

Madison, Wisconsin

INDEX OF SHEETS

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CITY OF MADISON

CITY ENGINEERING DIVISION

DEPARTMENT OF PUBLIC WORKS

PLAN OF PROPOSED IMPROVEMENT

JOHN NOLEN BRIDGE REPAIRS - 2023

CITY PROJECT NO. 11860
CITY CONTRACT NO. 8707

| CONVENTIONAL SIGNS | |
|---|---------|
| FIELD VERIFY ALL UTILITY LOCATIONS | |
| GAS | — G — |
| STORM SEWER | — ST — |
| SANITARY SEWER | — SAN — |
| WATER | — W — |
| BURIED ELECTRIC | — E — |
| OVERHEAD ELECTRIC | — OH — |
| POWER POLE | |
| ADA COMPLIANT RAMP W/ DETECTABLE WARNING FIELD | |
| COMBUSTIBLE FLUIDS | |



PROJECT LOCATION

PUBLIC IMPROVEMENT PROJECT
APPROVED

MAY 16, 2023

BY THE COMMON COUNCIL
OF MADISON, WISCONSIN

PUBLIC IMPROVEMENT DESIGN
APPROVED BY:

J. Hill

May 25, 2023

City Engineer

Date

STRUCTURE
DESIGNED BY:



Nathan J. Kindt

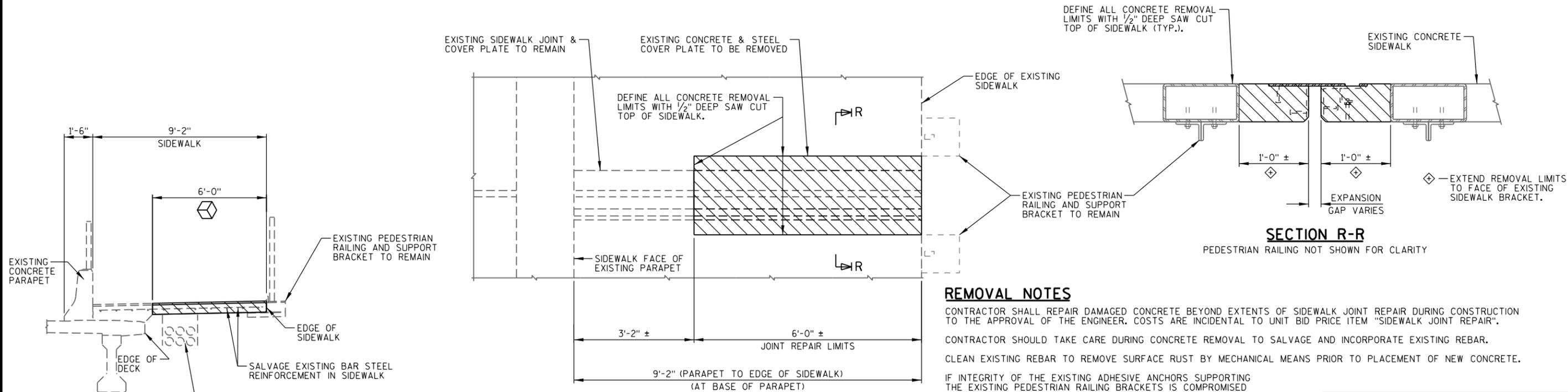
MSA ENGINEERING | ARCHITECTURE | SURVEYING
FUNDING | PLANNING | ENVIRONMENTAL
1702 PANKRATZ STREET, MADISON WI 53704
(608) 242-7779 www.msa-ps.com

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
 THE FIRST DIGIT OF A THREE DIGIT BAR MARK SIGNIFIES THE BAR SIZE.
 BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.
 DIMENSIONS ARE BASED ON THE ORIGINAL STRUCTURE PLANS AND 1995 DECK REHABILITATION PLANS. EXISTING PLANS ARE AVAILABLE FROM THE CITY OF MADISON UPON REQUEST. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ADJUST IN THE FIELD, AS NECESSARY.
 THE LOCATIONS OF THE EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE NOT SHOWN. CONTRACTOR IS RESPONSIBLE FOR PROTECTING AND TEMPORARILY SUPPORTING EXISTING UTILITIES DURING CONSTRUCTION.
 THE PROJECT WILL REHABILITATE THE EXISTING JOHN NOLEN DRIVE PRESTRESSED GIRDER STRUCTURES LISTED BELOW:
 - B-13-332, A TWO SPAN 112'-2" LONG PRESTRESSED CONCRETE GIRDER BRIDGE FOUNDED ON CONCRETE ABUTMENTS AND A CONCRETE PIER.
 - B-13-333, A THREE SPAN 168'-7" LONG PRESTRESSED GIRDER BRIDGE FOUNDED ON CONCRETE ABUTMENTS AND TWO CONCRETE PIERS.
 - P-13-754, A THREE SPAN 168'-7" LONG PRESTRESSED GIRDER BRIDGE FOUNDED ON CONCRETE ABUTMENTS AND TWO CONCRETE PIERS.
 - P-13-755, A FOUR SPAN 184'-5" LONG PRESTRESSED GIRDER BRIDGE FOUNDED ON CONCRETE ABUTMENTS AND THREE CONCRETE PIERS.
 - P-13-756, A FOUR SPAN 184'-5" LONG PRESTRESSED GIRDER BRIDGE FOUNDED ON CONCRETE ABUTMENTS AND THREE CONCRETE PIERS.
 IMPROVEMENTS INCLUDE NON-STRUCTURAL REPAIRS TO THE PRESTRESSED GIRDER ELEMENTS, SIDEWALK JOINT REPAIRS, WEDGING BEARINGS, AND THE INSTALLATION OF A NEW EXPANSION BEARING AND EXPANSION BEARING ASSEMBLY BRACKET.
 THE COLOR OF PROTECTIVE SURFACE TREATMENT FOR THE SUPERSTRUCTURE ELEMENTS SHALL BE CONCRETE GRAY IN COLOR TO MATCH THE COLOR OF THE ADJACENT CONCRETE.
 PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP OF THE SIDEWALK AT JOINT REPAIR LOCATIONS.
 ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1/2-INCH DEEP SAW CUT UNLESS NOTED OTHERWISE.
 CONTRACTOR SHALL USE CAUTION AROUND EXISTING UTILITY HANGERS AND RAILING SUPPORT BRACKETS AND ANCHORAGE.
 ANY DAMAGED PEDESTRIAN RAILING, RAILING SUPPORT BRACKETS, ANCHORAGES, OR EXISTING UTILITY COMPONENTS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR, INCIDENTAL TO THE BID ITEM "SIDEWALK JOINT REPAIR".

TOTAL ESTIMATED QUANTITIES

| ITEM NO. | BID ITEM | ITEM DESCRIPTION | QTY | UNITS |
|----------|----------|--|-----|-------|
| 1 | 10701.0 | Traffic Control | 1 | LS |
| 2 | 10911.0 | Mobilization | 1 | LS |
| 3 | 90000.0 | Steel Support Bracket Assembly | 1 | EA |
| 4 | 90001.0 | Bearings Assemblies Expansion P-13-754 | 1 | EA |
| 5 | 90002.0 | Steel Wedging at Existing Bearing Assemblies | 3 | EA |
| 6 | 90003.0 | Debris Containment over Waterway B-13-332 | 1 | EA |
| 7 | 90004.0 | Debris Containment over Waterway B-13-333 | 1 | EA |
| 8 | 90005.0 | Debris Containment over Waterway P-13-755 | 1 | EA |
| 9 | 90006.0 | Debris Containment over Waterway P-13-756 | 1 | EA |
| 10 | 90007.0 | Bridge Jacking B-13-332 | 1 | EA |
| 11 | 90008.0 | Bridge Jacking B-13-333 | 1 | EA |
| 12 | 90009.0 | Bridge Jacking P-13-754 | 1 | EA |
| 13 | 90010.0 | Bridge Jacking P-13-755 | 1 | EA |
| 14 | 90011.0 | Bridge Jacking P-13-756 | 1 | EA |
| 15 | 90012.0 | Sidewalk Joint Repair | 5 | EA |
| 16 | 90013.0 | Fiber Wrap Reinforcing Non-Structural | 120 | SF |
| 17 | 90014.0 | Protective Surface Treatment | 8 | SY |



