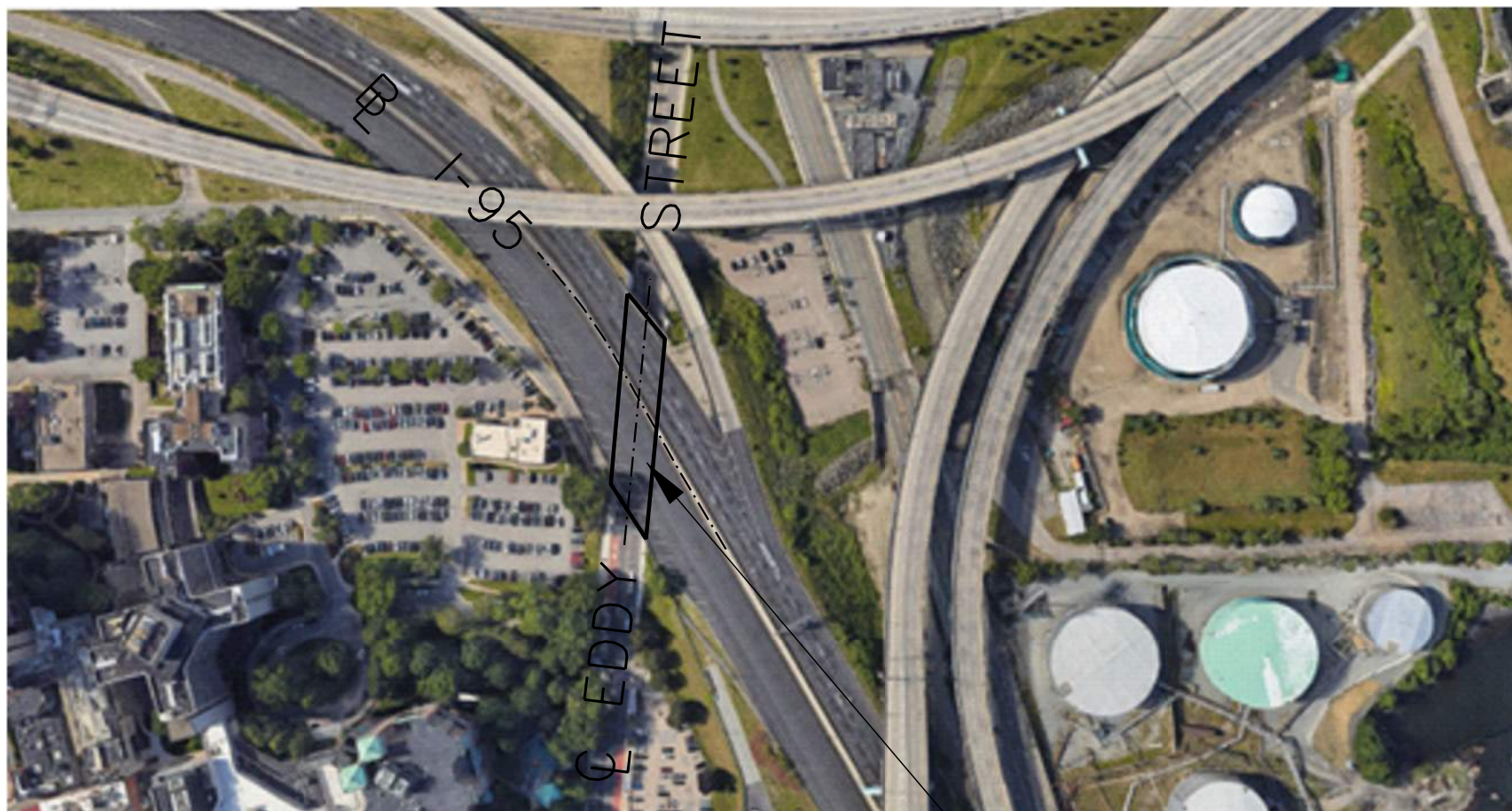


HIGH PRIORITY STEEL REPAIRS TO BRIDGE NOS. 053701, 062501, 065501 and 068501

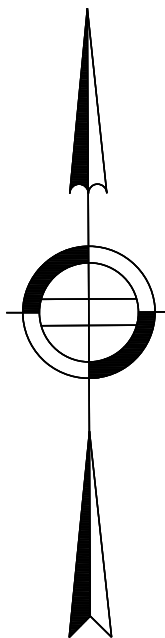
R.I.C. NO. 2023-CB-025
F.A.P. NO. BHO-HPSP(001)

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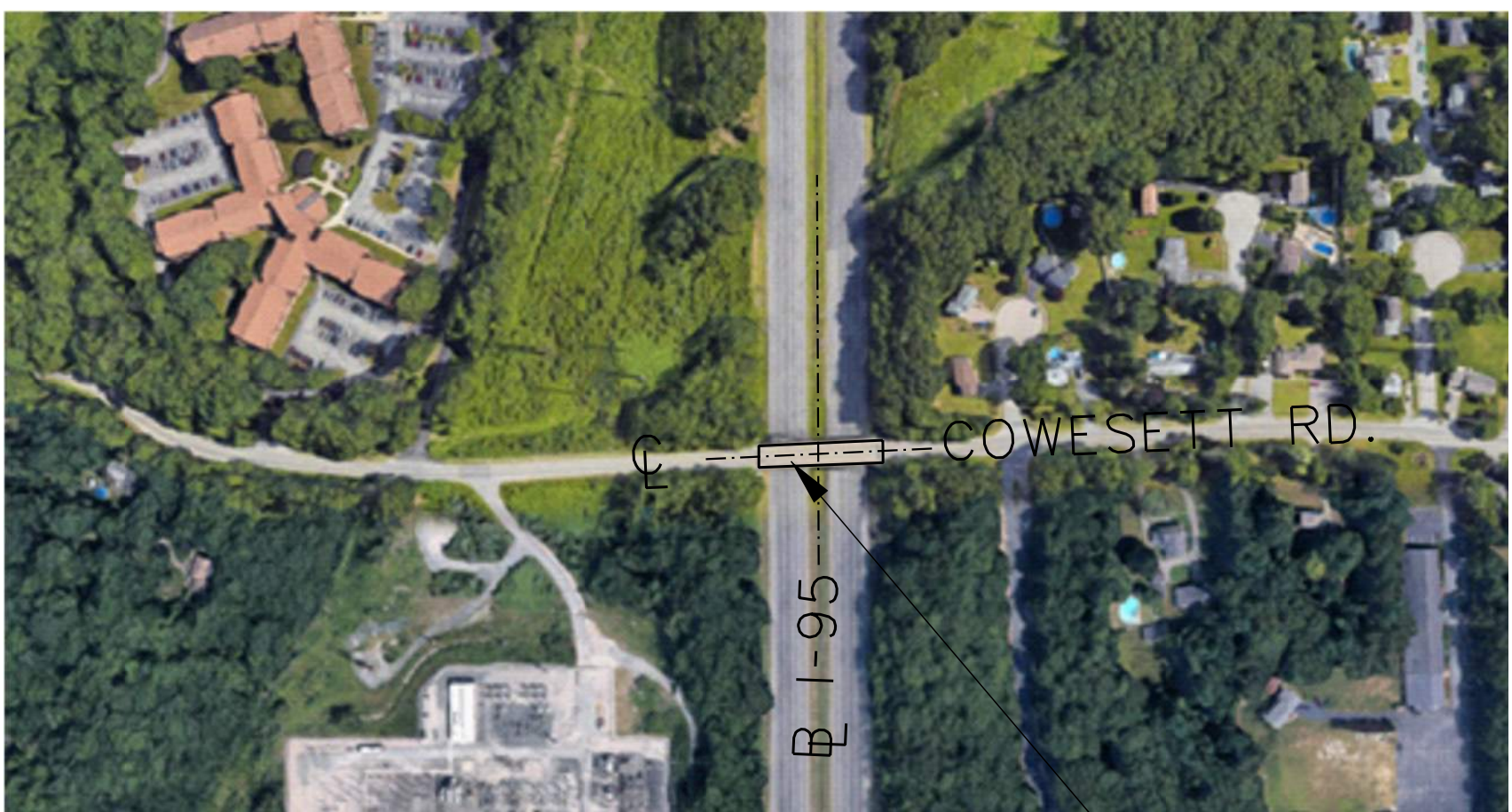
BR. 053701
BRIDGE 053701
PROVIDENCE, RI



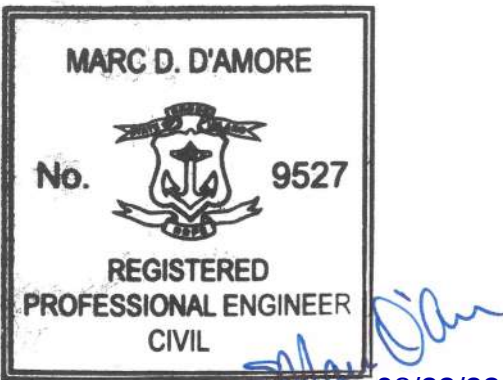
BR. 062501
BRIDGE 062501
CRANSTON, RI



BR. 065501
BRIDGE 065501
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BR. 068501
BRIDGE 068501
WARWICK, RI



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RHODE ISLAND DEPARTMENT OF TRANSPORTATION		
HIGH PRIORITY STEEL REPAIRS TO BRIDGE NOS. 053701, 062501, 065501 and 068501		
COVER SHEET		
CHECKED BY: <u>MDD</u>	DATE: <u>08/22/23</u>	SCALE: <u>AS SHOWN</u>

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH:
 - THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (RISTANDARD SPECIFICATIONS), 2022 EDITION, WITH ALL REVISIONS.
 - THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) LRFD BRIDGE CONSTRUCTION SPECIFICATIONS, LATEST EDITION.
 - THE RHODE ISLAND BRIDGE STANDARD DETAILS.
 - THE RHODE ISLAND STANDARD DETAILS.
2. DIMENSIONS, STATIONS, ELEVATIONS, AND ANGLES OF THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE ORIGINAL CONSTRUCTION. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS REQUIRED FOR PROPER PERFORMANCE OF THE WORK. FIELD CONDITIONS MAY EXIST WHICH DEVIATE FROM THE DIMENSIONS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR FABRICATION AND FIT OF ALL WORK.
3. BOTH FEDERAL AND STATE LAW (RI. GENERAL LAW 39-1.2) REQUIRE NOTIFICATION OF APPROPRIATE UTILITY COMPANIES BEFORE BORING DIGGING, TRENCHING, BLASTING, DEMOLISHING, GRADING, BACK FILLING, LANDSCAPING, OR OTHER EARTH MOVING OPERATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES (INCLUDING THROUGH THE "DIG SAFE" PROGRAM) TO ENSURE THAT ALL UTILITIES, BOTH UNDERGROUND AND OVERHEAD, HAVE BEEN MARKED BEFORE COMMENCEMENT OF SUCH WORK. THE CONTRACTOR SHOULD UNDERSTAND THAT NOT ALL UTILITIES SUBSCRIBE TO THE "DIG SAFE" PROGRAM. ANY DAMAGE TO EXISTING UTILITIES MARKED IN THE FIELD, OR AS A RESULT OF FAILING TO CONTACT THE APPROPRIATE UTILITY COMPANIES, SHALL BE REPAIRED OR REPLACED (AS DEEMED APPROPRIATE BY THE STATE AND/OR THE IMPACTED UTILITY COMPANY) AT NO ADDITIONAL COST TO THE STATE.
4. ALL EXISTING UTILITIES SHALL BE MAINTAINED AND PROTECTED AS REQUIRED FOR DURATION OF ALL CONSTRUCTION ACTIVITES. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY ANY CONSTRUCTION ACTIVITIES.
5. IN ACCORDANCE WITH THE ALLOWABLE TRAFFIC RESTRICTIONS NOTED IN THE TRAFFIC MANAGEMENT PLAN (TMP) FOR THIS PROJECT, THE CONTRACTOR SHALL PERFORM TEMPORARY TRAFFIC CLOSURES TO REMOVE VEHICULAR TRAFFIC FROM GIRDERS TO BE REPAIRED PRIOR TO COMMENCING ALL REPAIR WORK. TRAFFIC CLOSURES SHALL REMAIN IN EFFECT FOR THE DURATION OF THE GIRDER REPAIR WORK, AND GIRDER REPAIRS FOR EACH LOCATION SHALL CONTINUE WITHOUT INTERRUPTION UNTIL REPAIR IS COMPLETED FOR SAID LOCATION, PRIOR TO ALLOWING TRAFFIC BACK ONTO GIRDERS.

DESIGN DATA

1. DESIGN SPECIFICATIONS
 - THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, LATEST EDITION, INCLUDING ALL INTERIM REVISIONS.
 - THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL 2007 EDITION INCLUDING ALL REVISIONS TO DATE.
 - ALL OTHER APPLICABLE DESIGN SPECIFICATIONS AS REFERENCED IN SECTION 1 OF THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL DATED 2007.
 - THE 2022 EDITION AND ALL SUPPLEMENTS TO THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (RISTANDARD SPECIFICATIONS)

IN CASE OF CONFLICT, THE AASHTO LRFD BRIDGE DESIGN MANUAL, SHALL GOVERN.

MATERIALS

1. STRUCTURAL STEEL: AASHTO DESIGNATION M270, GRADE 50

STRUCTURAL STEEL NOTES

1. FOR LOCATION OF STRUCTURAL STEEL REPAIRS, REFER TO "GIRDER REPAIR LOCATION PLAN" SHEETS (4, 10, 12 AND 14).
2. THE SHOPS FABRICATING THE STRUCTURAL STEEL, MUST BE CERTIFIED FOR "SIMPLE STEEL BRIDGES (SBR)" IN ACCORDANCE WITH THE AISC CERTIFICATION PROGRAM OR EQUIVALENT. THE SHOPS SHALL ALSO BE CERTIFIED UNDER THE AISC "SOPHISTICATED PAINT ENDORSEMENT (SPE)" QUALITY PROGRAM OR THE SSPC-QP3 CERTIFICATION PROGRAM. THE FABRICATOR MUST SUBMIT PROOF OF CURRENT CERTIFICATION AS SPECIFIED.
3. STRUCTURAL STEEL SHAPES AND PLATES SHALL CONFORM TO THE LATEST PROVISIONS OF AASHTO DESIGNATION M270 GRADE 50 UNLESS OTHERWISE DESIGNATED ON PLANS.
4. ALL AASHTO M270 STRUCTURAL STEEL USED SHALL MEET THE ZONE 2 CHARPY V-NOTCH FRACTURE TOUGHNESS TEST REQUIREMENTS AS SPECIFIED IN TABLE C6.6.2.1-1 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR NON-FRACTURE CRITICAL COMPONENTS AS FOLLOWS:
 - GRADE 50 15 FT-LBS AT 40°F (UP TO 2 INCH THICKNESS)
- SAMPLING AND TESTING PROCEDURES SHALL CONFORM TO AASHTO T243.
5. ALL HIGH STRENGTH BOLTS SHALL CONFORM TO ASTM F3125/ F3125M, GRADE A325, AND SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 824 OF RISTANDARD SPECIFICATIONS. BOLTS SHALL BE GALVANIZED.
6. WASHERS MEETING ASTM F436, TYPE 1 REQUIREMENTS ARE TO USED OVER ALL HOLES THAT ARE MORE THAN 1/16" IN DIAMETER GREATER THAN THE BOLT DIAMETER AND UNDER ALL PARTS TURNED DURING ASSEMBLY.
7. PRIOR TO FABRICATION, ALL MATERIALS SHALL BE BLAST-CLEANED TO AT LEAST SSPC-SP10 TO REMOVE ALL OIL, DIRT, GREASE, MILL SCALE, AND OTHER DELETERIOUS MATERIALS FROM THE SURFACES OF THE STEEL TO BE FABRICATED.
8. THE STEEL ERECTOR/CONTRACTOR FOR THIS PROJECT SHALL BE CERTIFIED FOR "ADVANCED CERTIFIED STEEL ERECTOR (ACSE)" IN ACCORDANCE WITH THE AISC QUALITY CERTIFICATION PROGRAM. THE ERECTOR/CONTRACTOR OF THE STRUCTURAL STEEL SHALL BE REQUIRED TO SUBMIT PROOF OF CURRENT CERTIFICATION AS SPECIFIED.
9. ALL STRUCTURAL STEEL REPAIR SHAPES SHALL RECEIVE A SHOP-APPLIED COAT OF ZINC-RICH PRIMER IN ACCORDANCE WITH SECTION 825 OF RISTANDARD SPECIFICATIONS, LATEST EDITION WITH ALL INTERIMS. STEEL REPAIR SHAPES FOR BRIDGES 053701, 065501, AND 068501 SHALL RECEIVE TOP COAT TO MATCH EXISTING (VERIFY IN FIELD AND SUBMIT SAMPLE FOR RIDOT APPROVAL PRIOR TO COMMENCING CONSTRUCTION). DAMAGE TO THE SHOP-APPLIED ZINCRICH PRIMER AND/OR TOP COATS DURING TRANSPORTATION OR ERECTION SHALL BE TOUCHED UP BY THE CONTRACTOR WITH A SUITABLE ZINC-RICH PRIMER TO THE SATISFACTION OF THE ENGINEER, AT NO COST TO THE STATE.
10. PRIOR TO SHOP COATING, AS SPECIFIED IN SECTION 825 OF THE RISTANDARD SPECIFICATIONS, ALL CORNERS AND EDGES OF STEEL WHICH HAVE BEEN FLAME CUT OR OTHERWISE HARDENED SHALL BE SOFTENED BY GRINDING OR BLAST-CLEANED TO PROVIDE A SURFACE SUITABLE FOR APPLICATION OF THE ZINC-RICH PRIMER.

STRUCTURAL STEEL NOTES (CONT.):

11. THE CONTRACTOR(S) PERFORMING THE COATING APPLICATION MUST DEMONSTRATE QUALIFICATION BY OBTAINING EITHER THE SOCIETY OF PROTECTIVE COATINGS (SSPC) QP-1 "STANDARD PROCEDURE FOR EVALUATING PAINTING CONTRACTORS (FIELD APPLICATION TO COMPLEX INDUSTRIAL STRUCTURES)" FOR FIELD PAINTING AND SSPC QP-3 "CERTIFICATION STANDARD FOR SHOP APPLICATION OF COMPLEX PROTECTIVE COATING SYSTEMS" AS APPROPRIATE, OR THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) SOPHISTICATED PAINT ENDORSEMENT (SPE).
12. WELDING OF ATTACHMENTS TO BEAM FLANGES OR WEBS FOR CONSTRUCTION PURPOSES IS NOT PERMITTED EXCEPT WHEN APPROVED BY THE ENGINEER.
13. WHEN STEEL DIE STAMPS ARE USED TO IDENTIFY PIECES AND MEMBERS, FABRICATORS SHALL UTILIZE LOW STRESS STAMPS.
14. SHOP DRAWINGS FOR ALL FABRICATED STEEL SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
15. ALL WELDING SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE. FOR APPLICATIONS NOT INCLUDED IN THAT CODE, AWS D1.1 SHALL BE USED.
16. WELDING ELECTRODES SHALL HAVE THE SAME CORROSION RESISTANCE AS THE BASE METAL AND SHALL BE FREE OF MOISTURE AT THE TIME OF USE.

RIDOT CONTRACT NO.	SHEET NO.	TOTAL SHEETS
2023-CB-025	2	15

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

HIGH PRIORITY STEEL REPAIRS TO
BRIDGE NOS. 053701, 062501,
065501 and 068501

GENERAL NOTES

CHECKED BY: MDD DATE: 08/22/23 SCALE: AS SHOWN

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STEEL REPAIR NOTES:

1. REMOVAL OF EXISTING COMPONENTS SHALL BE ACCOMPLISHED BY MECHANICAL METHODS. FLAME CUTTING IS NOT ALLOWED.
2. UNLESS OTHERWISE NOTED, ALL BOLT HOLES FOR NEW STRUCTURAL STEEL COMPONENTS SHALL BE SHOP DRILLED STANDARD DIAMETER.
3. ALL BOLT HOLES IN EXISTING STRUCTURAL STEEL MEMBERS SHALL BE FIELD DRILLED, STANDARD DIAMETER HOLES.
4. THE EXACT LOCATION OF FIELD DRILLED BOLT HOLES TO BE DETERMINED IN THE FIELD.
5. WHERE BOLT LOCATIONS COINCIDE WITH HEAVILY DETERIORATED PORTIONS OF THE WEB, (MATERIAL LOSS GREATER THAN 1/8"), THE BOLTS SHALL HAVE DOUBLE NUTS. THE FIRST NUT SHALL BE SEATED SNUG TIGHT AGAINST THE SURFACE AND THEN HELD IN PLACE WITH A WRENCH WHILE TIGHTENING A SECOND NUT AGAINST IT.
6. EPOXY PASTE (RIDOT APPROVED) FOR STEEL REPAIRS SHALL BE APPLIED TO DETERIORATED SURFACES AND VOIDS BEHIND THE GIRDER REPAIR PLATES AND SHAPES. NEW PLATES, AND SHAPES SHALL FIT FLUSH AND TIGHT AGAINST THE EXISTING ELEMENTS AND BOLTS SHALL BE SNUG TIGHTENED IN PLACE PRIOR TO SETTING OF THE EPOXY PASTE. THE PASTE SHALL BE APPLIED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S LATEST WRITTEN INSTRUCTIONS.
7. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND PROPOSED REPAIR DIMENSIONS PRIOR TO FABRICATING STEEL REPAIRS. PROPOSED REPAIR COMPONENTS SHALL BE DETAILED AND SUBMITTED WITH REQUIRED SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR THE OVERALL FIT OF ALL FIELD BOLTED CONNECTIONS. BOLT SPACING SHOWN MAY NEED TO BE FIELD ADJUSTED BASED ON ACTUAL FIELD CONDITIONS. FINAL BOLT SPACING AND DETAILS SHALL BE SUBMITTED WITH THE REQUIRED SHOP DRAWINGS FOR REVIEW APPROVAL PRIOR TO FABRICATION.
9. ALL STEEL REPAIRS SHALL BE PERFORMED AFTER THE EXISTING STRUCTURAL STEEL AT THE LOCATIONS DESIGNATED FOR STEEL REPAIRS IN THESE PLANS HAVE BEEN SURFACE PREPPED.
10. FOR BRIDGE 062501, SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL AT STEEL REPAIR LOCATIONS SHALL MEET AISC STANDARD SSPC-SP2 "HAND-TOOL CLEANING" AND CONSIST OF WIRE-BRUSHING EXISTING WEB AND FLANGE SURFACES IN CONTACT WITH PROPOSED REPAIR COMPONENTS, INCLUDING FILLER PLATES AND REPAIR ANGLES. SURFACE PREPARED AREAS ON EXISTING STRUCTURAL STEEL WHICH ARE VISIBLE OUTSIDE THE LIMITS OF THE STRUCTURAL STEEL REPAIR AREAS SHALL BE TOUCHED UP WITH THE ZINC-RICH PRIMER.
11. FOR BRIDGES 053701, 065501, AND 068501, SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL AT STEEL REPAIR LOCATIONS SHALL MEET AISC STANDARD SSPC-SP3 "POWER TOOL CLEANING" AND INCLUDE EXISTING WEB AND FLANGE SURFACES IN CONTACT WITH PROPOSED REPAIR COMPONENTS, INCLUDING FILLER PLATES AND REPAIR ANGLES. SURFACE PREPARED AREAS ON EXISTING STRUCTURAL STEEL WHICH ARE VISIBLE OUTSIDE THE LIMITS OF THE STRUCTURAL STEEL REPAIR AREAS SHALL BE TOUCHED UP WITH THE ZINC-RICH PRIMER AND TOP COAT AS REQUIRED.
12. ALL COSTS ASSOCIATED WITH REMOVAL AND DISPOSAL OF EXISTING STEEL COMPONENTS SHALL BE PAID FOR WITHIN THE CONTRACT UNIT PRICE FOR THE REPAIR BEING PERFORMED AND WILL NOT BE MEASURED SEPARATELY FOR PAYMENT.

