

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
VARIOUS	2005-044 I	WILL	12	1

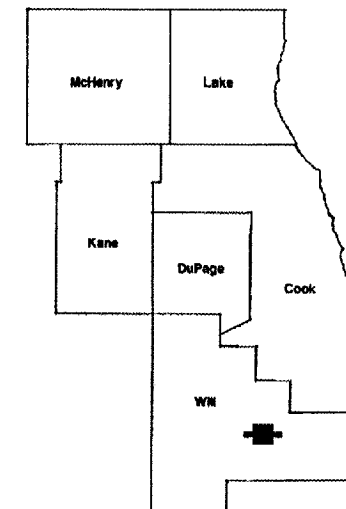
FOR INDEX OF SHEETS SEE SHEET 2

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
DISTRICT ONE

D-91-279-05

PROPOSED HIGHWAY PLANS

VARIOUS ROUTES
AT BASCULE BRIDGES OVER DES PLAINES RIVER
SECTION 2005-044 I
TIMBER SIDEWALK REPLACEMENT
WILL COUNTY
C-91-279-05



**IMPROVEMENTS
ARE LOCATED IN
THE CITY OF JOLIET**

TRAFFIC DATA

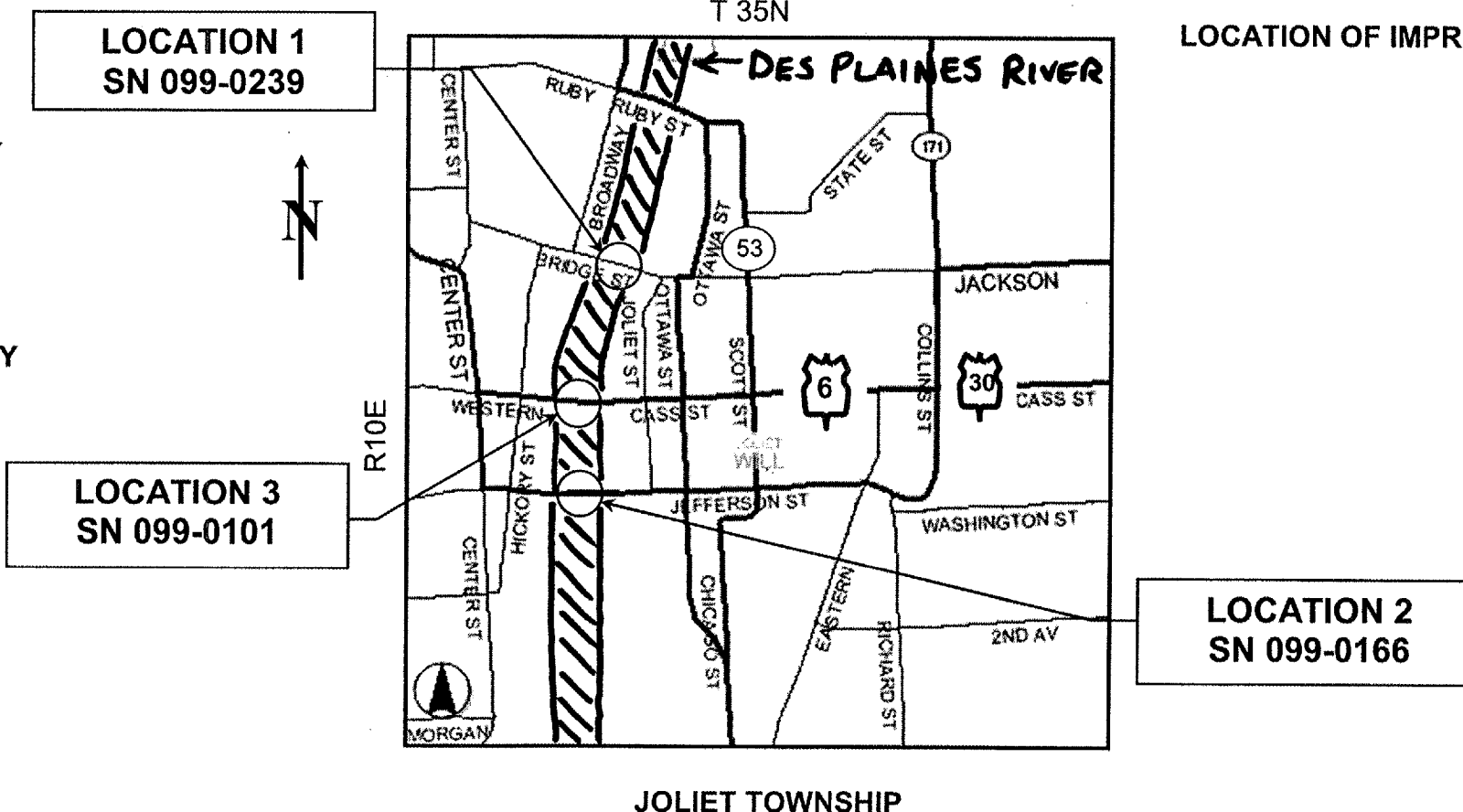
LOC 1- JACKSON ST (SN 099-0239)
2004 ADT = 3,600 2 LANES TWO WAY
POSTED SPEED LIMIT = 35 MPH

LOC 2- US 30 EB (SN 099-0166)
2004 ADT = 9,800 4 LANES ONE WAY
POSTED SPEED LIMIT = 35 MPH

LOC 3- US 30 WB (SN 099-0101)
2003 ADT = 19,300 4 LANES ONE WAY
POSTED SPEED LIMIT = 35 MPH

LOC. 1) SN 099-0239 JACKSON ST
LOC. 2) SN 099-0166 US 30 EB (JEFFERSON ST)
LOC. 3) SN 099-0101 US 30 WB (CASS ST)

LOCATION OF IMPROVEMENT INDICATED THUS:



DISTRICT ONE DESIGN PLAN PREPARATION ENGINEER
KEN ENG / R. BORO (847) 705-4178

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
SUBMITTED: Oct. 27 2005
Diane M. O'Keefe / cd
DEPUTY DIRECTOR OF HIGHWAY, REGION ENGINEER
December 9, 2005
Mikeltine / D
ENGINEER OF DESIGN AND ENVIRONMENT
December 9, 2005
Eric Harm / D
DEPUTY DIRECTOR, DIVISION OF HIGHWAYS

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

J.U.L.I.E.: JOINT UTILITY LOCATION
INFORMATION FOR EXCAVATION
(800) 892-0123

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
VARIOUS	2005-044 I	WILL	12	2

INDEX OF SHEETS

1	TITLE SHEET
2	INDEX OF SHEETS AND LIST OF STATE STANDARDS
3	GENERAL NOTES
4	SUMMARY OF QUANTITIES
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7-8	LOC 2: SN 099-0166 (JEFFERSON ST) BRIDGE PLANS
9-11	LOC 3: SN 099-0101 (CASS ST) BRIDGE PLANS
12	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAY DETAILS

LIST OF STATE STANDARD

<u>STANDARD</u>	<u>DESCRIPTION</u>
701301 - 02	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701501 - 03	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701601 - 04	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NON-TRAVERSABLE MEDIAN
701801 - 03	LANE CLOSURE, MULTILANE, 1W OR 2W, CROSSWALK OR SIDEWALK CLOSURE
702001 - 05	TRAFFIC CONTROL DEVICES

ILLINOIS DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS
LIST OF STATE STANDARDS

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
VARIOUS	2005-044 I	WILL	12	3

GENERAL NOTES

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." (JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION) AT (800) 892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. (48 HOUR NOTIFICATION IS REQUIRED).
 - THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.
 - THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
 - THE CONTRACTOR SHALL OBTAIN COAST GUARD APPROVAL TO OCCUPY NAVIGABLE WATERS, IF REQUIRED, FOR THE PROPOSED WORK. A WORK PLAN SHALL BE PREPARED BY THE CONTRACTOR, REVIEWED AND APPROVED BY THE ENGINEER AND BE SUBMITTED BY THE ENGINEER TO THE COAST GUARD AT THE ADDRESS LISTED BELOW FOR APPORVAL.
- BRIDGE ADMINISTRATOR
 US COAST GUARD
 EIGHTH COAST GUARD DISTRICT
 1222 SPRUCE ST
 ST. LOUIS, MO 63103-2832
- IDOT STAFF WILL OPERATE THE BRIDGE THROUGHOUT THE DURATION OF THIS PROJECT. COORDINATION BETWEEN THE CONTRACTOR AND BRIDGE TENDER IS REQUIRED TO PREVENT DISTRUPTION TO WATERWAY TRAFFIC.
 - CONTRACTOR SHALL REMOVE OR KEEP ANY TRAFFIC CONTROL DEVICES ATTACHED FIRMLY TO THE BRIDGE DECK THROUGHOUT THE DURATION OF THE PROJECT, SO THEY WILL NOT FALL OFF THE DECK WHEN THE BRIDGE SPANS ARE LIFTED.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSION AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
 - THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
 - THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM FIELD BRIDGE MAINTENANCE ENGINEERS.
 - THE CONTRACTOR SHALL LOCATE AND PROTECT ALL EXISTING ELECTRICAL CONDUIT AND LIGHTING FACILITIES IN AND AROUND THE VICINITY OF THE REPAIR LOCATIONS OF THE BRIDGE.
 - DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS
 - THE AREA WHERE THE SIDEWALK IS REMOVED SHALL BE SECURED WITH TEMPORARY FENCE ACCORDING TO ART. 201.05 (a) OF THE STANDARD SPECIFICATIONS. COST SHALL BE INCLUDED WITH "TRAFFIC CONTROL AND PROTECTION STD 701801."

ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
VARIOUS	2005-044 I	WILL	12	4

SUMMARY OF QUANTITIES				CONTRACT NO. 60A18			
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	URBAN CONSTRUCTION TYPE CODE -SFTY-2A			
				WILL COUNTY			
				LOC 1 099-0239	LOC 2 099-0166	LOC 3 099-0101	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	2.0	0.52	0.74	0.74	
67100100	MOBILIZATION	L SUM	1.0	0.26	0.37	0.37	
70102630	TRAFFIC CONTROL AND PROTECTION STANDARD 701601	L SUM	1.0		0.5	0.5	
70102640	TRAFFIC CONTROL AND PROTECTION, SANDARD 701801	L SUM	1.0	0.33	0.33	0.34	
X0322467	TEMPROARY INFORMATION SIGNING FOR LANE CLOSURE	SQ FT	144.0	48.0	48.0	48.0	
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1.0	1.0			
X0325204	TIMBER SIDEWALK REMOVAL AND REPLACEMENT	L SUM	1.0	0.26	0.37	0.37	

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
VARIOUS	2005-044 I	WILL	12	5