REMOVAL NOTES

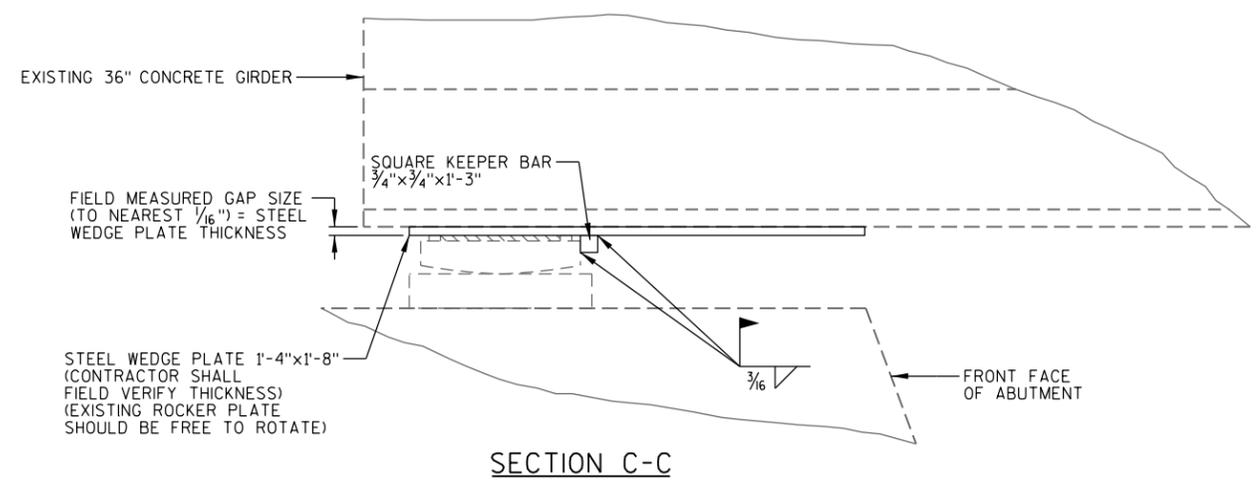
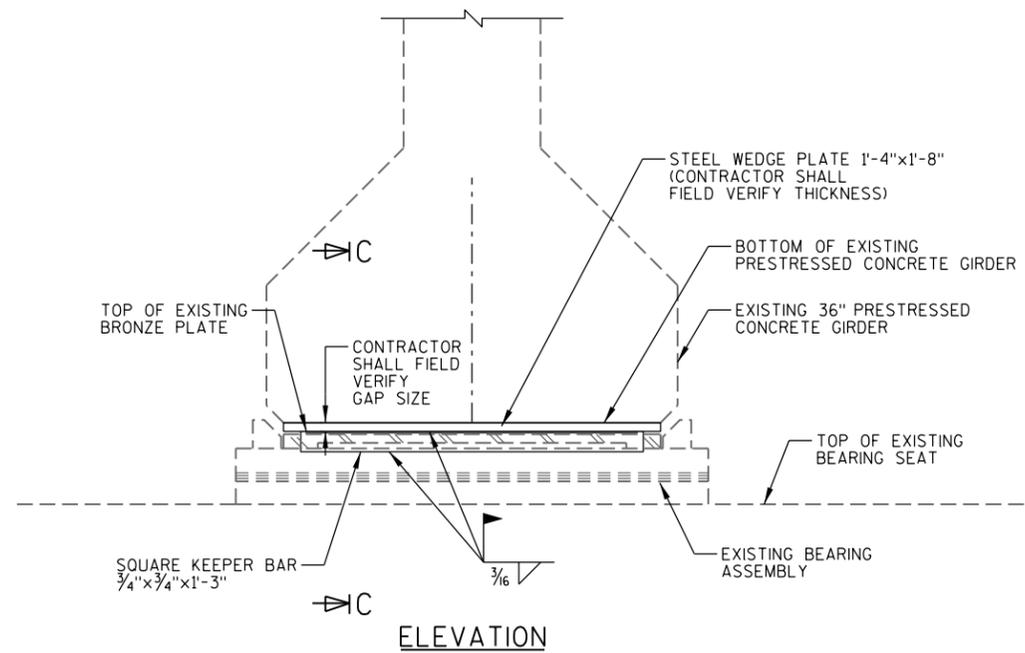
CONTRACTOR SHALL REPAIR DAMAGED CONCRETE BEYOND EXTENTS OF SIDEWALK JOINT REPAIR DURING CONSTRUCTION TO THE APPROVAL OF THE ENGINEER. COSTS ARE INCIDENTAL TO UNIT BID PRICE ITEM "SIDEWALK JOINT REPAIR".
 CONTRACTOR SHOULD TAKE CARE DURING CONCRETE REMOVAL TO SALVAGE AND INCORPORATE EXISTING REBAR.
 CLEAN EXISTING REBAR TO REMOVE SURFACE RUST BY MECHANICAL MEANS PRIOR TO PLACEMENT OF NEW CONCRETE.
 IF INTEGRITY OF THE EXISTING ADHESIVE ANCHORS SUPPORTING THE EXISTING PEDESTRIAN RAILING BRACKETS IS COMPROMISED DURING REMOVAL, CONTRACTOR SHALL FABRICATE AND CAST A SIMILAR SIZED BENT ANCHOR (THREADED) REPLACEMENT INTO THE NEW CONCRETE SIDEWALK TO THE SATISFACTION OF THE ENGINEER. THE NEW BENT ANCHOR (THREADED) SHALL MATCH OR EXCEED THE SIZE OF THE EXISTING ANCHOR AND BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS. THE COST FOR FABRICATING AND INSTALLING THE REPLACEMENT BENT ANCHOR (THREADED) IS INCIDENTAL TO "SIDEWALK JOINT REPAIR".
 IF NECESSARY, CONTRACTOR TO TEMPORARILY SUPPORT EXISTING PEDESTRIAN RAILING AND SUPPORT BRACKETS DURING CONSTRUCTION. THE COST FOR SUPPORTING THE EXISTING PEDESTRIAN RAILING AND/OR SUPPORT BRACKET IS INCIDENTAL TO "SIDEWALK JOINT REPAIR".
 CONTRACTOR TO REINSTALL EXISTING UTILITY HANGERS TO THE APPROVAL OF THE ENGINEER IF CONFLICT WITH PROPOSED WORK IS ENCOUNTERED. CONTRACTOR SHALL REPLACE EXISTING ANCHORS IN KIND. THE COST OF REINSTALLING EXISTING UTILITY HANGERS SHALL BE INCIDENTAL TO "SIDEWALK JOINT REPAIR".

SECTION THRU SIDEWALK
(SHOWING REMOVAL LIMITS)

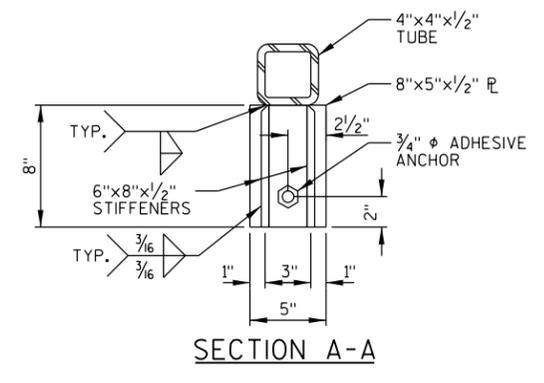
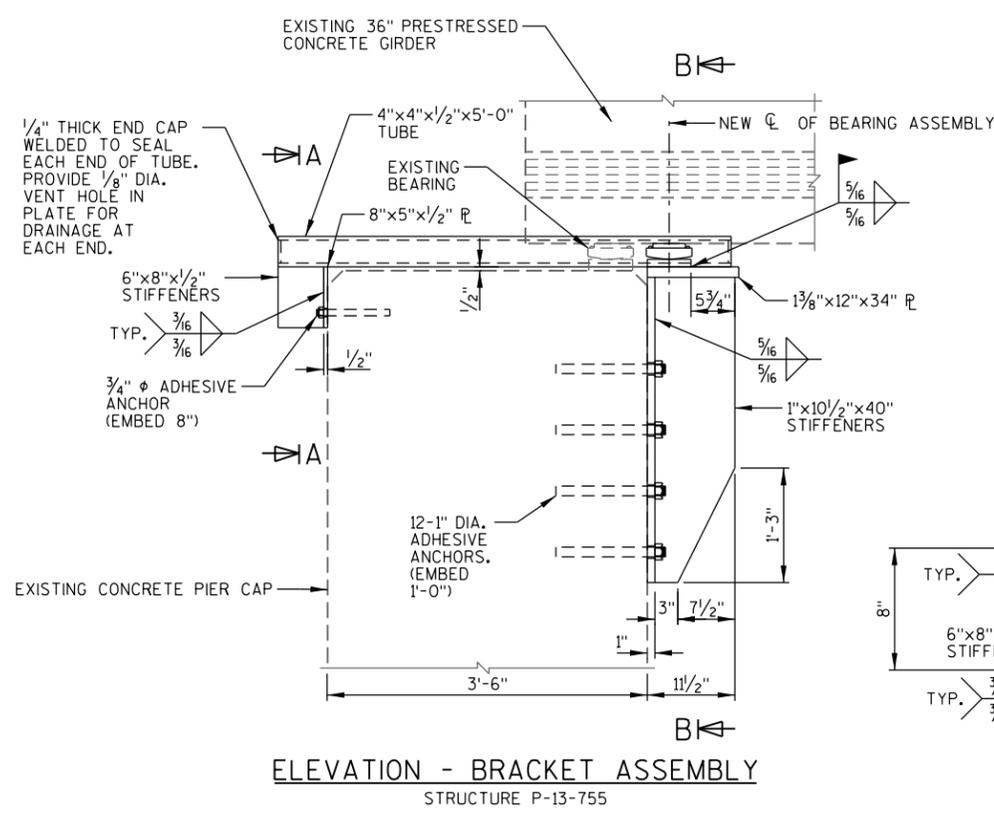
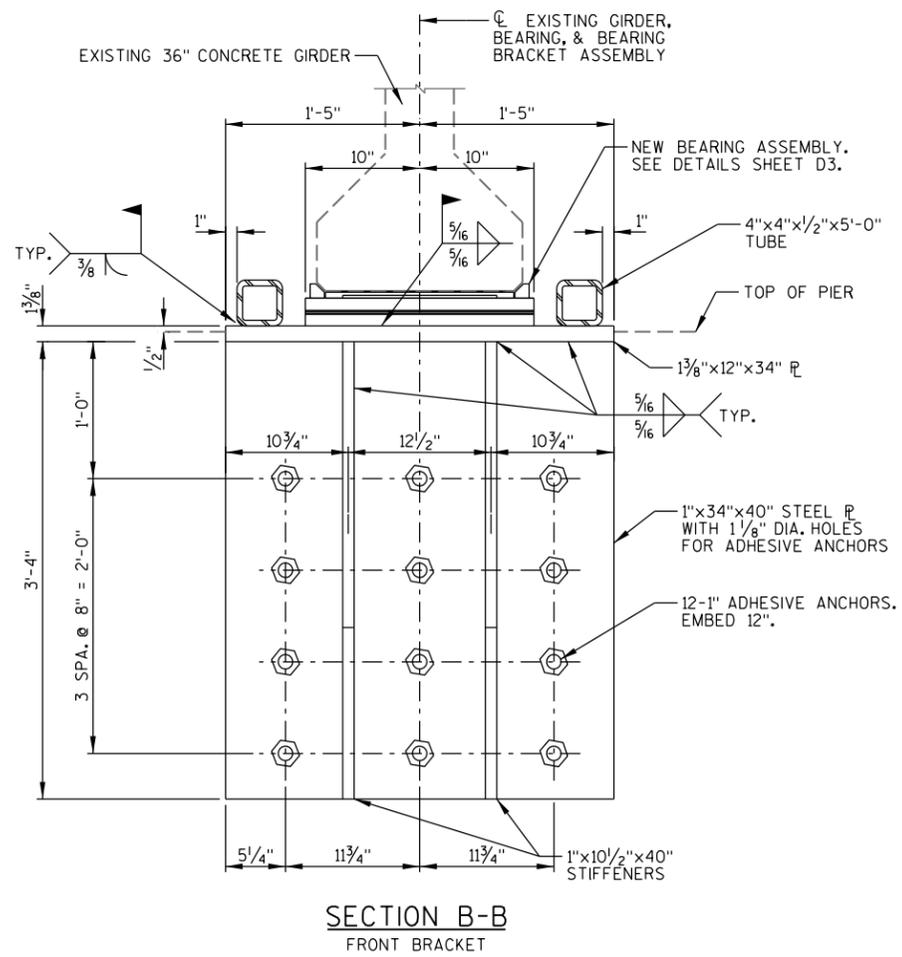
SIDEWALK JOINT REPAIR REMOVAL PLAN
PEDESTRIAN RAILING NOT SHOWN FOR CLARITY

