

10

F.A.P. NO.	SECTION	COUNTY	TOTAL SHEETS
330	2001-131-1	COOK	48

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED HIGHWAY

FAP 330: US 12/20/45/ LA GRANGE ROAD
OVER VARIOUS LOCATIONS

SECTION 2001-131-1

JOINT REPAIR AND DECK PATCHING

COOK COUNTY

C-91-424-01

- 1.) SN:016-2467 NB OVER DES PLAINES RIVER
- 2.) SN:016-2468 NB OVER S&S CANAL, I&M CANAL, AND ICG RR
- 3.) SN:016-2406 SB OVER S&S CANAL, I&M CANAL, AND ICG RR
- 4.) SN:016-2407 SB OVER DES PLAINES RIVER

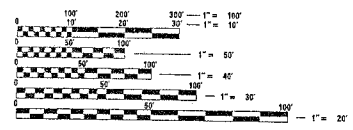
FOR INDEX OF SHEETS, SEE SHEET NO. 2

IMPROVEMENT 1 AND 4 LOCATED
IN THE VILLAGE OF HODGKINS

IMPROVEMENT 2 AND 3 LOCATED
IN THE VILLAGE OF WILLOW SPRINGS

TRAFFIC DATA

2001 ADT = 73,000
POSTED SPEED LIMIT = 45 MPH



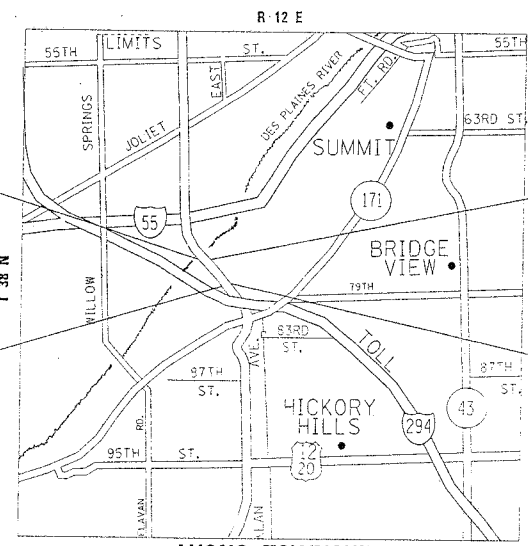
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

JULIE
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-8123

CONTRACT NO. 62299

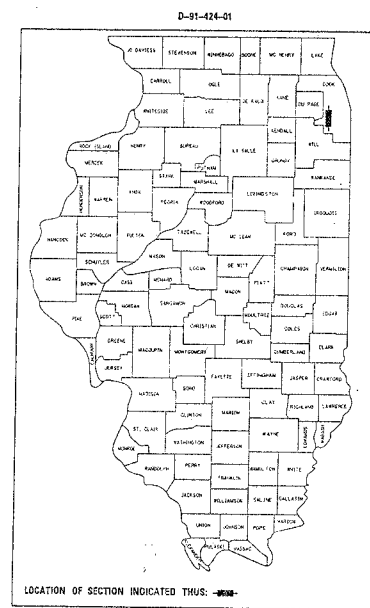
IMPROVEMENT 4
SN: 016-2407

IMPROVEMENT 3
SN: 016-2406



IMPROVEMENT 1
SN: 016-2467

IMPROVEMENT 2
SN: 016-2468



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED March 20
A.S.P. 1-6
DISTRICT ENGINEER

