

FOR INDEX OF SHEETS, SEE SHEET NO. 3

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

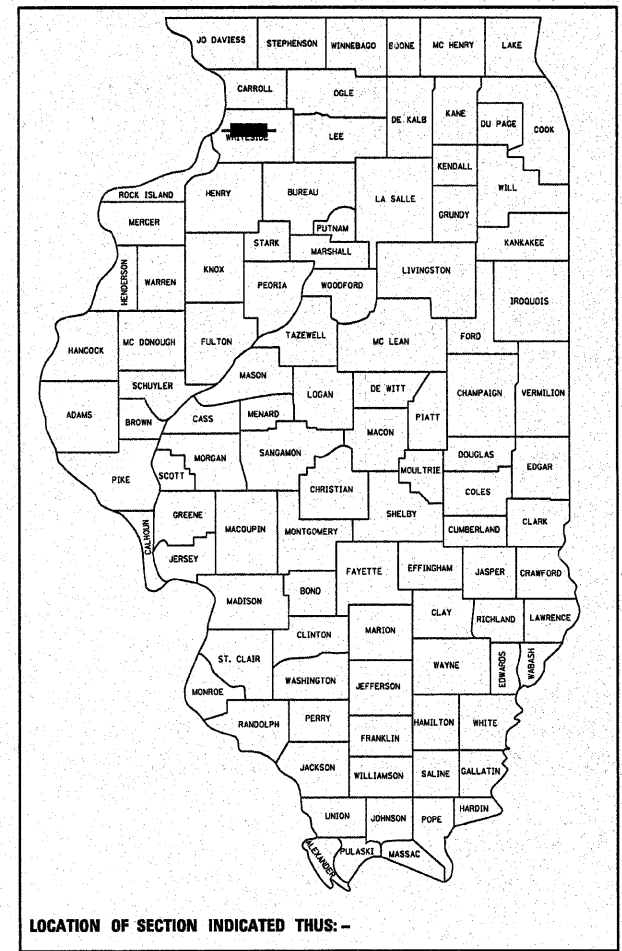
FAS ROUTE 1197 (U.S. ROUTE 30)
SECTION (110BR-1)M-1

BRIDGE REPAIR
WHITESIDE COUNTY

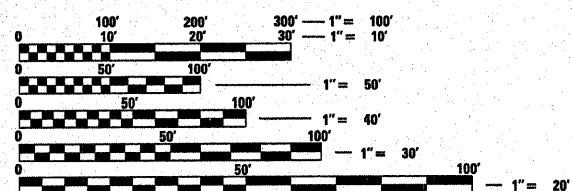
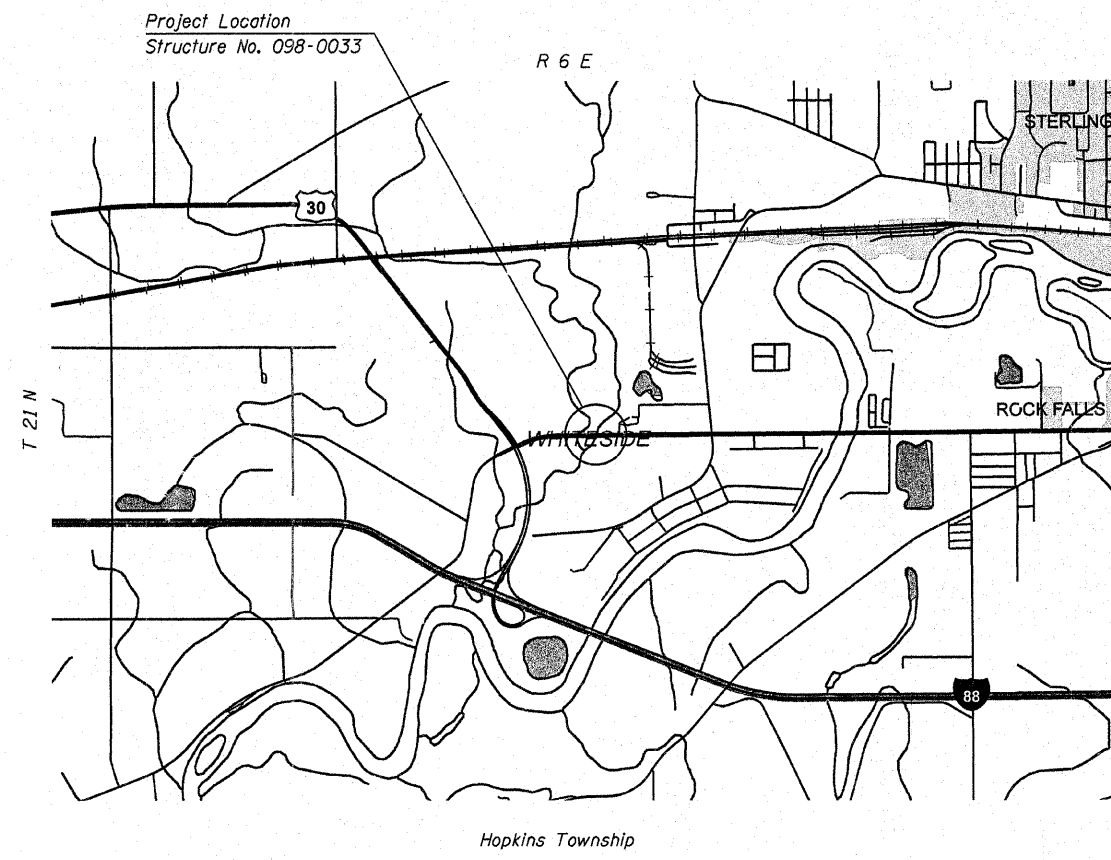
C-92-094-09

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1197	(110BR-1)M-1	WHITESIDE	13	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 64E91		

D-92-052-09



LOCATION OF SECTION INDICATED THUS: -



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

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

PROJECT ENGINEER Mahmoud Etemadi 815/284-5393

GROSS LENGTH = 448.0 FT. = 0.085 MILE
NET LENGTH = 448.0 FT. = 0.085 MILE

CONTRACT NO. 64E91

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Jan 28 20 09
George F. Ryan
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 27 20 09
Charles G. Ingersoll/D
ENGINEER OF DESIGN AND ENVIRONMENT

March 27 20 09
Christine M. Reed/D
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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

SUMMARY OF QUANTITIES

100% STATE
SFTY-2A

paycode	description	units	total quantity
40600990	TEMPORARY RAMP	SQ YD	54
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	60
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	534
50102400	CONCRETE REMOVAL	CU YD	18.9
50300255	CONCRETE SUPERSTRUCTURE	CU YD	18.9
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2990
50800515	BAR SPLICERS	EACH	38
52000110	PREFORMED JOINT STRIP SEAL	FOOT	170
63300455	REMOVAL AND REINSTALLATION OF EXISTING TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4
67000400	ENGINEERS FIELD OFFICE, TYPE A	CAL MO	3
67100100	MOBILIZATION	L SUM	1
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	1500
* 70300520	PAVEMENT MARKING TAPE, TYPE III 4"	FOOT	3480
* 70300570	PAVEMENT MARKING TAPE, TYPE III 24"	FOOT	48
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	1220
70400100	TEMPORARY CONCRETE BARRIER	FOOT	687.5
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1375
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	3240
78300100	PAVEMENT MARKING REMOVAL	SQ FT	500
X0325305	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	9
Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2
Z0030350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2

GENERAL NOTES & INDEX OF SHEETS
 US 30 OVER ELKHORN CREEK
 FAS 1197 (US 30)
 SECTION (110BR-1)M-1
 WHITESIDE COUNTY
 STRUCTURE NUMBER 098-0033

* SPECIALTY ITEM

FILE NAME =	USER NAME = lmkdj	DESIGNED - ---	REVISED - ---	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	Summary of Quantities	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
G:\BRV\CADD plans\Whiteside County\0980033.dgn	DRAWN - ---	REVISED - ---	1197			(110BR-1)M-1	Whiteside	13	2	
PLOT SCALE = 50.0000' / IN.	CHECKED - ---	REVISED - ---	CONTRACT NO. 64E91							
PLOT DATE = Wed Jan 28 09:00:17 2009	DATE - ---	REVISED - ---	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							
SCALE: _____ SHEET NO. ___ OF ___ SHEETS STA. _____ TO STA. _____										

GENERAL NOTES

The Contractor shall seed all disturbed areas within the project limits. Seeding Class 4 or 2A shall be used, except in front of properties where the grass will be mowed, then, use Seeding, Class 1. Class 2A shall be used on front slopes and ditch bottoms. Class 4 shall be used behind Type A gutter, on all backslopes and areas behind the backslope, and beyond the toe of front slope on fill sections without ditches. This work will be included in the contract unit price per Cubic Meter (Cubic Yard) for MOBILIZATION.

