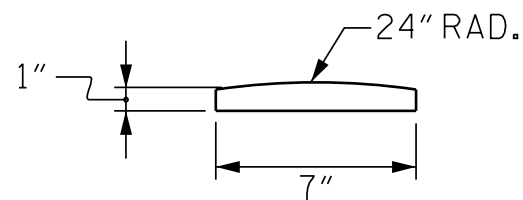
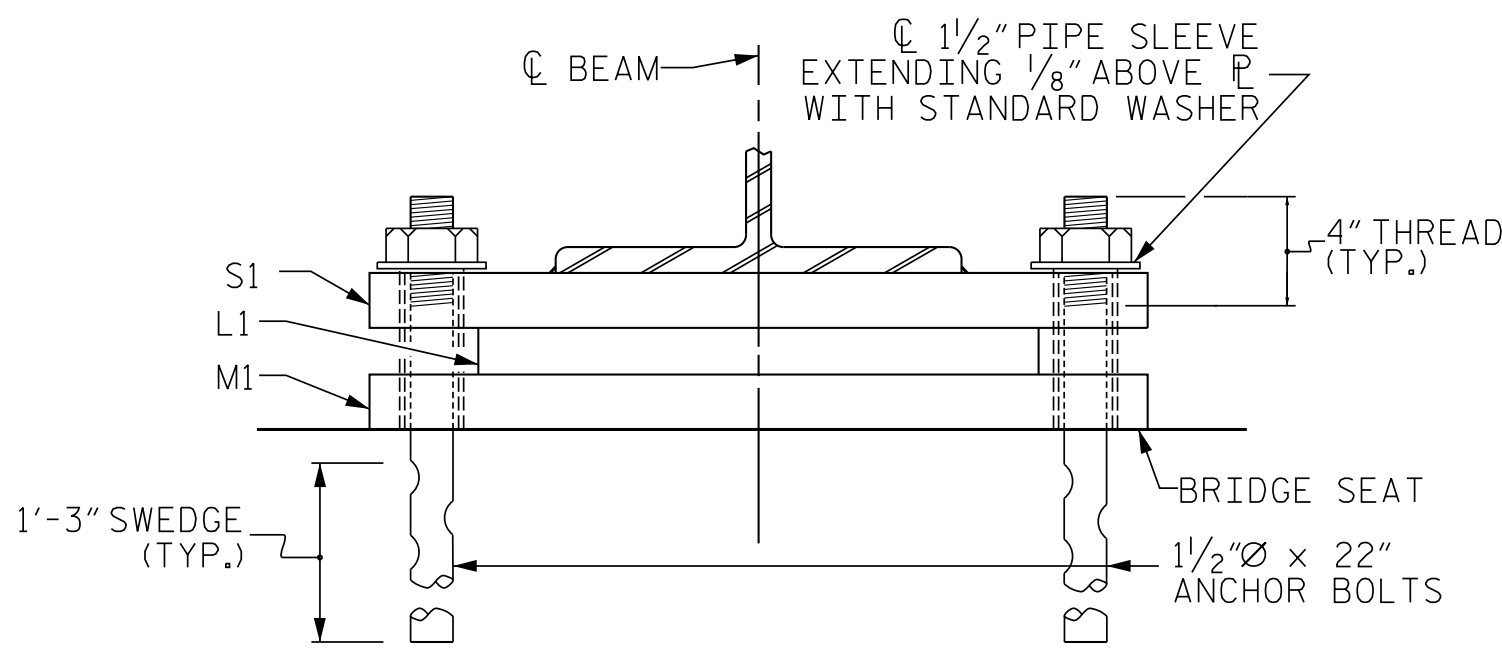
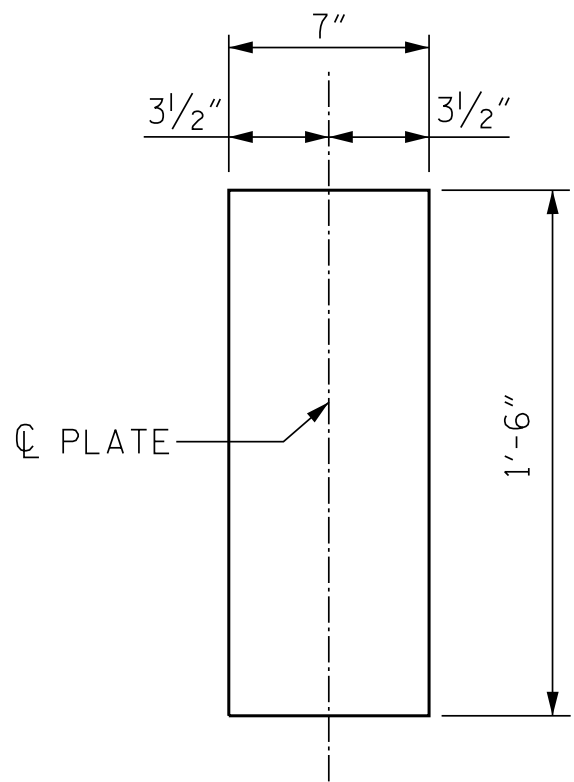


