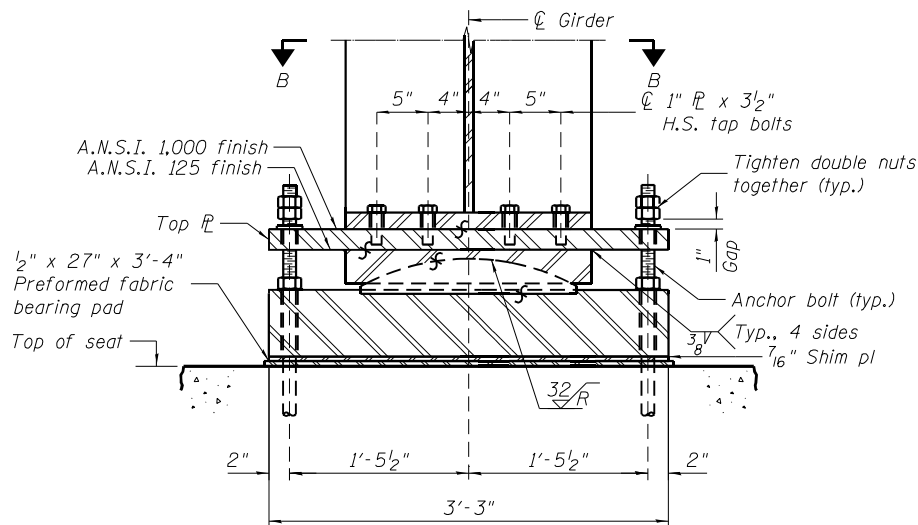
Note:

Arrow indicates freedom of movement direction.

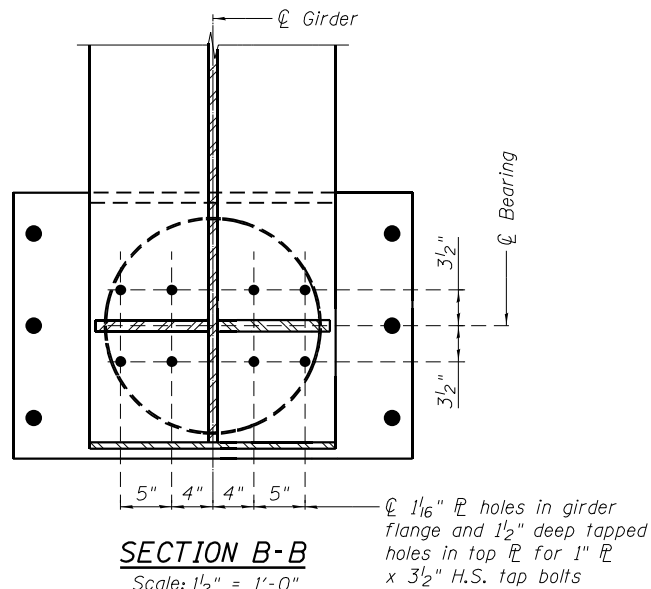


BEARING TYPE A ELEVATION

(Anchor bolts and floorbeams not shown for clarity)

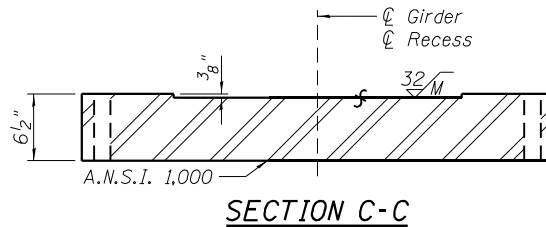


SECTION A-A

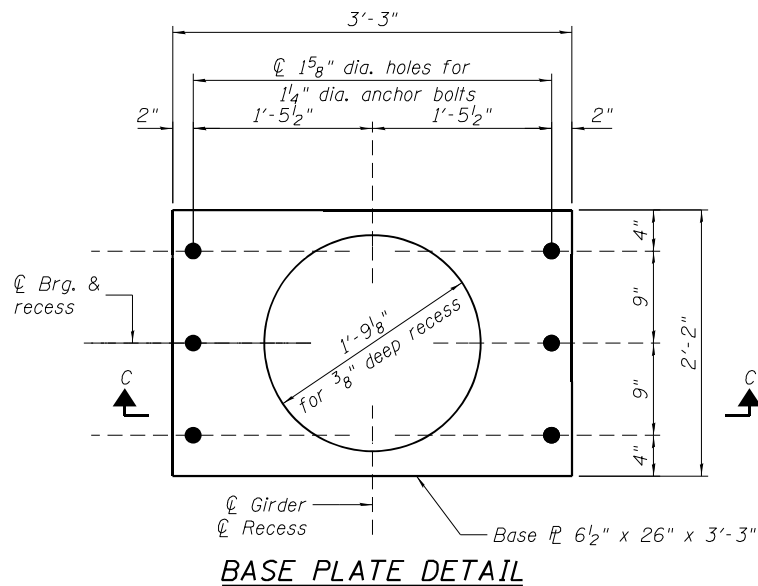


SECTION B-B

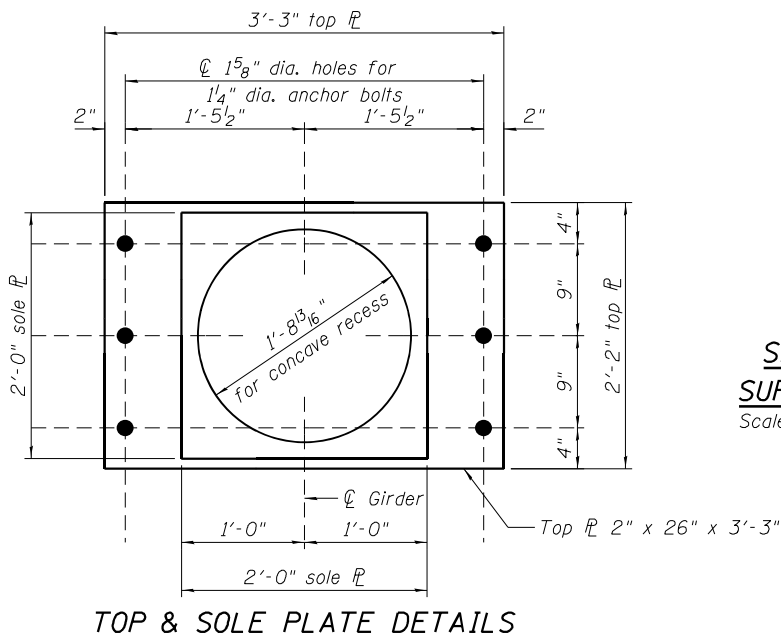
(End floorbeam and interior floorbeam not shown for clarity)



SECTION C-C

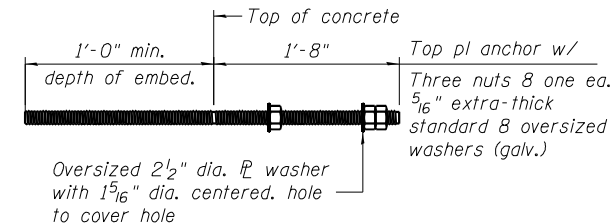


BASE PLATE DETAIL



TOP & SOLE PLATE DETAILS

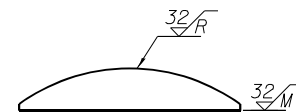
(Underside shown)



ANCHOR BOLT ASSEMBLY DETAIL

Notes:

- All surfaces marked "S" shall be machine finished by an automatic process. Surface roughness of sliding and rotational elements shall not exceed the limits indicated in accordance with ANSI/ASME B46.1, surface texture.
- Bearing assemblies shall be stress relieved after welding.
- Bearings shall be assembled complete in the shop and checked for fit and bearing of all contact surfaces, then match marked for installation in the field.
- Structural steel plate for the bearings shall conform to ASTM A709 gr. 36 or ASTM A36 specifications.
- Bronze elements shall conform to ASTM B22, copper alloy C86300.
- Tap bolts shall be 1" diameter high strength bolts conforming with ASTM F3125 grade A325, type 3.
- Floorbeams near bearings shall have their bottom flanges coped to avoid conflict with anchor bolts.
- Anchor bolts shall be made from high-strength material meeting the requirements of ASTM F1554, grade 105. The rods shall be supplied with heavy hex nuts meeting the requirements of ASTM A194 grade 2H or ASTM A563 grade DH and hardened washers meeting the requirements of ASTM F436. securing rods and hardware shall be galvanized in accordance with ASTM F2329.
- All bearing plates, anchor bolts, nuts and washers shall be galvanized according to AASHTO M111 or M232 as applicable.



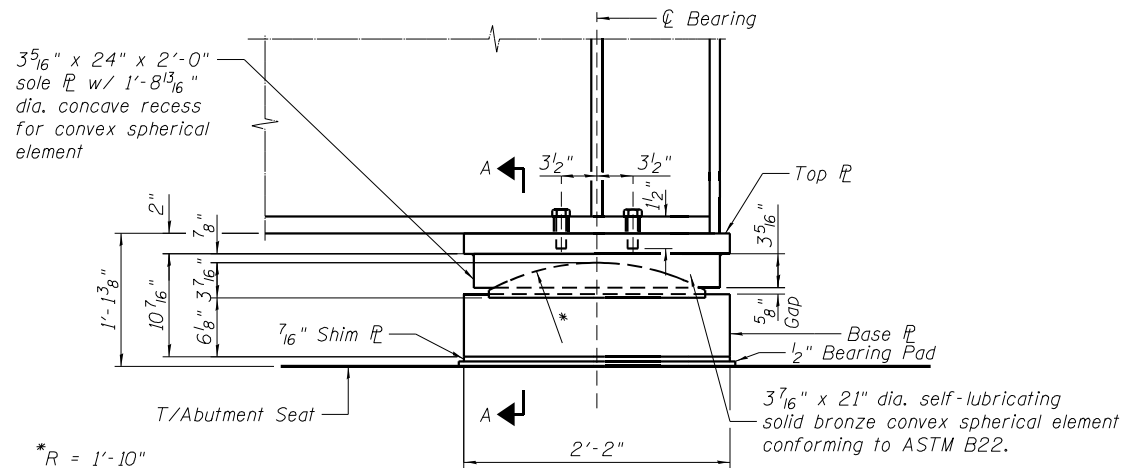
**SPHERICAL ELEMENT
SURFACE FINISH DETAIL**

Scale:

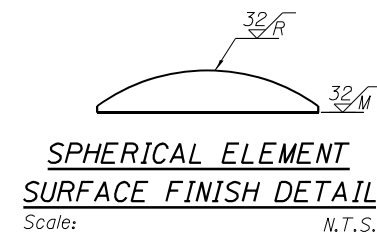
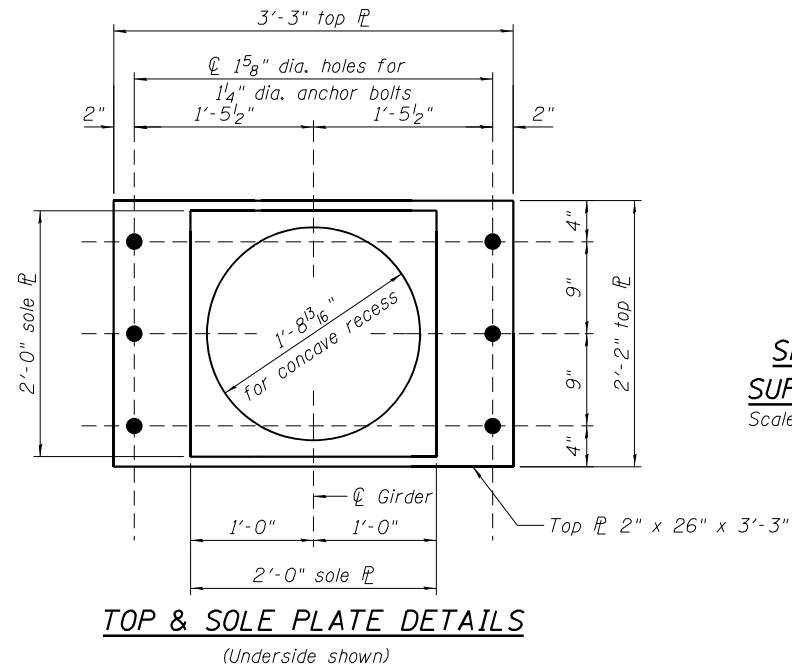
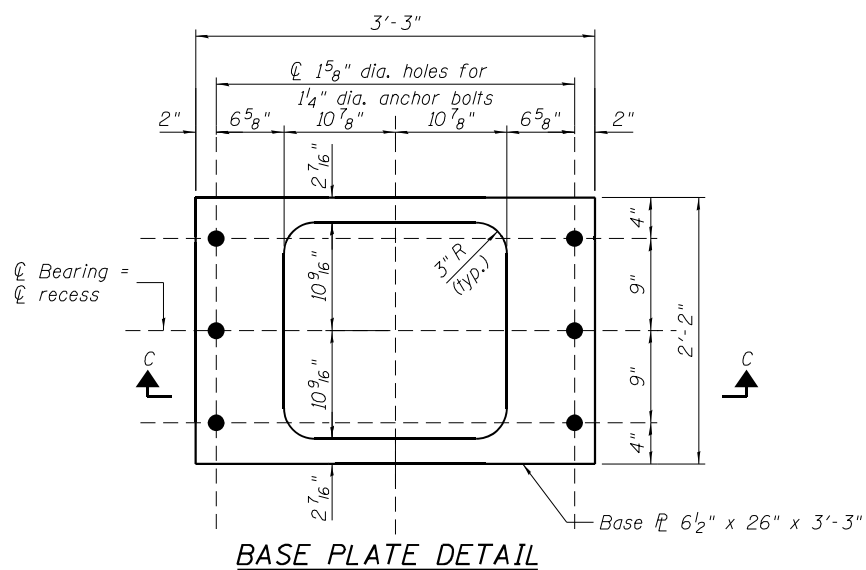
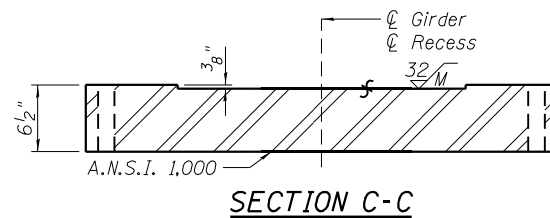
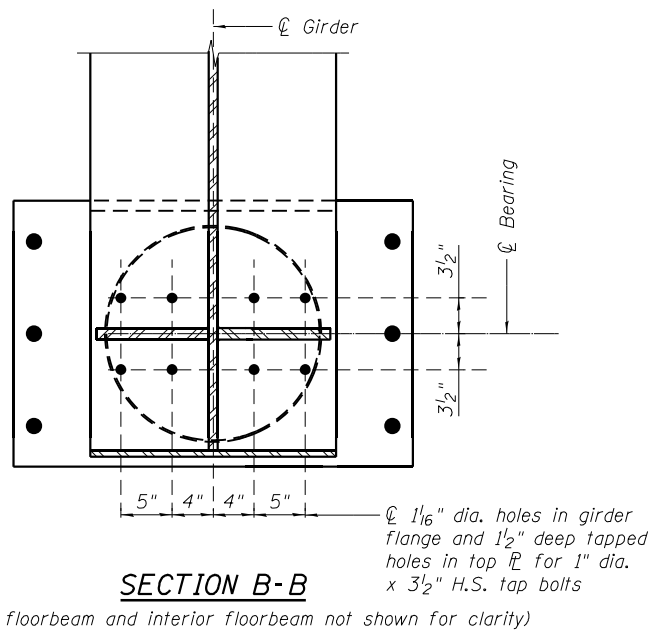
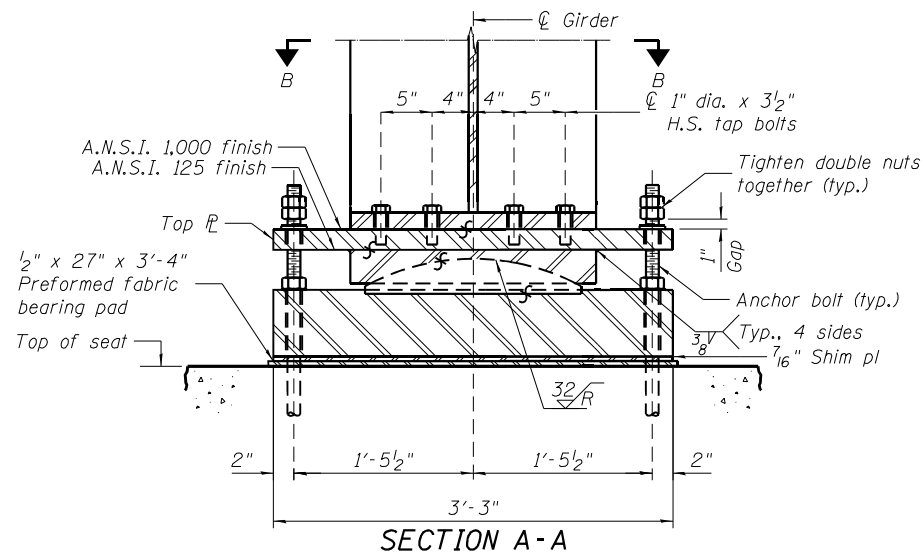
N.T.S.

TYPE A BEARING BILL OF MATERIAL

ITEM	UNIT	TOTAL
Anchor Bolts, 1 1/4"	EACH	12
Steel Bearing Assembly	EACH	2



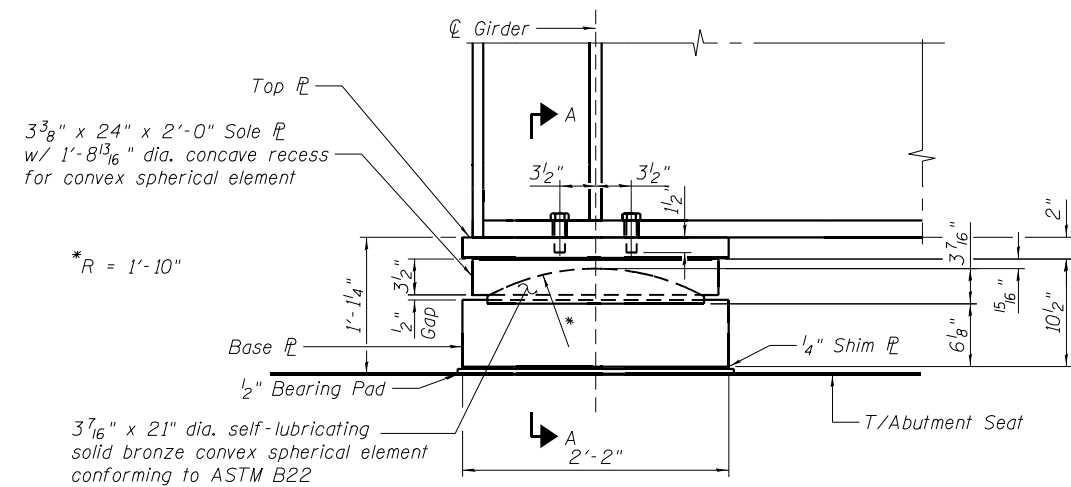
BEARING TYPE B ELEVATION
(Anchor bolts and floorbeams not shown for clarity)



- Notes:**
- All surfaces marked "S" shall be machine finished by an automatic process. Surface roughness of sliding and rotational elements shall not exceed the limits indicated in accordance with ANSI/ASME B46.1, surface texture.
 - Bearing assemblies shall be stress relieved after welding.
 - Bearings shall be assembled complete in the shop and checked for fit and bearing of all contact surfaces, then match marked for installation in the field.
 - Structural steel plate for the bearings shall conform to ASTM A709 gr. 36 or ASTM A36 specifications.
 - Bronze elements shall conform to ASTM B22, copper alloy C86300.
 - Tap bolts shall be 1" diameter high strength bolts conforming with ASTM F3125 grade A325, type 3.
 - Floorbeams near bearings shall have their bottom flanges coped to avoid conflict with anchor bolts.
 - Anchor bolts shall be made from high-strength material meeting the requirements of ASTM F1554, grade 105. The rods shall be supplied with heavy hex nuts meeting the requirements of ASTM A194 grade 2H or ASTM A563 grade DH and hardened washers meeting the requirements of ASTM F436, securing rods and hardware shall be galvanized in accordance with ASTM F2329.
 - All bearing plates, anchor bolts, nuts and washers shall be galvanized according to AASHTO M111 or M232 as applicable.

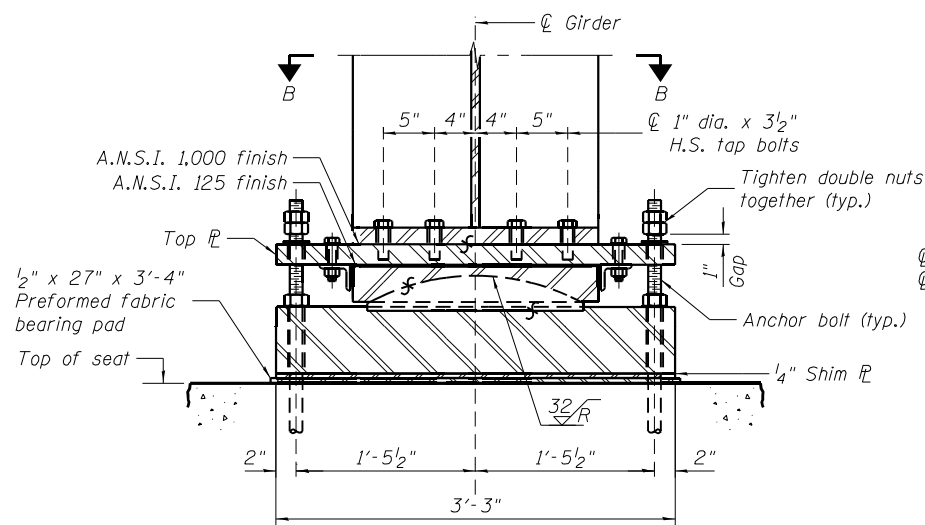
TYPE B BEARING BILL OF MATERIAL

ITEM	UNIT	TOTAL
Anchor Bolts, 1 1/4"	EACH	12
Steel Bearing Assembly	EACH	2

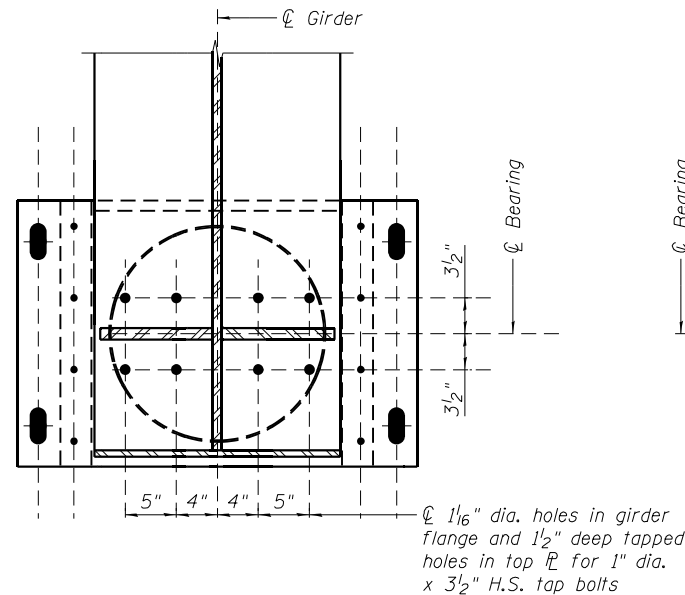


BEARING TYPE C ELEVATION

(Anchor bolts and floorbeams not shown for clarity)

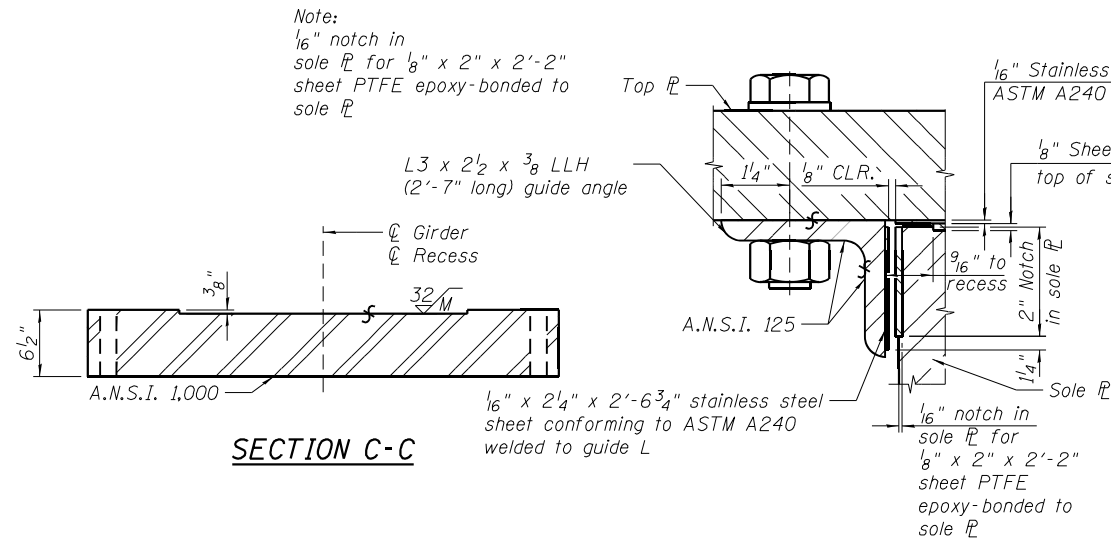


SECTION A-A



SECTION B-B

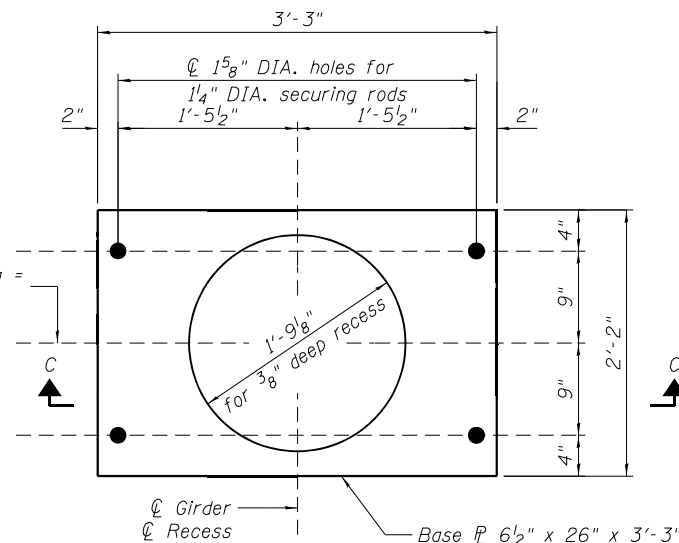
(End floorbeam and interior floorbeam not shown for clarity)



SECTION C-C

DETAIL D

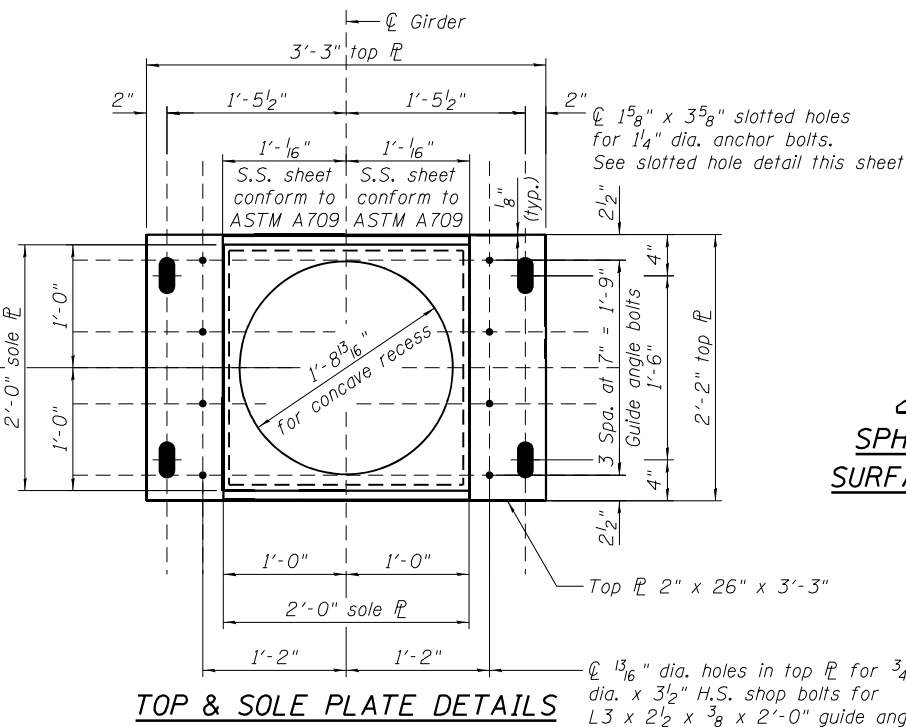
(Shown in section near ϕ of bearing)



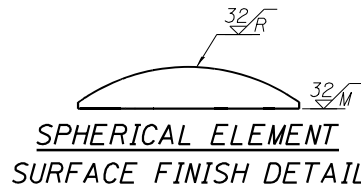
BASE PLATE DETAIL

SLOTTED HOLE DETAIL

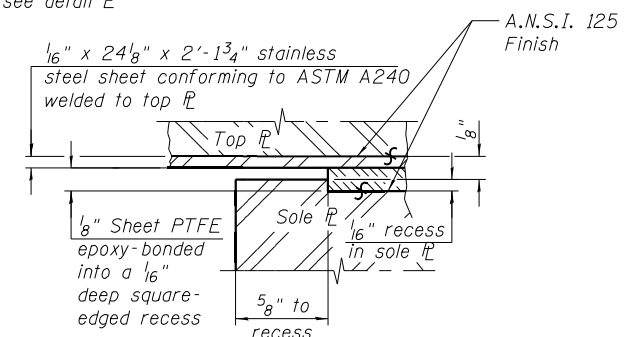
ϕ 1 1/4\"/>



TOP & SOLE PLATE DETAILS

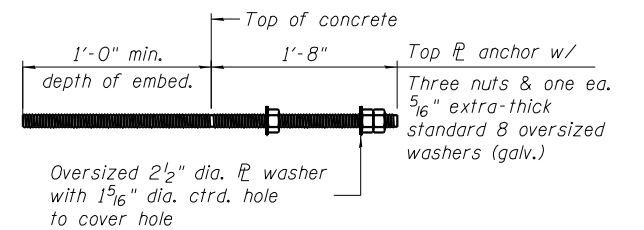


**SPHERICAL ELEMENT
SURFACE FINISH DETAIL**



DETAIL E

(Shown in section near ϕ of girder)



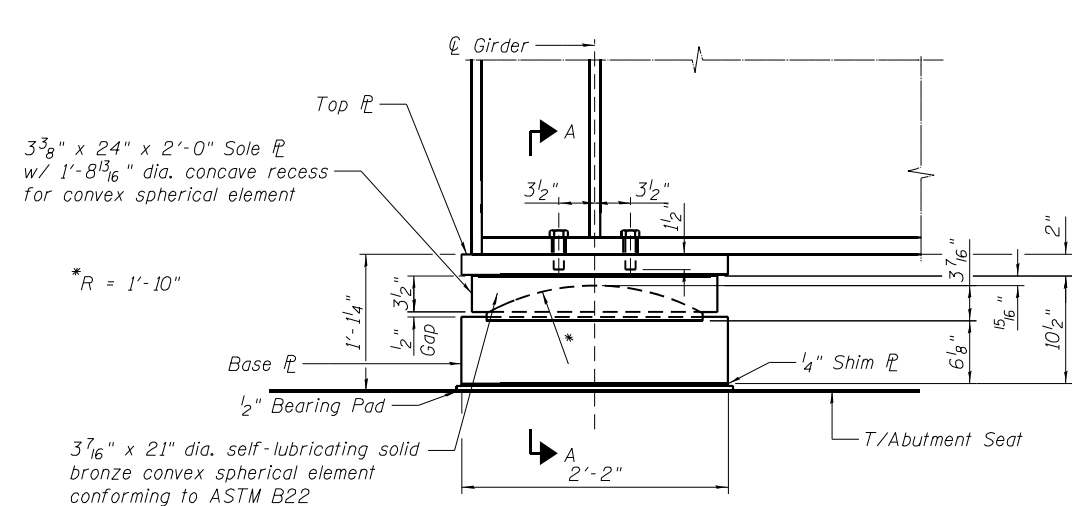
ANCHOR BOLT DETAIL

Notes:

1. All surfaces marked "S" shall be machine finished by an automatic process. Surface roughness of sliding and rotational elements shall not exceed the limits indicated in accordance with ANSI/ASME B46.1, surface texture.
2. Bearing assemblies shall be stress relieved after welding.
3. Bearings shall be assembled complete in the shop and checked for fit and bearing of all contact surfaces, then match marked for installation in the field.
4. Structural steel plate for the bearings shall conform to ASTM A709 gr. 36 or ASTM A36 specifications.
5. Bronze elements shall conform to ASTM B22, copper alloy C86300.
6. Tap bolts shall be 1" diameter high strength bolts conforming with ASTM F3125 grade A325, type 3.
7. Floorbeams near bearings shall have their bottom flanges coped to avoid conflict with anchor bolts.
8. Anchor bolts shall be made from high-strength material meeting the requirements of ASTM F1554, grade 105. The rods shall be supplied with heavy hex nuts meeting the requirements of ASTM A194 grade 2H or ASTM A563 grade DH and hardened washers meeting the requirements of ASTM F436. securing rods and hardware shall be galvanized in accordance with ASTM F2329.
9. All bearing plates, anchor bolts, nuts and washers shall be galvanized according to AASHTO M111 or M232 as applicable.

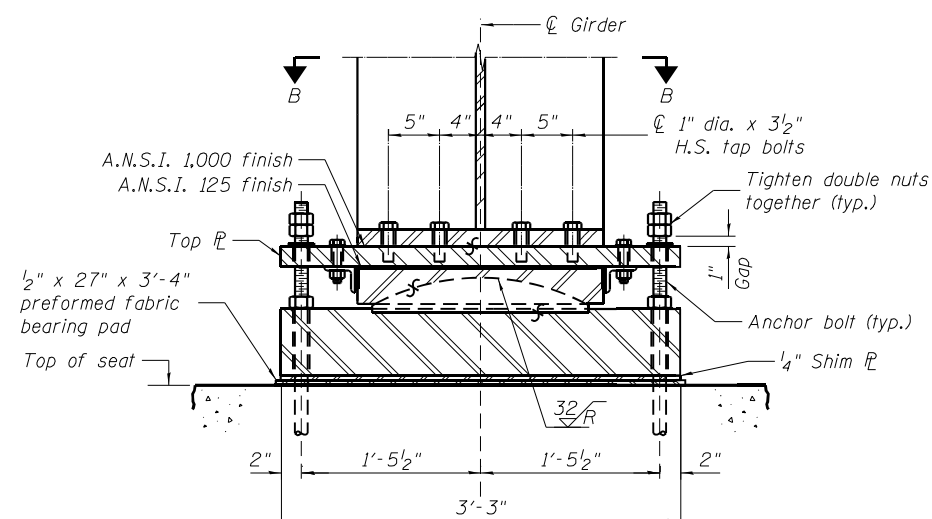
TYPE C BEARING BILL OF MATERIAL

ITEM	UNIT	TOTAL
Anchor Bolts, 1 1/4"	EACH	8
Steel Bearing Assembly	EACH	2

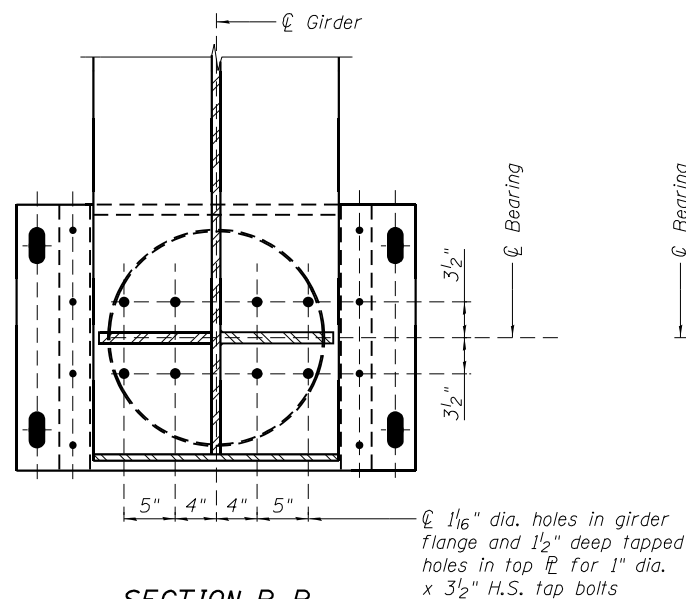


BEARING TYPE D ELEVATION

(Anchor bolts and floorbeams not shown for clarity)

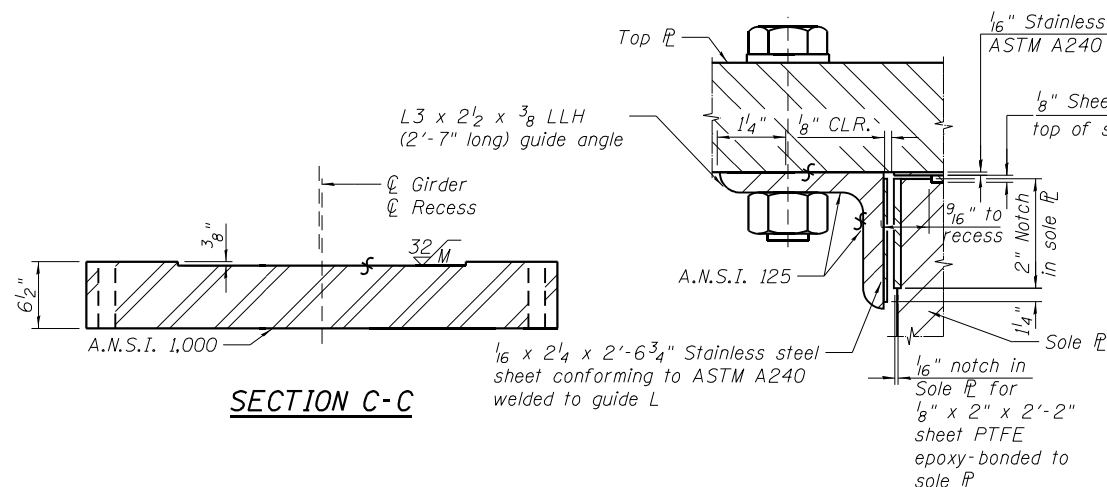


SECTION A-A



SECTION B-B

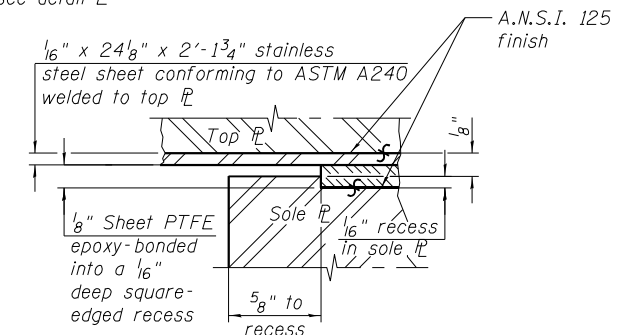
(End floorbeam and interior floorbeam not shown for clarity)



SECTION C-C

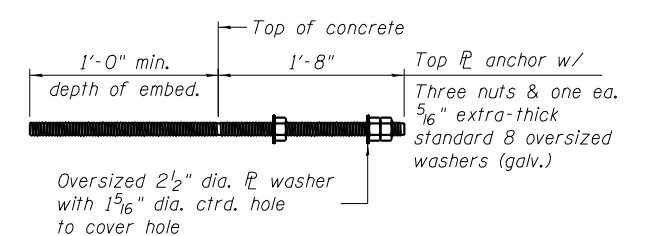
DETAIL D

(Shown in section near C of bearing)



DETAIL E

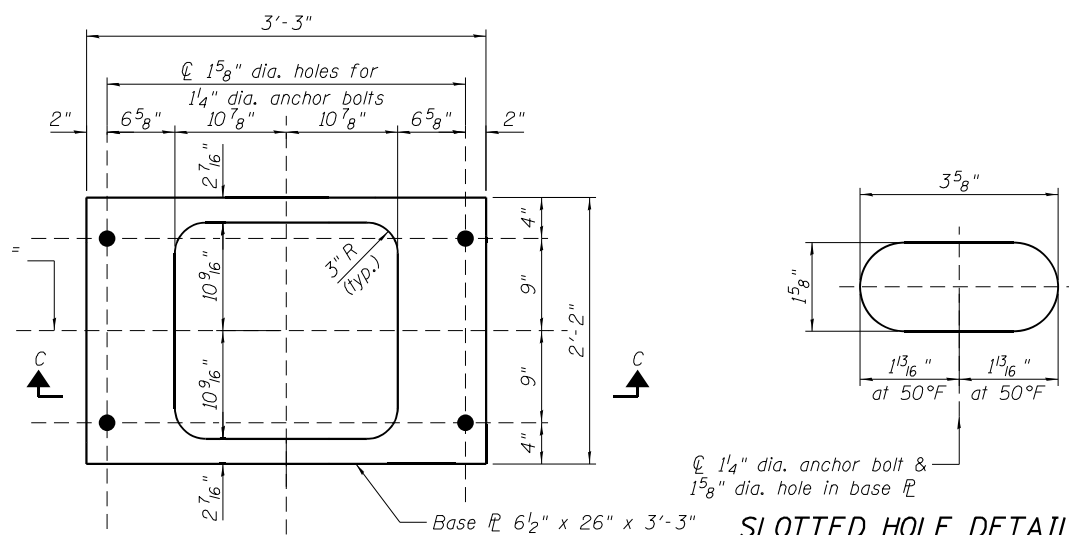
(Shown in section near C of girder)



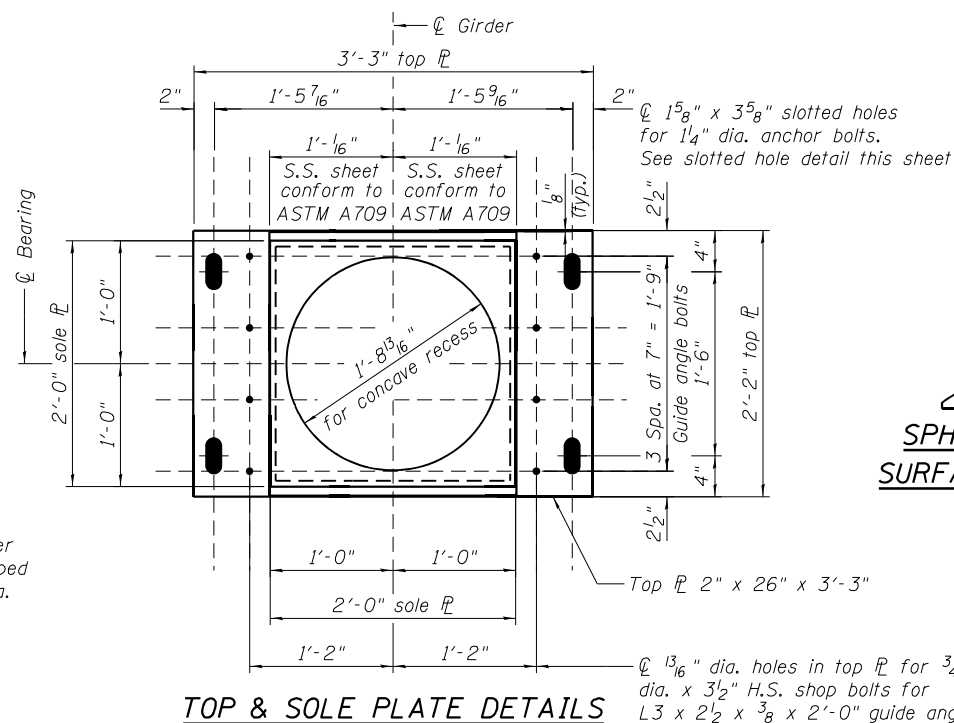
ANCHOR BOLT DETAIL

Notes:

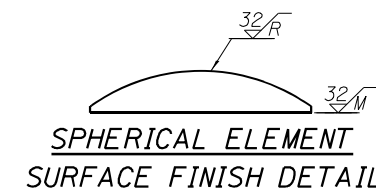
1. All surfaces marked "S" shall be machine finished by an automatic process. Surface roughness of sliding and rotational elements shall not exceed the limits indicated in accordance with ANSI/ASME B46.1, surface texture.
2. Bearing assemblies shall be stress relieved after welding.
3. Bearings shall be assembled complete in the shop and checked for fit and bearing of all contact surfaces, then match marked for installation in the field.
4. Structural steel plate for the bearings shall conform to ASTM A709 gr. 36 or ASTM A36 specifications.
5. Bronze elements shall conform to ASTM B22, copper alloy C86300.
6. Tap bolts shall be 1" diameter high strength bolts conforming with ASTM F3125 grade A325, type 3.
7. Floorbeams near bearings shall have their bottom flanges coped to avoid conflict with anchor bolts.
8. Anchor bolts shall be made from high-strength material meeting the requirements of ASTM F1554, grade 105. The rods shall be supplied with heavy hex nuts meeting the requirements of ASTM A194 grade 2H or ASTM A563 grade DH and hardened washers meeting the requirements of ASTM F436, securing rods and hardware shall be galvanized in accordance with ASTM F2329.
9. All bearing plates, anchor bolts, nuts and washers shall be galvanized according to AASHTO M111 or M232 as applicable.