Fertilizer shall be applied to all disturbed areas and incorporated into the seedbed prior to seeding or placement of sod at the rate specified in Sections 250 and 252 of the Standard Specifications. This work shall be included in the cost of MOBILIZATION.

Mulch Method II shall be applied over all seeded areas. This shall be included in the cost of the MOBILIZATION

At bridge expansion joints, if temporary expansion joint bulkheads are attached to adjacent deck slabs or abutments for support, the Contractor shall cut the attachments as soon as the concrete has set to prevent joint damage due to horizontal contraction or expansion.

The Contractor shall be responsible for protecting utility property during construction operations as outlined in Article 107.31 of the Standard Specifications. A minimum of 48 hours advance notice is required for non-emergency work. The JULIE number is 800-892-0123.

The following Mixture Requirements are applicable for this project:

Mixture Uses(s):	Surface	Level Binder
PG:	PG 64-22	PG 64-22
Design Air Voids	4.0 @ N50	4.0 @ N50
Mixture Composition		
(Gradation Mixture)	IL 9.5 or 12.5	IL 9.5
Friction Aggregate	D	n/a
20 Year ESAL	2.8	2.8
Mix Unit Weight - 112 lbs/sy/in		

Bituminous and Aggregate prime coat shall be placed in accordance with Section 406 of the Standard Specifications. The cost of the prime coats shall be included in the contract unit price per ton for HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 of the type specified.

INDEX OF SHEETS

1. Cover Sheet
2. Summary of Quantities
3. General Notes, Index of Sheets
4. Traffic Control Plan
5. Roadway Approach Plan
6. General Plan & Elevation
7. Deck Plan & Cross-Section
8. Joint Details
9. Joint Details
10. Preformed Joint Strip Seal
11. Bar Splicers
12. District Standard
13. District Standard

STANDARDS

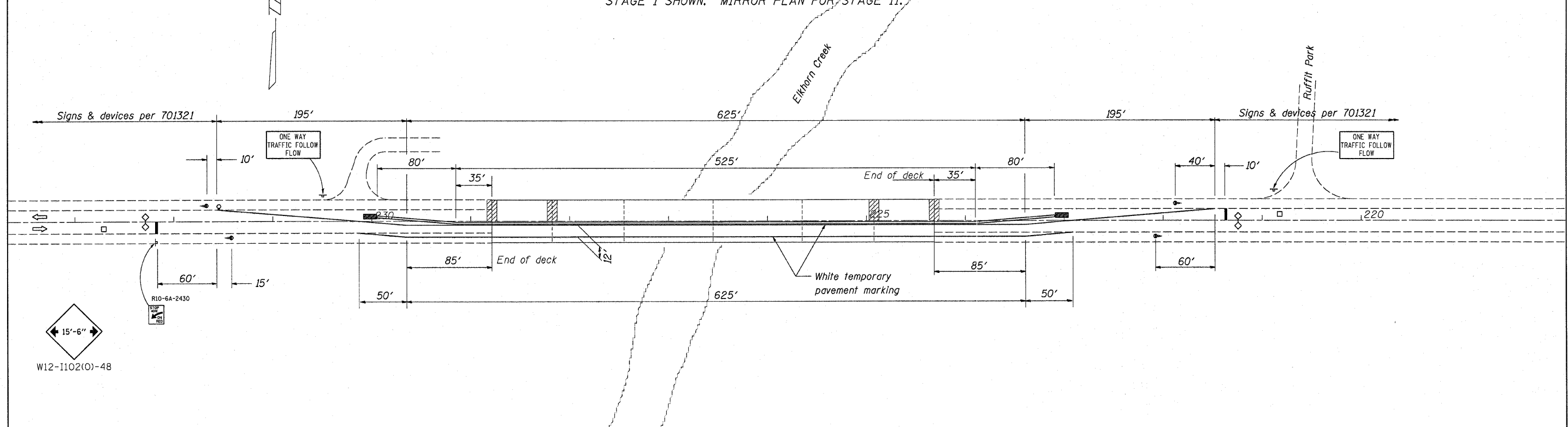
- 701006-03
- 701201-03
- 701301-03
- 701321-10
- 701901-01
- 704001-05
- 720011-01
- 728001-01
- 729001-01

GENERAL NOTES & INDEX OF SHEETS
US 30 OVER ELKHORN CREEK
FAS 1197 (US 30)
SECTION (110BR-1)M-1
WHITESIDE COUNTY
STRUCTURE NUMBER 098-0033

FILE NAME =	USER NAME = linkdj	DESIGNED -	REVISD -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	General Notes Index of Sheets	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
D:\BR\CA00\plans\Whiteside County\0980033.dgn	DRAWN -	REVISD -	1197			(110BR-1)M-1	Whiteside	13	3	
PLOT SCALE = 58.0000' / IN.	CHECKED -	REVISD -	CONTRACT NO. 64E91							
PLOT DATE = Wed Jan 28 09:00:24 2009	DATE -	REVISD -	FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT							
SCALE: _____ SHEET NO. ___ OF ___ SHEETS STA. _____ TO STA. _____										

TRAFFIC CONTROL PLAN

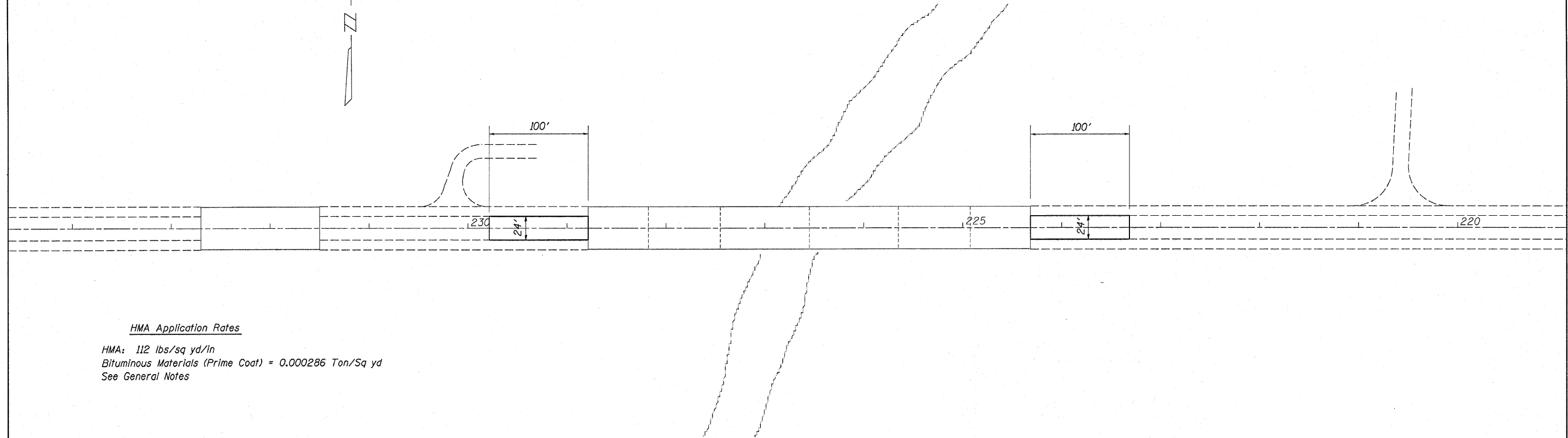
STAGE I SHOWN. MIRROR PLAN FOR STAGE II.



