

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
852	18B	WILL	31	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 60D87		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FAP ROUTE 852/US ROUTE 52
OVER FORKED CREEK
SECTION 18B
BRIDGE BEAM REPLACEMENT, NEW DECK

WILL COUNTY
C-91-121-08

FOR INDEX OF SHEETS SEE SHEET NUMBER 2

THIS IMPROVEMENT IS LOCATED
IN WILTON TOWNSHIP WITHIN
UNINCORPORATED WILL COUNTY

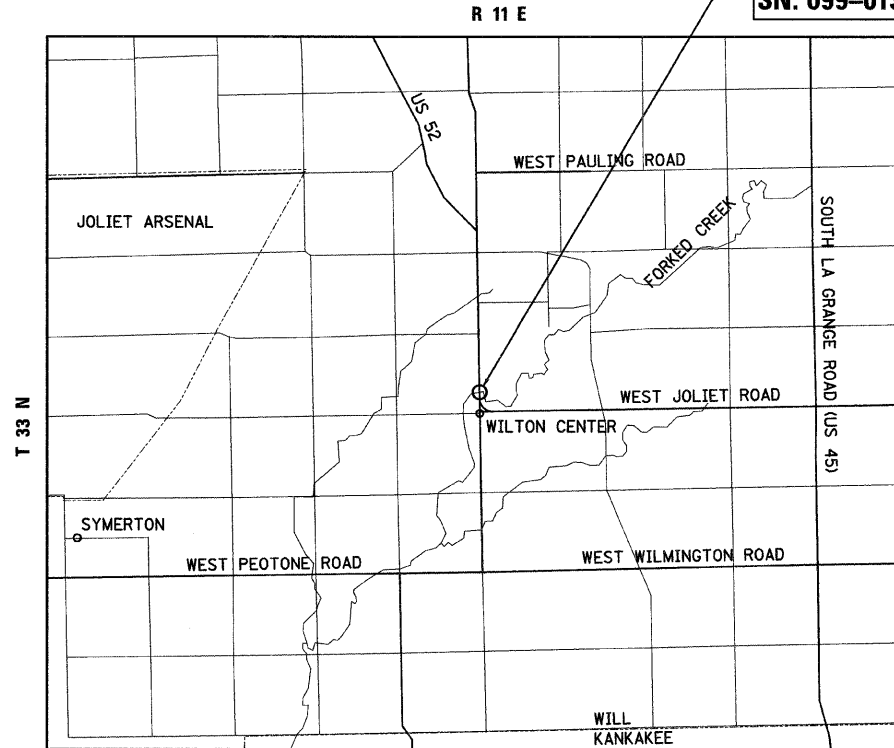
TRAFFIC DATA

2005 ADT - 4700
POSTED SPEED LIMIT - 45 MPH

US 52 OVER FORKED CREEK

SN: 099-0133 (STA. 65+70.00)
3-SPAN PPC DECK BEAM BRIDGE
ON PIERS AND CLOSED ABUTMENTS

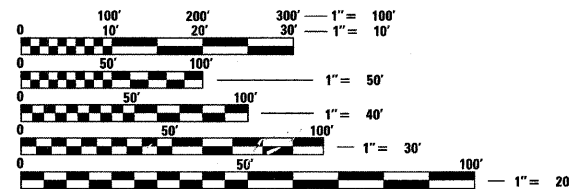
IMPROVEMENT LOCATION
SN: 099-0133



WILTON TOWNSHIP
LOCATION MAP

1" = 5000'

GROSS AND NET LENGTH OF PROJECT = 483 FT = 0.09 MI



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.

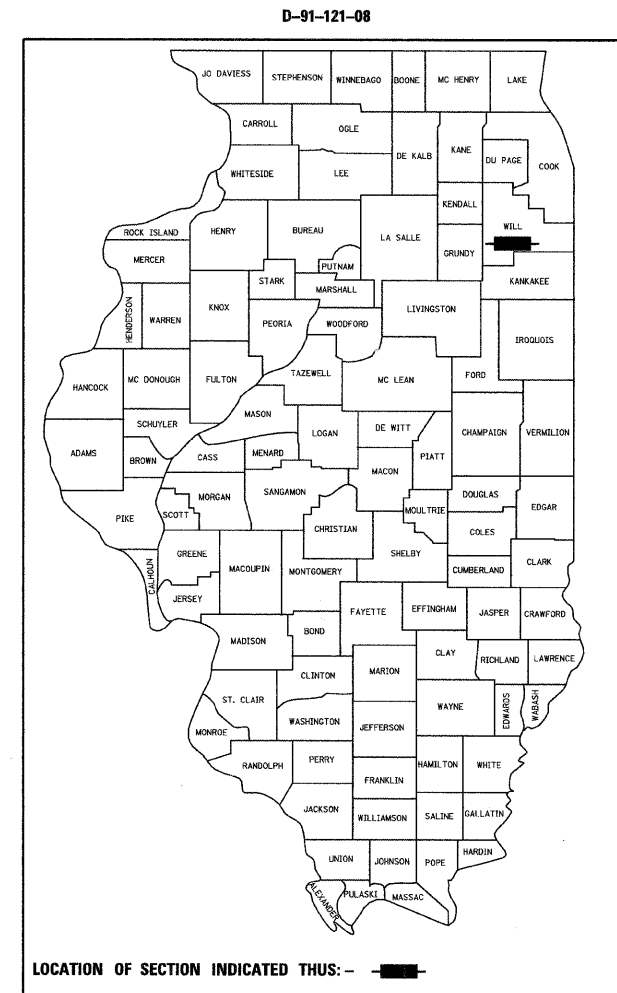
J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

Ciorba Group, Inc.

DESIGN FIRM
REGISTRATION NUMBER

184-001016

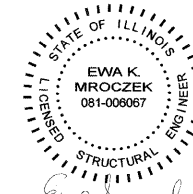
CONSULTING ENGINEERS
SUITE 402, 5507 NORTH CUMBERLAND AVE
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LOCATION OF SECTION INDICATED THUS: - [black rectangle] -



Matthew J. Lehan
DATE: 07/09/2008
SEAL EXPIRES: 11/30/2009



Ewa K. Mroczek
DATE: 07/09/2008
SEAL EXPIRES: 11/30/2009

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED JULY 7, 2008

Diana M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

August 15, 2008
Eric E. Harnett
ENGINEER OF DESIGN AND ENVIRONMENT

August 15, 2008
Christina M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS**

DISTRICT 1 DESIGN PLAN PREPARATION ENGINEER: K.ENG (847) 705-4247

CONTRACT NO. 60D87

INDEX OF SHEETS

SHEET NO	DESCRIPTION	STATE STANDARDS	GENERAL NOTES
1	TITLE	000001-05 STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS	1. 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 IS REQUIRED) 2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES. 3. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT. 4. ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OUTSIDE THE PAVEMENT MARKING LIMITS SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. 5. WHEN ARTIFICIAL LIGHTING IS USED IN NIGHT OPERATIONS THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS. 6. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TRAFFIC CONTROL DEVICES. 7. TWO WEEKS PRIOR TO PLACING PERMANENT PAVEMENT MARKINGS, CONTACT MS. CORA MATHIS, AREA TRAFFIC FIELD ENGINEER AT (815) 485-6475 8. CHANGEABLE MESSAGE SIGNS SHALL BE PLACED IN ADVANCE OF THE PROJECT LIMIT AT LEAST ONE WEEK PRIOR TO LANE CLOSURE AND TEMPORARY TRAFFIC SIGNAL OPERATIONS.
2	INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES	420401-06 BRIDGE APPROACH PAVEMENT	
3	SUMMARY OF QUANTITIES	515001-02 NAME PLATE FOR BRIDGES	
4	ALIGNMENT AND CONTROL POINTS	542301-01 PRECAST REINFORCED CONCRETE FLARED END SECTION	
5	EXISTING CONDITIONS AND REMOVAL PLAN	542311 GRATING FOR CONCRETE FLARED END SECTION	
6	PROPOSED ROADWAY PLAN	630001-07 STEEL PLATE BEAM GUARDRAIL	
7	TRAFFIC CONTROL AND PROTECTION - STAGE 1	630301-04 SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS	
8	TRAFFIC CONTROL AND PROTECTION - STAGE 2	631032-03 TRAFFIC BARRIER TERMINAL, TYPE 6A	
9	PAVEMENT MARKING PLAN	635006-02 REFLECTOR AND TERMINAL MARKER PLACEMENT	
10	TEMPORARY TRAFFIC SIGNAL PLAN	635011-01 REFLECTOR MARKER AND MOUNTING DETAILS	
11	TEMPORARY CABLE PLAN & TEMPORARY PHASE DESIGNATION DIAGRAM	701201-02 LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH	
12	TEMPORARY LIGHTING PLAN	701301-02 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS	
13-15	TEMPORARY LIGHTING DETAILS	701321-09 LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER	
16	GENERAL PLAN AND ELEVATION	701901 TRAFFIC CONTROL DEVICES	
17	STAGE CONSTRUCTION DETAILS	704001-04 TEMPORARY CONCRETE BARRIER	
18	TEMPORARY CONCRETE BARRIER	805001 ELECTRICAL SERVICE INSTALLATION DETAILS	
19	21"x36" PPC DECK BEAM	857001 STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES	
20	21"x36" PPC DECK BEAM DETAILS	880001 SPAN WIRE MOUNTED SIGNALS AND FLASHING LIGHT BEACON INSTALLATION	
21-22	SUPERSTRUCTURE DETAILS		
23	STEEL RAILING DETAILS		
24	NORTH & SOUTH ABUTMENTS REPAIRS		
25	NORTH AND SOUTH ABUTMENTS		
26	PIER 1		
27	PIER 2		
28	BAR SPLICER DETAILS		
29	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT) (TC-11)		
30	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)		
31	ARTERIAL ROAD INFORMATION SIGN (TC-22)		

COMMITMENTS

NONE

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

OPERATIONS	MIXTURE TYPE	AC TYPE	PERCENT AIR VOIDS
BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL-9.5 mm), 2"	PG 64-22	4% @ 70 GYR
	HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N70, 10" TO 13"	PG 64-22*	4% @ 70 GYR

THE UNIT WEIGHT USED TO CALCULATE ALL HMA 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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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

FAP 852 / US ROUTE 52
 OVER FORKED CREEK
 INDEX OF SHEETS, STATE STANDARDS & GENERAL NOTES

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
852	18B	WILL	31	2
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60D87	

SCALE: SHEET NO. OF SHEETS STA. TO STA.

SUMMARY OF QUANTITIES			URBAN TOTAL QUANTITY 100% STATE	CONSTRUCTION TYPE CODE	
CODE NO.	DESCRIPTION	UNIT		ROADWAY 1000	BRIDGE X081-2A
20200100	EARTH EXCAVATION	CU YD	108	108	
28100103	STONE RIPRAP, CLASS A2	SQ YD	21	21	
31100300	SUB-BASE GRANULAR MATERIAL, TYPE A 4"	SQ YD	245	245	
42001165	BRIDGE APPROACH PAVEMENT	SQ YD	220	220	
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	44	44	
44000100	PAVEMENT REMOVAL	SQ YD	105	105	
44000700	APPROACH SLAB REMOVAL	SQ YD	180		180
48101500	AGGREGATE SHOULDERS, TYPE B 6"	SQ YD	275	275	
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1		1
50102400	CONCRETE REMOVAL	CU YD	0.5		0.5
50104400	CONCRETE HEADWALL REMOVAL	EACH	1	1	
50300225	CONCRETE STRUCTURES	CU YD	6.8		6.8
50300255	CONCRETE SUPERSTRUCTURE	CU YD	3.1		3.1
50300260	BRIDGE DECK GROOVING	SQ YD	442		442
50300300	PROTECTIVE COAT	SQ YD	470		470
50301200	CONCRETE WEARING SURFACE	SQ YD	470		470
50400405	PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ FT	4,226		4,226
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	7,090		7,090
50800515	BAR SPLICERS	EACH	139		139
50901050	STEEL BRIDGE RAIL, TYPE SM	FOOT	265		265
51500100	NAME PLATES	EACH	1		1
52000110	PREFORMED JOINT STRIP SEAL	FOOT	66		66
54213681	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 36"	EACH	1	1	
54247170	GRATING FOR CONCRETE FLARED END SECTION 36"	EACH	1	1	
* 63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	100	100	
* 63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4	4	
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4	
63200310	GUARDRAIL REMOVAL	FOOT	504	504	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	2	4
67100100	MOBILIZATION	L SUM	1	0.2	0.8
70101800	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	0.2	0.8
70106700	TEMPORARY RUMBLE STRIP	EACH	6	6	

SUMMARY OF QUANTITIES			URBAN TOTAL QUANTITY 100% STATE	CONSTRUCTION TYPE CODE	
CODE NO.	DESCRIPTION	UNIT		ROADWAY 1000	BRIDGE X081-2A
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	12	12	
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	810	810	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	450	450	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	450	450	
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	1,650	1,650	
* 78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	650	650	
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	24	24	
* 78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	10	10	
* 78200450	MONODIRECTIONAL GUARD RAIL REFLECTORS	EACH	8	8	
* 78200530	BARRIER WALL MARKERS, TYPE C	EACH	44	44	
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4	
78300100	PAVEMENT MARKING REMOVAL	SQ FT	780	780	
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	20	20	
* 80400100	ELECTRIC SERVICE INSTALLATION	EACH	1	1	
* 80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1	1	
* 82103400	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 400 WATT	EACH	6	6	
* 83057355	LIGHT POLE, WOOD, 60 FOOT, CLASS 4, WITH 15FT MAST ARM	EACH	6	6	
* 84100110	REMOVAL OF TEMPORARY LIGHTING UNITS	EACH	6	6	
* 84500120	REMOVAL OF ELECTRIC SERVICE INSTALLATION	EACH	1	1	
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	52	52	
* X0323574	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	6	6	
X0325305	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	474		474
X0325775	WET REFLECTIVE TEMPORARY TAPE, TYPE III, 4 INCH	FOOT	2,150	2,150	
X0325841	WET REFLECTIVE TEMPORARY TAPE, TYPE III, 24 INCH	FOOT	48	48	
* X8900005	TEMPORARY BRIDGE TRAFFIC SIGNAL INSTALLATION	EACH	1	1	
* XX006937	GROUND ROD, 5/8" DIA. X 10 FT.	EACH	3	3	
Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	24		24
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	0.2	0.8
Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
Z0030350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
* X0326135	ELECTRIC SERVICE DISCONNECT, LIGHTING AND TRAFFIC SIGNAL	EACH	1	1	
* X0326170	AERIAL CABLE, 3-1/C NO. 4, ALUMINUM, WITH MESSENGER WIRE	FOOT	1,250	1,250	
* X0326133	TEMPORARY WOOD POLE, 45 FEET, CLASS 5	EACH	1	1	

* SPECIALTY ITEM

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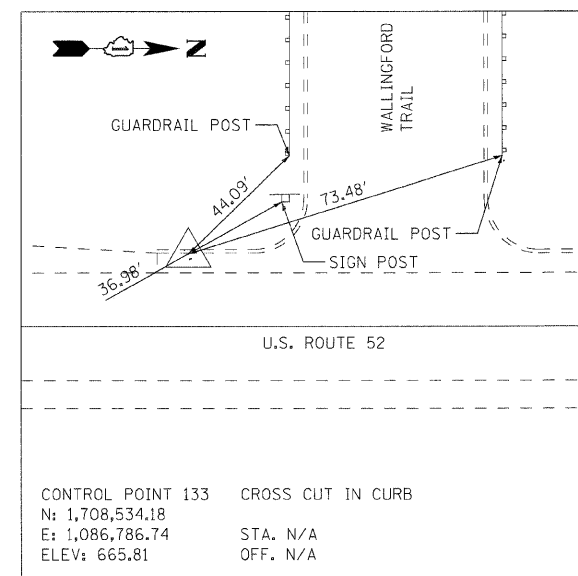
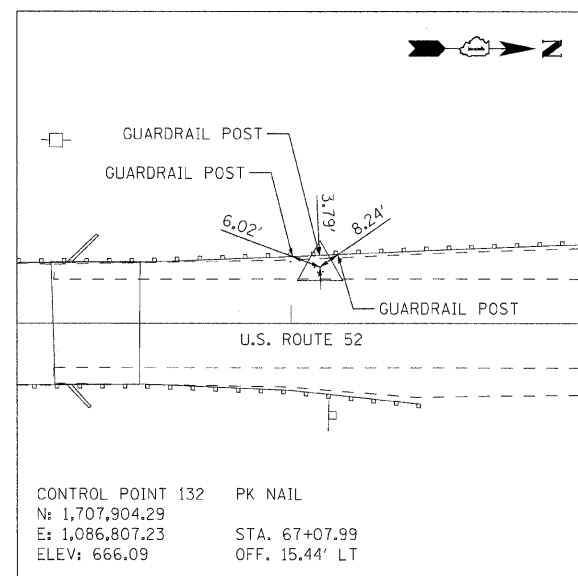
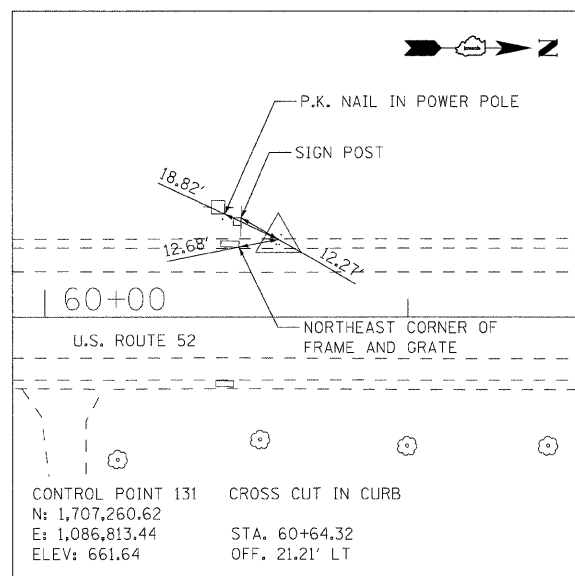
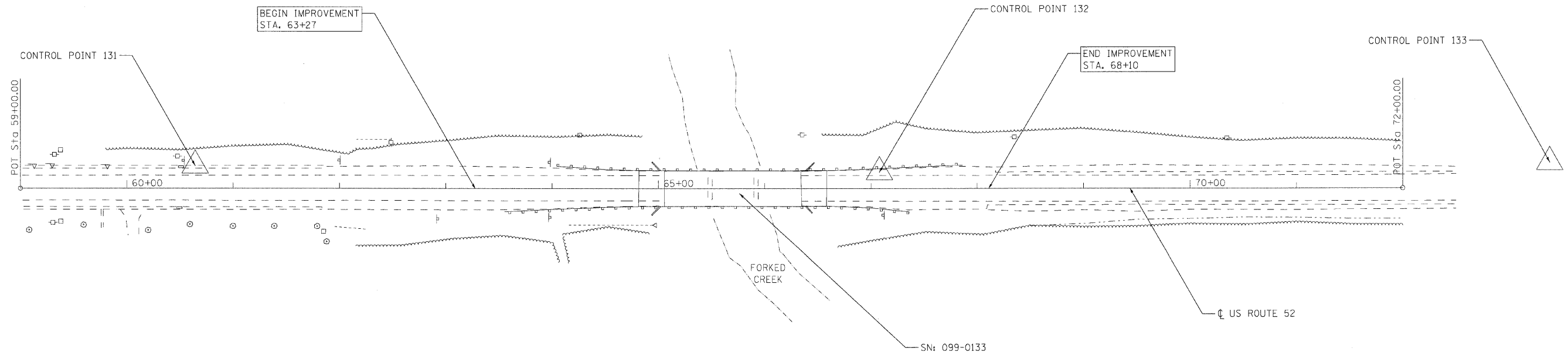
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**FAP 852 /US ROUTE 52
OVER FORKED CREEK
SUMMARY OF QUANTITIES**

SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.	F.A.P. RTE. 852	SECTION 18B	COUNTY WILL	TOTAL SHEETS 31	SHEET NO. 3	CONTRACT NO. 608B7
					FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT			



PROJECT COORDINATES

US ROUTE 52 CENTERLINE			
DESCRIPTION	NORTHING	EASTING	
P.O.T. 59+00.00	1,707,096.72	1,086,837.70	
P.O.T. 72+00.00	1,708,396.50	1,086,813.52	

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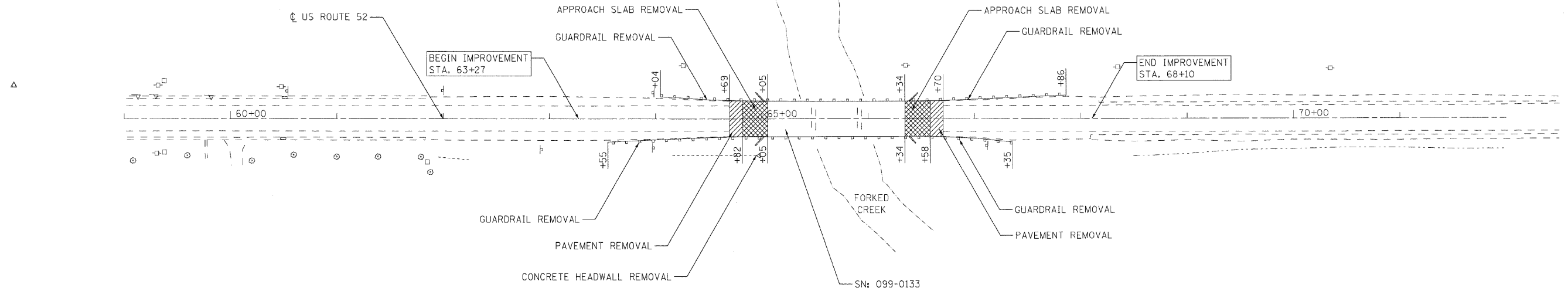
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

FAP 852/US ROUTE 52
 OVER FORKED CREEK
 ALIGNMENT AND CONTROL POINTS

SCALE: 1"=50'	SHEET NO.	OF SHEETS	STA.	TO STA.
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F.A.P. RTE. 852	SECTION 18B	COUNTY WILL	TOTAL SHEETS 31	SHEET NO. 4
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60D87				



NOTE: THE EXISTING PAVEMENT CONSISTS OF 8 INCHES OF HOT-MIX ASPHALT OVER 9 INCHES OF PCC BASE COURSE.

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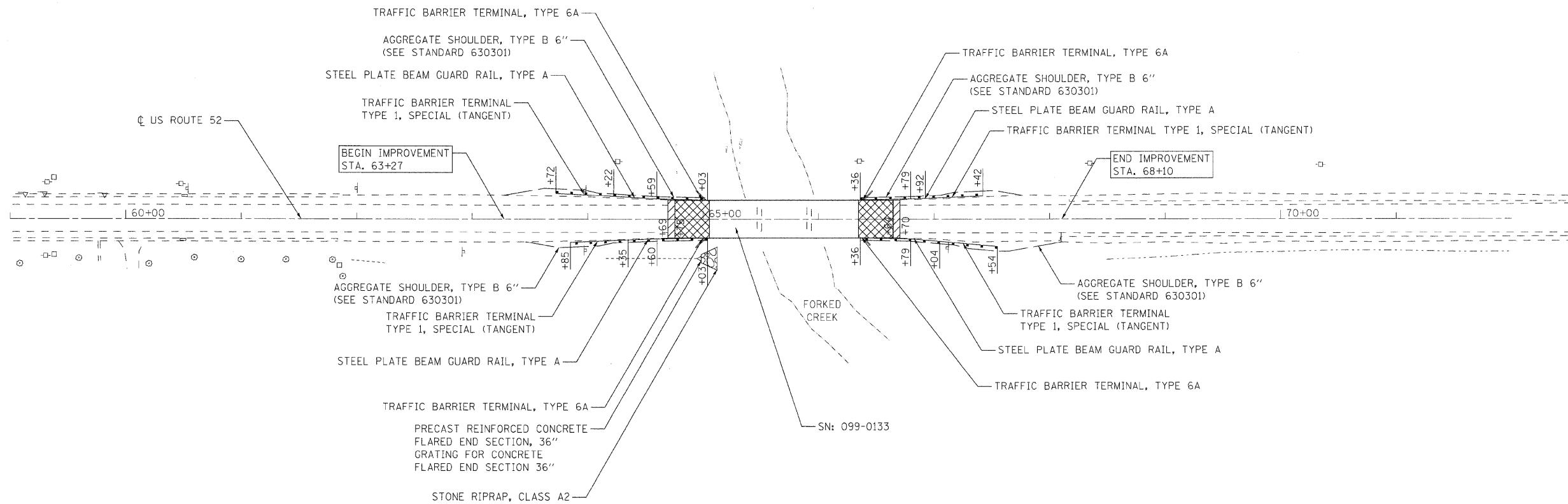
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**FAP 852 /US ROUTE 52
 OVER FORKED CREEK
 EXISTING CONDITIONS AND REMOVAL PLAN**

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

F.A.P. RTE. 852	SECTION 18B	COUNTY WILL	TOTAL SHEETS 31	SHEET NO. 5
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 60D87	



NOTES:

- EARTH EXCAVATION QUANTITIES HAVE BEEN INCLUDED FOR THE FOLLOWING LOCATIONS:
 FOR BRIDGE APPROACH PAVEMENT AND BRIDGE APPROACH CONNECTOR (FLEXIBLE) 70 CU YD
 FOR AGGREGATE SHOULDERS, TYPE B 38 CU YD
- SEE SHEET NO. 16 FOR PROFILE GRADE.

LEGEND

- SUB-BASE GRANULAR MATERIAL, TYPE A 4"
- BRIDGE APPROACH PAVEMENT (SEE STANDARD 42040)
- BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)
- HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL-9.5), 2"
- HOT-MIX ASPHALT BINDER COURSE, IL 19.0 mm, N70, 10" TO 13" (IN 4 LIFTS)

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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**FAP 852 /US ROUTE 52
 OVER FORKED CREEK
 PROPOSED ROADWAY PLAN**

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

F.A.P. RTE. 852	SECTION 18B	COUNTY WILL	TOTAL SHEETS 31	SHEET NO. 6
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 60D87	

CONSTRUCTION SEQUENCE

CONSTRUCTION

TRAFFIC CONTROL

STAGE 1

NORTHBOUND DECK BEAM REPLACEMENT, BRIDGE APPROACH AND GUARDRAIL

ONE-WAY TRAFFIC ON SOUTHBOUND LANE FROM STA. 62+14 TO STA. 68+92 UTILIZE STANDARD 701321

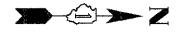
STAGE 2

SOUTHBOUND DECK BEAM REPLACEMENT, BRIDGE APPROACH AND GUARDRAIL

ONE-WAY TRAFFIC ON NORTHBOUND LANE FROM STA. 62+64 TO STA. 69+25 UTILIZE STANDARD 701321

- Work area
- Sign
- Type III barricade
- Traffic signal
- Detector loops
- Impact attenuator
- Stop Bar 24-inch
- Drum with steady burning light (25' cts.)
- Temporary concrete barrier
- Temporary rumble strip (when specified)
- Double vertical panel (see detail)
- Crystal, bidirectional
- barrier wall/guardrail marker (25' cts.)
- Non-directional flashing beacon

- ① Type III barricade to be placed when no work is being performed.
- ② Barrier wall/guardrail markers at 25' cts. See Standards 704001 & 635011.

