

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO. SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412 50-4B (F&E)	LASALLE	26	4
FED. ROAD DIST. NO.	ILLINOIS PROJECT	EBF-412-4(6)	

GENERAL NOTES

DESIGN SPECIFICATIONS: IN ACCORDANCE WITH AASHTO 1977 EDITION AND 1978, 1979, 1980, 1981, AND 1982 INTERIM SPECIFICATIONS.

SUPERSTRUCTURE - STRUCTURAL STEEL:

ALL STRUCTURAL STEEL SHALL CONFORM TO AASHTO M-183 UNLESS OTHERWISE NOTED. STEEL INDICATED M-223 SHALL BE GRADE 50.

CALCULATED WEIGHT OF STRUCTURAL STEEL:

2,255,500 Lbs. M-183
4,064,590 Lbs. M-223, GRADE 50 & M-222
68,290 Lbs. M-192, GRADE 90

ALL SHOP AND FIELD CONNECTIONS, OTHER THAN WELDED SHALL BE MADE WITH 7/8" Ø HIGH STRENGTH BOLTS AND 15/16" Ø HOLES AND CONFORM TO AASHTO M-104 UNLESS OTHERWISE NOTED. SHOP BOLTS ARE SHOWN ON THE PLANS BY THE SYMBOL (+), AND FIELD BOLTS BY (⊕). SHOP AND FIELD CONNECTIONS MAY BE INTERCHANGED AT THE OPTION OF THE CONTRACTOR.

FRACTURE CRITICAL MEMBER REQUIREMENTS ARE MANDATORY FOR TIE GIRDERS, KNUCKLES. THESE COMPONENTS ARE NOTED F.C.M. ON THE PLANS. SEE SPECIAL PROVISIONS.

SUPPLEMENTAL NOTCH TOUGHNESS REQUIREMENTS (ZONE 2) ARE MANDATORY FOR ALL STRINGERS, LINK BARS, SPLICE PLATES, AND BOTTOM FLANGES AND WEBS OF ALL FLOORBEAMS. THESE COMPONENTS ARE NOTED N.T.R. ON PLANS. SEE SPECIAL PROVISIONS.

PROVISIONS HAVE BEEN MADE FOR JACKING THE TOTAL DEAD LOAD ONLY, OF THE ARCH SPAN AT BOTH PIERS.

A COMPLETE PENETRATION GROOVE WELD SHALL BE USED WHENEVER THE TERM "GROOVE WELD" IS USED ON THE PLANS. FIELD WELDING OF CONSTRUCTION ACCESSORIES WILL NOT BE PERMITTED TO ANY PART OF THE ARCH TIES, THE BOTTOM FLANGES AND WEBS OF FLOORBEAMS AND STRINGERS OR TO THE TOP FLANGE OF STRINGERS FOR A DISTANCE EQUAL TO ONE-FOURTH THE SPAN LENGTH EACH WAY FROM THE CENTER OF SUPPORT OVER WHICH THE MEMBER IS CONTINUOUS. FIELD WELDING IN OTHER AREAS WILL BE PERMITTED ONLY WHEN APPROVED BY THE ENGINEER.

ARCH SPAN SHALL BE FABRICATED TO THE FINAL GEOMETRIC SHAPE UNDER FULL DEAD LOAD EXCLUDING FUTURE WEARING SURFACE. A FABRICATION ALLOWANCE SHALL BE MADE FOR SHORTENING OF THE ARCH RIB AND LENGTHENING OF THE TIE GIRDER AND HANGERS UNDER FULL DEAD LOAD EXCLUDING FUTURE WEARING SURFACE. SEE SPECIAL PROVISIONS.

HANGERS SHALL CONSIST OF MULTIPLE-WIRE BRIDGE STRAND CONFORMING TO ASTM A586 AND SHALL BE ZINC COATED. ZINC COATING SHALL BE CLASS C ON OUTER WIRES, AND CLASS A ON INNER WIRES. MINIMUM METALLIC AREA OF EACH STRAND SHALL BE 1.59 SQUARE INCHES AND HAVE A MINIMUM BREAKING STRENGTH (EACH STRAND) OF 310 KIPS. MODULUS OF ELASTICITY AFTER PRESTRESSING SHALL BE 24,000 KSI. SEE SPECIAL PROVISIONS.

THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER COMPLETE PLANS OF PROPOSED ERECTION SCHEMES FOR THE WORK SHOWING ERECTION LOAD STRESSES. ANY MATERIAL ORDERED PRIOR TO THE REVIEW OF THE ERECTION SCHEME BY THE ENGINEER SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ERECTION STRESSES SHALL BE COMPOSED OF THE STEEL DEAD LOAD OF THE STRUCTURE AND ERECTION EQUIPMENT PLUS THE STRESS FROM WIND OF 45 POUNDS PER SQUARE FOOT ON THE STRUCTURE AND ERECTION EQUIPMENT IN ELEVATION. ERECTION STRESSES SHALL NOT EXCEED NORMAL UNIT STRESS BY MORE THAN 33-1/3 PERCENT. NO PAYMENT WILL BE MADE FOR ANY EXTRA MATERIAL REQUIRED DUE TO ERECTION CONDITIONS. REVIEW OF THE ERECTION PLANS SHALL NOT RELIEVE THE CONTRACTOR FROM HIS FULL RESPONSIBILITY FOR THE SAFETY OF THE ERECTION SCHEMES.