RIDOT CONTRACT NO.	SHEET NO.	TOTAL SHEETS
2023-CB-025	3	15

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HIGH PRIORITY STEEL REPAIRS TO
BRIDGE NOS. 053701, 062501,
065501 and 068501

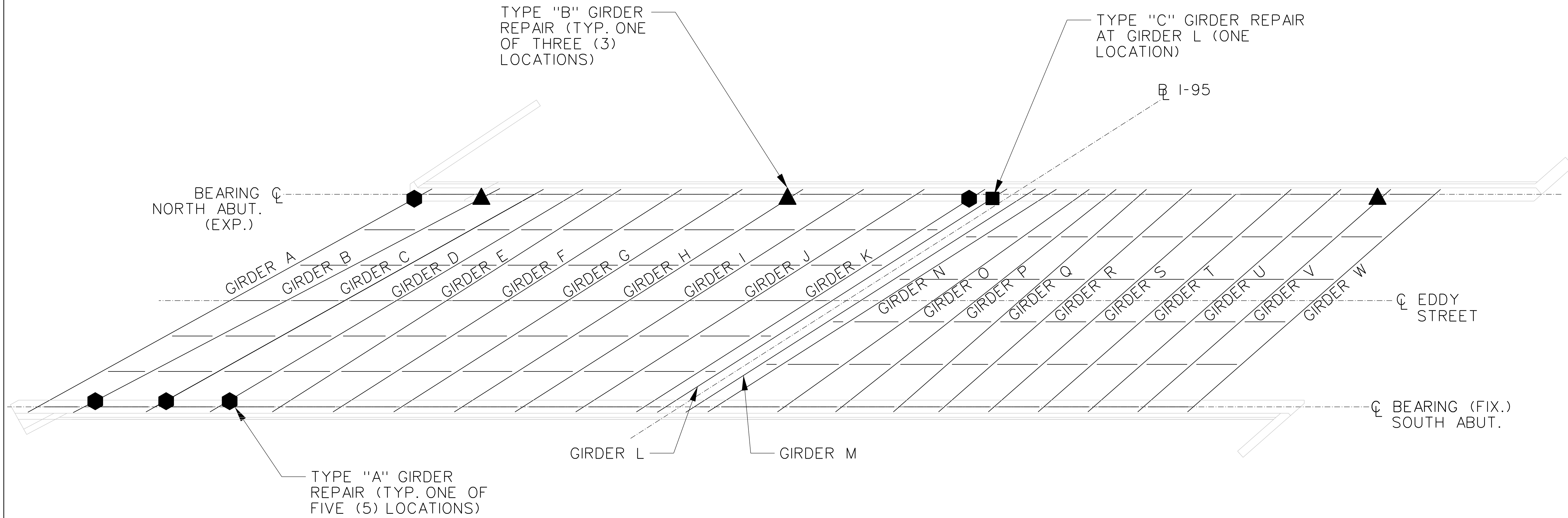
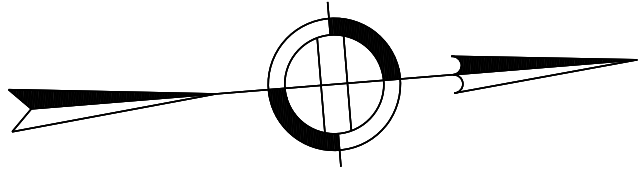
STEEL REPAIR NOTES

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BRIDGE 053701 - GIRDER REPAIR LOCATION PLAN
SCALE : N.T.S.

LEGEND:

- = TYPE "A" GIRDER REPAIR DETAIL
- ▲ = TYPE "B" GIRDER REPAIR DETAIL
- = TYPE "C" GIRDER REPAIR DETAIL

NOTES:

- SEE SHEETS 2-3 FOR GENERAL AND STEEL REPAIR NOTES.
- SEE SHEETS 5-9 FOR GIRDER REPAIR DETAILS.
- ALL UTILITY LOCATIONS SHALL BE CONFIRMED IN FIELD. PROPER PRECAUTIONS SHALL BE TAKEN WHEN WORKING ADJACENT TO ALL UTILITES.

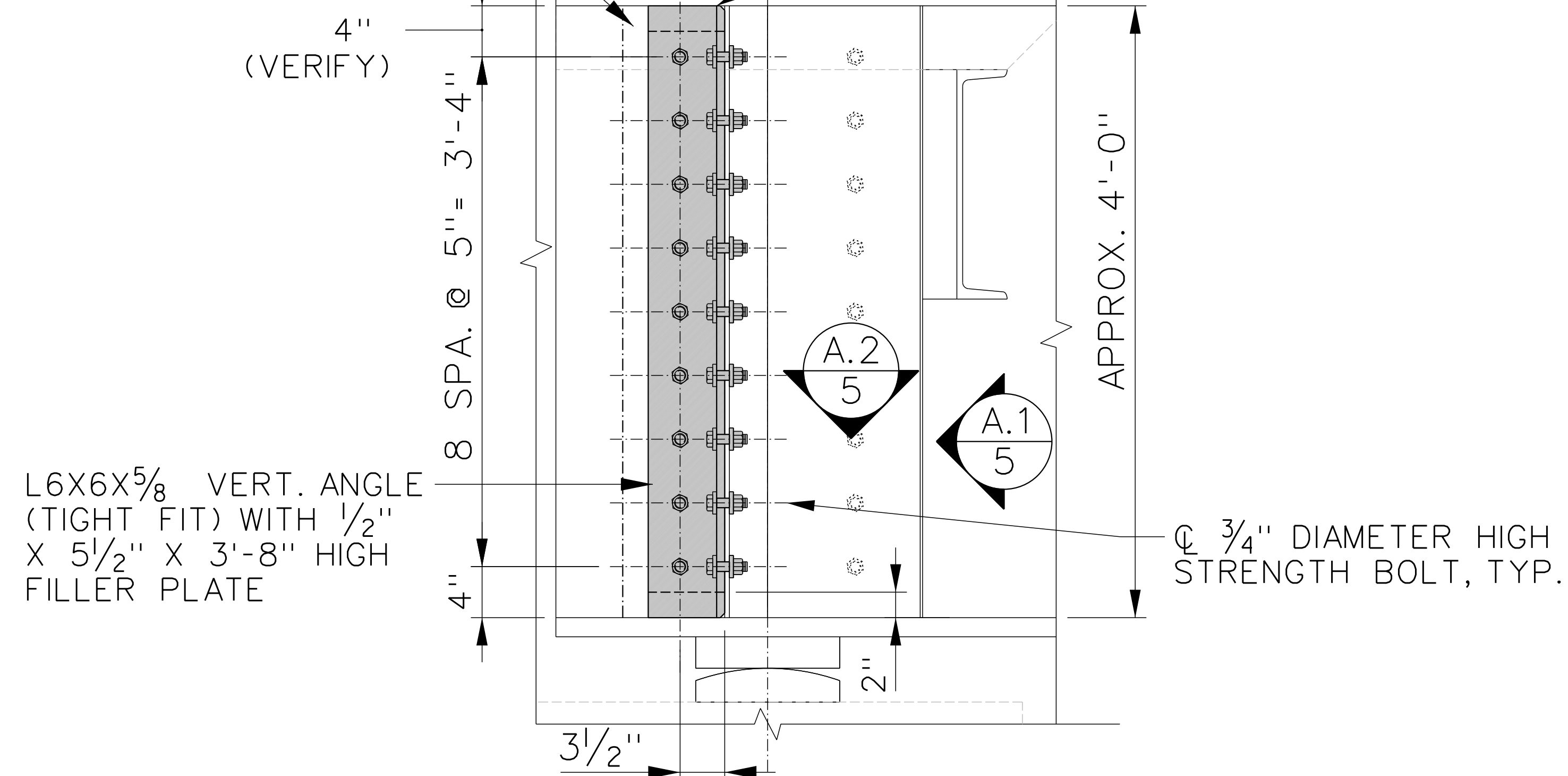
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HIGH PRIORITY STEEL REPAIRS TO BRIDGE NO. 053701	
I-95 OVER EDDY STREET	PROVIDENCE, RI
GIRDER REPAIR LOCATION PLAN - BR. 053701	
CHECKED BY: <u>MDD</u>	DATE: <u>08/22/23</u> SCALE: <u>AS SHOWN</u>

EXIST. CONCRETE DECK HAUNCH TO BE CUT AS REQ'D FOR ANGLE INSTALLATION, TYP.

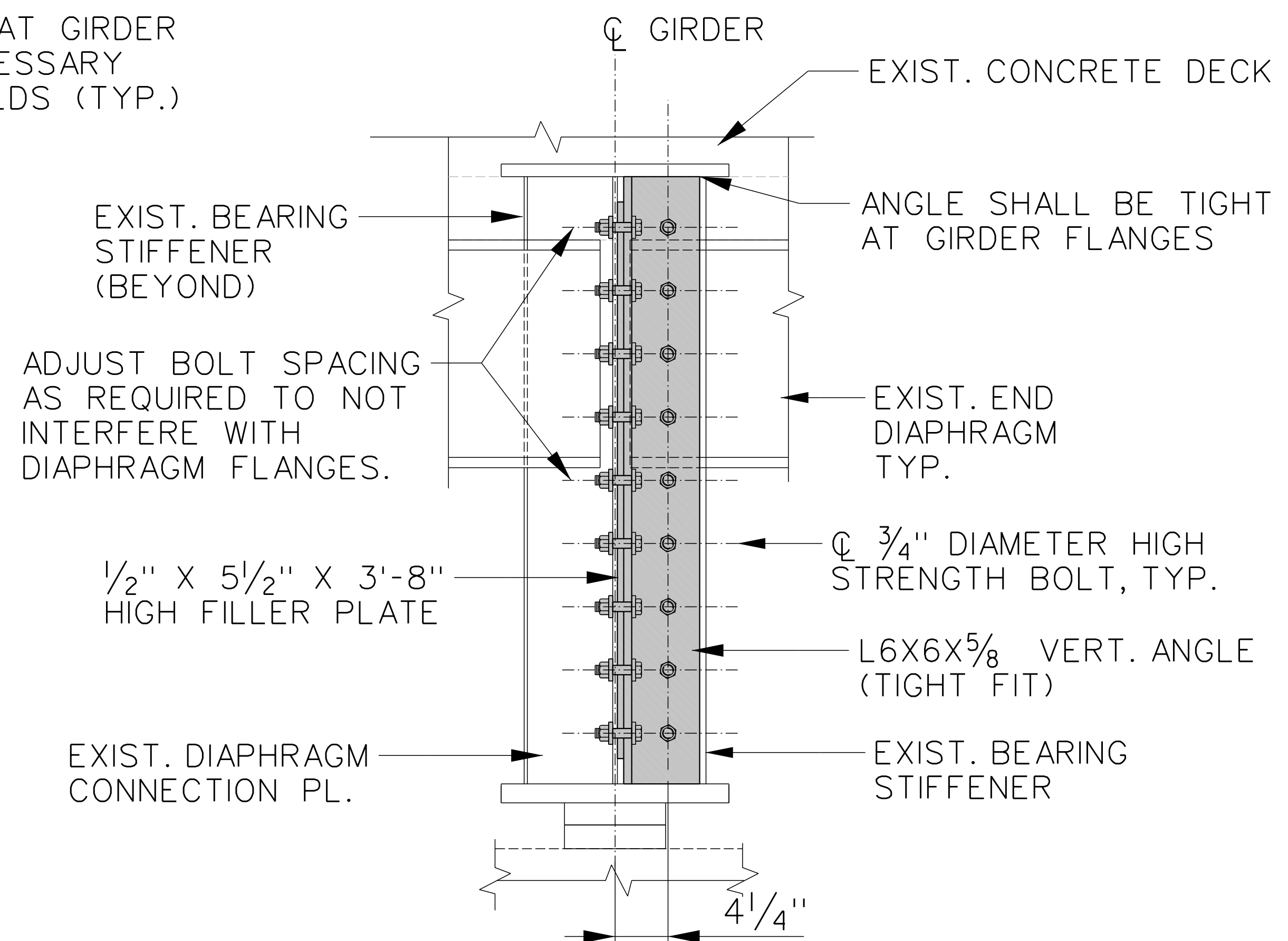
CL BEARING

ANGLE SHALL BE TIGHT FIT AT GIRDER FLANGES. CLIP LEGS AS NECESSARY FOR BEARING STIFFENER WELDS (TYP.)



ELEVATION**
SCALE: N.T.S.

** NOTE, GIRDER B AT SOUTH ABUTMENT SHOWN. OTHER REPAIR LOCATIONS ARE SIMILAR EXCEPT FOR GIRDER A, NORTH ABUTMENT (SEE DETAILS ON SHEET 6)



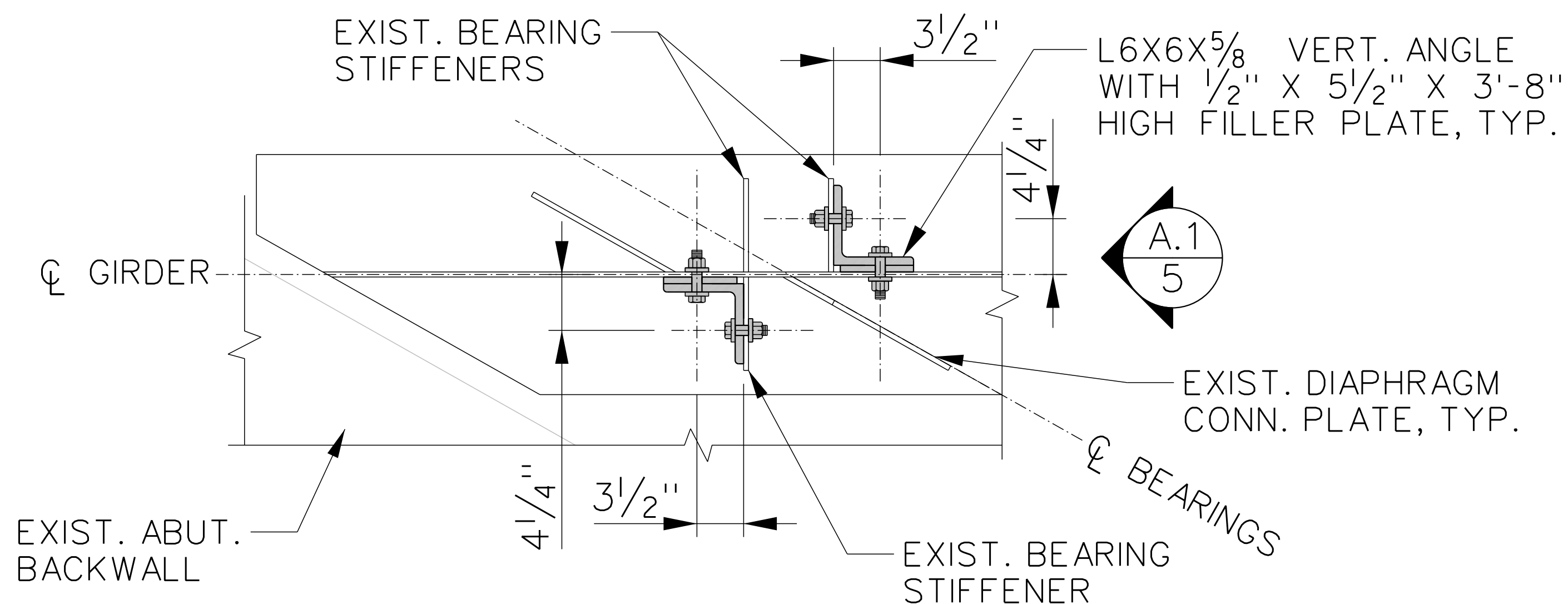
SECTION
SCALE: N.T.S.

LEGEND:

■ = NEW REPAIR STEEL AND GIRDER SURFACE PREPARATION/ PAINTING LIMITS

NOTES:

- SEE SHEET 4 FOR GIRDER REPAIR LOCATIONS.
- SEE SHEETS 2-3 FOR GENERAL AND STEEL REPAIR NOTES.



SECTION
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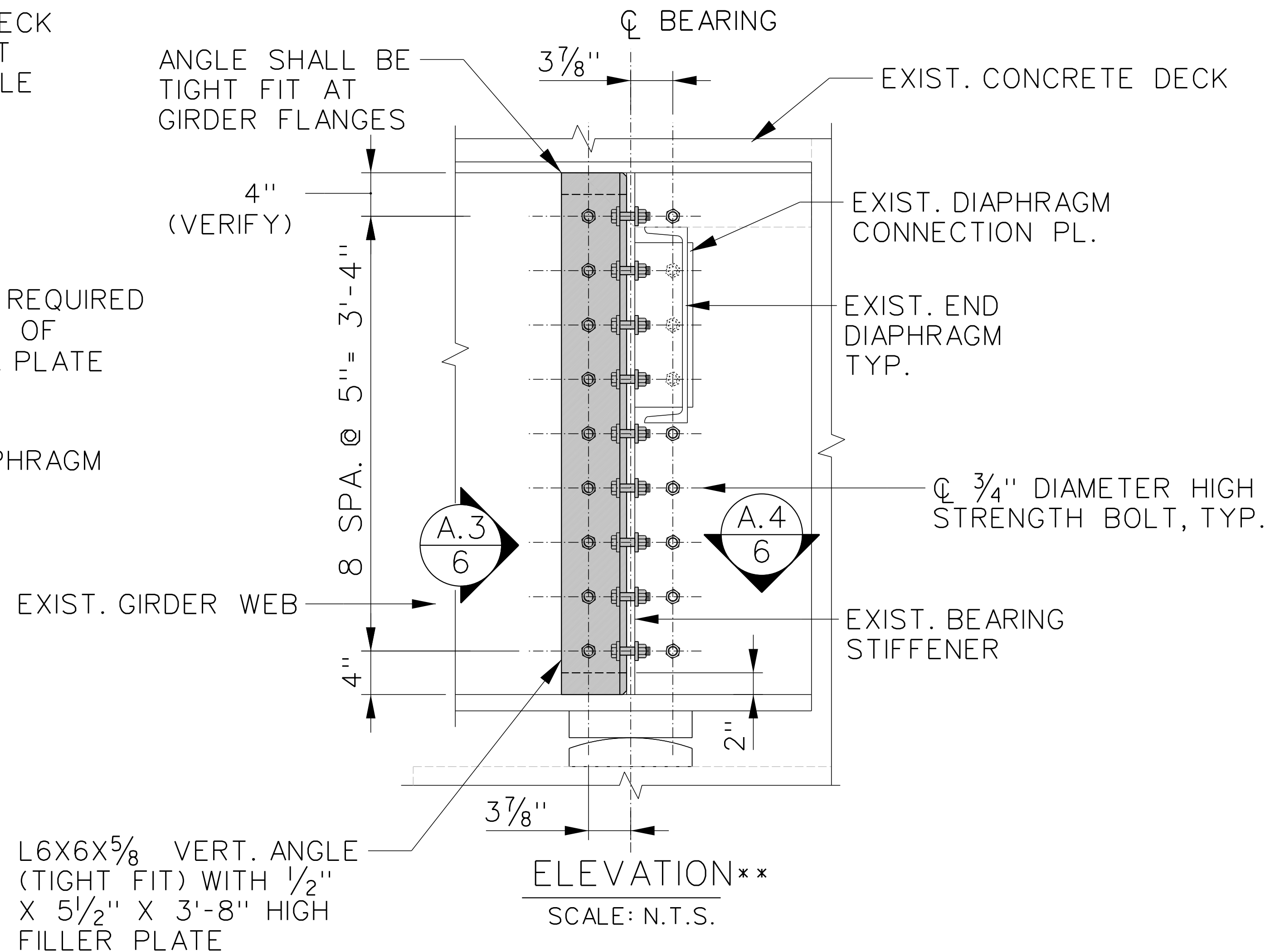
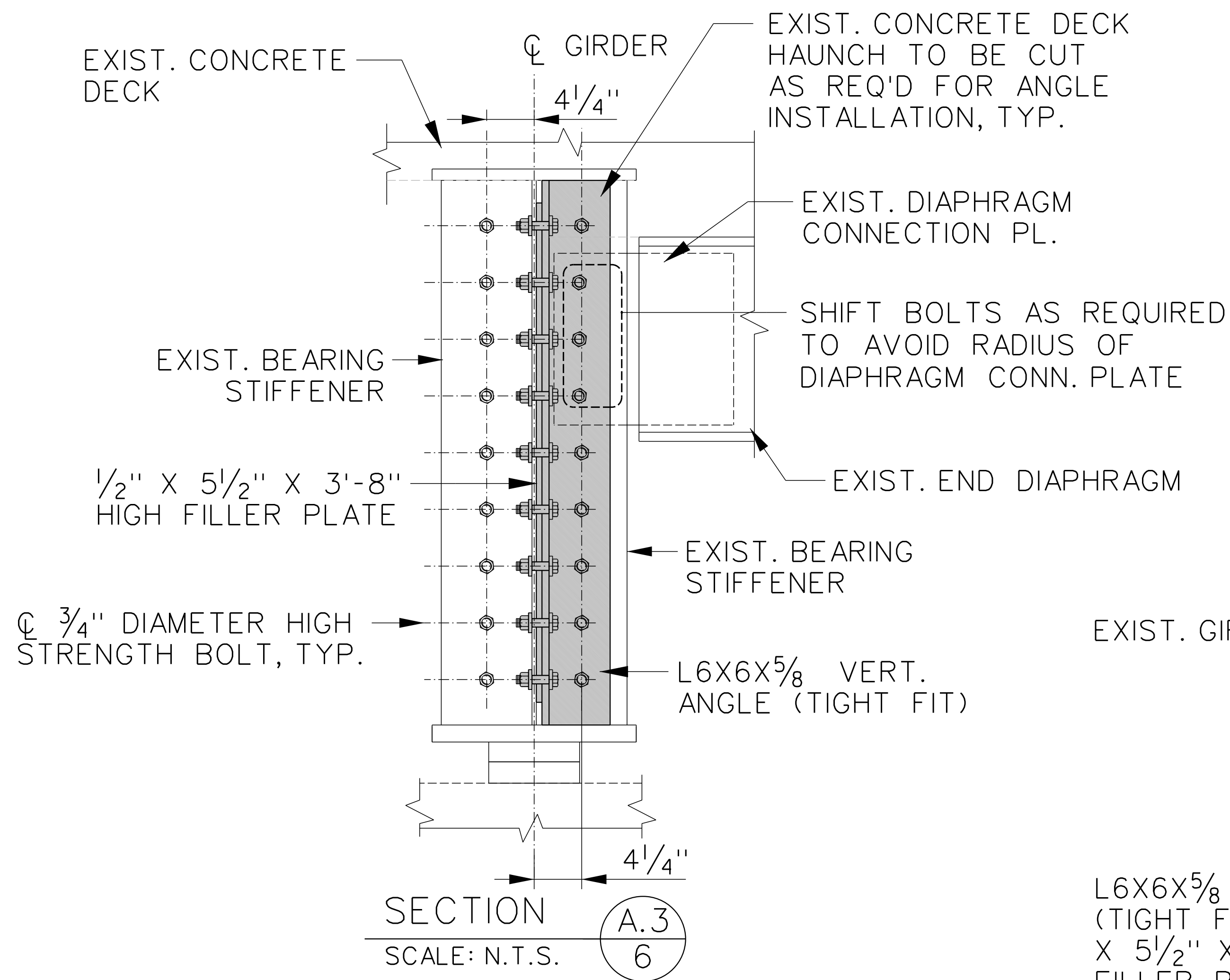
RHODE ISLAND
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HIGH PRIORITY STEEL REPAIRS TO
BRIDGE NO. 053701

