

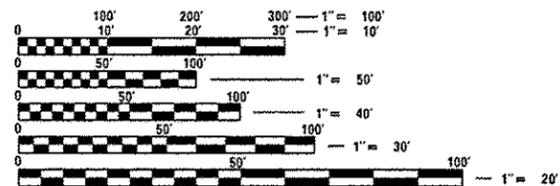
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
**PROPOSED
HIGHWAY PLANS**
FAI ROUTE 39 (I-39)
SECTION: D2 BRIDGE PAINTING 2014-4
TYPE of IMPROVEMENT: BRIDGE PAINTING
LEE COUNTY

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	D2 BRIDGE PAINTING 2014-4	LEE	32	1
		ILLINOIS	CONTRACT NO. 64K11	

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

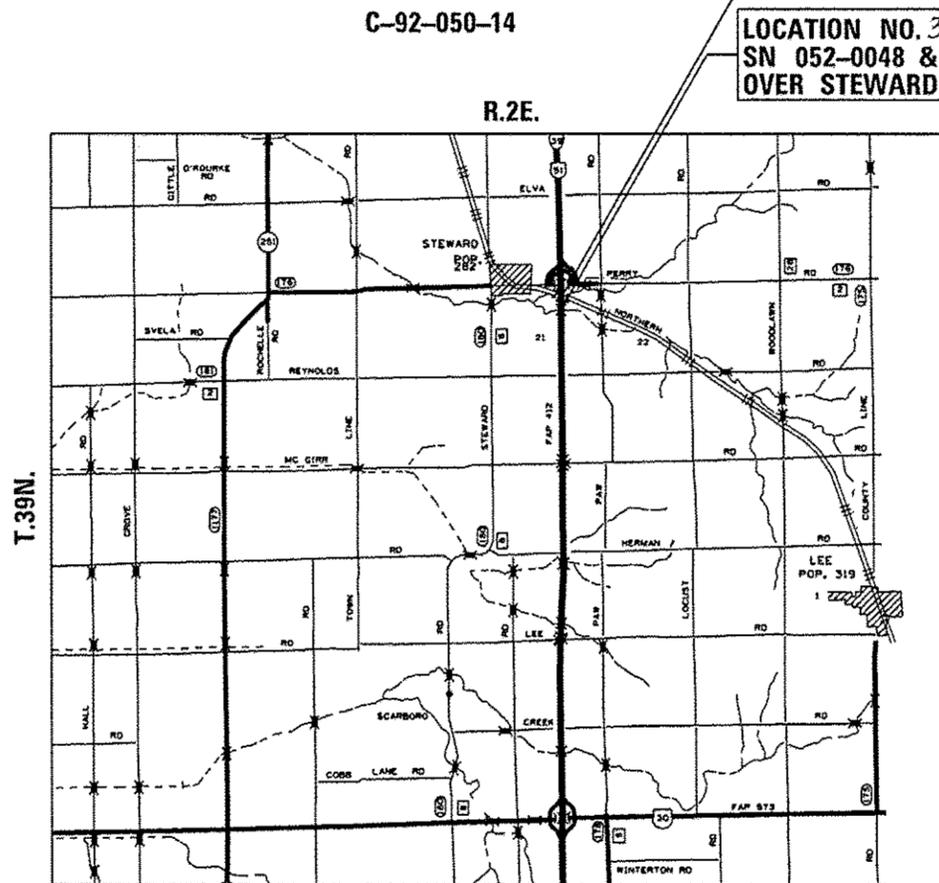


ALTO TOWNSHIP, SECTION 21



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



LOCATION NO. 1 #2
SN 052-0046 & 052-0047
OVER THE BN RAILROAD

LOCATION NO. 3 #4
SN 052-0048 & 052-0049
OVER STEWARD CREEK

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED March 14th 2014
Paul C. [Signature]
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 9 2014
John D. Baranzelli, PE
acting ENGINEER OF DESIGN AND ENVIRONMENT

May 9 2014
Osman [Signature]
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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

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

CONTRACT NO. 64K11

Rev.

INDEX OF SHEETS

1	COVER SHEET
2	INDEX OF SHEETS & STATE STANDARDS & GENERAL NOTES
3	SUMMARY OF QUANTITIES
4	TYPICAL SECTIONS
5 - 8	TRAFFIC CONTROL PLAN - STAGE I
9 - 12	TRAFFIC CONTROL PLAN - STAGE II
13 - 15	TYPICAL PAVEMENT MARKINGS (DIST STD 41.1)
16	PAINTING DETAILS (DIST STD 44.1)
17	INFORMATIONAL WARNING SIGNS (FOR NARROW TRAVEL LANES) (DIST STD 39.2)
18 - 32	EXISTING PLAN SHEETS

STATE STANDARDS

701101 - 04	OFF-RD OPERATIONS, MULTILANE, 15'(4.5m) TO 24"(600mm) FROM PAVEMENT EDGE
701106 - 02	OFF-RD OPERATIONS, MULTILANE, MORE THAN 15'(4.5m) AWAY
701400 - 07	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401 - 08	LANE CLOSURE, FREEWAY/EXPRESSWAY
701402 - 09	LANE CLOSURE, FREEWAY/EXPRESSWAY, WITH BARRIER
701411 - 08	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS \geq 45 MPH
701426 - 06	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS \geq 45 MPH
701901 - 03	TRAFFIC CONTROL DEVICES
704001 - 07	TEMPORARY CONCRETE BARRIER
720011 - 01	SIGN PANEL MOUNTING DETAILS
728001 - 01	TELESCOPING STEEL SIGN SUPPORT
729001 - 01	APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)

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. The following listed utilities located within the project limits or immediately adjacent to the project construction limits are members of JULIE:

Electric:
COMMONWEALTH EDISON COMPANY
ATTN: NORA FERNANDEZ
123 ENERGY AVENUE
ROCKFORD, IL 61109

Telephone:
FRONTIER
ATTN: DONALD BELMORE
2239 NEWBURG ROAD
BELVIDERE, IL 61008

Gas:
NICOR GAS CO.
ATTN: CONSTANCE LANE
1844 FERRY ROAD
NAPERVILLE, IL 60563

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.

NO STREAM PERMITS HAVE BEEN PROCURED FOR THIS PROJECT. NONE ARE REQUIRED FROM THE REGULATORY AGENCIES AS LONG AS THERE IS NO DEBRIS FALLING OR BEING PLACED INTO THE STREAM. ANY TEMPORARY FILL IN THE STREAM OR THE COMPROMISING OF THE DIKE (IF APPLICABLE) WILL NOT BE ALLOWED. IF THE CONTRACTOR CHOOSES TO USE ALTERNATE/MODIFIED CONSTRUCTION METHOD(S) FROM THE AFOREMENTIONED, THEY WILL BE RESPONSIBLE FOR OBTAINING THE PROPER PERMITS. NO RELIEF OR COMPENSATION WILL BE GIVEN FOR ANY DELAYS, WORKING DAYS CHARGED OR CALENDAR DAYS EXPIRED AS A RESULT OF THE LOSS OF TIME OR DELAY DURING THE RE-SUBMITTAL PROCESS TO PROCURE THE NECESSARY PERMIT(S) DUE TO THE CONTRACTOR CHOOSING ALTERNATE/MODIFIED CONSTRUCTION METHOD(S). ABSOLUTELY NO CONSTRUCTION ACTIVITIES WILL TAKE PLACE WITHOUT THE PROPER PERMITS BEING SECURED.

FILE NAME : D:\BR\0000\Lee\54K11 Cleaning & Painting	USER NAME : dosidd	DESIGNED - _____	REVISED - _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS STATE STANDARDS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SN 052-0046, 052-0047, 052-0048, 052-0049	DRAWN: [unclear]	CHECKED - _____	REVISED - _____			39	02 BRIDGE PAINTING 2014-4	LEE	32	2
PLOT SCALE * 100.0000 ' / in.	DATE	DATE	DATE			CONTRACT NO. 64K11				
PLOT DATE * Mon Mar 17 14:12:55 2014	DATE	DATE	DATE			ILLINOIS FED. AID PROJECT				

SUMMARY OF QUANTITIES

CODE NUMBER	ITEM	UNIT	100% STATE TOTAL QUANTITY	100% STATE LEE COUNTY 0014
67100100	MOBILIZATION	L SUM	1	1
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	1	1
70100207	TRAFFIC CONTROL AND PROTECTION, STANDARD 701402	EACH	2	2
70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	EACH	1	1
70300220	TEMPORARY PAVEMENT MARKING LINE 4"	FOOT	12,473	12,473
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	4,158	4,158
70400100	TEMPORARY CONCRETE BARRIER	FOOT	3,129.49	3129.49
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	3,091.48	3,091.48
70600250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	1	1
70600251	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	1	1
70600350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	1	1
70600352	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	1	1
* 78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	8,473	8,473
Z0007101	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 1	L SUM	1	1
Z0007103	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 3	L SUM	1	1
Z0007102	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 2	L SUM	1	1
Z0007104	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 4	L SUM	1	1
Z0010501	CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1	1
Z0010503	CLEANING AND PAINTING STEEL BRIDGE NO. 3	L SUM	1	1
Z0010502	CLEANING AND PAINTING STEEL BRIDGE NO. 2	L SUM	1	1
Z0010504	CLEANING AND PAINTING STEEL BRIDGE NO. 4	L SUM	1	1
X7010410	SPEED DISPLAY TRAILER	CAL MO	3	3

* 78008210

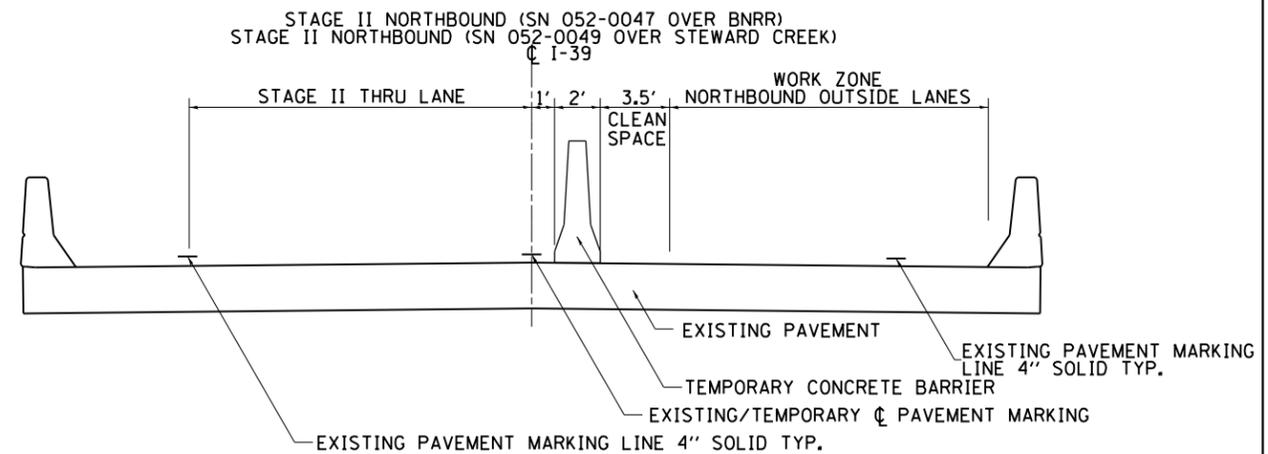
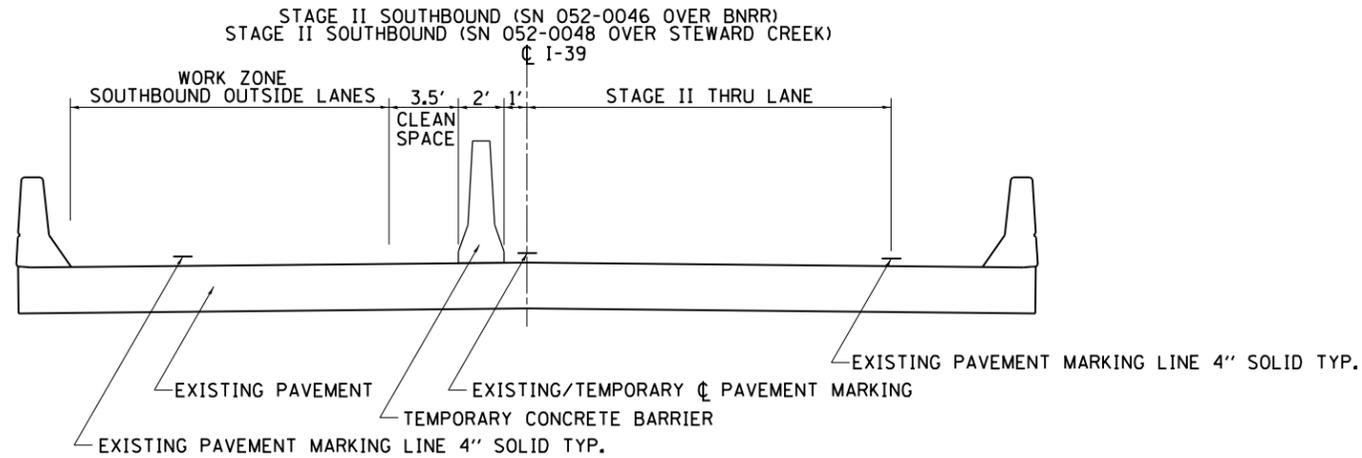
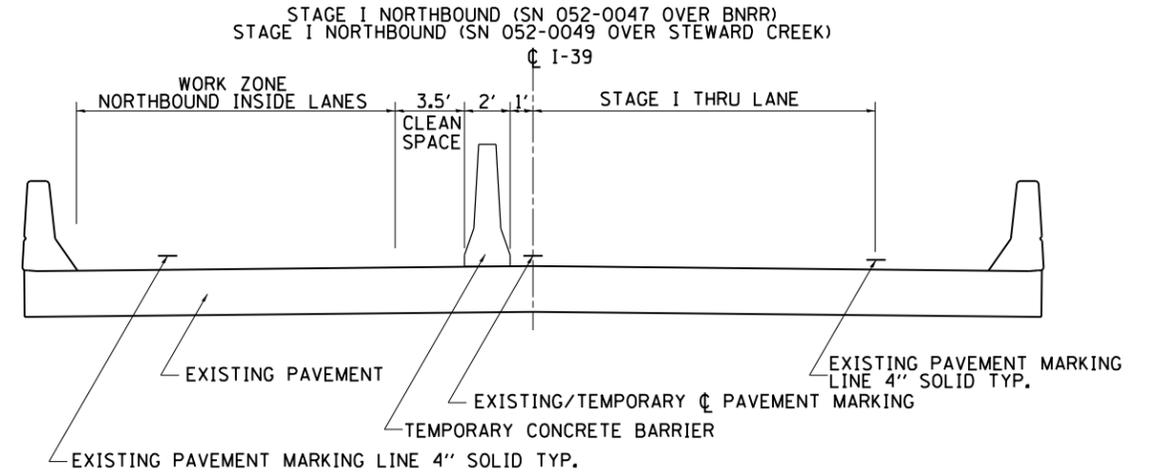
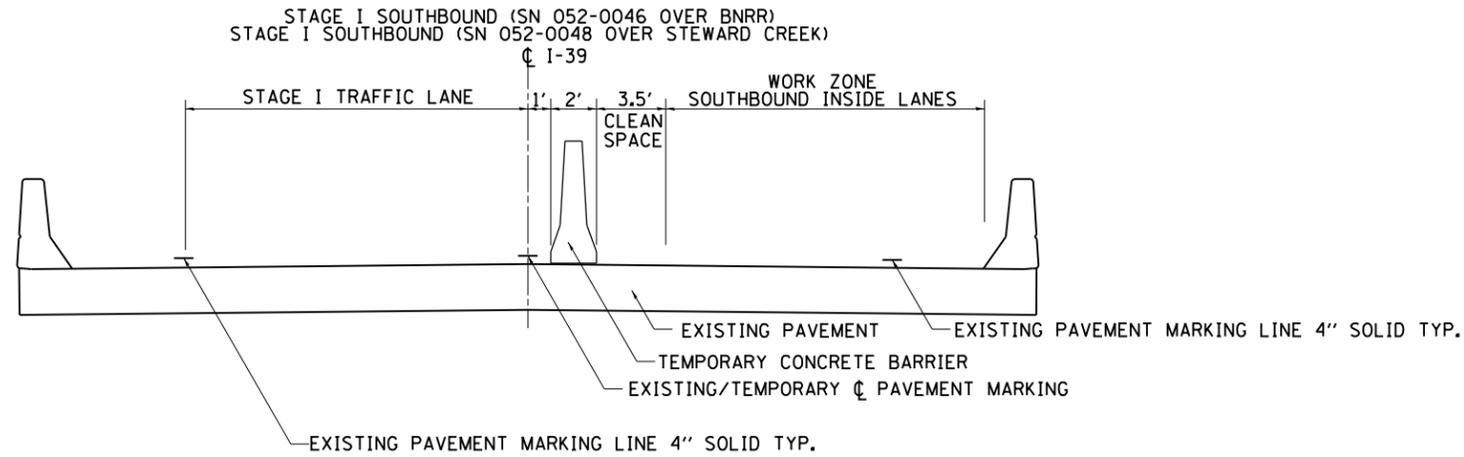
11

** Specialty Items*

Rev.

FILE NAME : D:\BR\Draws\Lee\64K11 Cleaning & Painting	USER NAME : dassdd	DESIGNED - CORNER	REVISED - CORNER	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES	F.A.I. RTE. 39	SECTION D2 BRIDGE PAINTING 2014-4	COUNTY LEE	TOTAL SHEETS 32	SHEET NO. 3
Default	Plot Scale : 100,0000 / 1" = 100'	CHECKED -	REVISED -	SCALE: _____	SHEET _____ OF _____ SHEETS	ILLINOIS FED. AID PROJECT		CONTRACT NO. 64K11		

STAGING TYPICALS



FILE NAME =	USER NAME = dssdd	DESIGNED - _____	REVISED - _____
D:\BR\Draw\Lee\64K11 Cleaning & Painting	SN 052-0046, 052-0047, 052-0048, 052-0049	DRAWN - _____	REVISED - _____
Default	PLOT SCALE = 100.0000' / in.	CHECKED - _____	REVISED - _____
	PLOT DATE = Mon Mar 17 11:49:25 2014	DATE - _____	REVISED - _____

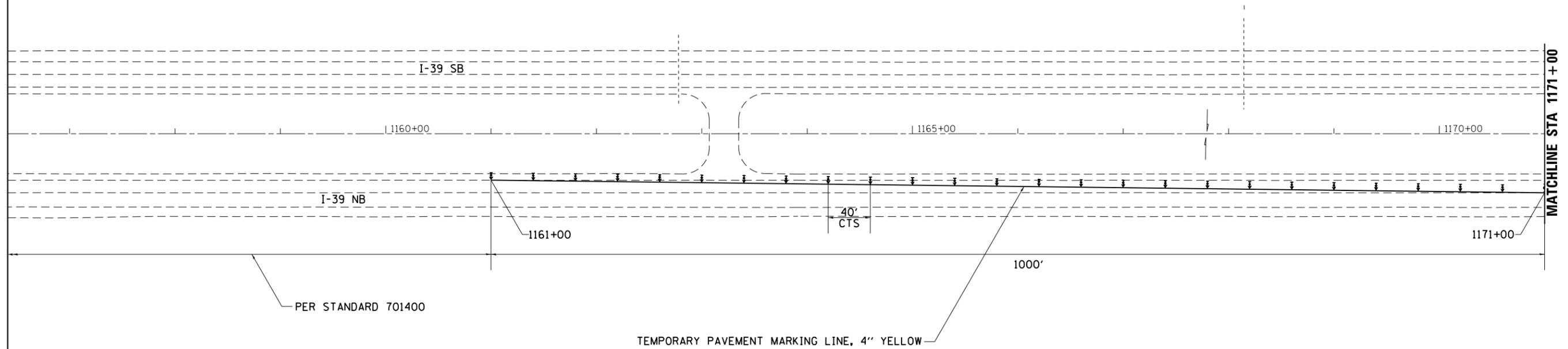
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING TYPICALS

SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	D2 BRIDGE PAINTING 2014-4	LEE	32	4
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64K11	

TRAFFIC CONTROL PLAN – STAGE I



SYMBOLS

-  Arrow board
-  Work area
-  Sign
-  Direction indicator barricade with steady burn monodirectional light
-  Type II barricade or drum with steady burn monodirectional light
-  Temporary concrete barrier
-  Impact attenuator
-  Drums with steady burning monodirectional light

NOTES

- ① ReflectORIZED temporary pavement marking shall be placed throughout the taper and along-side the work area. The edge line shall be white for right lane closure and yellow for left lane closures.
- ② Barrier wall/guardrail markers at 25' (7.6 m). Markers on right shall be shall be crystal and markers on left shall be amber.
- ③ Offsets shown are from the centerline pavement marking of the direction of travel.
- ④ Barrier wall offsets are to the construction side of the barrier wall.
- ⑤ Refer to Highway Standard 701402 for additional details not shown.

FILE NAME =	USER NAME = dosddd	DESIGNED - _____	REVISED - _____
D:\NBR\Draw\Lee\64K11 Cleaning & Painting	SN 052-0046, 052-0047, 052-0048, 052-0049	DRAWN - _____	REVISED - _____
Default	PLOT SCALE = 100.0000' / in.	CHECKED - _____	REVISED - _____
	PLOT DATE = Mon Mar 17 11:49:29 2014	DATE - _____	REVISED - _____

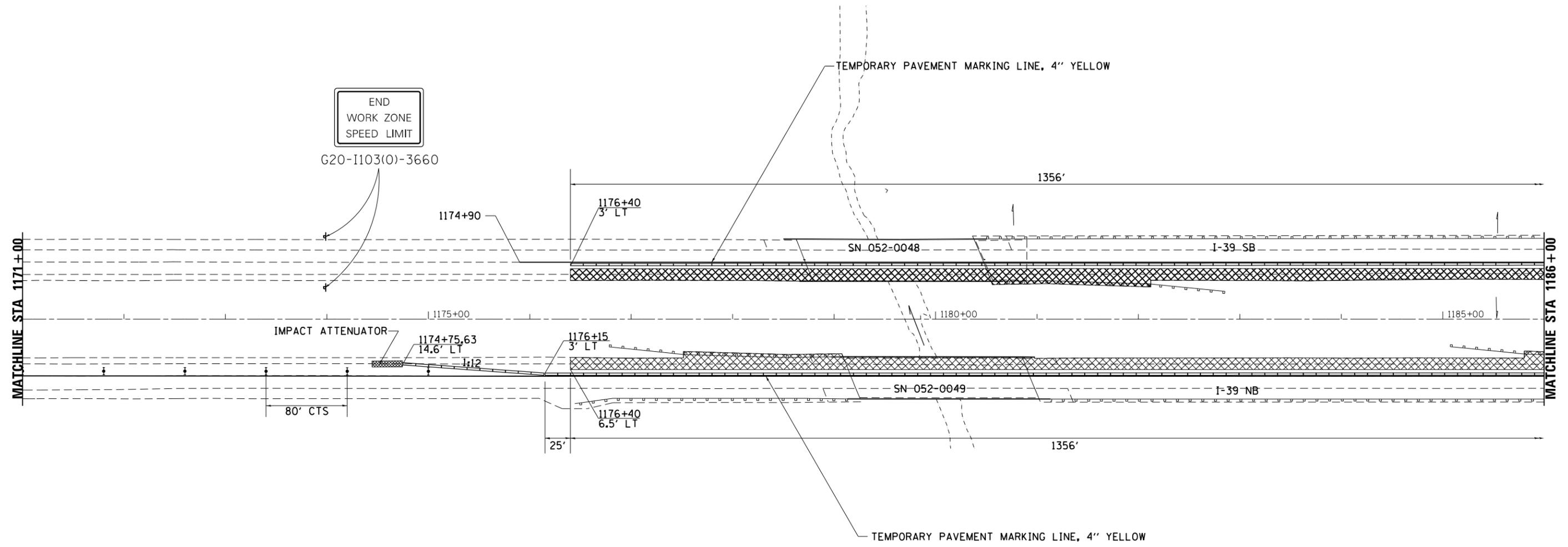
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL PLAN
STAGE I**

SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	D2 BRIDGE PAINTING 2014-4	LEE	32	5
CONTRACT NO. 64K11				
ILLINOIS FED. AID PROJECT				

TRAFFIC CONTROL PLAN – STAGE I



SYMBOLS

-  Arrow board
-  Work area
-  Sign
-  Direction indicator barricade with steady burn monodirectional light
-  Type II barricade or drum with steady burn monodirectional light
-  Temporary concrete barrier
-  Impact attenuator
-  Drums with steady burning monodirectional light

NOTES

- ① ReflectORIZED temporary pavement marking shall be placed throughout the taper and along-side the work area. The edge line shall be white for right lane closure and yellow for left lane closures.
- ② Barrier wall/guardrail markers at 25' (7.6 m). Markers on right shall be shall be crystal and markers on left shall be amber.
- ③ Offsets shown are from the centerline pavement marking of the direction of travel.
- ④ Barrier wall offsets are to the construction side of the barrier wall.
- ⑤ Refer to Highway Standard 701402 for additional details not shown.