— SAW CUT AND REMOVE EXISTING SIDEWALK CONCRETE, SIDEWALK COVER PLATES, AND MOUNTING HARDWARE. CONTRACTOR TO FIELD VERIFY AND MARK SAW CUT LOCATION AND EXTENTS OF REMOVAL PRIOR TO CONSTRUCTION.

| | | | |
|---|------|---------------|-------------------------------------|
| No. | Date | Revision | By |
| ENGINEERING ARCHITECTURE SURVEYING FUNDING PLANNING ENVIRONMENTAL 1702 PANKRATZ STREET, MADISON WI 53704 (608) 242-7779 www.msa-ps.com <small>© MSA Professional Services, Inc.</small> | | | |
| JOHN NOLEN BRIDGE REPAIRS | | | |
| Drawn By | RLR | Plans Checked | NJK |
| QUANTITIES, NOTES & REMOVAL DETAILS | | | SHEET D1 PROJECT NUMBER 11860 |



STEEL WEDGING AT EXISTING BEARING DETAIL
STRUCTURE P-13-754

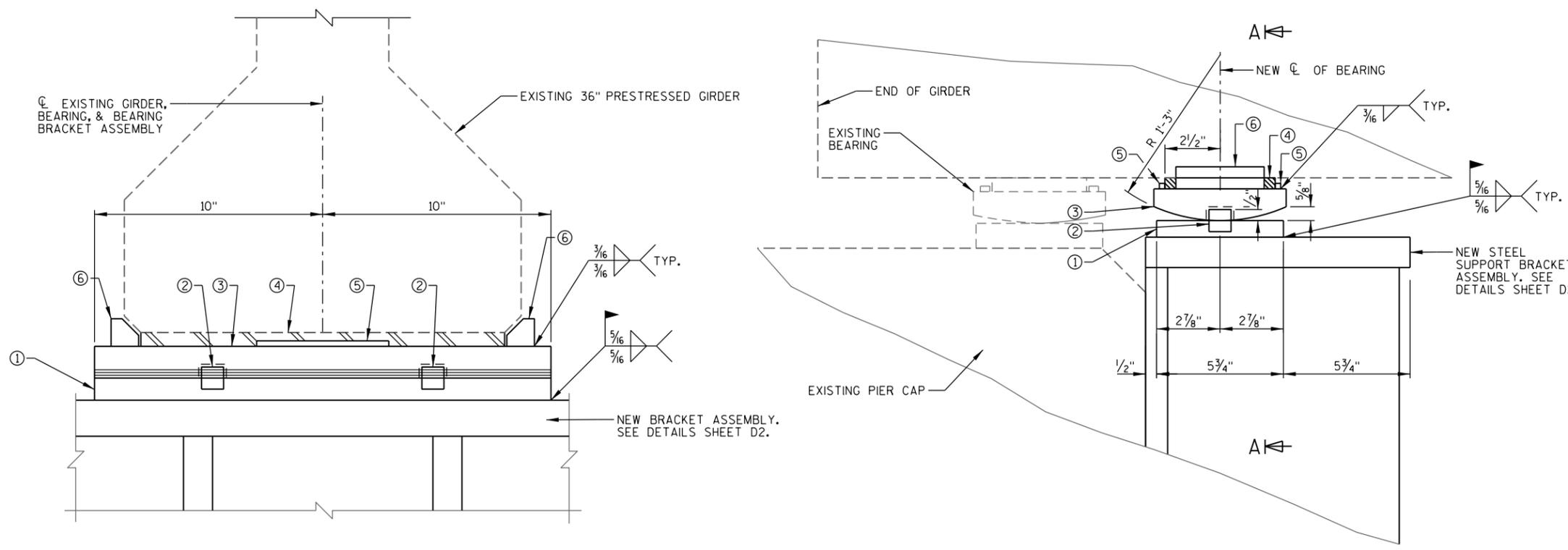


STEEL SUPPORT BRACKET ASSEMBLY DETAILS
STRUCTURE P-13-755

BEARING REHABILITATION NOTES

- ALL MATERIAL USED FOR BRACKETS SHALL BE PAID AT THE UNIT PRICE BID FOR "STEEL SUPPORT BRACKET ASSEMBLY".
- STRUCTURAL STEEL PLATES SHALL CONFORM TO ASTM A709 GRADE 36. ALL STRUCTURAL TUBING SHALL CONFORM TO ASTM A500 GRADE B.
- ALL STRUCTURAL STEEL BEARING PLATES SHALL BE FLAT ROLLED STEEL PLATES WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT, AND VERTICAL. ALL PLATES CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.
- CONCRETE ADHESIVE ANCHORS 1-INCH DIAMETER, UNLESS NOTED OTHERWISE. EMBED 12" INTO CONCRETE. ADHESIVE ANCHORS SHALL CONFORM TO SECTIONS 502.2.12 AND 502.3.14 OF THE WISDOT STANDARD SPECIFICATIONS. ADHESIVE ANCHORS SHALL BE APPROVED FOR USE IN CRACKED CONCRETE.
- WEDGE PLATES SHALL BE GALVANIZED.
- BRACKET AND PLATE MATERIAL SHALL BE SHOP PAINTED IN ACCORDANCE WITH THE SPECIAL PROVISIONS. TOUCH-UP PAINTING TO BE DONE AT COMPLETION OF STEEL BRACKET OR WEDGE PLATE INSTALLATION TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST.
- BRACKETS SHALL BE INSTALLED IN THREE STEPS. STEP ONE SHALL BE TO INSTALL FRONT BRACKET AND BEARING ASSEMBLY TIGHT UNDER BEAM. STEP TWO SHALL BE TO INSTALL BACK BRACKET AND 4" SQUARE TUBES TIGHT TO BACK SIDE OF PIER. STEP THREE SHALL BE TO FIELD WELD THE 4" SQUARE TUBES TO THE FRONT BRACKET AS SHOWN.
- CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS BEFORE ORDERING MATERIALS.
- ALL WELDING SHALL CONFORM TO SECTION 506.3.19 OF THE WISDOT STANDARD SPECIFICATIONS.
- AT INSTALLATION, ENSURE THE SLIDING FACE ON THE EXISTING BRONZE PLATE IS CLEAN AND FREE OF ALL DUST, MOISTURE, AND ANY OTHER FOREIGN MATTER.

