

03-03-2017 LETTING ITEM 069

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
316	D2 BJR 2017-1	STEPHENSON	26	1
		ILLINOIS	CONTRACT NO. 64L81	

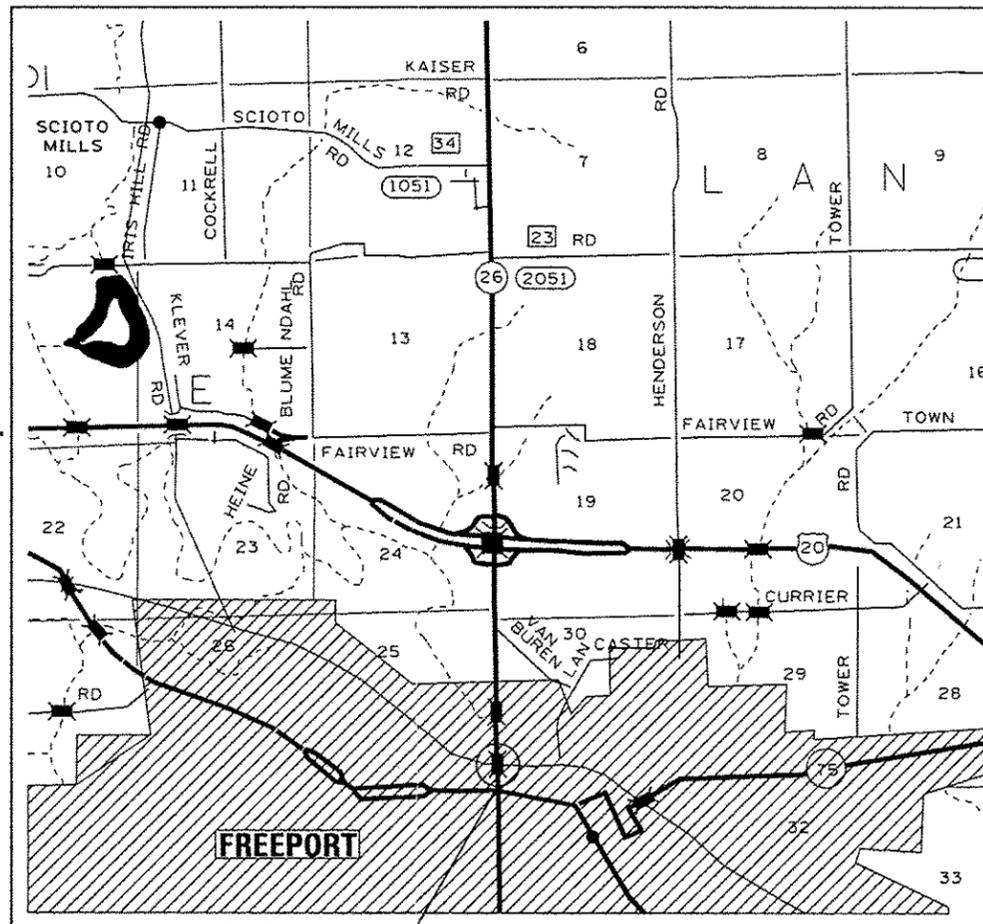
D-92-102-16



# PROPOSED HIGHWAY PLANS

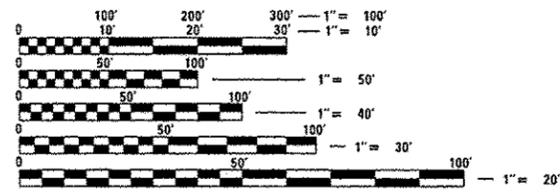
F.A.P. ROUTE 316 (IL 26)  
SECTION: D2 BJR 2017-1  
TYPE of IMPROVEMENT: BRIDGE REPAIR  
STEPHENSON COUNTY

C-92-009-17  
R.7-8E.



FOR INDEX OF SHEETS, SEE SHEET NO. 2  
FOR STATE STANDARDS, SEE SHEET NO. 2

HARLEM TOWNSHIP: SECTION 25  
SILVER CREEK TOWNSHIP: SECTION 30



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: DAVE DOSS (815) 284-5416  
PROJECT MANAGER: MAHMOUD ETEMADI (815) 284-5393

CONTRACT NO. 64L81

SN 089-0052

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED 12-21-2016  
KE Mauch  
REGIONAL ENGINEER

Jan 27 2017  
Maurice M. Addis P.E.  
ENGINEER OF DESIGN AND ENVIRONMENT

Jan 27 2017  
Amelia [Signature]  
DIRECTOR OF PROGRAM DEVELOPMENT

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OF THE STATE OF ILLINOIS

# INDEX OF SHEETS

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# GENERAL NOTES

All Borrow/Waste/Use sites must be approved by the Department prior to removing any material from the project or initiating any earthmoving activities, including temporary stockpiling outside the limits of construction.

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.

IDOT is not a member of JULIE. If you are near any overhead lighting, intersection lighting or traffic signals, contact the IDOT Traffic Office at 815/284-5469 at least 48 hours prior to work.

Hazards behind Temporary Concrete Barrier Wall  
No materials, equipment, vehicles or other hazards shall be within 3'-6" of the temporary concrete barrier wall, measured from the closest point of the barrier wall perpendicular to the hazard. Equipment that is actively working with 3'-6" of the barrier wall may be allowed for a short duration, if approved by the engineer, required for the work activity, and there is not another method to complete the work.

# STATE STANDARDS

- 000001 - 06 STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
- 001006 DECIMAL EQUIVALENTS OF AN INCH AND FOOT
- 701101 - 05 OFF ROAD OPERATIONS, MULTILANE, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
- 701427 - 05 LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATIONS, FOR SPEEDS ≤ 40 MPH
- 701611 - 01 URBAN HALF ROAD CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
- 701901 - 06 TRAFFIC CONTROL DEVICES
- 704001 - 08 TEMPORARY CONCRETE BARRIER
- 720011 - 01 METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
- 728001 - 01 TELESCOPING STEEL SIGN SUPPORT
- 729001 - 01 APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)

FILE NAME *	USER NAME * dmsdd	DESIGNED - _____	REVISED - _____	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>INDEX OF STATES, GENERAL NOTES &amp; STATE STANDARDS</b>				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
D:\BR\Draws\Stephenson\64L81 Bridge Repairs	SN 089-0052\CADD\02-plt-cover.dgn	DRAWN - _____	REVISED - _____		316	D2 BJR 2017-1	STEPHENSON	26	2				
Default	PLOT SCALE * 100.0000' / 1"	CHECKED - _____	REVISED - _____		SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____				CONTRACT NO. 64L81				
	PLOT DATE * Dec-19-2016 09:07:56 AM	DATE - _____	REVISED - _____		ILLINOIS FED. AID PROJECT								

# SUMMARY OF QUANTITIES

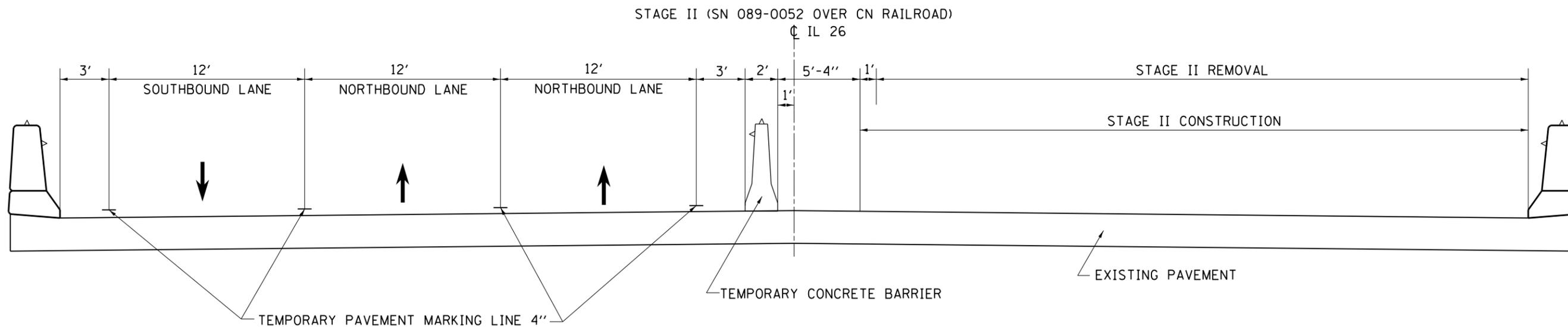
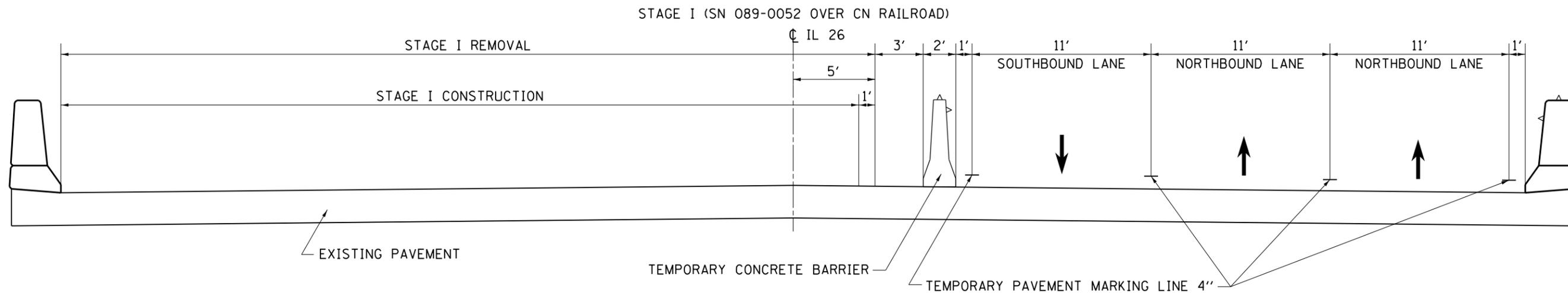
CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	STEPHENSON COUNTY
42001300	PROTECTIVE COAT	SQ YD	40	40
50102400	CONCRETE REMOVAL	CU YD	21	21
50300255	CONCRETE SUPERSTRUCTURE	CU YD	21	21
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2,350	2,350
50800515	BAR SPLICERS	EACH	16	16
52000110	PREFORMED JOINT STRIP SEAL	FOOT	190	190
67100100	MOBILIZATION	L SUM	1	1
70102634	TRAFFIC CONTROL AND PROTECTION, STANDARD 701611	L SUM	1	1
70300220	TEMPORARY PAVEMENT MARKING LINE, 4"	FOOT	7,460	7,460
70400100	TEMPORARY CONCRETE BARRIER	FOOT	325	325
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	325	325
70600255	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW) TEST LEVEL 2	EACH	2	2
70600322	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW) TEST LEVEL 2	EACH	2	2
* 78007110	PERMANENT PAVEMENT MARKING - LINE 4"	FOOT	6,870	6,870
X0327980	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	4,776	4,776

\* SPECIALTY ITEMS

REV



# STAGING TYPICALS



FILE NAME =	USER NAME = dossed	DESIGNED - _____	REVISED - _____
D:\BR\Draws\Stephenson\64L81 Bridge Repairs SN 089-0052\CADD\02-sh1-cover.dgn		DRAWN - _____	REVISED - _____
Default	PLOT SCALE = 100.0000' / 1" =	CHECKED - _____	REVISED - _____
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

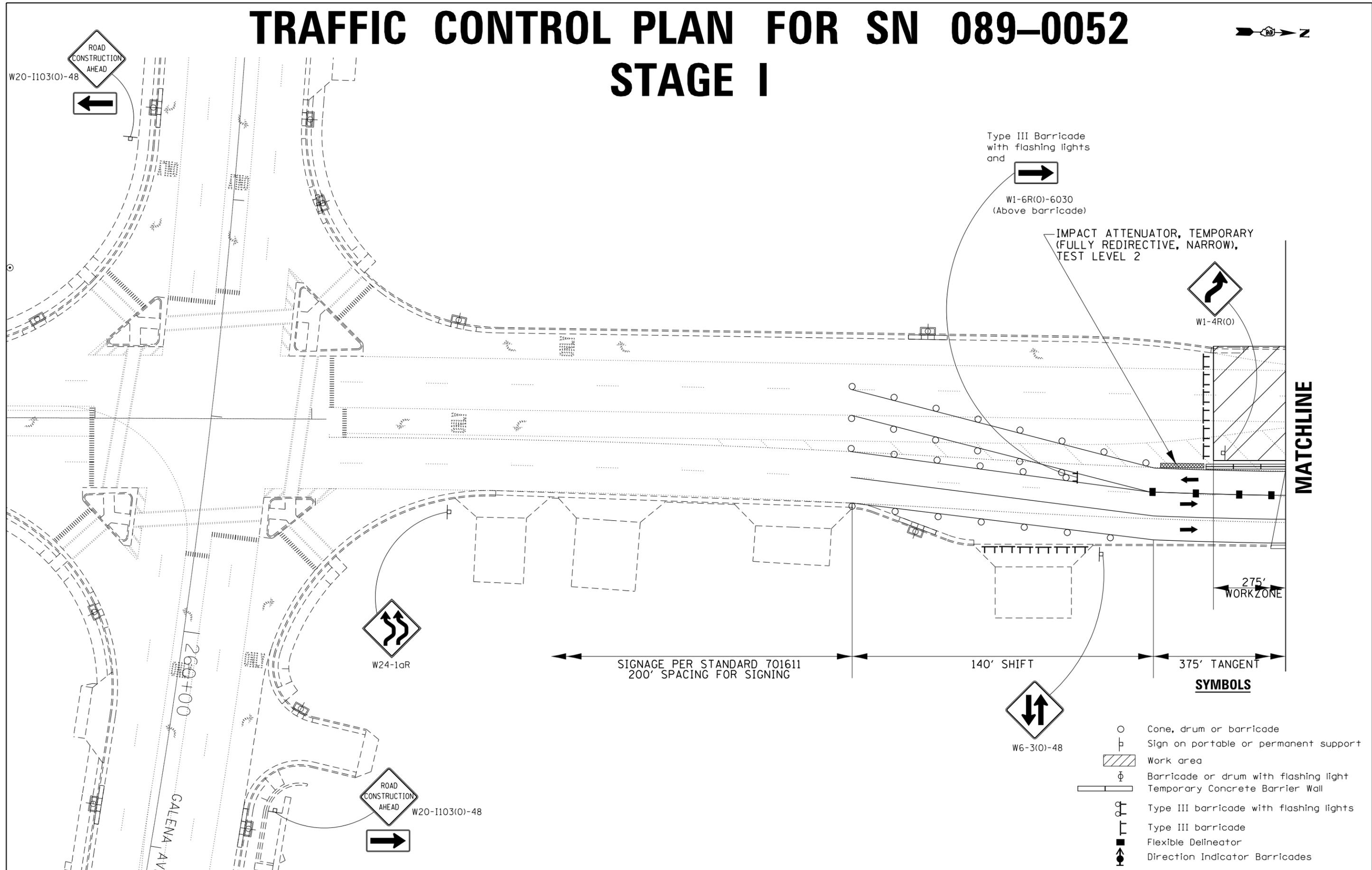
STAGING TYPICALS

SCALE: \_\_\_\_\_ SHEET \_\_\_\_ OF \_\_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
316	D2 BJR 2017-1	STEPHENSON	26	5
CONTRACT NO. 64L81			ILLINOIS FED. AID PROJECT	

# TRAFFIC CONTROL PLAN FOR SN 089-0052

## STAGE I



Type III Barricade with flashing lights and  
W1-6R(O)-6030  
(Above barricade)

IMPACT ATTENUATOR, TEMPORARY  
(FULLY REDIRECTIVE, NARROW),  
TEST LEVEL 2

W1-4R(O)

MATCHLINE

275'  
WORKZONE

← 200' SPACING FOR SIGNING →      ← 140' SHIFT →      ← 375' TANGENT →

**SYMBOLS**

- Cone, drum or barricade
- ⊥ Sign on portable or permanent support
- ▨ Work area
- ⊕ Barricade or drum with flashing light
- ▬ Temporary Concrete Barrier Wall
- ⊕ Type III barricade with flashing lights
- ⊥ Type III barricade
- Flexible Delineator
- ⬆ Direction Indicator Barricades

FILE NAME =	USER NAME = dosddd	DESIGNED -	REVISED -
Q:\BR\Draws\Stephenson\64L81 Bridge Repairs SN 089-0052\CADD\02-sht-cover.dgn		DRAWN -	REVISED -
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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

