

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
67	(W)BR	SANGAMON	29	1
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 72B70	

29+1=30

D-96-030-08



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

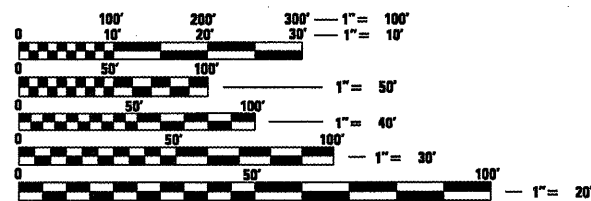
FAP 67 (IL RTE. 97)
SECTION (W)BR
PROJECT: ACBHF-0067(078)
SANGAMON COUNTY
C-96-030-08

INDEX OF SHEETS

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STANDARDS

000001-05	701201-02
001001-01	701301-02
515001-01	701306-01
630001-07	701311-02
630301-04	701321-09
631032-03	701362-02
635006-02	701901
635011-01	704001-04
701001-01	780001-01
701006-02	805001

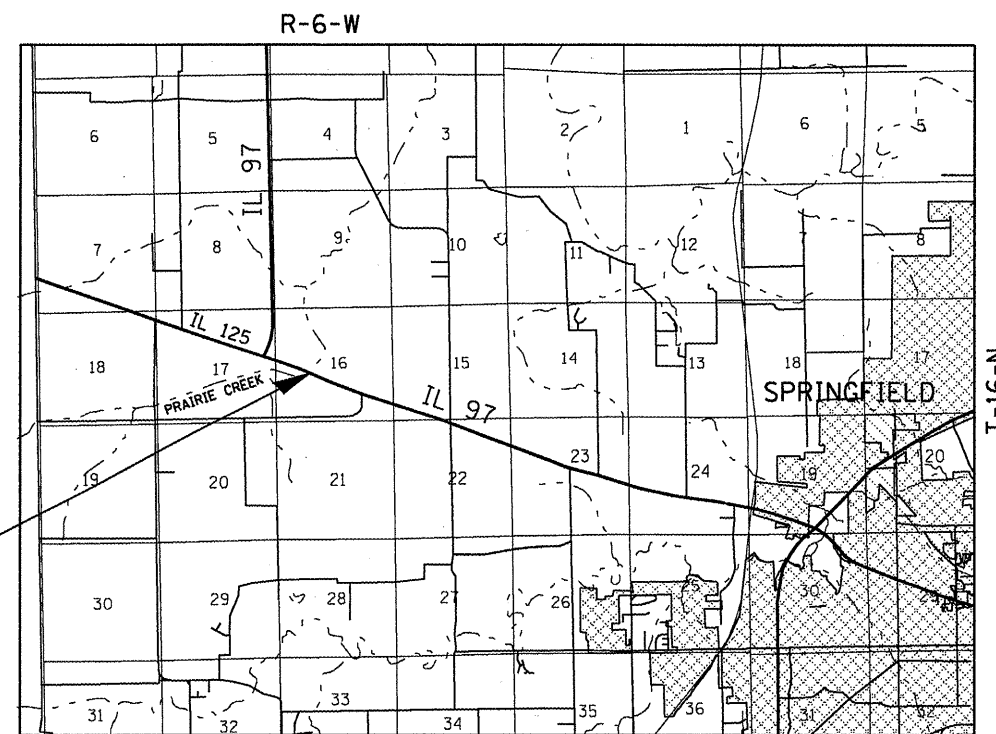


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-992-0123
OR 811

PROJECT ENGINEER Sal Madonia 217-782-4761
PROJECT MANAGER Marcus Bruce 217-524-0946

CONTRACT NO. 72B70



PROJECT LOCATION
STATION 121+64.71
STR. NO. 084-0046

**SUPERSTRUCTURE REPLACEMENT AND ASSOCIATED
ROADWAY WORK FOR S.N. 084-0046**

LOCATION MAP

NET LENGTH OF PROJECT = 722.59 FT. (0.137 MILES)
AVERAGE DAILY TRAFFIC = 15,000 (2007)
ROAD CLASSIFICATION = MINOR ARTERIAL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED March 24, 2008

Christine M. Reed
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 9, 2008
Eric E. Harn
INTERIM ENGINEER OF DESIGN AND ENVIRONMENT

May 9, 2008
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS**

GENERAL NOTES:

1. ALL OF THE DISTURBED AREAS WITHIN THE RIGHT OF WAY NOT COVERED BY SURFACING MATERIAL SHALL BE SEEDED.
2. THE CONTRACTOR SHALL PROVIDE ADEQUATE DRAINAGE FOR THE DURATION OF THIS PROJECT.
3. SEEDING WILL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET OR IN AN UNTILLABLE CONDITION. LOCATIONS TO BE SEEDED SHALL BE DETERMINED BY THE ENGINEER.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY FROM CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. THE JULIE NUMBER IS 800-892-0123. A MINIMUM OF FORTY-EIGHT HOURS ADVANCE NOTICE IS REQUIRED. ANY DAMAGE TO THE UNDERGROUND FACILITIES, CAUSED BY THE CONTRACTOR SHALL BE REPAIRED TO THE SATISFACTION OF THE DEPARTMENT AT THE CONTRACTOR'S EXPENSE, INCLUDING TEMPORARY REPAIRS WHICH MAY BE REQUIRED TO KEEP THE FACILITY OPERATIONAL WHILE MATERIAL IS BEING OBTAINED TO MAKE PERMANENT REPAIRS.
5. THE THICKNESS OF HOT-MIX ASPHALT SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HOT-MIX ASPHALT IS PLACED.
6. WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL MONUMENTS UNTIL AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR RE-ESTABLISH ANY SECTION OR SUBSECTION MONUMENTS DESTROYED BY HIS OPERATIONS.
7. THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:
SEEDING, CLASS 2:
 FERTILIZER RATIO 1:1:1 RATE:270 LBS/ACRE (90% OF NITROGEN, 90% OF PHOSPHOROUS, 90% OF POTASSIUM)
 AGRICULTURAL GROUND LIMESTONE: 2 TON/ACRE
 MULCH: 2 TON/ACRE
 BITUMINOUS MATERIALS (PRIME COAT) - 0.00038 TON/SQYD (ON PAVEMENT)
 BITUMINOUS MATERIALS (PRIME COAT) - 0.001425 TON/SQYD (ON AGGREGATE)
 AGGREGATE PRIME COAT - 0.002 TON/SQYD
 HOT-MIX ASPHALT SURFACE / BINDER - 0.056 TONS/SQYD/IN
 AGGREGATE MATERIAL - 2.05 TON/CUYD
8. ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER LISTED ON THE INDEX OF SHEETS OR THE COPY OF THE STANDARD INCLUDED IN THESE PLANS.
9. UNLESS NOTED OTHERWISE, STATIONS AND OFFSETS REFER TO CENTERLINE OF PROJECT.
10. IN ADDITION TO FIELD SURVEYS AND AERIAL SURVEYS, PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING FACILITIES HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD. SUCH VARIATIONS SHALL NOT BE A CAUSE FOR ADDITIONAL COMPENSATION DUE TO A CHANGE IN THE SCOPE OF THE WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.
11. ALL ELEVATIONS SHOWN ON THE PLANS ARE ESTABLISHED FROM U.S.G.S. MEAN SEA LEVEL DATUM.
12. THE EXISTING ROAD SIGNS THAT INTERFERE WITH CONSTRUCTION WILL BE REMOVED OR RELOCATED AS DIRECTED BY THE ENGINEER. AFTER THE CONSTRUCTION IS COMPLETED, THE CONTRACTOR WILL REPLACE THE SIGNS AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID SEPARATELY, BUT BE CONSIDERED INCLUDED IN THE CONTRACT, AND NO COMPENSATION WILL BE ALLOWED.
13. ALL SAW CUTS, NECESSARY TO COMPLETE THE WORK DETAILED IN THESE PLANS, SHALL BE INCLUDED IN THE COST FOR THE VARIOUS PAY ITEMS INVOLVED. THE MINIMUM SAW CUT DEPTH IN THE PAVEMENT SHALL BE 1 1/2" UNLESS OTHERWISE SPECIFIED IN A DETAIL SHOWN IN THE PLANS.

14. THE DISTRICT BUREAU OF OPERATIONS SHALL BE NOTIFIED AT LEAST 14 DAYS PRIOR TO PLACEMENT OF FINAL PAVEMENT MARKING (PH: 217-785-5312).
15. TWO CHANGEABLE MESSAGE SIGNS, ONE FOR EACH END OF THE PROJECT, SHALL BE PLACED PRIOR TO ANY CONSTRUCTION ACTIVITY TAKING PLACE.
16. INSTALLATION OF PROPOSED STEEL BEAM BRACING FOR THE EXISTING PRAIRIE CREEK STRUCTURE SHALL BE PREFORMED PRIOR TO THE SETUP FOR STAGE 1 TRAFFIC CONTROL.

BITUMINOUS MIXTURE REQUIREMENTS		
LOCATION(S):	IL 97 ROADWAY	LEFT & RIGHT SHOULDERS
MIXTURE USE(S):	HMA SURFACE	HMA BASE COURSE
P.G.:	PG 64-22	PG 64-22
DESIGN AIR VOIDS:	4.0% @ N DESIGN = 70	4.0% @ N DESIGN = 70
MIXTURE COMPOSITION: (GRADATION MIXTURE)	IL 9.5 OR 12.5	IL 19.0
FRICTION AGGREGATE:	N/A	N/A

COMMITMENTS:

A COMMITMENT HAS BEEN MADE FOR THE IMPROVEMENT OF AN EXISTING FIELD ENTRANCE LOCATED AT STATION 107+80.5 LEFT, OWNED BY PATRICIA A. IRWIN. THIS IMPROVEMENT SHALL BE MADE PRIOR TO THE CLOSURE OF THE FIELD ENTRANCE LOCATED AT STATION 119+77 LEFT, ALSO OWNED BY MS. IRWIN. THE PROPOSED FIELD ENTRANCE IMPROVEMENT DETAIL CAN BE SEEN ON SHEET 9 WITHIN THESE PLANS.

DISTRICT SIX	
EXAMINED <u>March 24</u> 20 <u>08</u>	<u>[Signature]</u>
OPERATIONS ENGINEER	
EXAMINED <u>Mar 20</u> 20 <u>08</u>	<u>[Signature]</u>
PROGRAM IMPLEMENTATION ENGINEER	
EXAMINED <u>MAR 24</u> 20 <u>08</u>	<u>[Signature]</u>
PROGRAM DEVELOPMENT ENGINEER	

SUMMARY OF QUANTITIES			S. N. 084-0046 80% STATE 20% FED
CODE NO	PAY ITEM		CODE X080-2A QUANTITY
44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SQ YD	560
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1
50102400	CONCRETE REMOVAL	CU YD	6.8
50300225	CONCRETE STRUCTURES	CU YD	9.6
50300255	CONCRETE SUPERSTRUCTURES	CU YD	4.8
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1680
50800515	BAR SPLICERS	EACH	16
50901050	STEEL RAILING, TYPE SM	FOOT	121
51500100	NAME PLATES	EACH	1
58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	214
58300100	PORTLAND CEMENT MORTAR FAIRING COURSE	FOOT	584
* 63000000	STEEL PLATE BEAM GUARDRAIL, TYPE A	FOOT	500
* 63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4
63200310	GUARDRAIL REMOVAL	FOOT	751
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4
67100100	MOBILIZATION	L SUM	1
70101205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321 (SPECIAL)	EACH	1

*Specialty Items

SUMMARY OF QUANTITIES			S. N. 084-0046 80% STATE 20% FED
CODE NO	PAY ITEM		CODE X080-2A QUANTITY
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	5
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	9
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	27
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	828
70400100	TEMPORARY CONCRETE BARRIER	FOOT	250
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	237.5
* 78001120	PAINT PAVEMENT MARKING - LINE 5"	FOOT	1454
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	8
* 78201000	TERMINAL MARKERS-DIRECT APPLIED	EACH	4
78300100	PAVEMENT MARKING REMOVAL	SQ FT	613
78300200	RAISED REFLECTIVE PAVEMENT MARKING REMOVAL	EACH	4

* Specialty Items

HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	
LOCATION	NEEDED QUANTITY (SQ YD)
STA. 120+16.66 TO STA. 121+16.66	276.87
STA. 122+76.66 TO STA. 123+76.66	282.20
TOTAL = 559.06 SQ YD	

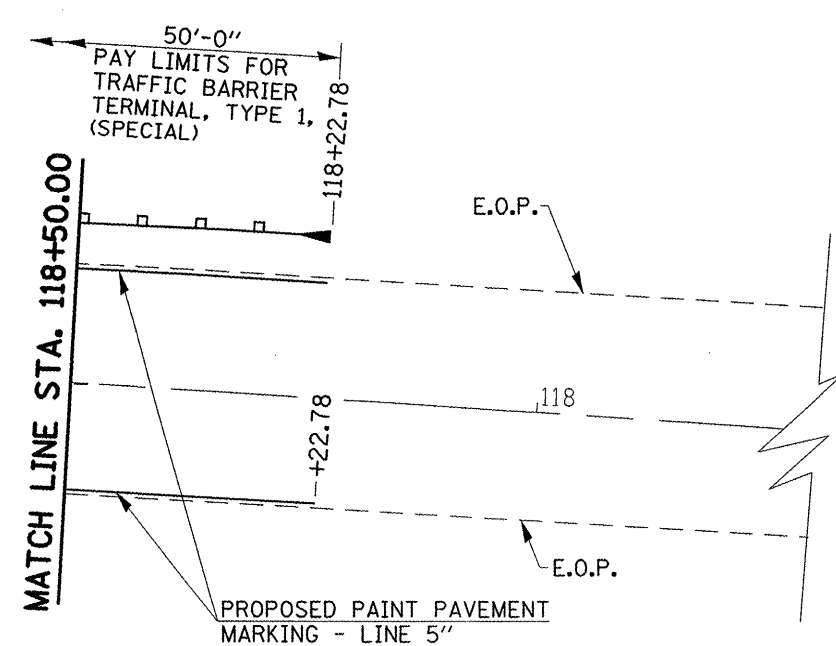
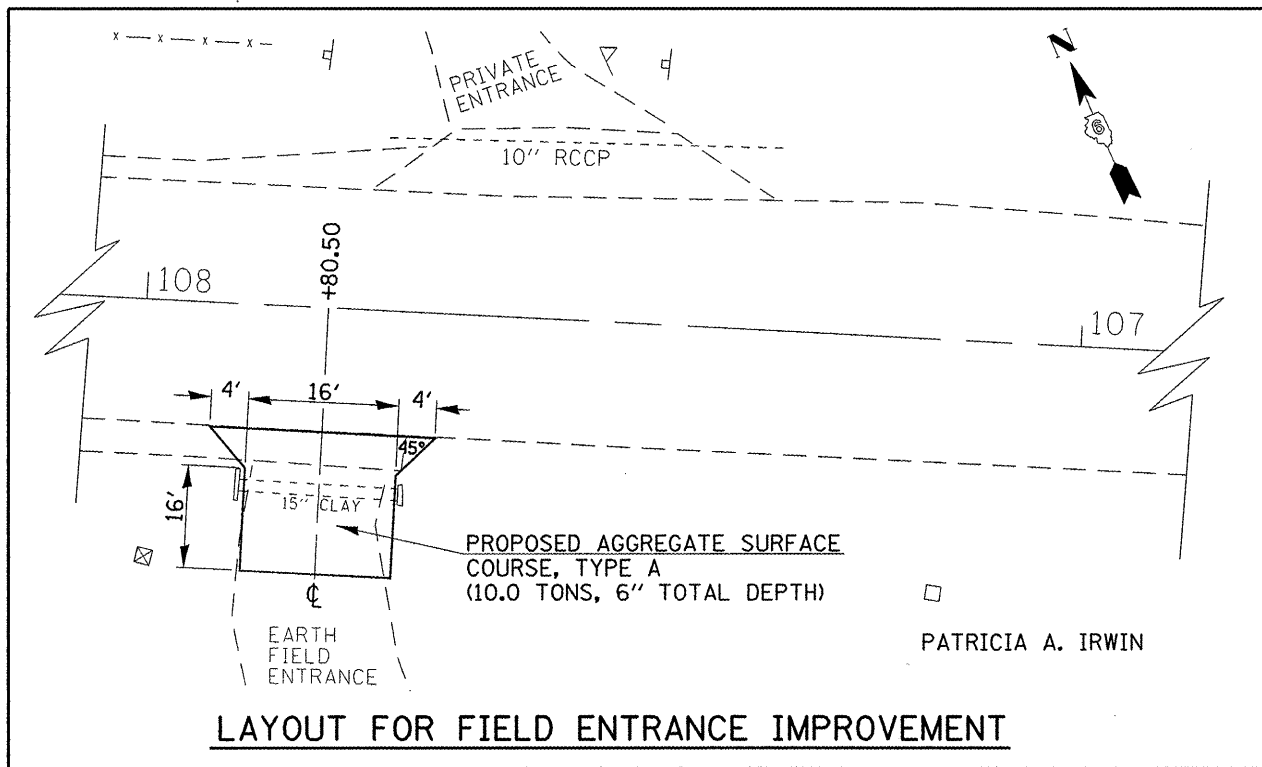
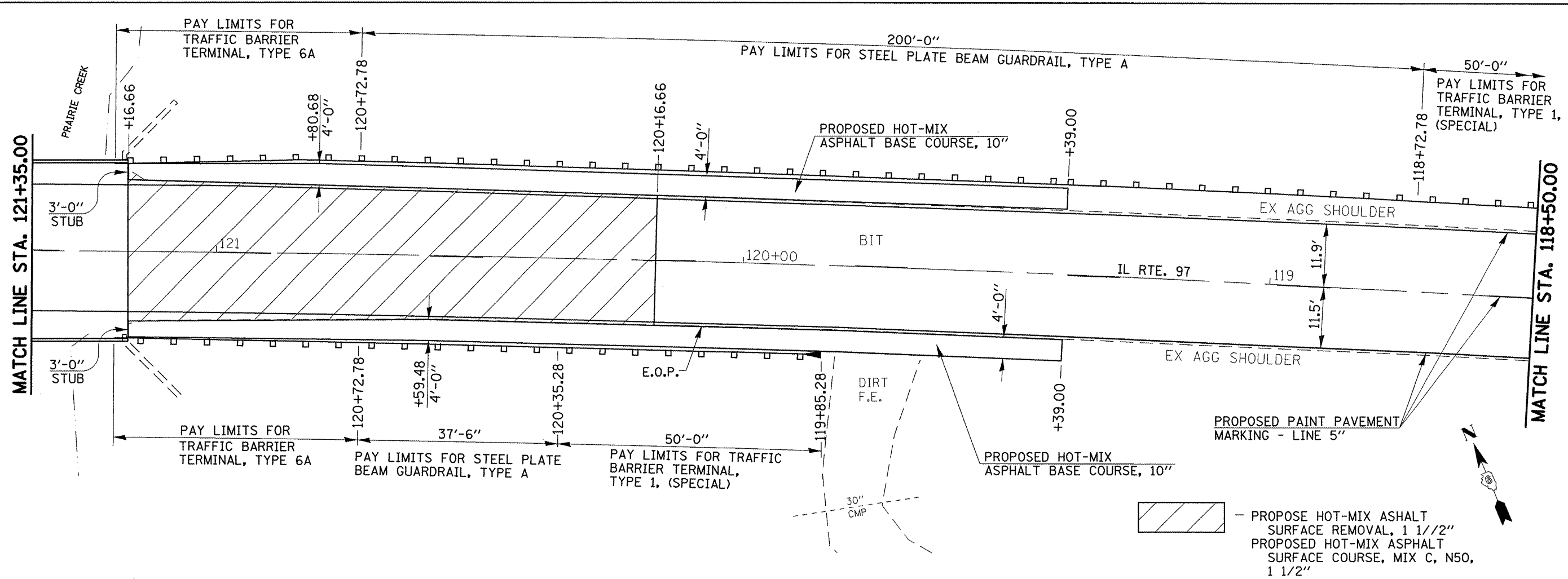
EARTH EXCAVATION (FOR BIT. SHLDRS. WORK)				
LOCATION	WIDTH (FOOT)	DEPTH (FOOT)	NEEDED QUANTITY (CU YD)	
STA. 119+39.00 TO STA. 121+16.66 RIGHT	4.0	0.8333	21.93	
STA. 119+39.00 TO STA. 121+16.66 LEFT	4.0	0.8333	21.93	
STA. 121+76.76 TO STA. 124+02.03 RIGHT	4.0	0.8333	27.81	
STA. 121+76.76 TO STA. 124+02.03 LEFT	4.0	0.8333	27.81	
TOTAL = 99.48 CU YD				