I-95 OVER EDDY STREET PROVIDENCE, RI

GIRDER REPAIR DETAIL
TYPE "A"

CHECKED BY: MDD DATE: 08/22/23 SCALE: AS SHOWN



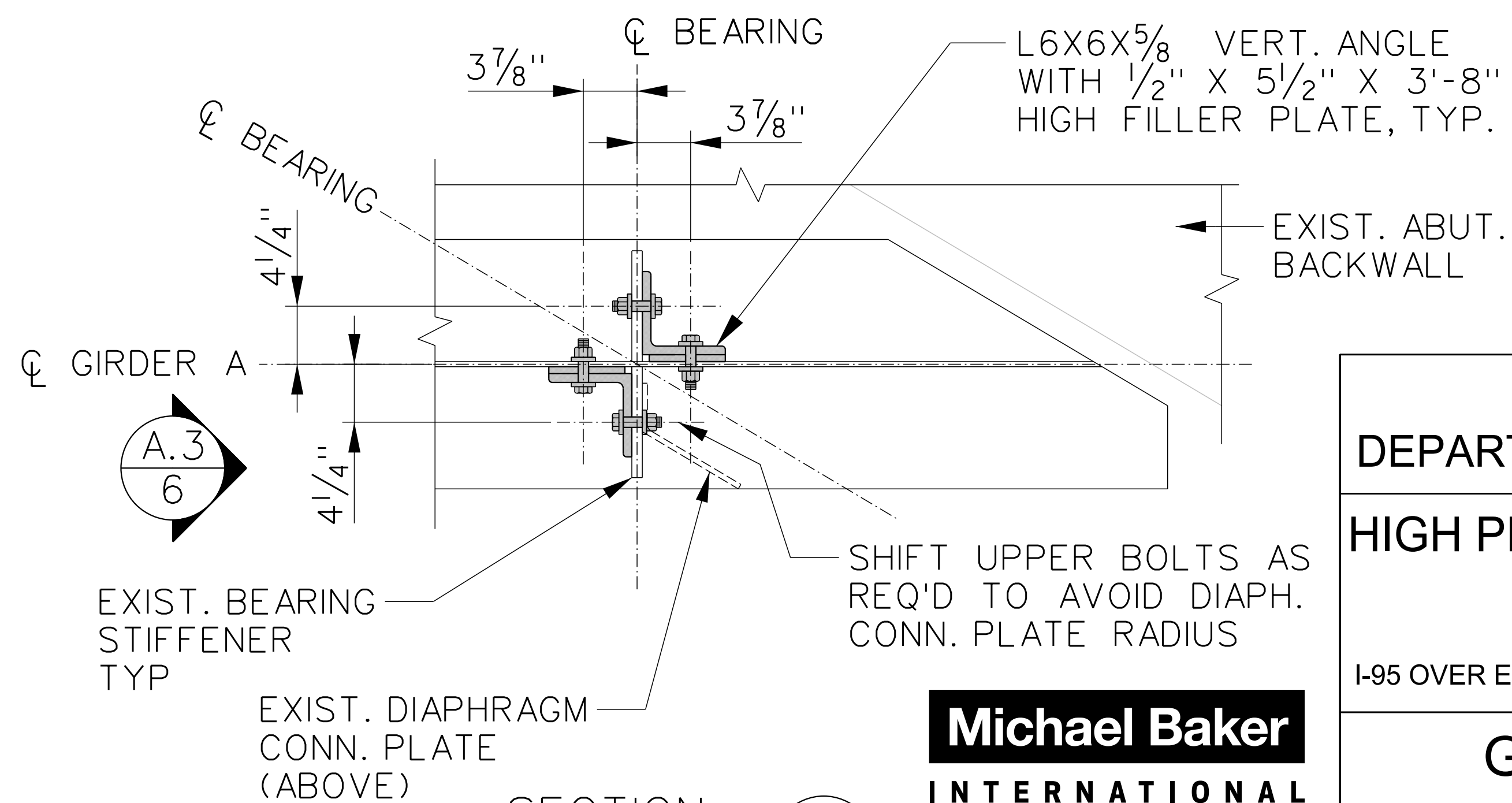
** NOTE, GIRDER A AT NORTH ABUTMENT SHOWN.

LEGEND:

 = NEW REPAIR STEEL AND GIRDER SURFACE PREPARATION/ PAINTING LIMITS

NOTES:

- SEE SHEET 4 FOR GIRDER REPAIR LOCATIONS.
- SEE SHEETS 2-3 FOR GENERAL AND STEEL REPAIR NOTES.



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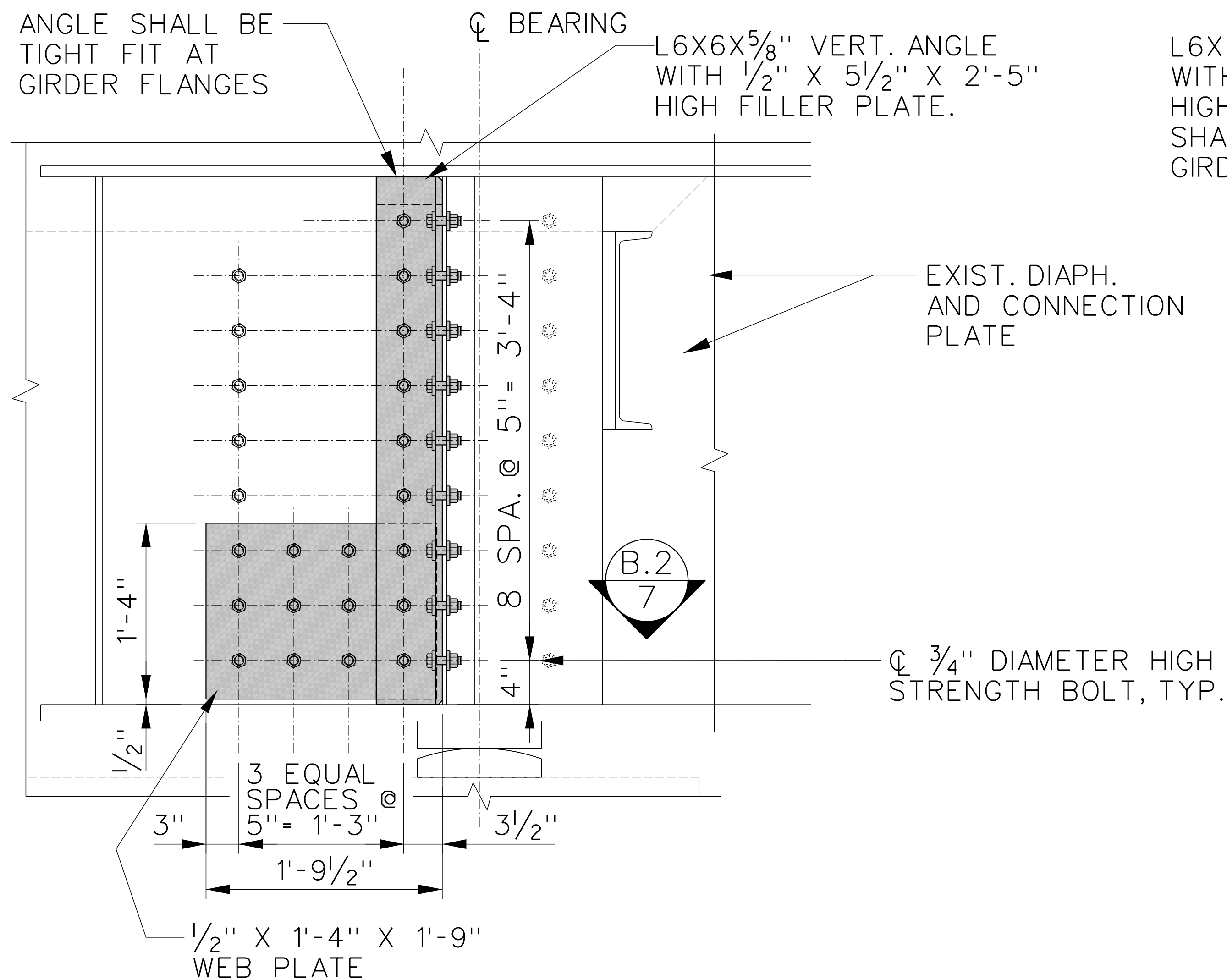
HIGH PRIORITY STEEL REPAIRS TO
BRIDGE NO. 053701

I-95 OVER EDDY STREET

PROVIDENCE, RI

GIRDER "A" REPAIR
DETAIL TYPE "A"

CHECKED BY: MDD DATE: 08/22/23 SCALE: AS SHOWN



WEST ELEVATION**
SCALE: N.T.S.

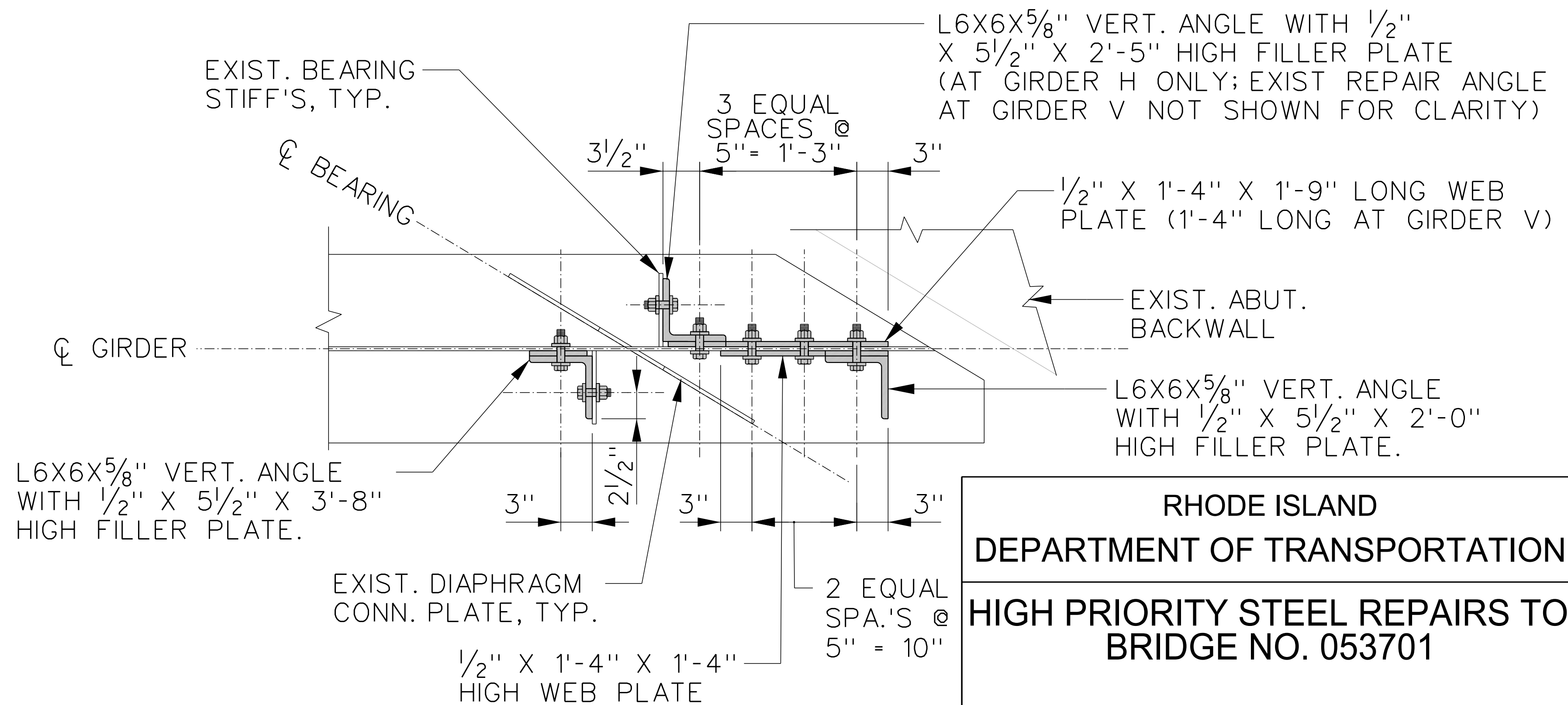
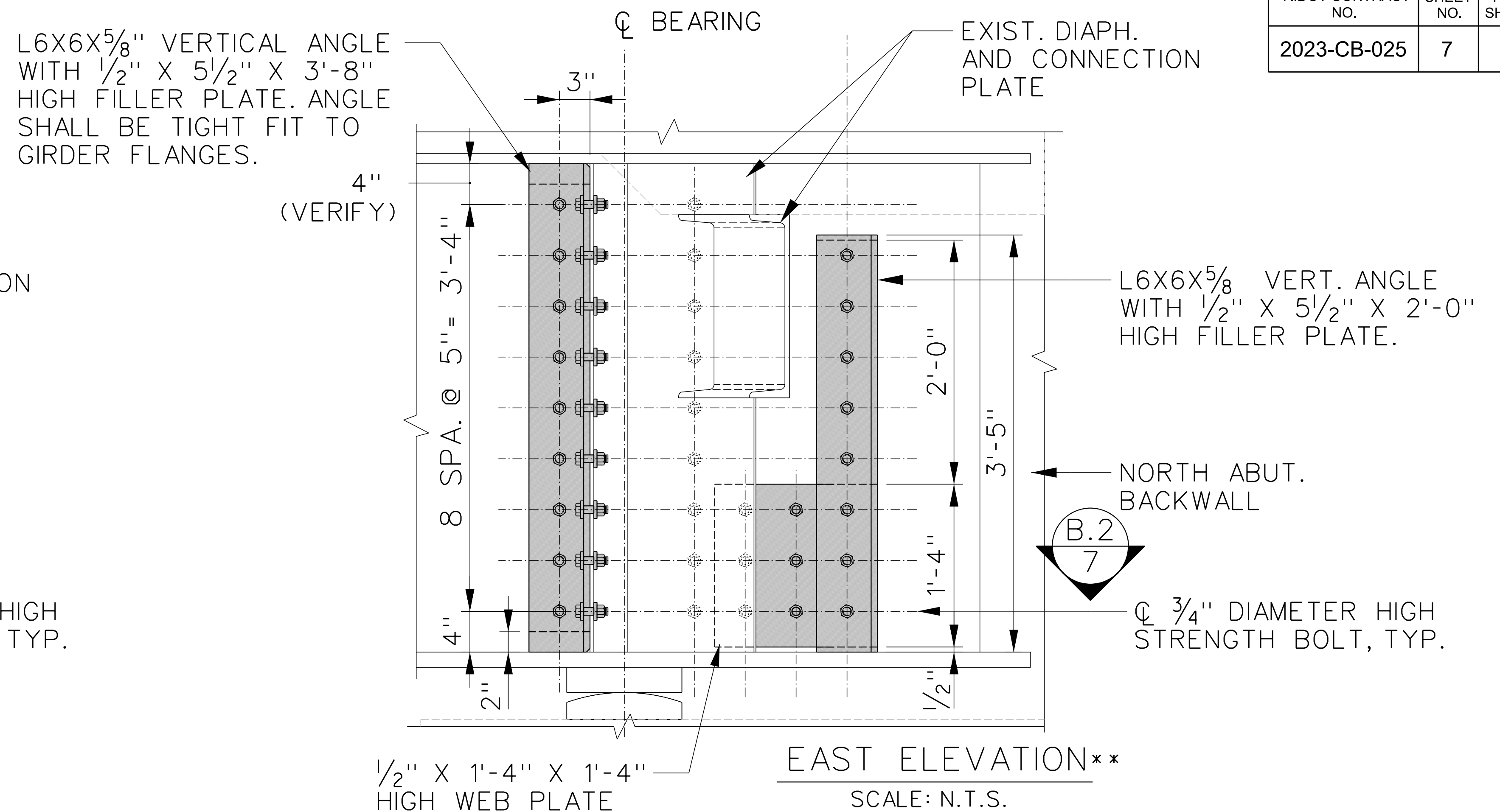
** NOTE, GIRDER H AT NORTH ABUTMENT SHOWN. GIRDER V AT NORTH ABUTMENT SIMILAR. FOR GIRDER B, NORTH ABUTMENT SEE DETAILS ON SHEET 8.

LEGEND:

= NEW REPAIR STEEL AND GIRDER SURFACE PREPARATION/ PAINTING LIMITS

NOTES:

- SEE SHEET 4 FOR GIRDER REPAIR LOCATIONS.
- SEE SHEETS 2-3 FOR GENERAL AND STEEL REPAIR NOTES.



RHODE ISLAND
DEPARTMENT OF TRANSPORTATION
HIGH PRIORITY STEEL REPAIRS TO
BRIDGE NO. 053701

I-95 OVER EDDY STREET

PROVIDENCE, RI

GIRDER REPAIR DETAIL
TYPE "B"

CHECKED BY: MDD DATE: 08/22/23 SCALE: AS SHOWN

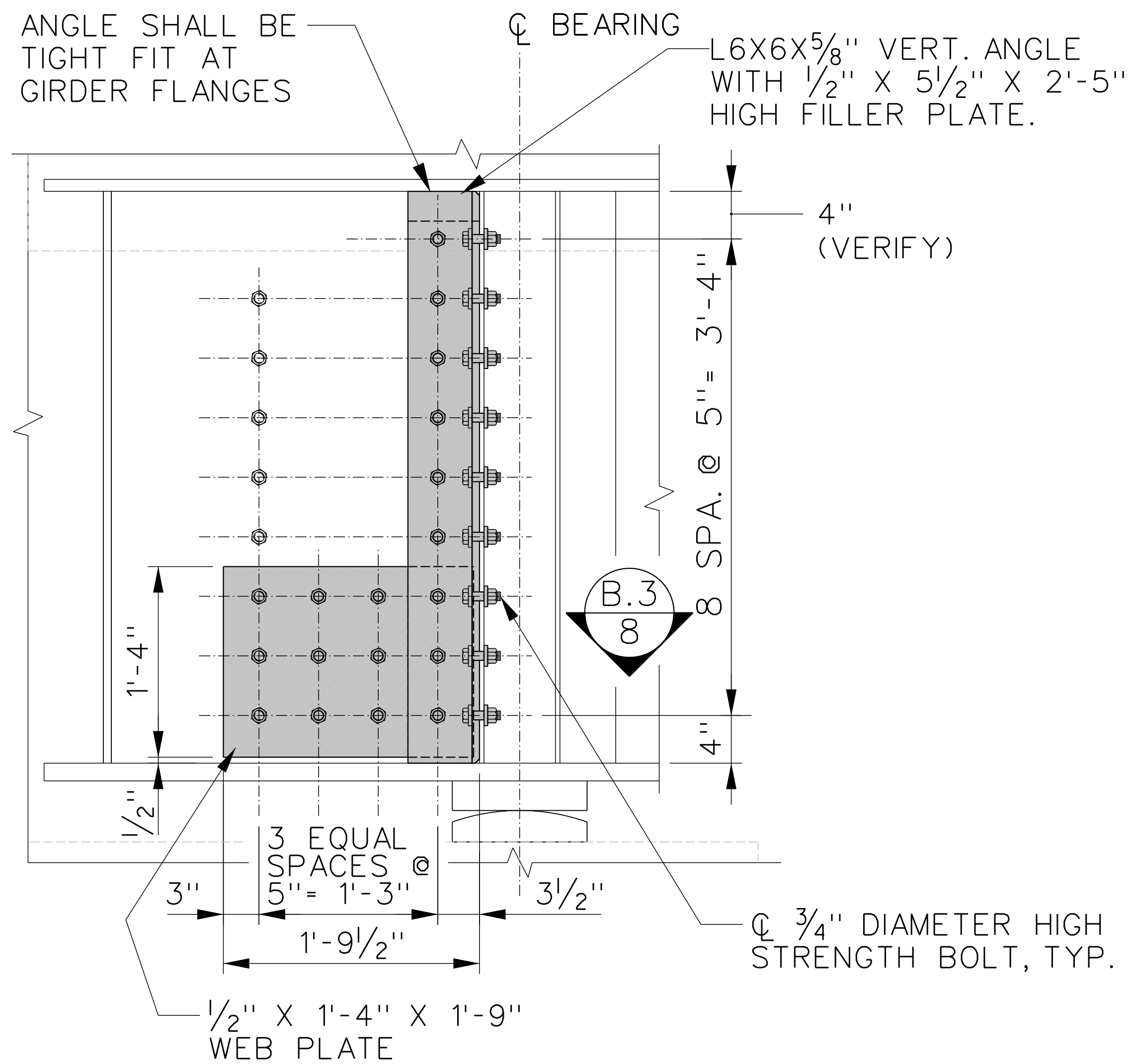
SECTION

SCALE: N.T.S.