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DATE: 5/5/2025
TIME: 5/5/2025



TYPICAL SECTION OF BEARING PLATE (L1)



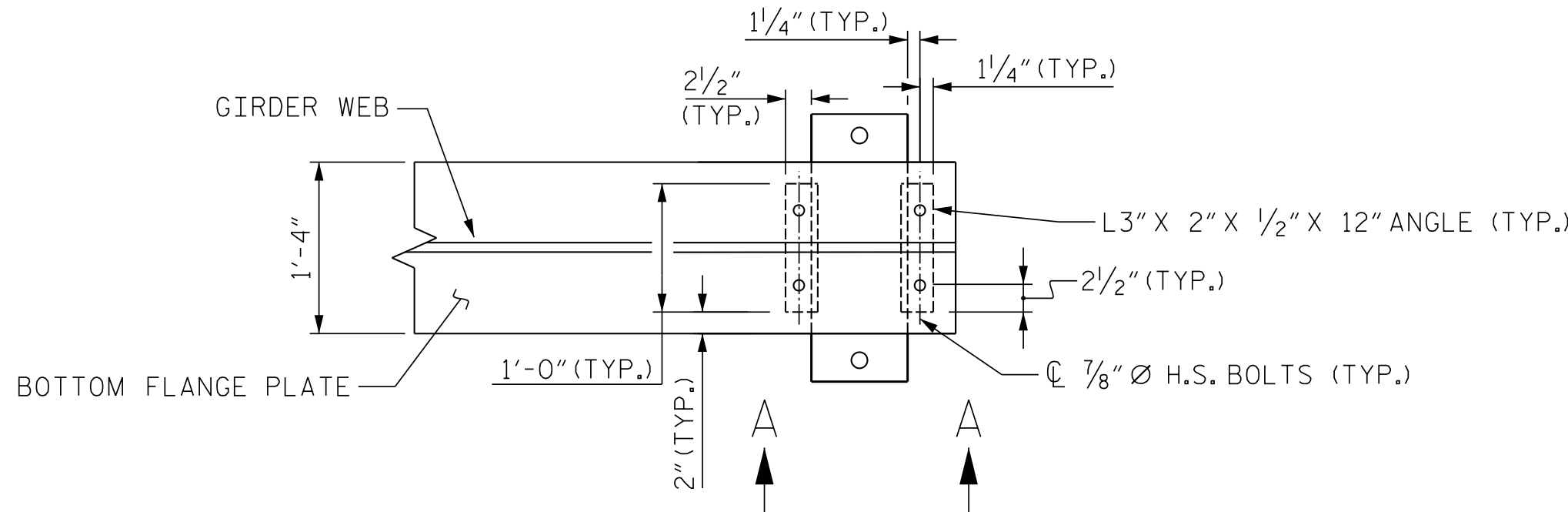
PLAN VIEW OF PLATE (L1)

BEARING REPLACEMENT DETAIL AT BENT 2

THE DIMENSIONS PROVIDED FOR THE REPLACEMENT BEARING PLATE ARE BASED ON THE 1977 EXISTING PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL PLATE DIMENSIONS FOR ACCURACY.