PAINT PAVEMENT MARKING - LINE 5"		
LOCATION	MARKING TYPE	QUANTITY NEEDED (FOOT)
STA. 118+23.00 TO STA. 124+70.00	RIGHT OUTSIDE EDGE LINE, WHITE	647
STA. 118+23.00 TO STA. 124+70.00	LEFT OUTSIDE EDGE LINE, WHITE	647
STA. 118+23.00 TO STA. 124+70.00	CENTERLINE, 30' SKIP / 10' DASH, WHITE	160
TOTAL = 1454 FEET		

HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N 70			
LOCATION	SURFACE DEPTH (INCH)	WIDTH (FOOT)	NEEDED QUANTITY (TON)
STA. 120+16.66 TO STA. 121+16.66	1.5	VARIES 24.21 TO 28.92	23.26
PRAIRIE CREEK STRUCTURE	3.0 (AVG.)	33.00	36.00
STA. 121+76.66 STA. 122+76.66	1.5	VARIES 24.59 TO 28.10	23.70
TOTAL = 82.96 TONS			

HOT-MIX ASPHALT BASE COURSE, 10"			
LOCATION	WIDTH (FOOT)	LENGTH (FOOT)	NEEDED QUANTITY (SQ YD)
STA. 119+39.00 TO STA. 121+16.66 RIGHT	4.0	177.7	77.2
STA. 119+39.00 TO STA. 121+16.66 LEFT	4.0	177.7	75.5
STA. 121+76.76 TO STA. 124+00.50 RIGHT	4.0	223.7	94.5
STA. 121+76.76 TO STA. 124+00.50 LEFT	4.0	223.7	97.3
TOTAL = 344.5 SQ YD			

GUARDRAIL REMOVAL		TRAFFIC BARRIER TERMINAL, TYPE 6A		STEEL PLATE BEAM GUARDRAIL, TYPE A		TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	
LOCATION	NEEDED QUANTITY (FOOT)	LOCATION	NEEDED QUANTITY (EACH)	LOCATION	NEEDED QUANTITY (FOOT)	LOCATION	NEEDED QUANTITY (EACH)
STA. 118+83.18 TO STA. 121+16.66 RT.	233.5	N.E. QUADRANT OF PRARIE CREEK STRUCTURE	1	STA. 118+72.78 TO STA. 120+72.78 RIGHT	200.0	N.E. QUADRANT OF PRARIE CREEK STRUCTURE	1
STA. 121+76.76 TO STA. 123+30.08 RT.	153.3	S.E. QUADRANT OF PRARIE CREEK STRUCTURE	1	STA. 120+35.28 TO STA. 120+72.78 LEFT	37.5	S.E. QUADRANT OF PRARIE CREEK STRUCTURE	1
STA. 119+94.77 TO STA. 121+16.66 LT.	121.9	N.W. QUADRANT OF PRARIE CREEK STRUCTURE	1	STA. 122+20.64 TO STA. 122+70.64 RIGHT	50.0	N.W. QUADRANT OF PRARIE CREEK STRUCTURE	1
STA. 121+76.76 TO STA. 124+19.05 LT.	242.3	S.W. QUADRANT OF PRARIE CREEK STRUCTURE	1	STA. 122+20.64 TO STA. 124+20.64 LEFT	200.0	S.W. QUADRANT OF PRARIE CREEK STRUCTURE	1
TOTAL = 751.0 FEET		TOTAL = 4 EACH		TOTAL = 500 FEET		TOTAL = 4 EACH	

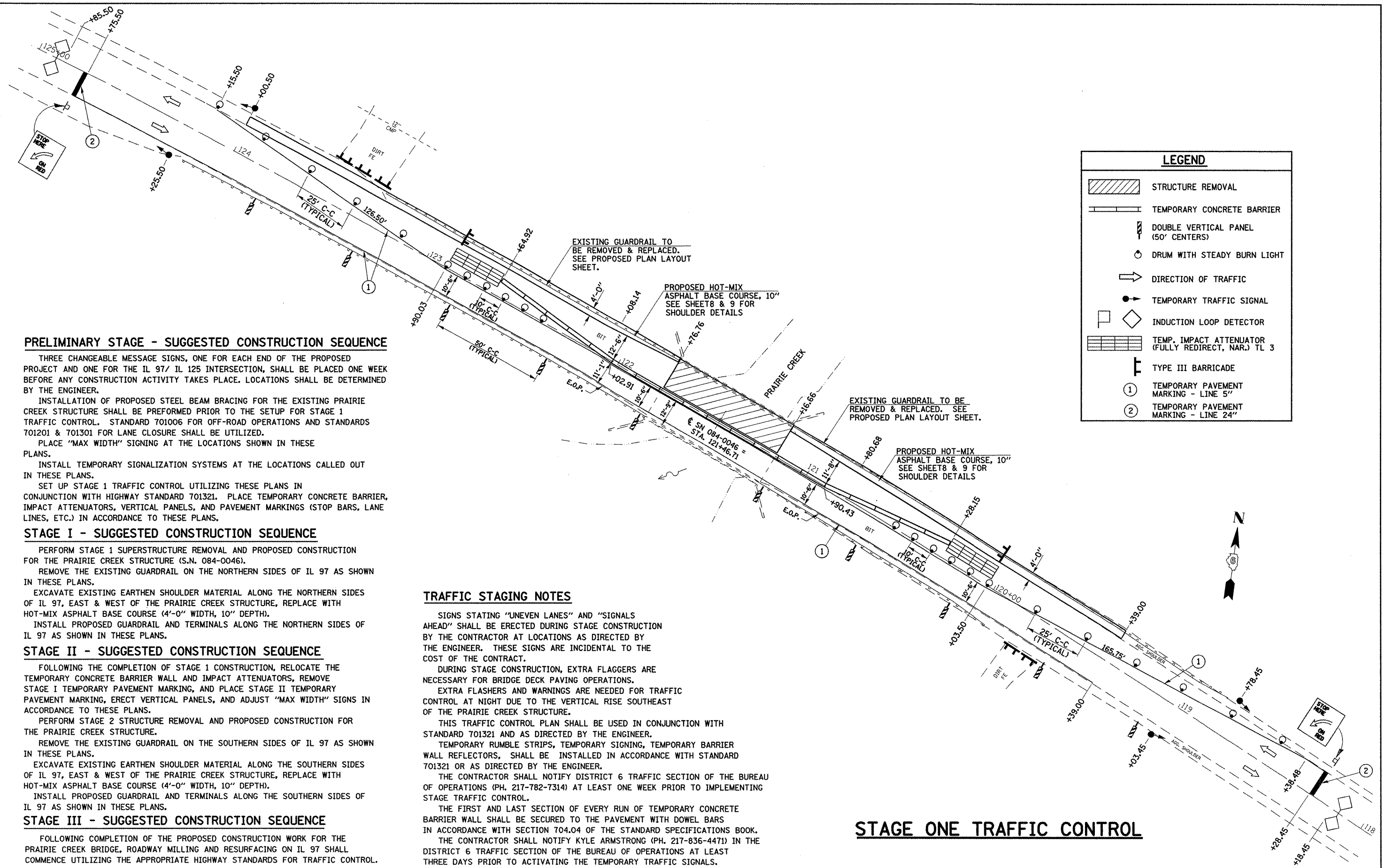


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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED PLAN LAYOUT	
SCALE: 1:20	SHEET NO. 2 OF 2 SHEETS
STA. 121+35	TO STA. 117+75

F.A.P. RTE. 67	SECTION (W)BR	COUNTY SANGAMON	TOTAL SHEETS 29	SHEET NO. 9
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 72B70	



LEGEND	
	STRUCTURE REMOVAL
	TEMPORARY CONCRETE BARRIER
	DOUBLE VERTICAL PANEL (50' CENTERS)
	DRUM WITH STEADY BURN LIGHT
	DIRECTION OF TRAFFIC
	TEMPORARY TRAFFIC SIGNAL
	INDUCTION LOOP DETECTOR
	TEMP. IMPACT ATTENUATOR (FULLY REDIRECT, NAR.) TL 3
	TYPE III BARRICADE
①	TEMPORARY PAVEMENT MARKING - LINE 5"
②	TEMPORARY PAVEMENT MARKING - LINE 24"

PRELIMINARY STAGE - SUGGESTED CONSTRUCTION SEQUENCE

THREE CHANGEABLE MESSAGE SIGNS, ONE FOR EACH END OF THE PROPOSED PROJECT AND ONE FOR THE IL 97/ IL 125 INTERSECTION, SHALL BE PLACED ONE WEEK BEFORE ANY CONSTRUCTION ACTIVITY TAKES PLACE. LOCATIONS SHALL BE DETERMINED BY THE ENGINEER.

INSTALLATION OF PROPOSED STEEL BEAM BRACING FOR THE EXISTING PRAIRIE CREEK STRUCTURE SHALL BE PREFORMED PRIOR TO THE SETUP FOR STAGE 1 TRAFFIC CONTROL. STANDARD 701006 FOR OFF-ROAD OPERATIONS AND STANDARDS 701201 & 701301 FOR LANE CLOSURE SHALL BE UTILIZED.

PLACE "MAX WIDTH" SIGNING AT THE LOCATIONS SHOWN IN THESE PLANS.

INSTALL TEMPORARY SIGNALIZATION SYSTEMS AT THE LOCATIONS CALLED OUT IN THESE PLANS.

SET UP STAGE 1 TRAFFIC CONTROL UTILIZING THESE PLANS IN CONJUNCTION WITH HIGHWAY STANDARD 701321. PLACE TEMPORARY CONCRETE BARRIER, IMPACT ATTENUATORS, VERTICAL PANELS, AND PAVEMENT MARKINGS (STOP BARS, LANE LINES, ETC.) IN ACCORDANCE TO THESE PLANS.

STAGE I - SUGGESTED CONSTRUCTION SEQUENCE

PERFORM STAGE 1 SUPERSTRUCTURE REMOVAL AND PROPOSED CONSTRUCTION FOR THE PRAIRIE CREEK STRUCTURE (S.N. 084-0046).

REMOVE THE EXISTING GUARDRAIL ON THE NORTHERN SIDES OF IL 97 AS SHOWN IN THESE PLANS.

EXCAVATE EXISTING EARTHEN SHOULDER MATERIAL ALONG THE NORTHERN SIDES OF IL 97, EAST & WEST OF THE PRAIRIE CREEK STRUCTURE, REPLACE WITH HOT-MIX ASPHALT BASE COURSE (4'-0" WIDTH, 10" DEPTH).

INSTALL PROPOSED GUARDRAIL AND TERMINALS ALONG THE NORTHERN SIDES OF IL 97 AS SHOWN IN THESE PLANS.

STAGE II - SUGGESTED CONSTRUCTION SEQUENCE

FOLLOWING THE COMPLETION OF STAGE 1 CONSTRUCTION, RELOCATE THE TEMPORARY CONCRETE BARRIER WALL AND IMPACT ATTENUATORS, REMOVE STAGE I TEMPORARY PAVEMENT MARKING, AND PLACE STAGE II TEMPORARY PAVEMENT MARKING, ERECT VERTICAL PANELS, AND ADJUST "MAX WIDTH" SIGNS IN ACCORDANCE TO THESE PLANS.

PERFORM STAGE 2 STRUCTURE REMOVAL AND PROPOSED CONSTRUCTION FOR THE PRAIRIE CREEK STRUCTURE.

REMOVE THE EXISTING GUARDRAIL ON THE SOUTHERN SIDES OF IL 97 AS SHOWN IN THESE PLANS.

EXCAVATE EXISTING EARTHEN SHOULDER MATERIAL ALONG THE SOUTHERN SIDES OF IL 97, EAST & WEST OF THE PRAIRIE CREEK STRUCTURE, REPLACE WITH HOT-MIX ASPHALT BASE COURSE (4'-0" WIDTH, 10" DEPTH).

INSTALL PROPOSED GUARDRAIL AND TERMINALS ALONG THE SOUTHERN SIDES OF IL 97 AS SHOWN IN THESE PLANS.

STAGE III - SUGGESTED CONSTRUCTION SEQUENCE

FOLLOWING COMPLETION OF THE PROPOSED CONSTRUCTION WORK FOR THE PRAIRIE CREEK BRIDGE, ROADWAY MILLING AND RESURFACING ON IL 97 SHALL COMMENCE UTILIZING THE APPROPRIATE HIGHWAY STANDARDS FOR TRAFFIC CONTROL.

TRAFFIC STAGING NOTES

SIGNS STATING "UNEVEN LANES" AND "SIGNALS AHEAD" SHALL BE ERECTED DURING STAGE CONSTRUCTION BY THE CONTRACTOR AT LOCATIONS AS DIRECTED BY THE ENGINEER. THESE SIGNS ARE INCIDENTAL TO THE COST OF THE CONTRACT.

DURING STAGE CONSTRUCTION, EXTRA FLAGGERS ARE NECESSARY FOR BRIDGE DECK PAVING OPERATIONS.

EXTRA FLASHERS AND WARNINGS ARE NEEDED FOR TRAFFIC CONTROL AT NIGHT DUE TO THE VERTICAL RISE SOUTHEAST OF THE PRAIRIE CREEK STRUCTURE.

THIS TRAFFIC CONTROL PLAN SHALL BE USED IN CONJUNCTION WITH STANDARD 701321 AND AS DIRECTED BY THE ENGINEER.

TEMPORARY RUMBLE STRIPS, TEMPORARY SIGNING, TEMPORARY BARRIER WALL REFLECTORS, SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD 701321 OR AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL NOTIFY DISTRICT 6 TRAFFIC SECTION OF THE BUREAU OF OPERATIONS (PH. 217-782-7314) AT LEAST ONE WEEK PRIOR TO IMPLEMENTING STAGE TRAFFIC CONTROL.

THE FIRST AND LAST SECTION OF EVERY RUN OF TEMPORARY CONCRETE BARRIER WALL SHALL BE SECURED TO THE PAVEMENT WITH DOWEL BARS IN ACCORDANCE WITH SECTION 704.04 OF THE STANDARD SPECIFICATIONS BOOK.

THE CONTRACTOR SHALL NOTIFY KYLE ARMSTRONG (PH. 217-836-4471) IN THE DISTRICT 6 TRAFFIC SECTION OF THE BUREAU OF OPERATIONS AT LEAST THREE DAYS PRIOR TO ACTIVATING THE TEMPORARY TRAFFIC SIGNALS.

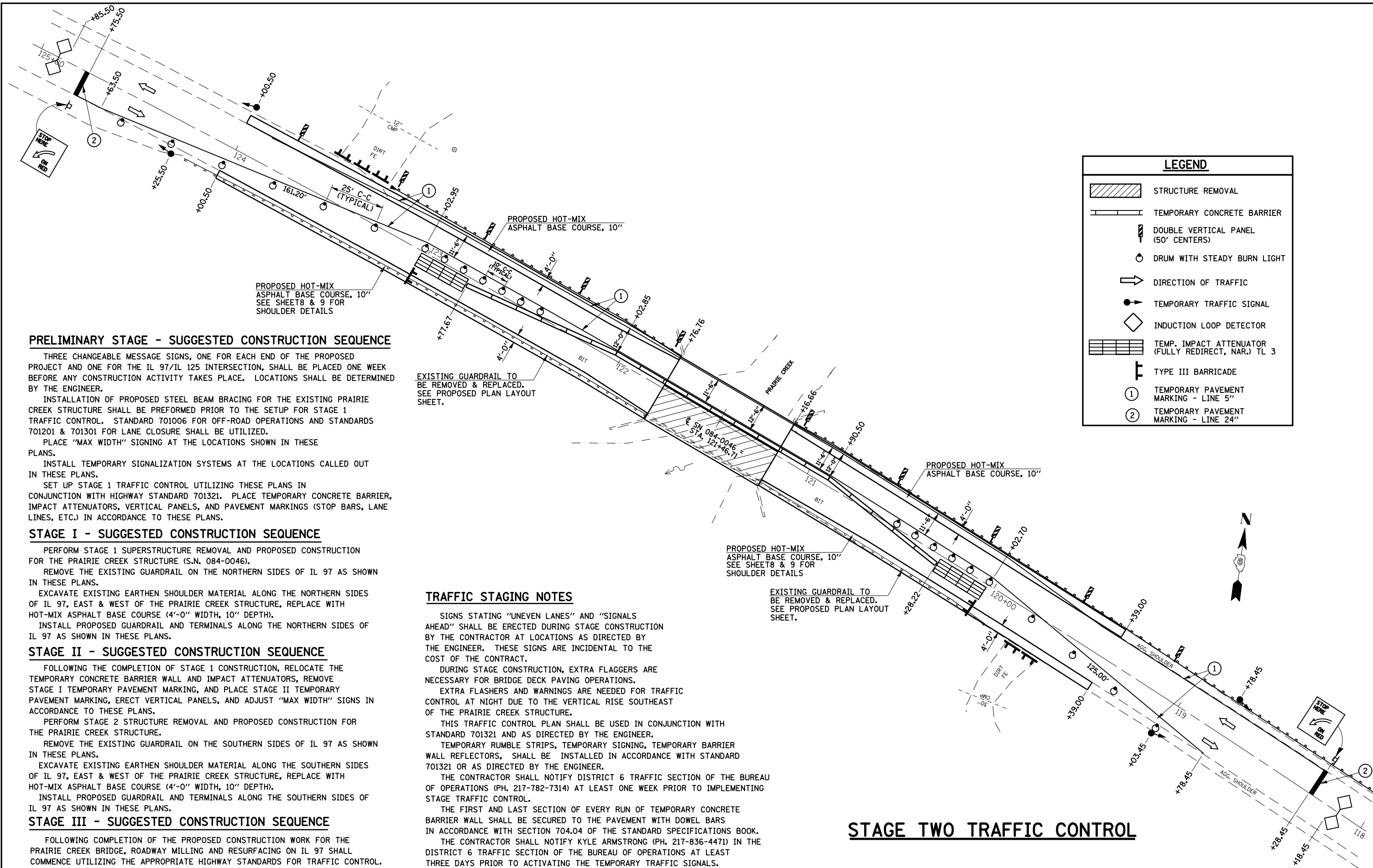
STAGE ONE TRAFFIC CONTROL

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCALE:		SHEET NO. 1 OF 2 SHEETS		STA.	TO STA.
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F.A.P. R.T.E. 67	SECTION (W)BR	COUNTY SANGAMON	TOTAL SHEETS 29	SHEET NO. 10
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		CONTRACT NO. 72B70



LEGEND	
	STRUCTURE REMOVAL
	TEMPORARY CONCRETE BARRIER
	DOUBLE VERTICAL PANEL (50' CENTERS)
	DRUM WITH STEADY BURN LIGHT
	DIRECTION OF TRAFFIC
	TEMPORARY TRAFFIC SIGNAL
	INDUCTION LOOP DETECTOR
	TEMP. IMPACT ATTENUATOR (FULLY REDIRECT, NAR.) TL 3
	TYPE III BARRICADE
	TEMPORARY PAVEMENT MARKING - LINE 5"
	TEMPORARY PAVEMENT MARKING - LINE 24"

PRELIMINARY STAGE - SUGGESTED CONSTRUCTION SEQUENCE

THREE CHANGEABLE MESSAGE SIGNS, ONE FOR EACH END OF THE PROPOSED PROJECT AND ONE FOR THE IL 97/IL 125 INTERSECTION, SHALL BE PLACED ONE WEEK BEFORE ANY CONSTRUCTION ACTIVITY TAKES PLACE. LOCATIONS SHALL BE DETERMINED BY THE ENGINEER.