SLOTTED HOLE DETAIL

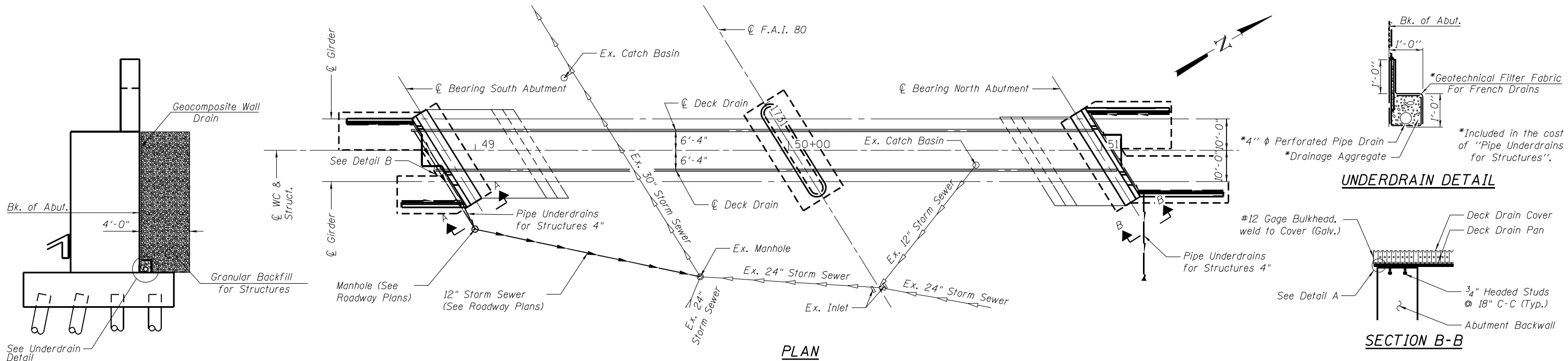


TOP & SOLE PLATE DETAILS



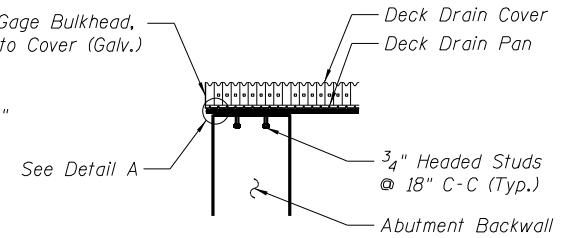
TYPE D BEARING BILL OF MATERIAL

ITEM	UNIT	TOTAL
Anchor Bolts, 1 $\frac{1}{4}$ "	EACH	8
Steel Bearing Assembly	EACH	2

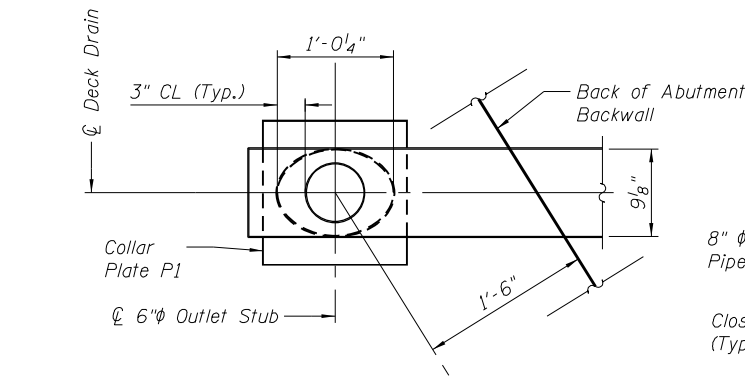


TYPICAL SECTION

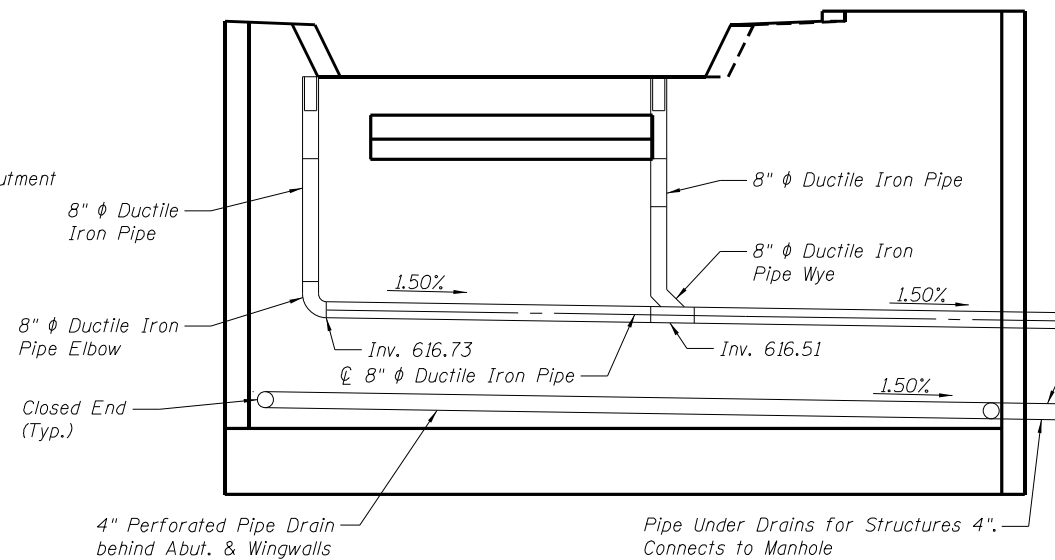
UNDERDRAIN DETAIL



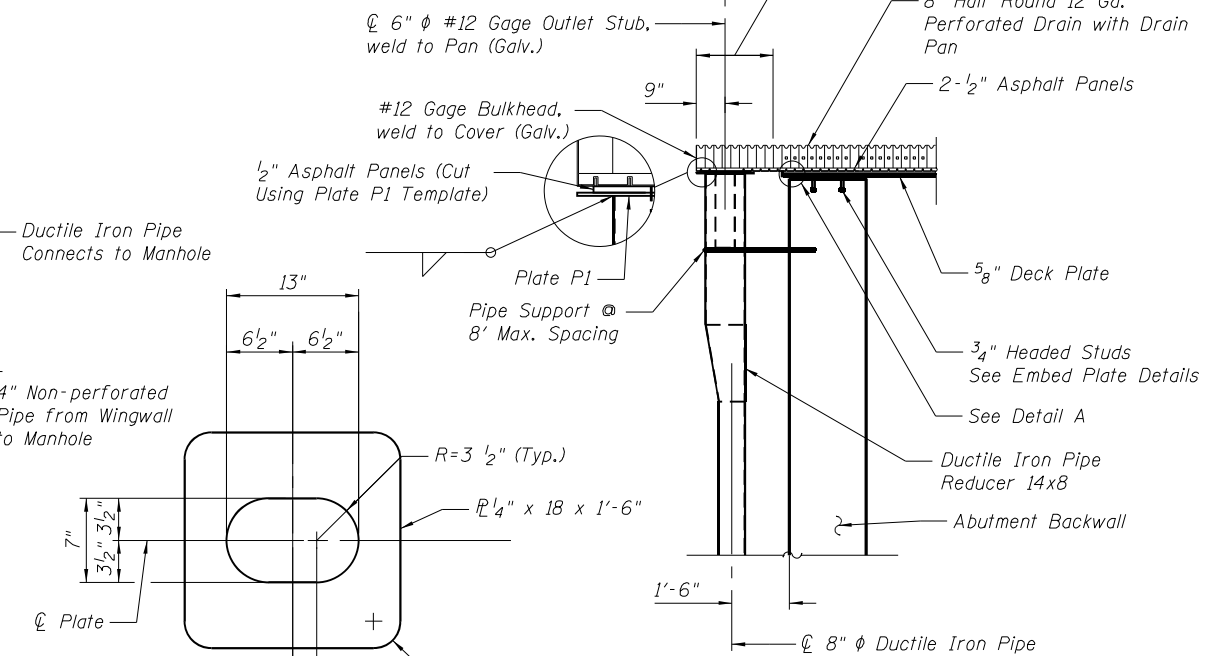
SECTION B-B



DETAIL "B"



REAR ELEVATION SOUTH ABUTMENT

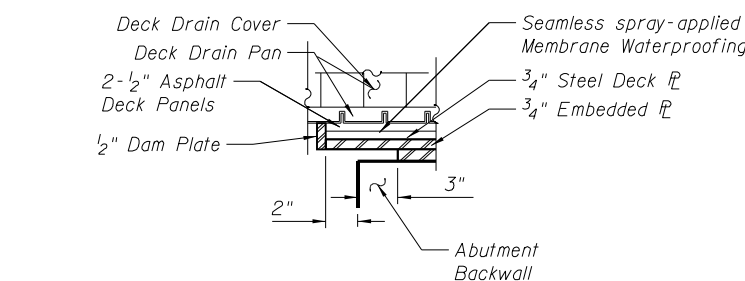


SECTION A-A

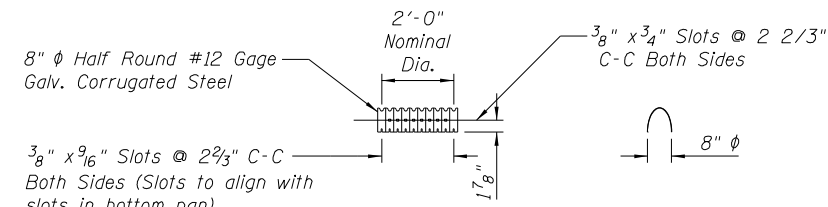
PLATE P1

BILL OF MATERIAL

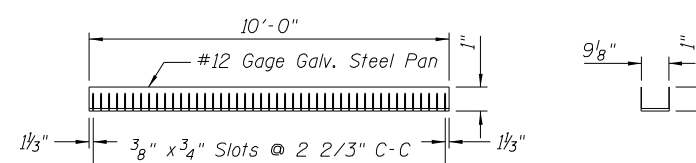
ITEM	UNIT	TOTAL
Drainage System for Structures	L. SUM	1



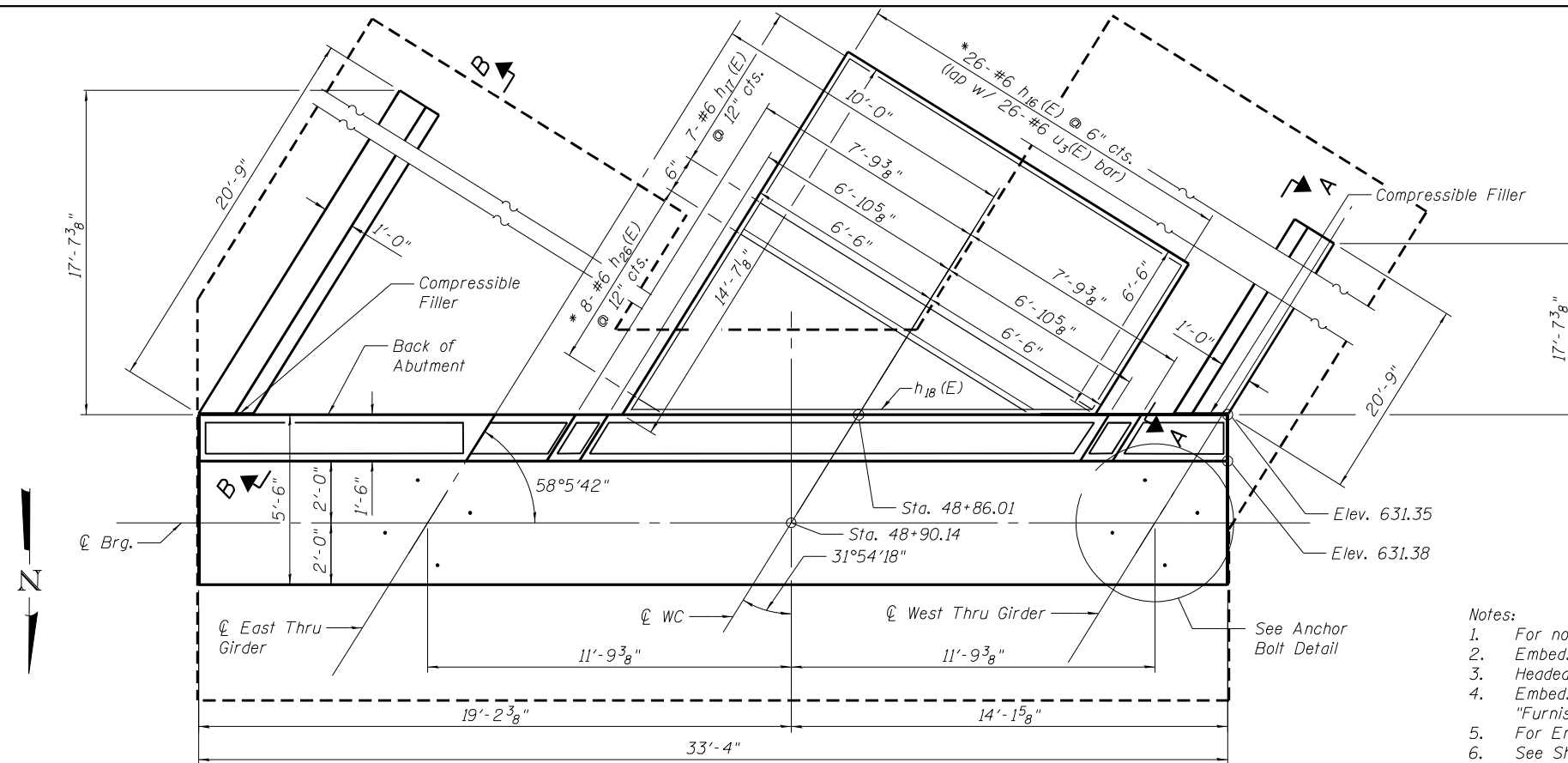
DETAIL "A"



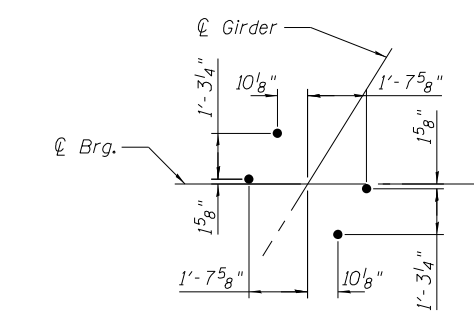
DECK DRAIN COVER



DECK DRAIN BOTTOM PAN

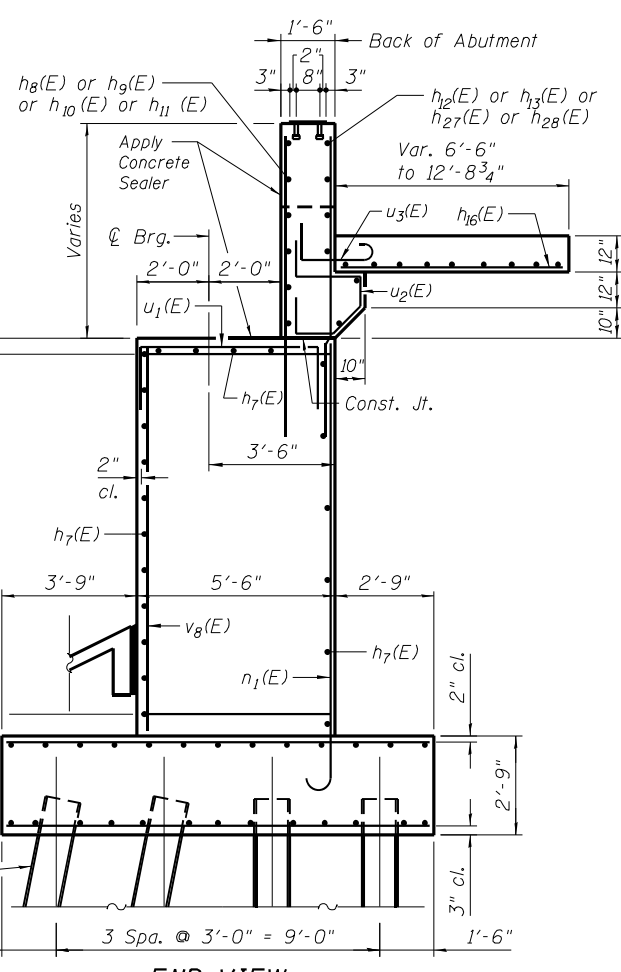
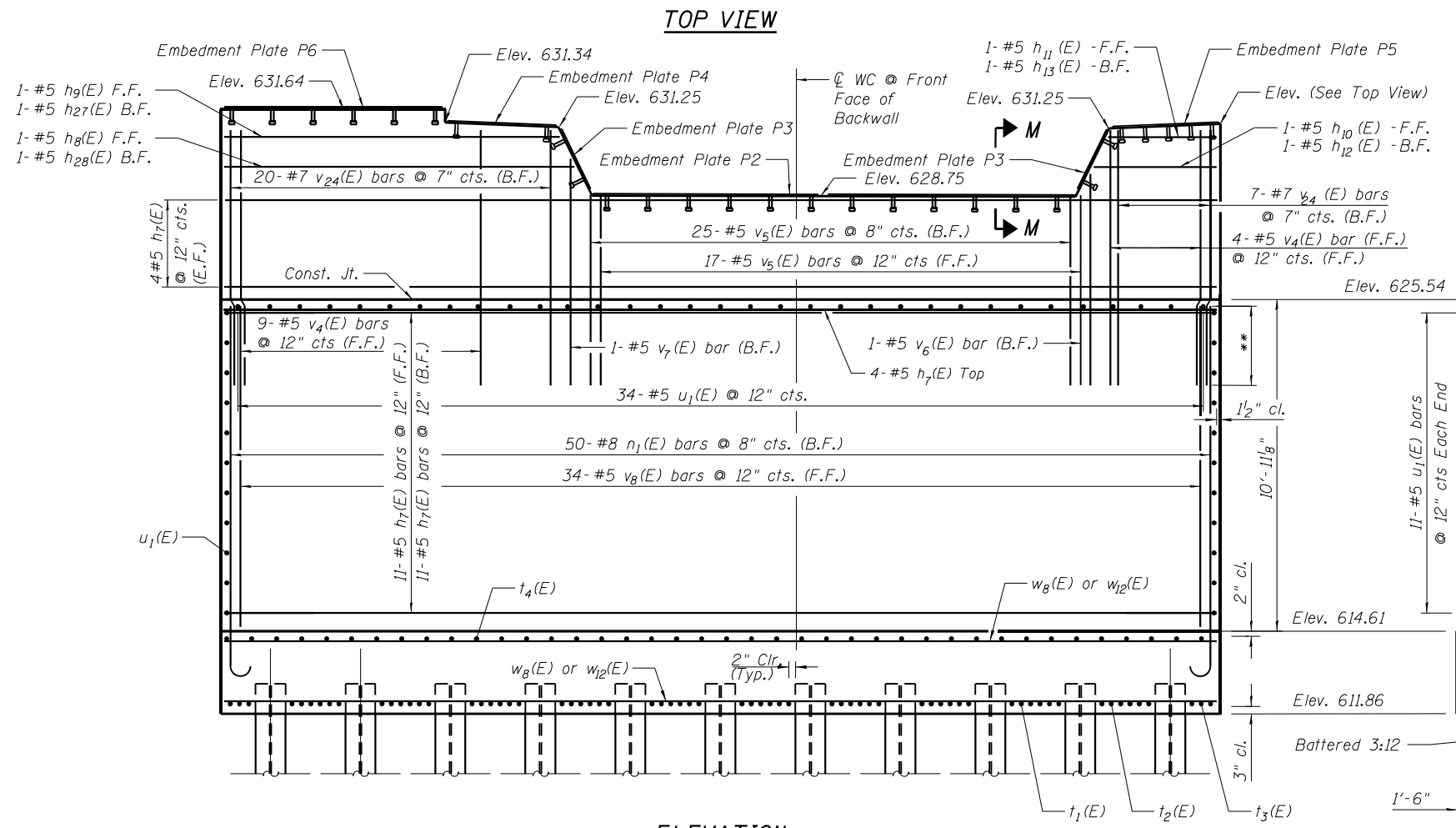


* See Cutting Diagram on Sheet 41 of 49.
 ** #5 = 2'-7"
 #7 = 4'-5"



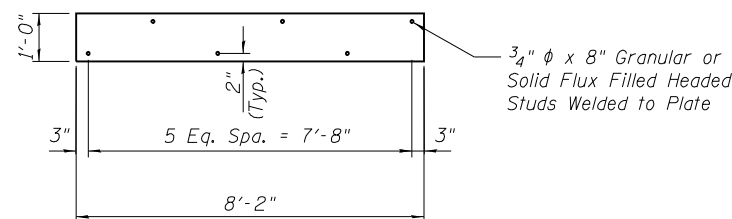
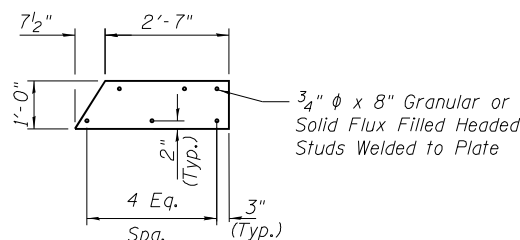
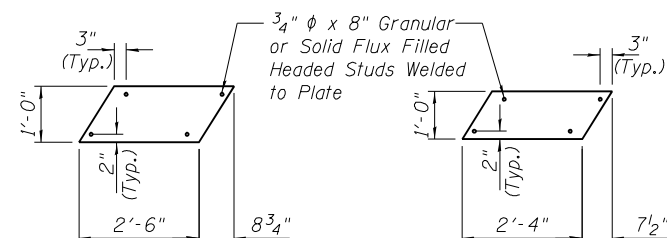
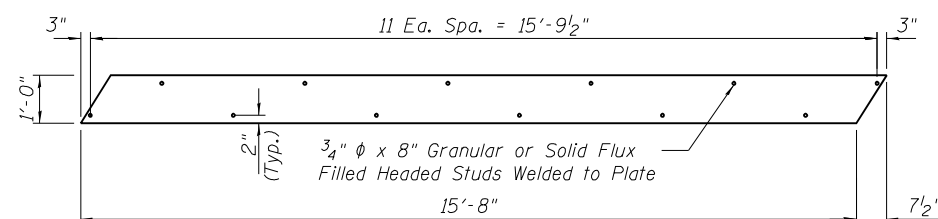
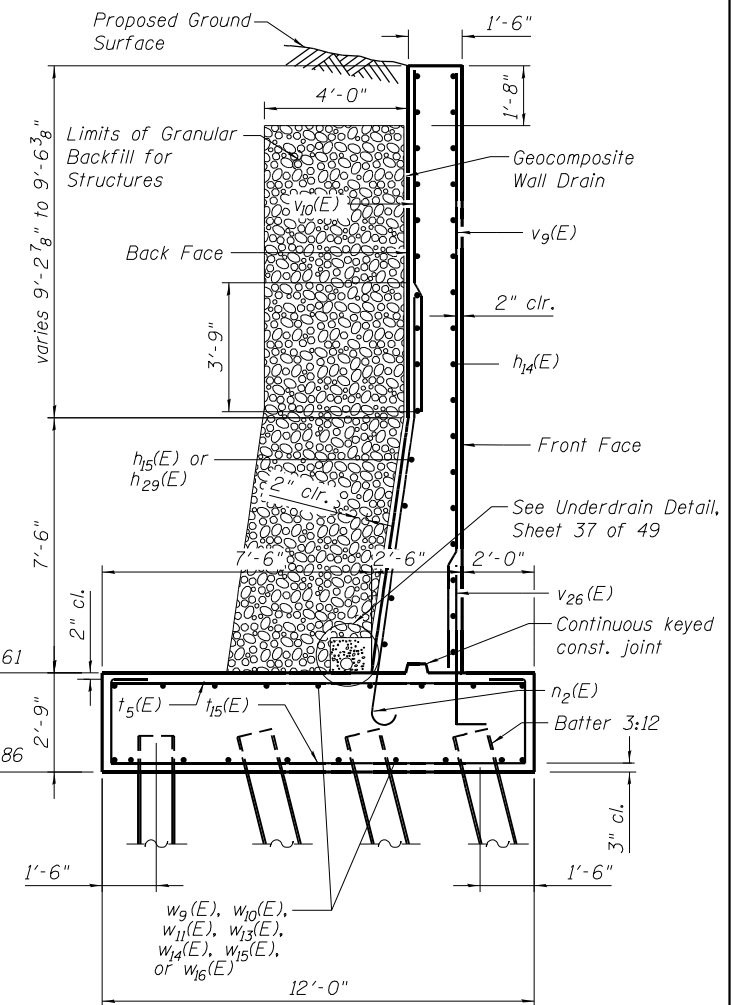
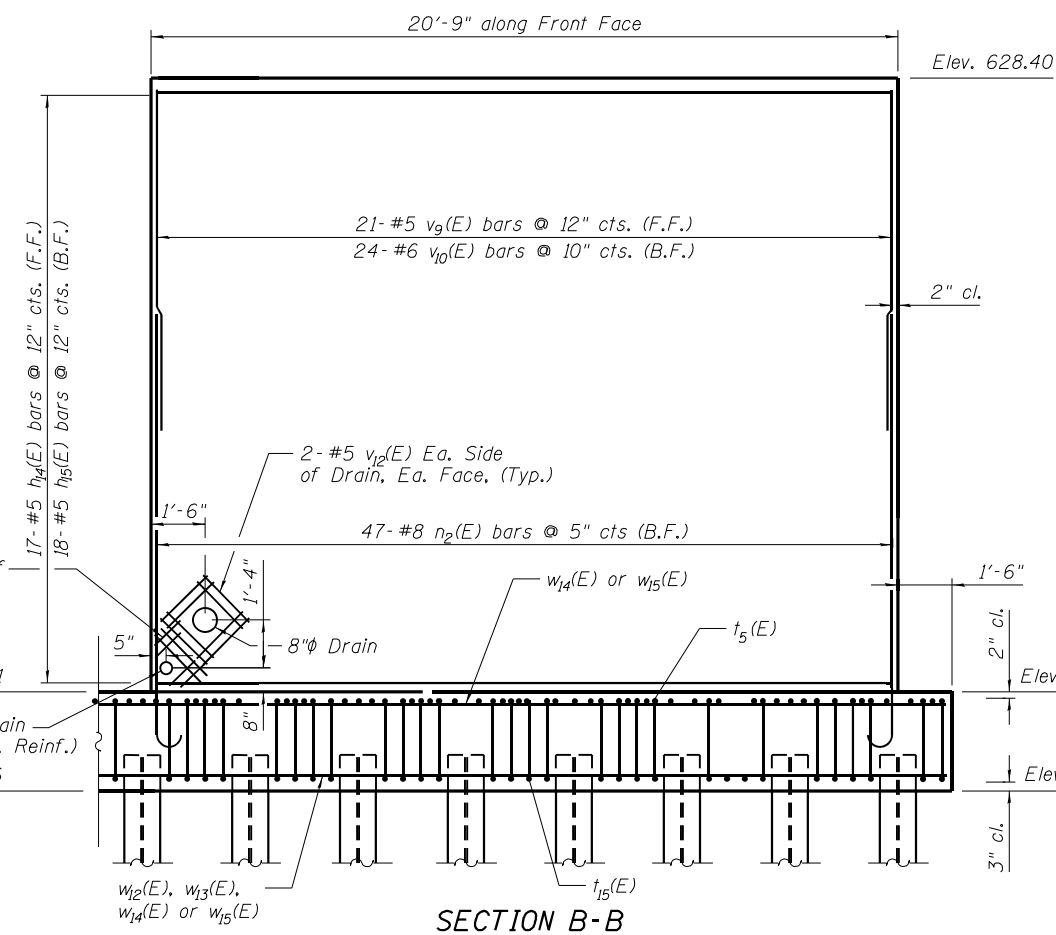
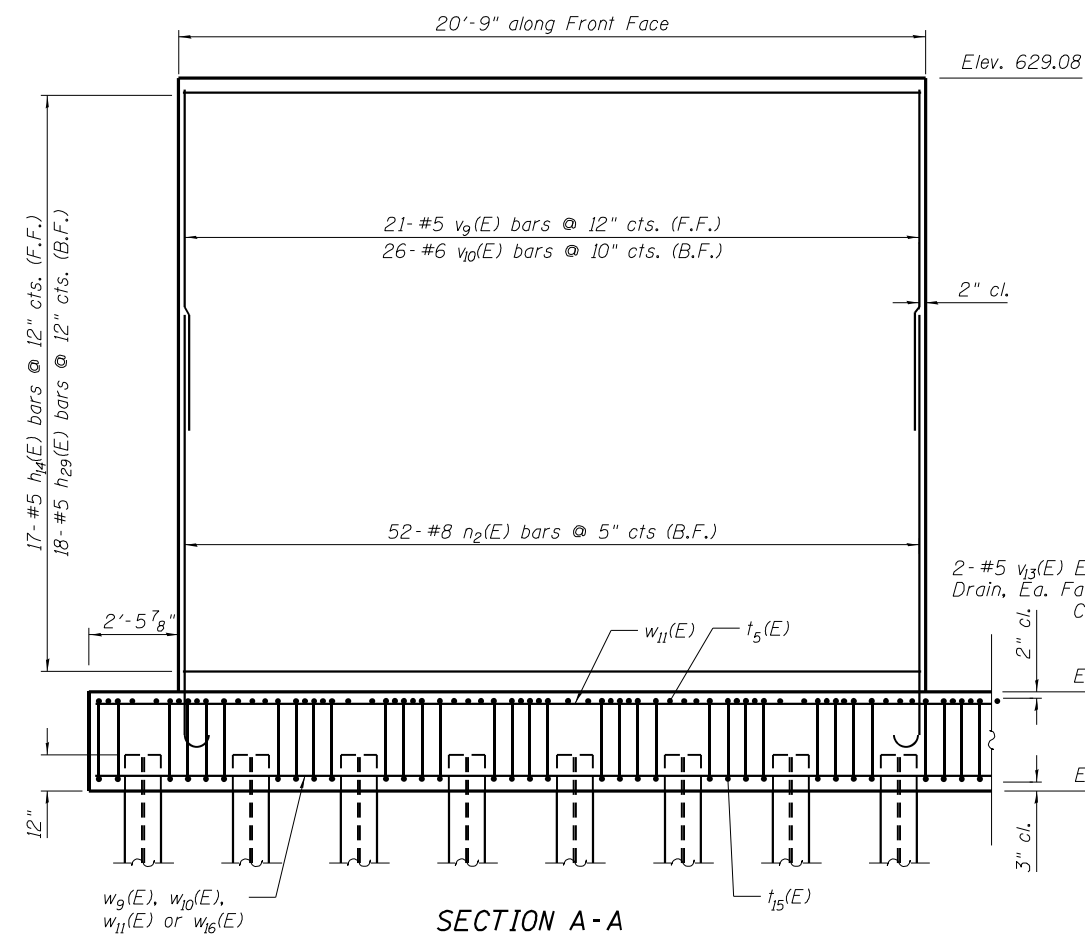
ANCHOR BOLT DETAIL

- Notes:
1. For notes see sheet 39 of 49.
 2. Embed. Plates Shall Conform to AASHTO M270, Grade 50.
 3. Headed Studs Shall Conform to AASHTO M169, Grade 1015.
 4. Embed. Plates with Studs are Paid for as Part of "Furnishing and Erecting Structural Steel".
 5. For Embed. Plate Details See Sheet 39 of 49.
 6. See Sheet 26 of 49 for Section M-M.



ELEVATION

END VIEW



EMBEDMENT PLATE DETAILS

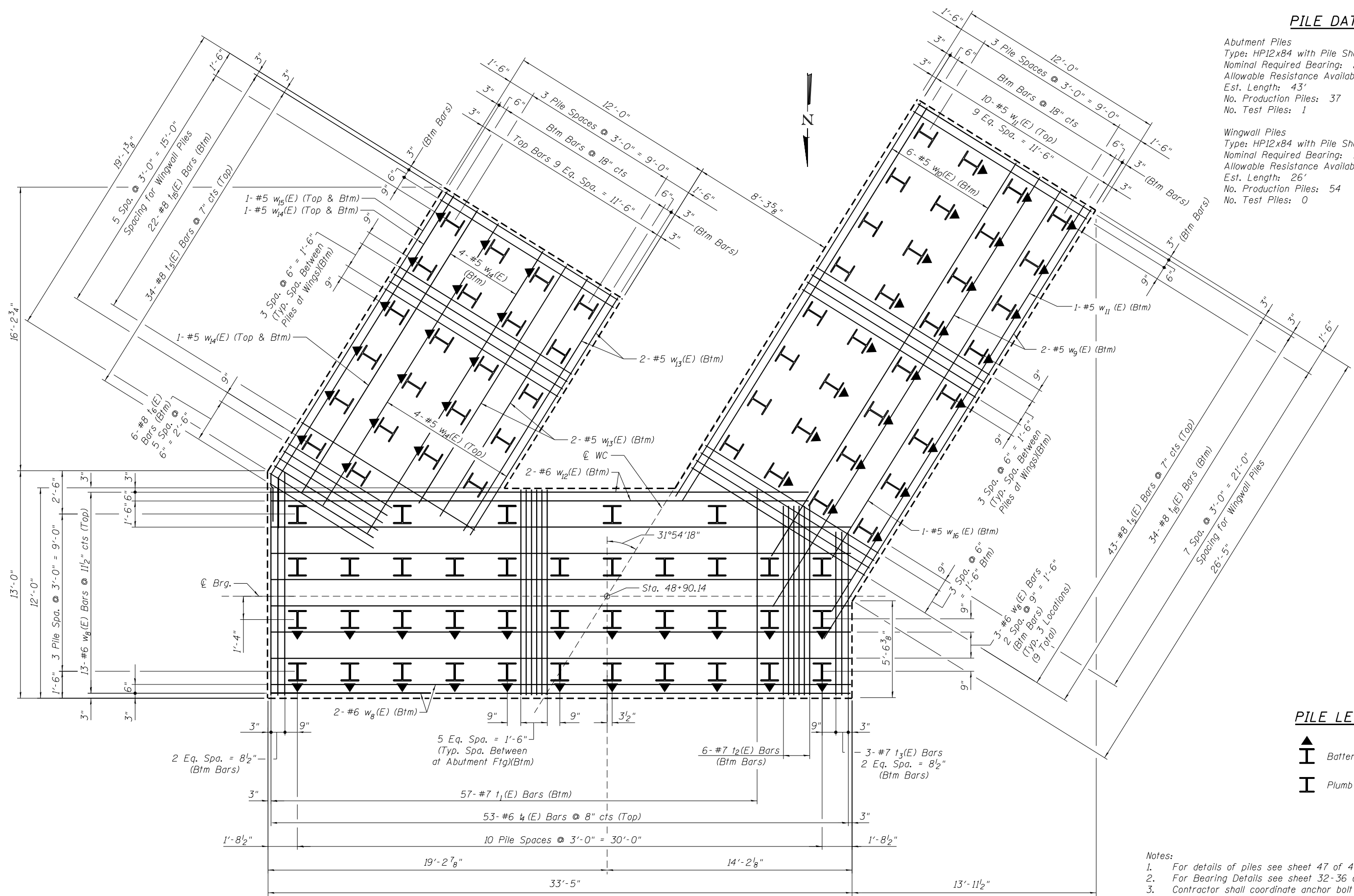
Notes:
For details of piles see sheet 47 of 49.
For Bearing Details see Sheet 32-36 of 49.
Contractor to coordinate anchor bolt installation with Roll-In procedure.