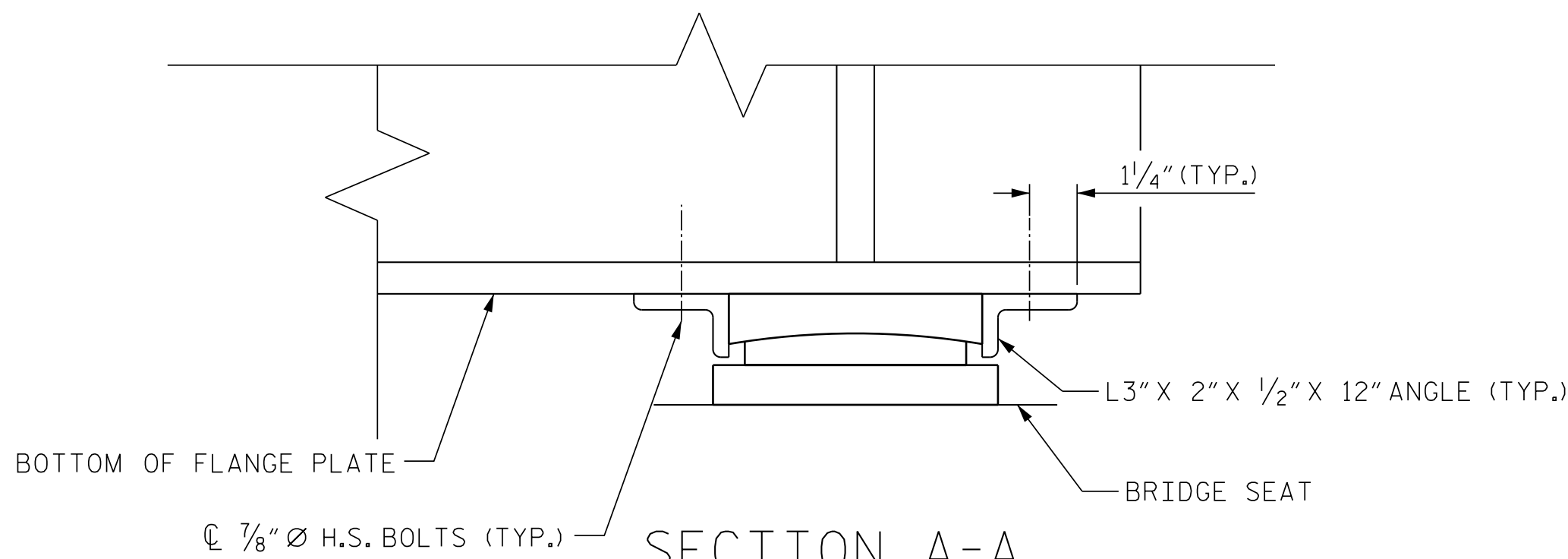
BRIDGE JACKING TABLE

LOCATION	SPAN	BEAM(S)	BRIDGE JACKING TYPE
BENT 2	B	1	TYPE I

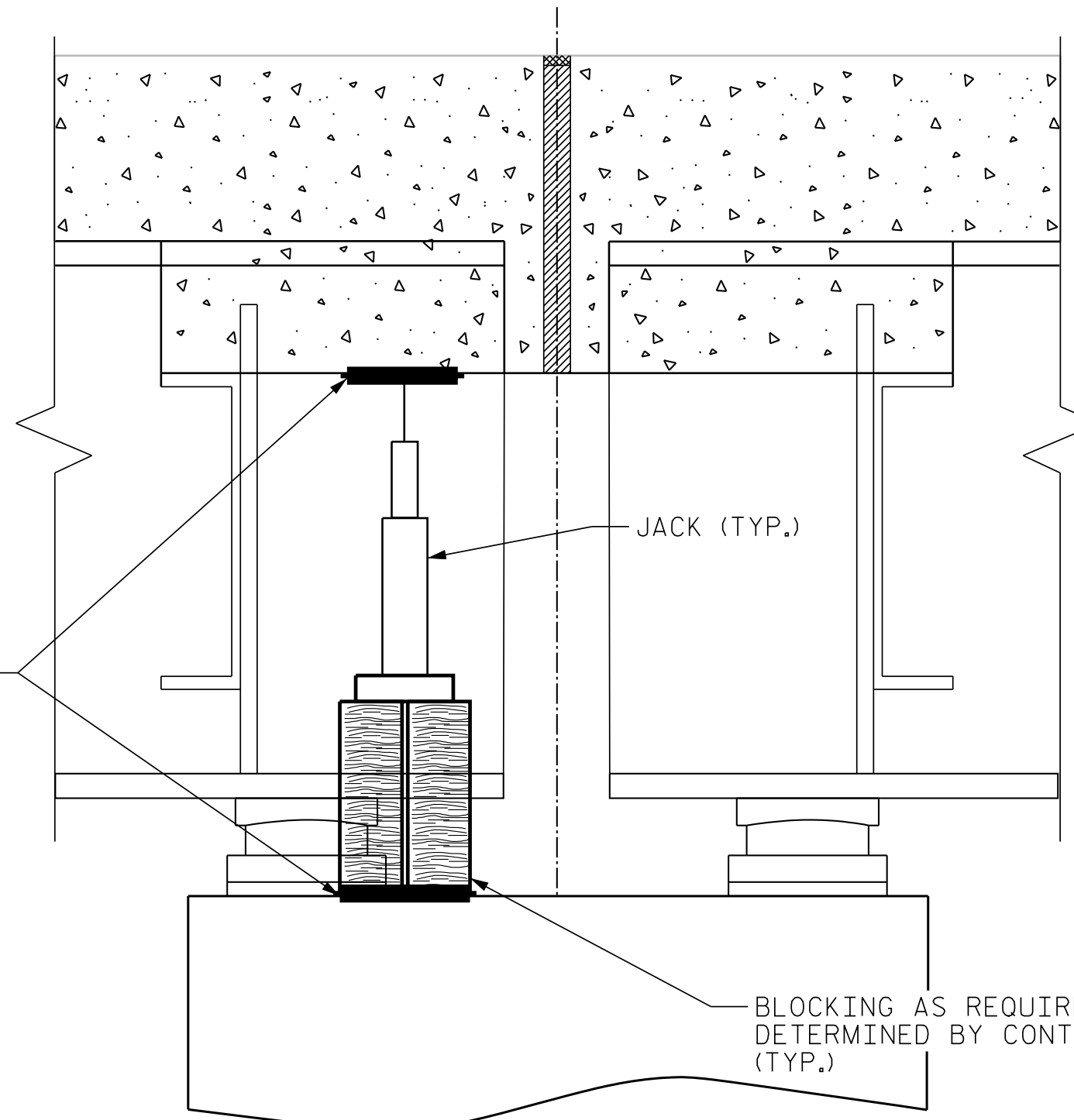


PLAN VIEW OF ANGLE ATTACHMENT FOR BEARING ASSEMBLY

PROVIDE SUFFICIENT LENGTH OF THREADS ON ALL BOLTS TO ACCOMMODATE WASHER AND THICKNESS OF CONNECTION MEMBER PLUS AT LEAST 1/4" PROJECTION BEYOND THE NUT. DRILL HOLES THROUGH BOTTOM FLANGE NO LARGER THAN 3/16" OF THE NOMINAL BOLT DIAMETER. GALVANIZE THE HIGH STRENGTH BOLTS, NUTS AND WASHERS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.



1" (MIN.) THICK STEEL PLATES NEEDED TO DISTRIBUTE THE LOAD (REQUIRED AT TOP OF JACK AND AGAINST BENT CAP)



SECTION THRU DIAPHRAGM

BRIDGE JACKING NOTES:

THIS DETAIL IS A GENERIC EXAMPLE OF A JACKING SCHEME AND DOES NOT NECESSARILY REPRESENT SPECIFIC CONDITIONS AT A PARTICULAR BRIDGE. ACTUAL BRIDGE GEOMETRIES, DIMENSIONS, AND CONDITIONS MAY DIFFER FROM THIS DETAIL. PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL INVESTIGATE THE BRIDGE ON THE PROJECT AND DEVELOP A JACKING PLAN TO BE SUBMITTED FOR REVIEW AND APPROVAL. SEE BRIDGE JACKING SPECIAL PROVISION.