INSTALLATION OF PROPOSED STEEL BEAM BRACING FOR THE EXISTING PRAIRIE CREEK STRUCTURE SHALL BE PERFORMED PRIOR TO THE SETUP FOR STAGE 1 TRAFFIC CONTROL. STANDARD 701006 FOR OFF-ROAD OPERATIONS AND STANDARDS 701201 & 701301 FOR LANE CLOSURE SHALL BE UTILIZED.

PLACE "MAX WIDTH" SIGNING AT THE LOCATIONS SHOWN IN THESE PLANS.

INSTALL TEMPORARY SIGNALIZATION SYSTEMS AT THE LOCATIONS CALLED OUT IN THESE PLANS.

SET UP STAGE 1 TRAFFIC CONTROL UTILIZING THESE PLANS IN CONJUNCTION WITH HIGHWAY STANDARD 701321. PLACE TEMPORARY CONCRETE BARRIER, IMPACT ATTENUATORS, VERTICAL PANELS, AND PAVEMENT MARKINGS (STOP BARS, LANE LINES, ETC.) IN ACCORDANCE TO THESE PLANS.

STAGE I - SUGGESTED CONSTRUCTION SEQUENCE

PERFORM STAGE 1 SUPERSTRUCTURE REMOVAL AND PROPOSED CONSTRUCTION FOR THE PRAIRIE CREEK STRUCTURE (S.N. 084-0046).

REMOVE THE EXISTING GUARDRAIL ON THE NORTHERN SIDES OF IL 97 AS SHOWN IN THESE PLANS.

EXCAVATE EXISTING EARTHEN SHOULDER MATERIAL ALONG THE NORTHERN SIDES OF IL 97, EAST & WEST OF THE PRAIRIE CREEK STRUCTURE, REPLACE WITH HOT-MIX ASPHALT BASE COURSE (4'-0" WIDTH, 10" DEPTH).

INSTALL PROPOSED GUARDRAIL AND TERMINALS ALONG THE NORTHERN SIDES OF IL 97 AS SHOWN IN THESE PLANS.

STAGE II - SUGGESTED CONSTRUCTION SEQUENCE

FOLLOWING THE COMPLETION OF STAGE 1 CONSTRUCTION, RELOCATE THE TEMPORARY CONCRETE BARRIER WALL AND IMPACT ATTENUATORS, REMOVE STAGE I TEMPORARY PAVEMENT MARKING, AND PLACE STAGE II TEMPORARY PAVEMENT MARKING, ERECT VERTICAL PANELS, AND ADJUST "MAX WIDTH" SIGNS IN ACCORDANCE TO THESE PLANS.

PERFORM STAGE 2 STRUCTURE REMOVAL AND PROPOSED CONSTRUCTION FOR THE PRAIRIE CREEK STRUCTURE.

REMOVE THE EXISTING GUARDRAIL ON THE SOUTHERN SIDES OF IL 97 AS SHOWN IN THESE PLANS.

EXCAVATE EXISTING EARTHEN SHOULDER MATERIAL ALONG THE SOUTHERN SIDES OF IL 97, EAST & WEST OF THE PRAIRIE CREEK STRUCTURE, REPLACE WITH HOT-MIX ASPHALT BASE COURSE (4'-0" WIDTH, 10" DEPTH).

INSTALL PROPOSED GUARDRAIL AND TERMINALS ALONG THE SOUTHERN SIDES OF IL 97 AS SHOWN IN THESE PLANS.

STAGE III - SUGGESTED CONSTRUCTION SEQUENCE

FOLLOWING COMPLETION OF THE PROPOSED CONSTRUCTION WORK FOR THE PRAIRIE CREEK BRIDGE, ROADWAY MILLING AND RESURFACING ON IL 97 SHALL COMMENCE UTILIZING THE APPROPRIATE HIGHWAY STANDARDS FOR TRAFFIC CONTROL.

EXISTING GUARDRAIL TO BE REMOVED & REPLACED. SEE PROPOSED PLAN LAYOUT SHEET.

PROPOSED HOT-MIX ASPHALT BASE COURSE, 10" SEE SHEETS 8 & 9 FOR SHOULDER DETAILS

EXISTING GUARDRAIL TO BE REMOVED & REPLACED. SEE PROPOSED PLAN LAYOUT SHEET.

TRAFFIC STAGING NOTES

SIGNS STATING "UNEVEN LANES" AND "SIGNALS AHEAD" SHALL BE ERECTED DURING STAGE CONSTRUCTION BY THE CONTRACTOR AT LOCATIONS AS DIRECTED BY THE ENGINEER. THESE SIGNS ARE INCIDENTAL TO THE COST OF THE CONTRACT.

DURING STAGE CONSTRUCTION, EXTRA FLAGGERS ARE NECESSARY FOR BRIDGE DECK PAVING OPERATIONS.

EXTRA FLASHERS AND WARNINGS ARE NEEDED FOR TRAFFIC CONTROL AT NIGHT DUE TO THE VERTICAL RISE SOUTHEAST OF THE PRAIRIE CREEK STRUCTURE.

THIS TRAFFIC CONTROL PLAN SHALL BE USED IN CONJUNCTION WITH STANDARD 701321 AND AS DIRECTED BY THE ENGINEER.

TEMPORARY RUMBLE STRIPS, TEMPORARY SIGNING, TEMPORARY BARRIER WALL REFLECTORS, SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD 701321 OR AS DIRECTED BY THE ENGINEER.

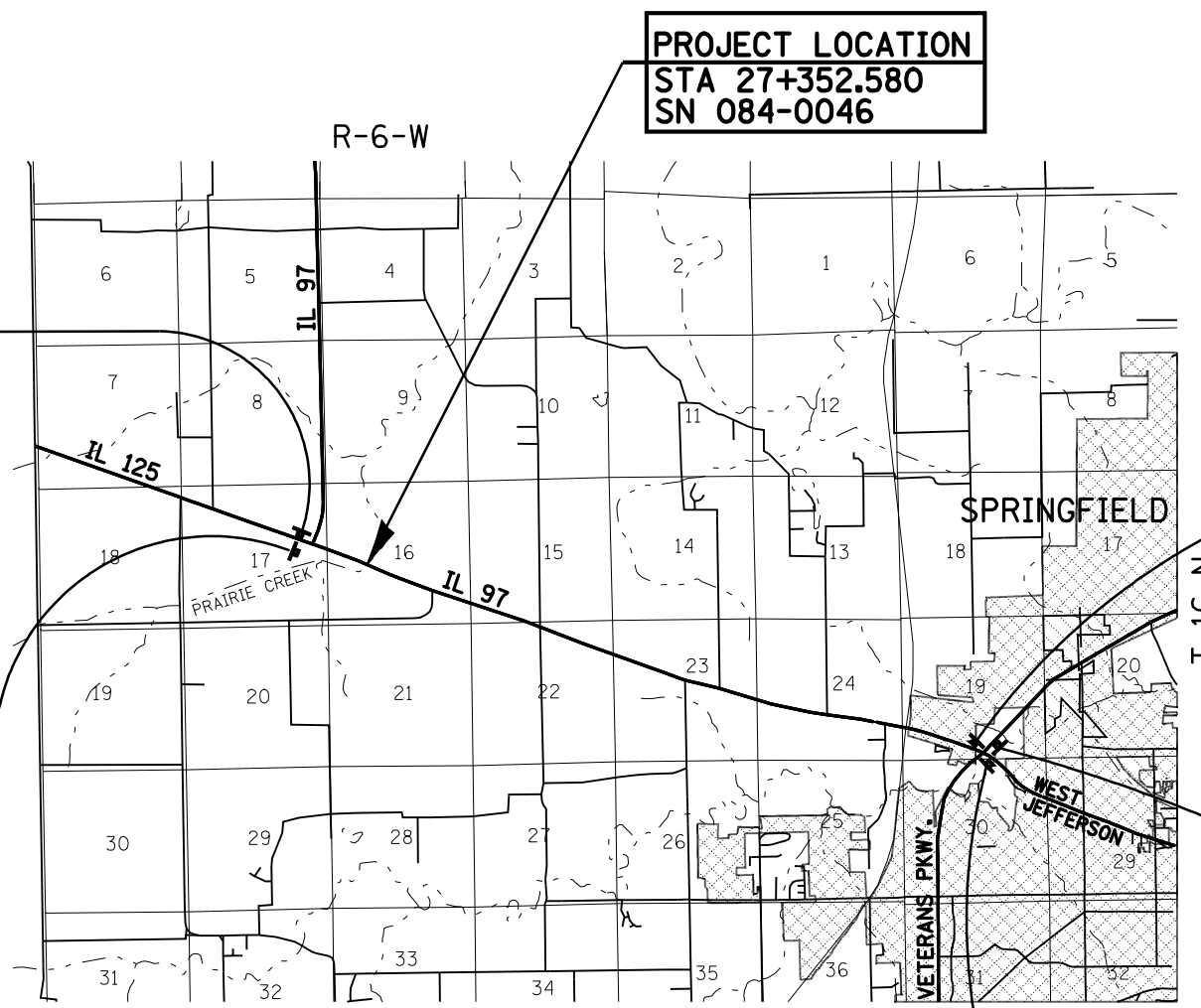
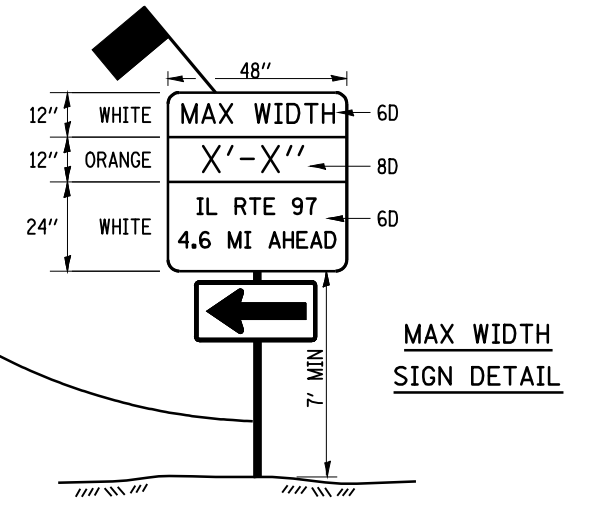
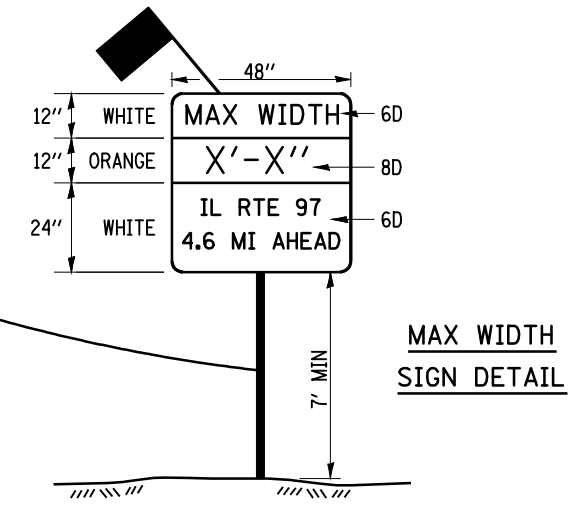
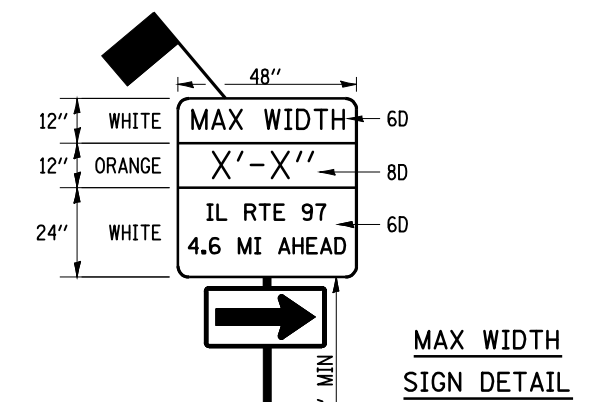
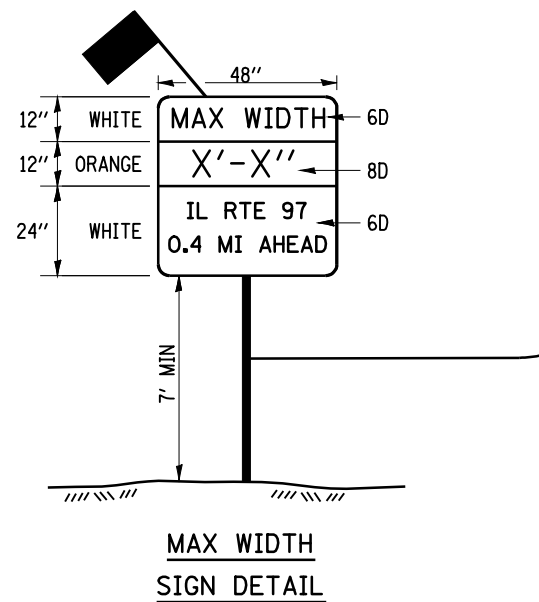
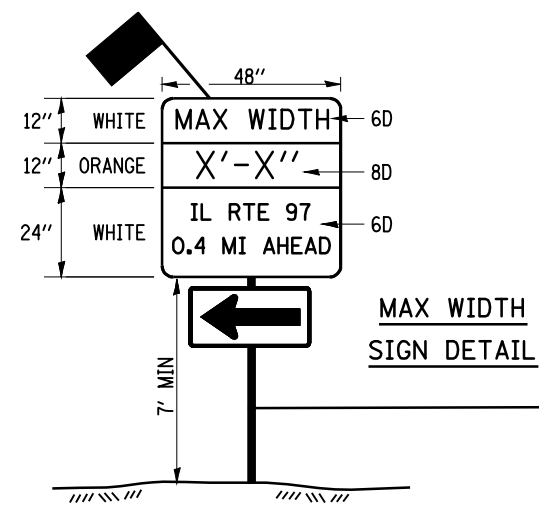
THE CONTRACTOR SHALL NOTIFY DISTRICT 6 TRAFFIC SECTION OF THE BUREAU OF OPERATIONS (PH. 217-782-7314) AT LEAST ONE WEEK PRIOR TO IMPLEMENTING STAGE TRAFFIC CONTROL.

THE FIRST AND LAST SECTION OF EVERY RUN OF TEMPORARY CONCRETE BARRIER WALL SHALL BE SECURED TO THE PAVEMENT WITH DOWEL BARS IN ACCORDANCE WITH SECTION 704.04 OF THE STANDARD SPECIFICATIONS BOOK.

THE CONTRACTOR SHALL NOTIFY KYLE ARMSTRONG (PH. 217-836-4471) IN THE DISTRICT 6 TRAFFIC SECTION OF THE BUREAU OF OPERATIONS AT LEAST THREE DAYS PRIOR TO ACTIVATING THE TEMPORARY TRAFFIC SIGNALS.

STAGE TWO TRAFFIC CONTROL

FILE NAME =	USER NAME = laughlinr1	DESIGNED - RTS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STAGE CONSTRUCTION LAYOUT			F.A.P. RTE. = 67	SECTION = (W)BR	COUNTY = SANGAMON	TOTAL SHEETS = 29	SHEET NO. = 11
C:\Projects\d672b70\cad\sheets\d672b70-stg-staging.dgn		DRAWN - RTS	REVISED -		SCALE:	SHEET NO. 2 OF 2 SHEETS	STA.	TO STA.	CONTRACT NO. 72B70			
PLOT SCALE = 40.0000' / IN.		CHECKED - MEB	REVISED -									
PLOT DATE = Mar-31-2008 08:45:45AM		DATE - 02-27-08	REVISED -									



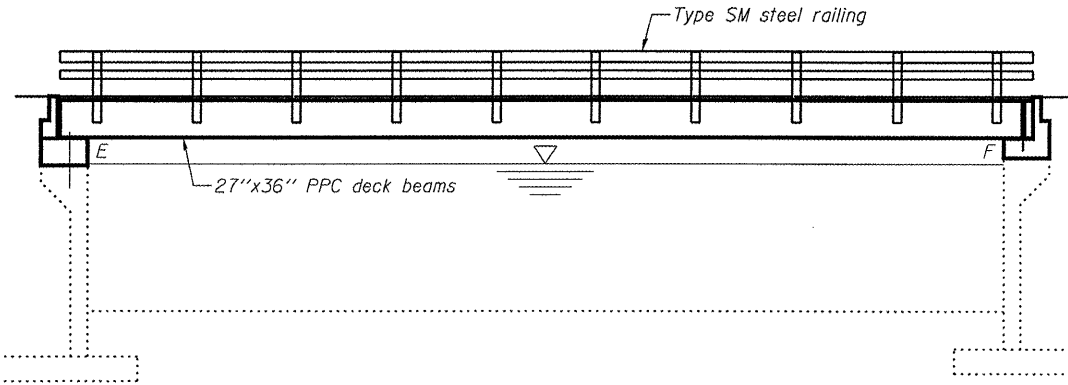
MAXIMUM WIDTH SIGN LOCATIONS

FILE NAME =	USER NAME = laughlinr1	DESIGNED - RTS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAXIMUM WIDTH SIGNING			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
C:\Projects\d672b70\cad\sheeta\d672b70-sh1-staging.dgn	DRAWN - RTS	REVISED -			SCALE:	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	67	(WBR)	SANGAMON	29	13
PLOT SCALE = 40.0000' / IN.	CHECKED - MEB	REVISED -			CONTRACT NO. 72B70								
PLOT DATE = Mar-21-2008 03:01:05PM	DATE - 03-04-08	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT								

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

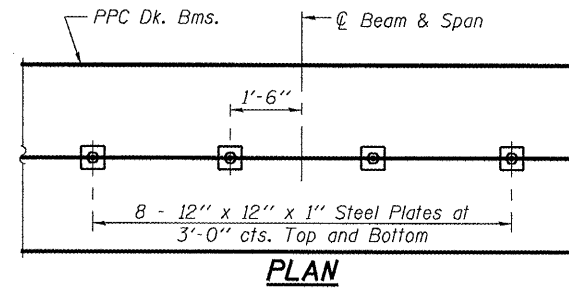
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
IL 97		SANGAMON	29	14	8 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract Number: 72B70

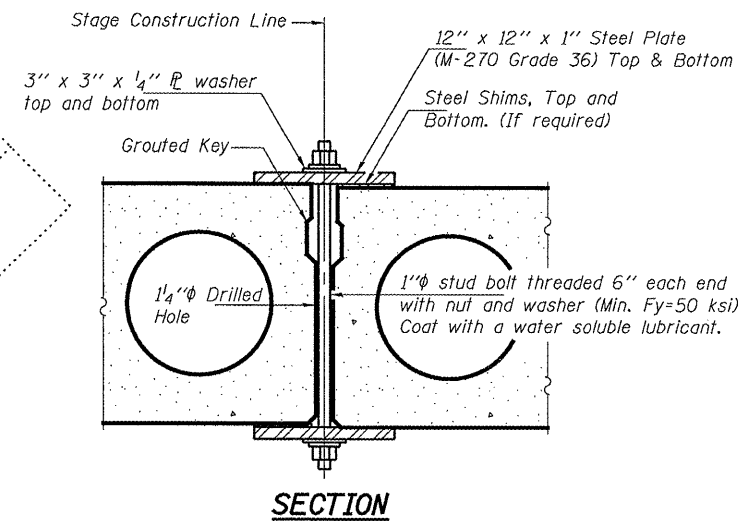


ELEVATION

* To be installed prior to switching traffic over for Stage I. Steel beams to be salvaged. See Special Provision for Erecting Structural Steel.