Temporary Concrete Barrier		Pavement Marking Tape, Type III 4"		Temporary Bridge Traffic Signals		Paint Pavement Marking - Line 4"		Work Zone Pavement Marking Removal			
Stage I	Taper	87.5	Foot	Standard 701321	Each	Stop Bar to Stop Bar	Foot	Stage I	Temporary Lines	610	Sq. Ft.
	Tangent	512.5	1740		1	Edge Lines	2160	Stage II	Temporary Lines	610	
	Taper	87.5	1740	Total	1	Centerline	1080				
Total		687.5	3480			Total	3240	Total		1220	
Relocate Temporary Concrete Barrier		Pavement Marking Removal		Pavement Marking Tape, Type III 24"		IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3		IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3			
Stage II		Foot	Sq. Ft.	Stop Bars	Foot	Stage I	2	Stage II	2		
Temporary Storage		687.5	250	Stage I	24	Total	2	Total	2		
		687.5	250	Stage II	24						
Total		1375	500	Total							

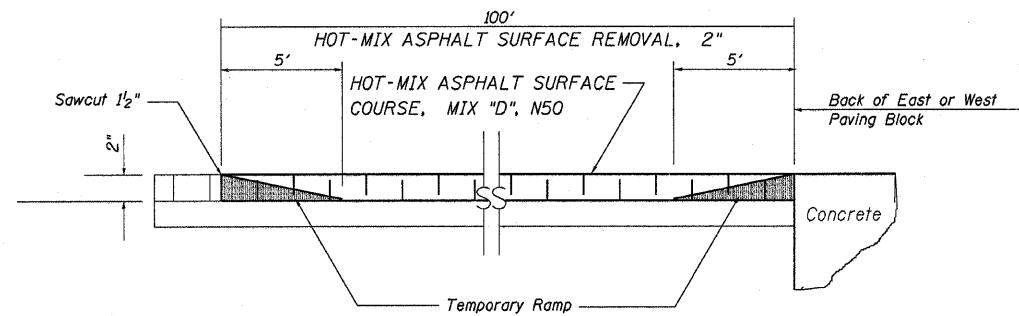
TRAFFIC CONTROL PLAN
 US 30 OVER ELKHORN CREEK
 FAS 1197 (US 30)
 SECTION (110BR-1)M-1
 WHITESIDE COUNTY
 STRUCTURE NUMBER 098-0033

APPROACH PLAN



HMA Application Rates

HMA: 112 lbs/sq yd/in
 Bituminous Materials (Prime Coat) = 0.000286 Ton/Sq yd
 See General Notes



Roadway Profile

HOT-MIX ASPHALT SURFACE REMOVAL, 2"

	Sq Yd
East Approach	267
West Approach	267
Total	534 Sq Yd

Temporary Ramp

	Sq Yd
East Approach	27
West Approach	27
Total	54 Sq YD

HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50

	Ton
East Approach	30
West Approach	30
Total	60 Ton

ROADWAY APPROACH PLAN
US 30 OVER ELKHORN CREEK
FAS 1197 (US 30)
SECTION (110BR-1)M-1
WHITESIDE COUNTY
STRUCTURE NUMBER 098-0033

FILE NAME =	USER NAME = linkdj	DESIGNED -	REVISIED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	Roadway Approach Plan			F.A.S. RTE. 1197	SECTION (110BR-1)M-1	COUNTY Whiteside	TOTAL SHEETS 13	SHEET NO. 5
D:\BRYCAD\plans\Whiteside County\0980033.dgn		DRAWN -	REVISIED -					ILLINOIS FED. AID PROJECT				
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISIED -					SCALE: _____ SHEET NO. ___ OF ___ SHEETS STA. _____ TO STA. _____				
PLOT DATE = Wed Jan 28 09:00:35 2009		DATE -	REVISIED -									

GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr. 60. See Special Provisions.

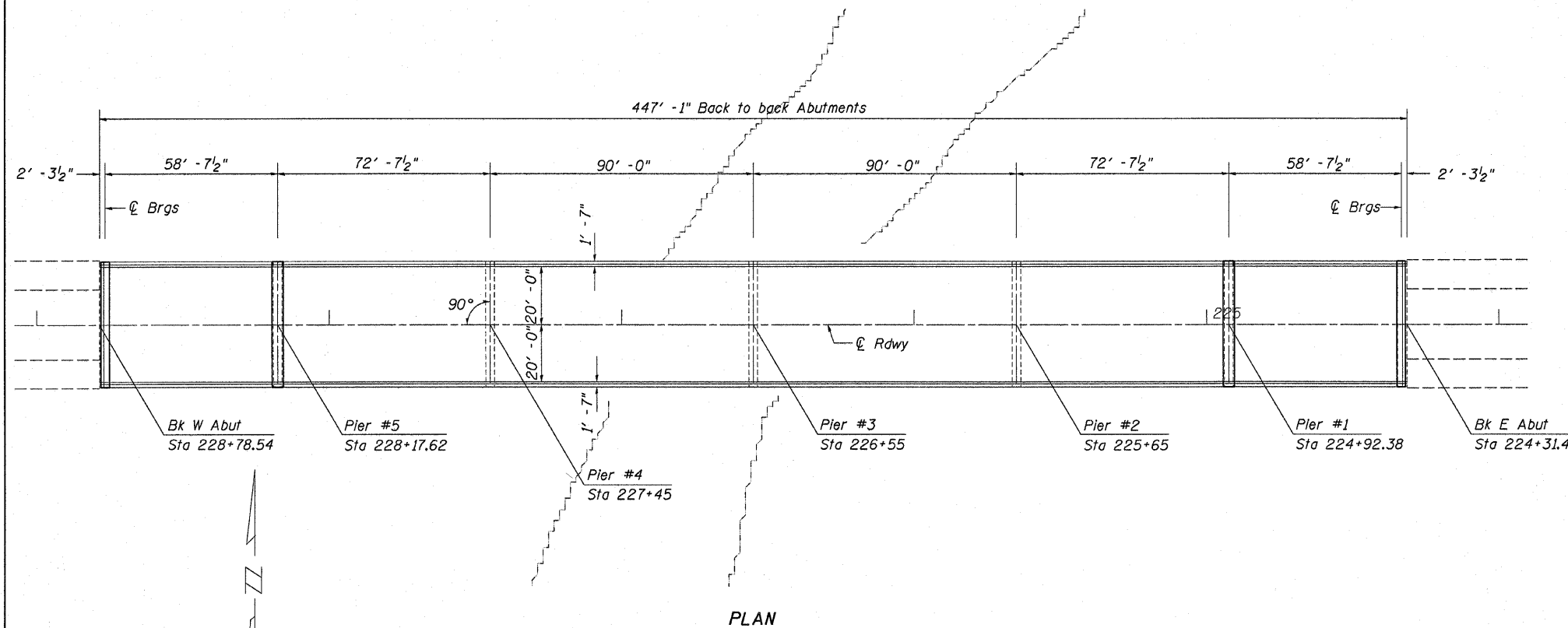
Reinforcement bars designated (E) shall be epoxy coated.