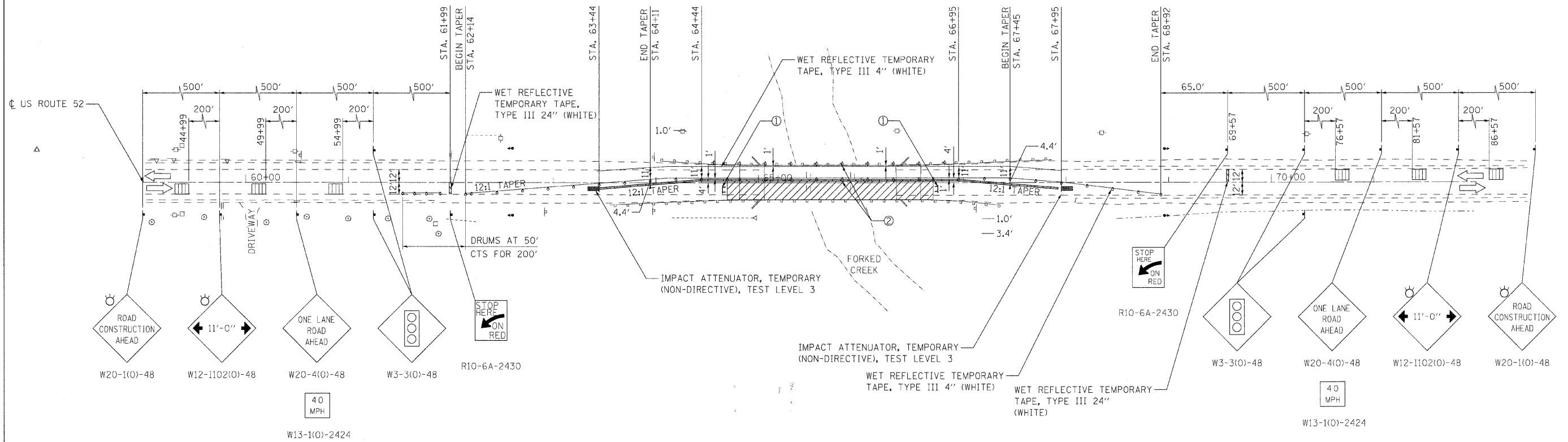


GENERAL NOTES

Traffic signals shall be operational only when all traffic controls are in place. When traffic signals are not in operation, flaggers shall be used and traffic control shall conform to Standard 701201.

Temporary concrete barrier shall be according to Standard 704001.

When existing pavement markings and raised pavement markers are in conflict with the traffic control and protection plan, existing pavement marking and raised pavement markers shall be removed and paid for as pavement marking removal or as raised reflective pavement marking removal.



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP 852 /US ROUTE 52
OVER FORKED CREEK
TRAFFIC CONTROL AND PROTECTION - STAGE 1

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

F.A.P. RTE. 852	SECTION 18B	COUNTY WILL	TOTAL SHEETS 31	SHEET NO. 7
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 60D87

CONSTRUCTION SEQUENCE

CONSTRUCTION

TRAFFIC CONTROL

STAGE 1
NORTHBOUND DECK BEAM
REPLACEMENT, BRIDGE
APPROACH AND GUARDRAIL

ONE-WAY TRAFFIC ON SOUTHBOUND LANE
FROM STA. 62+14 TO STA. 68+92
UTILIZE STANDARD 701321

STAGE 2
SOUTHBOUND DECK BEAM
REPLACEMENT, BRIDGE
APPROACH AND GUARDRAIL

ONE-WAY TRAFFIC ON NORTHBOUND LANE
FROM STA. 62+64 TO STA. 69+25
UTILIZE STANDARD 701321

- Work area
- Sign
- Type III barricade
- Traffic signal
- Detector loops
- Impact attenuator
- Stop Bar 24-inch
- Drum with steady burning light (25' cts.)
- Temporary concrete barrier
- Temporary rumble strip (when specified)
- Double vertical panel (see detail)
- Crystal, bidirectional barrier wall/guardrail marker (25' cts.)
- Non-directional flashing beacon

- ① Type III barricade to be placed when no work is being performed.
- ② Barrier wall/guardrail markers at 25' cts. See Standards 704001 & 635011.

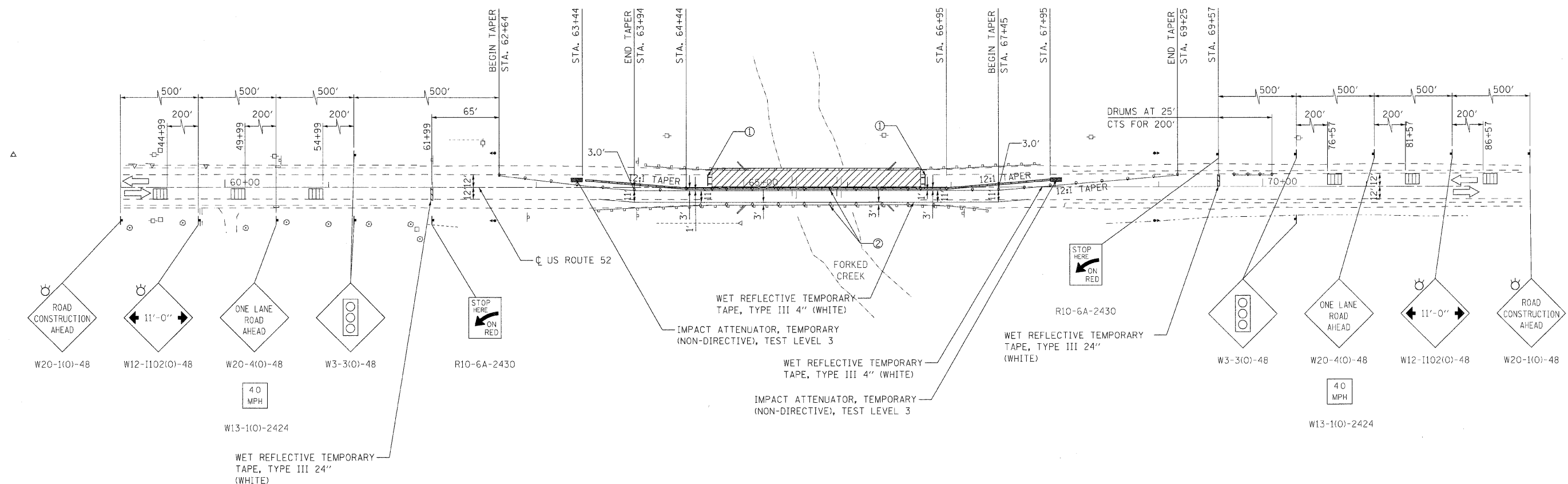


GENERAL NOTES

Traffic signals shall be operational only when all traffic controls are in place. When traffic signals are not in operation, flaggers shall be used and traffic control shall conform to Standard 701201.

Temporary concrete barrier shall be according to Standard 704001.

When existing pavement markings and raised pavement markers are in conflict with the traffic control and protection plan, existing pavement marking and raised pavement markers shall be removed and paid for as pavement marking removal or as raised reflective pavement marking removal.



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Ciorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402
Chicago, Illinois 60655
Tel. 773.775.4009 Fax 773.775.4014

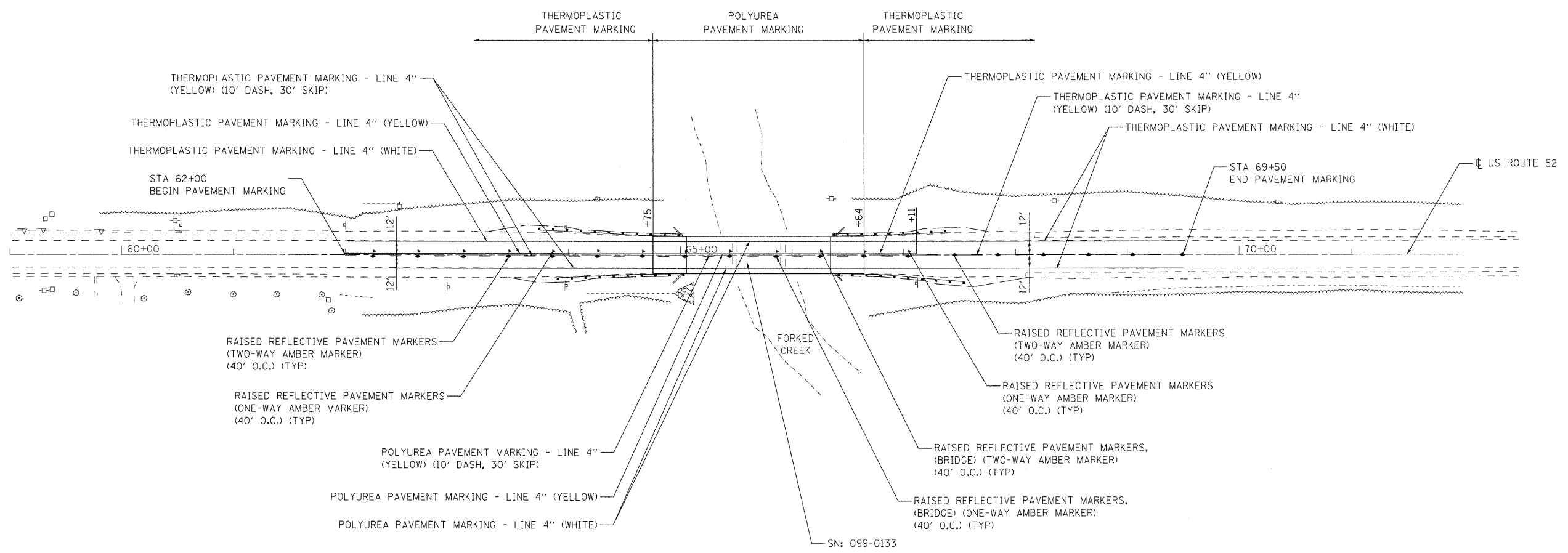
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	DATE - 07/09/2008	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**FAP 852 /US ROUTE 52
OVER FORKED CREEK
TRAFFIC CONTROL AND PROTECTION - STAGE 2**

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

F.A.P. RTE. 852	SECTION 18B	COUNTY WILL	TOTAL SHEETS 31	SHEET NO. 8
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT	CONTRACT NO. 60D87	



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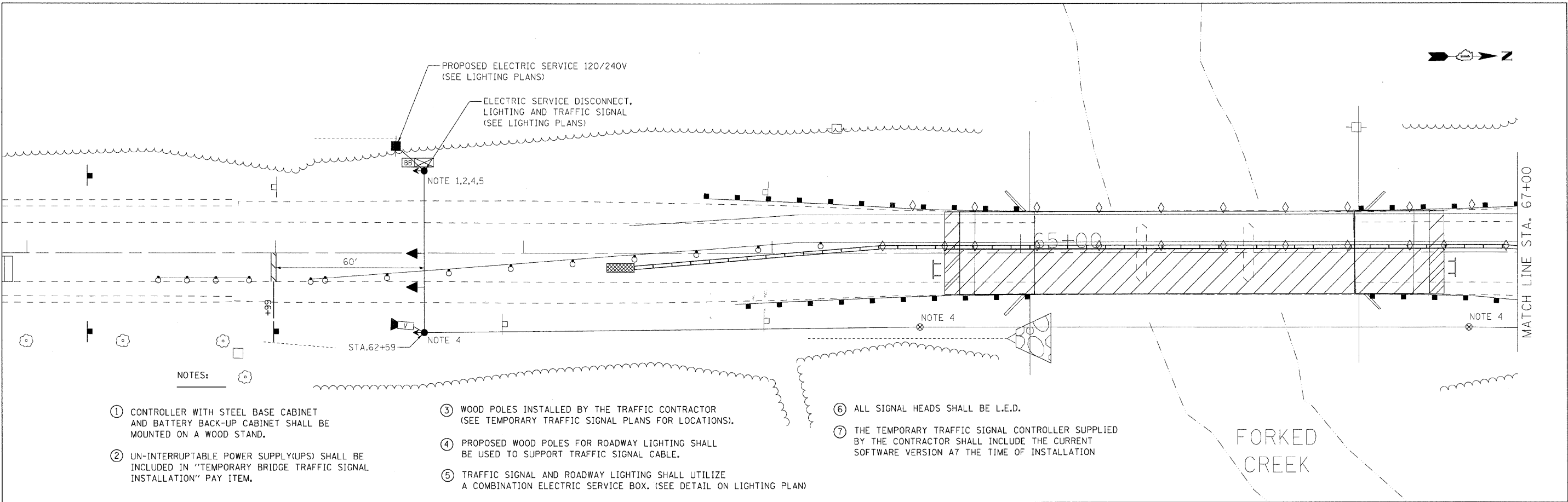
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

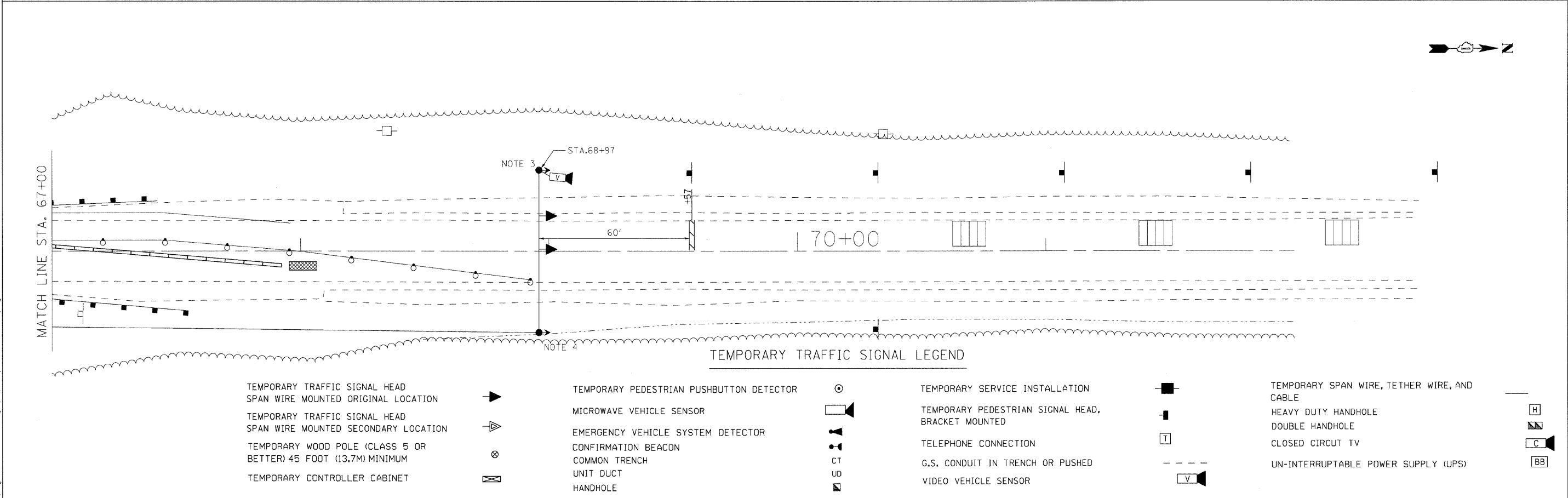
**FAP 852 /US ROUTE 52
 OVER FORKED CREEK
 PAVEMENT MARKING PLAN**

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

F.A.P. RTE. 852	SECTION 18B	COUNTY WILL	TOTAL SHEETS 31	SHEET NO. 9
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60D87				



- 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



TEMPORARY TRAFFIC SIGNAL LEGEND

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

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5507 North Cumberland Avenue, Suite 402
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Tel. 773.775.4009 Fax 773.775.4014

USER NAME = wlcroster	DESIGNED -	REVISED -
PLOT SCALE = 20.0000 ' / IN.	DRAWN -	REVISED -
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	DATE - 07/09/2008	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

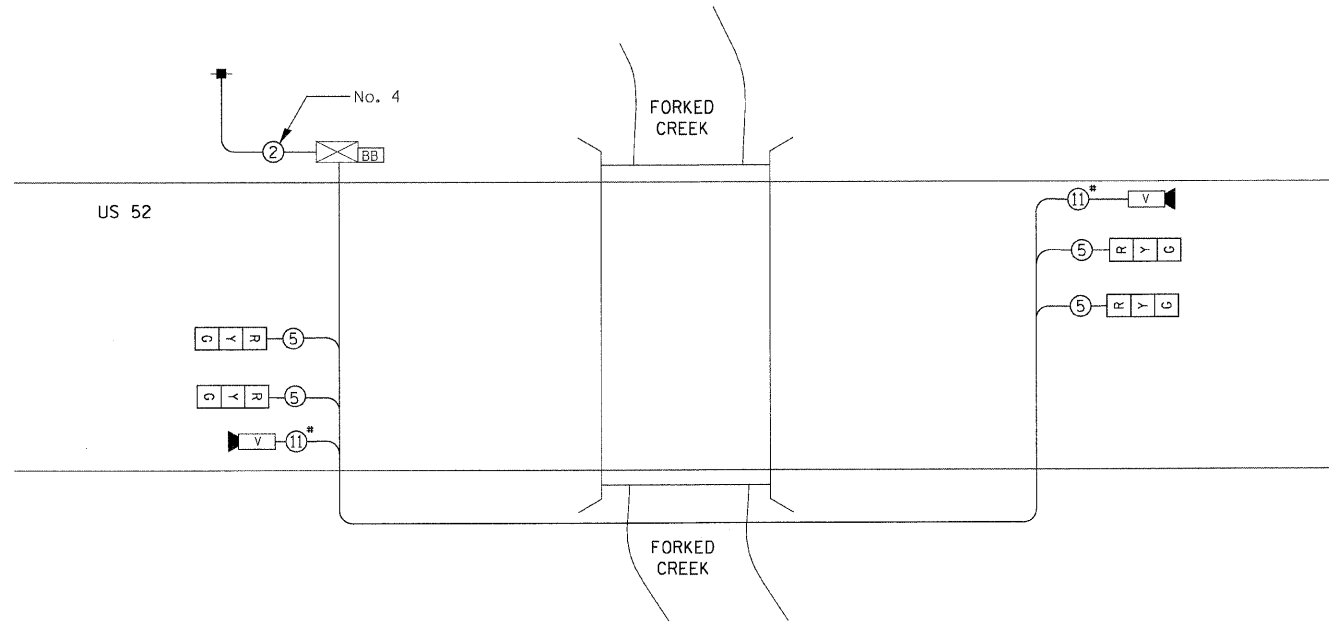
FAP 852 /US ROUTE 52
OVER FORKED CREEK
TEMPORARY TRAFFIC SIGNALS

SCALE: 1"=20' SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
852	18B	WILL	31	10
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60D87	

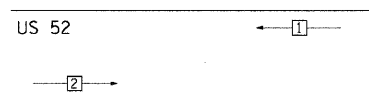
NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR, EVP WILL BE PAID FOR SEPARATELY.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET, ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT. A REPRESENTATIVE OF THE TRAFFIC SIGNAL CONTROLLER/CABINET VENDOR/SUPPLIER MUST BE PRESENT AT THE TRAFFIC SIGNAL TURN ON.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12" (300mm), HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATED HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS, EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
7. 24" WHITE STOP BAR TO BE INSTALLED AFTER THE INSTALLATION AND IMPLEMENTATION OF THE TEMPORARY TRAFFIC SIGNALS.
8. THE VIDEO CAMERA VENDOR/SUPPLIER REPRESENTATIVE WILL ASSIST THE CONTRACTOR IN THE EQUIPMENT SETUP/PLACEMENT OF CAMERAS AND WILL BE PRESENT AT THE TRAFFIC SIGNAL TURN ON.



NOTE: OR AS SPECIFIED BY CAMERA VENDOR

CONTROLLER SEQUENCE



PHASE DESIGNATION

- LEGEND
- Single entry phase symbol
 - Overlap symbol
 - Pedestrian phase symbol
 - Number refers to associated phase

SUMMARY OF QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
X8900005	TEMPORARY BRIDGE TRAFFIC SIGNAL INSTALLATION	EACH	1

TEMPORARY CABLE DIAGRAM LEGEND

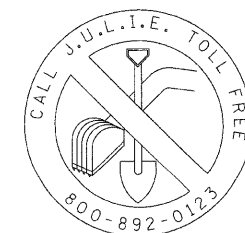
- Temporary traffic signal section or pedestrian signal section 12" (300mm)
- Temporary controller cabinet
- Temporary service installation
- Indicates number of conductors in cable, all conductors to be number 14 AWG wire unless otherwise noted.
- Emergency vehicle light detector
- Confirmation beacon
- Pedestrian pushbutton detector
- Vehicle detector, induction loop
- 12" (300mm) pedestrian signal section
- Microwave vehicle sensor
- Video detector sensor
- Closed circuit TV
- Battery - back up
- Telephone connection

NOTE:
EQUIPMENT GROUND CONDUCTOR (GREEN COLOR CODED) SPLICE TO FRAME AND COVER IS REQUIRED FOR ALL HANDHOLES OR DOUBLE HANDHOLES THAT CARRY SIGNAL CABLES AND SERVICE CABLES.

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCANDESCENT	WATTAGE LED	% OPERATION	
SIGNAL (RED)	4	135	17	0.50	34
(YELLOW)	4	135	25	0.25	25
(GREEN)	4	135	15	0.25	15
ARROW		135	12	0.10	
PED. SIGNAL		90	25	1.00	
CONTROLLER	1	100	100	1.00	100
ILLUM. SIGN		84		0.05	
VIDEO CAMERA	2		45	1.0	90
TOTAL =					264

ENERGY COSTS TO:
ILLINOIS DEPARTMENT OF TRANSPORTATION
201 WEST CENTER COURT
SCHAMBURG, ILLINOIS 60196-1096
CONTACT: KATHY NYSTROM
PHONE: (847) 816-5489
COMPANY: COM. ED.

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)		FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2'
E - M. ARM POLE		SIGNAL POST	2 (1.0)		(6m+L-0.6m)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
		ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)



48 - HOURS BEFORE DIGGING

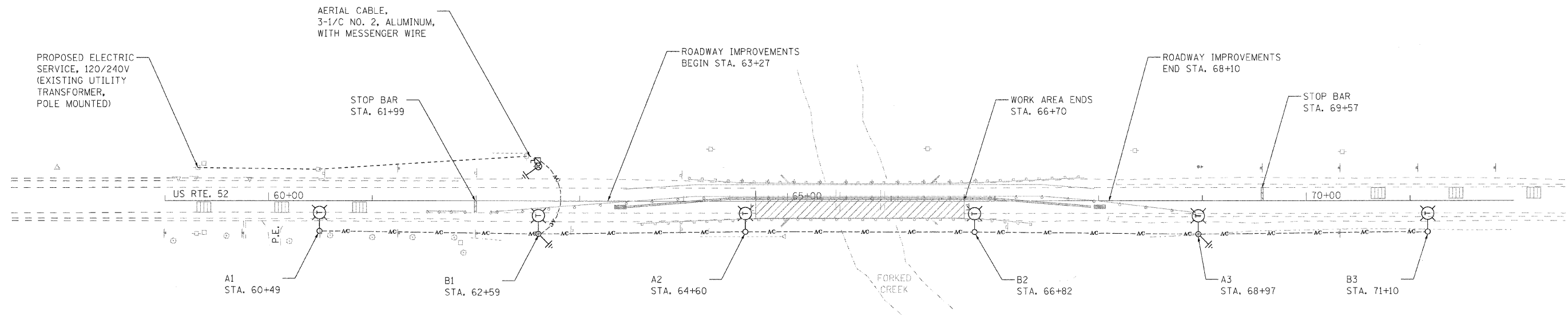
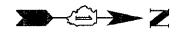
Ciorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402
Chicago, Illinois 60656
Tel. 773.775.4029 Fax 773.775.4014

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PLOT SCALE = 50:2000 ' / IN.	CHECKED - MJL	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

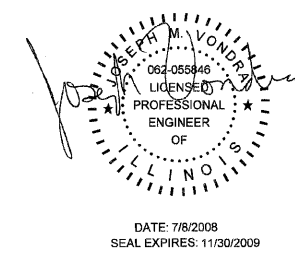
FAP 852 /US ROUTE 52
OVER FORKED CREEK
TEMPORARY CABLE PLAN & TEMPORARY PHASE DESIGNATION DIAGRAM

F.A.P. RTE. 852	SECTION 18B	COUNTY WILL	TOTAL SHEETS 31	SHEET NO. 11
CONTRACT NO. 60D87			ILLINOIS FED. AID PROJECT	



LEGEND:

- TEMPORARY LIGHTING UNIT
50 FT. MOUNTING HEIGHT, 15 FT. MAST ARM
400 WATT, 120 VOLT LUMINAIRE WITH PHOTOCELL
ON EACH LUMINAIRE
- AERIAL CABLE, 3-1/4 NO. 4, ALUMINUM, WITH MESSENGER WIRE
- GROUND ROD, 5/8" DIAMETER X 10 FT.
- ELECTRIC SERVICE DISCONNECT, LIGHTING
AND TRAFFIC SIGNAL
- EXISTING UTILITY POLE
- TEMPORARY WOOD POLE, 45 FT, CLASS 5



DATE: 7/8/2008
SEAL EXPIRES: 11/30/2009

NOTES

1. TEMPORARY LIGHTING SHALL BE INSTALLED AND OPERATIONAL BEFORE THE START OF CONSTRUCTION.
2. POLE SHALL BE SET BACK 18 FT. FROM THE EDGE OF THE TRAVELLED PAVEMENT, UNLESS OTHERWISE REQUIRED BY THE FIELD CONDITIONS.
3. TEMPORARY LIGHTING SHALL REMAIN OPERATIONAL FOR BOTH STAGE I AND STAGE II. STAGE I SHOWN.
4. ALL POLES SHOWN ON THIS PLAN SHALL BE INSTALLED BY THE LIGHTING CONTRACTOR.