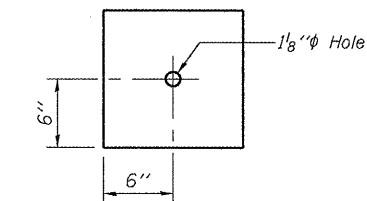
PLAN



SECTION

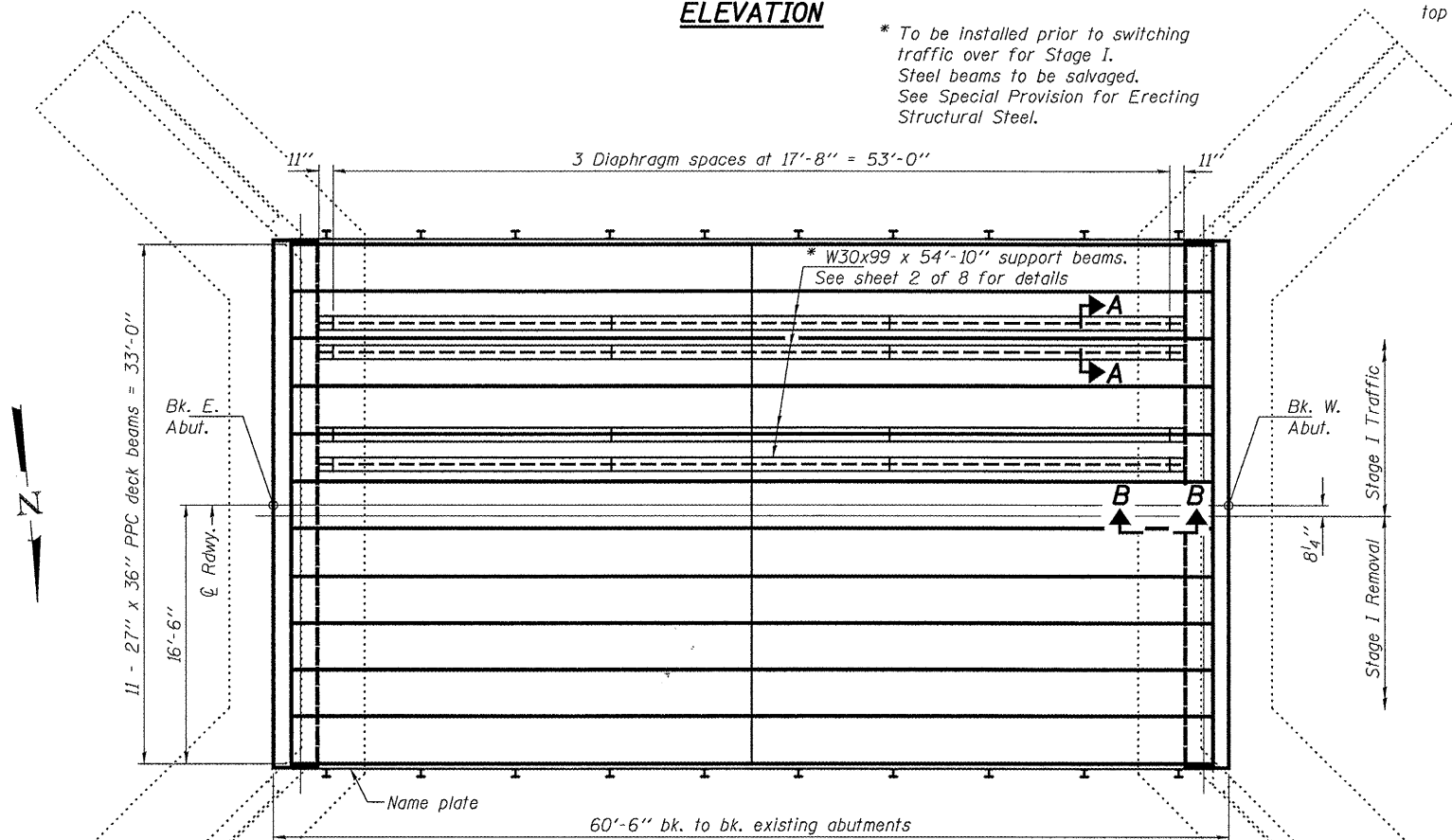
GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.
Reinforcement bars designated (E) shall be epoxy coated.
Plan dimensions and details relative to existing plans are subject to routine 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 based upon the unit price bid for the work.
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.
Attach new name plate to the backside of 8" Rail element. Existing name plate is to be removed, cleaned and relocated adjacent to new name plate. Cost included in the cost of Name Plates.
All structural steel shall be shop painted with the inorganic zinc rich primer per AASHTO M300, Type 1. Cost included with HMA Surface Course.
Temporary concrete barrier shall only be anchored into overlay and not into the PPC deck beams.



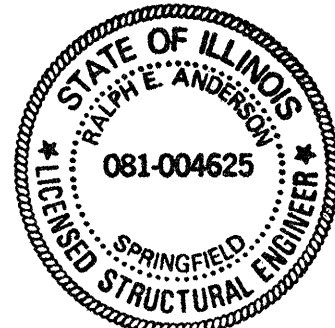
CLAMPING PLATE

Notes:
See Special Provisions for Stage Construction Precast Prestressed Concrete Deck Beams.
See Stage Construction Detail for traffic lane.
Cost is included with Erecting Precast Prestressed Concrete Deck Beams.



PLAN

For SECTIONS A-A & B-B & staging details, see sheet 2 of 8.



EXPIRES 11-30-2008

STATION 270+33
REBUILT 2008 BY
STATE OF ILLINOIS
LOADING HS20
STRUCTURE NO. 084-0046

NAME PLATE
See Std. 515001

LOADING HS20-44

DESIGN SPECIFICATIONS
2002 AASHTO Standard Specifications

DESIGN STRESSES

FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

PRECAST PRESTRESSED UNITS

f'c = 5,000 psi
f'ci = 4,000 psi
f's = 270,000 psi (1/2" low lax strands)
f'si = 201,960 psi (1/2" low lax strands)

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.	6.8		6.8
Concrete Structures	Cu. Yd.		9.6	9.6
Concrete Superstructure	Cu. Yd.	4.8		4.8
Name Plates	Each	1		1
Erecting Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	1927		1927
Reinforcement Bars, Epoxy Coated	Pound		1680	1680
Removal of Existing Superstructures	Each	1		1
Steel Railing, Type SM	Foot	121		121
Waterproofing Membrane System	Sq. Yd.	214		214
Erecting Structural Steel	Pound		26060	26060
Silicone Joint Sealer	Foot	33		33
Hot-Mix Asphalt Surface Course, Mix "D", N70	Tons	36		36
Polymer Concrete	Cu. Ft.	1.2		1.2
PC Mortar Fairing Course	Foot	584		584
Bar Splicers	Each	8	8	16

PLAN AND ELEVATION
IL. 97 OVER PRAIRIE CREEK
SANGAMON COUNTY
SN 084-0046

DESIGNED: Victor H. Veliz
CHECKED: Adrian J. Holloway
DRAWN: boliva
CHECKED: VHV ATH

APRIL 30, 2008
EXAMINED: Dr. Carl H. Hines
PASSED: Ralph E. Anderson
ENGINEER OF STRUCTURAL SERVICES
ENGINEER OF BRIDGES AND STRUCTURES

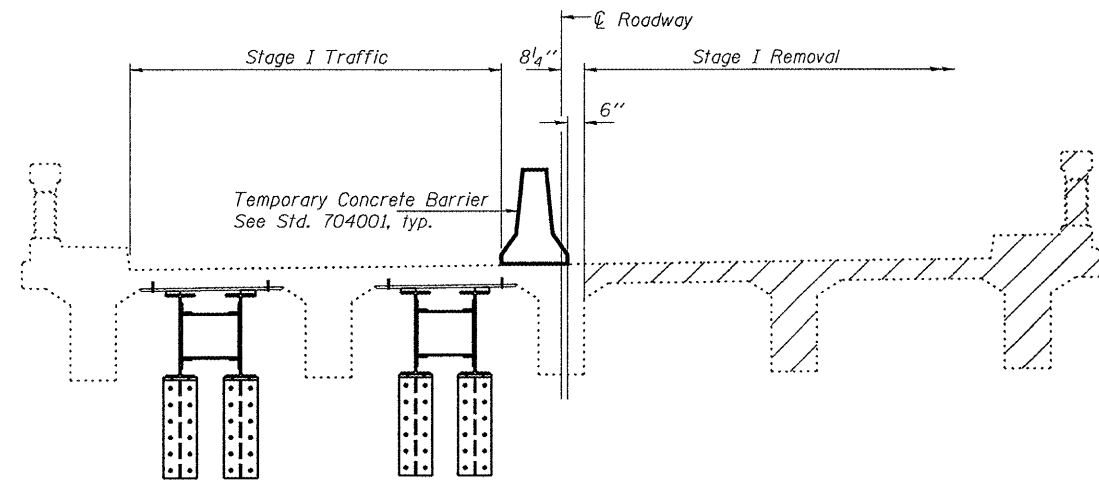
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IL 97		SANGAMON	29	15
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

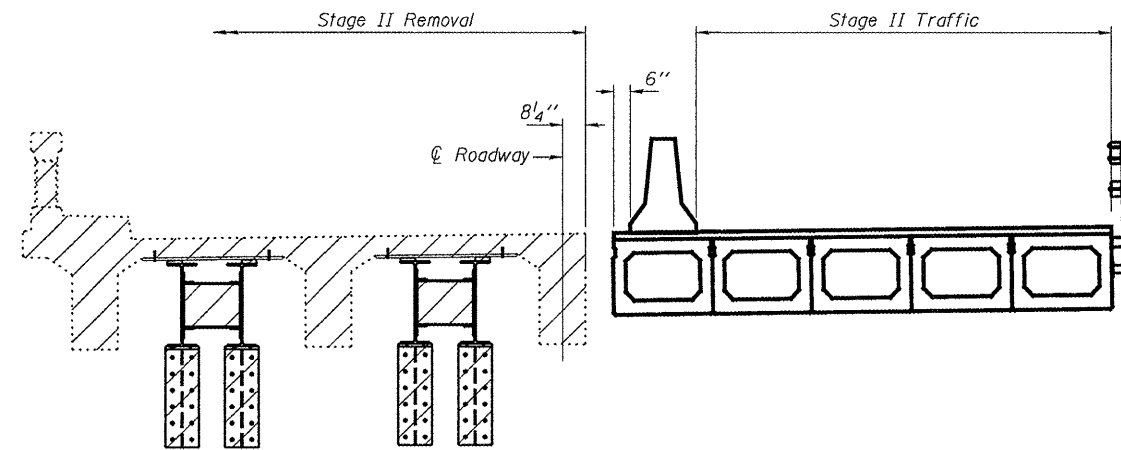
SHEET NO. 2

8 SHEETS

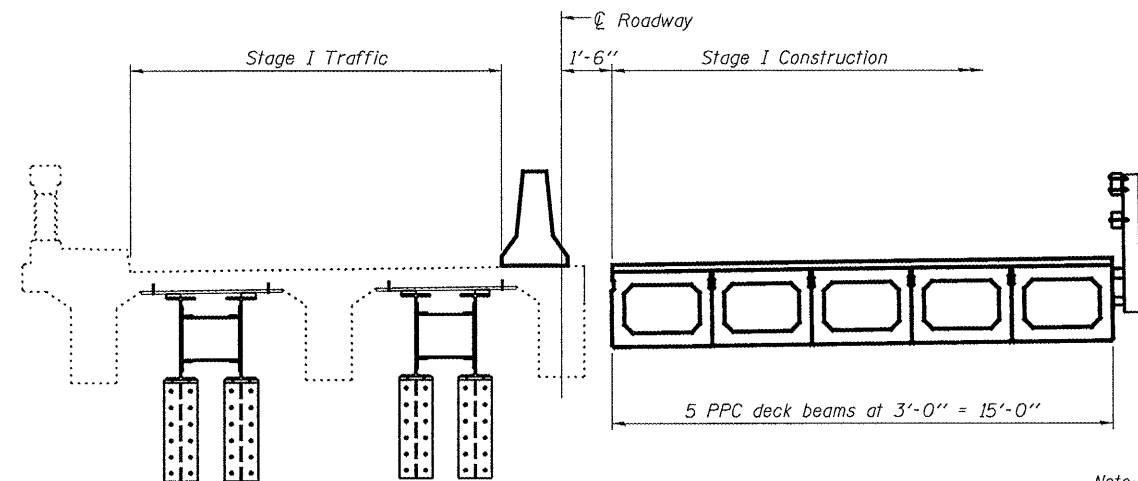
Contract Number: 72B70



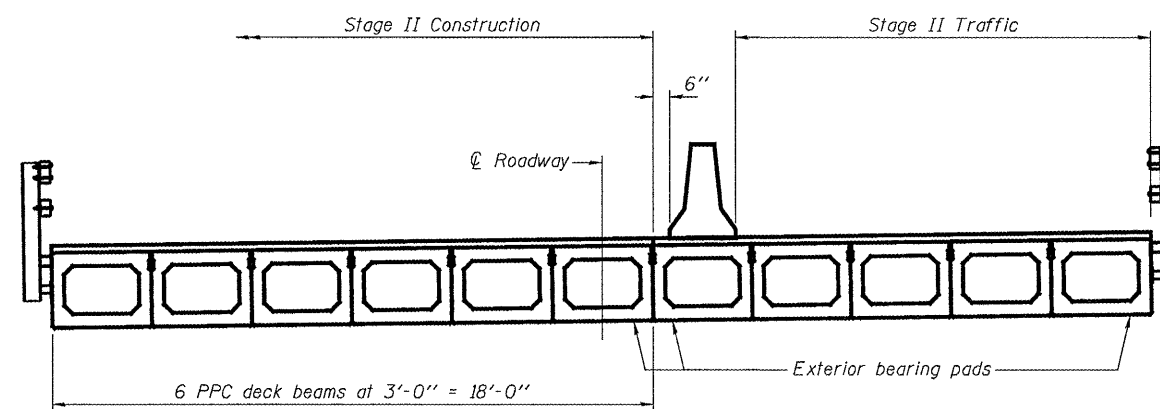
STAGE I REMOVAL



STAGE II REMOVAL



STAGE I CONSTRUCTION



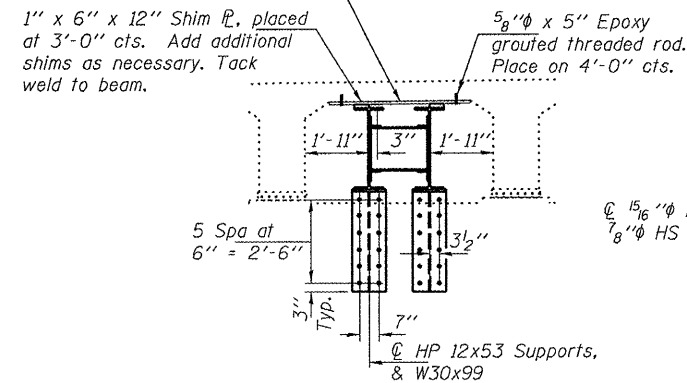
STAGE II CONSTRUCTION

Note:
All views are looking West.
Hatched areas indicate Removal.
After removal, anchor bolts for
HP sections to be cut flush with
wall and sealed. Typ.

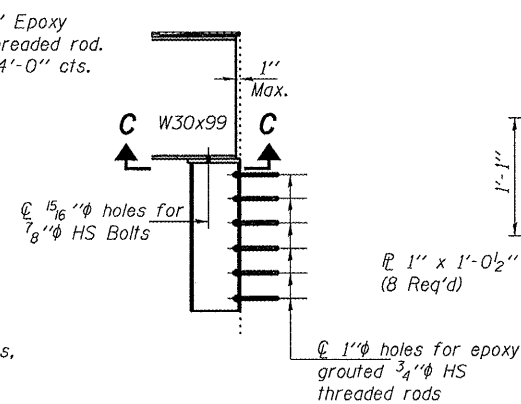
1" x 4'-1/2" Plywood. Cost
included with Erecting
Structural Steel.

1" x 6" x 12" Shim Pl. placed
at 3'-0" cts. Add additional
shims as necessary. Tack
weld to beam.

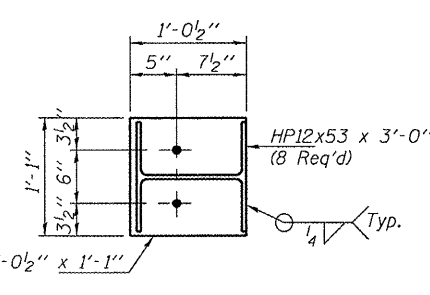
5/8" φ x 5" Epoxy
grouted threaded rod.
Place on 4'-0" cts.