SEE SPECIAL PROVISIONS FOR NAVIGATIONAL CONSIDERATIONS AND CONSTRUCTION IN NAVIGABLE WATERS.

THE ZINC-SILICATE AND VINYL PAINT SYSTEM SHALL BE USED FOR SHOP PAINTING AND FIELD PAINTING OF STRUCTURAL STEEL. SEE SPECIAL PROVISIONS.

ALL CONTACT SURFACES OF JOINTS WITH FRICTION TYPE BOLTS SHALL BE FREE OF PAINT OR LACQUER.

ALL LENGTHS SHOWN ON PLANS ARE AT A NORMAL TEMPERATURE OF 50° F. UNDER TOTAL DEAD LOAD EXCLUDING FMS, EXCEPT AS NOTED.

IN THE APPLICATION OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS AND THE SUPPLEMENTARY REQUIREMENTS STATED HEREIN, THE FOLLOWING STRUCTURAL PARTS SHALL BE CLASSIFIED AS MAIN MEMBERS: STRINGERS, FLOORBEAMS, ARCH MEMBERS (TIES, HANGERS, AND RIBS), UPPER BRACING BETWEEN THE ARCH RIBS AND THE COMPONENTS OF THE LOWER LATERAL BRACING SYSTEM.

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TOTAL BILL OF MATERIAL SUPERSTRUCTURE - STRUCTURAL STEEL		
ITEM	UNIT	QUANTITY
Furnishing and Erecting Structural Steel	L.SUM	1
Maintaining Engineer's Field Office	DL.MO	24

NOTES
For Anchor Bolt Details, see Sheet 10 of 24.

State of Illinois
Department of Transportation
District Three

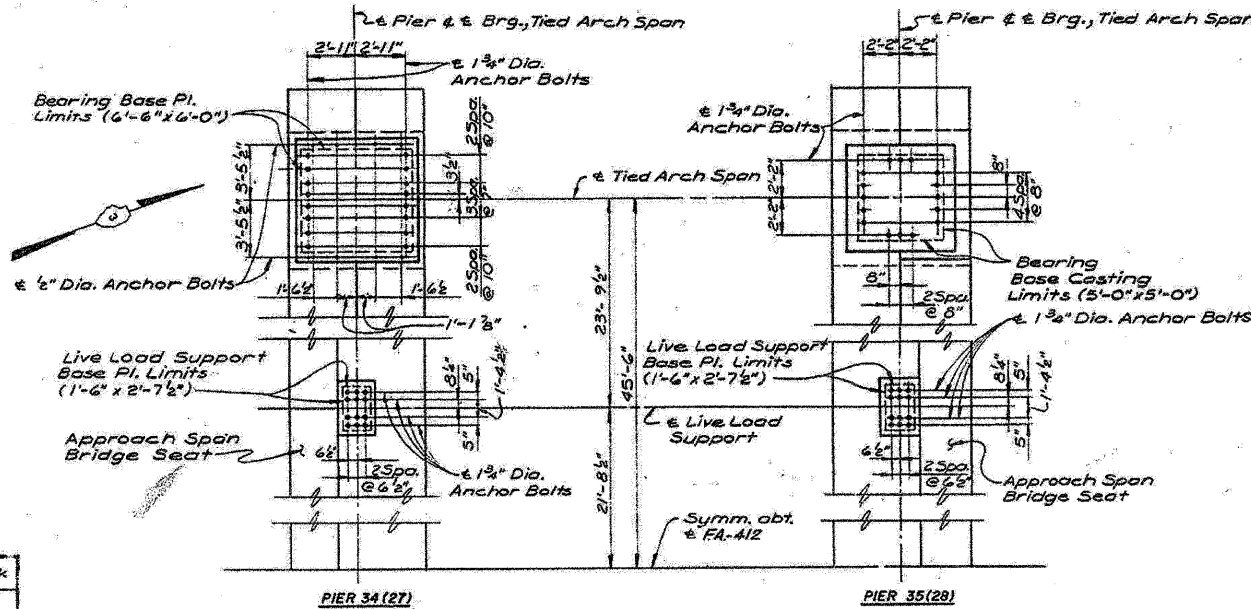
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TIED ARCH SPAN
GENERAL NOTES, ANCHOR BOLT PLAN,
QUANTITIES AND INDEX
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B (F&E) PROJECT EBF-412-4(6)
STA. 863+1600 (FA-412) LASALLE CO.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
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NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET NO. 2 OF 24

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FOR INFORMATION ONLY

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EXISTING TIED ARCH GENERAL NOTES
ABRAHAM LINCOLN MEMORIAL BRIDGE OVER
THE ILLINOIS RIVER (PUBLIC WATERS)

SHEET NO. S4	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	39	[(50-4B)BR]I	LASALLE	12	10
SHEETS S6	CONTRACT NO. 66A34				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

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