ORIGINAL:	UPDATED:	DESIGNED - ZJH	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOUTH ABUTMENT – 2 STRUCTURE NO. 032-9906	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
 DLZ Illinois, Inc.	 LIN ENGINEERING LTD. Consulting Engineers Springfield, Illinois	CHECKED - PRD MTH	REVISED							
		DRAWN - BAE	REVISED							
		CHECKED - ZJH MTH	REVISED							
DATE - 03/25/22					SHEET NO. 39 OF 49 SHEETS					
				</						

PILE DATA

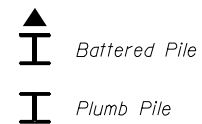
Abutment Piles
Type: HP12x84 with Pile Shoes
Nominal Required Bearing: 252 kips
Allowable Resistance Available: 84 kips
Est. Length: 43'
No. Production Piles: 37
No. Test Piles: 1

Wingwall Piles
Type: HP12x84 with Pile Shoes
Nominal Required Bearing: 151 kips
Allowable Resistance Available: 50 kips
Est. Length: 26'
No. Production Piles: 54
No. Test Piles: 0



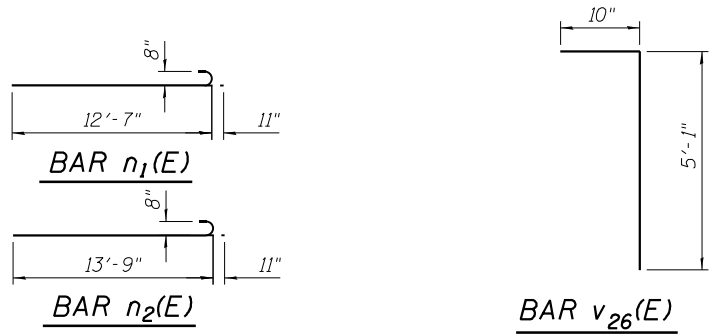
FOOTING PLAN

PILE LEGEND



- Notes:
- For details of piles see sheet 47 of 49.
 - For Bearing Details see sheet 32-36 of 49.
 - Contractor shall coordinate anchor bolt installation with Roll-in procedure.
 - Battered Piles at 3"/12" in Direction Shown.

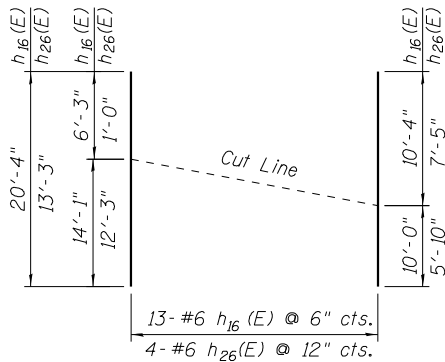
ORIGINAL:  DLZ Illinois, Inc.	UPDATED:  LIN ENGINEERING, LTD. Consulting Engineers Springfield, Illinois	DESIGNED - ZJH	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOUTH ABUTMENT-3 STRUCTURE NO. 032-9906	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	80	((32, 47-4)VB, HBR-3) BR, BRR	GRUNDY			143	97			
	CONTRACT NO. 66295									
	ILLINOIS FED. AID PROJECT									
DATE - 03/25/22		CHECKED - ZJH MTH	REVISED	SHEET NO. 40 OF 49 SHEETS						



S. ABUTMENT BILL OF MATERIAL

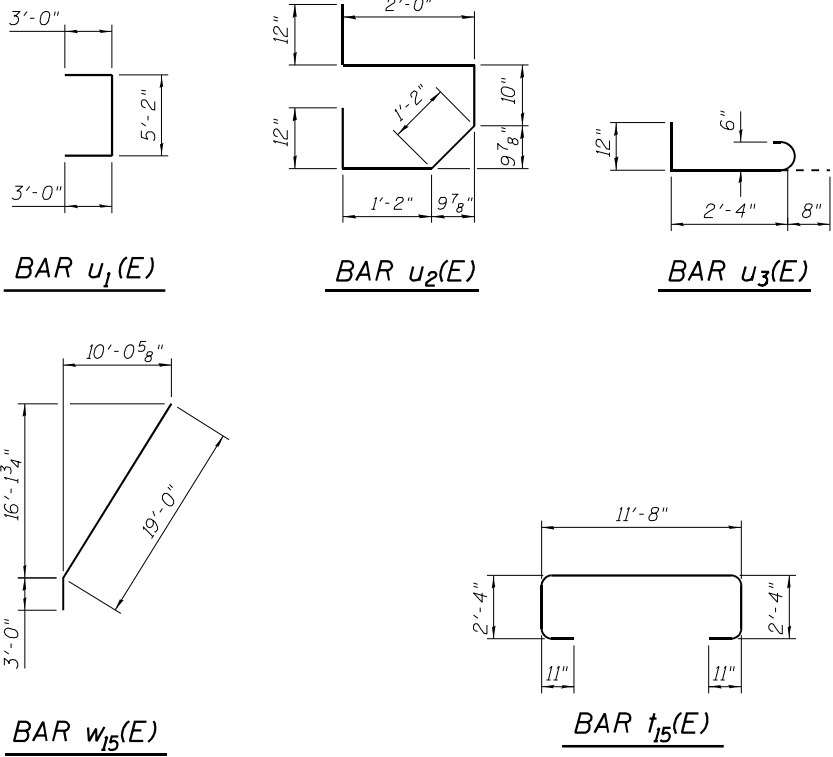
Bar	No.	Size	Length	Shape
$h_7(E)$	34	#5	33'-1"	—
$h_8(E)$	1	#5	11'-6"	—
$h_9(E)$	1	#5	11'-0"	—
$h_{10}(E)$	1	#5	3'-9"	—
$h_{11}(E)$	1	#5	3'-3"	—
$h_{12}(E)$	1	#5	2'-11"	—
$h_{13}(E)$	1	#5	2'-6"	—
$h_{14}(E)$	34	#5	20'-6"	—
$h_{15}(E)$	18	#5	19'-7"	—
$h_{16}(E)$	13	#6	20'-4"	—
$h_{17}(E)$	7	#6	12'-8"	—
$h_{18}(E)$	1	#6	14'-11"	—
$h_{26}(E)$	4	#6	13'-3"	—
$h_{27}(E)$	1	#5	11'-9"	—
$h_{28}(E)$	1	#5	12'-3"	—
$h_{29}(E)$	18	#5	21'-5"	—
$n_1(E)$	50	#8	13'-6"	U
$n_2(E)$	99	#8	14'-8"	U
$v_4(E)$	13	#5	8'-6"	—
$v_5(E)$	42	#5	6'-4"	—
$v_6(E)$	1	#5	7'-1"	—
$v_7(E)$	1	#5	7'-7"	—
$v_8(E)$	34	#5	10'-9"	—
$v_9(E)$	42	#5	16'-6"	—
$v_{10}(E)$	50	#6	9'-5"	—
$v_{12}(E)$	16	#5	1'-10"	—
$v_{13}(E)$	8	#5	1'-0"	—
$v_{24}(E)$	27	#7	10'-4"	—
$v_{26}(E)$	42	#5	5'-11"	—
$t_1(E)$	57	#7	11'-8"	—
$t_2(E)$	6	#7	10'-10"	—
$t_3(E)$	3	#7	9'-3"	—
$t_4(E)$	53	#6	11'-8"	—
$t_5(E)$	77	#8	11'-8"	—
$t_6(E)$	6	#8	7'-0"	—
$t_{15}(E)$	56	#8	18'-2"	—

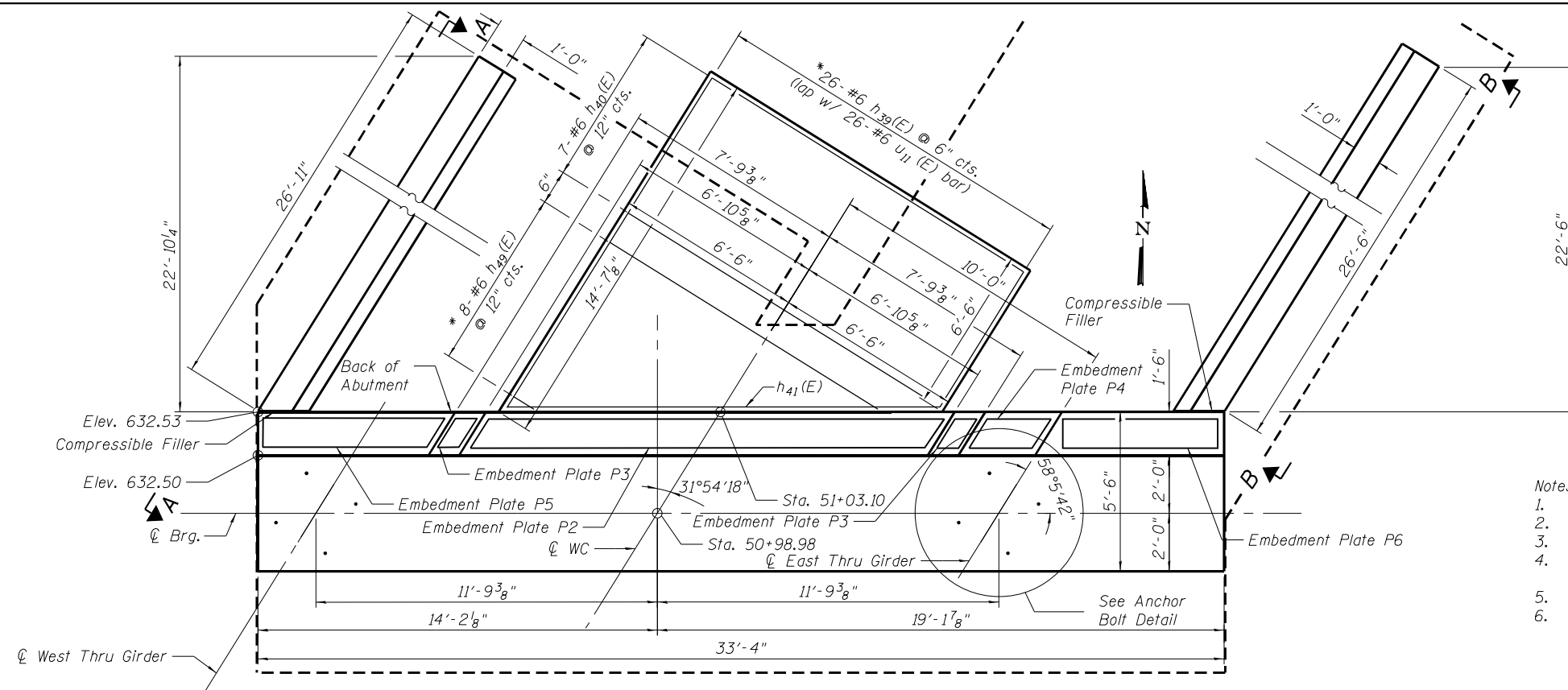
Bar	No.	Size	Length	Shape
$w_8(E)$	24	#6	33'-1"	—
$w_9(E)$	2	#5	29'-0"	—
$w_{10}(E)$	6	#5	26'-6"	—
$w_{11}(E)$	11	#5	27'-5"	—
$w_{12}(E)$	2	#6	30'-9"	—
$w_{13}(E)$	4	#5	16'-0"	—
$w_{14}(E)$	12	#5	21'-7"	—
$w_{15}(E)$	2	#5	22'-0"	—
$w_{16}(E)$	1	#5	24'-9"	—
$u_1(E)$	56	#5	11'-2"	—
$u_2(E)$	26	#6	7'-2"	—
$u_3(E)$	26	#6	4'-0"	—
Structure Excavation			Cu. Yd.	800.0
Concrete Structures			Cu. Yd.	215.0
Reinforcement Bars, Epoxy Coated			Pound	23,250
Furnishing Steel Piles HP12x84			Foot	2,995
Driving Piles			Foot	2,995
Test Pile Steel HP12x84			Each	1
Pile Shoes			Each	92
Concrete Sealer			Sq. Ft.	285



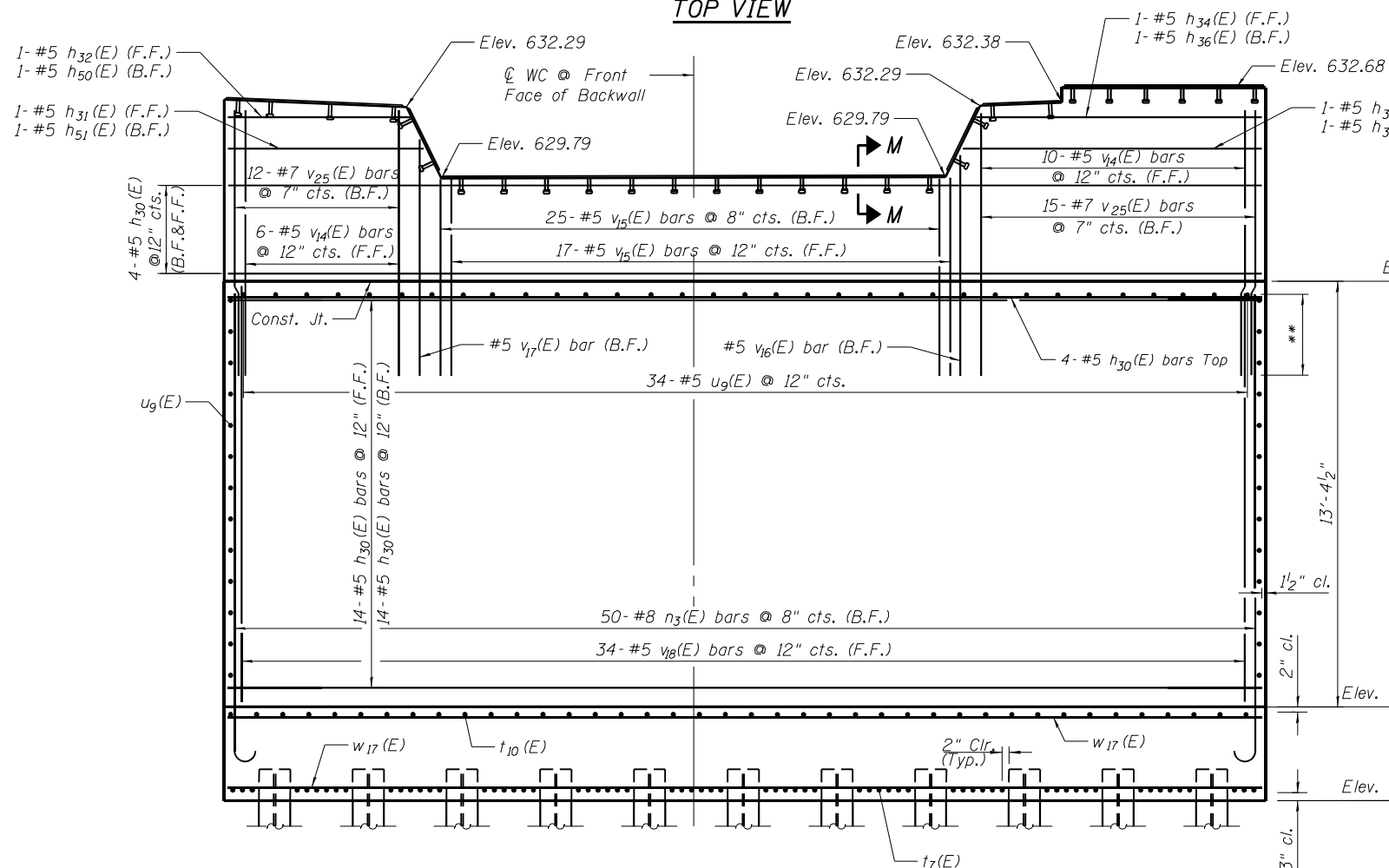
FIELD CUTTING DIAGRAM

Order bars full length. Cut bars in field as shown. Use remaining bars in opposite half.

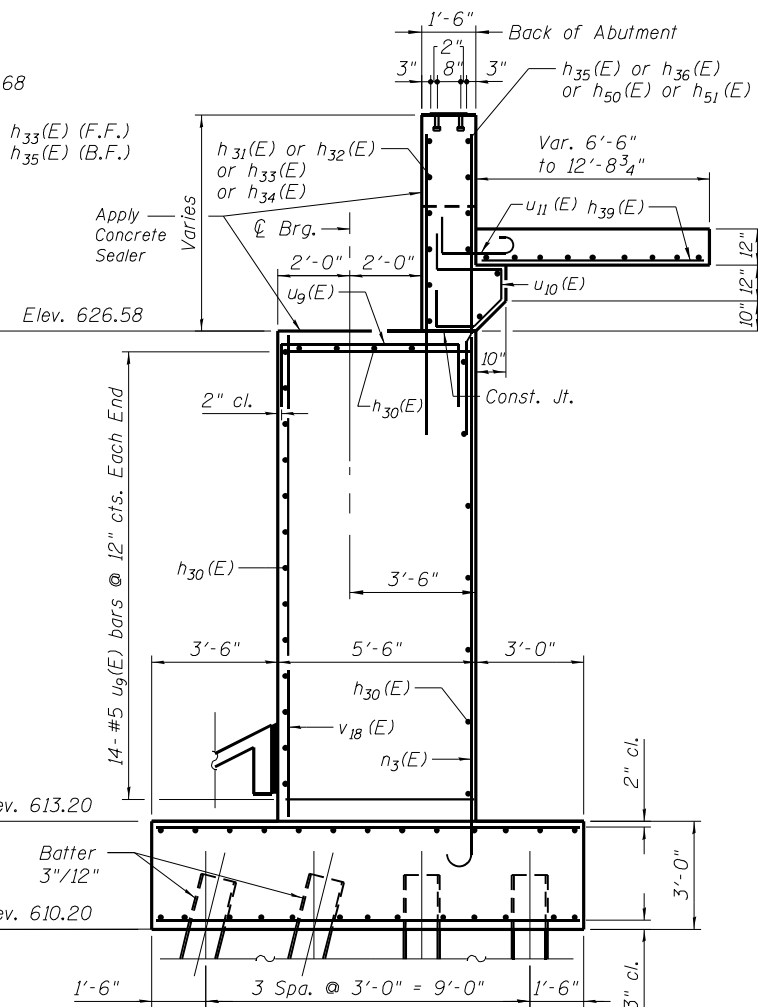




TOP VIEW

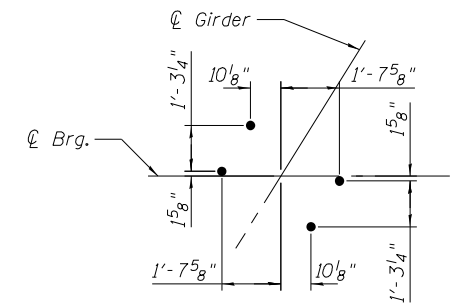


ELEVATION



END VIEW

*See Cutting Diagram on Sheet 45 of 49.
 *#5 = 2'-7"
 #7 = 4'-5"

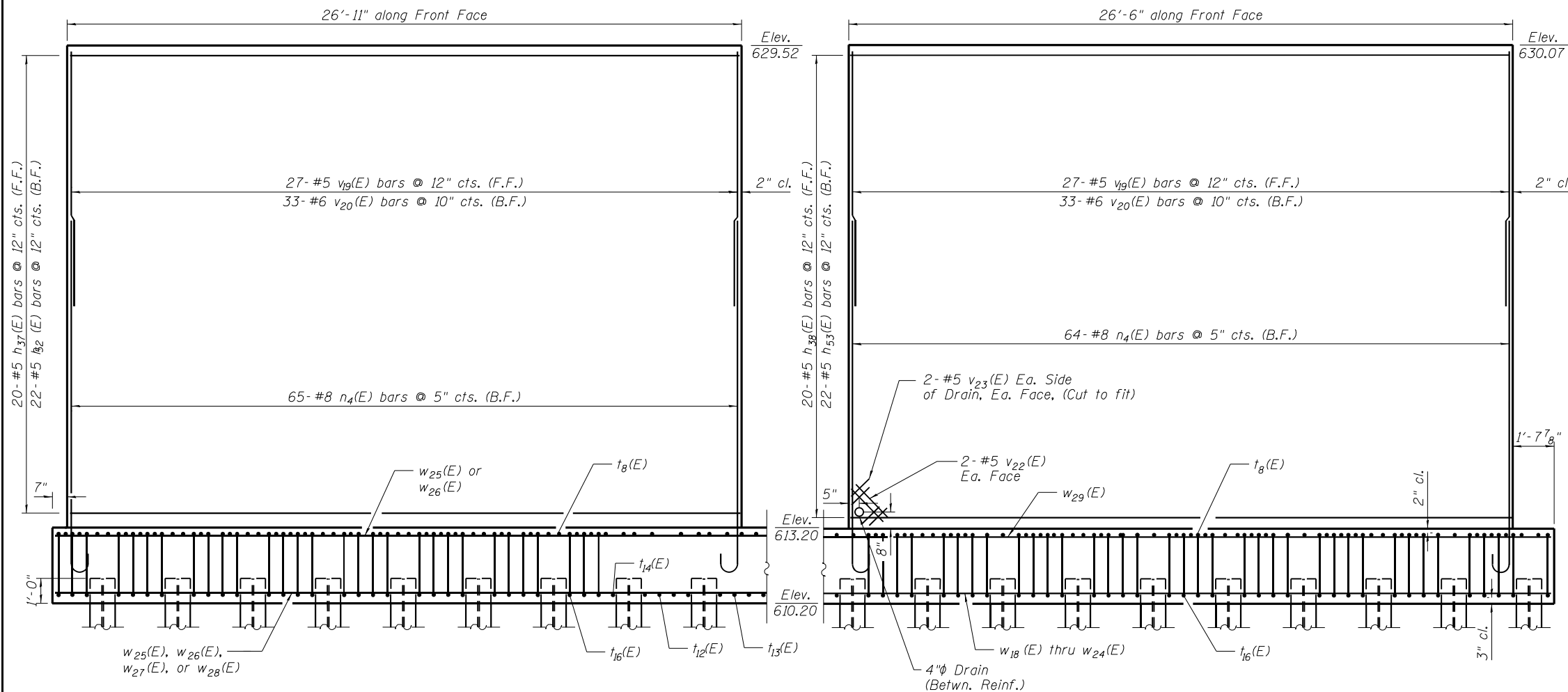


ANCHOR BOLT DETAIL

Notes:

- For notes see sheet 43 of 49.
- Embed. Plates Shall Conform to AASHTO M270, Grade 50.
- Headed Studs Shall Conform to AASHTO M169, Grade 1015.
- Embed. Plates with Studs are Paid for as Part of "Furnishing and Erecting Structural Steel".
- For Embed. Plate Details See Sheet 43 of 49.
- See Sheet 26 of 49 for Section M-M.

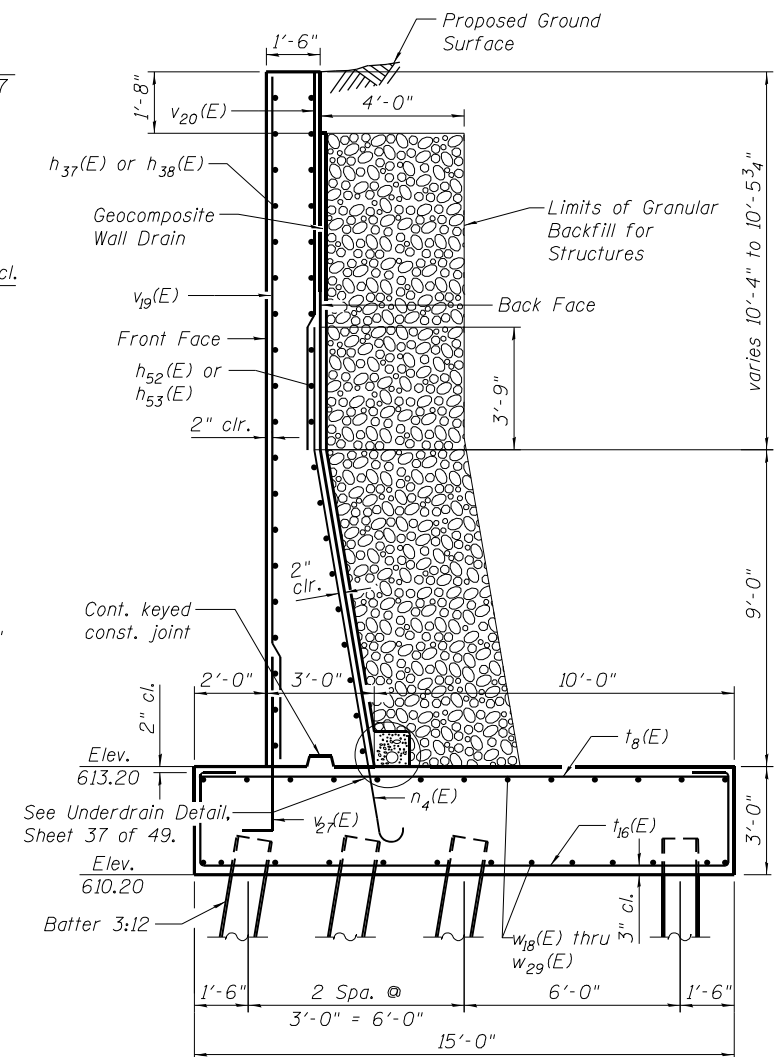
ORIGINAL: DLZ UPDATED: E UN ENGINEERING LTD. Consulting Engineers Springfield, Illinois	DESIGNED - ZJH CHECKED - PRD MTH DRAWN - BAE CHECKED - ZJH MTH	REVISED REVISED REVISED REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		NORTH ABUTMENT - 1 STRUCTURE NO. 032-9906 SHEET NO. 42 OF 49 SHEETS		F.A.I. RTE. 80 SECTION (I32, 47-4)VD, HBR-3) BR, BRR COUNTY GRUNDY TOTAL SHEETS 143 SHEET NO. 99 CONTRACT NO. 66295 ILLINOIS FED. AID PROJECT
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SECTION A-A

SECTION B-B

Note:
Cut n_4 , v_{20} , h_{35} , or h_{38} as required to clear drains.



SECTION THRU WINGWALLS

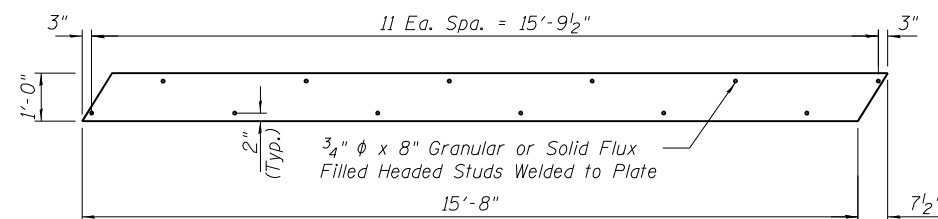


PLATE P2

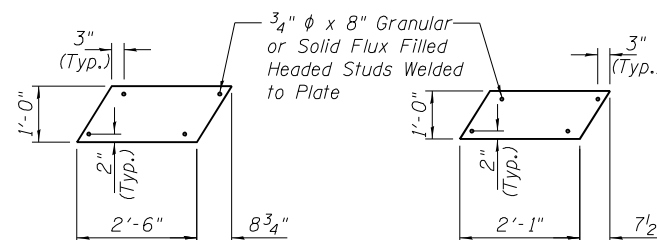


PLATE P3

PLATE P4

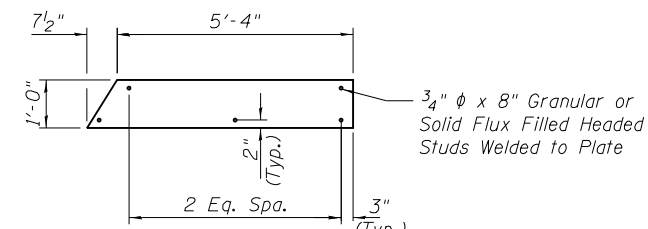


PLATE P5

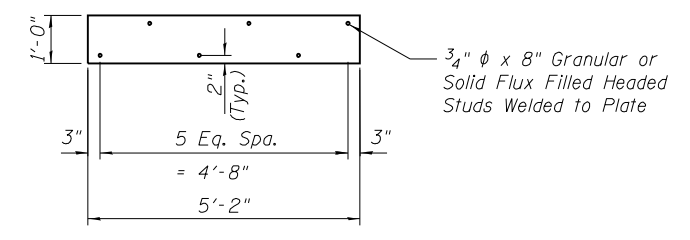


PLATE P6

EMBEDMENT PLATE DETAILS

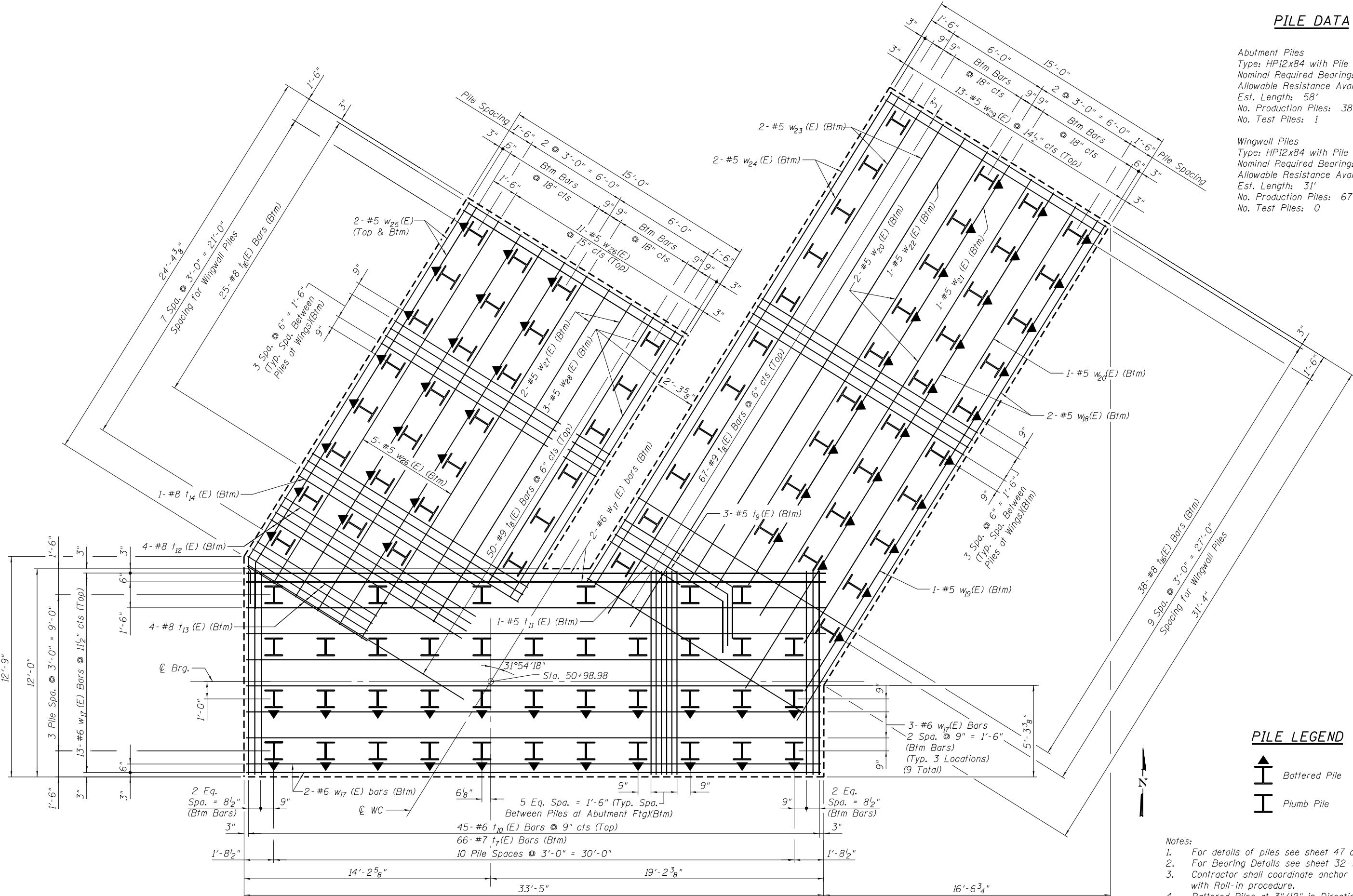
Notes:
For details of piles see sheet 47 of 49.
For Bearing Details see Sheet 32-36 of 49.
Contractor to coordinate anchor bolt installation with Roll-In procedure.

ORIGINAL:	UPDATED:	DESIGNED - ZJH	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	NORTH ABUTMENT - 2 STRUCTURE NO. 032-9906	SHEET NO. 43 OF 49 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DLZ	UN ENGINEERING LTD.	CHECKED - PRD MTH	REVISED				80	((32, 47-4)VD, HBR-3) DR, BRR	GRUNDY	143	100
DLZ Illinois, Inc.	Consulting Engineers	DRAWN - BAE	REVISED				CONTRACT NO. 66295				
		CHECKED - ZJH MTH	REVISED				ILLINOIS FED. AID PROJECT				

PILE DATA

Abutment Piles
Type: HP12x84 with Pile Shoes
Nominal Required Bearing: 295 kips
Allowable Resistance Available: 98 kips
Est. Length: 58'
No. Production Piles: 38
No. Test Piles: 1

Wingwall Piles
Type: HP12x84 with Pile Shoes
Nominal Required Bearing: 144 kips
Allowable Resistance Available: 48 kips
Est. Length: 31'
No. Production Piles: 67
No. Test Piles: 0



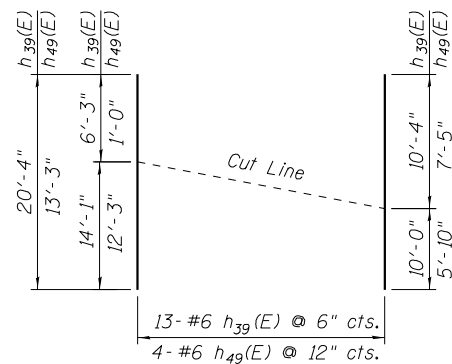
PILE LEGEND



- Notes:
- For details of piles see sheet 47 of 49.
 - For Bearing Details see sheet 32-36 of 49.
 - Contractor shall coordinate anchor bolt installation with Roll-in procedure.
 - Battered Piles at 3"/12" in Direction Shown.

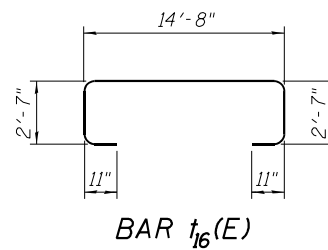
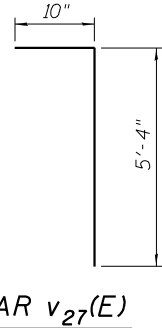
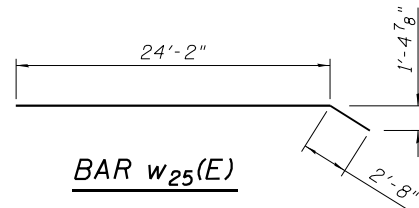
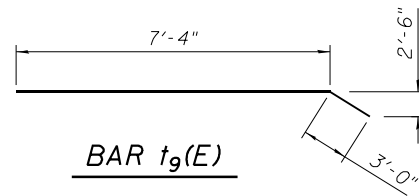
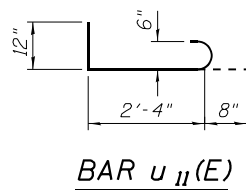
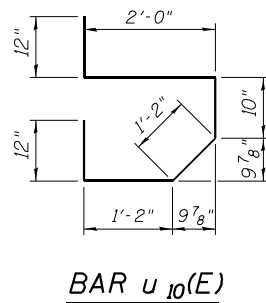
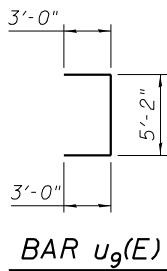
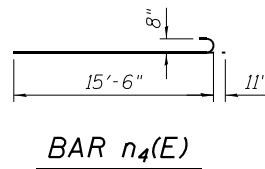
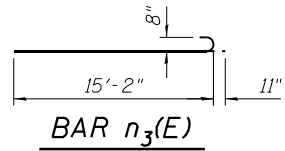
FOOTING PLAN

ORIGINAL: DLZ		UPDATED: UN ENGINEERING LTD.		DESIGNED - ZJH		REVISED		STATE OF ILLINOIS		NORTH ABUTMENT-3		F.A.I.		SECTION		COUNTY		TOTAL		SHEET	
DLZ Illinois, Inc.		Consulting Engineers		CHECKED - PRD MTH		REVISED		DEPARTMENT OF TRANSPORTATION		STRUCTURE NO. 032-9906		80		(32, 47-4)VD, HBR-3) BR, BRR		GRUNDY		143		101	
DATE - 03/25/22		DRAWN - BAE		CHECKED - ZJH MTH		REVISED		SHEET NO. 44 OF 49 SHEETS		CONTRACT NO. 66295		ILLINOIS		FED. AID PROJECT							



FIELD CUTTING DIAGRAM

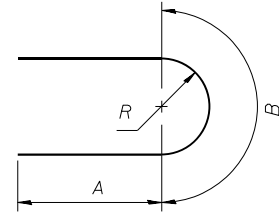
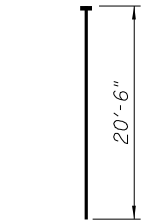
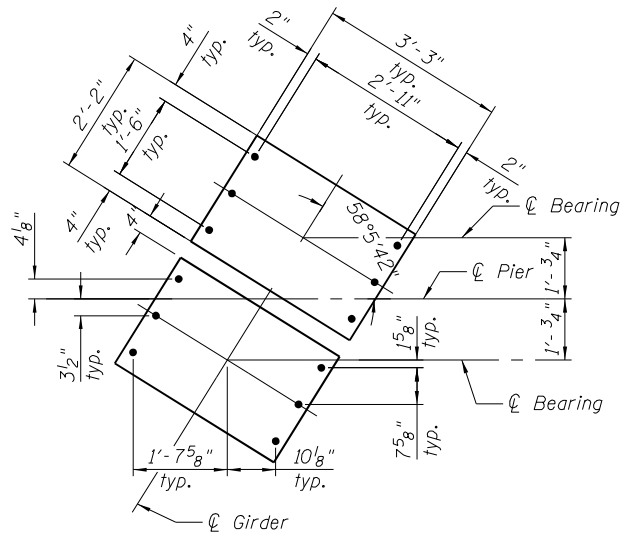
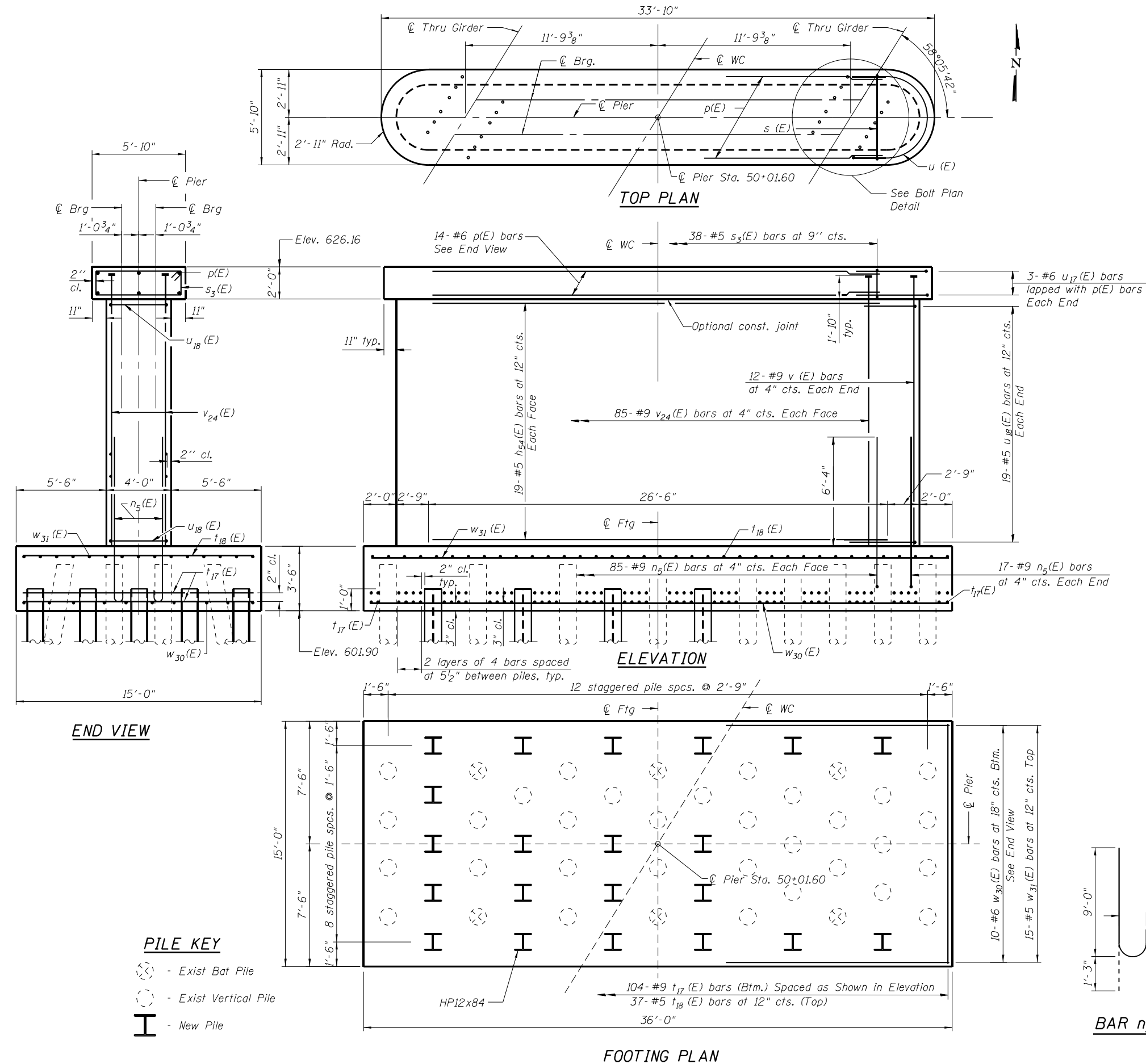
Order bars full length. Cut bars in field as shown. Use remaining bars in opposite half.