PRIOR TO BRIDGE JACKING OPERATIONS, THE ENGINEER AND CONTRACTOR SHALL INSPECT THE STRUCTURE FOR ANY NOTABLE DEFECTS TO THE PRIMARY AND SECONDARY STRUCTURAL MEMBERS. ALL NOTABLE DEFECTS SHALL BE DOCUMENTED AND REPORTED TO THE AREA BRIDGE MAINTENANCE ENGINEER PRIOR TO COMMENCEMENT OF ANY BRIDGE JACKING. THE CONTRACTOR SHALL PROVIDE SAFE AND SUFFICIENT ACCESS TO ALL STRUCTURAL MEMBERS FOR THE ENGINEER TO ESTABLISH PROPER DOCUMENTATION.

PRIOR TO JACKING, THE CONTRACTOR SHALL ENSURE THERE ARE NO OBSTACLES PREVENTING THE BEAM FROM BEING LIFTED.

THE BEAM SHALL BE LIFTED ENOUGH THAT THE BEAM CLEARS THE BEARINGS AND ALL LOAD IS SUPPORTED BY THE JACKS. AFTER JACKING IS COMPLETE, THE CONTRACTOR SHALL PROVIDE FOR A METHOD TO REMOVE THE JACKS AND SUPPORT THE BEAM FOR DEAD AND LIVE LOAD DURING THE REPAIR OPERATIONS. IF THE JACKS REMAIN IN PLACE DURING THE ENTIRE JACKING AND REPAIR OPERATION, THEY SHALL HAVE MECHANICAL LOCK OFF CAPABILITIES.

IF, DURING THE JACKING PROCESS, OR WHILE THE BEAM IS BEING SUPPORTED, THE BEAM SHIFTS FROM ITS ORIGINAL POSITION, ALL WORK SHALL CEASE AND THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY.

BEARINGS ADJACENT TO THE BEAM BEING JACKED MAY BE LOOSENED TO DECREASE THE RESISTANCE OF THE DECK SLAB DURING JACKING. ALL BEARINGS LOOSENED SHALL BE TIGHTENED BACK AFTER REPAIR OPERATIONS ARE COMPLETED AND THE JACKS AND BLOCKING HAVE BEEN REMOVED.

THE MAXIMUM DIFFERENTIAL BETWEEN ADJACENT BEAMS THAT ARE BEING JACKED IS 1/8".

THE CONTRACTOR SHALL SUBMIT WORKING DRAWINGS AND CALCULATIONS OF THE JACKING PROCEDURE(S) SEALED BY A PROFESSIONAL ENGINEER IN THE STATE OF NORTH CAROLINA TO THE ENGINEER FOR APPROVAL PRIOR TO BRIDGE JACKING OPERATIONS.

FOR TYPE I OR TYPE II BRIDGE JACKING, SEE SPECIAL PROVISIONS.

FOR WORKING DRAWING SUBMITTALS, SEE SPECIAL PROVISIONS.

ANY STEEL THAT HAS BEEN WELDED TO THE EXISTING STRUCTURE SHALL REMAIN IN PLACE.

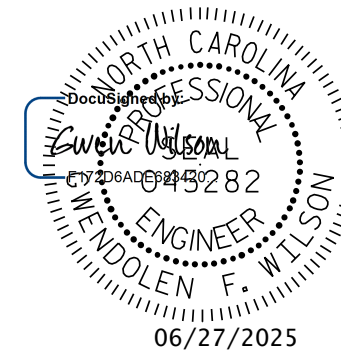
THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED TO THE EXISTING STRUCTURE BY BRIDGE JACKING OPERATIONS AT NO ADDITIONAL COST TO THE DEPARTMENT.

BEARING PLATE (L1) SHALL CONFIRM TO AASHTO M270 GRADE 50W.

THE BEARING REPLACEMENT PAY ITEM AT SPAN B, BENT 2, BEAM 1 INCLUDES THE INSTALLATION OF THE NEW RETAINER ANGLES LOCATED ON THE BOTTOM FLANGE OF BEAM 1.

THE BEARING SHALL BE REPLACED PRIOR TO THE CLEANING AND PAINTING OF THE STEEL.

PROJECT NO. I-5880
FORSYTH COUNTY
BRIDGE: 330029



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

BRIDGE JACKING & BEARING ASSEMBLY

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



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License No: C-3097

REVISIONS						SHEET NO. S1-20
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 21
2			4			

DWN. BY: BC DATE: 10/2024
CHKD. BY: GFW DATE: 11/2024