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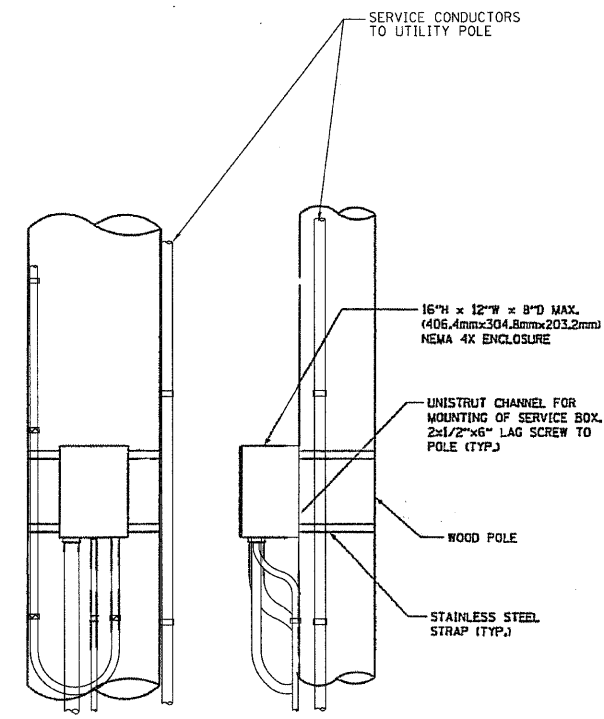
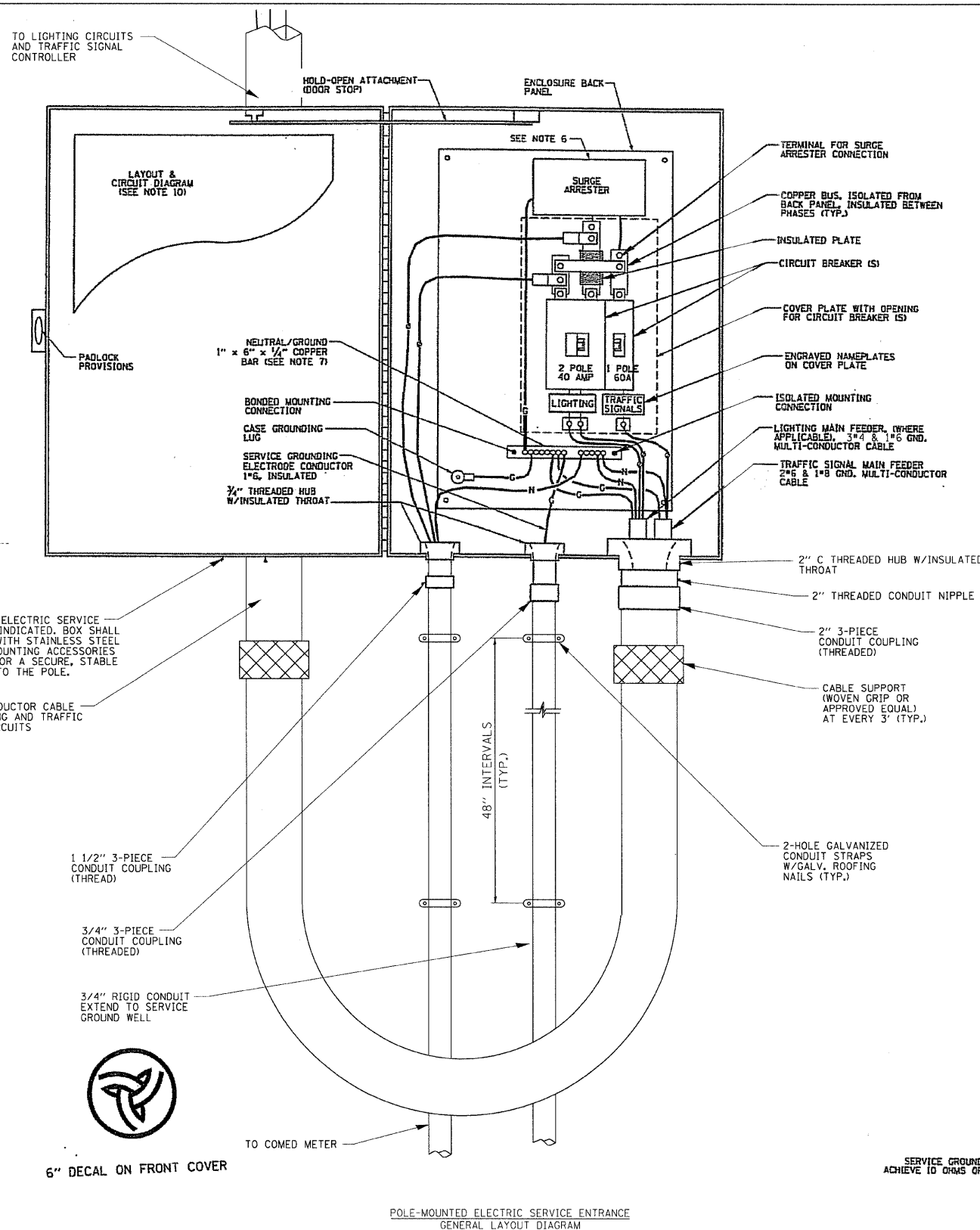
Ciorba Group, Inc.
CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402
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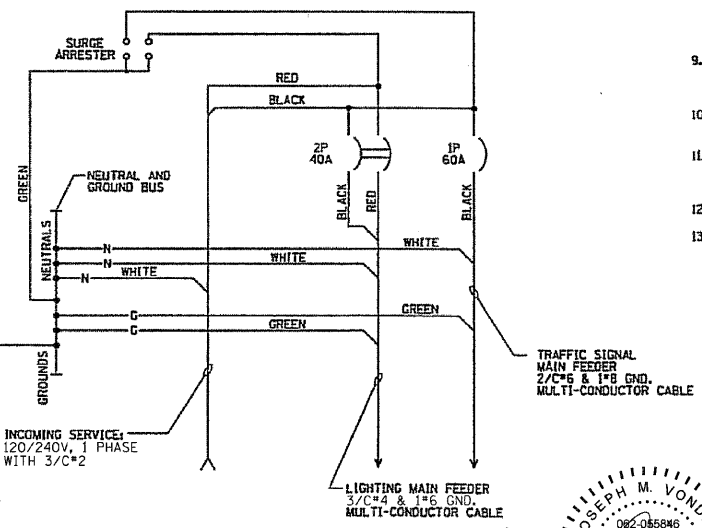
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

FAP 852 /US ROUTE 52 OVER FORKED CREEK TEMPORARY LIGHTING PLAN			
SCALE: 1"=50'	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.P. RTE. 852	SECTION 18B	COUNTY WILL	TOTAL SHEETS 31	SHEET NO. 12
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT CONTRACT NO. 60DB7		



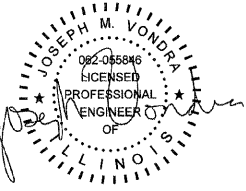
DISCONNECT MOUNTING DETAIL
N.T.S.



SCHEMATIC DIAGRAM

- 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 WIRED 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, 3Ø SERVICE, COMPLETE WITH LIGHTING MAIN BREAKER
 - TYPE A1 FULLY EQUIPPED FOR 240/120V, 3Ø SERVICE, BLANK COVER IN LIEU OF LIGHTING MAIN BREAKER
 - TYPE B EQUIPPED FOR 120V, SERVICE, COMPLETE WITH 1Ø, 60A, TRAFFIC SIGNALS MAIN BREAKER
 - TYPE B1 EQUIPPED FOR 120V, SERVICE, COMPLETE WITH 1Ø, 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\"/>

DATE: 7/8/2008
SEAL EXPIRES: 11/30/2009



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Tel. 773.775.4009 Fax 773.775.4014

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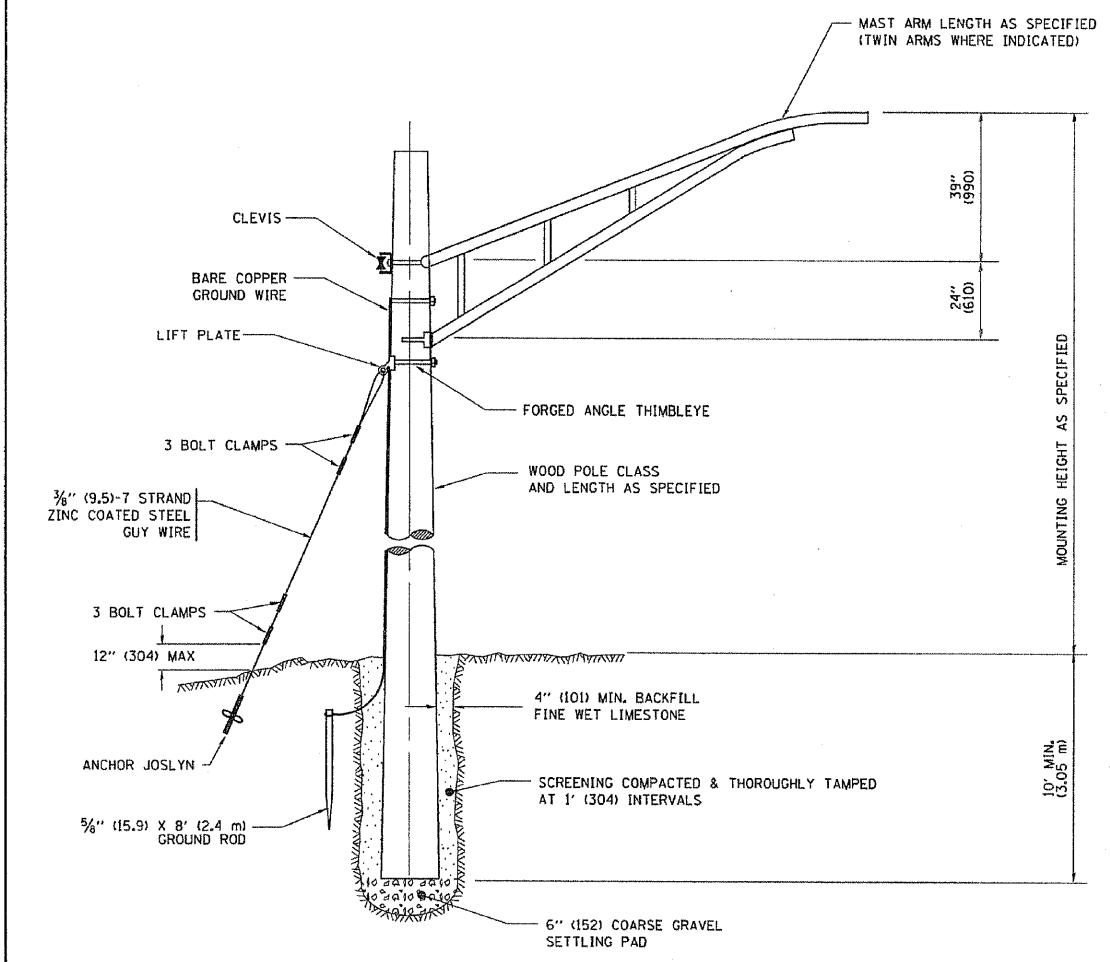
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP 852 /US ROUTE 52 OVER FORKED CREEK
ELECTRIC SERVICE DISCONNECT,
LIGHTING AND TRAFFIC SIGNAL

SCALE: NONE SHEET NO. 2 OF 4 SHEETS STA. TO STA.

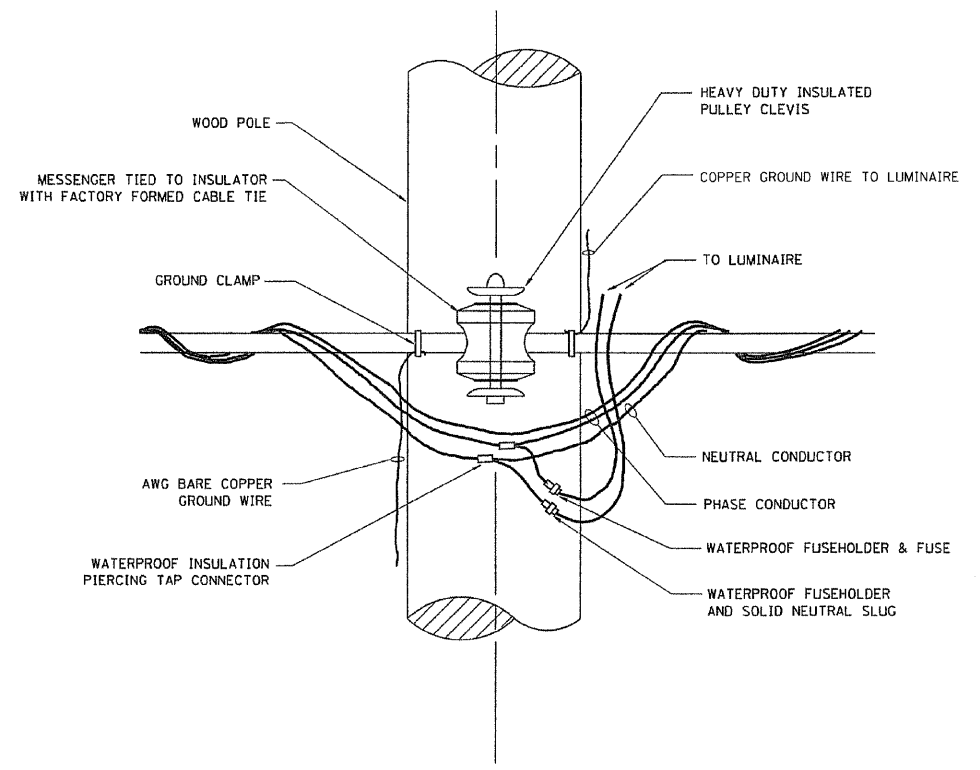
F.A.P. RTE. 852	SECTION 18B	COUNTY WILL	TOTAL SHEETS 31	SHEET NO. 13
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 60D87	

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

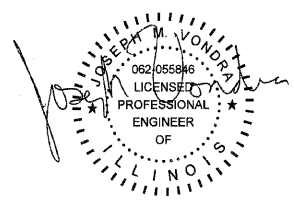


TEMPORARY LIGHT POLE DETAIL

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



TEMPORARY LIGHT POLE ATTACHMENT DETAIL



DATE: 7/8/2008
 SEAL EXPIRES: 11/30/2009

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
	08/08/03	TEMPORARY LIGHT POLE DETAILS SCALE: VERT. NONE HORIZ. DRAWN BY CHECKED BY BE-800

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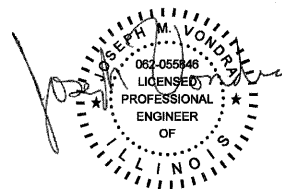
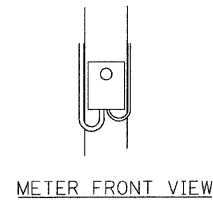
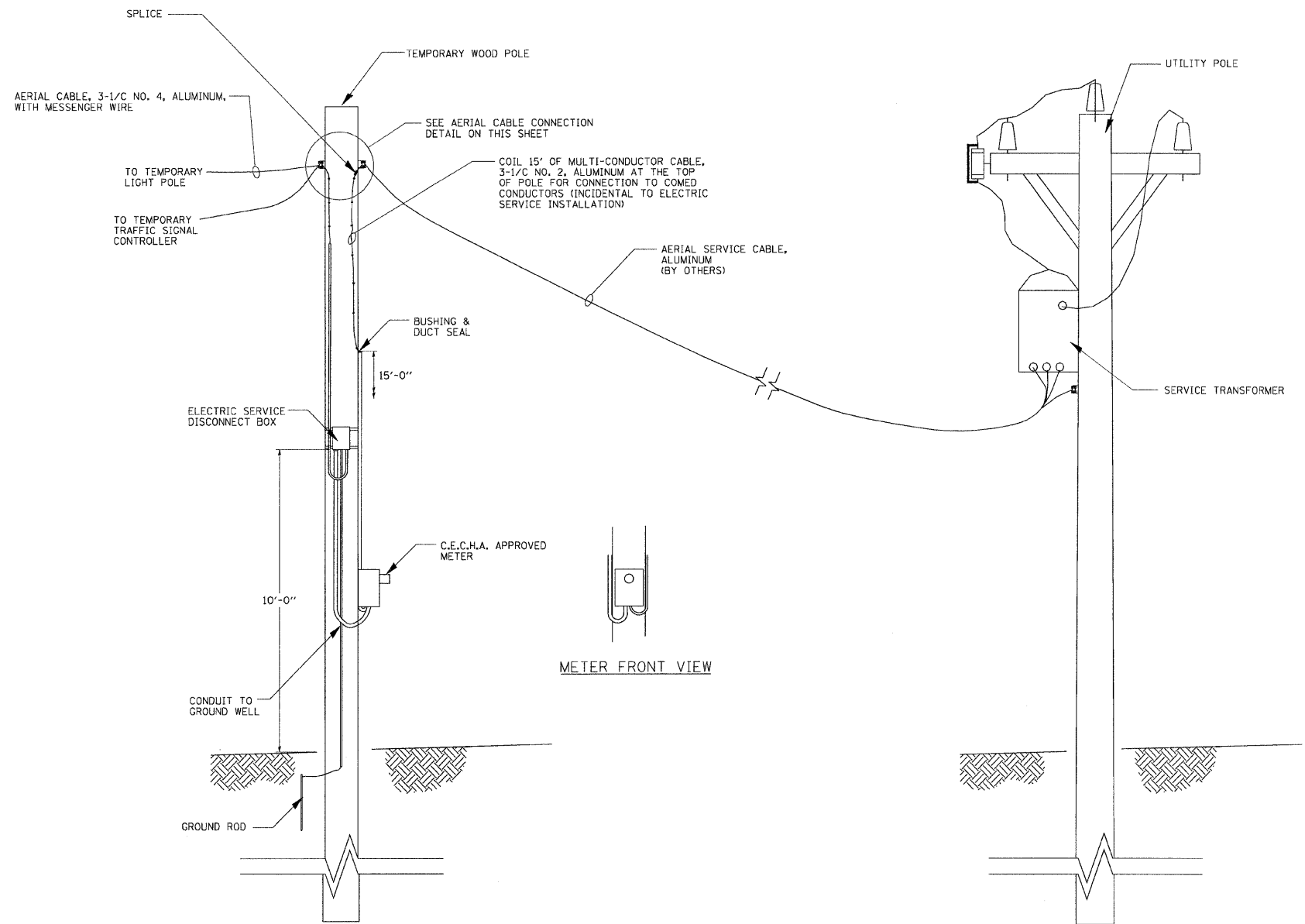
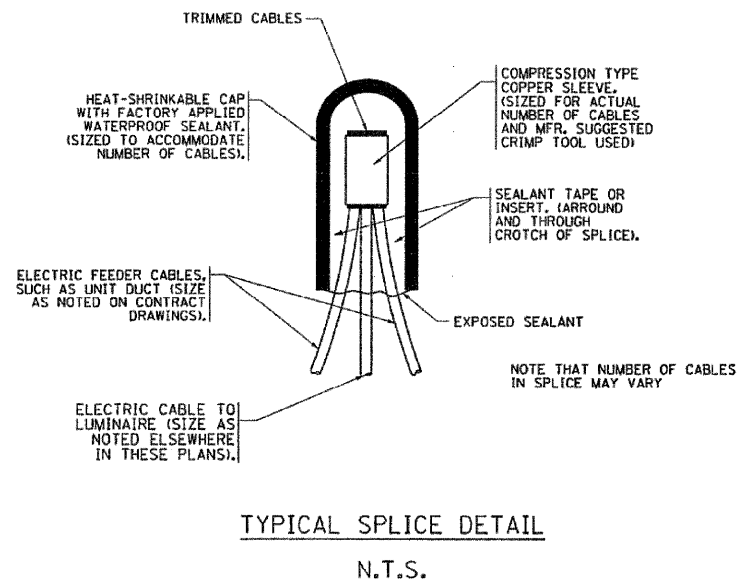
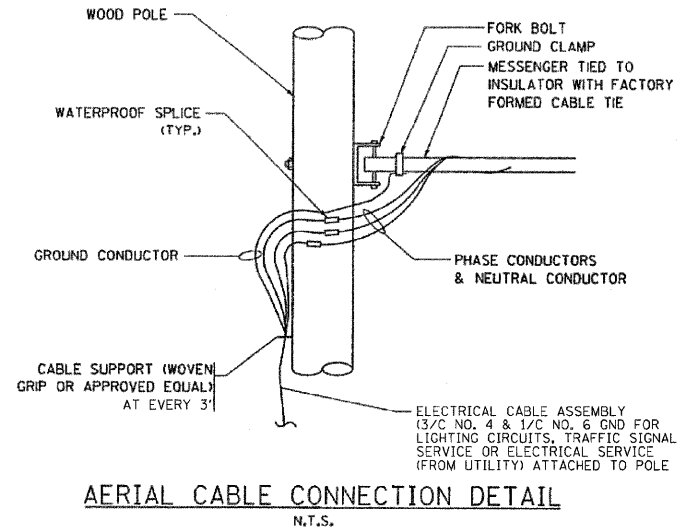
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USER NAME = wlancoaster	DESIGNED - JMV	REVISED -
PLOT SCALE = 1/8" = 1' IN.	DRAWN - MB	REVISED -
PLOT DATE = 7/8/2008	CHECKED - JMV	REVISED -
	DATE - 07/09/2008	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

FAP 852 /US ROUTE 52 OVER FORKED CREEK TEMPORARY LIGHTING DETAILS			
SCALE: NONE	SHEET NO. 3 OF 4 SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
852	18B	WILL	31	14
CONTRACT NO. 60DB7				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



DATE: 7/15/2008
SEAL EXPIRES: 11/30/2009

NOTE:
COMMONWEALTH EDISON SHALL BE CONTACTED BEFORE THE INSTALLATION WORK BEGINS FOR THE ELECTRIC SERVICE INSTALLATION.

(7-17-08)

Ciorba Group, Inc.
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USER NAME = jvondra	DESIGNED - JMV	REVISED -
PLOT SCALE = 1/8" = 1' / IN.	DRAWN - MB	REVISED -
PLOT DATE = 7/15/2008	CHECKED - JMV	REVISED -
	DATE - 07/09/2008	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAP 852 /US ROUTE 52		OVER FORKED CREEK	
TEMPORARY LIGHTING DETAILS			
SCALE: NONE	SHEET NO. 4 OF 4 SHEETS	STA.	TO STA.

F.A.P. RTE. 852	SECTION 18B	COUNTY WILL	TOTAL SHEETS 31	SHEET NO. 15
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
CONTRACT NO. 60DB7				

B.M.: PK Nail on East shoulder pavement Sta. 63+84.00, offset 16' Rt., Elev. 665.017

Existing Structure: SN 099-0133 at Sta. 64+70 built in 1924 as S.B I. 44 Sec. 18. Existing structure is a 3 span 21" X 36" PPC Deck Beam Bridge with the 4" concrete wearing surface. In 1971 abutments and piers were widened to accommodate the new superstructure. The substructure consists of two closed abutments and two solid concrete piers. The structure measures 128'-11 1/2" Bk. to Bk. Abutments and 33'-0" Out to Out Deck. Traffic is to be maintained utilizing stage construction. One lane for both directions will be provided by using temporary traffic signals.

Salvage: None

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STATION 65+70
REBUILT 200 BY
STATE OF ILLINOIS
FAP RT. 852 SEC. 18B
LOADING HL 93
S.N. 099-0133

NAME PLATE
See Std. 515001

SCOPE OF WORK

1. Total Superstructure Removal and Replacement
2. Substructure Repairs
3. Approach Slab Removal and Replacement

GENERAL NOTES

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

Reinforcement bars shall conform to the requirements of ASTM A706 Grade 60 (IL Modified). See Special Provisions.

The Contractor is advised that the existing PPC Deck Beams are in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the beams when developing construction procedures for removal and replacement of the superstructure.

Attach new Name Plate to the inside face of Railing as shown. Existing name plate is to be removed, cleaned and relocated adjacent to new name plate. Cost included in the cost of Name Plates.

Reinforcement Bars designated (E) shall be epoxy coated.

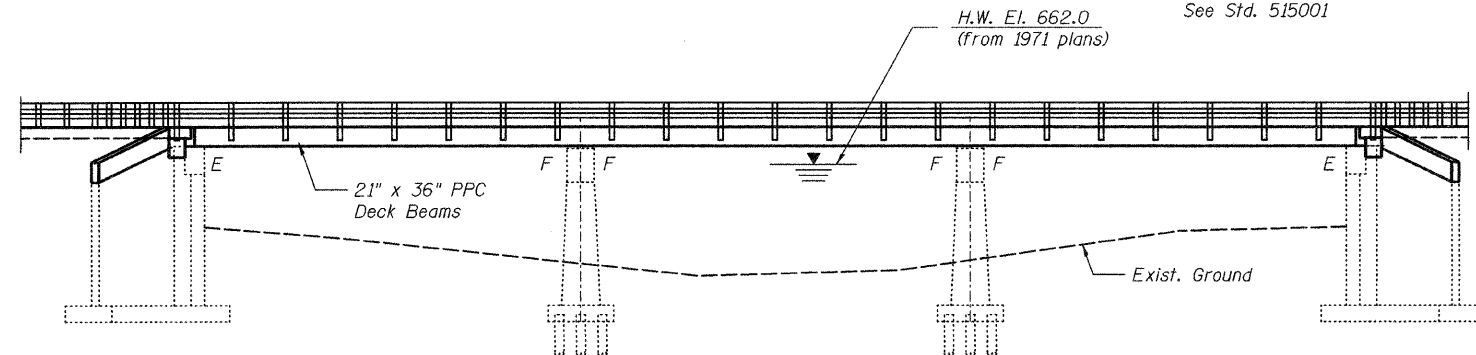
After the removal of the existing beams for stage I removal, the Contractor shall re-connect or re-engage the transverse ties in the existing beams for stage I traffic.

Burn or cut the existing dowel rods flush with existing bearing seat. Grind the existing dowel rods smooth and seal with epoxy. The cost of this work shall be included with "Removal of Existing Superstructure."

No in-stream work will be allowed on this project.

The minimum thickness of the concrete overlay shall be 5" and varies as required to adjust for the new profile grade and beam camber.

Repair of the substructure shall be completed prior to placement of the new deck beams.