June 28, 20 02
Michael R. ...
ENGINEER OF DESIGN AND ENVIRONMENT

June 28, 20 02
James A. ...
DIRECTOR, DIVISION OF HIGHWAYS

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OF THE STATE OF ILLINOIS

C:\paw\paw\paw\1612467.dwg: 14:18:29 05/09/2002

DISTRICT ONE - BUREAU OF MAINTENANCE:
MAINTENANCE DESIGN ENGINEER: R. BURD (847) 705-4178

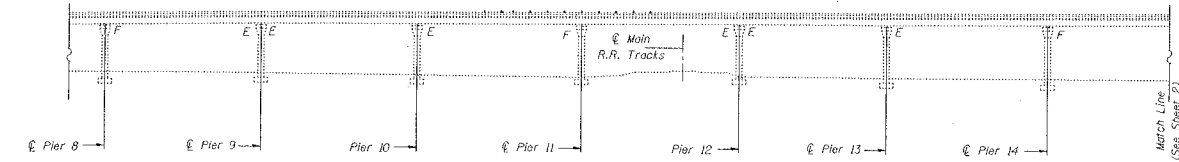
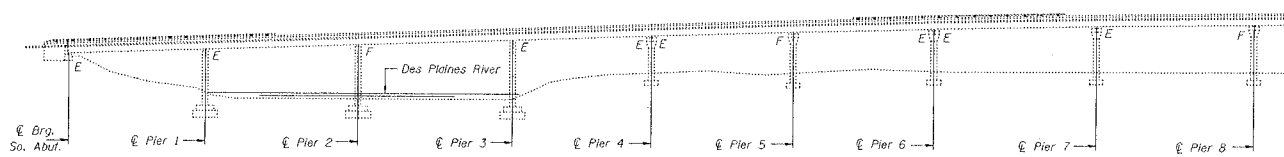
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DATE	REVISION	BY	CHKD	NO.	SHEET NO. 1
3/30		DDK	SP	27	10 SHEETS
PROJECT NAME		SHEET NO.		TOTAL SHEETS	
LA GRANGE ROAD		27		10	

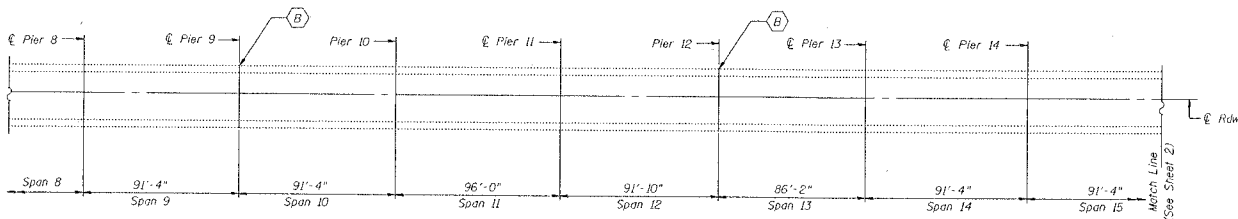
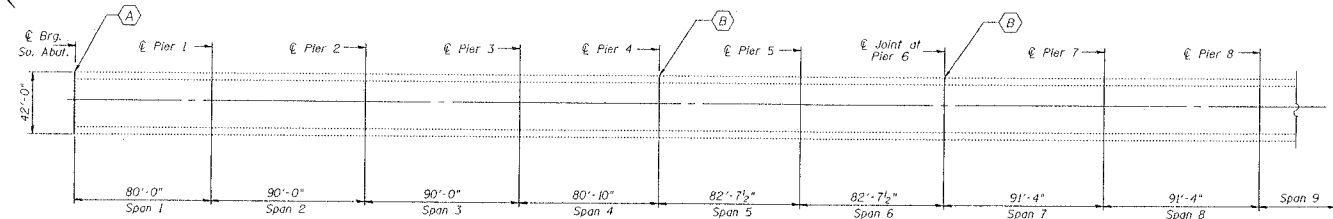
GENERAL NOTES

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53 Grade 60.
Joint openings at Piers 15, 21, 25 and South Abutment shall be adjusted according to Article 503.10(c) of the Std. Specs. when the deck is poured at an ambient temperature other than 50° F.



PARTIAL ELEVATION



PARTIAL PLAN

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	24.5
Concrete Superstructure	Cu. Yd.	24.5
Reinforcement Bars, Epoxy Coated	Pound	36,500
Bar Splicers	Each	54
Neoprene Expansion Joint 4"	Foot	324
Modular Expansion Joint 6"	Foot	30
Silicone Joint Sealer	Foot	41
Polymer Concrete	Cu. Ft.	8

PLAN & ELEVATION
LA GRANGE ROAD (U.S. 12/20/45)
OVER DESPLAINES RIVER &
SANTA FE DR. & BNSF RAILROAD
F.A. RTE. 124
COOK COUNTY
S.N. 016-2467 (N.B.)