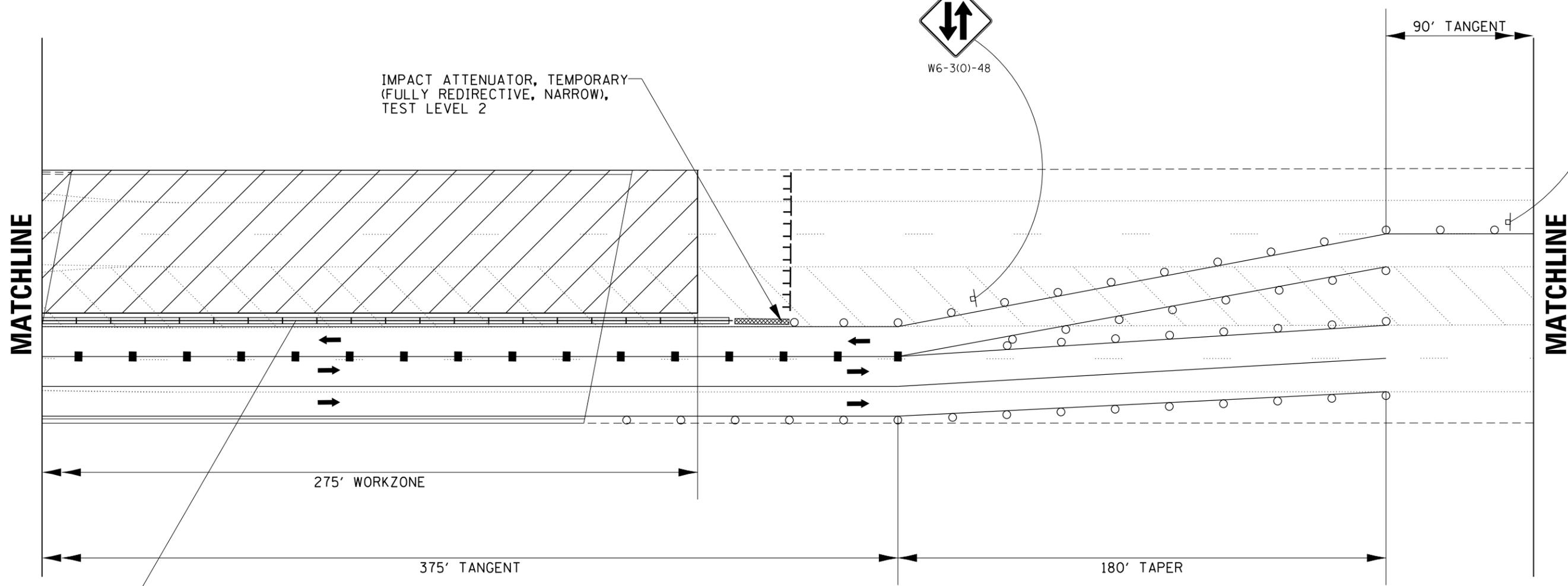
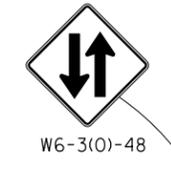
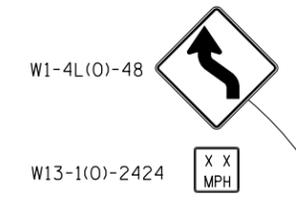
**TRAFFIC CONTROL PLAN FOR SN 089-0052**  
**STAGE I**

SCALE: \_\_\_\_\_ SHEET \_\_\_\_\_ OF \_\_\_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
316	D2 BUR 2017-1	STEPHENSON	26	6
CONTRACT NO. 64L81				
ILLINOIS FED. AID PROJECT				

# TRAFFIC CONTROL PLAN FOR SN 089-0052

## STAGE I



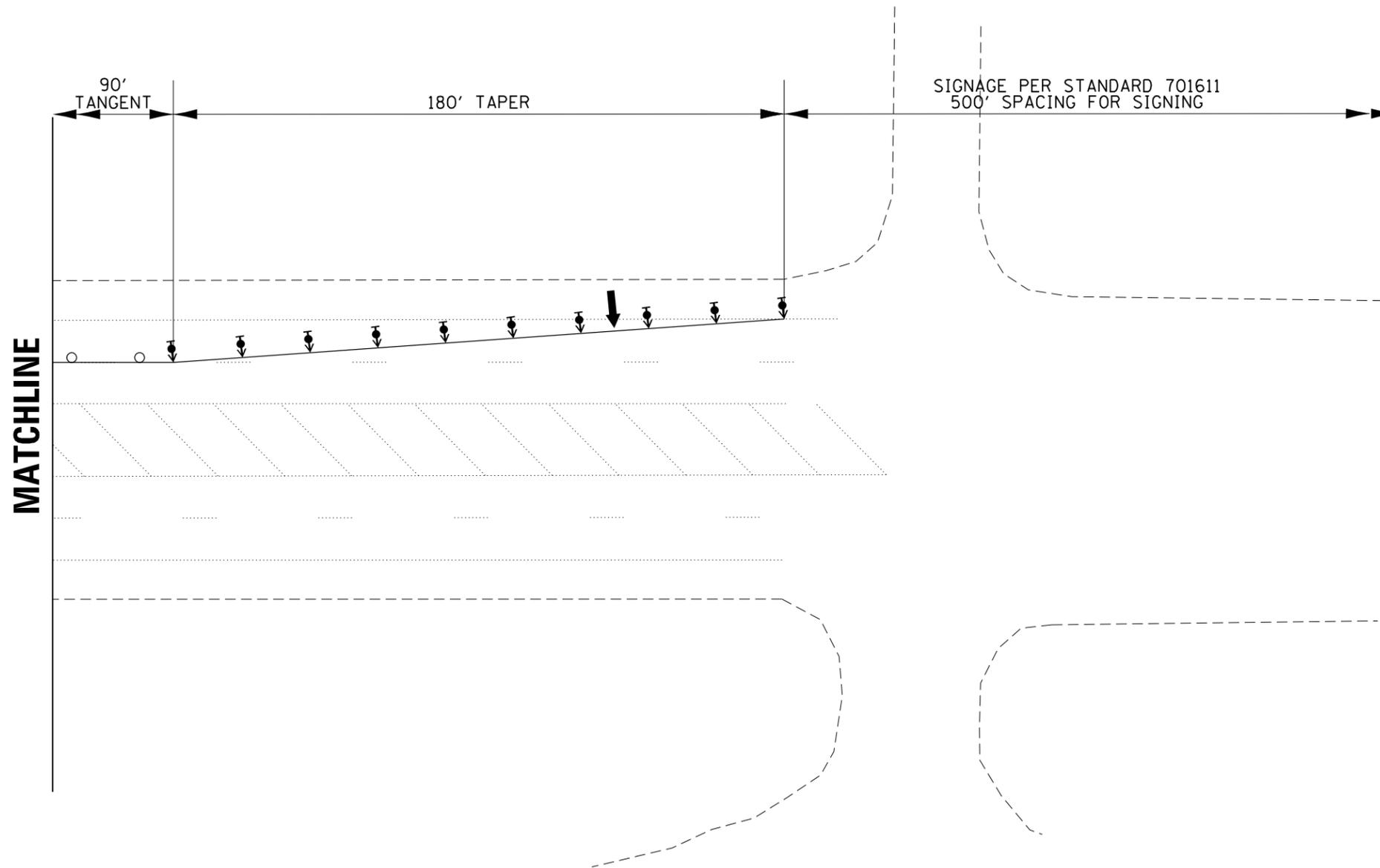
### SYMBOLS

- Cone, drum or barricade
- ⊥ Sign on portable or permanent support
- ▨ Work area
- ⊕ Barricade or drum with flashing light
- ⊕ Type III barricade with flashing lights
- ⊥ Type III barricade
- Flexible Delineator
- ⬆ Direction Indicator Barricades

FILE NAME =	USER NAME = dosddd	DESIGNED - _____	REVISED - _____	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC CONTROL PLAN FOR SN 089-0052 STAGE I</b>		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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Default	PLOT SCALE = 40.0000' / in.	CHECKED - _____	REVISED - _____		SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____		CONTRACT NO. 64L81		ILLINOIS FED. AID PROJECT		
	PLOT DATE = Dec-19-2016 07:46:28 AM	DATE - _____	REVISED - _____								

# TRAFFIC CONTROL PLAN FOR SN 089-0052

## STAGE I



### SYMBOLS

- Cone, drum or barricade
- ⊥ Sign on portable or permanent support
- ▨ Work area
- ⊕ Barricade or drum with flashing light
- ⊕ Type III barricade with flashing lights
- ⊥ Type III barricade
- Flexible Delineator
- ↑ Direction Indicator Barricades

FILE NAME =	USER NAME = dosddd	DESIGNED - _____	REVISED - _____
Q:\BR\Draws\Stephenson\64L81 Bridge Repairs SN 089-0052\CADD\02-sht-cover.dgn		DRAWN - _____	REVISED - _____
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

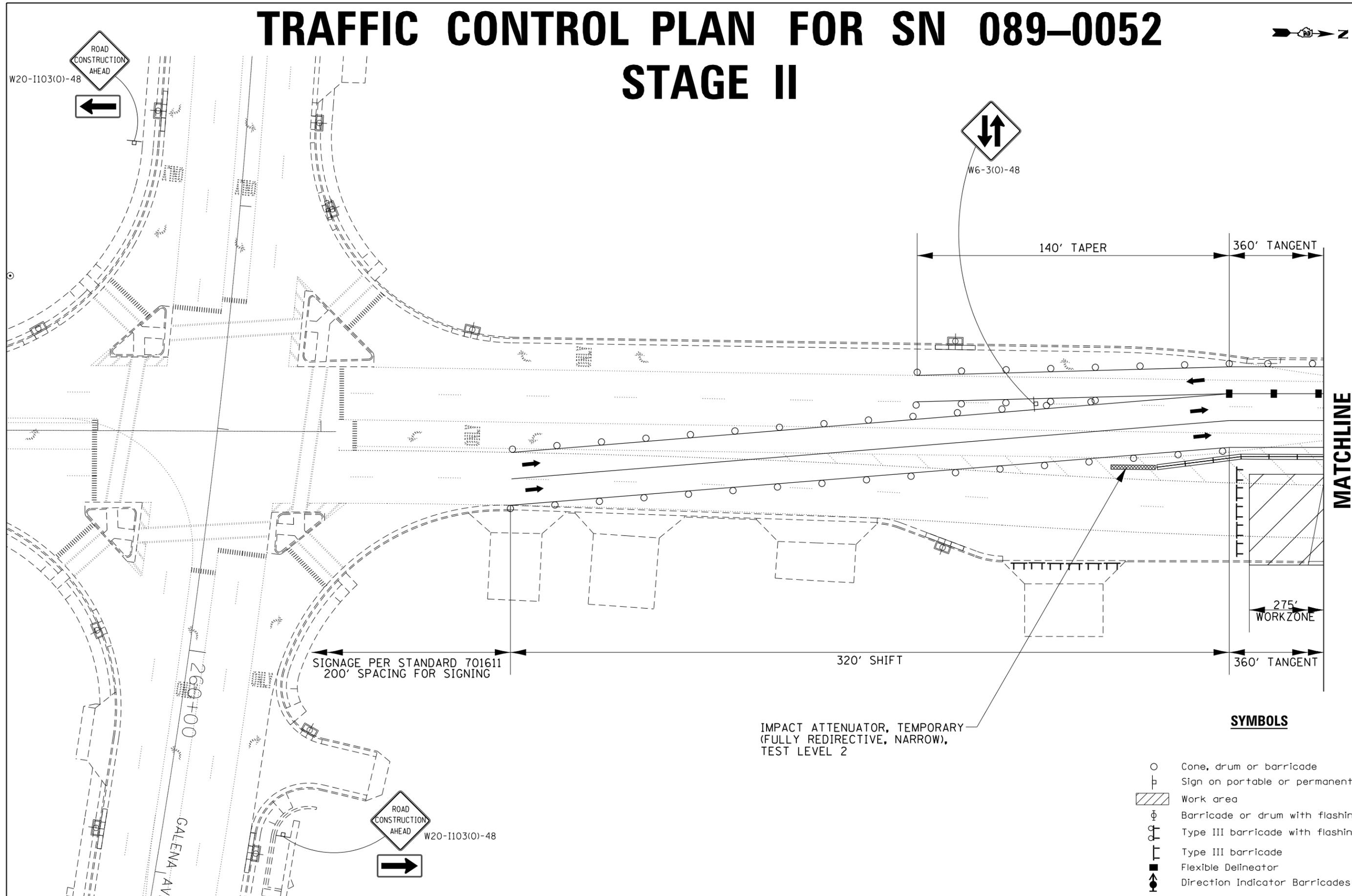
**TRAFFIC CONTROL PLAN FOR SN 089-0052  
STAGE I**

SCALE: \_\_\_\_\_ SHEET \_\_\_\_ OF \_\_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
316	D2 BJR 2017-1	STEPHENSON	26	8
CONTRACT NO.			64L81	
ILLINOIS FED. AID PROJECT				

# TRAFFIC CONTROL PLAN FOR SN 089-0052

## STAGE II



MATCHLINE

### SYMBOLS

- Cone, drum or barricade
- ⊥ Sign on portable or permanent support
- ▨ Work area
- ⊕ Barricade or drum with flashing light
- ⊗ Type III barricade with flashing lights
- ⊥ Type III barricade
- Flexible Delineator
- ⬆ Direction Indicator Barricades

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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

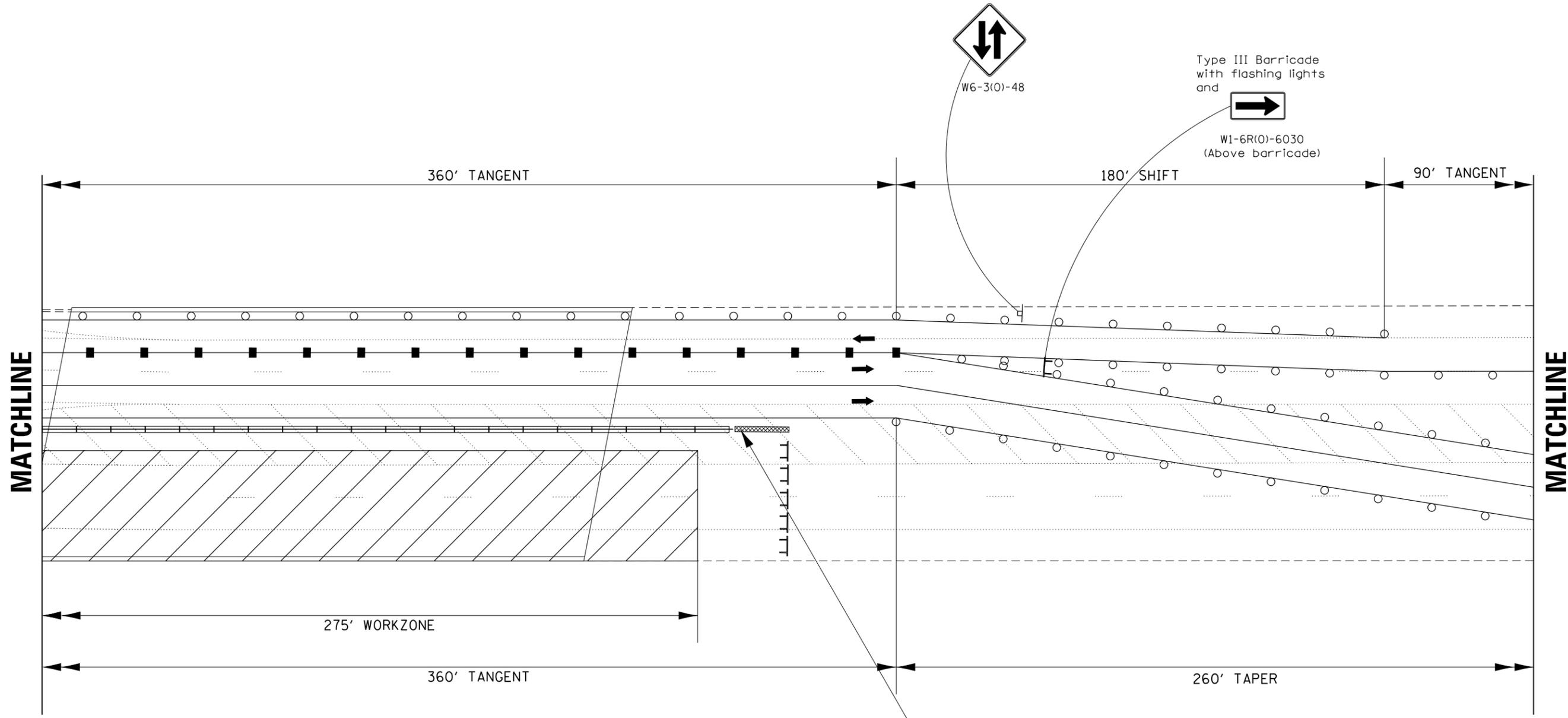
**TRAFFIC CONTROL PLAN FOR SN 089-0052**  
**STAGE II**

SCALE: \_\_\_\_\_ SHEET \_\_\_\_\_ OF \_\_\_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
316	D2 BJR 2017-1	STEPHENSON	26	9
CONTRACT NO. 64L81				
ILLINOIS FED. AID PROJECT				

