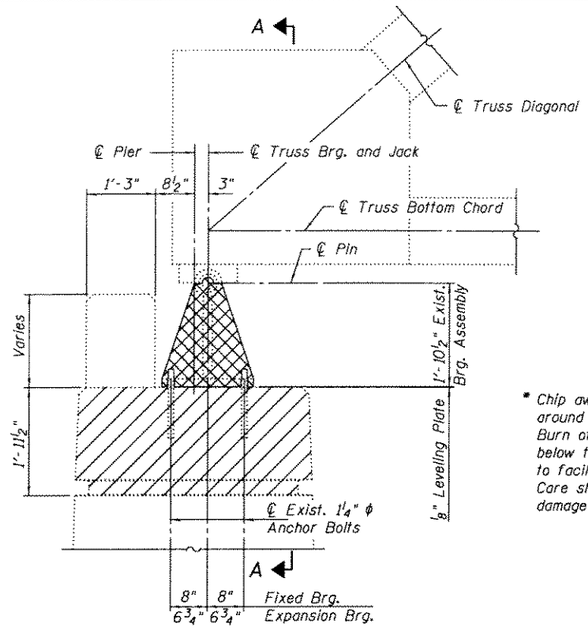
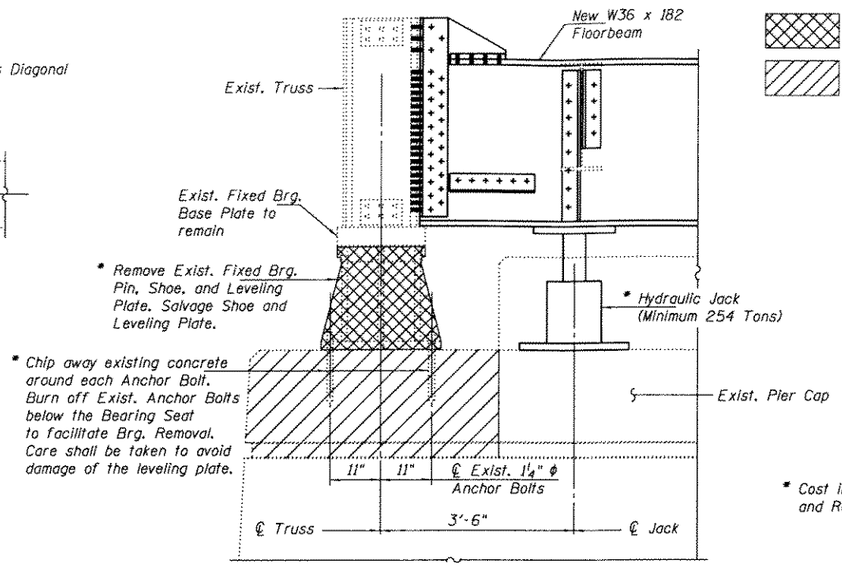


ELEVATION

(Fix Bearing Assembly at Pier 3 shown. Expansion Bearing Assembly at Pier 4 similar except as noted.)



SECTION A-A

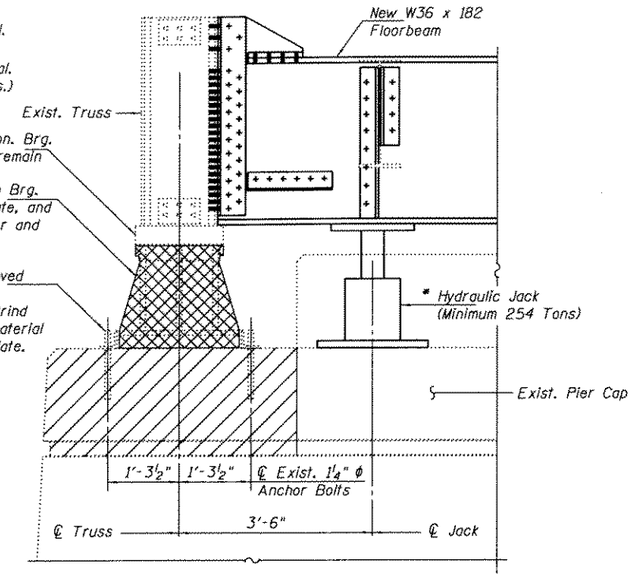
(Showing Fixed Brg. Assembly Removal)

LEGEND

Limits of Bearing Assembly Removal.

Limits of Pier Cap Concrete Removal. (See sheets 19-21 of 28 for details.)

* Cost included with Remove and Reinstall Existing Bearings.