B.2
7

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WEST ELEVATION**
SCALE: N.T.S.

** NOTE, GIRDER B AT NORTH ABUTMENT SHOWN.

LEGEND:

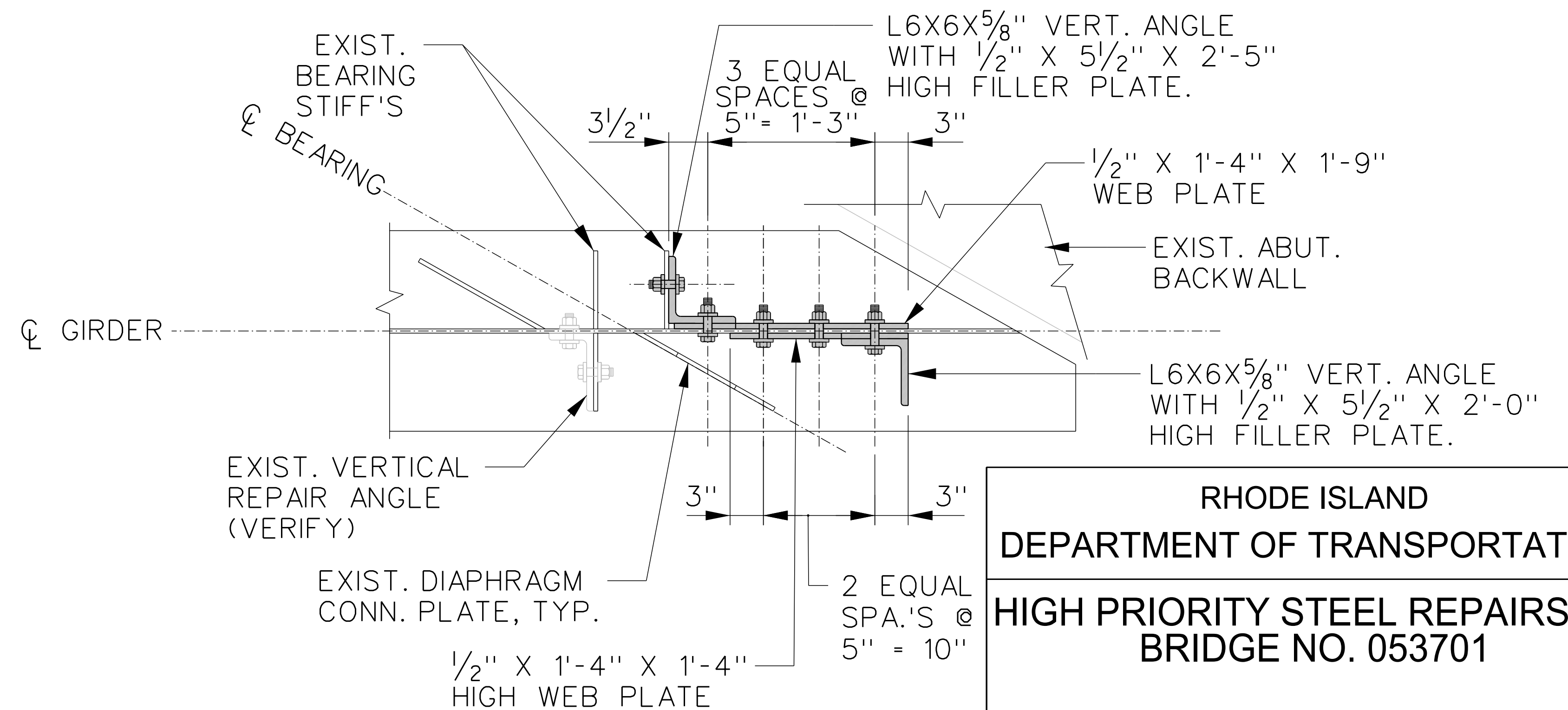
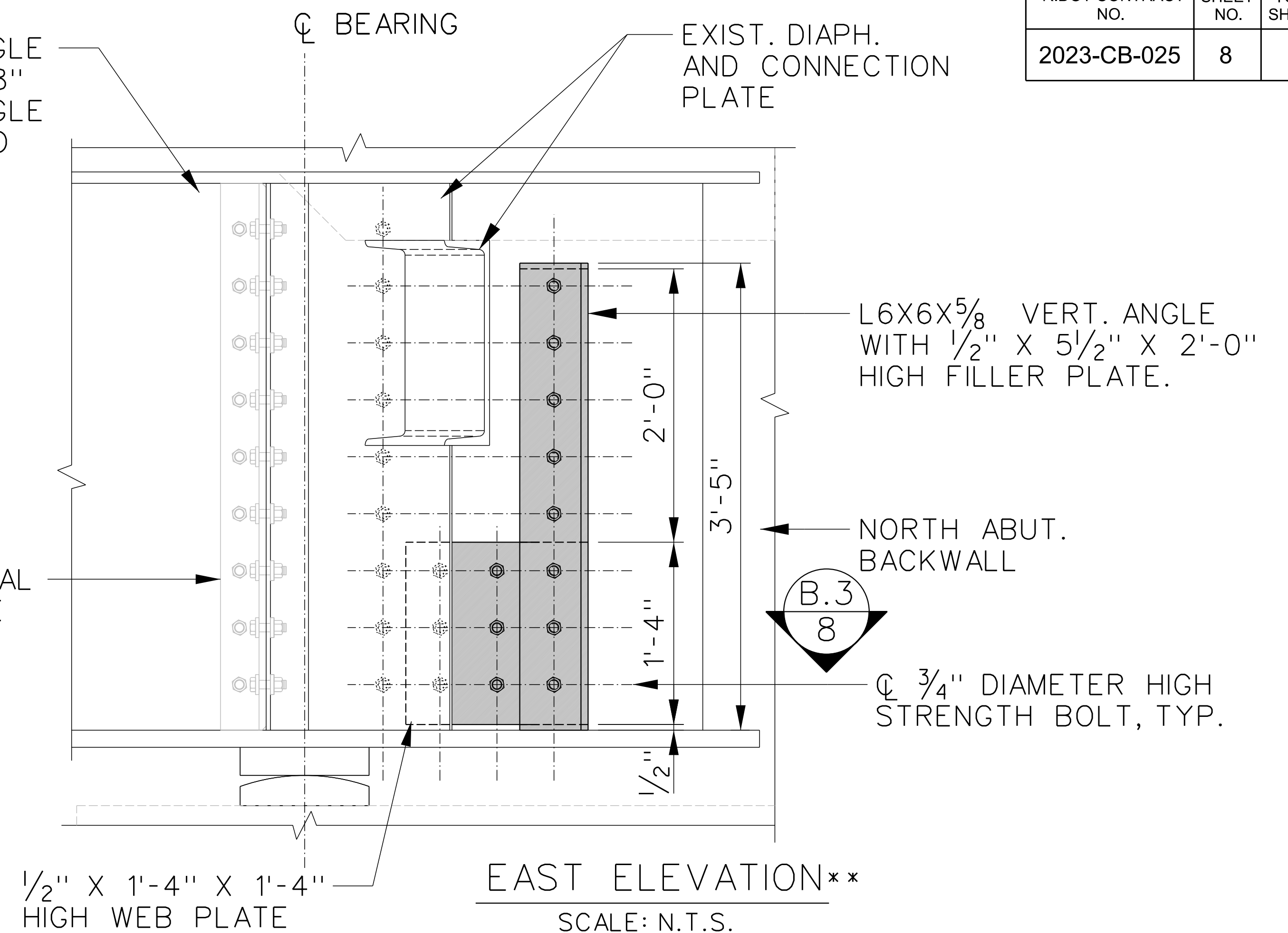
 = NEW REPAIR STEEL AND GIRDER SURFACE PREPARATION/ PAINTING LIMITS

NOTES:

- SEE SHEET 4 FOR GIRDER REPAIR LOCATIONS.
- SEE SHEETS 2-3 FOR GENERAL AND STEEL REPAIR NOTES.

L6X6X $\frac{5}{8}$ " VERTICAL ANGLE WITH $\frac{1}{2}$ " X $5\frac{1}{2}$ " X 3'-8" HIGH FILLER PLATE. ANGLE SHALL BE TIGHT FIT TO GIRDER FLANGES.

EXIST. VERTICAL REPAIR ANGLE (VERIFY)



RHODE ISLAND
DEPARTMENT OF TRANSPORTATION
HIGH PRIORITY STEEL REPAIRS TO
BRIDGE NO. 053701

I-95 OVER EDDY STREET

PROVIDENCE, RI

GIRDER "B" REPAIR
DETAIL TYPE "B"

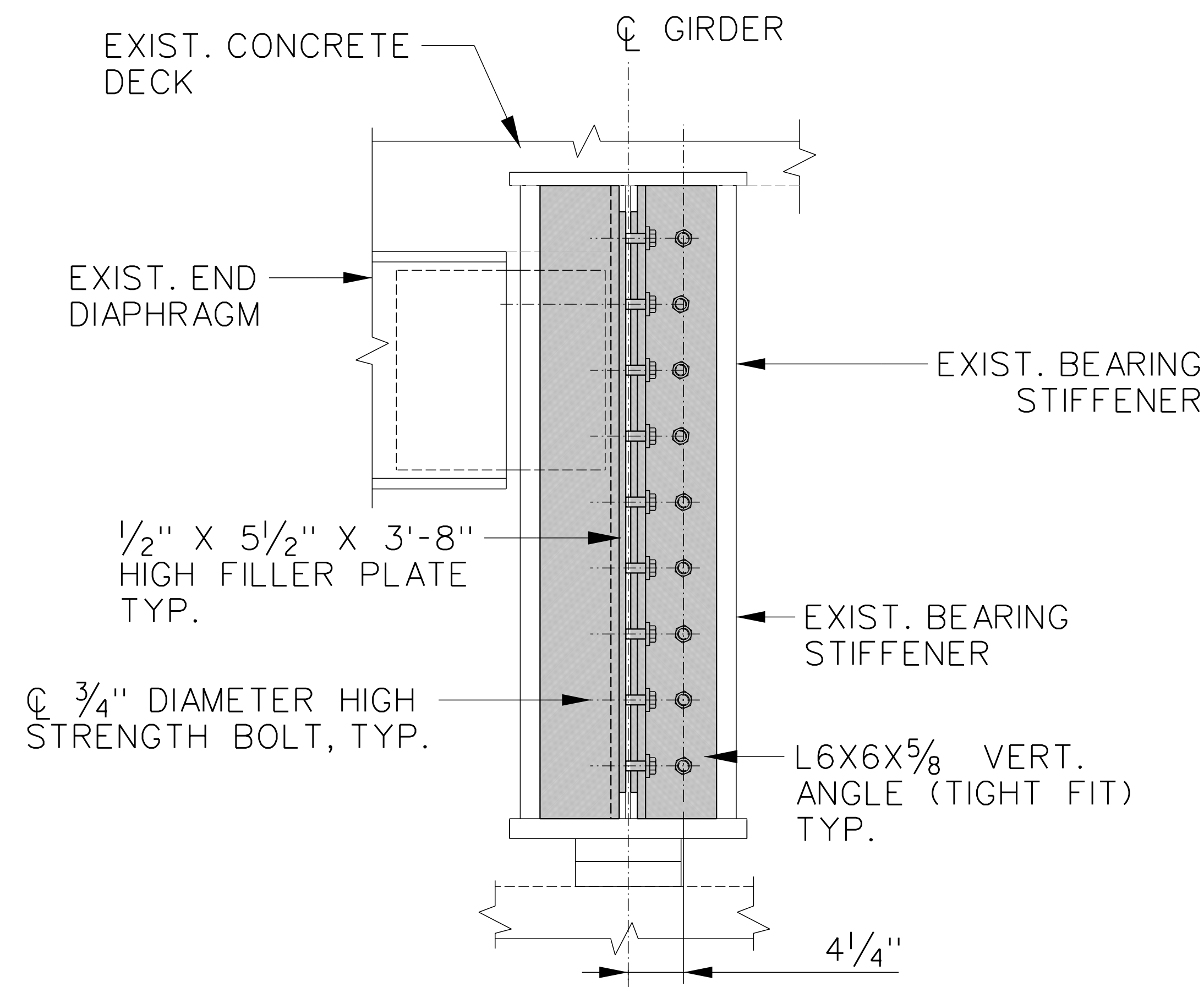
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SECTION
SCALE: N.T.S.

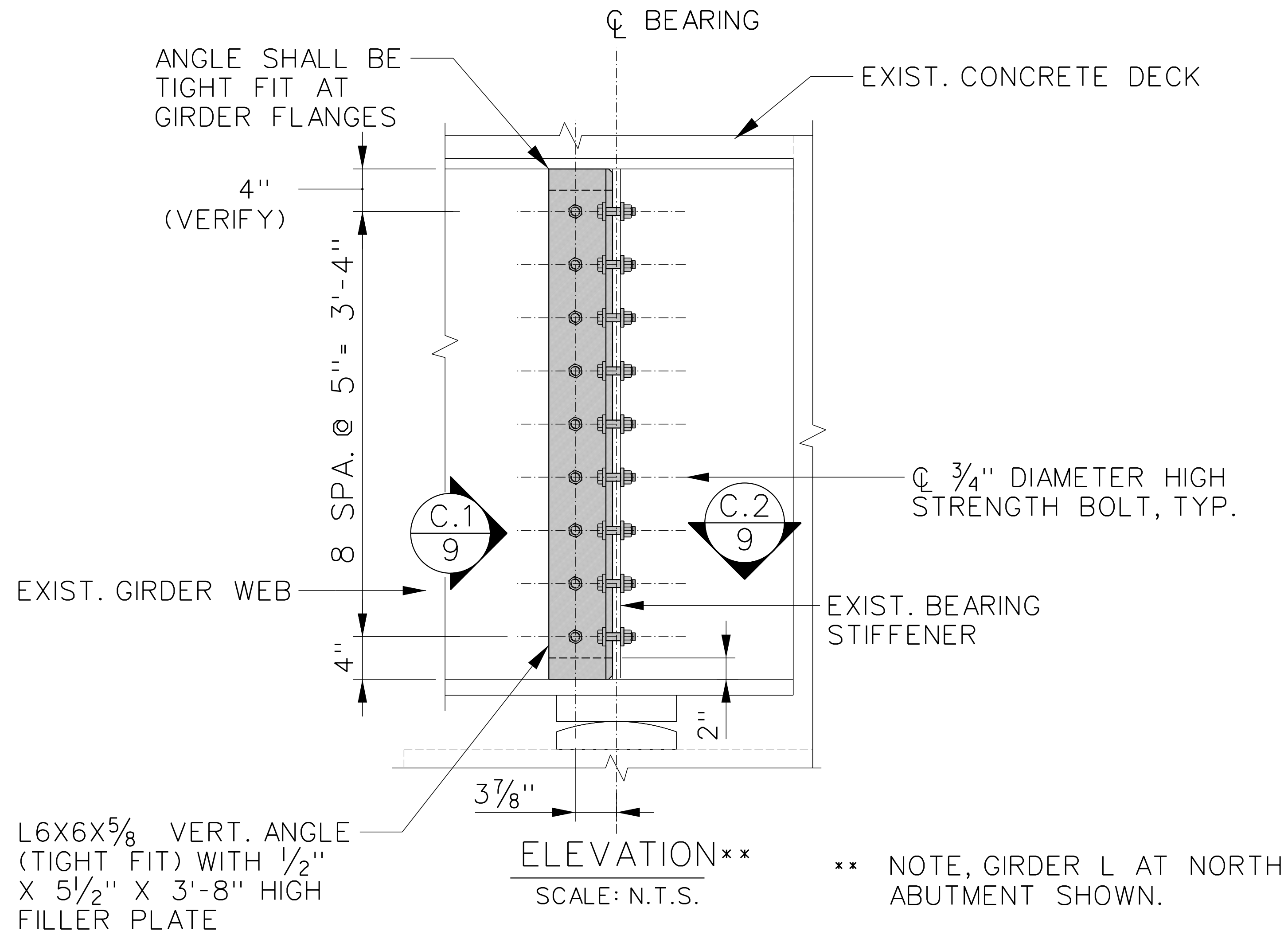
B.3
8

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SECTION C.1/9
SCALE: N.T.S.



** NOTE, GIRDER L AT NORTH ABUTMENT SHOWN.

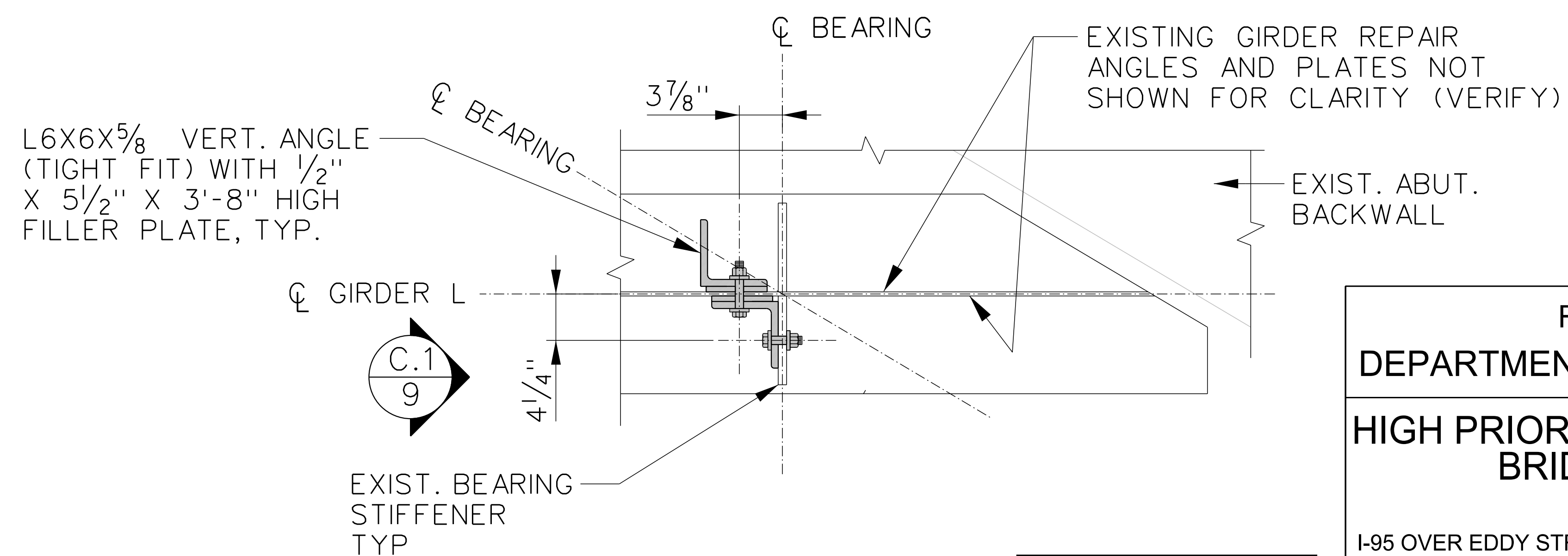
ELEVATION** C.2/9
SCALE: N.T.S.

LEGEND:

 = NEW REPAIR STEEL AND GIRDER SURFACE PREPARATION/ PAINTING LIMITS

NOTES:

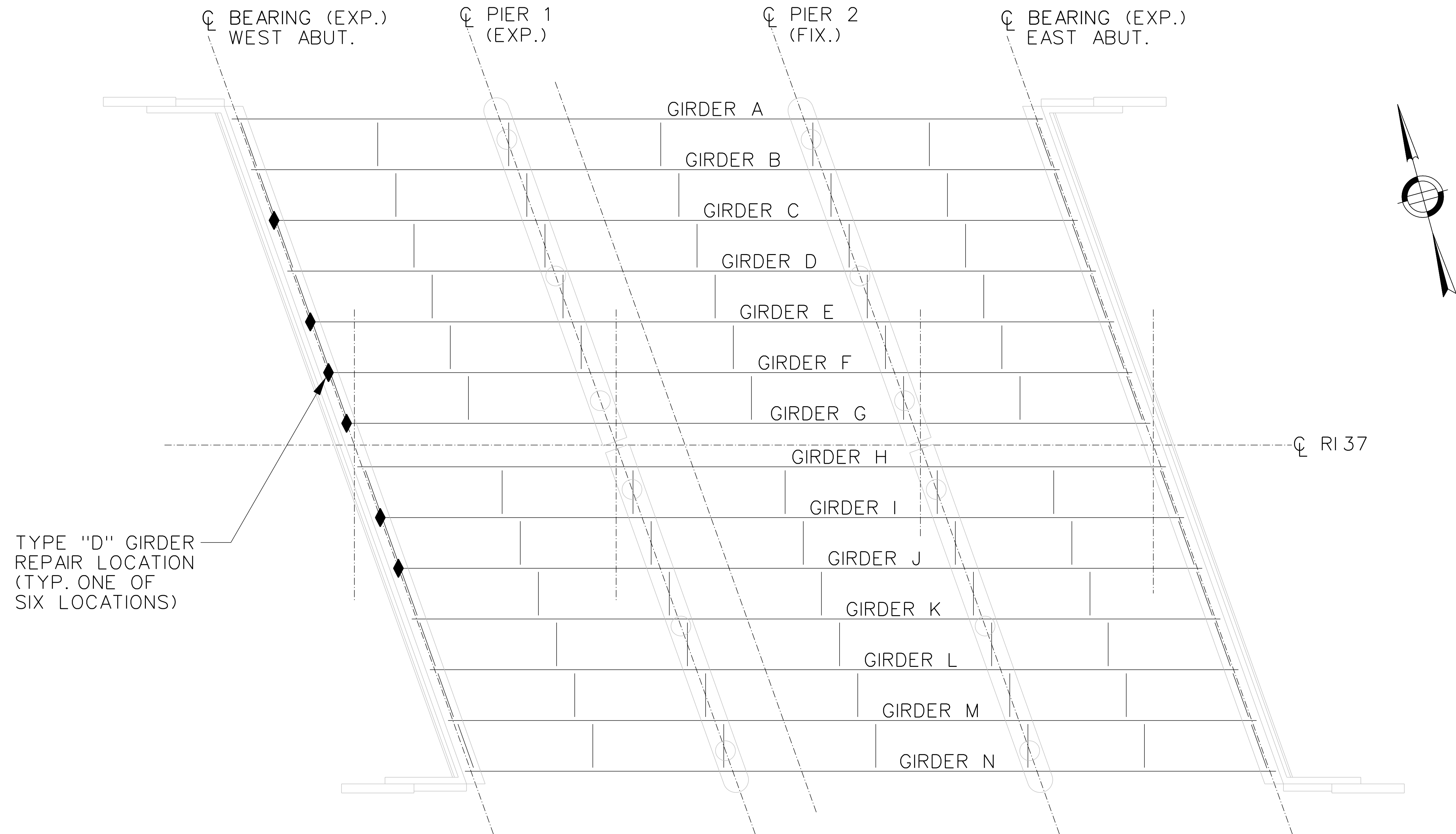
- SEE SHEET 4 FOR GIRDER REPAIR LOCATIONS.
- SEE SHEETS 2-3 FOR GENERAL AND STEEL REPAIR NOTES.