# TRAFFIC CONTROL PLAN FOR SN 089-0052

## STAGE II



IMPACT ATTENUATOR, TEMPORARY  
(FULLY REDIRECTIVE, NARROW),  
TEST LEVEL 2

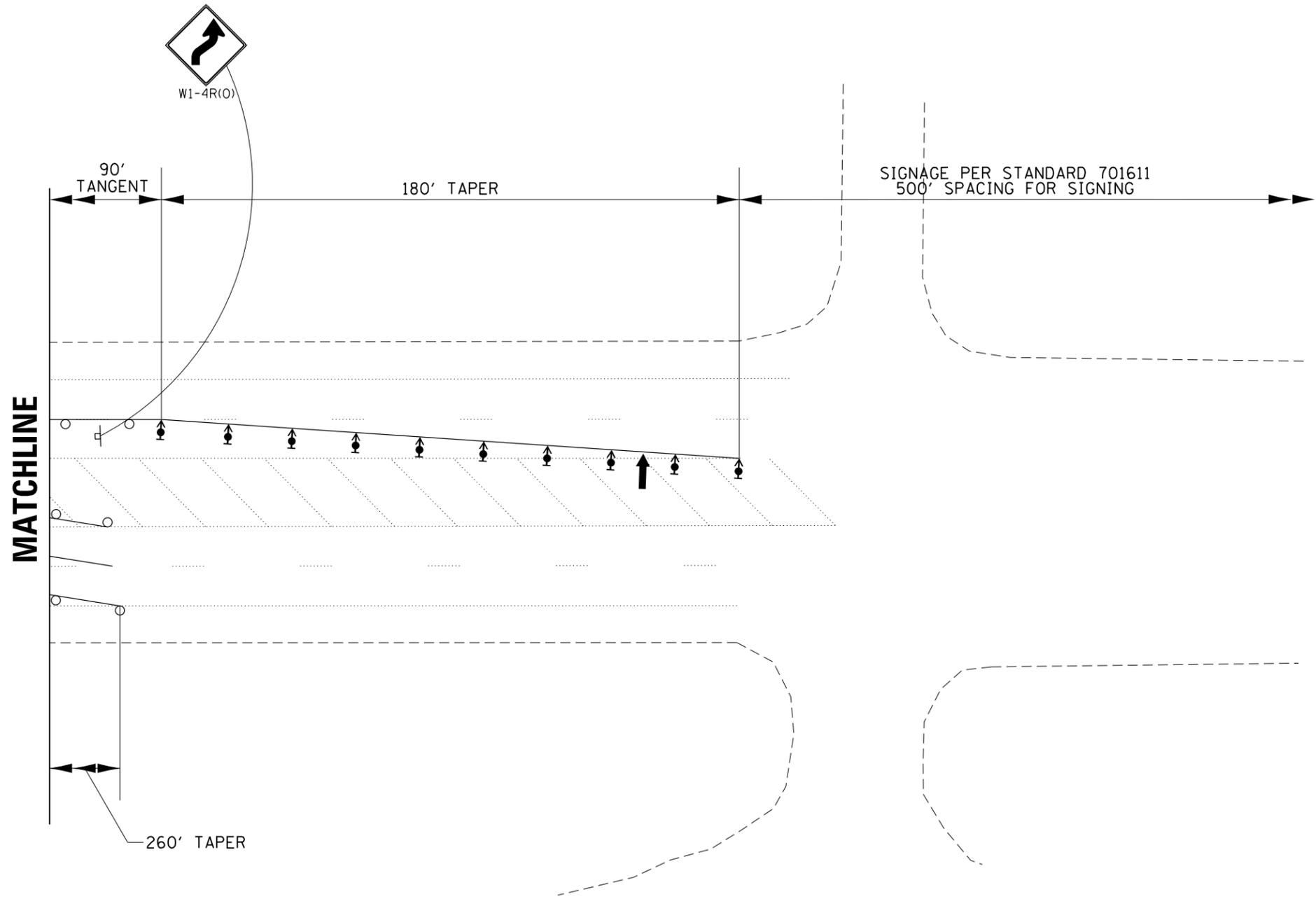
### SYMBOLS

- Cone, drum or barricade
- ⊥ Sign on portable or permanent support
- ▨ Work area
- ⊕ Barricade or drum with flashing light
- ⊕ Type III barricade with flashing lights
- ⊥ Type III barricade
- Flexible Delineator
- ⬆ Direction Indicator Barricades

FILE NAME =	USER NAME = dssdd	DESIGNED - _____	REVISED - _____	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC CONTROL PLAN FOR SN 089-0052 STAGE II</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Default	Q:\BR\Draws\Stephenson\64L81 Bridge Repairs SN 089-0052\CADD\02-sh1-cover.dgn	DRAWN - _____	REVISED - _____			316	D2 BJR 2017-1	STEPHENSON	26	10	
	PLOT SCALE = 40.0000' / in.	CHECKED - _____	REVISED - _____			CONTRACT NO. 64L81					
	PLOT DATE = Dec-19-2016 07:46:46 AM	DATE - _____	REVISED - _____			ILLINOIS FED. AID PROJECT					

# TRAFFIC CONTROL PLAN FOR SN 089-0052

## STAGE II



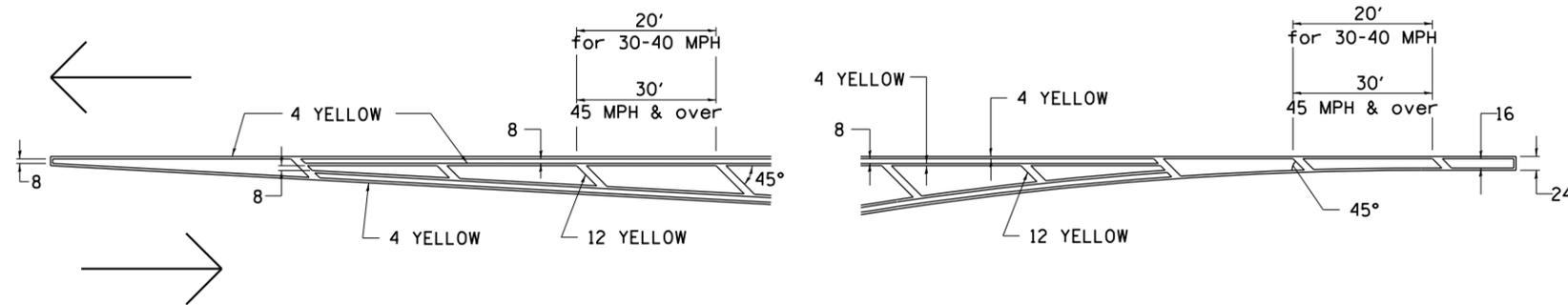
### SYMBOLS

- Cone, drum or barricade
- Sign on portable or permanent support
- Work area
- Barricade or drum with flashing light
- Type III barricade with flashing lights
- Type III barricade
- Flexible Delineator
- Direction Indicator Barricades

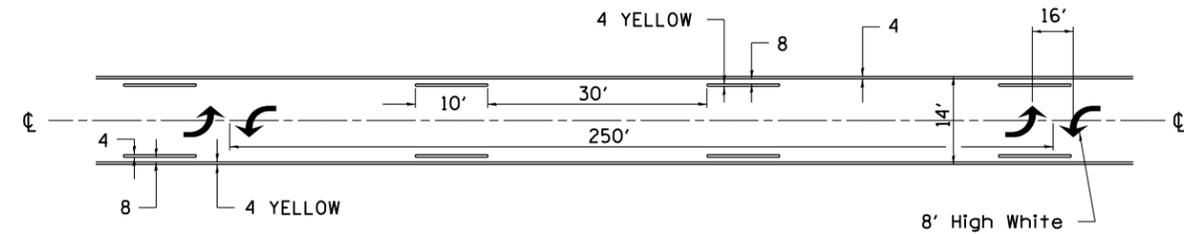
FILE NAME =	USER NAME = dossed	DESIGNED - _____	REVISED - _____	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC CONTROL PLAN FOR SN 089-0052 STAGE II</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Q:\BR\Draws\Stephenson\64L81 Bridge Repairs SN 089-0052\CADD\02-sh1-cover.dgn	PLOT SCALE = 40.0000' / in.	DRAWN - _____	REVISED - _____			316	D2 BJR 2017-1	STEPHENSON	26	11	
Default	PLOT DATE = Dec-19-2016 07:46:50 AM	CHECKED - _____	REVISED - _____			SCALE: _____ SHEET ____ OF ____ SHEETS STA. _____ TO STA. _____		CONTRACT NO. 64L81			
		DATE - _____	REVISED - _____			ILLINOIS FED. AID PROJECT					

# TYPICAL PAVEMENT MARKINGS

## TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN AT LEFT TURN LANE

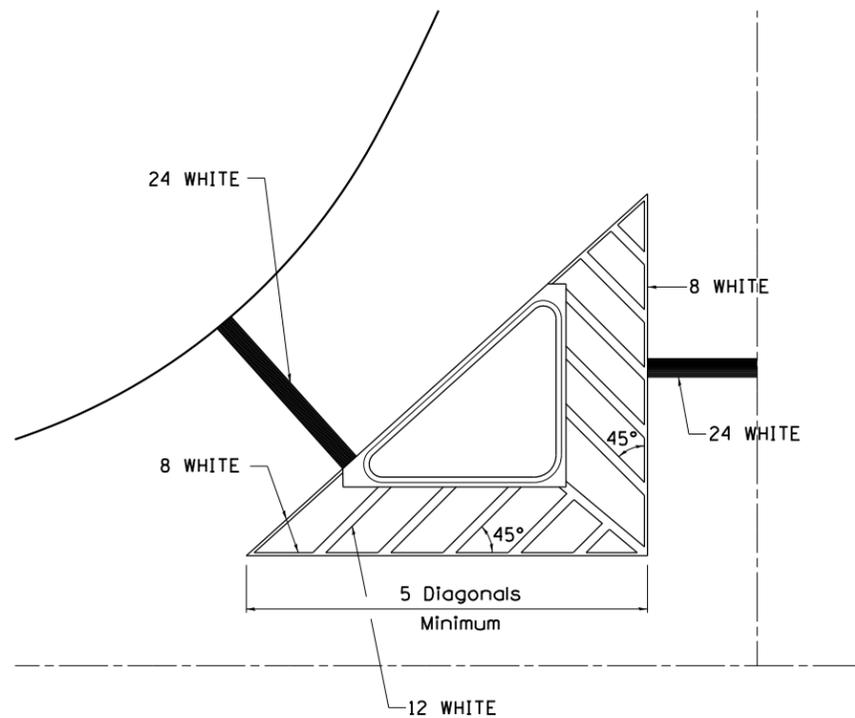


## MEDIAN PAVEMENT MARKING



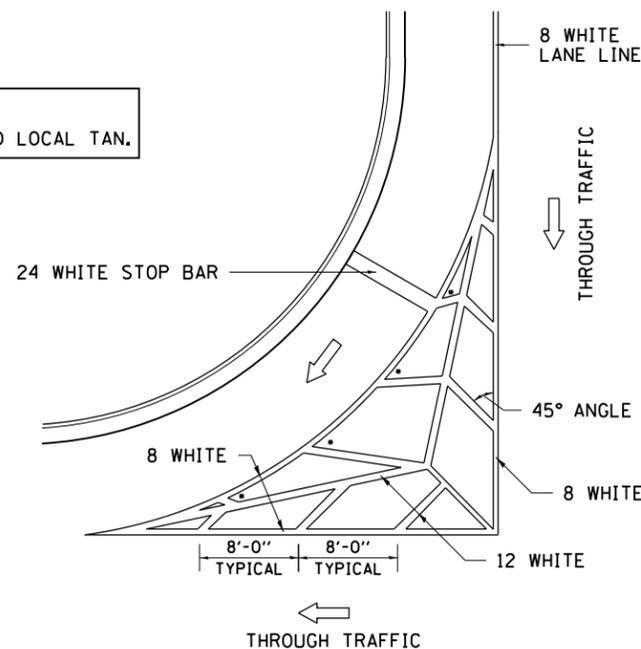
•• ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

## TYPICAL ISLAND OFFSET SHOULDER WIDTH



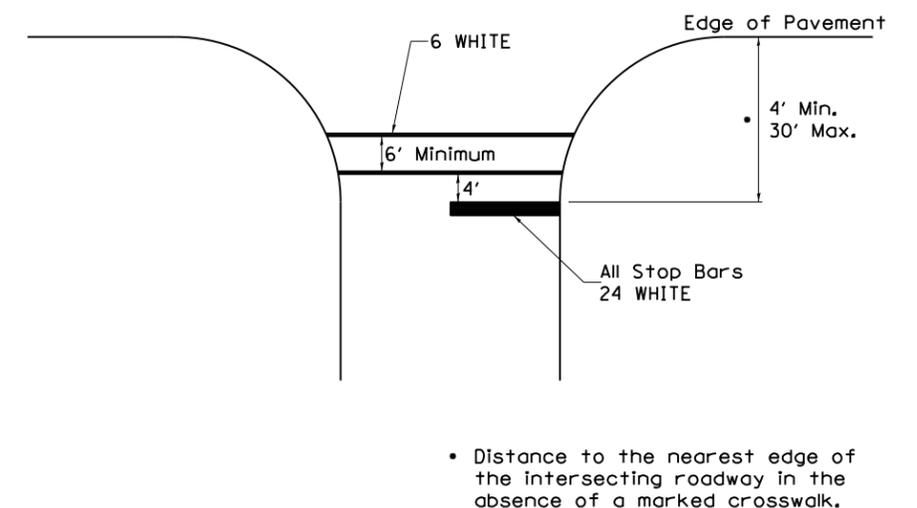
## TYPICAL MARKING FOR PAINTED ISLANDS

NOTE:  
\* 45° TO LOCAL TAN.



## STANDARD CROSSWALK MARKING

See Schedules for Locations

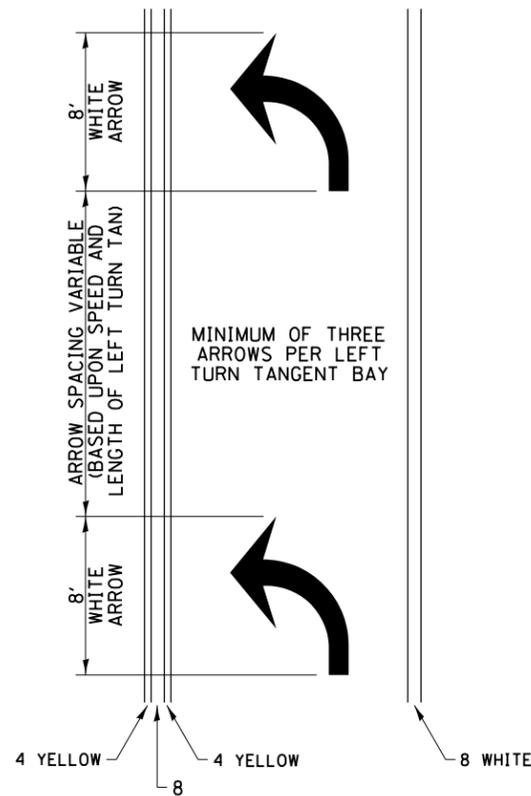


• Distance to the nearest edge of the intersecting roadway in the absence of a marked crosswalk.