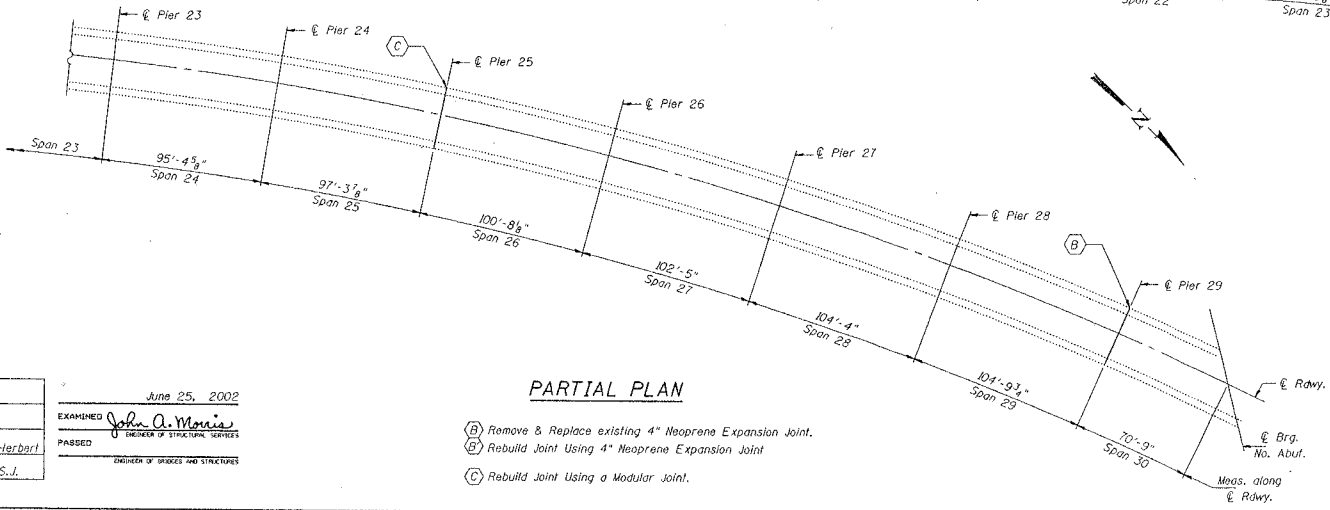
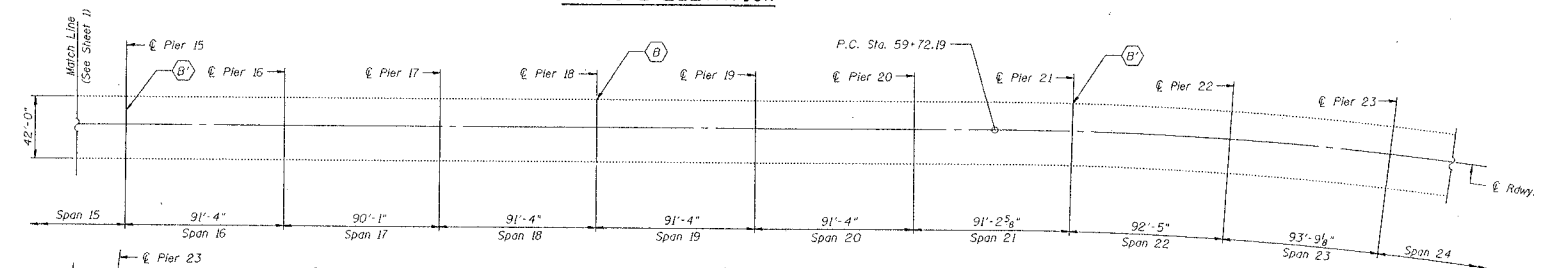
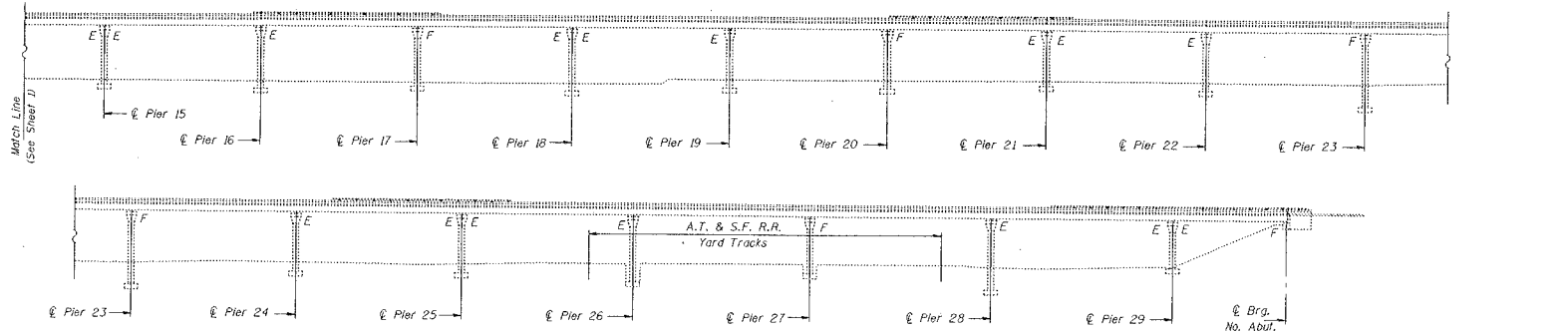
DESIGNED: VECTOR H. VEIR
CHECKED: Paul H. Johnson
DRAWN: [Signature]
CHECKED: VHV PSS