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

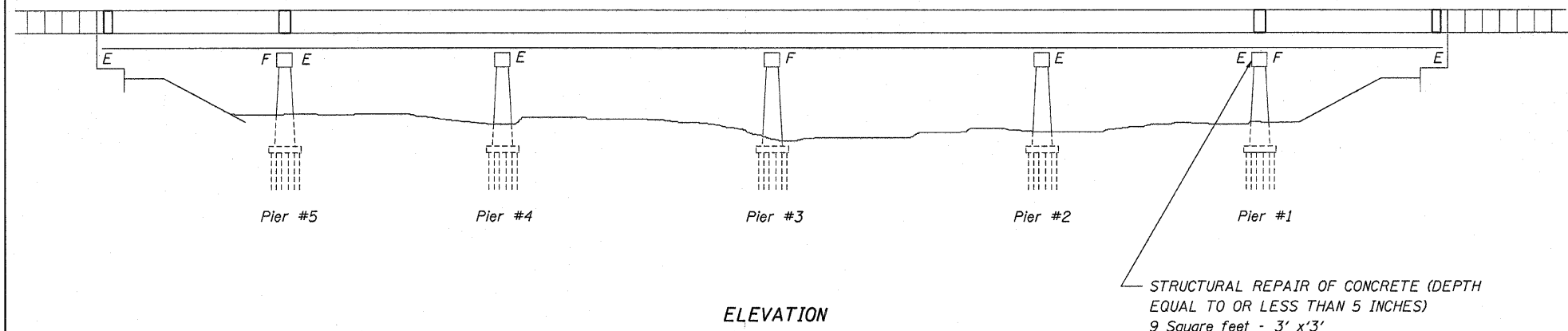
Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost of this work will be included in the pay item covering removal of existing concrete.

Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal

Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the deck is poured at an ambient temperature other than 50° F.



PLAN



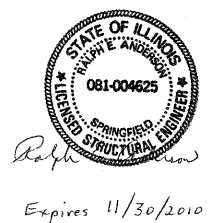
ELEVATION

Remove and replace joints at abutments and piers 1 & 5

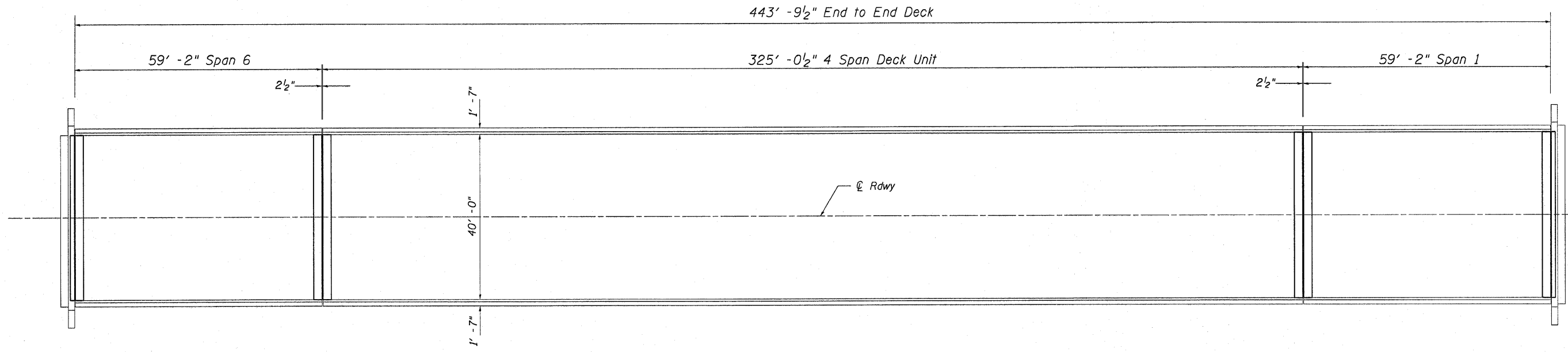
TOTAL BILL OF MATERIALS

ITEM	UNIT	QUANTITY
CONCRETE REMOVAL	CU YD	18.9
CONCRETE SUPERSTRUCTURE	CU YD	18.9
REINFORCEMENT BARS, EPOXY COATED	POUND	2330
PREFORMED JOINT STRIP SEAL	FOOT	170
BAR SPLICERS	EACH	38
REM REIN T B TERM T6	EACH	4
STR REP CON DP = < 5	SQ FT	9

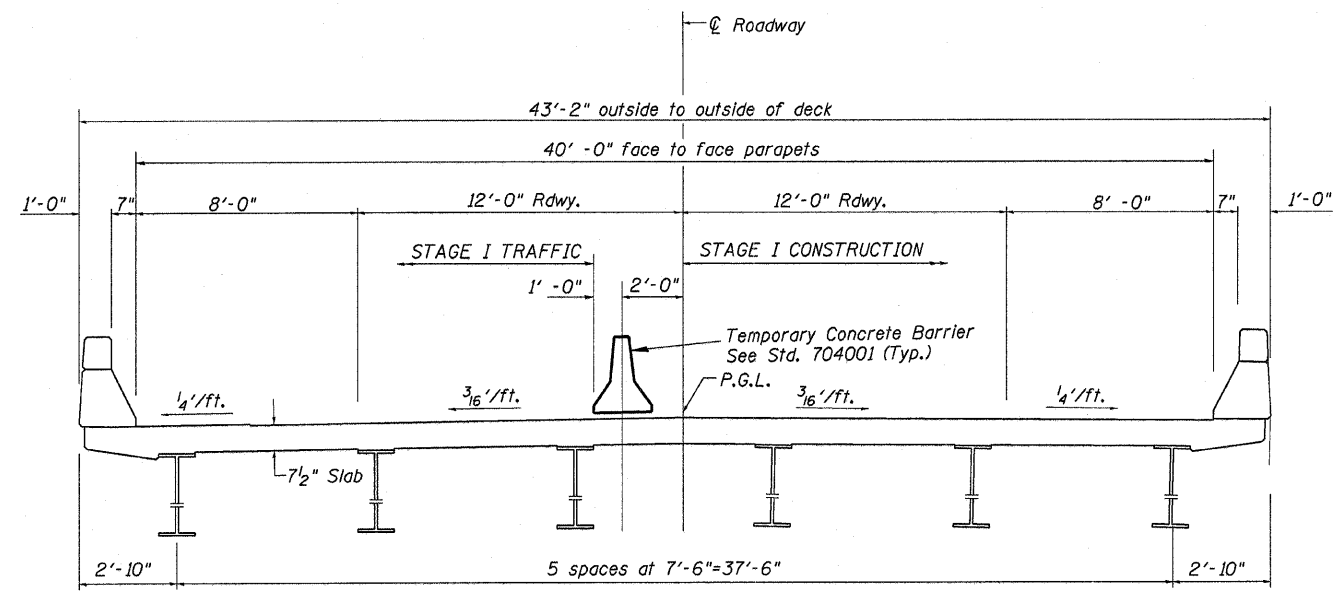
**GENERAL PLAN & ELEVATION
US 30 OVER ELKHORN CREEK
FAS 1197 (US 30)
SECTION (110BR-1)M-1
WHITESIDE COUNTY
STRUCTURE NUMBER 098-0033**



FILE NAME =	USER NAME = linkdj	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN & ELEVATION	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
D:\BR\CADD\plans\Whiteside County\0980033.dgn		DRAWN -	REVISED -			1197	(110BR-1)M-1	Whiteside	13	6
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -			CONTRACT NO. 64E91				
PLOT DATE = Wed Jan 28 09:00:42 2009		DATE -	REVISED -			FED. ROAD DIST. NO. [] ILLINOIS FED. AID PROJECT				