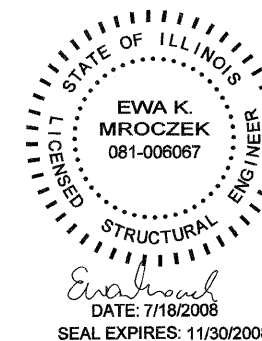
ELEVATION

INDEX OF SHEETS

- S-1. General Plan & Elevation
- S-2. Stage Construction Details
- S-3. Temporary Concrete Barrier
- S-4. 21"x36" Deck Beam
- S-5. 21"x36" Deck Beam Details
- S-6. Superstructure Details 1
- S-7. Superstructure Details 2
- S-8. Steel Railing Details
- S-9. North and South Abutment Repairs
- S-10. North and South Abutments
- S-11. Pier 1
- S-12. Pier 2
- S-13. Bar Splicer Details

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

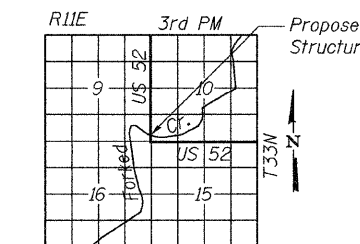
Repha E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES



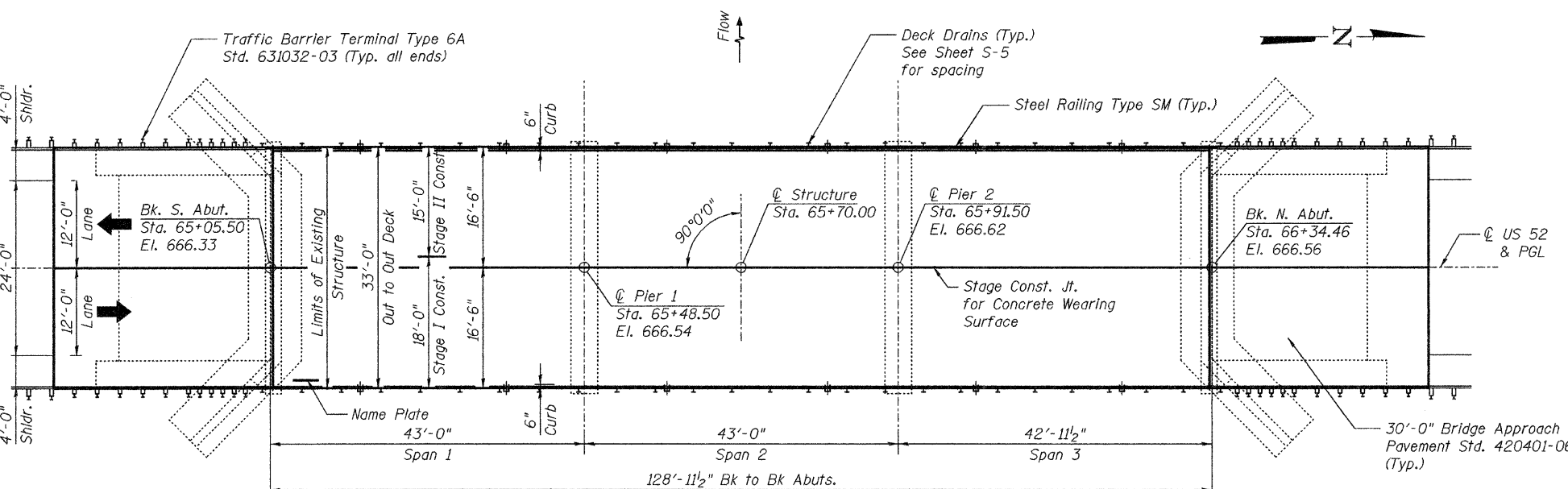
TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Removal of Existing Superstructures	Each	1
Concrete Removal	Cu. Yd.	0.5
Concrete Structures	Cu. Yd.	6.8
Concrete Superstructure	Cu. Yd.	3.1
Bridge Deck Grooving	Sq. Yd.	442
Protective Coat	Sq. Yd.	470
Concrete Wearing Surface	Sq. Yd.	470
* Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	4,226
Reinforcement Bars, Epoxy Coated	Pound	7,090
Bar Splicers	Each	139
Steel Railing, Type SM	Foot	265
Name Plates	Each	1
Preformed Joint Strip Seal	Foot	66
Structural Repair of Concrete (Depth Equal to or Less than 5 inches)	Sq. Ft.	474
* Asbestos Bearing Pad Removal	Each	24

* Special Provision



LOCATION SKETCH



PLAN

LOADING HL - 93

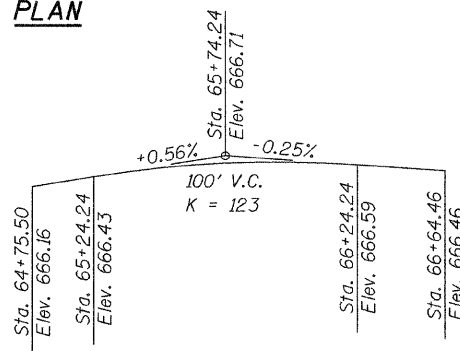
No future wearing surface allowed

DESIGN SPECIFICATIONS

AASHTO LRFD Bridge Design Specifications (4th Edition, 2007)

DESIGN STRESSES

FIELD UNITS PRESTRESSED UNITS
 $f'c = 3,500$ psi $f'c = 6,000$ psi
 $f_y = 60,000$ psi $f'ci = 5,000$ psi
 $f's = 270,000$ psi (1/2" ϕ low lax. strands)
 $f'si = 201,400$ psi (1/2" ϕ low lax. strands)



PROFILE GRADE

DESIGNED	B. Sauter
CHECKED	E. Mroczek
DRAWN	R. Danley
CHECKED	B. Sauter

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GENERAL PLAN AND ELEVATION

US 52 OVER FORKED CREEK

STA. 65+70
S.N. 099-0133

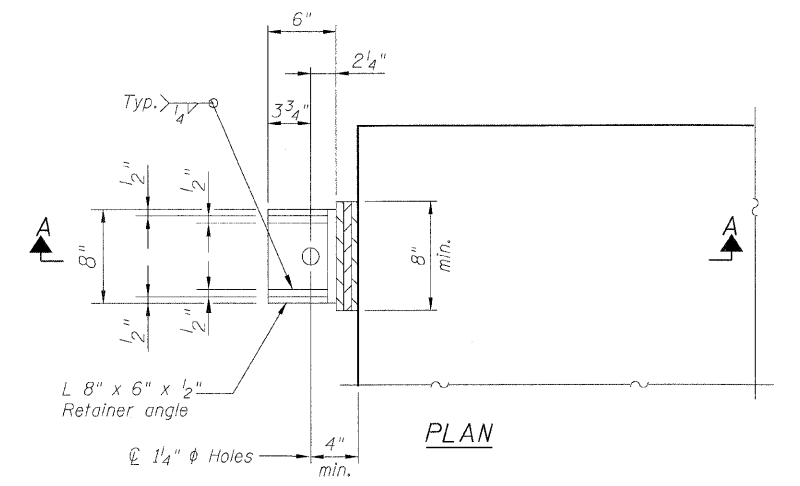
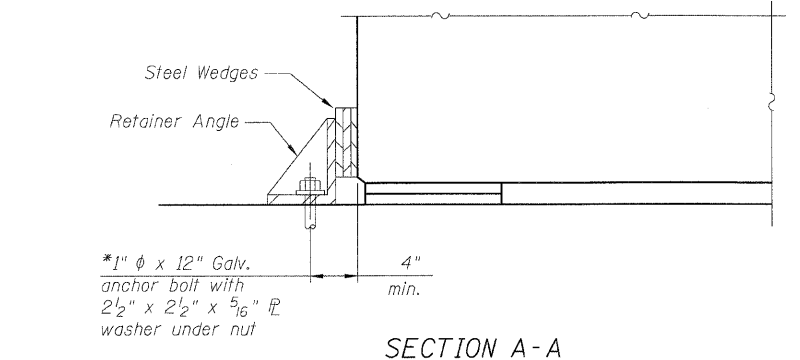
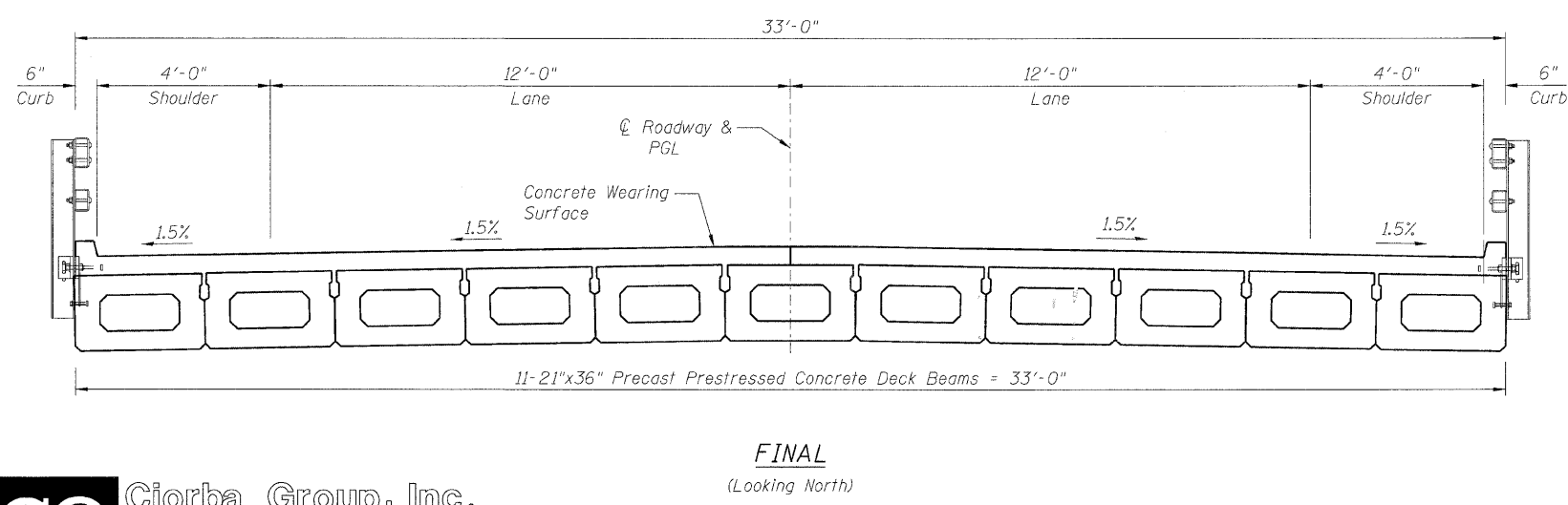
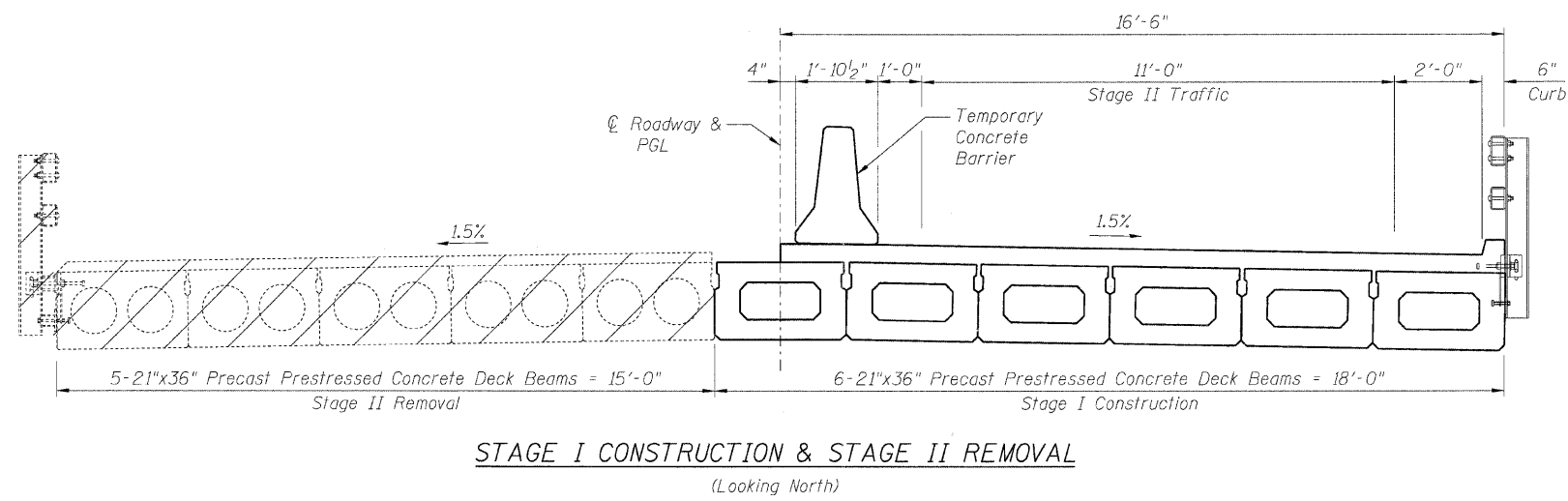
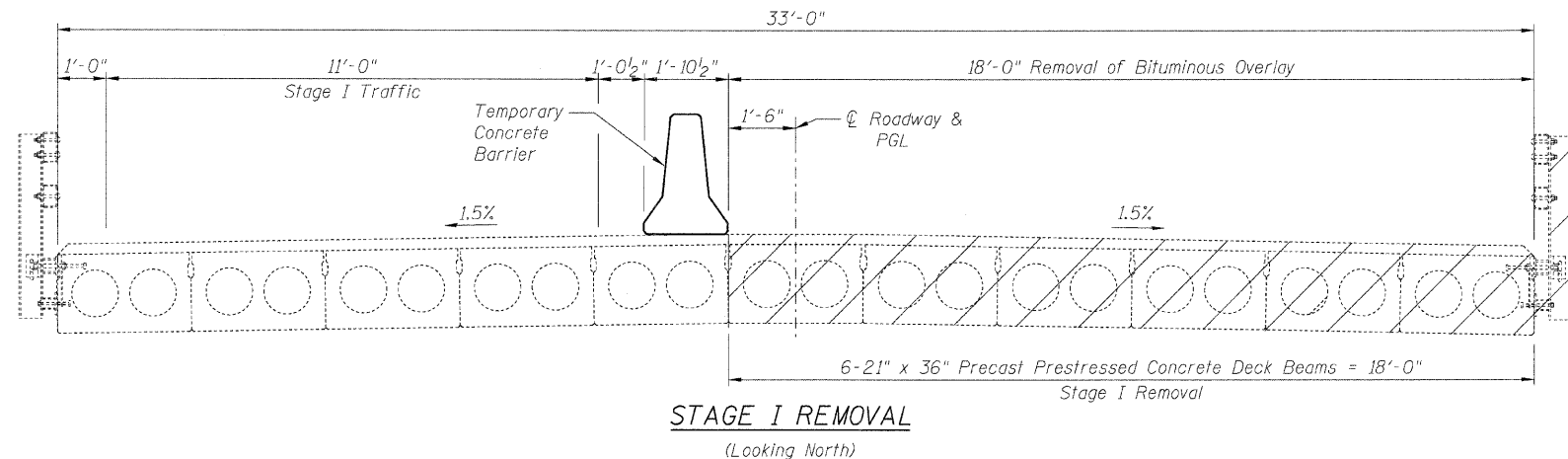
SHEET NO. S-1	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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S-13 SHEETS			CONTRACT NO. 60D87		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

7/18/2008

rdm:ley

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STATE OF ILLINOIS
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TEMPORARY RETAINER ANGLE

* Retainer angle to be placed adjacent to center beam at South and East Abutments right after Stage I center beam is removed. Retainer angle shall be removed right before installation of the new stage I beams. Repeat procedure for stage II. Cost of retainer and accessories are included with Precast Prestressed Concrete Deck Beams.

LEGEND:

Removal of Existing Superstructure

NOTES:

- See Sheet S-3 for Temporary Concrete Barrier Details.
- The Contractor is ultimately responsible of means and methods to ensure the complete stability of the structural members during construction.
- Existing Bearing removal to be paid for under "Asbestos Bearing Pad Removal".

STAGE CONSTRUCTION DETAILS
US 52 OVER FORKED CREEK
STA. 65+70
S.N. 099-0133

SHEET NO. S-2	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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S-13 SHEETS		CONTRACT NO. 60087			
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

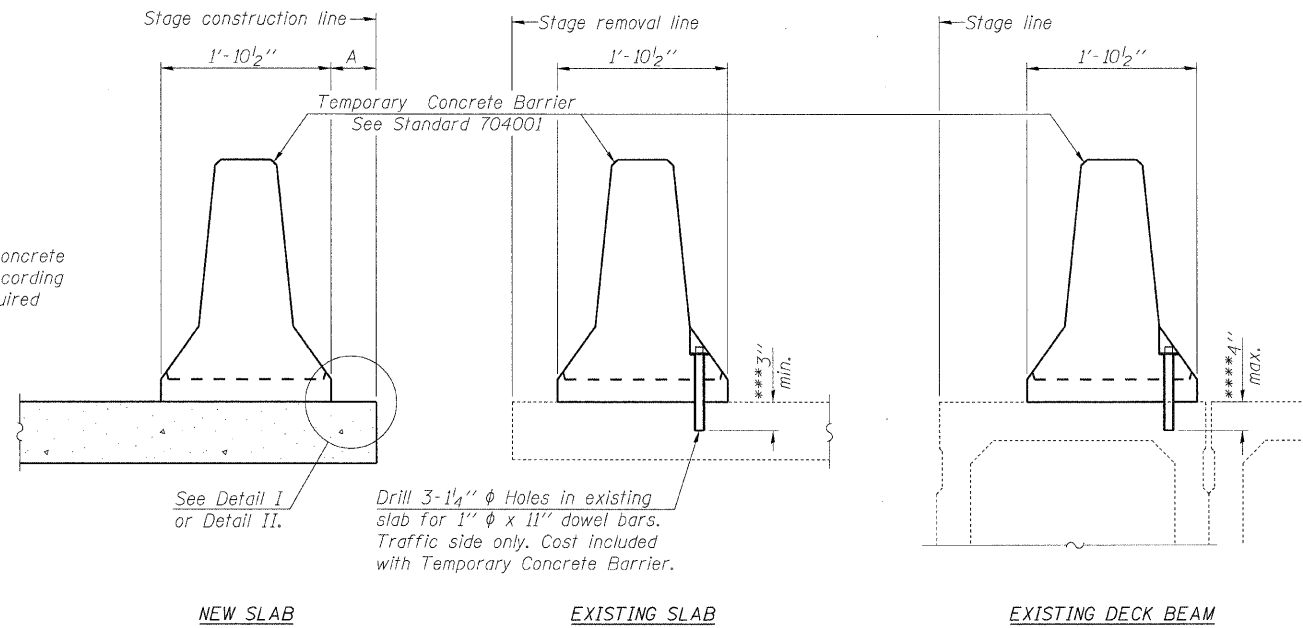
DESIGNED	B. Sauter
CHECKED	E. Mroczek
DRAWN	R. Danley
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7/8/2008 rdentley m:\proj\3329\3329_23\design\structural\road\shd\3329_21_02_Stage_Constructions.sht

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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".



SECTIONS THRU SLAB OR DECK BEAM

NOTES

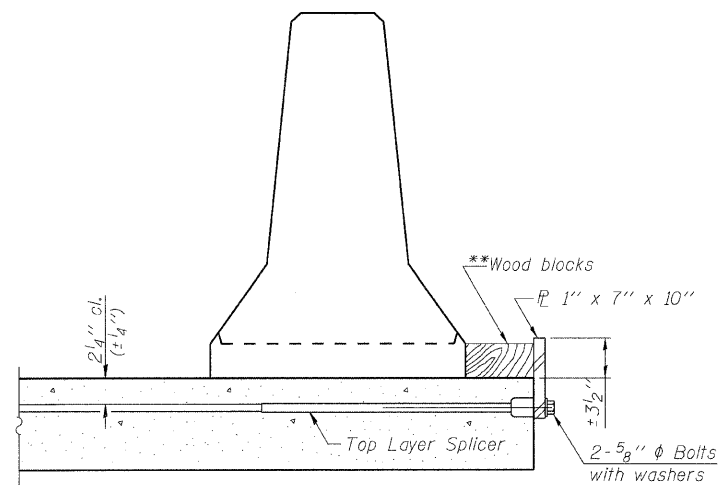
Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel \bar{L} to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate \bar{C} of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" steel \bar{L} to the concrete slab or concrete wearing surface with 2-5/8" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \bar{C} of each barrier panel.

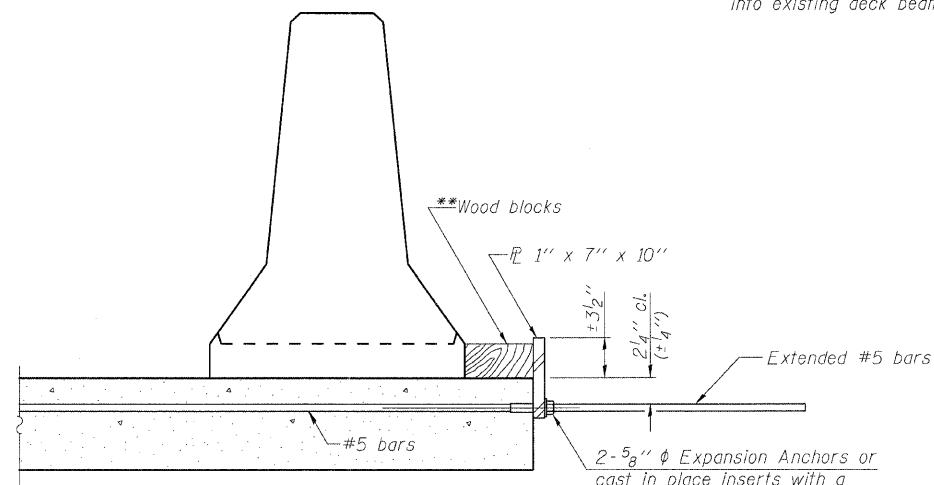
Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x 10" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

***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.

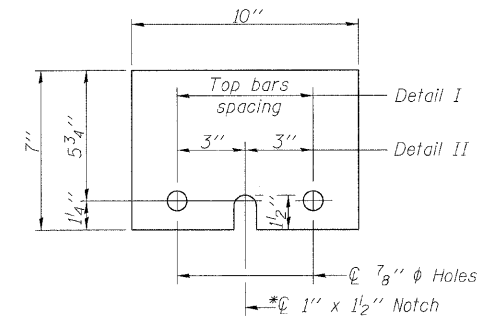
***If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



STEEL RETAINER \bar{L} 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.

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R-27

5-16-08

TEMPORARY CONCRETE BARRIER

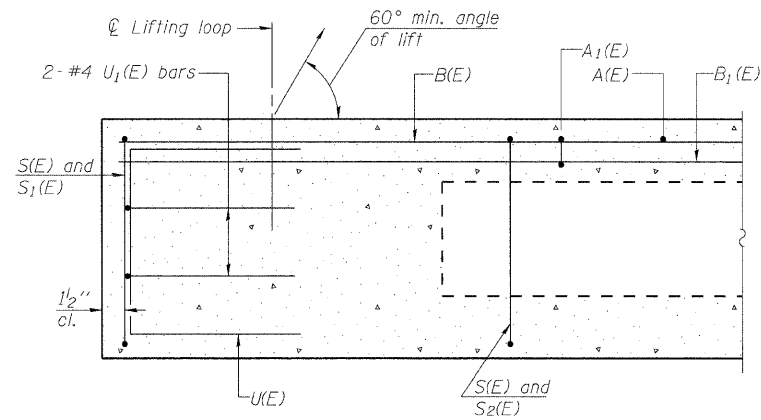
US 52 OVER FORKED CREEK

STA. 65+70

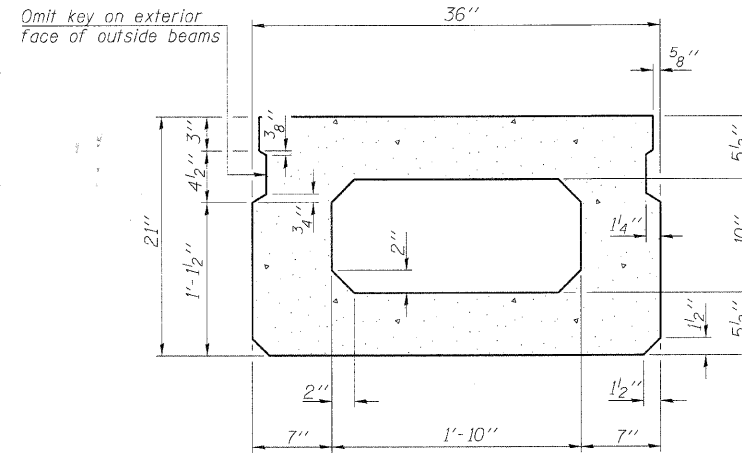
S.N. 099-0133

SHEET NO. S-3	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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S-13 SHEETS		CONTRACT NO. 60087			
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

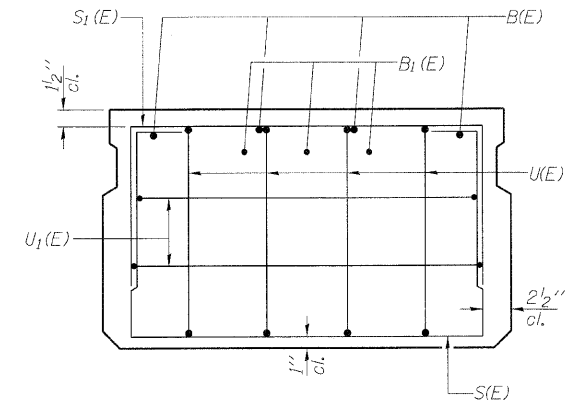
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



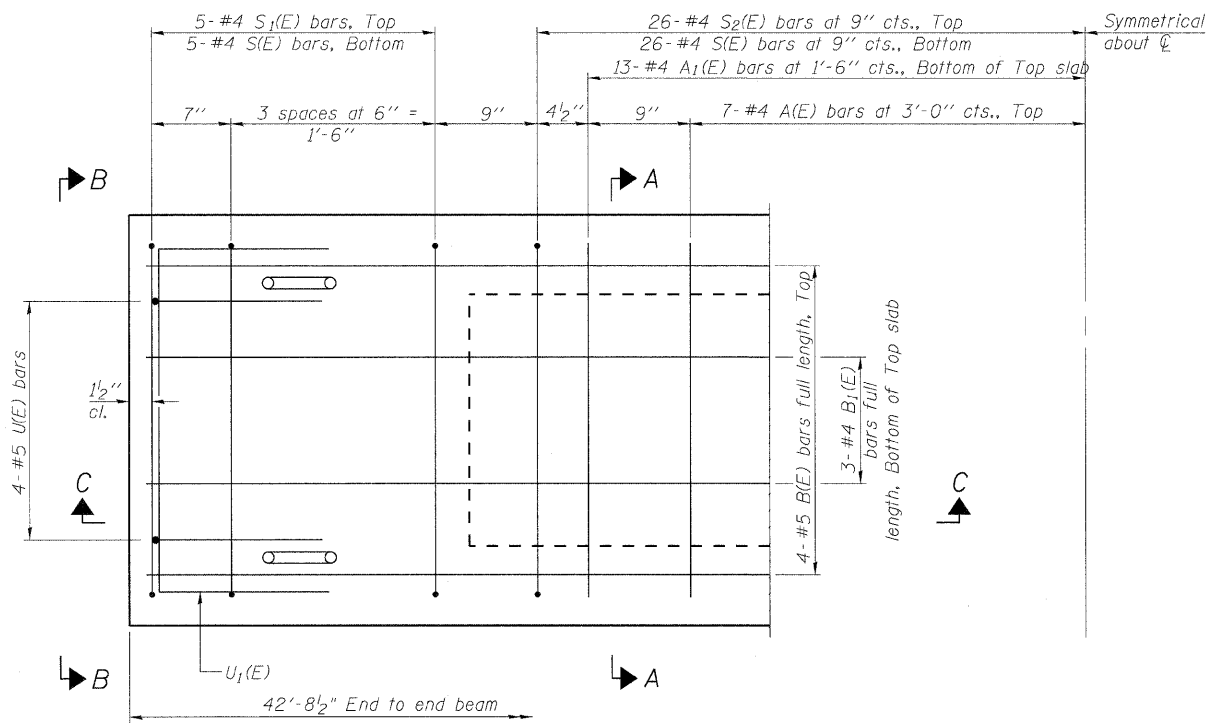
SECTION C-C



SECTION A-A
(Showing dimensions)

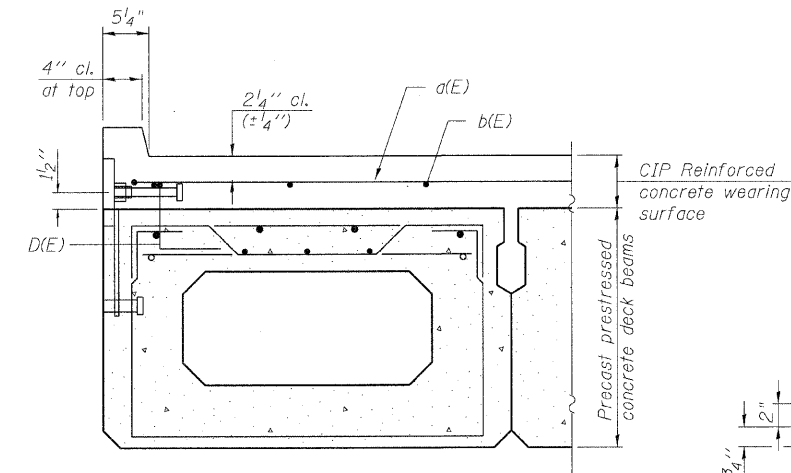


VIEW B-B



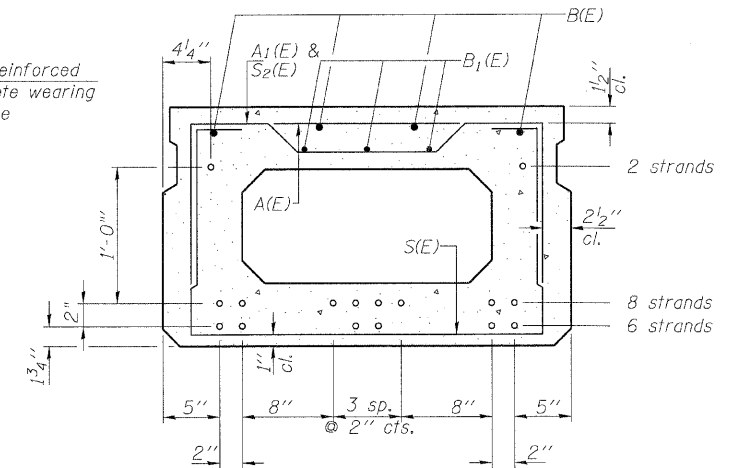
PLAN VIEW

Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.