EXAMINED: John A. Morris
PASSED: [Signature]
ENGINEER OF BRIDGES AND STRUCTURES

- (A) Rebuild Joint Using Silicone Joint Sealer w/polymer concrete nosing.
- (B) Remove & Replace existing 4" Neoprene Expansion Joint.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	DATE	BY	CHK'D	SHEET NO.	TOTAL SHEETS
330		COOK	9/8	22	10	10 SHEETS
FILE NO. DIST. 17	ALIGNED	FILE NO. PROJECT				



DESIGNED	V.H.V.
CHECKED	P.S.J.
DRAWN	Dierbarl
CHECKED	V.H.V., P.S.J.

EXAMINED
John A. Morris
ENGINEER OF STRUCTURAL SERVICES
PASSED
CHIEF OF BRIDGES AND STRUCTURES

June 25, 2002

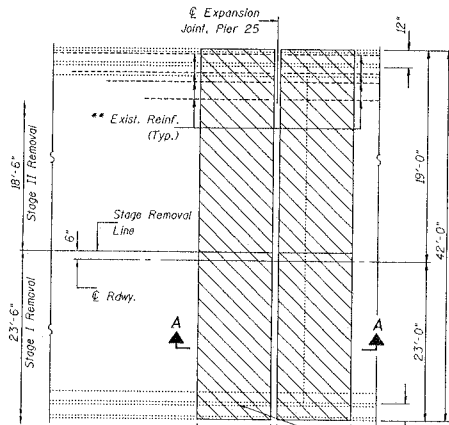
- (B) Remove & Replace existing 4" Neoprene Expansion Joint.
- (B) Rebuild Joint Using 4" Neoprene Expansion Joint
- (C) Rebuild Joint Using a Modular Joint.

PLAN & ELEVATION
LaGRANGE ROAD (U.S. 12/20/45)
OVER DESPLAINES RIVER &
SANTA FE DR. & BNSF RAILROAD
F.A. RTE. 124
COOK COUNTY
S.N. 016-2467 (N.B.)

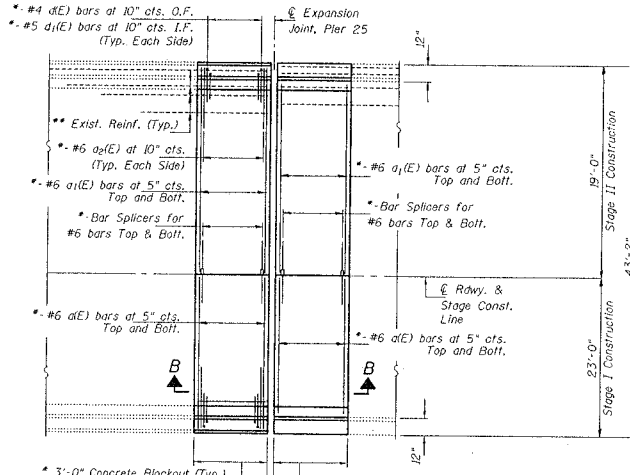
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	SECTION	DATE	BY	SHEET NO.
330	COOK	4/8	26	10 SHEETS
FOR NAME AND NO.	ENGINEER	DATE OF PROJECT		