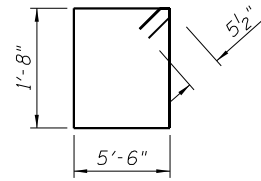
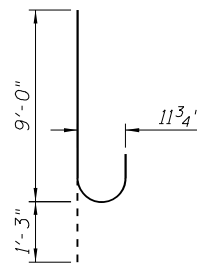
N. ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$h_{30}(E)$	40	#5	33'-1"	=====
$h_{31}(E)$	1	#5	6'-0"	=====
$h_{32}(E)$	1	#5	5'-6"	=====
$h_{33}(E)$	1	#5	9'-3"	=====
$h_{34}(E)$	1	#5	8'-10"	=====
$h_{35}(E)$	1	#5	8'-5"	=====
$h_{36}(E)$	1	#5	8'-0"	=====
$h_{37}(E)$	20	#5	26'-8"	=====
$h_{38}(E)$	20	#5	26'-3"	=====
$h_{39}(E)$	13	#6	20'-4"	=====
$h_{40}(E)$	7	#6	12'-8"	=====
$h_{41}(E)$	1	#6	14'-11"	=====
$h_{49}(E)$	4	#6	13'-3"	=====
$h_{50}(E)$	1	#5	6'-3"	=====
$h_{51}(E)$	1	#5	6'-9"	=====
$h_{52}(E)$	22	#5	25'-8"	=====
$h_{53}(E)$	22	#5	27'-2"	=====
$n_3(E)$	50	#8	16'-1"	=====
$n_4(E)$	129	#8	16'-5"	=====
$v_{14}(E)$	16	#5	8'-6"	=====
$v_{15}(E)$	42	#5	6'-4"	=====
$v_{16}(E)$	1	#5	7'-1"	=====
$v_{17}(E)$	1	#5	7'-7"	=====
$v_{18}(E)$	9	#5	13'-2"	=====
$v_{19}(E)$	16	#5	19'-0"	=====
$v_{20}(E)$	66	#6	10'-4"	=====
$v_{22}(E)$	4	#5	1'-10"	=====
$v_{23}(E)$	8	#5	1'-0"	=====
$v_{25}(E)$	27	#7	10'-4"	=====
$v_{27}(E)$	54	#5	6'-2"	=====
$t_7(E)$	66	#7	11'-9"	=====
$t_8(E)$	117	#9	14'-8"	=====
$t_9(E)$	3	#5	10'-4"	=====
$t_{10}(E)$	45	#6	11'-9"	=====
$t_{11}(E)$	1	#5	4'-9"	=====
$t_{12}(E)$	4	#8	13'-0"	=====
$t_{13}(E)$	4	#8	8'-2"	=====
$t_{14}(E)$	1	#8	12'-0"	=====
$t_{16}(E)$	63	#8	21'-8"	=====

Bar	No.	Size	Length	Shape
$w_{17}(E)$	26	#6	33'-1"	=====
$w_{18}(E)$	2	#5	33'-8"	=====
$w_{19}(E)$	1	#5	32'-0"	=====
$w_{20}(E)$	3	#5	29'-8"	=====
$w_{21}(E)$	1	#5	28'-6"	=====
$w_{22}(E)$	1	#5	30'-3"	=====
$w_{23}(E)$	2	#5	34'-2"	=====
$w_{24}(E)$	2	#5	33'-3"	=====
$w_{25}(E)$	4	#5	26'-10"	=====
$w_{26}(E)$	16	#5	24'-8"	=====
$w_{27}(E)$	2	#5	21'-8"	=====
$w_{28}(E)$	3	#5	18'-2"	=====
$w_{29}(E)$	13	#5	35'-0"	=====
$u_9(E)$	62	#5	11'-2"	=====
$u_{10}(E)$	26	#6	7'-2"	=====
$u_{11}(E)$	26	#6	4'-0"	=====
Structure Excavation			Cu. Yd.	1,210
Concrete Structures			Cu. Yd.	277.9
Reinforcement Bars, Epoxy Coated			Pound	31,530
Furnishing Steel Piles HP12x84			Foot	4,281
Driving Piles			Foot	4,281
Test Pile Steel HP12x84			Each	1
Pile Shoes			Each	106
Concrete Sealer			Sq. Ft.	284



Bar	A	B	R
u17(E)	3'-6"	8'-8"	2'-9"
u18(E)	3'-6"	5'-9"	1'-10"



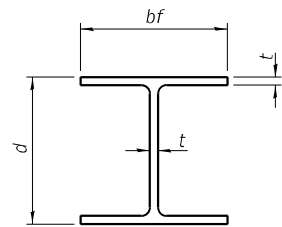
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h54(E)	38	#5	28'-0"	—
n5(E)	204	#9	10'-3"	⌋
p(E)	14	#6	28'-0"	—
s3(E)	29	#5	15'-3"	□
t17(E)	104	#9	14'-8"	—
t18(E)	37	#5	14'-8"	—
u17(E)	6	#6	15'-8"	⌋
u18(E)	38	#5	12'-9"	⌋
v24(E)	204	#9	20'-6"	—
w30(E)	10	#6	35'-8"	—
w31(E)	15	#5	35'-8"	—
Structure Excavation		Cu. Yd.	118.0	
Concrete Structures		Cu. Yd.	170.3	
Reinforcement Bars, Epoxy Coated		Pound	30,990	
Furnishing Steel Piles HPI2x84		Foot	920	
Driving Piles		Foot	920	
Test Pile Steel HPI2x84		Each	1	
Pile Shoes		Each	21	
Concrete Sealer		Sq. Ft.	1,370	

PILE DATA

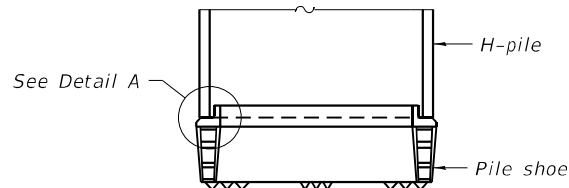
Type: HPI2x84 with Pile Shoes
 Nominal Required Bearing: 262 Kips
 Allowable Resistance Available: 87 Kips
 Est. Length: 46 Ft
 No. Production Piles: 20
 No. Test Piles: 1

Notes:
 Space reinforcement in cap to miss anchor bolts.
 Coordinate anchor bolt installation with roll-in track.
 For details of HP piles, see sheet 47 of 49.
 Contractor is responsible for maintaining existing pile integrity.

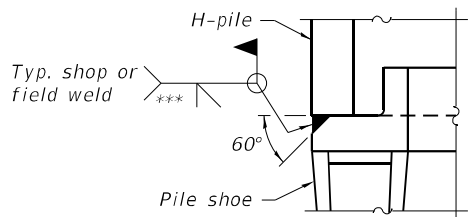


STEEL PILE TABLE

Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	1 3/16"	30"
x102	14"	14 3/4"	1 1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1 1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 1/8"	7/16"	24"
HP 8x36	8"	8 1/8"	7/16"	18"



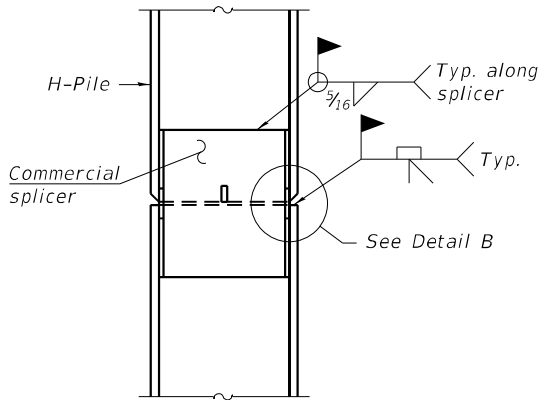
ELEVATION



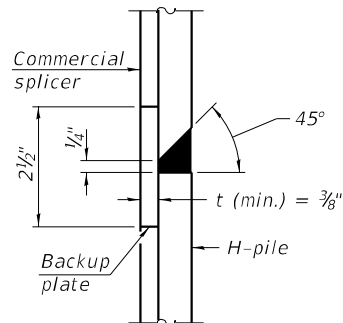
DETAIL A

SHOE ATTACHMENT

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

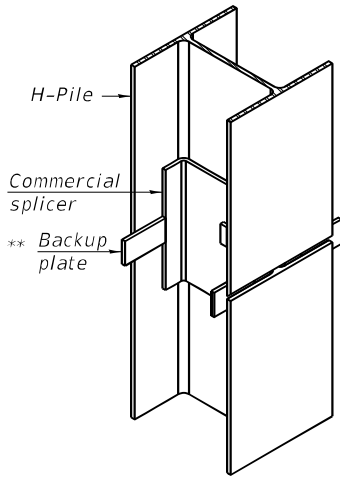


ELEVATION

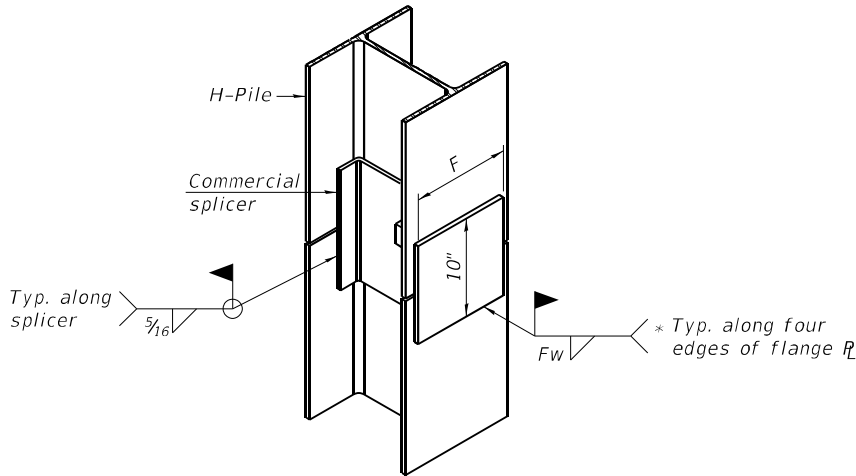


DETAIL "B"

WELDED COMMERCIAL SPLICE



ISOMETRIC VIEW



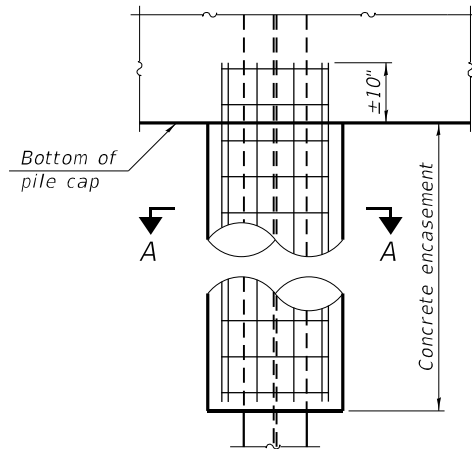
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

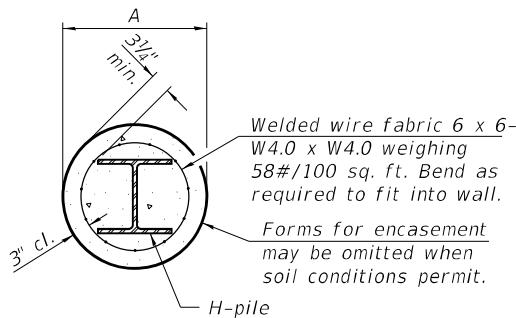
* Interrupt welds 1/4" from end of web and/or each flange.

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

*** Weld size per pile shoe manufacturer (3/16" min.).

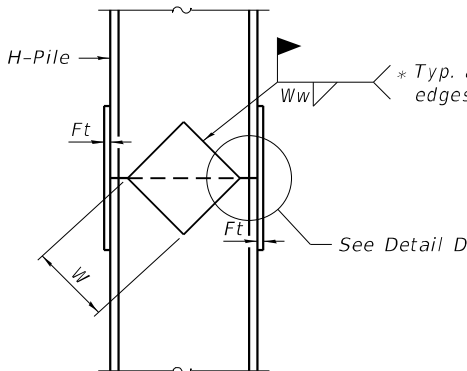


ELEVATION

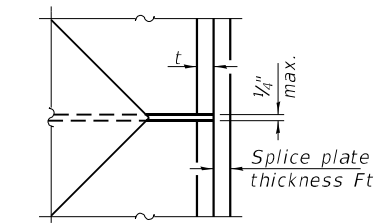


SECTION A-A

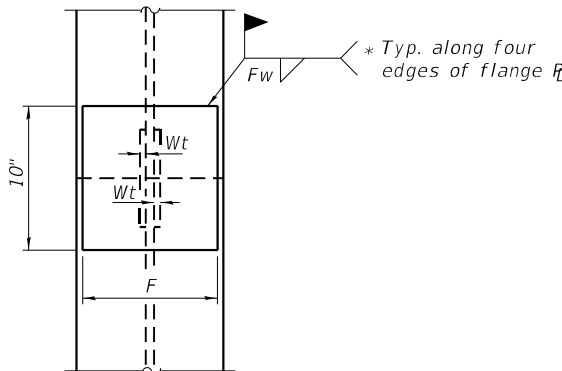
INDIVIDUAL PILE
CONCRETE ENCASEMENT
(when specified)



ELEVATION



DETAIL D



END VIEW

Designation	F	Ft	Fw	W	Wt	Ww
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	3/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	1 1/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	1 1/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	1 1/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

WELDED PLATE FIELD SPLICE

F-HP

1-1-2020

Illinois Department of Transportation Division of Highway District Nine Materials			Page <u>1</u> of <u>2</u> Date <u>6-24-02</u>	
ROUTE <u>FAL 80 (I-80)</u>		DESCRIPTION <u>E.J. & E Railroad over I-80</u>	LOGGED BY <u>Larry Myers</u>	
SECTION <u>(32.47)-JK, BR-8, BR-9</u>		LOCATION <u>NW 14, SEC. 1, TWP. 34N, RNG. 8E, 3rd PM</u>		
COUNTY <u>GRUNDY</u>	DRAINAGE METHOD <u>Hollow Steam Auger</u>	HAMMER TYPE <u>CME Automatic</u>		
STRUCT. NO. <u>032-9901 EXISTING</u>				
Station <u>50 + 01.60</u>				
BORING NO. <u>#1-S About SE Quad</u>				
Station <u>49 + 21.6</u>				
Offset <u>12.50 ft Rt</u>				
Ground Surface Elev. <u>626.55</u> ft				
D E P T H S	B L O W S	U C S	M O I S T Q u	Surface Water Elev. _____ ft Stream Bed Elev. _____ ft Groundwater Elev.: First Encounter _____ ft Upon Completion _____ ft After _____ hrs.
(ft)	(6")	(tsf)	(<%)	(ft) (6") (tsf) (<%)
				Very Stiff, gray, Silty Clay Loam Till (continued)
				2 4 2.5 16.3
				5 B
				3
				4 2.1 17.2
				6 B
				-25
				2
				4 2.5 18.0
				4 B
				619.55
				Stiff, gray, Silty Clay Loam Till
				2
				2 1.9 16.1
				4 B
				-30
				2
				3 1.4 17.6
				5 B
				2
				3 1.6 17.4
				6 B
				594.06
				Very stiff, gray, Silty Clay Loam Till
				-35
				2
				3 2.1 13.3
				6 B
				613.05
				Medium, brown, Silty Clay Loam
				2 1.0 11.5
				3 B
				611.05
				Medium, brown, Silty Clay Loam Till
				2
				2 1.0 15.5
				3 P
				609.05
				Very Stiff, gray, Silty Clay Loam Till
				-20

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B=Bulge, S=Shear, P=Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T260)

[illegible]

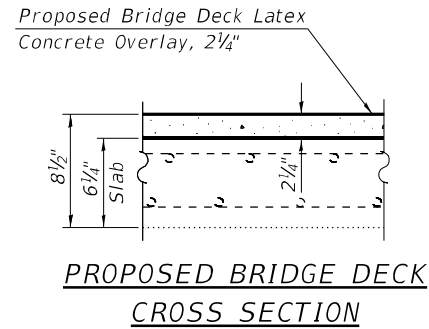
	Illinois Department of Transportation Division of Highways District Nine Materials	Page <u>1</u> of <u>2</u> Date <u>7/8/02</u>
ROUTE <u>FAL80 (I-80)</u> DESCRIPTION <u>E.J & E Railroad over I-80</u> LOGGED BY <u>Larry Myers</u>		
SECTION <u>(32.47-4IK, BR-8, BR-9)</u> LOCATION <u>NW 14, SEC. 1, TWP. 34N, RNG. 8E, 3rd PM</u>		
COUNTY <u>GRUNDY</u>	DRILLING METHOD <u>Hollow Steam Auger</u>	HAMMER TYPE <u>CME Automatic</u>
STRUCT. NO. <u>032-9901 EXISTING</u> Station <u>50+01.60</u>		
BORING NO. <u>#3:Center Pier, W</u> Station <u>49 - 91.6</u> Offset <u>22.00ft Lt.</u> Ground Surface Elev. <u>609.06</u> ft		

D E P T H H S	B L O W S	U C S	M O I S T Q u	Surf. Water Elev. _____ ft Stream Bed Elev. _____ ft Groundwater Elev.: First Encounter _____ ft Upon Completion _____ ft After _____ Hrs. _____ ft	(ft) (6")	(tsf)	(%)	D E P T H H S	B L O W S	U C S	M O I S T Q u	Surf. Water Elev. _____ ft Stream Bed Elev. _____ ft Groundwater Elev.: First Encounter _____ ft Upon Completion _____ ft After _____ Hrs. _____ ft	(ft) (6")	(tsf)	(%)
				Augered, white and brown, CA06 crushed, Stone								Stiff, gray, Silty Clay Till (continued)	6	B	
													538.06		
				Very Stiff, gray, Silty Clay Loam Till	4								2		
					2								4	2.2	17.7
					3								6	B	
													535.56		
				Stiff, gray, Silty Clay Loam Till	3								2		
					-6		17.6						-25	4	1.3
					3								5	B	16.7
					2										
					4	2.7	16.9								
					6	B									
				Stiff, gray, Silty Clay Till											
					3								4		
					-10	3	1.2	17.9					-30	3	1.7
						5	B						7	B	17.5
					2										
					3	1.5	17.4								
					5	B									
													577.06		
				Stiff, gray, Silty Clay Loam Till	2								2		
					-15	3	1.1	17.4					-35	4	1.6
						6	B						6	B	22.5
					2										
					4	1.5	16.9								
					7	B									
					2								4		
					-20	3	1.4	17.1					-40		

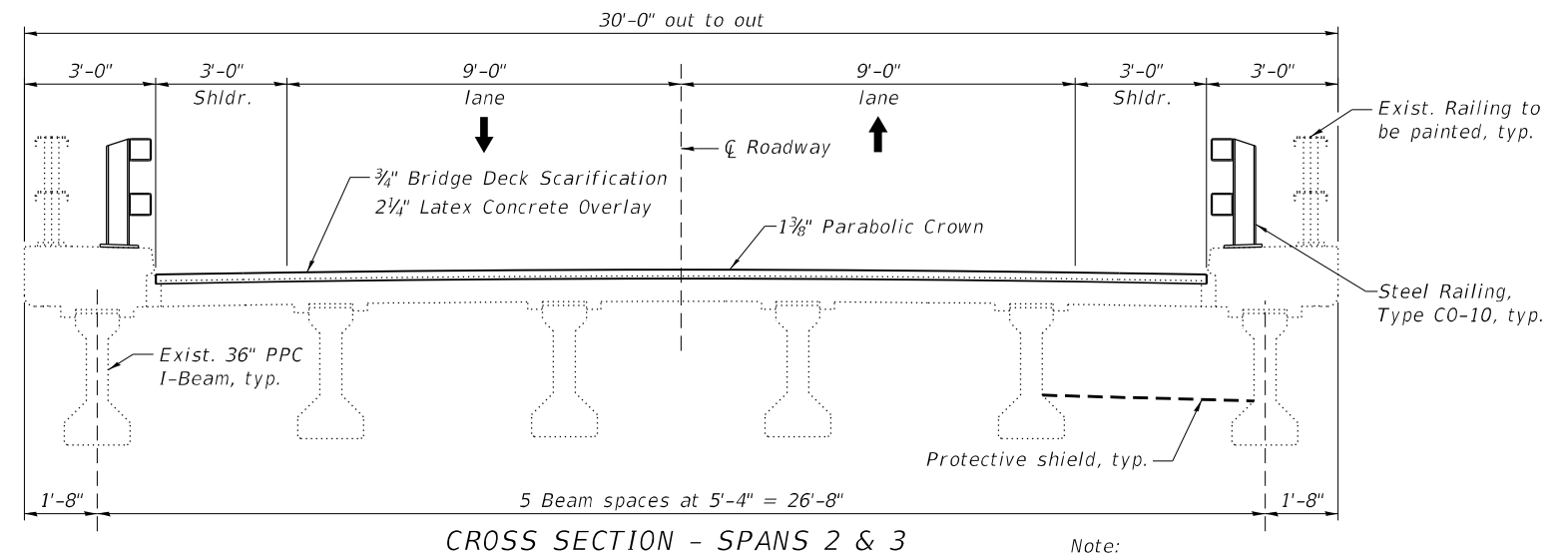
 Illinois Department of Transportation Division of Highways District Nine Materials		SOIL BORING LOG		Page <u>2</u> of <u>2</u>
ROUTE <u>FAI 80 (I-80)</u>		DESCRIPTION <u>E.J. & E. Railroad over I-80</u>		Date <u>7/6/02</u>
SECTION <u>(32.47-41K, BR-8, BR-9)</u>	LOCATION <u>NW 1/4, SEC. 1, TWP. 34N, RNG. 8E, 3rd PM</u>			LOGGED BY <u>Larry Myers</u>
COUNTY <u>GRUNDY</u>	DILLING METHOD <u>Hollow Steam Auger</u>	HAMMER TYPE <u>CME Automatic</u>		
STRUCT. NO. <u>032-9901 EXISTING</u> Station <u>50+01.60</u>		D E U M I P L C O T H S W I H S Qu S T		Surface Water Elev. _____ ft Stream Bed Elev. _____ ft Groundwater Elev.: First Encounter _____ ft Upon Completion _____ ft After _____ Hrs. _____ ft
BORING NO. <u>#3:Center Pier, W</u> Station <u>49+91.6</u> Offset <u>22.00ft Lt</u> Ground Surface Elev. <u>609.06</u> ft		(ft) (6") (tsf) (%)		(ft) (6") (tsf) (%)
Very stiff, gray, Silty Clay Loam Till with Silt and loamy, Sand layers at 40.3'		2.5 B 16.2		8 B
565.06 Stiff, gray, interbedded, Silt and Silty Loam		4 7 1.6 S 17.2		23
562.66 Very stiff, gray, Clay with fine, Silt layers at 59.5'		3 5 7 3.1 B 22.1		1002" 5.2
565.56 Gray, Sand and Gravel Free water at 63.5'		4 6 9 2.5 B 23.9		75
562.66 Fractured, coarse-grained, pyritic, oolitic, Limestone with small vugs with recrystallized calcite and pyrite Maquoketa Formation Ordovician System End of Boring		3 4 3.1 31.7		80

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B=Bulge, S=Shear, P=Penetrometer)
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

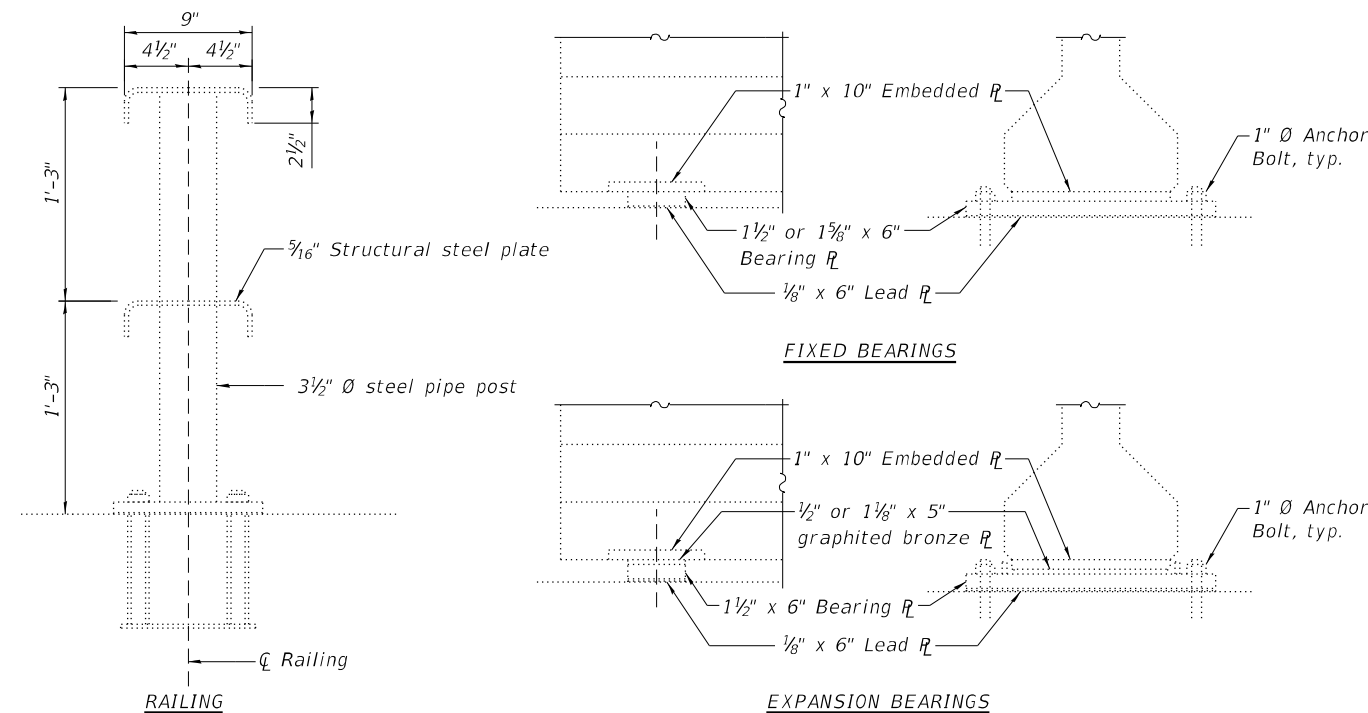
1. Reinforcement bars designated (E) shall be epoxy coated.
2. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior 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.
3. Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.
4. Cost of removal and disposal of existing expansion joints shall be included in the cost of Concrete Removal.
5. Protective Coat shall be applied to the top surface of new overlay and to the inside and top faces of new concrete adjacent to joints.
6. Joint openings shall be adjusted according to Article 520.04 of the Std. Specs. when the concrete adjacent to joints is poured at an ambient temperature other than 50°F.
7. Expansion joints shall be fabricated to conform to the existing cross slope of the bridge.
8. The Contractor shall exercise care during removal of existing joints to ensure that the slab, beams, and diaphragms' integrity will not be detrimentally impacted. The Contractor shall repair any damage(s) to the slab, beams and diaphragms caused by their operation as directed by the Engineer at no additional cost to the Department.
9. Cleaning and painting of the existing steel handrail and bearings shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All railing and bearings shall be cleaned per Near White Blast Cleaning (SSPC-SP10) and shall be painted according to the requirements of Organic Zinc-Rich / Epoxy / Urethane paint system. The color of the final finish coat for all steel surfaces shall be Gray, Munsell No 5B 7/1.
10. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
11. Concrete Sealer shall be applied to all exposed faces of the new concrete on pier crash walls, and also on the traffic face of the existing pier surfaces.



<u>TOTAL BILL OF MATERIAL</u>				
ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.	10.2	-	10.2
Protective Shield	Sq. Yd.	360	-	360
Concrete Structures	Cu. Yd.	-	9.9	9.9
Concrete Superstructure	Cu. Yd.	11.8	-	11.8
Protective Coat	Sq. Yd.	695	-	695
Cleaning and Painting Structural Steel No. 1	L. Sum	1	-	1
Containment and Disposal of Lead Paint Cleaning Residues No. 1	L. Sum	1	-	1
Reinforcement Bars, Epoxy Coated	Pound	1,880	-	1,880
Steel Railing, Type C0-10	Foot	402	-	402
Preformed Joint Strip Seal	Foot	116	-	116
Concrete Sealer	Sq. Ft.	-	1,512	1,512
Floor Drain Extensions	Each	8	-	8
Bridge Deck Grooving	Sq. Yd.	482	-	482
Bridge Deck Latex Concrete Overlay, 2¼" Inches	Sq. Yd.	510	-	510
Bridge Deck Scarification, 3/4 Inch	Sq. Yd.	510	-	510
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	71	-	71
Cleaning Bridge Seats	Sq. Ft.	472	-	472
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	10	-	10
Polymer Concrete	Cu. Ft.	2.4	-	2.4



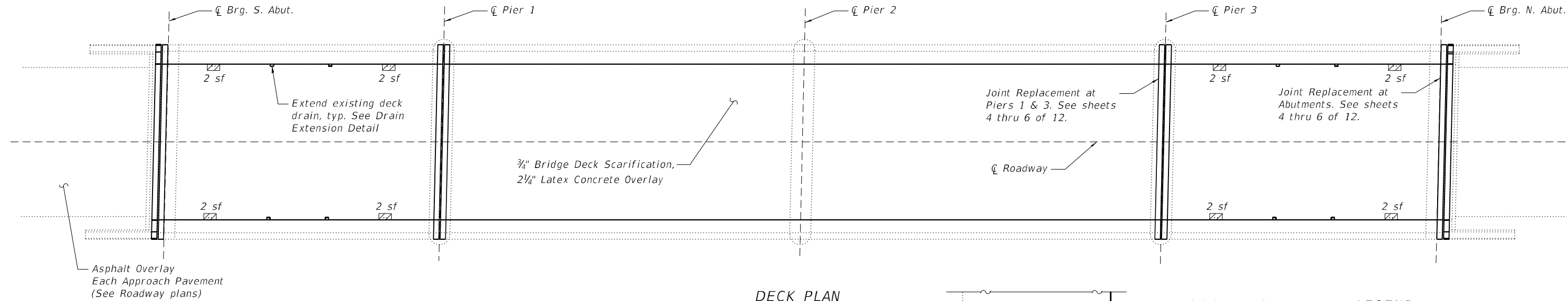
Note:
All transverse dimensions are measured
at right angles to C roadway.