| No. | Date | Revision | By |
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| JOHN NOLEN BRIDGE REPAIRS | | | |
| Drawn By | RLR | Plans Checked | NJK |
| BEARING REHABILITATION DETAILS | | | SHEET D2 |
| | | | PROJECT NUMBER 11860 |



SECTION A-A

ELEVATION

LEGEND

- ① MASONRY PLATE, 3/4" x 5 3/4" x 1'-10". DRILL 1" DIA. HOLES TO PROVIDE DRIVING FIT FOR STEEL PINTLES 2.
- ② STEEL PINTLE, 1" DIA. x 1". DRILL HOLES IN MASONRY PLATE FOR A DRIVING FIT. DRIVE INTO TOP OF MASONRY PLATE AND WELD BOTTOM. CHAMFER TOP OF PINTLE 1/8".
- ③ ROCKER PLATE, 1 1/16" x 6" x 1'-8". MACHINE FINISH BOTTOM SURFACE TO ANSI 250. PROVIDE 1/8" DIA. x 5/8" DEEP HOLES IN BOTTOM, CENTERED ON PINTLES. MACHINE FINISH IN DIRECTION PARALLEL TO CL OF GIRDER.
- ④ STAINLESS STEEL PLATE, 1/2" x 4" x 1'-4 1/2", WITH TEFLON SURFACE ON BOTTOM SIDE ONLY.
- ⑤ KEEPER BAR EACH SIDE, 1/4" x 1/2" x 6".
- ⑥ BAR 1" x 1" x 4", CHAMFER 1/2".
- ▲ TEFLON SURFACE SHALL BE UNFILLED WITH MINIMUM 1/16" THICKNESS. PLACE WITH SCRIBE MARKS IN DIRECTION OF MOVEMENT. BOND STAINLESS STEEL PLATE ④ AND TEFLON WITH ADHESIVE MATERIAL MEETING THE REQUIREMENTS FOUND IN THE WISDOT STANDARD SPECIFICATION.
- PROVIDE A METHOD FOR HANDLING ROCKER PLATE "C" DURING GALVANIZING.

EXPANSION BEARING NOTES

BEARINGS ARE SYMMETRICAL ABOUT CL OF GIRDER AND CL OF BEARING.

ALL MATERIAL IN BEARINGS, BUT EXCLUDING STAINLESS STEEL PLATE, TEFLON SURFACE, AND PINTLES, SHALL CONFORM TO ASTM A709 GRADE 50W.

STAINLESS STEEL PLATE SHALL CONFORM TO ASTM A240, TYPE 304.

STEEL PINTLES SHALL CONFORM TO ASTM A449 OR ASTM 572 GRADE 50.

ALL STRUCTURAL STEEL BEARING PLATES SHALL BE FLAT ROLLED STEEL PLATES WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT, AND VERTICAL.

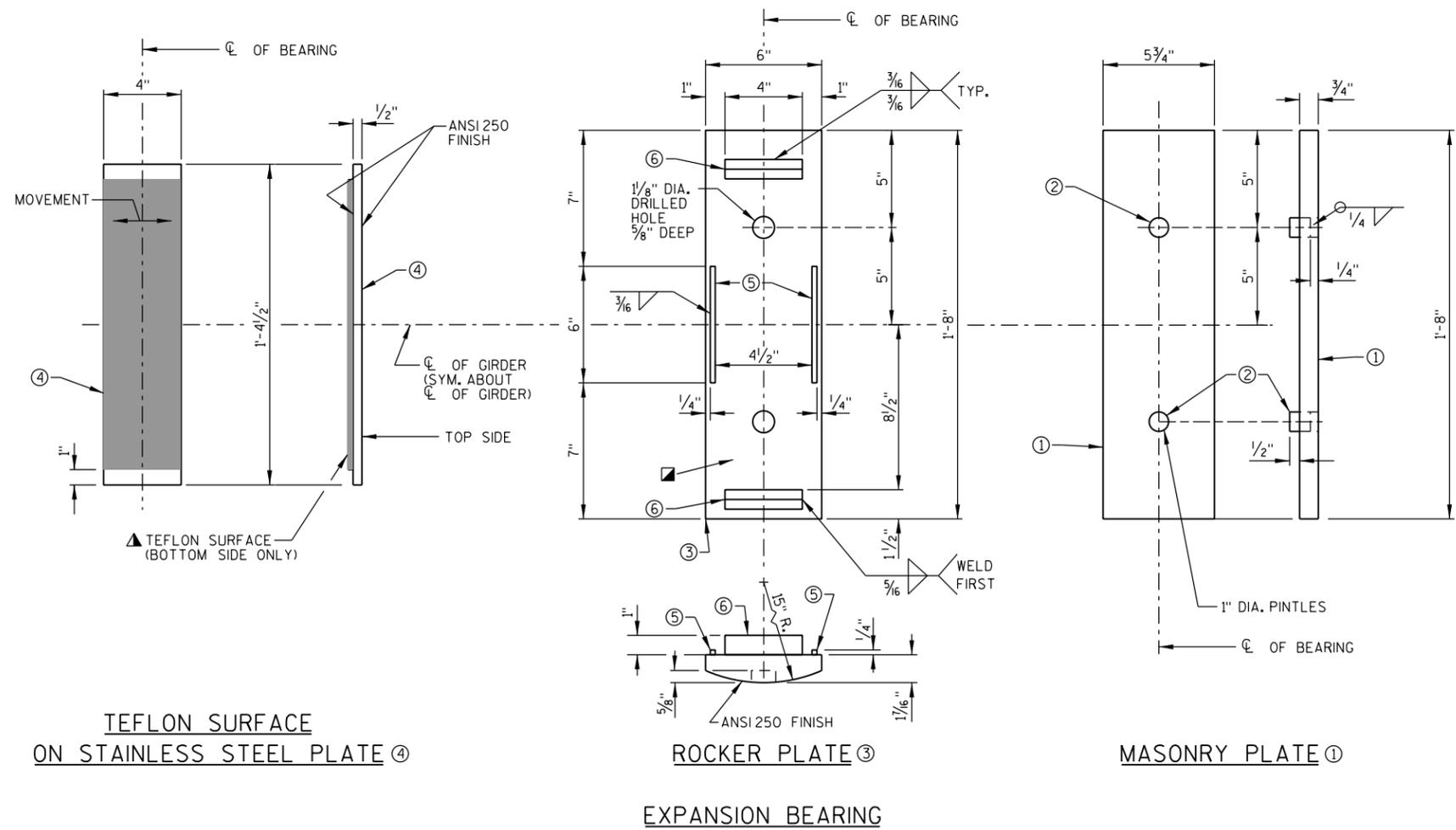
ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL FINISHED SURFACES SHALL BE MACHINE FINISHED BY AN AUTOMATIC PROCESS.

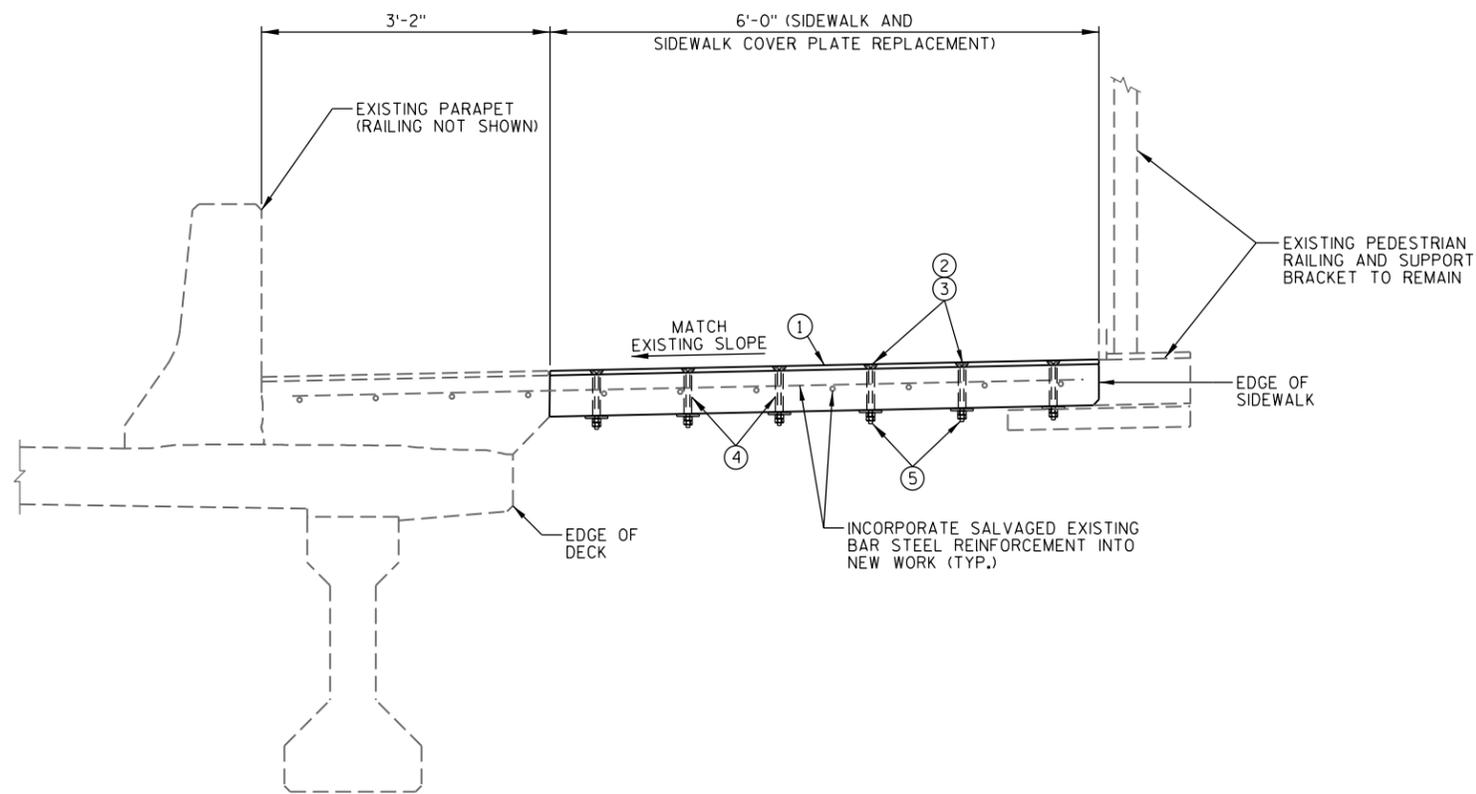
MASONRY PLATE ① AND ROCKER PLATE ③ SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153, CLASS "C". STEEL PLATE ④ SHALL BE SHOP PAINTED. DO NOT PAINT TEFLON SURFACE.