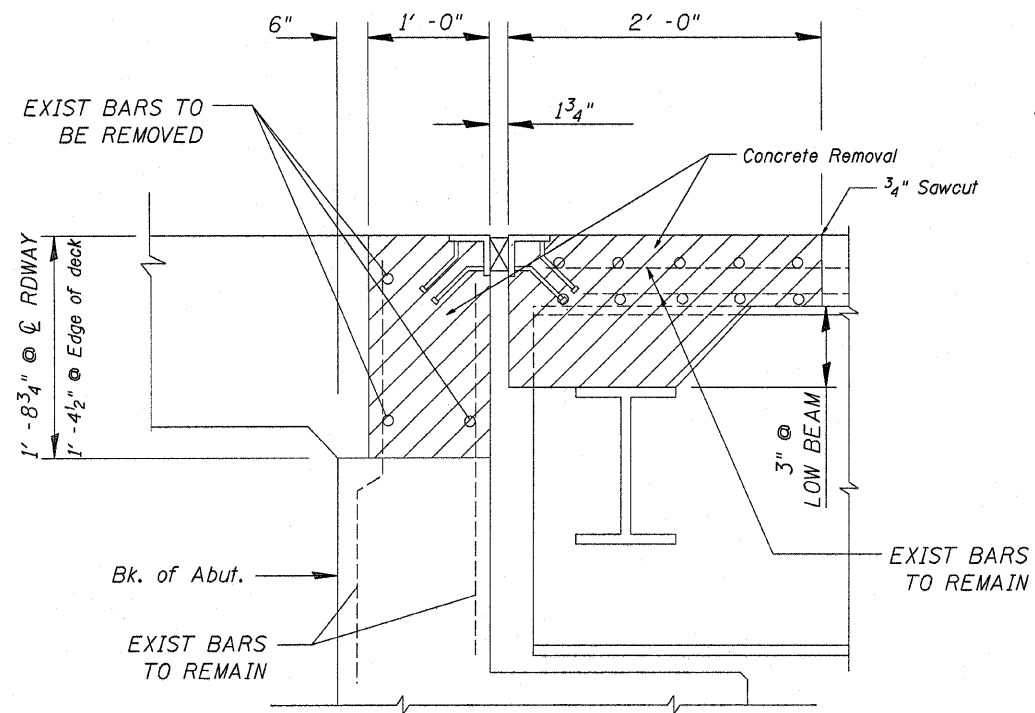
DECK PLAN



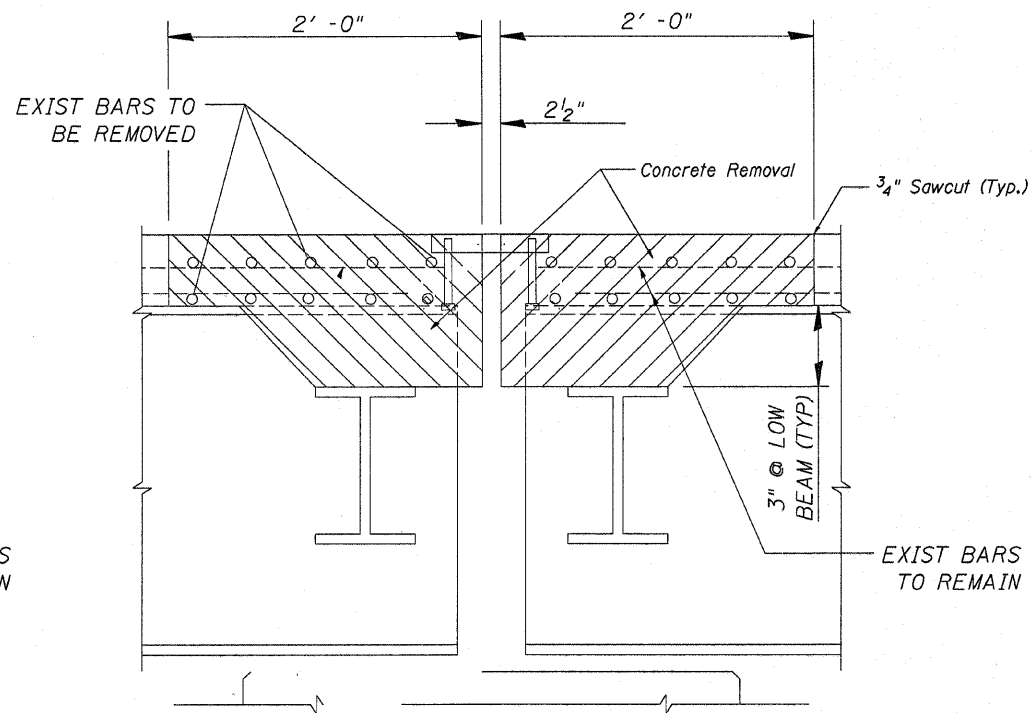
CROSS SECTION
LOOKING AHEAD WEST
Stage 1

DECK PLAN & CROSS-SECTION
US 30 OVER ELKHORN CREEK
FAS 1197 (US 30)
SECTION (110BR-1)M-1
WHITESIDE COUNTY
STRUCTURE NUMBER 098-0033

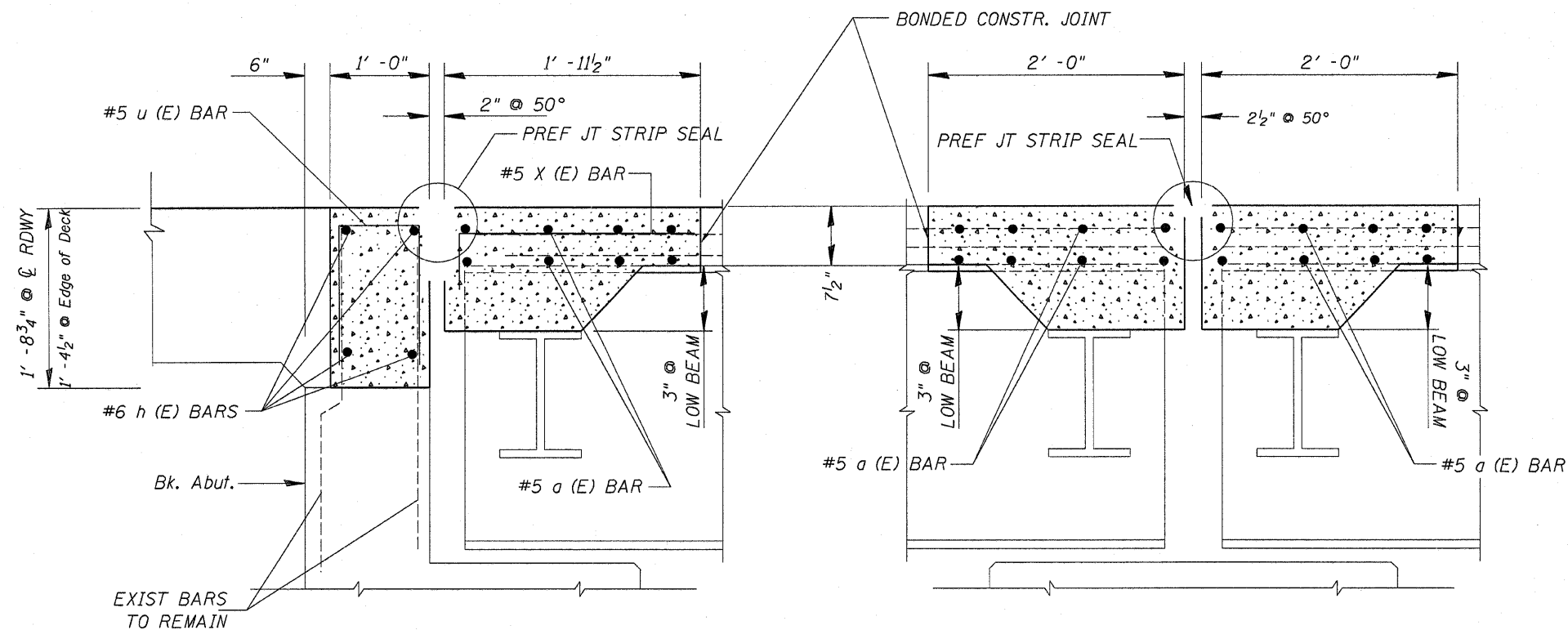
FILE NAME =	USER NAME = Iurkdj	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	Deck Plan & Cross Section	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
D:\BRV\CADD\plans\Whiteside County\0980033.dgn		DRAWN -	REVISED -			1197	(110BR-1)M-1	Whiteside	13	7
PLOT SCALE = 58.0000' / IN.		CHECKED -	REVISED -			CONTRACT NO. 64E91		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		
PLOT DATE = Wed Jan 28 09:00:48 2009		DATE -	REVISED -			SCALE: _____	SHEET NO. _____ OF _____ SHEETS	STA. _____ TO STA. _____		