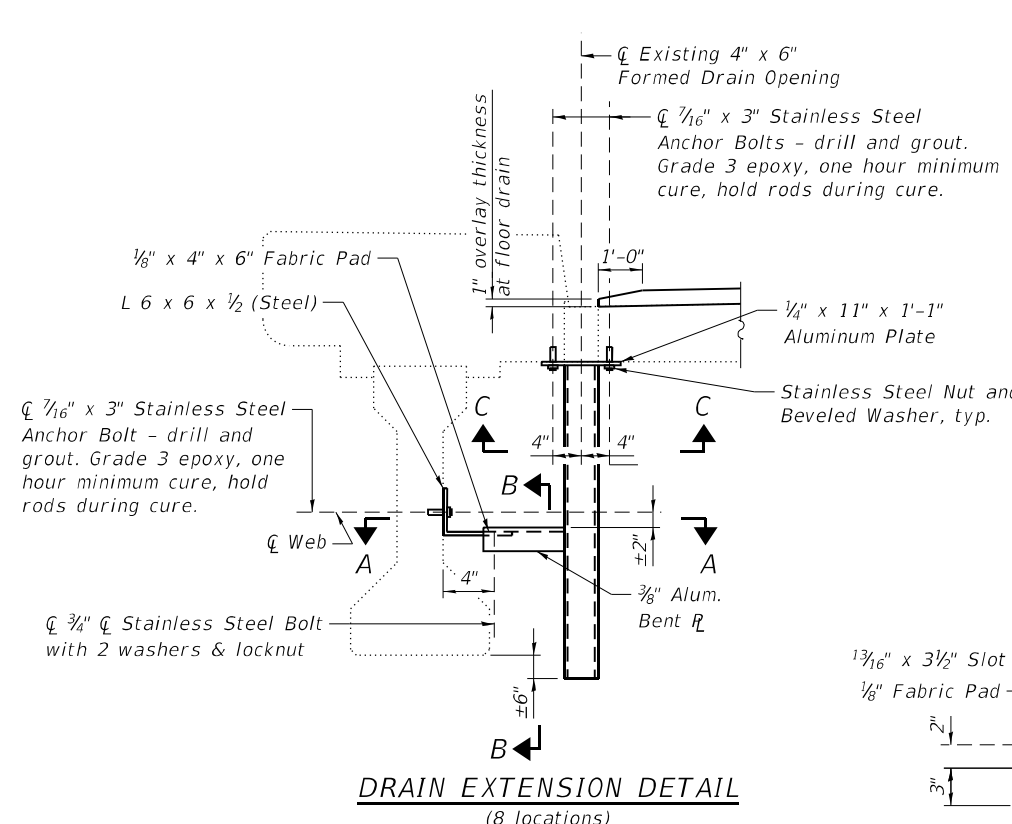
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

GENERAL DATA
STRUCTURE NO. 032-0065

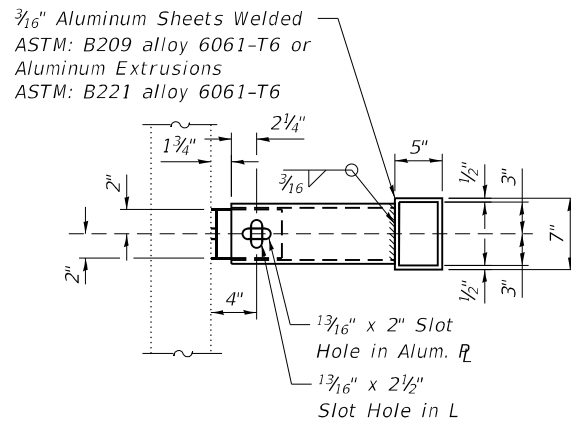
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	(32,47-4)VB	GRUNDY/KENDALL	143	108
CONTRACT NO. 66295				
	ILLINOIS	FED. AID PROJECT		



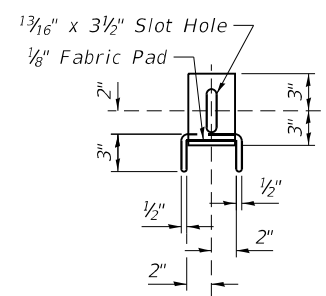
DECK PLAN



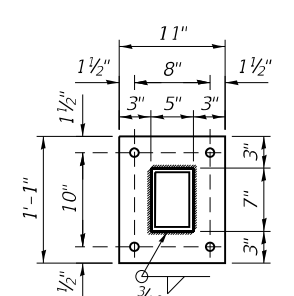
DRAIN EXTENSION DETAIL
(8 locations)



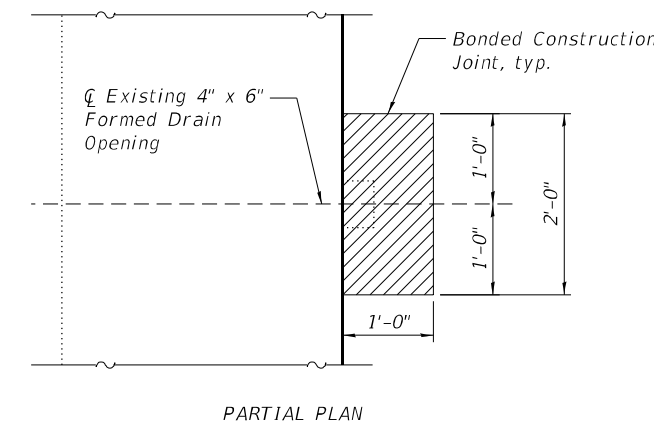
SECTION A-A



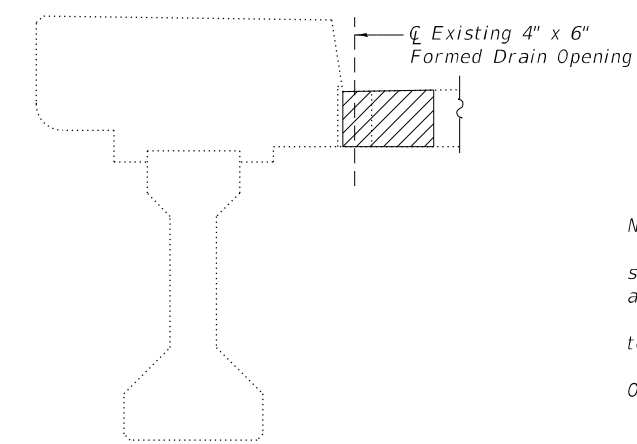
SECTION B-B



SECTION C-C



PARTIAL PLAN



SECTION AT DRAIN

Hatched areas indicate concrete sections to be removed and replaced. Perimeters of concrete removal areas shall be saw cut 3/4\"/>

DRAIN ELIMINATION DETAIL

LEGEND

- Floor Drain Elimination paid as Deck Slab Repair (Full Depth, Type I)
- sf - Square Feet

Notes:
Repair areas shown are estimated. The Engineer shall document actual locations of repairs on as-built plans.
Quantity of Deck Slab Repair has been increased to account for anticipated findings during construction.
See special provision Bridge Deck Latex Concrete Overlay for payment of partial depth deck repairs.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	10
Floor Drain Extension	Each	8

MODEL: Default
FILE NAME: E:\1815-6\Struct\Final Design\CADD\CADD Sheets\0320065-66295-003-DeckSlabRepairPlan.dgn



USER NAME =	DESIGNED - MSS	REVISED -
	CHECKED - AGJ	REVISED -
PLOT SCALE =	DRAWN - AJF	REVISED -
PLOT DATE = 1/9/2025	CHECKED - MTH	REVISED -

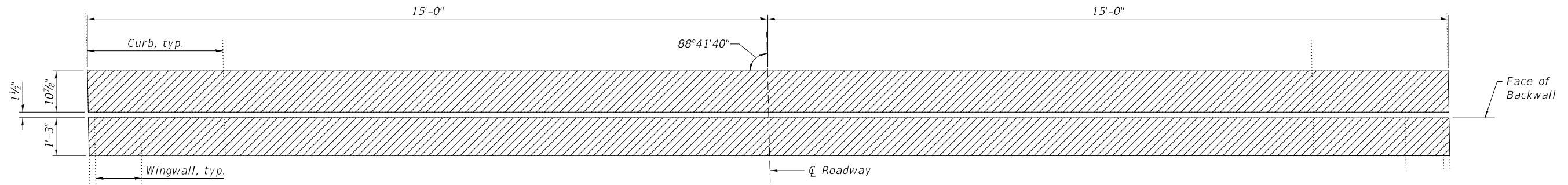
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK SLAB PLAN
STRUCTURE NO. 032-0065

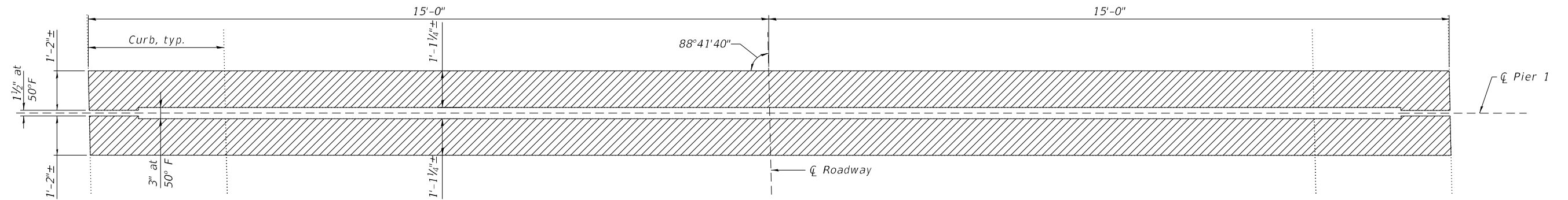
SHEET 3 OF 12 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	(32,47-4)VB	GRUNDY/KENDALL	143	109
CONTRACT NO. 66295				
ILLINOIS FED. AID PROJECT				

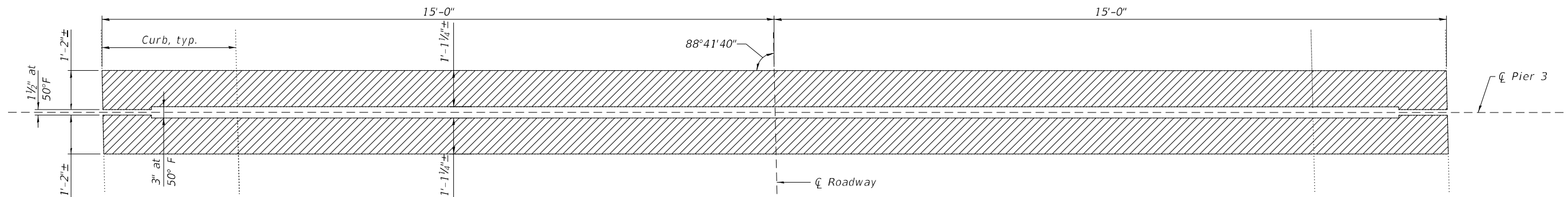
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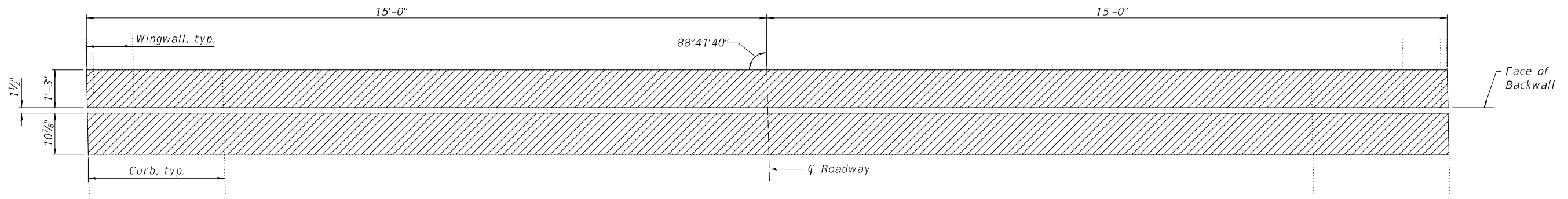
JOINT REMOVAL AT SOUTH ABUTMENT



JOINT REMOVAL AT PIER 1



JOINT REMOVAL AT PIER 3

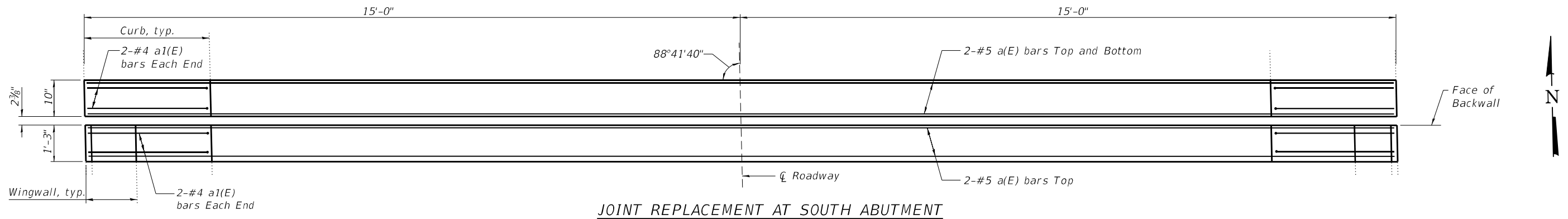


JOINT REMOVAL AT NORTH ABUTMENT

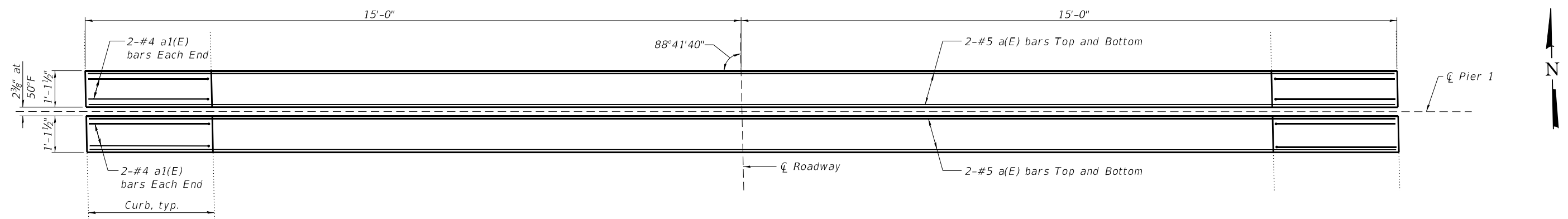
Notes:
Hatched areas indicate limits of Concrete Removal.
See sheet 6 of 12 for Sections.

(Sheet 1 of 3)

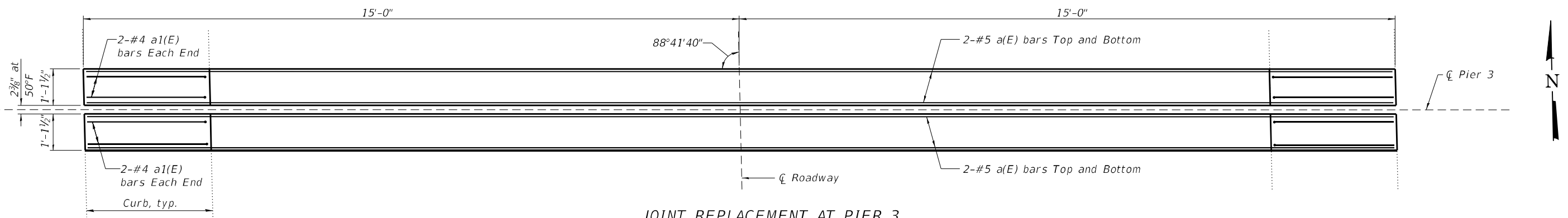
 LIN ENGINEERING, LTD. Consulting Engineers Springfield, Illinois	USER NAME =	DESIGNED - MSS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	JOINT REPLACEMENT DETAILS STRUCTURE NO. 032-0065	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - AGJ	REVISED -			80	(32,47-4)VB	GRUNDY/KENDALL	143	110
	PLOT SCALE=	DRAWN - AJF	REVISED -			CONTRACT NO. 66295				
	PLOT DATE = 1/9/2025	CHECKED - MTH	REVISED -			ILLINOIS FED. AID PROJECT				
SHEET 4 OF 12 SHEETS										



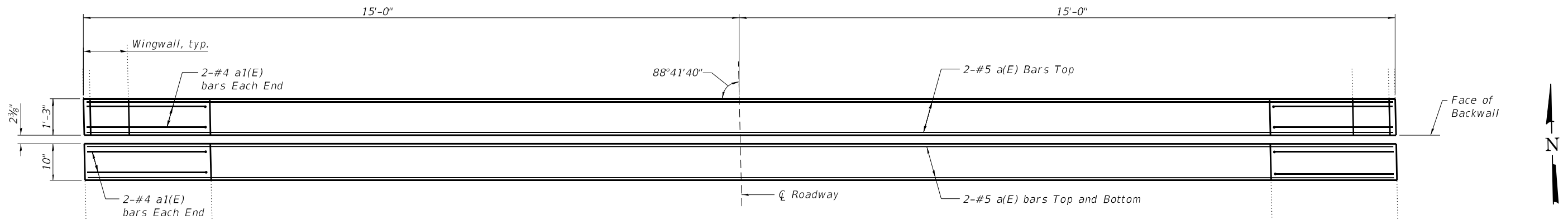
JOINT REPLACEMENT AT SOUTH ABUTMENT



JOINT REPLACEMENT AT PIER 1

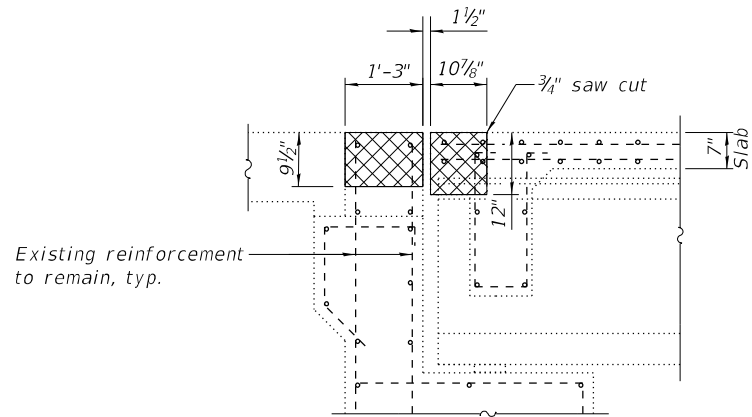


JOINT REPLACEMENT AT PIER 3

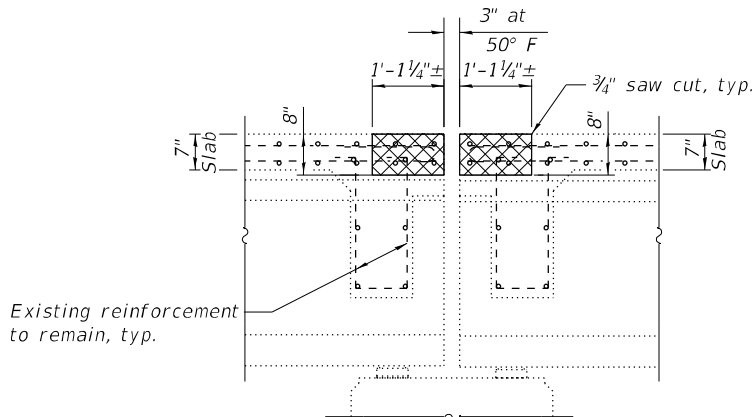


JOINT REPLACEMENT AT NORTH ABUTMENT

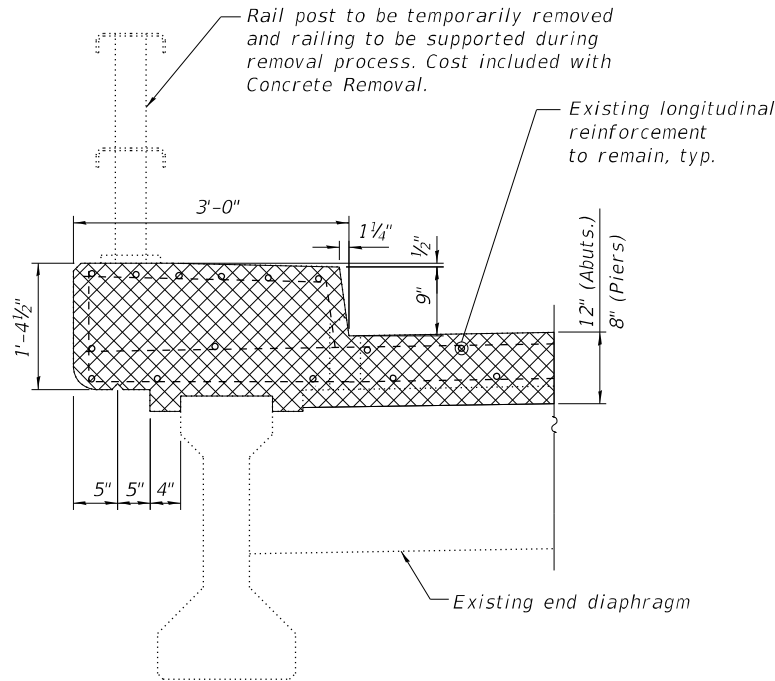
Note:
See sheet 6 of 12 for Sections.



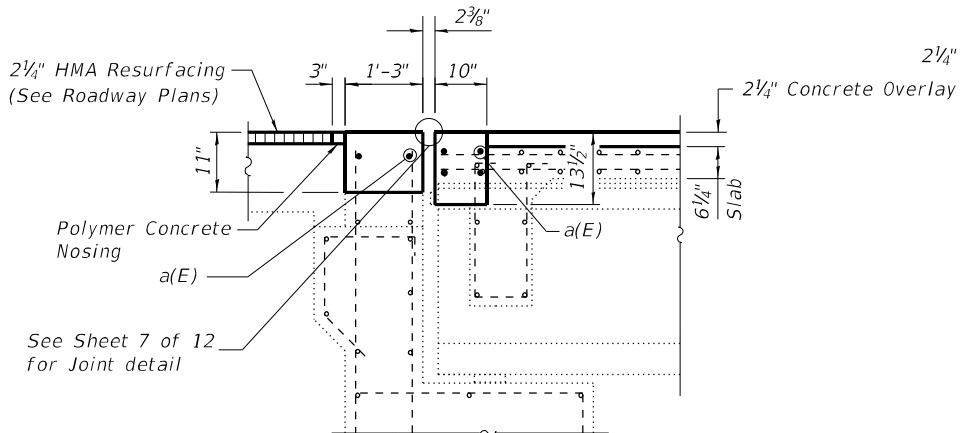
SECTION THRU JOINT AT ABUTMENTS
(Showing Removal; Dimensions at right angles)



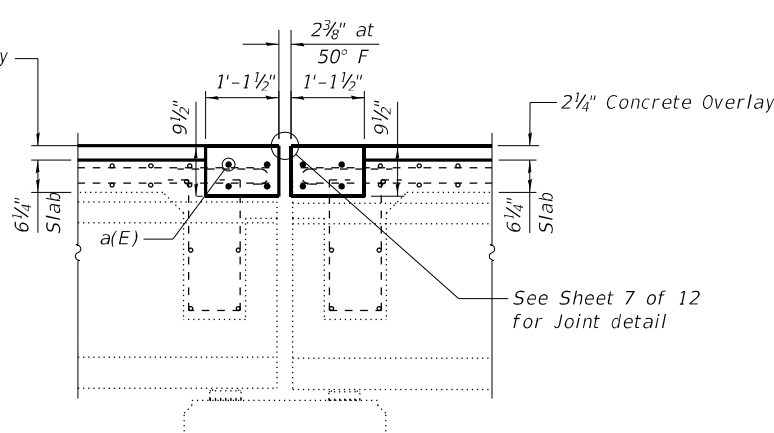
SECTION THRU JOINT AT PIERS 1 & 3
(Showing Removal; Dimensions at right angles)



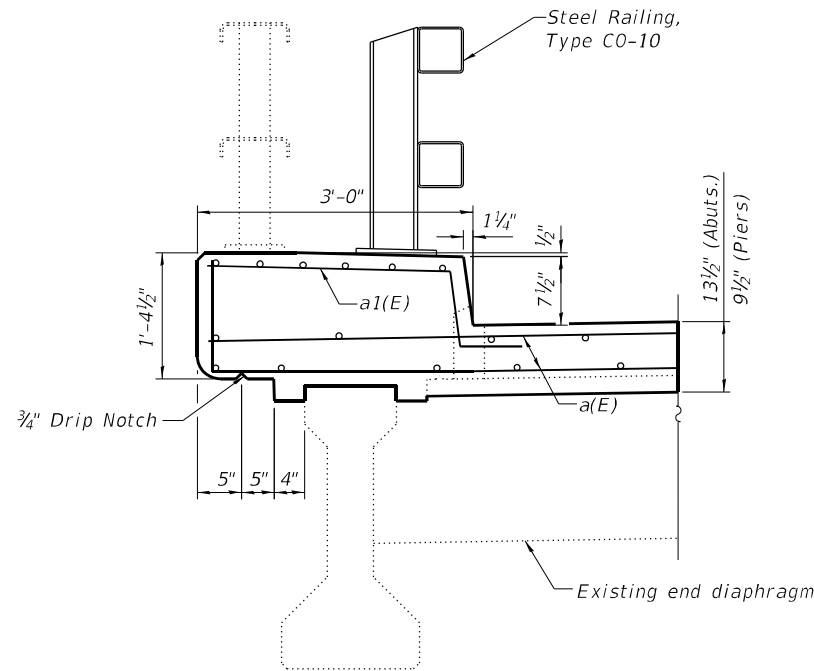
SECTION THRU CURB AT JOINT
(Showing Removal)



SECTION THRU JOINT AT ABUTMENTS
(Showing Proposed; Dimensions at right angles)



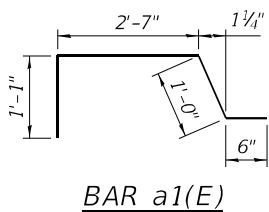
SECTION THRU JOINT AT PIERS 1 & 3
(Showing Proposed; Dimensions at right angles)



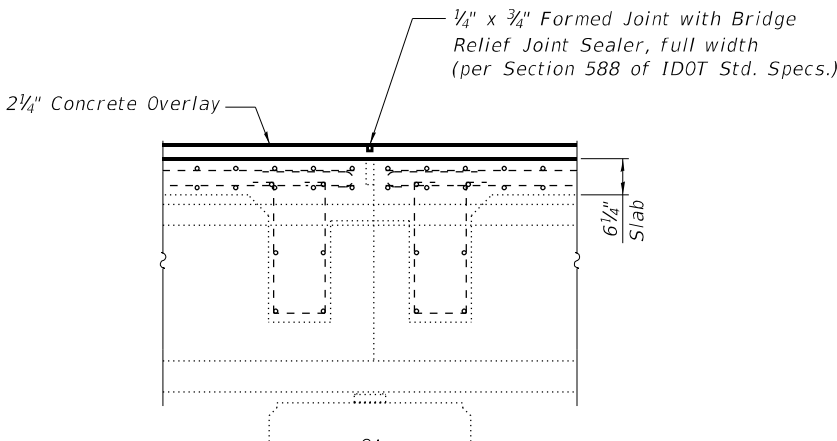
SECTION THRU CURB AT JOINT
(Showing Proposed)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	28	#5	29'-8"	
a1(E)	32	#4	5'-2"	
Concrete Removal			Cu. Yd.	10.2
Concrete Superstructure			Cu. Yd.	11.8
Reinforcement Bars, Epoxy Coated			Pound	980
Polymer Concrete			Cu. Ft.	2.4



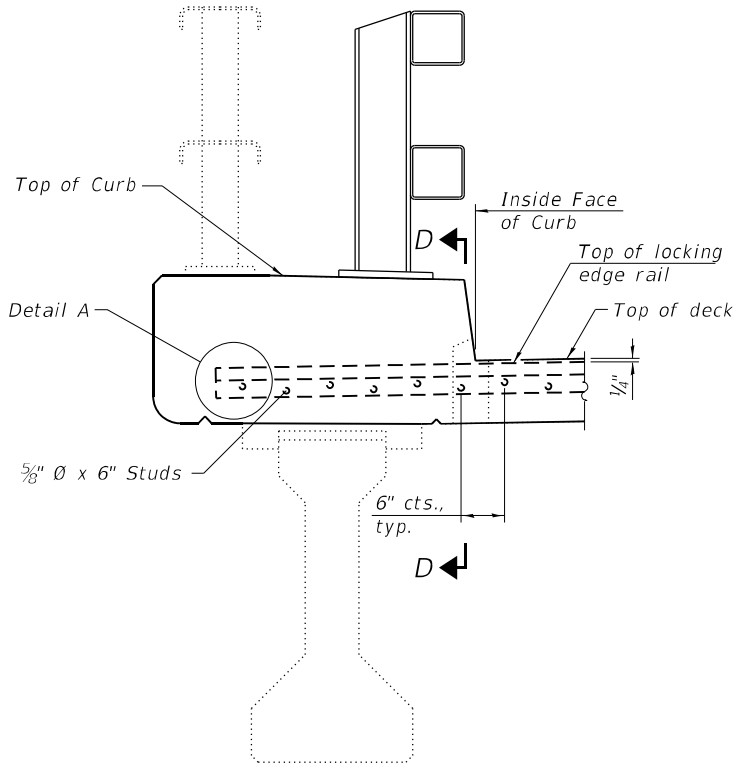
BAR a1(E)



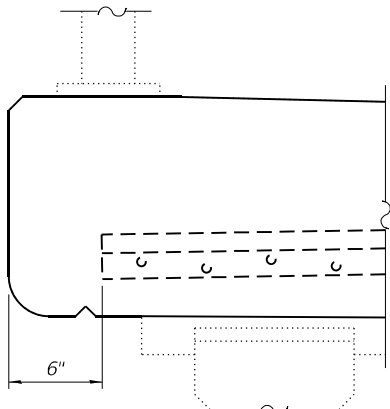
SECTION THRU JOINT AT PIER 2
(Showing Removal; Dimensions at right angles)

Note:
Cross-hatched areas indicate limits of Concrete Removal.

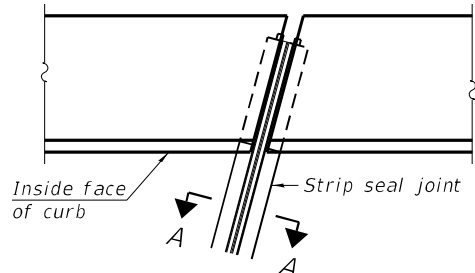
(Sheet 3 of 3)



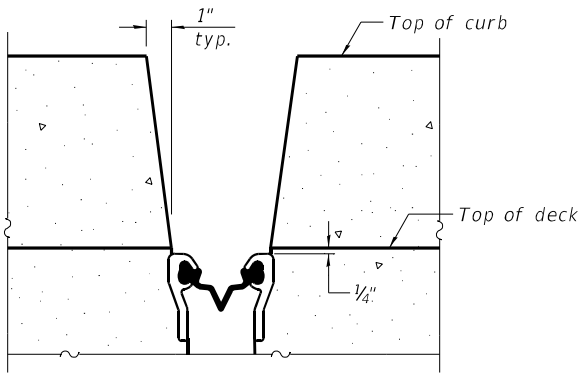
SECTION AT PARAPET



DETAIL A



PLAN AT CURB



SECTION D-D
(at Rt. L's)

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4 1/2" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

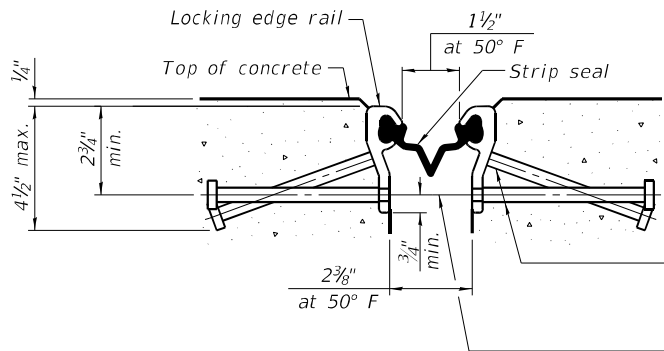
The manufacturer's recommended installation methods shall be followed.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

The Maximum space between locking edge rail segments shall be 3/16" and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

Cost of anchorage studs are included with Preformed Joint Strip Seal.

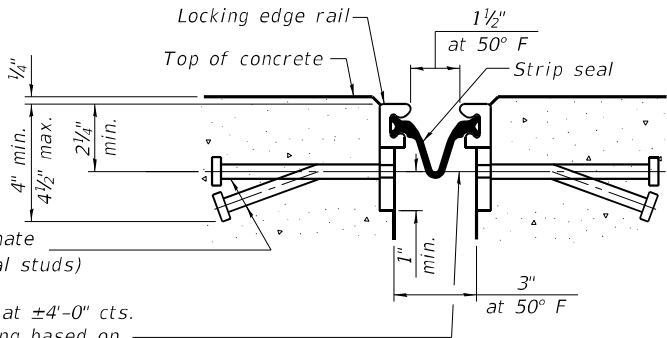
The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and curb lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required.



SHOWING ROLLED RAIL JOINT

* 5/8" ϕ x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

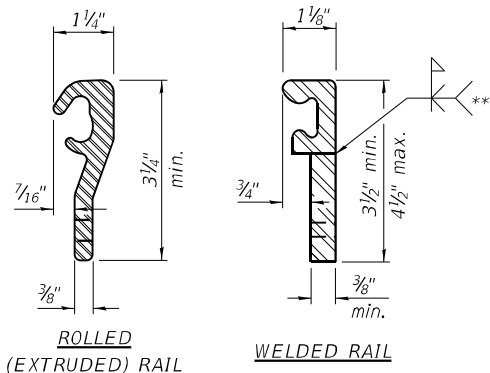
3/8" ϕ threaded rods in 7/16" ϕ holes at $\pm 4'-0"$ cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.



SHOWING WELDED RAIL JOINT

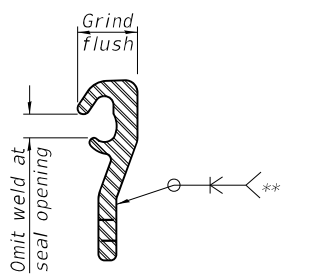
SECTION A-A

* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



LOCKING EDGE RAILS

** Back gouge not required if complete joint penetration is verified by mock-up.



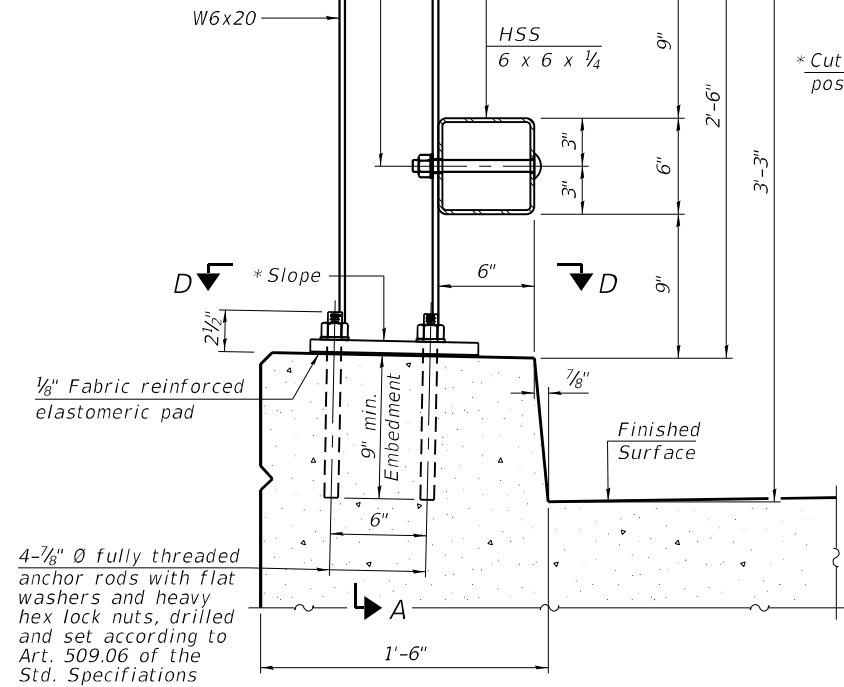
LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	116

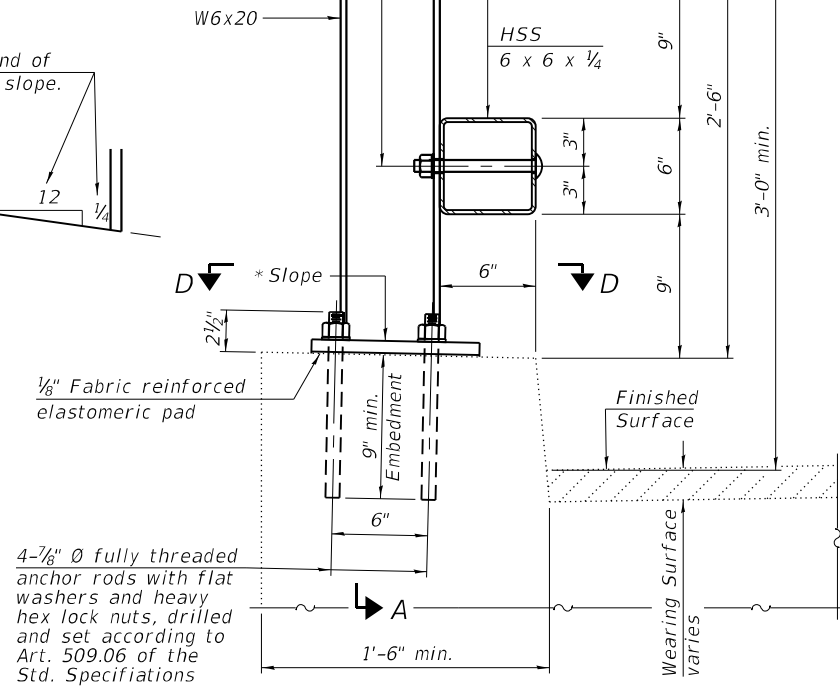
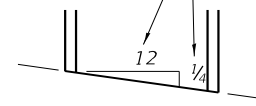
4 - 3/4" Ø x 7 1/2" Round head bolts with heavy hex locknuts and flat washers. Field drill 7/8" Ø holes in HSS tubing using holes in post as template.



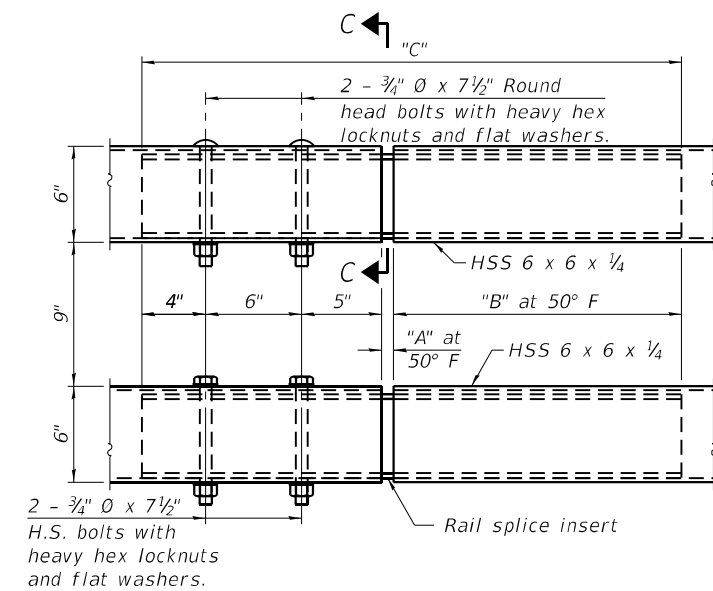
SECTION AT RAIL POST
(New construction)

4 - 3/4" Ø x 7 1/2" Round head bolts with heavy hex locknuts and flat washers. Field drill 7/8" Ø holes in HSS tubing using holes in post as template.

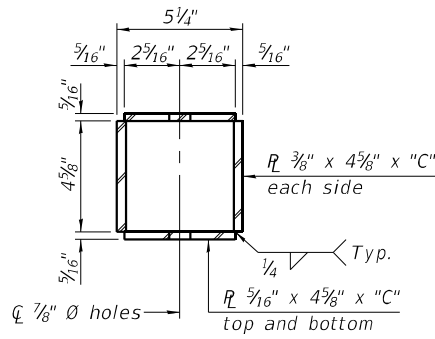
*Cut bottom end of post to curb slope.



SECTION AT RAIL POST
(Retrofit construction)



TOP AND BOTTOM RAIL
SPLICE ELEVATION

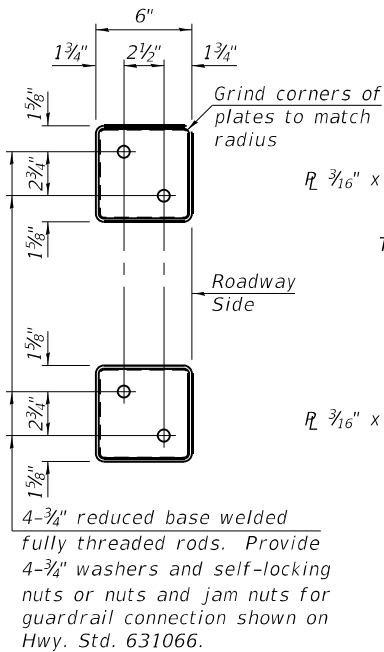


SECTION C-C

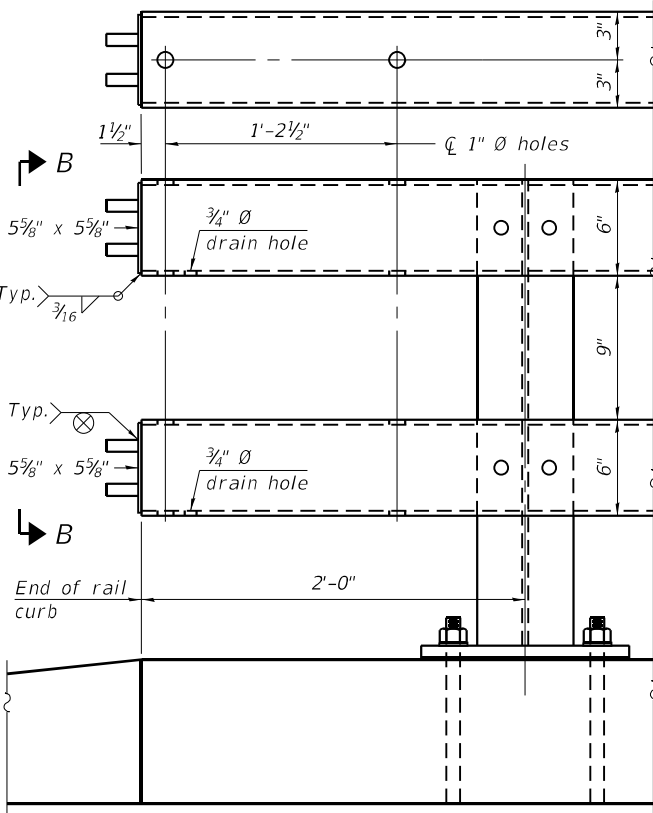
SPLICE DIMENSIONS

Location	T	A	B	C
All locs. not over exp. jts.	0	1/2"	1'-6"	2'-9 1/2"
Over Strip Seal Jt.	≤4"	2 1/2"	1'-8"	3'-1 1/2"
Over Finger or Modular Jt.	≤9 1/2"	5 1/2"	1'-10 3/4"	3'-7 1/4"
Over Finger or Modular Jt.	≤15"	8 1/4"	2'-1 1/2"	4'-0 3/4"

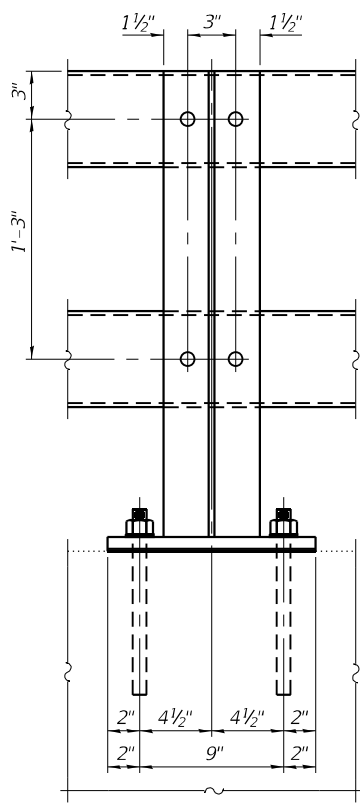
T = ; total movement along centerline of roadway at expansion joint.



VIEW B-B

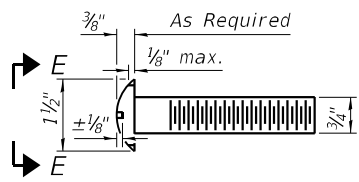


END OF RAIL DETAILS

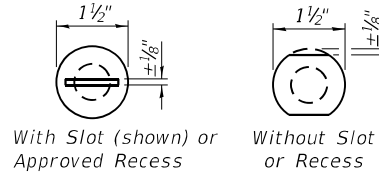


SECTION A-A

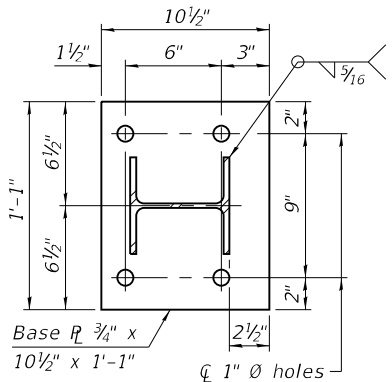
Notes:
All HSS tubing shall be ASTM A500 grade C.
All plates shall be AASHTO M270 grade 50.
All heavy hex nuts shall be according to ASTM A563 grade DH.
All fully threaded anchor rods shall be ASTM F1554 grade 105.
The post base plate shall be fastened to the curb snug tight and given an additional 1/8" turn.
Posts shall not be located closer than 2'-6" to a bridge expansion joint.
Provide one 1/8" and two 1/16" steel shims for 25% of the posts. Shims shall be similar to base plates in size and holes.
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
All HSS tubing shall be CVN tested according to Article 1006.34(b) of the Standard Specifications.
Rail splice inserts may be built out of 2 - 3/8" bent plates in lieu of the 4 plate rail splice inserts shown, provided the outside dimensions are matched.
All round head bolts shall be ASTM A449.
The centerline of rail splices shall be placed between 1'-8" to 2'-6" from the centerline of the posts.
The free end of the splice tube shall be oriented away from the closest post.