SECTION THRU EXTERIOR BEAM

See Typical Section Thru Interior Beam for strand pattern, dimensions and bar call outs. CWS and Curb shall be poured in the field.



SECTION A-A

(Showing reinforcement and permissible strand locations)

Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

BAR LIST
ONE BEAM ONLY
(For information only)

Bar	No.	Size	Length	Shape
A(E)	14	#4	2'-7"	—
A1(E)	26	#4	2'-11"	~
B(E)	4	#5	42'-4"	—
B1(E)	3	#4	42'-4"	—
D(E)	16	#4	2'-9"	U
S(E)	62	#4	6'-5"	U
S1(E)	10	#4	4'-11"	U
S2(E)	52	#4	5'-2"	U
U(E)	8	#5	4'-0"	U
U1(E)	4	#4	5'-0"	U

Note: See sheet S-5 for additional details and Bill of Material.

* Exterior Beams only

21" x 36" PPC DECK BEAM
US 52 OVER FORKED CREEK
STA. 65+70
S.N. 099-0133

DESIGNED	B. Sauter
CHECKED	E. Mroczek
DRAWN	R. Danley
CHECKED	B. Sauter

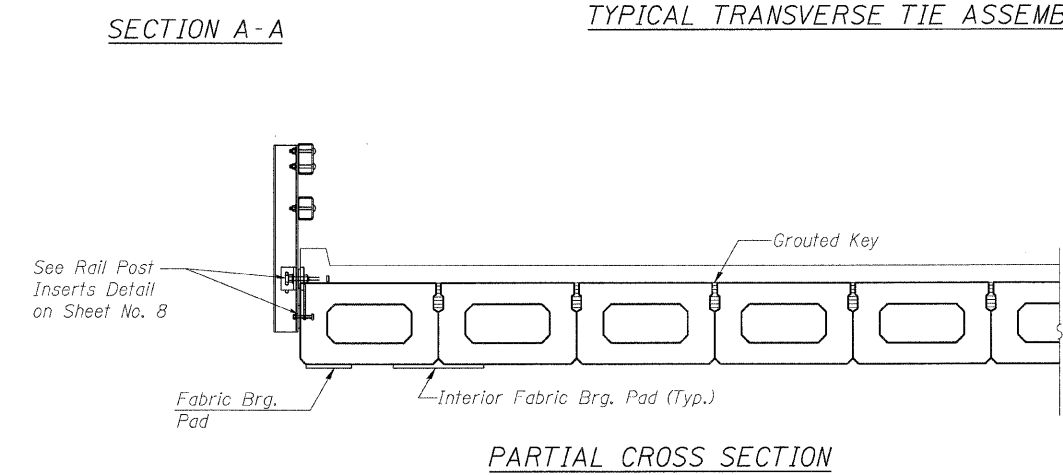
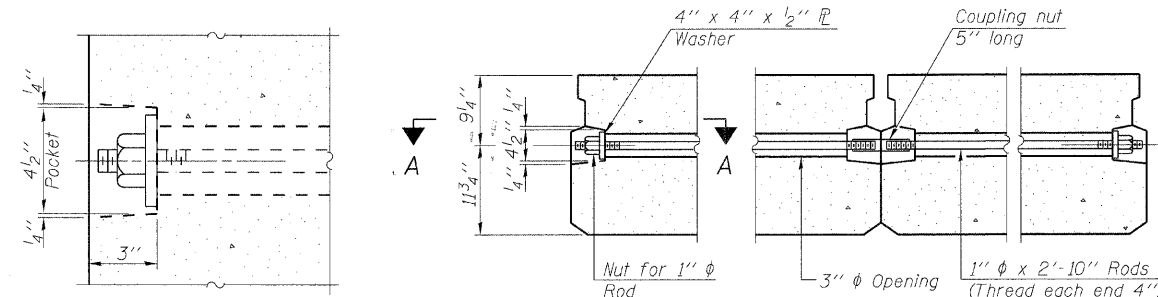
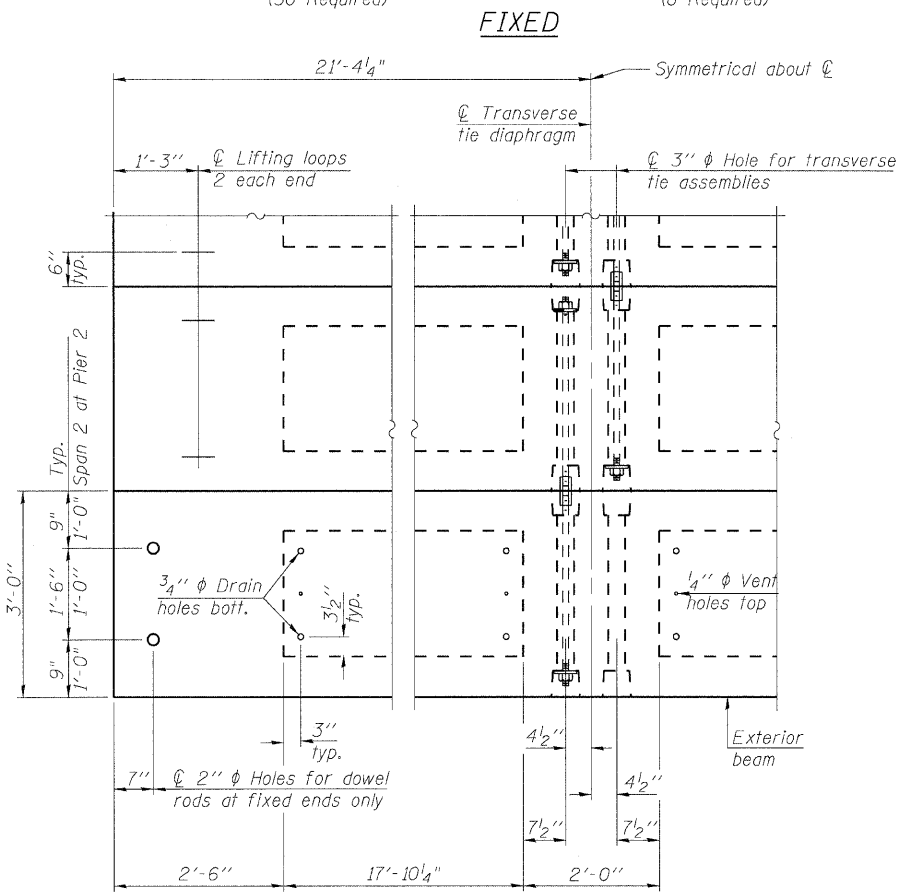
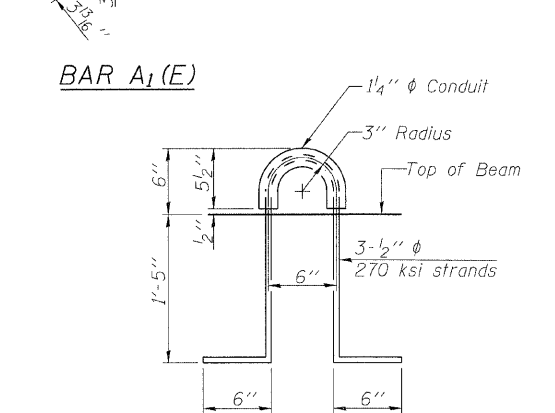
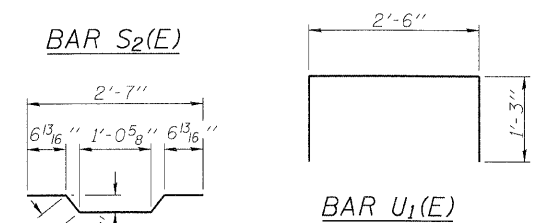
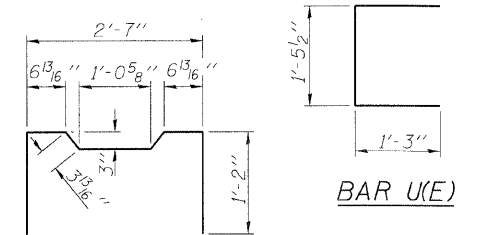
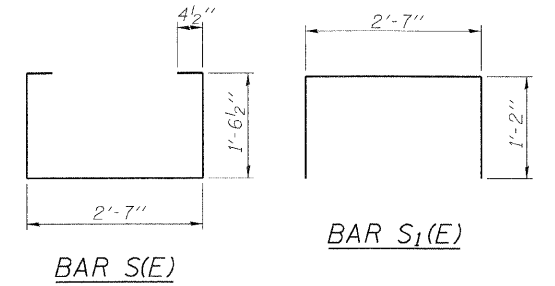
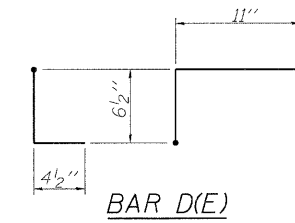
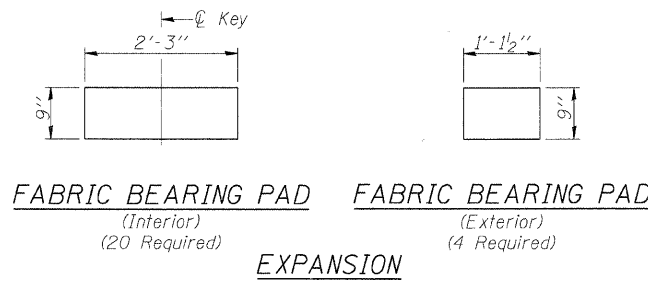
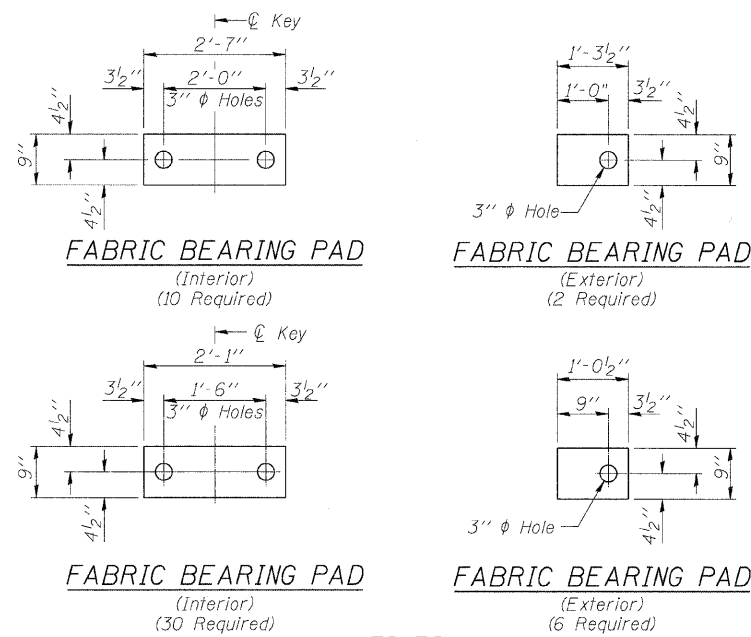
PD-2136-0 5-16-08



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SHEET NO. S-4	F.A.P R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	852	18B	WILL	31	19
S-13 SHEETS	CONTRACT NO. 60D87				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



LIFTING LOOP DETAIL

PARTIAL CROSS SECTION

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (21" depth)	Sq. Ft. 4,226
---	---------------

21" X 36" PPC DECK BEAM
DETAILS
US 52 OVER FORKED CREEK
STA. 65+70
S.N. 099-0133

NOTES

- Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in.
- The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.
- Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions).
- Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.
- A minimum 2 1/2" diameter lifting pin shall be used to engage the lifting loops during handling.
- Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
- Compressive strength of prestressed concrete, f'c, shall be 6000 psi.
- Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

Note: Connect beams in pairs with the transverse tie configuration shown.

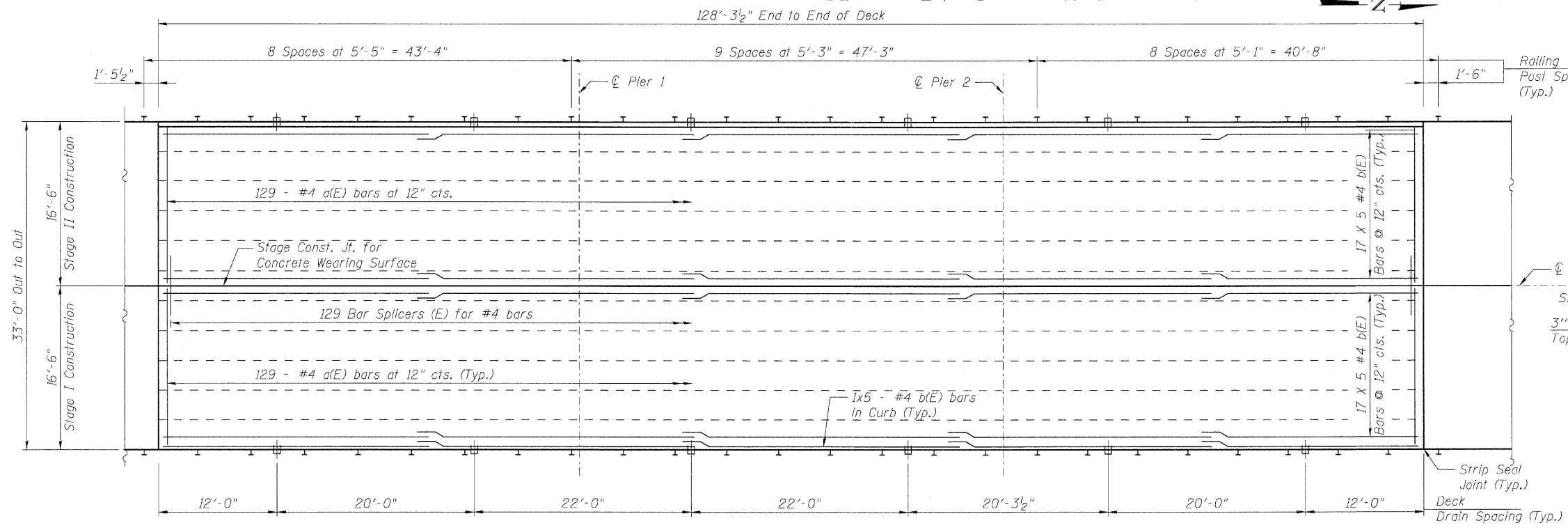
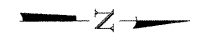
DESIGNED	B. Sauter
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DRAWN	R. Danley
CHECKED	B. Sauter

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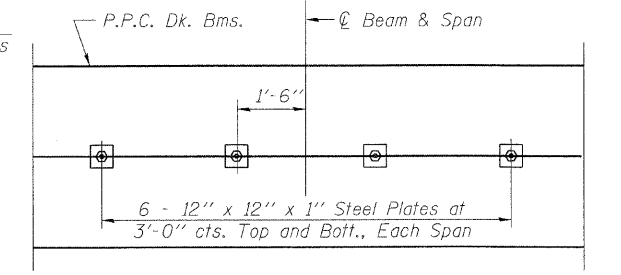
PD-2136-OD 5-16-08

SHEET NO. S-5	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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S-13 SHEETS				CONTRACT NO. 60D87	
FED. ROAD DIST. NO.		ILLINOIS		FED. AID PROJECT	

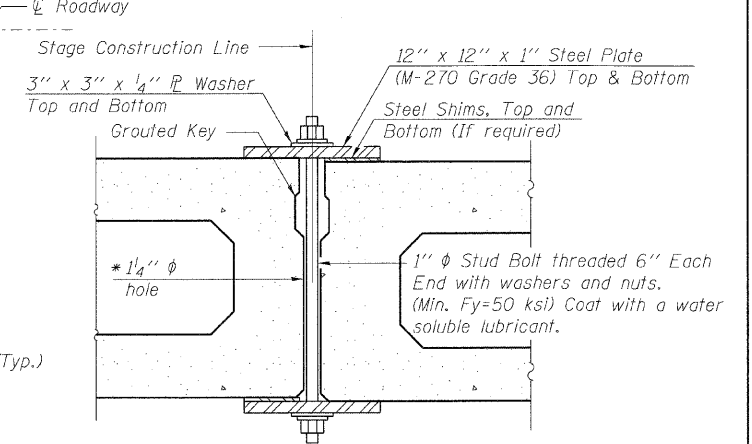
STATE OF ILLINOIS
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CONCRETE WEARING SURFACE - PLAN

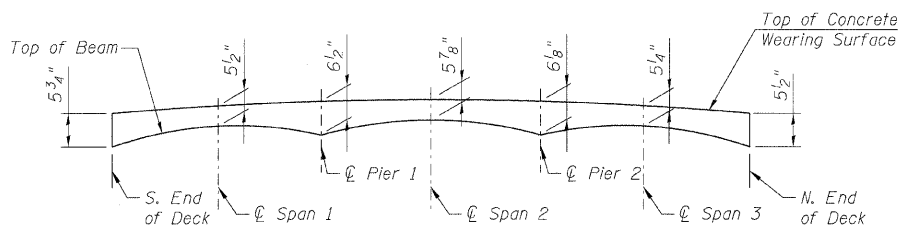


PLAN

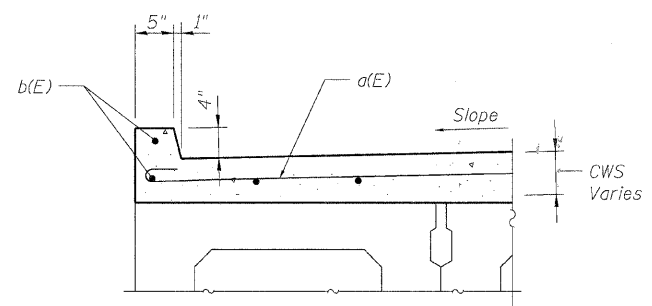


SECTION

* The fabricator shall cast 2" diameter semi-circular recesses in the sides of each beam adjacent to the stage construction line. These recesses shall align to form a hole at the appropriate locations for the clamping device bolts. The Contractor shall show the details on the shop drawings.

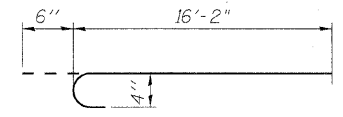


REINFORCED CONCRETE WEARING SURFACE PROFILE



SECTION THRU CURB

Curbs shall be poured in the field.



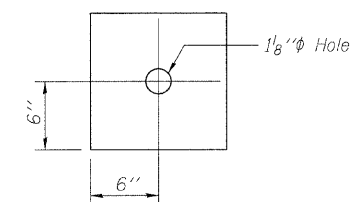
a(E) BAR

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	258	#4	16'-8"	
b(E)	180	#4	26'-11"	
Reinforcement Bars, Epoxy Coated			Pound	6,070
Concrete Wearing Surface			Sq. Yd.	470
Bridge Deck Grooving			Sq. Yd.	442
Bar Splicers			Each	129
Preformed Joint Strip Seal			Foot	66

SHEAR KEY CLAMPING DETAILS AT STAGE CONST. JT.

Cost included with Precast Prestressed Concrete Deck Beams. See Stage Construction Details for traffic lanes.



CLAMPING PLATE

SUPERSTRUCTURE DETAILS 1

US 52 OVER FORKED CREEK

STA. 65+70

S.N. 099-0133

LAP LENGTH
4 bars - 1'-8"

NOTES:

1. Reinforcement bars designated (E) shall be epoxy coated.
2. Bars indicated thus 2x3-#4 etc. indicates 2 lines of bars with 3 lengths per line.

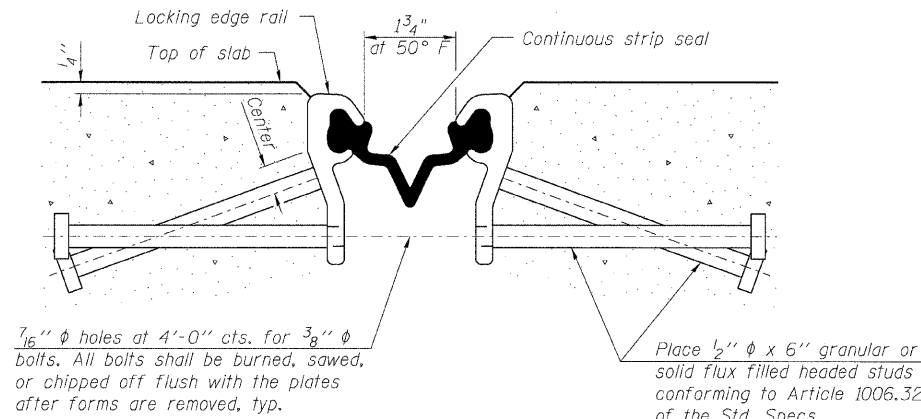
SHEET NO.	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S-6	852	18B	WILL	31	21
S-13 SHEETS			CONTRACT NO. 60D87		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

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CHECKED	B. Sauter

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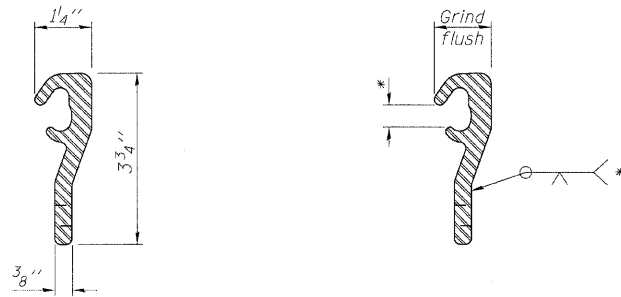
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STATE OF ILLINOIS
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SECTION THRU STRIP SEAL JOINT
FOR OVERLAY OVER DECK BEAMS

DETAIL A



LOCKING EDGE RAIL

LOCKING EDGE RAIL SPLICE

* Omit weld at seal opening.

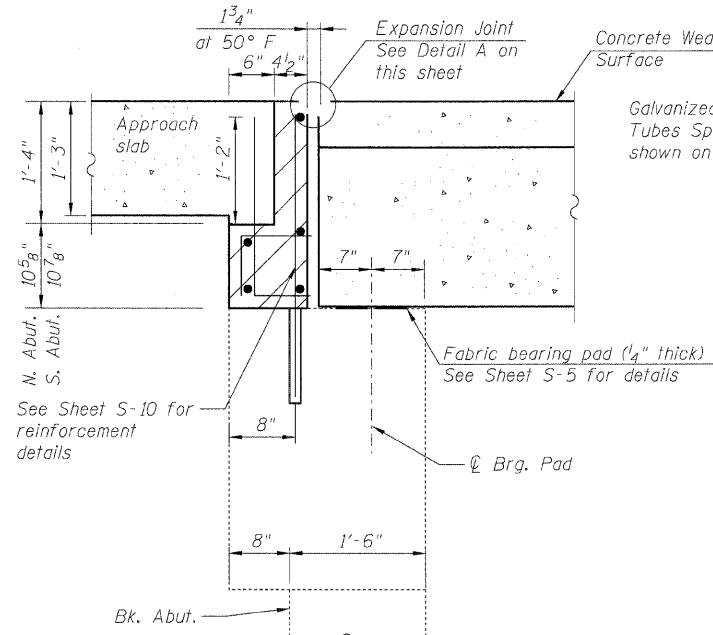
Notes:

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails.

The height and thickness of the Locking Edge Rails shown are minimum dimensions. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed.

The inside of the Locking Edge Rail groove shall be free of weld residue. Locking Edge Rails may be spliced at slope discontinuities and stage construction joints.

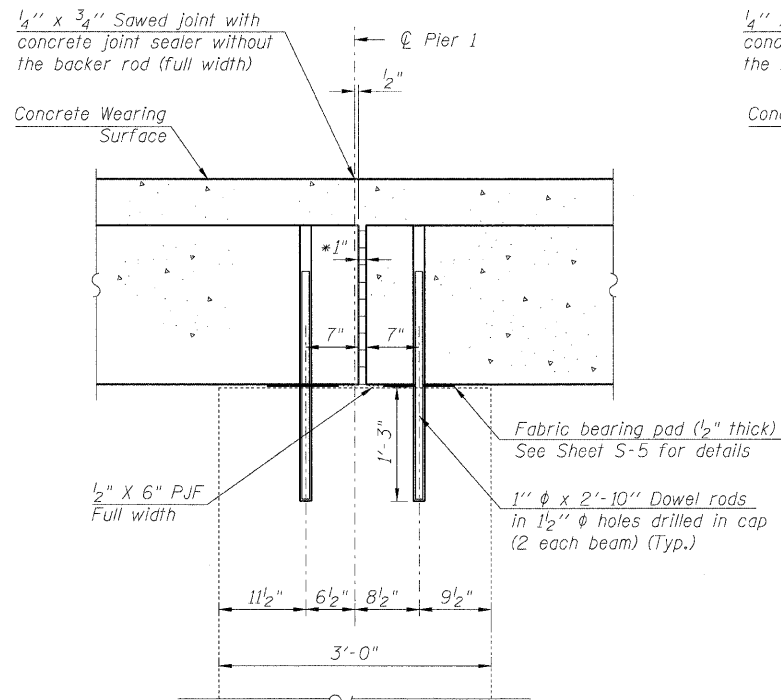
The manufacturer's recommended installation methods shall be followed.



SECTION THRU ABUTMENT

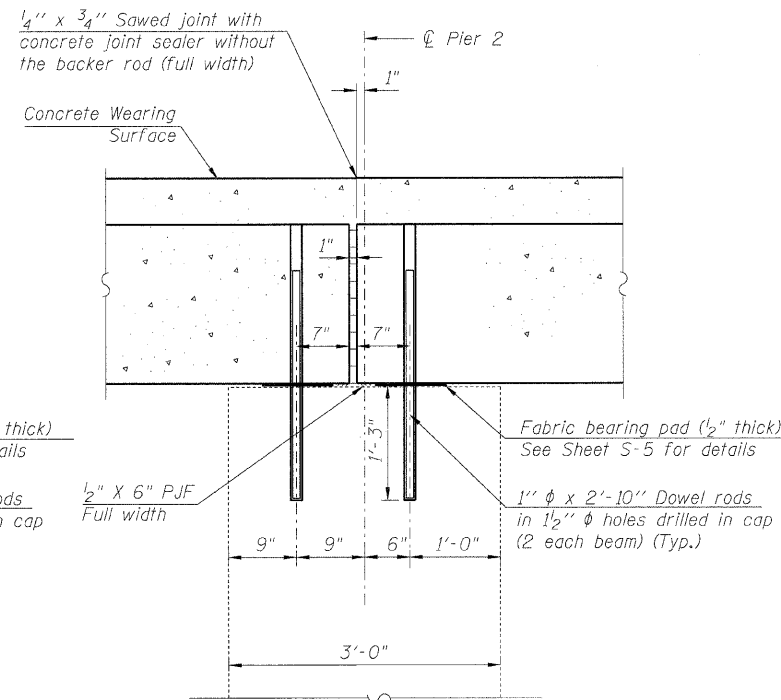
Hatched area to be poured after concrete wearing surface is in place.

See Sheet S-10 - for quantities.