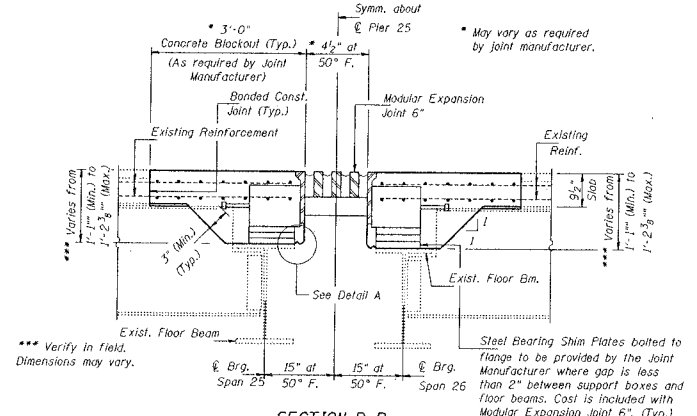
Hatched areas indicate concrete sections to be removed and replaced. Perimeters of concrete removal areas shall be saw cut $\frac{3}{4}$ " prior to the removal of concrete.



PARTIAL PLAN SHOWING CONCRETE REMOVAL AT PIER 25

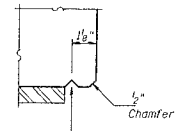


PARTIAL PLAN SHOWING CONCRETE REPLACEMENT AT PIER 25

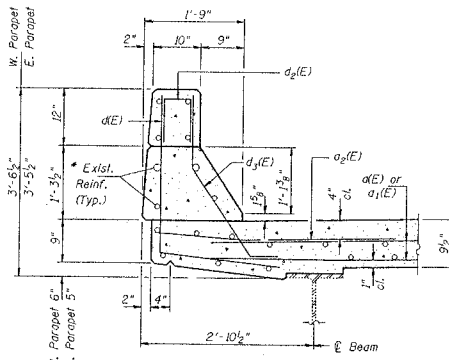


SECTION B-B

*** Verify in field. Dimensions may vary.
(Cut or bend reinforcement bars as required to miss support boxes by $\frac{1}{2}$ ")

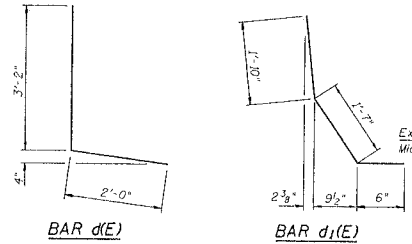


DETAIL "A"

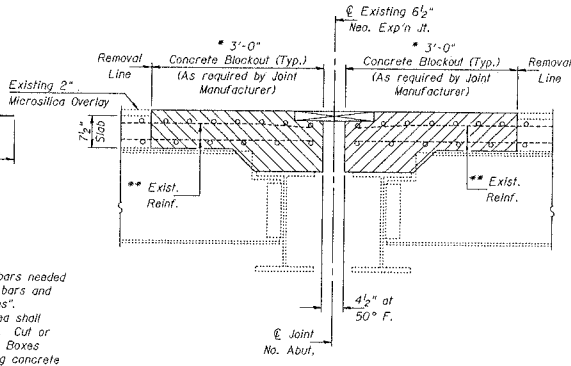


SECTION THRU CURB

Remove, store and re-install existing rail post, remove and replace existing rail post anchors, if necessary. Cost included in Concrete Removal. (S. side of Joint on E. Parapet, N. side of Joint on W. parapet) See sheet 5 for anchor details.



BAR d(E) BAR d1(E)



SECTION A-A

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	8.8
Concrete Superstructure	Cu. Yd.	8.5
Modular Expansion Joint 6"	Foot	39

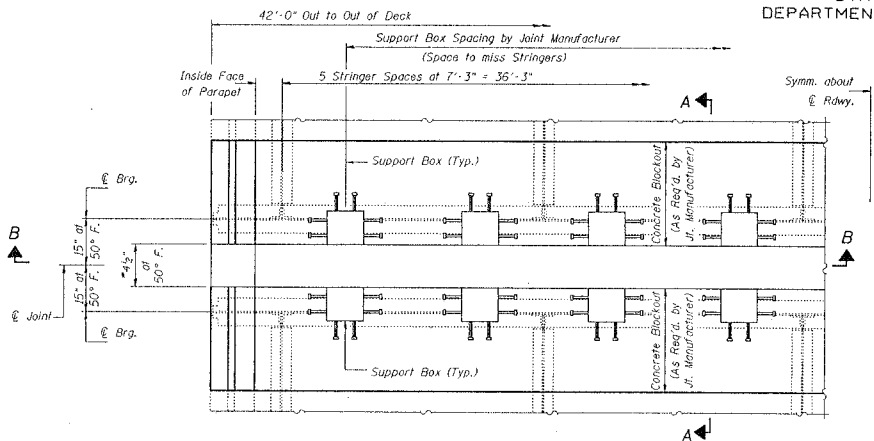
**CONCRETE REMOVAL & REPLACEMENT
PIER 25
LaGRANGE ROAD (U.S. 12/20/45)
OVER DESPLAINES RIVER &
SANTA FE DR. & BNSF RAILROAD
F.A. RTE. 124
COOK COUNTY
S.N. 016-2467 (N.B.)**