ALL MATERIAL IN "EXPANSION BEARING ASSEMBLY", INCLUDING TEFLON SURFACE, SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "BEARING ASSEMBLIES EXPANSION P-13-754", EACH.

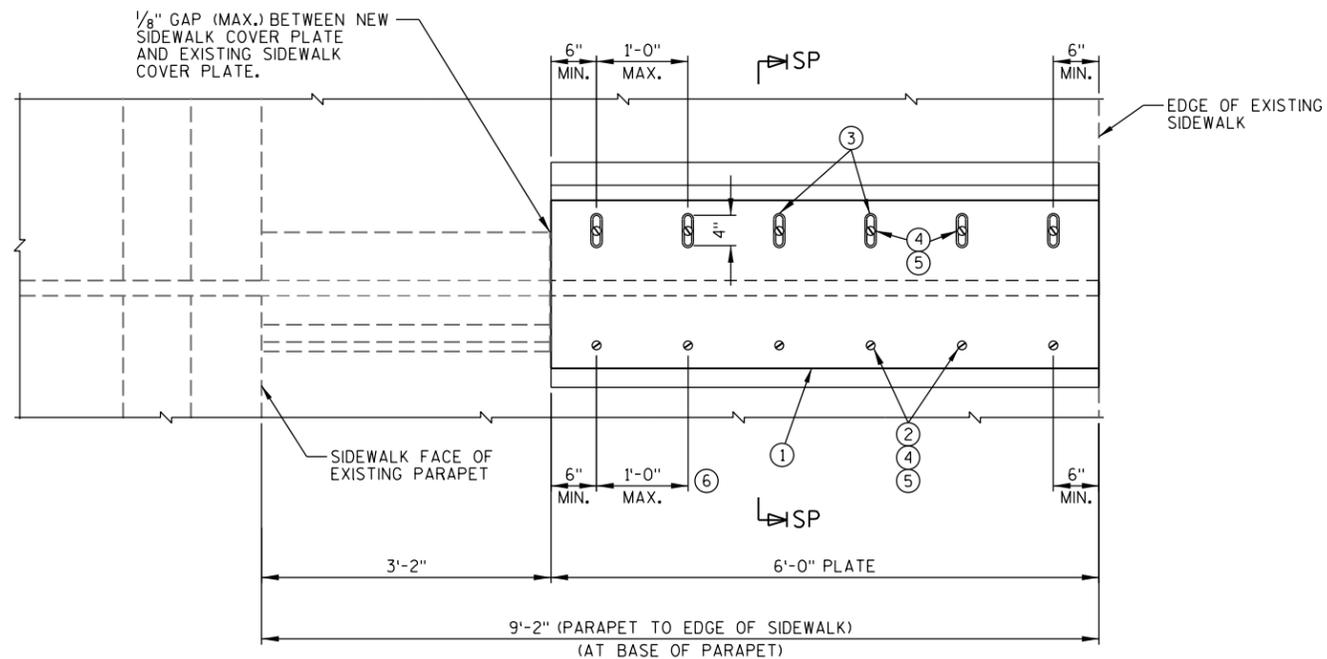
AT INSTALLATION, ENSURE TEFLON SLIDING FACE ON STEEL PLATE ④ HAS THE SURFACE FINISH SPECIFIED AND IS CLEAN AND FREE OF ALL DUST, MOISTURE, AND ANY OTHER FOREIGN MATTER.



| No. | Date | Revision | By |
|---|------|---------------|-------------------------|
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| JOHN NOLEN BRIDGE REPAIRS | | | |
| Drawn By | RLR | Plans Checked | NJK |
| EXPANSION BEARING DETAILS | | | SHEET D3 |
| | | | PROJECT NUMBER 11860 |

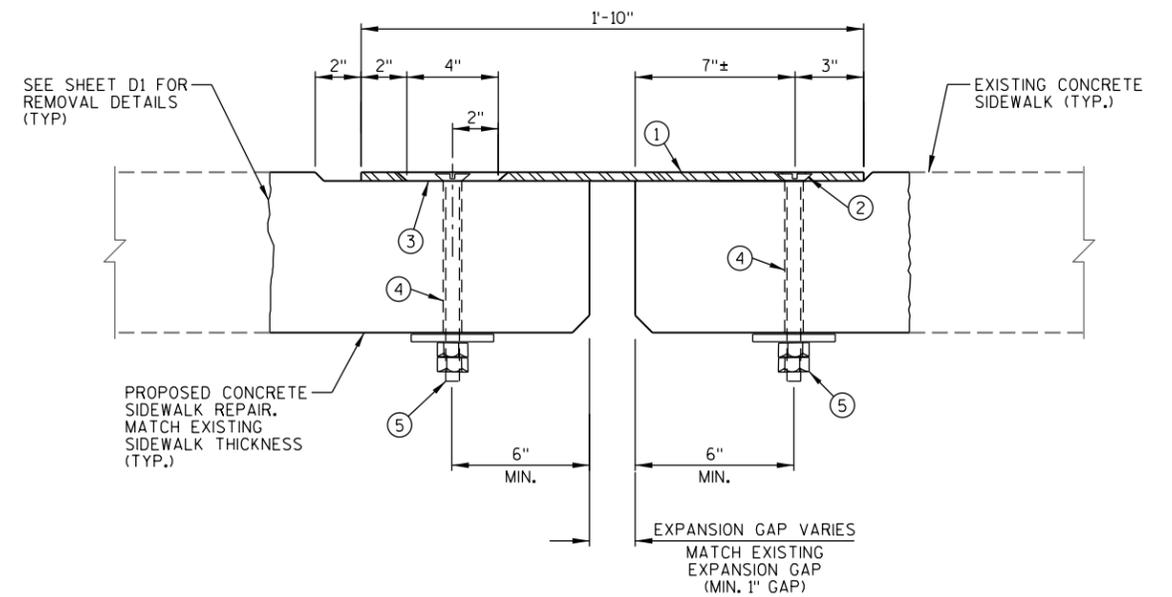


SECTION THRU SIDEWALK AT SIDEWALK COVER PLATE REPAIR



PLAN - SIDEWALK COVER PLATE REPAIR

RAIL POST ATTACHMENTS NOT SHOWN



SECTION SP-SP

NOTES

EXISTING BARS ARE LIKELY TO BE CORRODED AND/OR DAMAGED DURING CONCRETE REMOVAL. SALVAGE AND INCORPORATE EXISTING BAR STEEL REINFORCEMENT.

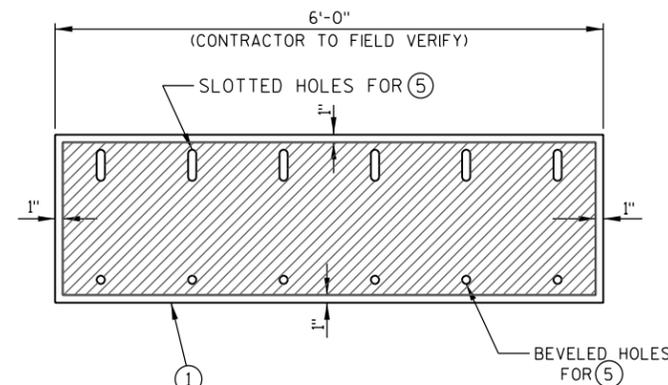
SANDBLAST PLATE AFTER FABRICATION IN ACCORDANCE WITH SSPC SP. #6 "COMMERCIAL BLAST CLEANING". AFTER BLAST CLEANING, THE PLATE SHALL BE HOT DIPPED GALVANIZED. SLIP-RESISTANT SURFACE IS APPLIED TO SIDEWALK COVER PLATE BY THE MANUFACTURER AND THEN HOT DIPPED GALVANIZED TO THEIR RECOMMENDATIONS TO MAINTAIN THE INTEGRITY OF THIS SURFACE.

