

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	104B-3-BR	WILL	42	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 60B80		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

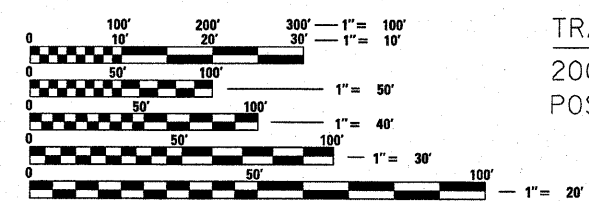
F.A.P. ROUTE 330 (U.S. RTE. 45)
OVER JACKSON CREEK
SECTION: 104B-3-BR
BRIDGE DECK REPLACEMENT
~~PROJECT:~~
WILL COUNTY
C-91-431-06

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT LOCATED IN
THE VILLAGE OF FRANKFORT



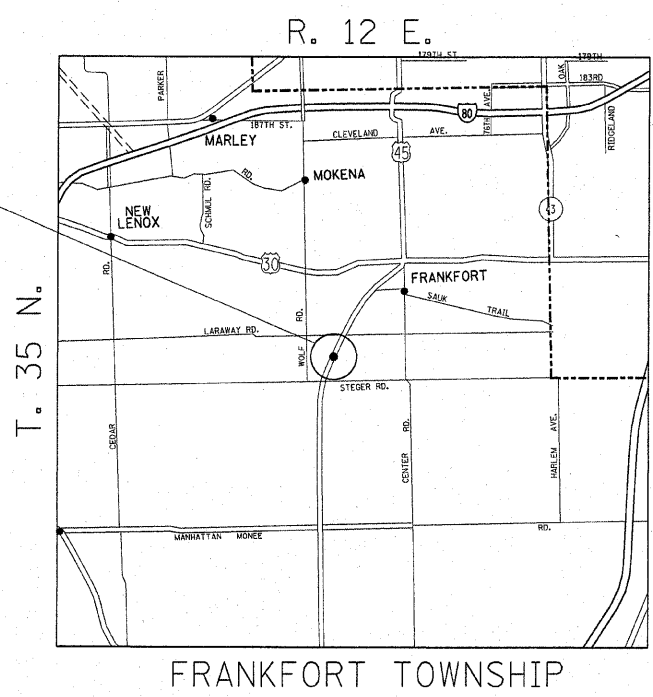
LOCATION OF PROJECT
U.S. RTE. 45 (LAGRANGE ROAD)
OVER JACKSON CREEK



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

TRAFFIC DATA
2001 ADT = 5,400
POSTED SPEED = 45 MPH



US 45 OVER JACKSON CREEK
EXISTING SN: 099 - 2005
PROPOSED SN: 099-4649
REMOVE EXISTING SINGLE SPAN
PRECAST PRESTRESSED CONCRETE
DECK BEAM STRUCTURE AND
CONSTRUCT THREE SIDED PRECAST
CONCRETE STRUCTURE 32' X 10'



PROJECT ENGINEER: J.P. CHANG (847) 705-4432
PLAN PREPARATION ENGINEER: KEN ENG

GROSS & NET LENGTH OF PROJECT = 550 FEET = 0.10 MILE

CONTRACT NO. 60B80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED October 30 2007

Dione O'Keefe /c/
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
December 7, 2007

Eric E. Haran
ENGINEER OF DESIGN AND ENVIRONMENT
December 7, 2007

Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

INDEX OF SHEETS

GENERAL NOTES

STATE STANDARDS

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
1	TITLE SHEET
2	INDEX OF SHEETS, STATE STANDARDS & GENERAL NOTES
3-4	SUMMARY OF QUANTITIES
5-6	EXISTING AND PROPOSED TYPICAL SECTIONS
7	SCHEDULE OF QUANTITIES
8	EXISTING AND PROPOSED ROADWAY PLAN AND PROFILE
9-11	SUGGESTED TRAFFIC CONTROL PLAN FOR US 45 (LAGRANGE RD.) OVER JACKSON CREEK
12	EROSION CONTROL DETAILS
13	PAVEMENT MARKING AND LANDSCAPING PLAN
14-16	TEMPORARY TRAFFIC SIGNAL PLANS
17-18	TEMPORARY LIGHTING PLANS
19	DETAILS OF BRIDGE APPROACH SLABS, STANDARD 1909 (INFO. ONLY)
20-30	BRIDGE REPAIR PLANS
31	DRIVEWAY DETAILS DISTANCE BETWEEN ROW AND FACE OF CURB & EDGE OF SHOULDER > 15' (4.5m)
32	BUTT JOINT AND HMA TAPER DETAILS
33	TRAFFIC CONTROL AND PROTECTION FOR INTERSECTIONS, SIDEROADS AND DRIVEWAYS
34	TYPICAL APPLICATIONS: RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)
35	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
36	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
37	ARTERIAL ROAD INFORMATION SIGN
38	COMBINATION LIGHTING & TRAFFIC POLE MOUNTED ELECTRIC SERVICE BOX DETAIL
39	TEMPORARY LIGHT POLE DETAILS
40	TEMPORARY AERIAL CABLE INSTALLATION
41-42	CROSS SECTIONS

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. (48 HOUR NOTIFICATION REQUIRED)

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE VILLAGE OF FRANKFORT.

THE CONTRACTOR WILL NOT BE ABLE TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT THE WRITTEN PERMISSION OF THE DEPARTMENT.

THE RESIDENT ENGINEER SHALL CONTACT MS. CORA MATHIS, AREA TRAFFIC FIELD ENGINEER, AT (815) 485-6475 A MINIMUM OF TWO (2) WEEKS PRIOR TO PLACEMENT OF FINAL PAVEMENT MARKINGS.

<u>STANDARD NO.</u>	<u>DESCRIPTION</u>
000001-05	TYPICAL SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-04	TEMPORARY EROSION CONTROL SYSTEMS
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
630001-07	STEEL PLATE BEAM GUARDRAIL
630201-05	PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
630301-04	SHOULDER WIDENING FOR TYPE I (SPECIAL) GUARDRAIL TERMINALS
631011-04	TRAFFIC BARRIER TERMINAL, TYPE 2
631026-04	TRAFFIC BARRIER TERMINAL, TYPE 5 & 5A
631031-06	TRAFFIC BARRIER TERMINAL, TYPE 6
635006-02	REFLECTOR AND TERMINAL MARKER PLACEMENT
701006-02	OFF-ROAD OPERATIONS 2L, 2W, 4.5 m (15') TO PAVEMENT EDGE FOR SPEEDS > 45 MPH
701201-02	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH
701321-09	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701901	TRAFFIC CONTROL DEVICES
704001-04	TEMPORARY CONCRETE BARRIER

FILE NAME = c:\projects\p135202\design_00.dgn	USER NAME = smithkl	DESIGNED - DRAWN -	REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING AND PROPOSED ROADWAY PLAN U.S. RTE. 45 OVER JACKSON CREEK - S.N. 099-4649	F.A.P. RTE. 330	SECTION 104B-3-BR	COUNTY WILL	TOTAL SHEETS 42	SHEET NO. 2	
PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED -	SCALE: 1" = 50'			SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			
PLOT DATE = 12/4/2007	DATE -	REVISED -	CONTRACT NO. 60B80								

F.A.P. RTEL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	104B-3-BR	WILL	42	3
FED. ROAD DIST. NO. 1		ILLINOIS	HIGHWAY PROJECT	

SUMMARY OF QUANTITIES			100% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		ROADWAY 1000 - 2A	BRIDGE X028-2A			
83057355	LIGHT POLE, WOOD, 60 FOOT, CLASS 4, WITH 15 FT. MAST ARM	EACH	6	6				
XX007024	PRECAST CONCRETE (THREE-SIDED) STRUCTURE, 32' X 10'	FOOT	43		43			
20200100	EARTH EXCAVATION	CU YD	122	122				
20201006	GRADING AND SHAPING SHOULDERS	UNIT	2	2				
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	389	389				
20400800	FURNISHED EXCAVATION	CU YD	14	14				
20800150	TRENCH BACKFILL	CU YD	21	21				
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	1760	1760				
25000210	SEEDING, CLASS 2A	ACRE	0.4	0.4				
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	40	40				
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	40	40				
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	40	40				
25100630	EROSION CONTROL BLANKET	SQ YD	1760	1760				
25200200	SUPPLEMENTAL WATERING	UNIT	20	20				
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	40	40				
28000300	TEMPORARY DITCH CHECKS	EACH	4	4				
28000400	PERIMETER EROSION BARRIER	FOOT	1060	1060				
28100107	STONE RIPRAP, CLASS A4	SQ YD	326		326			
28200200	FILTER FABRIC	SQ YD	326		326			
31101200	SUB-BASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	145	145				
31102100	SUB-BASE GRANULAR MATERIAL, TYPE C 4"	SQ YD	200	200				
35501308	HOT-MIX ASPHALT BASE COURSE, 6"	SQ YD	50	50				
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	1	1				
40600300	AGGREGATE (PRIME COAT)	TON	4	4				
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGWAYS	TON	1	1				
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	30	30				
40603085	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	TON	215	215				

SUMMARY OF QUANTITIES			100% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE				
CODE NO	ITEM	UNIT		ROADWAY 1000 - 2A	BRIDGE X028-2A			
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	6	6				
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	191	191				
44000100	PAVEMENT REMOVAL	SQ YD	125	125				
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	1300	1300				
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	80	80				
44000700	APPROACH SLAB REMOVAL	SQ YD	125	125				
44004250	PAVED SHOULDER REMOVAL	SQ YD	50	50				
44300200	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	1650	1650				
48101500	AGGREGATE SHOULDERS, TYPE B 6"	SQ YD	80	80				
48203037	HOT-MIX ASPHALT SHOULDERS, 10"	SQ YD	900	900				
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1			1		
50105220	PIPE CULVERT REMOVAL	FOOT	21	21				
50300225	CONCRETE STRUCTURES	CU YD	181			181		
50300300	PROTECTIVE COAT	SQ YD	17.3			17.3		
50800105	REINFORCEMENT BARS	POUND	15,970			15,970		
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1,780			1,780		
50800515	BAR SPLICERS	EACH	60			60		
X0325701	STEEL RAILING, TYPE 2399	FOOT	70			70		
51205200	TEMPORARY SHEET PILING	SQ FT	1,510			1,510		
51500100	NAME PLATES	EACH	1			1		
54213660	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15"	EACH	2	2				
54247100	GRATING FOR CONCRETE FLARED END SECTION 15"	EACH	2	2				
542A0220	PIPE CULVERTS, CLASS A, TYPE 1 15"	FOOT	21	21				
60107600	PIPE UNDERDRAINS 4"	FOOT	70	70				
* 63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	425	425				
* 63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	1	1				
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4				
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	3	3				

10/30/2007

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES

*SPECIALTY ITEMS

Rev.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	104B-3-BR	WILL	42	4
FED. ROAD DIST. NO. 1		ILLINOIS	HIGHWAY PROJECT	

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT	100% STATE TOTAL QUANTITIES	ROADWAY 1000 - 2A	BRIDGE X028-2A			
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	10	10				
67100100	MOBILIZATION	L SUM	1	1				
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1				
70101800	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	1	1				
70106705	TEMPORARY RUMBLE STRIP	FOOT	405	405				
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	2120	2120				
70400100	TEMPORARY CONCRETE BARRIER	FOOT	410	410				
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	410	410				
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	2200	2200				
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	30	30				
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4				
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	25	25				
80400100	ELECTRIC SERVICE INSTALLATION	EACH	1	1				
80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1	1				
* 81800320	AERIAL CABLE, 3-1/C NO. 4 WITH MESSENGER WIRE	FOOT	1600	1600				
* 82103400	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 400 WATT	EACH	6	6				
* 84100110	REMOVAL OF TEMPORARY LIGHTING UNITS	EACH	6	6				
* 84500110	REMOVAL OF LIGHTING CONTROLLER	EACH	1	1				
* 84500120	REMOVAL OF ELECTRIC SERVICE INSTALLATION	EACH	1	1				
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	51.4	51.4				
* X0323574	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	6	6				
X0325239	TEMPORARY PAVEMENT 10"	SQ YD	305	305				
* X8250090	COMBINATION POLE LIGHTING CONTROLLER	EACH	1	1				
* XX006937	GROUND ROD, 5/8" DIA. X 10 FT.	EACH	3	3				
Z0001050	AGGREGATE SUBGRADE 12"	SQ YD	980	980				
X8900005	TEMPORARY BRIDGE TRAFFIC SIGNAL INSTALLATION	EACH	1	1				

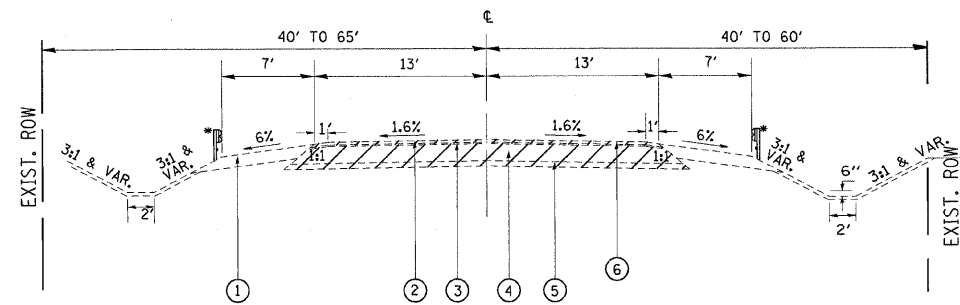
SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE					
CODE NO	ITEM	UNIT	TOTAL QUANTITIES					

* SPECIALTY ITEMS

REVISIONS	
NAME	DATE

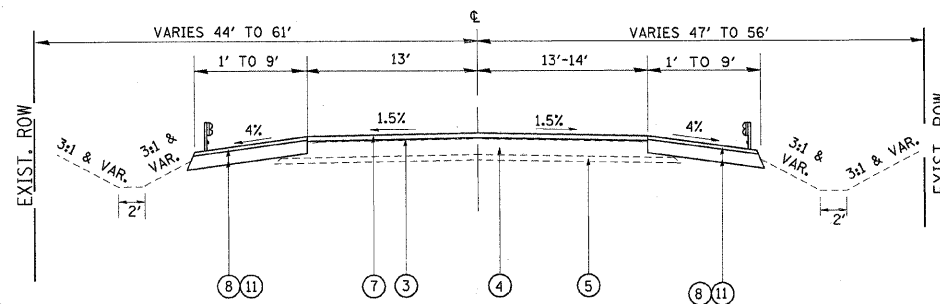
ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES

10/30/2007



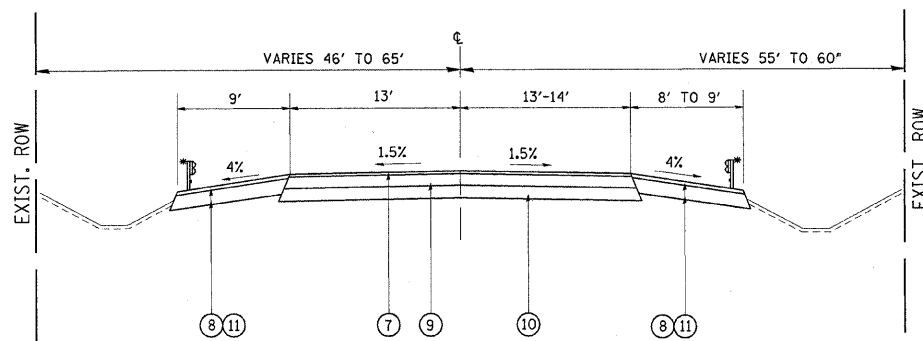
EXISTING TYPICAL SECTION
US 45

STATION
146+50 TO 149+70
149+43 TO 152+00



PROPOSED TYPICAL SECTION
US 45

STATION
146+50 TO 148+50
149+63 TO 152+00



PROPOSED TYPICAL SECTION
US 45

STATION
148+50 TO 148+90
149+23 TO 149+63

LEGEND

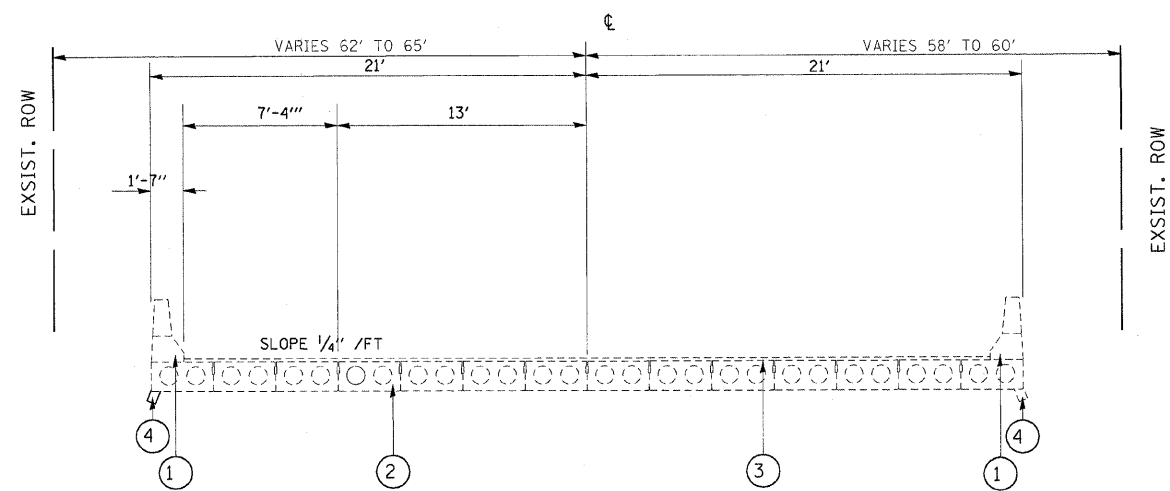
- ① EXIST. AGGREGATE SHOULDER, (6")
- ② EXIST. HMA CONCRETE SURFACE COURSE MIXTURE D (CLASS I) (1 1/2")
- ③ EXIST. HMA CONCRETE BINDER COURSE (CLASS I) (1 1/2")
- ④ EXIST. HMA BASE COURSE (9")
- ⑤ EXIST. SUB-BASE GRANULAR MATERIAL TYPE A (4")
- ⑥ PROP. HMA SURFACE REMOVAL, 2" (STA. 146+50-148+50 AND STA. 149+63-152+00)
- ⑦ PROP. HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 2"
- ⑧ PROP. HMA SHOULDER, 10"
- ⑨ PROP. HMA BINDER COURSE, IL - 19, N70, 11"
- ⑩ PROP. AGGREGATE SUBGRADE, 12"
- ⑪ PROP. HMA SURFACE COURSE, MIX "D", N50, 1 3/4"
- ⑫ PROP. AGGREGATE WEDGE SHOULDER, TYPE B

- * STA 147+76 TO STA 148+90(LT)
- * STA 149+23 TO STA 150+38(LT)
- * STA 147+76 TO STA 148+90(RT)
- * STA 149+23 TO STA 150+37(RT)

NOTES:

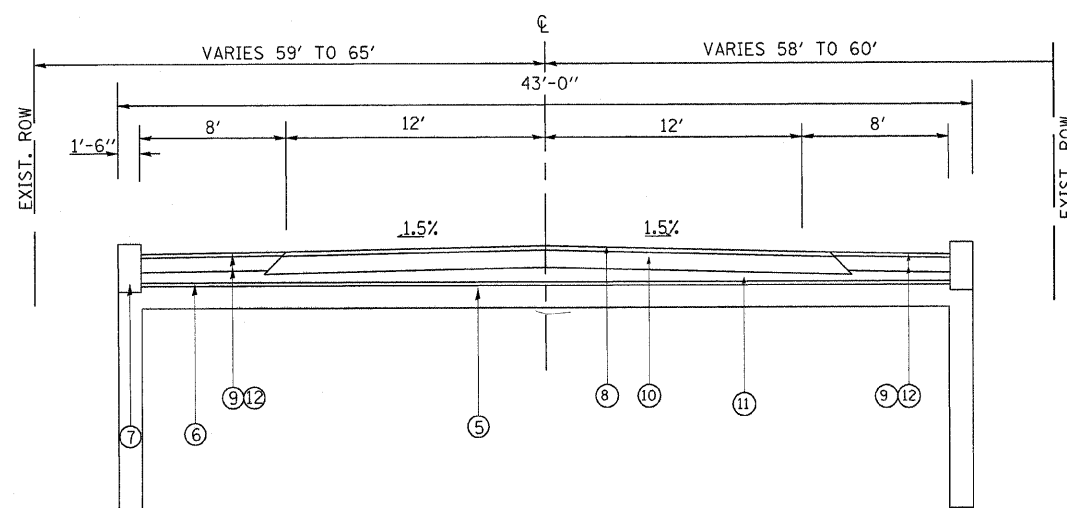
FOR EXISTING APPROACH PAVEMENT DETAIL, SEE DETAILS OF APPROACH PAVEMENT SHEET
FOR TEMPORARY PAVEMENT LOCATIONS, SEE PRE-STAGE CONSTRUCTION SHEET

FILE NAME = c:\projects\p135282\design.dgn	USER NAME = sm:thk1	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING AND PROPOSED ROADWAY PLAN			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE = 50,000 / / IN.	DRAWN -	REVISED -		U.S. RTE. 45 OVER JACKSON CREEK - S.N. 099-4649			330	104B-3-BR	WILL	42	5	
	PLOT DATE = 10/30/2007	CHECKED -	REVISED -		SCALE: 1" = 50'			SHEET NO.	OF	SHEETS	STA.	TO	STA.
		DATE -	REVISED -		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT								



EXISTING TYPICAL SECTION
US 45

STATION
148+90 TO 149+23 (BRIDGE)



PROPOSED TYPICAL SECTION
US 45

STATION
148+90 TO 149+23

LEGEND

- ① EXIST. PARAPET WALL
- ② EXIST. PRE-CAST, PRESTRESSED CONCRETE DECK BEAMS @ 3'-0" (WIDE) EACH
- ③ EXIST. HMA OVERLAY (1 1/2" - 2")
- ④ EXIST. SCUPPER
- ⑤ PROPOSED THREE SIDED PRECAST CONCRETE STRUCTURE, 32' x 10'
- ⑥ PROPOSED SUB-BASE GRANULAR MATERIAL, TYPE B, 4"
- ⑦ PROPOSED HEADWALL
- ⑧ PROP. HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 2"
- ⑨ PROP. TEMP. PAVEMENT, 10" (TO REMAIN IN PLACE)
- ⑩ PROP. HMA BINDER COURSE, IL - 19, N70, 11"
- ⑪ PROP. AGGREGATE SUBGRADE, 12"
- ⑫ PROP. HMA SURFACE COURSE, MIX "D", N50, 1 3/4"

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	PLDT DATE = 10/30/2007	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

EXISTING AND PROPOSED ROADWAY PLAN			
U.S. RTE. 45 OVER JACKSON CREEK - S.N. 099-4649			
SCALE: 1" = 50'	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.P. RTE. 330	SECTION 104B-3-BR	COUNTY WILL	TOTAL SHEETS 42	SHEET NO. 6
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				CONTRACT NO. 60B80

SCHEDULE OF QUANTITIES (EARTHWORK)						
1	2	3	4	5	6	7
US 45 OVER JACKSON CREEK	EARTH EXCAVATION (CU YD)	UNSUITABLE MATERIAL (CU YD)	EMBANKMENT (CU YD)	ADJUSTMENT FOR SHRINKAGE (CU YD)	FURNISHED EXCAVATION (CU YD)	TOP SOIL FURNISH AND PLACE (SQ YD)
US 45 - STA. 146+50 TO 152+00	122	389	118	104	-14	1,760
COLUMN 1: LOCATION FROM PLANS COLUMN 2: CUT QUANTITIES AFTER UNSUITABLE MATERIAL IS REMOVED COLUMN 3: MATERIAL THAT IS DETERMINED TO BE EITHER UNSTABLE OR UNSUITABLE FOR USE IN EMBANKMENT (TOP SOIL EXCAVATED AT 6" (150 MM) AVERAGE DEPTH) COLUMN 4: FILL QUANTITIES AFTER UNSUITABLE MATERIAL IS REMOVED			COLUMN 5: EARTH EXCAVATION THAT IS TO BE USED AS FILL MATERIAL IN THE EMBANKMENT, SHRINKAGE FACTOR WAS DETERMINED TO BE 15%. COLUMN 6: COLUMN 5 - COLUMN 4, POSITIVE QUANTITY= EXTRA EXCAVATION, NEGATIVE QUANTITY= FURNISHED EXCAVATION COLUMN 7: TOPSOIL FURNISH AND PLACE= AREA OF SODDING			

NOTE: THE TOP 6" OF TOPSOIL IS TO BE REMOVED AND PAID FOR AS REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL.

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

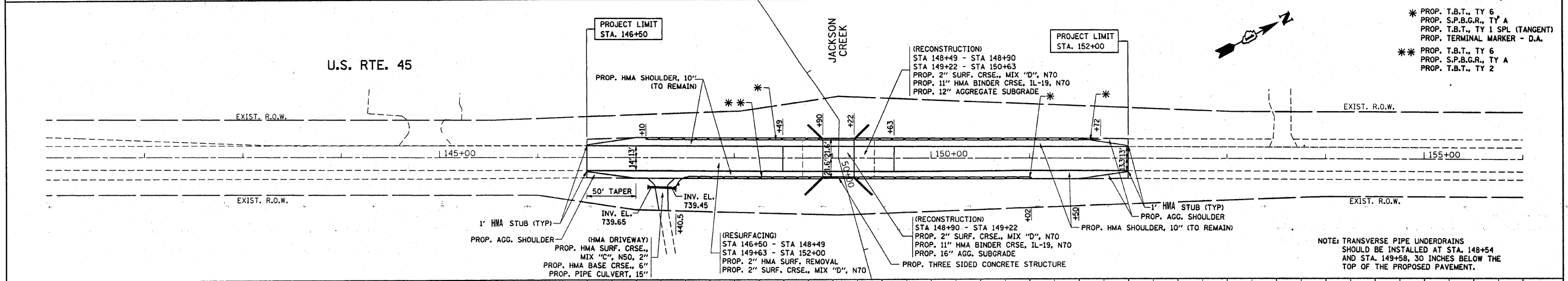
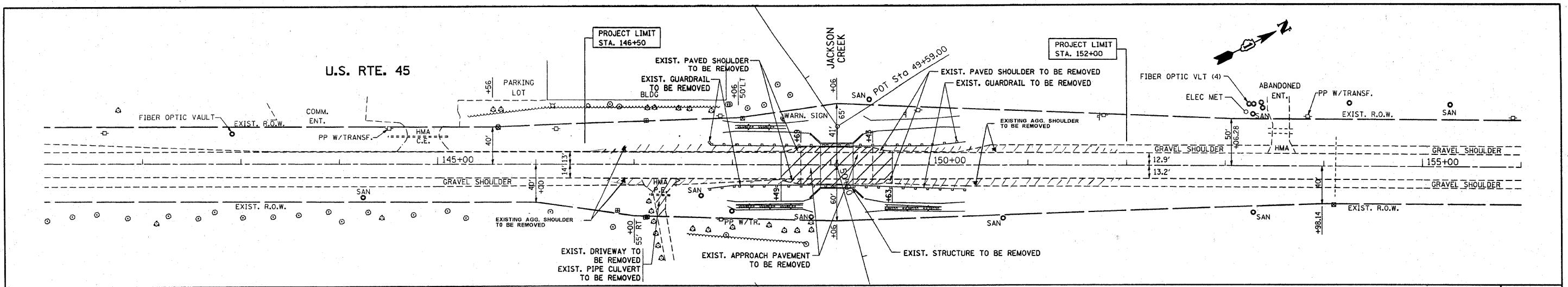
MIXTURE TYPE	AC TYPE	AIR VOIDS (%)
HMA SHOULDER		
HOT-MIX ASPHALT SHOULDER, N50, 10"	PG 64-22*	2% @ 30 GYR
TEMPORARY PAVEMENT		
TEMP. PAVEMENT, (HMA BINDER IL-19mm) 10"	PG 64-22*	4% @ 50 GYR
FULL DEPTH PAVEMENT		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 2"	PG 64-22	4% @ 70 GYR
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70, 11"	PG 64-22*	4% @ 70 GYR
DRIVEWAY		
HOT-MIX ASPHALT BASE COURSE, (HMA BINDER IL-19mm) 6"	PG 64-22*	4% @ 50 GYR
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 2"	PG 64-22	4% @ 50 GYR

THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN

* WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22

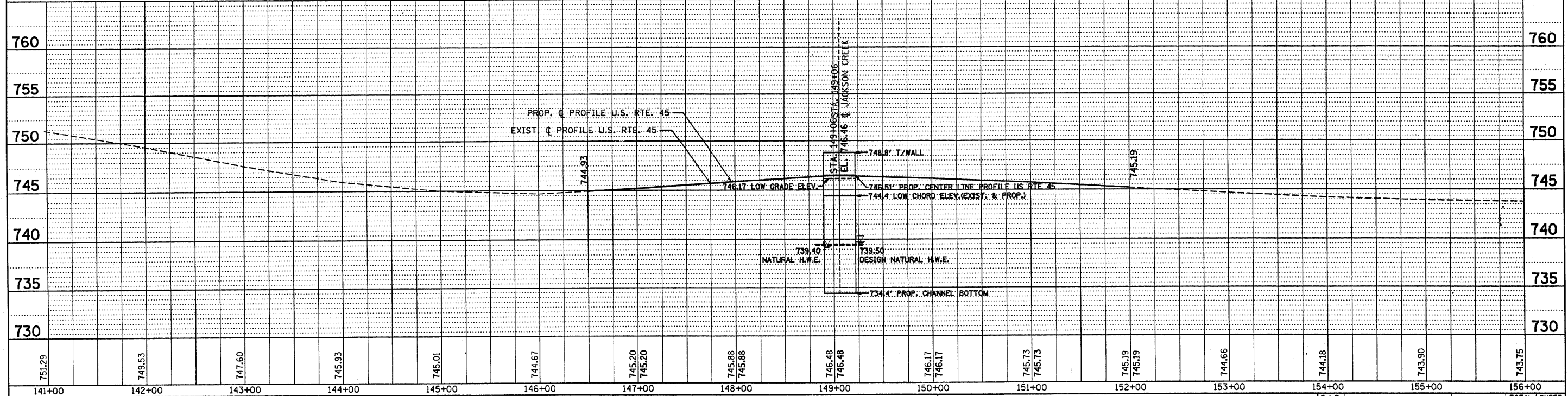
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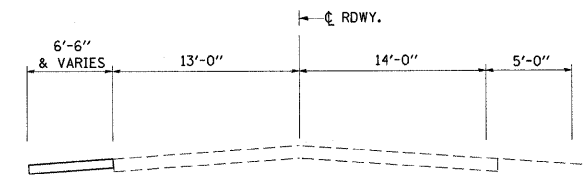
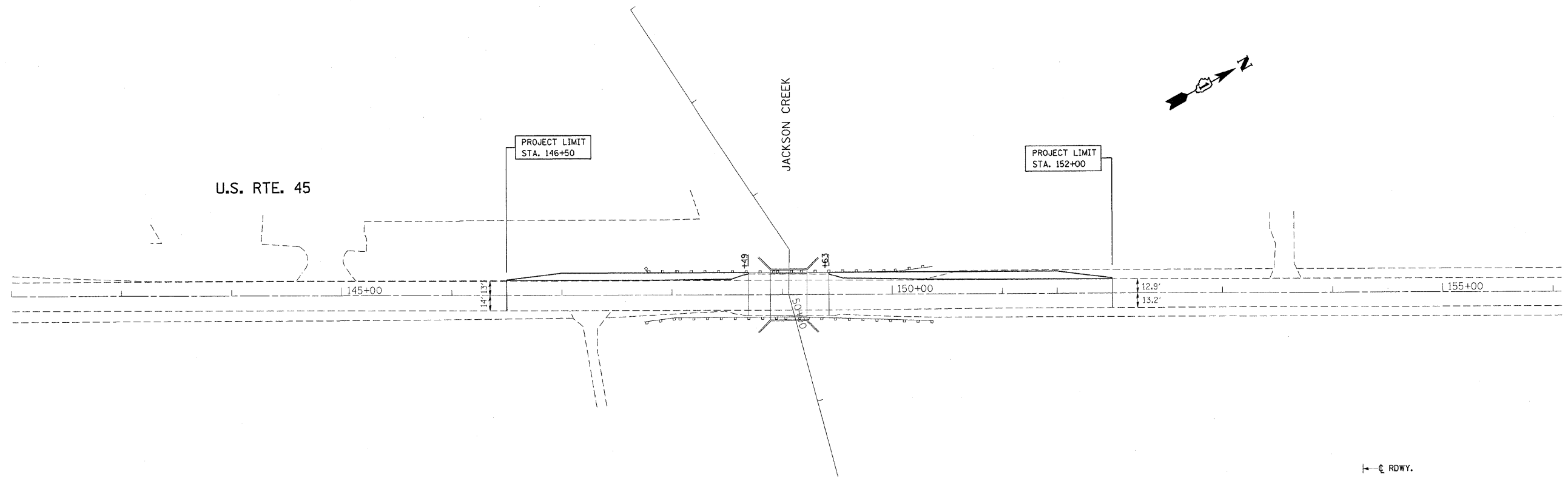


- * PROP. T.B.T., TY 6
- PROP. S.P.B.G.R., TY A
- PROP. T.B.T., TY 1 SPL (TANGENT)
- PROP. TERMINAL MARKER - D.A.
- ** PROP. T.B.T., TY 6
- PROP. S.P.B.G.R., TY A
- PROP. T.B.T., TY 2

NOTE: TRANSVERSE PIPE UNDERDRAINS SHOULD BE INSTALLED AT STA. 148+54 AND STA. 149+58, 30 INCHES BELOW THE TOP OF THE PROPOSED PAVEMENT.