SECTION C.2/9
SCALE: N.T.S.

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RHODE ISLAND DEPARTMENT OF TRANSPORTATION	
HIGH PRIORITY STEEL REPAIRS TO BRIDGE NO. 053701	
I-95 OVER EDDY STREET	PROVIDENCE, RI
GIRDER REPAIR DETAIL TYPE "C"	
CHECKED BY: <u>MDD</u>	DATE: <u>08/22/23</u> SCALE: <u>AS SHOWN</u>



BRIDGE 062501 - GIRDER REPAIR LOCATION PLAN

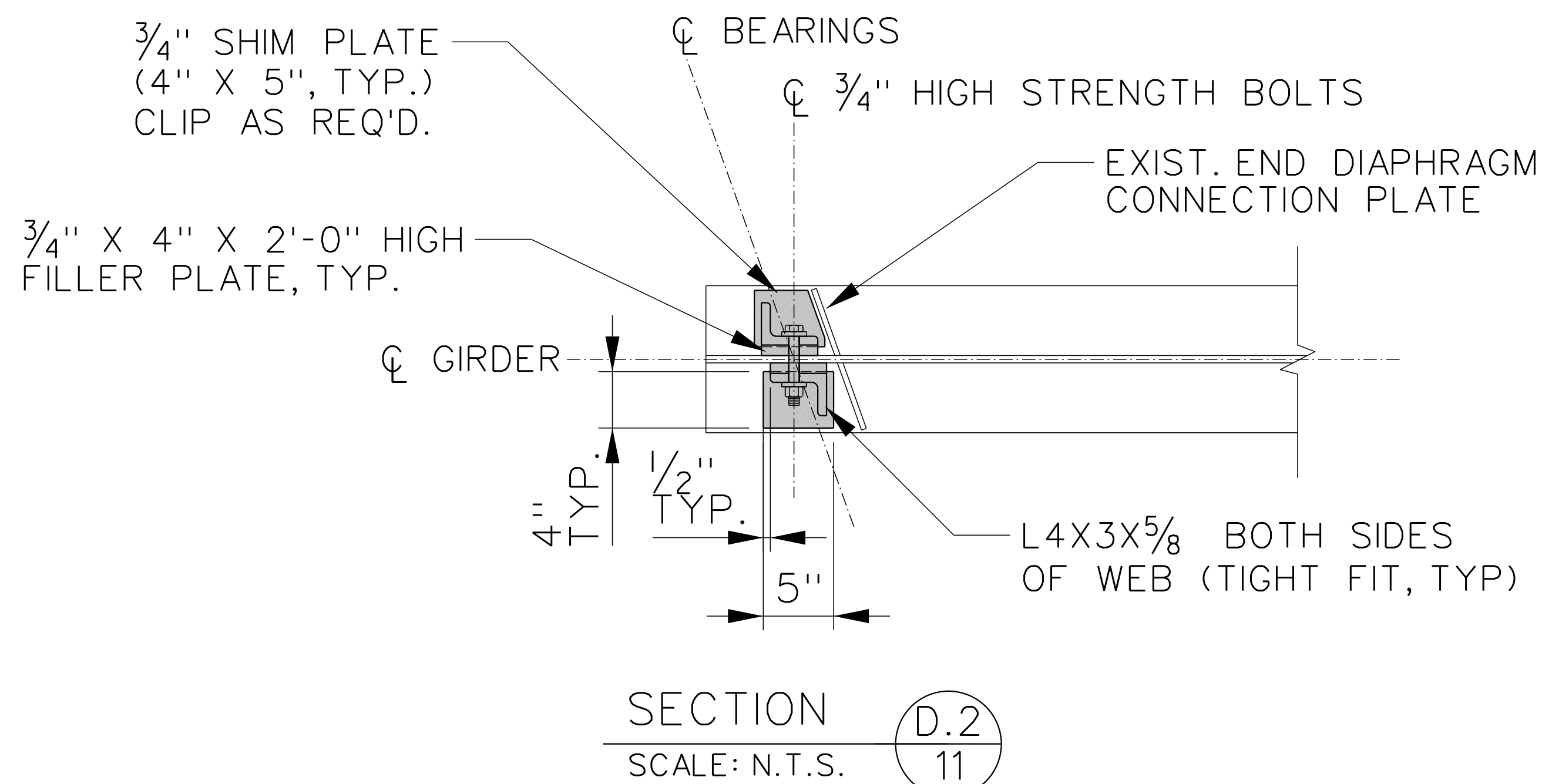
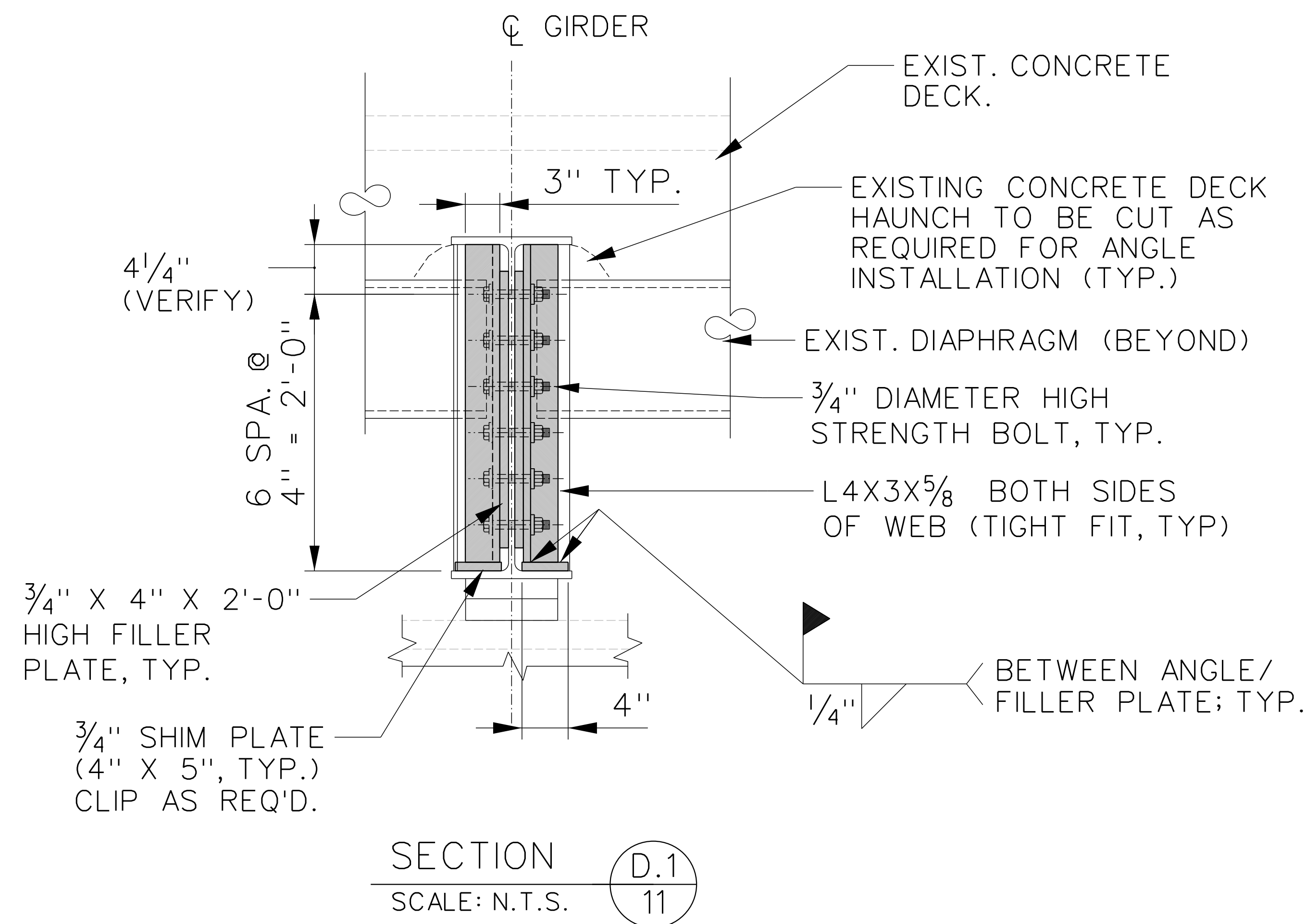
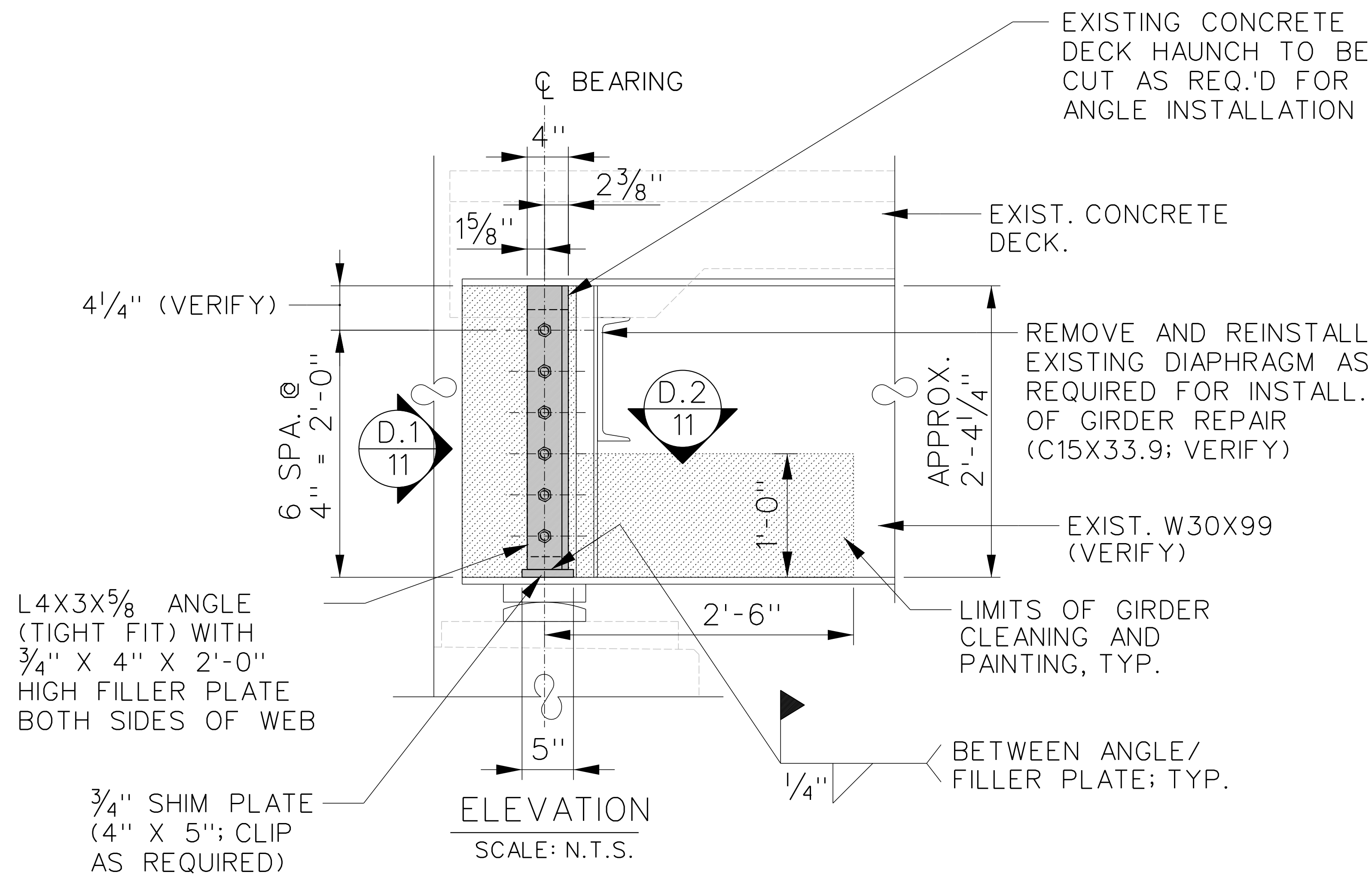
SCALE : N.T.S.

LEGEND:
◆ = TYPE "D" GIRDER REPAIR DETAIL

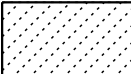
NOTES:
1. SEE SHEETS 2-3 FOR GENERAL AND STEEL REPAIR NOTES.
2. SEE SHEET 11 FOR GIRDER REPAIR DETAILS.
3. UTILITY LOCATIONS SHOWN ARE BASED ON ORIGINAL CONSTRUCTION DRAWINGS AND SHALL BE CONFIRMED IN FIELD. PROPER PRECAUTIONS SHALL BE TAKEN WHEN WORKING ADJACENT TO ALL UTILITES.

Michael Baker
INTERNATIONAL
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Providence, RI 02903
Phone: (401) 824-3600 · MBAKERINTL.COM

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
HIGH PRIORITY STEEL REPAIRS TO BRIDGE NO. 062501
RI 37 OVER HOWARD AVE. SERVICE ROAD CRANSTON, RI
GIRDER REPAIR LOCATION PLAN - BR. 062501
CHECKED BY: <u>MDD</u> DATE: <u>08/22/23</u> SCALE: <u>AS SHOWN</u>



LEGEND:

-  = NEW REPAIR STEEL
-  = LIMITS OF GIRDER WEB CLEANING, SURFACE PREP, AND PAINTING

NOTES:

1. SEE SHEETS 2-3 FOR GENERAL AND STEEL REPAIR NOTES.

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

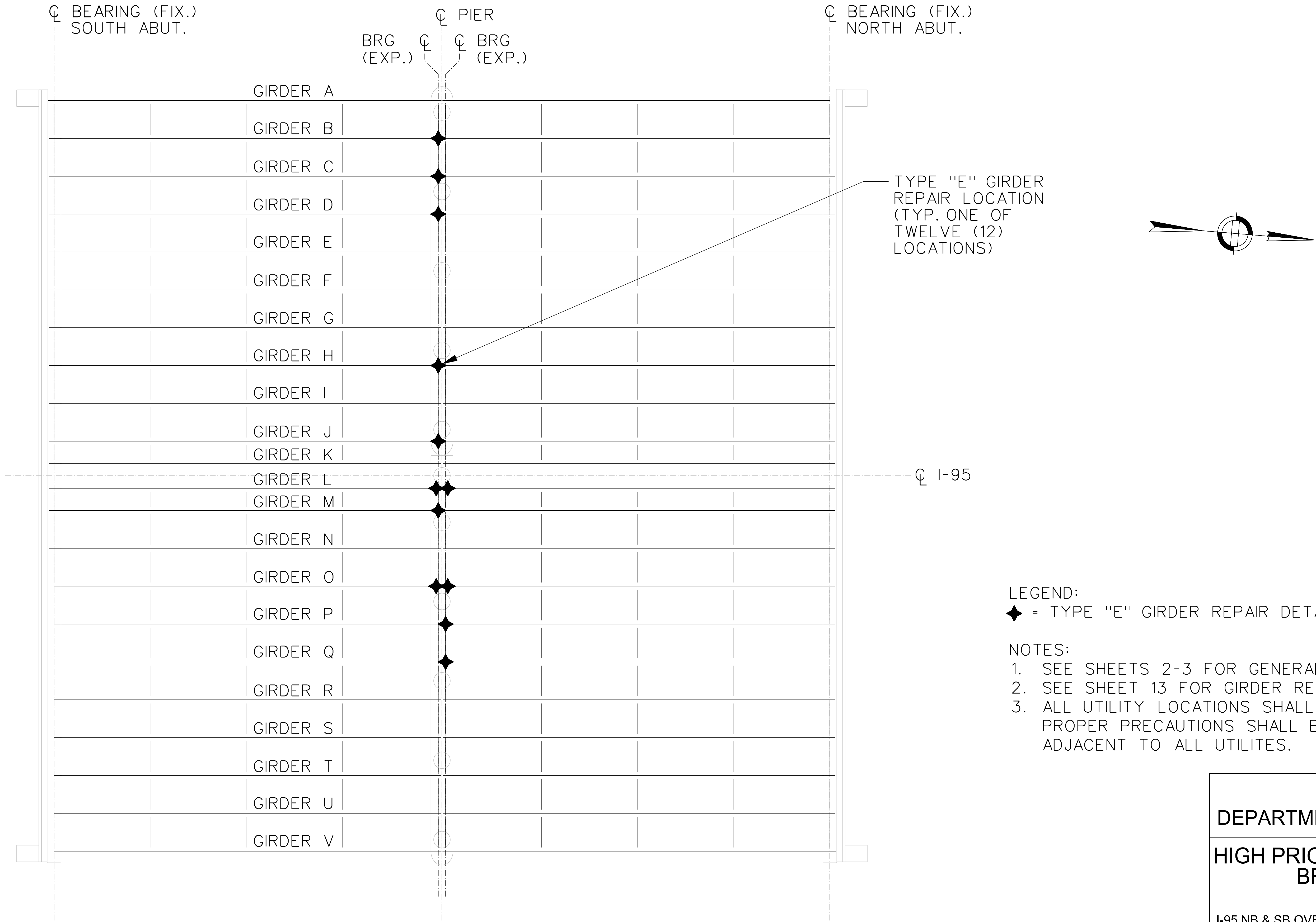
HIGH PRIORITY STEEL REPAIRS TO
BRIDGE NO. 062501

RI 37 OVER HOWARD AVE. SERVICE ROAD CRANSTON, RI

GIRDER REPAIR
DETAIL "TYPE D"