ROUND HEAD BOLT DETAIL



VIEW E-E



SECTION D-D

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type C0-10	Foot	402

RAILING CRITERIA

MASH 2016 Test Level	4
Railing Weight (plf)	75
Min F'c (psi)	4,500
Post Spacing Range	6'-8" - 10'-0"

R-42

5-15-2023

LIN ENGINEERING, LTD.
Consulting Engineers
Springfield, Illinois

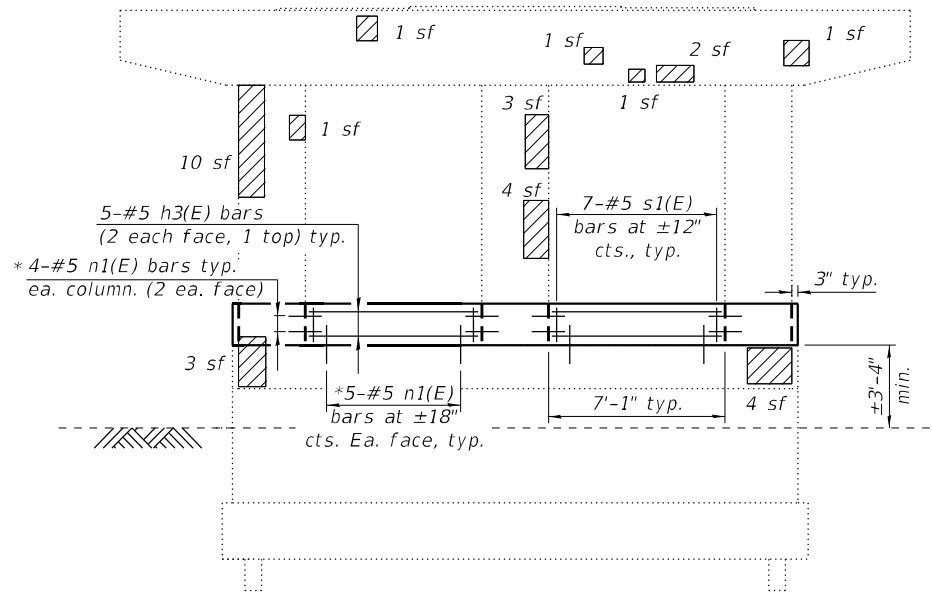
USER NAME =	DESIGNED - MSS	REVISED -
PLOT SCALE =	CHECKED - AGJ	REVISED -
PLOT DATE = 1/9/2025	DRAWN - AJF	REVISED -
	CHECKED - MTH	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

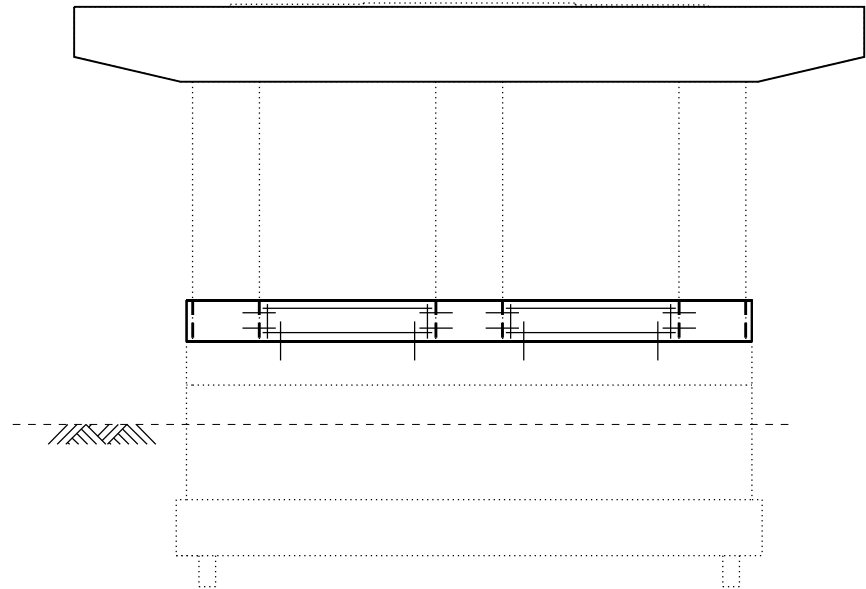
STEEL RAILING, TYPE C0-10
STRUCTURE NO. 032-0065

SHEET 8 OF 12 SHEETS

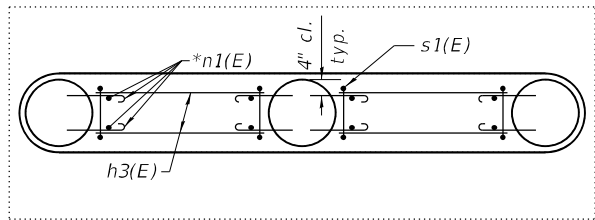
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	(32,47-4)VB	GRUNDY/KENDALL	143	114
CONTRACT NO. 66295				
ILLINOIS FED. AID PROJECT				



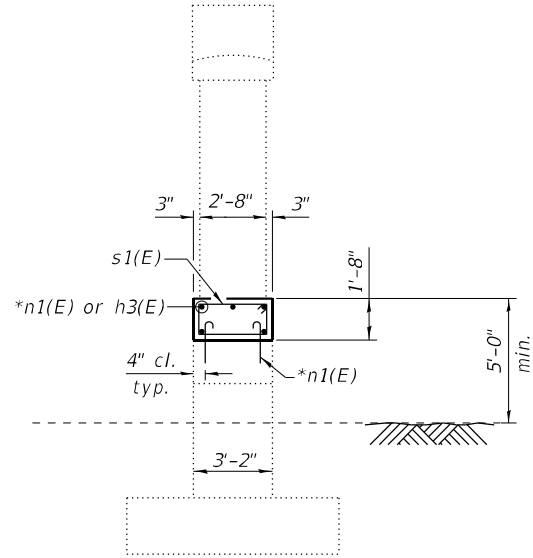
ELEVATION - PIER 1
(Looking North)



ELEVATION - PIER 1
(Looking South)



PLAN - PIER 1



END VIEW

* Epoxy grout n(E) bars in 9" min. deep holes according to Article 584 of the Standard Specifications.

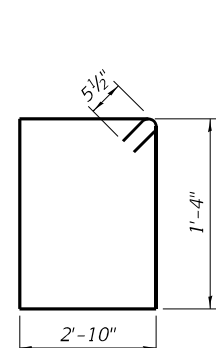
LEGEND

-  Structural Repair of Concrete (Depth Equal To or Less Than 5 in.)
- sf Square Feet

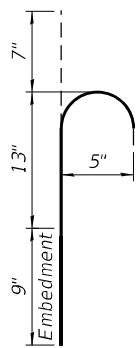
Notes:
Repair of the existing pier shall include but may not be limited to the areas shown. The actual area to be repaired shall be determined by the Engineer at the time of construction.
Cost of epoxy grouting bars shall be included with Reinforcement Bars, Epoxy Coated.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h3(E)	10	#5	6'-9"	—
n1(E)	36	#5	2'-5"	└
s1(E)	14	#5	9'-3"	□
Concrete Structures			Cu. Yd.	3.3
Reinforcement Bars, Epoxy Coated			Pound	300
Structural Repair of Concrete (Depth Equal To or Less Than 5 in.)			Sq. Ft.	31



BAR s1(E)



BAR n1(E)

MODEL: Default
FILE NAME: E:\1815-6\Struct\Final Design\CADD\CADD Sheets\0320065-66295-009-Pier1 RepairDetails.dgn

Lin Engineering, Ltd.
Consulting Engineers
Springfield, Illinois

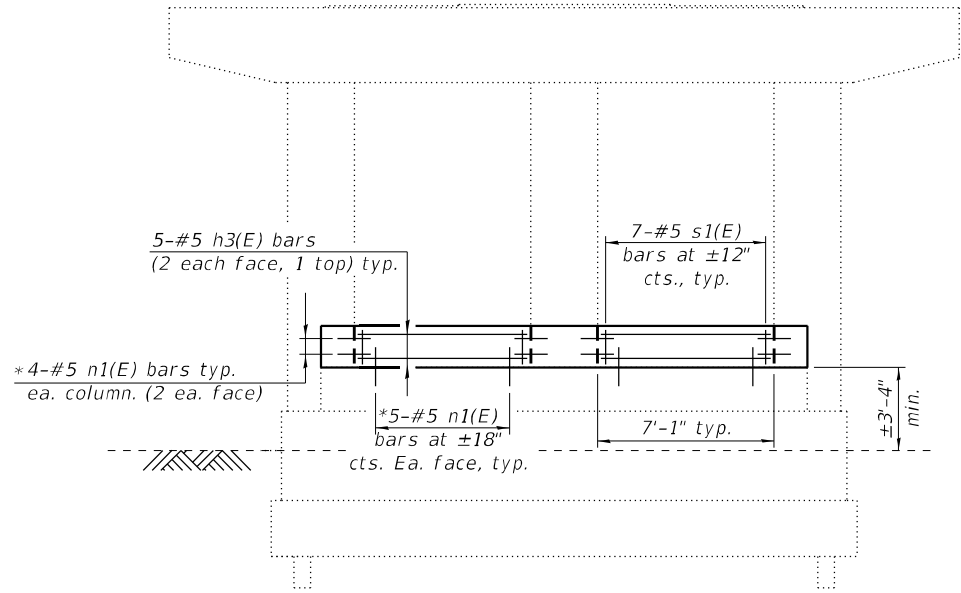
USER NAME =	DESIGNED - MSS	REVISED -
	CHECKED - AGJ	REVISED -
PLOT SCALE=	DRAWN - AJF	REVISED -
PLOT DATE = 1/9/2025	CHECKED - MTH	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

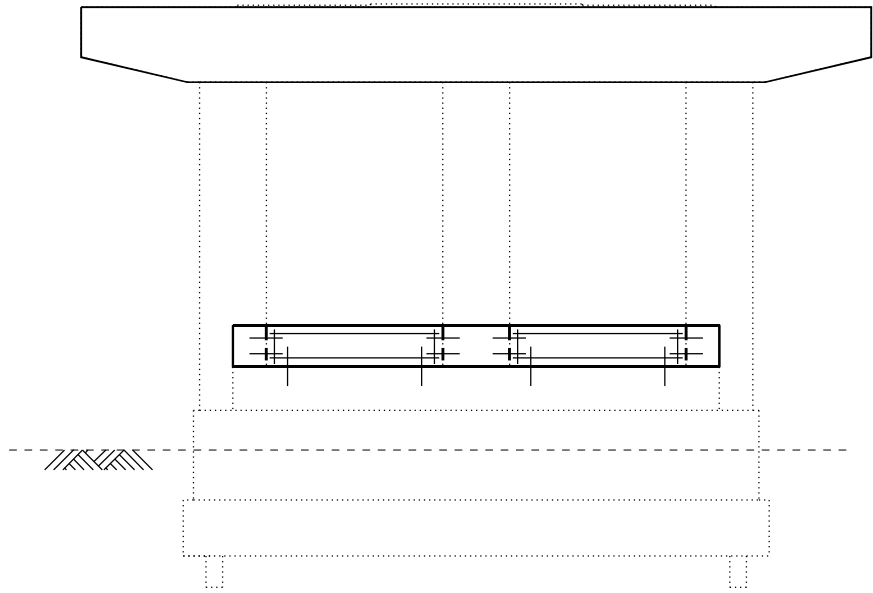
PIER 1 REPAIR DETAILS
STRUCTURE NO. 032-0065

SHEET 9 OF 12 SHEETS

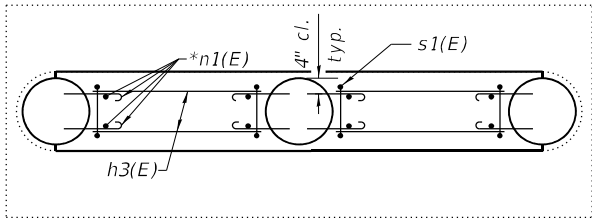
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	(32,47-4)VB	GRUNDY/KENDALL	143	115
CONTRACT NO. 66295				
		ILLINOIS	FED. AID PROJECT	



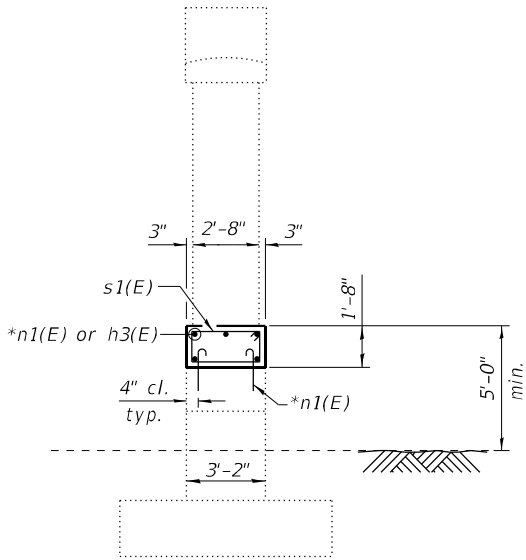
ELEVATION - PIER 2
(Looking North)



ELEVATION - PIER 2
(Looking South)



PLAN - PIER 2



END VIEW

* Epoxy grout n(E) bars in 9" min. deep holes according to Article 584 of the Standard Specifications.

LEGEND

- Structural Repair of Concrete
(Depth Equal To or Less Than 5 in.)
- Square Feet

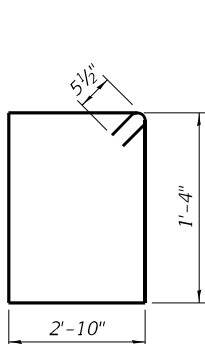
Notes:

Repair of the existing pier shall include but may not be limited to the areas shown. The actual area to be repaired shall be determined by the Engineer at the time of construction.

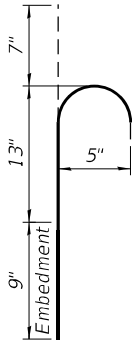
Cost of epoxy grouting bars shall be included with Reinforcement Bars, Epoxy Coated.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h3(E)	10	#5	6'-9"	—
n1(E)	36	#5	2'-5"	⌋
s1(E)	14	#5	9'-3"	□
Concrete Structures			Cu. Yd.	3.2
Reinforcement Bars, Epoxy Coated			Pound	300

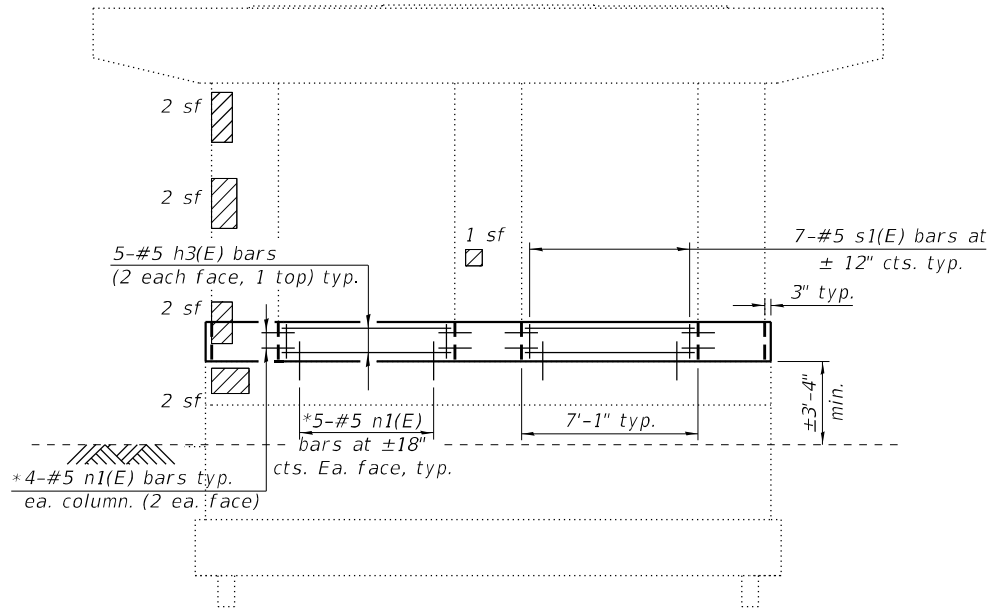


BAR s1(E)

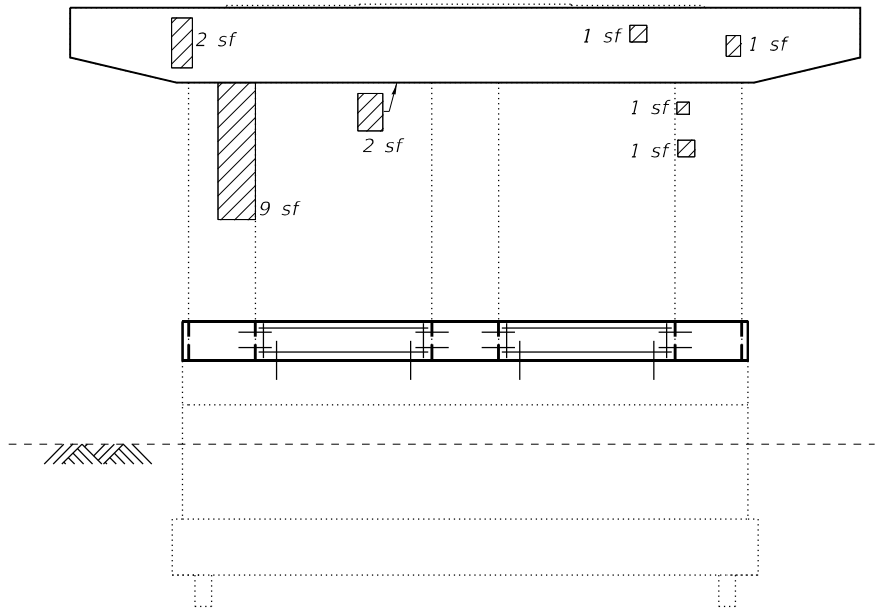


BAR n1(E)

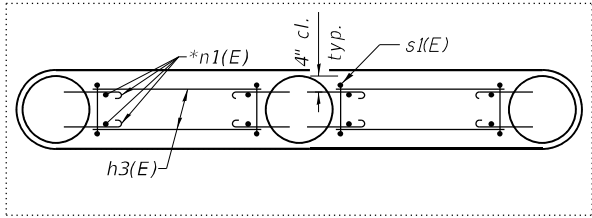
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FILE NAME: E:\1815-6\Struct\Final Design\CADD\CADD Sheets\0320065-66295-010-Pier2RepairDetails.dgn



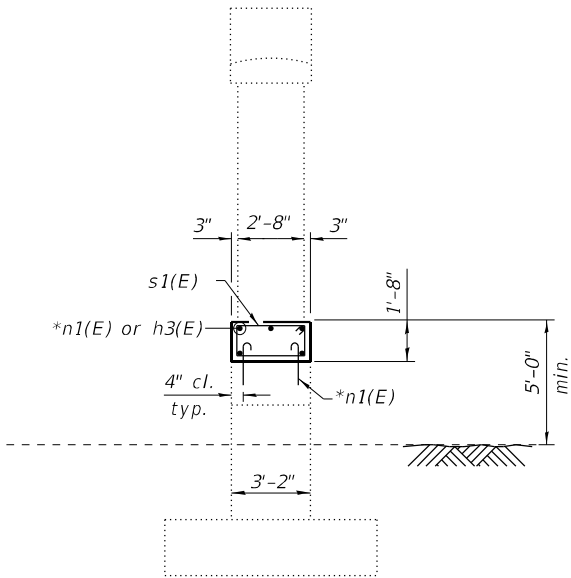
ELEVATION - PIER 3
(Looking North)



ELEVATION - PIER 3
(Looking South)



PLAN - PIER 3



END VIEW

* Epoxy grout n(E) bars in 9" min. deep holes according to Article 584 of the Standard Specifications.

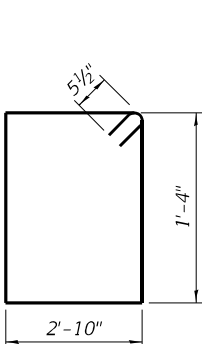
LEGEND

- Structural Repair of Concrete (Depth Equal To or Less Than 5 in.)
- Sf Square Feet

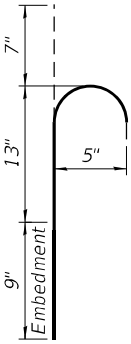
Notes:
Repair of the existing pier shall include but may not be limited to the areas shown. The actual area to be repaired shall be determined by the Engineer at the time of construction.
Cost of epoxy grouting bars shall be included with Reinforcement Bars, Epoxy Coated.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h3(E)	10	#5	6'-9"	—
n1(E)	36	#5	2'-5"	└
s1(E)	14	#5	9'-3"	□
Concrete Structures			Cu. Yd.	3.4
Reinforcement Bars, Epoxy Coated			Pound	300
Structural Repair of Concrete (Depth Equal To or Less Than 5 in.)			Sq. Ft.	26

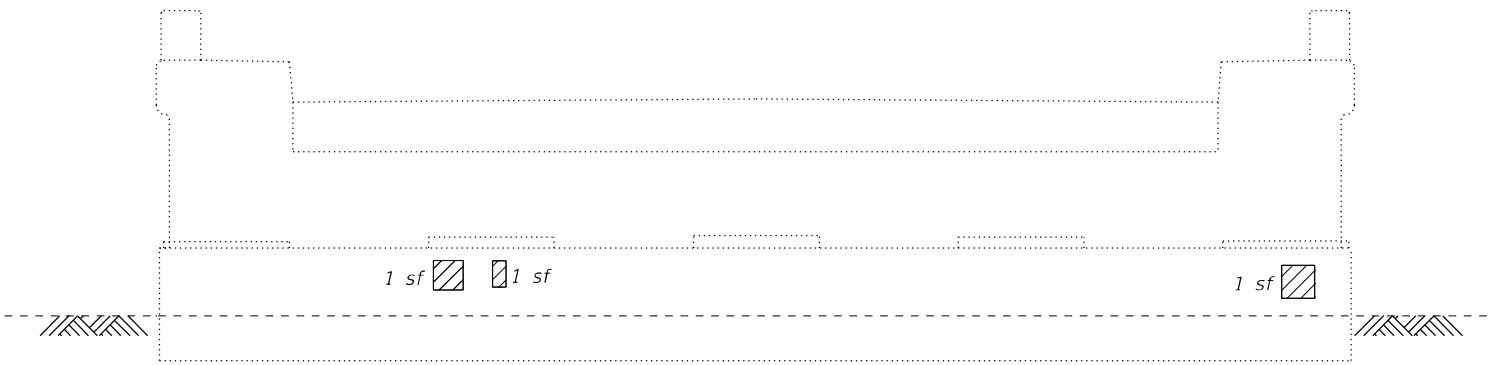


BAR s1(E)

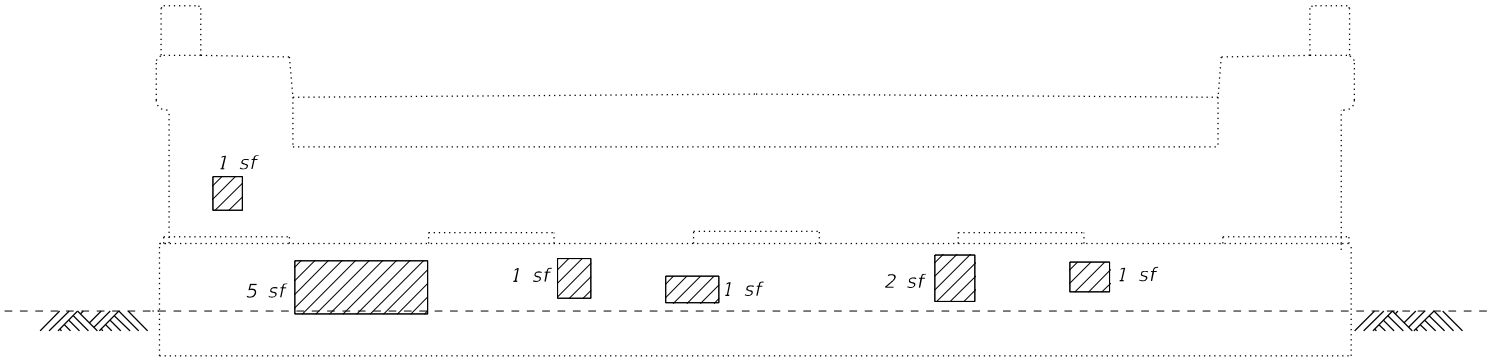


BAR n1(E)

MODEL: Default
FILE NAME: E:\1815-6\Struct\Final Design\CADD\CADD Sheets\0320065-66295-011-Pier3RepairDetails.dgn



ELEVATION - NORTH ABUTMENT
(Looking North)



ELEVATION - SOUTH ABUTMENT
(Looking South)

Note:
Repair of the existing abutments shall include but may not be limited to the areas shown. The actual area to be repaired shall be determined by the Engineer at the time of construction.

LEGEND

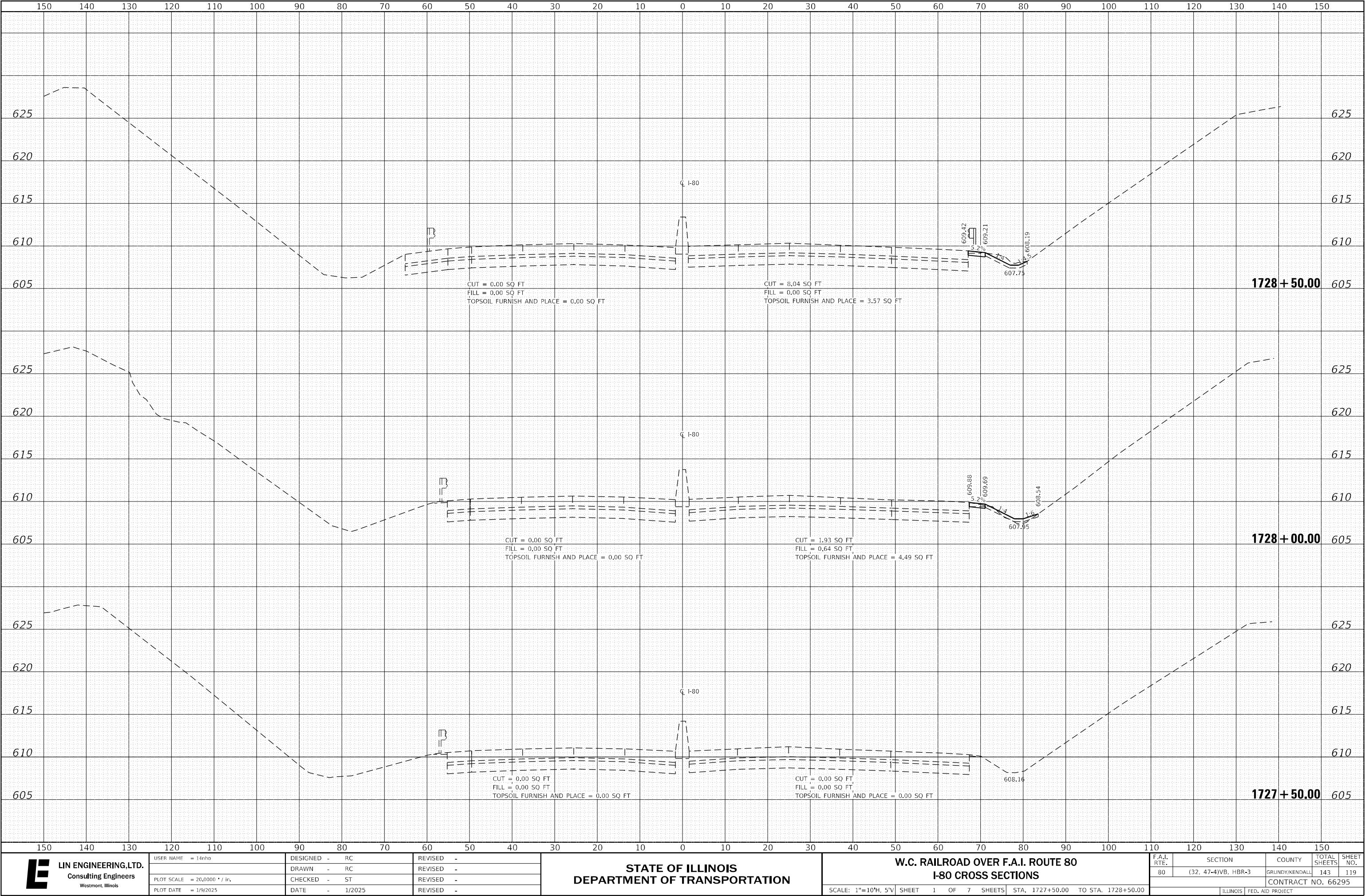
 Structural Repair of Concrete
(Depth Equal To or Less Than 5 in.)

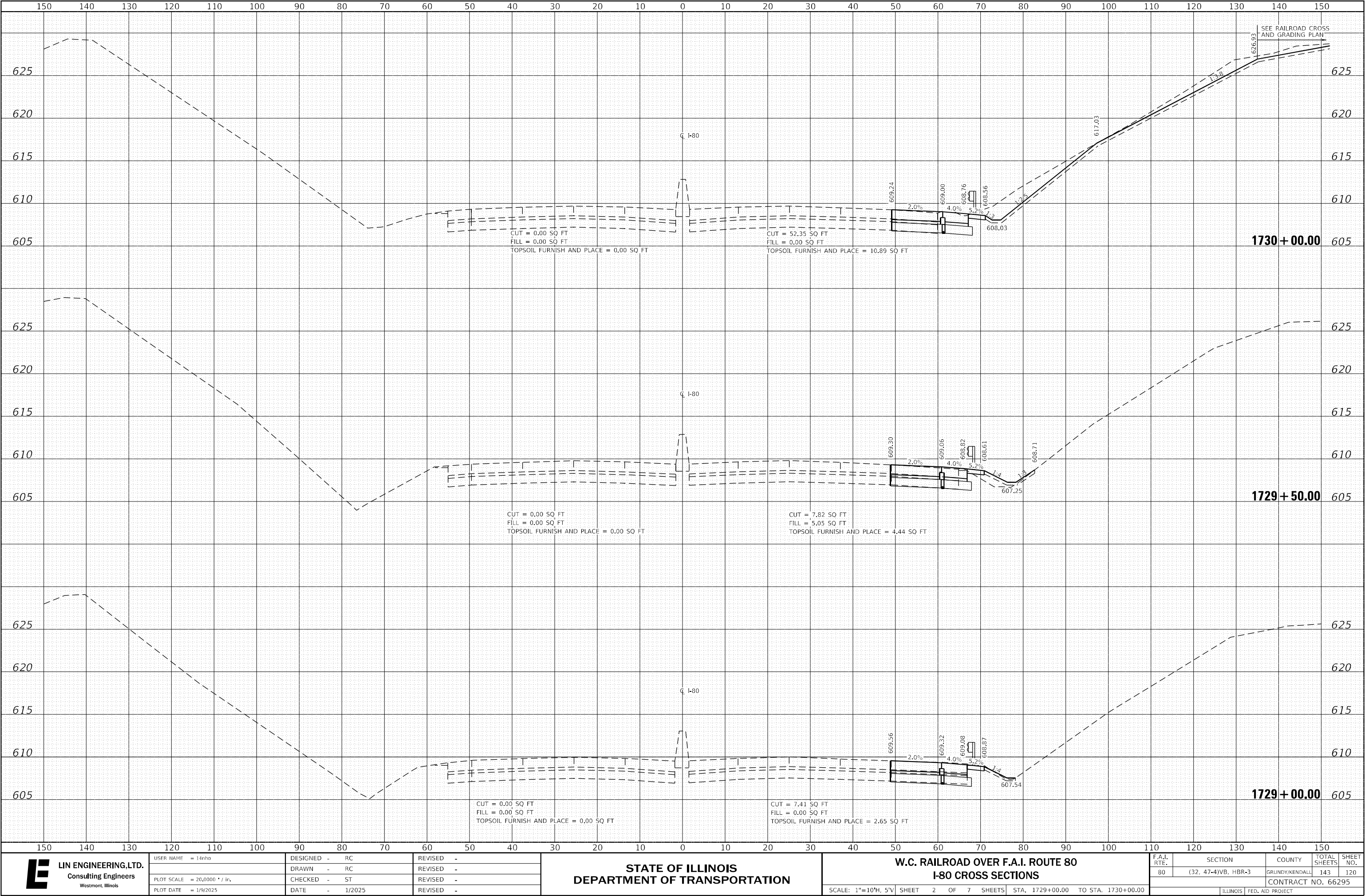
sf Square Feet

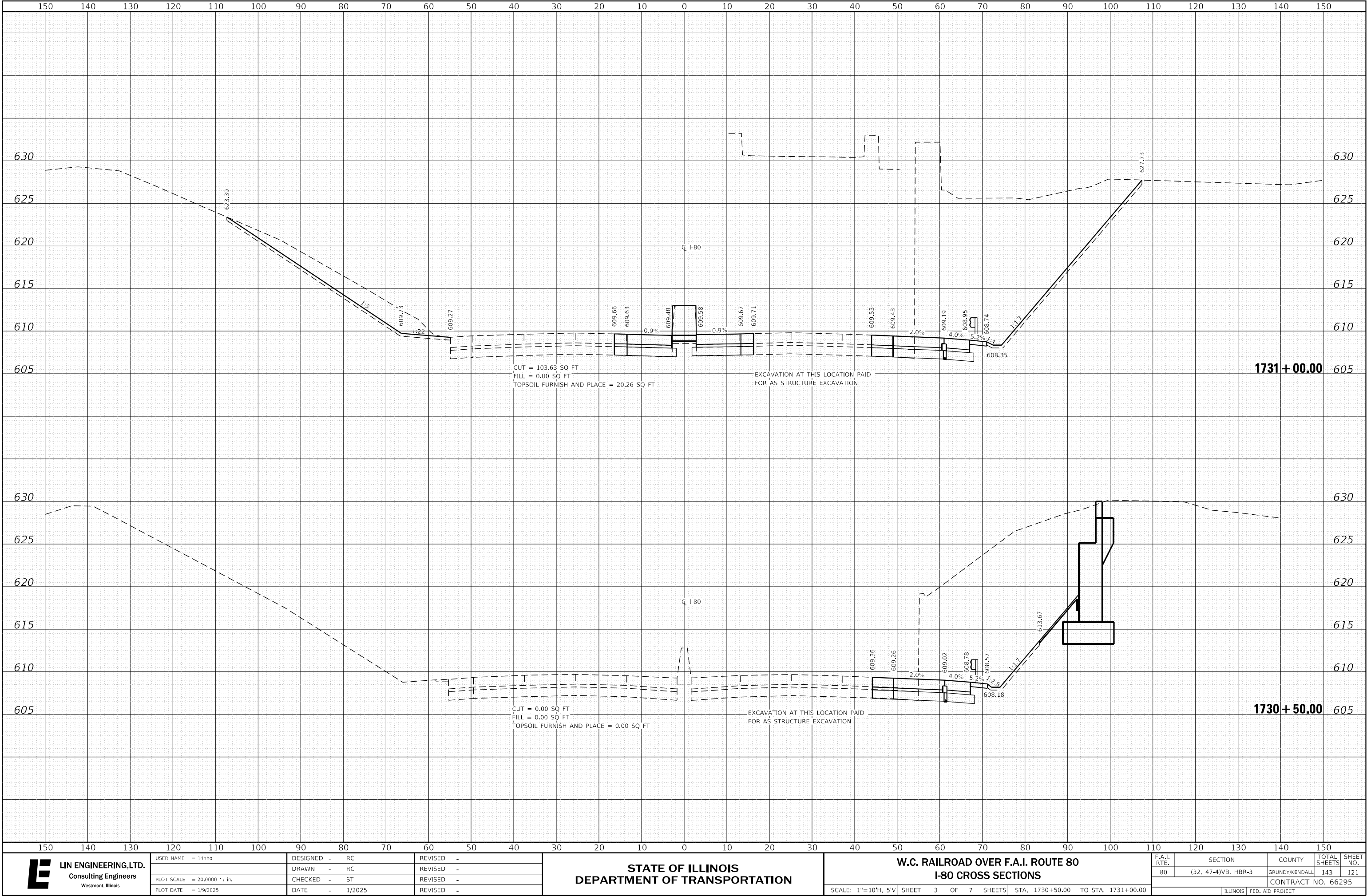
BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth Equal To or Less Than 5 in.)	Sq. Ft.	14

MODEL: Default
FILE NAME: E:\1815-6\Struct\Final Design\CADD\CADD Sheets\0320065-66295-012-AbutmentRepairDetails.dgn









LIN ENGINEERING, LTD.
Consulting Engineers
Westmont, Illinois

USER NAME = l4nho	DESIGNED - RC	REVISED -
	DRAWN - RC	REVISED -
PLOT SCALE = 20,0000' / in.	CHECKED - ST	REVISED -
PLOT DATE = 1/9/2025	DATE - 1/2025	REVISED -

DESIGNED - RC	REVISED -
DRAWN - RC	REVISED -
CHECKED - ST	REVISED -
DATE - 1/2025	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

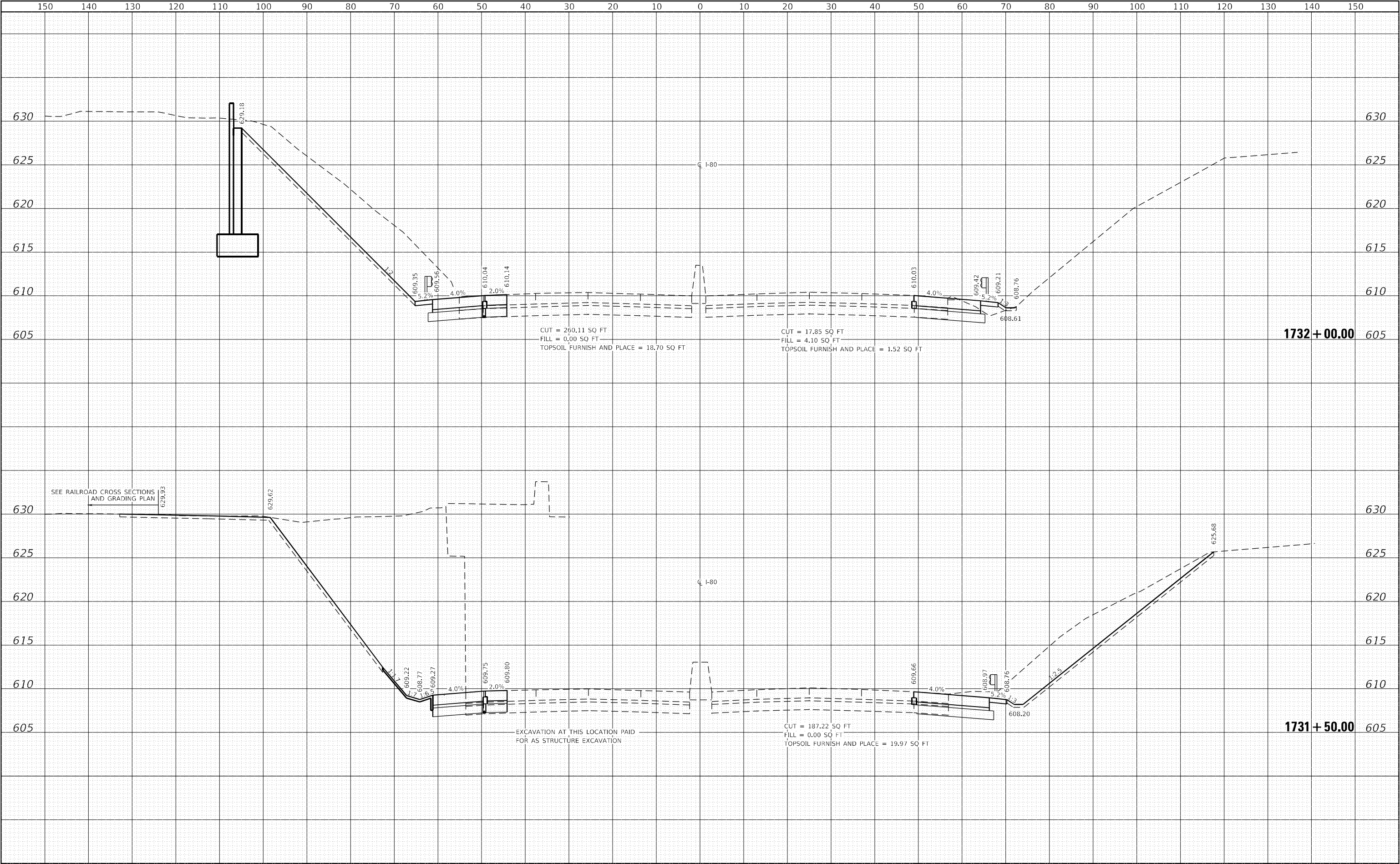
W.C. RAILROAD OVER F.A.I. ROUTE 80
I-80 CROSS SECTIONS