EXIST SECTION THRU ABUTMENTS



EXIST SECTION THRU PIERS 1 & 5



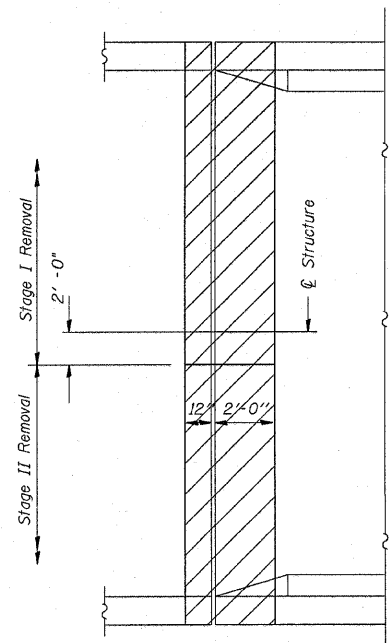
PROP SECTION THRU ABUTMENTS

PROP SECTION THRU PIERS 1 & 5

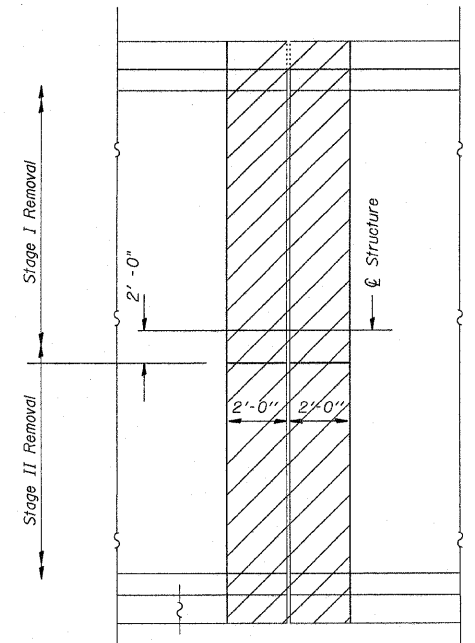
NOTE: EXISTING REINFORCEMENT BARS SHOWN ARE TO BE CLEANED AND INCORPORATED INTO NEW CONSTRUCTION

JOINT DETAILS
 US 30 OVER ELKHORN CREEK
 FAS 1197 (US 30)
 SECTION (110BR-1)M-1
 WHITESIDE COUNTY
 STRUCTURE NUMBER 098-0033

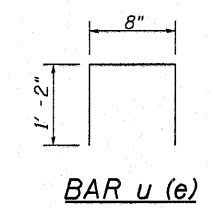
FILE NAME =	USER NAME = jmkdj	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	Joint Details		F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
D:\BR\CAOD plans\Whiteside County\0980033.dgn		DRAWN -	REVISED -				1197	(110BR-1)M-1	Whiteside	13	8
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -				CONTRACT NO. 64E91				
PLOT DATE = Wed Jan 28 09:00:56 2009		DATE -	REVISED -				FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				
				SCALE: _____ SHEET NO. ___ OF ___ SHEETS STA. _____ TO STA. _____							



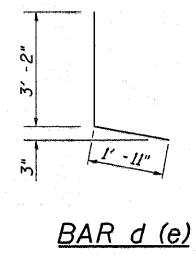
EXISTING PARTIAL PLAN
(At Abutment)



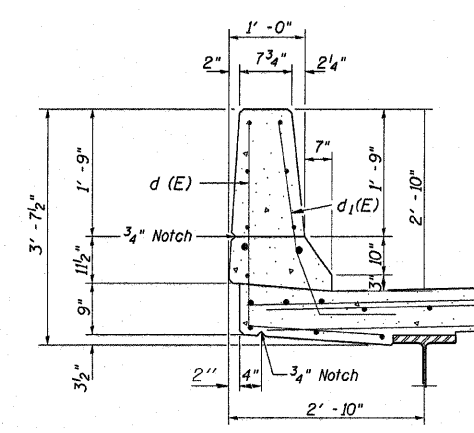
EXISTING PARTIAL PLAN
(At Piers 1 & 5)



BAR u (e)

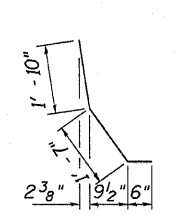


BAR d (e)

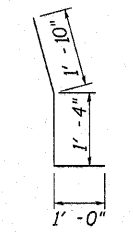


TYPICAL SECTION THRU PARAPET

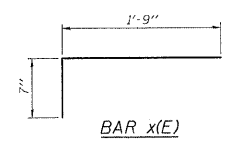
•• Existing Reinforcement



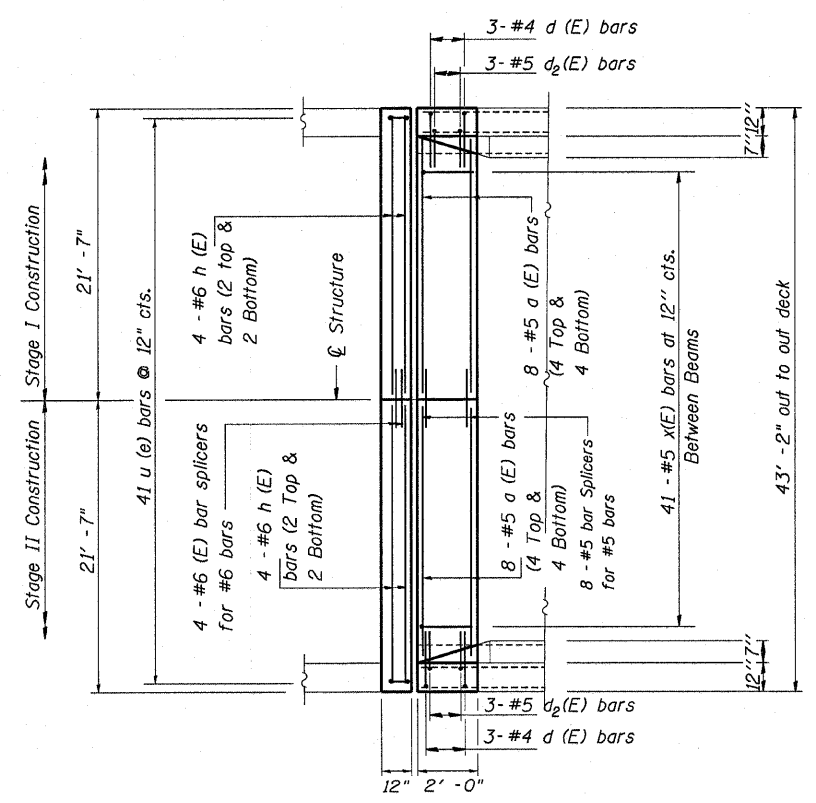
BAR d1 (e)



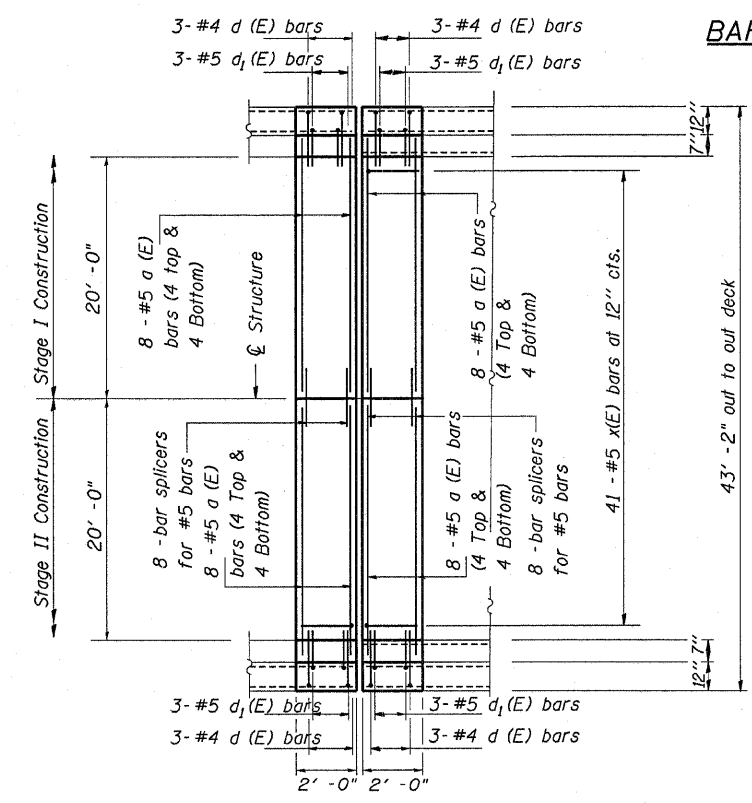
BAR d2 (e)



