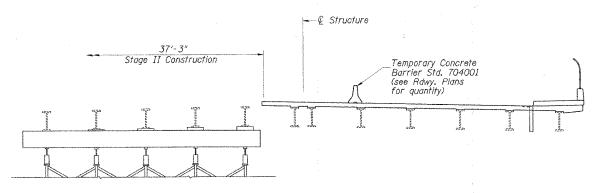
MAIN STEEL SPANS

SECTION AT JACKING AND CRIBBING LOCATIONS - STAGE I (Looking East)



MAIN STEEL SPANS

SECTION AT JACKING AND CRIBBING LOCATIONS - STAGE II (Looking East)

INTERIOR BEAM REACTION TABLE

		W. Abut. or E. Abut.	Pier 1 & 2	
*RQ	(k)	4.2	12.5	

^{*} For information only. Includes weight of steel beam and diaphragms only.

 F.A.P. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
805	122VBR-1	ST. CLAIR	58	50
STA.	N/A	TO STA. N/A	4	
FED, ROA	D DIST. NO. 7 ILLI	NOIS FED. AID	PROJECT	
Contro	act #76558	SHEE	T 25 OF	26

JACKING EXISTING SUPERSTRUCTURE NOTES:

- 1. Cribbing and falsework shall be designed to carry 150% of the Dead Load. The Contractor shall submit for approval by the Engineer, plans and design calculations, sealed by a Licensed Structural Engineer in the State of Illinois, for jacking, cribbing and bearing removal prior to commencing any work at the bearings including fabrication, erecting or construction of the cribbing. See Special Provisions for "Jacking Existing Superstructure".
- 2. All begins at abutments and piers shall be lifted simultaneously to a maximum 3_4 " above thier current elevations.
- 3. During the jacking and cribbing operation, the relative elevation between adjacent beams shall not vary more than \(\frac{1}{8} \) from their original elevation differential. Relative elevations at adjacent substructure locations shall not vary more than \(\frac{1}{4} \) from the original relative elevations.
- 4. Jack capacities shall be based on maximum expected load present during lifting, derived from reactions shown in the Interior Beam Reaction Table, this sheet.
- 5. Hardwood timbers shall be installed tightly between the top and bottom flange to prevent flange rotation. The Contractor shall design and attach steel stiffening angles to the web of the beams at the temporary jacking points when the beam web thickness is not adequate to carry the jacking load. Steel plates shall be placed under jacks bearing directly on the existing substructure to distribute the jacking load and prevent damage to the existing concrete. When lifting the entire superstructure as a unit, jacks shall be placed in a manner and in loactions that will ensure that the jacks will be equally loaded and the load will be uniformly distributed to the foundation of the Jacking system. Cost for designing and installing stiffening angles, hardwood timbers and miscellaneous hardware is included in "Jacking Existing Superstructure". Contractor's design calculations for jacking shall include calculations showing the adequacy of the existing structure to carry the jacking loads.
- 6. Prior to ordering any material or commencing any work at the bearings, the Contractor shall verify in the field all bearing height and shim thickness dimensions shown in the as-built drawings. Any variations in these dimensions from the as-built drawings shall not be cause for additional compensation to the Contractor.
- 7. Falsework shall be capable of carrying all expected vertical and horizontal forces included in Division I, Chapter 3, of the 2002 "Standard Specifications for Highway Bridges". Service load design may be used when when considering Group Loads in Table 3.22.IA. Only Group I thru VI need to be considered for load combinations. Falsework shall be capable of accompositing thermal movements, and is included in "Jacking Existing Structure".
- 8. When falsework is supported on timber mats, the following maximum allowable pressures shall be used to determine the required area of timber mats, unless information is available indicating that higher values may be used:

Supporting Material	Max. Allowable Pressure (Tons/ Sq. Ft.)
Natural Ground (unsaturated)	0.5
Concrete Slope Walls & Bituminous Shoulders	1.0
Bituminous Pavements	2.0
Concrete Pavements	4.0

Where footings for cribbing are on slope walls, Contractor to provide for leveling. The Contractor is responsible for locating and protecting underground facilities and utilities. Cost to repair or replace damaged facilities or utilities shall be borne by the Contractor. The Contractor shall monitor the settlement and make adjustments to maintain the superstructure at its original elevation.

9. New bearing and concrete pedestals shall be in place and jacks lowered before pouring new deck or approach slab.

NAME DATE

JACKING

ILLINOIS

STATION

STATION

SCALE: NONE

SPRIG-ELD, IL # AUBORA, IL # CHEAGA, E. DATE: 77/03/06

ILLINOIS DEPARTMENT OF TRANSPORTATION

JACKING AND CRIBBING DETAILS

F.A.P. ROUTE 805

SECTION 122VBR-1

ST. CLAIR COUNTY

ILLINOIS ROUTE 161 OVER METRO-LINK

STATION 69+96.56 S.N. 082-0091

SCALE: NONE DRAWN BY: GLD

DRAWN BY: GLD CHECKED BY: GBR