FILE NAME =	USER NAME = dssdd	DESIGNED -	REVISED - 6-27-14	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>REGION 2 / DISTRICT 2 STANDARD</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	PLOT DATE = Dec-19-2016 07:47:25 AM	DATE -	REVISED -		FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT							

# TYPICAL PAVEMENT MARKINGS

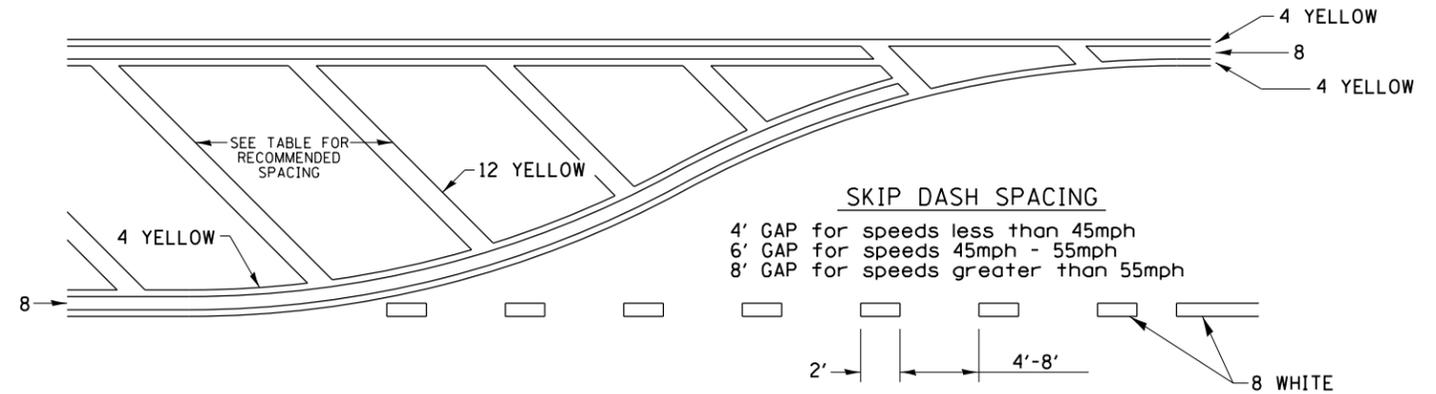
## ARROW LAYOUT



- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER
- ◆ TWO-WAY AMBER MARKER

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

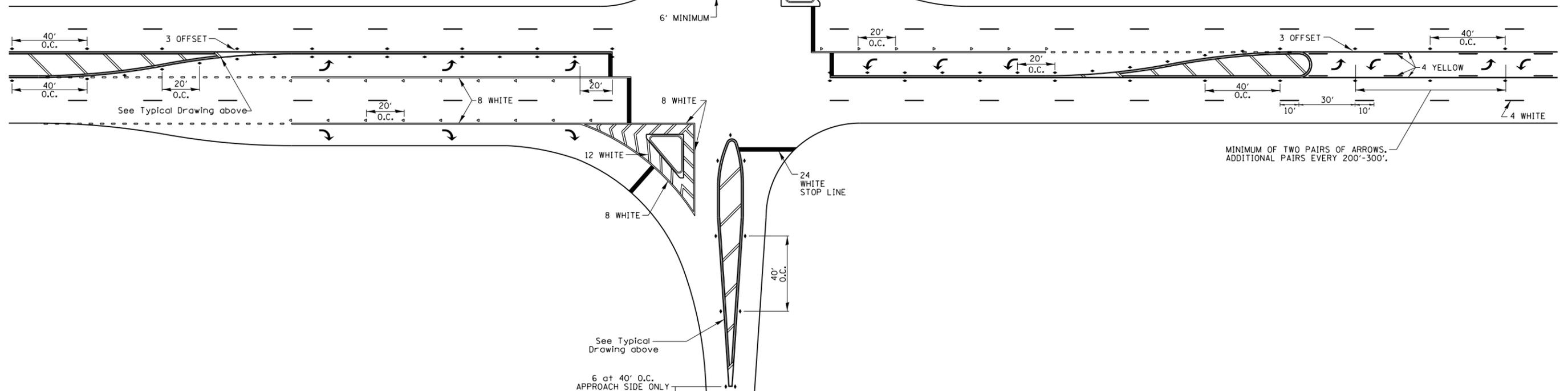
## TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN



### RECOMMENDED SPACING BETWEEN DIAGONALS (IN FEET)

Speed Limit Range	Continuous Median Area	Intersection Channelization	Objects (Islands)
less than 30MPH	50'	15'	10'
30-40MPH	75'	20'	15'
45MPH & over	75'	30'	20'

NOTE: if the spacing recommended in the Table does not permit at least five diagonal lines in the area being marked, the spacing from the next lowest speed range should be used. The recommended spacing is measured parallel to the pavement center line.



FILE NAME =	USER NAME = dossdd	DESIGNED -	REVISED - 6-27-14
D:\BR\Draws\Stephenson\64L81 Bridge Repairs	SN 089-0052\CADD\02-sh1-cover.dgn	DRAWN -	REVISED - 3-05-12
	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED -
	PLOT DATE = Dec-19-2016 07:47:36 AM	DATE -	REVISED -

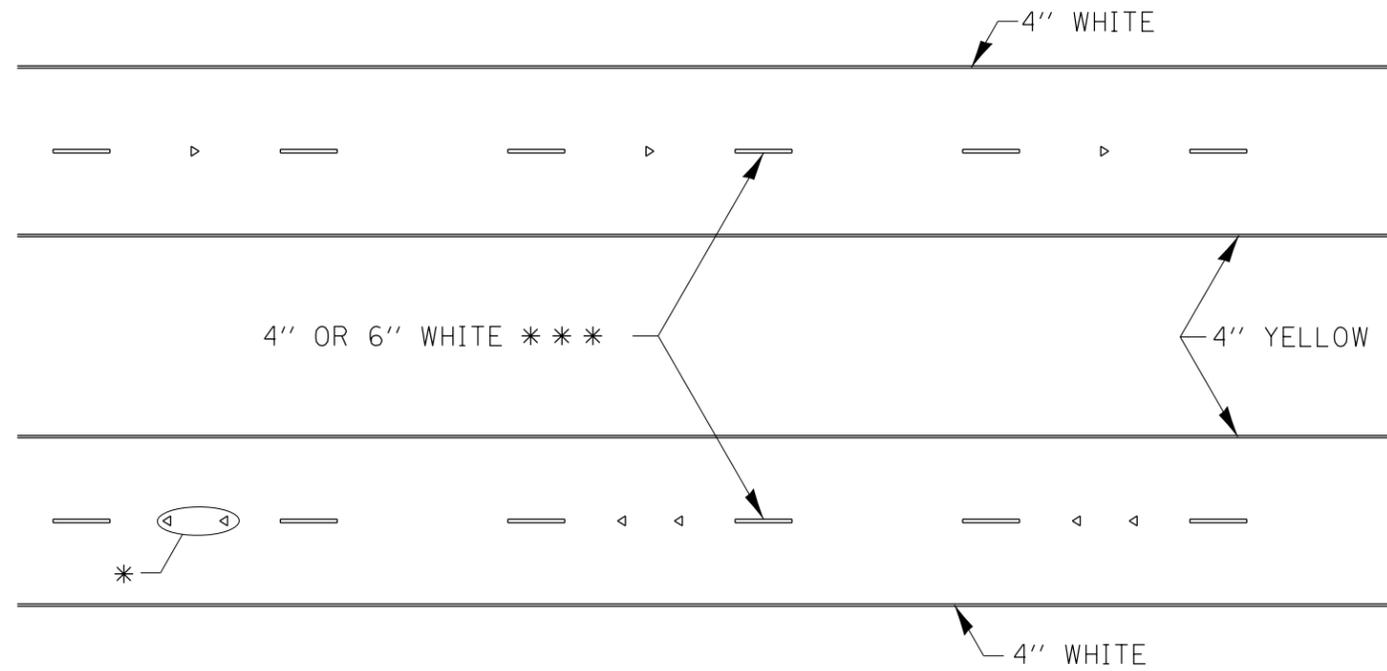
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

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

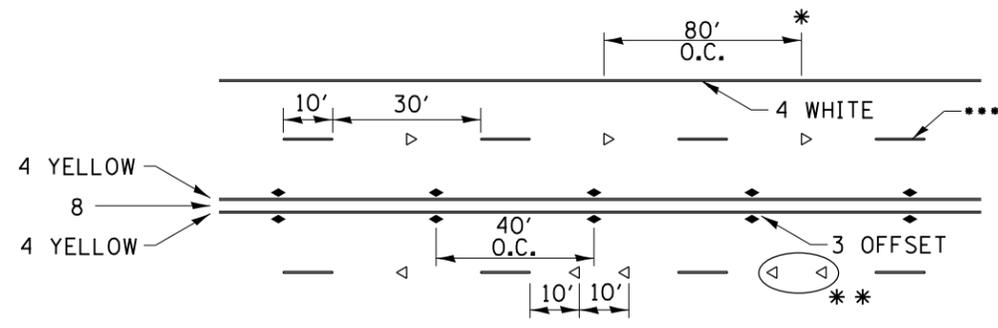
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
316	D2 BJR 2017-1	STEPHENSON	26	13
FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT			CONTRACT NO. 64L81	

# TYPICAL PAVEMENT MARKINGS



\* SEE HIGHWAY STANDARD 781001 FOR SPACING DETAILS.  
USE DOUBLE MARKERS WHEN ADT > 20,000.

## MULTI-LANE / DIVIDED



\* REDUCE TO 40' O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH LOWER THAN POSTED SPEEDS.

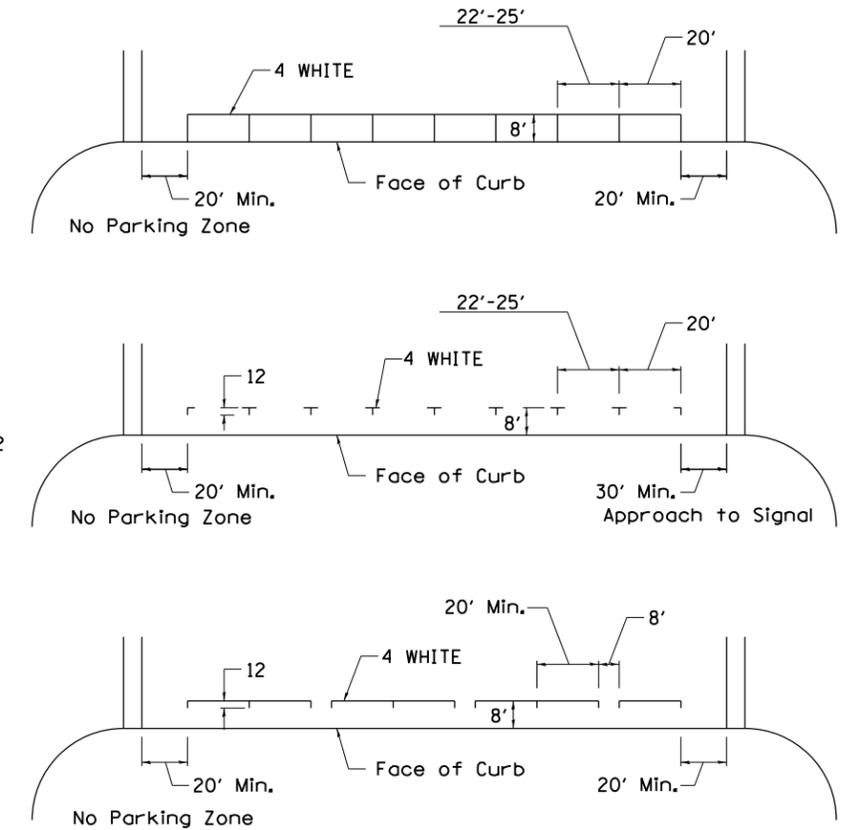
\*\* USE DOUBLE MARKERS WHEN ADT ≥ 20,000

\*\*\* CENTERLINE SKIP DASH PAVEMENT MARKING SPEED LIMIT LESS THAN 40 MPH USE 4" LINE. SPEED LIMIT 40 MPH AND OVER USE 6" LINE.

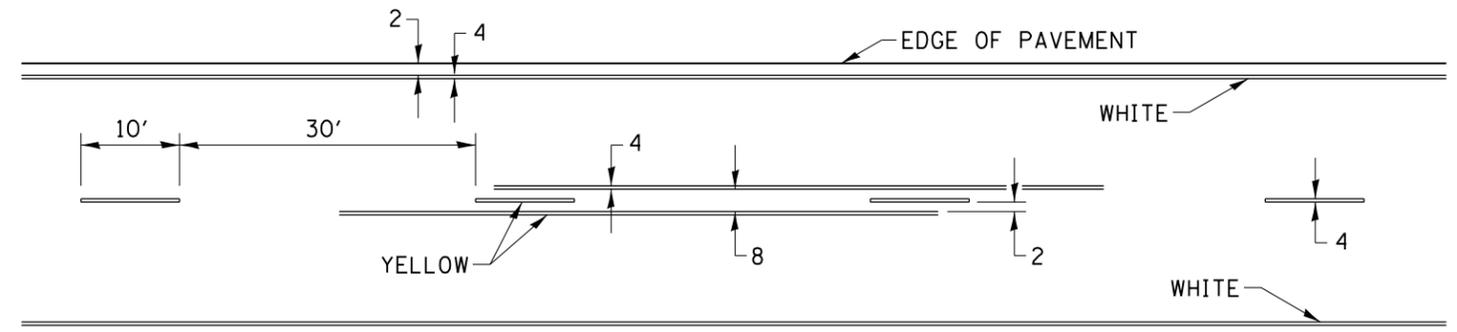
## MULTI-LANE / UNDIVIDED & ONE WAY

(FOR MULTI-LANE UNDIVIDED HIGHWAYS USE THIS  
DETAIL NOT HIGHWAY STANDARD 781001)

## TYPICAL PARKING SPACING



## TYPICAL PAVEMENT MARKING FOR TWO LANE SECTION – NO PASSING ZONES



## SYMBOLS

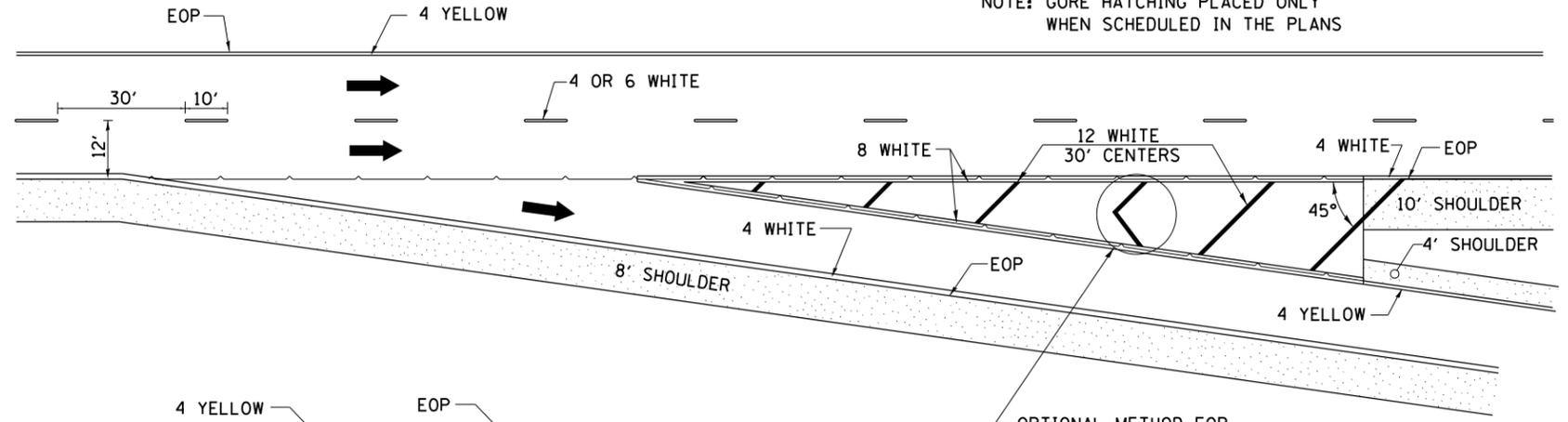
FILE NAME =	USER NAME = dossed	DESIGNED -	REVISED - 6-27-14	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>REGION 2 / DISTRICT 2 STANDARD</b>		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0:\BR\Draws\Stephenson\64L81 Bridge Repairs	SN 089-0052\CADD\02-sh1-cover.dgn	DRAWN -	REVISED - 8-27-13				316	D2 BJR 2017-1	STEPHENSON	26	14
	PLOT SCALE = 100.0000' / 1" =	CHECKED -	REVISED - 11-28-12		SCALE: _____ SHEET NO. ___ OF ___ SHEETS STA. _____ TO STA. _____		CONTRACT NO. 64L81				
	PLOT DATE = Dec-19-2016 07:47:41 AM	DATE -	REVISED -				FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT				

# PAINING DETAILS

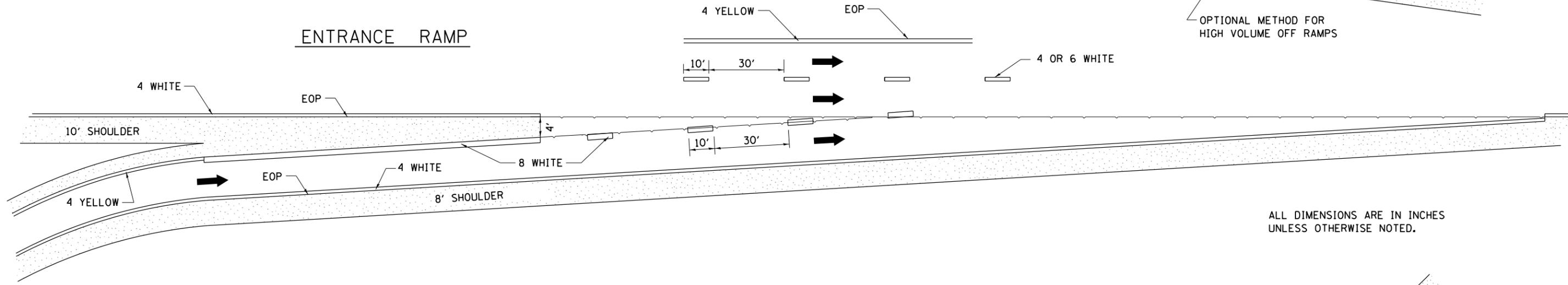
CENTERLINE SKIP DASH PAVEMENT MARKING WIDTH SHALL BE 4" WHEN THE POSTED SPEED LIMIT IS UNDER 40 MPH AND 6" WHEN THE POSTED SPEED LIMIT IS 40 MPH AND OVER.