FILE NAME =	USER NAME = bouerd1	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING & PROPOSED ROADWAY PLAN U.S. RTE. 45 OVER JACKSON CREEK - S.N. 099-4649				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cr\projects\p135282\sh.rdw.dgn		DRAWN -	REVISED -		330	1048-3-BR	WILL	42	8				
PLOT SCALE = 50.000' / IN.		CHECKED -	REVISED -		SCALE: 1"=50'				CONTRACT NO. 60880				
PLOT DATE = 10/24/2007		DATE -	REVISED -		SHEET NO. OF SHEETS STA. TO STA.				FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

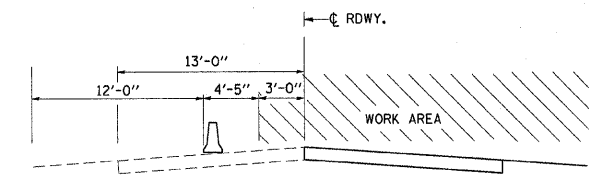
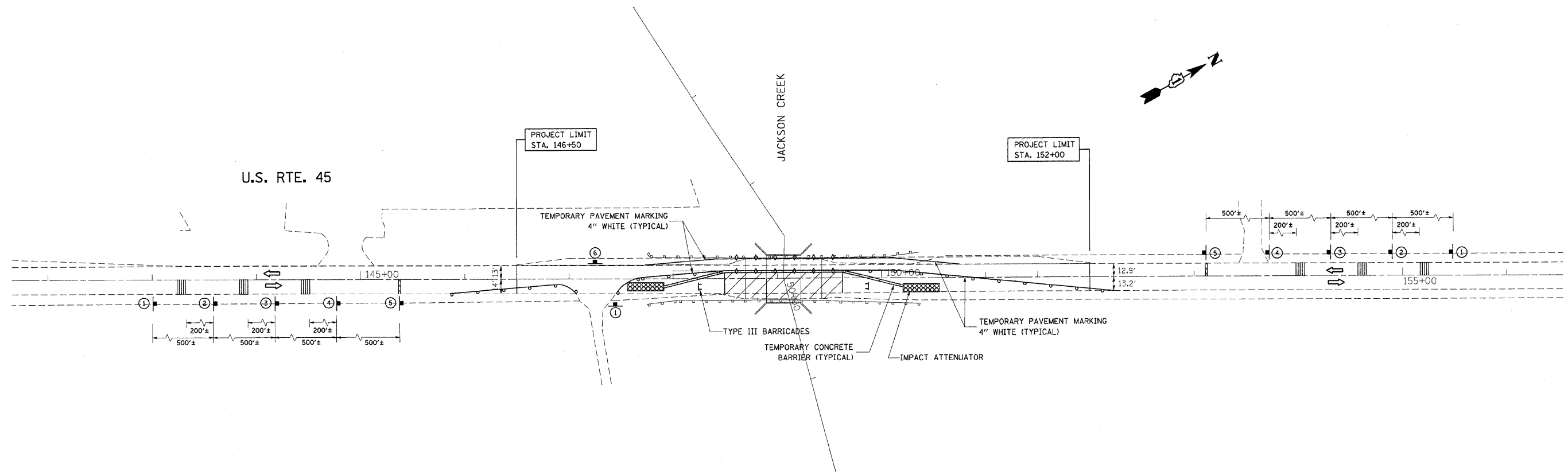


PRE-STAGE TYPICAL
(LOOKING NORTH)









PRE-STAGE WORK

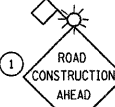
- PROVIDE TEMPORARY PAVEMENT MARKINGS
- TEMPORARY PAVEMENT SHALL BE CONSTRUCTED BEFORE TRAFFIC STAGING
- TEMPORARY PAVEMENT SHALL BE REMOVED DURING STAGE II CONSTRUCTION AND REPLACED WITH HOT-MIX ASPHALT SHOULDER

FILE NAME = e:\projects\p135202\sh_stage1.dgn	USER NAME = smthkl	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PRE-STAGE U.S. RTE. 45 OVER JACKSON CREEK - S.N. 099-4649			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE = 50.000' / IN.	DRAWN -	REVISED -					330	104B-3-BR	WILL	42	7	
	PLOT DATE = 10/25/2007	CHECKED -	REVISED -					SCALE: 1"=50' SHEET NO. OF SHEETS STA. TO STA.			CONTRACT NO. 60B80		
		DATE -	REVISED -					FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					



LEGEND

-  WORK AREA
-  TEMPORARY CONC. BARRIER
-  TYPE I OR II BARRICADES W/ STEADY BURN LIGHT 25' C-C
-  TYPE III BARRICADES (2) WITH HIGH INTENSITY FLASHING LIGHT ON EACH (TYP.)
-  SIGN ON PERMANENT OR PORTABLE SUPPORT
-  IMPACT ATTENUATOR
-  TEMPORARY RUMBLE STRIP
-  CRYSTAL, BIDIRECTIONAL BARRIER WALL / GUARDRAIL MARKER

-  1 ROAD CONSTRUCTION AHEAD W20-1101-48
-

NOTES:

- SIGNS, BARRICADES AND RUMBLE STRIPS SHALL BE PLACED IN ACCORDANCE TO TRAFFIC CONTROL STANDARD 701321
- SEE TEMPORARY TRAFFIC SIGNAL SHEETS FOR LOCATIONS OF TRAFFIC SIGNALS AND DETECTOR LOOPS

STAGE I WORK

- MAINTAIN TRAFFIC ON SOUTHBOUND LANES
- REMOVE STRUCTURE (NORTHBOUND)
- REMOVE PAVEMENT TO BE RECONSTRUCTED (NORTHBOUND)
- REMOVE EXISTING SHOULDER (NORTHBOUND)
- REMOVE EXISTING DRIVEWAY
- PLACE THREE SIDED STRUCTURE (NORTHBOUND)
- CONSTRUCT NEW PAVEMENT
- CONSTRUCT NEW DRIVEWAY
- CONSTRUCT NEW SHOULDER
- MOUNT NEW GUARDRAIL

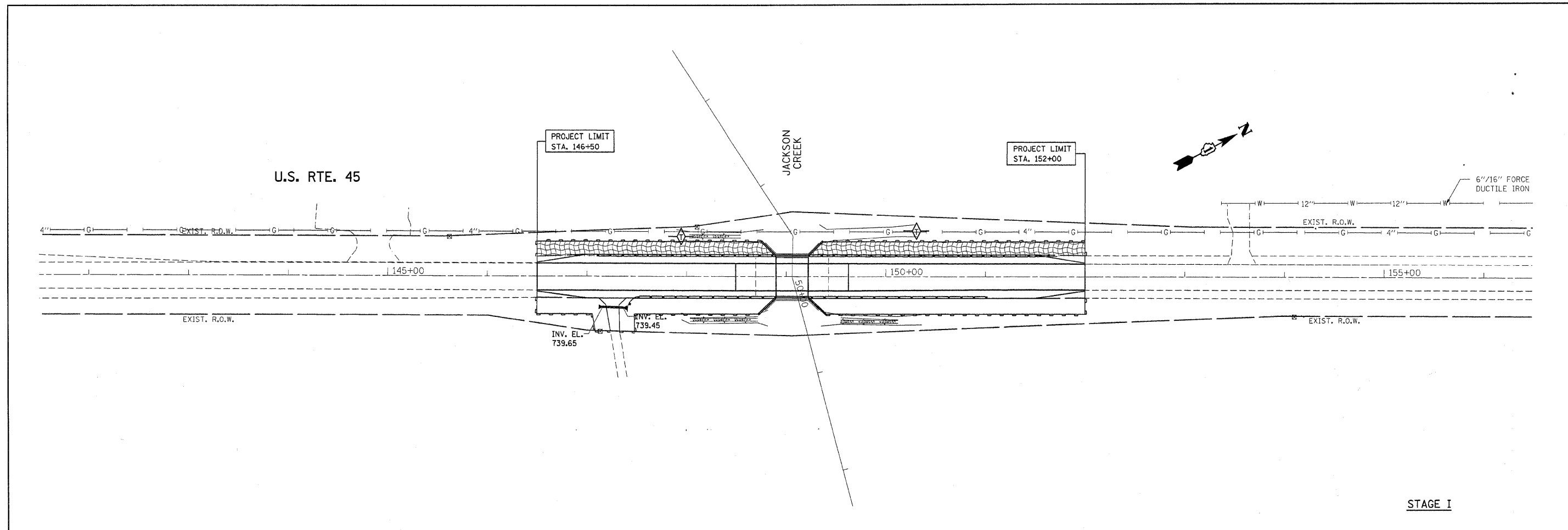
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		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

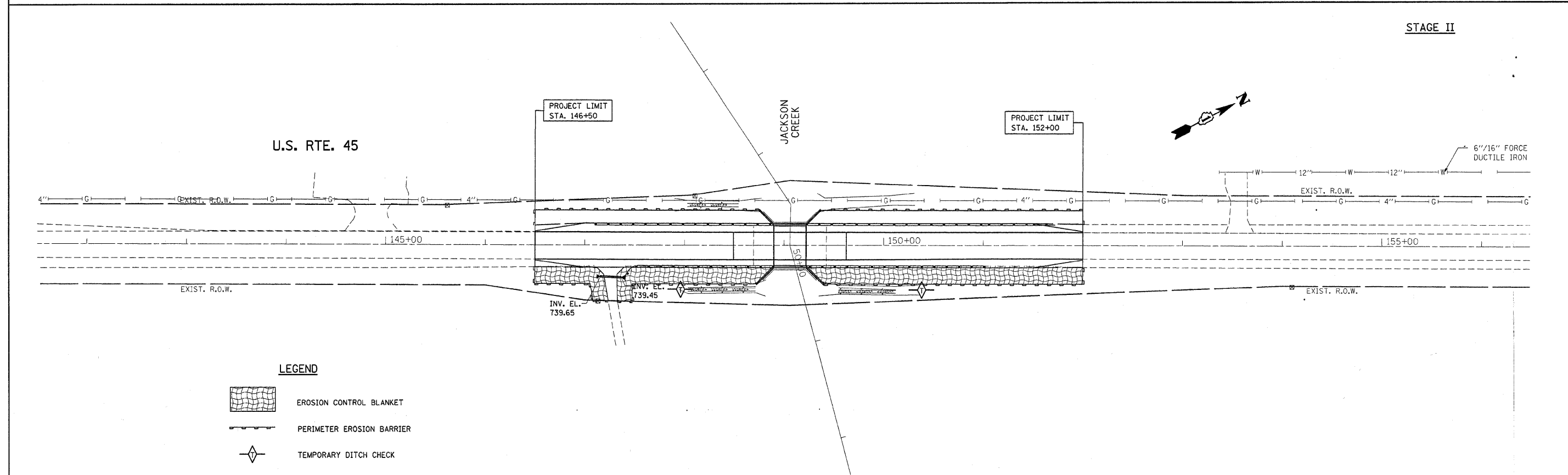
**STAGE I
U.S. RTE. 45 OVER JACKSON CREEK - S.N. 099-4649**

SCALE: 1"=50' SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE. 330	SECTION 104B-3-BR	COUNTY WILL	TOTAL SHEETS 42	SHEET NO. 10
CONTRACT NO. 60B80				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				






STAGE I



STAGE II

LEGEND

-  EROSION CONTROL BLANKET
-  PERIMETER EROSION BARRIER
-  TEMPORARY DITCH CHECK

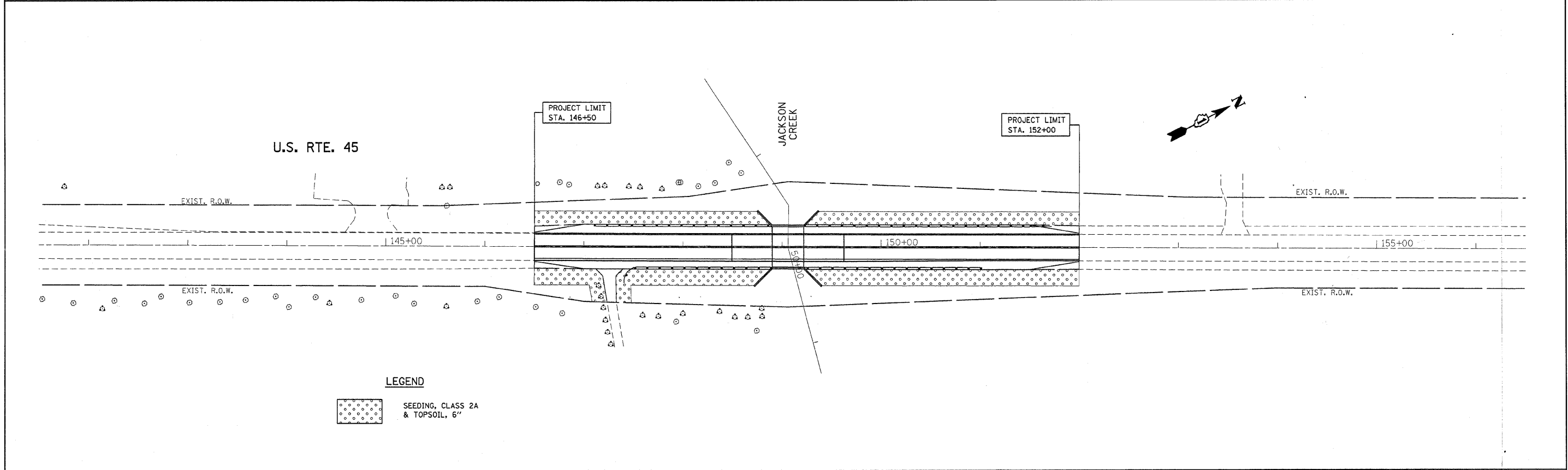
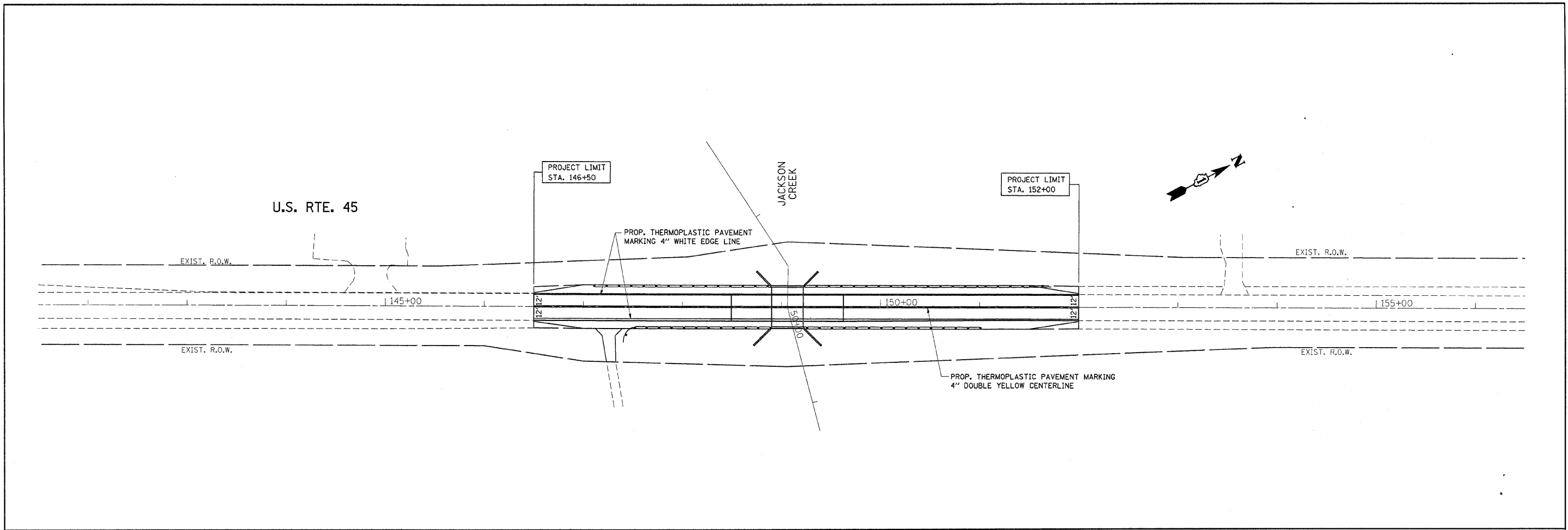
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		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**


**EROSION CONTROL PLAN
U.S. RTE. 45 OVER JACKSON CREEK - S.N. 099-4649**

SCALE: 1"=50' SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	104B-3-BR	WILL	42	12
CONTRACT NO. 60B80				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



LEGEND

 SEEDING, CLASS 2A & TOPSOIL, 6"

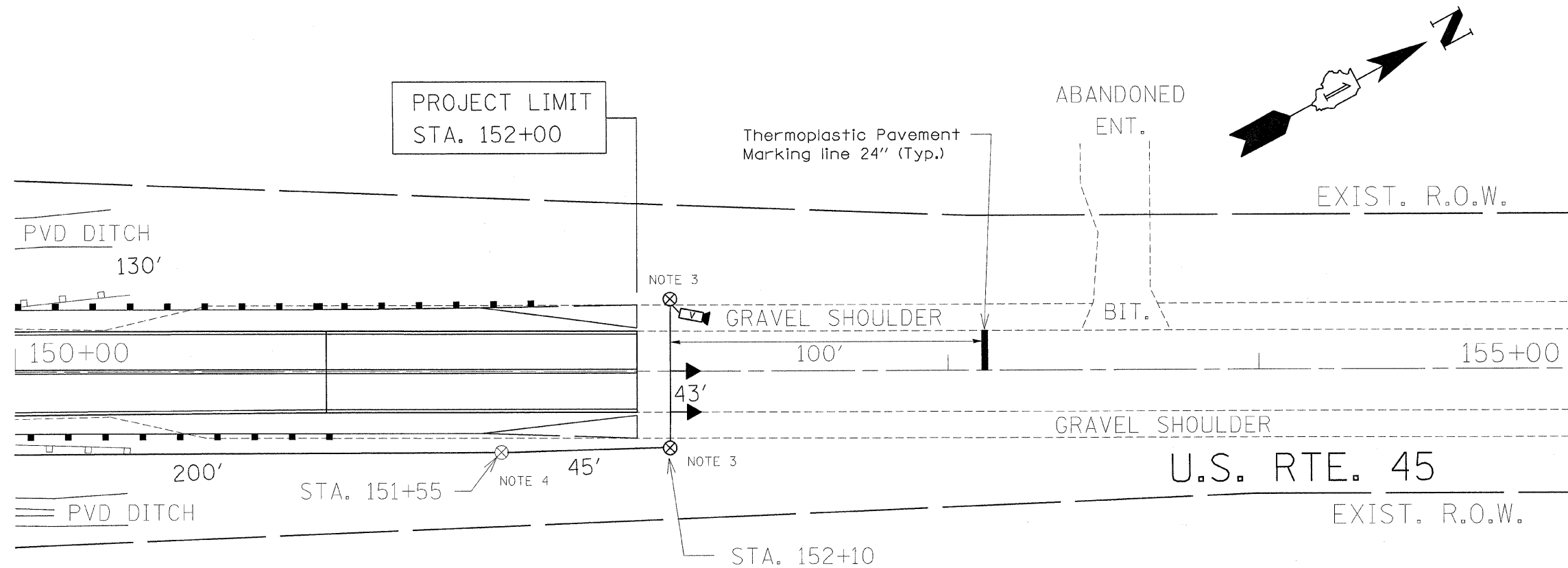
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		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PROP. PAVEMENT MARKING AND LANDSCAPING PLAN
U.S. RTE. 45 OVER JACKSON CREEK - S.N. 099-4649**

SCALE: 1"=50' SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	104B-3-BR	WILL	42	13
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 60B80	

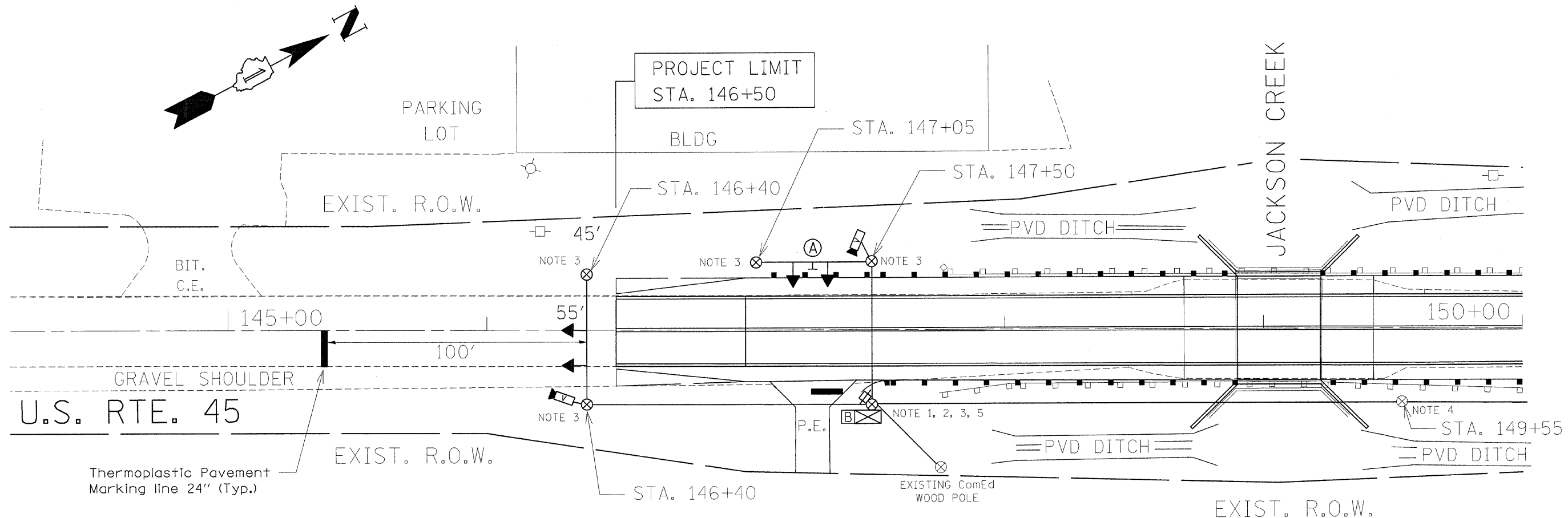


TEMPORARY TRAFFIC SIGNAL LEGEND

TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION	→	TEMPORARY PEDESTRIAN PUSHBUTTON DETECTOR	⊙
TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED SECONDARY LOCATION	→	MICROWAVE VEHICLE SENSOR	M
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM	⊗	EMERGENCY VEHICLE LIGHT DETECTOR	◀
TEMPORARY CONTROLLER CABINET	⊠	CONFIRMATION BEACON	⊙
TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE	—	VEHICLE DETECTOR, INDUCTION LOOP	□
TEMPORARY SERVICE INSTALLATION	⊞	COMMON TRENCH	CT
TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED	■	UNIT DUCT	UD
TELEPHONE CONNECTION	⊞	G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)	----
		HANDHOLE	■
		HEAVY DUTY HANDHOLE	H
		VIDEO DETECTOR SENSOR	V
		CLOSED CIRCUIT TV	C
		UN-INTERRUPTABLE POWER SUPPLY (UPS)	BB

Notes:

- ① CONTROLLER WITH STEEL BASE CABINET AND BATTERY BACK-UP CABINET SHALL BE MOUNTED ON A WOOD STAND.
- ② UN-INTERRUPTABLE POWER SUPPLY(UPS) SHALL BE INCLUDED IN "TEMPORARY BRIDGE TRAFFIC SIGNAL INSTALLATION" PAY ITEM.
- ③ 7 WOOD POLES INSTALLED BY THE TRAFFIC CONTRACTOR (SEE TEMPORARY TRAFFIC SIGNAL PLANS FOR LOCATIONS).
- ④ PROPOSED WOOD POLES FOR ROADWAY LIGHTING SHALL BE USED TO SUPPORT TRAFFIC SIGNAL CABLE.
- ⑤ TRAFFIC SIGNAL AND ROADWAY LIGHTING SHALL UTILIZE A COMBINATION ELECTRIC SERVICE BOX. (SEE DETAIL)
- ⑥ ALL SIGNAL HEADS SHALL BE L.E.D.
- ⑦ THE TEMPORARY TRAFFIC SIGNAL CONTROLLER SUPPLIED BY THE CONTRACTOR SHALL INCLUDE THE CURRENT SOFTWARE VERSION AT THE TIME OF INSTALLATION

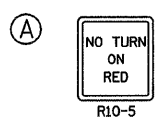


TEMPORARY TRAFFIC SIGNAL LEGEND

TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION	→	TEMPORARY PEDESTRIAN PUSHBUTTON DETECTOR	⊙
TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED SECONDARY LOCATION	→▷	MICROWAVE VEHICLE SENSOR	M
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM	⊗	EMERGENCY VEHICLE LIGHT DETECTOR	◀
TEMPORARY CONTROLLER CABINET	⊠	CONFIRMATION BEACON	◀◀
TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE	—	VEHICLE DETECTOR, INDUCTION LOOP	□
TEMPORARY SERVICE INSTALLATION	⊞	COMMON TRENCH	CT
TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED	■	UNIT DUCT	UD
TELEPHONE CONNECTION	⊞	G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)	---
		HANDHOLE	■
		HEAVY DUTY HANDHOLE	H
		VIDEO DETECTOR SENSOR	V
		CLOSED CIRCUIT TV	C
		UN-INTERRUPTABLE POWER SUPPLY (UPS)	B

Notes:

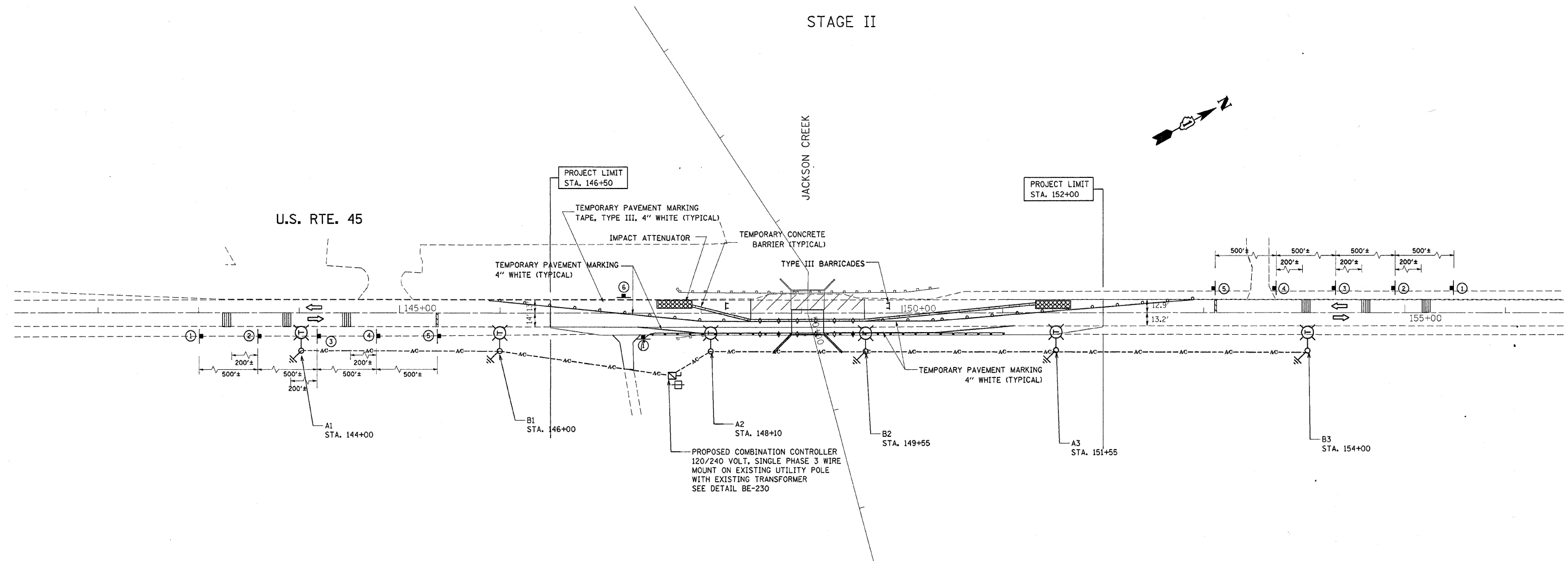
- ① CONTROLLER WITH STEEL BASE CABINET AND BATTERY BACK-UP CABINET SHALL BE MOUNTED ON A WOOD STAND.
- ② UN-INTERRUPTABLE POWER SUPPLY(UPS) SHALL BE INCLUDED IN "TEMPORARY BRIDGE TRAFFIC SIGNAL INSTALLATION" PAY ITEM.
- ③ WOOD POLES INSTALLED BY THE TRAFFIC CONTRACTOR (SEE TEMPORARY TRAFFIC SIGNAL PLANS FOR LOCATIONS).
- ④ PROPOSED WOOD POLES FOR ROADWAY LIGHTING SHALL BE USED TO SUPPORT TRAFFIC SIGNAL CABLE.
- ⑤ TRAFFIC SIGNAL AND ROADWAY LIGHTING SHALL UTILIZE A COMBINATION ELECTRIC SERVICE BOX. (SEE DETAIL ON LIGHTING PLAN)
- ⑥ ALL SIGNAL HEADS SHALL BE L.E.D.
- ⑦ THE TEMPORARY TRAFFIC SIGNAL CONTROLLER SUPPLIED BY THE CONTRACTOR SHALL INCLUDE THE CURRENT SOFTWARE VERSION AT THE TIME OF INSTALLATION




24" X 30" (600mm x 750mm)
(TYPICAL) SIGN PANEL TYPE 1

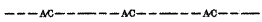
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PLOT SCALE = 20,000' / IN.	CHECKED - DAD	REVISED -	REVISED -		SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
PLOT DATE = 10/5/2007	DATE - 10/05/07	REVISED -	REVISED -									
								CONTRACT NO. 60880				


STAGE II





LEGEND

- 

TEMPORARY LIGHTING UNIT
47.5 FT. MOUNTING HEIGHT, 15 FT. MAST ARM
400 WATT, 120 VOLT LUMINAIRE WITH PHOTOCELL
ON EACH LUMINAIRE
- 

AERIAL CABLE, 3-1/2"-#4, ALUMINUM, WITH MESSENGER WIRE
- 

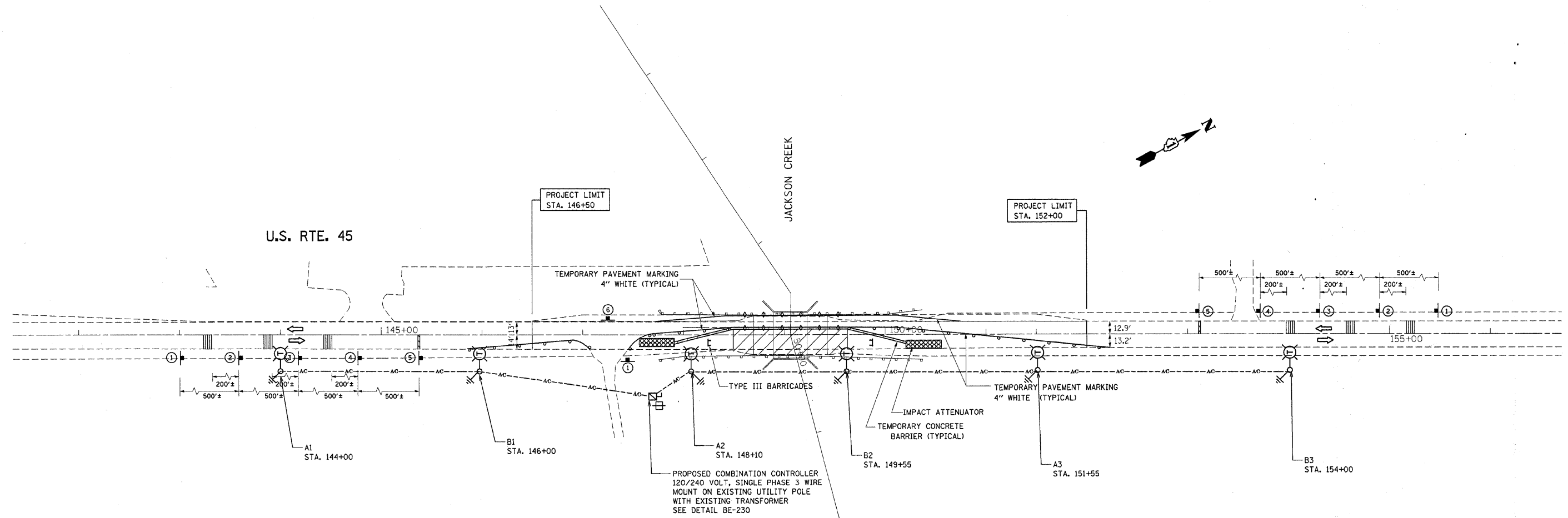
GROUND ROD, 5/8" DIAMETER X 10 FT.
- 

COMBINATION TRAFFIC/LIGHTING CONTROLLER,
120/240 VOLT, SINGLE PHASE 3 WIRE
MOUNTED ON COMED UTILITY POLE
- 


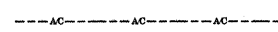



EXISTING UTILITY TRANSFORMER, POLE MOUNTED

FILE NAME = c:\Projects\p135202\Lighting.dgn	USER NAME = lszekr1	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY LIGHTING PLAN		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50.0000' / IN.	DRAWN -	REVISED -		U.S. RTE. 45 OVER JACKSON CREEK - S.N. 099-4649		330	104B-3-BR	WILL	42	17
PLOT DATE = 10/30/2007	CHECKED -	REVISED -	SCALE:		SHEET NO.	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 60880	
	DATE -	REVISED -	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT								

STAGE I



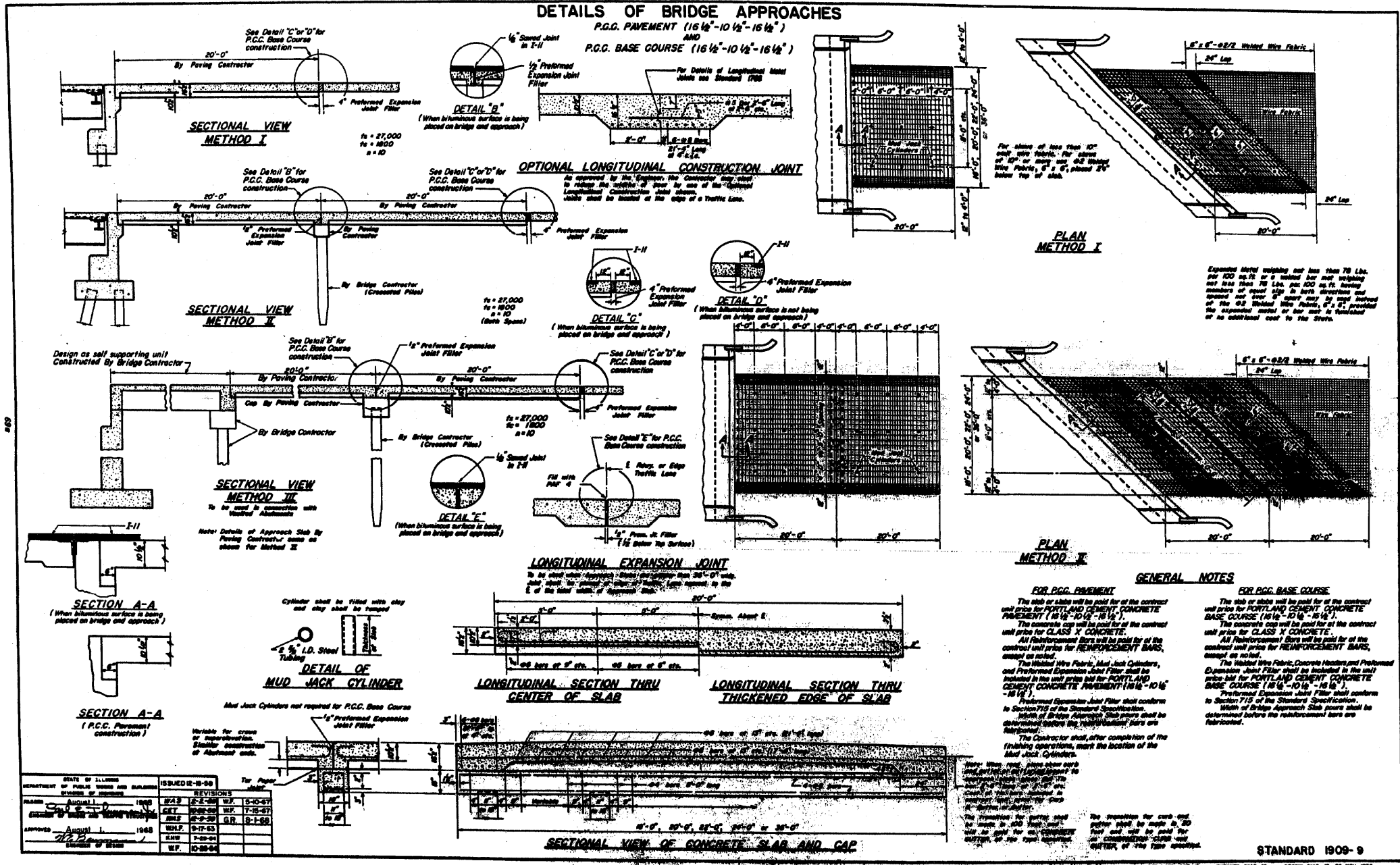
LEGEND

-  TEMPORARY LIGHTING UNIT
47.5 FT. MOUNTING HEIGHT, 15 FT. MAST ARM
400 WATT, 120 VOLT LUMINAIRE WITH PHOTOCELL
ON EACH LUMINAIRE
-  AERIAL CABLE, 3-1/C-#4, ALUMINUM, WITH MESSENGER WIRE
-  GROUND ROD, 5/8" DIAMETER X 10 FT.
-  COMBINATION TRAFFIC/LIGHTING CONTROLLER,
120/240 VOLT, SINGLE PHASE 3 WIRE
MOUNTED ON COMED UTILITY POLE
-  EXISTING UTILITY TRANSFORMER, POLE MOUNTED

NOTES

THE SETBACK FOR THE POLES SHOULD BE 12 FT. FROM EDGE OF TRAVELED PAVEMENT TO THE POLE

FILE NAME = c:\Projects\p135202\lighting.dgn	USER NAME = lizekr-f	DESIGNED - TG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY LIGHTING PLAN U.S. RTE. 45 OVER JACKSON CREEK - S.N. 099-4649			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		DATE - 10-29-2007	REVISED -		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							



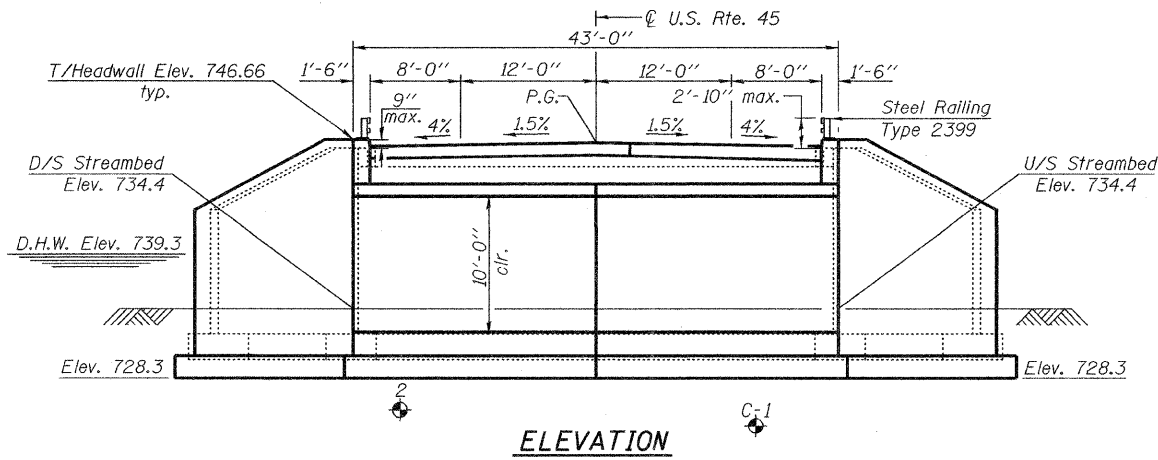
FOR INFORMATION ONLY

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PLOT SCALE = 50,000' / IN.		PLOT DATE = 10/30/2007	SCALE: 1" = 50'			SHEET NO. OF SHEETS STA. TO STA.			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		

Bench Mark: BM#2: Cut Square top NW corner of wingwall U.S. 45 bridge over Jackson Creek
 ±Sta. 149+22.6, Offset ±22.3' Lt., Elev. = 746.16

Existing Structure: S.N. 099-2005 was built in 1978 as F.A. Route 124, Section 104B-3R, at station 149+06.00. The single span superstructure consists of precast prestressed concrete deck beams. The substructure consists of footing supported closed abutments. The structure is ±33'-0" back to back of abutments and 42'-0" out to out of deck. The existing structure will be replaced. Stage construction will be utilized to maintain one lane of traffic at all times.

No Salvage



ELEVATION

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS

- 1 General Plan & Elevation
- 2 Stage Construction Details
- 3 Temporary Concrete Barrier
- 4-5 Footing Details
- 6 Wingwall Details
- 7 Headwall Details
- 8 Bar Splicer Details
- 9 Steel Railing, Type 2399
- 10-11 Boring Logs

STATION 149+06.00
 BUILT 20 BY
 STATE OF ILLINOIS
 F.A.P. RTE. 330 SEC. 104B-3-BR
 LOADING HS20
 STRUCTURE NO. 099-4649

NAME PLATE

See Std. 515001

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.
 The option of using a precast footing is not allowed.
 The option of using precast wingwalls is not allowed.
 Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
 After the keyways have been grouted and cured, the joints on all three sides of the structure shall be externally sealed using 13" wide external sealing bands conforming to Article 1057.01. Cost included with Three-Sided Precast Concrete Structure 32'x10'.
 All details shown are developed assuming the use of cast-in-place headwalls and wingwalls placed as shown. The Contractor has the option of using precast headwalls. If the precast option is used, the details for the headwalls shall be submitted to the Engineer for approval.
 The footing design is based on the following maximum reactions applied at the top of the footing pedestal:
 Vertical: 13.2 k/ft DL + 2.3 k/ft LL
 Horizontal: 2.25 k/ft DL + 1.0 k/ft LL
 The Contractor shall verify that the selected structure meets these design parameters. If the design parameters are exceeded, a complete footing design with calculations, details, and the required structural seals shall be submitted for review and approval.
 Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure. The Contractor shall sawcut the upper portion of the existing abutment at the Stage Removal Line before Stage I Removal to ensure the remaining portion will not be prematurely damaged.
 Cost of excavation is included in the pay item Three Sided Precast Concrete Structure 32' x 10'.
 Structural Seal does not include the design of precast elements.
 Dimensions for the Three-Sided Precast are for a Hy-Span section. Con-Span, Redi-Span Bridge System and Bebo-Arch System are also acceptable, but dimensions may vary.

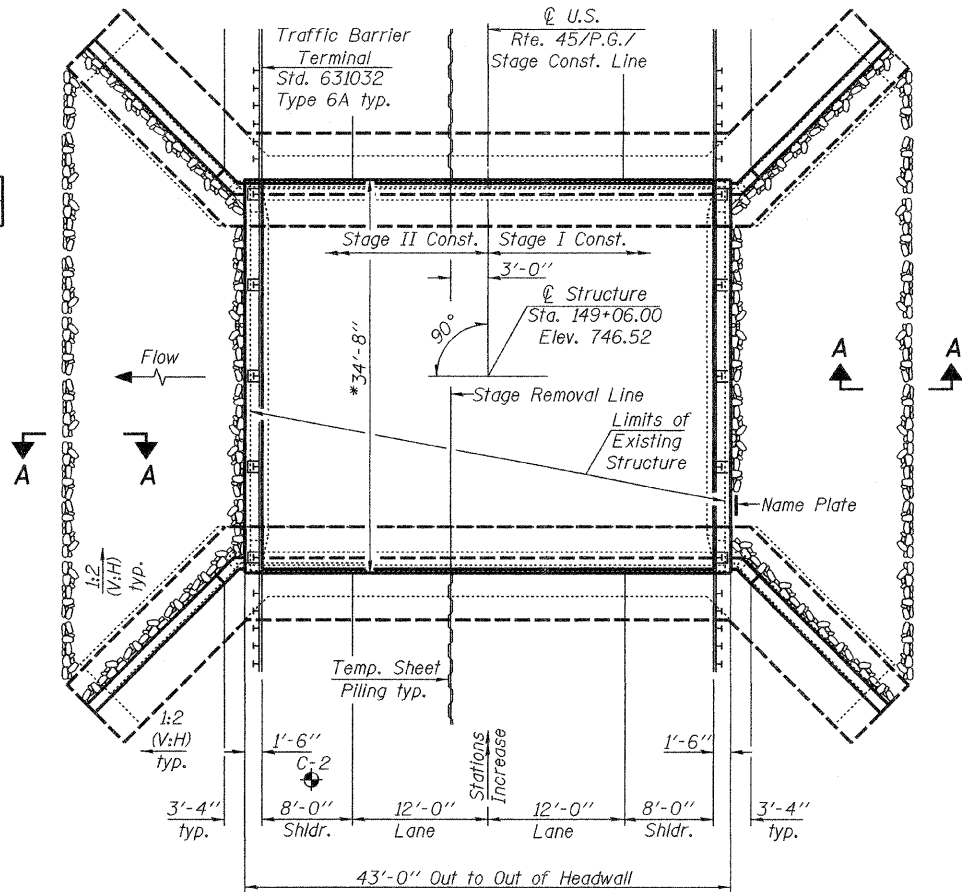
TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Removal of Existing Structures	Each	1
Name Plates	Each	1
Concrete Structures	Cu. Yd.	181.0
Protective Coat	Sq. Yd.	17.3
Reinforcement Bars	Pound	15970
Reinforcement Bars, Epoxy Coated	Pound	1780
Three Sided Precast Concrete Structure 32' x 10'	Foot	43
Bar Splicers	Each	60
Steel Railing, Type 2399	Foot	70
Temporary Sheet Piling	Sq. Ft.	1510
Stone Riprap, Class A4	Sq. Yd.	326
Filter Fabric	Sq. Yd.	326

**Protective coat shall be applied to top surface of headwalls and upper 9" of inside face of headwalls.

DESIGN SCOUR
 ELEVATION TABLE

Design Scour Elev. (ft.)	D.S.	U.S.
	728.3	728.3



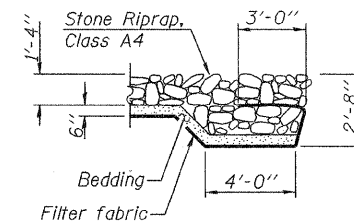
PLAN

WATERWAY INFORMATION

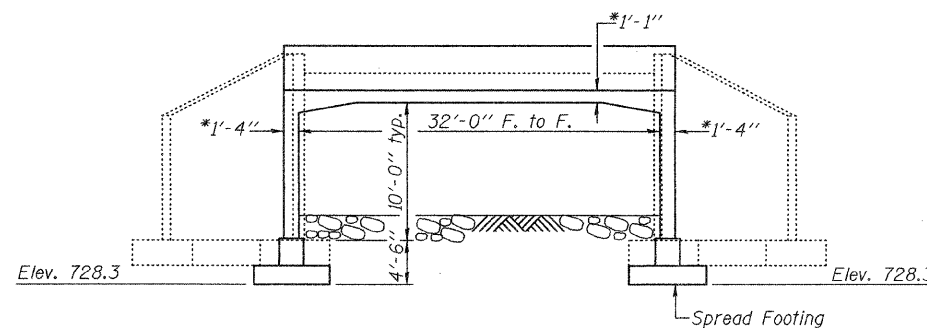
Exist. Low Grade Elev. 743.7 ft. @ Sta. 156+00
 Drainage Area = 2.0 mi.² Propo. Low Grade Elev. 743.7 ft. @ Sta. 156+00

Flood	Freq. Yr.	Q		Opening Sq. Ft.		Nat. H.W.E.		Head - Ft.		Headwater El.	
		Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Design	10	329	124	128	738.5	0.0	0.0	738.5	738.5		
Base	50	568	150	154	739.3	0.0	0.0	739.3	739.3		
Max. Calc.	100	703	159	163	739.6	0.0	0.0	739.6	739.6		
	500	1151	179	182	740.2	0.4	0.4	740.6	740.6		

10 Year Velocity through Existing Bridge = 2.7 fps
 10 Year Velocity through Proposed Bridge = 2.6 fps



SECTION A-A



SECTION THRU STRUCTURE

*Slab and wall thickness may vary as per manufacturer's design.

SEISMIC DATA

Seismic Performance Category (SPC) = A
 Bedrock Acceleration Coefficient (A) = 0.04g
 Site Coefficient (S) = 1.0

LOADING HS20-44

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

DESIGN SPECIFICATIONS

2002 AASHTO

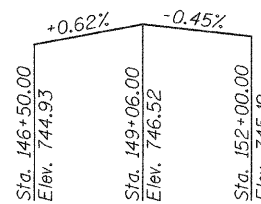
DESIGN STRESSES

FIELD UNITS

f'_c = 3,500 psi
 f_y = 60,000 psi (reinforcement)

PRECAST UNITS

f'_c = 5,000 psi
 f_y = 65,000 psi (welded wire fabric)



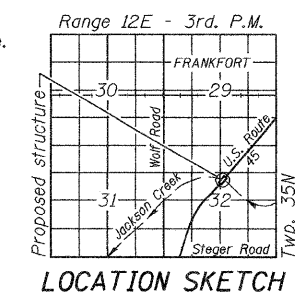
PROFILE GRADE

DESIGNED	Phuro P. Nasiriboda
CHECKED	Stephen M. Ryan
DRAWN	h.f. duong
CHECKED	D.P.N. / SMR

November 20, 2007
 EXAMINED: [Signature]
 PASSED: [Signature]
 ENGINEER OF BRIDGE DESIGN
 ENGINEER OF BRIDGES AND STRUCTURES



EXPIRES 11-30-2008

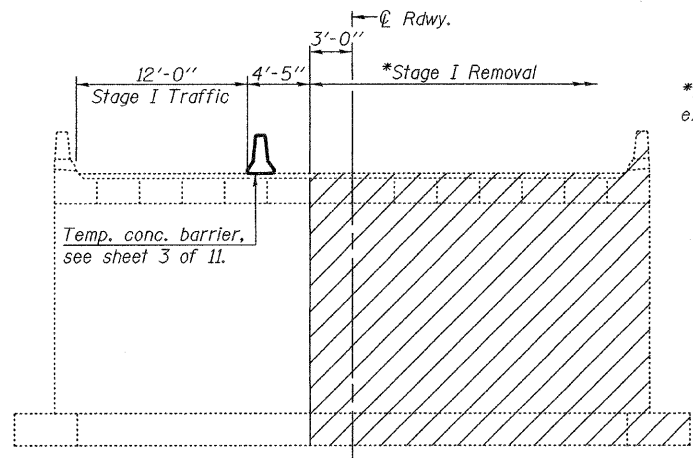


LOCATION SKETCH

GENERAL PLAN & ELEVATION
 U.S. RT. 45 OVER JACKSON CREEK
 F.A.P. RT. 330 SEC. 104B-3-BR
 WILL COUNTY
 STATION 149+06.00
 STRUCTURE NO. 099-4649

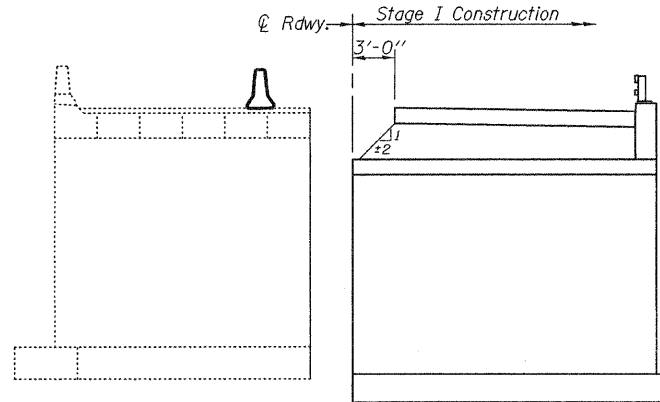
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 2
FAP 330	104B-3-BR	WILL	42	2-1	11 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	Contract No. 60B80		

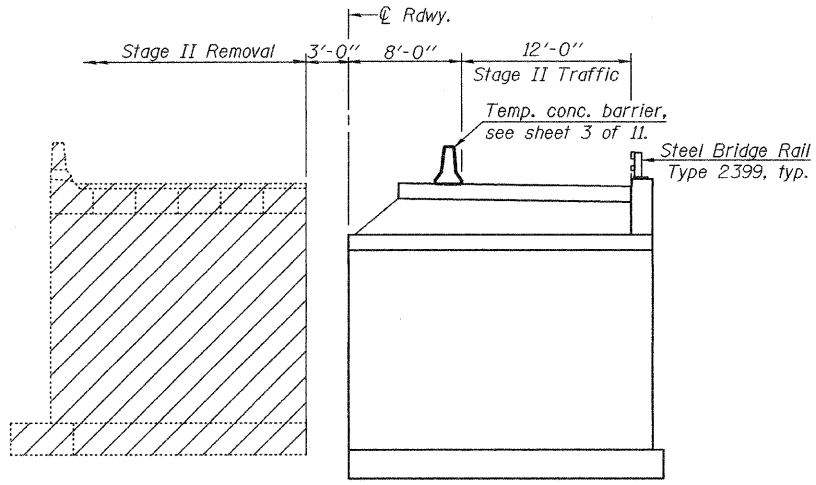


*See General Note on sheet 1 of 11 regarding excavation behind existing abutment walls.