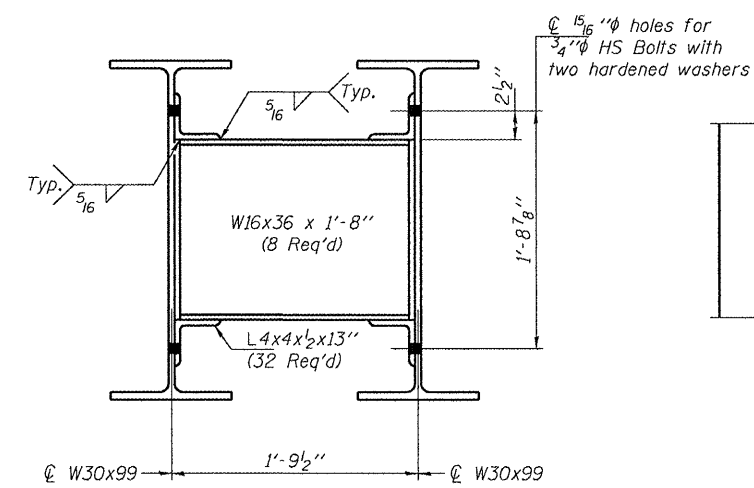
SECTION A-A



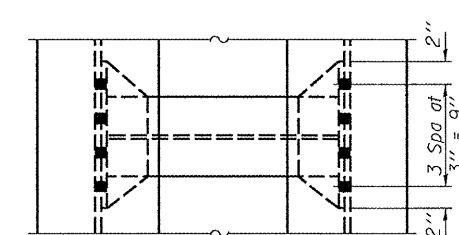
SECTION B-B



SECTION C-C



DIAPHRAGM ELEVATION



DIAPHRAGM PLAN

STAGING DETAILS
IL. 97 OVER PRAIRIE CREEK
SANGAMON COUNTY
SN 084-0046

DESIGNED	VHV
CHECKED	ATH
DRAWN	baliva
CHECKED	VHV ATH

APRIL 30, 2008

EXAMINED *Carl P. ...*
ENGINEER OF STRUCTURAL SERVICES

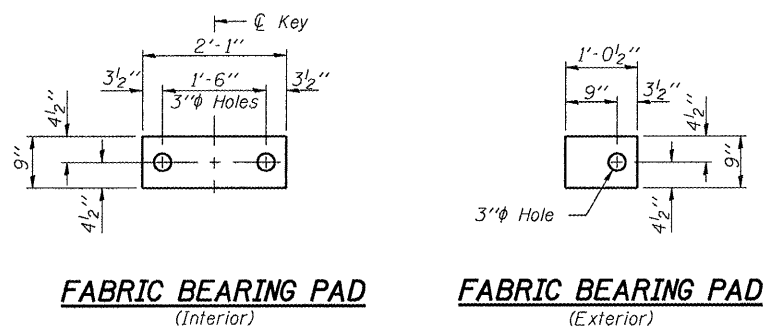
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

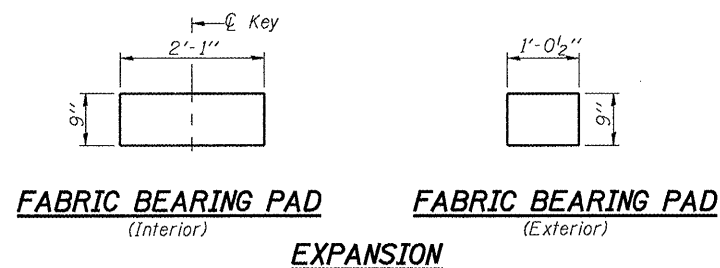
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IL 97		SANGAMON	29	16
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 3
8 SHEETS

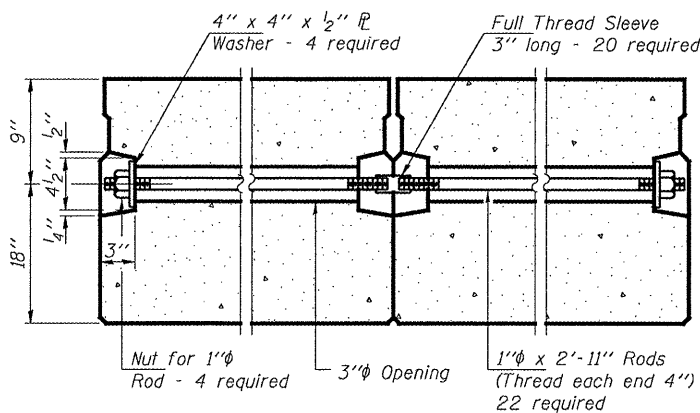
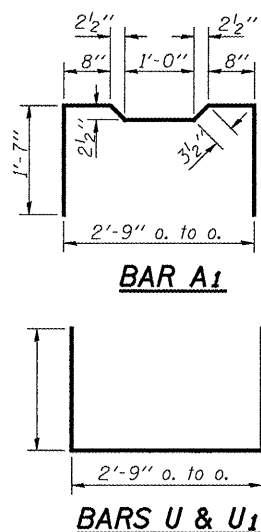
Contract Number: 72B70



FIXED



EXPANSION

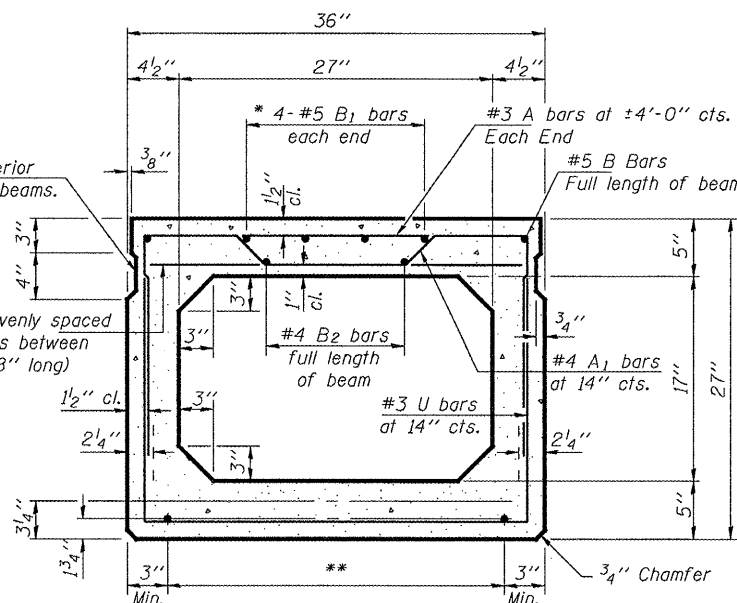


TYPICAL TRANSVERSE TIE ASSEMBLY

*** TRANSVERSE PLACEMENT GUIDELINES**

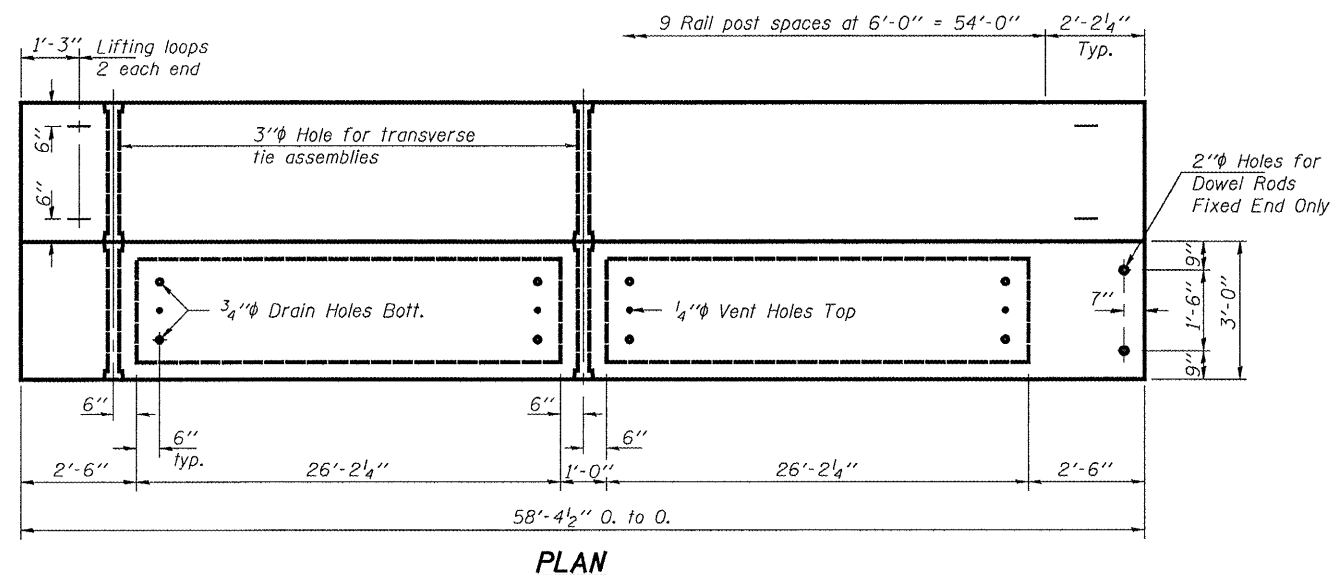
1. Place strands symmetrically about centerline of beam.
2. The minimum distance from center to center of strands in all directions shall be 2".
3. The minimum clearance from strand to dowel hole shall be 1/2".
4. The minimum clearance from strand to void shall be 1/2".

Vertical placement of strands shall not be adjusted to satisfy the above guidelines.

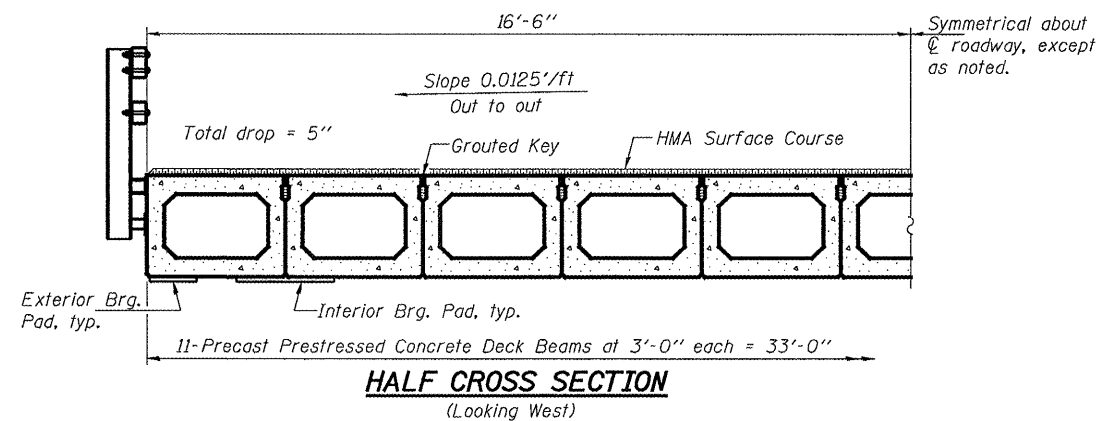


TYPICAL SECTION

1/2" Strands, Each Strand Stressed to 30,900 Lbs.
6-Strands 1 3/4" up, 6-Strands 3 1/4" up, 2-Strands 4 1/2" up



PLAN



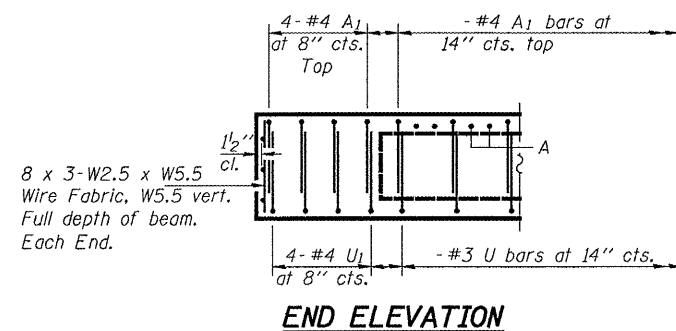
HALF CROSS SECTION (Looking West)

NOTES

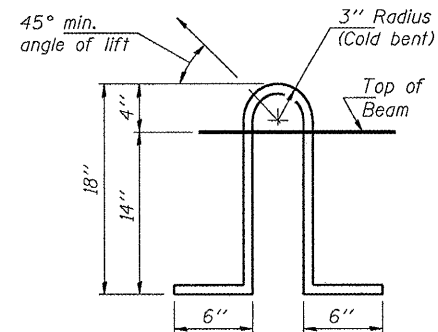
Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be 2-1/2" 270 ksi strands, as shown. The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place. Non prestressing steel shall conform to ASTM A 706 (IL MOD), Grade 60. The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 1/8" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing. Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between top of the beam and the bottom edge of the key. Corrosion Inhibitor, per Article 1020.05(b)(12) of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams. Required Release Strength, f'ci, shall be 4000 p.s.i.

BILL OF MATERIAL

Erecting Precast Prestressed Conc. Deck Bms. (27" Depth)	Sq. Ft.	1927



END ELEVATION



LIFTING LOOP DETAIL

DESIGNED	VHV
CHECKED	ATH
DRAWN	baliva
CHECKED	VHV ATH

APRIL 30, 2008
EXAMINED *Carl Perry*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

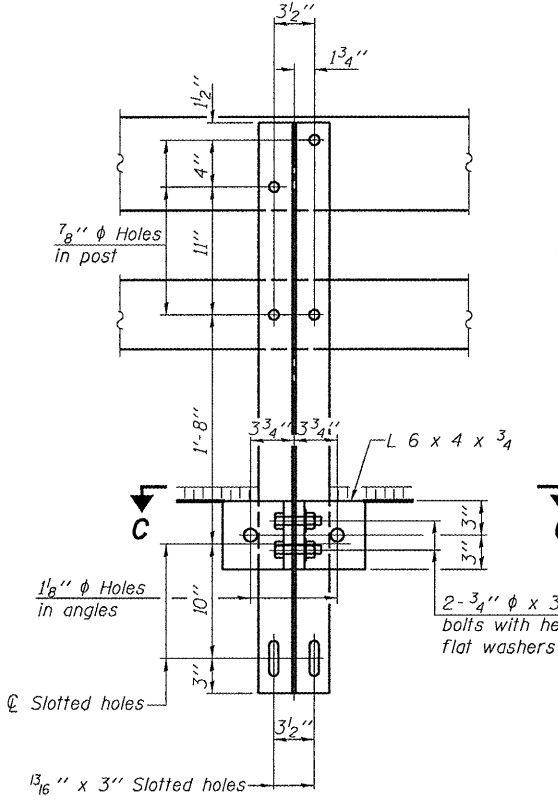
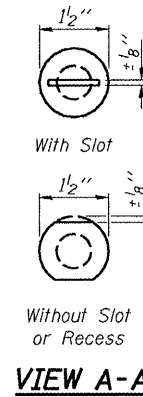
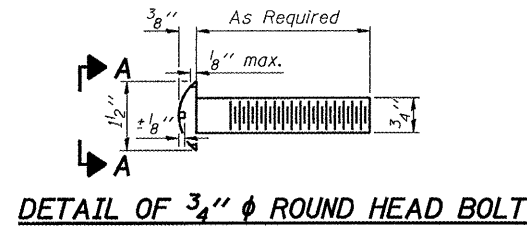
BEAM DETAILS
IL. 97 OVER PRAIRIE CREEK
SANGAMON COUNTY
SN 084-0046

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

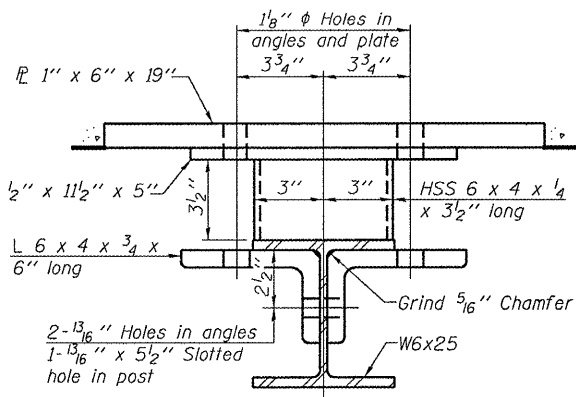
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IL 97		SANGAMON	29	17
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 4
8 SHEETS

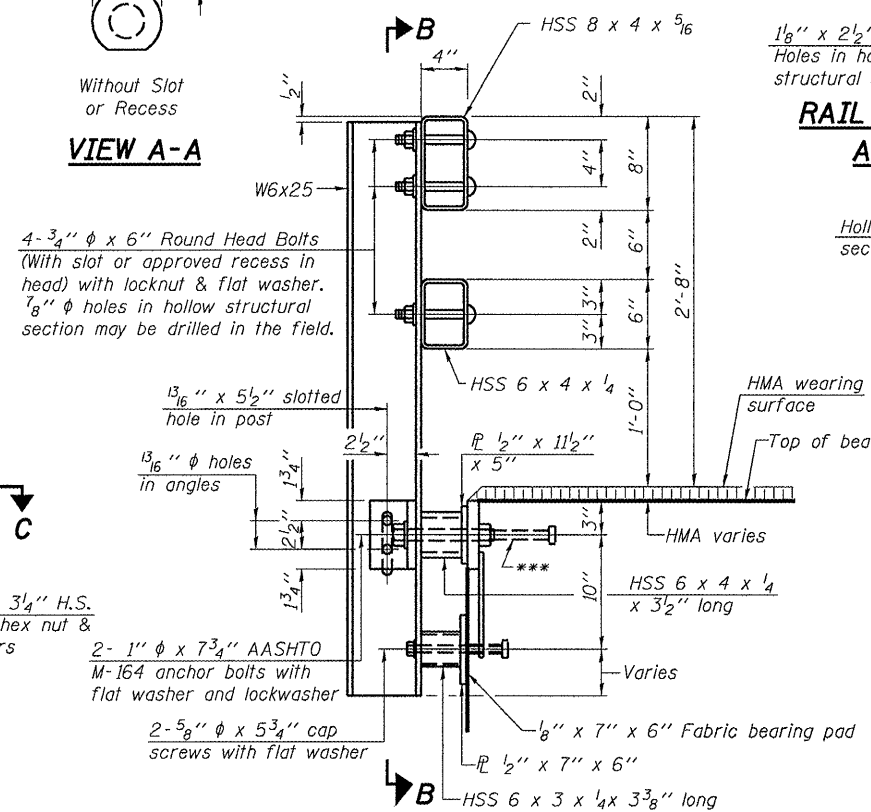
Contract Number: 72B70



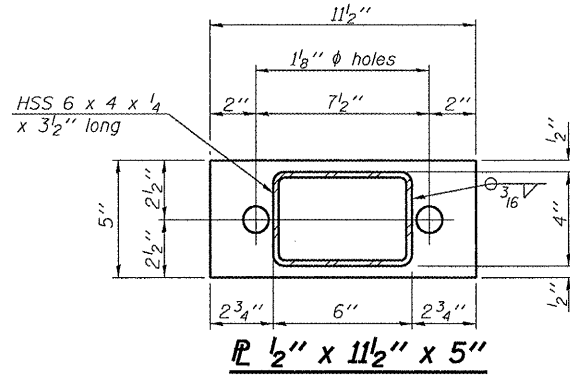
SECTION B-B



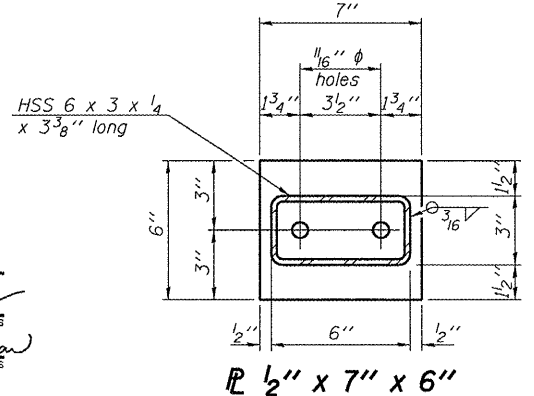
SECTION C-C



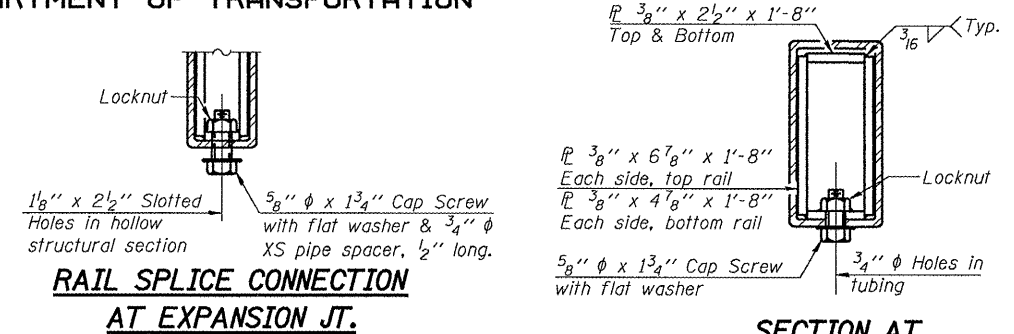
SECTION AT RAIL POST



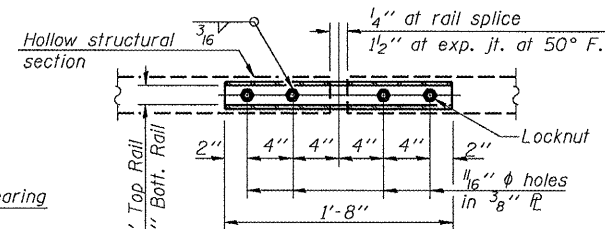
PLAN-BOTT. SPLICE P
TYPICAL



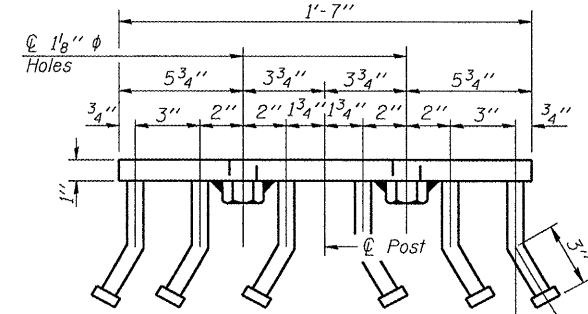
ANCHOR DEVICE



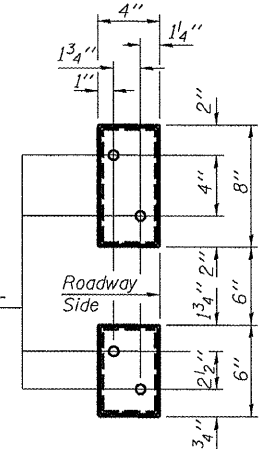
RAIL SPLICE CONNECTION
AT EXPANSION JT.