SECTION THRU PIER 1

Looking West



SECTION THRU PIER 2

Looking West

* 1" Jt. shall be filled with non-shrink grout. 1" dimension may vary to accommodate tolerance in beam lengths.

Notes:

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

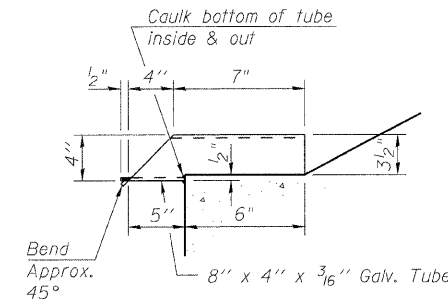
All horizontal dimensions are at right angles to beam ends.

See sheet S-5 for bearing pad details.



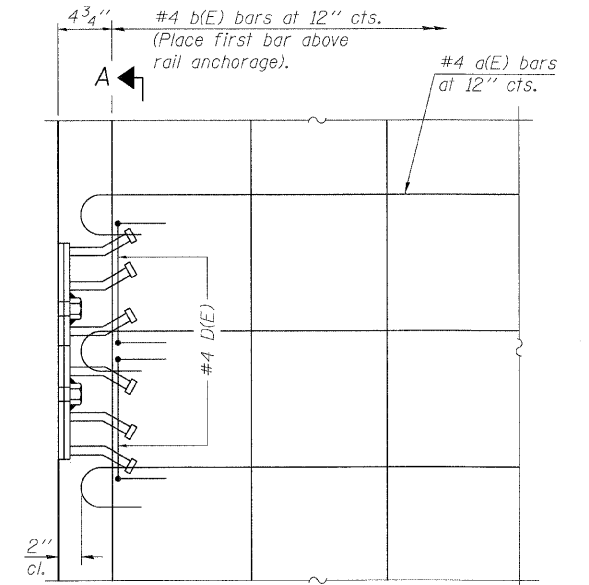
SECTION THRU CURB

Curbs shall be poured in the field.



DRAIN DETAIL

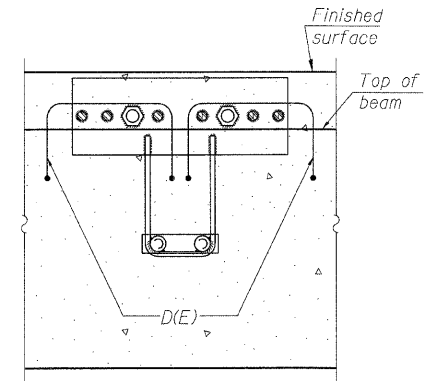
Cost of drains is included with Concrete Wearing Surface



RAIL ANCHORAGE PLAN

Notes:

The rail anchorage shall be cast with the beam and the wearing surface shall be cast in the field. Formwork necessary for the wearing surface may be secured utilizing the bottom rail anchorage inserts and/or additional inserts cast into the beam. Drilling into the beam will not be permitted. For the rail posts location see Sheet S-6.



SECTION A-A

SUPERSTRUCTURE DETAILS 2

US 52 OVER FORKED CREEK

STA. 65+70

S.N. 099-0133

DESIGNED	B. Sauter
CHECKED	E. Mroczek
DRAWN	R. Danley
CHECKED	B. Sauter

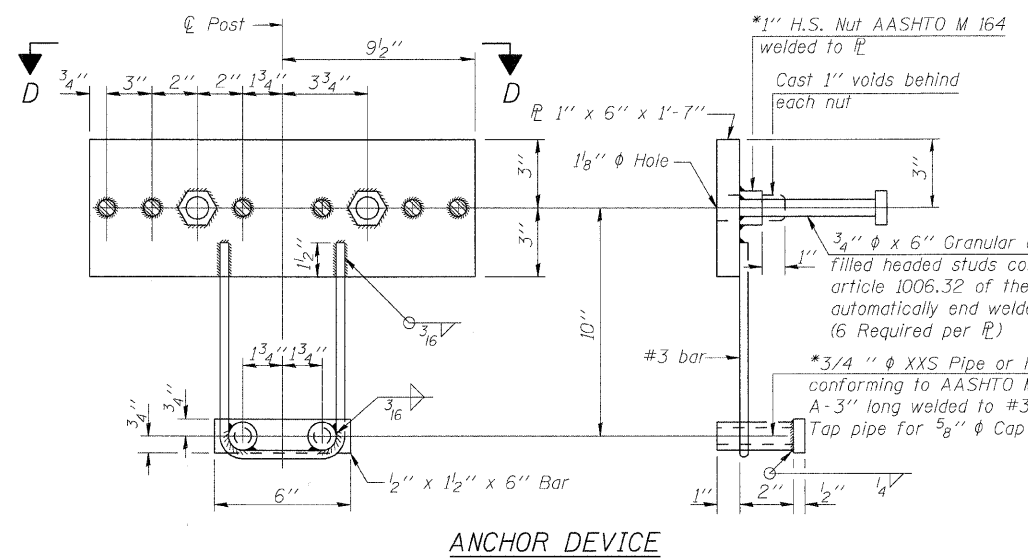
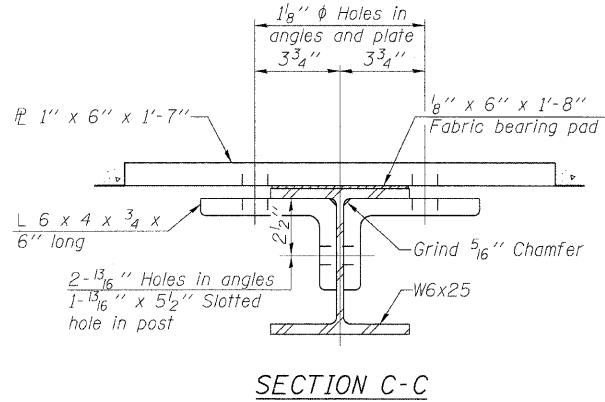
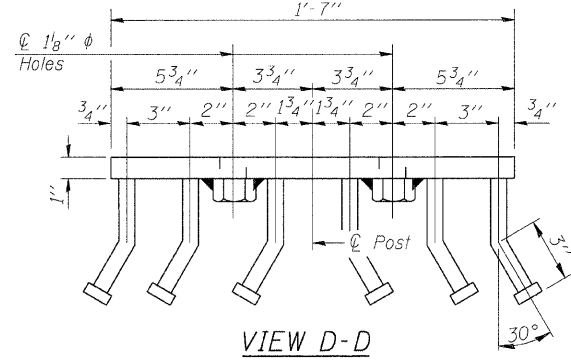
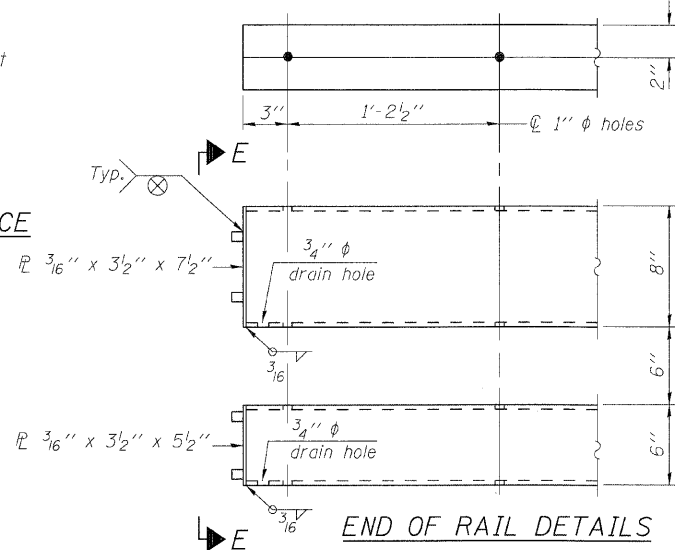
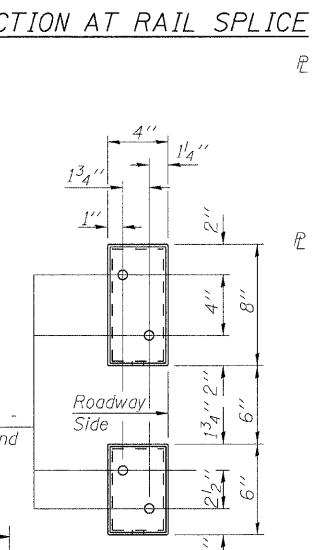
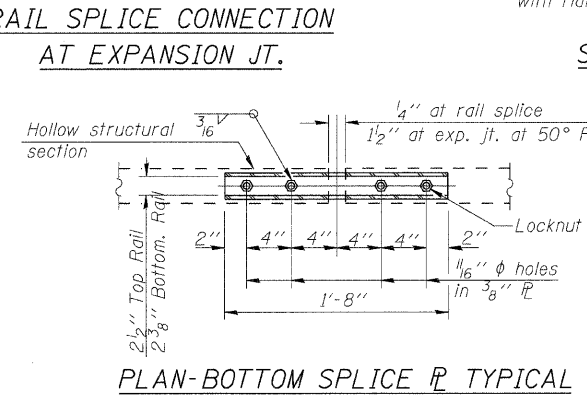
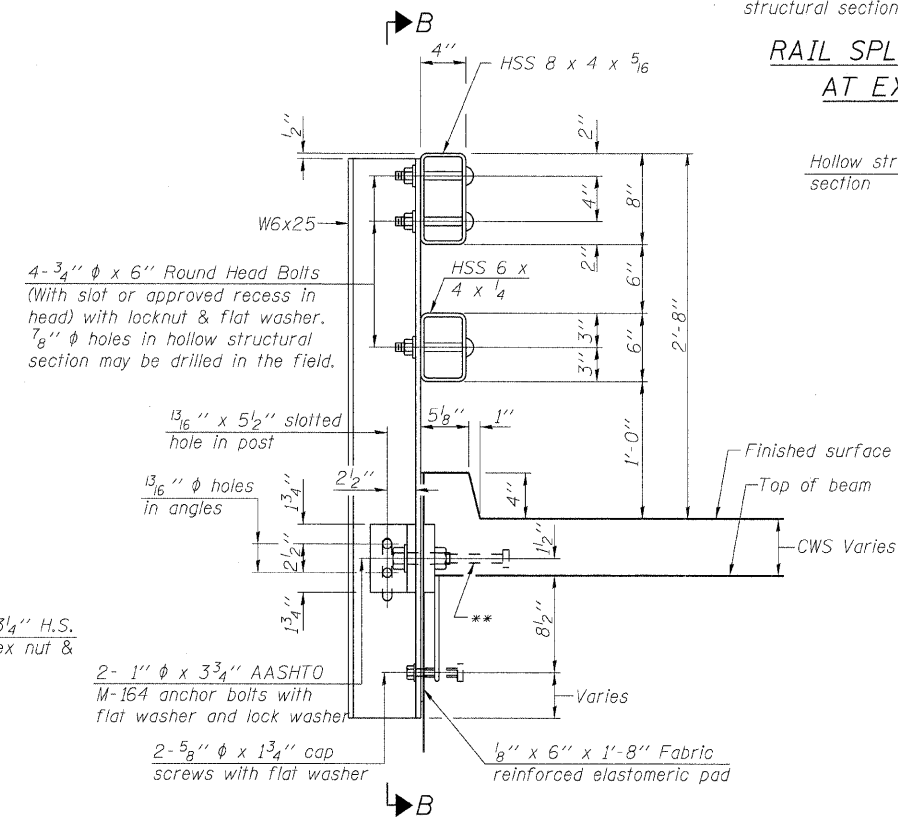
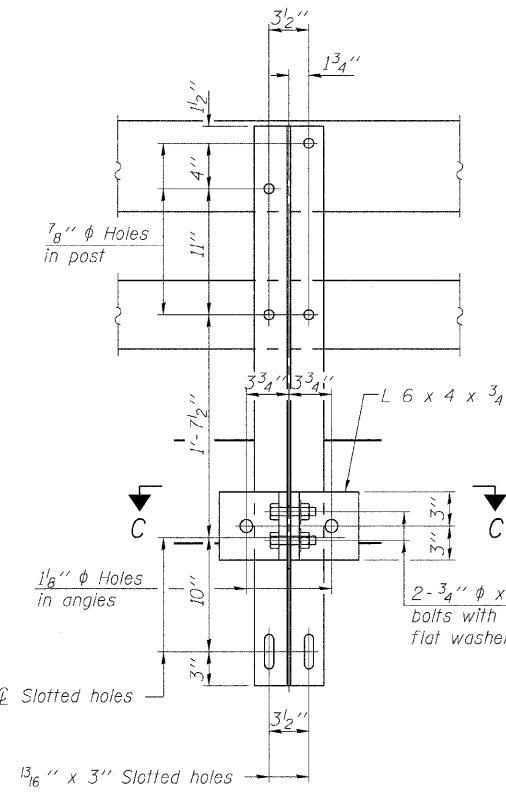
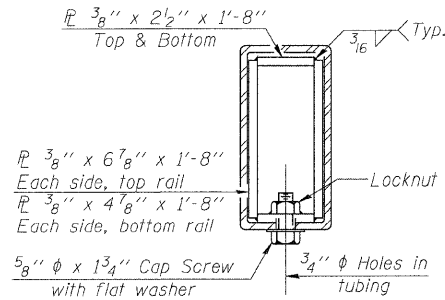
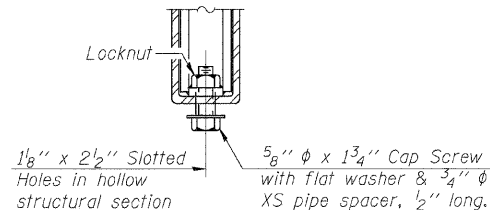
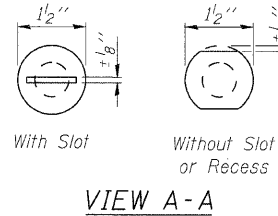
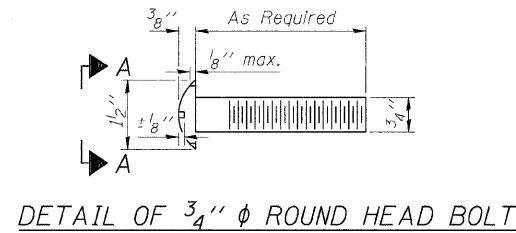


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SHEET NO. S-7	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	852	18B	WILL	31	22
S-13 SHEETS		CONTRACT NO. 60D87			
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



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

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type SM	Foot	265

STEEL RAILING DETAILS
US 52 OVER FORKED CREEK
STA. 65+70
S.N. 099-0133

SHEET NO. S-8	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S-13 SHEETS	852	18B	WILL	31	23
CONTRACT NO. 60D87					
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

DESIGNED B. Sauter
CHECKED E. Mroczek
DRAWN R. Danley
CHECKED B. Sauter
R-34CWS 5-16-08

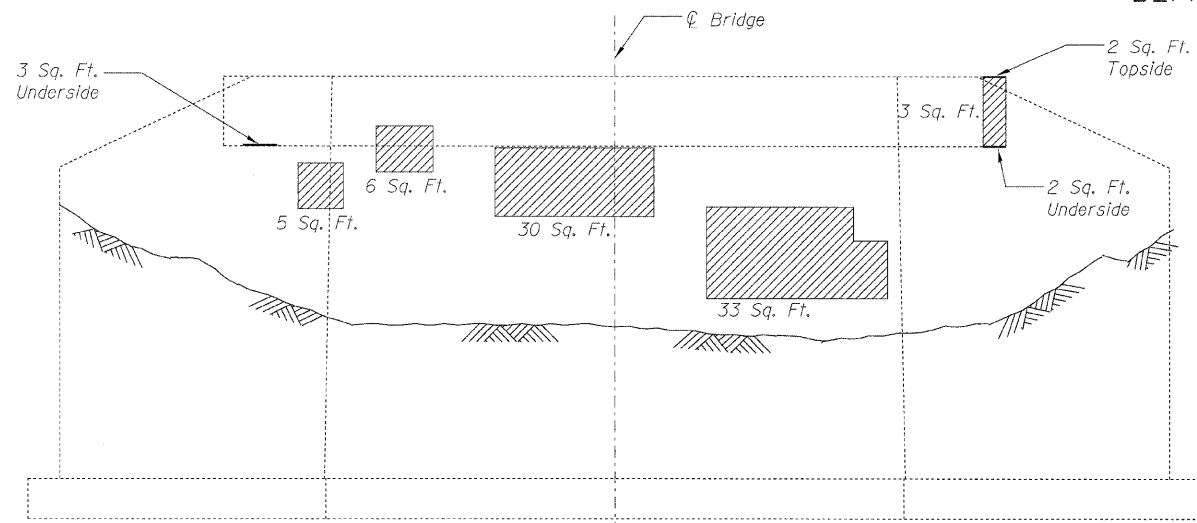
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CONSULTING ENGINEERS
5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014 Email chicago@giorba.com

(6'-3" Maximum Post Spacing) (5" minimum to 7 1/8" maximum CWS thickness)

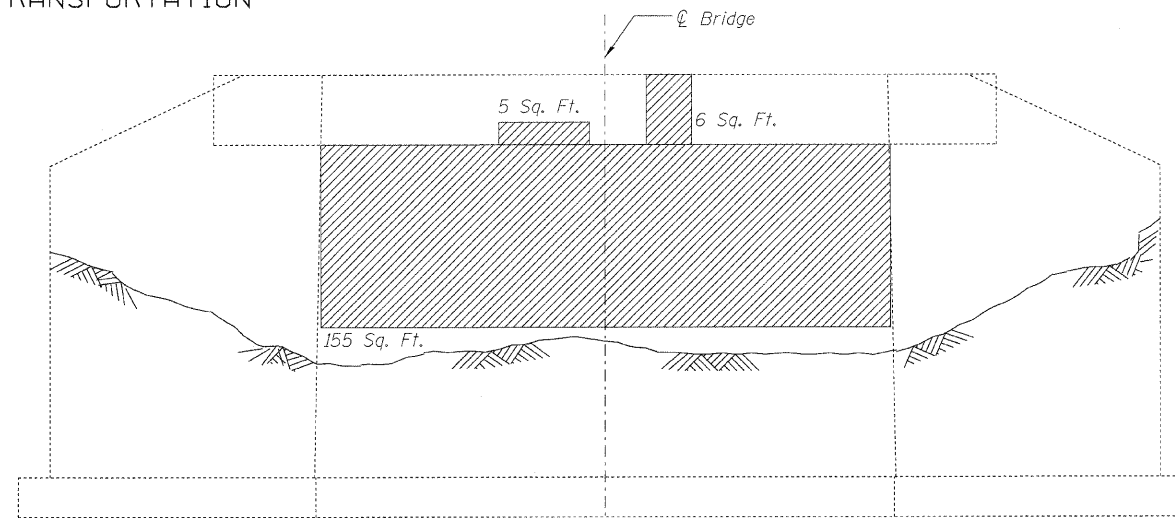
*Threaded areas shall be plugged or blocked off during casting of beam. Galvanized after fabrication.

7/8/2008 rcs/rls/7/8/2008 design/structural/lead/ah/3329_23_08 Railing Details.sht

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



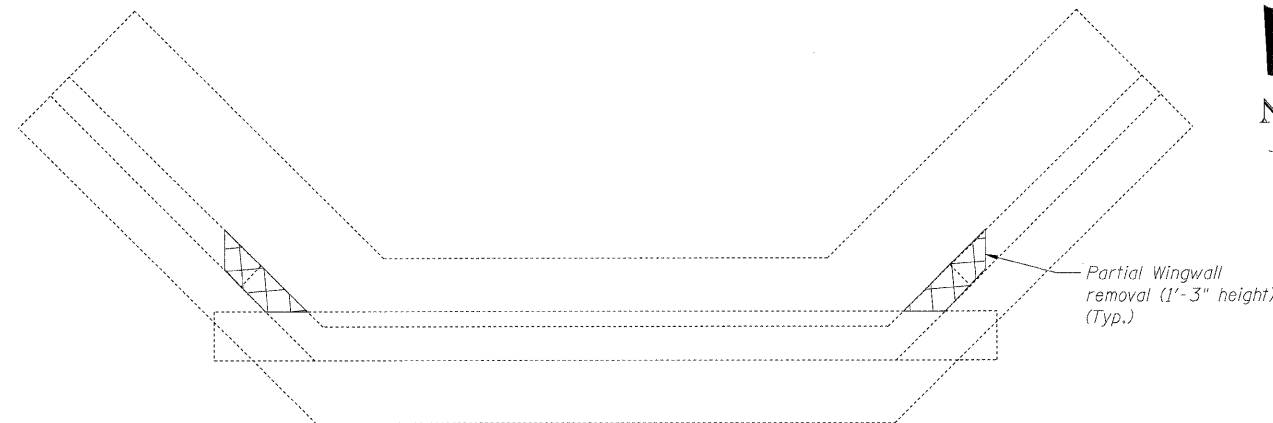
NORTH ABUTMENT ELEVATION



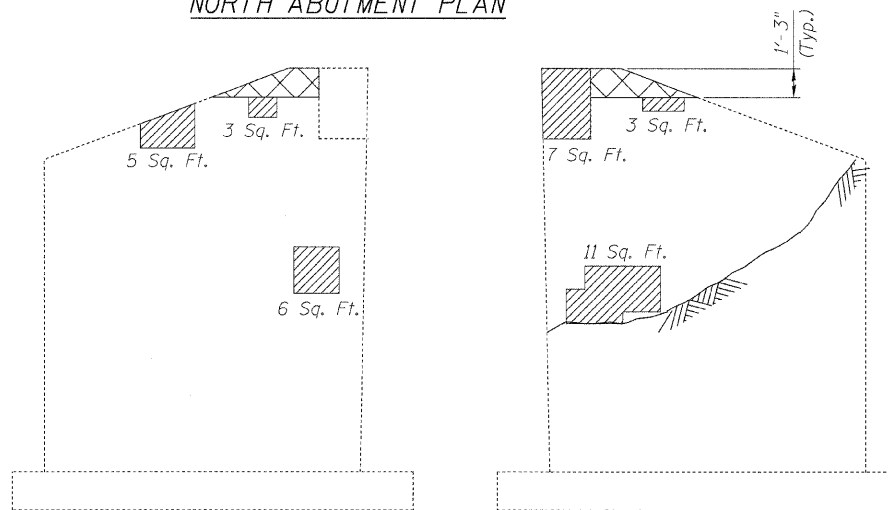
SOUTH ABUTMENT ELEVATION



NORTH ABUTMENT PLAN

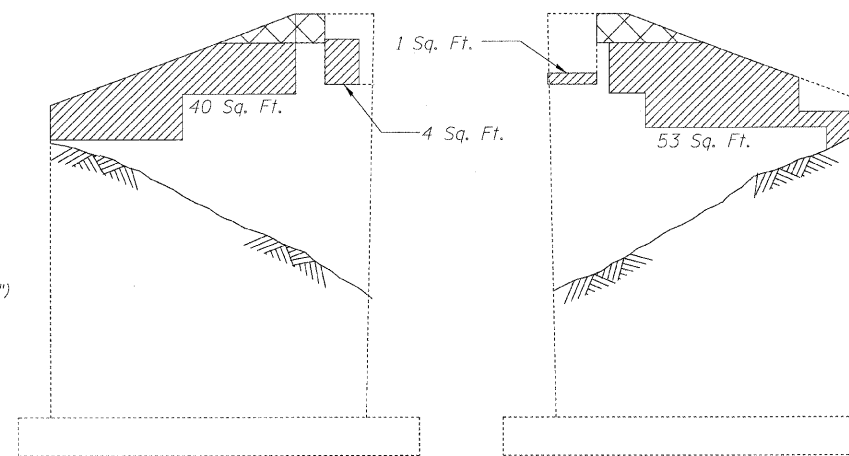


SOUTH ABUTMENT PLAN



NW WINGWALL
(looking east)

NE WINGWALL
(looking west)



SE WINGWALL
(looking west)

SW WINGWALL
(looking east)

NOTE:
Repairs of the existing abutments shall include but not be limited to the areas shown. The actual areas to be determined by the engineer at the time of construction.