## EXIT RAMP

NOTE: GORE HATCHING PLACED ONLY WHEN SCHEDULED IN THE PLANS

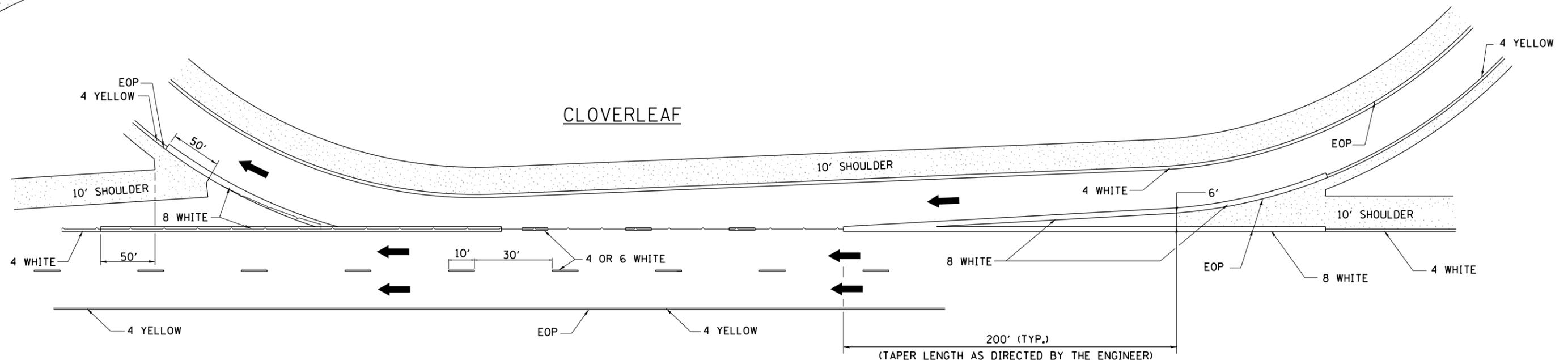


## ENTRANCE RAMP



ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

## CLOVERLEAF



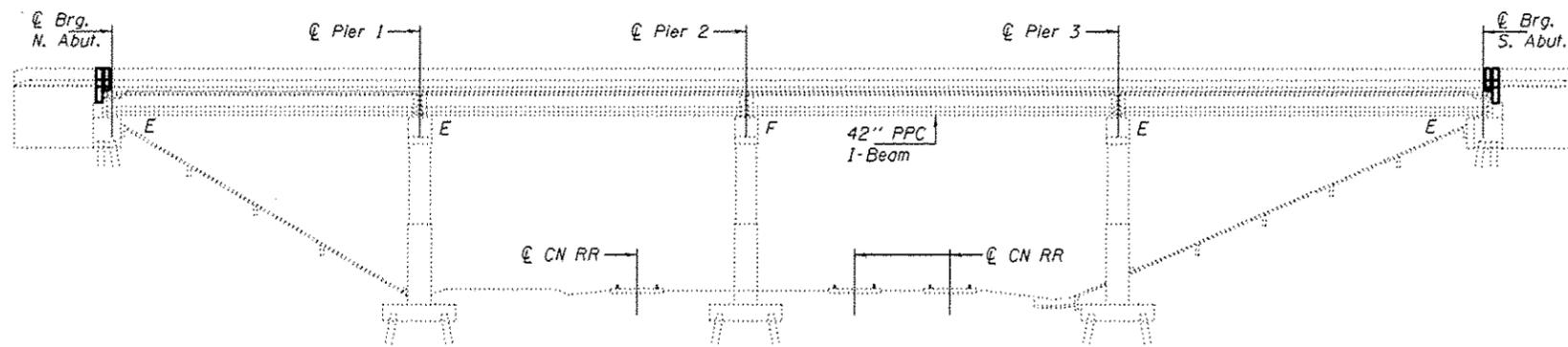
FILE NAME =	USER NAME = dossed	DESIGNED -	REVISED - 8-27-13
D:\BR\Draws\Stephenson\64L81 Bridge Repairs	SN 089-0052\CADD\02-sh1-cover.dgn	DRAWN -	REVISED - 10-18-11
	PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED -
	PLOT DATE = Dec-19-2016 07:47:46 AM	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
316	D2 BJR 2017-1	STEPHENSON	26	15
FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT			CONTRACT NO. 64L81	



**ELEVATION**

**GENERAL NOTES**

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.

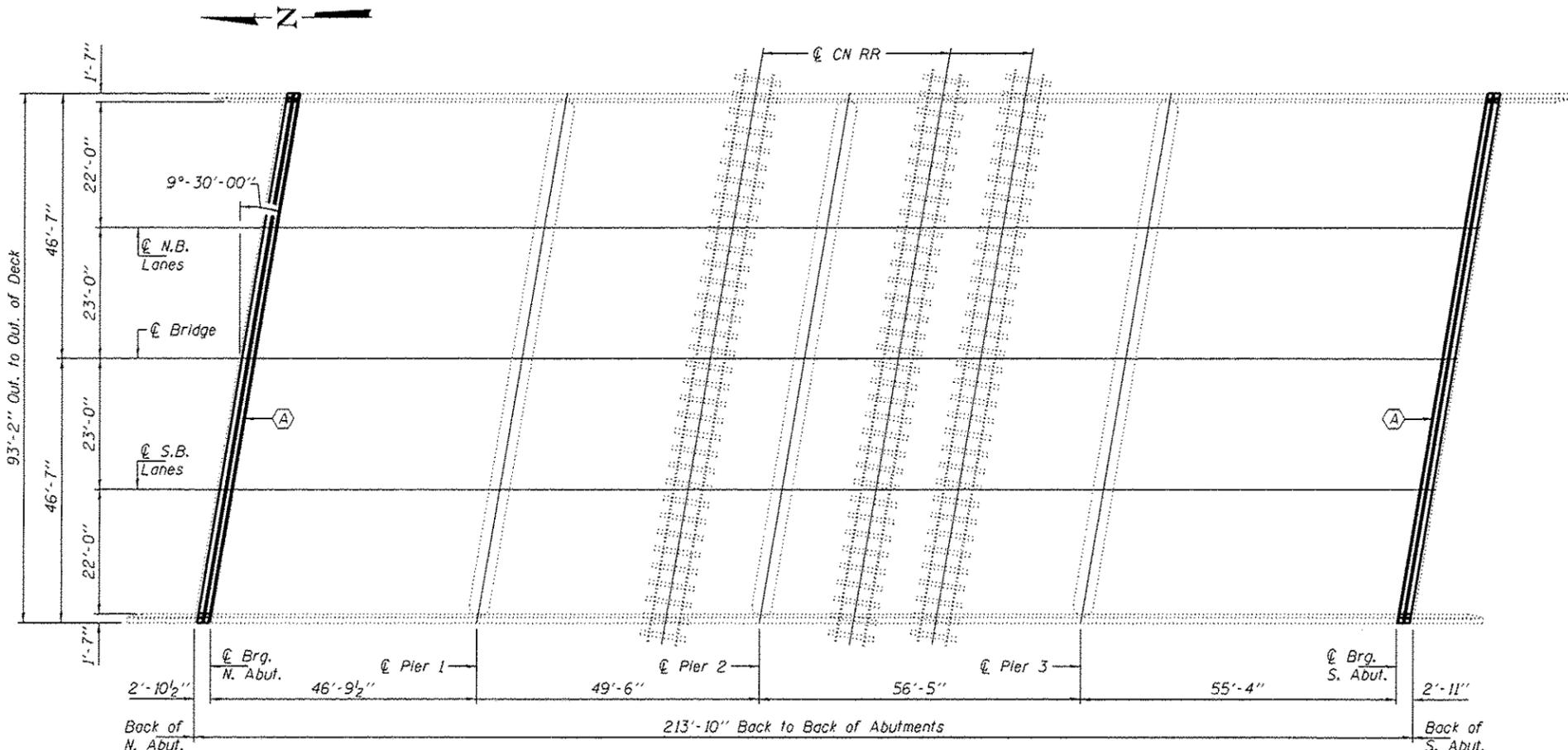
Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall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

Reinforcement bars designated (E) shall be epoxy coated.

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.

Areas of deck repairs shown are estimated. The Engineer shall show actual locations of deck repairs on As-built Plans.

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



**PLAN**

(A) - Remove existing Expansion Joint and install new Preformed Strip Seal Joint.



EXPIRES 11-30-2018

DESIGNED	<i>[Signature]</i>
CHECKED	<i>[Signature]</i>
DRAWN	<i>[Signature]</i>
CHECKED	<i>[Signature]</i>

PASSED

*[Signature]*  
ENGINEER OF BRIDGES AND STRUCTURES

DATE	JANUARY 18, 2017
REVISED	
REVISED	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PLAN AND ELEVATION  
FAP 316 (IL 26) OVER CN RR  
SN 089-0052

SHEET NO. 1 OF 4 SHEETS

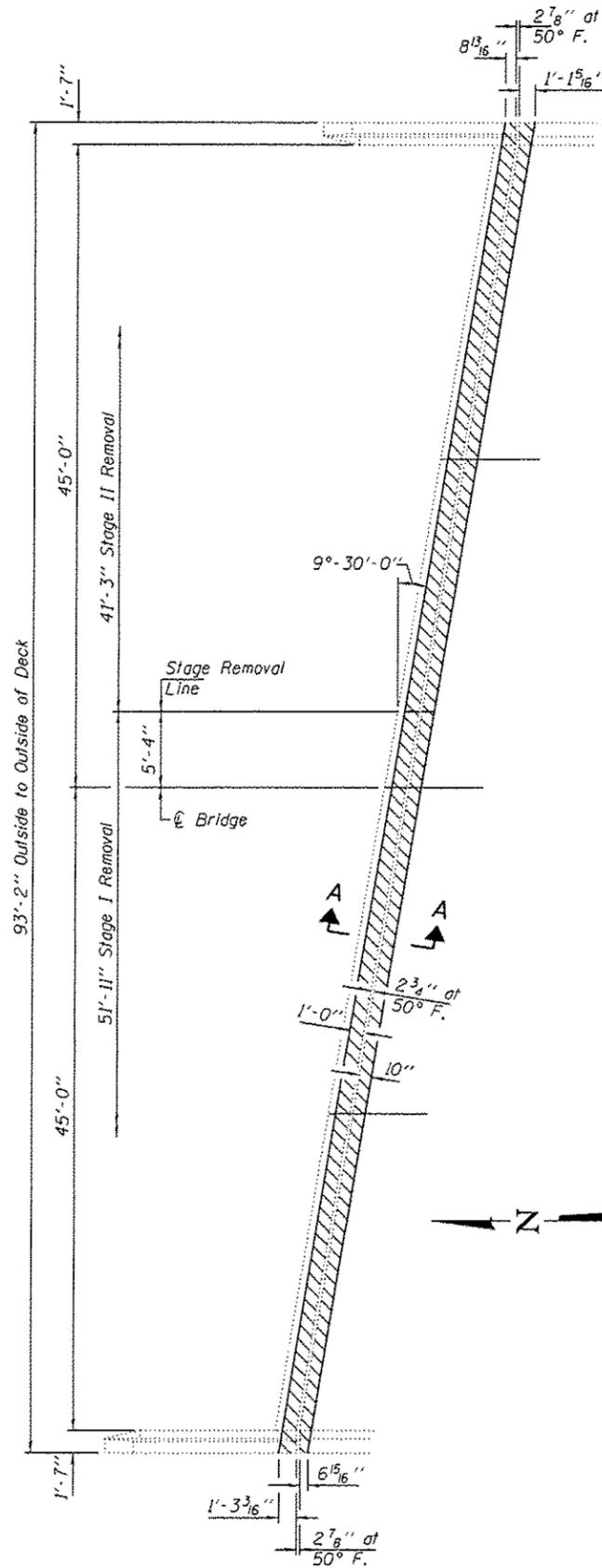
**TOTAL BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	21
Concrete Superstructure	Cu. Yd.	21
Reinforcement Bars, Epoxy Coated	Pound	2350
Bar Splicers	Each	16
Preformed Joint Strip Seal	Foot	190
** Protective Coat	Sq. Yd.	40
* Deck Slab Repair (Partial)	Sq. Yd.	321
* Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	107
* Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	64

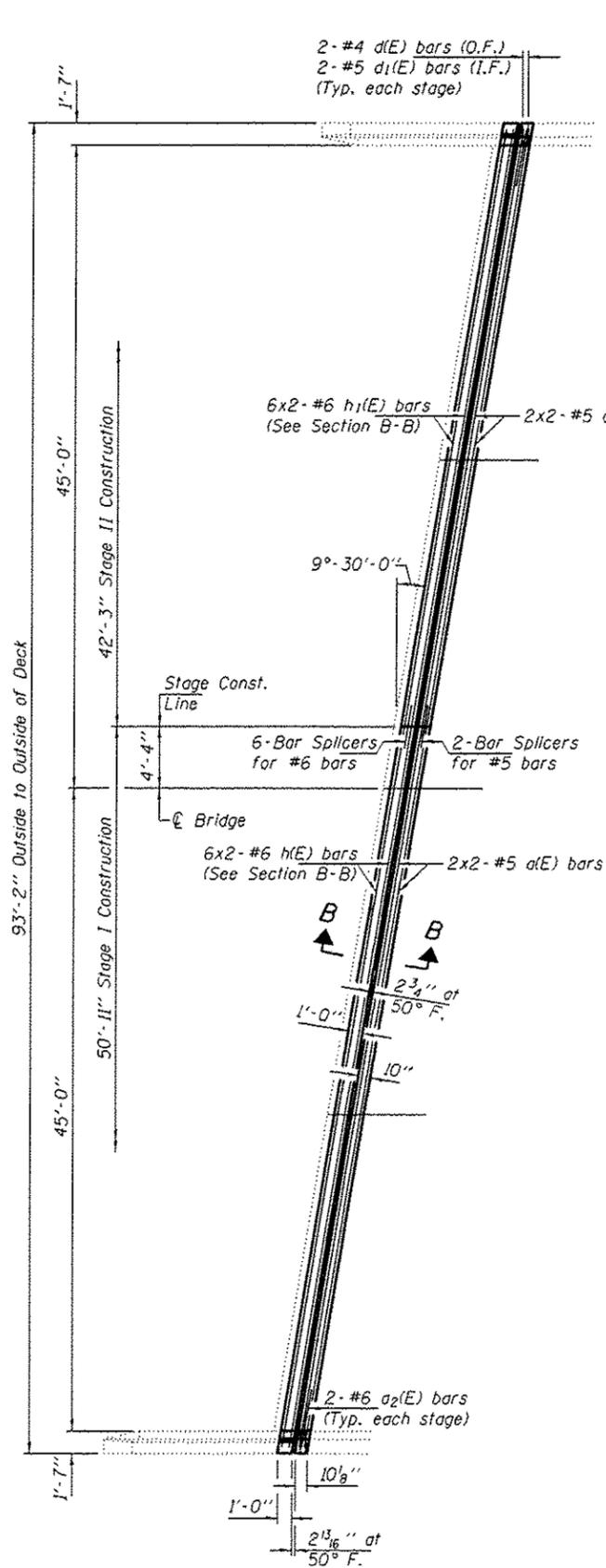
\* Quantities are estimated, Actual locations and quantities to be determined by the Engineer in the field.

\*\* New concrete areas only.