Jackson Street Bridge
 S/N: 099-0239
 Jackson Street /Des Plaines River

Sheet 1 of 2

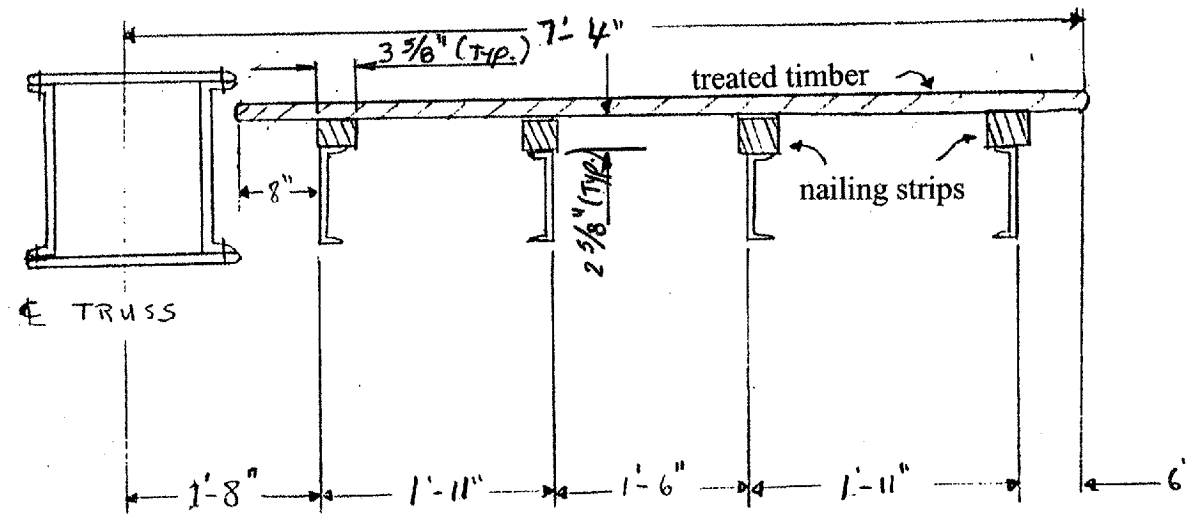
Timber Sidewalk Replacement Notes

- Use 3" x 4" Treated Timber Nailing Strip surfaced to 2-5/8" x 3-5/8". Secure nailing strip to sidewalk stringers with 5/8" x 4" long galvanized carriage head bolts at 2'-0" on center using existing holes in channel stringers. Beveled washers are required on channels.
- Use 2" x 10" Treated Timber deck planks for sidewalk surface. Use 3-1/2" long stainless steel deck screws to attach planks to nailing strip. Leave 1/8" gap between planks.

ITEM	UNIT	QUANTITY
TIMBER SIDEWALK REMOVAL AND REPLACEMENT	LUMP SUM	.26

APPROXIMATE QUANTITIES
 TIMBER = 600 FBM
 HARDWARE = 550 POUND

NOTE: ONLY ONE SIDEWALK SHALL BE CLOSED AT A TIME



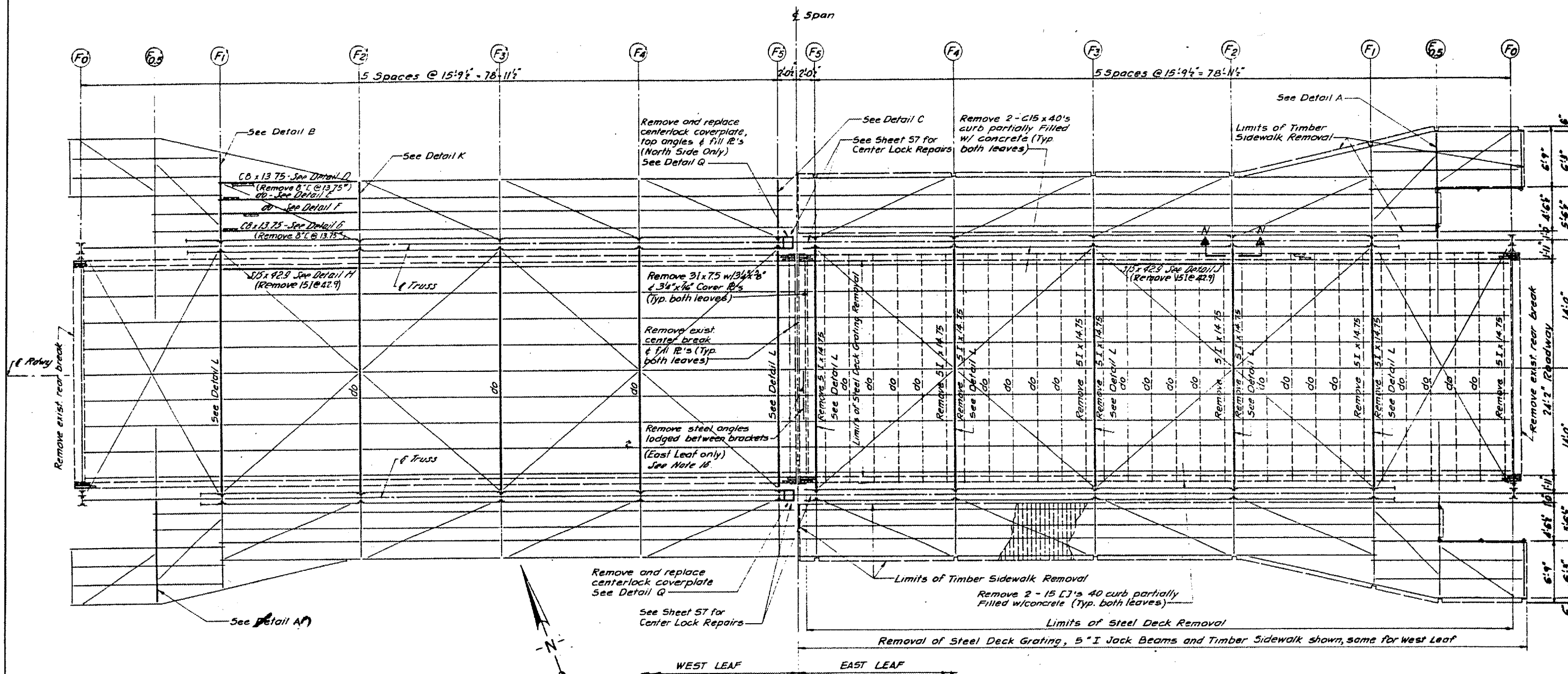
View of cross-section of timber sidewalk.

Schedule of Quantities Needed -

- 2" x 10" x 7' treated timbers = 300 each
- 2" x 10" x 10' treated timbers = 60 each
- 2" x 10" x 12' treated timbers = 60 each
- 3" x 4" (2-5/8" x 3-5/8") x 16' treated timbers = 88 each
- 5/8" x 4" carriage bolts & nuts = 730 each
- 5/8" diameter bevel head washers = 730 each
- 3-1/2" long stainless steel deck screws = 75 lbs.