SECTION A-A

(Showing Expansion Brg. Assembly Removal)

TRUSS BEARING REMOVAL AND REINSTALLATION PROCEDURE

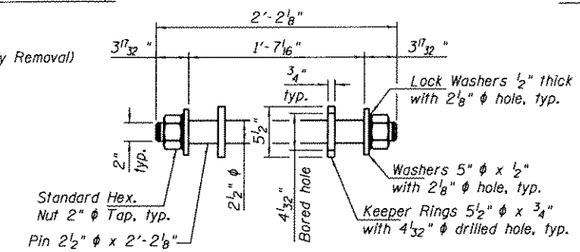
1. The Contractor is responsible for the complete design of the bridge lifting procedures and the materials used. The Contractor shall submit details and calculations sealed by an Illinois Licensed Structural Engineer for his/her proposed jacking systems and temporary support procedures for approval by the Engineer before commencing work.
2. Jacking of the Truss is not permitted during the period of placement and cure time required for the replacement of the expansion joints.
3. Traffic and construction loads shall be removed from the portion of the structure to be jacked prior to and during the entire time the load is being supported by the jacks. The maximum unfactored reactions at the proposed jacking locations are as follows:

   Dead Load = 303 kips
   Stage II Live Load Including Impact = 35 kips

   The minimum jack capacity is 254 Tons. Traffic shall also be kept off that portion of the structure during the entire bearing removal and replacement operation.
4. Jack and temporarily support floorbeams.
5. Burn off existing anchor bolts as detailed to facilitate bearing assembly removal at each location.
6. Remove existing bearing assemblies. Salvage the fixed bearing shoe and leveling plate and expansion bearing rocker, masonry plate, and leveling plate in accordance with Articles 501.02 and 501.05 of the Standard Specifications. Dispose of pins and expansion bearing retainers in accordance with Article 202.03 of the Standard Specifications. Care shall be taken not to damage the existing base plates to remain during pin extraction. If the Contractor damages the base plates and the Engineer deems them unfit for reuse, the Contractor shall replace the base plates in a manner satisfactory to the Engineer and at no additional cost to the contract.
7. Complete all pier cap repairs. See sheets 19 thru 21 of 28 for details.
8. Attach retainers to the existing expansion bearing masonry plate in accordance with 505.04(q) of the Standard Specifications.
9. Reinstall existing bearing assemblies. Drill and set anchor bolts accordance to Article 521.06 of the Standard Specifications.
10. Install new pins in accordance with Article 505.08(k) of the Standard Specifications.
11. Once the bearing assemblies have been installed to the satisfaction of the Engineer, the temporary support system shall be removed and jacks lowered before allowing traffic on that portion of the structure.

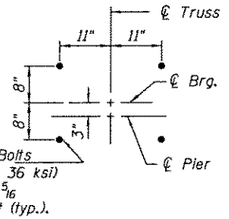
BILL OF MATERIAL

Item	Unit	Total
Remove and Reinstall Existing Bearings	Each	2
Anchor Bolts, 1¼"	Each	8



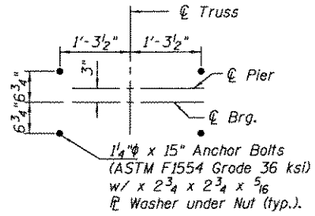
REPLACEMENT PIN DETAIL

(2 Required)



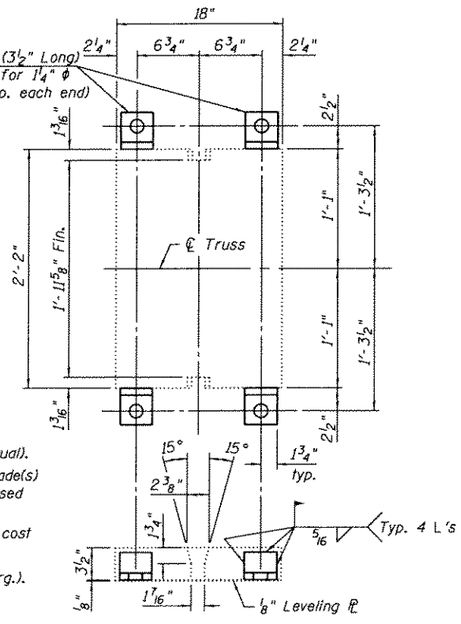
ANCHOR BOLT LAYOUT

(Pier 3)



ANCHOR BOLT LAYOUT

(Pier 4)



REPLACEMENT RETAINER DETAILS

(4 Required)

Notes:

1. Each pin for the bearing assemblies shall be according to ASTM A276, UNS 21800 (Nitronic 60 or equal).
2. Anchor bolts shall be ASTM F1554 all-treaded (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
3. Pins, retainers, and other steel members required for the bearing assemblies shall be included in the cost of Remove and Reinstall Existing Bearings. See Special Provisions.
4. Estimate weight of existing bearing Assemblies = 1,200 lbs. (Fixed Brg.) and 1,600 lbs. (Expansion Brg.).
5. See sheets 19 thru 21 of 28 for Pier 3 and Pier 4 cap repair details.
6. See sheet 2 of 28 for stage construction scheme.

design firm no. 184001036 — whks engineers + planners + land surveyors

USER NAME = #OPERATOR#	DESIGNED - FLL/SBC	REVISED	
FILE NAME = 0820077-00000.dgn	CHECKED - CWC/SBC	REVISED	
PLOT SCALE = 0.2 '' / in.	DRAWN - FLL/DLH	REVISED	
PLOT DATE = 11/14/2012	CHECKED - CWC	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRUSS BEARING REMOVAL AND REINSTALLATION DETAILS
STRUCTURE NO. 082-0077
SHEET NO. 22 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
817	421 BR -1	ST. CLAIR	43	37
		CONTRACT NO.	76F75	
		ILLINOIS FED. AID PROJECT		