DESIGNED	V.H.V.	DATE	June 25, 2002
CHECKED	P.S.J.	EXAMINED	John A. Morris
DRAWN	John F. Schaeffer Jr.	PASSED	
CHECKED	V.H.V. P.S.J.	OWNER OF BRIDGES AND STRUCTURES	

* Length of Blockout, width of Joint and number of reinforcement bars needed may vary as required by Joint Manufacturer. Cost of Reinforcement bars and bar splicers in this area are included with "Concrete Superstructures".
** Existing longitudinal reinforcement extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Cut or bend existing longitudinal reinforcement as required to miss Support Boxes by $\frac{1}{2}$ ". Any longitudinal reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost shall be included with Concrete Superstructure.

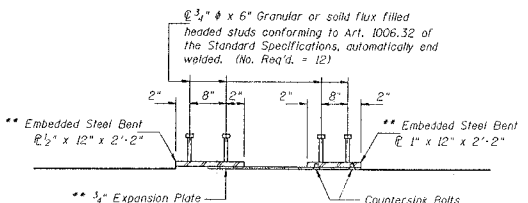
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DATE	REVISION	BY	APP'D	NO.
3.30		COOK	V/B	27
SHEET NO. 7		SHEETS		



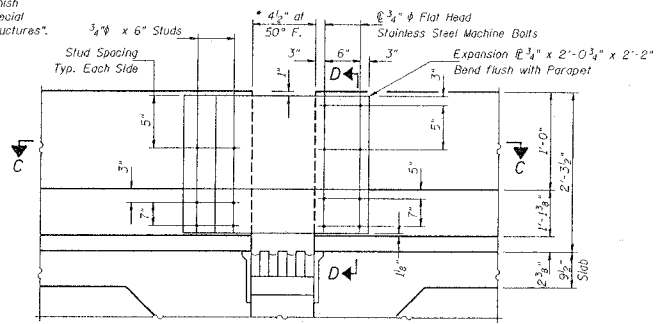
PARTIAL PLAN PIER 25

- Notes:
1. Modular Expansion Joint shall be designed according to the latest ASTM Specifications for HS20 Loading with 30% impact and for minimum movement of $\pm 3"$ (Total of 6").
 2. The Modular Expansion Joint shall be either MAURER model "D" by D.S. Brown Co., Wabo model "D" by Watson Bowman Acme Corp., or the ROBEX LG system by TechStar, Inc.
 3. Joint shall be fabricated and installed according to the manufacturer's recommendations and as approved by the Engineer.
 4. Joint shall be fabricated to conform to the Roadway Profile and Cross-Slopes.
 5. Cost of all hardware and installation of Steel Bearing Shim plates and additional reinforcement required to anchor the joint to the slab shall be included with "Modular Expansion Joint 6".
 6. The inorganic zinc rich primer/acrylic/acrylic paint system shall be used for shop and field painting of new structural steel except no top coat required in non-exposed areas. The color of the acrylic finish coat shall be Gray, Munsell No. 5B 7/1. See Special Provisions "Cleaning and Painting New Metal Structures".