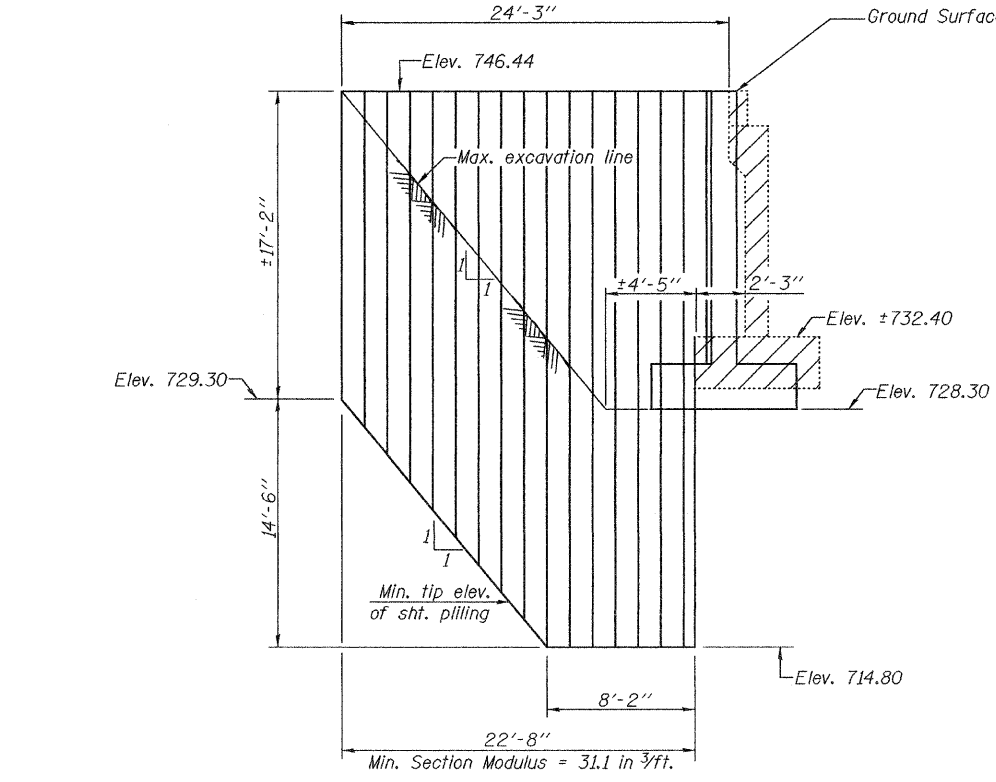
STAGE I REMOVAL



STAGE I CONSTRUCTION

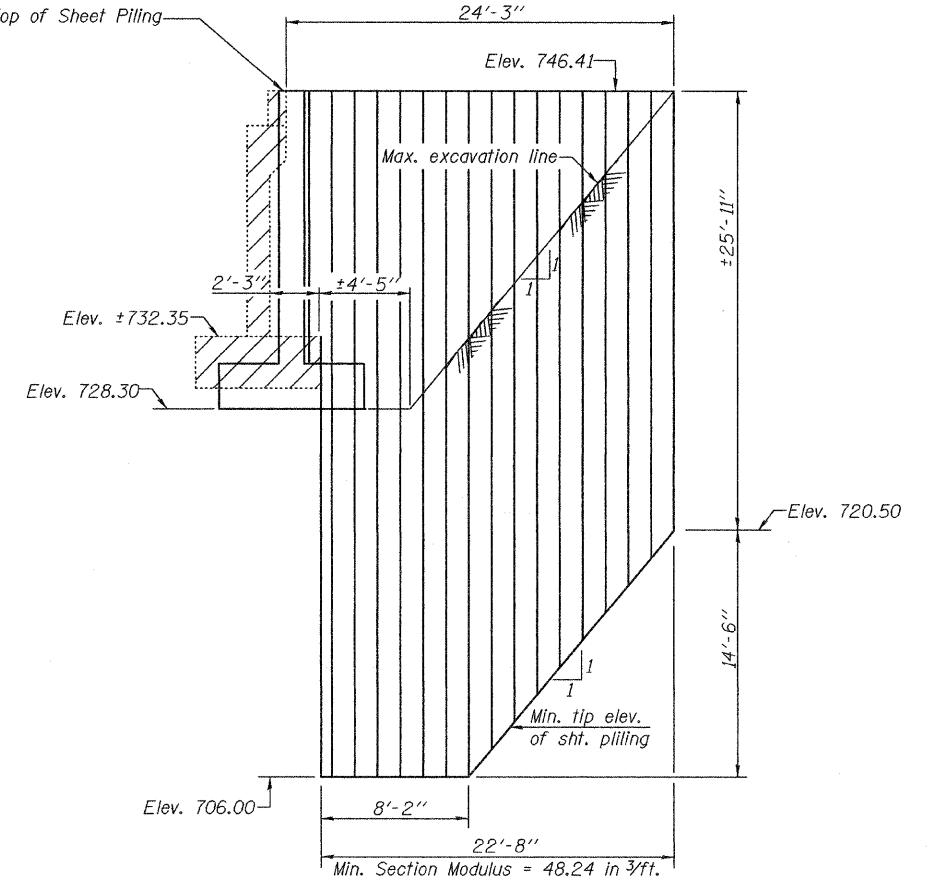


STAGE II REMOVAL



TEMPORARY SHEET PILING AT NORTH END

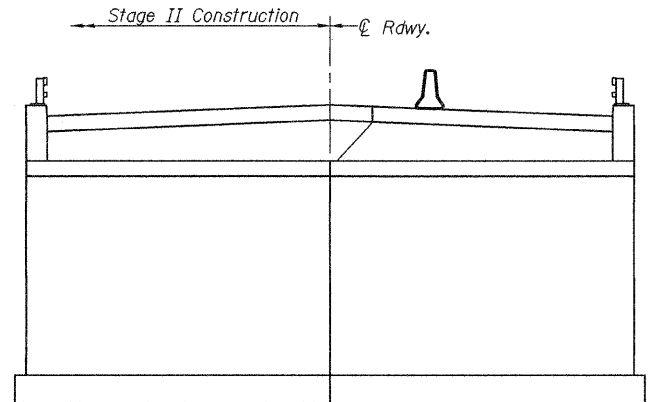
Notes: Hatched areas indicate removal of existing structures.
For quantity of temporary concrete barrier, See Roadway Plans.
All staging cross sections are looking upstation.



TEMPORARY SHEET PILING AT SOUTH END

Notes: If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

The Contractor shall connect the first sheet to the existing abutment wall to ensure stability of sheets driven to the top of the existing footing. This connection shall be reviewed and accepted by the Engineer and included in the cost for Temporary Sheet Piling.



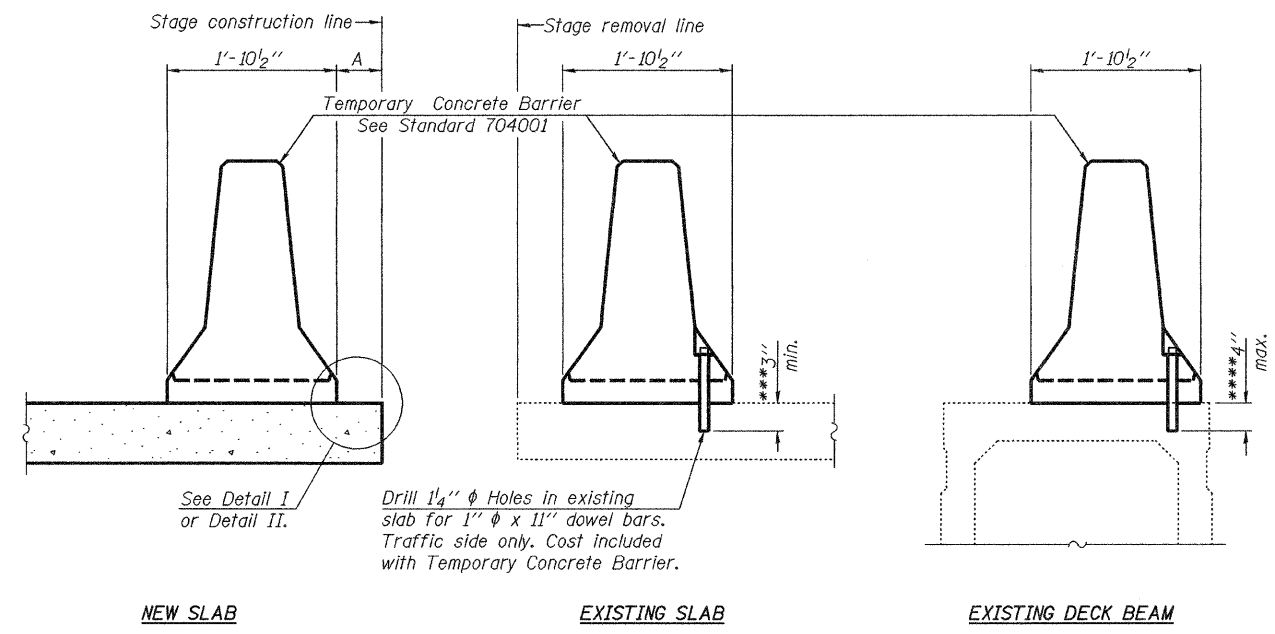
STAGE II CONSTRUCTION

DESIGNED Dhruv P. Nariehwala	November 20 2007
CHECKED Stephen M. Ryan	EXAMINED <i>Thomas J. Domagalala</i>
DRAWN h.t. duong	PASSED <i>Ralph E. Anderson</i>
CHECKED DPN/SMR	ENGINEER OF BRIDGES AND STRUCTURES

STAGE CONSTRUCTION DETAILS
F.A.P. RT. 330 SEC. 104B-3-BR
WILL COUNTY
STATION 149+06.00
STRUCTURE NO. 099-4649

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 3 11 SHEETS
FAP 330	104B-3-BR	WILL	42	22	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	Contract No. 60B80		



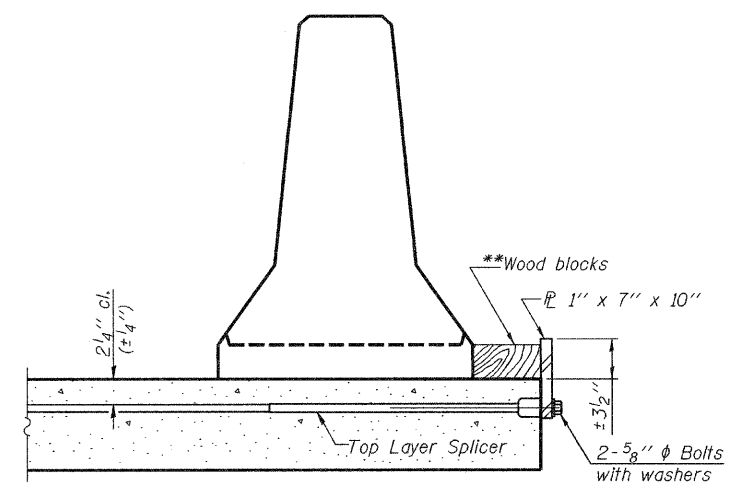
When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".

NEW SLAB

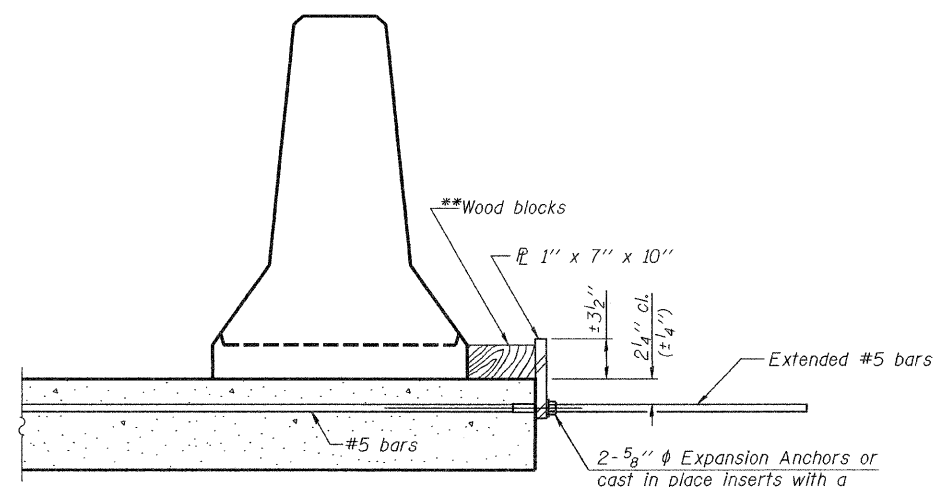
EXISTING SLAB

EXISTING DECK BEAM

SECTIONS THRU SLAB

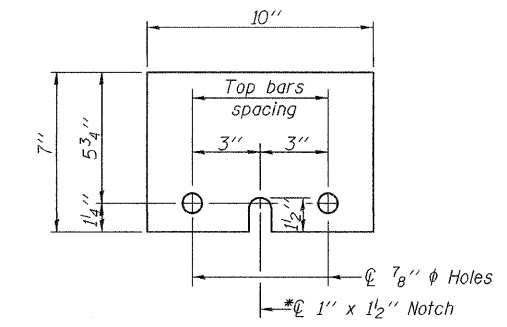


DETAIL I



DETAIL II

***Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.
****If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



STEEL RETAINER 1" x 7" x 10"

*Required only with Detail II

**Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

DESIGNED	Dhruv P. Narielwala
CHECKED	Stephen M. Ryan
DRAWN	h.t. duong
CHECKED	DPN/SMR

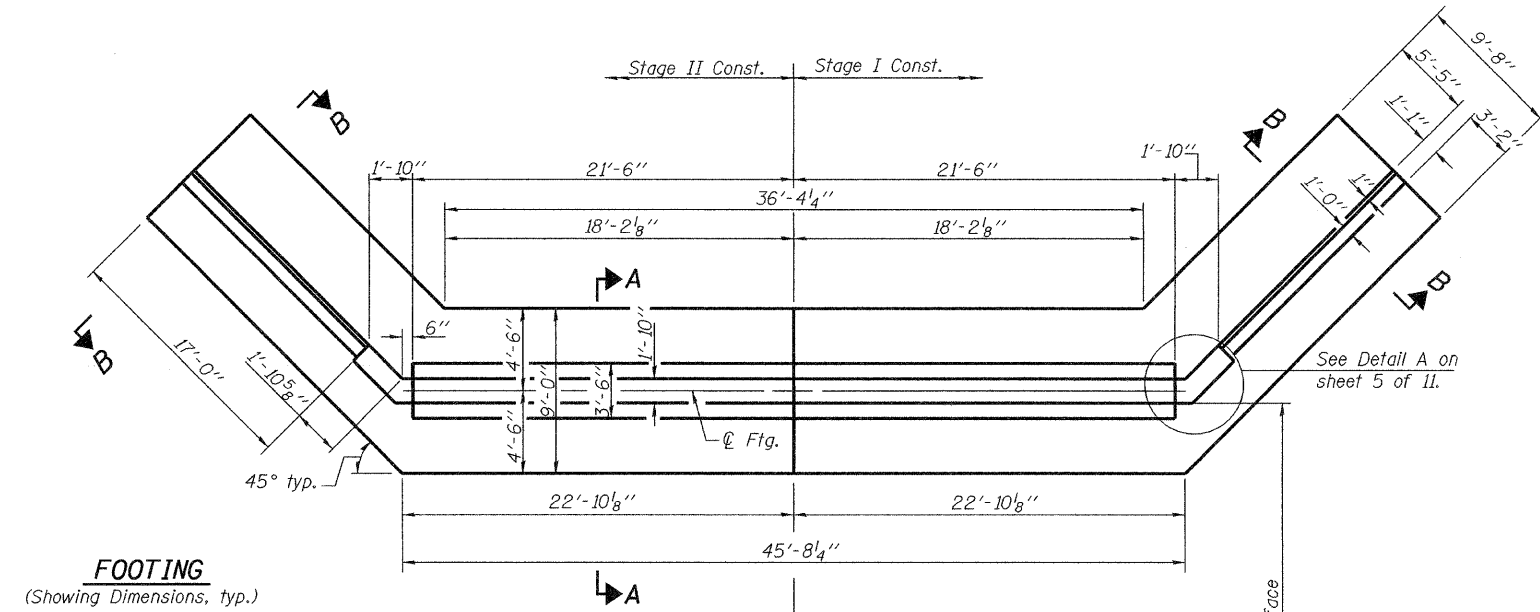
November 20 2007
EXAMINED *Thomas J. Domagala*
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

R-27 9-3-07

**TEMPORARY CONCRETE BARRIER
FOR STAGE CONSTRUCTION
F.A.P. RT. 330 SEC. 104B-3-BR
WILL COUNTY
STATION 149+06.00
STRUCTURE NO. 099-4649**

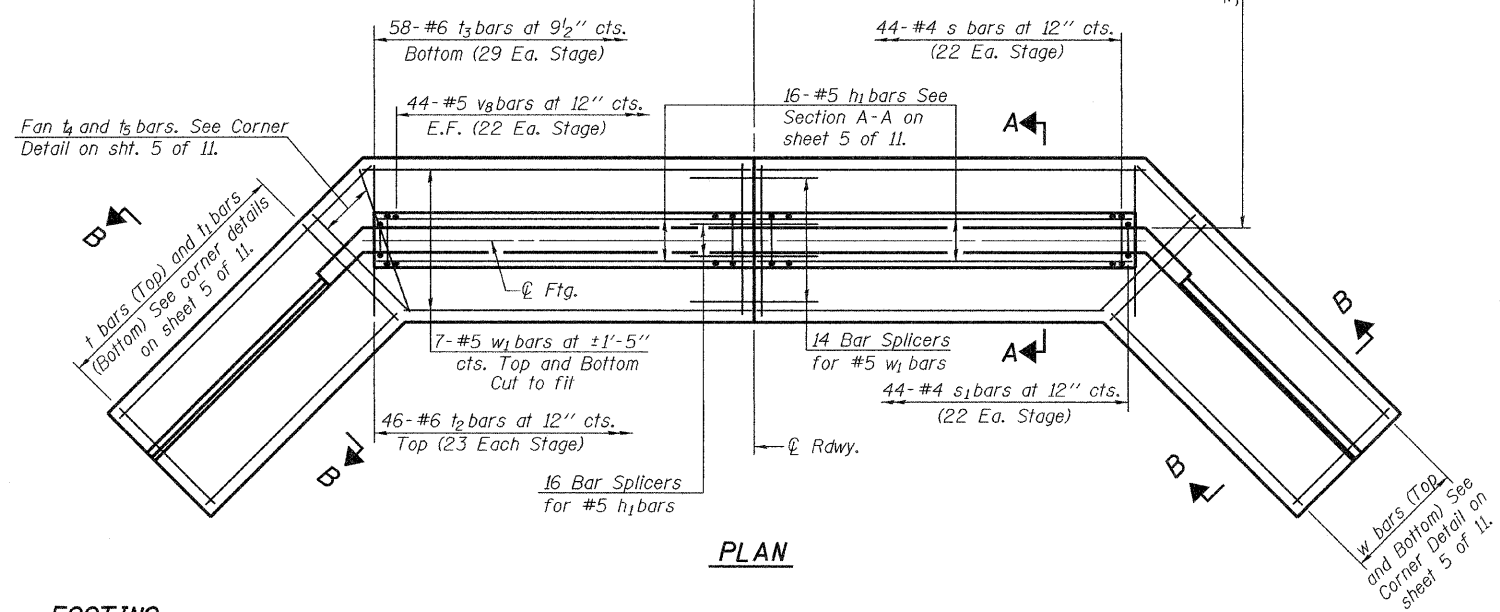
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 4
FAP 330	104B-3-BR	WILL	42	23	11 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	Contract No. 60B80		



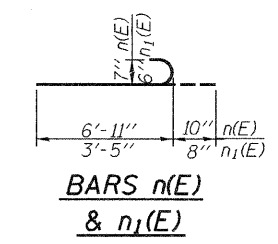
FOOTING
(Showing Dimensions, typ.)

Flow ←



FOOTING
(Showing Reinforcement, typ.)

PLAN



BILL OF MATERIAL
TWO STRUCTURE FOOTINGS, TWO PEDESTALS
AND FOUR WINGWALL FOOTINGS

Bar	No.	Size	Length	Shape
h ₁	64	#5	21'-2"	—
n(E)	80	#7	7'-9"	⌋
n ₁ (E)	84	#6	4'-1"	⌋
s	88	#4	12'-10"	⌋
s ₁	88	#4	8'-11"	⌋
t	124	#7	9'-4"	—
t ₁	80	#6	9'-4"	—
t ₂	92	#6	8'-8"	—
t ₃	116	#6	8'-8"	—
t ₄	20	#7	9'-9"	—
t ₅	12	#6	9'-9"	—
v ₈	176	#5	3'-10"	—
w	56	#5	21'-8"	—
w ₁	56	#5	22'-7"	—
Concrete Structures	Cu. Yd.		125.3	
Reinforcement Bars	Pound		12750	
Reinforcement Bars, Epoxy Coated	Pound		1780	

See sheet 5 of 11 for Section A-A.
See sheet 6 of 11 for Section B-B.
For details of bars s and s₁, See sheet #5 of 11.

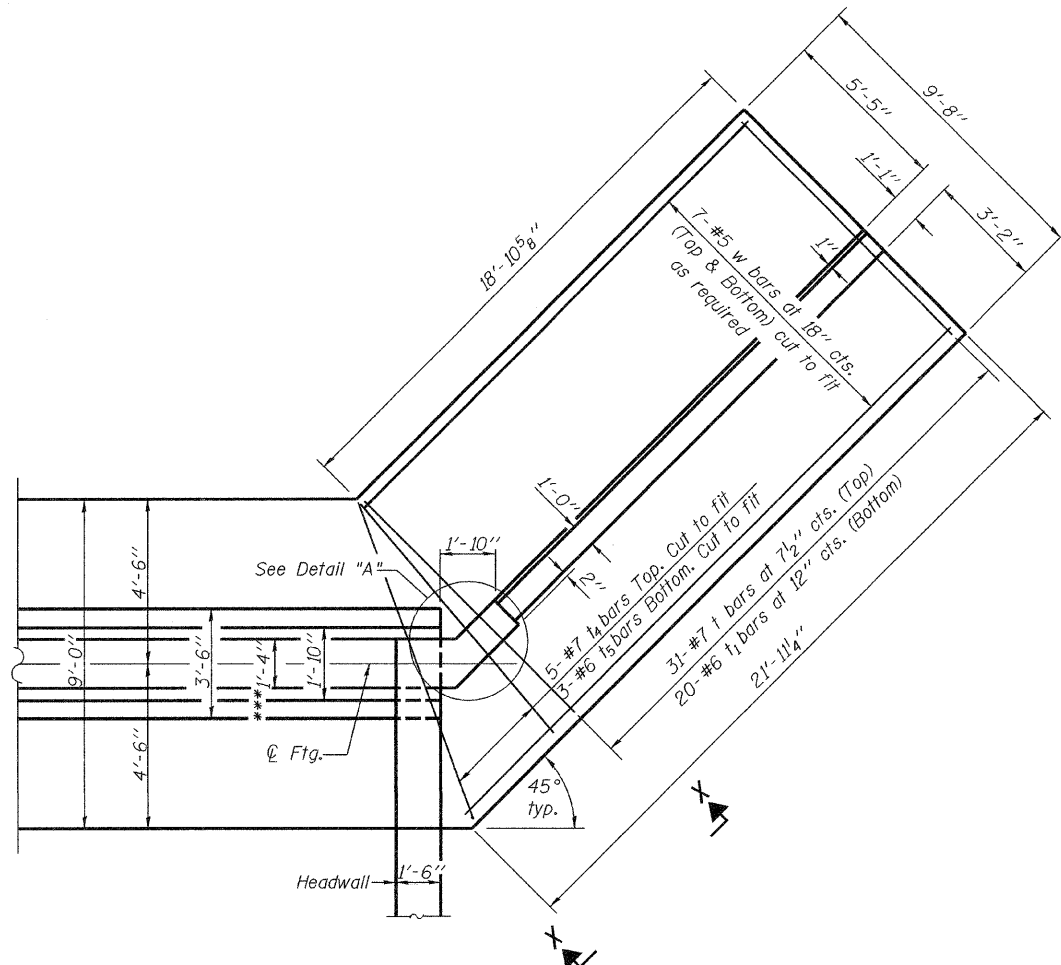
DESIGNED	Dhruv P. Narisetwala
CHECKED	Stephen M. Ryan
DRAWN	h.t. duong
CHECKED	DPN/SMR

November 20 2007
EXAMINED *Thomas J. Domagalak*
PASSED *Ralph C. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

FOOTING DETAILS
F.A.P. RT. 330 SEC. 104B-3-BR
WILL COUNTY
STATION 149+06.00
STRUCTURE NO. 099-4649

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 5 11 SHEETS
FAP 330	104B-3-BR	WILL	42	24	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	Contract No. 60B80		

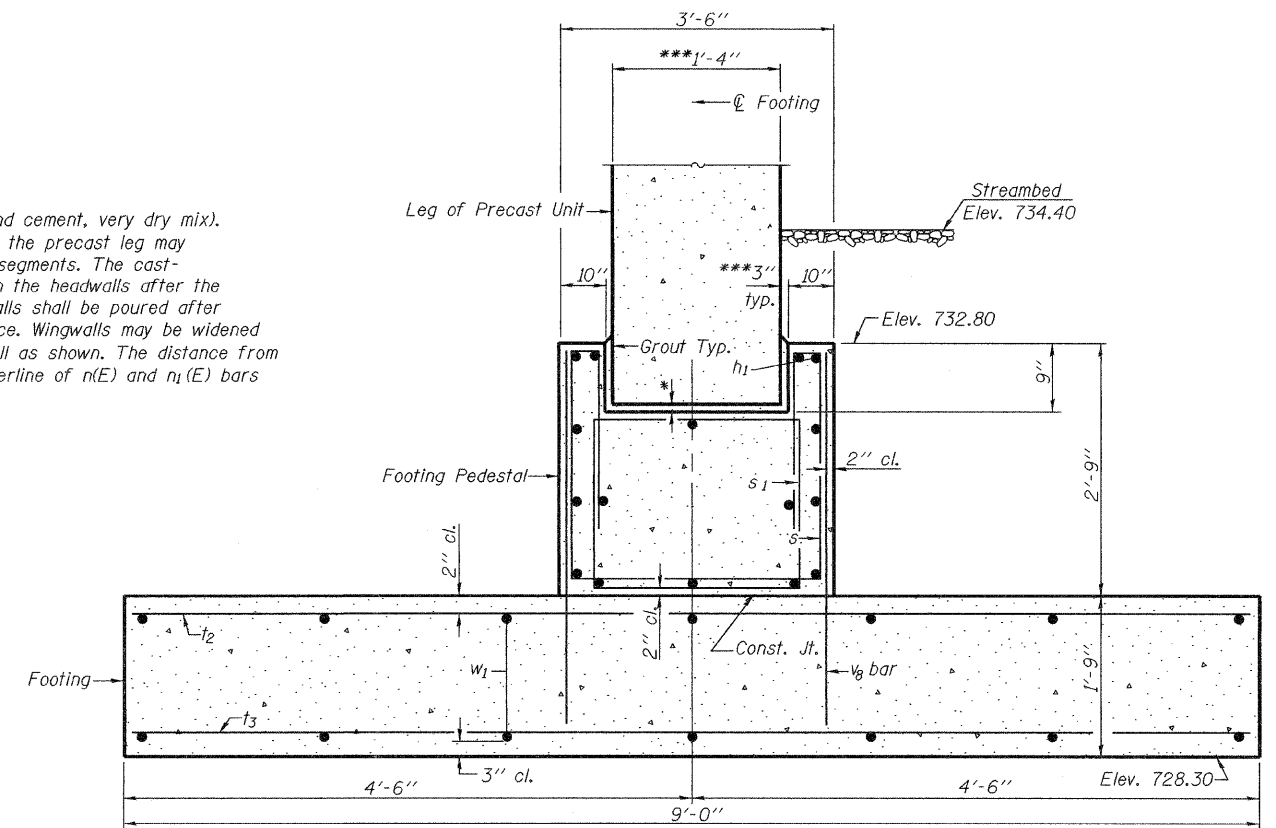


CORNER DETAIL

(Northeast corner shown; Southwest corner similar by 180° rotation, Northwest corner similar by symmetry; Southeast corner similar by 180° rotation & symmetry)

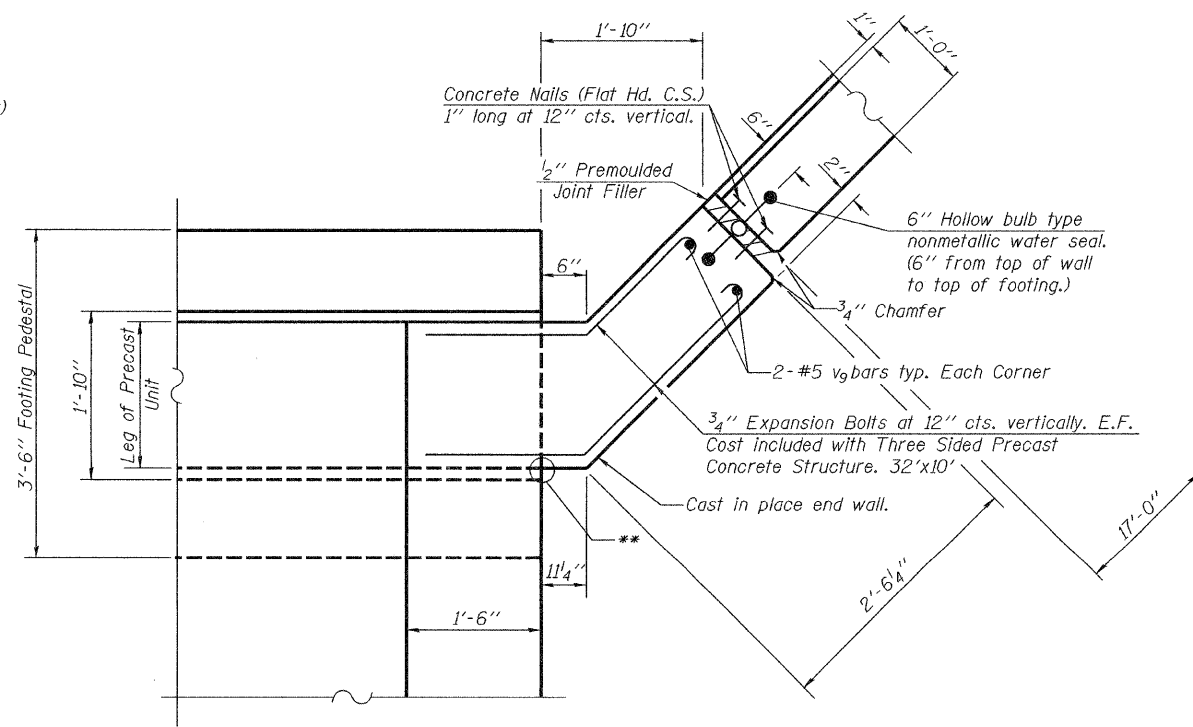
***Varies depending on thickness of leg of Precast Unit.

Notes: *1" initial grout (2:1 sand and portland cement, very dry mix).
**The location of the inside corner of the precast leg may vary due to tolerances in the precast segments. The cast-in-place end walls shall be poured with the headwalls after the precast units are in place. The wingwalls shall be poured after the headwalls and end walls are in place. Wingwalls may be widened up to 1" to align them with the end wall as shown. The distance from the front face of the wingwall to centerline of n(E) and n1(E) bars shall not be less than 11".
For View X-X see sheet 6 of 11.



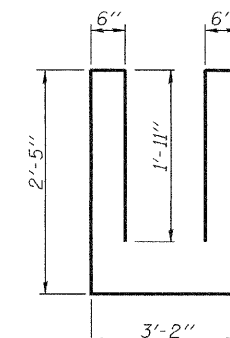
SECTION A-A

Maximum Applied Service Bearing Pressure (Qmax.) = 4.94 ksf.