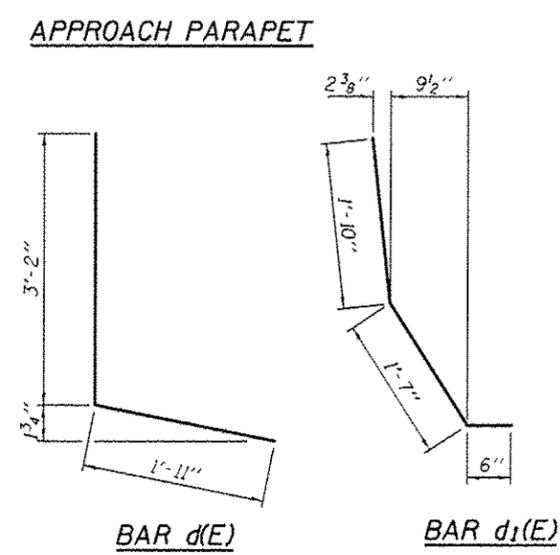
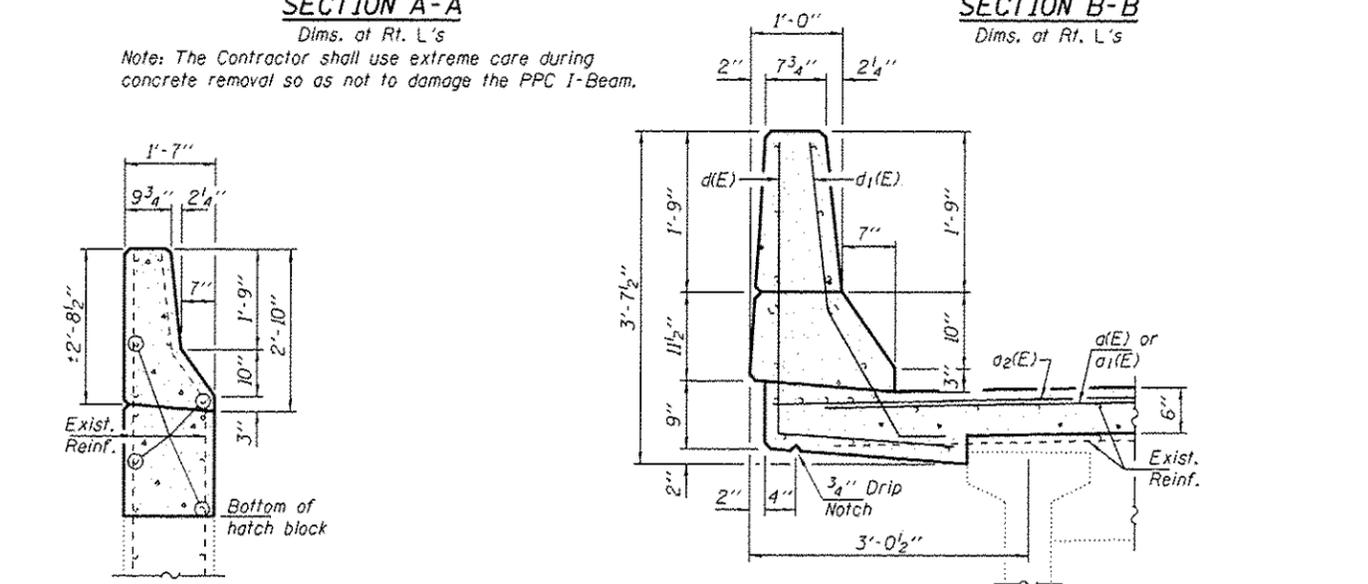
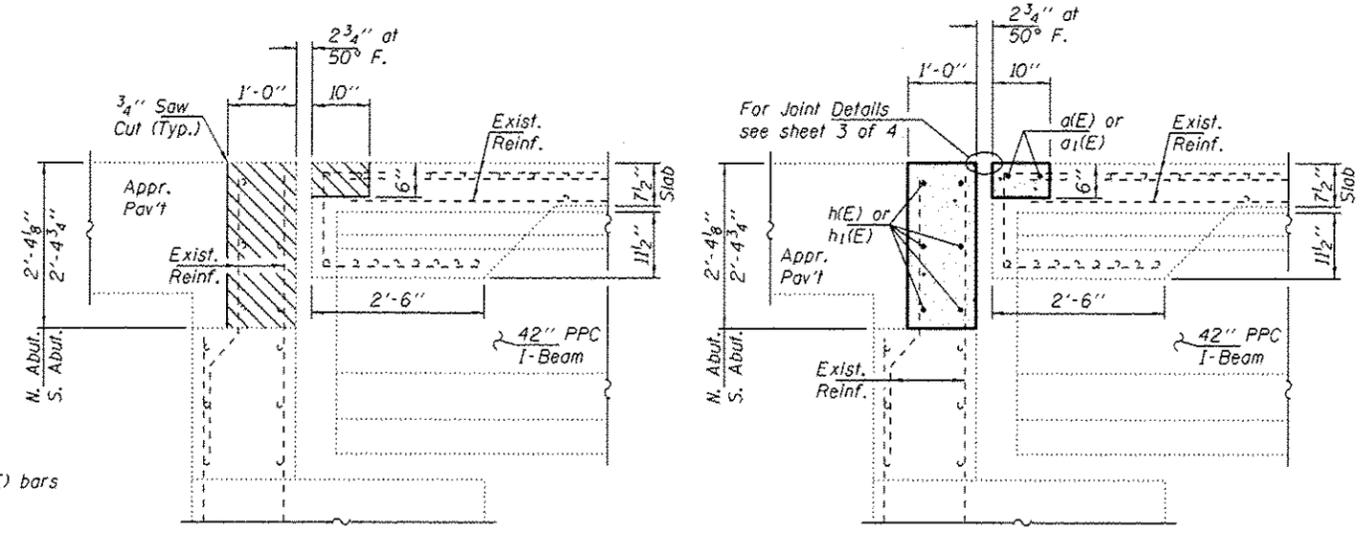
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
316	02 BJR 2017-1	STEPHENSON	26	16
CONTRACT NO. 64L81			ILLINOIS FED. AID PROJECT	



**CONCRETE REMOVAL PLAN**  
North Abutment shown, South Abutment similar.



**CONCRETE REPLACEMENT PLAN**  
North Abutment shown, South Abutment similar.



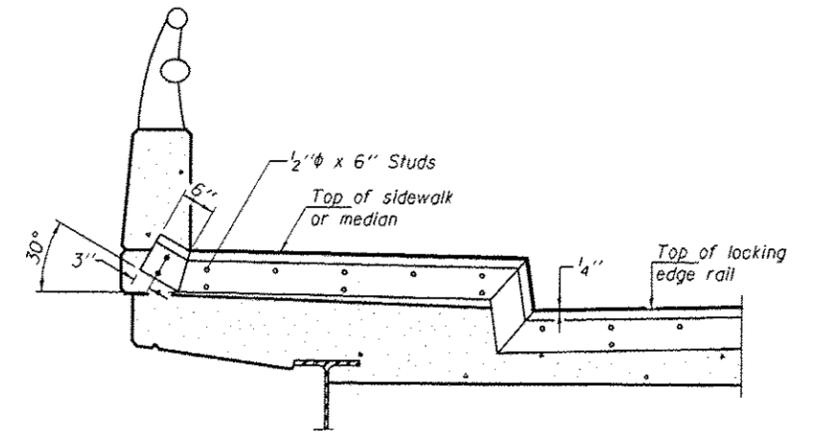
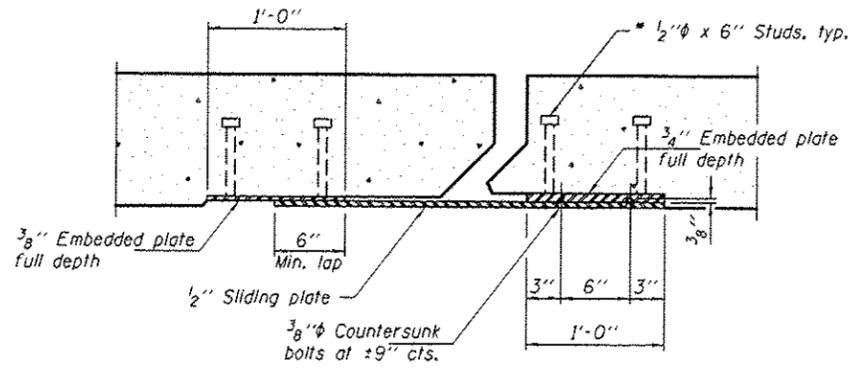
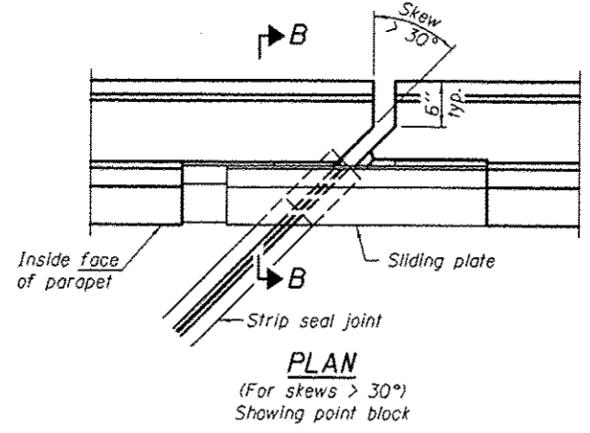
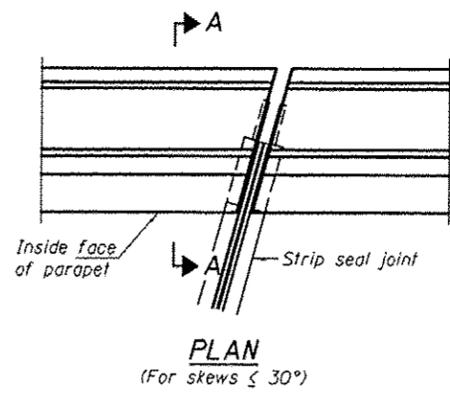
Note:  
Hatched areas indicate  
Concrete Removal.

**MIN. BAR LAP**  
#5 Bars = 3'-6"  
#6 Bars = 4'-0"

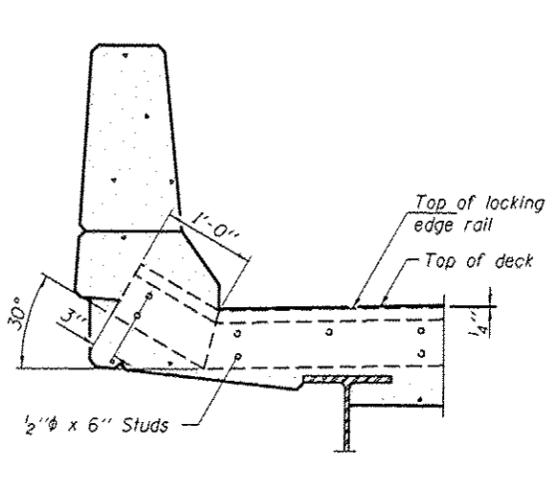
**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
d(E)	8	#5	26'-10"	—
a1(E)	8	#5	22'-6"	—
a2(E)	8	#6	4'-0"	—
d(E)	8	#4	5'-1"	L
d1(E)	8	#5	3'-11"	L
h(E)	24	#6	27'-6"	—
h1(E)	24	#6	23'-2"	—
Concrete Removal			Cu. Yd.	21
Concrete Superstructure			Cu. Yd.	21
Bar Splicers			Each	16
Reinforcement Bars, Epoxy Coated			Pound	2350

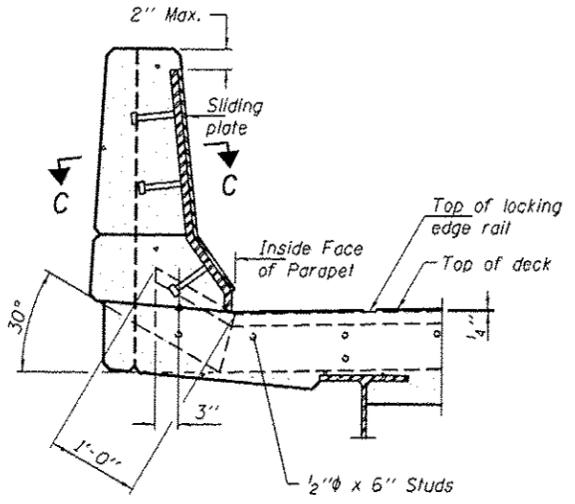
Bars indicated thus 6 x 2-#6 etc. indicates 6 lines of bars with 2 lengths per line.



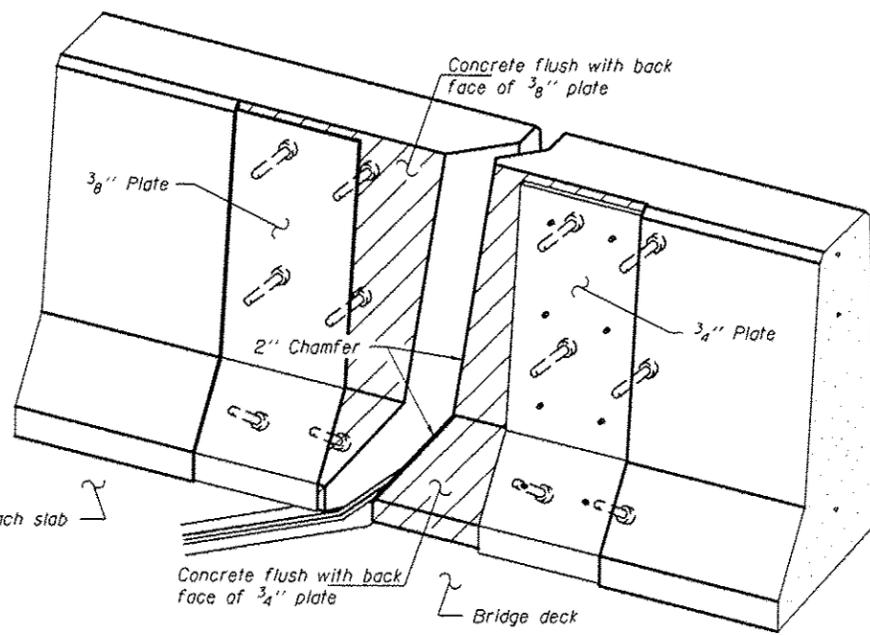
**TYPICAL END TREATMENT AT SIDEWALK OR MEDIAN**  
 Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.



**SECTION A-A**

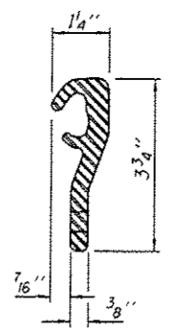


**SECTION B-B**

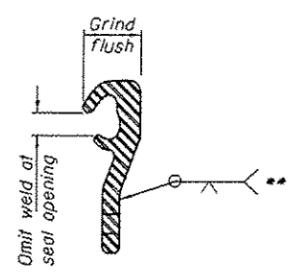


**TRIMETRIC VIEW (Showing back plates only)**

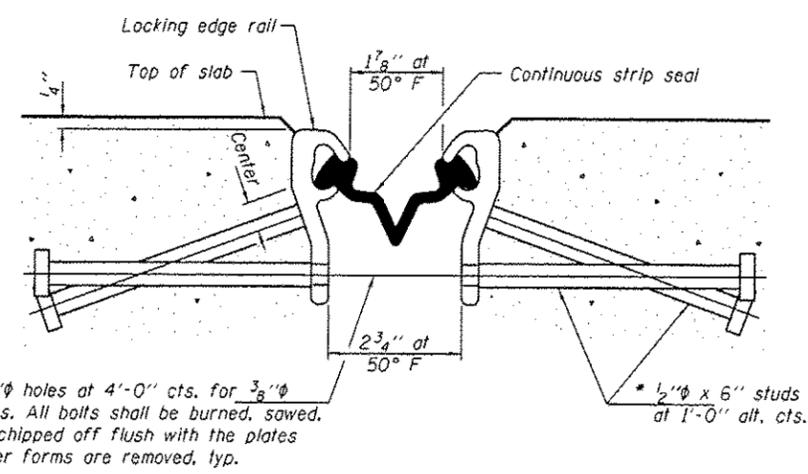
\* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



**LOCKING EDGE RAIL**



**LOCKING EDGE RAIL SPLICE**



**SECTION THRU SHALLOW STRIP SEAL JOINT**

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

**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.  
 All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.  
 Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant.  
 Parapet plates and anchorage studs for skews > 30° included in the cost of Preformed Joint Strip Seal.  
 The manufacturer's recommended installation methods shall be followed.

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

**BILL OF MATERIAL**

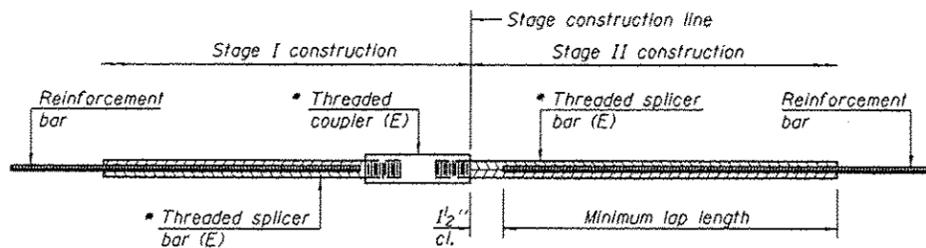
Item	Unit	Total
Preformed Joint Strip Seal	Foot	190

DESIGNED CCC	DATE JANUARY 18, 2017
CHECKED JGY	REVISOR
DRAWN Steffen	REVISOR
CHECKED CCC JGY	REVISOR

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL DETAILS  
 SN 089-0052  
 SHEET NO. 3 OF 4 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
316	02 BJR 2017-1	STEPHENSON	26	18
				CONTRACT NO. 64L81
ILLINOIS FED. AID PROJECT				

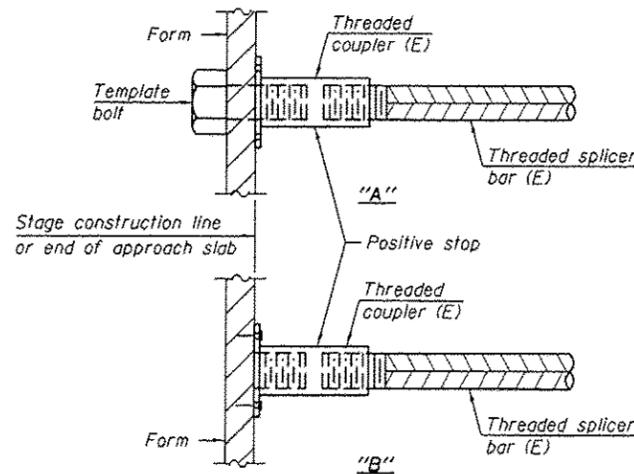


**STANDARD BAR SPLICER ASSEMBLY**

Threaded splicer bar length = min. lap length + 1/2" + thread length

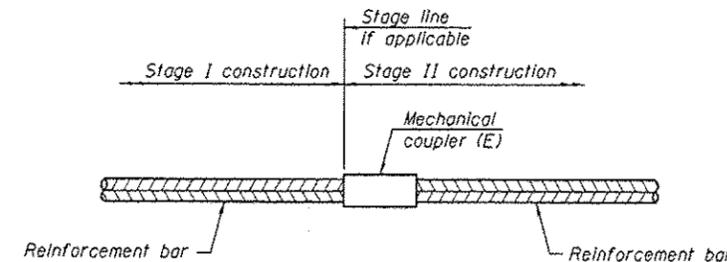
Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
N. Abut. Hatch Block	#6	6	4'-0"
N. Abut. Deck	#5	2	3'-6"
S. Abut. Hatch Block	#6	6	4'-0"
S. Abut. Deck	#5	2	3'-6"



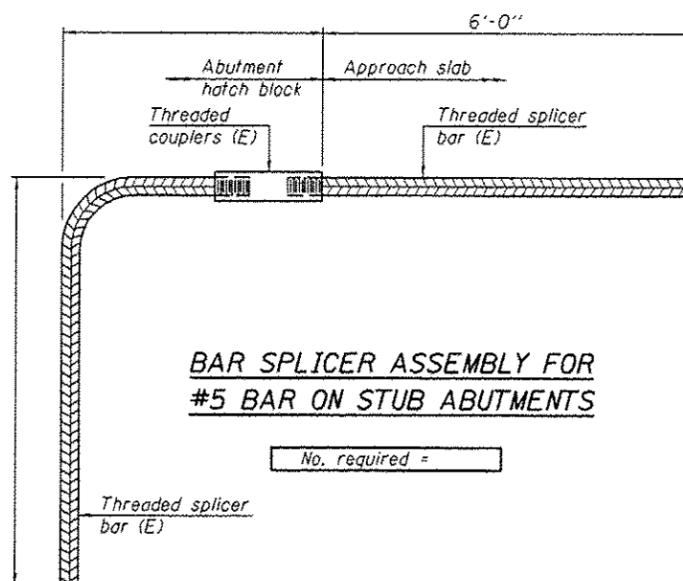
**INSTALLATION AND SETTING METHODS**

"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.