FILE NAME =	USER NAME = dosddd	DESIGNED - _____	REVISED - _____
D:\NBR\Draw\Lee\64K11 Cleaning & Painting	SN 052-0046, 052-0047, 052-0048, 052-0049	DRAWN - _____	REVISED - _____
Default	PLOT SCALE = 100.0000' / in.	CHECKED - _____	REVISED - _____
	PLOT DATE = Mon Mar 17 11:49:36 2014	DATE - _____	REVISED - _____

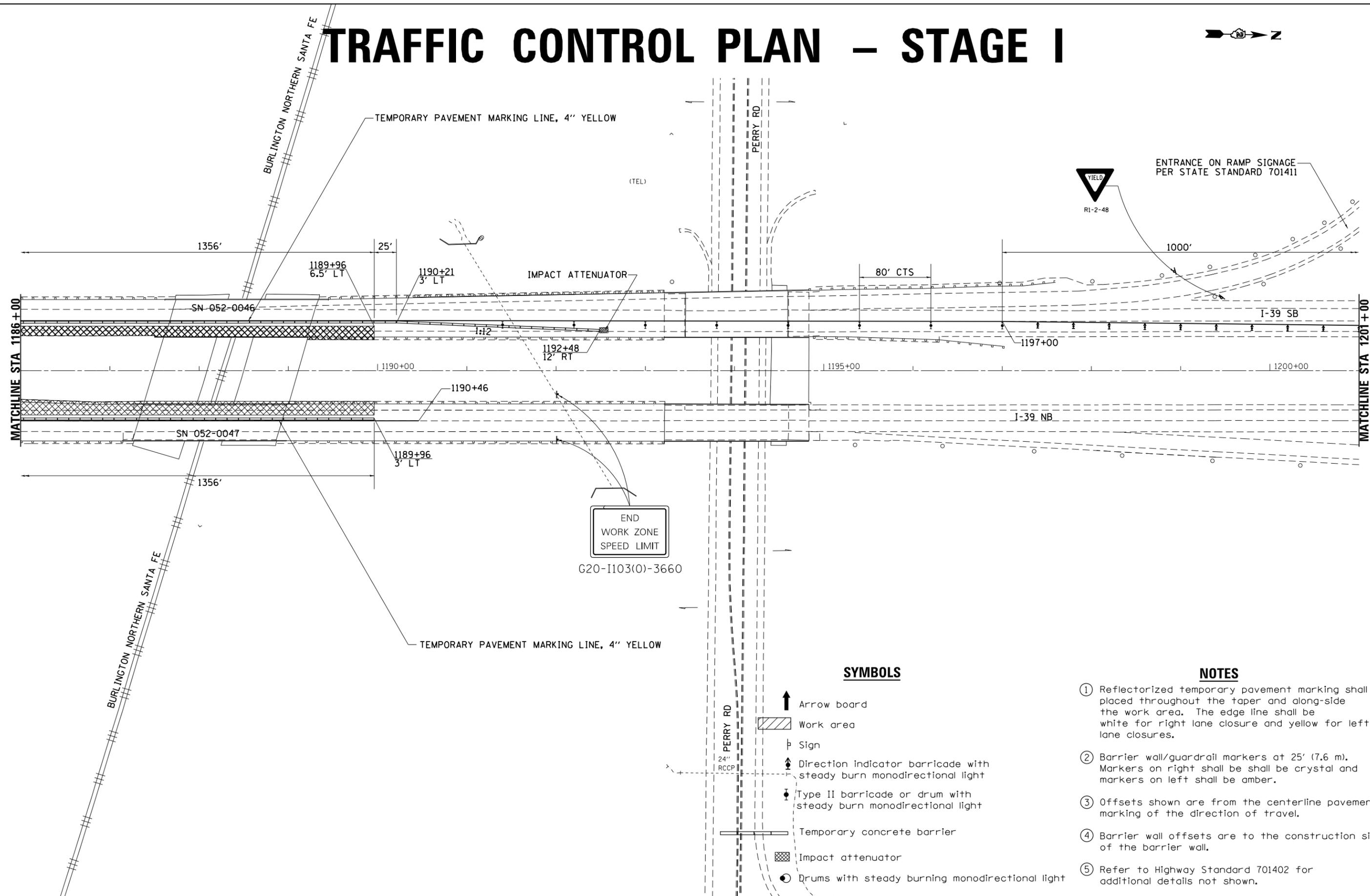
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL PLAN
STAGE I**

SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	D2 BRIDGE PAINTING 2014-4	LEE	32	6
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64K11	

TRAFFIC CONTROL PLAN – STAGE I



SYMBOLS

- Arrow board
- Work area
- Sign
- Direction indicator barricade with steady burn monodirectional light
- Type II barricade or drum with steady burn monodirectional light
- Temporary concrete barrier
- Impact attenuator
- Drums with steady burning monodirectional light

NOTES

- ① ReflectORIZED temporary pavement marking shall be placed throughout the taper and along-side the work area. The edge line shall be white for right lane closure and yellow for left lane closures.
- ② Barrier wall/guardrail markers at 25' (7.6 m). Markers on right shall be shall be crystal and markers on left shall be amber.
- ③ Offsets shown are from the centerline pavement marking of the direction of travel.
- ④ Barrier wall offsets are to the construction side of the barrier wall.
- ⑤ Refer to Highway Standard 701402 for additional details not shown.

FILE NAME =	USER NAME = dosddd	DESIGNED - _____	REVISED - _____
D:\BR\Draw\Lee\64K11 Cleaning & Painting	SN 052-0046, 052-0047, 052-0048, 052-0049	DRAWN - _____	REVISED - _____
Default	PLOT SCALE = 100.0000' / in.	CHECKED - _____	REVISED - _____
	PLOT DATE = Mon Mar 17 11:49:41 2014	DATE - _____	REVISED - _____

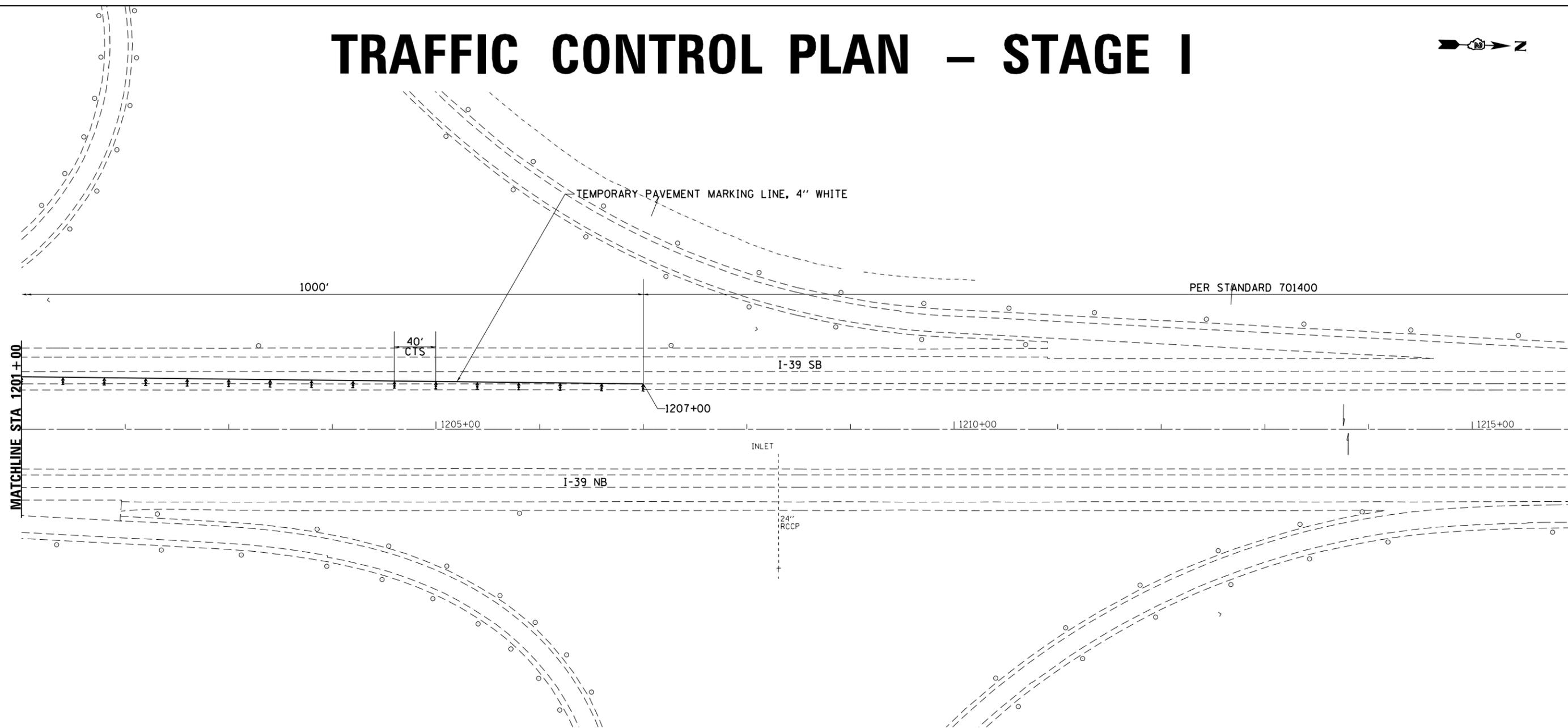
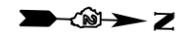
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN
STAGE I

SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	D2 BRIDGE PAINTING 2014-4	LEE	32	7
				CONTRACT NO. 64K11
ILLINOIS FED. AID PROJECT				

TRAFFIC CONTROL PLAN – STAGE I



SYMBOLS

-  Arrow board
-  Work area
-  Sign
-  Direction indicator barricade with steady burn monodirectional light
-  Type II barricade or drum with steady burn monodirectional light
-  Temporary concrete barrier
-  Impact attenuator
-  Drums with steady burning monodirectional light

NOTES

- ① ReflectORIZED temporary pavement marking shall be placed throughout the taper and along-side the work area. The edge line shall be white for right lane closure and yellow for left lane closures.
- ② Barrier wall/guardrail markers at 25' (7.6 m). Markers on right shall be shall be crystal and markers on left shall be amber.
- ③ Offsets shown are from the centerline pavement marking of the direction of travel.
- ④ Barrier wall offsets are to the construction side of the barrier wall.
- ⑤ Refer to Highway Standard 701402 for additional details not shown.

FILE NAME =	USER NAME = dosddd	DESIGNED - _____	REVISED - _____
D:\BR\Draw\Lee\64K11 Cleaning & Painting	SN 052-0046, 052-0047, 052-0048, 052-0049	CHECKED - _____	REVISED - _____
Default	PLOT SCALE = 100.0000' / in.	DATE - _____	REVISED - _____
	PLOT DATE = Mon Mar 17 11:49:46 2014		

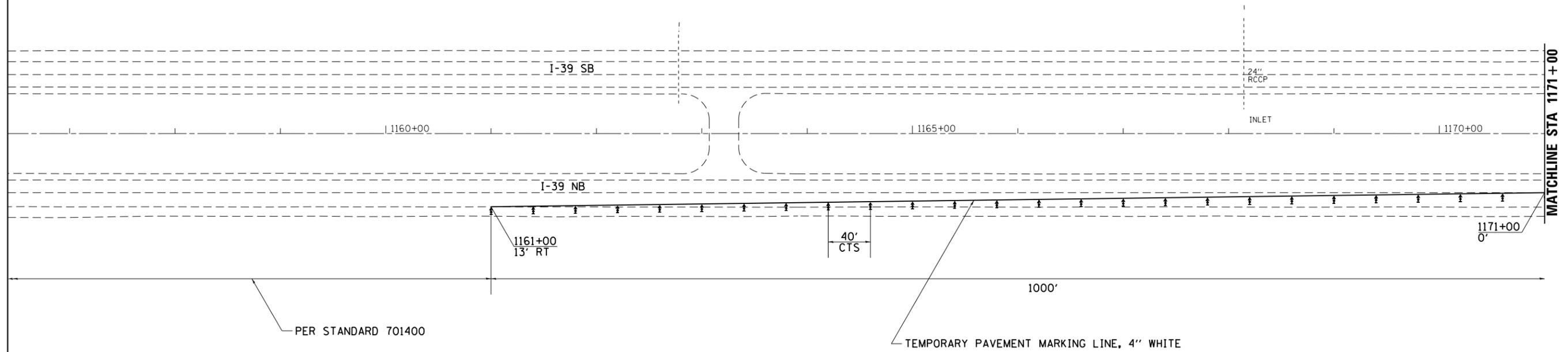
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL PLAN
STAGE I**

SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	D2 BRIDGE PAINTING 2014-4	LEE	32	8
CONTRACT NO. 64K11				
ILLINOIS FED. AID PROJECT				

TRAFFIC CONTROL PLAN – STAGE II



SYMBOLS

-  Arrow board
-  Work area
-  Sign
-  Direction indicator barricade with steady burn monodirectional light
-  Type II barricade or drum with steady burn monodirectional light
-  Temporary concrete barrier
-  Impact attenuator
-  Drums with steady burning monodirectional light

NOTES

- ① ReflectORIZED temporary pavement marking shall be placed throughout the taper and along-side the work area. The edge line shall be white for right lane closure and yellow for left lane closures.
- ② Barrier wall/guardrail markers at 25' (7.6 m). Markers on right shall be shall be crystal and markers on left shall be amber.
- ③ Offsets shown are from the centerline pavement marking of the direction of travel.
- ④ Barrier wall offsets are to the construction side of the barrier wall.
- ⑤ Refer to Highway Standard 701402 for additional details not shown.

FILE NAME =	USER NAME = dosddd	DESIGNED - _____	REVISED - _____
D:\BR\Draw\Lee\64K11 Cleaning & Painting	SN 052-0046, 052-0047, 052-0048, 052-0049	DRAWN - _____	REVISED - _____
Default	PLOT SCALE = 100.0000' / in.	CHECKED - _____	REVISED - _____
	PLOT DATE = Mon Mar 17 11:49:54 2014	DATE - _____	REVISED - _____

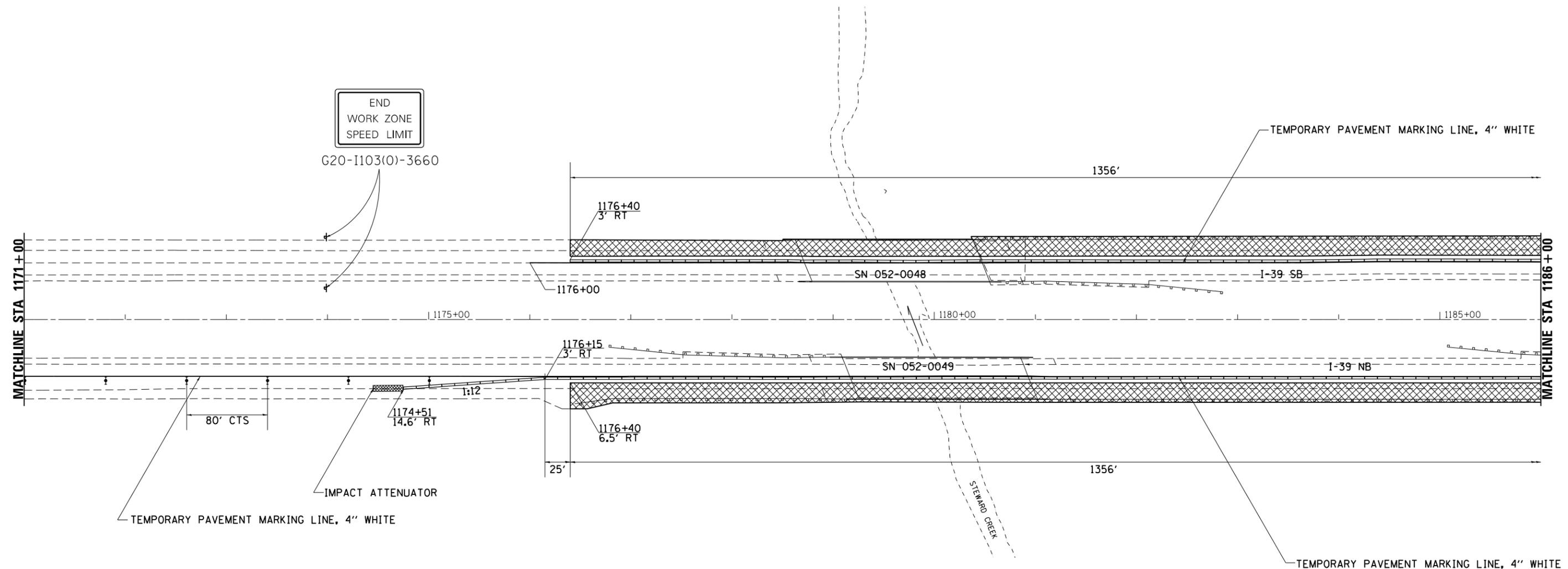
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL PLAN
STAGE II**

SCALE: _____ SHEET ____ OF ____ SHEETS STA. _____ TO STA. _____

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	D2 BRIDGE PAINTING 2014-4	LEE	32	9
CONTRACT NO. 64K11				
ILLINOIS FED. AID PROJECT				

TRAFFIC CONTROL PLAN – STAGE II



SYMBOLS

- Arrow board
- Work area
- Sign
- Direction indicator barricade with steady burn monodirectional light
- Type II barricade or drum with steady burn monodirectional light
- Temporary concrete barrier
- Impact attenuator
- Drums with steady burning monodirectional light

NOTES

- ① ReflectORIZED temporary pavement marking shall be placed throughout the taper and along-side the work area. The edge line shall be white for right lane closure and yellow for left lane closures.
- ② Barrier wall/guardrail markers at 25' (7.6 m). Markers on right shall be shall be crystal and markers on left shall be amber.
- ③ Offsets shown are from the centerline pavement marking of the direction of travel.
- ④ Barrier wall offsets are to the construction side of the barrier wall.
- ⑤ Refer to Highway Standard 701402 for additional details not shown.

FILE NAME =	USER NAME = dosddd	DESIGNED - _____	REVISED - _____
D:\BR\Draw\Lee\64K11 Cleaning & Painting	SN 052-0046, 052-0047, 052-0048, 052-0049	DRAWN - _____	REVISED - _____
Default	PLOT SCALE = 100.0000' / in.	CHECKED - _____	REVISED - _____
	PLOT DATE = Mon Mar 17 11:49:59 2014	DATE - _____	REVISED - _____

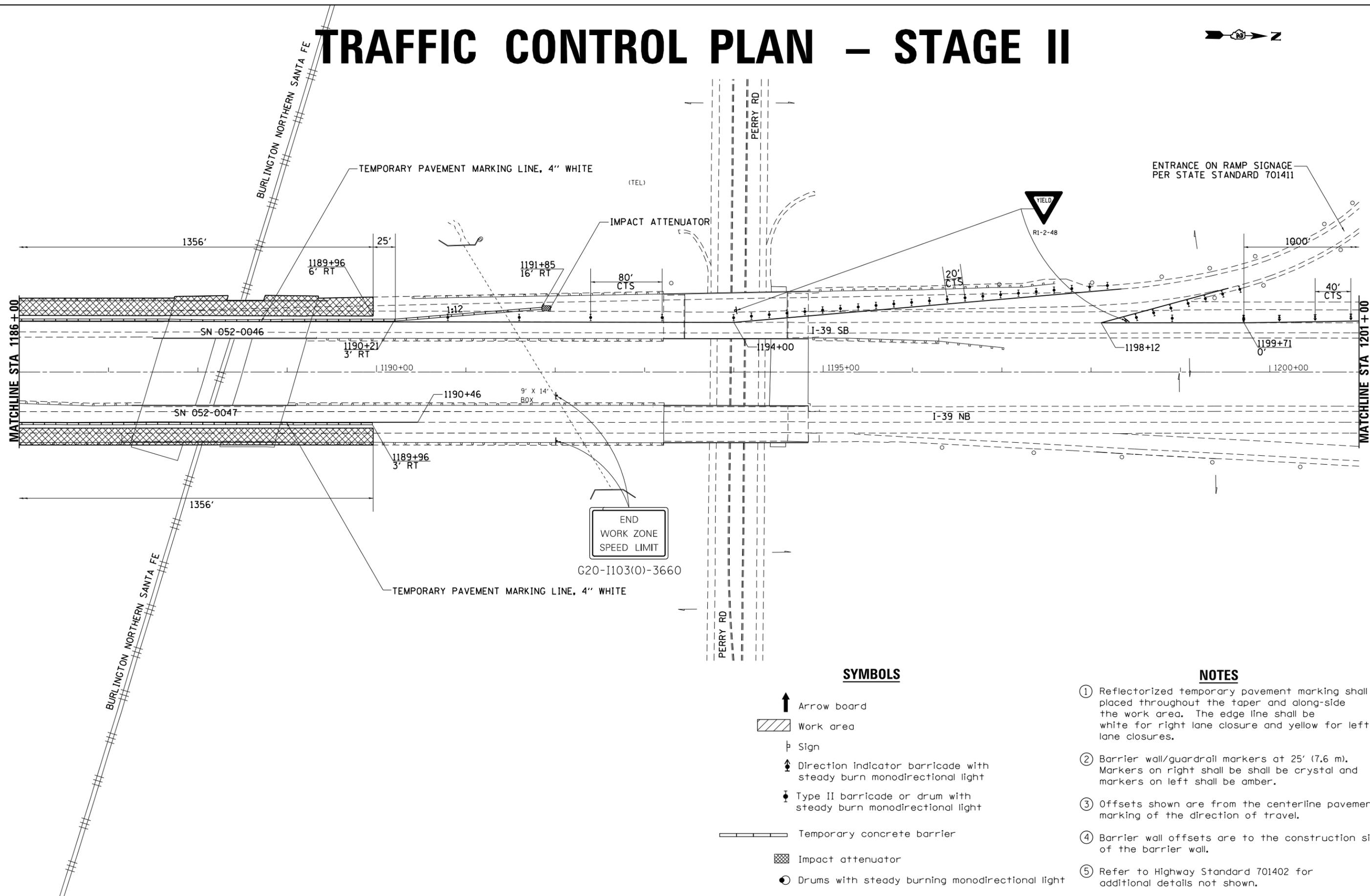
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL PLAN
STAGE II**

SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	D2 BRIDGE PAINTING 2014-4	LEE	32	10
ILLINOIS FED. AID PROJECT			CONTRACT NO. 64K11	

TRAFFIC CONTROL PLAN – STAGE II



END
WORK ZONE
SPEED LIMIT

G20-I103(0)-3660

SYMBOLS

-  Arrow board
-  Work area
-  Sign
-  Direction indicator barricade with steady burn monodirectional light
-  Type II barricade or drum with steady burn monodirectional light
-  Temporary concrete barrier
-  Impact attenuator
-  Drums with steady burning monodirectional light

NOTES

- ① ReflectORIZED temporary pavement marking shall be placed throughout the taper and along-side the work area. The edge line shall be white for right lane closure and yellow for left lane closures.
- ② Barrier wall/guardrail markers at 25' (7.6 m). Markers on right shall be shall be crystal and markers on left shall be amber.
- ③ Offsets shown are from the centerline pavement marking of the direction of travel.
- ④ Barrier wall offsets are to the construction side of the barrier wall.
- ⑤ Refer to Highway Standard 701402 for additional details not shown.