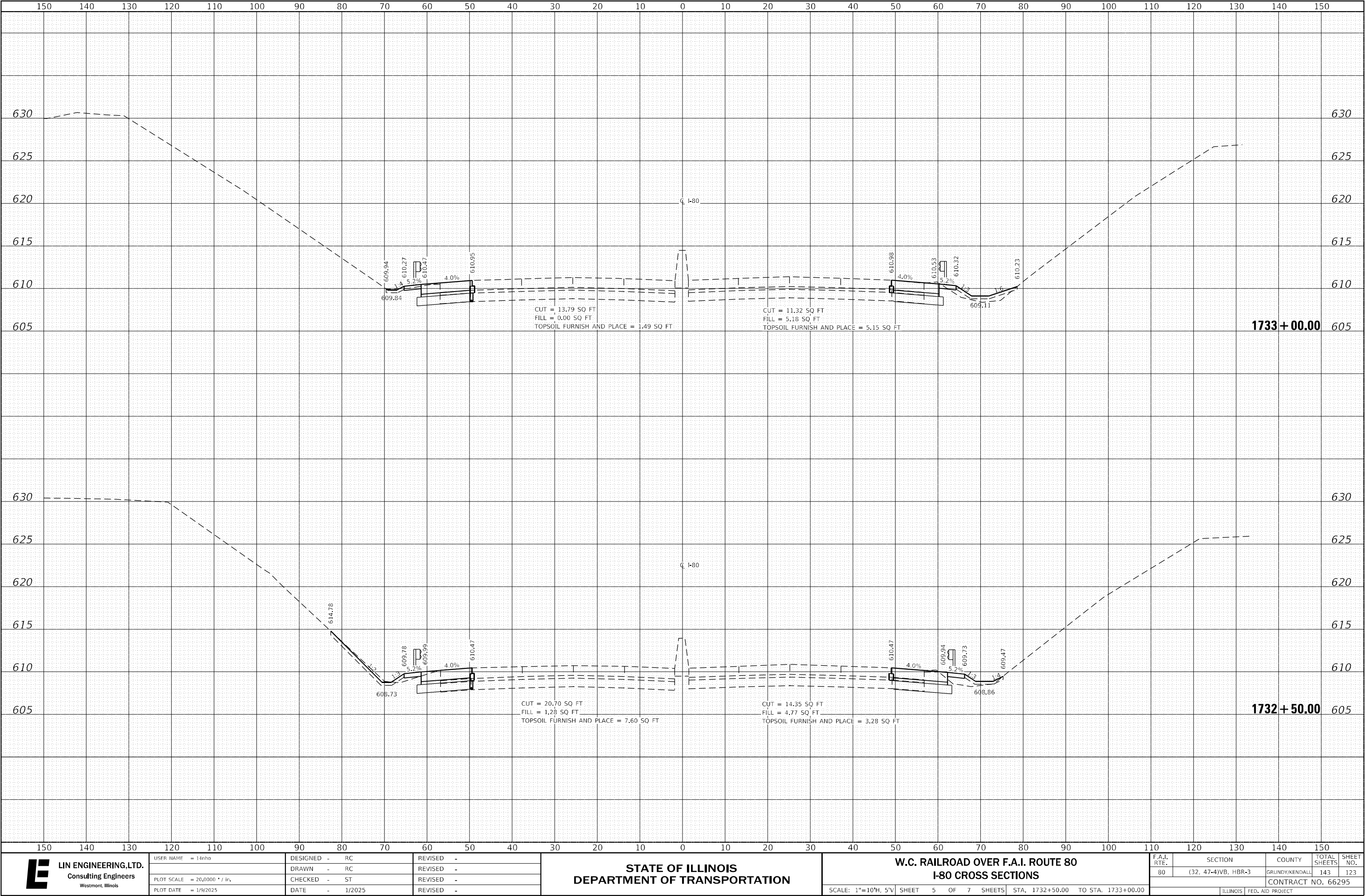
SCALE: 1"=10'H, 5'V

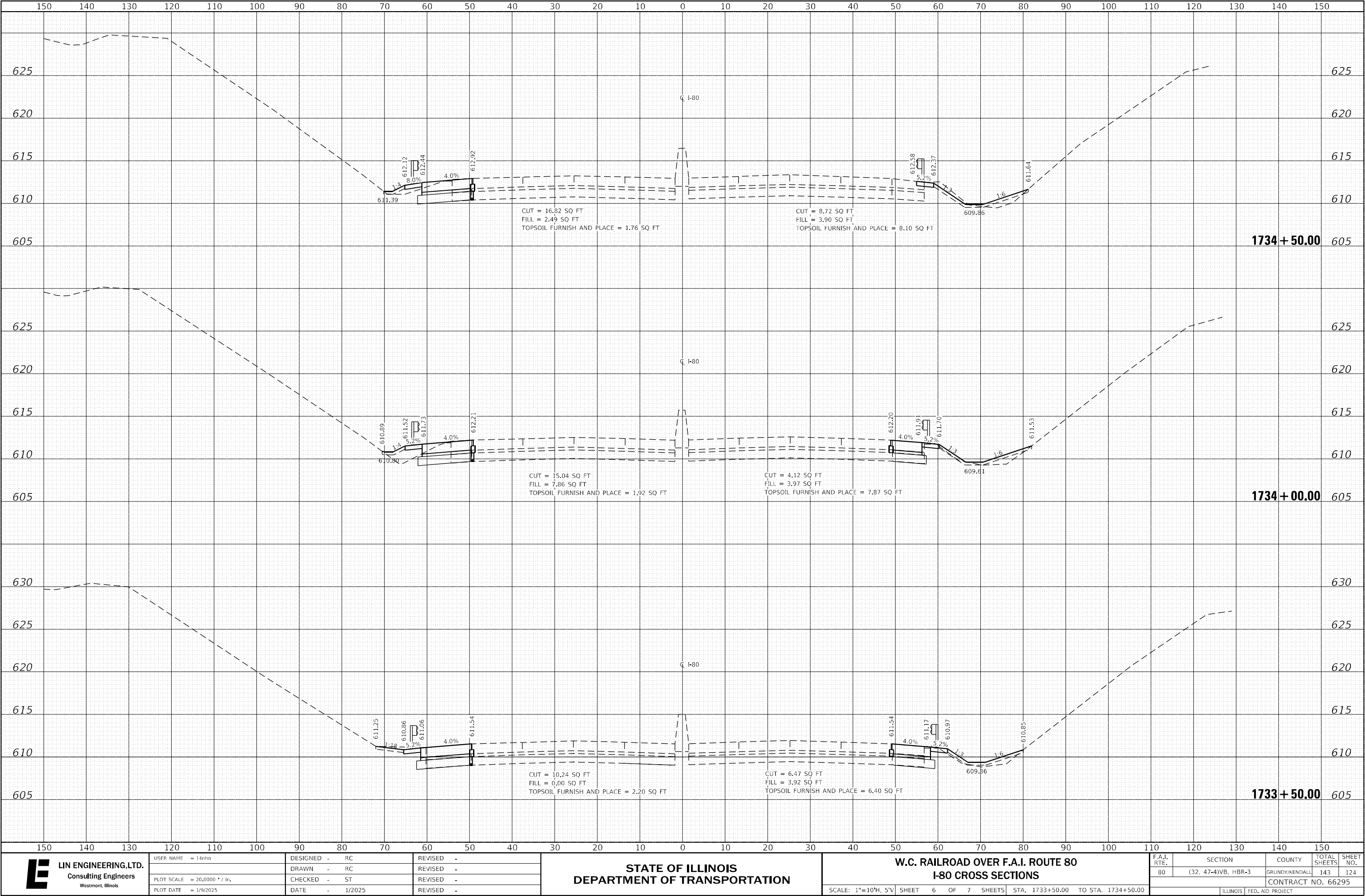
SHEET 3 OF 7 SHEETS

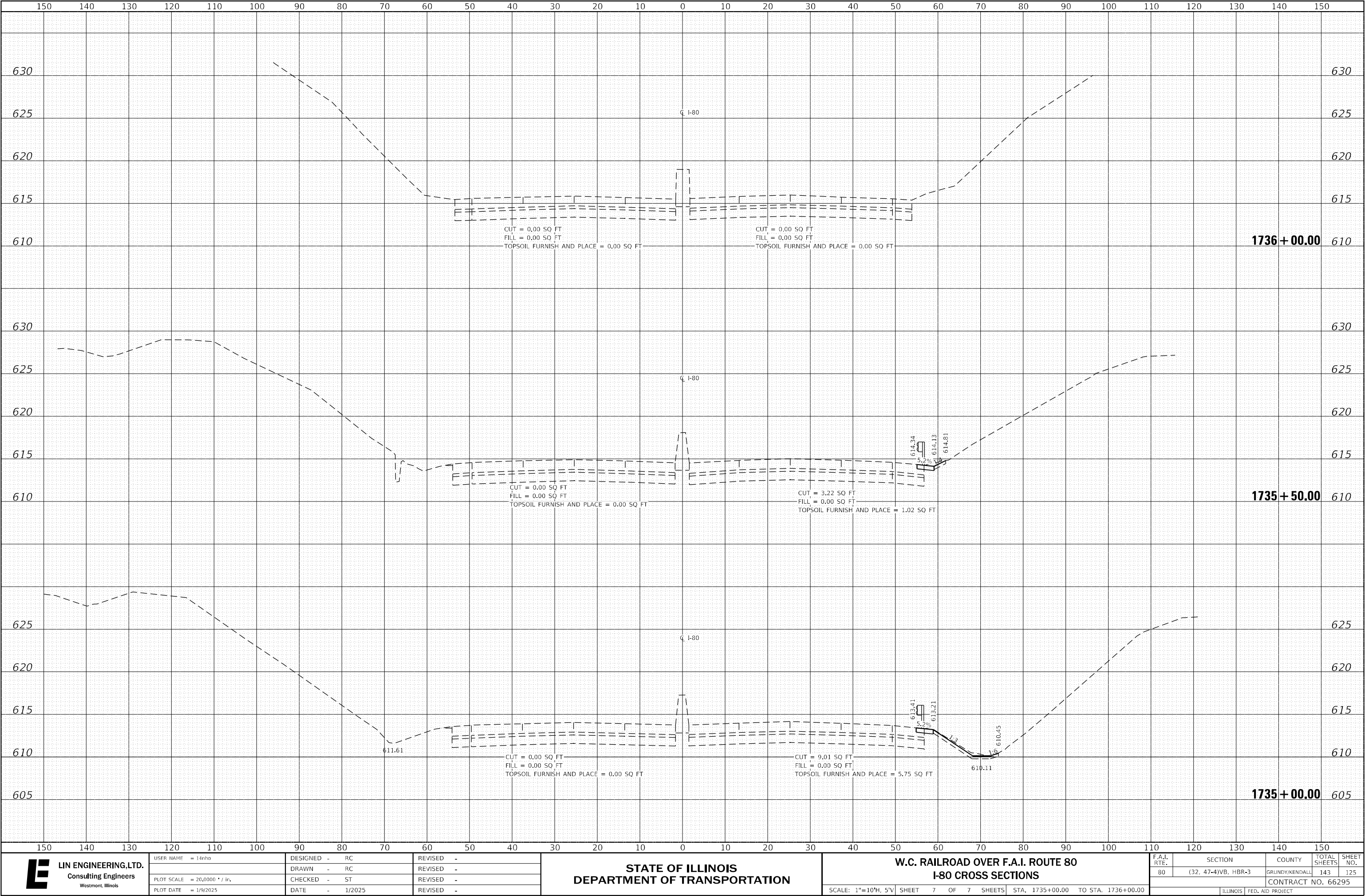
STA. 1730+50.00 TO STA. 1731+00.00

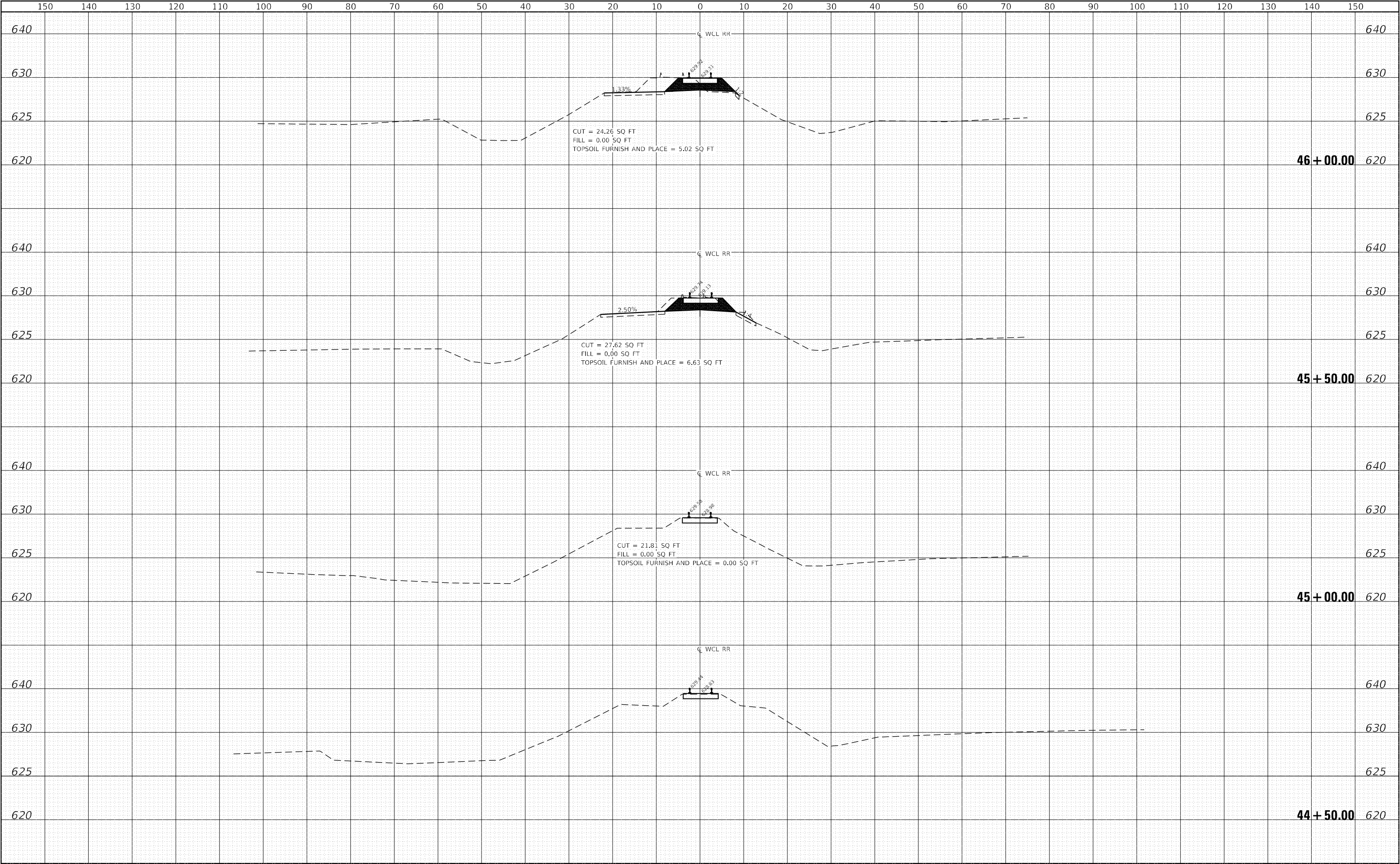
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	(32, 47-4)VB, HBR-3	GRUNDY/KENDALL	143	121
CONTRACT NO. 66295				
ILLINOIS FED. AID PROJECT				