CONTRACTOR SHALL REVIEW EXISTING BRIDGE PLANS AND SHOP DRAWINGS TO DETERMINE THE LOCATION OF REINFORCING STEEL. SET LOCATION OF SLEEVES (4) TO AVOID REINFORCING STEEL.

SIDEWALK COVER PLATE (1) SHALL BE FABRICATED AFTER FIELD VERIFICATION/MEASUREMENTS BY THE CONTRACTOR TO ENSURE PROPER FIT.

CLEAN EXISTING BAR STEEL REINFORCEMENT TO REMOVE SURFACE RUST BY MECHANICAL MEANS PRIOR TO PLACEMENT OF NEW CONCRETE.

SEE SHEET D1 FOR CONCRETE REMOVAL DETAILS FOR THE SIDEWALK COVER PLATE REPAIR.



PLAN OF SIDEWALK COVER PLATE WITH SLIP-RESISTANT SURFACE

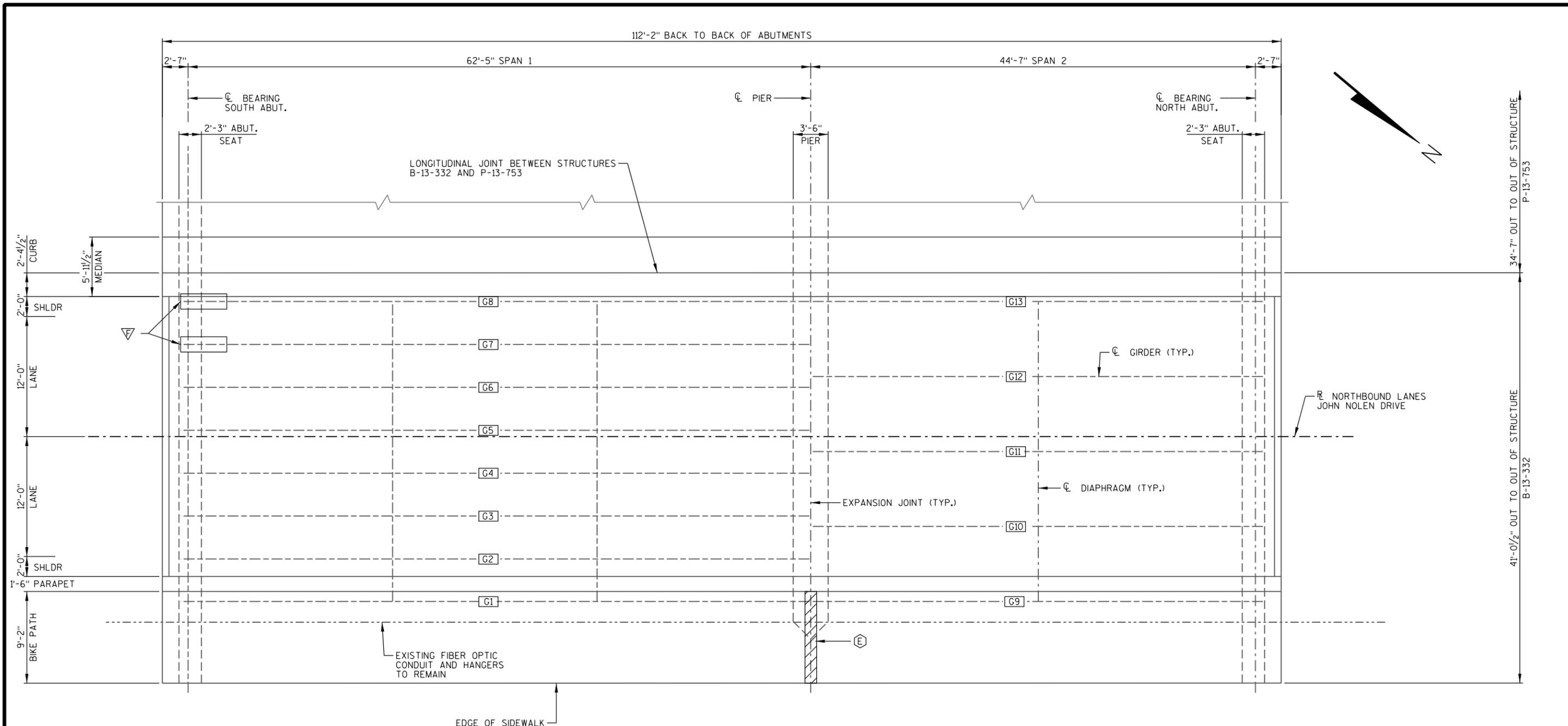
PLACE SLIP-RESISTANT SURFACE ON TOP WALKING SURFACE IN SHADED AREA ONLY.

LEGEND

- ① SIDEWALK COVER PLATE AS SHOWN, 3/8" X 1'-10" X 6'-0". GALVANIZE PLATE AFTER SLIP-RESISTANT SURFACE IS APPLIED. PLATE SHALL CONFORM TO ASTM A709 GRADE 36. (5 REQ'D.)
- ② 7/8" DIA. COUNTERSUNK HOLE FOR NO. 5.
- ③ 1" X 4" SLOTTED COUNTERSUNK HOLE FOR NO. 5. PLACE SLOT PARALLEL TO EDGE OF SIDEWALK.
- ④ FORM 1" DIA. HOLE IN DECK WITH PIPE SLEEVE FOR NO. 5.
- ⑤ 3/4" DIA. X 9" STAINLESS STEEL SOCKET FLAT HEAD SCREWS WITH TWO NUTS AND 3" X 3" X 1/4" STAINLESS STEEL PLATE WASHER. PLACE 9" SCREW THRU PLATE 1 AND HOLE 4. PROVIDE SNUG FIT USING PLATE WASHER AND NUT WITH ADDITIONAL JAMB NUT.

| APPROVED SLIP-RESISTANT APPLIED SURFACES FOR STEEL PLATES | | |
|---|-----------------------|----------------|
| PRODUCT | MANUFACTURER | CONTACT AT |
| SLIPNOT GRADE 2, STEEL | W. S. MOLNAR COMPANY | 1-800-SLIPNOT |
| ALGRIP, STEEL | ROSS TECHNOLOGY CORP. | 1-800-345-8170 |

| No. | Date | Revision | By |
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| JOHN NOLEN BRIDGE REPAIRS | | | |
| Drawn By | RLR | Plans Checked | NJK |
| SIDEWALK JOINT REPAIR DETAILS | | | SHEET D4 |
| | | | PROJECT NUMBER 11860 |



FRAMING PLAN
PEDESTRIAN RAILING AND SUPPORT
BRACKETS NOT SHOWN FOR CLARITY

- LEGEND**
- G1 — INDICATES GIRDER NUMBER.
 - ▽ — GIRDER END FIBER WRAP REPAIRS REQUIRED, SEE SPECIAL PROVISIONS FOR ADDITIONAL DETAILS.
 - E — SIDEWALK JOINT REPAIR REQUIRED, SEE SHEETS D1 & D4 FOR DETAILS.

BRIDGE JACKING AND ADJUSTING BEARING NOTES

THE THEORETICAL SERVICE LOADS (UNFACTORED) SHOWN IN THE TABLE ARE THE MAXIMUM JACKING LOADS FOR EACH SUBSTRUCTURE TYPE BASED ON ITS FINAL AS-BUILT CONFIGURATION. ADDITIONAL LOADS RESULTING FROM STAGING AND/OR CONTRACTOR OPERATIONS, SUCH AS UNEVEN JACKING OF ADJACENT GIRDERS OR ADJACENT SUBSTRUCTURE UNITS, IS NOT INCLUDED.

THE LL REACTIONS ARE BASED ON HL-93 AND INCLUDE IMPACT.

THE BRIDGE WILL BE OPEN TO TRAFFIC DURING CONSTRUCTION.

EXTERIOR GIRDER DEAD LOAD REACTIONS WERE INCREASED BY 10% TO ACCOUNT FOR VARIABILITY IN COMPOSITE DL DISTRIBUTION METHODS.