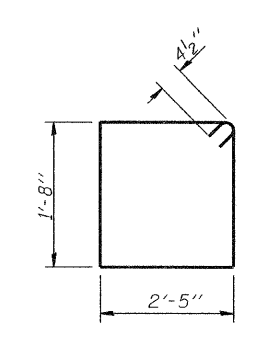


DETAIL A

w3 bars are billed on sheet 7 of 11.



BAR s(E)



BAR s1(E)

DESIGNED	Dhruv P. Narieiwala
CHECKED	Stephen M. Ryan
DRAWN	h.t. duong
CHECKED	DPN/SMR

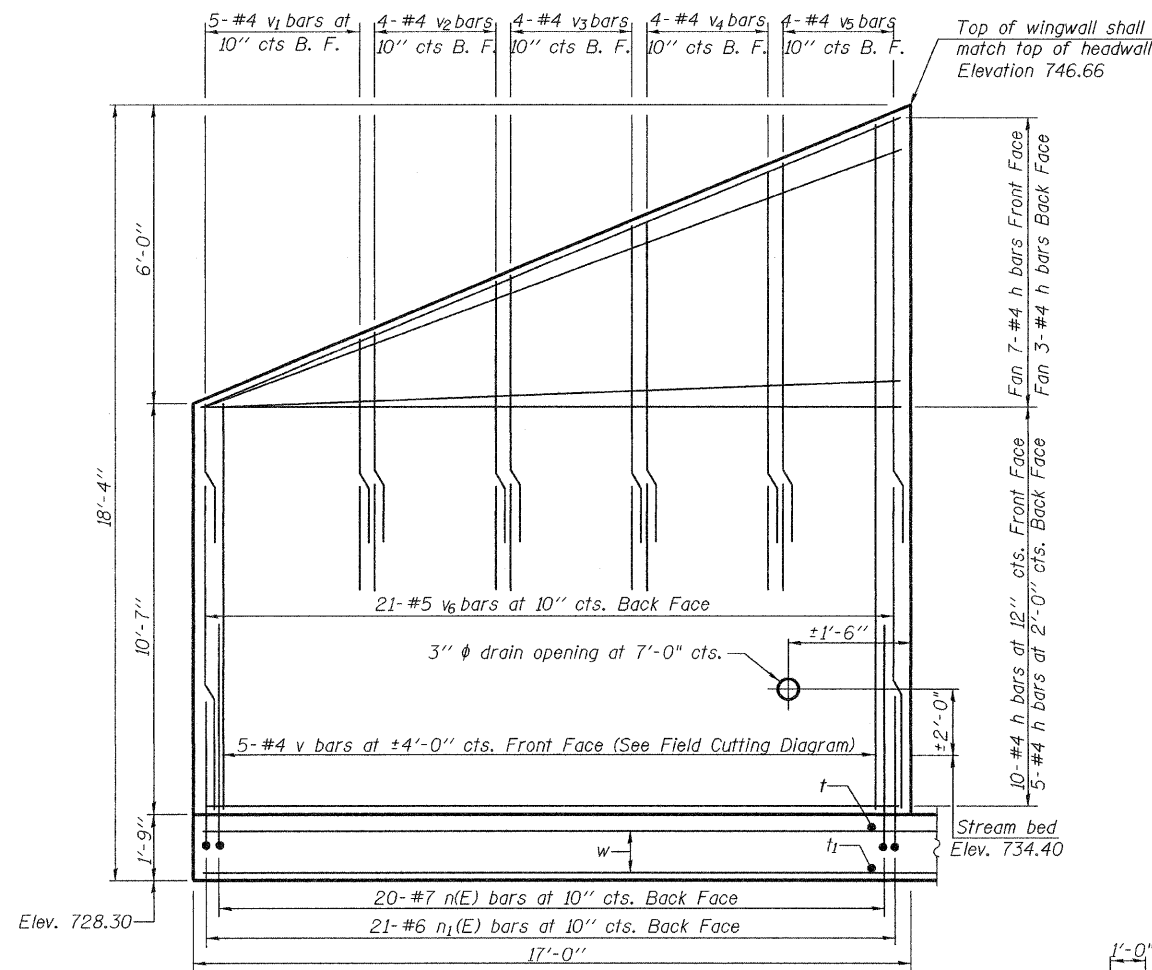
EXAMINED	Thomas J. Domagala ENGINEER OF BRIDGE DESIGN
PASSED	Ralph E. Anderson ENGINEER OF BRIDGES AND STRUCTURES

FOOTING DETAILS
F.A.P. RT. 330 SEC. 104B-3-BR
WILL COUNTY
STATION 149+06.00
STRUCTURE NO. 099-4649

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

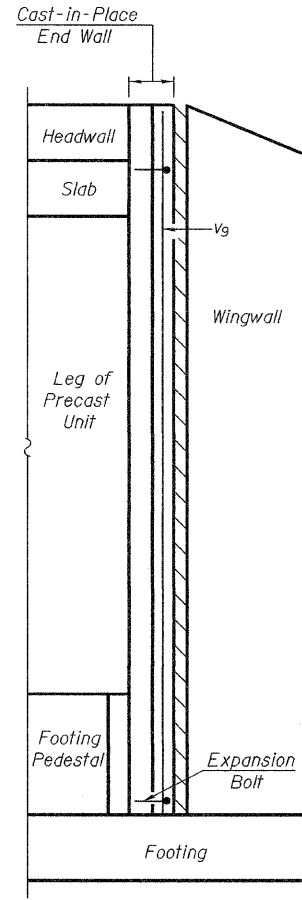
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FAP 330	104B-3-BR	WILL	42	25	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

Contract No. 60B80

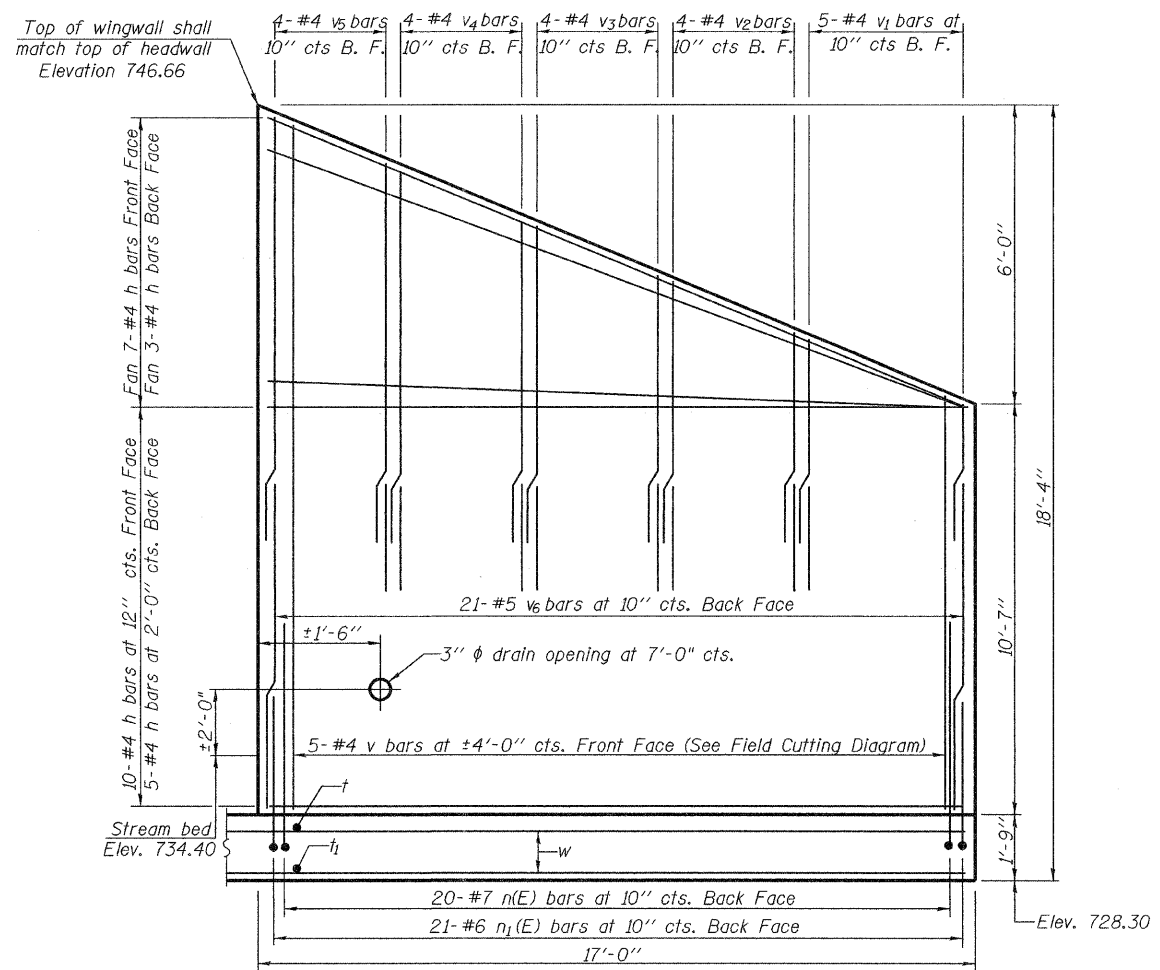


NORTHWEST WINGWALL ELEVATION
(Southeast Wingwall Similar)

MIN. BAR LAP
#4 bar = 1'-8"
#5 bar = 2'-2"

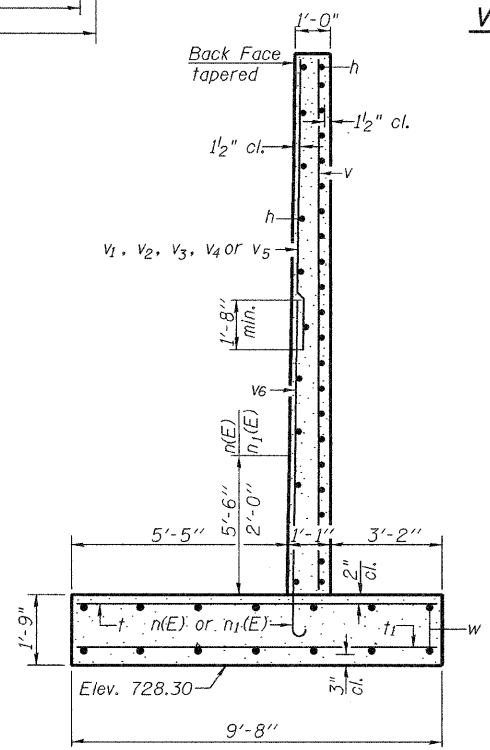


VIEW X-X

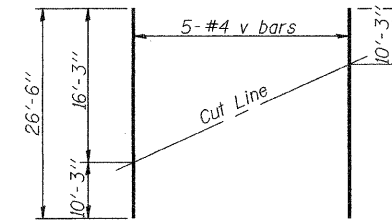


NORTHEAST WINGWALL ELEVATION
(Southwest Wingwall Similar)

Note: n(E) and n₁(E) bars are billed on sht. #4 of 11. Details of bars are shown on sht. #4 of 11.



SECTION B-B



FIELD CUTTING DIAGRAM

Order v bars full length. Cut as shown and use remainder of bars in opposite wingwall.

BILL OF MATERIAL WINGWALLS

Bar	No.	Size	Length	Shape
h	100	#4	16'-8"	
v	10	#4	26'-6"	
v ₁	20	#4	5'-3"	
v ₂	16	#4	6'-9"	
v ₃	16	#4	8'-2"	
v ₄	16	#4	9'-8"	
v ₅	16	#4	11'-2"	
v ₆	84	#5	8'-0"	
Concrete Structures			Cu. Yd.	35.7
Reinforcement Bars			Pound	2440

WINGWALL DETAILS
F.A.P. RT. 330 SEC. 104B-3-BR
WILL COUNTY
STATION 149+06.00
STRUCTURE NO. 099-4649

DESIGNED	Dhruv P. Narieiwala
CHECKED	Stephen M. Ryan
DRAWN	h.t. duong
CHECKED	DPN/SMR

November 20 2007

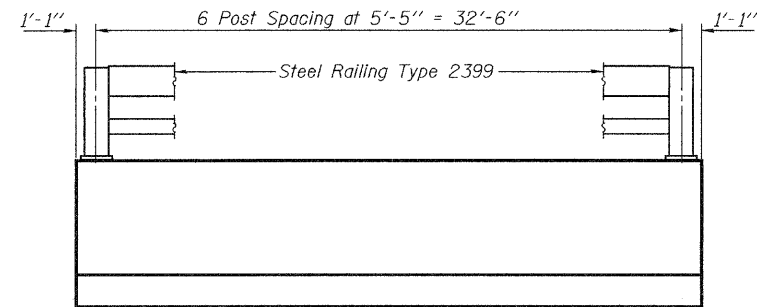
EXAMINED *Thomas J. Danna*
ENGINEER OF BRIDGE DESIGN

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

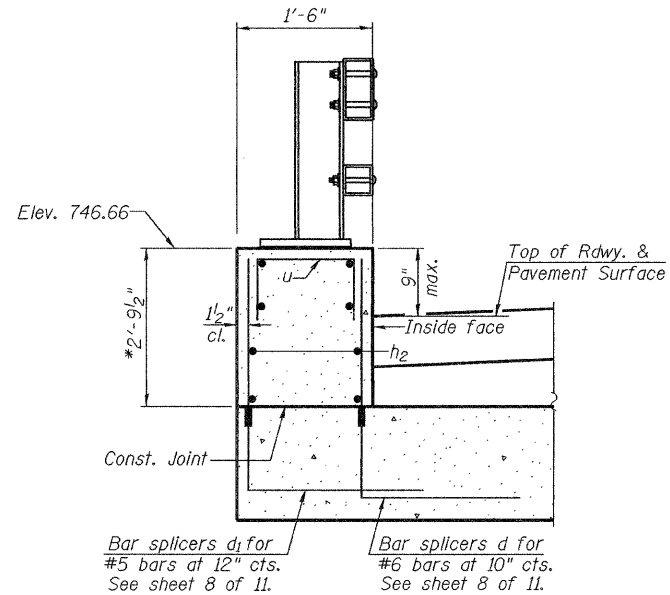
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 7 11 SHEETS
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FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

Contract No. 60B80

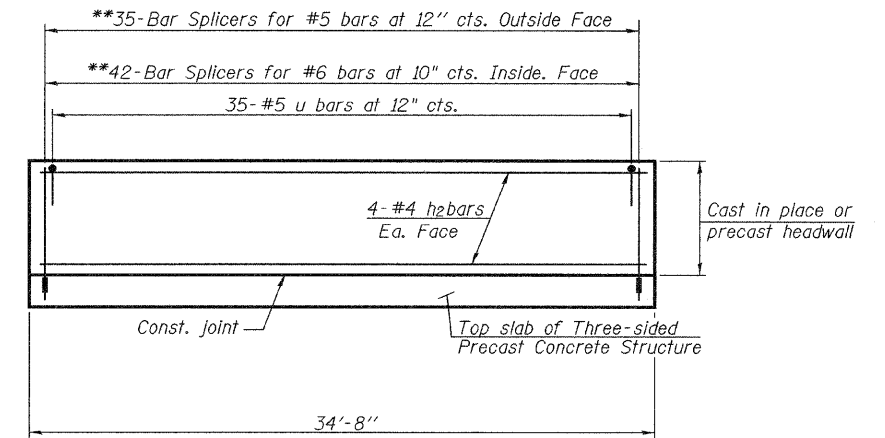


HEADWALL ELEVATION
(Showing Post Spacing)



SECTION THRU HEADWALL

*May vary depending on top slab thickness of Three Sided Precast Concrete Structure.



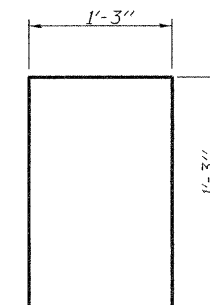
HEADWALL ELEVATION
(Showing Reinforcement)

Space reinforcement to miss anchor rods.

**The cost of the bar splicer assemblies for the headwalls shall be included in the cost of the Three-Sided Precast Concrete Structure 32'x10'.

**BILL OF MATERIAL
HEADWALLS AND ENDWALLS**

Bar	No.	Size	Length	Shape
h2	16	#4	34'-4"	—
u	70	#5	3'-9"	□
v9	8	#5	16'-3"	—
Concrete Structures		Cu. Yd.	20.0	
Reinforcement Bars		Pound	780	



BAR u

HEADWALL DETAILS
F.A.P. RT. 330 SEC. 104B-3-BR
WILL COUNTY
STATION 149+06.00
STRUCTURE NO. 099-4649

DESIGNED	Dhruv P. Narielwala
CHECKED	Stephen M. Ryan
DRAWN	h.t. duong
CHECKED	DPN/SMR

November 20 2007
EXAMINED *Thomas J. Donagale*
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. 8 11 SHEETS
FAP 330	104B-3-BR	WILL	42	27	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

Contract No. 60B80

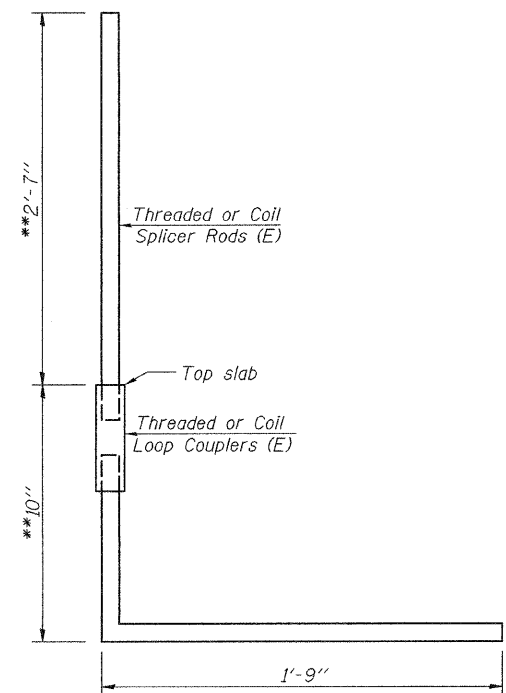
NOTES

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

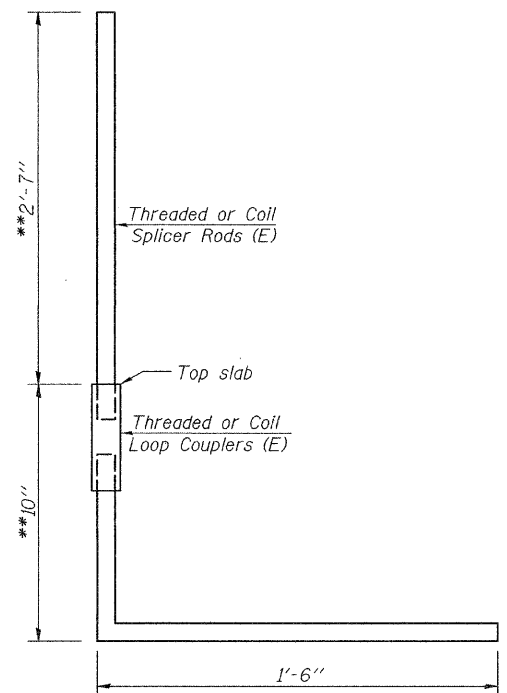
BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	7.9
#5	2'-0"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0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



*****FOR HEADWALLS**
(Cast into Three-Sided Precast Concrete Structure)

Bar Splicer d for #6 bar
Min. Capacity = 33.1 kips - tension
Min. Pull-out Strength = 17.4 kips - tension
No. Required = 84

***The cost of the bar splicer assemblies for the headwalls shall be included in the cost of the Three-Sided Precast Concrete Structure 32'x10'.



*****FOR HEADWALLS**
(Cast into Three-Sided Precast Concrete Structure)

Bar Splicer d ₁ for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = 70

***The cost of the bar splicer assemblies for the headwalls shall be included in the cost of the Three-Sided Precast Concrete Structure 32'x10'.

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**

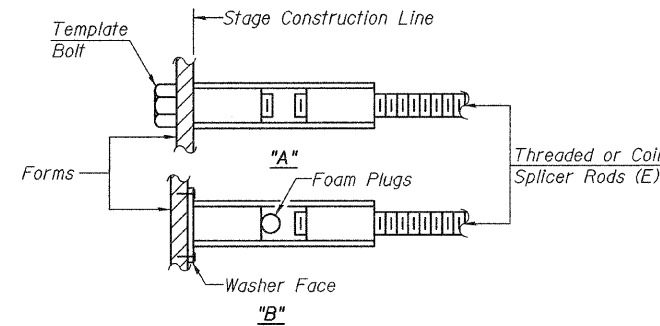
Wire Connector



WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTERNATIVES

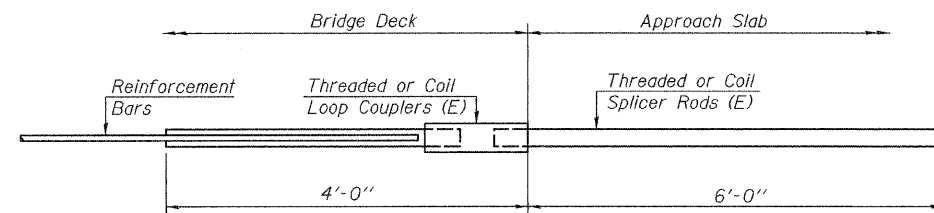
**Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



INSTALLATION AND SETTING METHODS

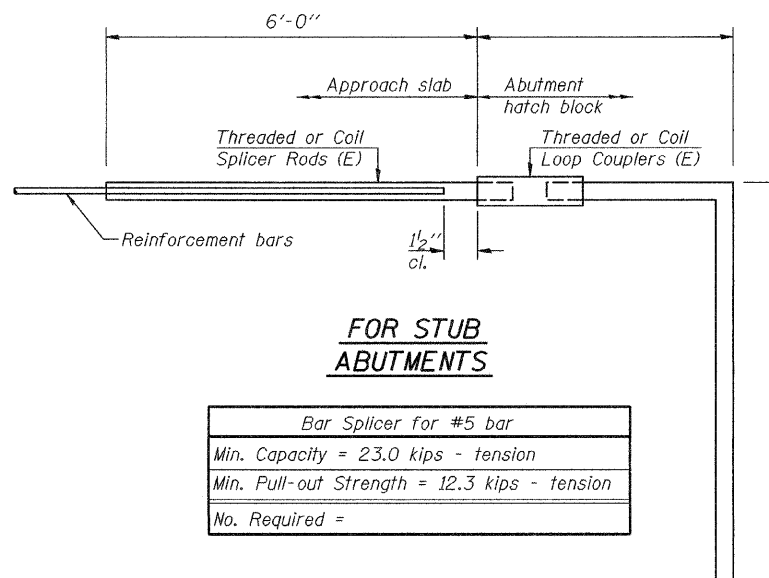
"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.

**May vary depending on top slab thickness of Three Sided Precast Concrete Structure. The horizontal leg of the bar splicer shall be 3" clear from bottom of the top slab.



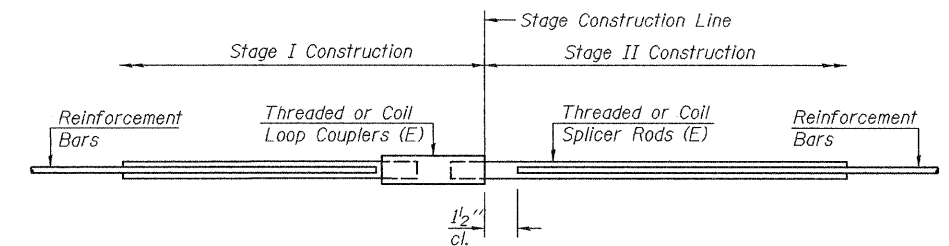
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

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
#5	28	Footing
#5	32	Pedestal

BAR SPLICER ASSEMBLY DETAILS

F.A.P. RT. 330 SEC. 104B-3-BR

WILL COUNTY

STATION 149+06.00

STRUCTURE NO. 099-4649

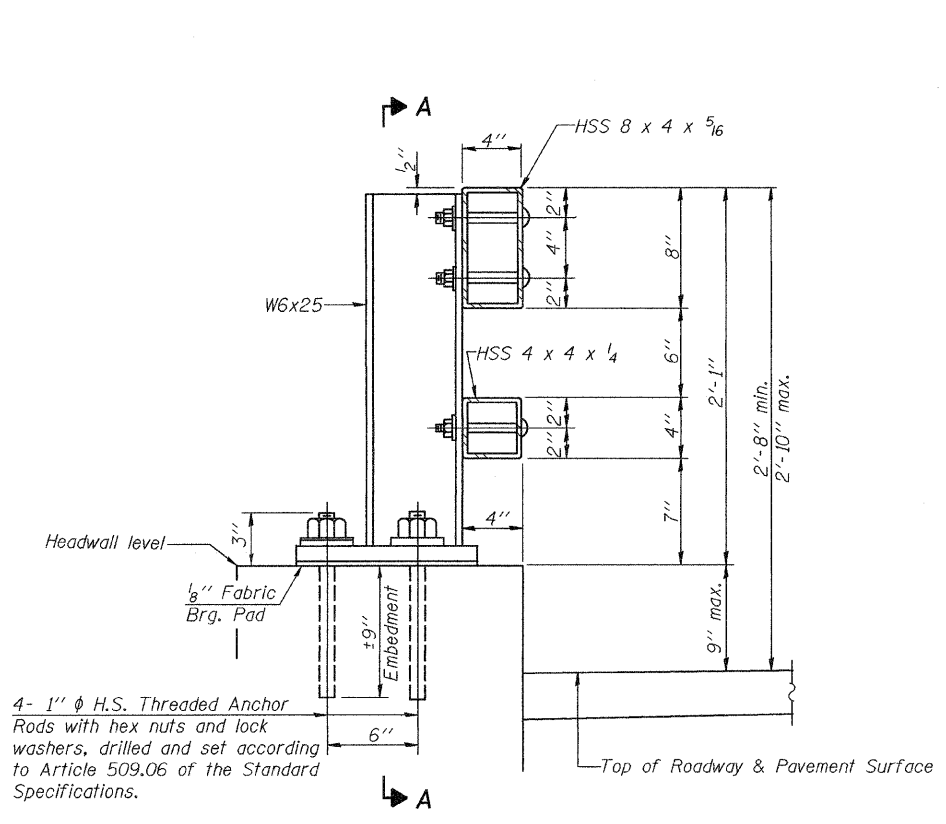
DESIGNED Dhruv P. Nariefwala
CHECKED Stephen M. Ryan
DRAWN h.t. duong
CHECKED DPN/SMR

November 20 2007
EXAMINED <i>Thomas J. Domasalek</i>
PASSED <i>Ralph E. Anderson</i>

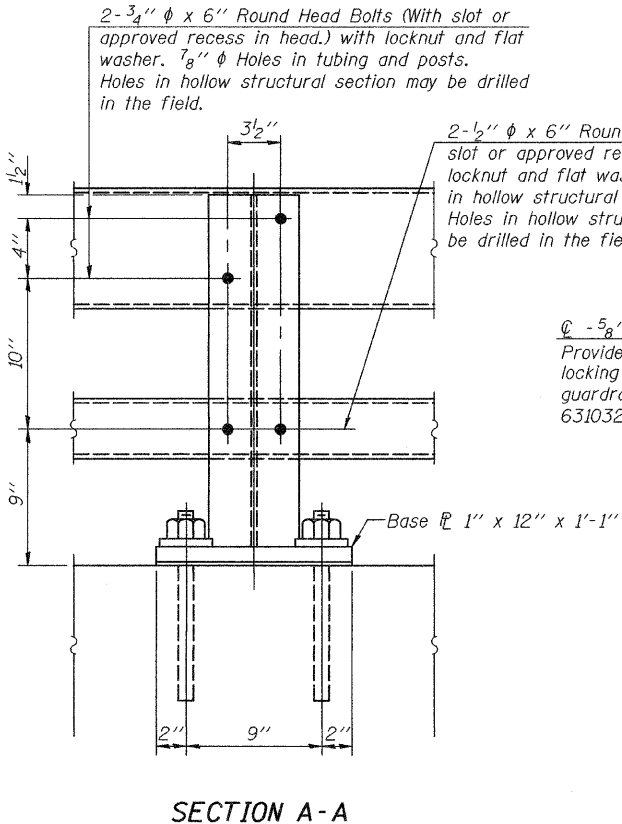
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 9 11 SHEETS
FAP 330	104B-3-BR	WILL	42	28	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

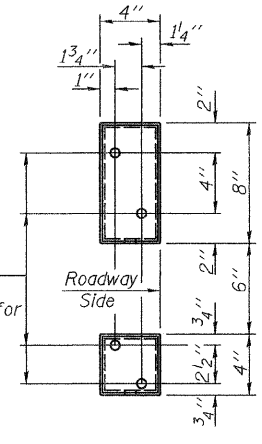
Contract No. 60B80



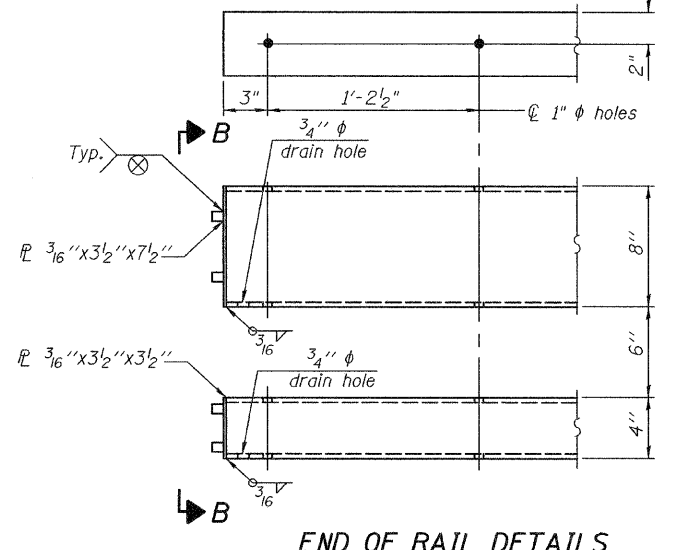
SECTION AT RAIL POST



SECTION A-A

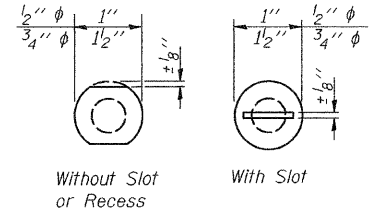


VIEW B-B

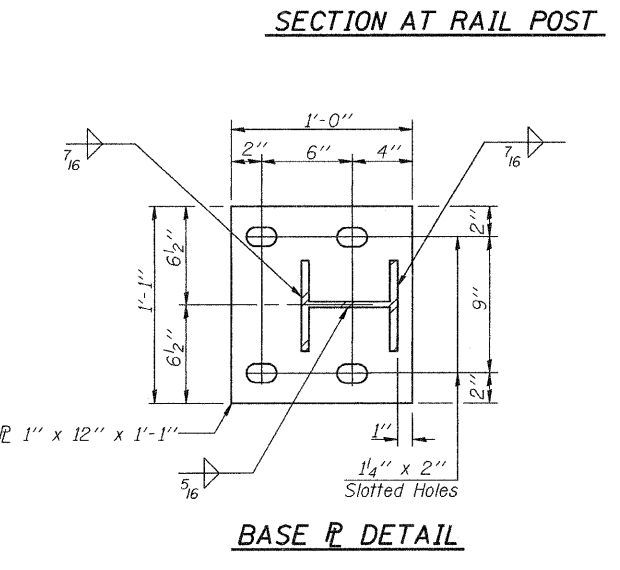


END OF RAIL DETAILS

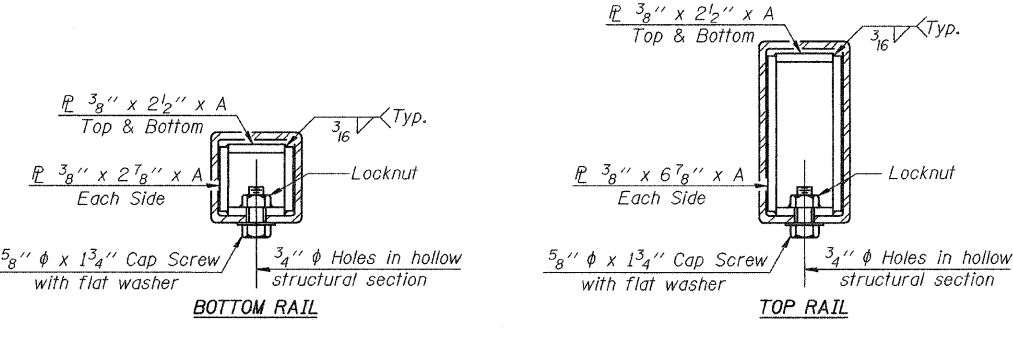
Notes:
All field drilled holes shall be coated with an approved zinc rich paint before erection.
Posts shall not be located closer than 1'-3" to an existing bridge expansion joint or end of bridge.
Steel Bridge Rail expansion joint shall be provided between any two (2) posts which span a bridge expansion joint. Bolts located at expansion joint shall be provided with locknuts and shall be tightened only to a point that will allow railing movement.
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.