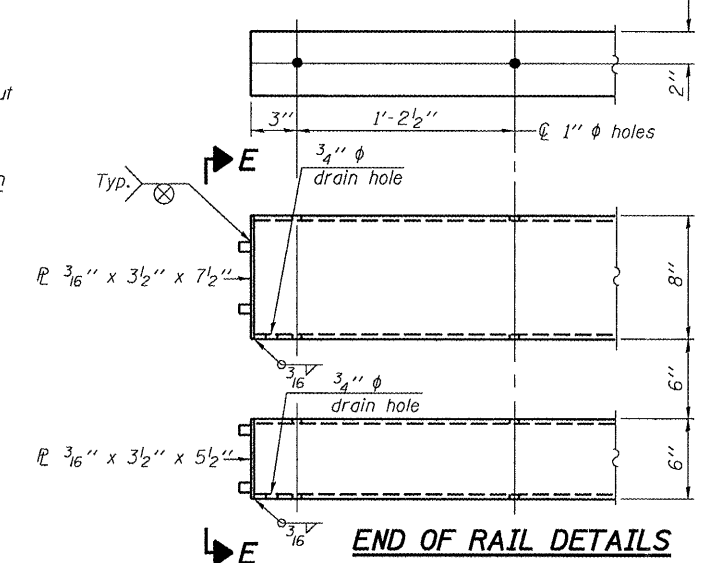
SECTION AT
RAIL SPLICE



VIEW D-D



VIEW E-E



END OF RAIL DETAILS

Notes:
All field drilled holes shall be coated with an approved zinc rich paint before erection.
For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type SM.
All steel rail members shall be galvanized according to Article 509.05 of the Standard Specifications.
***The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type SM	Foot	121

RAILING DETAILS
IL. 97 OVER PRAIRIE CREEK
SANGAMON COUNTY
SN 084-0046

DESIGNED	VHV	APRIL 30, 2008
CHECKED	ATH	EXAMINED <i>Carl Perry</i>
DRAWN	baliva	PASSED <i>Ralph E. Anderson</i>
CHECKED	VHV ATH	ENGINEER OF BRIDGES AND STRUCTURES

R-34HMAWS 9-3-07 (6'-3" Maximum Post Spacing) (1/4" minimum to 3/8" maximum HMA thickness)

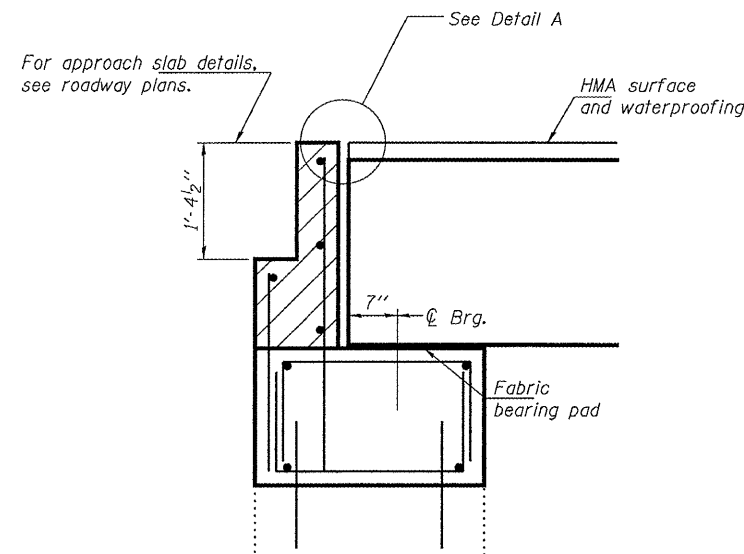
*Threaded areas shall be plugged or blocked off during casting of beam. Galvanized after fabrication.
**Whenever the lower insert assemblies interfere with strand locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed 1/2".

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

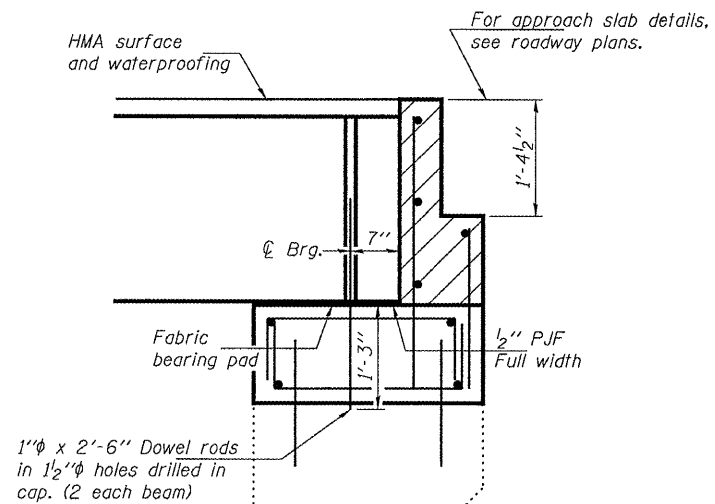
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IL 97		SANGAMON	29	18
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 5
8 SHEETS

Contract Number: 72B70

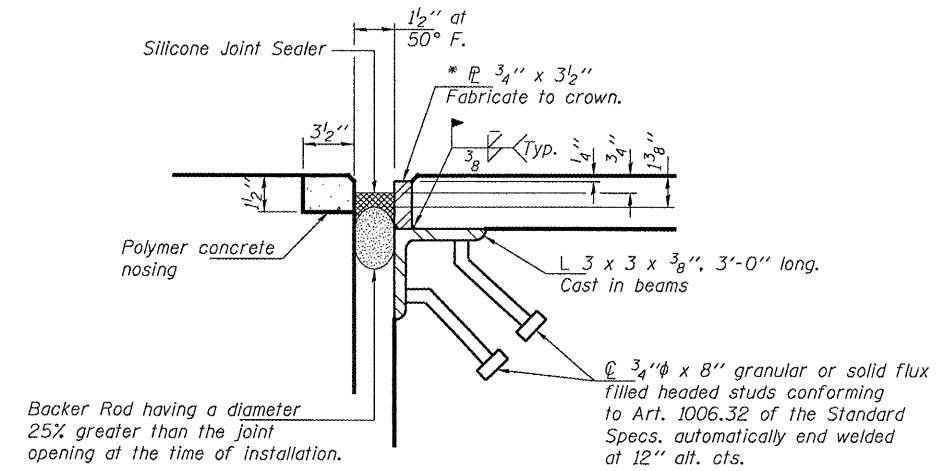


SECTION THRU E. ABUTMENT



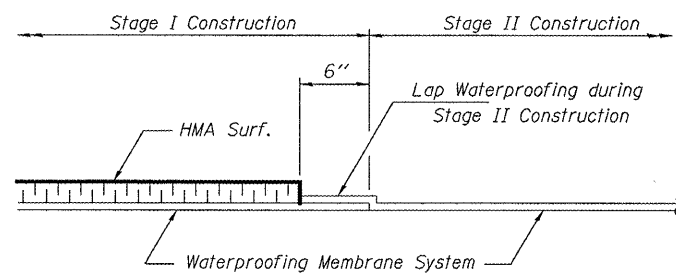
SECTION THRU W. ABUTMENT

Notes :
After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hrs. prior to grouting the shear keys.
Hatched area to be poured after beams are in place.

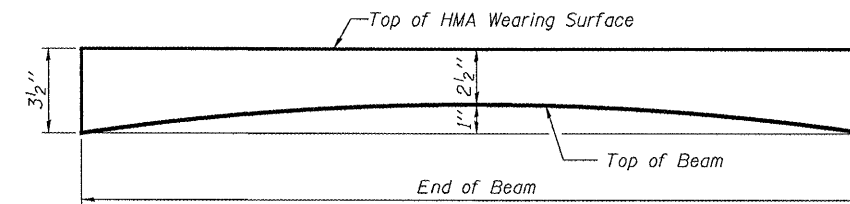


DETAIL A

* Furnish in segments of 20 ft. maximum length. Maximum space between installed segments shall be 3/16". Seal space with Silicone Sealant suitable for Structural Steel. After fabrication, all surfaces of the steel \varnothing shall be given one shop coat of paint specified for structural steel. No field painting required. Cost included with HMA Surface Course.



WATERPROOFING TREATMENT AT STAGE CONSTRUCTION



ANTICIPATED INITIAL CAMBER DIAGRAM

DESIGNED	VHV
CHECKED	ATH
DRAWN	baliva
CHECKED	VHV ATH

APRIL 30, 2008

EXAMINED *Carl Perry*
ENGINEER OF STRUCTURAL SERVICES

PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

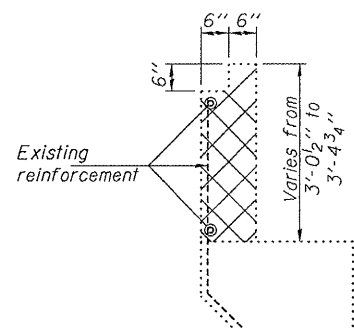
JOINT DETAILS
IL. 97 OVER PRAIRIE CREEK
SANGAMON COUNTY
SN 084-0046

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

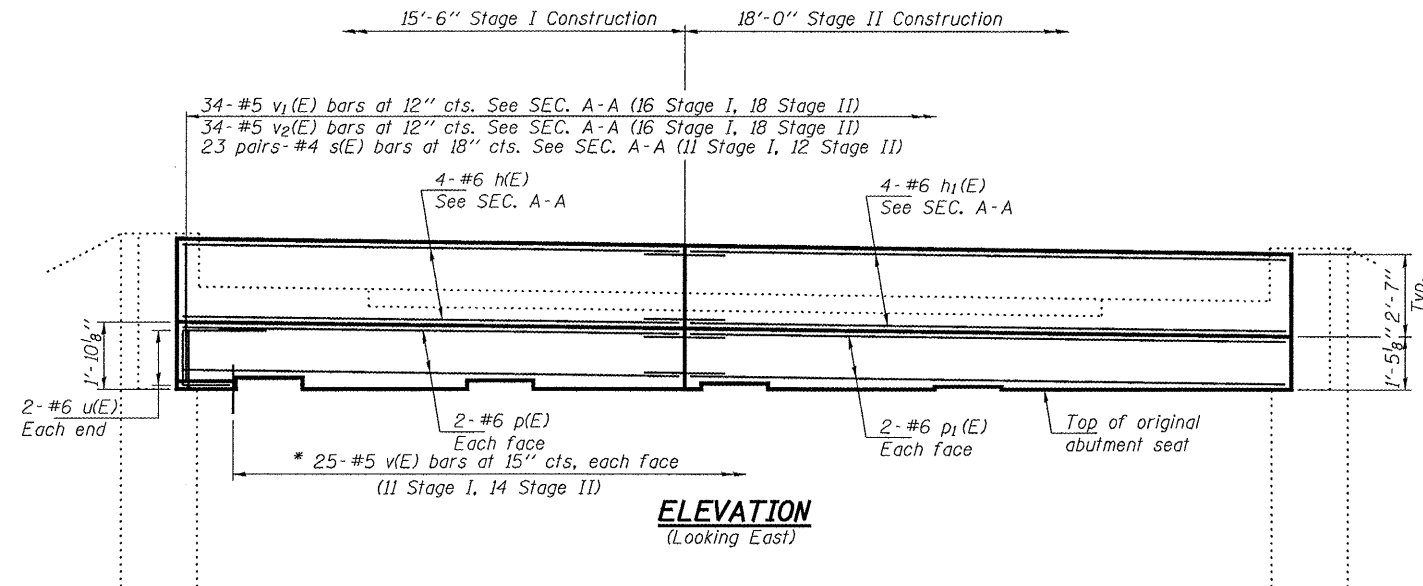
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IL 97		SANGAMON	29	19
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 6
8 SHEETS

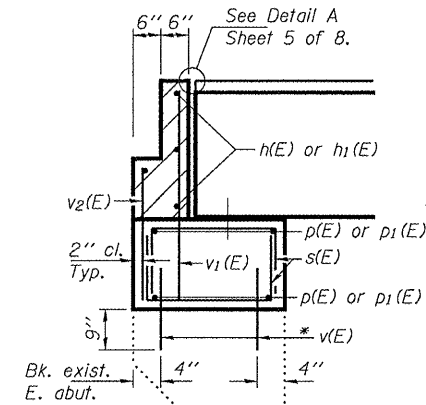
Contract Number: 72B70



SEC. THRU EXIST. ABUT.

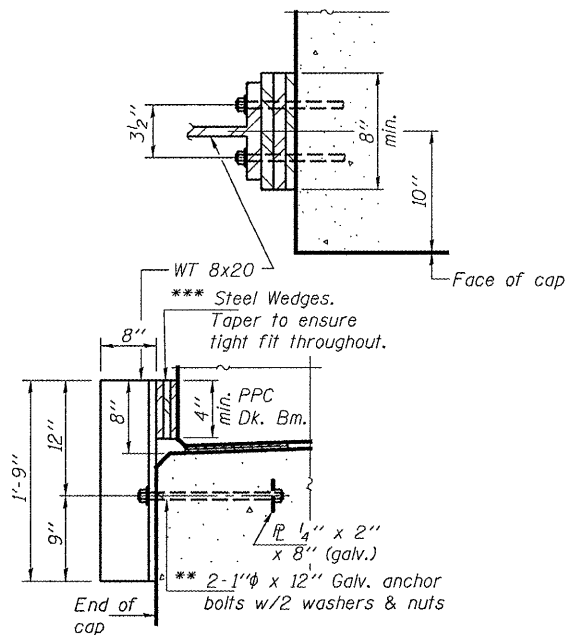


ELEVATION
(Looking East)



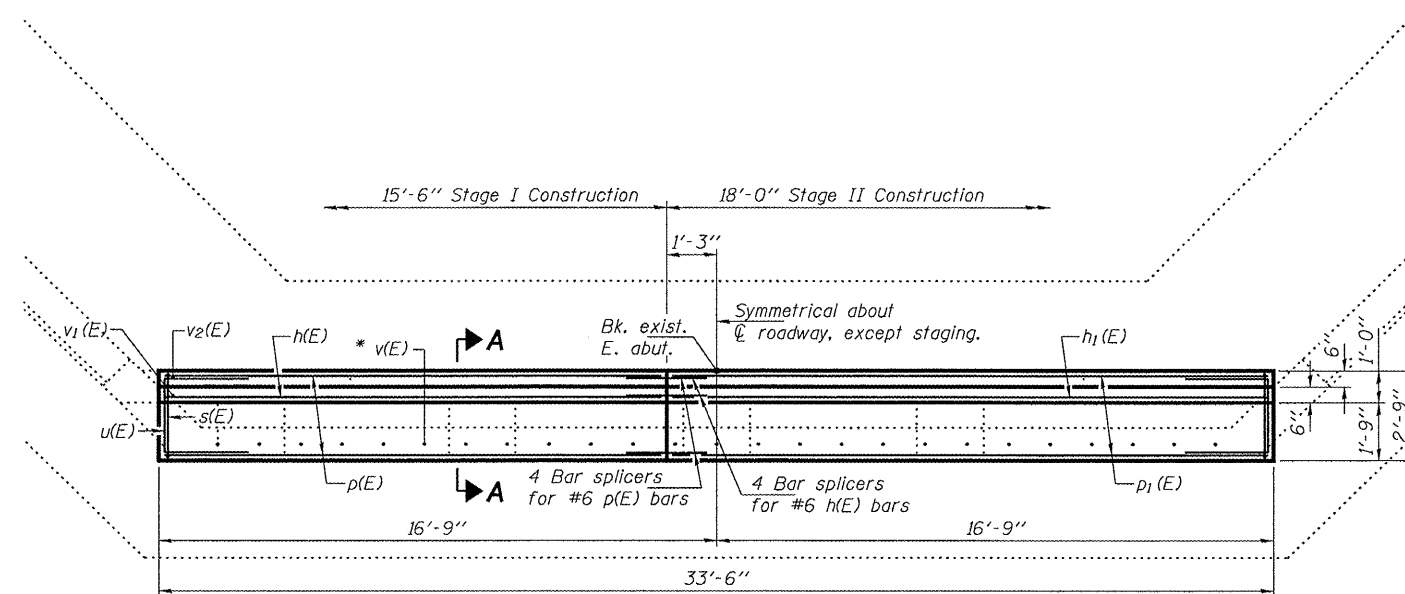
SECTION A-A

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

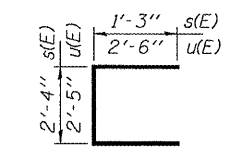


RETAINER

** Anchor bolts may be cast into the masonry or approved threaded rod may be placed in drilled holes and grouted in place. Cost of retainer and accessories are included with Erecting Precast Prestressed Concrete Deck Beams.
*** Wedges to be removed after overlay is placed.



PLAN



BARS s(E) & u(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	4	#6	15'-2"	—
h1(E)	4	#6	17'-8"	—
p(E)	4	#6	15'-2"	—
p1(E)	4	#6	17'-8"	—
s(E)	46	#4	4'-10"	□
u(E)	4	#6	7'-5"	□
v(E)	50	#5	1'-6"	—
v1(E)	34	#5	3'-6"	—
v2(E)	34	#5	2'-0"	—
Concrete Removal			Cu. Yd.	3.7
Concrete Structures			Cu. Yd.	5.6
Concrete Superstructure			Cu. Yd.	2.4
Reinforcement Bars, Epoxy Coated			Pound	860

Notes:
Hatched area to be poured after beams are in place. Cost of concrete included with Concrete Superstructure.
Cross hatched area indicates Concrete Removal.
All edges shall have standard 3/4" chamfers except as noted.
Removal of concrete between T-girder stems at abutments is included with Removal of Existing Superstructures.