FILE NAME =	USER NAME = dosddd	DESIGNED - _____	REVISED - _____
D:\BR\Draw\Lee\64K11 Cleaning & Painting	SN 052-0046, 052-0047, 052-0048, 052-0049	DRAWN - _____	REVISED - _____
Default	PLOT SCALE = 100.0000' / in.	CHECKED - _____	REVISED - _____
	PLOT DATE = Mon Mar 17 11:50:05 2014	DATE - _____	REVISED - _____

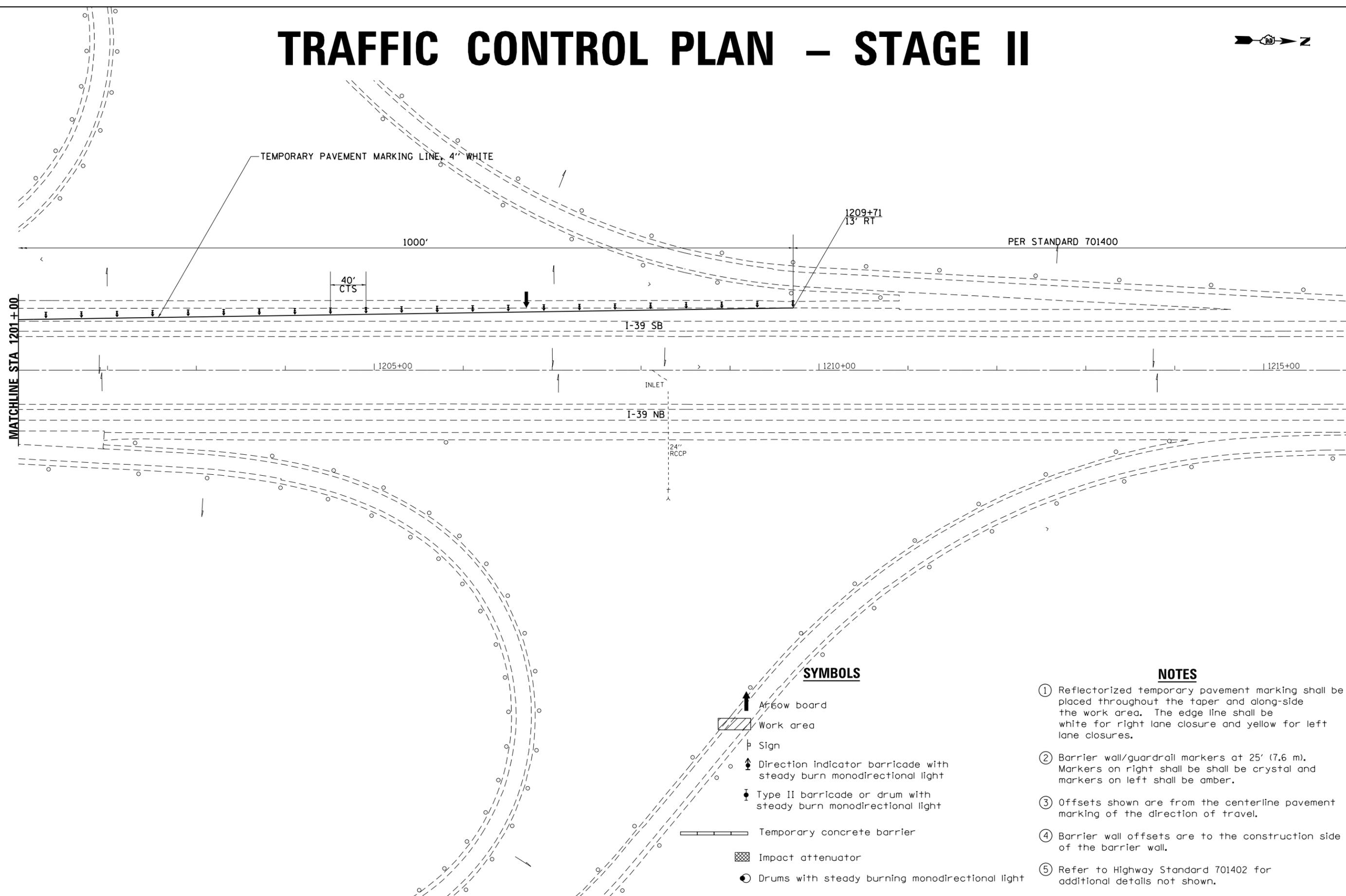
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN
STAGE II

SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	D2 BRIDGE PAINTING 2014-4	LEE	32	11
CONTRACT NO. 64K11			ILLINOIS FED. AID PROJECT	

TRAFFIC CONTROL PLAN – STAGE II



NOTES

- ① ReflectORIZED temporary pavement marking shall be placed throughout the taper and along-side the work area. The edge line shall be white for right lane closure and yellow for left lane closures.
- ② Barrier wall/guardrail markers at 25' (7.6 m). Markers on right shall be shall be crystal and markers on left shall be amber.
- ③ Offsets shown are from the centerline pavement marking of the direction of travel.
- ④ Barrier wall offsets are to the construction side of the barrier wall.
- ⑤ Refer to Highway Standard 701402 for additional details not shown.

FILE NAME =	USER NAME = dosddd	DESIGNED - _____	REVISED - _____
D:\BR\Loss\Lee\64K11 Cleaning & Painting	SN 052-0046, 052-0047, 052-0048, 052-0049	DRAWN - _____	REVISED - _____
Default	PLOT SCALE = 100.0000' / in.	CHECKED - _____	REVISED - _____
	PLOT DATE = Mon Mar 17 11:58:10 2014	DATE - _____	REVISED - _____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

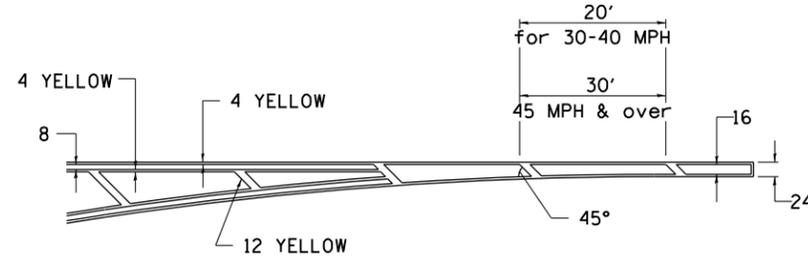
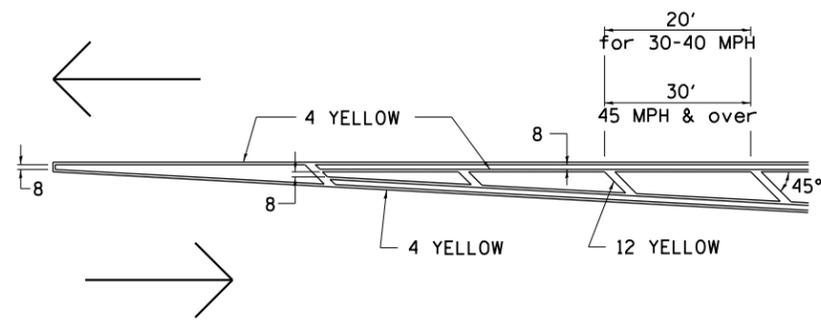
TRAFFIC CONTROL PLAN
STAGE II

SCALE: _____ SHEET _____ OF _____ SHEETS STA. _____ TO STA. _____

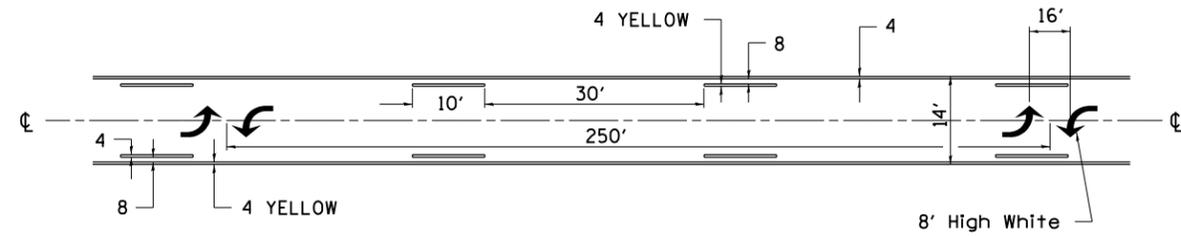
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	D2 BRIDGE PAINTING 2014-4	LEE	32	12
CONTRACT NO. 64K11				
ILLINOIS FED. AID PROJECT				

TYPICAL PAVEMENT MARKINGS

TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN AT LEFT TURN LANE

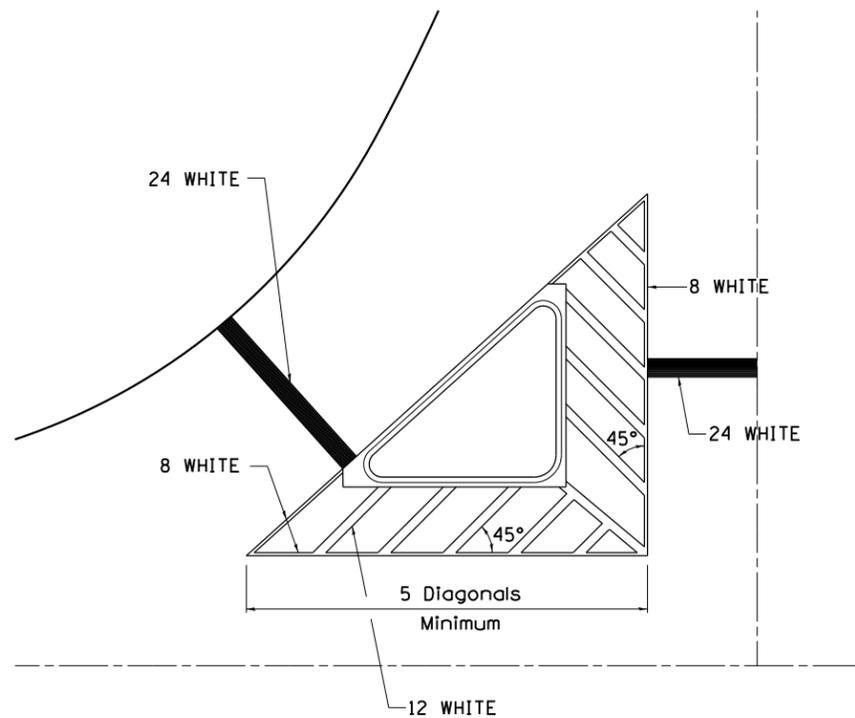


MEDIAN PAVEMENT MARKING

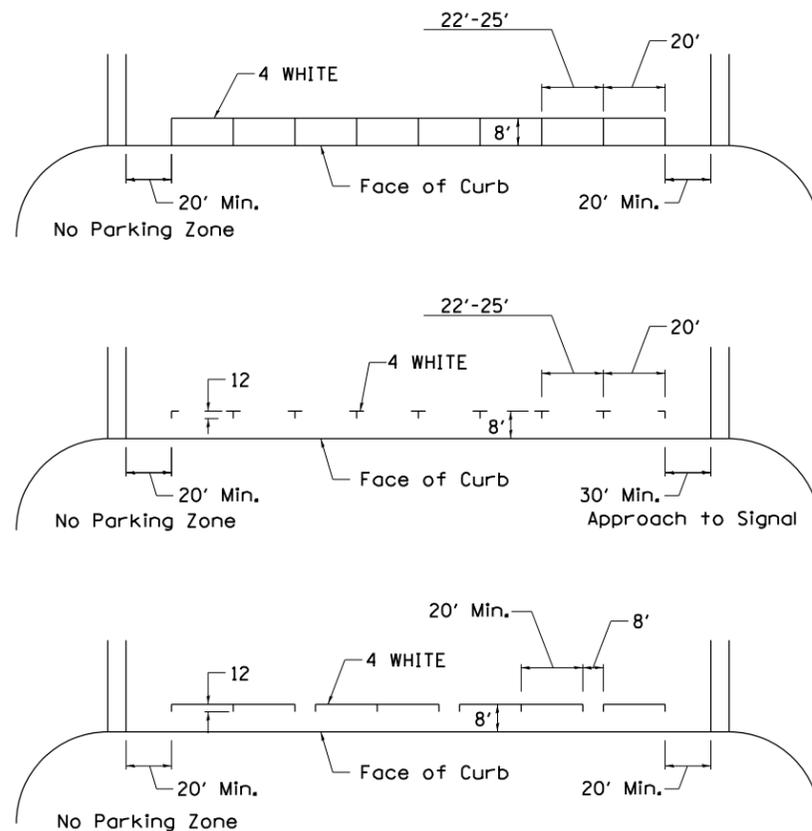


•• ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

TYPICAL ISLAND OFFSET SHOULDER WIDTH

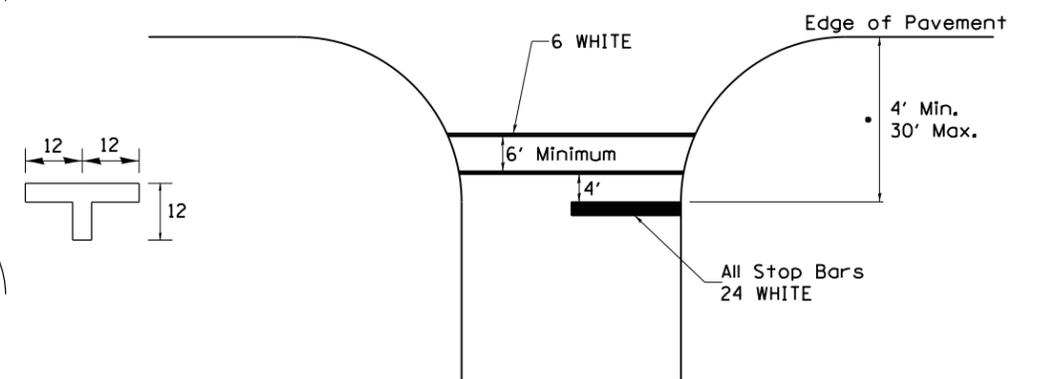


TYPICAL PARKING SPACING



STANDARD CROSSWALK MARKING

See Schedules for Locations

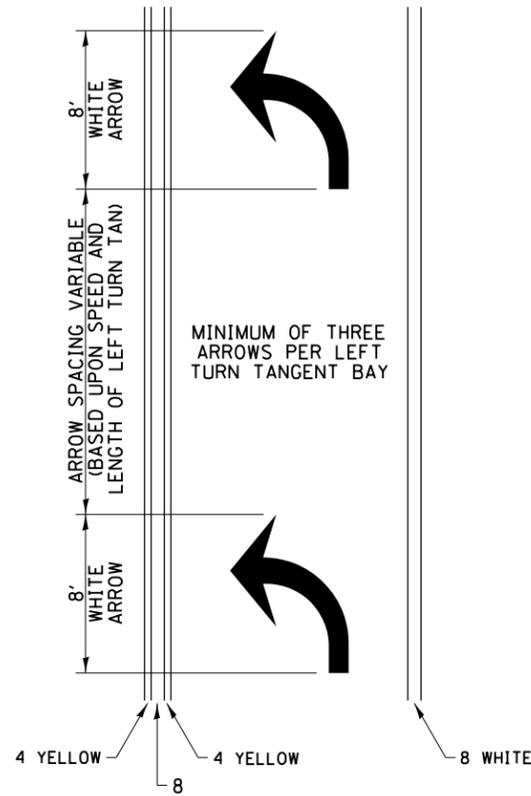


• Distance to the nearest edge of the intersecting roadway in the absence of a marked crosswalk.

FILE NAME =	USER NAME = dossdd	DESIGNED -	REVISED - 3-05-12	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
D:\BR\Loss\Lee\64K11 Cleaning & Painting	SN 052-0046, 052-0047, 052-0048, 052-0049	DRAWN	REVISED -		39	D2 BRIDGE PAINTING 2014-4	LEE	32	13		
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -	CONTRACT NO. 64K11								
PLOT DATE = Mon Mar 17 11:50:15 2014	DATE -	REVISED -	FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT								

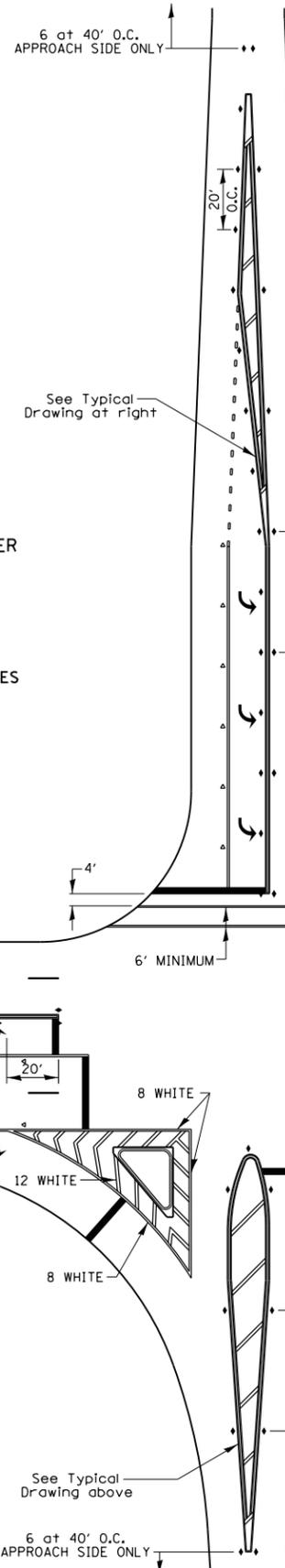
TYPICAL PAVEMENT MARKINGS

ARROW LAYOUT

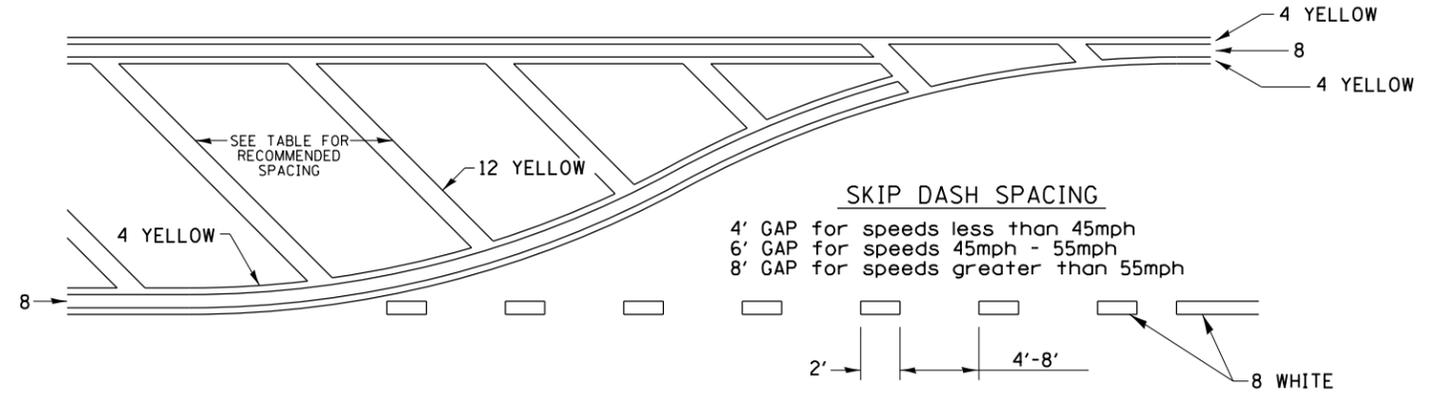


- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER
- ◆ TWO-WAY AMBER MARKER

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.



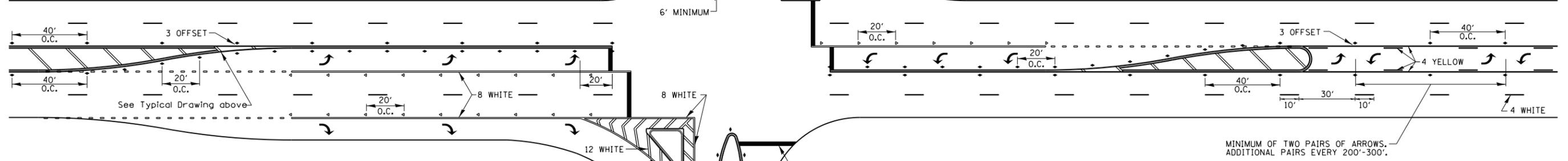
TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN



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 = dosddd	DESIGNED -	REVISED - 3-05-12
D:\BR\Draw\Lee\64K11 Cleaning & Painting	SN 052-0046, 052-0047, 052-0048, 052-0049	CHECKED -	REVISED -
	PLOT SCALE = 100.0000' / in.	DATE -	REVISED -
	PLOT DATE = Mon Mar 17 11:58:19 2014		

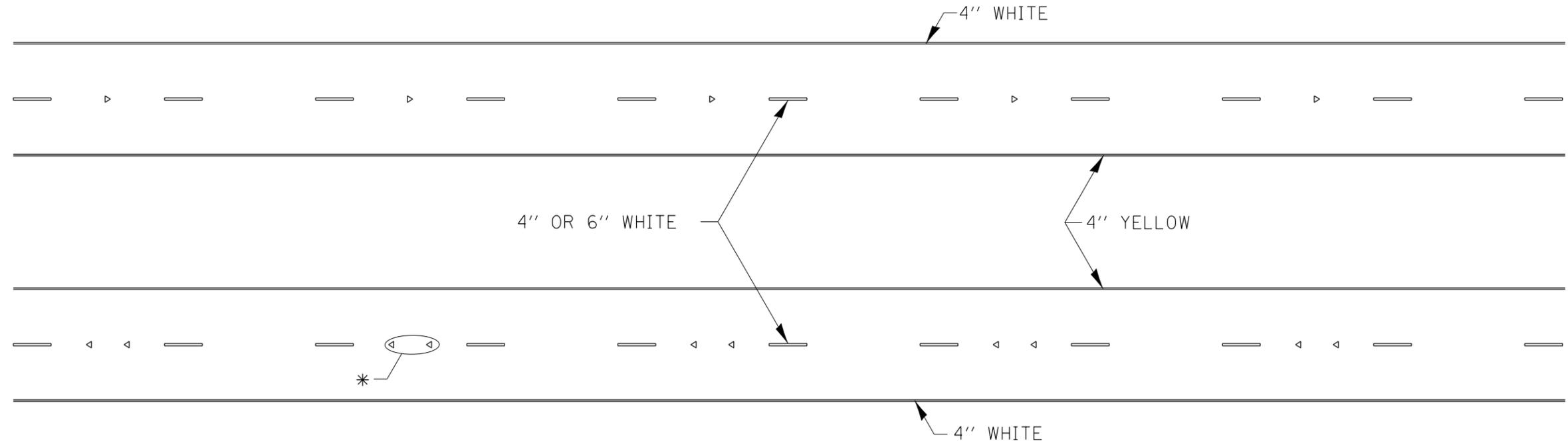
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

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

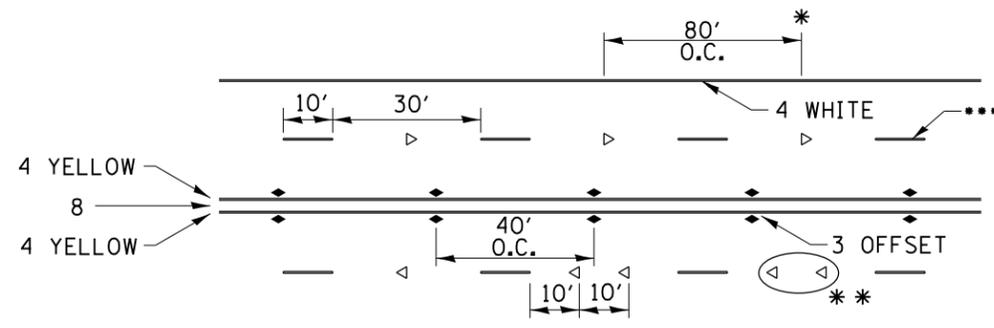
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	D2 BRIDGE PAINTING 2014-4	LEE	32	14
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT			CONTRACT NO. 64K11	