BAR x (e)



PROPOSED PARTIAL PLAN
(At Abutment)



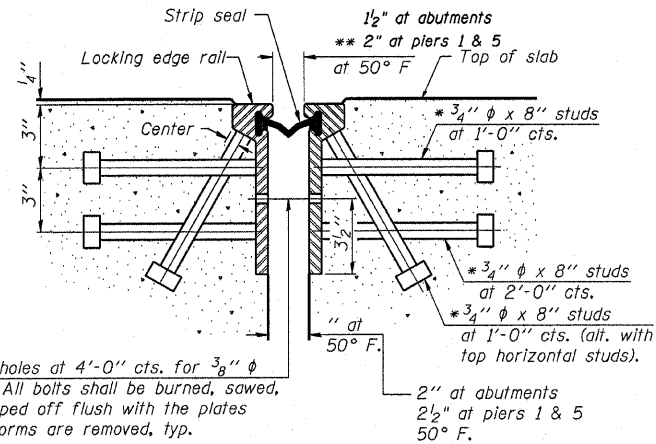
PROPOSED PARTIAL PLAN
(At Piers 1 & 5)

Bill of Material

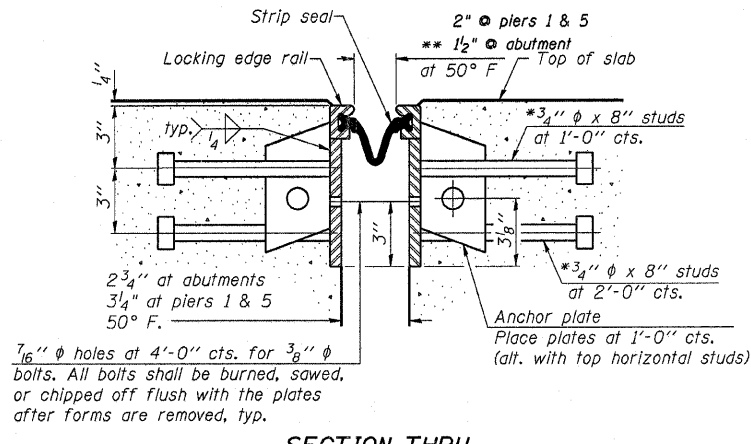
BAR	NO.	SIZE	LENGTH	SHAPE
a (E)	96	5	20' - 0"	—
d (E)	36	4	5' - 1"	J
d1 (E)	24	5	3' - 11"	J
d2 (E)	12	5	4' - 2"	J
h (E)	8	6	21' - 4"	—
u (E)	82	5	3' - 0"	U
x (E)	82	5	2' - 4"	—
CONCRETE SUPERSTRUCTURE			CU YD	18.9
CONCRETE REMOVAL			CU YD	18.9
REINFORCEMENT BARS, EPOXY COATED			POUND	2990
PREFORMED JOINT STRIP SEAL			FOOT	170
BAR SPLICERS			EACH	38
REM REIN T B TERM T6			EACH	4

JOINT DETAILS
US 30 OVER ELKHORN CREEK
FAS 1197 (US 30)
SECTION (110BR-1)M-1
WHITESIDE COUNTY
STRUCTURE NUMBER 098-0033

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



SECTION THRU ROLLED RAIL JOINT

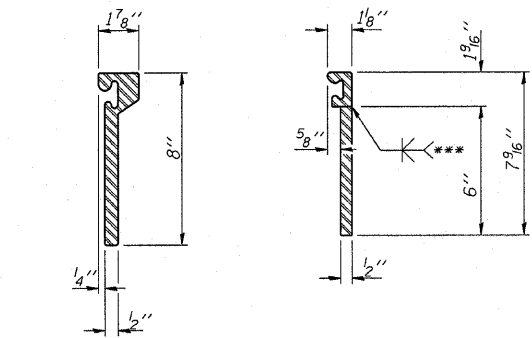


SECTION THRU WELDED RAIL JOINT

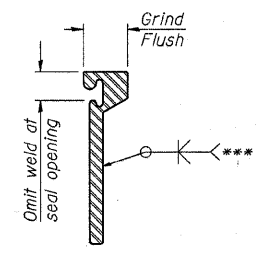
Notes:
 The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.
 The 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. Locking Edge Rails may be spliced at slope discontinuities and stage construction joints.
 The manufacturer's recommended installation methods shall be followed. The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.
 All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

7/16" φ holes at 4'-0" cts. for 3/8" φ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

7/16" φ holes at 4'-0" cts. for 3/8" φ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.



ROLLED EXTRUDED RAIL WELDED RAIL

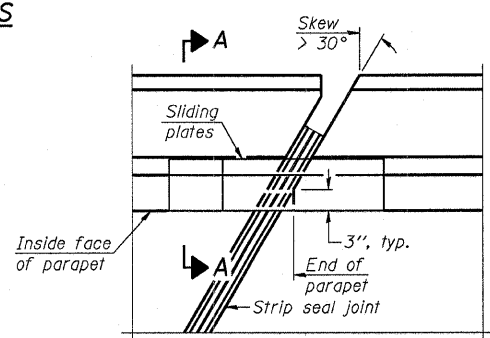


***Back gouge not required if complete joint penetration is verified by mock-up.

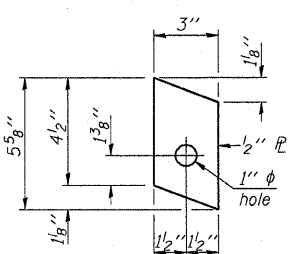
LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue.

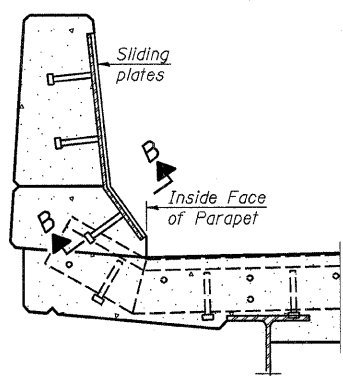
LOCKING EDGE RAILS



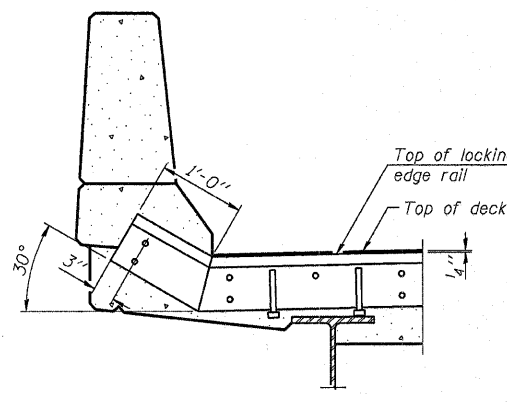
PLAN



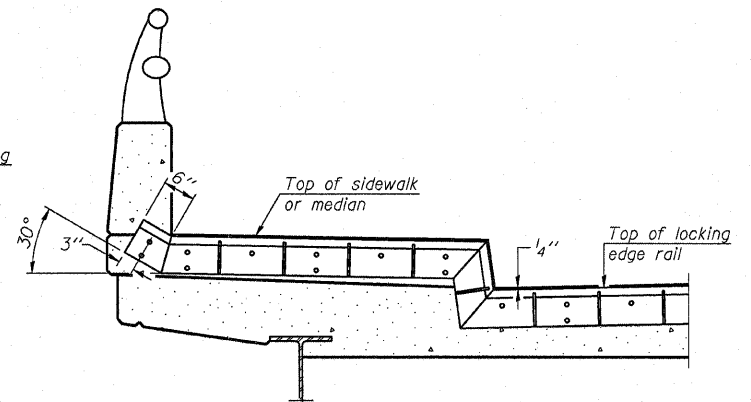
ANCHOR PLATE (for welded rail)



SECTION A-A POINT BLOCK DETAILS (for skews > 30°)



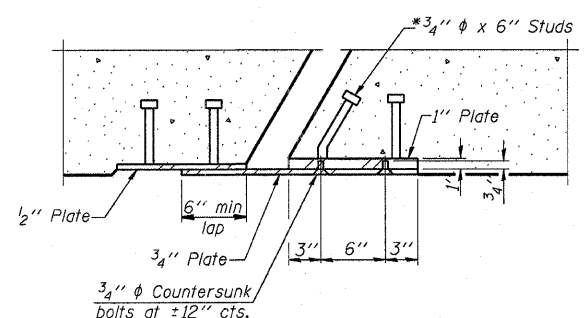
AT PARAPET



AT SIDEWALK OR MEDIAN

Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.

