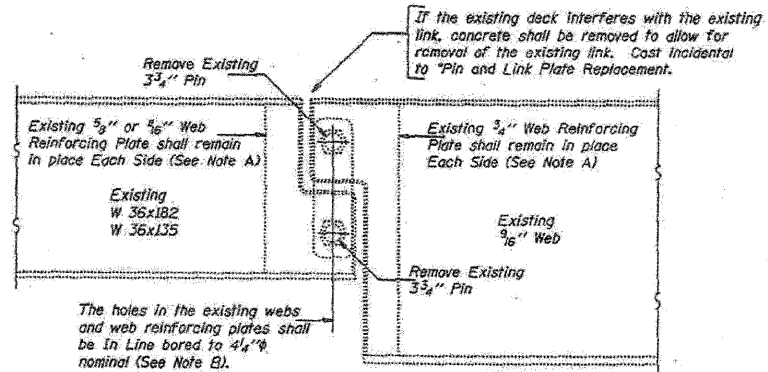


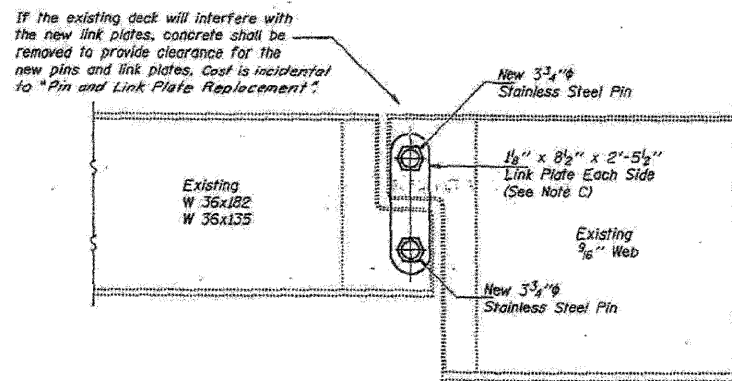
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

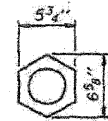
PROJECT NO.	SECTION	COUNTY	SHEET	SHEET NO. 2
F.A.P. RT. 431	SEC. 22-5HB-1	DUPAGE	67	19
11 SHEETS				



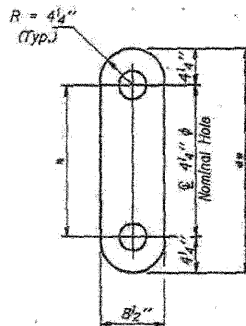
ELEVATION AT EXISTING PIN ASSEMBLY
FOR BMS. 10, 11, 12, 13, 14, 21, 22, 23, 24, 25 & 26



ELEVATION AT NEW PIN ASSEMBLY
FOR BMS. 10, 11, 12, 13, 14, 21, 22, 23, 24, 25 & 26



NUT DETAIL
(480 Required)



LINK PLATE DETAIL

Girders	#	#	No. Required
1, 9, 15, 17, 18, 20, 27 & 30	2'-4"	3'-0 1/2"	32
2 thru 8, 10 thru 14, 16, 19, 21 thru 26, 28 and 29	1'-9"	2'-5 1/2"	88