TYPICAL PAVEMENT MARKINGS



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

MULTI-LANE / DIVIDED



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

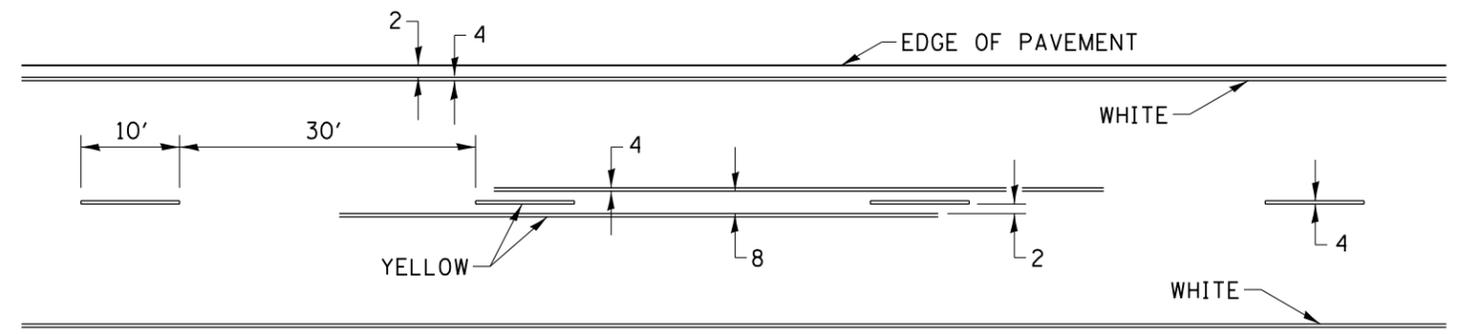
** USE DOUBLE MARKERS WHEN ADT \geq 20,000

*** 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 PAVEMENT MARKING FOR TWO LANE SECTION – NO PASSING ZONES



SYMBOLS

FILE NAME =	USER NAME = dosddd	DESIGNED -	REVISED - 8-27-13
D:\BR\Draw\Lee\64K11 Cleaning & Painting	SN 052-0046, 052-0047, 052-0048, 052-0049	DRAWN	REVISED - 11-28-12
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = Mon Mar 17 11:50:26 2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

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

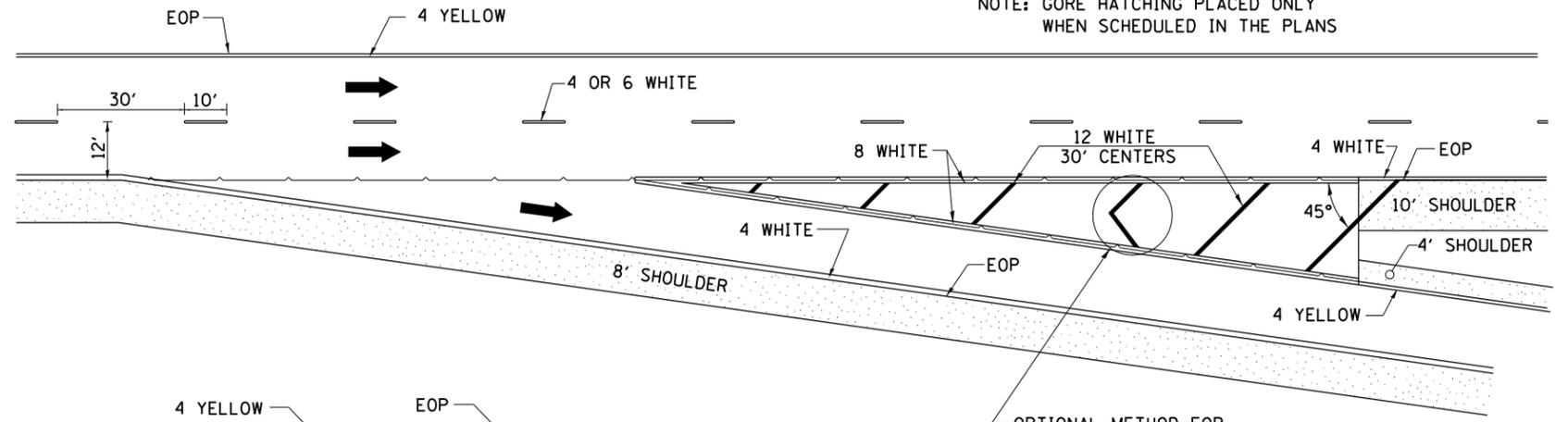
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	D2 BRIDGE PAINTING 2014-4	LEE	32	15
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT			CONTRACT NO. 64K11	

PAINING DETAILS

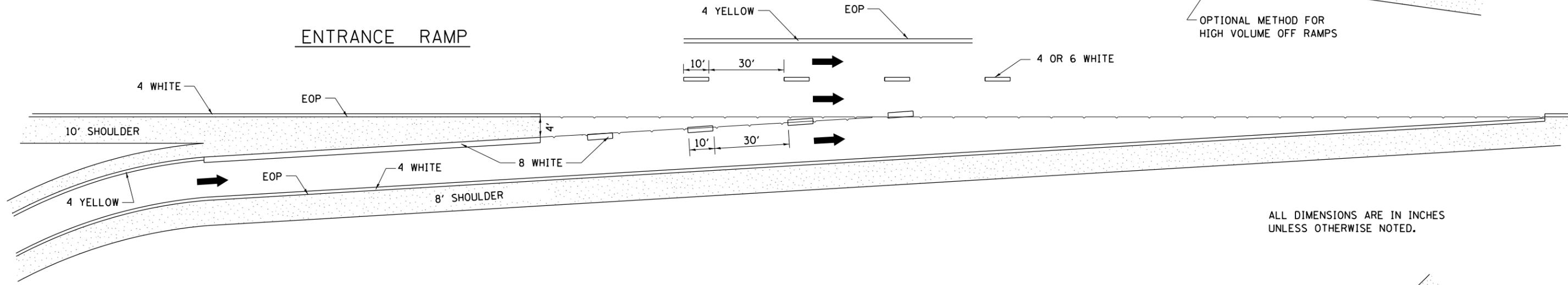
CENTERLINE SKIP DASH PAVEMENT MARKING WIDTH SHALL BE 4" WHEN THE POSTED SPEED LIMIT IS UNDER 40 MPH AND 6" WHEN THE POSTED SPEED LIMIT IS 40 MPH AND OVER.

EXIT RAMP

NOTE: GORE HATCHING PLACED ONLY WHEN SCHEDULED IN THE PLANS

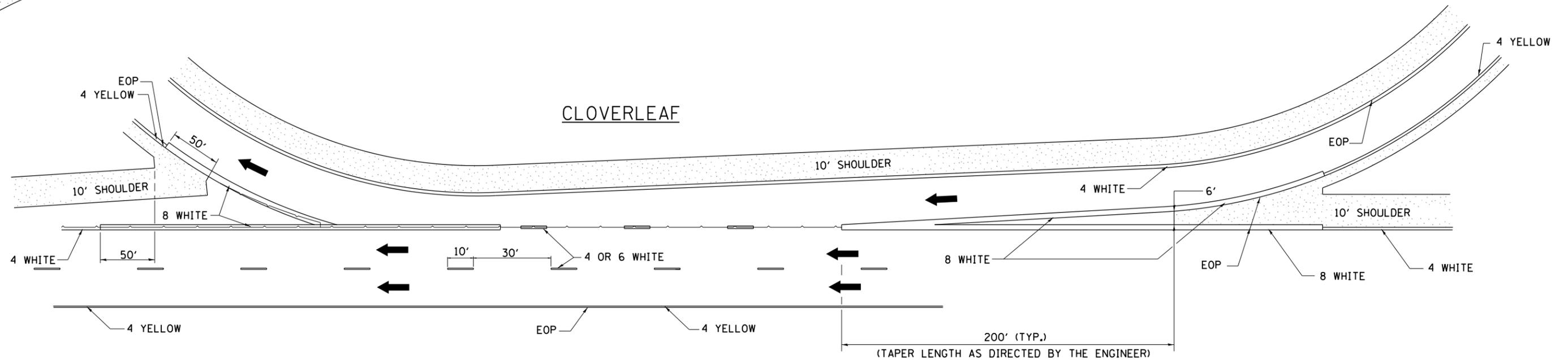


ENTRANCE RAMP



ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

CLOVERLEAF



FILE NAME =	USER NAME = dosddd	DESIGNED -	REVISED - 8-27-13
D:\BR\Draw\Lee\64K11 Cleaning & Painting	SN 052-0046, 052-0047, 052-0048, 052-0049	CHECKED -	REVISED - 10-18-11
	PLOT SCALE = 100.0000' / in.	DATE -	REVISED -
	PLOT DATE = Mon Mar 17 11:58:32 2014		REVISED -

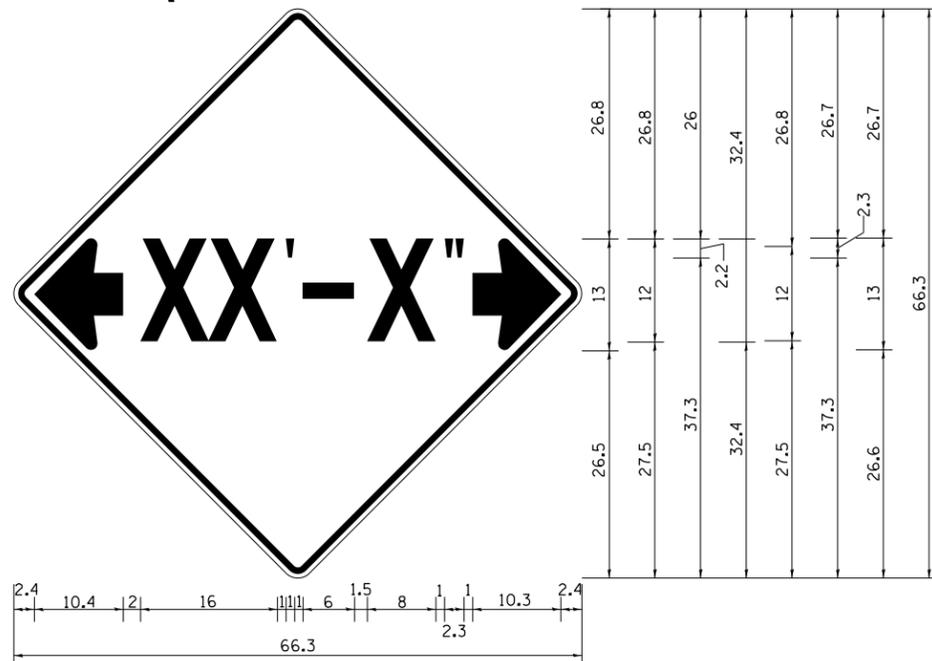
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

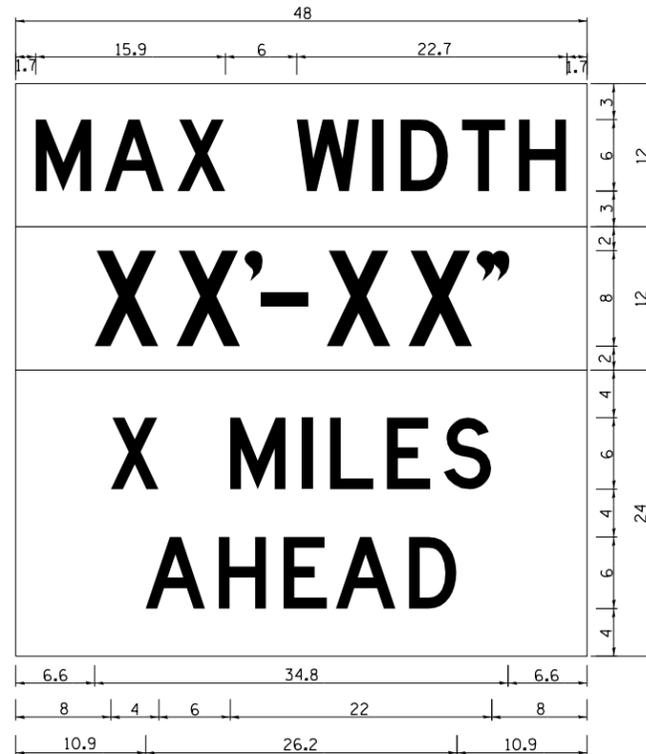
SCALE: _____ SHEET NO. ___ OF ___ SHEETS STA. _____ TO STA. _____

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
39	D2 BRIDGE PAINTING 2014-4	LEE	32	16
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT			CONTRACT NO. 64K11	

INFORMATIONAL WARNING SIGN (FOR NARROW TRAVEL LANES)



NOTES
 W12-2 - Horizontal Clearance Sign
 48.0" across sides, 1.9" Radius,
 0.8" Border, 0.5" Indent, Black on
 Orange; Standard Arrow Custom
 10.4" X 8.1" 180° Black 11 Inch
 D Series Lettering; Standard Arrow
 Custom 10.4" X 8.1" 0°



W12-1103 (Width is 8D);
 No border, Black on White;
 [MAX WIDTH] D;

No border, Black on Orange;
 [XX'-XX''] D;

No border, Black on White;
 [X MILES] D; [AHEAD] D;

All work to furnish and install these signs shall be included in the cost of the Traffic Control Standards and shall not be paid for separately.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

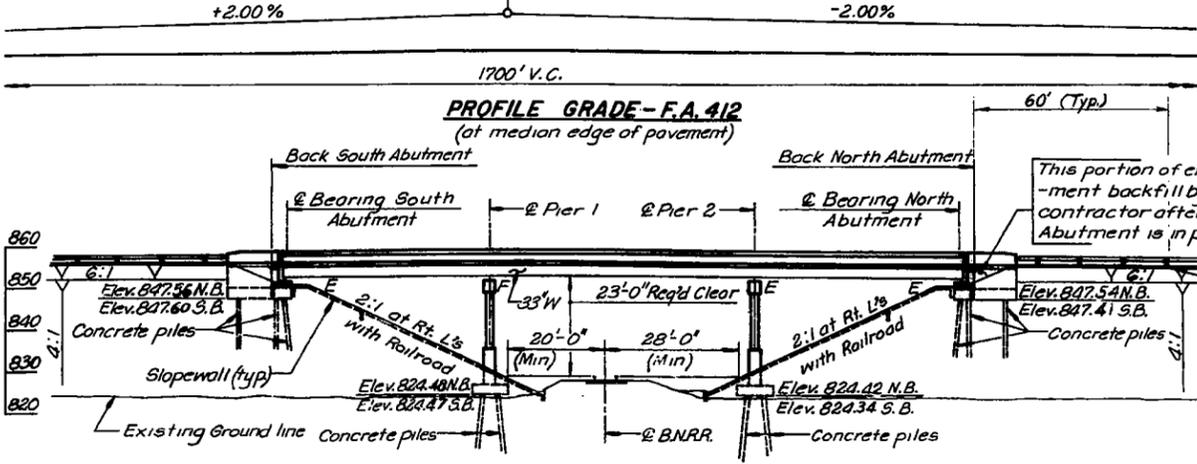
REVISED - 5-15-09

REVISED -	REGION 2 / DISTRICT 2 STANDARD	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
REVISED -		39	D2 BRIDGE PAINTING 2014-4	LEE	32	17	
REVISED -						CONTRACT NO. 64K11	
REVISED -						FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	
REVISED -		SCALE: 1/2" = 1'-0"	SHEET NO. OF SHEETS	STA. TO STA.			

PLOT DATE = Mon Mar 17 11:50:39 2014

BENCHMARK: Benchmark No. 23 is railroad spike in telephone pole 69 feet right of Station 1175+68. Elevation 827.12.
 R.V.I. Sta. 1175+25.00 Elev. 864.36

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 412	103-2VB	LEE	203	60
SIA. 4047		TO SIA. 4070		
FED. ROAD DIST. NO. 7		ILLINOIS		PROJECT

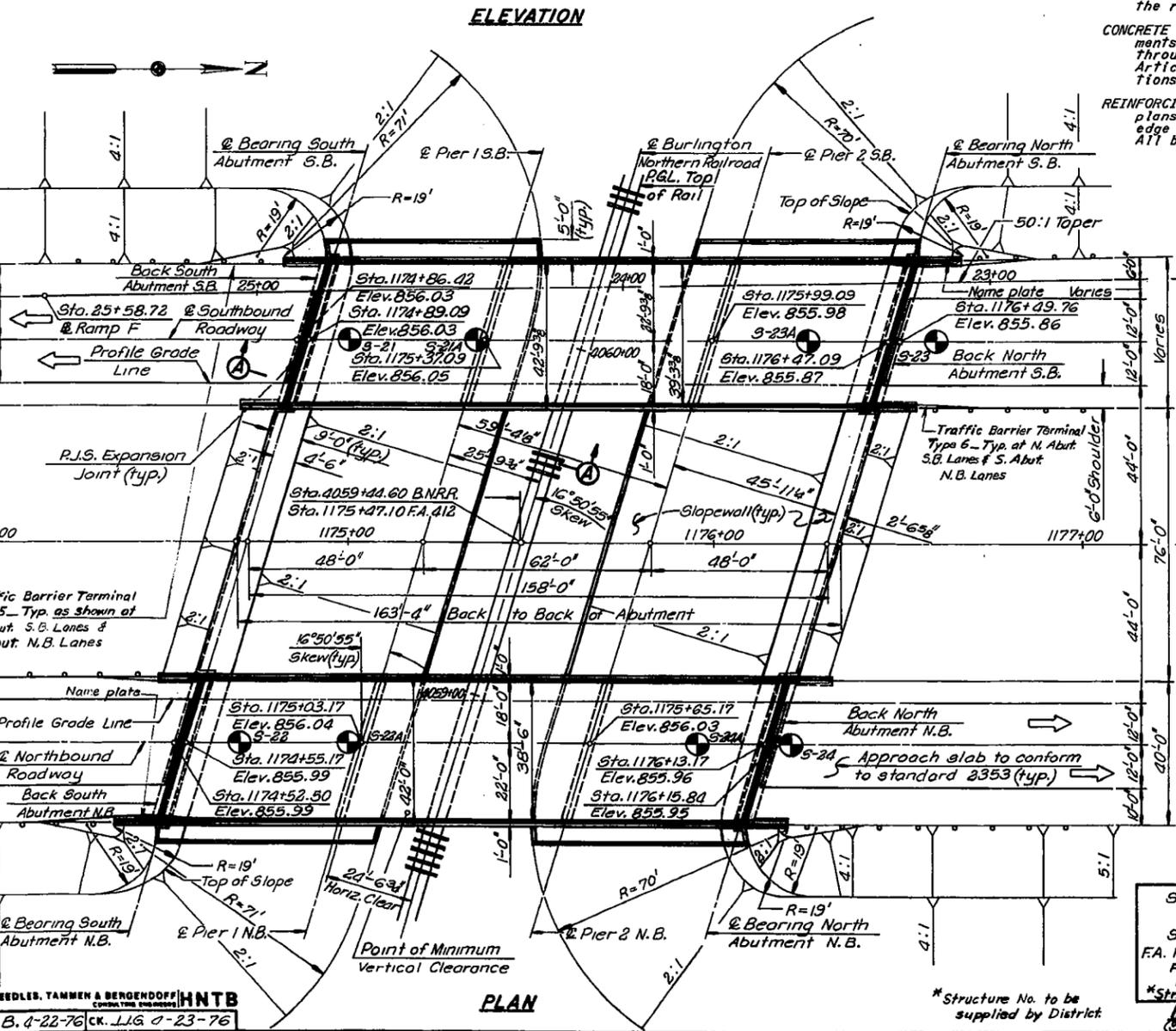


DESIGN SPECIFICATIONS: American Association of State Highway and Transportation Officials Standard Specifications for Highway Bridges, 1973 with 1974 & 1975 Interim Specifications.
 DESIGN LOADING: A.A.S.H.T.O. HS20-44 (25 pounds per square foot for future wearing surface on bridge deck).
 UNIT STRESSES:
 Substructure $f_c = 1400$ PSI
 Deck Slab $f_c = 3500$ PSI
 Reinforcing Steel (SUB.) $f_s = 24,000$ PSI
 Structural Steel M183, $f_s = 20,000$ PSI

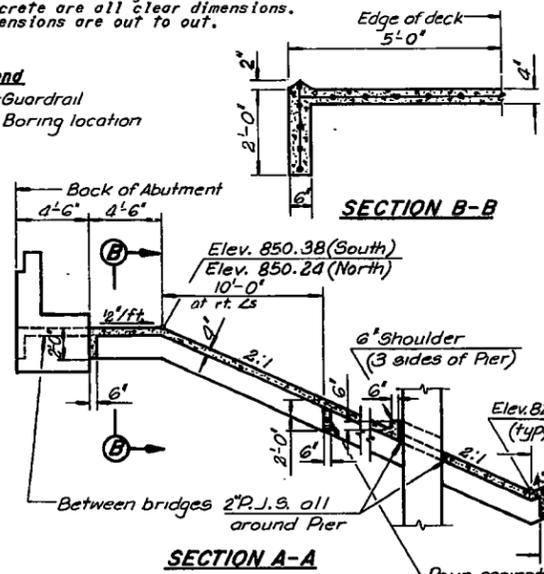
GENERAL NOTES

PAINTING: The basic lead silico chromate paint system shall be used for shop and field painting of Structural Steel except where otherwise noted.
FIELD WELDING: Field welding of construction accessories will not be permitted to the bottom flange of beams nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.
FIELD CONNECTIONS: Fasteners shall be high strength bolts. Bolts 1/2" diameter, open holes 3/4" diameter, unless otherwise noted.
STRUCTURAL STEEL: Structural steel for beams, bearings, beam splice plates, beam splice fill plates, all diaphragms, gusset plates, expansion joint angles, and attached bars shall conform to A.A.S.H.T.O. designation M183. Diaphragms shall be normal to the profile grade line. The main load carrying member components subject to the Supplemental Requirements for Notch Toughness Zone 2 are the tension flanges, webs and all splice plates of the steel girders. Calculated weight of structural steel = 312,100 Pounds.
ANCHOR BOLTS: Anchor bolts shall be set before bolting diaphragms over supports.
UTILITIES: The information concerning type and location of underground utilities is not guaranteed to be accurate or all inclusive. The Contractor is responsible for making his own determinations as to the type and location of underground utilities as may be necessary to avoid damage thereto.
BEARING SURFACES: Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8" inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two 1/2" inch adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.
SLOPE WALL: Slope wall shall be reinforced with welded wire fabric 6"X8"-W4.0 x W4.0 weighing 38 pounds per 100 square feet.

EMBAKMENT: The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.
 TEST PILING: The Contractor shall drive eight concrete test piles in a permanent location, one at each abutment and each pier as directed by the Engineer, before ordering the remainder of the piles.
 CONCRETE PILING: Concrete piles of all abutments shall be driven in holes precored through the embankment in accordance with Article 513.09(c) of the Standard Specifications.
 REINFORCING STEEL: Dimensions shown on the plans from the reinforcing steel to outside edge of concrete are all clear dimensions. All bar dimensions are out to out.