EAST ABUTMENT
IL. 97 OVER PRAIRIE CREEK
SANGAMON COUNTY
SN 084-0046

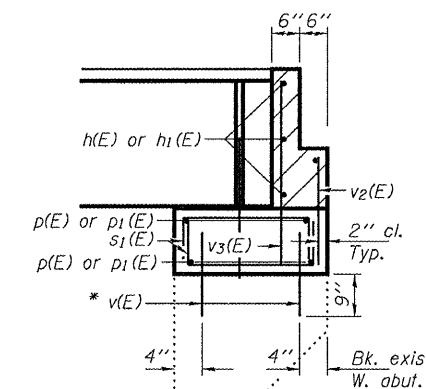
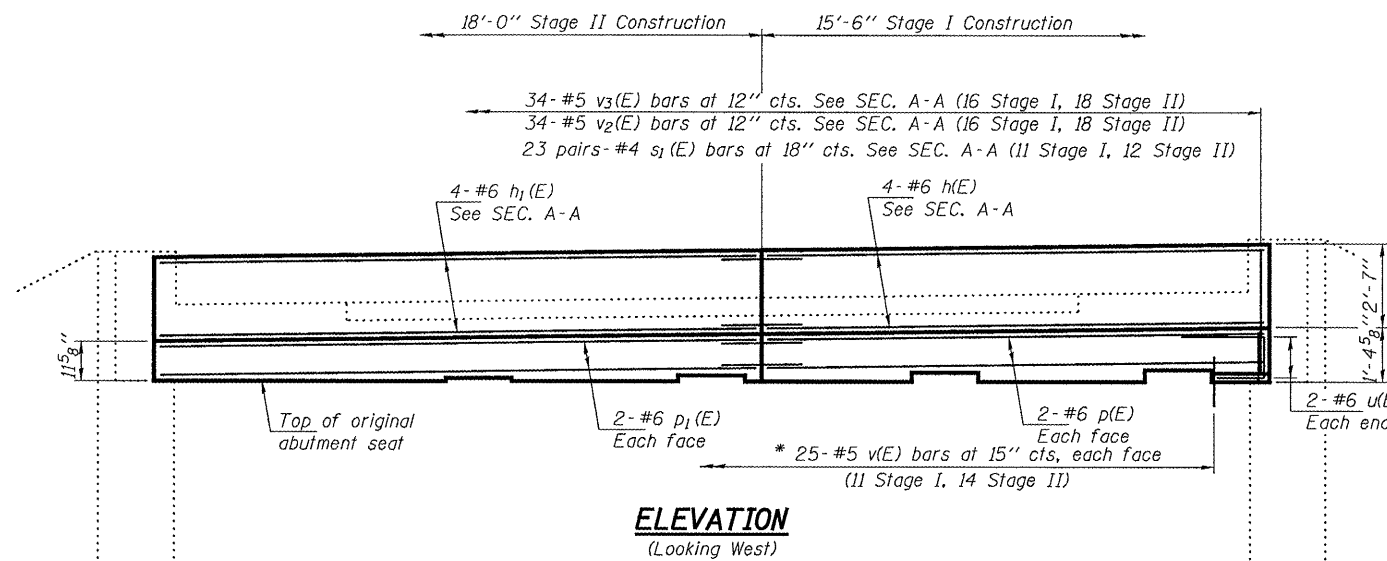
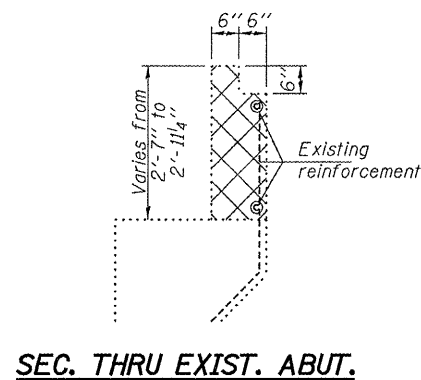
DESIGNED	VHV
CHECKED	ATH
DRAWN	balva
CHECKED	VHV ATH

APRIL 30, 2008
EXAMINED *Carl Koway*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

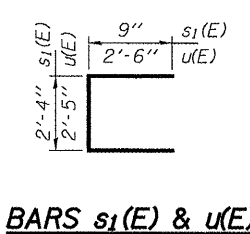
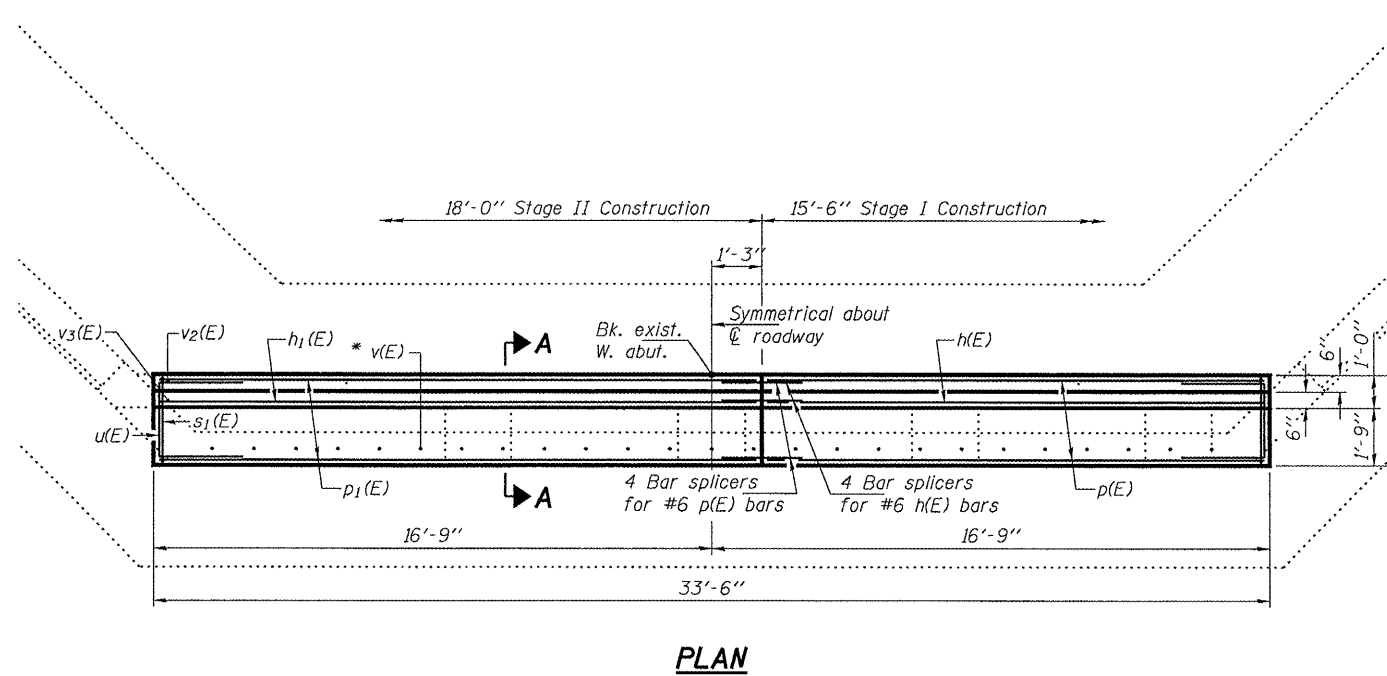
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 7 8 SHEETS
IL 97		SANGAMON	29	20	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract Number: 72B70



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



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	4	#6	15'-2"	—
h ₁ (E)	4	#6	17'-8"	—
p(E)	4	#6	15'-2"	—
p ₁ (E)	4	#6	17'-8"	—
s ₁ (E)	46	#4	3'-10"	□
u(E)	4	#6	7'-5"	C
v(E)	50	#5	1'-6"	—
v ₂ (E)	34	#5	2'-0"	—
v ₃ (E)	34	#5	3'-1"	—
Concrete Removal			Cu. Yd.	3.1
Concrete Structures			Cu. Yd.	4.0
Concrete Superstructure			Cu. Yd.	2.4
Reinforcement Bars, Epoxy Coated			Pound	820

WEST ABUTMENT
IL. 97 OVER PRAIRIE CREEK
SANGAMON COUNTY
SN 084-0046

DESIGNED	VHV
CHECKED	ATH
DRAWN	ballva
CHECKED	VHV ATH

APRIL 30, 2008
EXAMINED *Carl Prosser*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

Notes:
Hatched area to be poured after beams are in place.
Cost of concrete included with Concrete Superstructure.
Cross hatched area indicates Concrete Removal.
All edges shall have standard 3/4" chamfers except as noted.
Removal of concrete between T-girder stems at abutments is included with Removal of Existing Superstructures.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IL 97		SANGAMON	29	21
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 8
8 SHEETS

Contract Number: 72B70

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

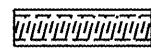
- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_t$
- ② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times f_y \times A_t$

Where f_y = Yield strength of lapped reinforcement bars in ksi.
 A_t = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	7.9
#5	2'-0"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8

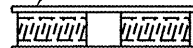
The diameter of this part is equal or larger than the diameter of bar spliced.
The diameter of this part is the same as the diameter of the bar spliced.

ROLLED THREAD DOWEL BAR



** ONE PIECE

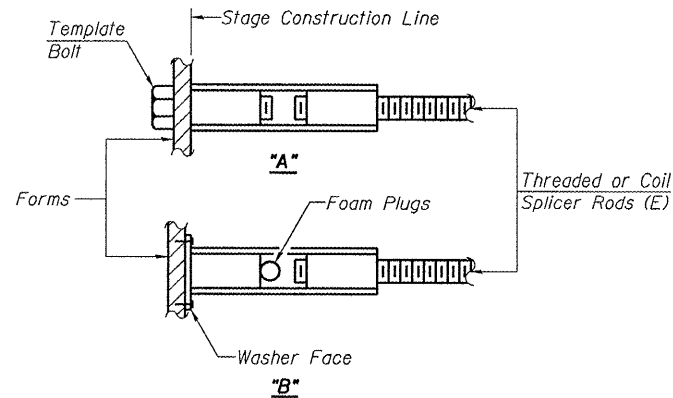
Wire Connector



WELDED SECTIONS

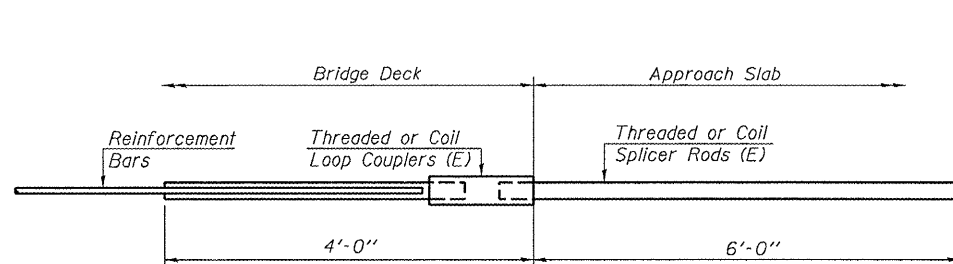
BAR SPLICER ASSEMBLY ALTERNATIVES

**Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



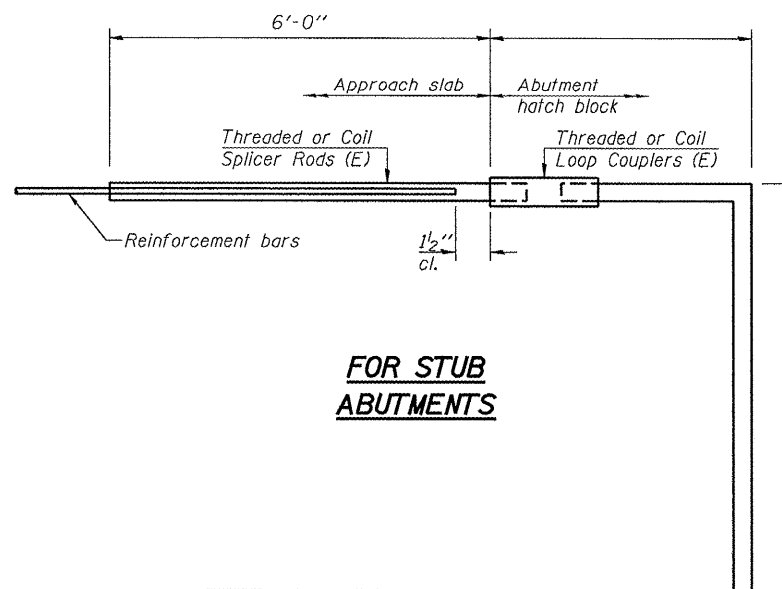
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



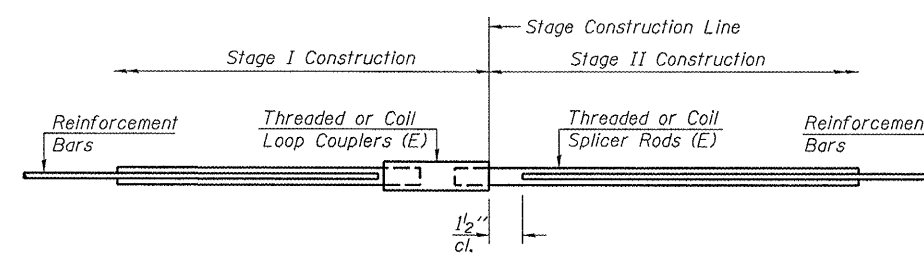
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar	
Min. Capacity = 23.0 kips - tension	
Min. Pull-out Strength = 12.3 kips - tension	
No. Required =	



FOR STUB ABUTMENTS

Bar Splicer for #5 bar	
Min. Capacity = 23.0 kips - tension	
Min. Pull-out Strength = 12.3 kips - tension	
No. Required =	



STANDARD

Bar Size	No. Assemblies Required	Location
#6	8	East Abutment
#6	8	West Abutment

BAR SPLICER DETAILS
IL. 97 OVER PRAIRIE CREEK
SANGAMON COUNTY
SN 084-0046

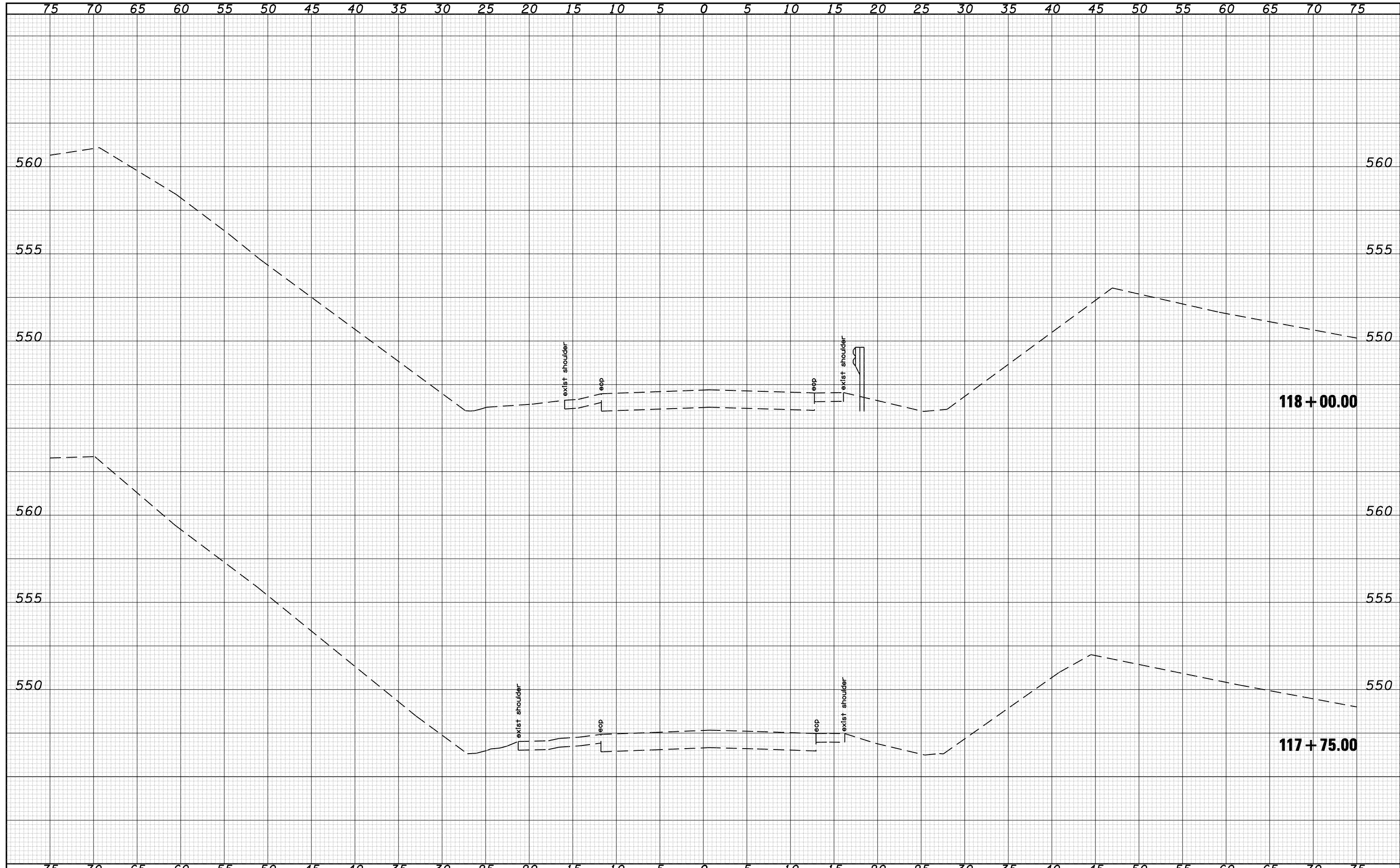
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CHECKED	ATH
DRAWN	baliva
CHECKED	VHV ATH

APRIL 30, 2008
EXAMINED *Carl Honey*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