**STANDARD MECHANICAL SPLICER**

Location	Bar size	No. assemblies required



**BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS**

No. required =

**NOTES**

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.  
 All reinforcement shall be lapped and tied to the splicer bars.  
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.  
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1 6-8-15

DESIGNED CCC  
 CHECKED JGY  
 DRAWN Steffen  
 CHECKED CCC JGY

PASSED

*Carl P. [Signature]*  
 ENGINEER OF BRIDGES AND STRUCTURES

DATE JANUARY 18, 2017

REVISED  
 REVISED

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
 SN 089-0052

SHEET NO. 4 OF 4 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
316	D2 BJR 2017-1	STEPHENSON	26	19

CONTRACT NO. 64L81

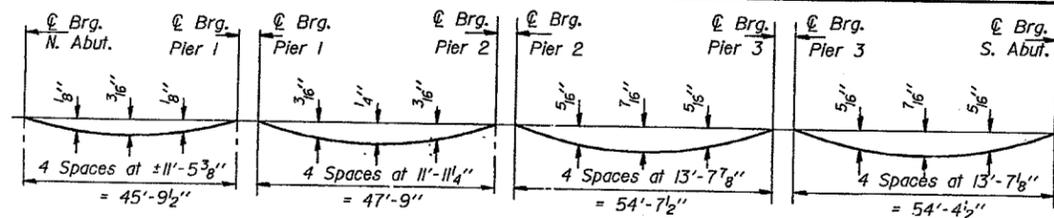
ILLINOIS FED. AID PROJECT



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
			86	27
F.A. PROJECT NO.		ILLINOIS FED. AID PROJECT NO.		

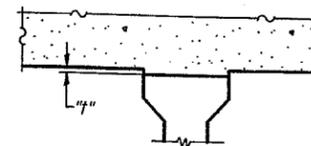
SHEET NO. 2  
22 SHEETS



**DEAD LOAD DEFLECTION DIAGRAM**

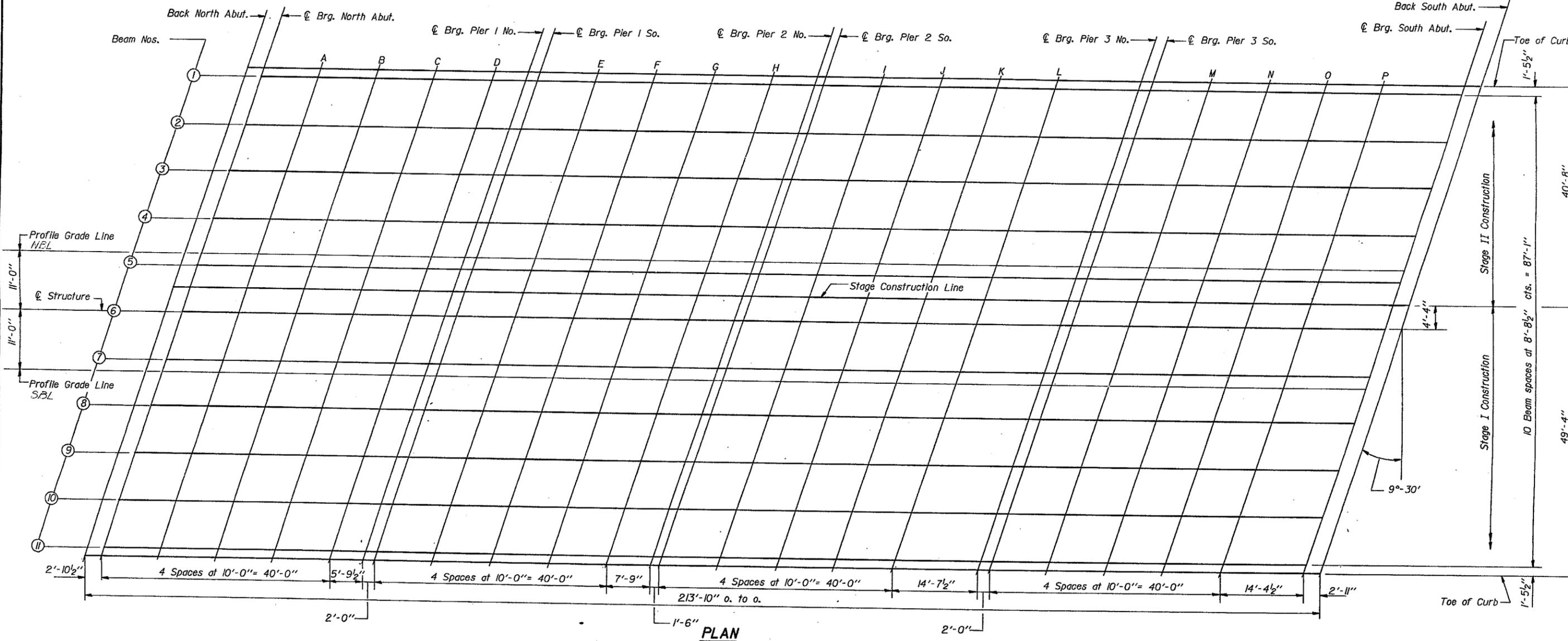
(Includes weight of concrete slab only)

Note: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheets 3 & 4.



To determine "f": After all precast prestressed beams have been erected, elevations of the top flanges of the beams shall be taken at intervals shown on sheets 3 & 4. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheets 3 & 4, minus slab thickness, equals the fillet heights "f" above top flange of beams.

**FILLET HEIGHTS**



**PLAN**

DESIGNED	March 27 1984
CHECKED	James J. Robinson
DRAWN	Mercado
CHECKED	AS

EXAMINED	James J. Robinson
PASSED	James J. Robinson
APPROVED	James J. Robinson

DIRECTOR OF HIGHWAYS

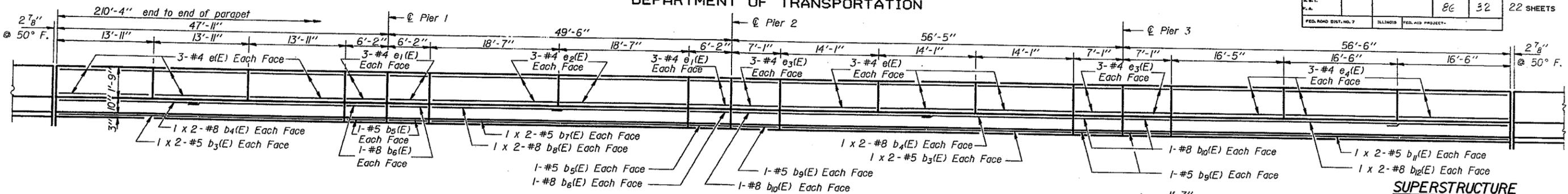
E-S 1-6-82

**DECK ELEVATIONS**  
F.A. RTE. 38 SEC. 102V-BR  
STEPHENSON COUNTY  
STA. 780+51.23

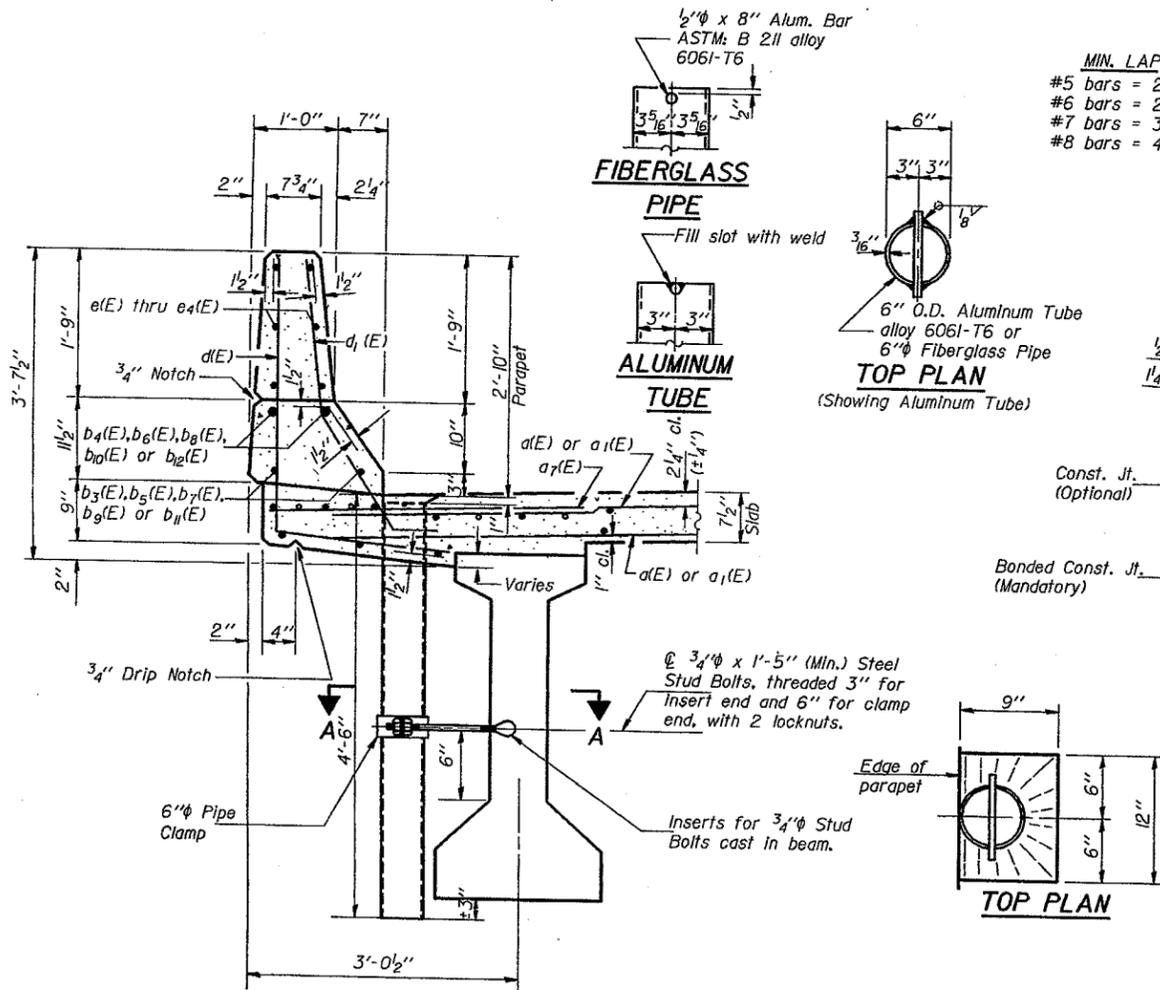


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNT	SCALE	SHEET NO.
S.B.L.			86	32
F.A.				22 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



INSIDE ELEVATION OF PARAPET  
(Looking East)



SECTION THRU PARAPET

PARAPET JOINT DETAILS

Notes:  
Fiberglass pipe shall conform to ASTM D2996, with short time rupture strength hoop tensile stress of 30000 p.s.i. minimum. Pipes with Class C or F liner are acceptable. The surface of the Fiberglass pipe shall be free of bond inhibiting agents.

The exterior surfaces of the Fiberglass Floor Drains shall be painted with one coat of Aluminum paint. Painting of the Fiberglass Floor Drains will not be required when the exterior surfaces of the furnished drains are coated by the manufacturer with silver pigment or a pigment that matches the color of the concrete beam.

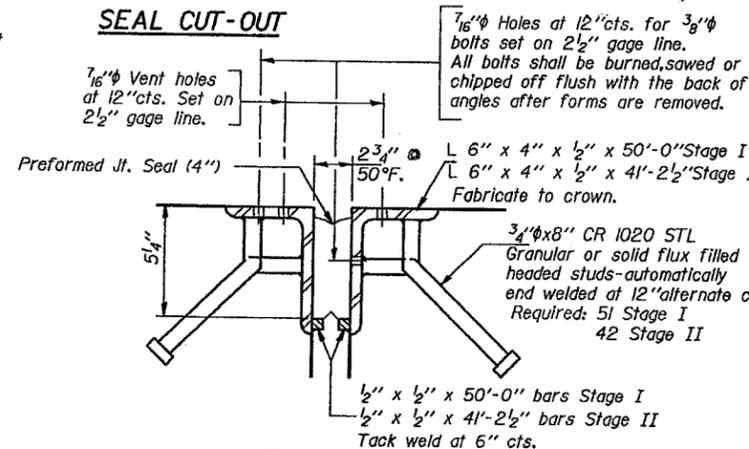
The clamping device and inserts shall be galvanized in accordance with AASHTO M232

END OF SEAL TREATMENT

BAR d<sub>1</sub>(E)

BAR d(E)

SEAL CUT-OUT



DETAIL A

SUPERSTRUCTURE  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	775	#5	52'-4"	
a <sub>1</sub> (E)	775	#5	41'-3"	
a <sub>2</sub> (E)	12	#7	54'-3"	
a <sub>3</sub> (E)	12	#7	41'-10"	
a <sub>4</sub> (E)	2	#6	51'-3"	
a <sub>5</sub> (E)	2	#6	39'-6"	
a <sub>6</sub> (E)	80	#6	8'-2"	
a <sub>7</sub> (E)	460	#6	4'-0"	
b(E)	672	#5	31'-9"	
b <sub>1</sub> (E)	279	#6	24'-0"	
b <sub>2</sub> (E)	688	#5	28'-0"	
b <sub>3</sub> (E)	16	#5	22'-3"	
b <sub>4</sub> (E)	16	#8	23'-5"	
b <sub>5</sub> (E)	12	#5	5'-11"	
b <sub>6</sub> (E)	12	#8	5'-11"	
b <sub>7</sub> (E)	8	#5	19'-9"	
b <sub>8</sub> (E)	8	#8	20'-10"	
b <sub>9</sub> (E)	12	#5	6'-10"	
b <sub>10</sub> (E)	12	#8	6'-10"	
b <sub>11</sub> (E)	8	#5	25'-10"	
b <sub>12</sub> (E)	8	#8	27'-0"	
d(E)	422	#4	5'-11"	
d <sub>1</sub> (E)	460	#5	3'-11"	
e(E)	72	#4	13'-8"	
e <sub>1</sub> (E)	36	#4	5'-11"	
e <sub>2</sub> (E)	24	#4	18'-4"	
e <sub>3</sub> (E)	36	#4	6'-10"	
e <sub>4</sub> (E)	36	#4	16'-2"	
m	120	#4	8'-0"	
m <sub>1</sub>	60	#6	6'-8"	
m <sub>2</sub>	27	#8	6'-0"	
m <sub>3</sub>	6	#8	3'-9"	
s	60	#4	10'-2"	
s <sub>1</sub>	120	#4	9'-10"	
x(E)	340	#6	7'-7"	
Reinforcement Bars	Lbs.	2930		
Reinforcement Bars (Epoxy Coated)	Lbs.	146600		
Class X Concrete	Cu. Yds.	595.8		

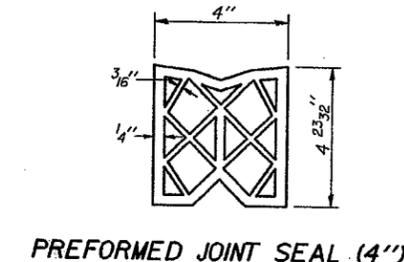
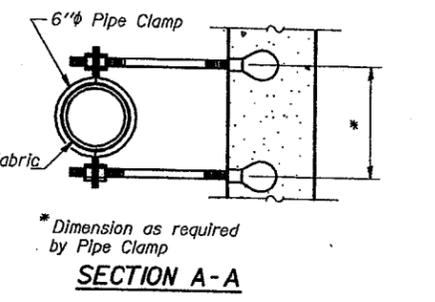
Reinforcement bars designated (E) shall be epoxy coated.