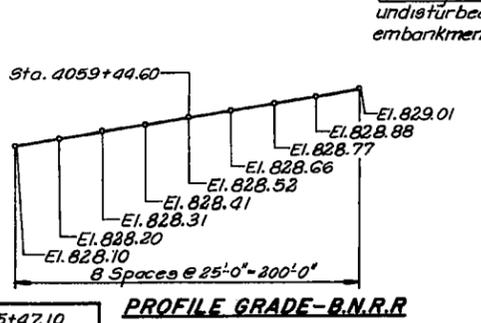
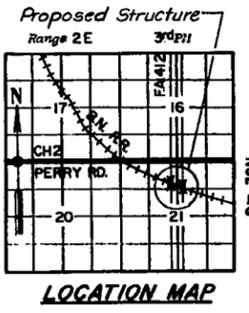


Legend
 Guardrail
 Boring location



TOTAL BILL OF MATERIALS				
ITEM	UNITS	Substructure	Superstructure	TOTAL
Stud Shear Connectors	Each	0	4,932	4,932
Protective Coat	Sq. Yd.	0	1691	1691
Class X Concrete	Cu. Yd.	492	391	883
Preformed Joint Seal (2 1/2")	Lin. Ft.	0	89	89
Preformed Joint Seal (4")	Lin. Ft.	0	89	89
Reinforcement Bars	Pound	61,160	40,160	101,320
Structural Steel	Lump Sum	0	0.30	0.30
Test Piles, Concrete	Each	8	0	8
Concrete Piles	Lin. Ft.	5,534	0	5,534
Slopewall (4")	Sq. Yd.	2,533	0	2,533
Name Plates	Each	0	2	2
Floor Drains	Each	0	44	44
Reinforcement Bars (Epoxy Coated)	Pound	0	64,200	64,200

Notes:
 Deck drains are spaced to clear railroad Signal Devices and lines by 10' minimum.
 Railroad Milepost 77 is at Sta. 4065+56.6 Back = Sta. 4065+60.0 Ahead.
 Existing south railroad ditch drains thru structure @ Sta. 1167+00. Existing north railroad ditch drains thru structure @ Sta. 1179+02.



STATION 1175+47.10
 BUILT BY
 STATE OF ILLINOIS
 F.A. RT. 412 SEC. 103-2VB
 F.A. PROJ. PD-412-4(36)
 LOADING HS 20
 *Structure No. to be supplied by District

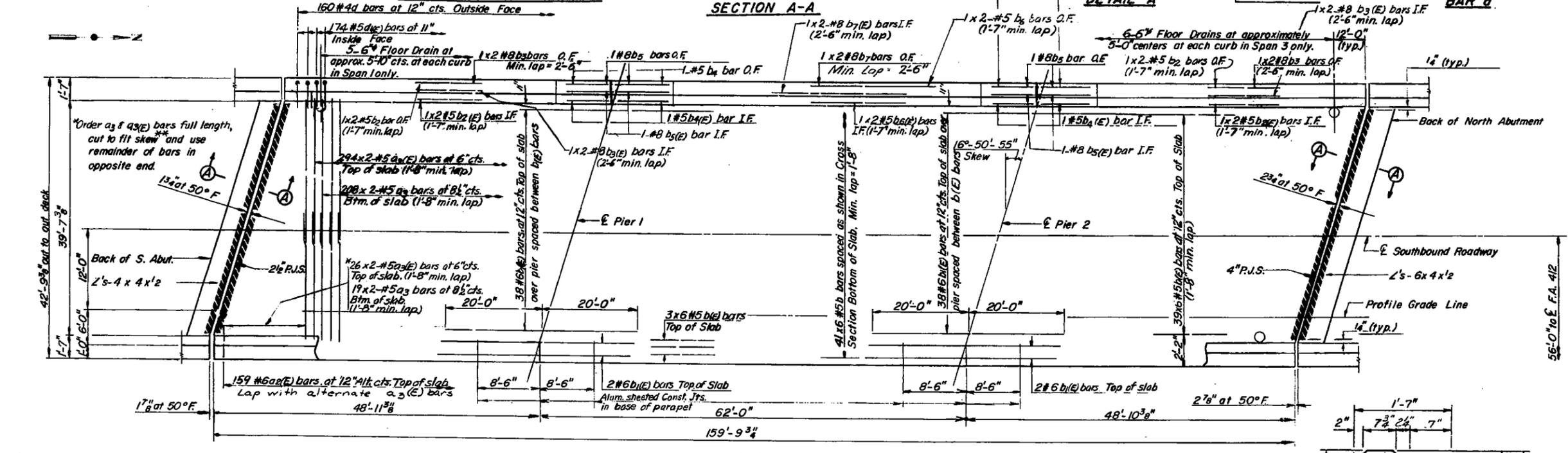
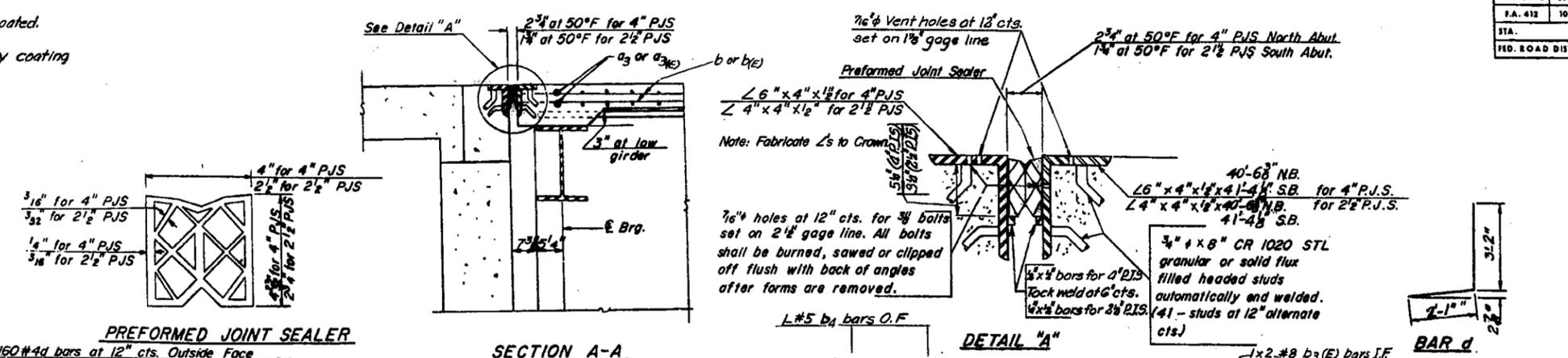
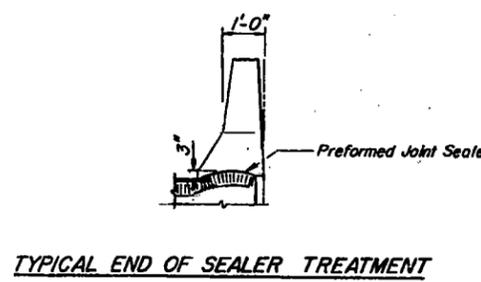
I hereby certify that this plan and specification was prepared by me or under my direct personal supervision and that I am a duly registered Structural Engineer under the laws of the State of Illinois.
 Signed: Leslie J. Fossen, S.E.
 Date: 11/15/82
 Illinois Reg. No. 81-3703



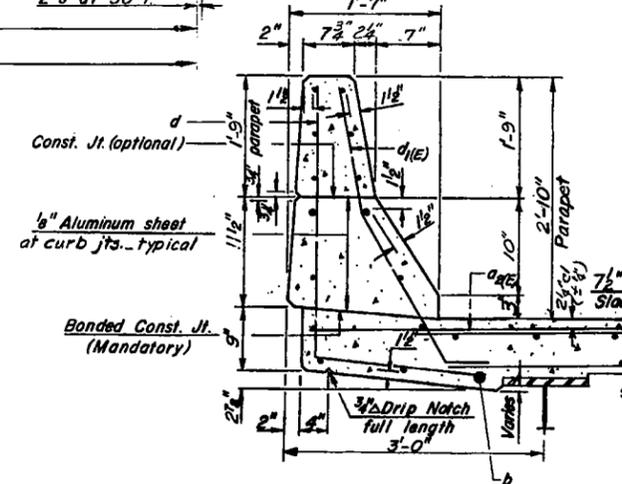
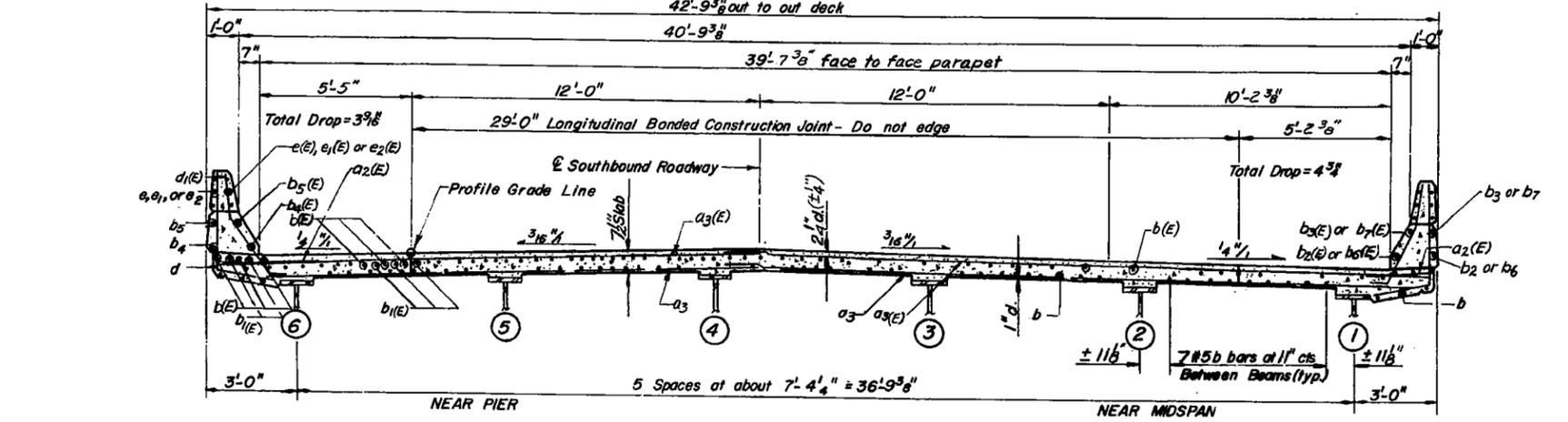
APPROVED
 FOR STRUCTURAL ADEQUACY ONLY
 GENERAL PLAN AND ELEVATION
 F.A. 412 SECTION 103-2VB
 F.A. 412 OVER B.N.R.R.
 LEE COUNTY
 STATION 1175+47.10
 DEPARTMENT OF TRANSPORTATION

Note: Bars indicated thus 20x3#5 indicates 20 lines of bars with 3 lengths per line.
 Reinforcement bars designated (E) shall be epoxy coated.
 See Special Provisions.
 **See Special Provisions for the procedure for epoxy coating of cut reinforcement bars.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 412	103-2VB	LEE	203	65
STA.	TO STA.			
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



Note: Floor Drains shall be located clear of all diaphragms.



BILL OF MATERIAL

Bar	No	Size	Length	Shape
a3	454	#5	21'-1"	
a2(E)	318	#6	4'-0"	
a3(E)	640	#5	21'-1"	
b	246	#5	28'-1"	
b2	8	#5	20'-10"	
b3	8	#8	2F-3"	
b4	8	#5	8'-3"	
b5	8	#8	8'-3"	
b6	4	#5	23'-4"	
b7	4	#8	23'-9"	
b(E)	270	#5	28'-1"	
b1(E)	84	#6	40'-0"	
b2(E)	8	#5	20'-10"	
b3(E)	8	#8	2F-3"	
b4(E)	8	#5	8'-3"	
b5(E)	8	#8	8'-3"	
b6(E)	4	#5	23'-4"	
b7(E)	4	#8	23'-9"	
d	320	#4	5'-3"	
d1(E)	348	#5	3'-11"	
e	24	#4	8'-3"	
e1	36	#4	13'-0"	
e2	18	#4	14'-9"	
e(E)	24	#4	8'-3"	
e1(E)	36	#4	13'-0"	
e2(E)	18	#4	14'-9"	
Class X Concrete		Cu. Yd.	197.0	
Reinforcement Bars		Pound	20,160	
Reinf. Bars (Epoxy Ctd)		Pound	32,210	

Notes:
 All Reinforcing Steel symmetrical about E Deck.

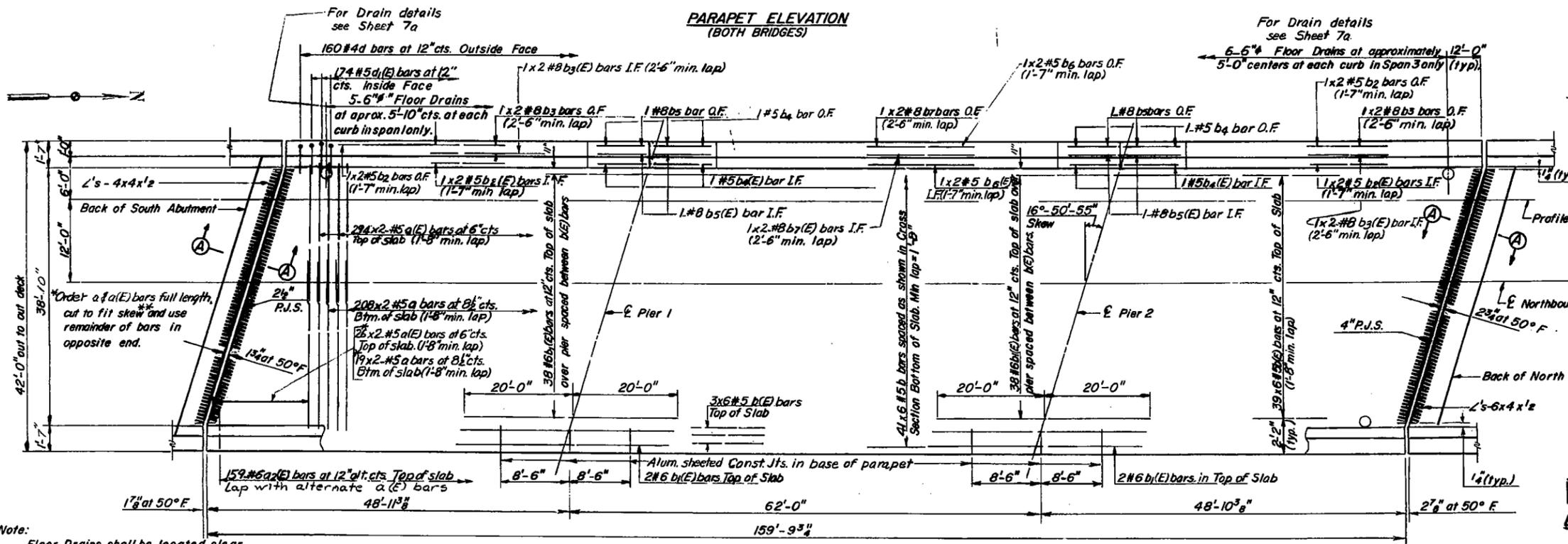
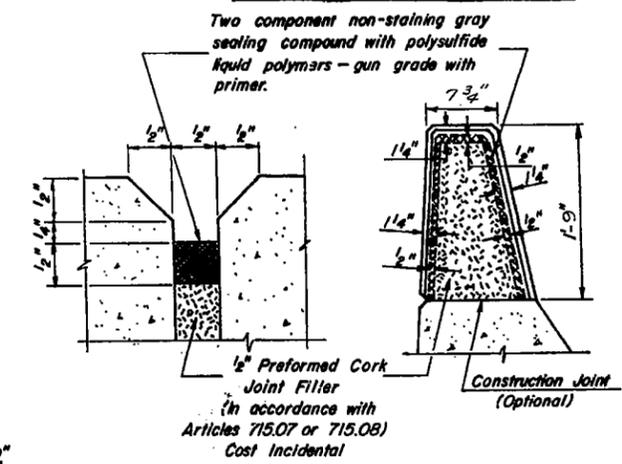
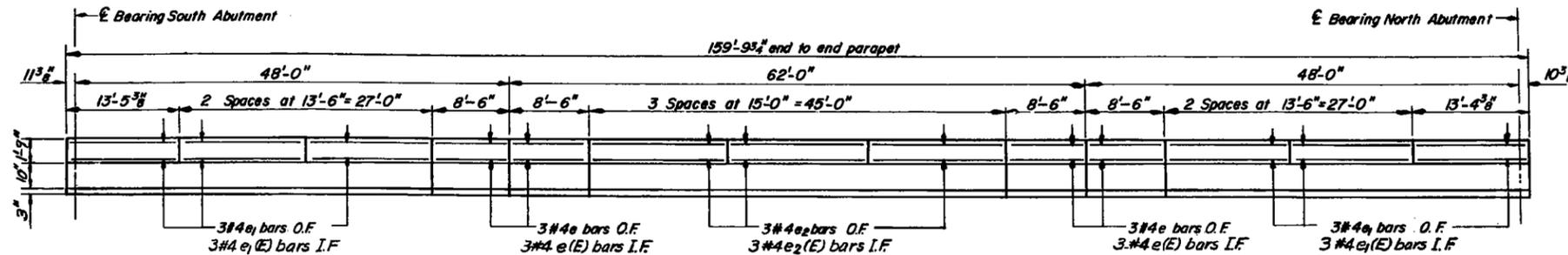
Work this sheet with Sheet 7. E, F denotes Each Face.

DECK PLAN AND SECTIONS SOUTHBOUND BRIDGE
 FA. 412 SECTION 103-2VB
 F.A. 412 OVER B.N.R.R.
 LEE COUNTY
 STATION 1175+47.10
 STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

Note: Bars indicated thus 20x3 #5 indicates 20 lines of bars with 3 lengths per line.

Reinforcement bars designated (E) shall be epoxy coated. See Special Provisions.
 **See Special Provisions for the procedure for epoxy coating at cut reinforcement bars.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 7
F.A. 412	103-2VB	LEE	223	66	OF 19 SHEETS
STA.	TO STA.				
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT			

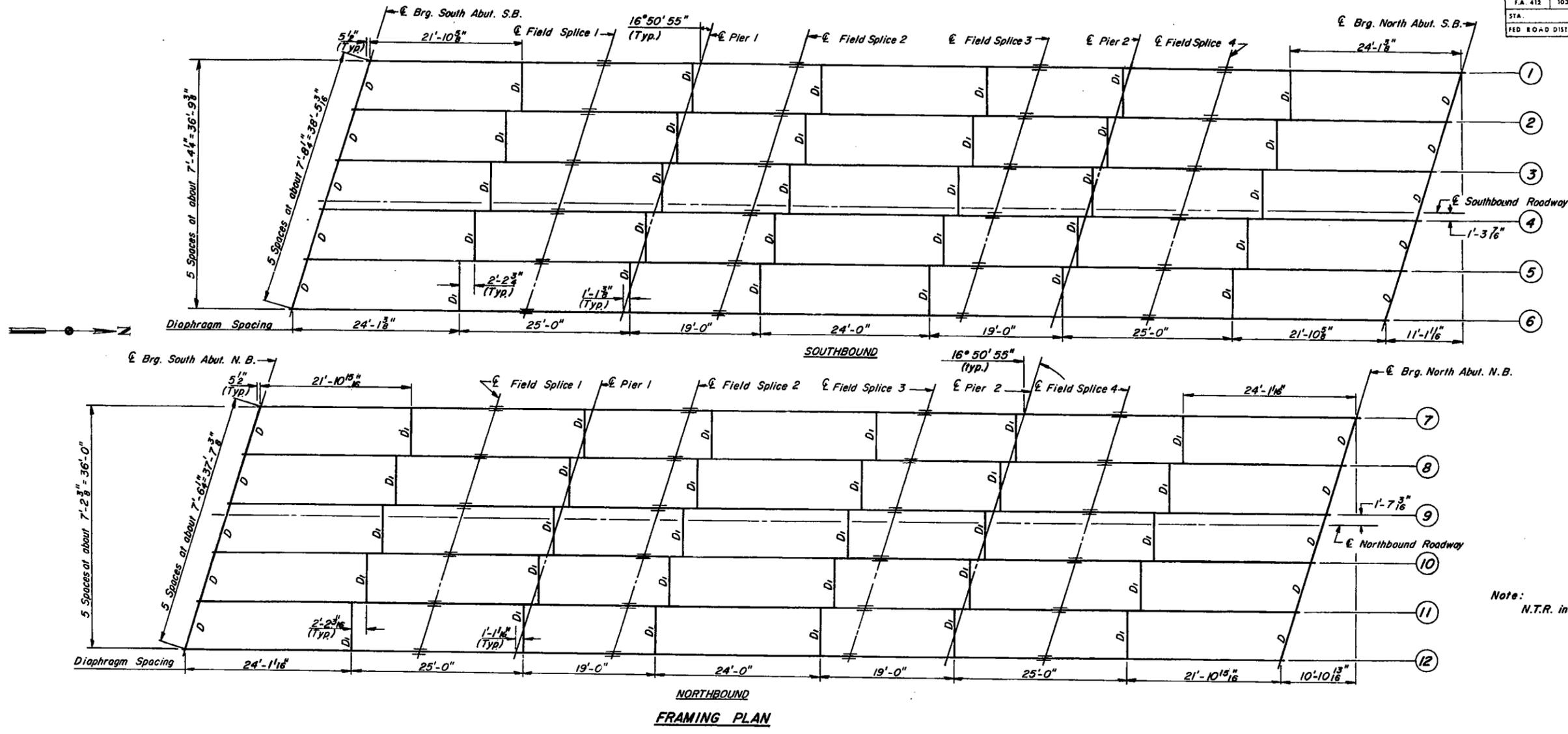


For Bill of Material see Sheet 7a.