TYPICAL END TREATMENTS



SECTION B-B

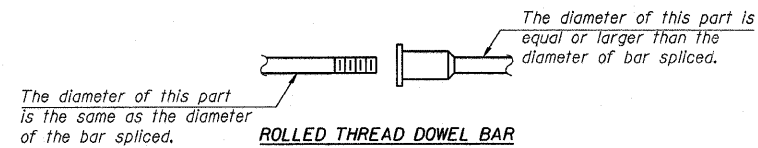
BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	170

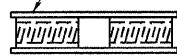
**PREFORMED JOINT STRIP SEAL
 US 30 OVER ELKHORN CREEK
 FAS 1197 (US 30)
 SECTION (110BR-1)M-1
 WHITESIDE COUNTY
 STRUCTURE NUMBER 098-0033**

EJ-SSJ 10-1-08

FILE NAME =	USER NAME = Iinkdj	DESIGNED -	REVISD -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	Preformed Joint Strip Seal	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
D:\BR\CADD plans\Whiteside County\0980033.dgn	DRAWN -	REVISD -	1197			(110BR-1)M-1	Whiteside	13	10	
PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISD -	ILLINOIS			CONTRACT NO. 64E91				
PLOT DATE = Wed Jan 28 09:01:08 2009	DATE -	REVISD -	FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT							



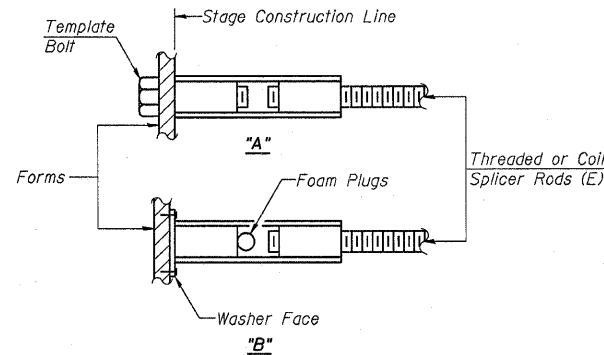
**** ONE PIECE**
Wire Connector



WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTERNATIVES

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



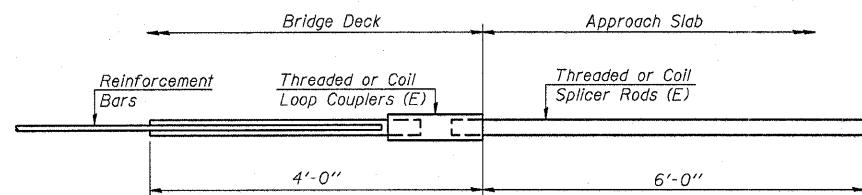
INSTALLATION AND SETTING METHODS

"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.

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:

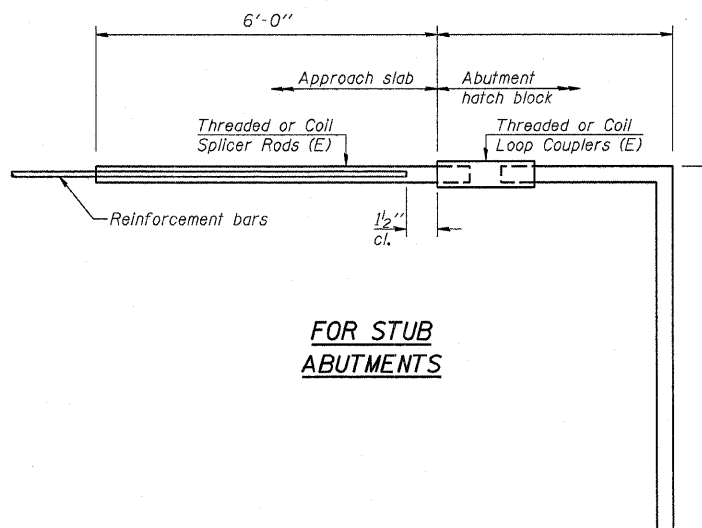
- ① Minimum Capacity = $1.25 \times f_y \times A_t$
 (Tension in kips)
 - ② Minimum *Pull-out Strength = $0.66 \times f_y \times A_t$
 (Tension in kips)
- Where f_y = Yield strength of lapped reinforcement bars in ksi.
 A_t = Tensile stress area of lapped reinforcement bars.
 * = 28 day concrete

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'-2"	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



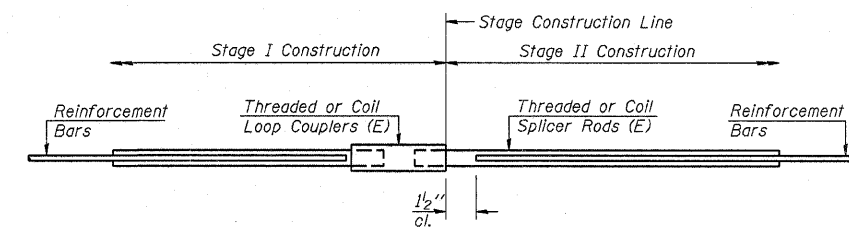
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

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	32	Deck
#6	6	Abutments

BAR SPLICER ASSEMBLY DETAILS
US 30 OVER ELKHORN CREEK
FAS 1197 (US 30)
SECTION (110BR-1)M-1
WHITESIDE COUNTY
STRUCTURE NUMBER 098-0033

BSD-1

10-1-08

FILE NAME =	USER NAME = jinkdj	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	Bar Splicers	F.A.S. RTE. 1197	SECTION (110BR-1)M-1	COUNTY Whiteside	TOTAL SHEETS 13	SHEET NO. 11
D:\BRY\CADD\plans\Whiteside County\0980033.dgn		DRAWN -	REVISED -			ILLINOIS	CONTRACT NO. 64E91		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	
PLOT SCALE = 58.0000' / IN.		CHECKED -	REVISED -			SCALE: None	STA. TO STA.			
PLOT DATE = Wed Jan 28 09:11:13 2009		DATE -	REVISED -							

STOP LINE SIGN FOR TEMPORARY SIGNALS



SIZE: 600(24) x 600(24)

100(4) CAPITAL LETTERS - BLACK

13 (1/2) BORDER - BLACK

WHITE REFLECTIVE - TYPE AP
HIGH INTENSITY PRISMATIC SHEETING

GENERAL NOTE:

THIS SIGN SHALL BE INSTALLED AT THE
STOP LINE AS DIRECTED BY ENGINEER.

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

REVISED - 1-22-07

STOP LINE SIGN FOR TEMPORARY SIGNALS

99.4

REVISED - ---	REGION 2 / DISTRICT 2 STANDARD	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
REVISED - ---		1197	(110BR-1)M-1	Whiteside	13	13	
REVISED - ---		CONTRACT NO. 64E91					
REVISED - ---		SCALE: 50.0000' / 1" IN SHEET NO. ___ OF ___ SHEETS	STA. _____	TO STA. _____	FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT		
REVISED - ---							

PLOT DATE = Wed Jan 28 09:01:29 2009