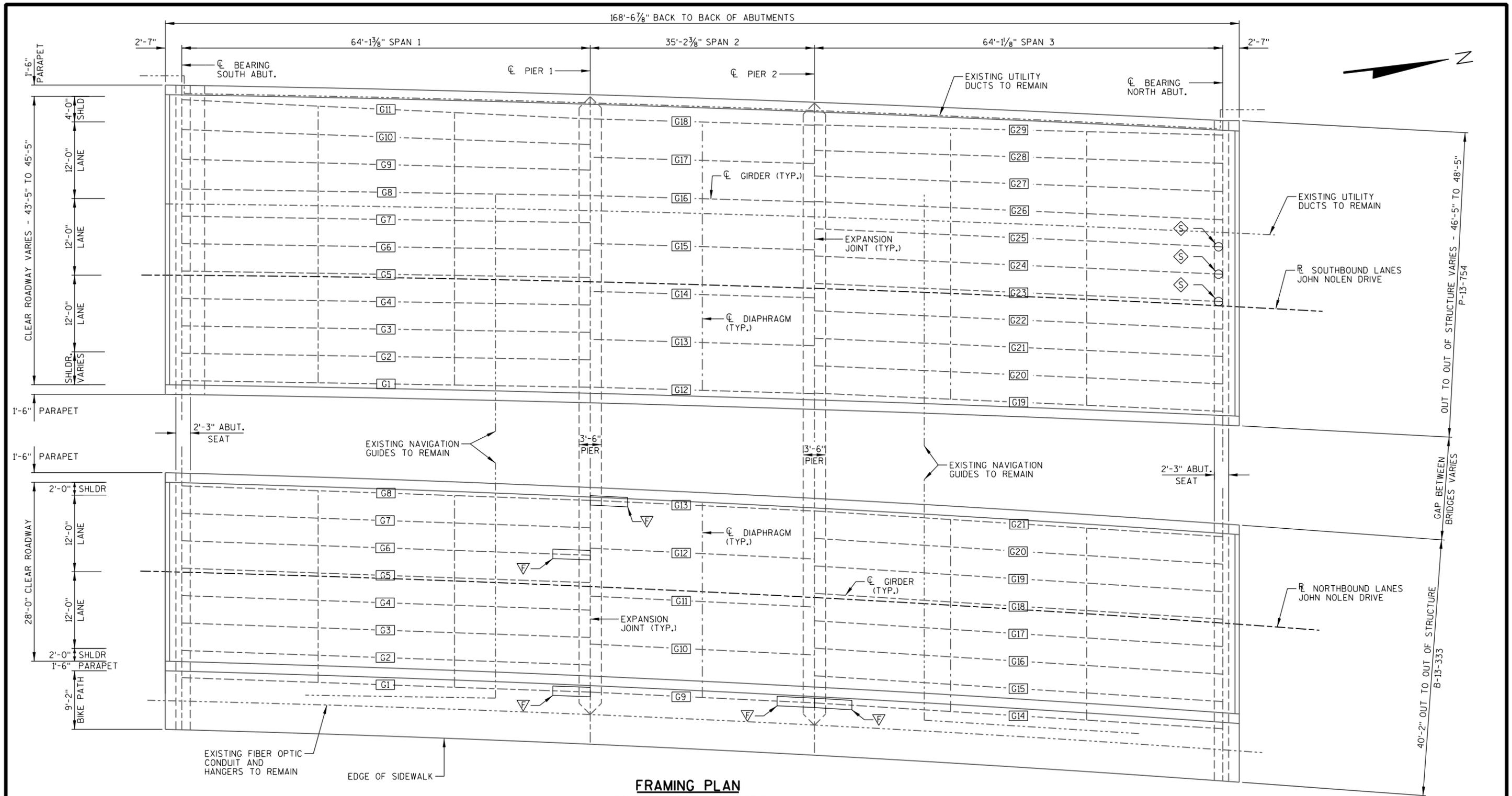
IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE ADEQUACY AND STABILITY OF THE GIRDER AT THE JACKING LOCATION.

ALL WORK ASSOCIATED WITH JACKING THE BRIDGE AND SUPPORTING IT DURING CONSTRUCTION WILL BE PAID AS A LUMP SUM UNDER BID ITEM "BRIDGE JACKING B-13-332".

GIRDER REACTIONS AT BEARINGS (KIPS)

| | | CL BEARING WEST ABUTMENT |
|-----------------|--------------|--------------------------|
| | | INTERIOR GIRDER |
| | LL 60.88 KIP | |
| EXTERIOR GIRDER | DL 33.46 KIP | |
| | LL 45.19 KIP | |

| | | | |
|--|------|---------------|-------------------------------------|
| No. | Date | Revision | By |
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| JOHN NOLEN BRIDGE REPAIRS | | | |
| Drawn By | RLR | Plans Checked | NJK |
| B-13-332 SUPERSTRUCTURE FRAMING PLAN | | | SHEET P1 PROJECT NUMBER 11860 |



FRAMING PLAN

PEDESTRIAN RAILING AND SUPPORT BRACKETS NOT SHOWN FOR CLARITY

BRIDGE JACKING AND ADJUSTING BEARING NOTES

THE THEORETICAL SERVICE LOADS (UNFACTORED) SHOWN IN THE TABLE ARE THE MAXIMUM JACKING LOADS FOR EACH SUBSTRUCTURE TYPE BASED ON ITS FINAL AS-BUILT CONFIGURATION. ADDITIONAL LOADS RESULTING FROM STAGING AND/OR CONTRACTOR OPERATIONS, SUCH AS UNEVEN JACKING OF ADJACENT GIRDERS OR ADJACENT SUBSTRUCTURE UNITS, IS NOT INCLUDED.

THE LL REACTIONS ARE BASED ON HL-93 AND INCLUDE IMPACT.

THE BRIDGE WILL BE OPEN TO TRAFFIC DURING CONSTRUCTION.

EXTERIOR GIRDER DEAD LOAD REACTIONS WERE INCREASED BY 10% TO ACCOUNT FOR VARIABILITY IN COMPOSITE DL DISTRIBUTION METHODS.

IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE ADEQUACY AND STABILITY OF THE GIRDER AT THE JACKING LOCATION.

ALL WORK ASSOCIATED WITH JACKING THE BRIDGE AND SUPPORTING IT DURING CONSTRUCTION WILL BE PAID AS A LUMP SUM UNDER BID ITEM "BRIDGE JACKING B-13-333" AND "BRIDGE JACKING P-13-754" RESPECTIVELY.

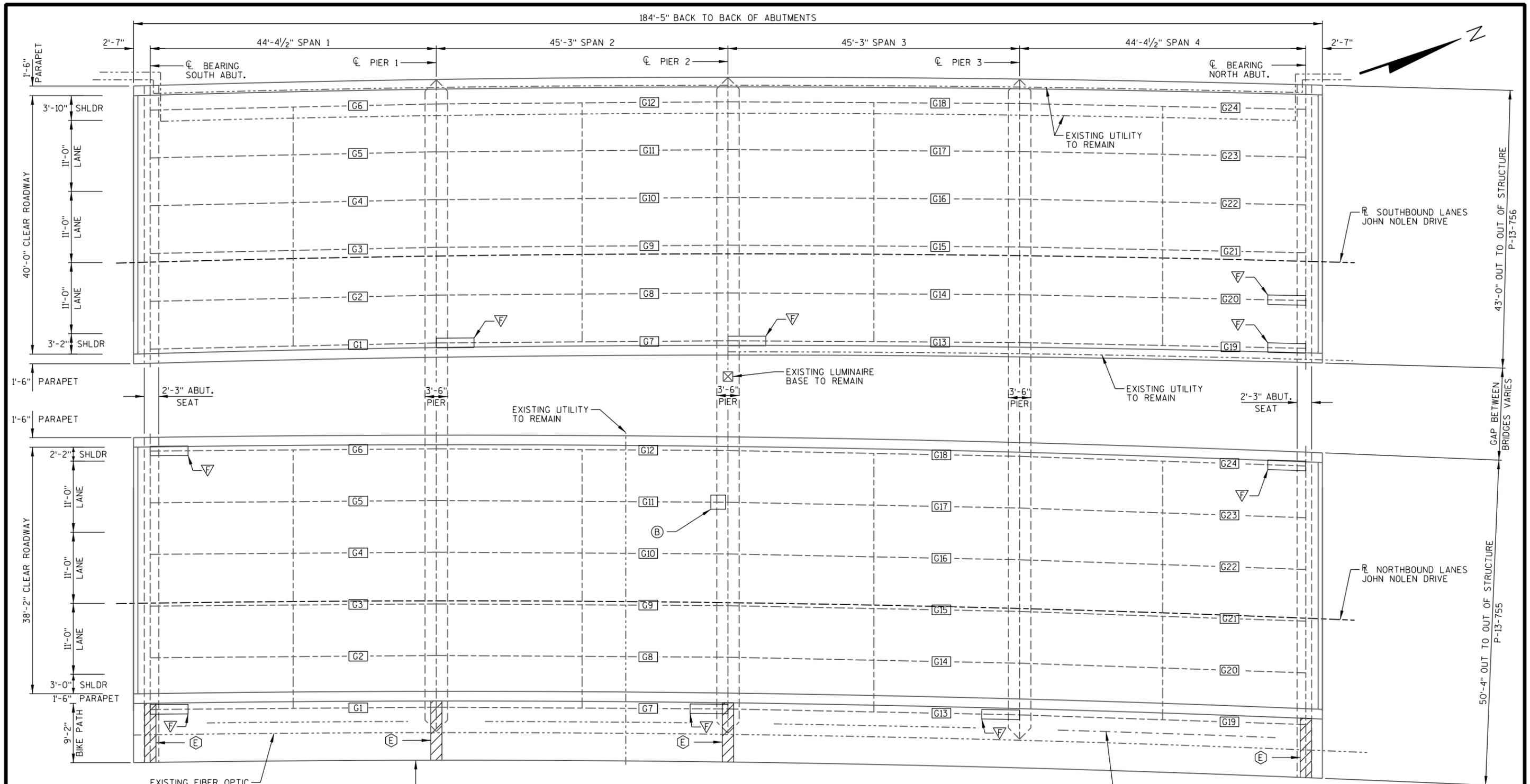
LEGEND

- G1 - INDICATES GIRDER NUMBER.
- ▽ - GIRDER END FIBER WRAP REPAIRS REQUIRED, SEE SPECIAL PROVISIONS FOR ADDITIONAL DETAILS.
- ◇ - WEDGE GAPS UNDER EXPANSION BEARING, SEE SHEET D2 FOR DETAILS.