CHECKED BY: MDD DATE: 08/22/23 SCALE: AS SHOWN

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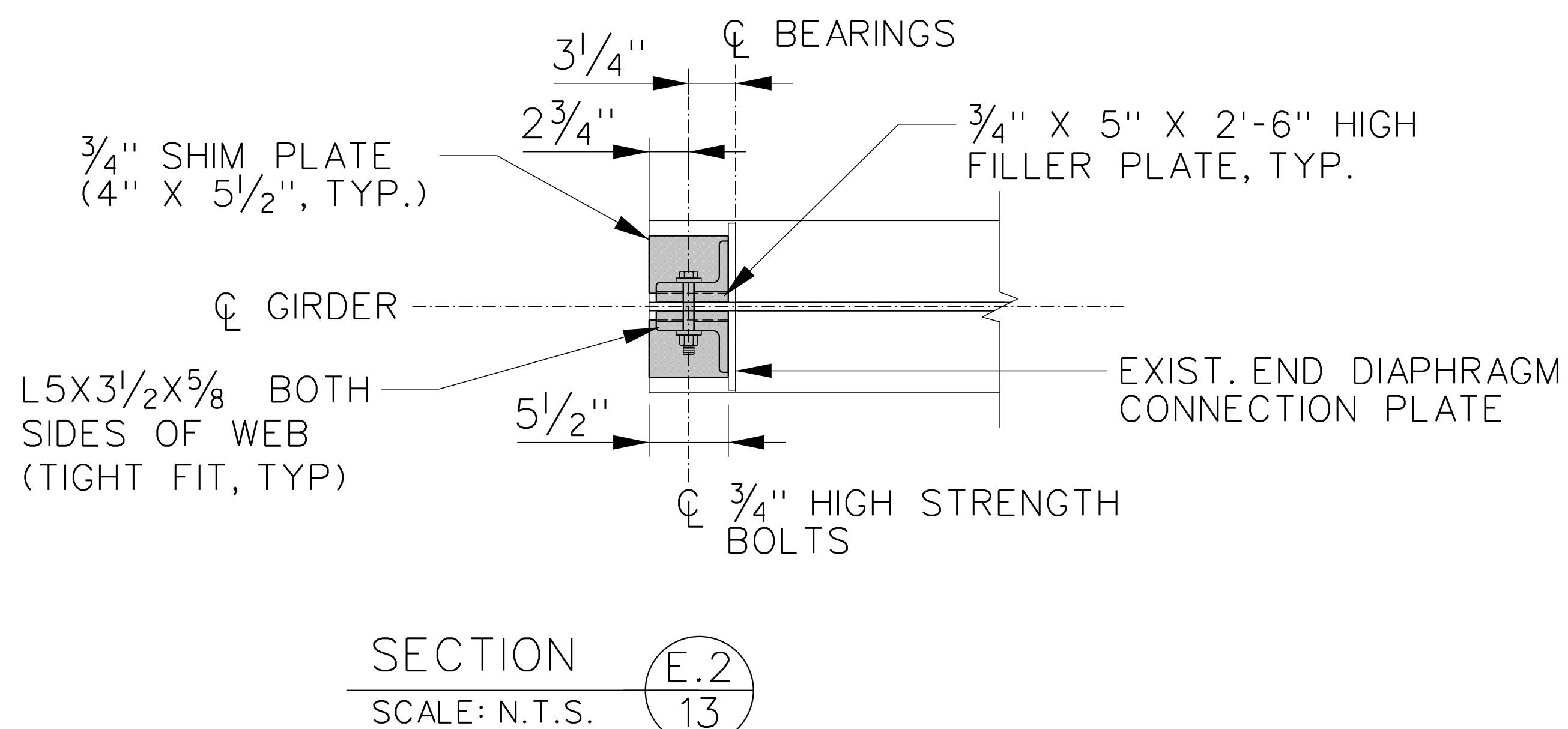
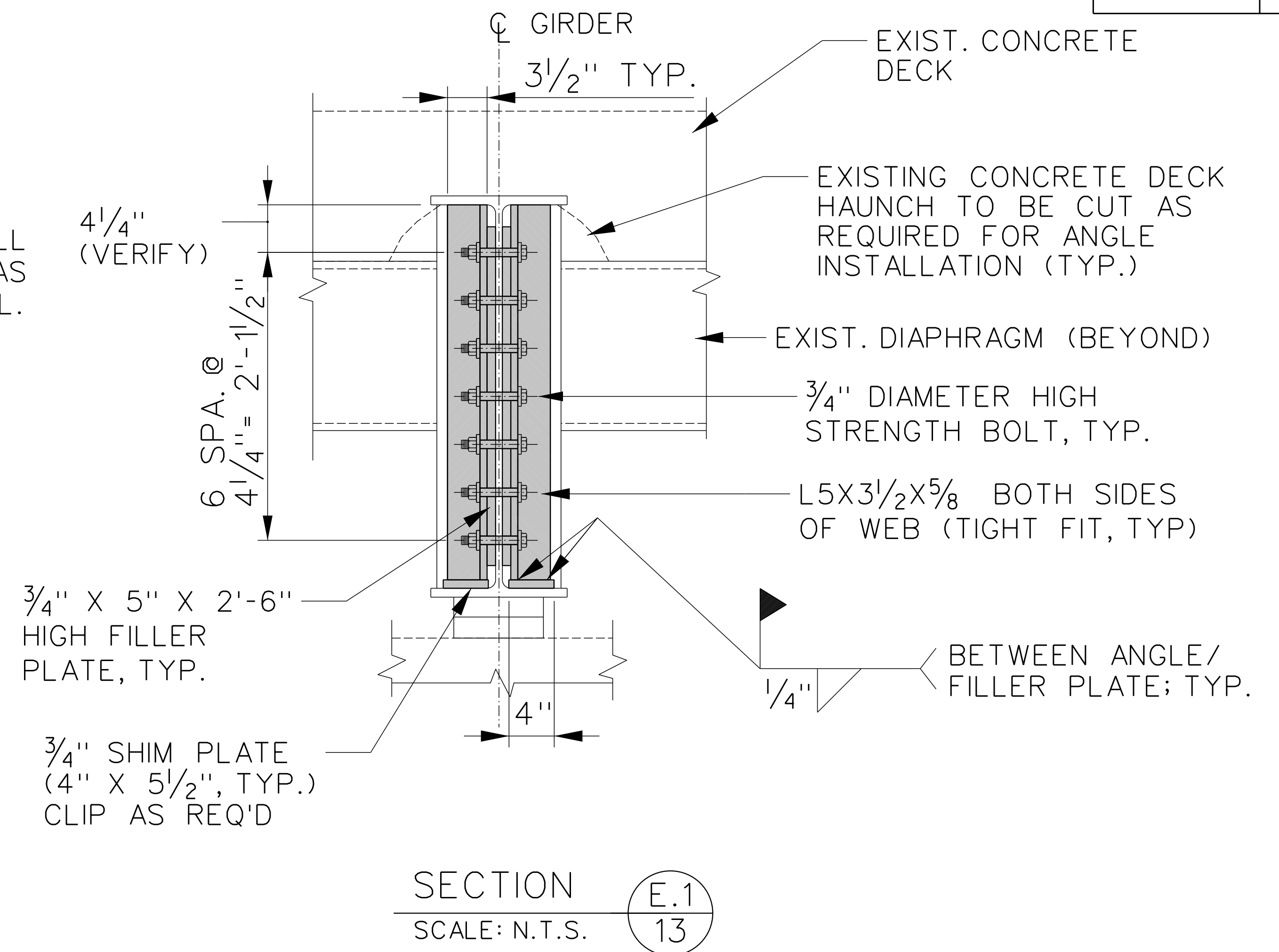
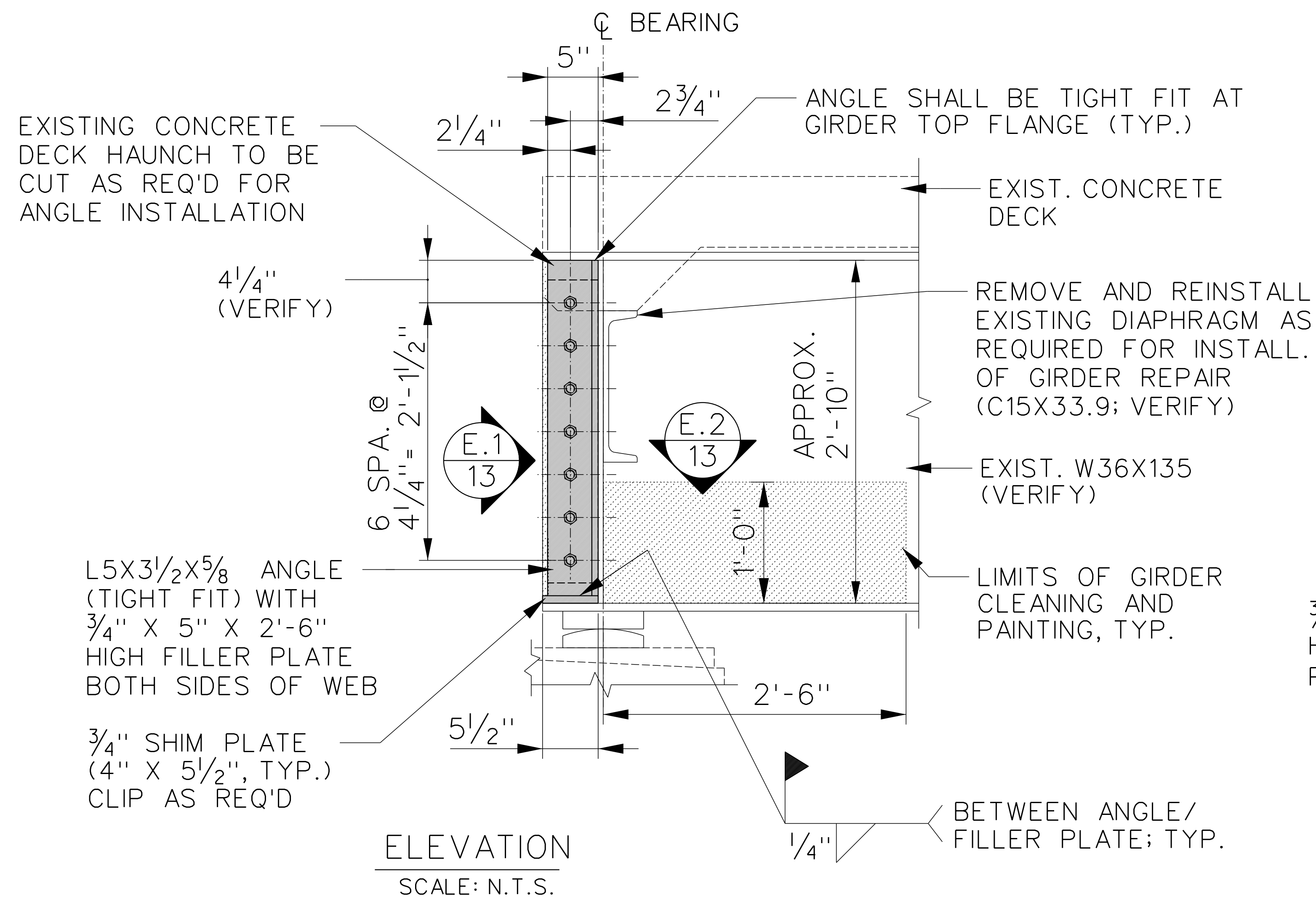
LEGEND:
◆ = TYPE "E" GIRDER REPAIR DETAIL

- NOTES:
- 1. SEE SHEETS 2-3 FOR GENERAL AND STEEL REPAIR NOTES.
 - 2. SEE SHEET 13 FOR GIRDER REPAIR DETAILS.
 - 3. ALL UTILITY LOCATIONS SHALL BE CONFIRMED IN FIELD. PROPER PRECAUTIONS SHALL BE TAKEN WHEN WORKING ADJACENT TO ALL UTILITES.

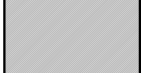
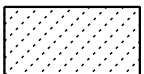
BRIDGE 065501 - GIRDER REPAIR LOCATION PLAN
SCALE : N.T.S.

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RHODE ISLAND DEPARTMENT OF TRANSPORTATION	
HIGH PRIORITY STEEL REPAIRS TO BRIDGE NO. 065501	
I-95 NB & SB OVER THURBERS AVE.	PROVIDENCE, RI
GIRDER REPAIR LOCATION PLAN - BR. 065501	
CHECKED BY: <u>MDD</u>	DATE: <u>08/22/23</u> SCALE: <u>AS SHOWN</u>



LEGEND:

-  = NEW REPAIR STEEL
-  = LIMITS OF GIRDER WEB CLEANING, SURFACE PREP, AND PAINTING

NOTES:

1. SEE SHEETS 2-3 FOR GENERAL AND STEEL REPAIR NOTES.

RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

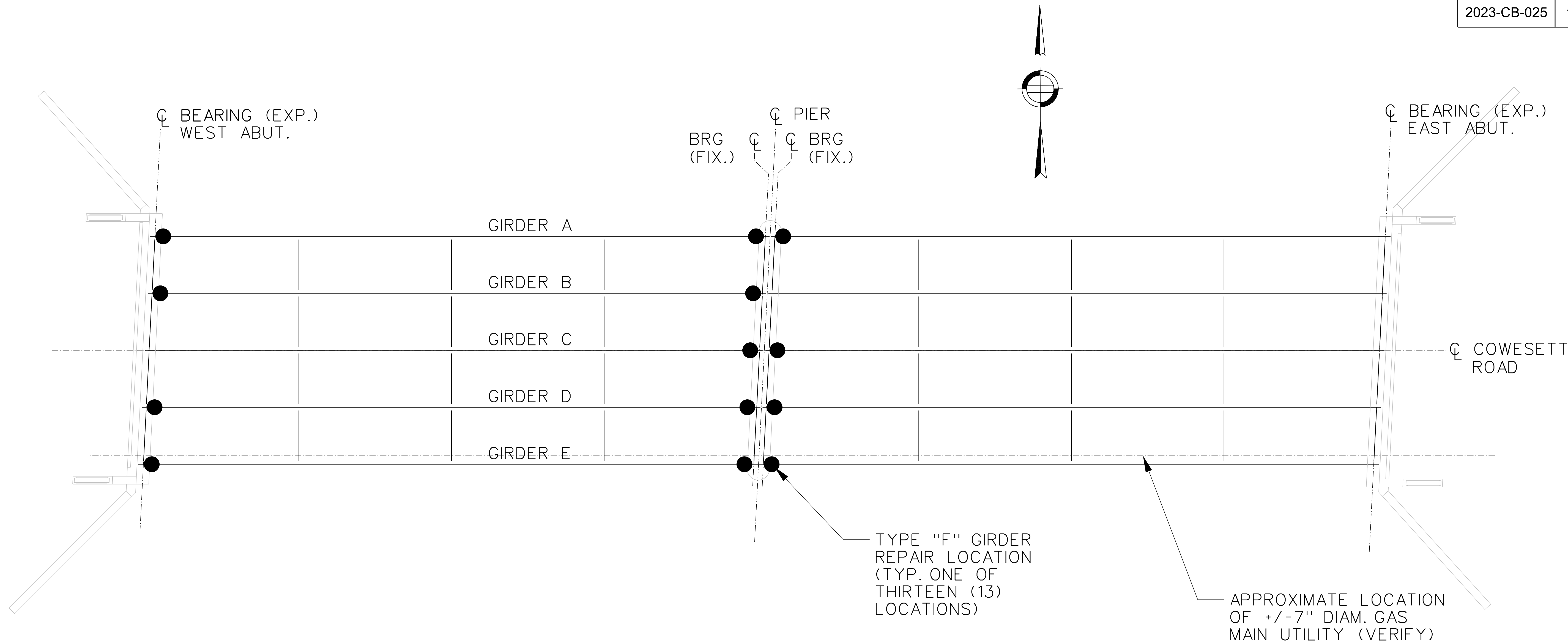
HIGH PRIORITY STEEL REPAIRS TO
BRIDGE NO. 065501

I-95 NB & SB OVER THURBERS AVE. PROVIDENCE, RI

GIRDER REPAIR DETAIL
TYPE "E"

CHECKED BY: MDD DATE: 08/22/23 SCALE: AS SHOWN

Michael Baker
INTERNATIONAL
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Providence, RI 02903
Phone: (401) 824-3600 · MBAKERINTL.COM



BRIDGE 068501 - GIRDER REPAIR LOCATION PLAN
SCALE : N.T.S.

LEGEND:

● = TYPE "F" GIRDER REPAIR DETAIL

NOTES:

1. SEE SHEETS 2-3 FOR GENERAL AND STEEL REPAIR NOTES.
2. SEE SHEET 15 FOR GIRDER REPAIR DETAILS.
3. ALL UTILITY LOCATIONS SHALL BE CONFIRMED IN FIELD. PROPER PRECAUTIONS SHALL BE TAKEN WHEN WORKING ADJACENT TO ALL UTILITES.

Michael Baker

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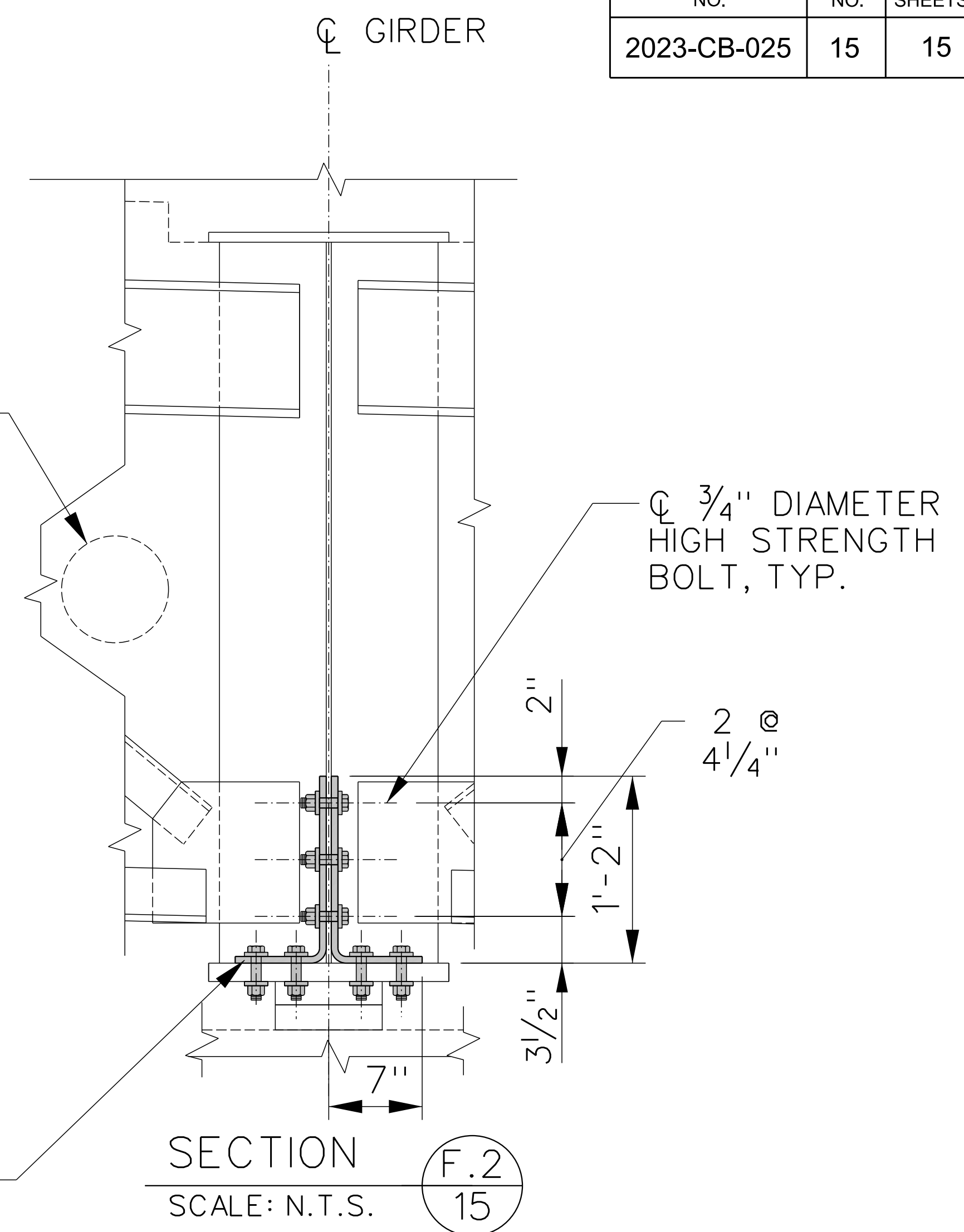
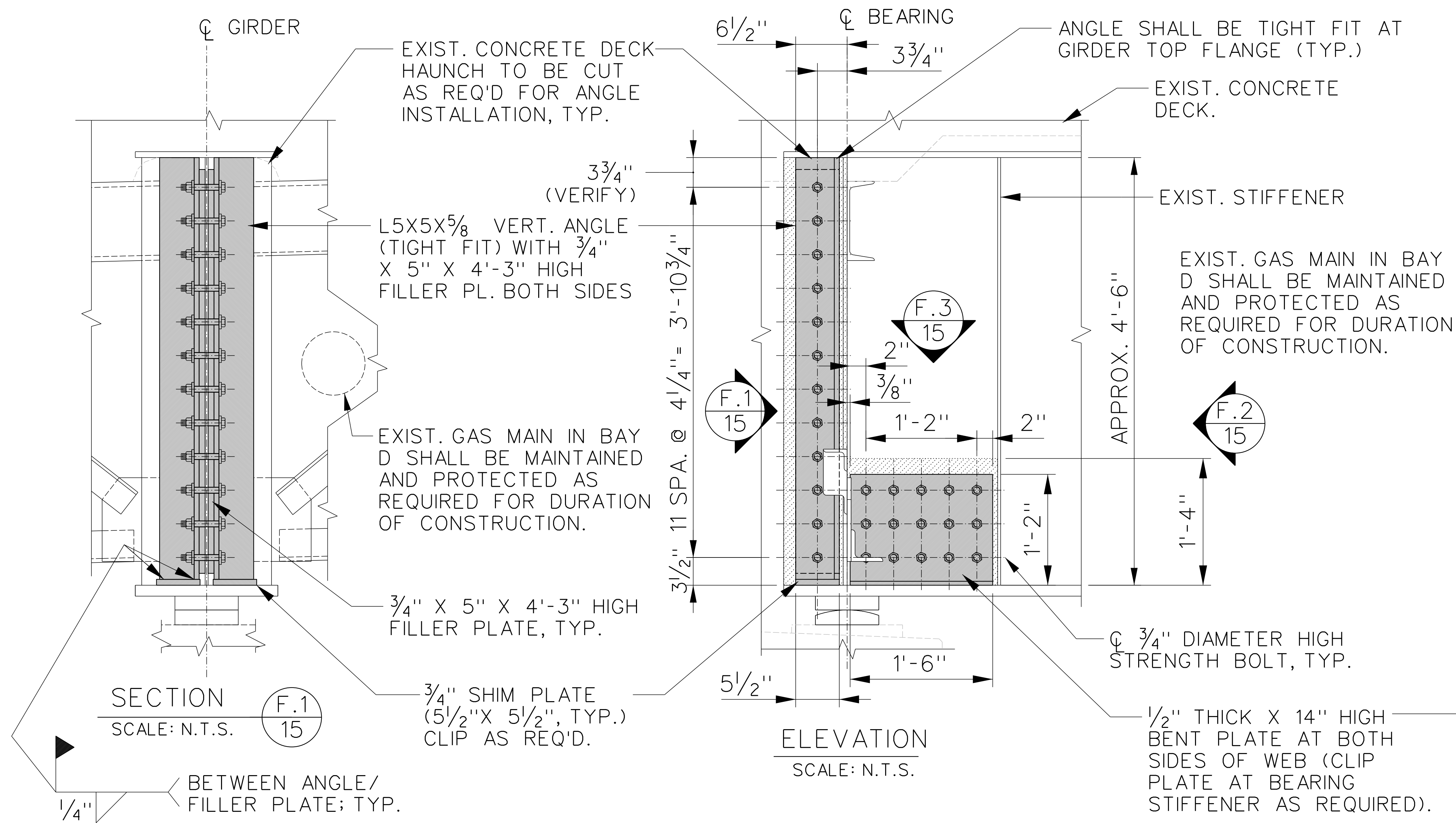
RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

HIGH PRIORITY STEEL REPAIRS TO
BRIDGE NO. 068501

COWESETT ROAD OVER I-95 WARWICK, RI

GIRDER REPAIR LOCATION
PLAN - BR. 068501

CHECKED BY: MDD DATE: 08/22/23 SCALE: AS SHOWN

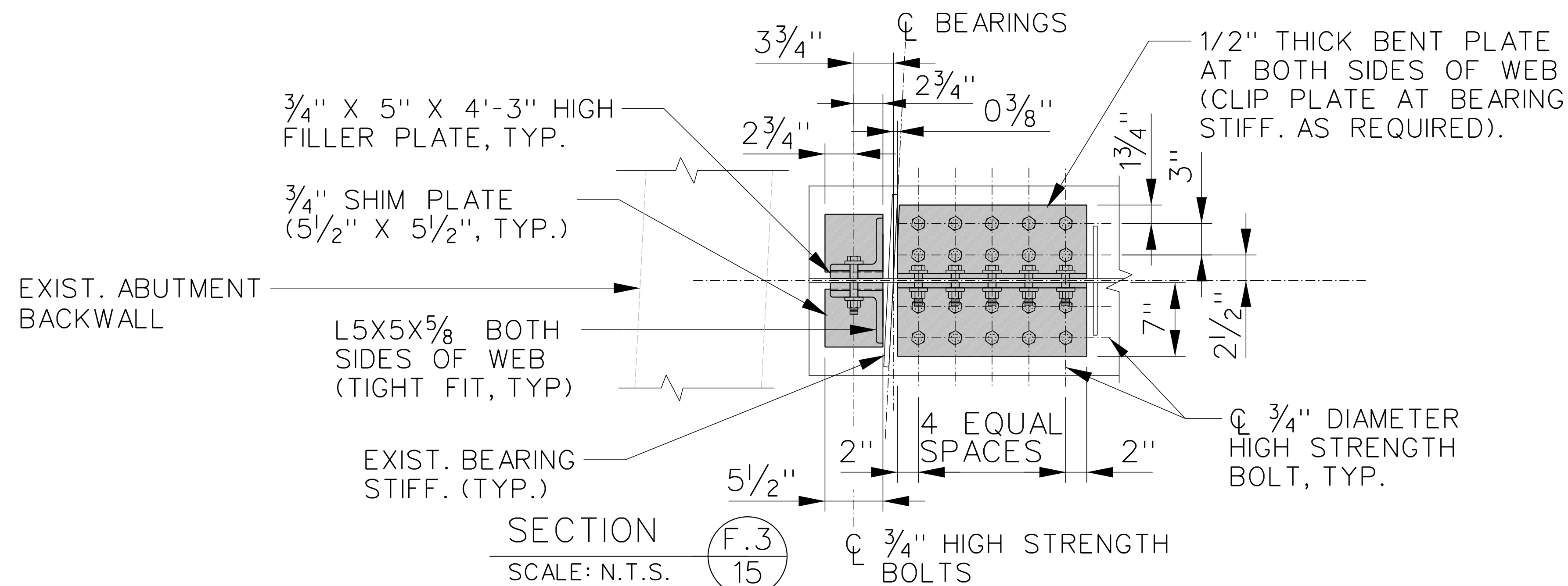


LEGEND:

- = NEW REPAIR STEEL
- = LIMITS OF GIRDER WEB CLEANING, SURFACE PREP, AND PAINTING

NOTES:

- SEE SHEET 14 FOR GIRDER REPAIR LOCATIONS.
- SEE SHEETS 2-3 FOR GENERAL AND STEEL REPAIR NOTES.