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TIMBER SIDEWALK REPLACEMENT
 DETAIL
 LOC 1 (SN 099-0239)
 JACKSON ST BRIDGE

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
VARIOUS	2005-044 I	WILL	12	6



FRAMING PLAN - REMOVALS AND REPAIRS
SHOWING REPLACEMENT OR REPAIR OF MAIN FRAMING MEMBERS

**FOR
INFORMATION
ONLY**

ILLINOIS DEPARTMENT OF TRANSPORTATION
LOC 1 (SN 099-0239)
JACKSON ST BRIDGE

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
VARIOUS	2005-044 I	WILL	12	7

Jefferson Street Bridge
 S/N: 099-0166
 US Route 30 EB/Des Plaines River

Sheet 1 of 2

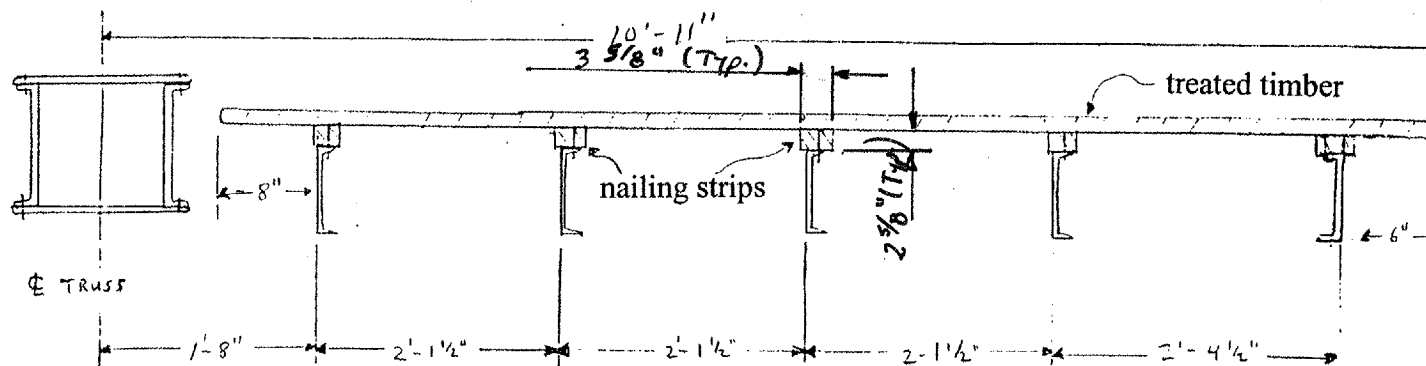
Timber Sidewalk Replacement Notes

- Use 3" x 4" treated timber nailing strip surfaced to 2-5/8" x 3-5/8". Secure nailing strip to sidewalk stringers with 5/8" x 4" long galvanized carriage head bolts at 2'-0" on center using existing holes in channel stringers. Beveled washers are required on channels.
- Use 2" x 10" treated timber deck plank for sidewalk surface. Use 3-1/2" long stainless steel deck screws to attach planks to nailing strip. Leave 1/8" gap between planks.

ITEM	UNIT	QUANTITY
TIMBER SIDEWALK REMOVAL AND REPLACEMENT	LUMP SUM	.37

APPROXIMATE QUANTITIES
 TIMBER = 850 FBM
 HARDWARE = 750 POUND

NOTE: ONLY ONE SIDEWALK SHALL BE CLOSED AT A TIME



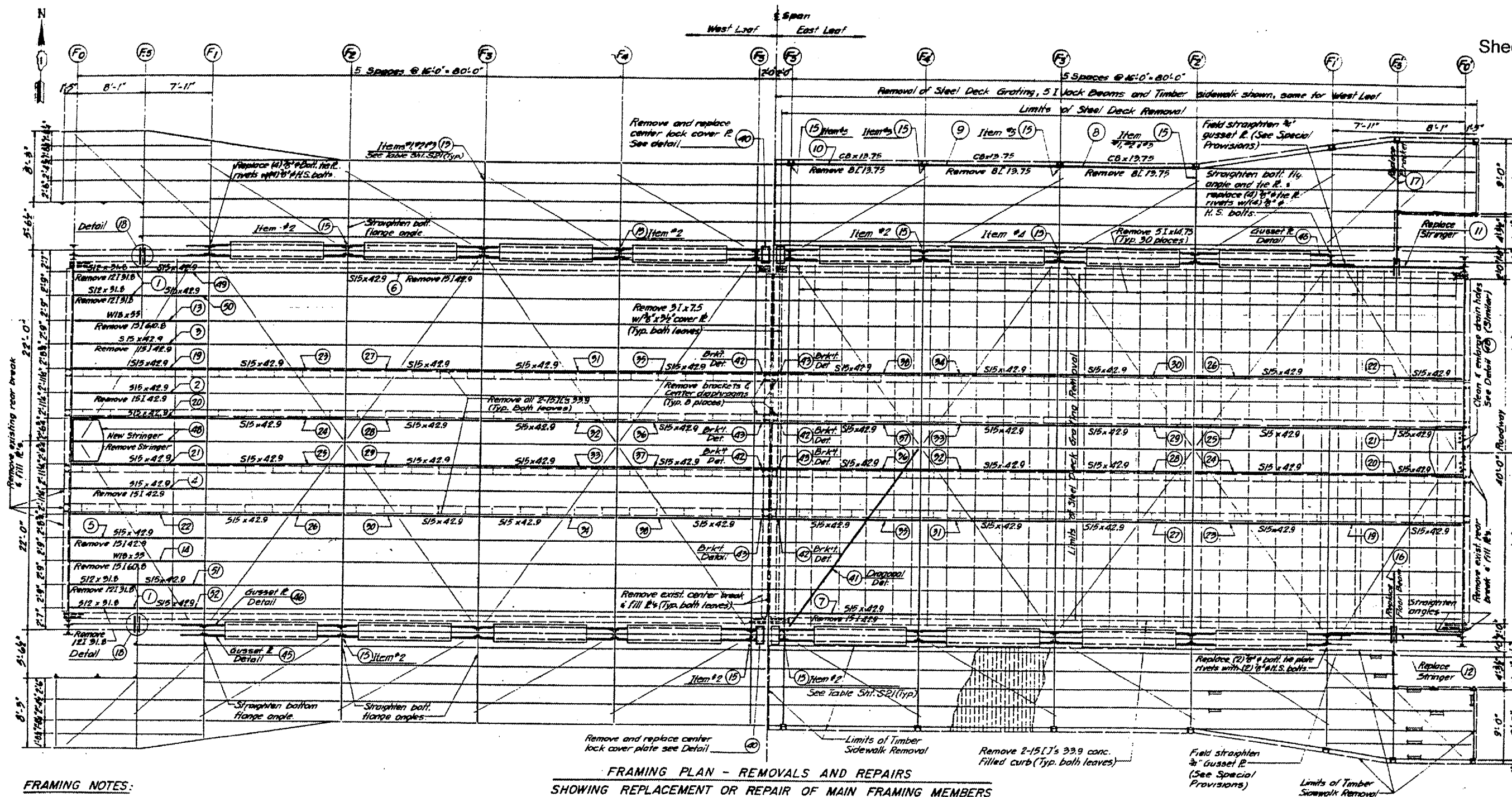
View of cross-section of timber sidewalk.