BSD-1 11-1-06

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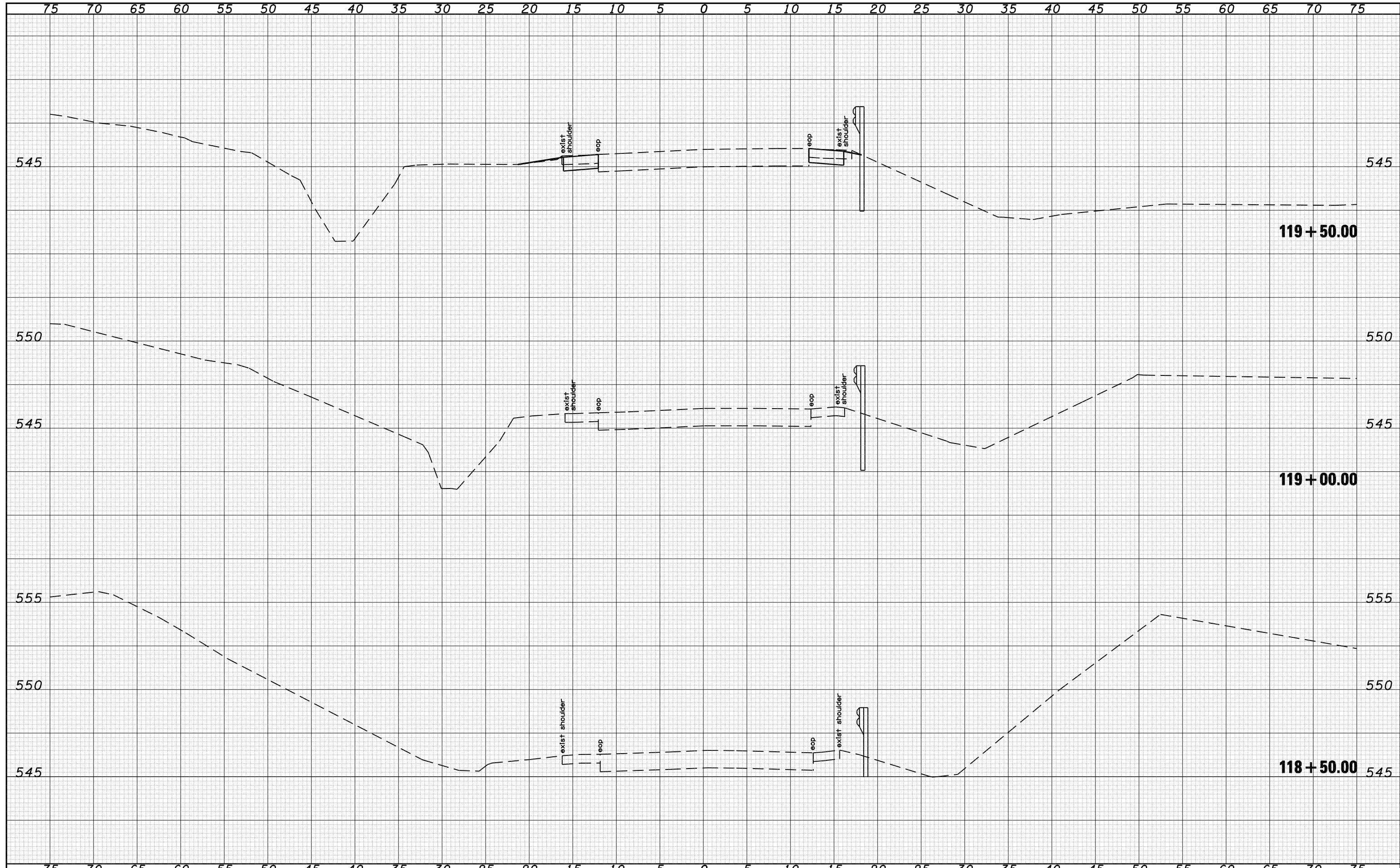
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NOTE BOOK	
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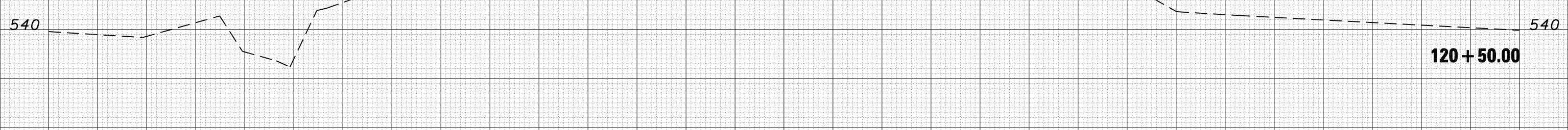
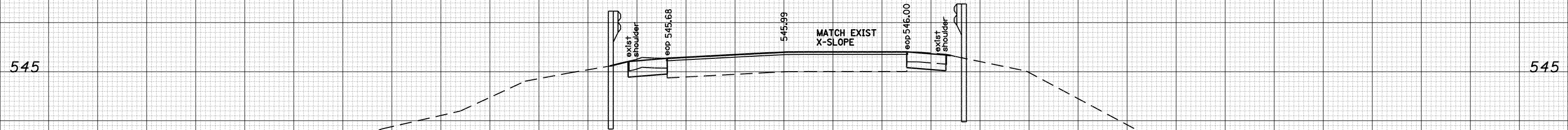
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NOTE BOOK	
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FINAL SURVEY	
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

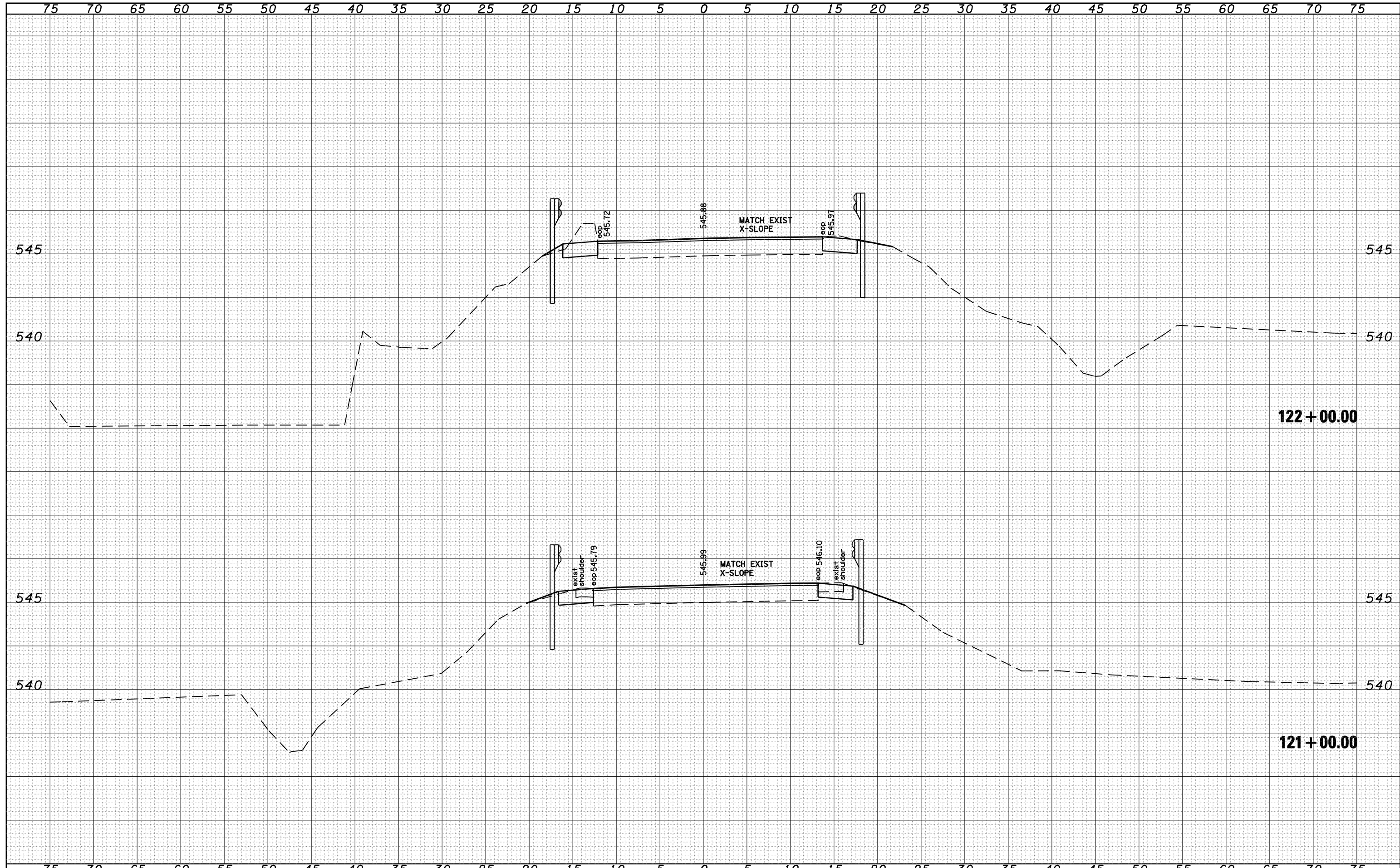
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
67	(W)BR	SANGAMON	29	24
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 72B70	

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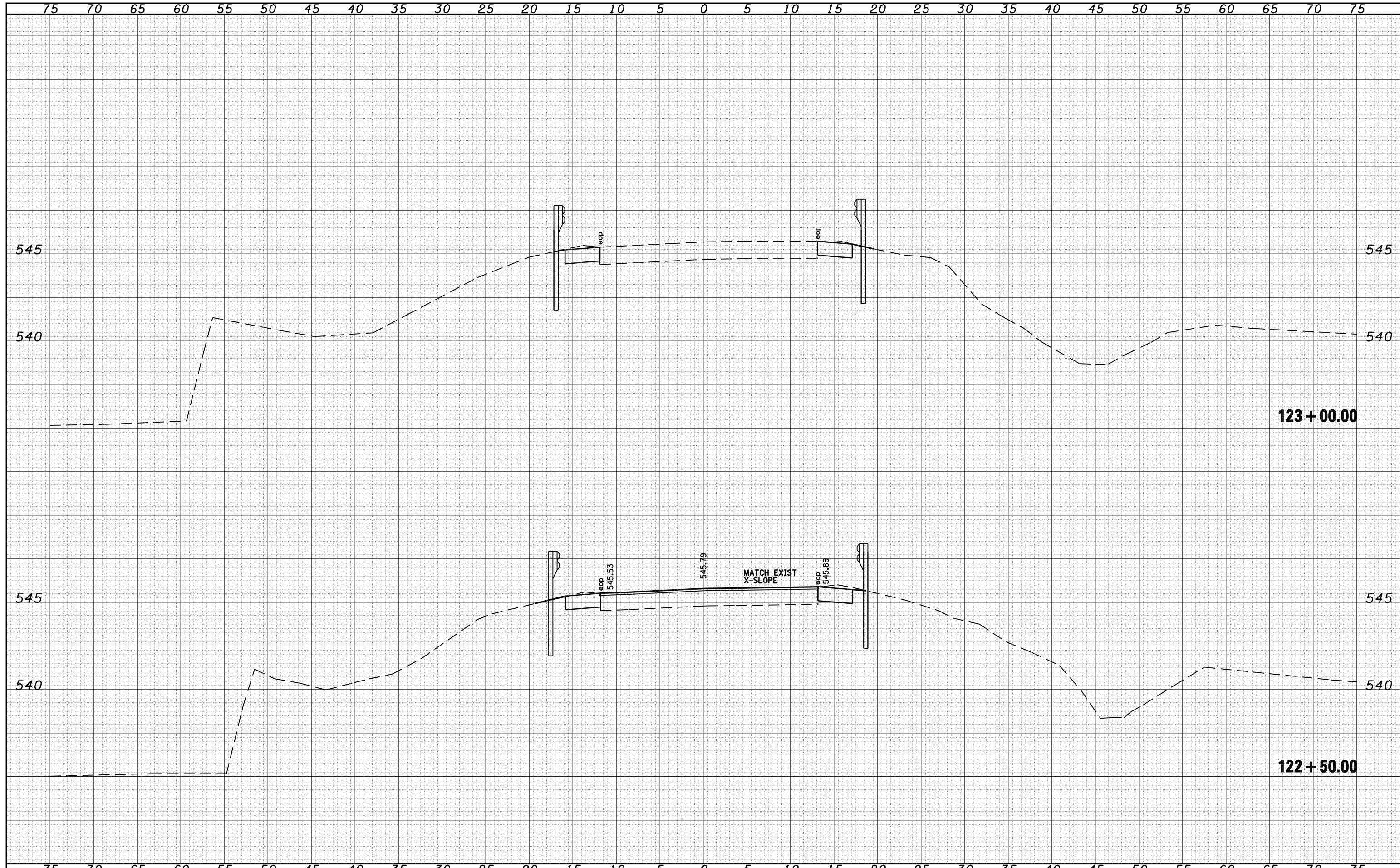
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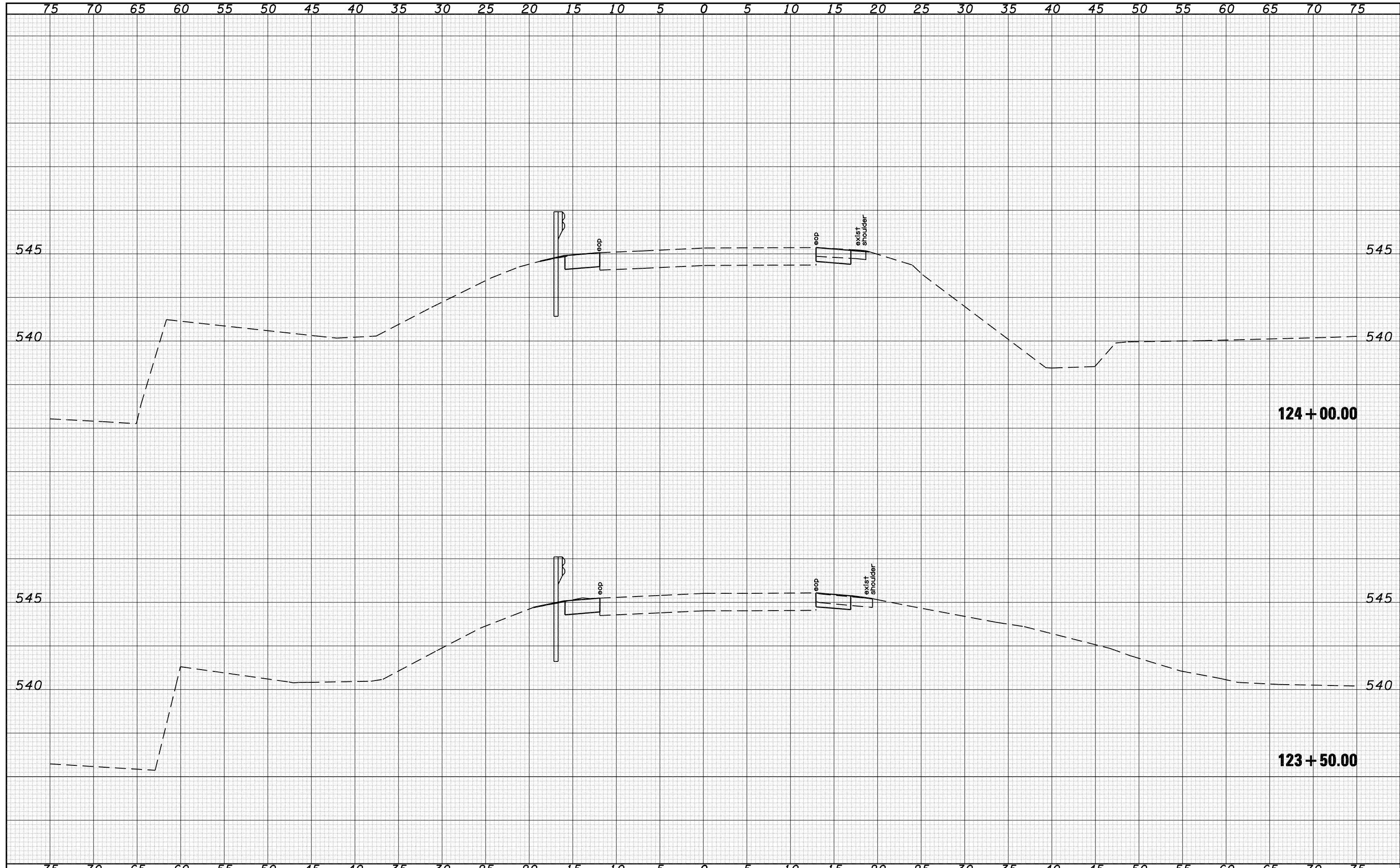
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DATE	
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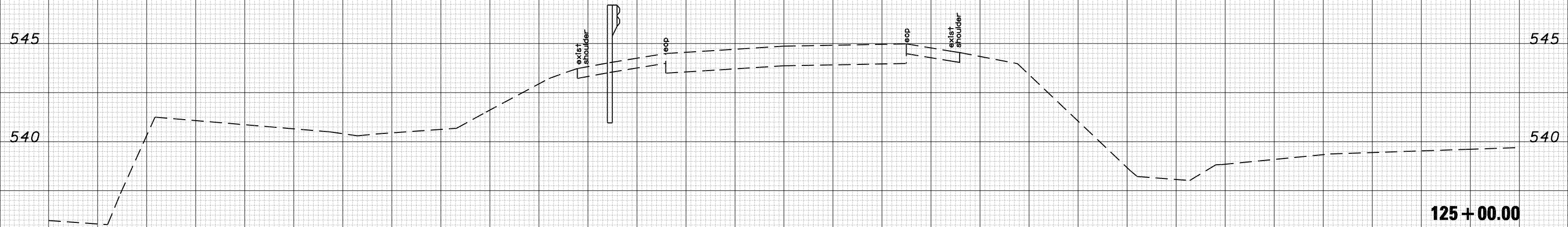
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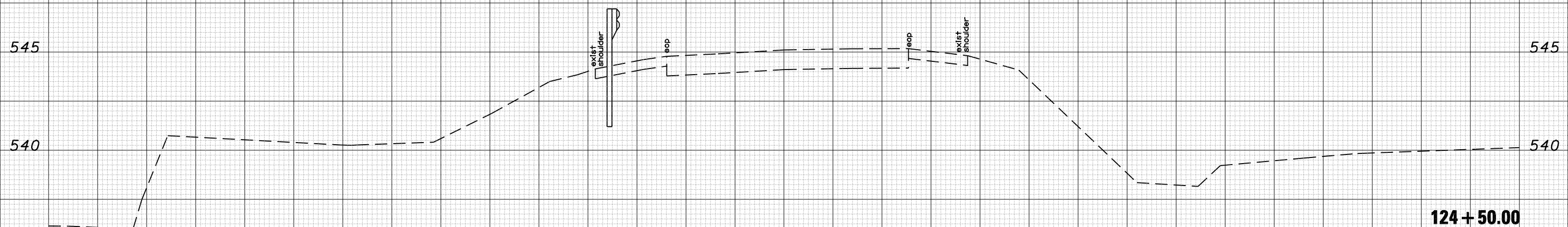
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FINAL SURVEY NO.	SURVEYED	DATE
NOTE BOOK	PLOTTED	
	TEMPLATE	
	AREAS	
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ORIGINAL SURVEY NO.	SURVEYED	DATE
NOTE BOOK	PLOTTED	
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS

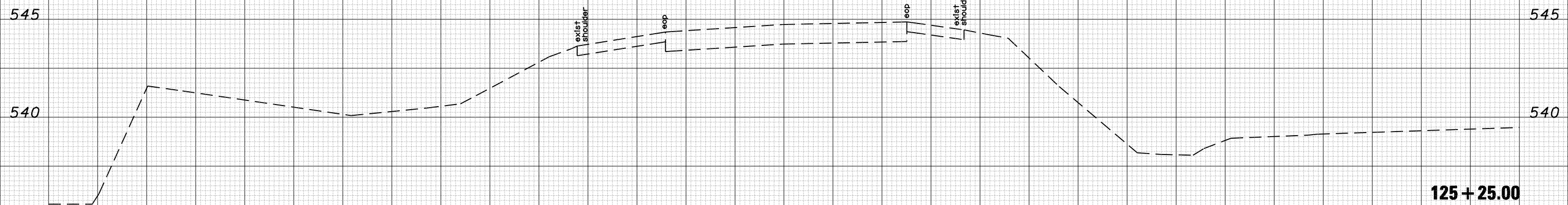
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
67	(W)BR	SANGAMON	29	28
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 72B70	

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

DATE	BY	ORIGINAL SURVEY NO.	NOTE BOOK	AREAS	CHECKED



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 DATE -

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 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS

SCALE: H=5 V=2.5 SHEET NO. 9 OF 9 SHEETS STA. 125+25.00 TO STA. 125+25.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
67	(W)BR	SANGAMON	29	29
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 72B70	