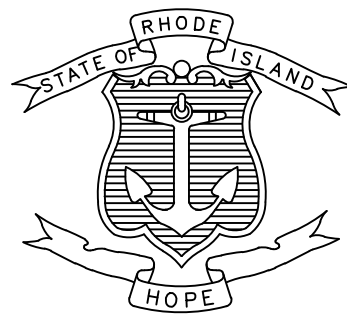
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Providence, RI 02903
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RHODE ISLAND DEPARTMENT OF TRANSPORTATION	
HIGH PRIORITY STEEL REPAIRS TO BRIDGE NO. 068501	
COWESETT ROAD OVER I-95	WARWICK, RI
GIRDER REPAIR DETAIL TYPE "F"	
CHECKED BY: <u>MDD</u>	DATE: <u>08/22/23</u> SCALE: <u>AS SHOWN</u>

INDEX

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES
3	GIRDER REPAIR LOCATION MAP
4	GIRDER REPAIR DETAILS

STATE OF RHODE ISLAND



DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION—STEEL REPAIRS

STATE HIGHWAY

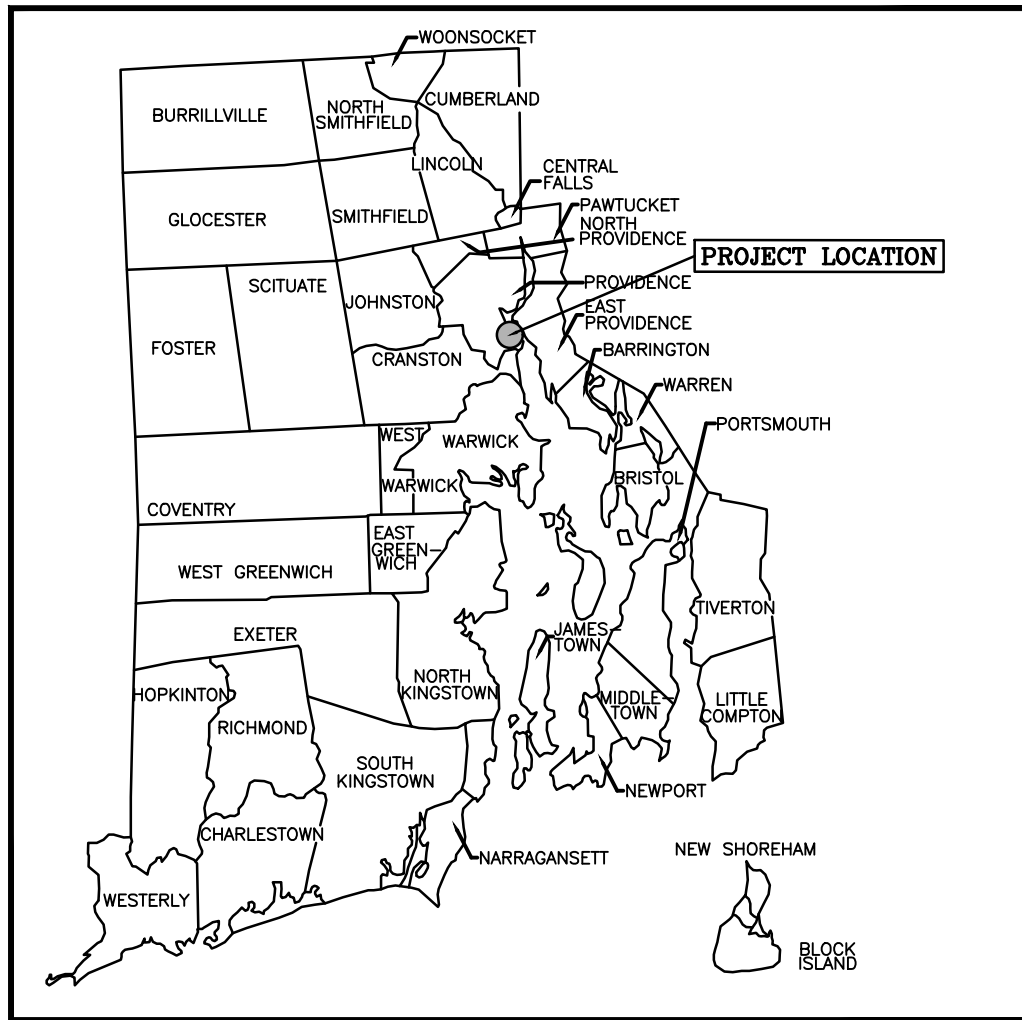
STEEL REPAIRS BRIDGE NO. 065401

I-95 RAMP BR-7 OVER US 1A ALLENS AVENUE

CITY OF PROVIDENCE
COUNTY OF PROVIDENCE

R.I. CONTRACT NO. 2023-CB-025 F.A. PROJECT NO. BHO-HPSP(001)

R.I. CONTRACT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
2023-CB-025	2023	1	4

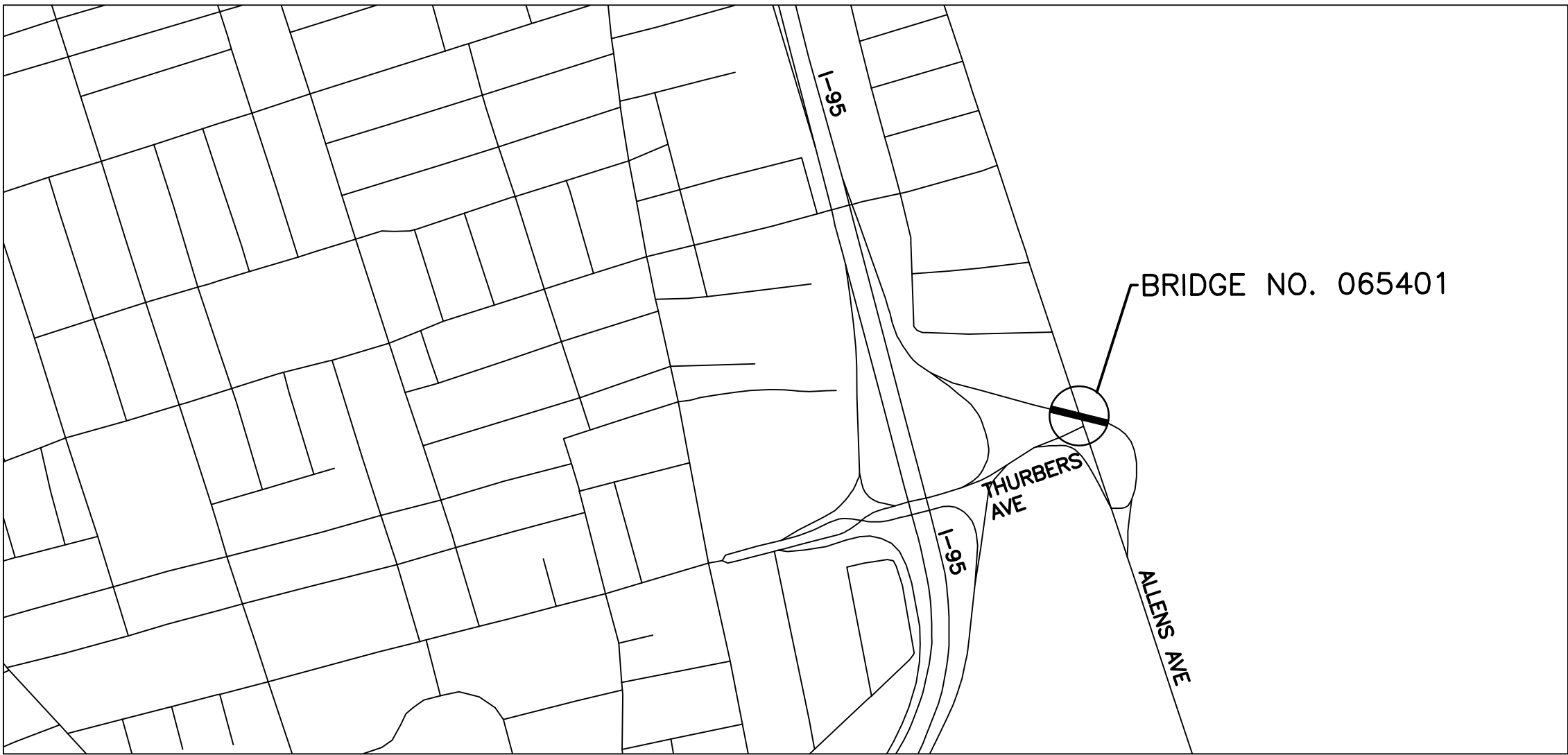


LOCATION MAP
N.T.S.

DESIGN	DESIGNATION
ADT	5,800 V.P.D.
ADTT	261 V.P.D.
T	9%
DESIGN SPEED	35 M.P.H.

R.I. STANDARD SPECIFICATIONS AND STANDARD DETAILS
SPECIFICATIONS TO GOVERN THIS PROJECT ARE THE R.I. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, DECEMBER 2022, WITH ALL REVISIONS AND THE STATE AND FEDERAL SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.

STANDARD DETAILS FOR THIS PROJECT ARE R.I. STANDARD DETAILS, 1998 EDITION, WITH ALL REVISIONS.



LAYOUT PLAN
1"=500'

SCALES OF DRAWINGS	
Plans	1/8 inch = 1 foot
Details	1-1/2 inch = 1 foot



BASE OF LEVELS
NGVD 29
NAD 83 (2011)

GREEN INTERNATIONAL AFFILIATES, INC.
Civil and Structural Engineers



Contract Number 2023-CB-025
Number of Sheet 1
Total Sheets 4

GENERAL NOTES

- ALL CONSTRUCTION INDICATED ON THESE PLANS SHALL BE IN ACCORDANCE WITH:
 - THE 2022 EDITION OF AND SUPPLEMENTS TO THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (RI STANDARD SPECIFICATIONS).
 - THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) LRFD BRIDGE CONSTRUCTION SPECIFICATIONS, FOURTH EDITION, 2017, INCLUDING THE LATEST INTERIM REVISIONS.
 - THE SPECIFICATIONS ACCOMPANYING THESE PLANS.
- DIMENSIONS, STATIONS, AND ELEVATIONS ARE SHOWN TO THE NEAREST ONE-HUNDREDTH OF A FOOT OR ONE-EIGHTH OF AN INCH.
- ALL ELEVATIONS ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1988 NAVD 88.
- COORDINATES USED ON THESE PLANS ARE BASED ON THE STATEWIDE COORDINATE SYSTEM, THE NORTH AMERICAN DATUM OF 1983 (NAD 83).
- ANGLES ARE SHOWN TO THE NEAREST SECOND.
- DIMENSIONS, STATIONS, ELEVATIONS, AND ANGLES OF THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE ORIGINAL CONSTRUCTION. THE CONTRACTOR SHALL VERIFY ALL DIMENSION REQUIRED FOR PROPER PERFORMANCE OF THE WORK. FIELD CONDITIONS MAY EXIST WHICH DEVIATE FROM THE DIMENSIONS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR FABRICATION AND FIT OF ALL WORK.
- BOTH FEDERAL AND STATE LAW (RI. GENERAL LAW 39-1.2) REQUIRE NOTIFICATION OF APPROPRIATE UTILITY COMPANIES BEFORE DIGGING, TRENCHING, BLASTING, DEMOLISHING, BORING, BACK FILLING, GRADING, LANDSCAPING, OR OTHER EARTH MOVING OPERATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES (INCLUDING THROUGH THE "DIG SAFE" PROGRAM) TO ENSURE THAT ALL UTILITIES, BOTH UNDERGROUND AND OVERHEAD, HAVE BEEN MARKED BEFORE COMMENCEMENT OF SUCH WORK. THE CONTRACTOR SHOULD UNDERSTAND THAT NOT ALL UTILITIES SUBSCRIBE TO THE "DIG SAFE" PROGRAM. ANY DAMAGE TO EXISTING UTILITIES MARKED IN THE FIELD, OR AS A RESULT OF FAILING TO CONTACT THE APPROPRIATE UTILITY COMPANIES, SHALL BE REPAIRED OR REPLACED (AS DEEMED APPROPRIATE BY THE STATE AND/OR THE IMPACTED UTILITY COMPANY) AT NO ADDITIONAL COST TO THE STATE.
- REMOVE TRAFFIC FROM BRIDGE PRIOR TO DRILLING HOLES IN THE EXISTING STRUCTURE AND INSTALLING BENT PLATES.

DESIGN DATA

- DESIGN SPECIFICATIONS
 - THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, NINTH EDITION, 2020, INCLUDING ALL INTERIM REVISIONS TO DATE.
 - THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL 2007 EDITION INCLUDING ALL REVISIONS TO DATE.
 - ALL OTHER APPLICABLE DESIGN SPECIFICATIONS ARE REFERENCED IN SECTION 1 OF THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL DATED 2007.
 - THE 2022 EDITION OF AND SUPPLEMENTS TO THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (RI STANDARD SPECIFICATIONS).
 - IN CASE OF CONFLICT, THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL SHALL GOVERN.

MATERIALS

STRUCTURAL STEEL:

AASHTO DESIGNATION M 270, GRADE 50

CLEANING AND PAINTING STRUCTURAL STEEL

- SURFACES OF EXISTING STRUCTURAL STEEL WITHIN THE REPAIR AREA SHALL BE BLAST CLEANED IN ACCORDANCE WITH SSPC-SP10 TO REMOVE ALL MILL SCALE, RUST, AND OTHER DELETERIOUS MATERIALS FROM THE SURFACES OF THE STEEL TO BE REPAIRED. BLAST CLEANING LIMITS SHALL ENCOMPASS THE FULL HEIGHT OF THE BEAM AND EXTEND 1'-0" BEYOND THE REPAIR PLATE EDGE CLOSEST TO THE MIDSPAN.
- THE CONTRACTOR IS HEREBY NOTIFIED THAT THE COATING SYSTEM ON THE EXISTING STEEL MAY CONTAIN LEAD BASED PAINT. THE CONTAINMENT, REMOVAL, HANDLING AND DISPOSAL OF THE EXISTING PAINT AND ABRASIVE MATERIAL SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.
- ANY COMPONENT NOT DESIGNATED TO BE REPAIRED SHALL BE ADEQUATELY PROTECTED FROM ANY CLEANING OPERATIONS.
- ANY DAMAGE RESULTING TO THE STRUCTURE OR PROTECTIVE COATINGS FROM CONTRACTOR'S CLEANING OR STEEL INSTALLING OPERATIONS, SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE STATE.

CLEANING AND PAINTING STRUCTURAL STEEL(CONT'D)

- ALL NEW STRUCTURAL STEEL REPAIR PLATES SHALL RECEIVE A SHOP-APPLIED COAT OF ZINC-RICH PRIMER IN ACCORDANCE WITH SECTION 825 OF RI STANDARD SPECIFICATIONS, LATEST EDITION WITH ALL INTERIMS. DAMAGE TO THE SHOP-APPLIED ZINC-RICH PRIMER DURING TRANSPORTATION OR INSTALLATION SHALL BE TOUCHED UP BY THE CONTRACTOR WITH A SUITABLE ZINC-RICH PRIMER, TO THE SATISFACTION OF THE ENGINEER, AT NO ADDITIONAL COST TO THE STATE.
- THE STRUCTURAL STEEL ELEMENTS, WITHIN THE REPAIR AREAS AND BLASTING LIMITS IDENTIFIED ON THE PLANS, SHALL BE PAINTED IN ACCORDANCE WITH THE CURRENT RI STANDARD SPECIFICATIONS AND SHALL RECEIVE A TOP COAT TO MATCH THE EXISTING STEEL COATING SYSTEM COLOR.

STRUCTURAL STEEL NOTES

- FRAMING DIMENSIONS ARE GIVEN ALONG CENTERLINES OF GIRDERS AND ALONG CENTERLINES OF BEARINGS ON ABUTMENTS AND PIERS.
- THE SHOPS FABRICATING THE STRUCTURAL STEEL MUST BE CERTIFIED FOR "SIMPLE STEEL BRIDGES (SBR)" IN ACCORDANCE WITH THE AISC QUALITY CERTIFICATION PROGRAM OR EQUIVALENT.

THE SHOPS SHALL ALSO BE CERTIFIED UNDER THE AISC "SOPHISTICATED PAINT ENDORSEMENT (SPE)" QUALITY PROGRAM OR THE SSPC-QP3 PAINT CERTIFICATION PROGRAM.

THE FABRICATOR MUST SUBMIT PROOF OF CURRENT CERTIFICATION AS SPECIFIED.
- THE STEEL ERECTOR/CONTRACTOR FOR THIS PROJECT SHALL BE CERTIFIED FOR "ADVANCED CERTIFIED STEEL ERECTOR (ASCE)" IN ACCORDANCE WITH THE AISC QUALITY CERTIFICATION PROGRAM. THE ERECTOR/CONTRACTOR OF THE STRUCTURAL STEEL SHALL BE REQUIRED TO SUBMIT PROOF OF CURRENT CERTIFICATION AS SPECIFIED.
- STRUCTURAL STEEL SHAPES AND PLATES SHALL CONFORM TO THE LATEST PROVISIONS OF AASHTO DESIGNATION M 270 GRADE 50 AS DESIGNATED ON THE PLANS.
- ALL AASHTO M 270 STRUCTURAL STEEL USED IN GIRDERS (INCLUDING CONNECTION PLATES AND STIFFENERS), SHALL MEET THE ZONE 2 CHARPY V-NOTCH FRACTURE TOUGHNESS TEST REQUIREMENTS AS SPECIFIED IN TABLE 6.6.2-2 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR "NONFRACTURE-CRITICAL" COMPONENTS. THE ZONE 2 FRACTURE TOUGHNESS REQUIREMENTS ARE AS FOLLOWS:

NONFRACTURE-CRITICAL

GRADE 50 15 FT-LBS @ 40°F (UP TO AND INCLUDING 2 INCHES THICK)

SAMPLING AND TESTING PROCEDURES SHALL BE IN ACCORDANCE WITH AASHTO T 243. THE FREQUENCY OF TESTING SHALL BE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

- ALL HIGH STRENGTH BOLTS SHALL CONFORM TO ASTM F3125, GRADE A325, AND THEY SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 824 OF THE RI STANDARD SPECIFICATIONS.
- WASHERS MEETING ASTM F436, TYPE 1 REQUIREMENTS ARE TO BE USED OVER ALL HOLES THAT ARE MORE THAN 1/16" IN DIAMETER GREATER THAN THE BOLT DIAMETER AND UNDER ALL PARTS TURNED DURING ASSEMBLY.
- PRIOR TO SHOP COATING AS SPECIFIED IN SECTION 825 OF THE RI STANDARD SPECIFICATIONS, ALL CORNERS AND EDGES OF STEEL WHICH HAVE BEEN FLAME CUT OR OTHERWISE HARDENED SHALL BE SOFTENED BY GRINDING OR BLAST-CLEANING TO PROVIDE A SURFACE SUITABLE FOR APPLICATION OF THE SPECIFIED PAINT SYSTEM.
- WELDING OF ATTACHMENTS TO GIRDER FLANGES OR WEBS FOR CONSTRUCTION PURPOSES IS NOT PERMITTED EXCEPT WHEN APPROVED BY THE ENGINEER.
- BOLTED CONNECTIONS SHALL BE DESIGNED AS SLIP-CRITICAL CONNECTIONS. THE FAYING SURFACES SHALL SATISFY CLASS B SURFACE CONDITION AS DEFINED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.
- WHEN STEEL DIE STAMPS ARE USED TO IDENTIFY PIECES AND MEMBERS, FABRICATORS SHALL UTILIZE LOW STRESS STAMPS.

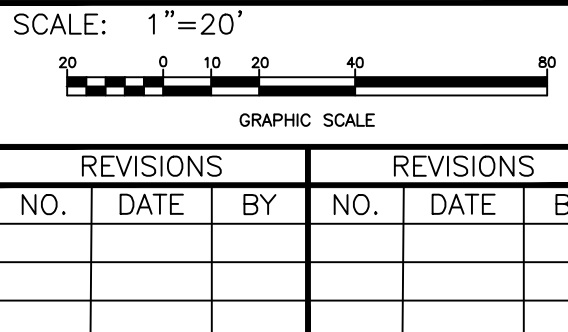
STEEL REPAIR NOTES

- REMOVAL OF EXISTING COMPONENTS SHALL BE ACCOMPLISHED BY MECHANICAL METHODS. FLAME CUTTING SHALL NOT BE ALLOWED.
- UNLESS OTHERWISE NOTED, ALL BOLT HOLES FOR NEW STRUCTURAL STEEL COMPONENTS SHALL BE SHOP DRILLED STANDARD DIAMETER.
- ALL BOLT HOLES IN EXISTING STRUCTURAL STEEL MEMBERS SHALL BE FIELD DRILLED, STANDARD DIAMETER HOLES.
- THE EXACT LOCATION OF FIELD DRILLED BOLT HOLES ARE TO BE DETERMINED IN THE FIELD.
- WHERE BOLT LOCATIONS COINCIDE WITH HEAVILY DETERIORATED PORTIONS OF THE WEB, (MATERIAL LOSS GREATER THAN 1/8"), THE BOLTS SHALL HAVE DOUBLE NUTS. THE FIRST NUT SHALL BE SEATED SNUG TIGHT AGAINST THE SURFACE AND THEN HELD IN PLACE WITH A WRENCH WHILE TIGHTENING A SECOND NUT AGAINST IT.
- EPOXY PASTE (RIDOT APPROVED) FOR STEEL REPAIRS SHALL BE APPLIED TO DETERIORATED SURFACES AND VOIDS BEHIND THE BENT PLATE RADIUS. NEW PLATES SHALL FIT FLUSH AND TIGHT AGAINST THE EXISTING ELEMENTS AND BOLTS SHALL BE SNUG TIGHTENED IN PLACE PRIOR TO SETTING OF THE EPOXY PASTE. THE PASTE SHALL BE APPLIED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S LATEST WRITTEN INSTRUCTIONS.
- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND PROPOSED REPAIR DIMENSIONS PRIOR TO FABRICATING STEEL REPAIRS. PROPOSED REPAIR COMPONENTS SHALL BE DETAILED AND SUBMITTED WITH REQUIRED SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE OVERALL FIT OF ALL FIELD BOLTED CONNECTIONS. BOLT SPACING SHOWN MAY NEED TO BE FIELD ADJUSTED BASED ON ACTUAL FIELD CONDITIONS. FINAL BOLT SPACING AND DETAILS SHALL BE SUBMITTED WITH THE REQUIRED SHOP DRAWINGS FOR REVIEW APPROVAL PRIOR TO FABRICATION.
- ALL STEEL REPAIRS FOR THIS BRIDGE SHALL BE PERFORMED AFTER THE EXISTING STRUCTURAL STEEL AT THE LOCATIONS DESIGNATED FOR STEEL REPAIRS IN THESE PLANS HAVE BEEN SURFACE PREPPED.
- ALL COSTS ASSOCIATED WITH REMOVAL AND DISPOSAL OF EXISTING STEEL COMPONENTS SHALL BE PAID FOR WITHIN THE CONTRACT UNIT PRICE FOR THE REPAIR BEING PERFORMED AND WILL NOT BE MEASURED SEPARATELY FOR PAYMENT.
- ALL REPAIR PLATES SHALL BE ON SITE PRIOR TO DRILLING HOLES OR CUTTING THE EXISTING STRUCTURAL STEEL.
- THE CONTRACTOR(S) PERFORMING THE COATING APPLICATION MUST DEMONSTRATE QUALIFICATION BY OBTAINING EITHER THE SOCIETY OF PROTECTIVE COATINGS (SSPC) QP-1 "STANDARD PROCEDURE FOR EVALUATING PAINTING CONTRACTORS (FIELD APPLICATION TO COMPLEX INDUSTRIAL STRUCTURES)" FOR FIELD PAINTING AND SSPC QP-3 "CERTIFICATION STANDARD FOR SHOP APPLICATION OF COMPLEX PROTECTIVE COATING SYSTEMS" AS APPROPRIATE, OR THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) SOPHISTICATED PAINT ENDORSEMENT (SPE).



RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

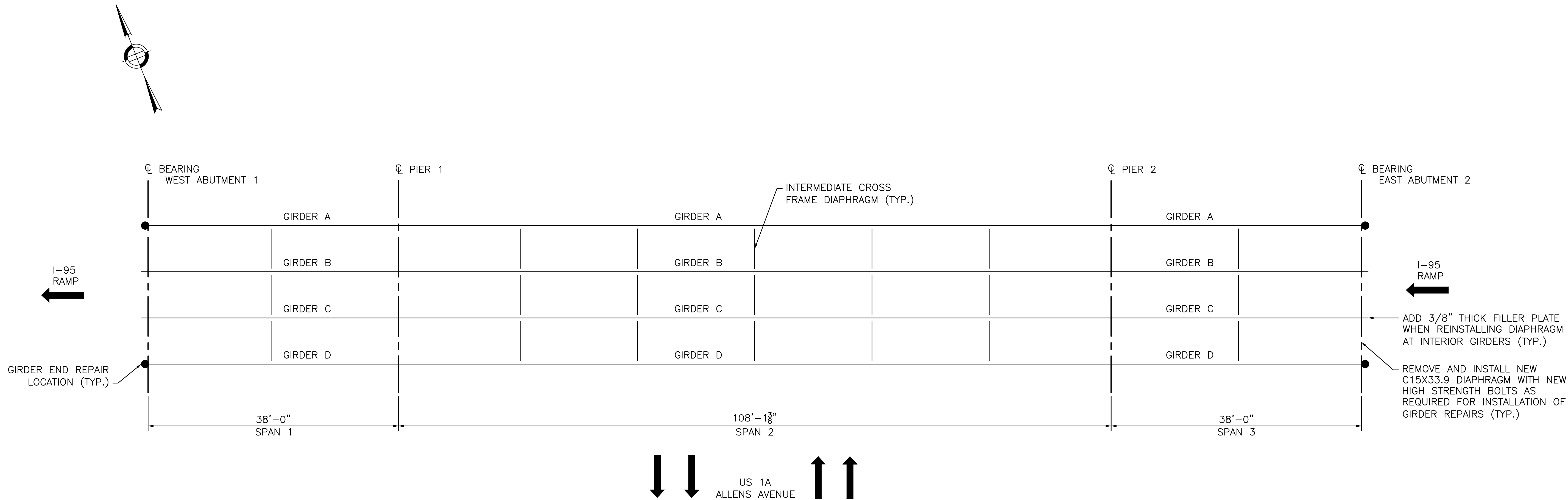
DESIGNED BY: MDL
CHECKED BY: MAC
DATE: 2/22/2023
SHEET: 2
OF: 4



STEEL REPAIRS TO
ALLENS AVE RAMP BRIDGE NO. 065401
2023-CB-025
PROVIDENCE
RHODE ISLAND

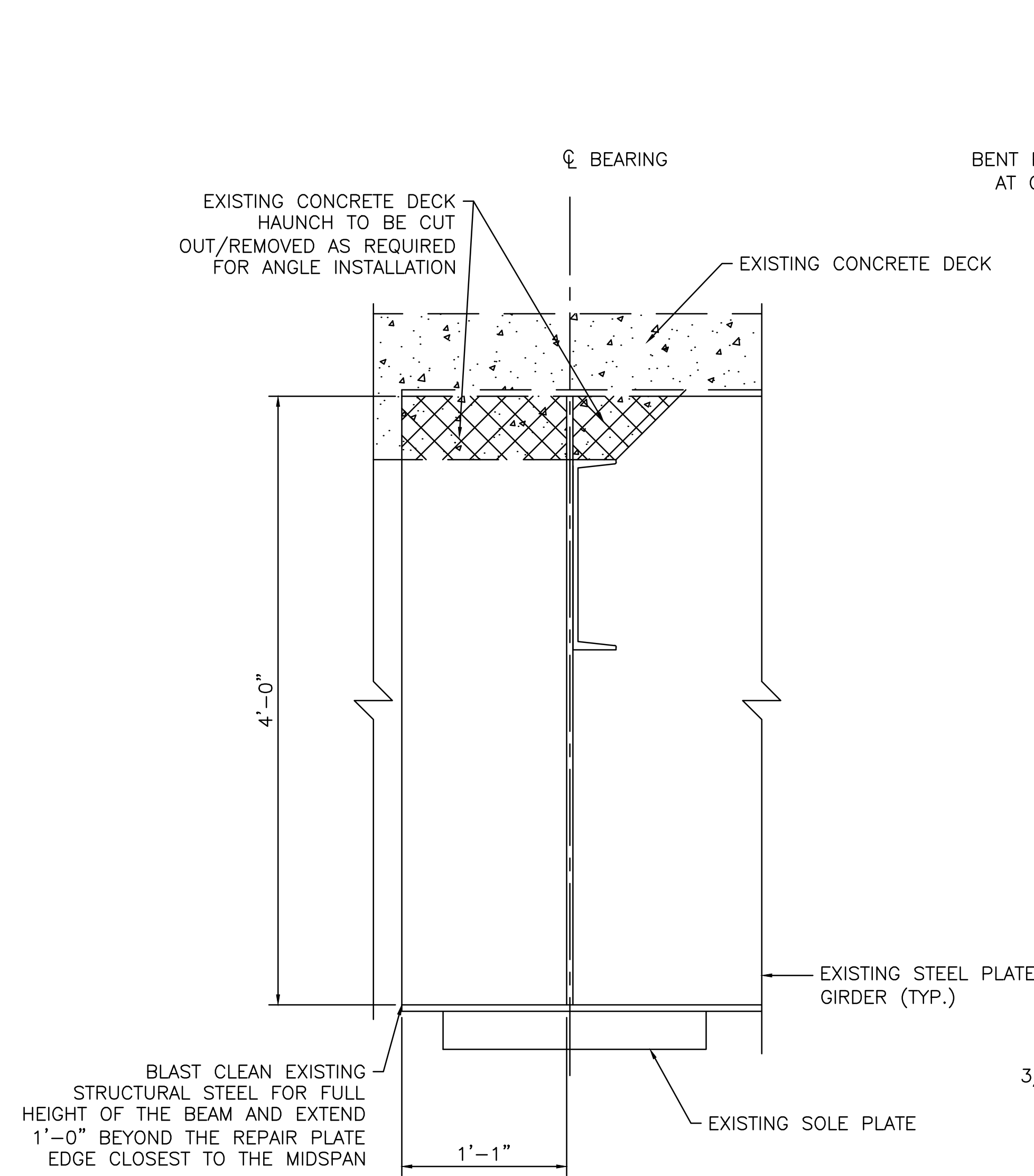
GENERAL NOTES

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	RI	BHO-HPSP(001)	2023	3	4

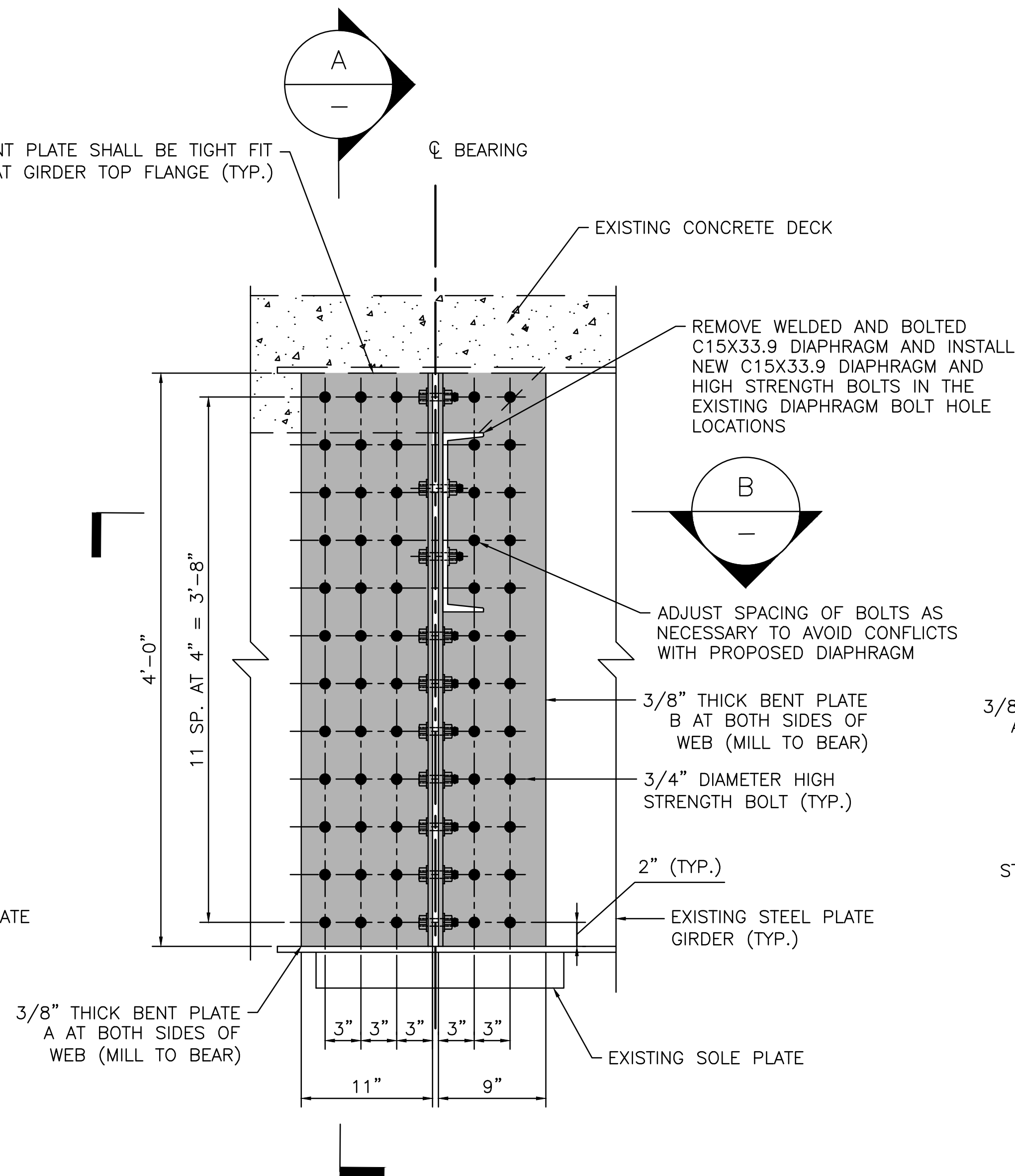


LEGEND:
● = GIRDER END REPAIR LOCATIONS

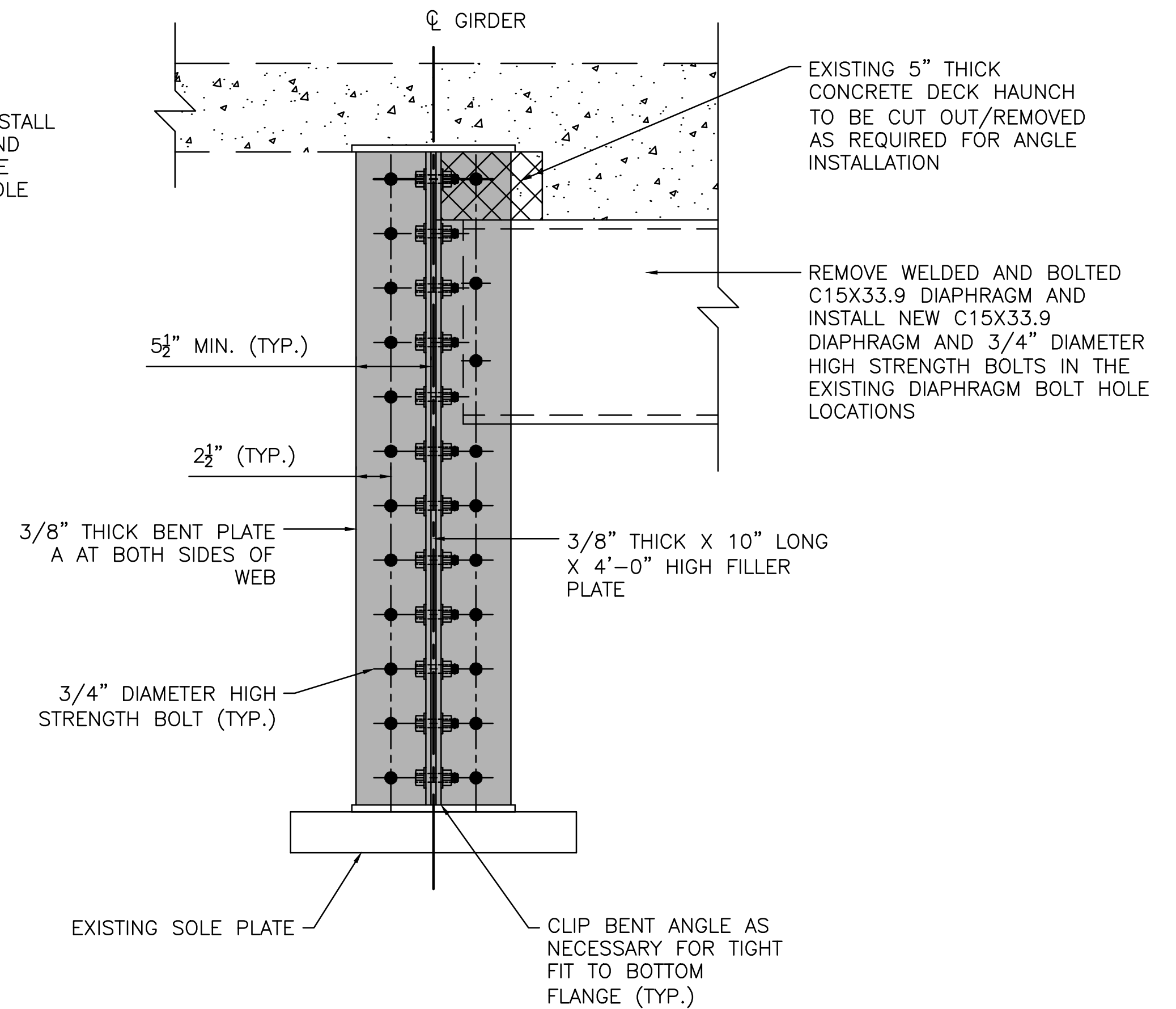
GIRDER REPAIR LOCATION PLAN
SCALE: 1/8"=1'-0"



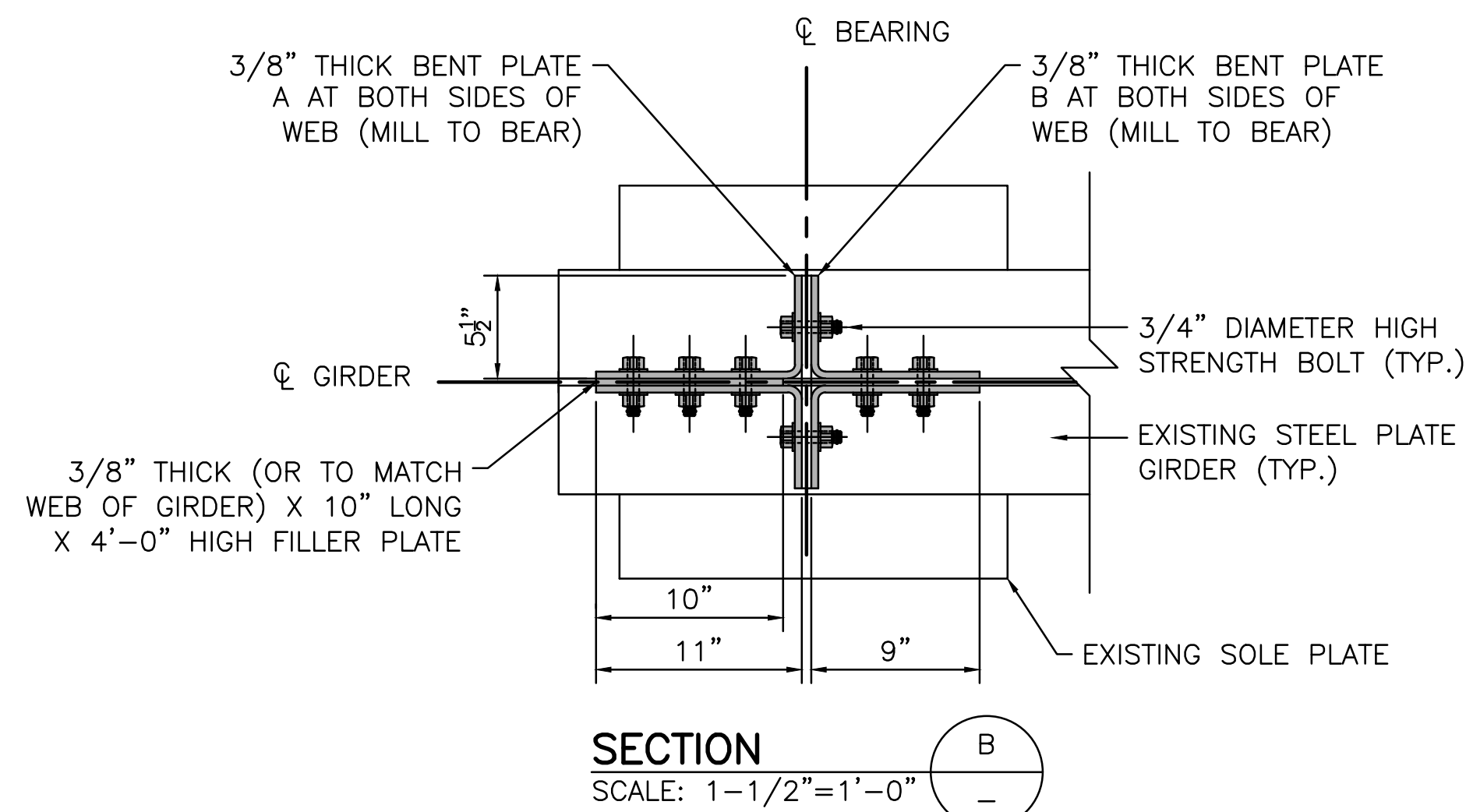
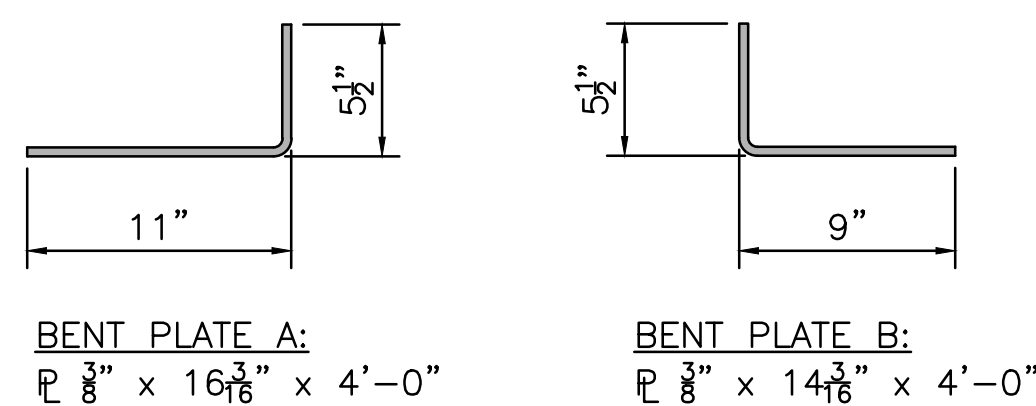
HAUNCH DEMO INTERIOR ELEVATION
SCALE: 1-1/2"=1'-0"



GIRDER REPAIR INTERIOR ELEVATION
SCALE: 1-1/2"=1'-0"



SECTION
SCALE: 1-1/2"=1'-0"



SECTION
SCALE: 1-1/2"=1'-0"

LEGEND:

NEW REPAIR STEEL

NOTES:

- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND PROPOSED REPAIR DIMENSIONS PRIOR TO FABRICATING STEEL REPAIRS. PROPOSED REPAIR COMPONENTS SHALL BE DETAILED AND SUBMITTED WITH REQUIRED SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
- PAINING LIMITS SHALL EXTEND A MINIMUM OF 1'-0" BEYOND THE REPAIR PLATE EDGE CLOSEST TO THE MIDSPAN.
- ADD 3/8" THICK X 15" LONG X 5-1/2" WIDE FILLER PLATE WHEN REINSTALLING DIAPHRAGM AT INTERIOR GIRDERS (TYP.)