Schedule of Quantities Needed -

- 2" x 10" x 10' treated timbers = 320 each
- 2" x 10" x 12' treated timbers = 66 each
- 2" x 10" x 14' treated timbers = 66 each
- 3" x 4" (2-5/8" x 3-5/8") x 16' treated timbers = 112 each
- 5/8" x 4" carriage bolts & nuts = 840 each
- 5/8" diameter bevel head washers = 840 each
- 3-1/2" long stainless steel deck screws = 90 lbs.

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TIMBER SIDEWALK REPLACEMENT
 DETAIL
 LOC 2 (SN 099-0166)
 JEFFERSON ST BRIDGE

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
VARIOUS	2005-044 I	WILL	12	8



FRAMING PLAN - REMOVALS AND REPAIRS
SHOWING REPLACEMENT OR REPAIR OF MAIN FRAMING MEMBERS

FRAMING NOTES:

- For details of Bascule Span steel framing removal, replacements, and repairs see sheets S20 thru S26, Steel Details I thru VII.
- Removal of structural steel shall be paid for under item "Structural Steel Removal." Removal of timber sidewalk shall be paid for under item "Removal of Existing Timber Floor." Removal of steel deck grating shall be paid for under item "Removal of Existing Steel Deck Grating."
- All 5" Jack beams shall be removed without damaging existing roadway stringers. All weld material remaining on roadway stringers shall be ground smooth from top of S15 I stringers.
- After the existing Steel Deck Grating and 5" I jack beams are removed, all top flanges of steel members should be checked for loss of section. If more than 5% loss is recorded then that section shall be checked by the Engineer for adequacy and strengthened accordingly. The work under this item shall be paid for under "Force Account."
- Where stringers, which support diagonal bracing are removed, the replacement stringers bottom flange shall have bolt holes drilled in the field to match the bracing holes. Bolt bracing to replacement stringers.
- Reshim Main Truss bearing 2% of Anchorage Girders - 4 locations. See Detail 39 Sheet S24.
- Revise Main Pinion Drive Shaft collar bearing connection - 4 locations. See Detail 45, Sheet S25.
- For additional Framing Notes, See Sheet S12.
- Remove existing wood bumpers on the rear of the Segmental Girders and replace with new treated Oak bumpers to match existing. (4-locations) Cost incidental.

**FOR
INFORMATION
ONLY**

ILLINOIS DEPARTMENT OF TRANSPORTATION
LOC 2 (SN 099-0166)
JEFFERSON ST BRIDGE

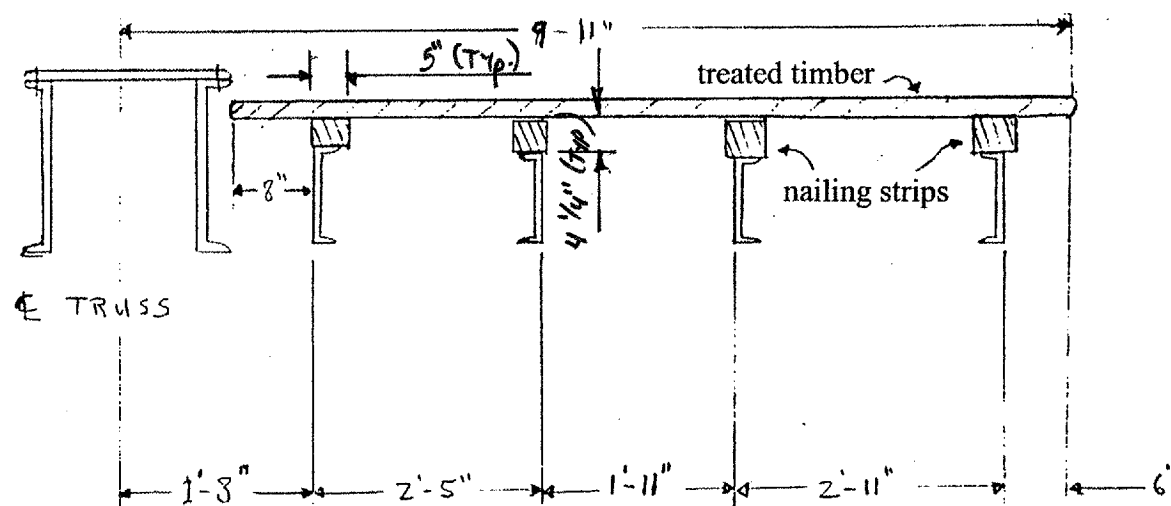
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
VARIOUS	2005-044 I	WILL	12	9

Cass Street Bridge
 S/N: 099-0101
 US Route 30 WB/Des Plaines River

Sheet 1 of 3

Timber Sidewalk Replacement Notes

- Use 5" x 5" treated timber nailing strip surfaced to 4-1/4" thick. Secure nailing strip to sidewalk stringers with 5/8" x 5" galvanized carriage head bolts at 2'-0" on center using existing holes in channel stringers. Beveled washers are required on channels.
- Use 2" x 10" treated timber deck plank for sidewalk surface. Use 3-1/2" long stainless steel deck screws to attach planks to nailing strip. Leave 1/8" gap between planks.