GIRDER REACTIONS AT BEARINGS (KIPS)

| | | CL BEARING ABUTMENT | CL BEARING PIER |
|-----------------|----|---------------------|-----------------|
| INTERIOR GIRDER | DL | 34.63 KIP | 34.63 KIP |
| | LL | 61.40 KIP | 61.40 KIP |
| EXTERIOR GIRDER | DL | 34.29 KIP | 34.29 KIP |
| | LL | 48.09 KIP | 48.09 KIP |

| No. | Date | Revision | By |
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| JOHN NOLEN BRIDGE REPAIRS | | | |
| Drawn By | RLR | Plans Checked | NJK |
| B-13-333 & P-13-754 SUPERSTRUCTURE FRAMING PLANS | | SHEET P2 PROJECT NUMBER 11860 | |



FRAMING PLAN

PEDESTRIAN RAILING AND SUPPORT BRACKETS NOT SHOWN FOR CLARITY

BRIDGE JACKING AND ADJUSTING BEARING NOTES

THE THEORETICAL SERVICE LOADS (UNFACTORED) SHOWN IN THE TABLE ARE THE MAXIMUM JACKING LOADS FOR EACH SUBSTRUCTURE TYPE BASED ON ITS FINAL AS-BUILT CONFIGURATION. ADDITIONAL LOADS RESULTING FROM STAGING AND/OR CONTRACTOR OPERATIONS, SUCH AS UNEVEN JACKING OF ADJACENT GIRDERS OR ADJACENT SUBSTRUCTURE UNITS, IS NOT INCLUDED.

THE LL REACTIONS ARE BASED ON HL-93 AND INCLUDE IMPACT.

THE BRIDGE WILL BE OPEN TO TRAFFIC DURING CONSTRUCTION.

EXTERIOR GIRDER DEAD LOAD REACTIONS WERE INCREASED BY 10% TO ACCOUNT FOR VARIABILITY IN COMPOSITE DL DISTRIBUTION METHODS.

IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE ADEQUACY AND STABILITY OF THE GIRDER AT THE JACKING LOCATION.

ALL WORK ASSOCIATED WITH JACKING THE BRIDGE AND SUPPORTING IT DURING CONSTRUCTION WILL BE PAID AS A LUMP SUM UNDER BID ITEM "BRIDGE JACKING P-13-755" & "BRIDGE JACKING P-13-756" RESPECTIVELY.

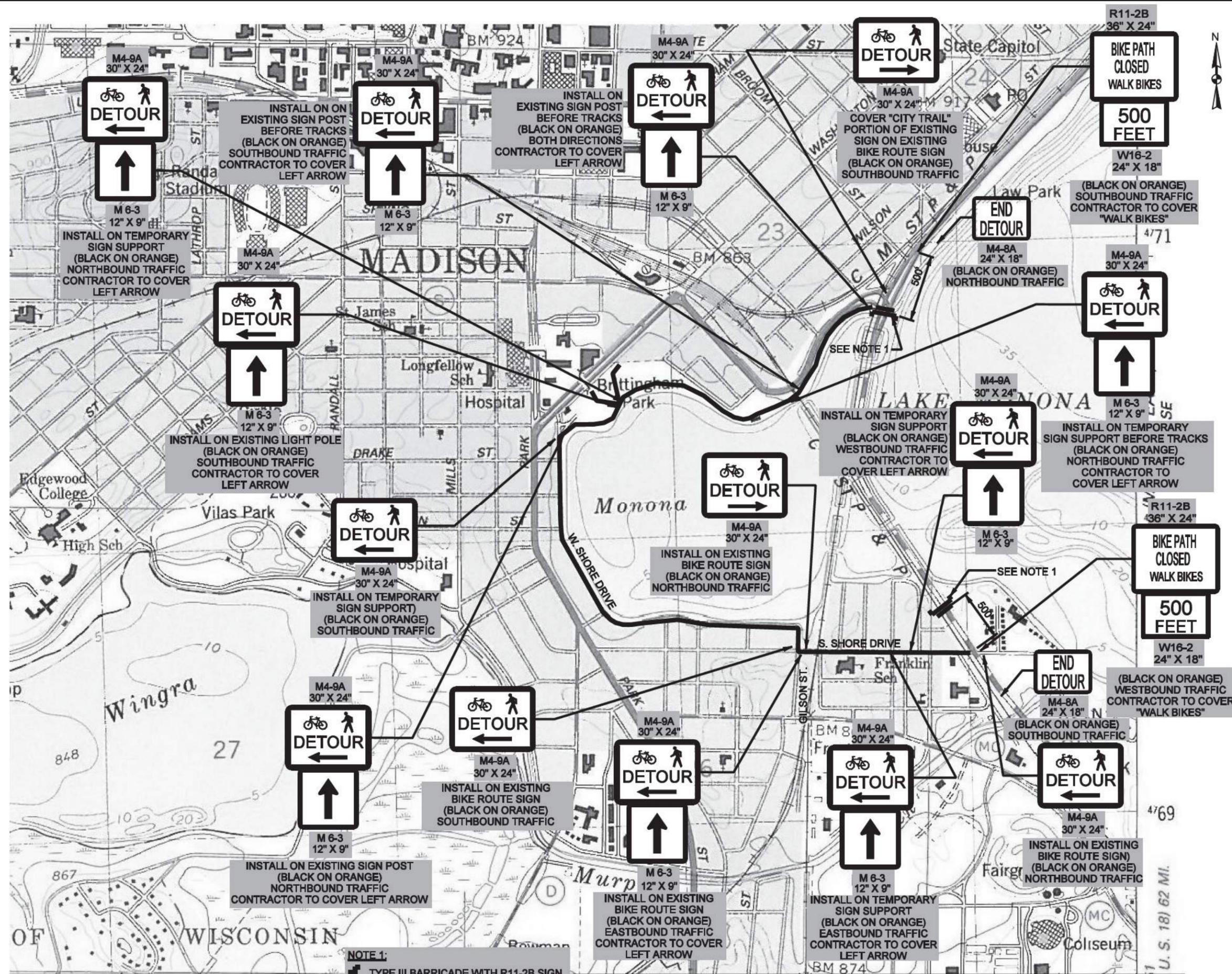
LEGEND

- G1 - INDICATES GIRDER NUMBER.
- ▽ - GIRDER END FIBER WRAP REPAIRS REQUIRED, SEE SPECIAL PROVISIONS FOR ADDITIONAL DETAILS.
- ⓑ - INSTALL NEW EXPANSION BEARING ASSEMBLY AND BEARING BRACKET SEE SHEETS D2 & D3 FOR DETAILS.
- ⓔ - SIDEWALK JOINT REPAIR REQUIRED, SEE SHEETS D1 & D4 FOR DETAILS.

GIRDER REACTIONS AT BEARINGS (KIPS)

| | | ℄ BEARING ABUTMENT | ℄ BEARING PIER |
|-----------------|----|--------------------|----------------|
| INTERIOR GIRDER | DL | 32.52 KIP | 33.17 KIP |
| | LL | 80.37 KIP | 80.99 KIP |
| EXTERIOR GIRDER | DL | 31.42 KIP | 32.03 KIP |
| | LL | 50.90 KIP | 51.29 KIP |

| No. | Date | Revision | By |
|---|------|---------------|-------------------------------------|
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| JOHN NOLEN BRIDGE REPAIRS | | | |
| Drawn By | RLR | Plans Checked | NJK |
| P-13-755 & P-13-756 SUPERSTRUCTURE FRAMING PLANS | | | SHEET P3 PROJECT NUMBER 11860 |



NOTE 1:
 TYPE III BARRICADE WITH R11-2B SIGN AND WARNING LIGHT, TYPE A

| No. | Date | Revision | By |
|---|------|----------------|-------|
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| JOHN NOLEN BRIDGE REPAIRS | | | |
| Drawn By | RLR | Plans Checked | NJK |
| TRAFFIC CONTROL PLAN | | SHEET | TC1 |
| | | PROJECT NUMBER | 11860 |