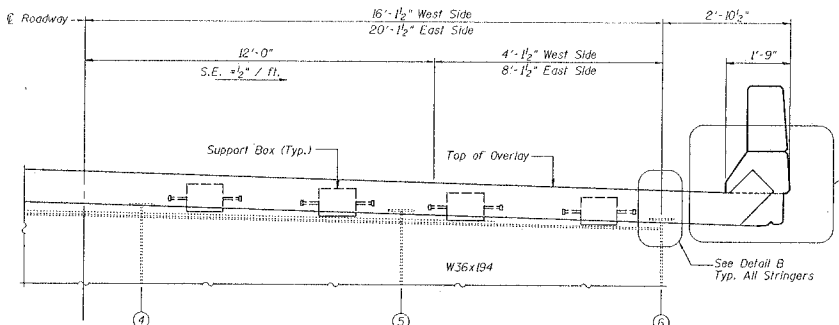
SECTION C-C

** Expansion Plate and Embedded Plates shall be galvanized according to AASHTO M113. Coat included with Modular Expansion Joint 6".

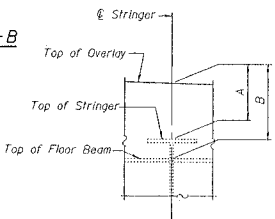


ELEVATION - PARAPET SLIDING PLATE

* Adjust as required by Joint Manufacturer.

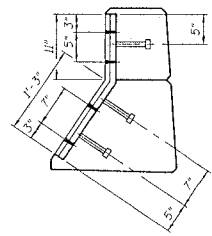


SECTION B-B
(Looking North)



DETAIL B

Location	Beam Number	Top of Overlay Elevations	At Bearing Dim "A"	Dim "B"
Pier #25 South Bearing	1	635.053	9 1/8"	14 3/8"
	2	634.749	10"	13"
	3	634.444	10"	13"
	4	634.140	10"	13"
	5	633.836	10"	13"
	6	633.531	9 7/8"	14 3/8"
Pier #25 North Bearing	1	635.045	9 7/8"	14 3/8"
	2	634.741	10"	13"
	3	634.436	10"	13"
	4	634.132	10"	13"
	5	633.827	10"	13"
	6	633.523	9 7/8"	14 3/8"



SECTION D-D

DESIGNED	V.H.V.
CHECKED	P.S.J.
DRAWN	Dterbert
CHECKED	V.H.V. P.S.J.

EXAMINED
John A. Morris
ENGINEER OF STRUCTURAL SERVICES
June 25, 2002
PASSED
MEMBER OF BRIDGES AND STRUCTURES

MODULAR JOINT DETAILS
PIER 25
LaGRANGE ROAD (U.S. 12/20/45)
OVER DESPLAINES RIVER &
SANTA FE DR. & BNSF RAILROAD
F.A. RTE. 124
COOK COUNTY
S.N. 016-2467 (N.B.)

STATE	SECTION	COUNTY	TOTAL SHEET
ILLINOIS	2001-131-1	COOK	48
STA.	TO STA.		25
FED. AID DIST. NO. 1 (ILLINOIS) FED. AID PROJECT			

SN 016-2467

S. ABUT. Ⓞ PIER 1 Ⓞ PIER 2 Ⓞ PIER 3 Ⓞ PIER 4 Ⓞ PIER 5 Ⓞ PIER 6 Ⓞ PIER 7 Ⓞ PIER 8 Ⓞ PIER 9 Ⓞ PIER 10 Ⓞ PIER 11 Ⓞ PIER 12 Ⓞ PIER 13 Ⓞ PIER 14 Ⓞ PIER 15

SOUTH ABUTMENT

MATCHLINE Ⓞ PIER 16

Ⓞ PIER 17 Ⓞ PIER 18 Ⓞ PIER 19 Ⓞ PIER 20 Ⓞ PIER 21 Ⓞ PIER 22 Ⓞ PIER 23 Ⓞ PIER 24 Ⓞ PIER 25 Ⓞ PIER 26 Ⓞ PIER 27 Ⓞ PIER 28 Ⓞ PIER 29

MATCHLINE Ⓞ PIER 16

NORTH ABUTMENT



NOTES

DRAWING NOT TO SCALE

THE ENGINEER SHALL DETERMINE IN THE FIELD AND MARK THE ACTUAL DECK REPAIR LOCATIONS ON THE AS-BUILT PLANS

PATCHING LOCATIONS DETERMINED ON MARCH 20, 2002 BY M. PALELLO

SN:016-2467 APPROX. 0 S.F. OF PATCHING

PARTIAL DEPTH PATCHING

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

PARTIAL DEPTH PATCHING
PLAN SHEET
SN: 016-2467

SCHLE:
DATE

DRAWN BY
CHECKED BY