View of cross-section of timber sidewalk.

Schedule of Quantities Needed -

- 2" x 10" x 8' treated timbers = 320 each
- 2" x 10" x 10" treated timbers = 42 each
- 2" x 10" x 12' treated timbers = 42 each
- 2" x 10" x 14' treated timbers = 42 each
- 5" x 5" (4-1/4" x 5") x 17' treated timbers = 90 each
- 5/8" x 5" carriage bolts & nuts = 720
- 5/8" diameter bevel head washers = 720 each
- 3-1/2" long stainless steel deck screws = 75 lbs.

ITEM	UNIT	QUANTITY
TIMBER SIDEWALK REMOVAL AND REPLACEMENT	LUMP SUM	.37

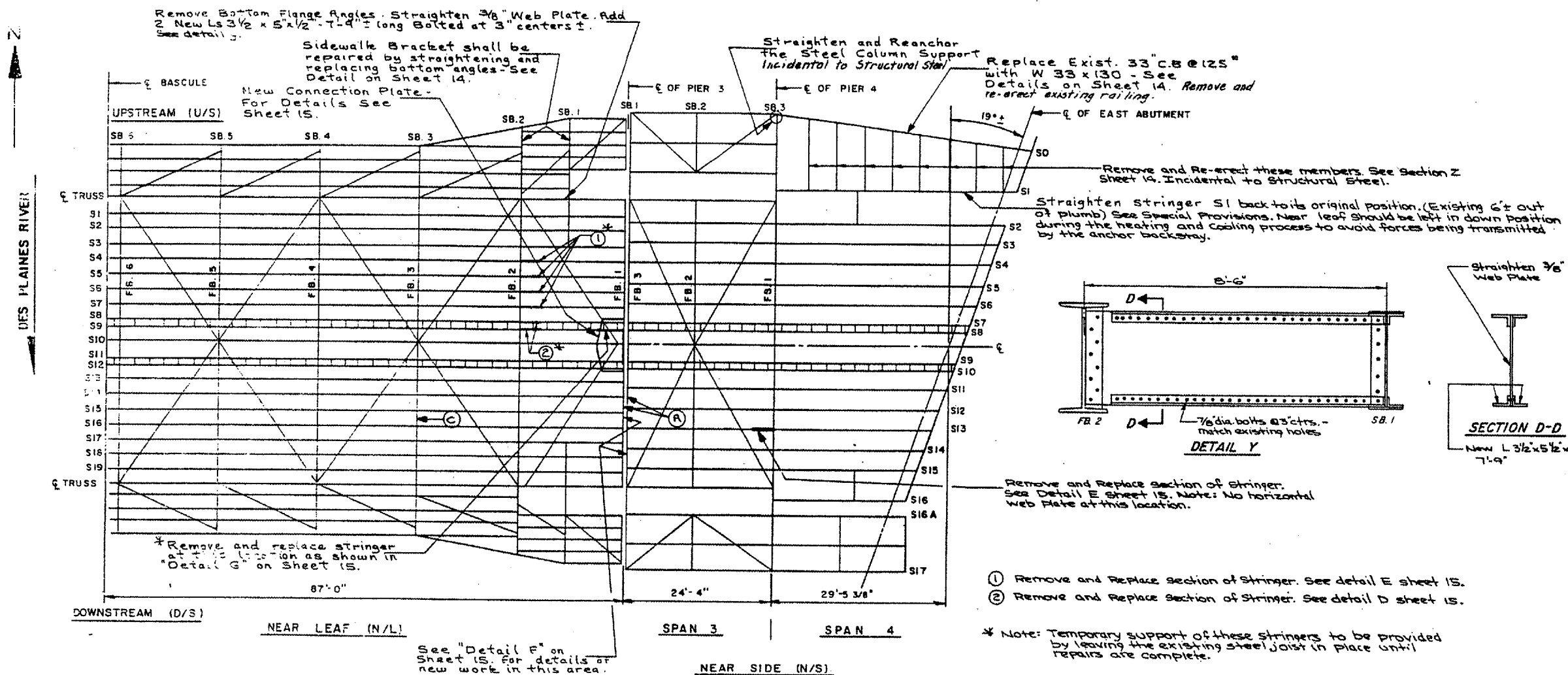
APPROXIMATE QUANTITIES

TIMBER = 850 FBM
 HARDWARE = 750 POUND

NOTE: ONLY ONE SIDEWALK SHALL BE CLOSED AT A TIME

ILLINOIS DEPARTMENT OF TRANSPORTATION
 TIMBER SIDEWALK REPLACEMENT
 DETAIL
 LOC 3 (SN 099-0101)
 CASS ST BRIDGE

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
VARIOUS	2005-044 I	WILL	12	10



LEGEND

FB — FLOOR BEAM

SB — SIDEWALK BRACKET

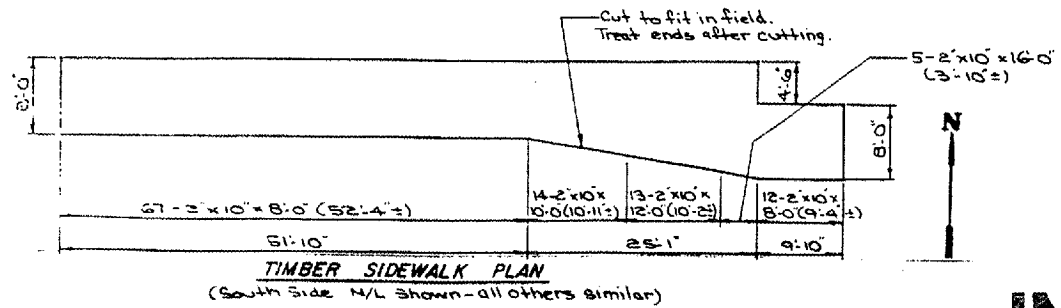
S — STRINGER

HALF PLAN

(A) Remove bottom flange cover plate and replace with new 7/8" x 16" x 24'-10" plate and 132 ± 7/8" dia. bolts. See detail Z sheet 12.