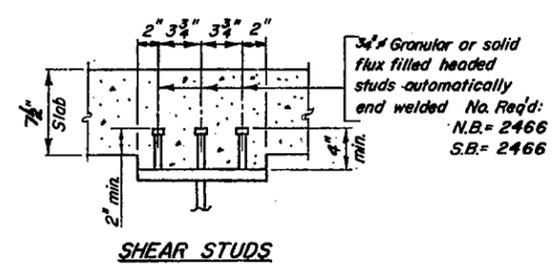
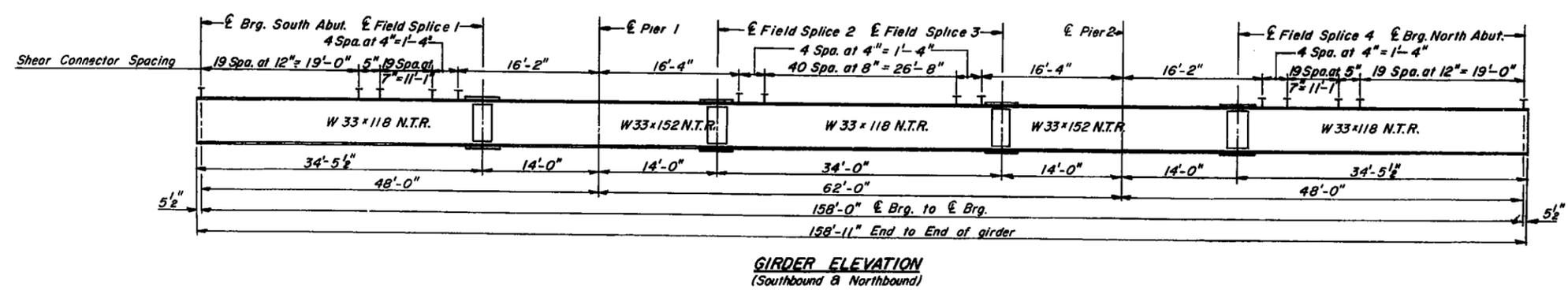
BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
a	11	#5	10'-0"	U
b	20	#5	10'-0"	U
c	24	#5	10'-0"	U
d	5	#5	10'-0"	U
e	9	#5	10'-0"	U
f	16	#5	10'-0"	U
g	16	#5	10'-0"	U
h	16	#5	10'-0"	U
i	16	#5	10'-0"	U
j	16	#5	10'-0"	U
k	16	#5	10'-0"	U
l	16	#5	10'-0"	U
m	16	#5	10'-0"	U
n	16	#5	10'-0"	U
o	16	#5	10'-0"	U
p	16	#5	10'-0"	U
q	16	#5	10'-0"	U
r	16	#5	10'-0"	U
s	16	#5	10'-0"	U
t	16	#5	10'-0"	U
u	16	#5	10'-0"	U
v	16	#5	10'-0"	U
w	16	#5	10'-0"	U
x	16	#5	10'-0"	U
y	16	#5	10'-0"	U
z	16	#5	10'-0"	U
aa	16	#5	10'-0"	U
ab	16	#5	10'-0"	U
ac	16	#5	10'-0"	U
ad	16	#5	10'-0"	U
ae	16	#5	10'-0"	U
af	16	#5	10'-0"	U
ag	16	#5	10'-0"	U
ah	16	#5	10'-0"	U
ai	16	#5	10'-0"	U
aj	16	#5	10'-0"	U
ak	16	#5	10'-0"	U
al	16	#5	10'-0"	U
am	16	#5	10'-0"	U
an	16	#5	10'-0"	U
ao	16	#5	10'-0"	U
ap	16	#5	10'-0"	U
aq	16	#5	10'-0"	U
ar	16	#5	10'-0"	U
as	16	#5	10'-0"	U
at	16	#5	10'-0"	U
au	16	#5	10'-0"	U
av	16	#5	10'-0"	U
aw	16	#5	10'-0"	U
ax	16	#5	10'-0"	U
ay	16	#5	10'-0"	U
az	16	#5	10'-0"	U
ba	16	#5	10'-0"	U
bb	16	#5	10'-0"	U
bc	16	#5	10'-0"	U
bd	16	#5	10'-0"	U
be	16	#5	10'-0"	U
bf	16	#5	10'-0"	U
bg	16	#5	10'-0"	U
bh	16	#5	10'-0"	U
bi	16	#5	10'-0"	U
bj	16	#5	10'-0"	U
bk	16	#5	10'-0"	U
bl	16	#5	10'-0"	U
bm	16	#5	10'-0"	U
bn	16	#5	10'-0"	U
bo	16	#5	10'-0"	U
bp	16	#5	10'-0"	U
bq	16	#5	10'-0"	U
br	16	#5	10'-0"	U
bs	16	#5	10'-0"	U
bt	16	#5	10'-0"	U
bu	16	#5	10'-0"	U
bv	16	#5	10'-0"	U
bw	16	#5	10'-0"	U
bx	16	#5	10'-0"	U
by	16	#5	10'-0"	U
bz	16	#5	10'-0"	U
ca	16	#5	10'-0"	U
cb	16	#5	10'-0"	U
cc	16	#5	10'-0"	U
cd	16	#5	10'-0"	U
ce	16	#5	10'-0"	U
cf	16	#5	10'-0"	U
cg	16	#5	10'-0"	U
ch	16	#5	10'-0"	U
ci	16	#5	10'-0"	U
cj	16	#5	10'-0"	U
ck	16	#5	10'-0"	U
cl	16	#5	10'-0"	U
cm	16	#5	10'-0"	U
cn	16	#5	10'-0"	U
co	16	#5	10'-0"	U
cp	16	#5	10'-0"	U
cq	16	#5	10'-0"	U
cr	16	#5	10'-0"	U
cs	16	#5	10'-0"	U
ct	16	#5	10'-0"	U
cu	16	#5	10'-0"	U
cv	16	#5	10'-0"	U
cw	16	#5	10'-0"	U
cx	16	#5	10'-0"	U
cy	16	#5	10'-0"	U
cz	16	#5	10'-0"	U
da	16	#5	10'-0"	U
db	16	#5	10'-0"	U
dc	16	#5	10'-0"	U
dd	16	#5	10'-0"	U
de	16	#5	10'-0"	U
df	16	#5	10'-0"	U
dg	16	#5	10'-0"	U
dh	16	#5	10'-0"	U
di	16	#5	10'-0"	U
dj	16	#5	10'-0"	U
dk	16	#5	10'-0"	U
dl	16	#5	10'-0"	U
dm	16	#5	10'-0"	U
dn	16	#5	10'-0"	U
do	16	#5	10'-0"	U
dp	16	#5	10'-0"	U
dq	16	#5	10'-0"	U
dr	16	#5	10'-0"	U
ds	16	#5	10'-0"	U
dt	16	#5	10'-0"	U
du	16	#5	10'-0"	U
dv	16	#5	10'-0"	U
dw	16	#5	10'-0"	U
dx	16	#5	10'-0"	U
dy	16	#5	10'-0"	U
dz	16	#5	10'-0"	U
ea	16	#5	10'-0"	U
eb	16	#5	10'-0"	U
ec	16	#5	10'-0"	U
ed	16	#5	10'-0"	U
ee	16	#5	10'-0"	U
ef	16	#5	10'-0"	U
eg	16	#5	10'-0"	U
eh	16	#5	10'-0"	U
ei	16	#5	10'-0"	U
ej	16	#5	10'-0"	U
ek	16	#5	10'-0"	U
el	16	#5	10'-0"	U
em	16	#5	10'-0"	U
en	16	#5	10'-0"	U
eo	16	#5	10'-0"	U
ep	16	#5	10'-0"	U
eq	16	#5	10'-0"	U
er	16	#5	10'-0"	U
es	16	#5	10'-0"	U
et	16	#5	10'-0"	U
eu	16	#5	10'-0"	U
ev	16	#5	10'-0"	U
ew	16	#5	10'-0"	U
ex	16	#5	10'-0"	U
ey	16	#5	10'-0"	U
ez	16	#5	10'-0"	U
fa	16	#5	10'-0"	U
fb	16	#5	10'-0"	U
fc	16	#5	10'-0"	U
fd	16	#5	10'-0"	U
fe	16	#5	10'-0"	U
ff	16	#5	10'-0"	U
fg	16	#5	10'-0"	U
fh	16	#5	10'-0"	U
fi	16	#5	10'-0"	U
fj	16	#5	10'-0"	U
fk	16	#5	10'-0"	U
fl	16	#5	10'-0"	U
fm	16	#5	10'-0"	U
fn	16	#5	10'-0"	U
fo	16	#5	10'-0"	U
fp	16	#5	10'-0"	U
fq	16	#5	10'-0"	U
fr	16	#5	10'-0"	U
fs	16	#5	10'-0"	U
ft	16	#5	10'-0"	U
fu	16	#5	10'-0"	U
fv	16	#5	10'-0"	U
fw	16	#5	10'-0"	U
fx	16	#5	10'-0"	U
fy	16	#5	10'-0"	U
fz	16	#5	10'-0"	U
ga	16	#5	10'-0"	U
gb	16	#5	10'-0"	U
gc	16	#5	10'-0"	U
gd	16	#5	10'-0"	U
ge	16	#5	10'-0"	U
gf	16	#5	10'-0"	U
gg	16	#5	10'-0"	U
gh	16	#5	10'-0"	U
gi	16	#5	10'-0"	U
gj	16	#5	10'-0"	U
gk	16	#5	10'-0"	U
gl	16	#5	10'-0"	U
gm	16	#5	10'-0"	U
gn	16	#5	10'-0"	U
go	16	#5	10'-0"	U
gp	16	#5	10'-0"	U
gq	16	#5	10'-0"	U
gr	16	#5	10'-0"	U
gs	16	#5	10'-0"	U
gt	16	#5	10'-0"	U
gu	16	#5	10'-0"	U
gv	16	#5	10'-0"	U
gw	16	#5	10'-0"	U
gx	16	#5	10'-0"	U
gy	16	#5	10'-0"	U
gz	16	#5	10'-0"	U
ha	16	#5	10'-0"	U
hb	16	#5	10'-0"	U
hc	16	#5	10'-0"	U
hd	16	#5	10'-0"	U
he	16	#5	10'-0"	U
hf	16	#5	10'-0"	U
hg	16	#5	10'-0"	U
hh	16	#5	10'-0"	U
hi	16	#5	10'-0"	U
hj	16	#5	10'-0"	U
hk	16	#5	10'-0"	U
hl	16	#5	10'-0"	U
hm	16	#5	10'-0"	U
hn	16	#5	10'-0"	U
ho	16	#5	10'-0"	U
hp	16	#5	10'-0"	U
hq	16	#5	10'-0"	U
hr	16	#5	10'-0"	U
hs	16	#5	10'-0"	U
ht	16	#5	10'-0"	U
hu	16	#5	10'-0"	U
hv	16	#5	10'-0"	U
hw	16	#5	10'-0"	U
hx	16	#5	10'-0"	U
hy	16	#5	10'-0"	U
hz	16	#5	10'-0"	U
ia	16	#5	10'-0"	U
ib	16	#5	10'-0"	U
ic	16	#5	10'-0"	U
id	16	#5	10'-0"	U
ie	16	#5	10'-0"	U
if	16	#5	10'-0"	U
ig	16	#5	10'-0"	U
ih	16	#5	10'-0"	U
ii	16	#5	10'-0"	U
ij	16	#5	10'-0"	U
ik	16	#5	10'-0"	U
il	16	#5	10'-0"	U
im	16	#5	10'-0"	U
in	16	#5	10'-0"	U
io	16	#5	10'-0"	U
ip	16	#5	10'-0"	U
iq	16	#5	10'-0"	U
ir	16	#5	10'-0"	U

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. OF 10 SHEETS
F.A. 412	103-2VB	LEE	203	67	
STA.	TO STA.				
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT			



Note:
N.T.R. indicates Notch Toughness Requirement.



FRAMING PLAN AND
GIRDER ELEVATION
F.A. 412 SECTION 103-2VB
F.A. 412 OVER B.N.R.R.
LEE COUNTY
STATION 1175+47.10
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOR INFORMATION ONLY

TOP OF WIDE FLANGE ELEVATIONS (FOR FABRICATION ONLY)

BEAM NO.	€ Brg. S. Abut.	€ F.S. 1 *	€ Pier 1	€ F.S. 2 *	€ F.S. 3 *	€ Pier 2	€ F.S. 4 *	€ Brg. N. Abut.
1	854.99	854.96	854.94	854.92	854.89	854.87	854.86	854.80
2	855.14	855.12	855.10	855.08	855.05	855.03	855.02	854.96
3	855.26	855.24	855.22	855.21	855.17	855.16	855.15	855.10
4	855.34	855.32	855.30	855.29	855.25	855.24	855.23	855.18
5	855.22	855.21	855.19	855.17	855.14	855.12	855.11	855.07
6	855.08	855.07	855.05	855.04	855.00	854.99	854.98	854.94
7	855.05	855.05	855.04	855.04	855.02	855.02	855.02	855.00
8	855.18	855.19	855.18	855.18	855.16	855.16	855.16	855.14
9	855.29	855.30	855.29	855.29	855.27	855.27	855.27	855.25
10	855.22	855.24	855.23	855.23	855.21	855.21	855.21	855.20
11	855.10	855.12	855.11	855.11	855.10	855.10	855.10	855.08
12	854.95	854.96	854.95	854.95	854.95	854.95	854.95	854.93

*Elevations at Splices are for top of W33x152.

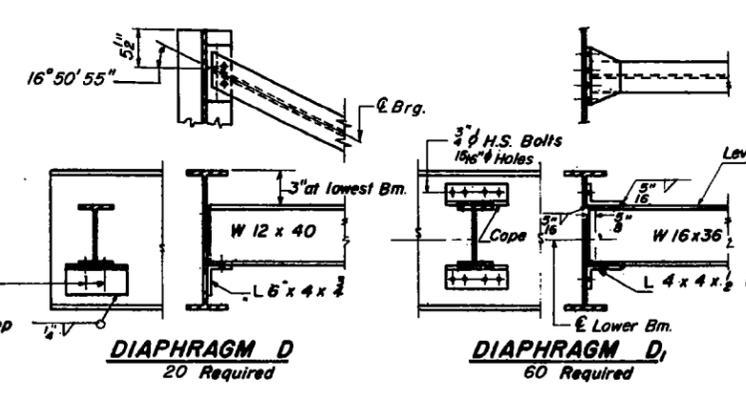
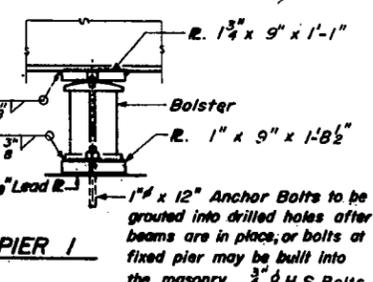
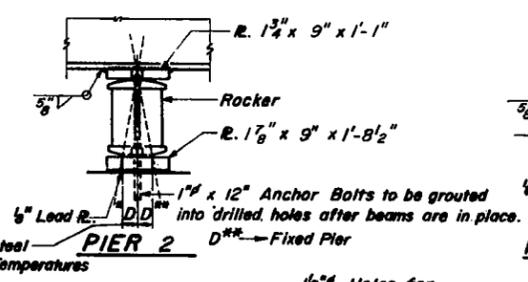
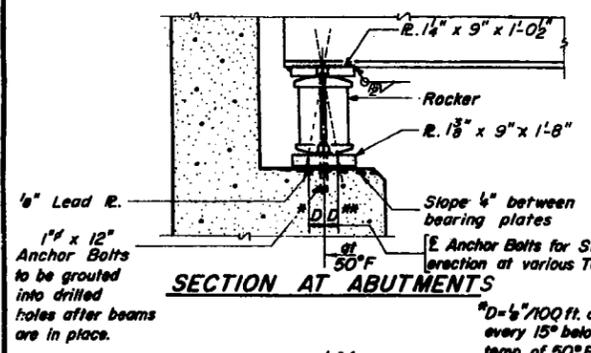
INTERIOR GIRDER MOMENT TABLE

	0.4 Sp. 1 or 3	Pier 1 or 2	0.5 Sp. 2
I_s (in ⁴)	5900	8160	5900
I_c (in ⁴)	16,329	—	16,329
S_s (in ³)	359	487	359
S_c (in ³)	535	—	535
I (in ⁴)	.837	.1497	.837
M (in)	122	369	126
I_s non-comps ²	4.1	9.1	4.2
S (in ³)	.321	—	.321
M (in)	54	—	68
M (in)	335	225	371
M (in)	97	63	100
TOTAL (in)	486	288	539
I_s comp (ksi)	10.9	7.1	12.1
I_s TOTAL (ksi)	15.0	16.2	16.3
VR (k)	50.0	—	42.7

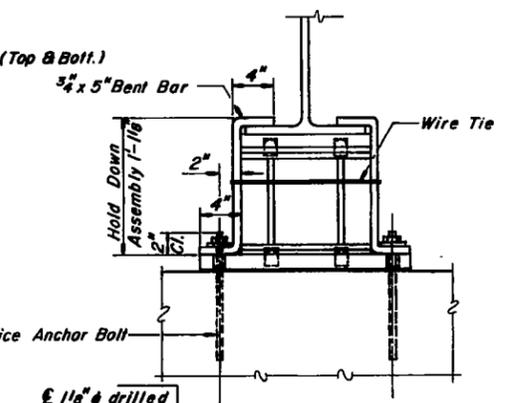
INTERIOR GIRDER REACTION TABLE

	Abut	Pier
R ₀ (k)	20.4	72.2
R ₁ (k)	37.5	45.6
I _{mp} (k)	10.9	12.8
R _{TOTAL} (k)	68.8	130.6

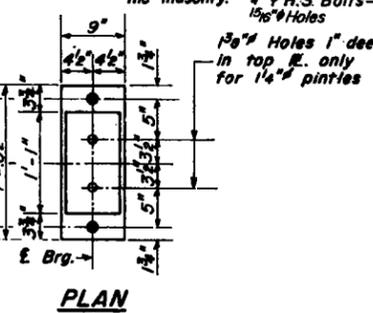
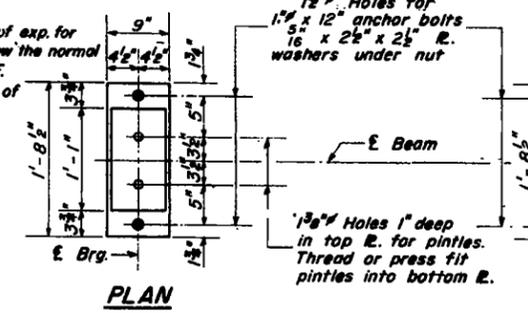
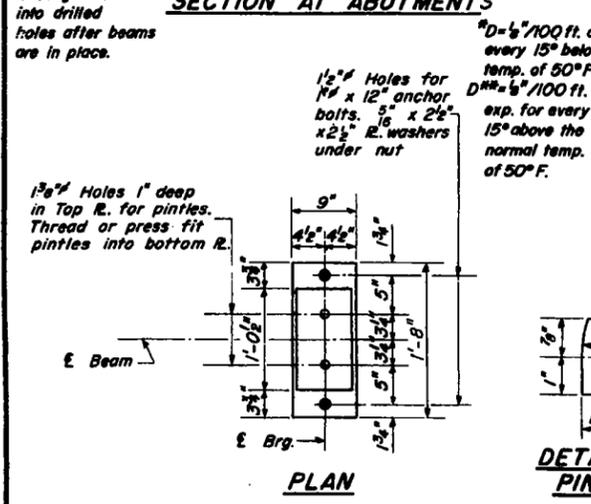
I_s and S_s are the moment of inertia and section modulus of the steel section used in computing I_s total.
 I_c and S_c are the moment of inertia and section modulus of the composite section used in computing I_s .
 VR is the maximum k + Impact shear range in span used to determine shear connector spacing.



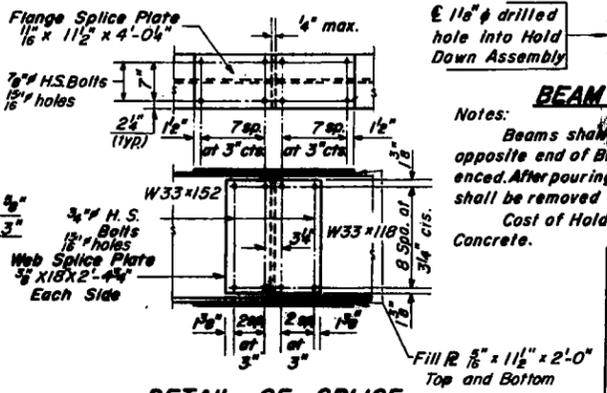
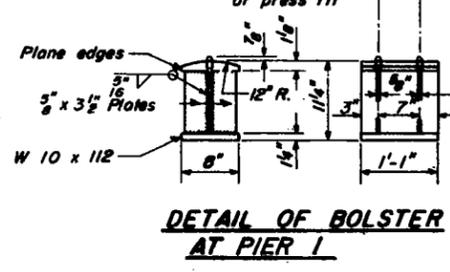
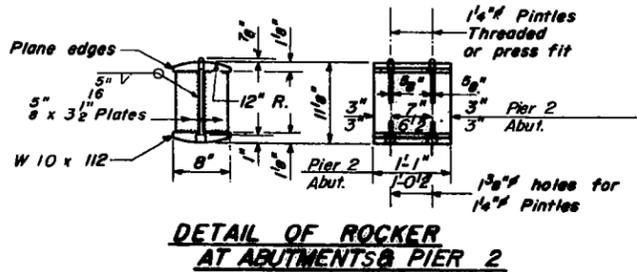
Note: Hardened washers shall be required over 1 1/2" holes for diaphragms. Contact surfaces of joint for diaphragms shall be free of paint or lacquer.



Notes:
 Beams shall be held down at the Abutment on the opposite end of Bridge from which the deck pour is commenced. After pouring is completed the Hold Down Assembly shall be removed and Nuts placed on Anchor Bolts.
 Cost of Hold Down Assembly, incidental to Class X Concrete.

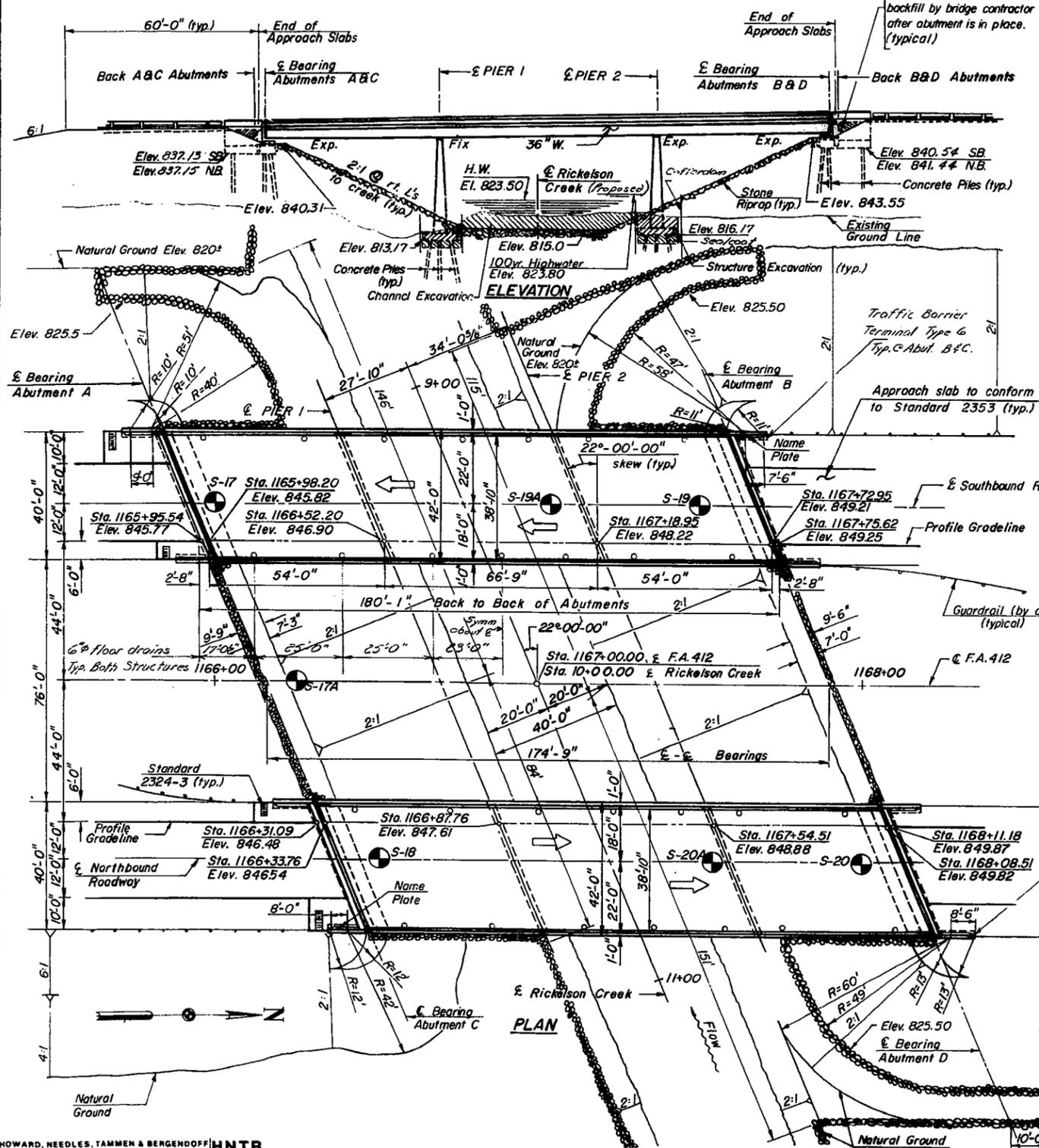
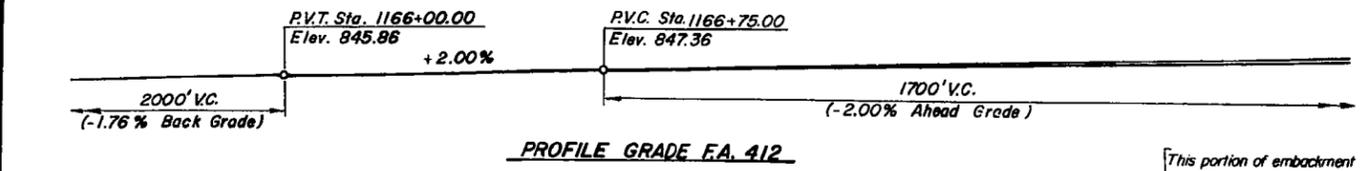


DESIGNED	G J K
CHECKED	R.B.D.
DRAWN	C G L
CHECKED	R.B.D.



STRUCTURAL STEEL DETAILS
 F.A. 412 SECTION 103-2VB
 F.A. 412 OVER B.N.R.R.
 LEE COUNTY
 STATION 1175+47.10
 STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BENCHMARK: Benchmark No. 22 is railroad spike in 24 inch diameter tree 223 feet left of Station 1166+28.00 Elevation 820.67.