**NORTH AND SOUTH
ABUTMENT REPAIRS**
US 52 OVER FORKED CREEK
STA. 65+70
S.N. 099-0133

LEGEND
 Structural Repair of Concrete (≤ 5")
 Concrete Removal

BILL OF MATERIAL

Item	Unit	Quantity
Structural Repair of Concrete (Depth Equal to or Less than 5")	Sq. Ft.	385
Concrete Removal	Cu. Yd.	0.5

DESIGNED	B. Sauter
CHECKED	E. Mroczek
DRAWN	R. Danley
CHECKED	B. Sauter



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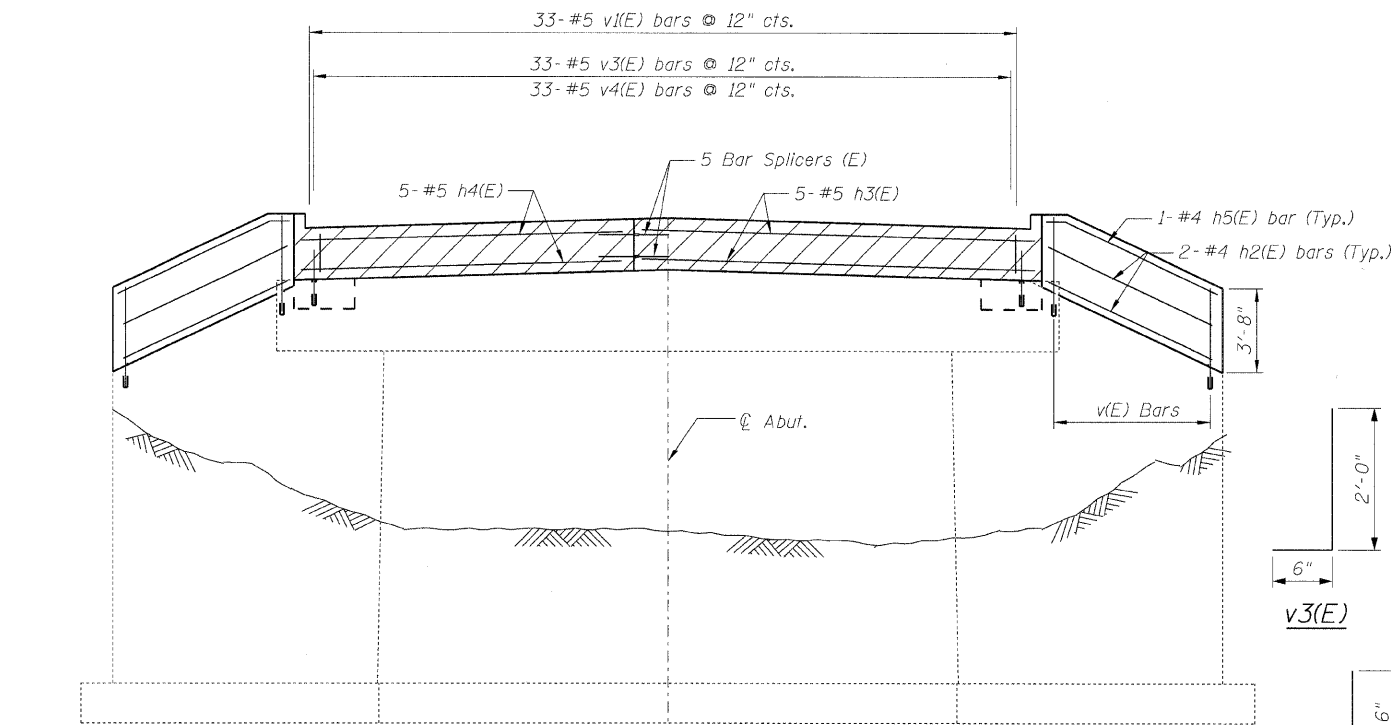
5507 North Cumberland Avenue, Suite 402 Chicago, Illinois 60656
Tel. 773.775.4009 Fax 773.775.4014 Email chicago@ciorba.com

SHEET NO. S-9	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	852	18B	WILL	31	24
S-13 SHEETS					
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60D87					

7/8/2008 rdbnley

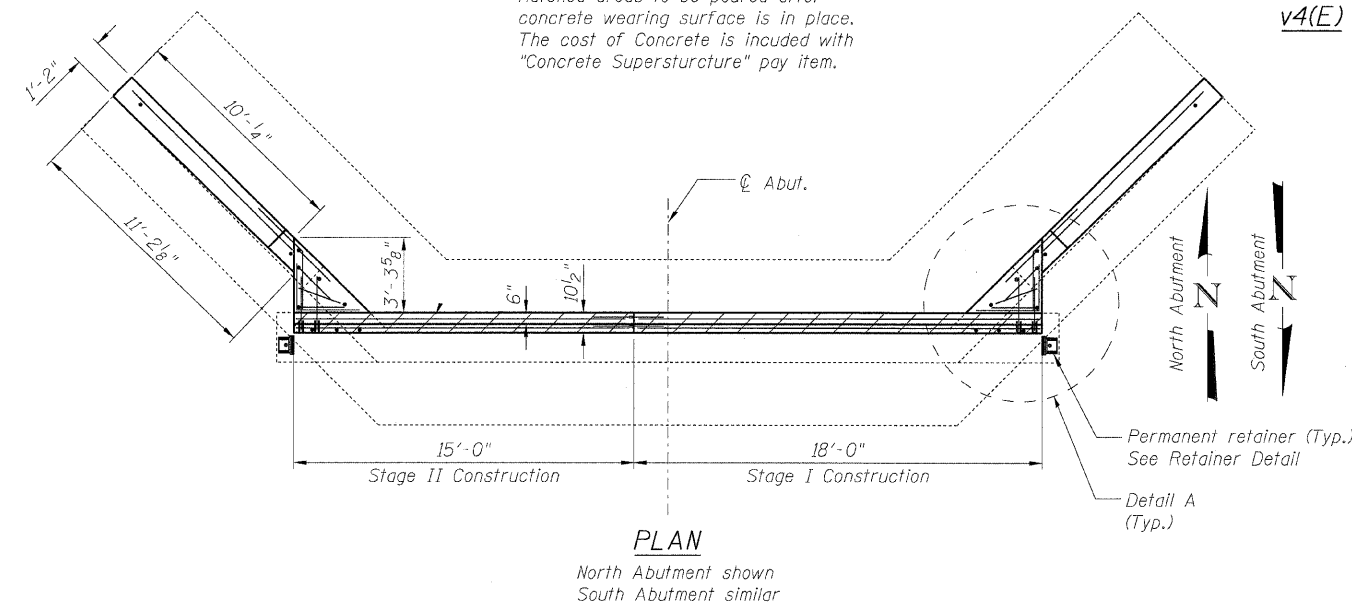
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



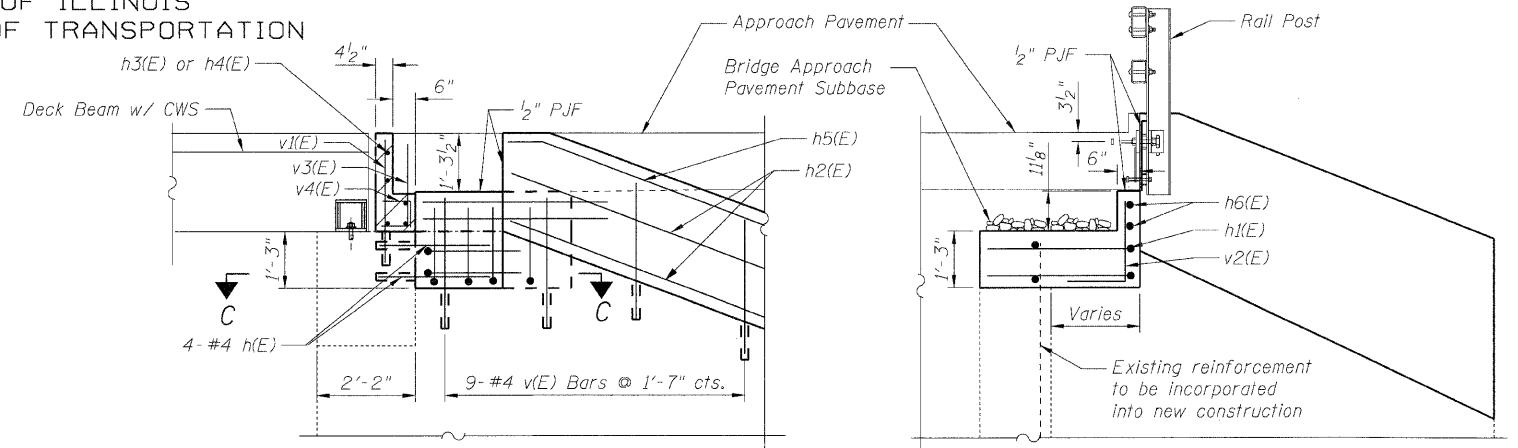
ELEVATION

Hatched areas to be poured after concrete wearing surface is in place. The cost of Concrete is included with "Concrete Superstructure" pay item.



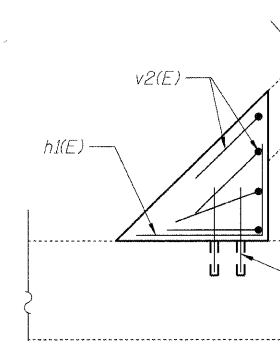
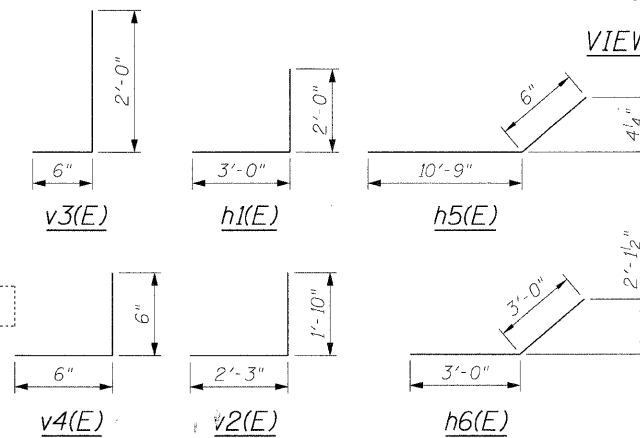
PLAN

North Abutment shown
South Abutment similar

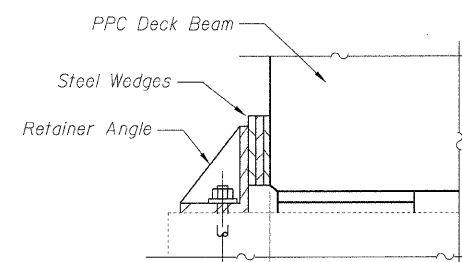


VIEW A-A

SECTION B-B

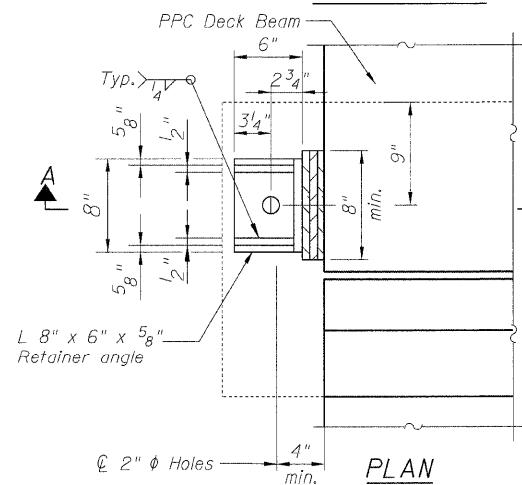


SECTION C-C



SECTION A-A

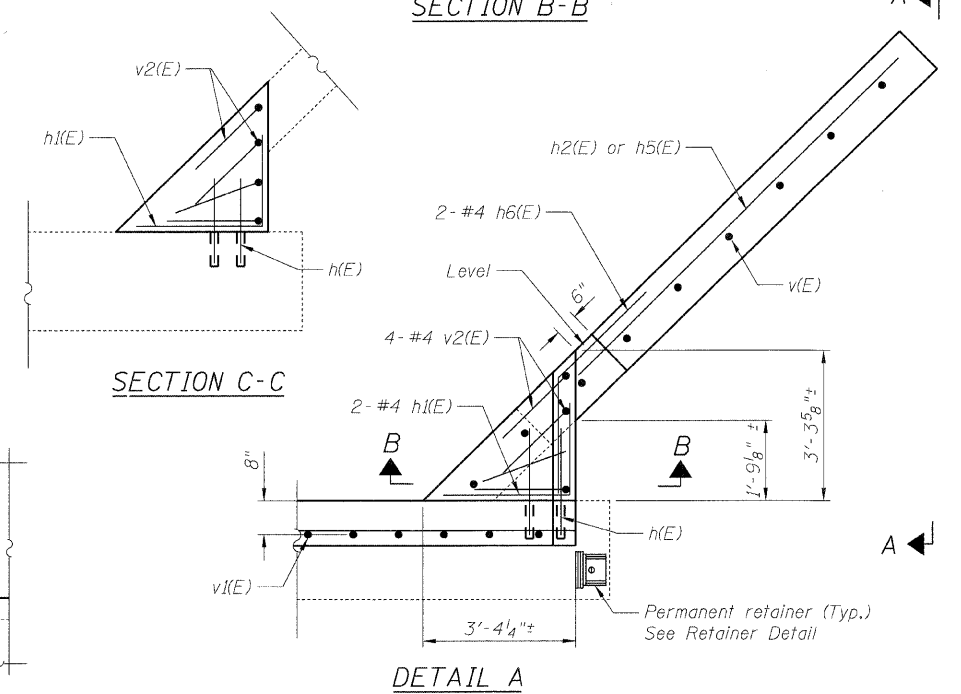
1/2" ϕ x 18" Galv. threaded rod with
3" x 3" x 3/16" ϕ washer under nut
Drill and Grout



PLAN

RETAINER DETAIL

Cost of retainer and accessories are included with Precast Prestressed Concrete Deck Beams.



DETAIL A

BILL OF MATERIAL

Bar	No.	Size	Length	Shape	
h1(E)	16	#4	2'-9"	—	
h2(E)	8	#4	5'-0"	—	
h3(E)	10	#5	17'-8"	—	
h4(E)	10	#5	14'-8"	—	
h5(E)	4	#4	11'-3"	—	
h6(E)	8	#4	6'-0"	—	
v(E)	36	#4	3'-10"	—	
v1(E)	66	#5	1'-10"	—	
v2(E)	16	#4	4'-1"	—	
v3(E)	66	#5	2'-6"	—	
v4(E)	66	#5	1'-0"	—	
Concrete Structures				Cu. Yd.	6.8
Concrete Superstructures				Cu. Yd.	3.1
Reinforcement Bars, Epoxy Coated				Lb.	1,020
Bar Splicers				Each	10

**NORTH AND SOUTH
ABUTMENTS
US 52 OVER FORKED CREEK
STA. 65+70
S.N. 099-0133**

DESIGNED	B. Sauter
CHECKED	E. Mroczek
DRAWN	R. Danley
CHECKED	B. Sauter

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CONSULTING ENGINEERS
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Tel. 773.775.4009 Fax 773.775.4014 Email chicago@ciorba.com

NOTES:

1. Drill and grout h(E) and v(E) bars 9" min., and v(E) bars 12" min. in accordance with Article 584 of the Standard Specifications. Cost included with "Reinforcement Bars, Epoxy Coated."
2. For rail anchorage details See Sheet S-8.
3. For rail post location, See Sheet S-6.
4. For typical section thru Abutment, See Sheet S-7.

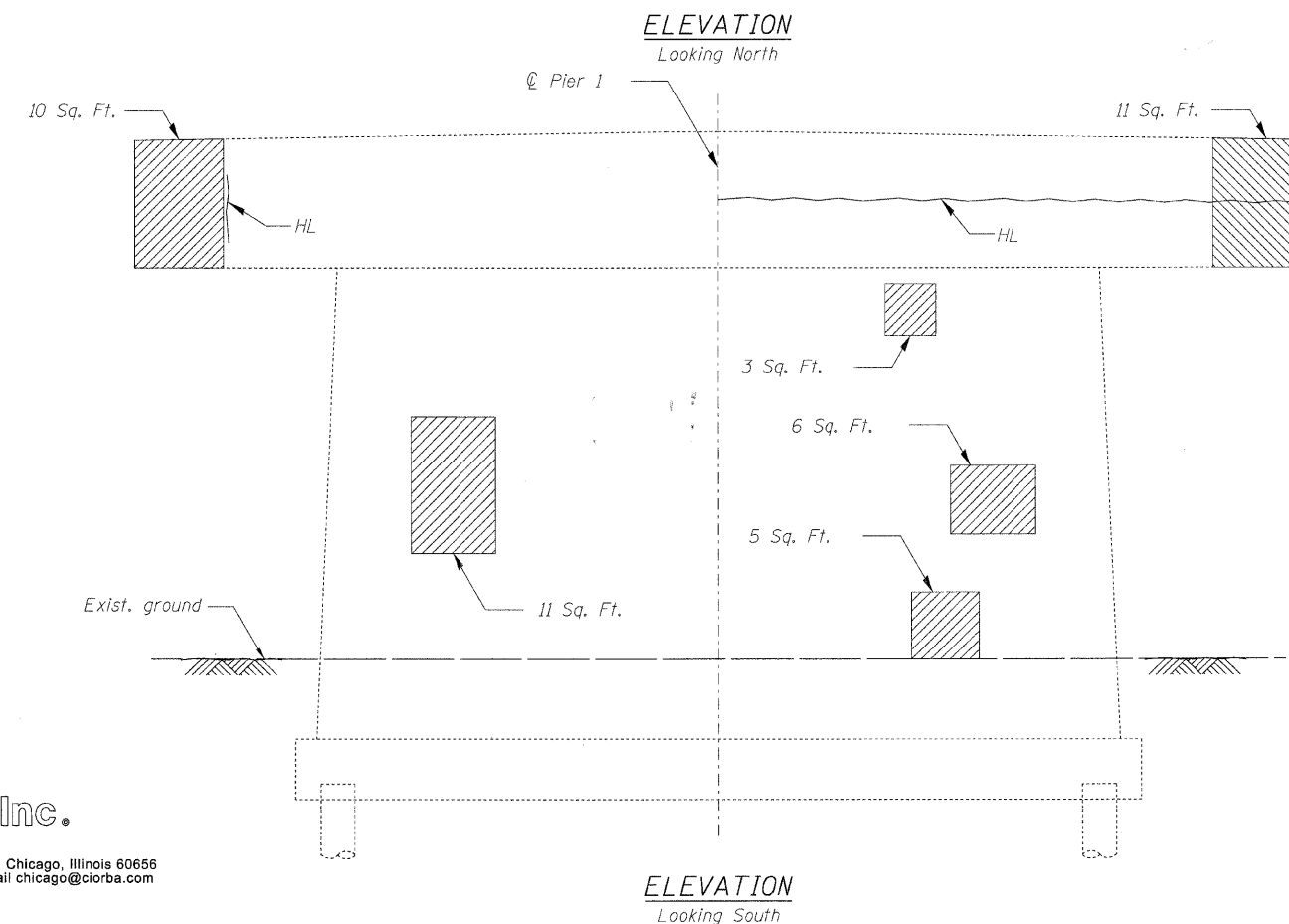
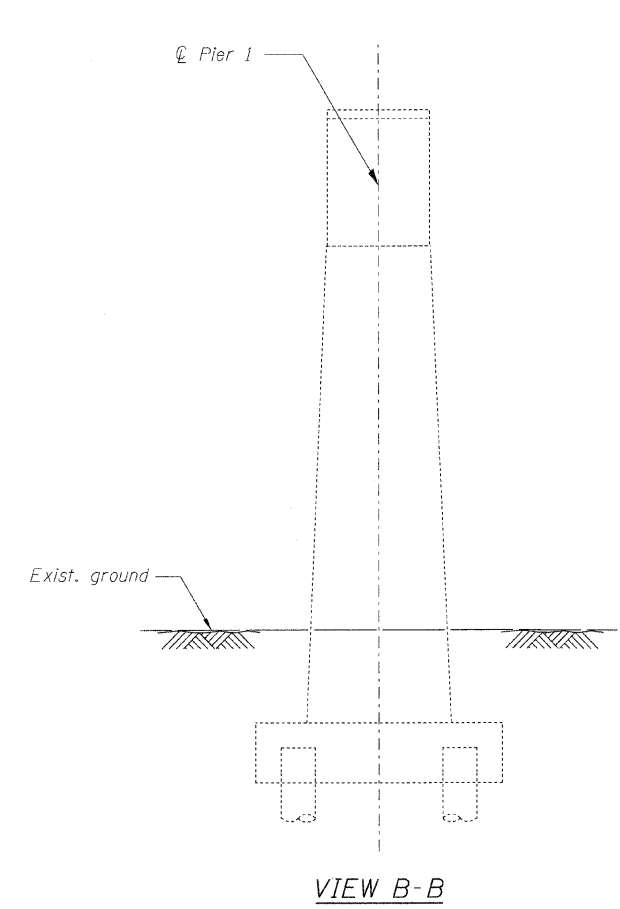
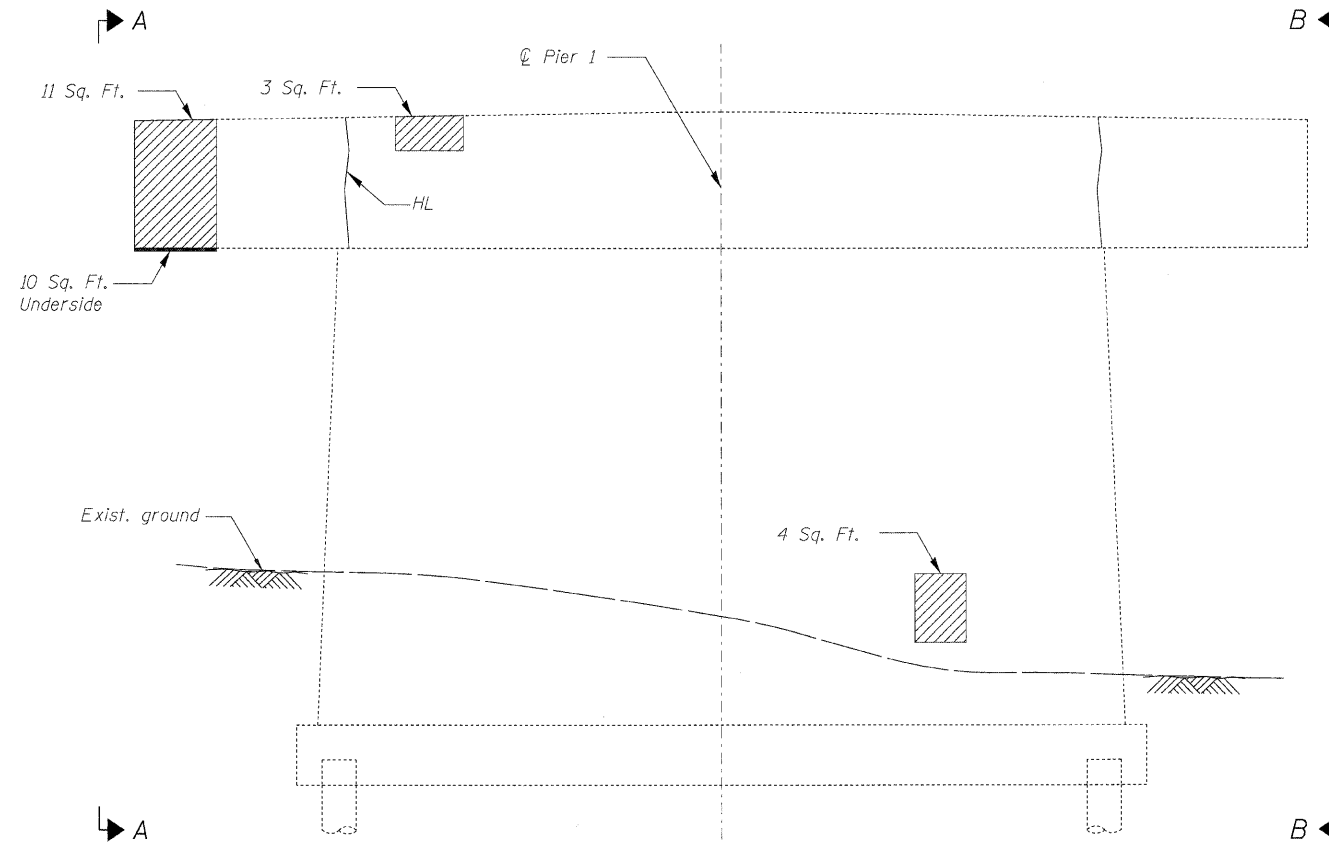
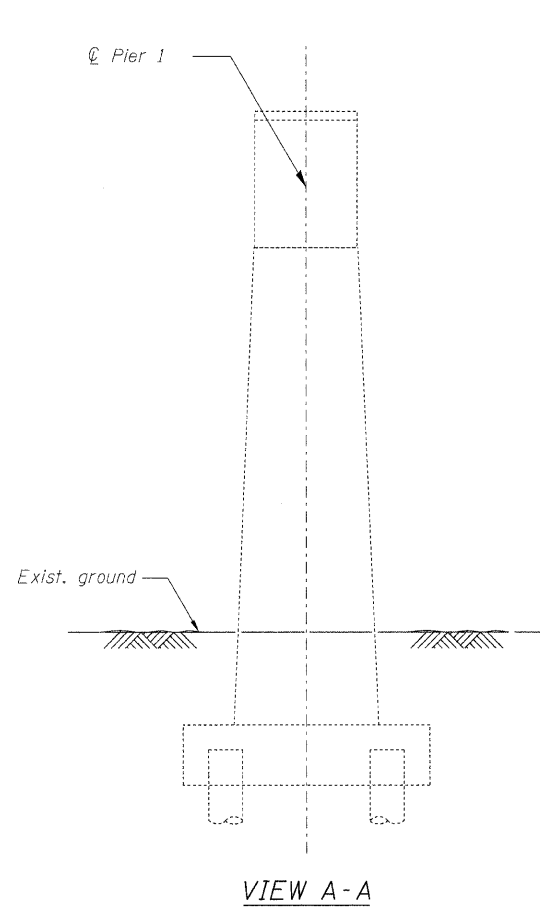
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	852	18B	WILL	31	25
S-13 SHEETS		CONTRACT NO. 60DB7			
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

rdanley

7/8/2008

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



BILL OF MATERIAL

Item	Unit	Quantity
Structural Repair of Concrete (Depth Equal to or Less than 5")	Sq. Ft.	74

LEGEND

Structural Repair of Concrete (< 5")

Hairline Crack

NOTE:
Repairs of the existing pier shall include but not be limited to the areas shown. The actual areas to be determined by the engineer at the time of construction.