(C) Remove bottom flange cover plate and replace with new 7/8" x 16" x 18'-6" plate and 92 ± 7/8" dia. bolts. See detail Z sheet 12.

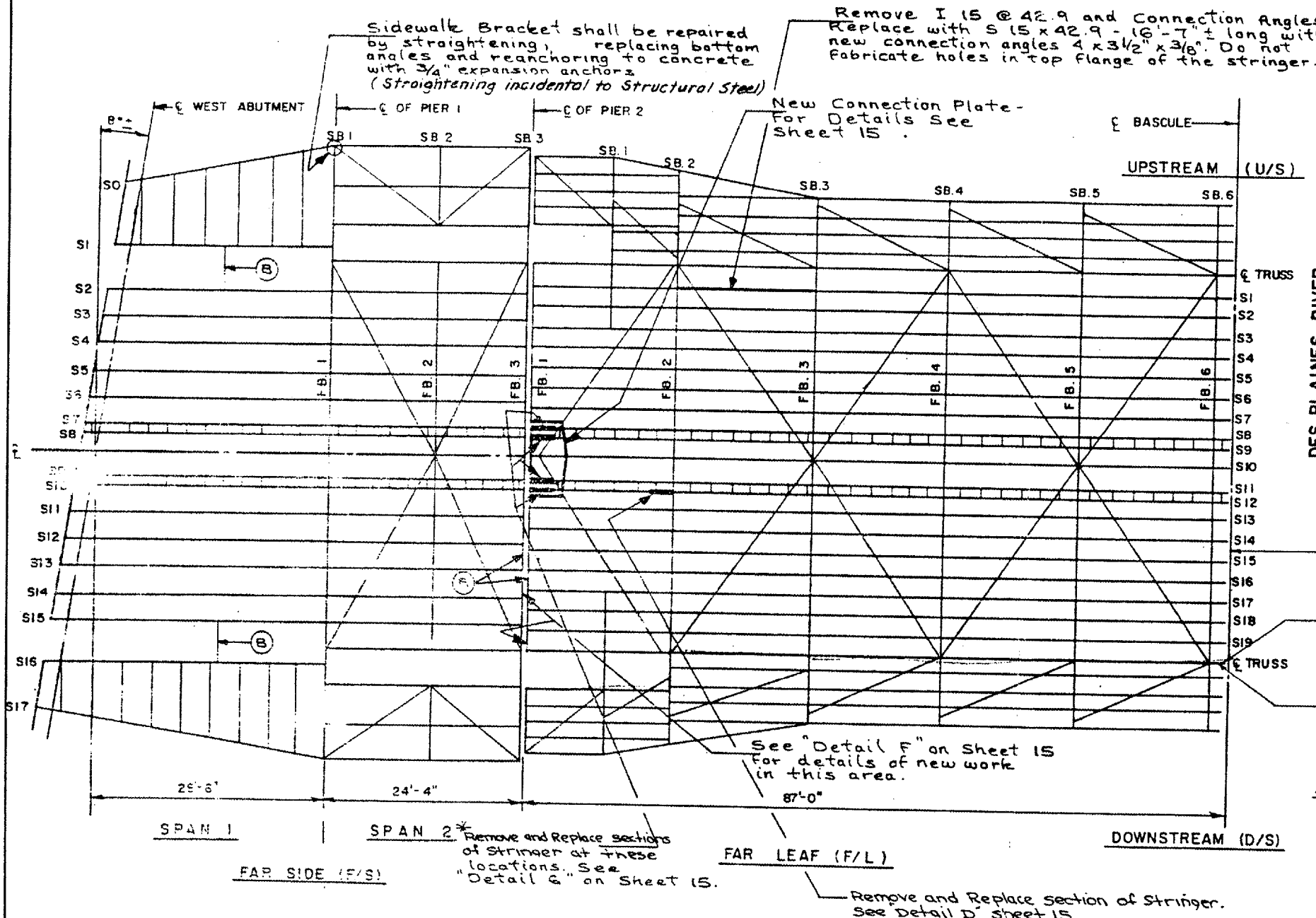
Note: See Sheet 12 For "Rivet Replacement" note.



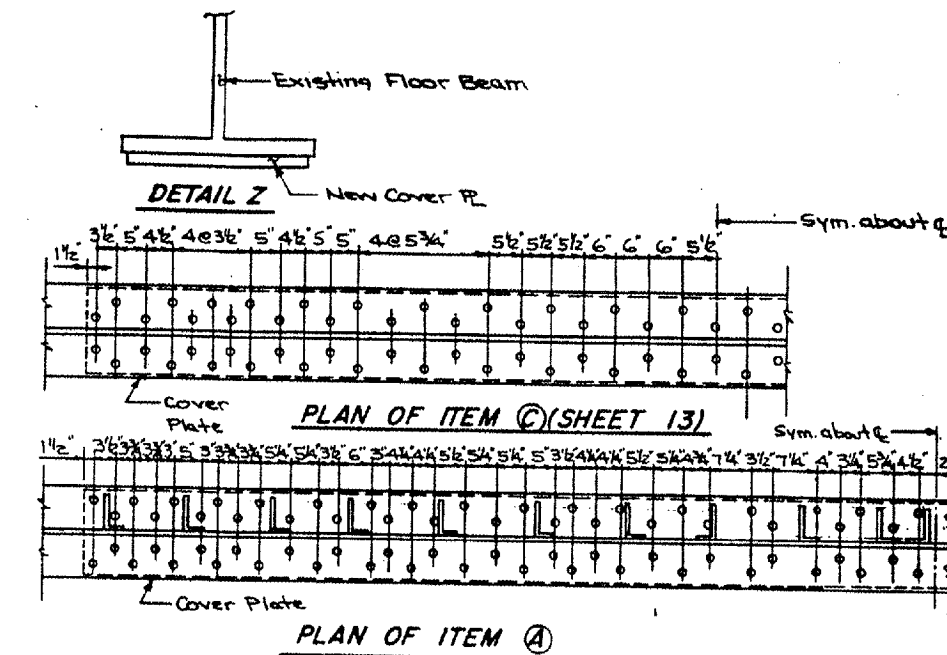
FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION
 LOC 3 (SN 099-0101)
 CASS ST BRIDGE