PARAPET DETAILS  
F.A RTE. 38 SEC. 102V-BR  
STEPHENSON COUNTY  
STA. 780+51.23

DESIGNED: [Signature]  
 CHECKED: [Signature]  
 DRAWN: Mercado  
 CHECKED: [Signature]

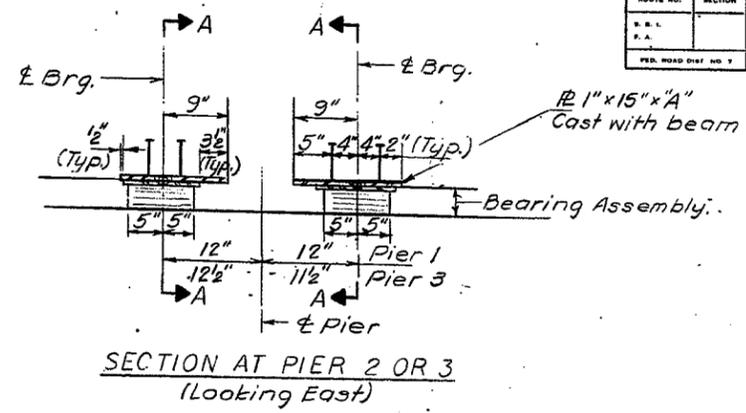
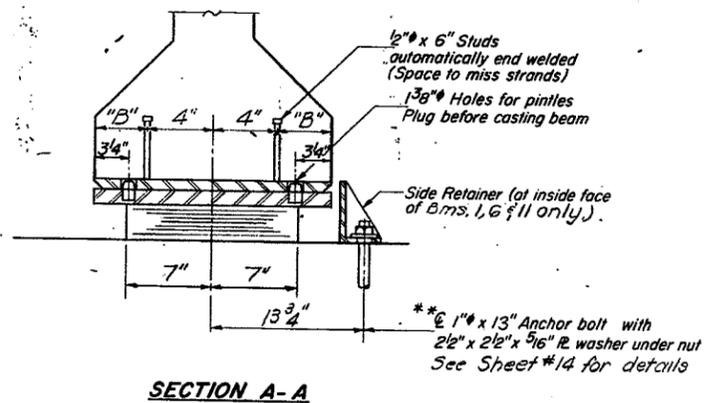
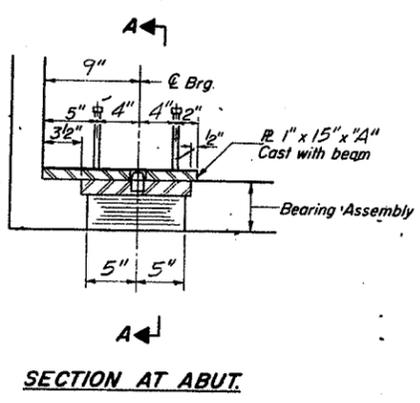
March 27 1984  
 EXAMINED: [Signature]  
 PASSED: [Signature]  
 APPROVED: [Signature]  
 DIRECTOR OF HIGHWAYS

PI-1-D

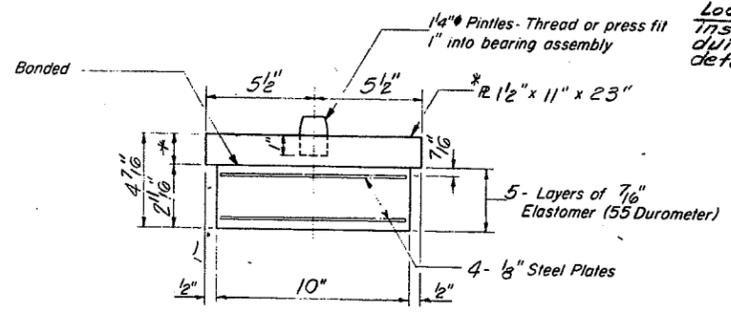


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

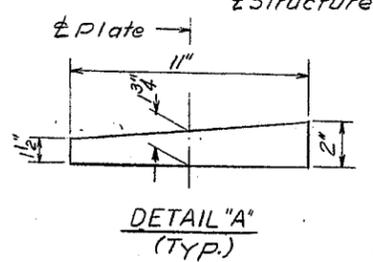
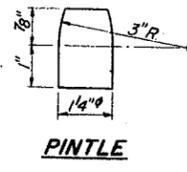
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 13 22 SHEETS
B. & L. P. A.			86 38		
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		



**TYPE I ELASTOMERIC EXP BRG.**

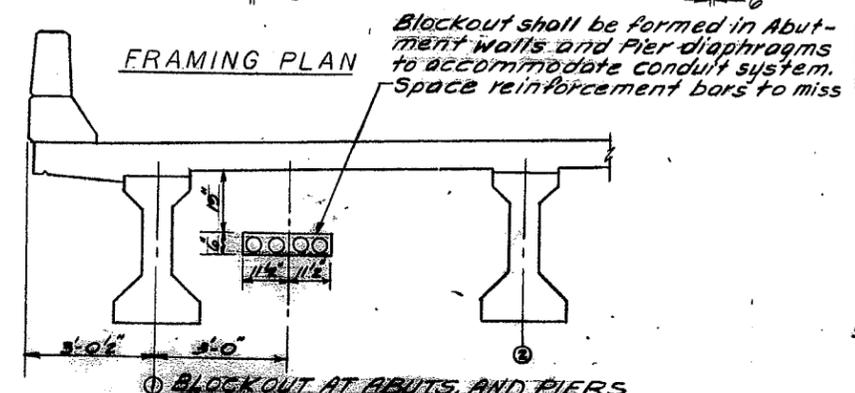
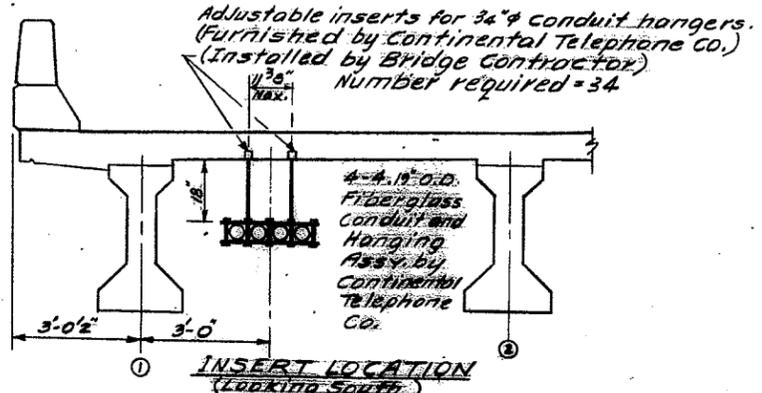
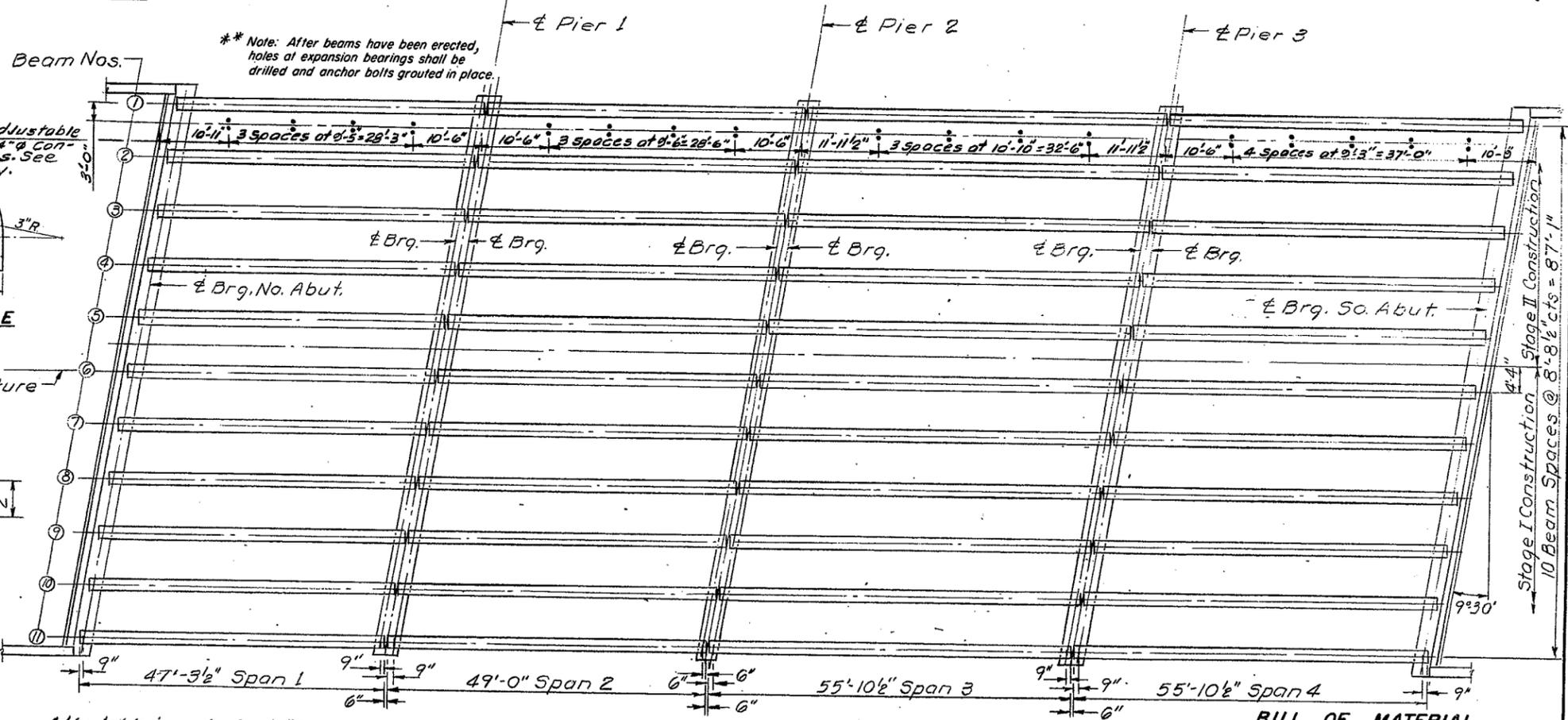
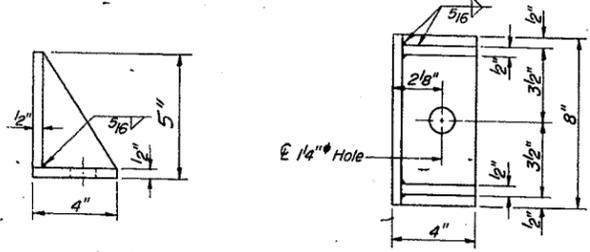


Location of adjustable inserts for 3/4" conduit hangers. See details below.



	Span 1 & 2	Span 3 & 4
"A"	1'-10 1/2"	1'-11"
"B"	0'-7 1/4"	0'-7 1/2"

\*\*\* Built-up retainers from 1/2" angles are acceptable



**BILL OF MATERIAL**

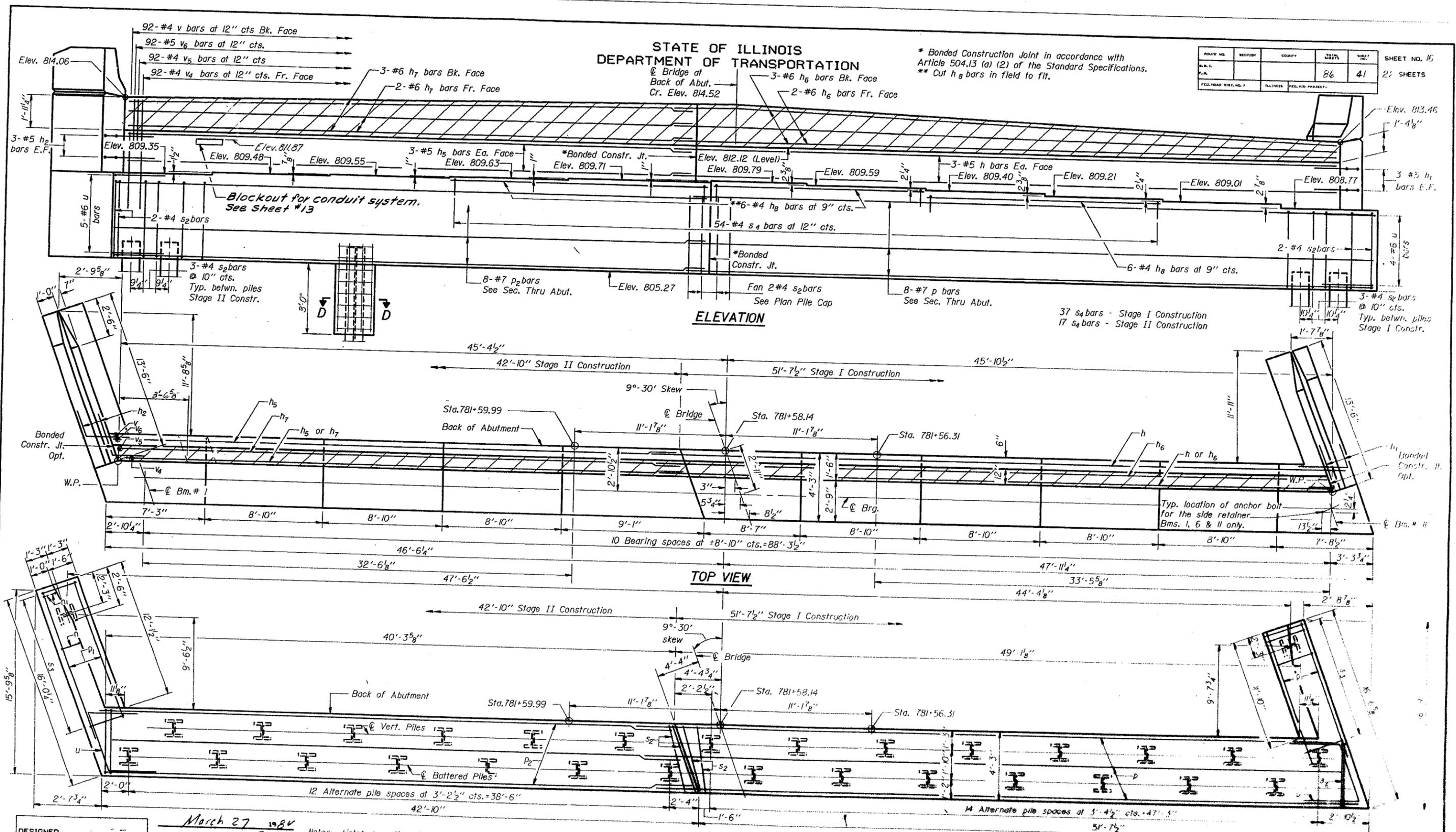
Item	Unit	Total
Elastomer Bearing Assembly, Type I	Each	66

DESIGNED *March 29, 1984*  
 CHECKED *LH*  
 DRAWN *F.M.*  
 CHECKED *AB*

EXAMINED *James J. ...*  
 PASSED *...*  
 APPROVED *...*  
 DIRECTOR OF HIGHWAYS

FRAMING PLAN AND BEARING DETAILS  
 F.A. RTE. 38 SEC. 102 V-BR  
 STEPHENSON COUNTY





STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

\* Bonded Construction Joint in accordance with Article 504.13 (a) (2) of the Standard Specifications.  
\*\* Cut h<sub>8</sub> bars in field to fit.

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.
			86	41
22 SHEETS				

ELEVATION

TOP VIEW

PLAN-PILE CAP

DESIGNED	
CHECKED	
DRAWN	Mercado JFS
CHECKED	

March 27 1984  
 EXAMINED  
 PASSED  
 APPROVED

Notes: Hatched portion shall be poured after superstructure forms have been removed.  
 Class X Concrete in the hatched portion is billed with the superstructure on sheet #7.  
 Space reinforcement in cap to miss anchor bolts.  
 Pour steps monolithically with cap.  
 See sheet # 11 for Abutment Details and Bill of Material.  
 For Section D D see sheet #17.

46 s<sub>2</sub> bars - Stage I Construction  
 40 s<sub>2</sub> bars - Stage II Construction  
 v<sub>1</sub>, v<sub>2</sub>, v<sub>3</sub> : 50 bars each - Stage I Construction  
 v<sub>4</sub>, v<sub>5</sub>, v<sub>6</sub> : 42 bars each - Stage II Construction

SOUTH ABUTMENT  
 F.A. RTE. 38 SEC. 12V-BR  
 STEPHENSON COUNTY