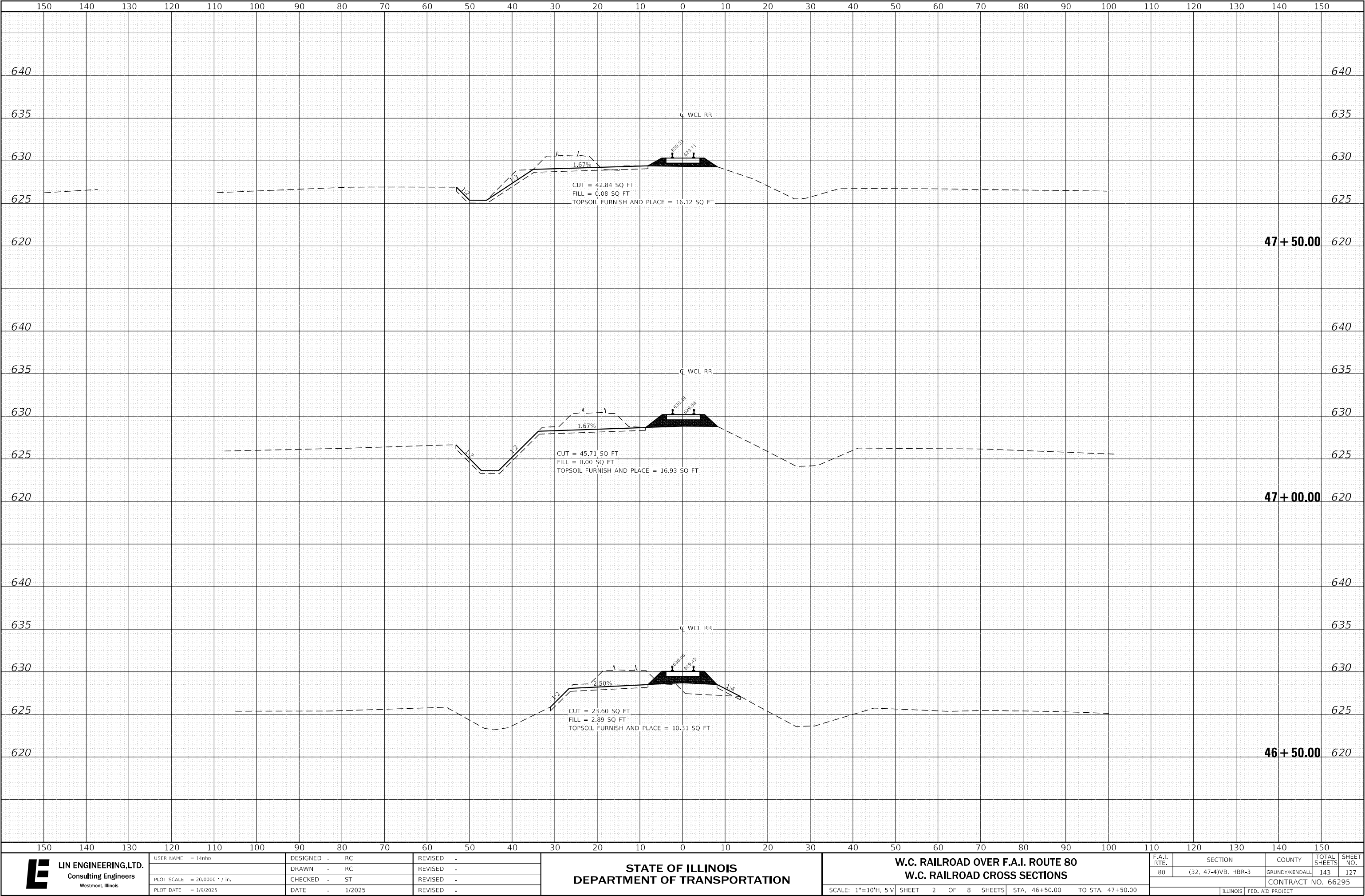


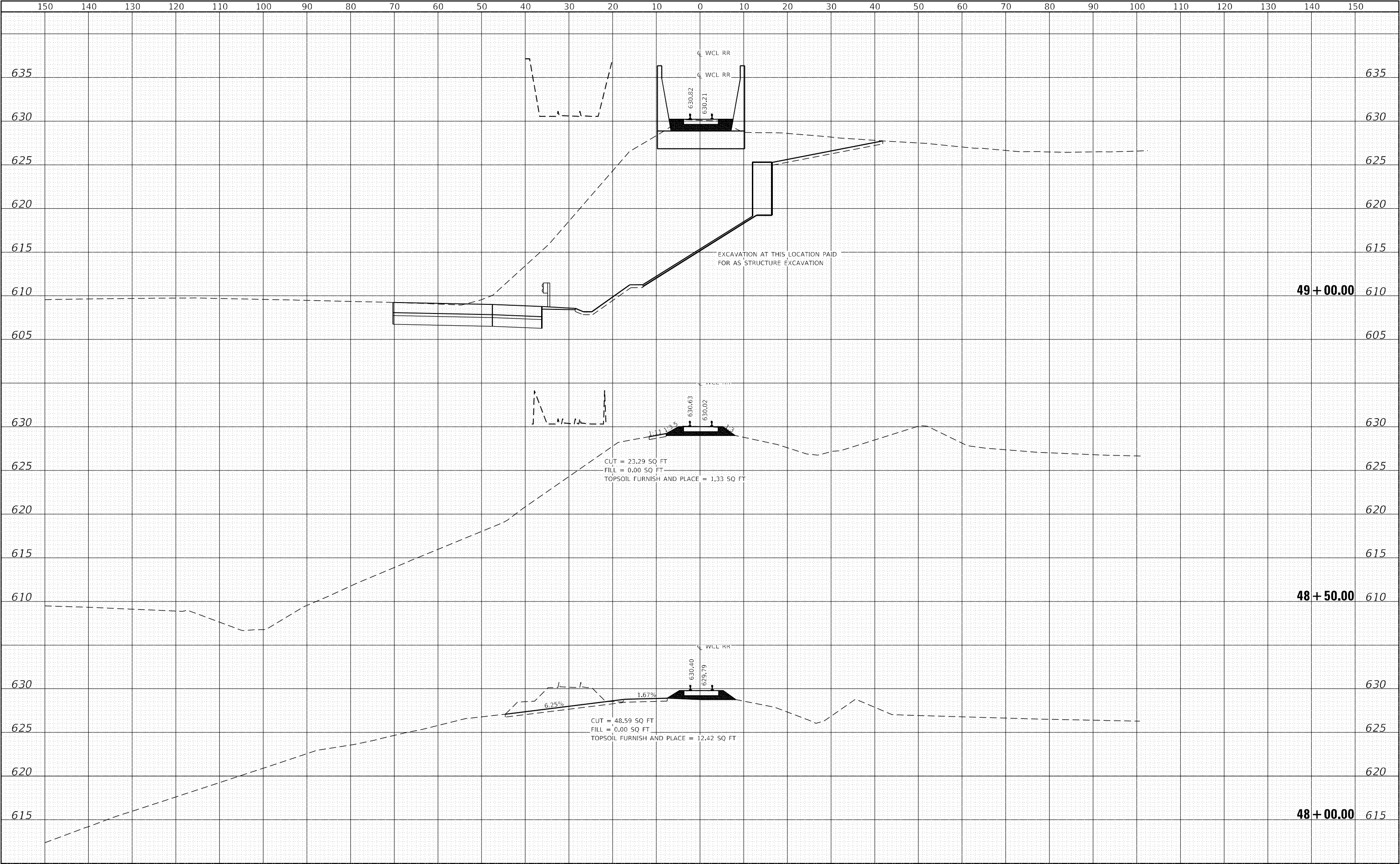


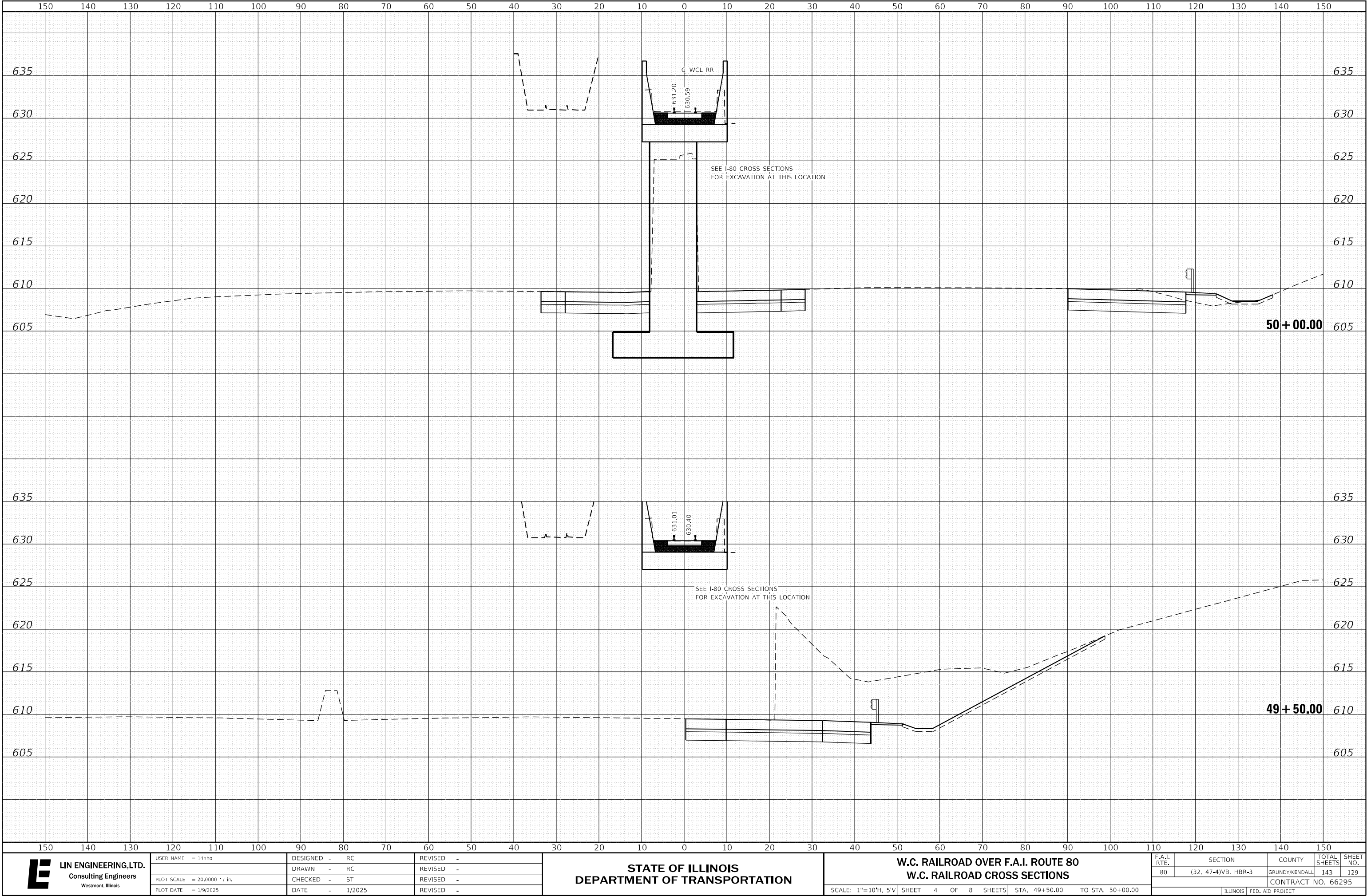


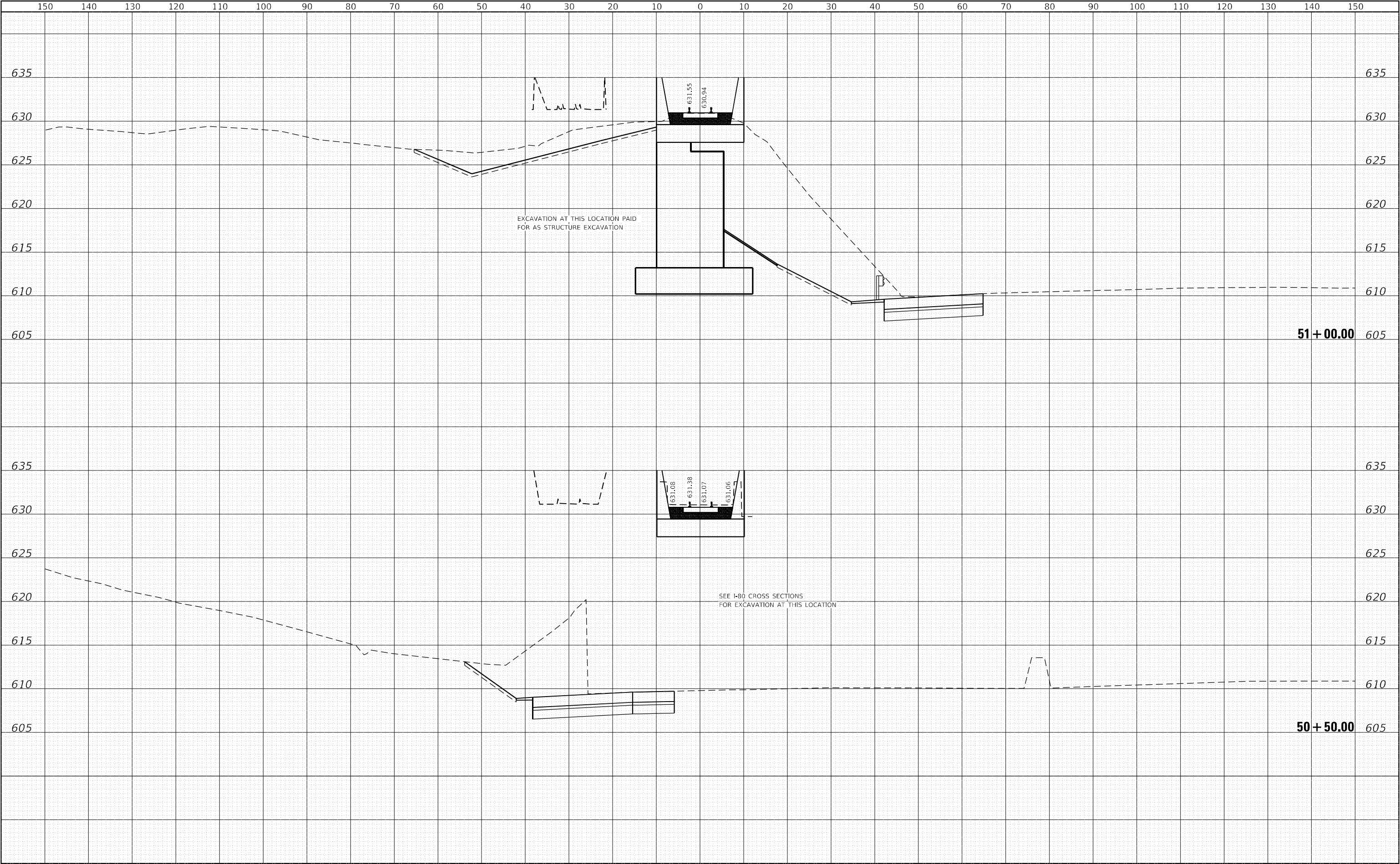


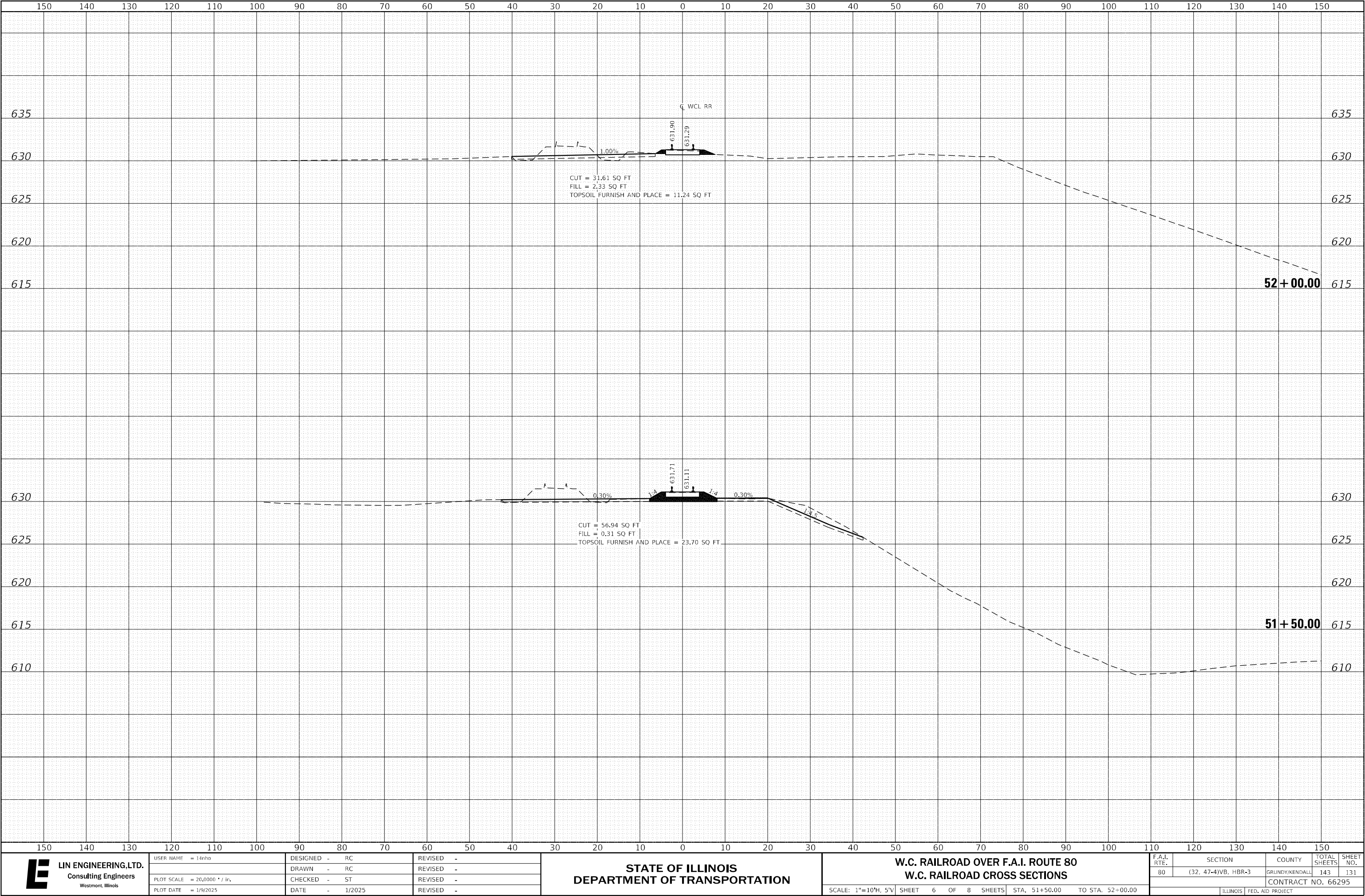


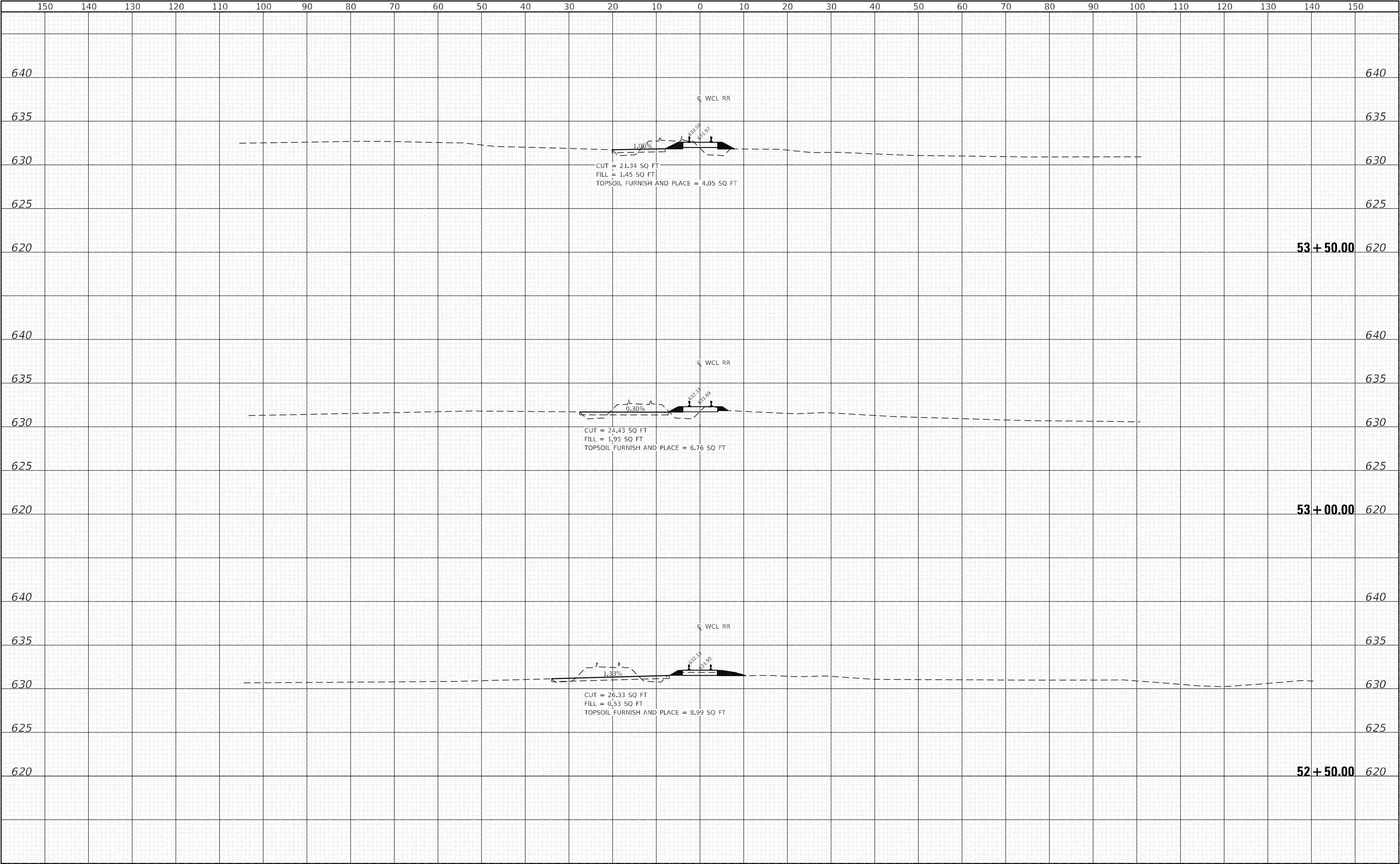


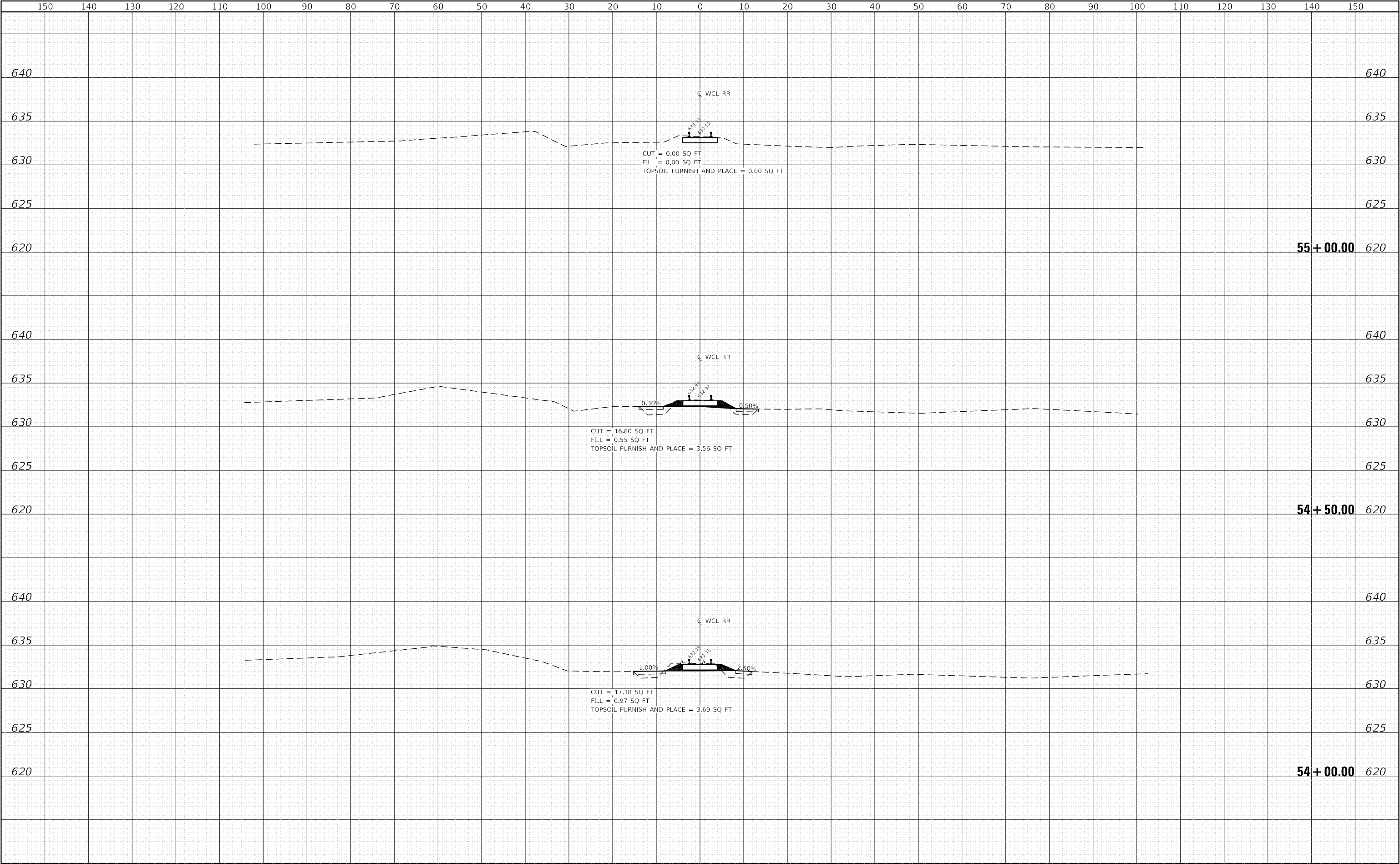


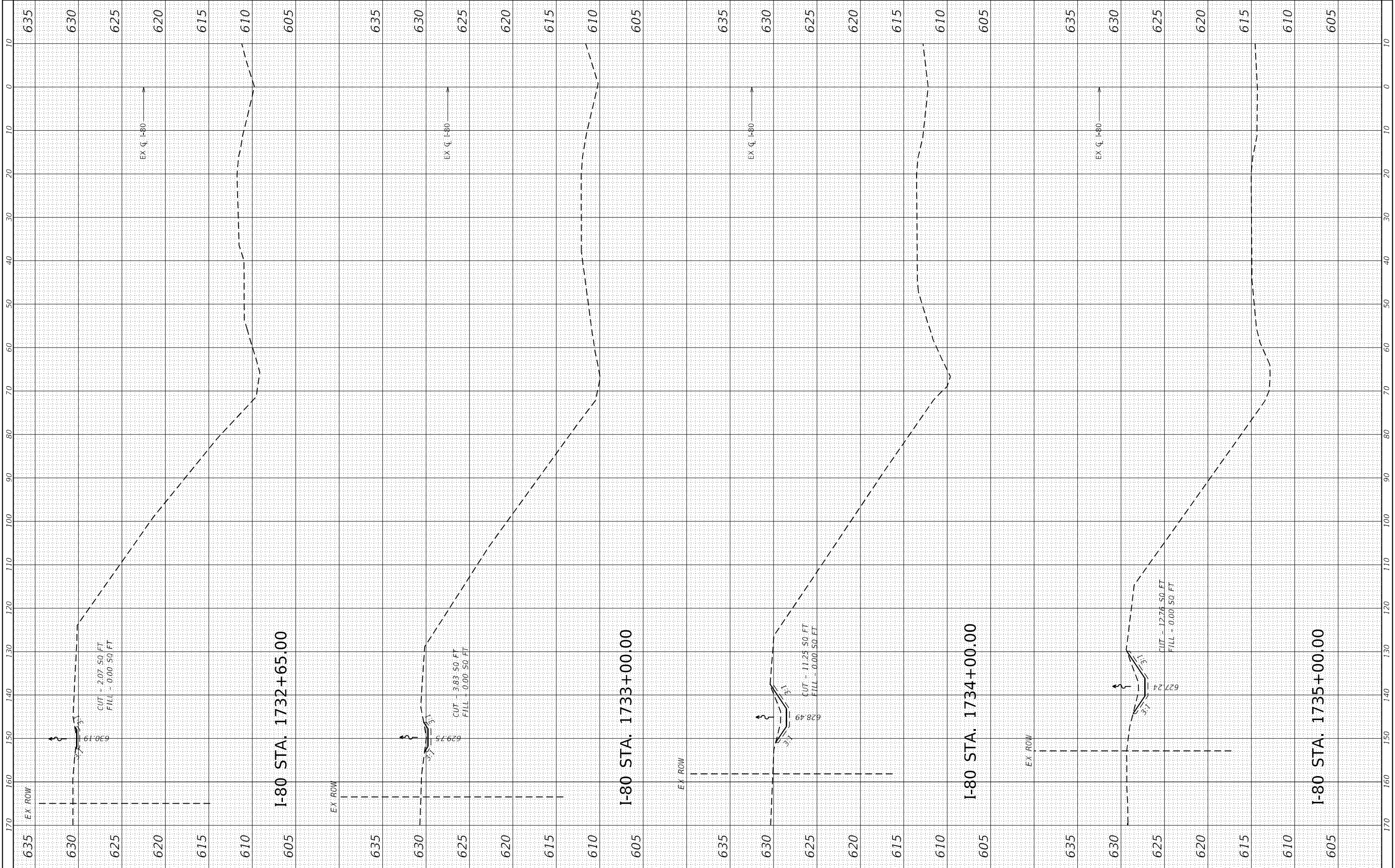














LIN ENGINEERING, LTD.
Consulting Engineers
Westmont, Illinois

USER NAME = LIN04-PC
PLOT SCALE = 20,0000' / in.
PLOT DATE = 1/9/2025

DESIGNED - LM
DRAWN - LM
CHECKED - SGL
DATE - 1/2025

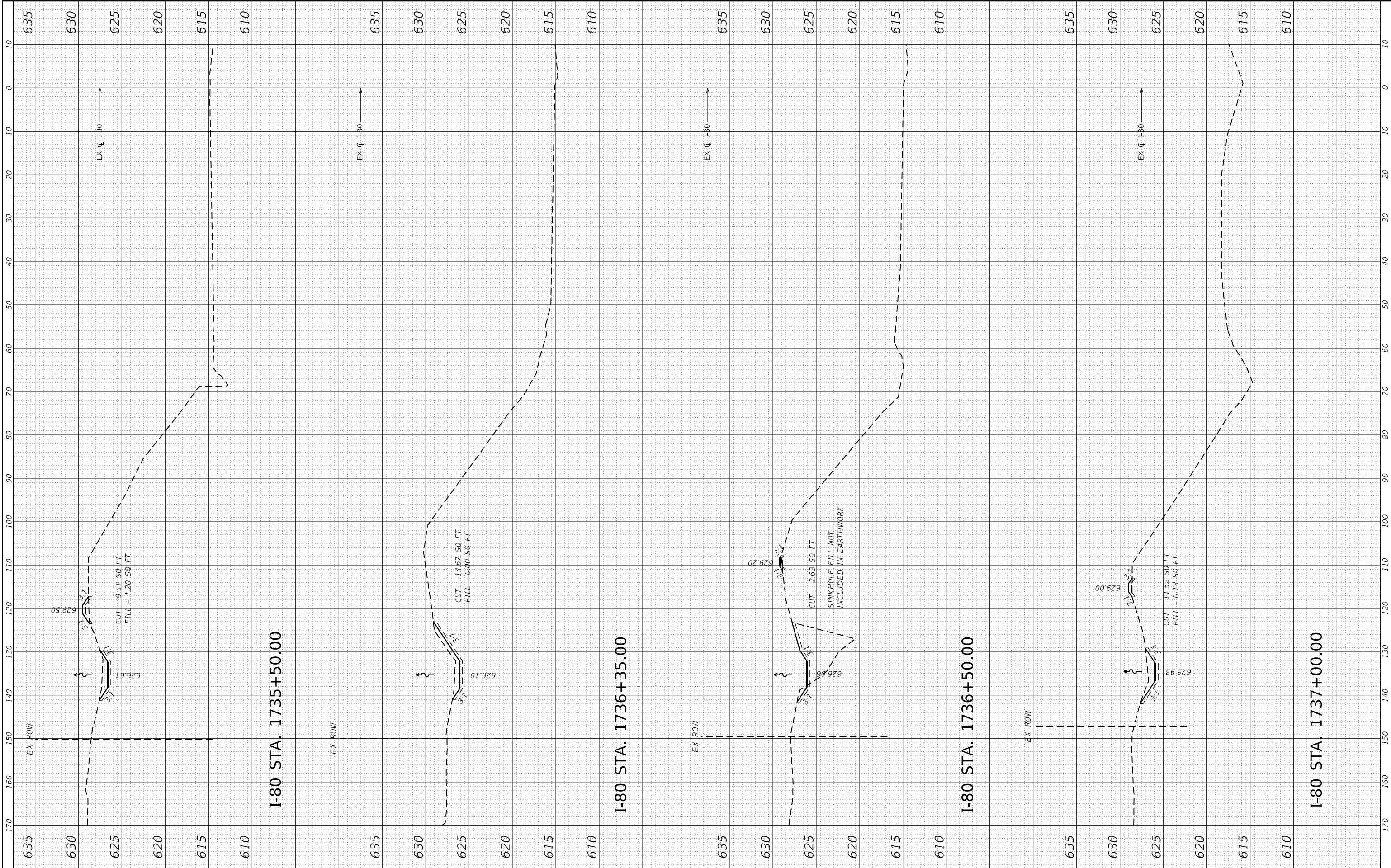
REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED I-80 UPPER DITCH CROSS SECTIONS
SINKHOLE REPAIR & ANALYSIS

SCALE: 1"=10H:5V SHEET 2 OF 6 SHEETS STA. 1735+50 TO STA. 1737+00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	(32, 47-4) VB, HBR-3	KENDALL	143	135
CONTRACT NO. 66295				
ILLINOIS FED. AID PROJECT				





LIN ENGINEERING, LTD.
Consulting Engineers
Westmont, Illinois

USER NAME = LIN04-PC
DESIGNED - LM
DRAWN - LM
PLOT SCALE = 20,0000 * / in.
CHECKED - SGL
PLOT DATE = 1/9/2025
DATE - 1/2025

DESIGNED - LM
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CHECKED - SGL
DATE - 1/2025

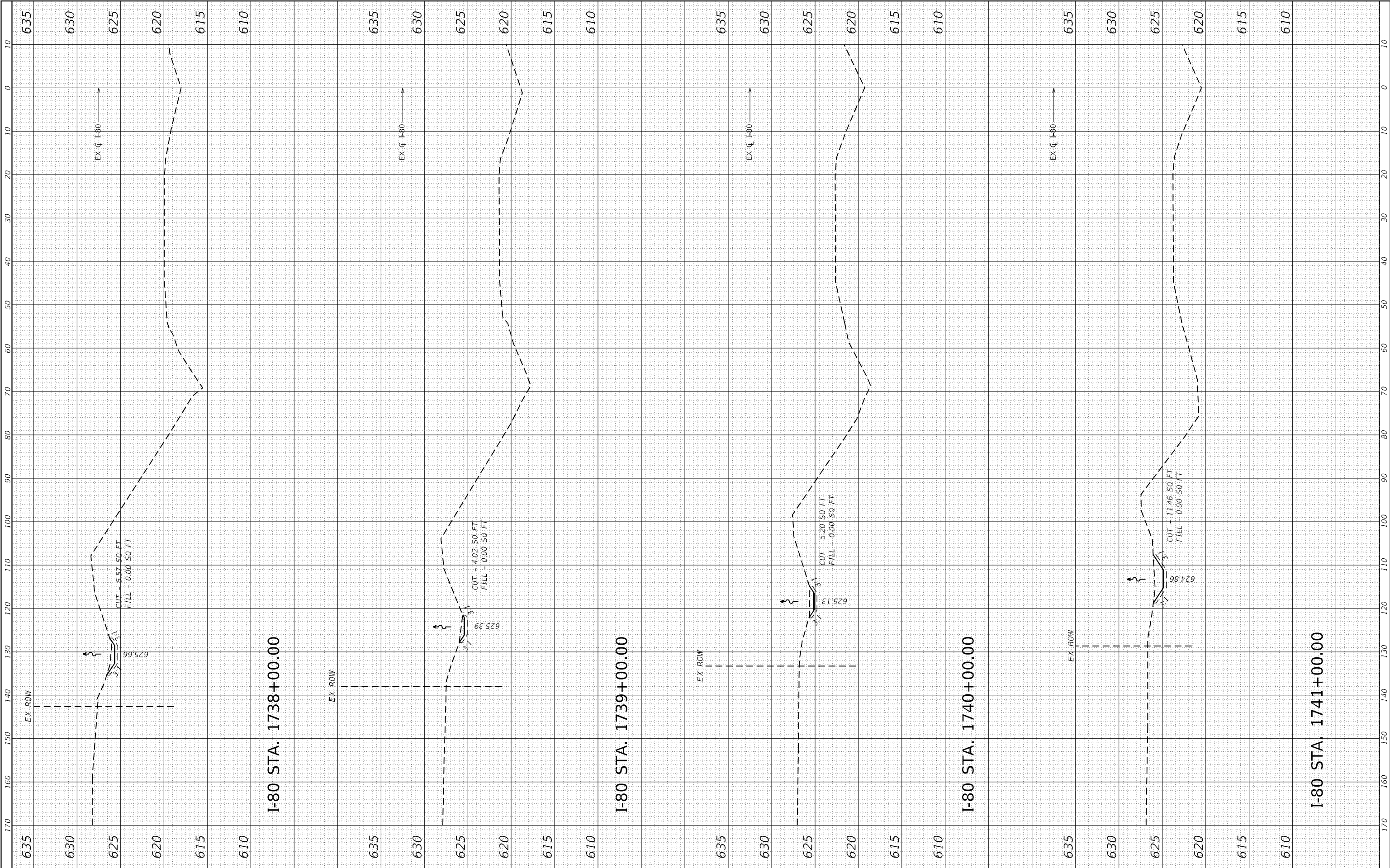
REVISED -
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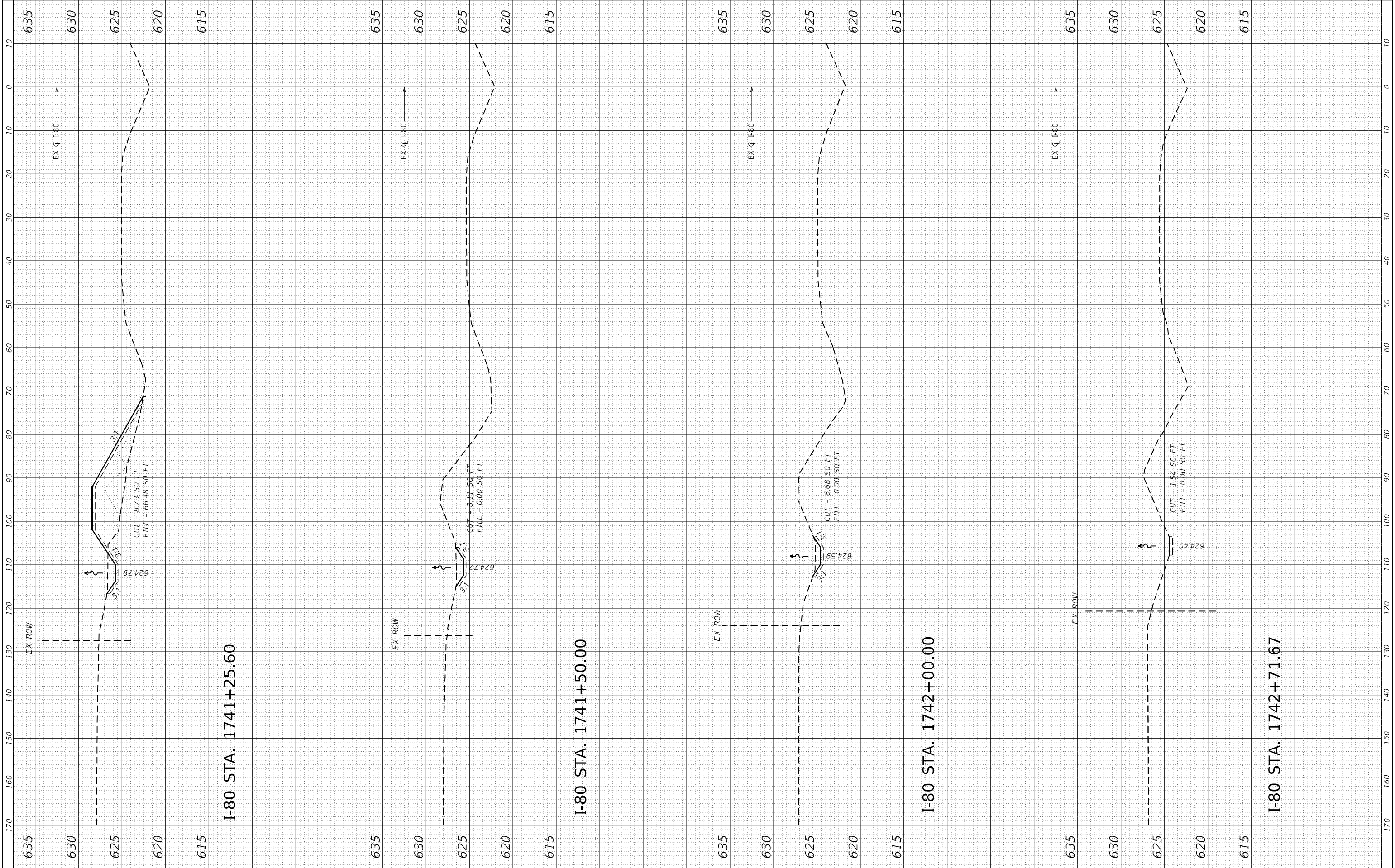
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED I-80 UPPER DITCH CORSS SECTIONS
SINKHOLE REPAIR & ANALYSIS

SCALE: 1"=10H:5V SHEET 3 OF 6 SHEETS STA. 1738+00 TO STA. 1741+00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	(32, 47-4) VB, HBR-3	KENDALL	143	136
CONTRACT NO. 66295				
ILLINOIS FED. AID PROJECT				







LIN ENGINEERING, LTD.
Consulting Engineers
Westmont, Illinois

USER NAME	= LIN04-PC
PLOT SCALE	= 20,0000 ' / in.
PLOT DATE	= 1/9/2025

DESIGNED	- LM
DRAWN	- LM
CHECKED	- SGL
DATE	- 11/2023

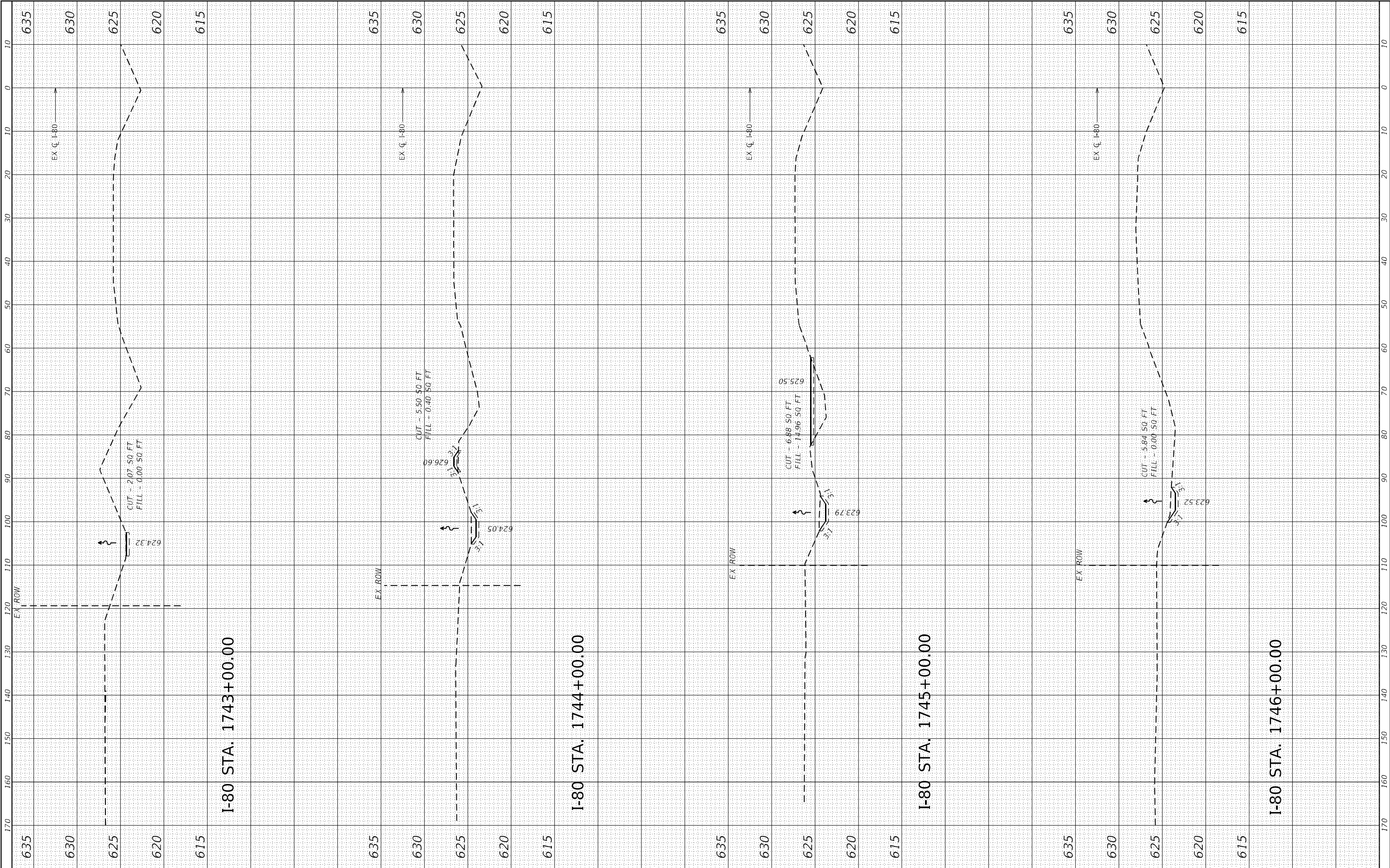
REVISED	-
REVISED	-
REVISED	-
REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED I-80 UPPER DITCH CROSS SECTIONS
SINKHOLE REPAIR & ANALYSIS

SCALE: 1"=10H:5V SHEET 5 OF 6 SHEETS STA. 1743+00 TO STA. 1746+00

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	(32, 47-4) VB, HBR-3	KENDALL	143	138
CONTRACT NO. 66295				
		ILLINOIS	FED. AID PROJECT	



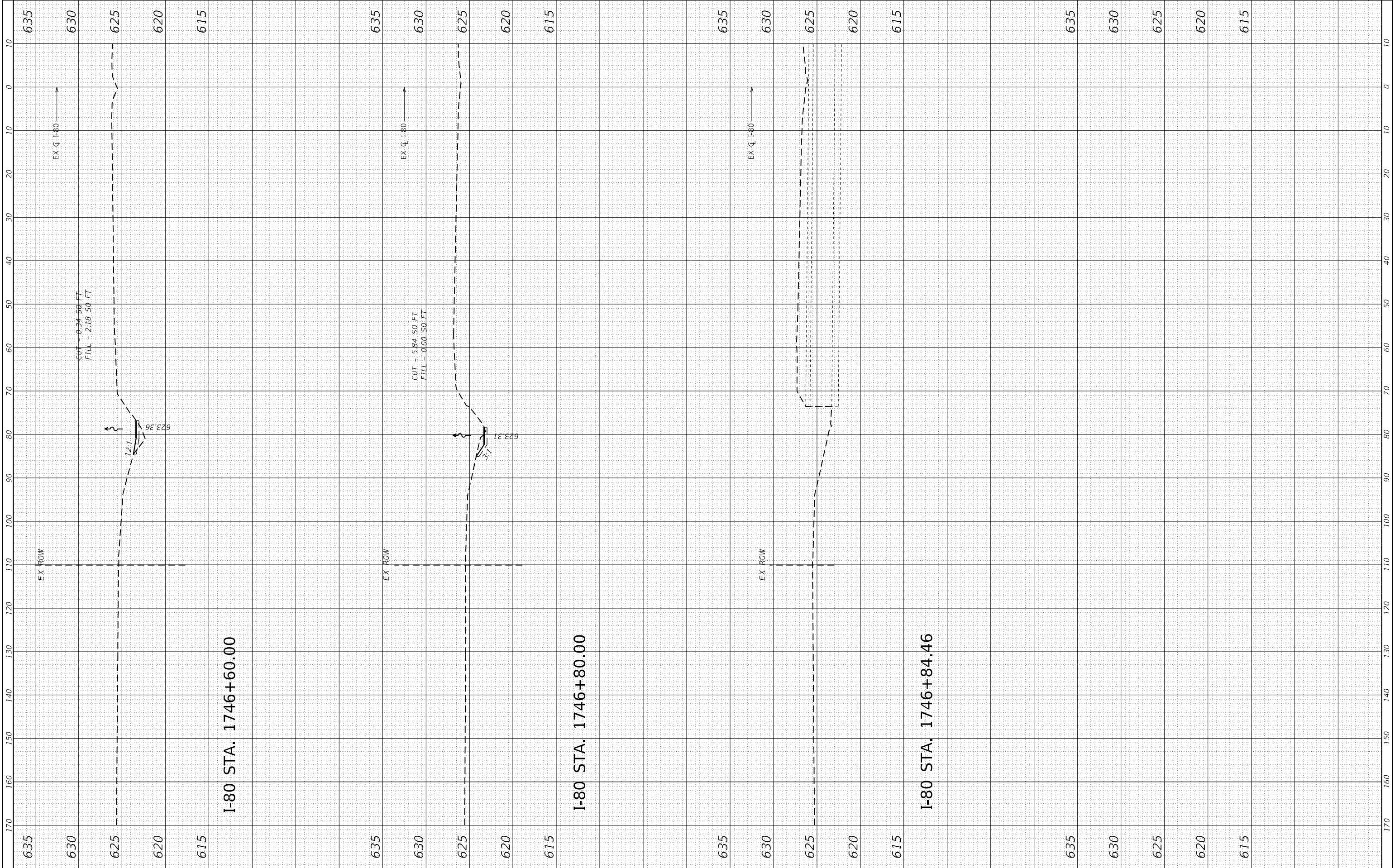


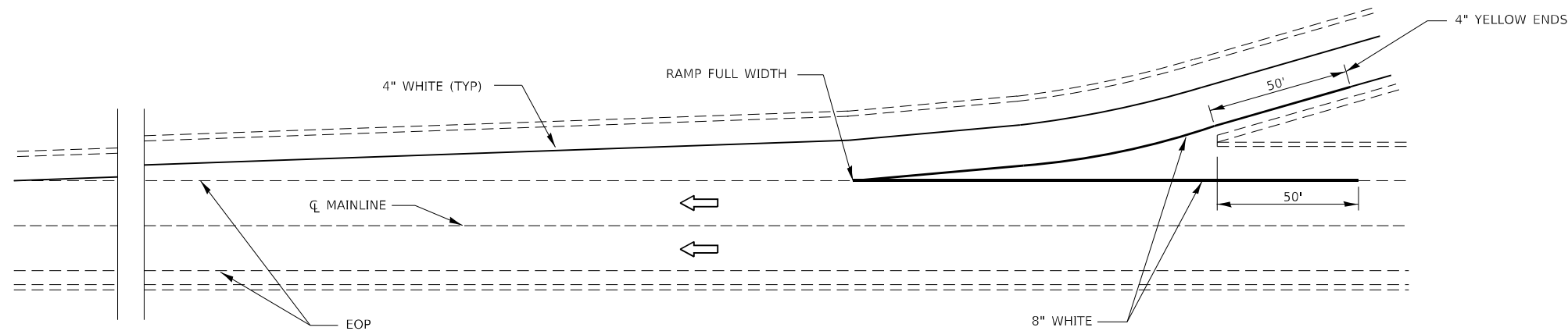


Diagram illustrating the dimensions and specifications for Amber Type "C" Prismatic Barrier Wall Reflectors:

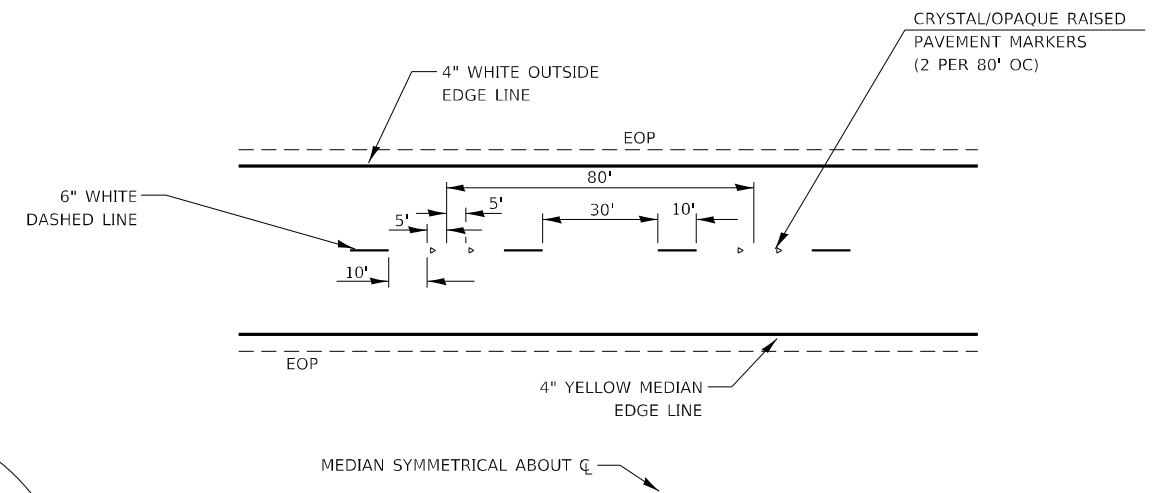
- The reflector is shown in a perspective view, highlighting its profile and the arrangement of reflective segments.
- The overall length of the reflector is indicated as 34" (MIN.).
- The height of the reflector is 24".
- The width of the reflector is 32".
- The distance between the centerlines of the reflective segments is 18".
- The distance between the centerlines of the reflective segments is 6".
- The reflective segments are labeled "WHITE" and "ORANGE".
- The text "AMBER TYPE 'C' PRISMATIC BARRIER WALL REFLECTORS AT 25' CTS." is present, indicating the type and spacing of the reflectors.

LINEAR DELINEATOR PANELS **FOR TEMPORARY CONCRETE BARRIER**

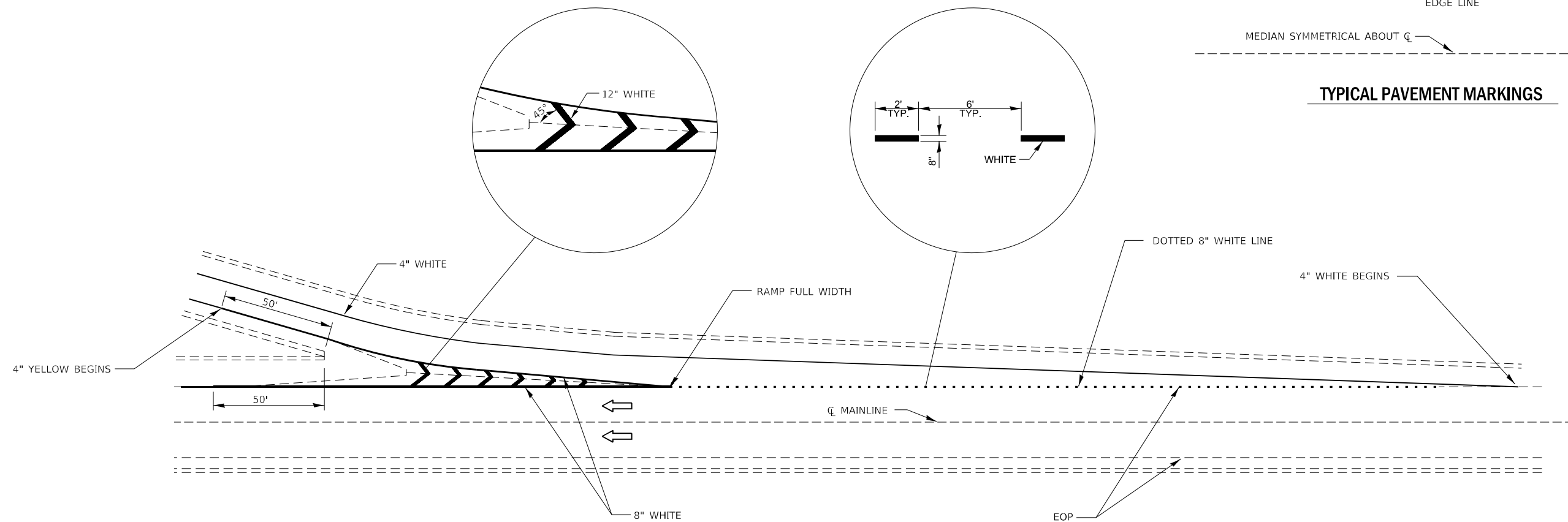
782-6



TYPICAL PAVEMENT MARKING FOR ENTRANCE RAMP TERMINALS



TYPICAL PAVEMENT MARKINGS

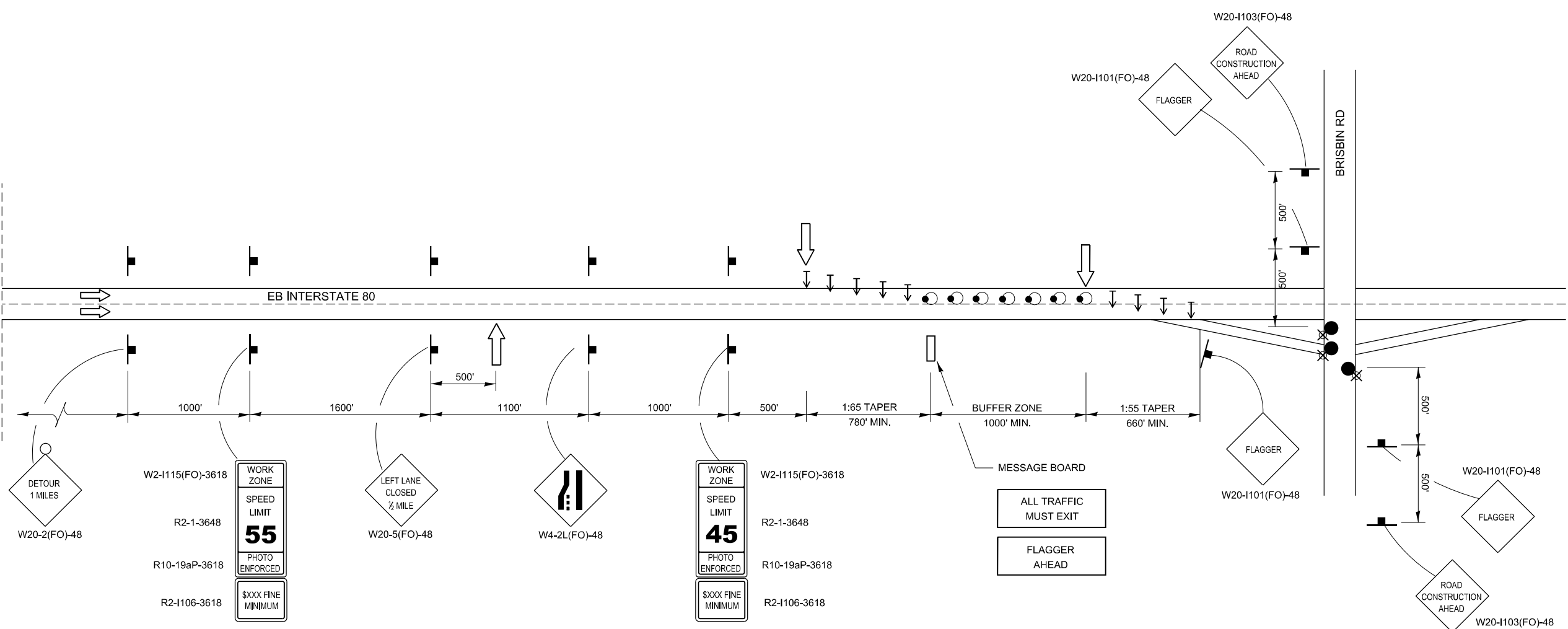


TYPICAL PAVEMENT MARKINGS FOR EXIT RAMP TERMINALS

780-12

 LIN ENGINEERING,LTD. Consulting Engineers Westmont, Illinois	USER NAME = 14nho	DESIGNED - RC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	W.C. RAILROAD OVER F.A.I. ROUTE 80 DISTRICT 3 DETAILS				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - RC	REVISED -						80	(32, 47-4)VB, HBR-3	GRUNDY/KENDALL	143	141
	PLOT SCALE = 100,0000 ' / in.	CHECKED - ST	REVISED -		CONTRACT NO. 66295								
	PLOT DATE = 1/9/2025	DATE - 1/2025	REVISED -										
						SCALE: N.T.S.	SHEET 2 OF 4 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT			

MATCH LINE A



MATCH LINE B

NOTE:
THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR TRAFFIC CONTROL AND PROTECTION (SPECIAL). SEE SPECIAL PROVISIONS FOR ADDITIONAL DETAILS.

- DRUMS WITH STEADY BURNING LIGHTS
50' IN TAPERS AND 100' IN TANGENT ON CENTERS
- LIGHTED FLAGGER STATIONS
- ARROWBOARD
- DIRECTION INDICATOR BARRICADE