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
VARIOUS	2005-044 I	WILL	12	11



DES PLAINES RIVER



LEGEND

FB — FLOOR BEAM
 SB — SIDEWALK BRACKET
 S — STRINGER

HALF PLAN

(A) Remove bottom flange cover plates and replace with new 7/8" x 16" x 24'-10" plates and 132 ± 7/8" dia. bolts. See detail Z above.

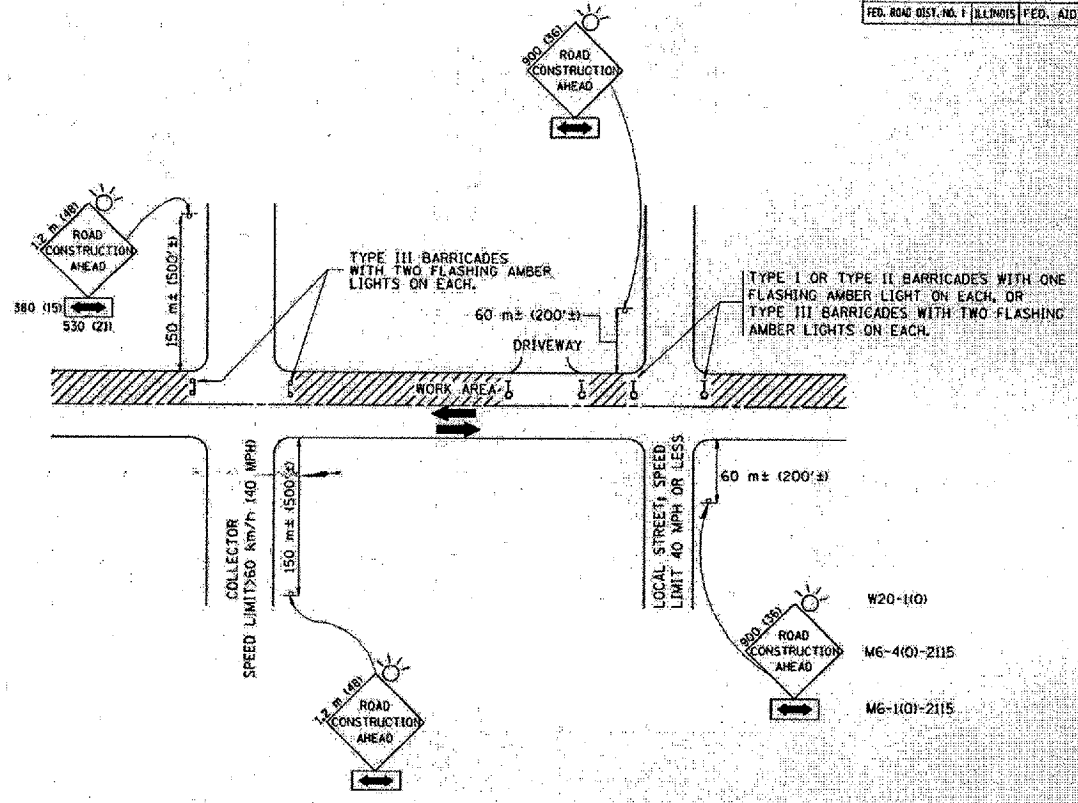
(B) Do not repair diaphragm members. Pour new deck concrete to deflected position.

Rivet Replacement: Rivets that have one head completely rusted off flush with the surface and rivets selected by the Engineer that are severely rusted shall be replaced with the same diameter high strength bolts. The rivets shall be removed by shearing off any remaining head driving or drilling out the shank. Use of flame cutting, adjacent material to be left in place, to facilitate the rivet removal is prohibited unless approved by the Engineer on a case by case basis. See Special Provisions for bid item "Rivet Replacement". The majority of rivet replacement is in the floor beams of the leaves on the side of the bottom flange facing the ϵ of Bascule.

FOR INFORMATION ONLY

ILLINOIS DEPARTMENT OF TRANSPORTATION
 LOC 3 (SN 099-0101)
 CASS ST BRIDGE

F.A. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			12	12
STA.		TO STA.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS**
- SIDE ROAD WITH A SPEED LIMIT OF 60 km/h (40 MPH) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE ROAD CONSTRUCTION AHEAD SIGN 300x300 (36x36) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 60 m (200') IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
 - SIDE ROAD WITH A SPEED LIMIT GREATER THAN 60 km/h (40 MPH) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - ONE ROAD CONSTRUCTION AHEAD SIGN 1.2 m x 1.2 m (48x48) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 150 m (500') IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
 - WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:**
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.**
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.**

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
NAME	DATE	
L.H.A.	6/89	SCALE: VERT. HORIZ. DATE 10/18/2002 DRAWN BY CHECKED BY TC-10 REVISION DATE: 01/06/00
T. RAMMACHER	09/08/94	
J. OBERLE	10/18/95	
A. HOUSEH	03/06/96	
A. HOUSEH	10/15/96	
T. RAMMACHER	01/06/00	