NOTES

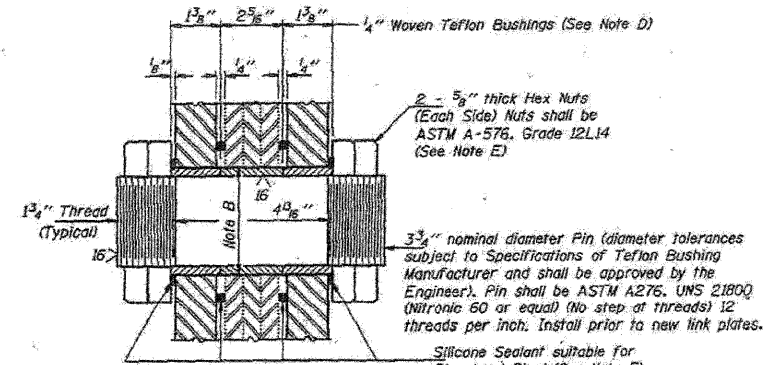
All new structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.
The Contractor shall provide support and/or shoring systems for the beam in the area of existing pin and link plate replacement. The support and/or shoring systems shall be approved by the Engineer. Such approval will not relieve the Contractor of responsibility for the safety of the structure. See Special Provisions for "Temporary Support System."
The inorganic zinc rich primer/acrylic/acrylic paint system shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the acrylic finish coat shall be Light Grey, Munsell No. 10Y 7/L. See Special Provisions "Cleaning and Painting Metal Structures".
Existing Structural steel shall be cleaned and painted as required by the Special Provision "Cleaning and Painting Adjacent Areas of Existing Steel Structures". Cost incidental to "Pin and Link Plate Replacement."
All existing steel surfaces behind link plates shall be cleaned and primed before installation of new link plates. Cost incidental to "Pin and Link Plate Replacement."
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.
The Pins and Link Plates shall conform to the minimum Charpy V-Notch Toughness of 25 ft.-lbs. at 40° F.
The pins, link plates, bushings, nuts and silicone sealant are the items included in "Pin and Link Plate Replacement".

MAXIMUM REACTIONS AT PIN

RR	(K)	39.9
R4	(K)	43.1
Imo.	(K)	11.7
R (Total)	(K)	94.7

DESIGNED	AYY
CHECKED	CHM
DRAWN	r.b. carbonell
CHECKED	AYY CHM

DECEMBER 13, 1995
EXAMINED *Jed E. H...*
PASSED
CHIEF OF BRIDGES AND STRUCTURES



SECTION THRU PIN
(120 Required)

Note A:
Existing welds shall be inspected for cracks using liquid dye penetrant or magnetic particle testing. Any cracks that are found shall be identified and reported to the Bureau of Bridges and Structures for further disposition. Clean and point before installing new link plates.

Note B:
Bore diameter for bushing in link plate, existing webs and web reinforcement plates shall correspond to bushing manufacturer's allowable tolerances for proper functioning. Hole diameter may be adjusted to allow use of stock bushings.

Note C:
Inside face of new link plates shall receive first field coat in shop. The primer shall pass the M.E.K. Rub Test before the first field coat is applied.

Note D:
Actual bushing thickness per manufacturer's specifications, 1/4" is approximate. Bushings shall be a self-lubricating filament wound epoxy matrix backed Duralon Bearing, metal backed Fiber Glide Bearing or equivalent. No primer or grease shall be allowed on bushings. Bushings shall be suitable for dynamic loads of 20,000 psi.

Note E:
Tighten inside nuts to bring all bushings into firm contact, then back off 1/4 turn and tighten outer nuts.

Note F:
Apply 3/8" bead to face of the web reinforcing plates approximately 1/2" from bushing immediately before installing new link plates. Place sealant around nuts after installation. Sealant shall be suitable for prolonged exterior exposure without losing flexibility or adhesion to painted steel surfaces. Proposed products shall be subject to Department's acceptance based on documented testing or other evidence.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Temporary Support System	Each	60
Pin and Link Plate Replacement	Each	60

PIN AND LINK PLATE REPLACEMENT
F.A.P. RT. 431 SEC. 22-5HB-1 & 22-1HB-9
DUPAGE COUNTY
STA. 1250+83.16
STR. No. 022-0137 & 022-0138

EXISTING PLAN INFORMATION 5 OF 17
STRUCTURE NO. 022-0137

FOR INFORMATION ONLY

benesch

alfred benesch & company
Engineers • Surveyors • Planners
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10050

SHEET NO. 20	F.A.I. RTE. 290-355	SECTION 22(1, 1-1, 2&3)RS-7	COUNTY DUPAGE	TOTAL SHEETS 546	SHEET NO. 433
32 SHEETS	CONTRACT NO. 60G51			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	