PIER 1
US 52 OVER FORKED CREEK
STA. 65+70
S.N. 099-0133

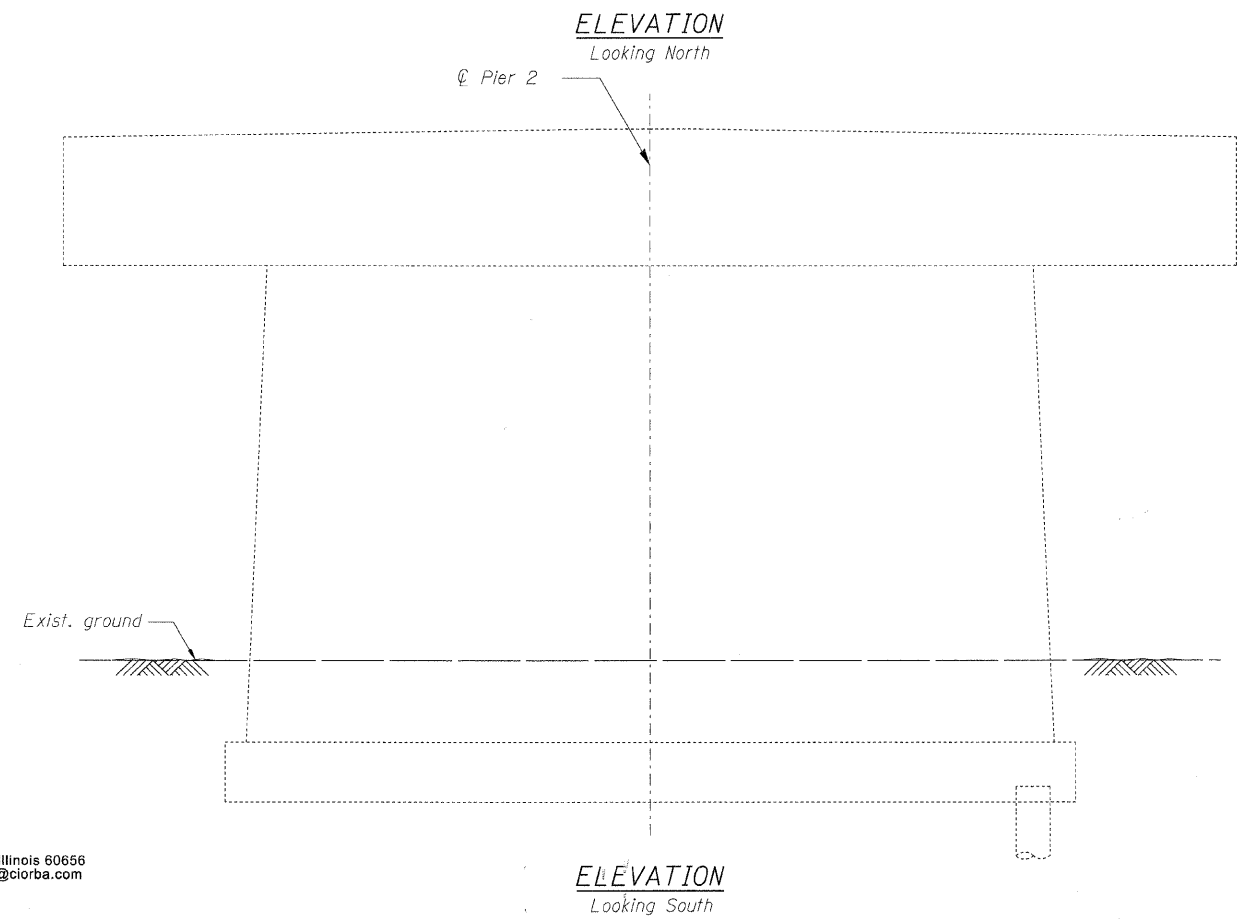
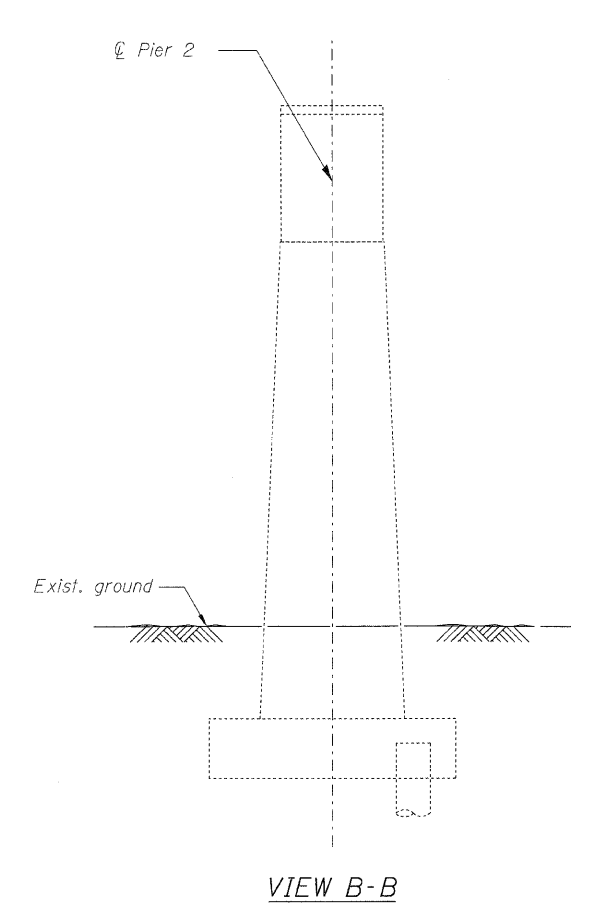
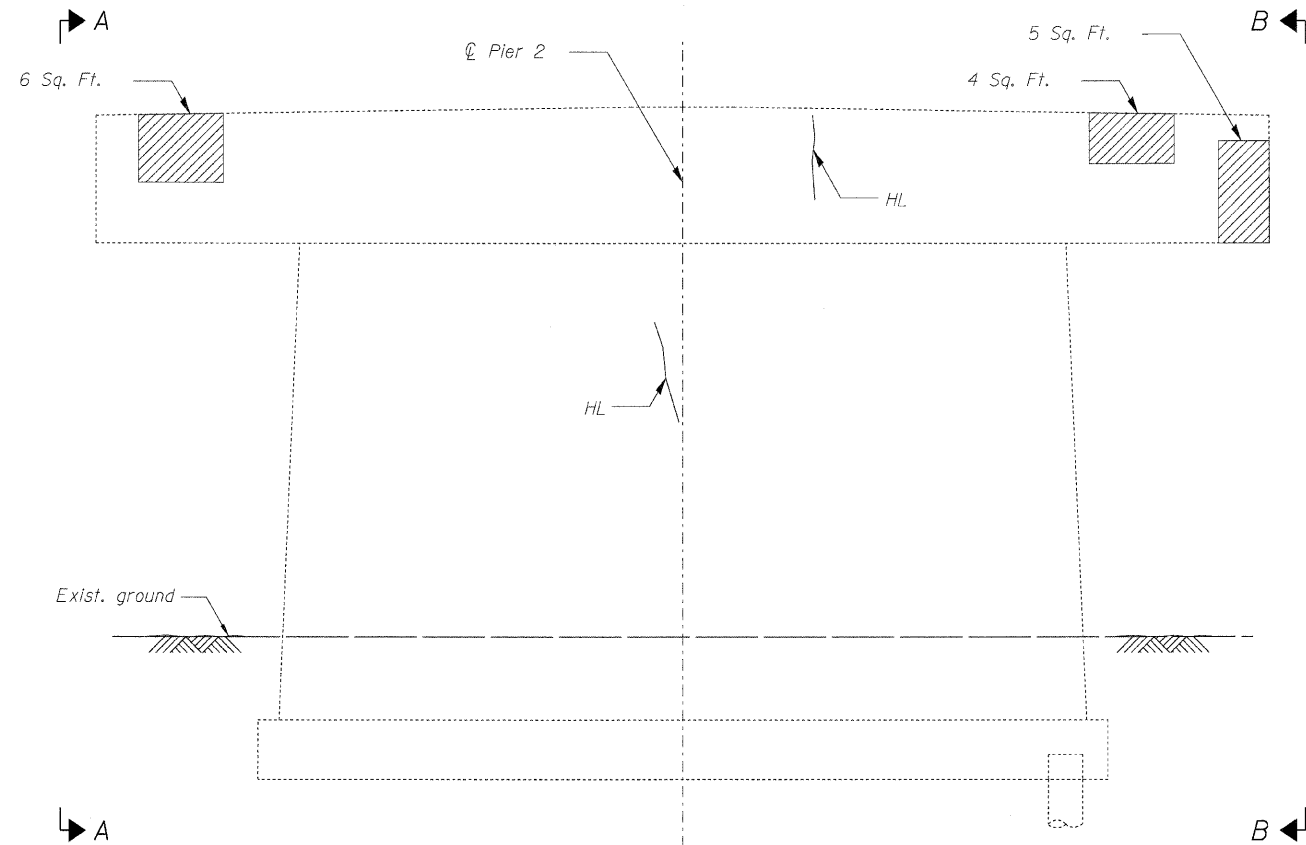
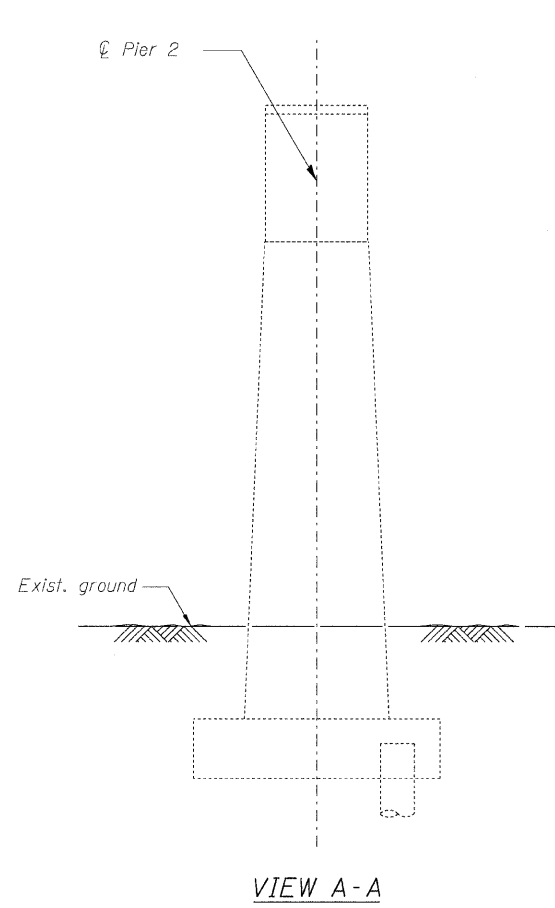
DESIGNED	B. Sauter
CHECKED	E. Mroczek
DRAWN	R. Danley
CHECKED	B. Sauter

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SHEET NO. S-11	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	852	18B	WILL	31	26
S-13 SHEETS			CONTRACT NO. 60D87		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

7/6/2008 rdanley mt:\pro_13321_23\design\Structural\Road\shant\3321_23_11_Pier1.dwg

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



BILL OF MATERIAL

Item	Unit	Quantity
Structural Repair of Concrete (Depth Equal to or Less than 5")	Sq. Ft.	15

LEGEND

	Structural Repair of Concrete (< 5")
	Hairline Crack

PIER 2
US 52 OVER FORKED CREEK
STA. 65+70
S.N. 099-0133

DESIGNED	B. Sauter
CHECKED	E. Mroczek
DRAWN	R. Danley
CHECKED	B. Sauter

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SHEET NO. S-12	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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S-13 SHEETS		CONTRACT NO. 60D87			
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

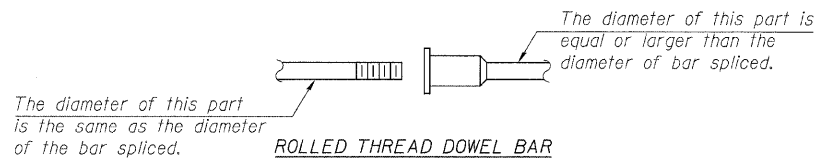
7/6/2008 rdanley

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DEPARTMENT OF TRANSPORTATION

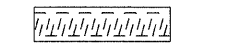
NOTES

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:

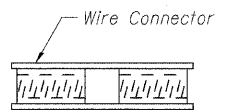
- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_l$
 - ② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times f_y \times A_l$
- Where f_y = Yield strength of lapped reinforcement bars in ksi.
 A_l = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete



ROLLED THREAD DOWEL BAR



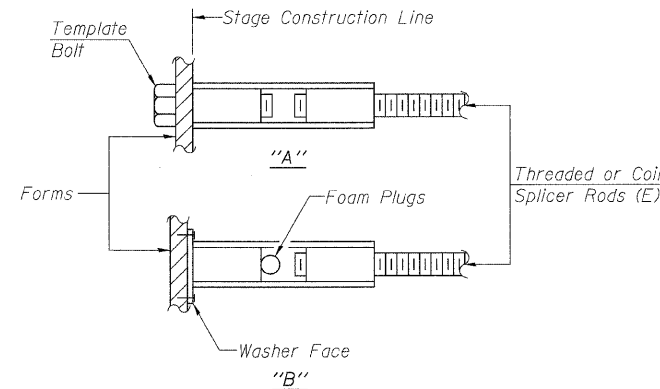
** ONE PIECE



WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTERNATIVES

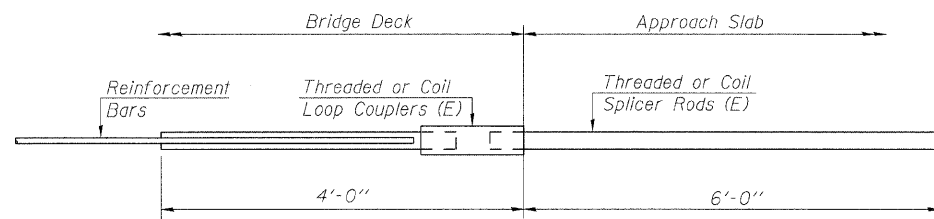
**Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



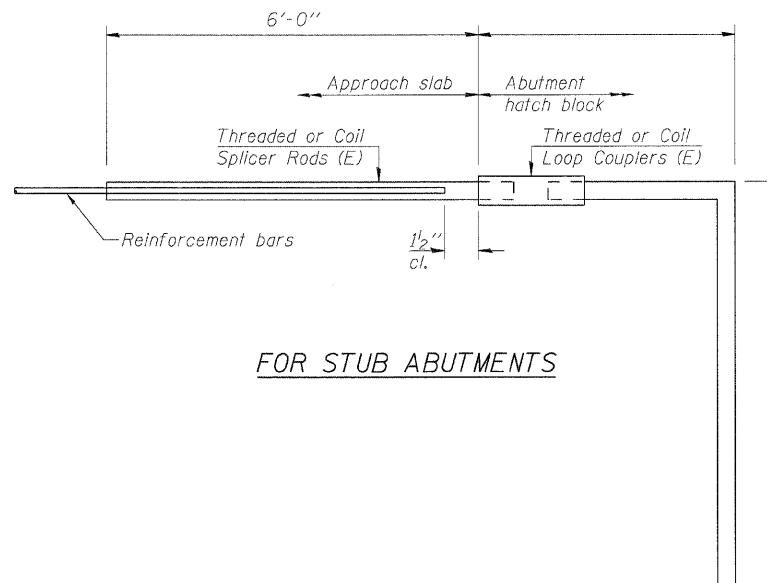
INSTALLATION AND SETTING METHODS

"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.

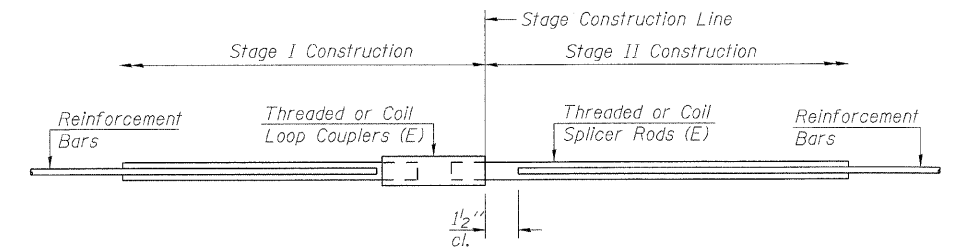
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	7.9
#5	2'-0"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8



FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS



FOR STUB ABUTMENTS



STANDARD

Bar Size	No. Assemblies Required	Location
#4	129	Deck Overlay
#5	10	Abut. Backwall

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

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

DESIGNED	B. Sauter
CHECKED	E. Mroczek
DRAWN	R. Danley
CHECKED	B. Sauter

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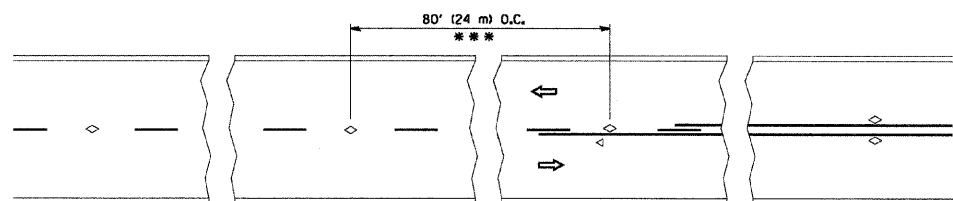
BSD-1 5-16-08

BAR SPLICER DETAILS
US 52 OVER FORKED CREEK
STA. 65+70
S.N. 099-0133

SHEET NO.	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S-13 SHEETS	852	18B	WILL	31	28
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60087					

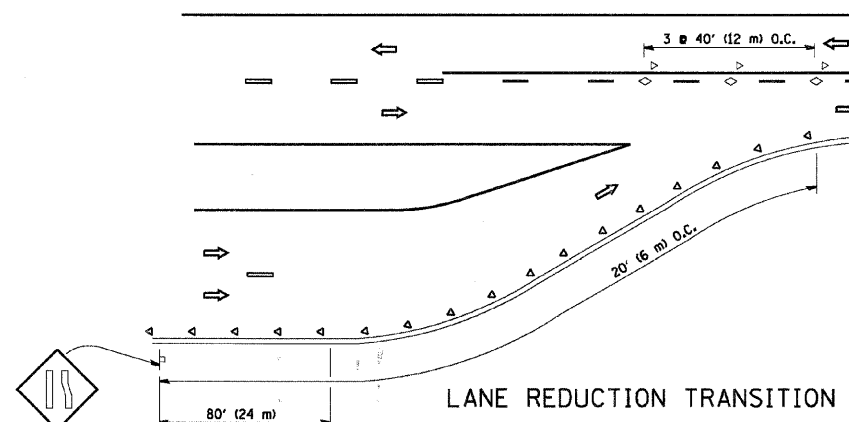
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CONTRACT NO.				
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

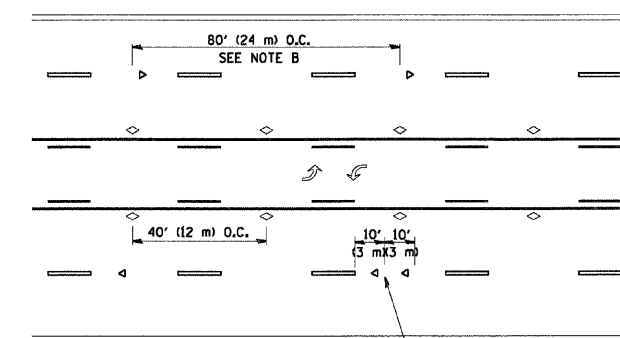


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

TWO-LANE/TWO-WAY

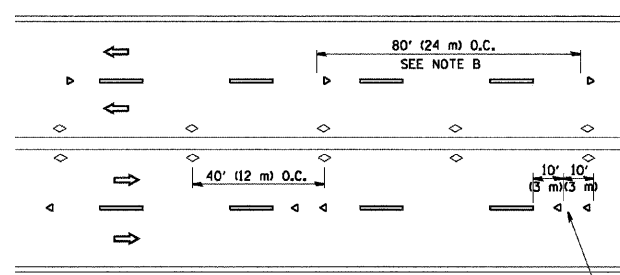


LANE REDUCTION TRANSITION



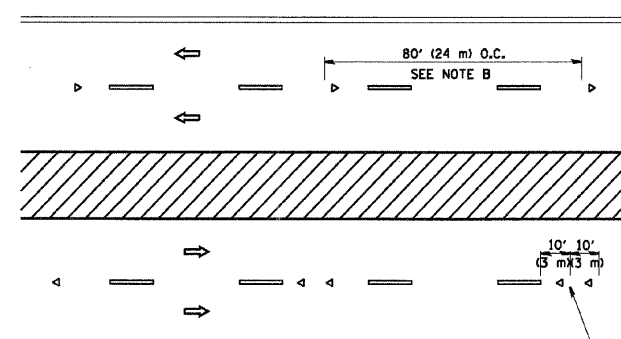
SEE NOTE A

TWO-WAY LEFT TURN



SEE NOTE A

MULTI-LANE/UNDIVIDED



SEE NOTE A

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.

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.

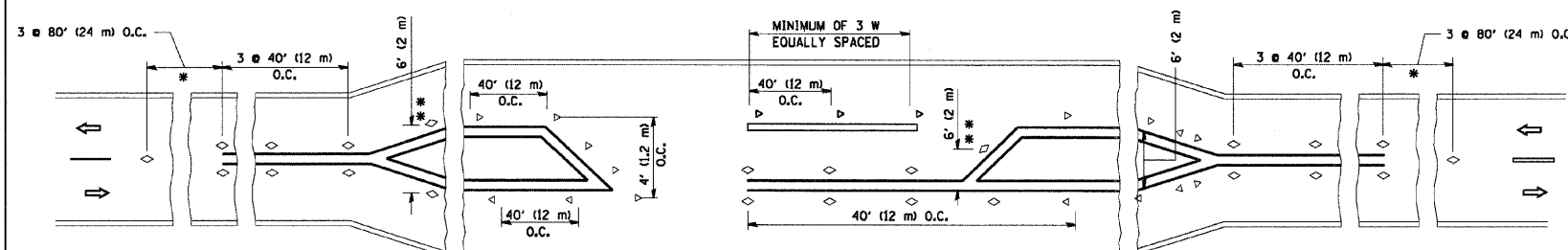
SYMBOLS

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

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.

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



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

LEFT TURN

PLOT DATE = 3/6/2007
 FILE NAME = M:\asdasd\ltdgn
 PLOT SCALE = 80000 / 1" = 2000 m
 USER NAME = bbarndt

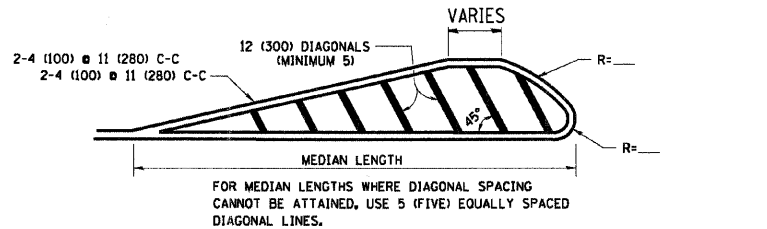
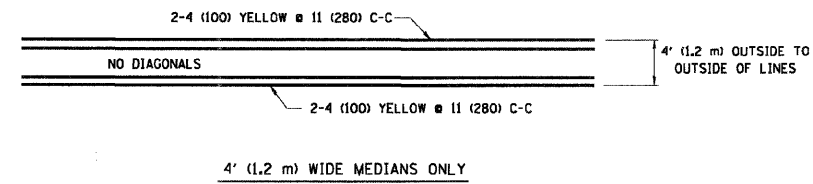
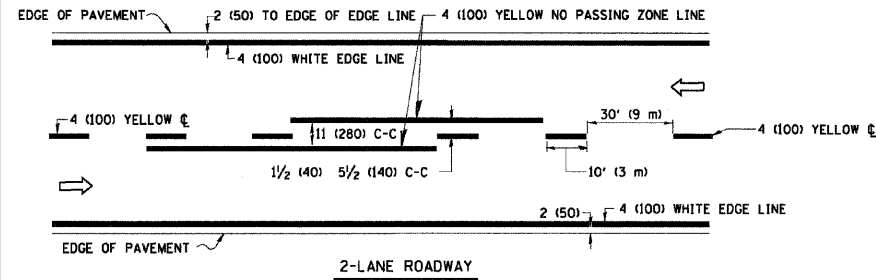
REVISIONS	
NAME	DATE
T. RAMMACHER	09-19-94
T. RAMMACHER	03-12-99
T. RAMMACHER	01-06-00

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

SCALE: NONE

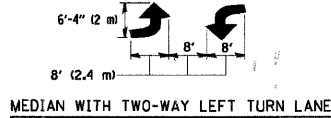
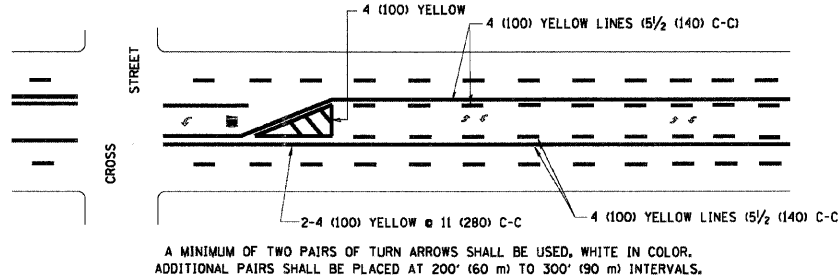
DRAWN BY CADD
 CHECKED BY
 TC-11

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
852	18B	WILL	31	30
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

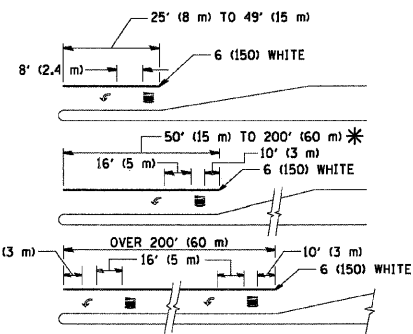


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
 75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)
 150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE



TYPICAL PAINTED MEDIAN MARKING

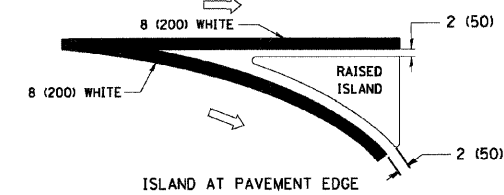
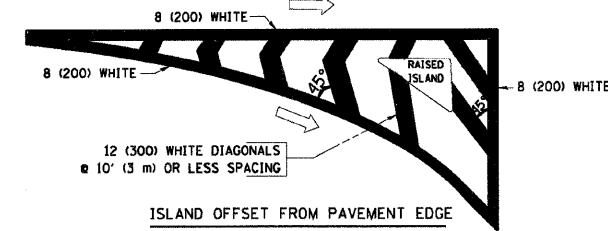


FULL SIZE LETTERS 8" (2.4 m) AND ARROWS SHALL BE USED.
 AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



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	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 2 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
CORE 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: "RR"=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

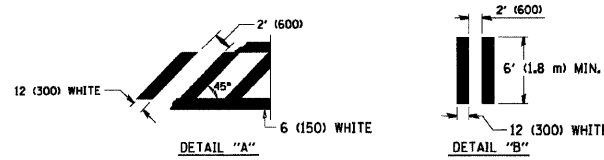
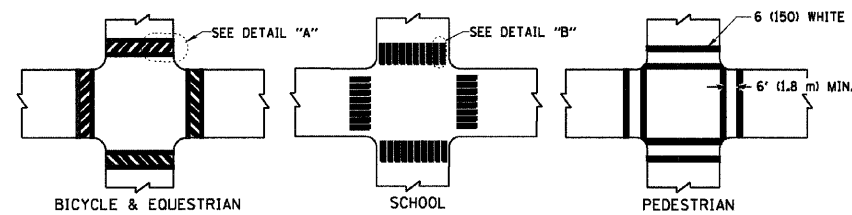
DISTRICT ONE
TYPICAL PAVEMENT
MARKINGS

SCALE: NONE

DRAWN BY CADD
CHECKED BY

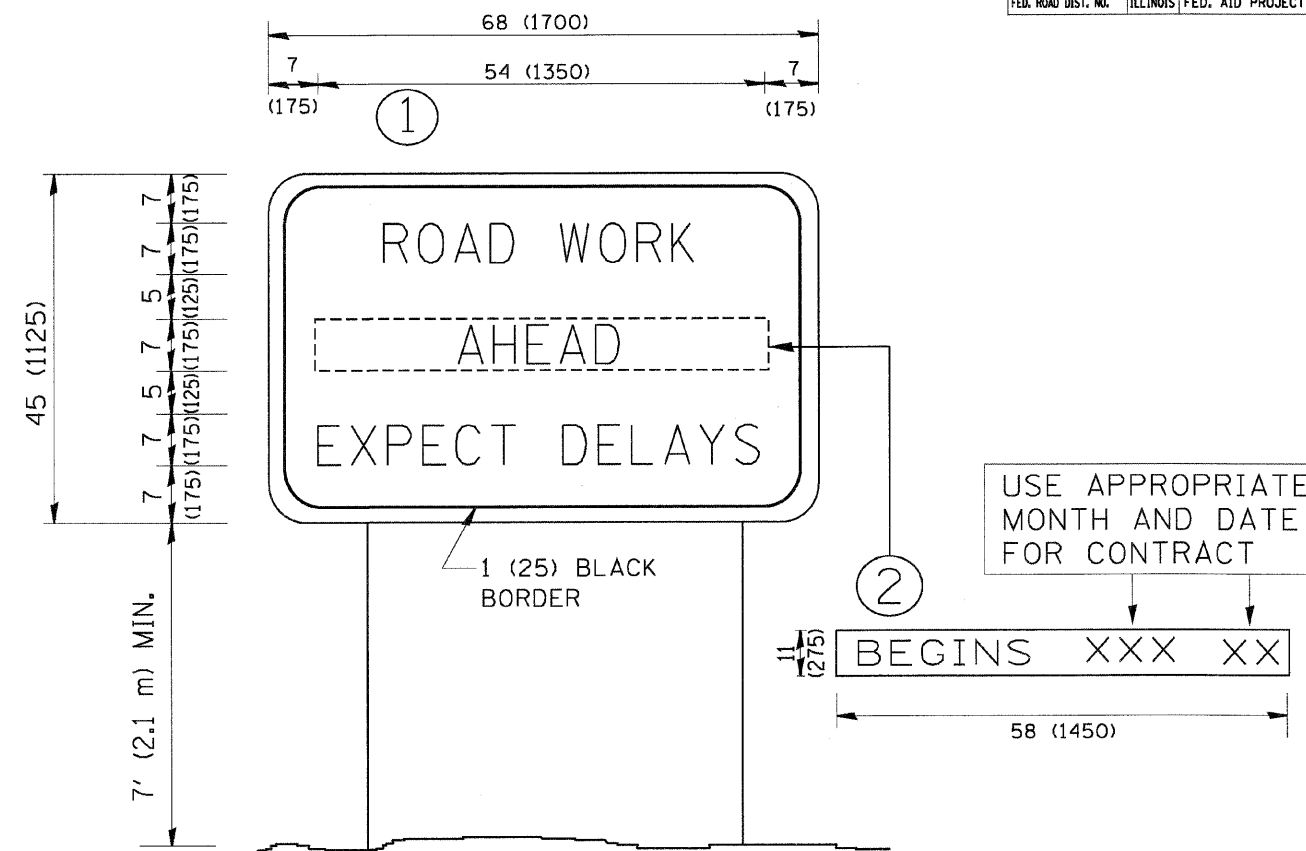
TC-13

TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING

CONTRACT NO.				
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
852	18B	WILL	31	31
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