Reinforcement bars shall conform to the requirements of AASHTO M31 or M53, Gr. 60

DESIGN SPECIFICATIONS: American Association of State Highway and Transportation Officials Standard Specifications for Highway Bridges, 1973 with 1974 & 1975 Interims

DESIGN LOADING: A.A.S.H.T.O. HS20-44 @ 25 pounds per square foot for future wearing surface on bridge deck.

UNIT STRESSES:
Substructure Concrete: $f_c = 1400$ PSI
Deck Slab: $f'_c = 3500$ psi
Deck Rein: $f_y = 60,000$ psi

Reinforcing Steel:
 $f_s = 24,000$ PSI (Substructure)
Structural Steel
M183, $f_s = 20,000$ PSI

EMBANKMENT: The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.

TEST PILING: The Contractor shall drive eight concrete test piles in a permanent location, one at each abutment and each pier as directed by the Engineer, before ordering the remainder of the piles.

The main load carrying members subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness, Zone 2. These components are the splice plates & wide flange bms.

GENERAL NOTES

CONCRETE PILING: Concrete piles at all abutments shall be driven in holes precored through the embankment in accordance with Article 513.09(c) of the Standard Specifications.

REINFORCING STEEL: Dimensions shown on the plans from the reinforcing steel to outside edge of concrete are all clear dimensions. All bar dimensions are out to out.

Expansion joint angles and attached bars shall be shop pointed with two coats of basic lead silico chromate paint.

PAINTING: The basic lead silico chromate paint system shall be used for shop and field painting of Structural Steel. Except where otherwise noted.

FIELD WELDING: Field welding of construction accessories will not be permitted to the bottom flange of beams nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.

The Contractor shall make allowance for the deflection of forms, shrinkage and settlement of falsework, in addition to allowance for dead load deflection.

FIELD CONNECTIONS: Fasteners shall be high strength bolts. Bolts 1/2" diameter, open holes 3/4" diameter, unless otherwise noted.

STRUCTURAL STEEL: Structural steel for beams, beam splice plates, beam splice fill plates, all diaphragms, bearings, gusset plates, expansion joint angles, and attached bars shall conform to A.A.S.H.T.O. designation M183. Diaphragms shall be normal to the profile grade line.

Calculated weight of structural steel = 382,900 pounds.

ANCHOR BOLTS: Anchor bolts for bearing devices shall be set before bolting diaphragms over supports.

All contact surfaces of joints for diaphragms shall be free of paint or lacquer.

BEARING SEAT: Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch. Adjustments shall be made either by grinding the surface or by shimming the bearing. Two inch adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.

WATERWAY INFORMATION

Drainage area	16.17 Sq. Mi.
Design highwater	823.50 Feet
Proposed freeboard	4.00**Feet
Flow line elevation	814.92 Feet
Present waterway opening	0 Sq. Ft.
Required waterway opening	324 Sq. Ft.
Proposed waterway opening	480 Sq. Ft.
Q (50 years)	2397 cfs
Q (100 years)	2876 cfs
Created head (50 years)	0.79 Feet
Created head (100 years)	1.00 Feet

* U = Unrestricted
** Proposed freeboard is the difference in elevation between the design high water and the bottom of the track ballast of the adjacent Burlington Northern Railroad.

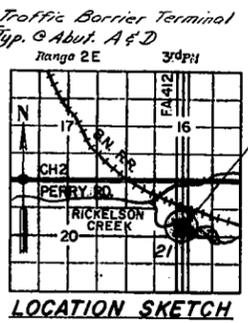
TOTAL BILL OF MATERIAL

ITEM	UNITS	Substructure	Superstructure	TOTAL
Reinforcement Bars (EpoxyCtd)	Pounds	0	69,780	69,780
Structure Excavation	Cu. Yd.	384	0	384
Protective Coat	Sq. Yd.	0	1848	1848
Class X Concrete	Cu. Yd.	206	445	651
Preformed Joint Seal (2 1/2")	Lin. Ft.	0	91	91
Preformed Joint Seal (4")	Lin. Ft.	0	91	91
Reinforcement Bars	Pounds	74,710	41,760	116,470
Structural Steel	Lump Sum	0	0.36	0.36
Floor Drains	Each	0	28	28
Test Piles (Conc.)	Each	8	0	8
Concrete Piles	Lin. Ft.	4658	0	4658
Class A Concrete	Cu. Yd.	617	0	617
Name Plates	Each	0	2	2
Channel Excavation	Cu. Yd.	5183	0	5183
Cofferdam Excavation	Cu. Yds.	703	0	703
Sealcoat Concrete	Cu. Yds.	212	0	212
Cofferdam	Each	4	0	4

Notes:
Remove clayey materials to top of sand at all 4 abutments - full depth to 4.5' (Elevation 816.5) at South Abutment (SB), 5.5' (Elevation 815.4) at South Abutment (NB), 4.5' (Elevation 816.9) at North Abutment (SB) and 5.0' (Elevation 817.0) at North Abutment (NB) - between the following limits: (a) outer point of end slopes and 10' behind back of abutments (or to merge with removal under roadways) and (b) between mid-points of side slopes. Replace with P.C.C. to 2'-0" above water level, if any, in excavation at time of replacement, and, above that level, with suitable earth embankment. (See Special Provisions)

For Riprap quantities, see Highway Plans.

LEGEND
● Boring Locations
⊗ indicates limits of riprap



STATION 1167+00.00
BUILT 19 BY
STATE OF ILLINOIS
F.A. RT. 412 SEC. 103-2B
F.A. PROJ. PD-412-4(36)
LOADING HS20
STR. NO.
NAME PLATE

(See Standard 2113)
* Structure number to be supplied by the District.

I hereby certify that this plan and specification was prepared by me or under my direct personal supervision and that I am a duly registered Structural Engineer under the laws of the State of Illinois.

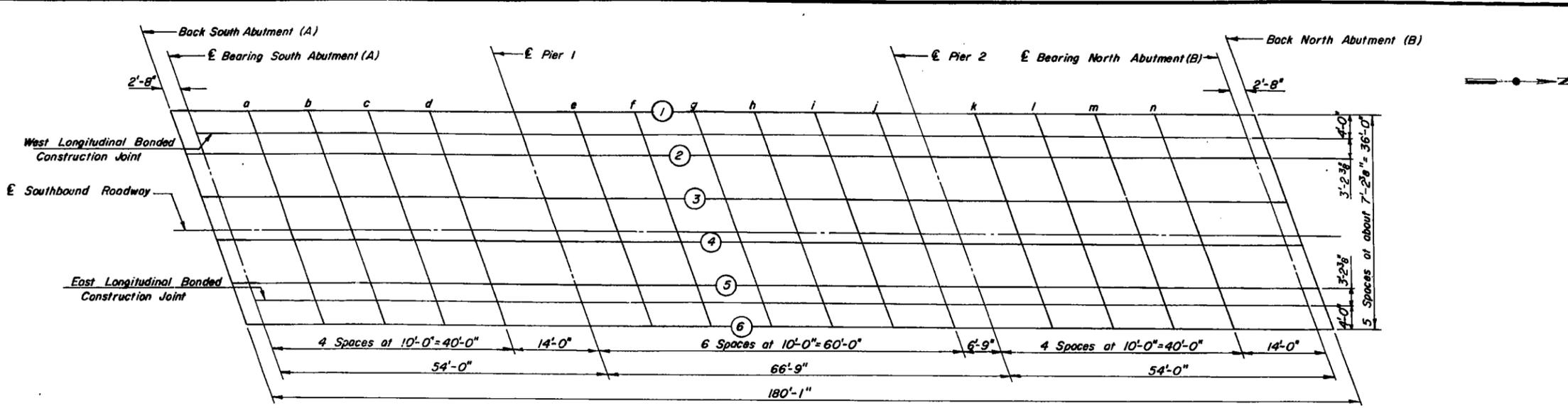


GENERAL PLAN & ELEVATION
FA. 412 SECTION 103-2B
FA. 412 OVER RICKELSON CREEK
LEE COUNTY
STATION 1167+00.00
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOR INFORMATION ONLY

052-0047, 48

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 2
F.A. 412	103-2B	LEE	203	44	of 17 SHEETS
STA.	TO STA.				
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT			



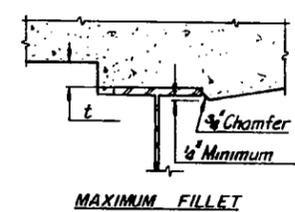
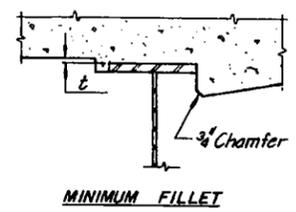
PLAN

GIRDER 1					
Location	STATION	OFFSET FT.	*** ELEVATION *** THEORETICAL ADJUSTED	DEFLECTION INCHES	
Back South Abutment(A)	1165+62.30	-20.000	845.223	845.223	0.0
E Bearing South Abutment(A)	1165+85.27	-20.000	845.276	845.276	0.0
a	1165+95.27	-20.000	845.474	845.493	0.223
b	1166+05.27	-20.000	845.674	845.702	0.335
c	1166+15.27	-20.000	845.874	845.899	0.298
d	1166+25.27	-20.000	846.074	846.087	0.155
E Pier 1	1166+39.27	-20.000	846.354	846.354	0.0
e	1166+49.27	-20.000	846.554	846.560	0.074
f	1166+59.27	-20.000	846.754	846.772	0.218
g	1166+69.27	-20.000	846.954	846.980	0.313
h	1166+79.27	-20.000	847.154	847.178	0.293
i	1166+89.27	-20.000	847.352	847.366	0.171
j	1166+99.27	-20.000	847.547	847.550	0.036
E Pier 2	1167+05.27	-20.000	847.678	847.678	0.0
k	1167+15.27	-20.000	847.869	847.877	0.093
l	1167+25.27	-20.000	848.058	848.079	0.248
m	1167+35.27	-20.000	848.245	848.273	0.338
n	1167+45.27	-20.000	848.434	848.453	0.286
E Bearing North Abutment(B)	1167+60.27	-20.000	848.684	848.684	0.0
Back North Abutment(B)	1167+62.69	-20.000	848.732	848.732	0.0

WEST LONGITUDINAL BONDED CONSTR. JOINT				
STATION	OFFSET FT.	*** ELEVATION *** THEORETICAL ADJUSTED	DEFLECTION INCHES	
1165+85.27	-15.000	845.391	845.391	0.0
1165+95.27	-15.000	845.590	845.608	0.223
1166+05.27	-15.000	845.790	845.817	0.335
1166+15.27	-15.000	845.990	846.014	0.298
1166+25.27	-15.000	846.190	846.202	0.155
1166+39.27	-15.000	846.470	846.470	0.0
1166+49.27	-15.000	846.670	846.676	0.074
1166+59.27	-15.000	846.870	846.888	0.218
1166+69.27	-15.000	847.070	847.096	0.313
1166+79.27	-15.000	847.269	847.294	0.293
1166+89.27	-15.000	847.457	847.461	0.171
1166+99.27	-15.000	847.662	847.665	0.036
1167+07.54	-15.000	847.792	847.792	0.0
1167+17.54	-15.000	847.963	847.991	0.093
1167+27.54	-15.000	848.172	848.193	0.248
1167+37.54	-15.000	848.358	848.387	0.338
1167+47.54	-15.000	848.542	848.566	0.286
1167+61.54	-15.000	848.796	848.796	0.0

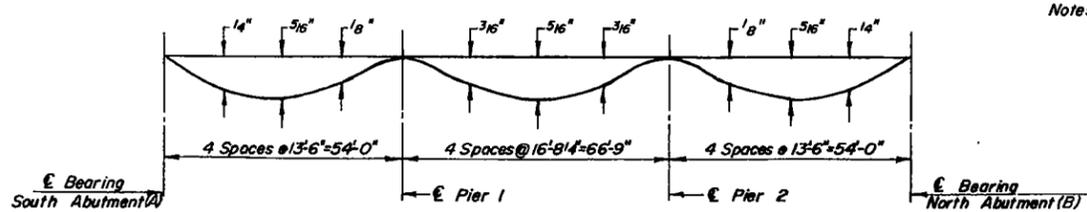
GIRDER 2				
STATION	OFFSET FT.	*** ELEVATION *** THEORETICAL ADJUSTED	DEFLECTION INCHES	
1165+85.51	-12.000	845.431	845.431	0.0
1165+88.18	-12.000	845.483	845.483	0.0
1165+98.18	-12.000	845.682	845.701	0.223
1166+08.18	-12.000	845.882	845.910	0.335
1166+18.18	-12.000	846.082	846.127	0.298
1166+23.18	-12.000	846.282	846.295	0.155
1166+42.18	-12.000	846.562	846.562	0.0
1166+52.18	-12.000	846.762	846.768	0.074
1166+62.18	-12.000	846.962	846.980	0.218
1166+72.18	-12.000	847.162	847.188	0.313
1166+82.18	-12.000	847.361	847.386	0.293
1166+92.18	-12.000	847.558	847.573	0.171
1167+02.18	-12.000	847.753	847.756	0.036
1167+08.93	-12.000	847.893	847.893	0.0
1167+18.93	-12.000	848.074	848.082	0.093
1167+28.93	-12.000	848.263	848.283	0.248
1167+38.93	-12.000	848.449	848.477	0.338
1167+48.93	-12.000	848.633	848.656	0.286
1167+62.93	-12.000	848.886	848.886	0.0
1167+65.60	-12.000	848.934	848.934	0.0

GIRDER 3					Location
STATION	OFFSET FT.	*** ELEVATION *** THEORETICAL ADJUSTED	DEFLECTION INCHES		
1165+86.42	-5.600	845.604	845.604	0.0	Back South Abutment(A)
1165+91.09	-5.600	845.657	845.657	0.0	E Bearing South Abutment(A)
1166+01.09	-5.600	845.857	845.875	0.223	a
1166+11.09	-5.600	846.057	846.085	0.335	b
1166+21.09	-5.600	846.257	846.281	0.298	c
1166+31.09	-5.600	846.457	846.470	0.155	d
1166+45.09	-5.600	846.737	846.737	0.0	E Pier 1
1166+55.09	-5.600	846.937	846.943	0.074	e
1166+65.09	-5.600	847.137	847.155	0.218	f
1166+75.09	-5.600	847.337	847.363	0.313	g
1166+85.09	-5.600	847.535	847.556	0.293	h
1166+95.09	-5.600	847.732	847.746	0.171	i
1167+05.09	-5.600	847.926	847.929	0.036	j
1167+11.84	-5.600	848.056	848.056	0.0	E Pier 2
1167+21.84	-5.600	848.246	848.254	0.093	k
1167+31.84	-5.600	848.434	848.454	0.248	l
1167+41.84	-5.600	848.619	848.647	0.338	m
1167+51.84	-5.600	848.802	848.826	0.286	n
1167+65.84	-5.600	849.055	849.055	0.0	E Bearing North Abutment(B)
1167+68.51	-5.600	849.102	849.102	0.0	Back North Abutment(B)



To determine *t*: elevations of the top flanges of girders shall be taken at the locations shown. These elevations subtracted from the "Adjusted Elevations" shown in the tables minus slab thickness, equals the fillet height *t* above top flanges of girders.

FILLET HEIGHTS



(Includes weight of concrete 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 above.

Notes:
"Theoretical Elevations" are at top of concrete slab.
○ denotes girder number.

Note: All theoretical and adjusted elevations in the top of slab elevation tables must be increased by .125 ft.

FOR INFORMATION ONLY

TOP OF SLAB ELEVATIONS
SOUTHBOUND BRIDGE
F.A. 412 SECTION 103-2B
F.A. 412 OVER RICKELSON CREEK
LEE COUNTY
STATION 1167+00.00
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GIRDER 4

Location	STATION	OFFSET FT.	*** ELEVATION THEORETICAL ***	*** ELEVATION ADJUSTED ***	DEFLECTION INCHES
Back South Abutment(A)	1165+91.33	1.000	845.724	845.724	0.0
E Bearing South Abutment(A)	1165+94.00	1.600	845.777	845.777	0.0
a	1166+04.00	1.600	845.977	845.996	0.223
b	1166+14.00	1.600	846.177	846.205	0.335
c	1166+24.00	1.600	846.377	846.402	0.298
d	1166+34.00	1.600	846.577	846.590	0.155
E Pier 1	1166+48.00	1.600	846.657	846.657	0.0
e	1166+58.00	1.600	847.057	847.053	0.074
f	1166+68.00	1.600	847.257	847.275	0.218
g	1166+78.00	1.600	847.457	847.483	0.313
h	1166+88.00	1.600	847.655	847.680	0.293
i	1166+98.00	1.600	847.851	847.865	0.171
j	1167+08.00	1.600	848.044	848.047	0.036
E Pier 2	1167+14.75	1.600	848.174	848.174	0.0
k	1167+24.75	1.600	848.363	848.371	0.093
l	1167+34.75	1.600	848.550	848.571	0.248
m	1167+44.75	1.600	848.735	848.763	0.338
n	1167+54.75	1.600	848.917	848.941	0.286
E Bearing North Abutment(B)	1167+68.75	1.600	849.169	849.169	0.0
Back North Abutment(B)	1167+71.42	1.600	849.216	849.216	0.0

GIRDER 5

STATION	OFFSET FT.	*** ELEVATION THEORETICAL ***	*** ELEVATION ADJUSTED ***	DEFLECTION INCHES
1165+94.23	8.000	845.670	845.670	0.0
1165+96.90	8.000	845.723	845.723	0.0
1166+06.90	8.000	845.923	845.942	0.223
1166+16.90	8.000	846.123	846.151	0.335
1166+26.90	8.000	846.323	846.348	0.298
1166+36.90	8.000	846.523	846.535	0.155
1166+50.90	8.000	846.803	846.803	0.0
1166+60.90	8.000	847.003	847.009	0.074
1166+70.90	8.000	847.203	847.221	0.218
1166+80.90	8.000	847.403	847.429	0.313
1166+90.90	8.000	847.600	847.624	0.293
1167+00.90	8.000	847.795	847.809	0.171
1167+10.90	8.000	847.988	847.991	0.036
1167+17.65	8.000	848.117	848.117	0.0
1167+27.65	8.000	848.305	848.313	0.093
1167+37.65	8.000	848.492	848.512	0.248
1167+47.65	8.000	848.676	848.704	0.338
1167+57.65	8.000	848.858	848.881	0.286
1167+71.65	8.000	849.108	849.108	0.0
1167+74.32	8.000	849.155	849.155	0.0

EAST LONGITUDINAL BONDED CONSTR. JOINT

STATION	OFFSET FT.	*** ELEVATION THEORETICAL ***	*** ELEVATION ADJUSTED ***	DEFLECTION INCHES
1165+98.20	12.000	845.699	845.699	0.0
1166+08.20	12.000	845.899	845.918	0.223
1166+18.20	12.000	846.099	846.127	0.335
1166+28.20	12.000	846.299	846.324	0.298
1166+38.20	12.000	846.499	846.512	0.195
1166+52.20	12.000	846.779	846.779	0.0
1166+62.20	12.000	846.979	846.985	0.074
1166+72.20	12.000	847.179	847.197	0.218
1166+82.20	12.000	847.378	847.404	0.313
1166+92.20	12.000	847.575	847.600	0.293
1167+02.20	12.000	847.770	847.784	0.171
1167+12.20	12.000	847.963	847.966	0.036
1167+18.95	12.000	848.091	848.091	0.0
1167+28.95	12.000	848.280	848.287	0.093
1167+38.95	12.000	848.466	848.486	0.248
1167+48.95	12.000	848.650	848.679	0.338
1167+58.95	12.000	848.831	848.855	0.286
1167+72.95	12.000	849.081	849.081	0.0

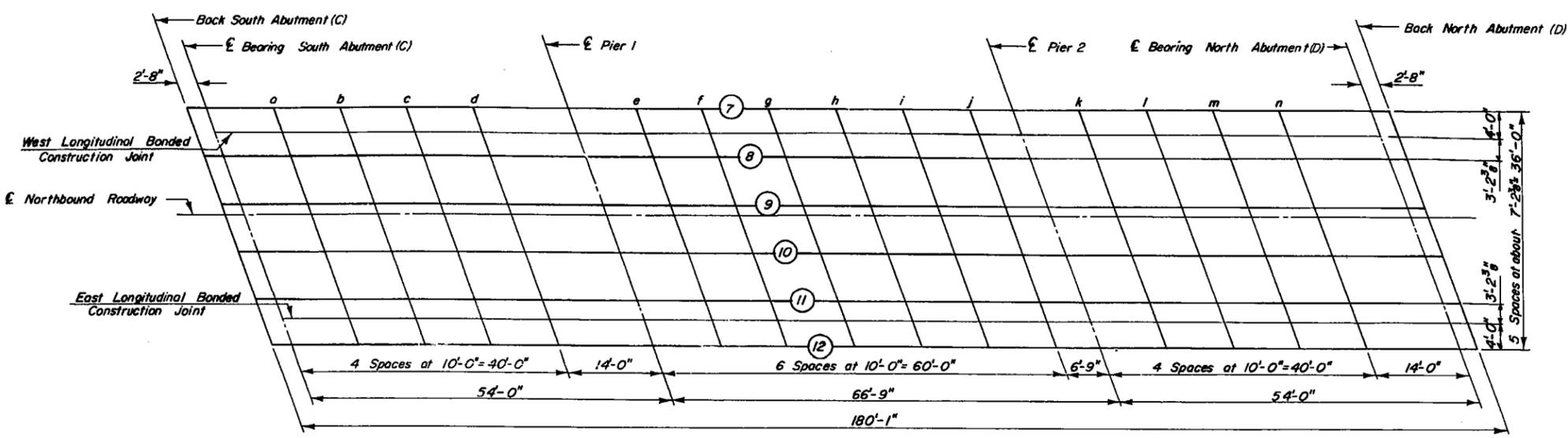
GIRDER 6

STATION	OFFSET FT.	*** ELEVATION THEORETICAL ***	*** ELEVATION ADJUSTED ***	DEFLECTION INCHES	Location
1165+97.14	16.000	845.595	845.595	0.0	Back South Abutment (A)
1165+99.81	16.000	845.648	845.648	0.0	E Bearing South Abutment(A)
1166+09.81	16.000	845.648	845.657	0.223	a
1166+19.81	16.000	846.248	846.276	0.335	b
1166+29.81	16.000	846.248	846.273	0.298	c
1166+39.81	16.000	846.248	846.401	0.155	d
1166+53.81	16.000	846.728	846.728	0.0	E Pier 1
1166+63.81	16.000	846.928	846.934	0.074	e
1166+73.81	16.000	847.128	847.146	0.218	f
1166+83.81	16.000	847.327	847.353	0.313	g
1166+93.81	16.000	847.524	847.548	0.293	h
1167+03.81	16.000	847.718	847.733	0.171	i
1167+13.81	16.000	847.910	847.913	0.036	j
1167+20.56	16.000	848.039	848.239	0.0	E Pier 2
1167+30.56	16.000	848.227	848.235	0.093	k
1167+40.56	16.000	848.413	848.433	0.248	l
1167+50.56	16.000	848.596	848.624	0.338	m
1167+60.56	16.000	848.777	848.801	0.286	n
1167+74.56	16.000	849.026	849.026	0.0	E Bearing North Abutment(B)
1167+77.23	16.000	849.074	849.074	0.0	Back North Abutment (B)

Notes:
For grid location and other information, see Sheet 2.

Note: All theoretical and adjusted elevations in the top of slab elevation tables must be increased by .125 ft.

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 4
FA 412	103-2B	LEE	203	46	of 17 SHEETS
STA.	TO STA.				
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT			



Note: All theoretical and adjusted elevations in the top of slab elevation tables must be increased by .125 ft.