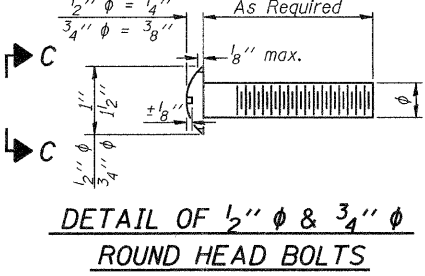
VIEW C-C



BASE PLATE DETAIL



SECTIONS AT RAIL SPLICE



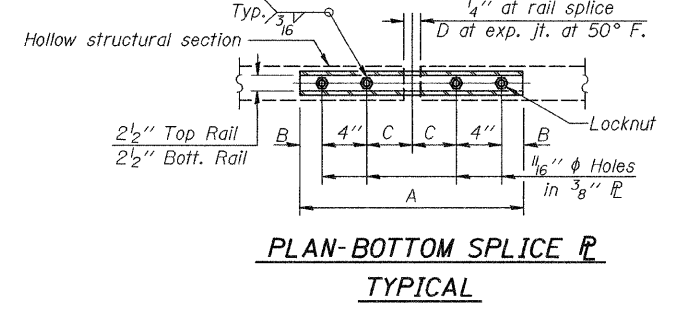
BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type 2399	Foot	70

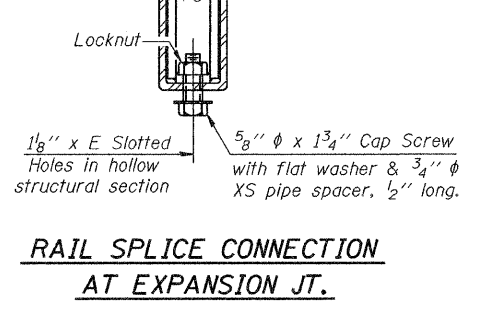
SPLICE DIMENSIONS

T	D	A	B	C	E
$\leq 4"$	$2\frac{1}{2}"$	1'-8"	2"	4"	$2\frac{1}{2}"$
$> 4" \leq 6\frac{1}{2}"$	$3\frac{3}{4}"$	2'-0"	$2\frac{1}{2}"$	5"	$3\frac{1}{2}"$
$> 6\frac{1}{2}" \leq 9"$	5"	2'-4"	$3\frac{1}{2}"$	$6\frac{1}{2}"$	9"
$> 9" \leq 13"$	7"	2'-10"	4" $\frac{1}{2}"$	$8\frac{1}{2}"$	11"
Rail Splice	$\frac{1}{4}"$	1'-8"	2"	4"	—

T = Total movement at expansion joint as shown on the design plans.



PLAN-BOTTOM SPLICE PLATE TYPICAL



RAIL SPLICE CONNECTION AT EXPANSION JT.

DESIGNED	Dhruv P. Nariefwala
CHECKED	Stephen M. Ryan
DRAWN	h.t. duong
CHECKED	DPN/SMR

EXAMINED	November 20, 2007
PASSED	Thomas J. Donagale ENGINEER OF BRIDGE DESIGN
	Ralph E. Anderson ENGINEER OF BRIDGES AND STRUCTURES

(6'-3" Maximum Post Spacing)

STEEL RAILING, TYPE 2399
F.A.P. RT. 330 SEC. 104B-3-BR
WILL COUNTY
STATION 149+06.00
STRUCTURE NO. 099-4649

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Illinois Department of Transportation SOIL BORING LOG Page 1 of 2
Date 9/26/61

ROUTE FAP 330 (US 45) DESCRIPTION over Jackson Creek LOGGED BY A. Reeder

SECTION 104-B LOCATION SW 14, SEC. 32, TWP. 35N, RNG. 12E, 3 PM

COUNTY Will DRILLING METHOD HAMMER TYPE

STRUCT. NO. 099-2005 (exist.)
099-4649 (prop.)
Station 149+06

BORING NO. 1
Station 149+50.5
Offset 17.00ft Rt
Ground Surface Elev. 741.65 ft (ft) (6") (tsf) (%)

Surface Water Elev. ft	D	B	U	M	Stream Bed Elev. ft	D	B	U	M										
	E	P	O	S		E	P	O	S										
	T	W	S			T	W	S											
	H	S	Qu	T		H	S	Qu	T										
720.65																			
717.15																			
715.65																			
712.65																			
710.65																			
709.65																			
726.15																			
723.15																			

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)

Illinois Department of Transportation SOIL BORING LOG Page 2 of 2
Date 9/26/61

ROUTE FAP 330 (US 45) DESCRIPTION over Jackson Creek LOGGED BY A. Reeder

SECTION 104-B LOCATION SW 14, SEC. 32, TWP. 35N, RNG. 12E, 3 PM

COUNTY Will DRILLING METHOD HAMMER TYPE

STRUCT. NO. 099-2005 (exist.)
099-4649 (prop.)
Station 149+06

BORING NO. 1
Station 149+50.5
Offset 17.00ft Rt
Ground Surface Elev. 741.65 ft (ft) (6") (tsf) (%)

Surface Water Elev. ft	D	B	U	M	Stream Bed Elev. ft	D	B	U	M										
	E	P	O	S		E	P	O	S										
	T	W	S			T	W	S											
	H	S	Qu	T		H	S	Qu	T										
696.15																			

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)

Illinois Department of Transportation SOIL BORING LOG Page 1 of 2
Date 9/26/61

ROUTE FAP 330 (US 45) DESCRIPTION over Jackson Creek LOGGED BY A. Reeder

SECTION 104-B LOCATION SW 14, SEC. 32, TWP. 35N, RNG. 12E, 3 PM

COUNTY Will DRILLING METHOD HAMMER TYPE

STRUCT. NO. 099-2005 (exist.)
099-4649 (prop.)
Station 149+06

BORING NO. 2
Station 149+50.5
Offset 19.00ft Lt
Ground Surface Elev. 741.86 ft (ft) (6") (tsf) (%)

Surface Water Elev. ft	D	B	U	M	Stream Bed Elev. ft	D	B	U	M										
	E	P	O	S		E	P	O	S										
	T	W	S			T	W	S											
	H	S	Qu	T		H	S	Qu	T										
721.36																			
719.86																			
736.36																			
731.86																			
730.36																			
726.36																			
723.86																			

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)

Illinois Department of Transportation SOIL BORING LOG Page 2 of 2
Date 9/26/61

ROUTE FAP 330 (US 45) DESCRIPTION over Jackson Creek LOGGED BY A. Reeder

SECTION 104-B LOCATION SW 14, SEC. 32, TWP. 35N, RNG. 12E, 3 PM

COUNTY Will DRILLING METHOD HAMMER TYPE

STRUCT. NO. 099-2005 (exist.)
099-4649 (prop.)
Station 149+06

BORING NO. 2
Station 149+50.5
Offset 19.00ft Lt
Ground Surface Elev. 741.86 ft (ft) (6") (tsf) (%)

Surface Water Elev. ft	D	B	U	M	Stream Bed Elev. ft	D	B	U	M										
	E	P	O	S		E	P	O	S										
	T	W	S			T	W	S											
	H	S	Qu	T		H	S	Qu	T										
681.36																			
684.36																			
692.36																			
688.36																			
686.36																			

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)

BORING LOGS
F.A.P. RT. 330 SEC. 104B-3-BR
WILL COUNTY
STATION 149+06.00
STRUCTURE NO. 099-4649

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Illinois Department of Transportation
Division of Highways
District 1/Region 1

SOIL BORING LOG

Page 1 of 2
Date 6/20/04

ROUTE FAP 330 (US 45) DESCRIPTION over Jackson Creek LOGGED BY MAOQJR

SECTION 104-B LOCATION SW 1/4, SEC. 32, TWP. 35N, RING. 12E, 3 PM

COUNTY Will DRILLING METHOD CME 750; (3 1/2" ID HSA) HAMMER TYPE CME-Automatic

STRUCT. NO. 099-2005 (exist.)
099-4649 (prop.)
Station 149+06

BORING NO. C-1
Station 149+43
Offset 15.00 ft
Ground Surface Elev. 745.98 ft

DEPTH (ft)	SOIL DESCRIPTION	WATER ELEV. (ft)	TESTS	REMARKS
0	Bluish-gray clay	734.80	U, M	Surface Water Elev. 734.80 ft
1	Stiff, Brown to Black, CLAY w/ trace gravel and roots (Fill)	733.86	U, M	Stream Bed Elev. 733.86 ft
2	Grades w/trace sand			
3	Grades to Stiff w/sand seams			
4	Soft, Brown to Black, CLAY w/ trace sand			
5	Grades w/trace gravel			
6	Soft, Gray, CLAY w/gravel			
7	Grades w/trace gravel			
8	Loose, Gray, SANDY CLAY LOAM w/gravel			
9	Very Stiff, Gray, CLAY	712.48		
10	Hard Gray CLAY			
11	Medium Stiff, Gray, CLAY w/ gravel (lit cobble)			
12	Medium Dense, Gray, SAND layered w/gray clay	707.48		
13				
14				
15				
16				
17				
18				
19				
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 T206)

Illinois Department of Transportation
Division of Highways
District 1/Region 1

SOIL BORING LOG

Page 2 of 2
Date 6/20/04

ROUTE FAP 330 (US 45) DESCRIPTION over Jackson Creek LOGGED BY MAOQJR

SECTION 104-B LOCATION SW 1/4, SEC. 32, TWP. 35N, RING. 12E, 3 PM

COUNTY Will DRILLING METHOD CME 750; (3 1/2" ID HSA) HAMMER TYPE CME-Automatic

STRUCT. NO. 099-2005 (exist.)
099-4649 (prop.)
Station 149+06

BORING NO. C-1
Station 149+43
Offset 15.00 ft
Ground Surface Elev. 745.98 ft

DEPTH (ft)	SOIL DESCRIPTION	WATER ELEV. (ft)	TESTS	REMARKS
21	Medium Dense, Gray, SAND layered w/gray clay (continued)			
22	End of Boring			

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)

Illinois Department of Transportation
Division of Highways
District 1/Region 1

SOIL BORING LOG

Page 1 of 1
Date 6/20/04

ROUTE FAP 330 (US 45) DESCRIPTION over Jackson Creek LOGGED BY MAOQJR

SECTION 104-B LOCATION SW 1/4, SEC. 32, TWP. 35N, RING. 12E, 3 PM

COUNTY Will DRILLING METHOD CME 750; (3 1/2" ID HSA) HAMMER TYPE CME-Automatic

STRUCT. NO. 099-2005 (exist.)
099-4649 (prop.)
Station 149+06

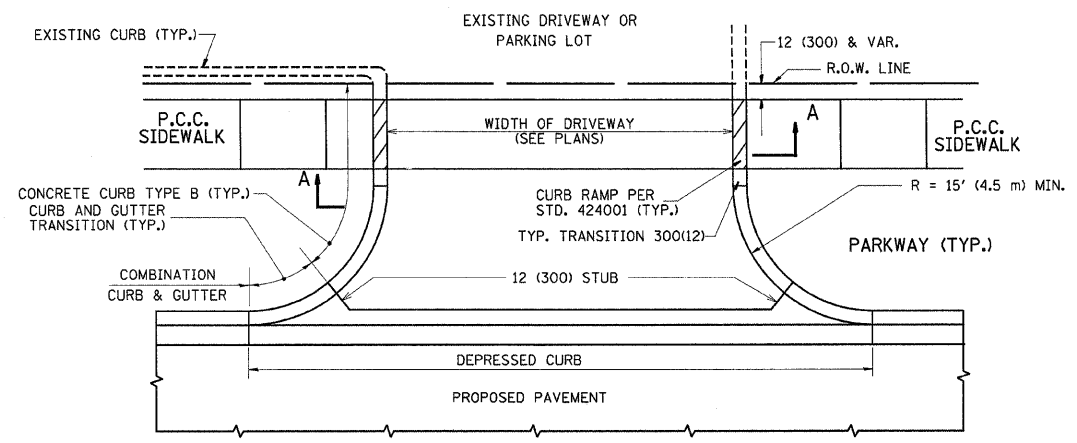
BORING NO. C-2
Station 148+74
Offset 14.00 ft
Ground Surface Elev. 745.96 ft

DEPTH (ft)	SOIL DESCRIPTION	WATER ELEV. (ft)	TESTS	REMARKS
0	Bluish-gray clay	734.80	U, M	Surface Water Elev. 734.80 ft
1	Stiff, Brown to Black, CLAY w/ trace gravel (Fill)	733.86	U, M	Stream Bed Elev. 733.86 ft
2	Grades w/trace sand			
3	Grades to Stiff w/sand seams			
4	Soft, Brown to Black, CLAY w/ trace sand			
5	Grades w/trace gravel			
6	Soft, Gray, CLAY w/gravel			
7	Grades w/trace gravel			
8	Loose, Gray, SANDY CLAY LOAM w/gravel			
9	Very Stiff, Gray, CLAY	712.48		
10	Hard Gray CLAY			
11	Medium Stiff, Brown/Gray, CLAY w/sand and gravel			
12	Hard, Gray, CLAY	712.46		
13	Loose, Gray, Fine SAND	709.46		
14	Loose, Mottled Brown/Gray, SANDY CLAY LOAM			
15	End of Boring	705.96		

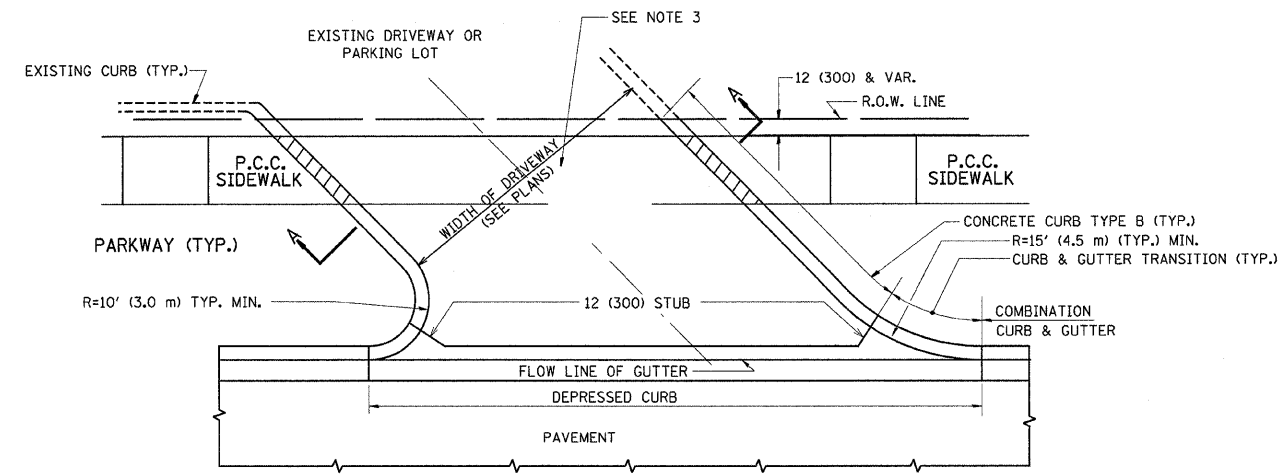
The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BORING LOGS
F.A.P. RT. 330 SEC. 104B-3-BR
WILL COUNTY
STATION 149+06.00
STRUCTURE NO. 099-4649

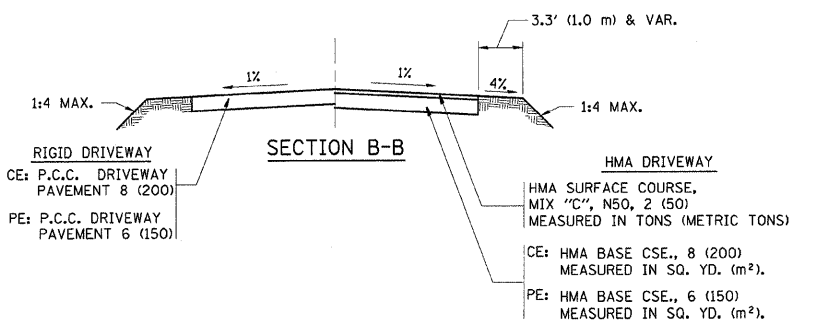
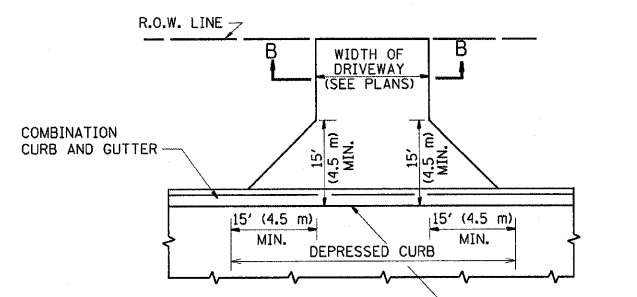
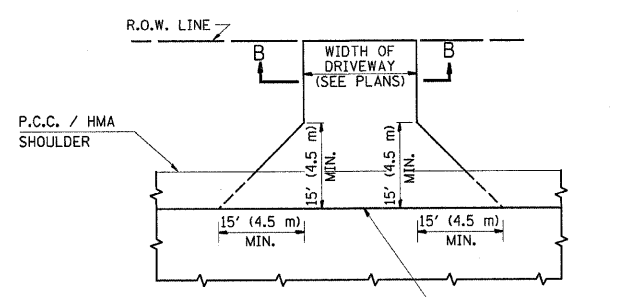
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	104B-3-BR	Will	42	31
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



WITH CONCRETE CURB, TYPE B



WITH CONCRETE CURB, TYPE B



GENERAL NOTES:

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

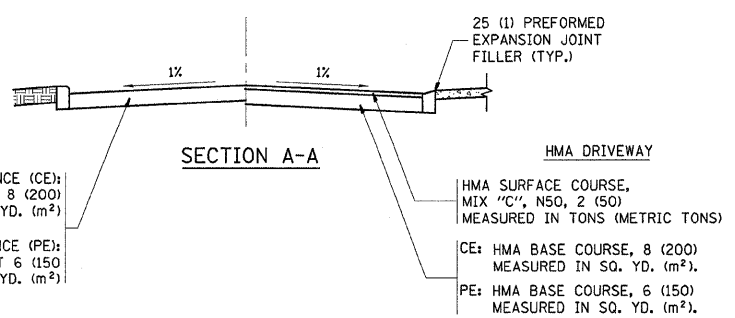
COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 150.



ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE NOTED

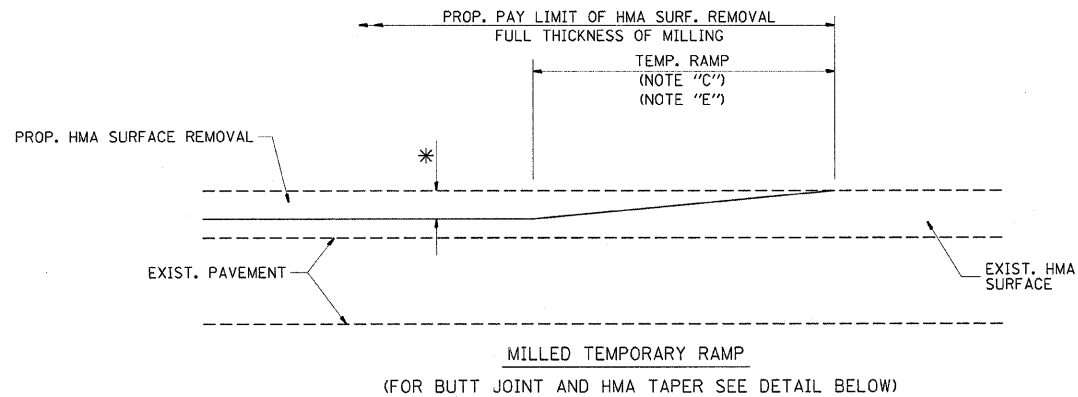
REVISIONS	
NAME	DATE
R. SHAH	11-04-95
J. POLLASTRINI	08-12-96
J. POLLASTRINI	12-14-96
A. ABBAS	03-21-97
T. HOLTZ	04-08-97
M. GOMEZ	04-06-01
P. L'EFLEUR	04-15-03
R. BORO	01-01-07

ILLINOIS DEPARTMENT OF TRANSPORTATION
DRIVEWAY DETAILS
DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 m)

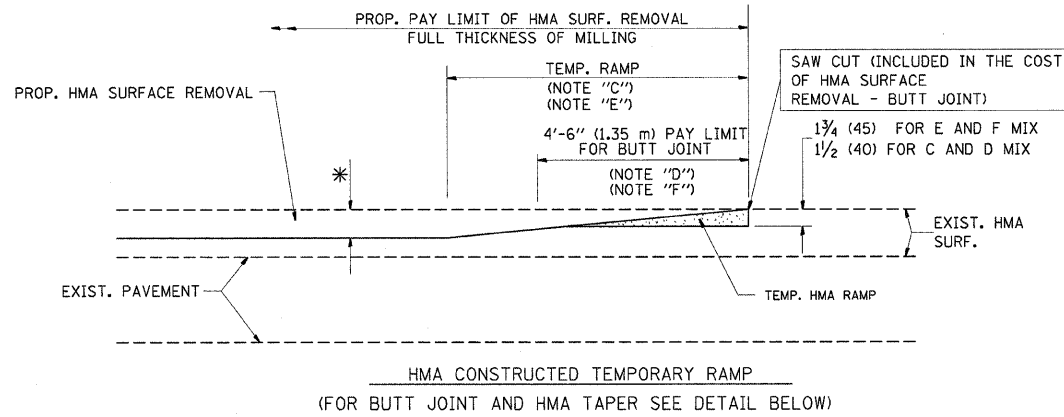
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HORIZ.
DRAWN BY
CHECKED BY

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USER NAME = wilgreenp

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	104B-3-BR	WILL	42	32
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

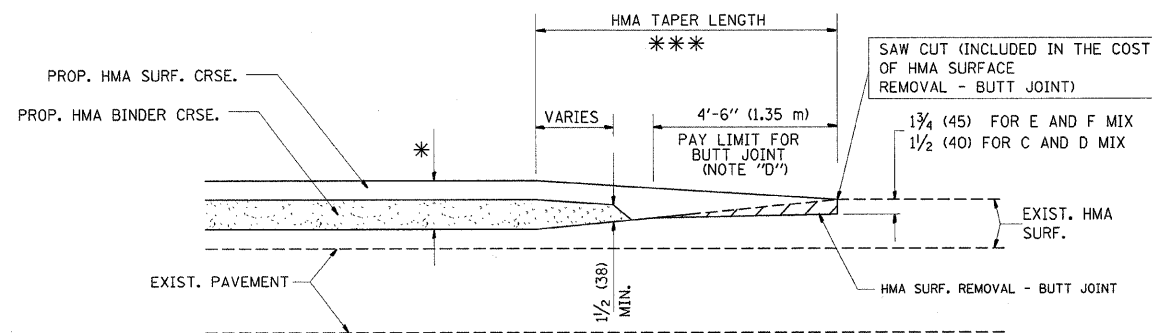


OPTION 1



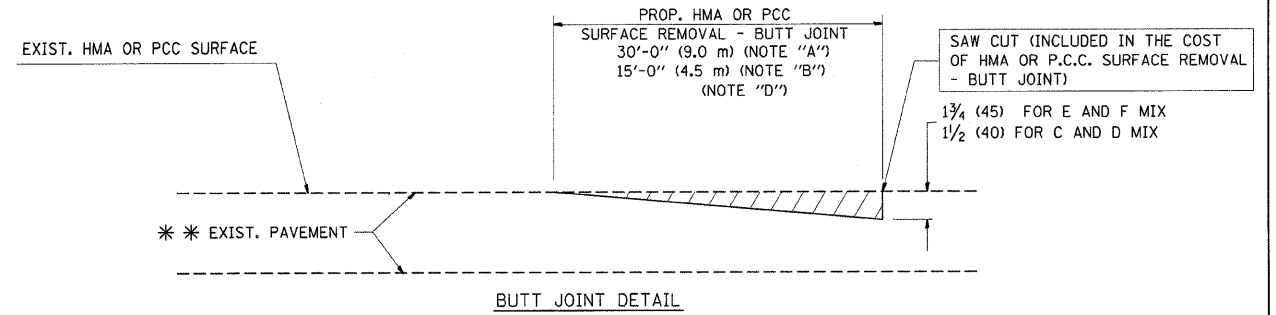
OPTION 2

TYPICAL TEMPORARY RAMP

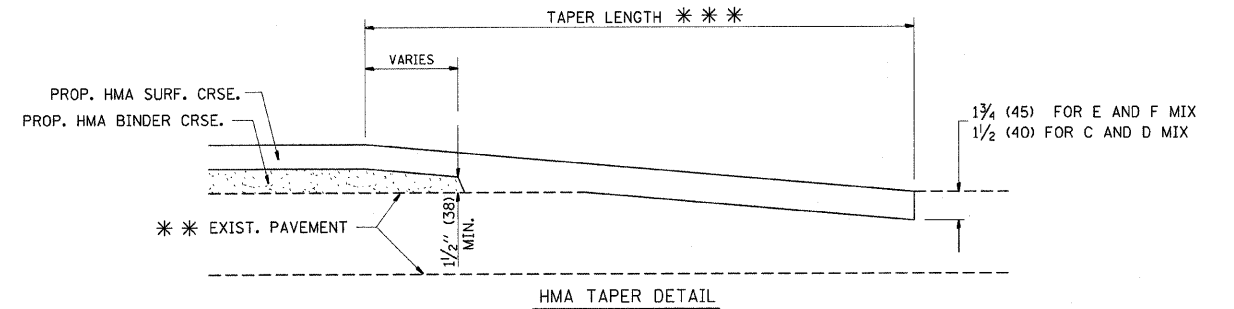


BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

*** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
 - B: MINOR SIDE ROADS.
 - C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
 - D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
 - E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
 - F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
 - G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- *** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

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

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

REVISIONS	
NAME	DATE
M. DE YONG	6-13-90
M. DE YONG	7-3-90
M. DE YONG	3-27-92
R. SHAH	09/09/94
R. SHAH	10/25/94
A. ABBAS	03/21/97
M. GOMEZ	04/06/01
R. BORO	01/01/07

ILLINOIS DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER DETAILS

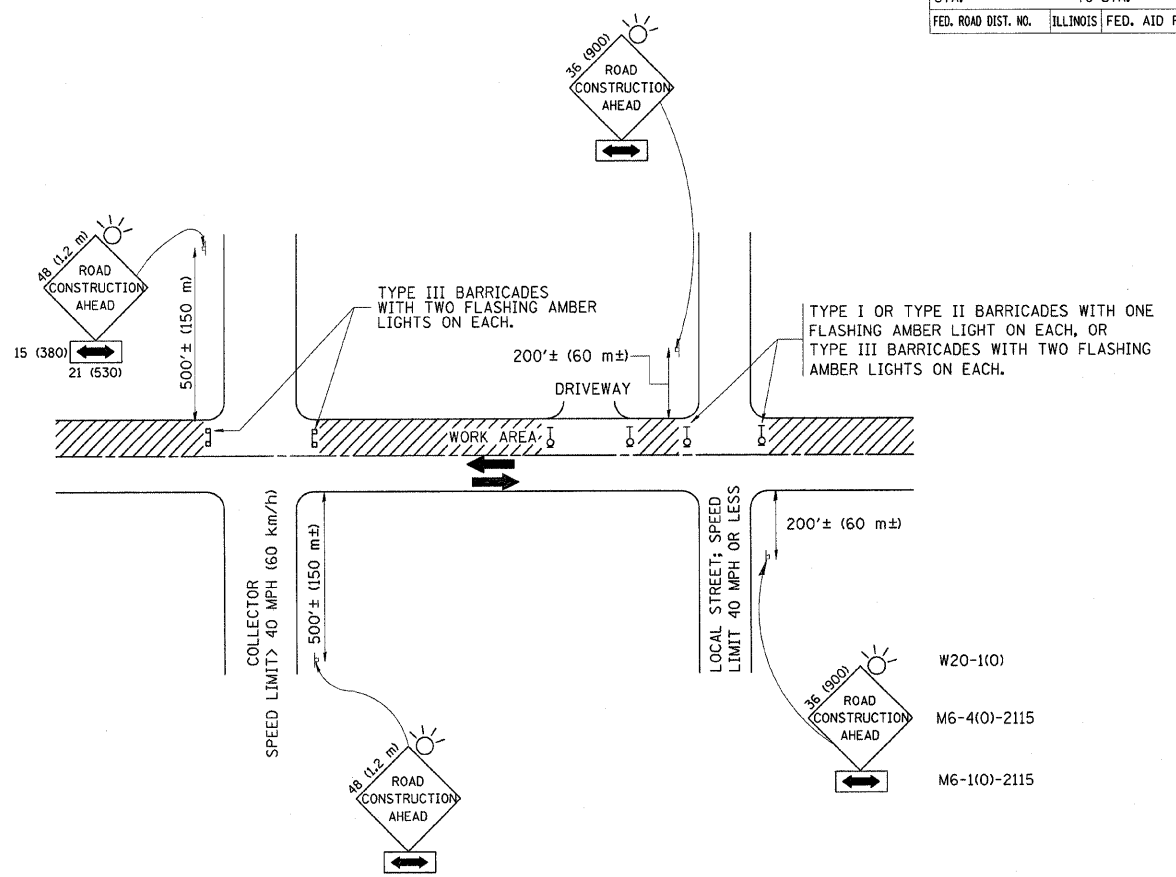
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HORIZ.

DRAWN BY

CHECKED BY

BD400-05 (VI-BD32)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	104B-3-BR	WILL	42	33
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
 - SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
 - WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in millimeters (Inches) unless otherwise shown.

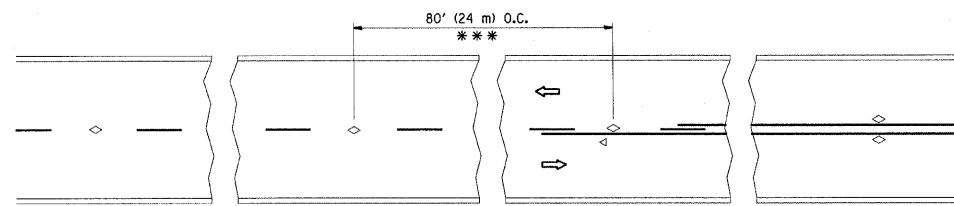
REVISIONS	
NAME	DATE
LHA	6/89
T. RAMMACHER	09/08/94
J. OBERLE	10/18/95
A. HOUSEH	03/06/96
A. HOUSEH	10/15/96
T. RAMMACHER	01/06/00

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TRAFFIC CONTROL AND PROTECTION
 FOR
 SIDE ROADS, INTERSECTIONS, AND
 DRIVEWAYS

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 CHECKED BY
 TC-10

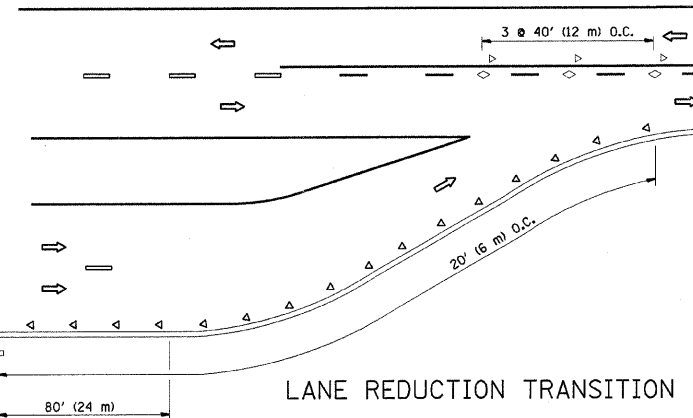
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 USER NAME = wilgreen

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	104B-3-BR	Will	42	34
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

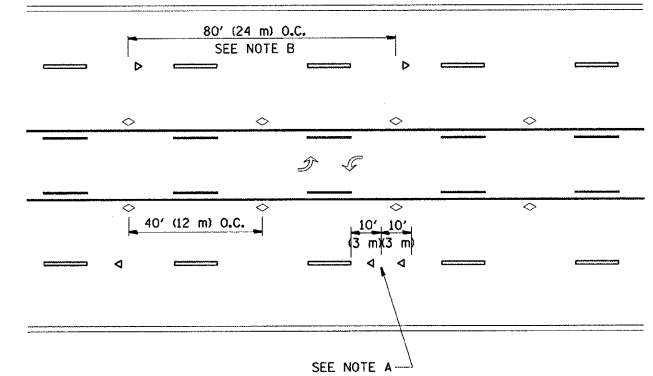


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

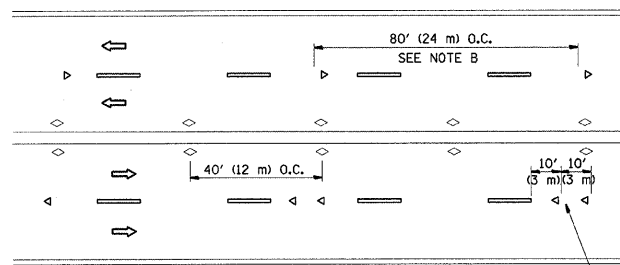
TWO-LANE/TWO-WAY



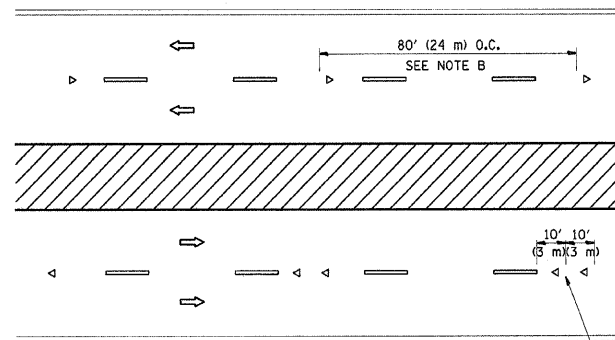
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

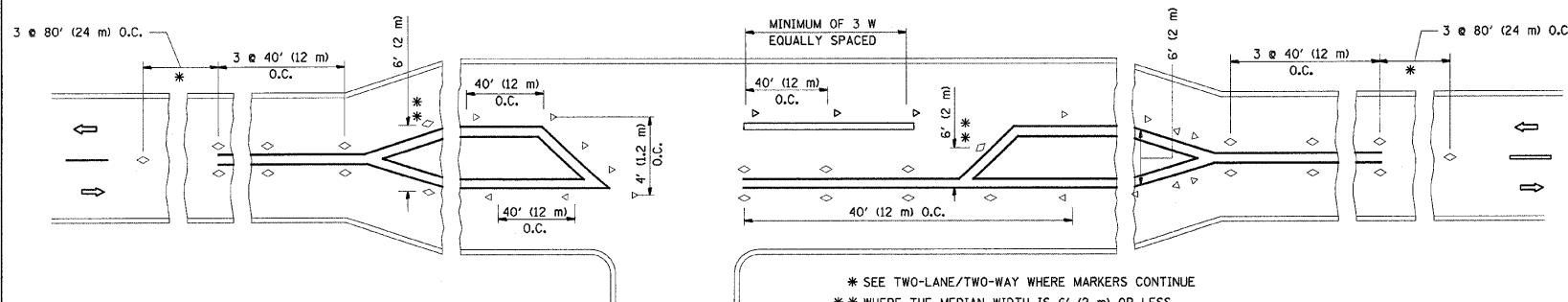
- YELLOW STRIPE
- WHITE STRIPE
- ◁ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◇ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H. (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE
 ** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

LEFT TURN

All dimensions are in inches (millimeters) unless otherwise shown.

REVISIONS	
NAME	DATE
T. RAMMACHER	09-19-94
T. RAMMACHER	03-12-99
T. RAMMACHER	01-06-00

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TYPICAL APPLICATIONS
 RAISED REFLECTIVE PAVEMENT
 MARKERS (SNOW-PLOW RESISTANT)

SCALE: NONE

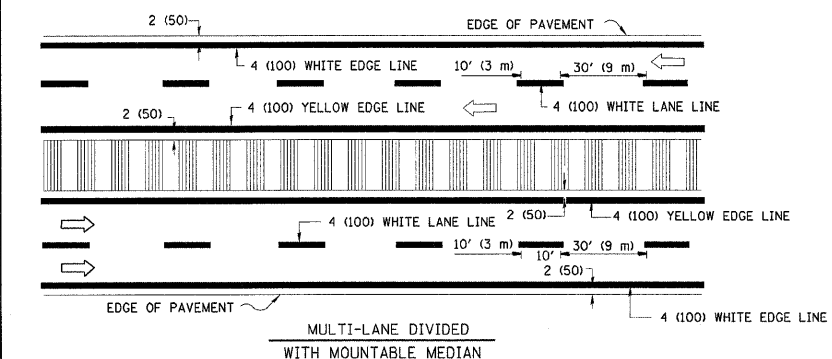
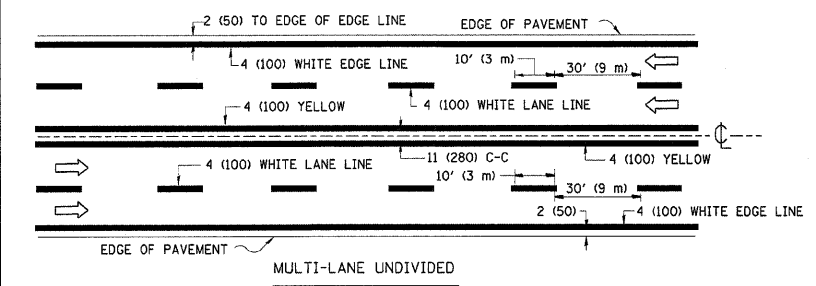
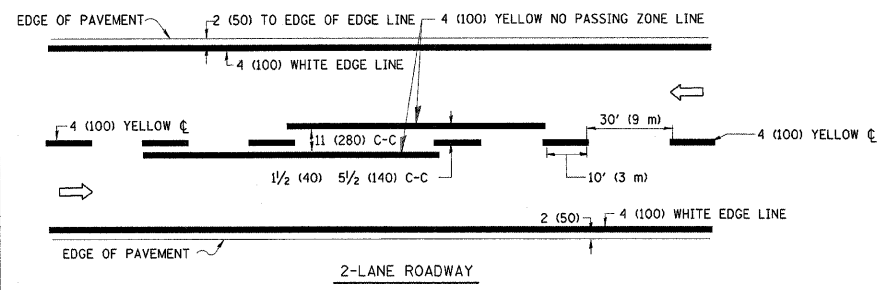
DRAWN BY CADD

CHECKED BY

TC-11

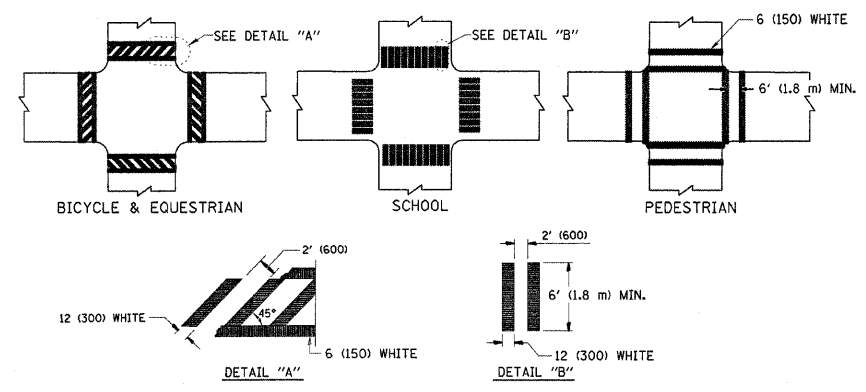
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 USER NAME = mjgreenp

F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	NO.
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STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

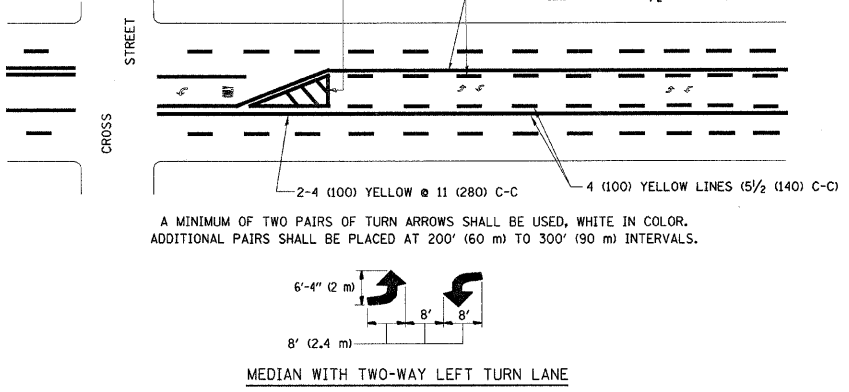
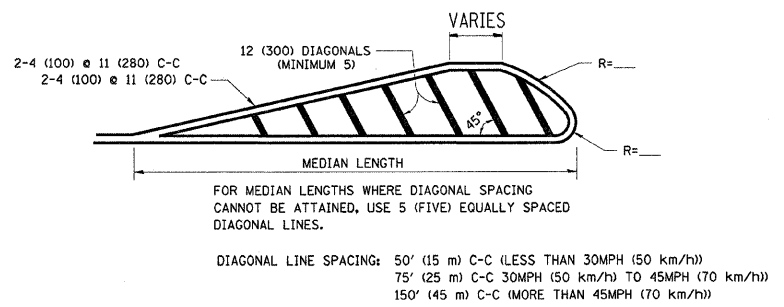
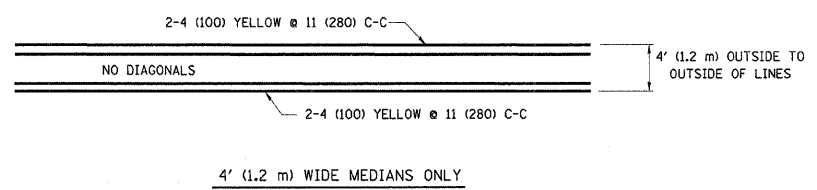


NOTE: MEDIANS WITH BARRIER CURBS DO NOT REQUIRE AN EDGE LINE

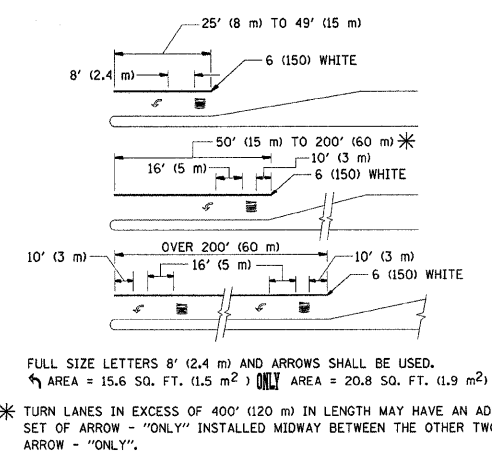
TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING

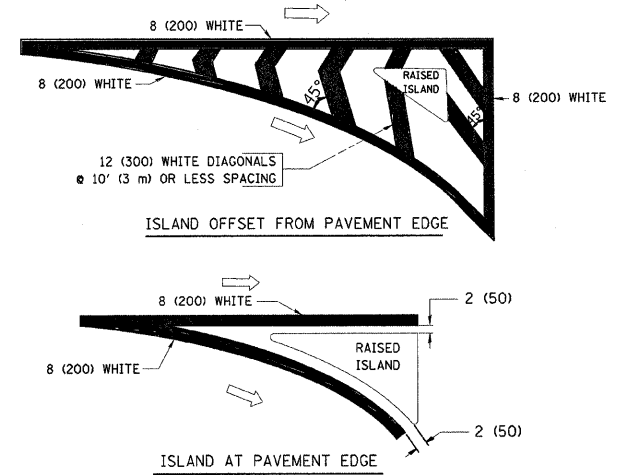


TYPICAL PAINTED MEDIAN MARKING



TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in inches (millimeters) unless otherwise shown.

REVISIONS	
NAME	DATE
EVERS	03-19-90
T. RAMMACHER	10-27-94
ALEX HOUSEH	10-09-96
ALEX HOUSEH	10-17-96
T. RAMMACHER	01-06-00

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE

TYPICAL PAVEMENT MARKINGS

SCALE: NONE

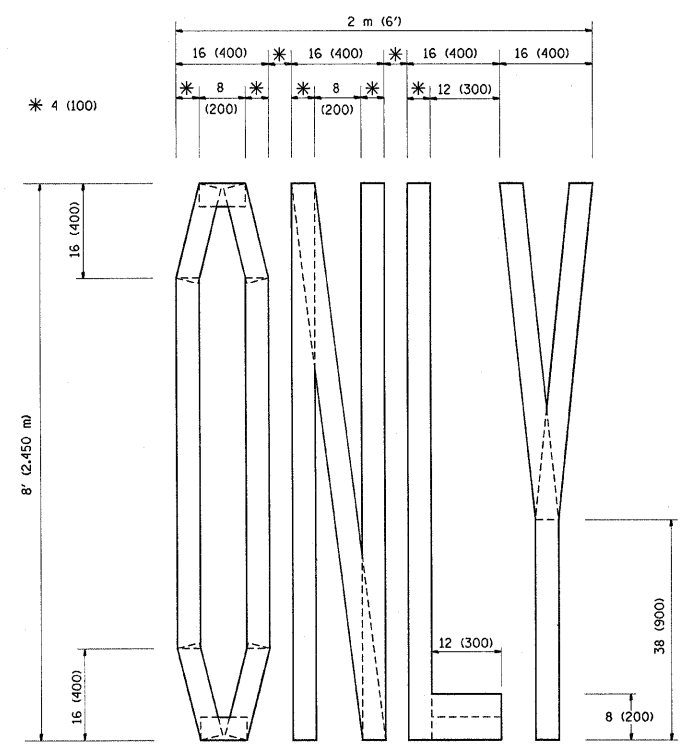
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CHECKED BY

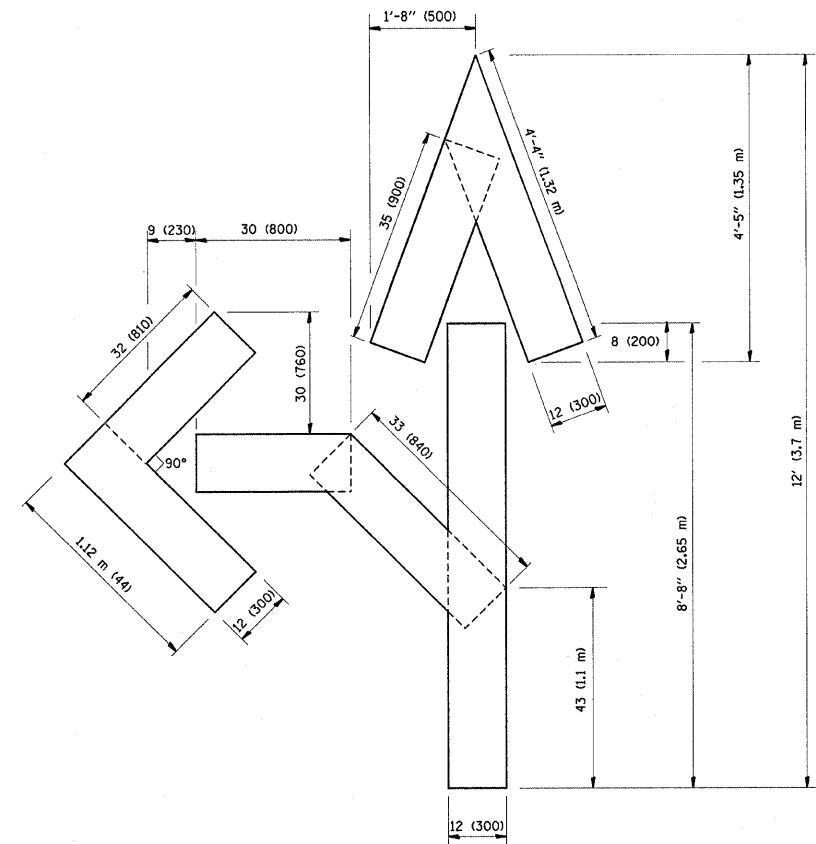
TC-13

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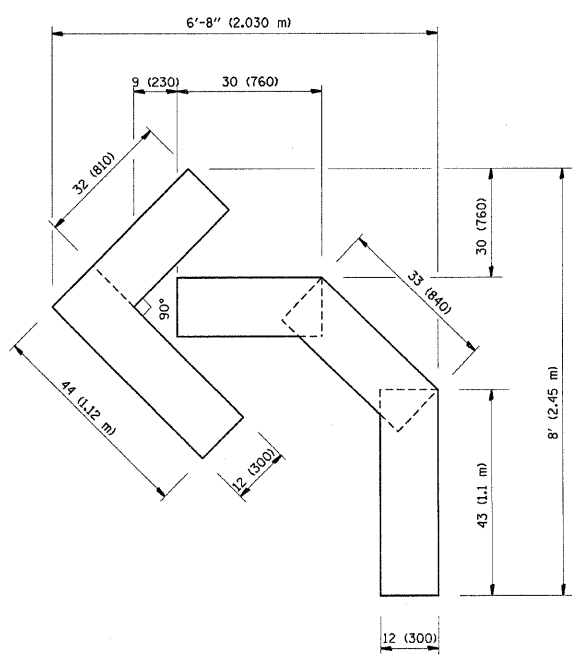
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	104B-3-BK	Will	42	36
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



QUANTITY
 4 (100) LINE = 64.1 ft. (19.7 m)
 21.1 sq. ft. (1.97 sq. m)



QUANTITY
 4 (100) LINE = 82.5 ft. (25.3 m)
 27.5 sq. ft. (2.53 sq. m)



QUANTITY
 4 (100) LINE = 45.5 ft. (13.9 m)
 15.2 sq. ft. (1.39 sq. m)

All dimensions are in inches (millimeters) unless otherwise shown.

REVISIONS	
NAME	DATE
T. RAMMACHER	09/18/94
J. OBERLE	06/01/96
T. RAMMACHER	06/05/96
T. RAMMACHER	11/04/97
T. RAMMACHER	03/02/98
E. GOMEZ	08/28/00

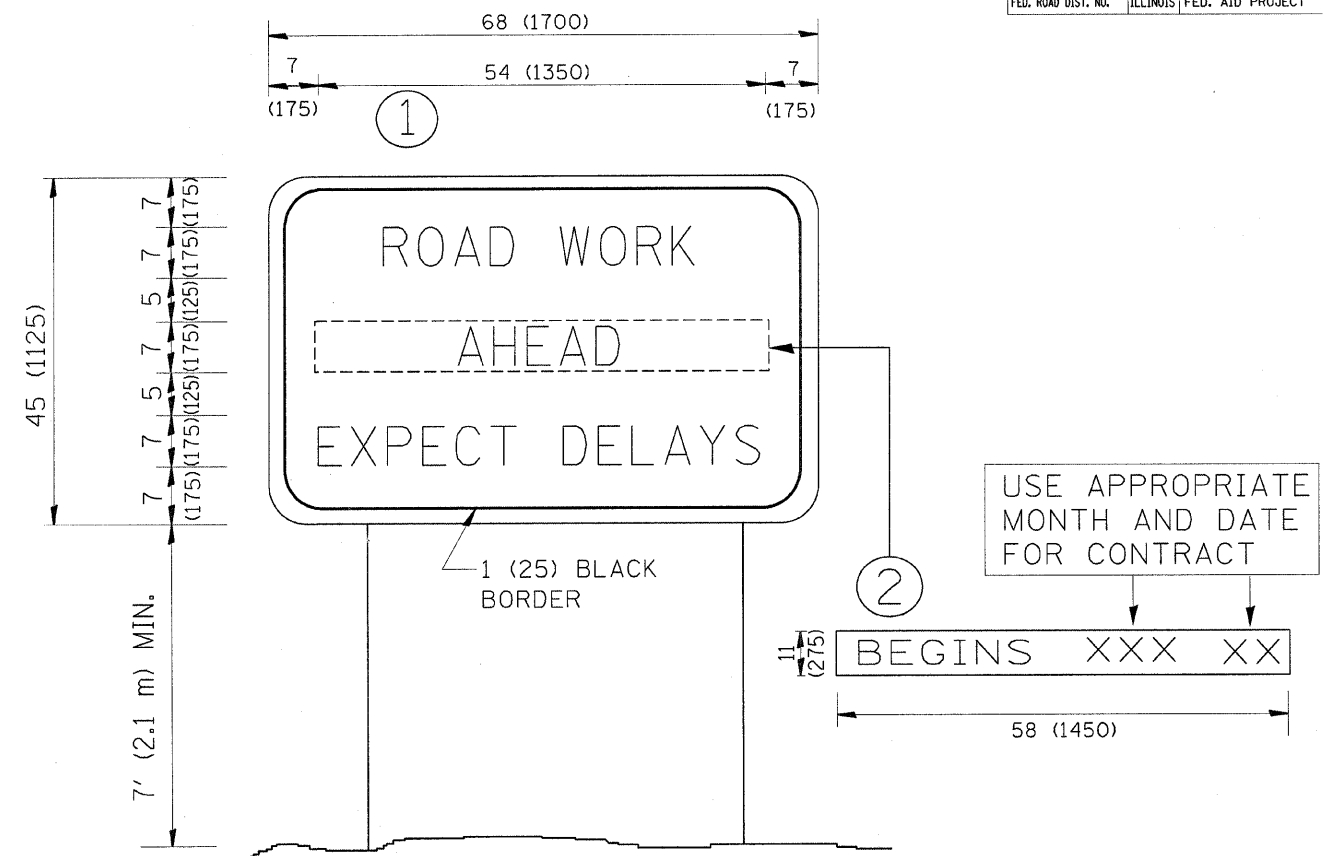
ILLINOIS DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKING
 LETTERS AND SYMBOLS
 FOR TRAFFIC STAGING**

SCALE: NONE

DRAWN BY CADD
 CHECKED BY
 TC-16

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 USER NAME = wlgrndp

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	104B-3-BR	Will	42	37
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

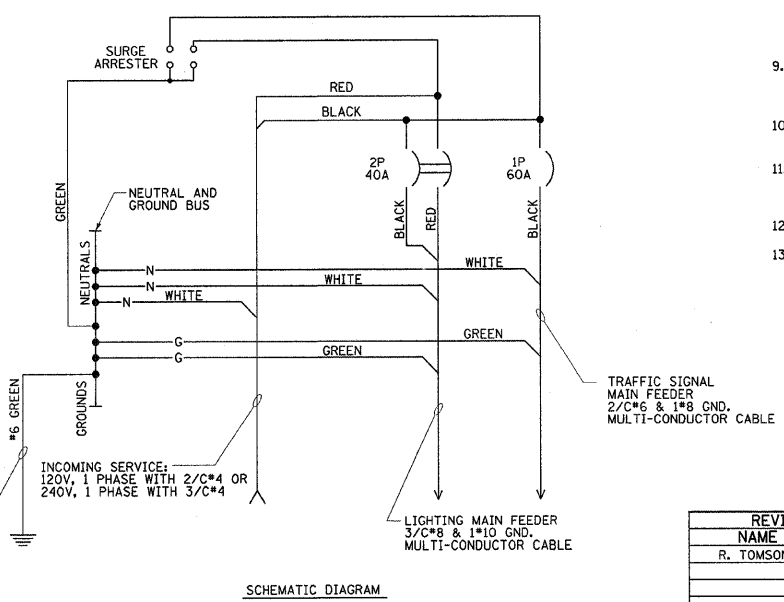
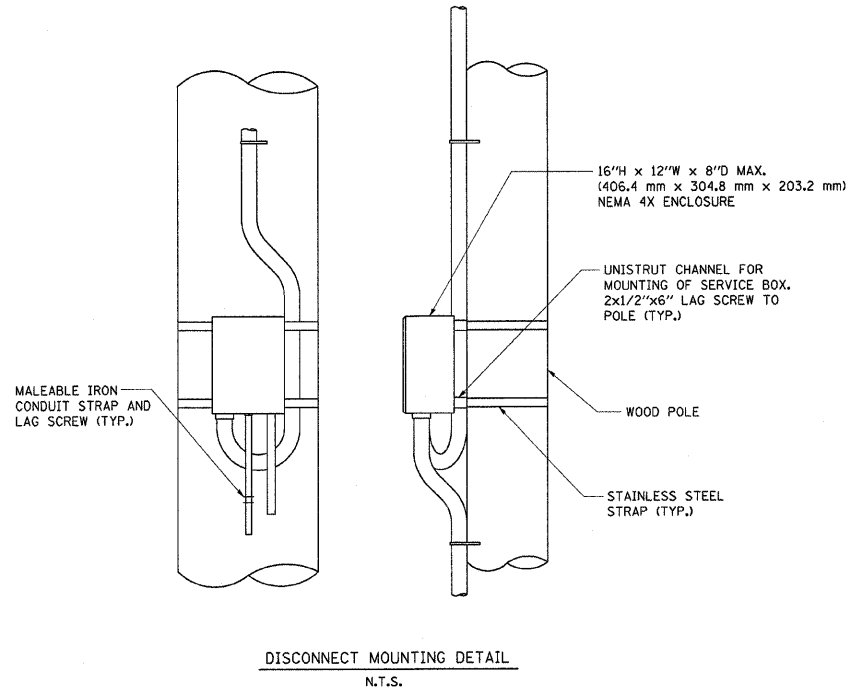
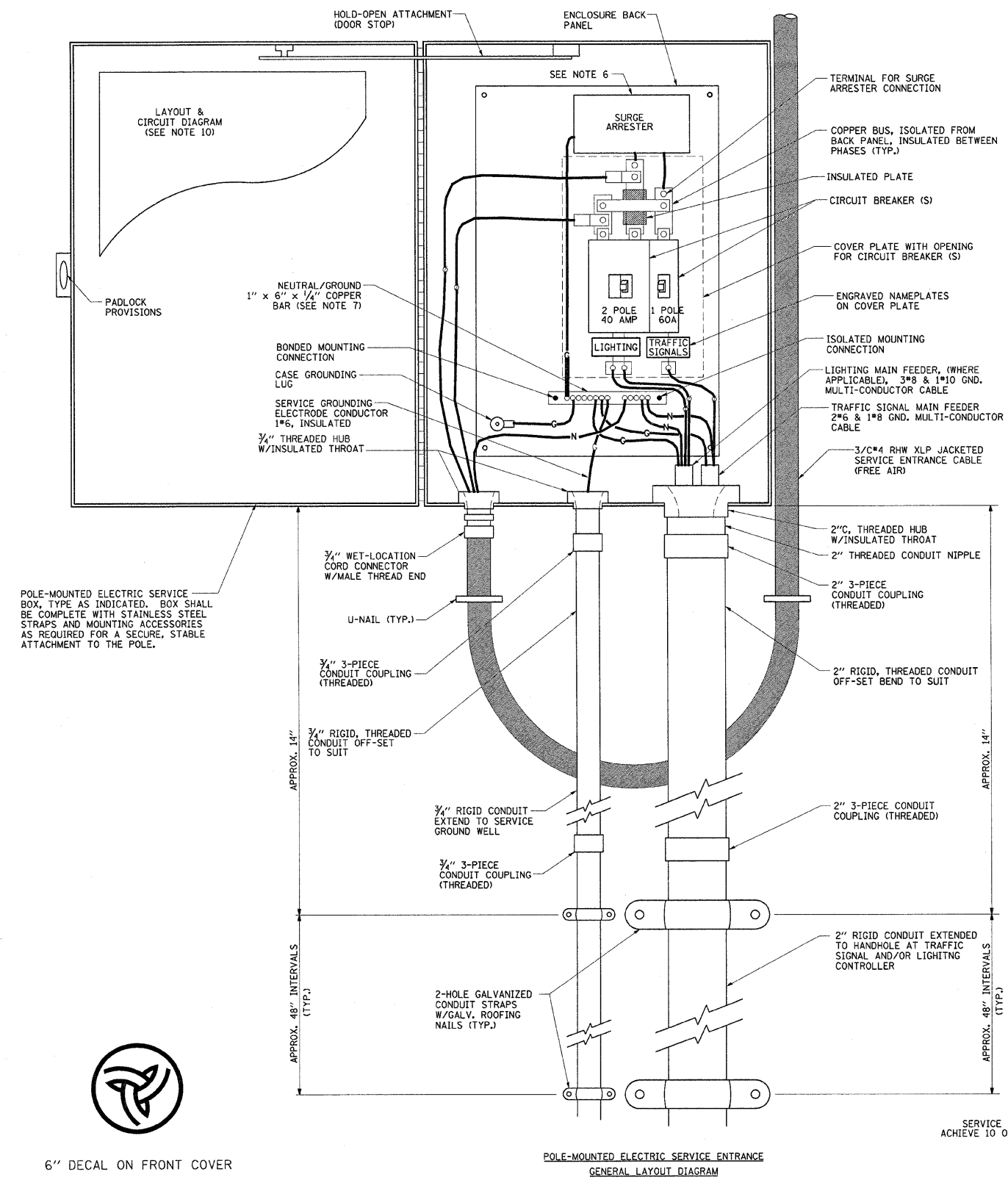
REVISIONS	
NAME	DATE
R. MIRS	9-15-97
R. MIRS	12-11-97
T. RAMMACHER	2-2-99
C. JUCIUS	1-31-07

ILLINOIS DEPARTMENT OF TRANSPORTATION
ARTERIAL ROAD
INFORMATION SIGN

SCALE: NONE
DRAWN BY DESIGN
CHECKED BY
TC22

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USER NAME = wtgraindp

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
330	104 B-3-BR	Will	42 38
STA.		TO STA.	
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT	



- NOTES:**
- ELECTRIC SERVICE SHALL BE OF THE VOLTAGE INDICATED OR DESIGNATED BY THE ENGINEER, AND SERVICE DROP CABLE SHALL BE COMPATIBLE WITH THE SERVICE ACCORDINGLY. SOME INSTALLATIONS MAY CALL FOR SERVICE ENTRANCE EQUIPMENT SUITABLE FOR 3-WIRE SERVICE EVEN THOUGH INITIALLY WIRING FOR 2-WIRE SERVICE.
 - THE POLE-MOUNTED ELECTRIC SERVICE BOX DETAIL DEPICTS THE BASIC CONSTRUCTION OF THE EQUIPMENT. SLIGHT MODIFICATIONS APPLY FOR DIFFERING SERVICES AND APPLICATIONS AS FOLLOWS:
 - TYPE A FULLY EQUIPPED FOR 240/120V. 3W SERVICE, COMPLETE WITH LIGHTING MAIN BREAKER
 - TYPE A1 FULLY EQUIPPED FOR 240/120V. 3W SERVICE, BLANK COVER IN LIEU OF LIGHTING MAIN BREAKER
 - TYPE B EQUIPPED FOR 120V. SERVICE, COMPLETE WITH IP, 60A. TRAFFIC SIGNALS MAIN BREAKER
 - TYPE B1 EQUIPPED FOR 120V. SERVICE, COMPLETE WITH IP, 40A. TRAFFIC SURVEILLANCE MAIN BREAKER
 - THE ELECTRIC SERVICE EQUIPMENT ASSEMBLY SHALL BE UL LISTED AS SUITABLE FOR USE AS SERVICE ENTRANCE EQUIPMENT.
 - THE ELECTRIC SERVICE EQUIPMENT ENCLOSURE SHALL BE NEMA 4X STAINLESS STEEL, NOMINALLY 12\"/>

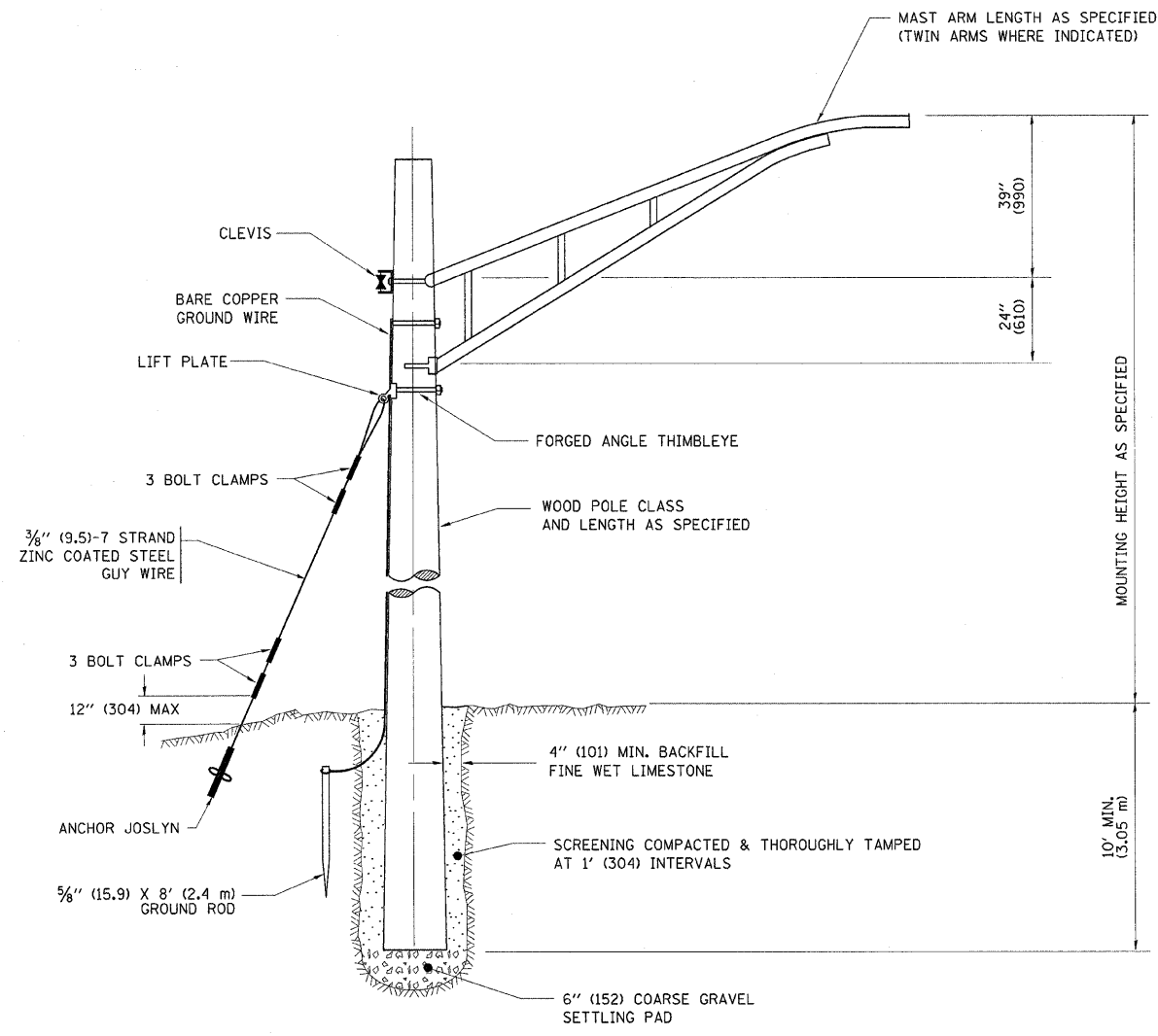
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 USER NAME = wlgreenop



REVISIONS	
NAME	DATE
R. TOMSONS	8-13-04

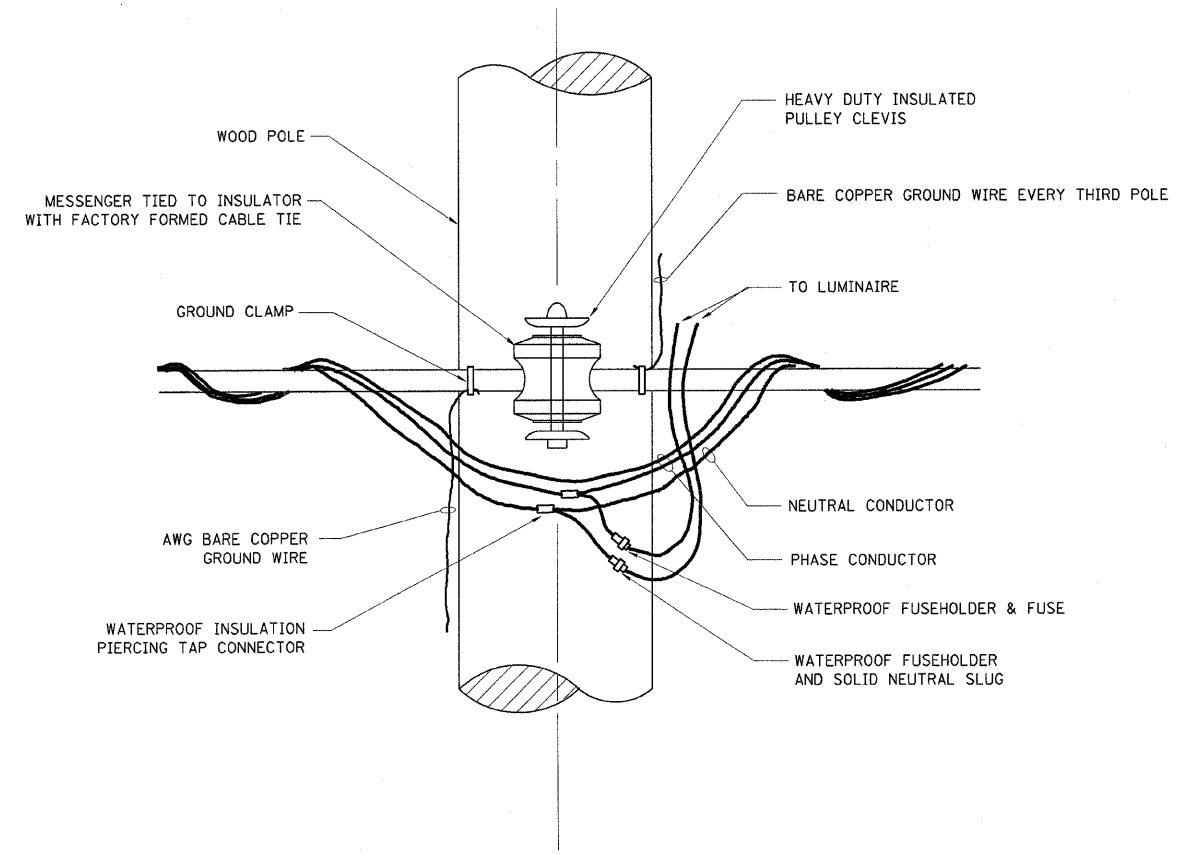
ILLINOIS DEPARTMENT OF TRANSPORTATION
COMBINATION LIGHTING & TRAFFIC POLE MOUNTED ELECTRIC SERVICE BOX DETAIL
 SCALE: NONE
 DRAWN BY
 CHECKED BY
 BE-230

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	104B-3-BR	WILL	42	39
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



TEMPORARY LIGHT POLE DETAIL

NOTES:
 1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED



TEMPORARY LIGHT POLE ATTACHMENT DETAIL

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REVISIONS	
NAME	DATE
	08/08/03

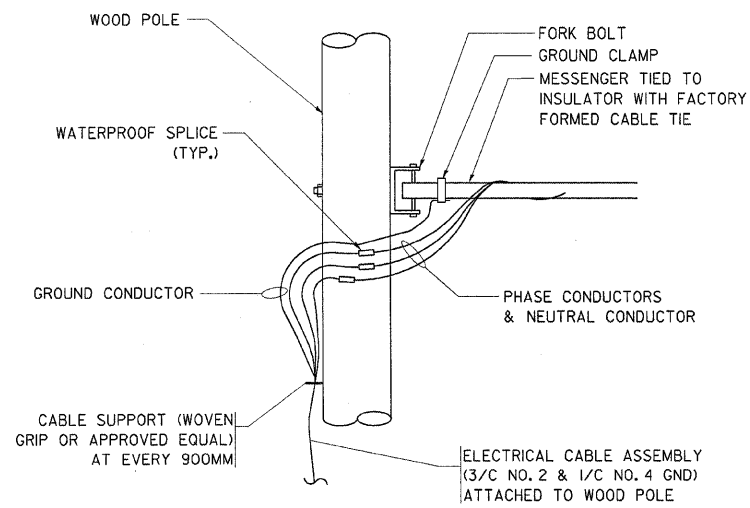
ILLINOIS DEPARTMENT OF TRANSPORTATION

TEMPORARY LIGHT POLE DETAILS

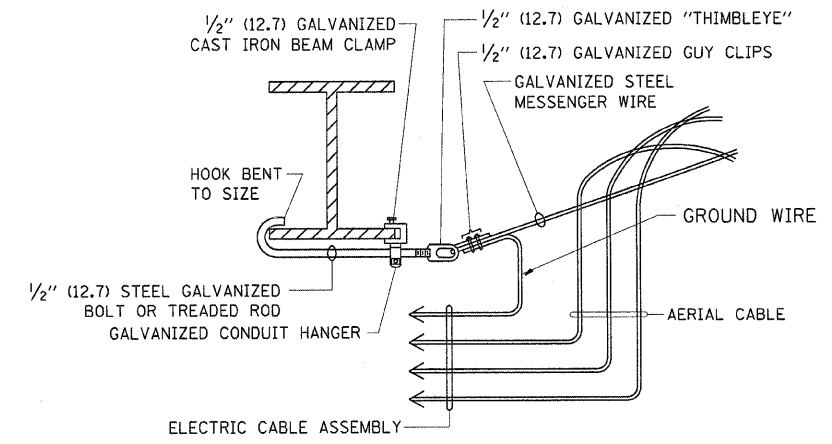
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 HORIZ.

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 CHECKED BY
 BE-800

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



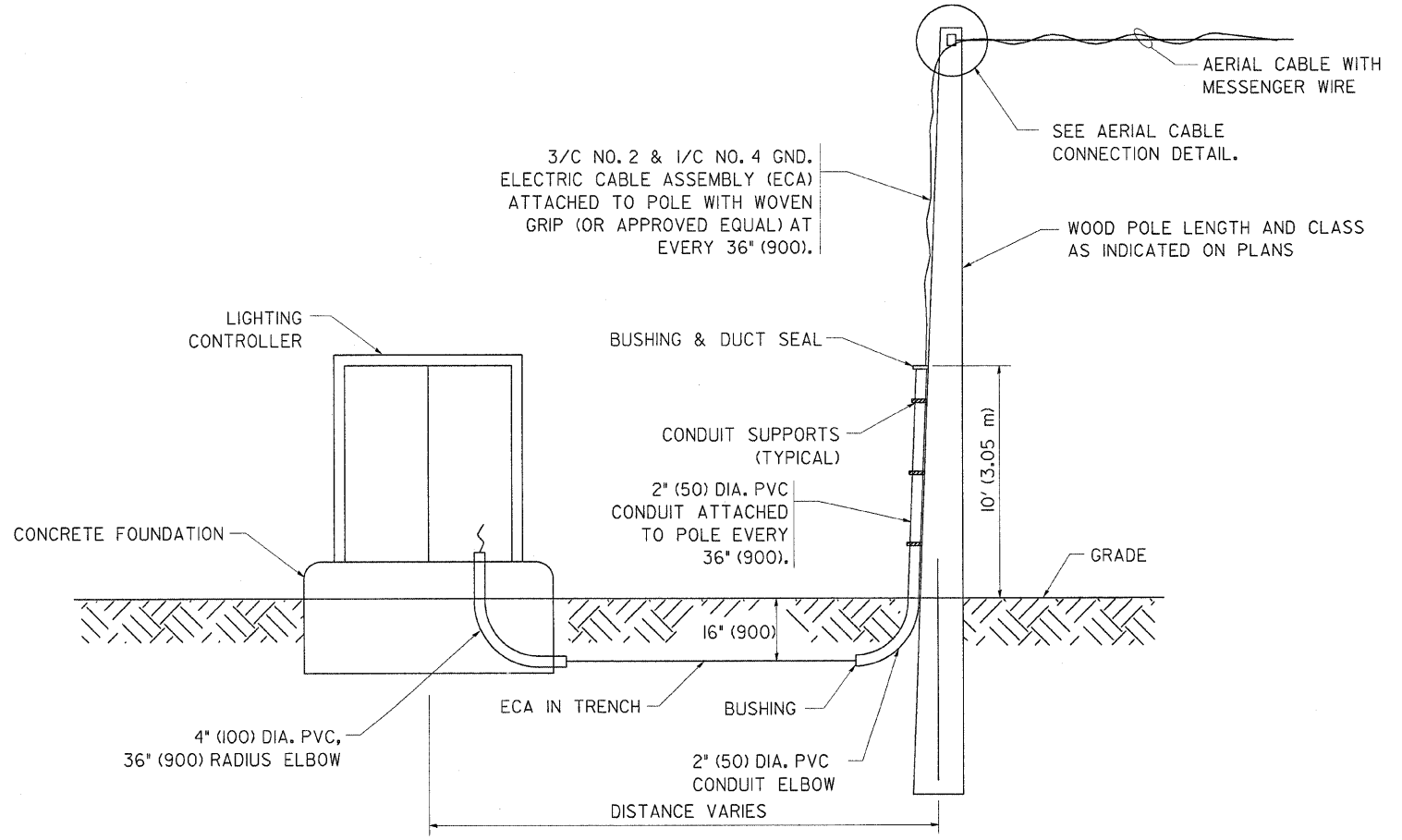
AERIAL CABLE CONNECTION DETAIL
N.T.S.



AERIAL CABLE ATTACHED TO STRUCTURE
NOT TO SCALE

NOTES:

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
2. SEE PROPOSED LIGHTING PLAN FOR CONDUIT, CABLE AND ROUTING.
3. THE CONTRACTOR SHALL PROVIDE INTERMEDIATE SUPPORTS TO MAINTAIN MINIMUM CLEARANCES. REFER TO AERIAL AERIAL CABLE ATTACHED TO STRUCTURE DETAIL.
4. COST OF SPLICES AND MOUNTING HARDWARE SHALL BE INCLUDED IN THE UNIT PRICE FOR AERIAL CABLE.



WOOD POLE TO LIGHTING CONTROLLER WIRING CONNECTION DETAIL
N.T.S.

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 USER NAME = vlgrandp

REVISIONS	
NAME	DATE
	08/08/03

ILLINOIS DEPARTMENT OF TRANSPORTATION

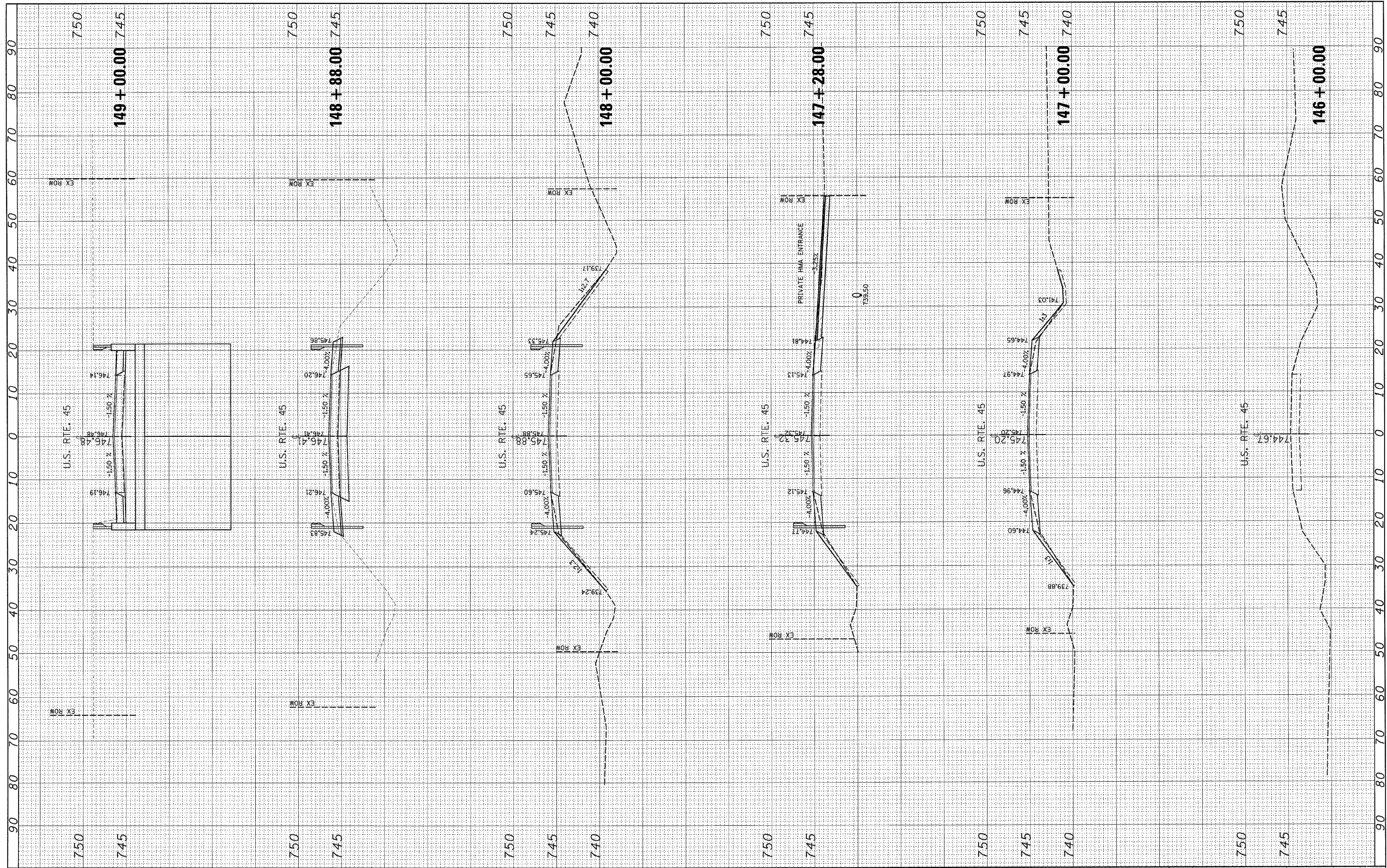
TEMPORARY AERIAL CABLE INSTALLATION

SCALE: VERT. NONE
HORIZ.

DRAWN BY
CHECKED BY
BE-801

FINAL SURVEY	DATE
REVISED	BY
NOTE BOOK	NO.
TEMPLATE	AREAS CHECKED
AREAS	AREAS CHECKED

ORIGINAL SURVEY	DATE
REVISED	BY
NOTE BOOK	NO.
TEMPLATE	AREAS CHECKED
AREAS	AREAS CHECKED



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DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

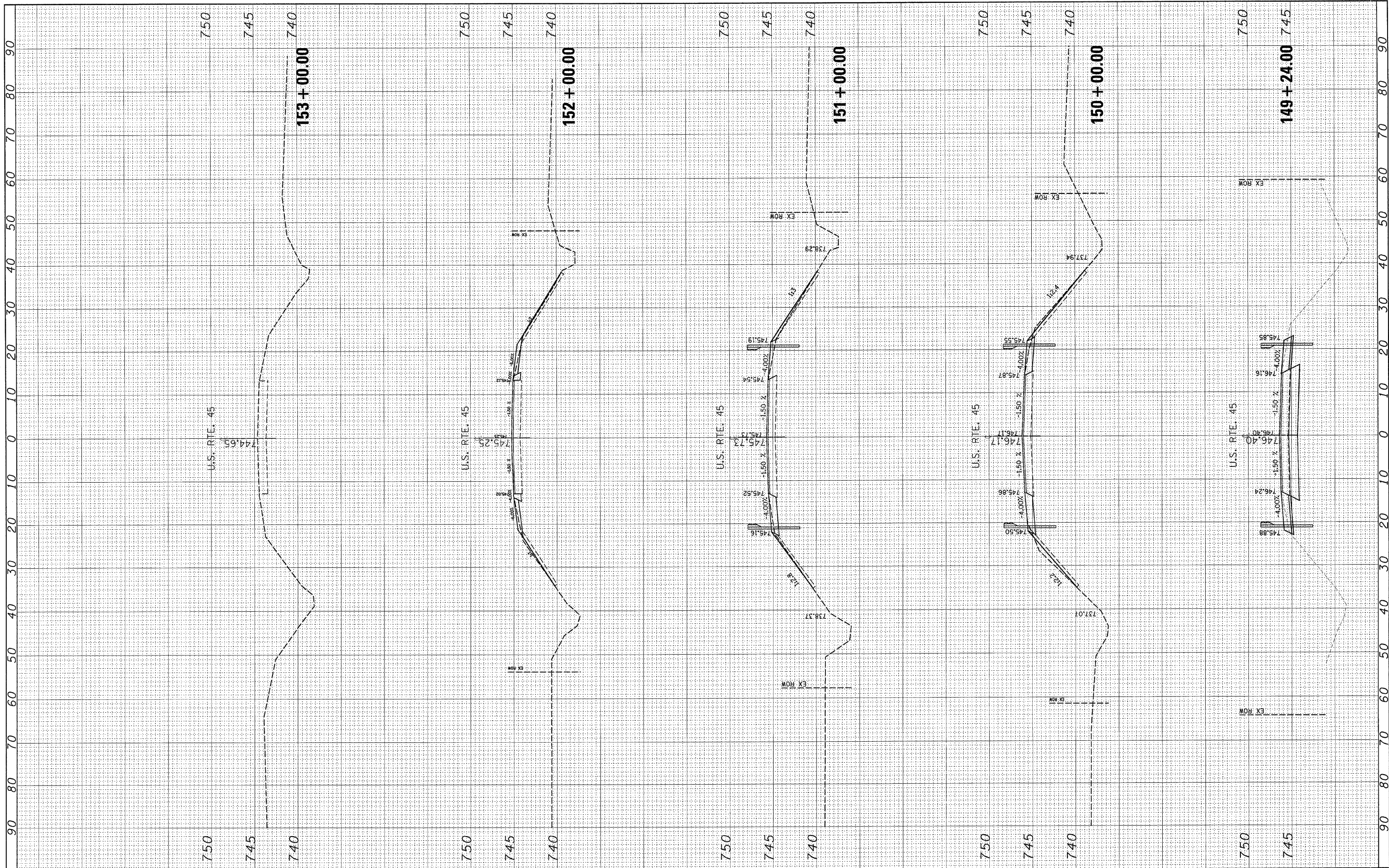
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SCALE:	SHEET NO.	OF	SHEETS	STA. 146+00.00	TO STA. 149+00.00
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	104B-3-BR	WILL	42	41
CONTRACT NO. 60B80				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				

FINAL SURVEY	BY	DATE
NOTE BOOK		
AREAS CHECKED		
NO.		

ORIGINAL SURVEY	BY	DATE
NOTE BOOK		
AREAS CHECKED		
NO.		



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 PLOT DATE = 10/31/2007

DESIGNED -
 DRAWN -
 CHECKED -
 DATE -

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SCALE: SHEET NO. OF SHEETS STA. 149+24.00 TO STA. 153+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	104B-3-BR	WILL	42	42
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60B80	