PLAN

GIRDER 7

Location	STATION	OFFSET FT.	*** ELEVATION THEORETICAL	*** ELEVATION ADJUSTED	DEFLECTION INCHES
Back South Abutment(C)	1166+29.48	-16.000	846.241	846.241	0.0
E Bearing South Abutment(C)	1166+32.15	-16.000	846.275	846.275	0.0
a	1166+42.15	-16.000	846.495	846.513	0.223
b	1166+52.15	-16.000	846.695	846.723	0.335
c	1166+62.15	-16.000	846.895	846.920	0.295
d	1166+72.15	-16.000	847.095	847.138	0.155
E Pier 1	1166+86.15	-16.000	847.373	847.373	0.0
e	1166+96.15	-16.000	847.569	847.576	0.074
f	1167+06.15	-16.000	847.753	847.781	0.218
g	1167+16.15	-16.000	847.951	847.981	0.313
h	1167+26.15	-16.000	848.144	848.168	0.293
i	1167+35.15	-16.000	848.331	848.345	0.171
j	1167+46.15	-16.000	848.515	848.516	0.036
E Pier 2	1167+52.90	-16.000	848.638	848.638	0.0
k	1167+62.90	-16.000	848.819	848.827	0.093
l	1167+72.90	-16.000	848.997	849.018	0.248
m	1167+82.90	-16.000	849.173	849.201	0.338
n	1167+92.90	-16.000	849.340	849.370	0.286
E Bearing North Abutment(D)	1168+06.90	-16.000	849.585	849.585	0.0
Back North Abutment(D)	1168+09.57	-16.000	849.630	849.630	0.0

WEST LONGITUDINAL BONDED CONSTR. JOINT

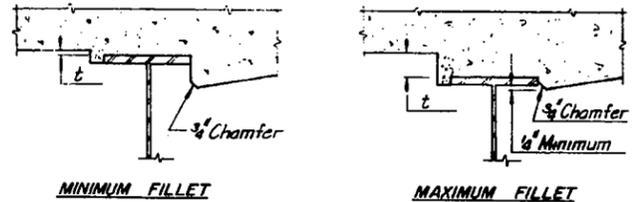
STATION	OFFSET FT.	*** ELEVATION THEORETICAL	*** ELEVATION ADJUSTED	DEFLECTION INCHES
1166+33.76	-12.000	846.410	846.416	0.0
1166+43.76	-12.000	846.610	846.629	0.223
1166+53.76	-12.000	846.810	846.835	0.335
1166+63.76	-12.000	847.010	847.035	0.295
1166+73.76	-12.000	847.210	847.223	0.155
1166+87.76	-12.000	847.488	847.488	0.0
1166+97.76	-12.000	847.684	847.690	0.274
1167+07.76	-12.000	847.878	847.896	0.218
1167+17.76	-12.000	848.069	848.095	0.313
1167+27.76	-12.000	848.257	848.282	0.293
1167+37.76	-12.000	848.444	848.458	0.171
1167+47.76	-12.000	848.628	848.631	0.036
1167+54.51	-12.000	848.751	848.751	0.0
1167+64.51	-12.000	848.931	848.939	0.093
1167+74.51	-12.000	849.110	849.129	0.248
1167+84.51	-12.000	849.284	849.312	0.338
1167+94.51	-12.000	849.457	849.481	0.286
1168+08.51	-12.000	849.636	849.636	0.0

GIRDER 8

STATION	OFFSET FT.	*** ELEVATION THEORETICAL	*** ELEVATION ADJUSTED	DEFLECTION INCHES
1166+32.38	-8.000	846.433	846.433	0.0
1166+35.05	-8.000	846.486	846.486	0.0
1166+45.05	-8.000	846.686	846.705	0.223
1166+55.05	-8.000	846.886	846.914	0.335
1166+65.05	-8.000	847.086	847.111	0.295
1166+75.05	-8.000	847.286	847.299	0.155
1166+89.05	-8.000	847.564	847.564	0.0
1166+99.05	-8.000	847.759	847.765	0.074
1167+09.05	-8.000	847.952	847.971	0.218
1167+19.05	-8.000	848.143	848.169	0.313
1167+29.05	-8.000	848.332	848.356	0.293
1167+39.05	-8.000	848.518	848.532	0.171
1167+49.05	-8.000	848.702	848.705	0.036
1167+55.80	-8.000	848.824	848.824	0.0
1167+65.80	-8.000	849.004	849.012	0.093
1167+75.80	-8.000	849.181	849.202	0.248
1167+85.80	-8.000	849.357	849.385	0.338
1167+95.80	-8.000	849.529	849.553	0.286
1168+09.80	-8.000	849.767	849.767	0.0
1168+12.47	-8.000	849.812	849.812	0.0

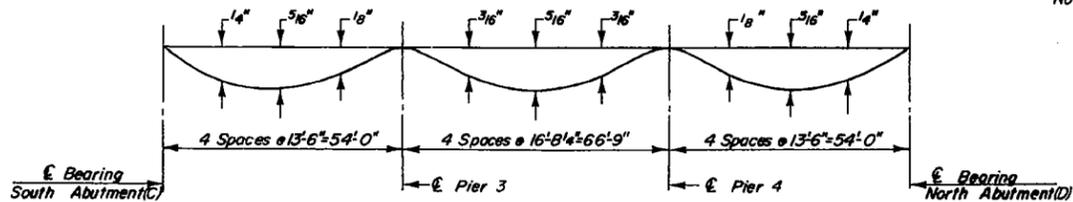
GIRDER 9

STATION	OFFSET FT.	*** ELEVATION THEORETICAL	*** ELEVATION ADJUSTED	DEFLECTION INCHES	Location
1166+35.29	-1.000	846.623	846.623	0.0	Back South Abutment(C)
1166+37.96	-1.000	846.657	846.657	0.0	E Bearing South Abutment(C)
1166+47.96	-1.000	846.657	846.675	0.223	a
1166+57.96	-1.000	847.057	847.054	0.335	b
1166+67.96	-1.000	847.457	847.461	0.295	c
1166+77.96	-1.000	847.856	847.869	0.155	d
1166+91.96	-1.000	847.733	847.733	0.0	E Pier 1
1167+01.96	-1.000	847.928	847.934	0.074	e
1167+11.96	-1.000	848.120	848.139	0.218	f
1167+21.96	-1.000	848.311	848.337	0.313	g
1167+31.96	-1.000	848.498	848.523	0.293	h
1167+41.96	-1.000	848.684	848.698	0.171	i
1167+51.96	-1.000	848.857	848.870	0.036	j
1167+58.71	-1.000	848.989	848.989	0.0	E Pier 2
1167+68.71	-1.000	849.168	849.175	0.093	k
1167+78.71	-1.000	849.345	849.356	0.248	l
1167+88.71	-1.000	849.519	849.548	0.338	m
1167+98.71	-1.000	849.691	849.715	0.286	n
1168+12.71	-1.000	849.928	849.925	0.0	E Bearing North Abutment(D)
1168+15.38	-1.000	849.973	849.973	0.0	Back North Abutment(D)



To determine t: elevations of the top flanges of girders shall be taken at the locations shown. These elevations subtracted from the "Adjusted Elevations" shown in the tables minus slab thickness, equals the fillet height t above top flanges of girders.

FILLET HEIGHTS



Dead Load Deflection Diagram

(Includes weight of concrete 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 above.

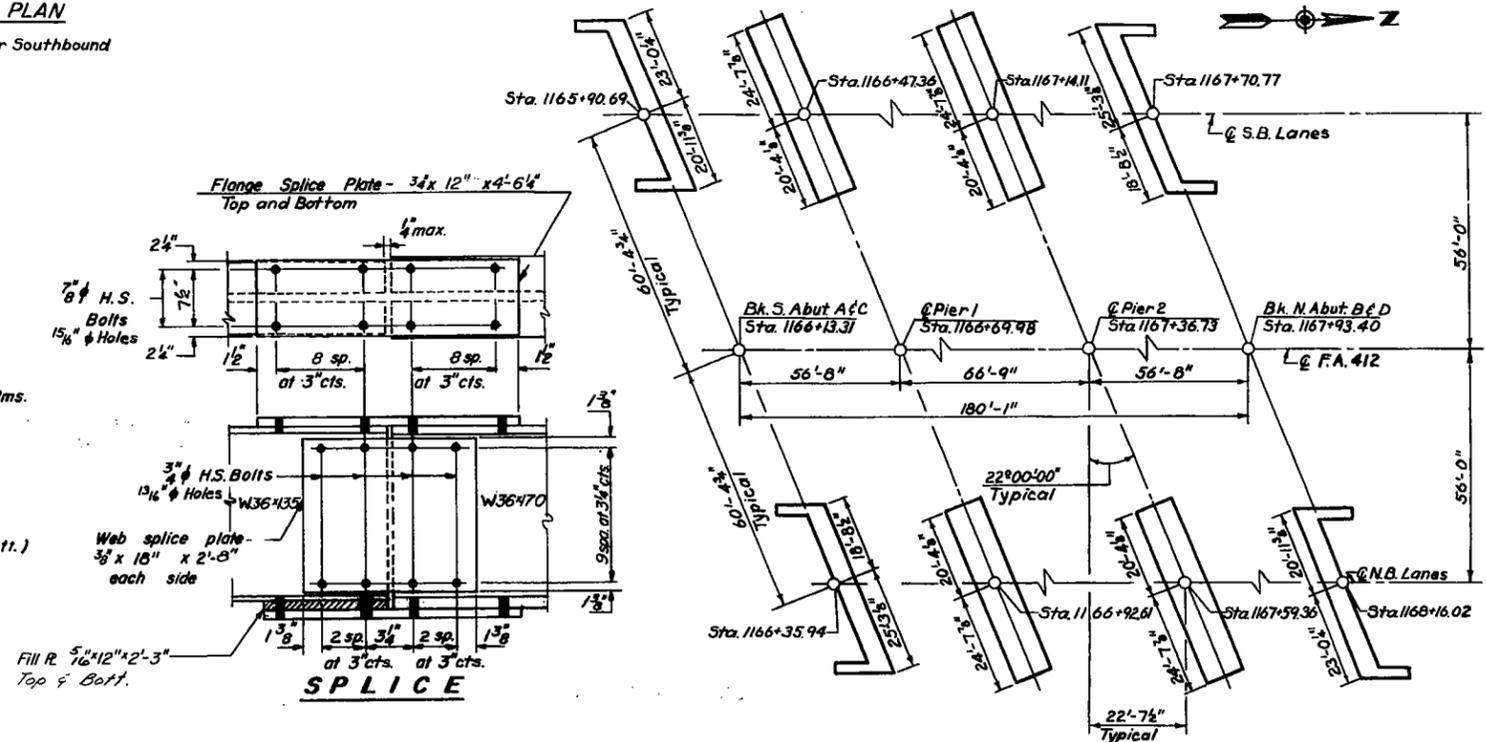
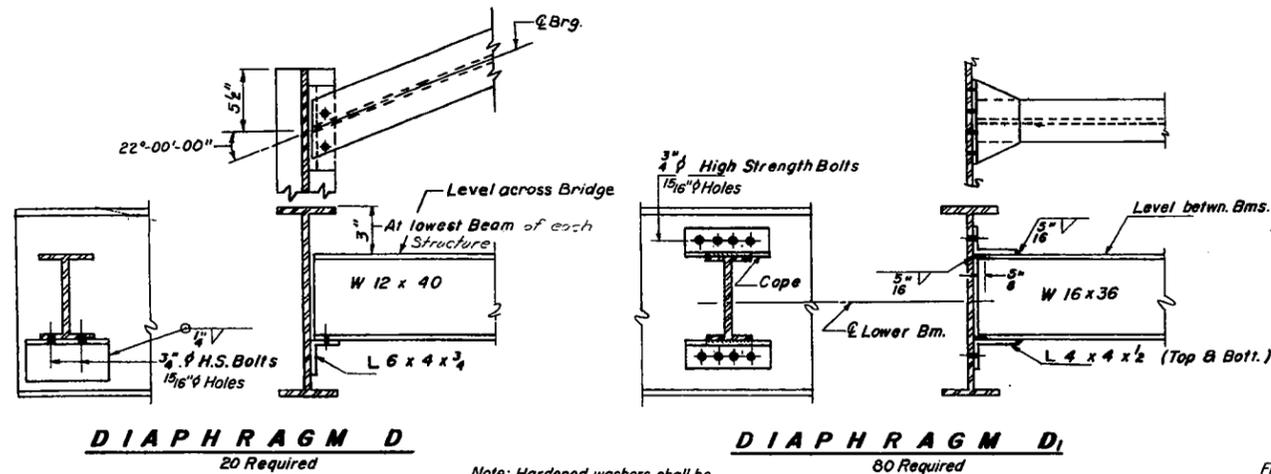
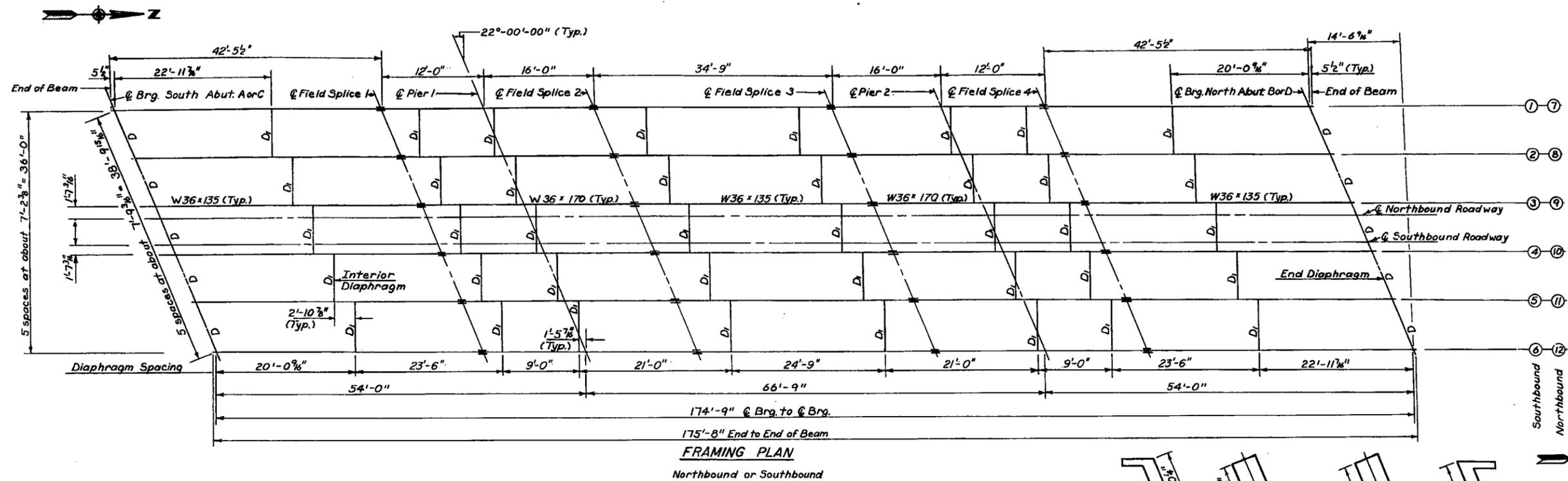
Notes:
"Theoretical Elevations" are at top of concrete slab.
O denotes girder number.

FOR INFORMATION ONLY

TOP OF SLAB ELEVATIONS
NORTHBOUND BRIDGE
F.A. 412 SECTION 103-2B
F.A. 412 OVER RICKELSON CREEK
LEE COUNTY
STATION 1167+00.00
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 8 of 17 SHEETS
FA. 412	103 - 2B	LEE	203	50	
STA.	TO STA.				
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT			



DESIGNED	P.C.A.
CHECKED	R.B.D.
DRAWN	W.J.B.
CHECKED	P.C.A.

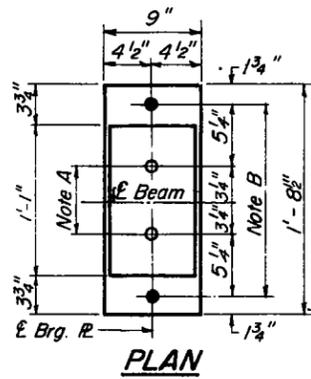
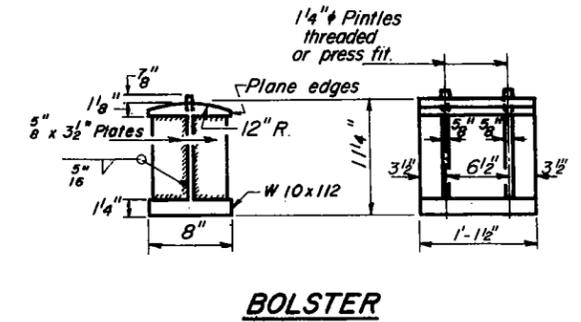
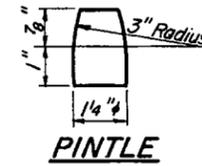
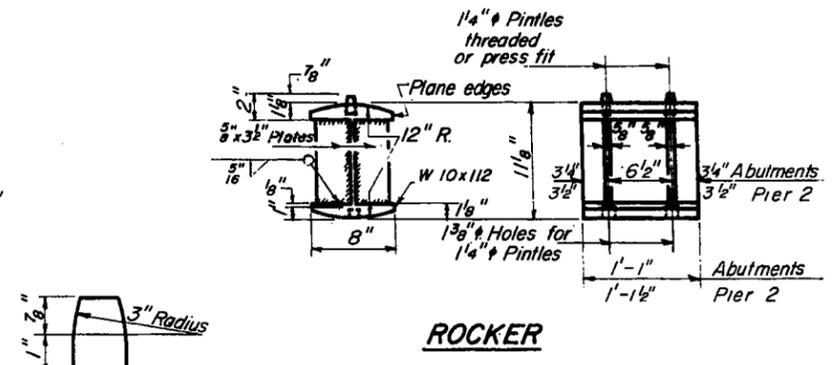
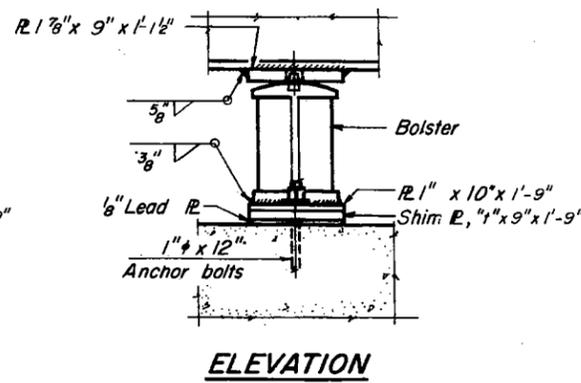
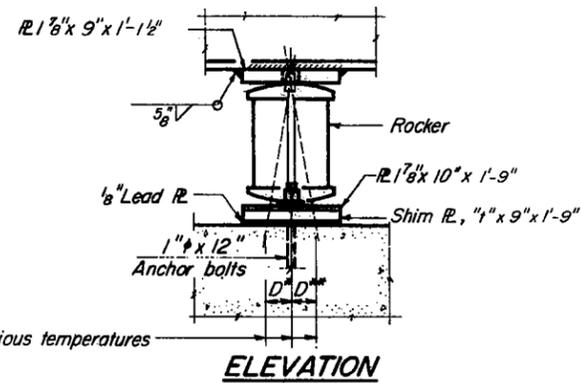
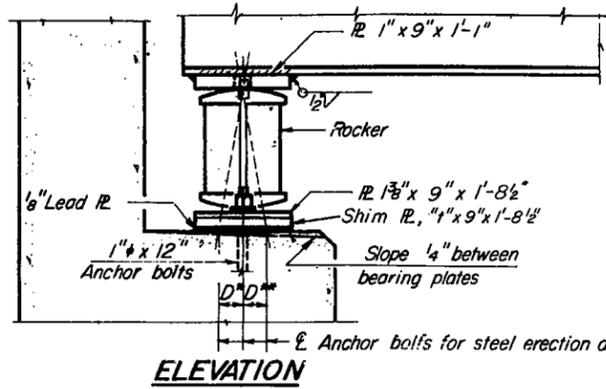
HOWARD, NEEDLES, TAMMEN & BERGENDOFF HNTB
CONSULTING ENGINEERS

FOR INFORMATION ONLY

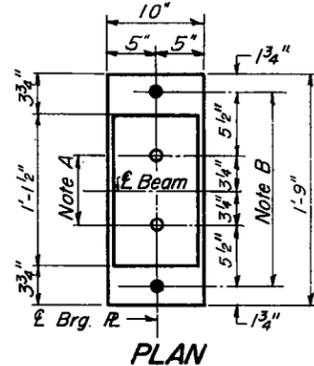
**FRAMING PLAN AND
MISCELLANEOUS DETAILS**
FA. 412 SECTION 103 - 2B
FA. 412 OVER RICKELSON CRK.
LEE COUNTY
STATION 1167+00.00
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

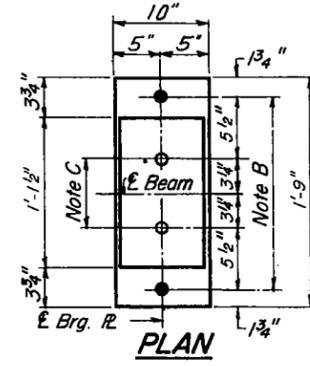
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 9
F.A. 412	103-2B	LEE	203	51	of 17 SHEETS
STA.	TO STA.				
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT			



NOTE A
1 3/8" Holes - 1" deep in top R.
for pintles. Thread or press fit
pintles into bottom R.



NOTE B
1 1/2" Holes for 1" anchor bolts.
1/16 x 2 1/2" x 2 1/2" R. Washers
under nut.



NOTE C
1 3/8" Holes 1" deep in top R.
only for 1/4" pintles.

NOTES ON SETTING OF ANCHOR BOLTS AT EXP. BRGS.

- a) D^* (Side of brg. away from fixed brg.)
 $D^* = \frac{1}{8}$ " per each 100' of expansion for
every 15° fall below the normal temp.
of 50°F.
- D^{**} (Side of brg. toward fixed brg.)
 $D^{**} = \frac{1}{8}$ " per each 100' of expansion for
every 15° rise above the normal temp.
of 50°F.

- b) After beams have been erected and dimensions D^* or D^{**}
determined, holes shall be drilled and anchor bolts shall
be grouted in place. All fixed anchor bolts may be built
into the masonry.

BEARING ASSEMBLY DETAILS

	0.4 Sp 1 or 3	Pier	0.5 Sp 2
I (in.⁴)	7800	10,500	7800
D (k/ft)	1.14	1.18	1.14
M _D (ik)	220	454	188
M _E (ik)	359	330	354
Imp. (ik)	100	88	91
M total (ik)	679	872	633
f _s (Ksi)	18.6	18.0	17.3

Girder	Abut. S.	F.S. 1 Δ	Pier 1	F.S. 2	F.S. 3	Pier 2	F.S. 4	Abut. N.
1	844.72	845.49	845.74	846.03	846.72	847.06	847.30	848.13
2	844.93	845.70	845.94	846.23	846.93	847.27	847.51	848.33
3	845.10	845.87	846.12	846.41	847.10	847.44	847.68	848.50
4	845.22	845.99	846.24	846.53	847.22	847.56	847.80	848.62
5	845.17	845.94	846.19	846.48	847.17	847.51	847.75	848.55
6	845.09	845.86	846.11	846.40	847.09	847.43	847.67	848.47
7	845.74	846.51	846.75	847.03	847.69	848.02	848.25	849.03
8	845.94	846.71	846.95	847.22	847.87	848.20	848.43	849.21
9	846.11	846.87	847.11	847.39	848.06	848.39	848.61	849.36
10	846.10	846.87	847.11	847.38	848.03	848.36	848.59	849.36
11	846.04	846.81	847.05	847.33	847.97	848.29	848.52	849.29
12	845.95	846.72	846.96	847.23	847.88	848.20	848.42	849.19

A Top of W36x135 C Splices

	Abut.	Pier
R _D (k)	22.0	78.0
R _E (k)	37.1	47.5
Imp. (k)	10.3	12.7
R Total (k)	69.4	138.2

Girder	Location	"
4	S. Abut.	5/8"
4	Pier 1	5/8"
4	Pier 2	5/8"
9	Pier 2	1/2"
9	N. Abut.	1/2"

DESIGNED	DNC
CHECKED	W.J.B.
DRAWN	DNC
CHECKED	W.J.B.

FOR INFORMATION ONLY

**BEARING DEVICES AND
DETAILS**
F.A. 412 SECTION 103-2B
F.A. 412 OVER MCKELSON CREEK
LEE COUNTY
STATION: 1167+00.00
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION