

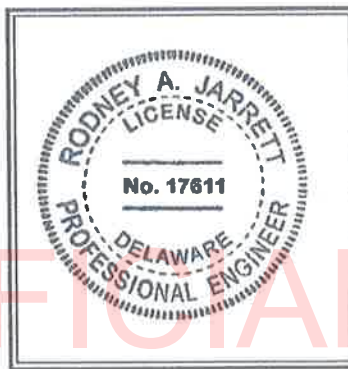
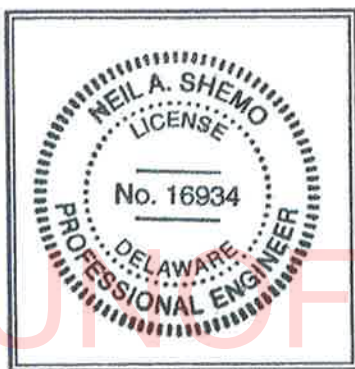
THE STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
Signature Sheet


Contract No.: T201707005

F.A.P. No.: EBHOS-2018(36)
P3E No.: 17-07005

Title: Statewide Movable Bridge Preventative Maintenance
Location: Bridges 1-687, 1-688, 1-693, 2-021A, 3-151, 3-153, 3-154, 3-164
County: Statewide

PREPARED BY




AECOM Project Manager
Date: 08/31/2018

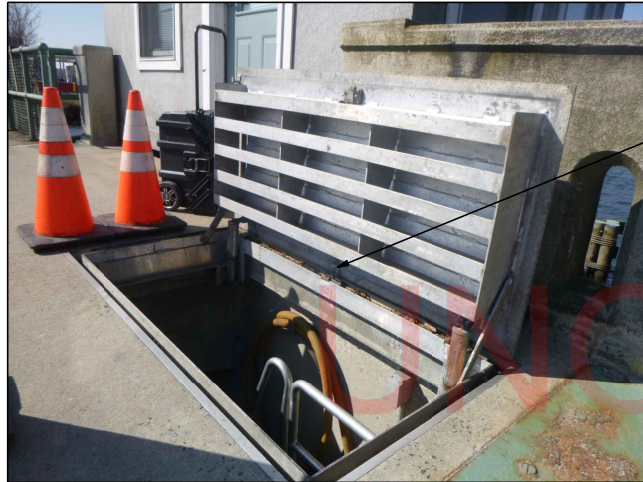

Hardesty & Hanover Project Manager
Date: 08-28-2018

APPROVED for ADVERTISEMENT


Director, Maintenance & Operations
Date: 9/4/2018

Bridge 3-151

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REPLACE DAMAGED HINGE (SEE NOTE 3)

COUNTERWEIGHT PIT WEST ACCESS HATCH

NOTE: 1 LOCATION



CLEAN DEBRIS FROM PIER 3

PIER 3 (BASCULE PIER) - FACING NORTH

NOTE: BASCULE PIER SHOWN WITH LEAF PARTIALLY RAISED



CLEAN DEBRIS FROM PIER 2

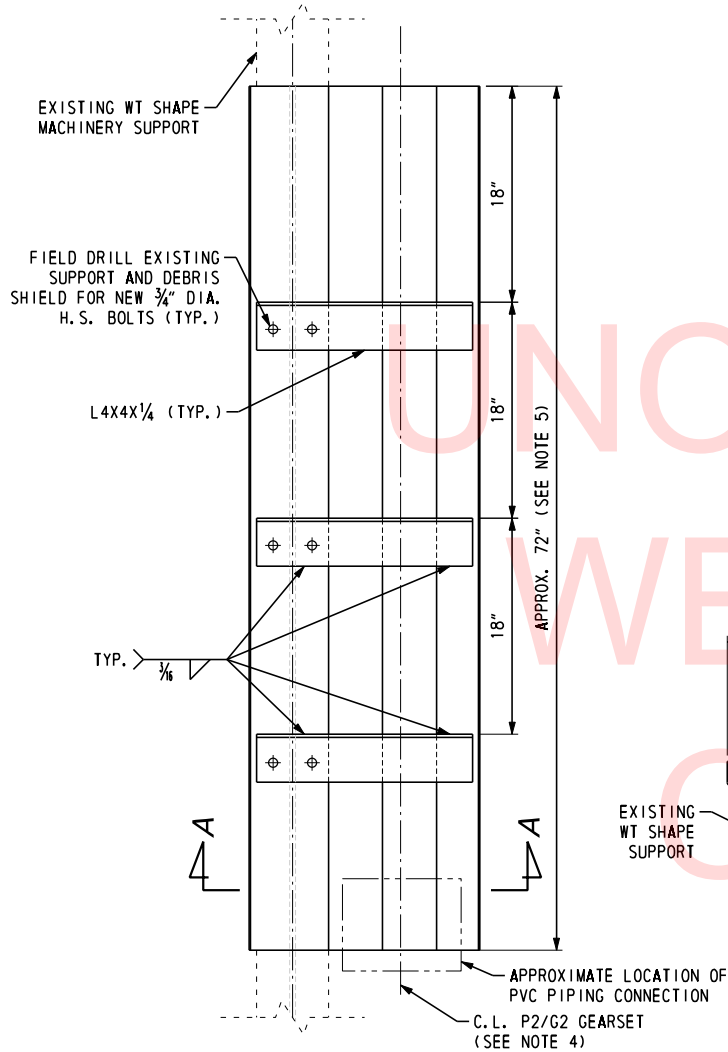
PIER 2

NOTE: PIER SHOWN WITH BASCULE LEAF RAISED

NOTES:

1. ALL ITEMS ON THIS DRAWING SHALL BE PAID UNDER SECTION 615625 "INITIAL REPAIRS AT BRIDGE 3-151."
2. REFER TO THE SPECIAL PROVISIONS FOR ADDITIONAL REQUIREMENTS.
3. EXISTING DOOR IS BILCO TYPE JAL-H20. CONTRACTOR TO VERIFY HINGE SIZE WITH MANUFACTURER.
4. DEBRIS TO BE PROPERLY DISPOSED OF ACCORDING TO LOCAL, STATE, AND FEDERAL REGULATIONS.

T201707005	FRONT STREET
615625 - INITIAL REPAIRS AT BRIDGE 3-151	
REPAIRS S1 & S2	



P2/G2 GEARSET DEBRIS SHIELD - PLAN

SCALE: NTS
QTY: 2

MATERIAL: SHEET METAL - 12 GAUGE ASTM A240 TYPE 316 STAINLESS STEEL
ANGLES - ASTM A276 TYPE 316 STAINLESS STEEL

NOTE: EAST DEBRIS SHIELD SHOWN. WEST DEBRIS SHIELD SYMMETRICAL ABOUT C.L. BRIDGE

CONNECT NEW DEBRIS SHIELD TO TOP FLANGE OF THE EXISTING WT SHAPE SUPPORT (SEE NOTE 3)

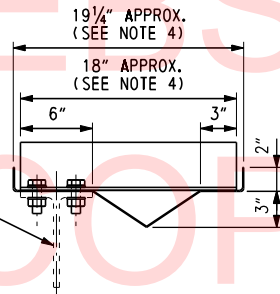


EAST P2/G2 GEARSET (FACING WEST)

NOTES: WEST P2/G2 GEARSET SYMMETRICAL ABOUT C.L. BRIDGE

NOTES:

- ALL ITEMS ON THIS DRAWING SHALL BE PAID UNDER SECTION 615625 "INITIAL REPAIRS AT BRIDGE 3-151."
- REFER TO THE SPECIAL PROVISIONS FOR ADDITIONAL REQUIREMENTS.
- THE DEBRIS SHIELD SHALL DRAIN INTO PVC PIPING (AT LEAST 3" DIAMETER), WHICH SHALL RUN DOWN TO THE BASCULE PIER FLOOR. PVC PIPING SHALL NOT DRAIN WATER ONTO THE CONCRETE SURROUNDING THE TRUNNION TOWER SUPPORTS OR CONDUIT WITHIN THE PIER. A PVC PIPING TROUGH SYSTEM MAY BE USED TO COLLECT THE WATER / DEBRIS FROM THE DEBRIS SHIELD OR PIPING MAY BE CONNECTED TO THE DEBRIS SHIELD (WHICH MAY REQUIRE AN END PLATE INSTALLED AT THE BOTTOM OF THE SHIELD TO ENSURE THE WATER AND DEBRIS DOES NOT BYPASS THE DRAIN PIPE). VERIFY THE PROPOSED PVC PIPING COMPONENTS WILL NOT INTERFERE WITH MOVABLE SPAN AND MACHINERY.
- THE DEBRIS SHIELD SHALL OVERHANG THE OUTBOARD SIDE OF THE P2/G2 GEARSET AT LEAST 3". THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING LOCATION OF THE GEARSET RELATIVE TO THE MACHINERY SUPPORT AND EXTEND THE DEBRIS SHIELD IF NEEDED. VERIFY THE THE DEBRIS SHIELD DOES NOT INTERFERE WITH OTHER ADJACENT MACHINERY AND STRUCTURAL SUPPORTS.
- THE DEBRIS SHIELD SHALL FULLY COVER THE P2/G2 GEARSET. THE CONTRACTOR SHALL FIELD VERIFY THE OVERALL LENGTH REQUIRED TO COVER THE GEARSET. VERIFY THE DEBRIS SHIELD WILL NOT INTERFERE WITH THE EXISTING SUPPORTS. COPING OF THE DEBRIS SHIELD MAY BE REQUIRED.



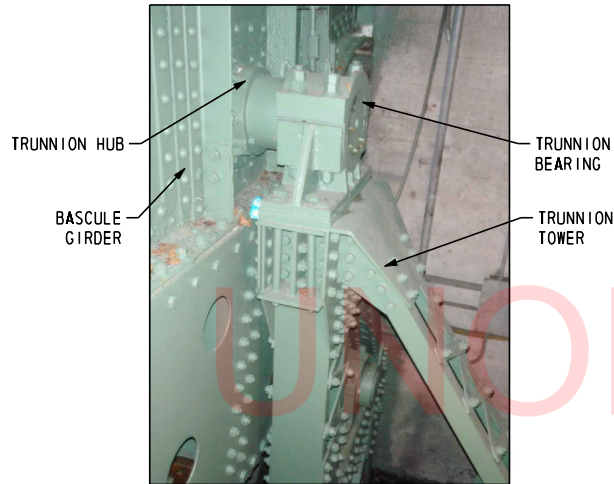
SECTION A-A

SCALE: NTS

REPAIR

M1 INSTALL A DEBRIS SHIELD OVER P2/G2 GEARSETS.

T201707005	FRONT STREET
615625 - INITIAL REPAIRS AT BRIDGE 3-151	
REPAIR M1	



**WEST TRUNNION ASSEMBLY -
OUTBOARD SIDE**



WEST TRUNNION ASSEMBLY - INBOARD SIDE

NOTE: 2 TRUNNION BEARING ASSEMBLIES TOTAL

REPLACE ALL WEST TRUNNION HUB 1/4" DIA. H.S. TURNED BOLTS (SEE NOTES 3, 4, 5, & 6) (QTY. 8 BOLTS)

TRUNNION HUB

CLEAN AND SPOT PAINT TRUNNION BEARING ASSEMBLIES (INCLUDING TRUNNION BEARINGS, SHAFTS, HUBS, AND FASTENERS) AFTER NEW TURNED BOLTS HAVE BEEN INSTALLED (TYP.)

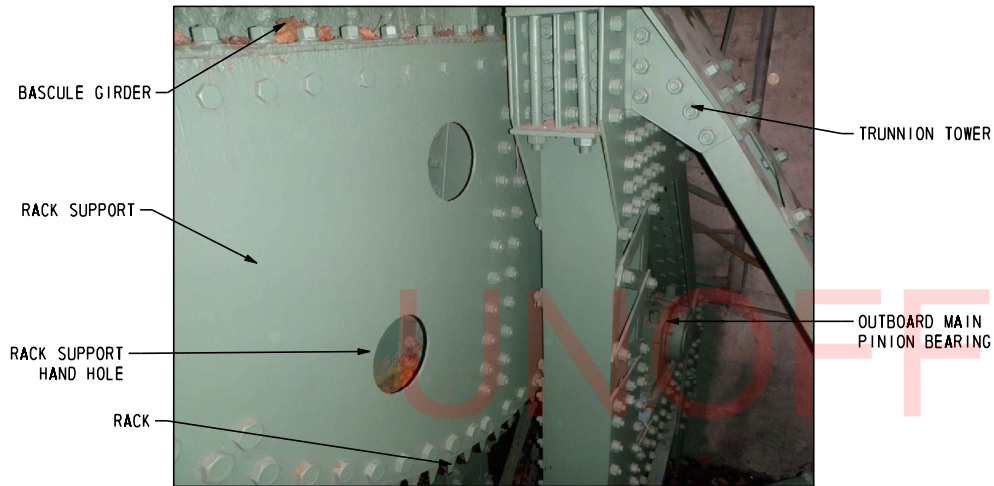
NOTES:

- ALL ITEMS ON THIS DRAWING SHALL BE PAID UNDER SECTION 615625 "INITIAL REPAIRS AT BRIDGE 3-151."
- REFER TO THE SPECIAL PROVISIONS FOR ADDITIONAL REQUIREMENTS.
- PRIOR TO ORDERING NEW TURNED BOLT MATERIAL, REMOVE ONE EXISTING TRUNNION FASTENER FOR MATERIAL PROPERTY TESTING (FOR YIELD STRENGTH AND ULTIMATE STRENGTH). THE CONTRACTOR SHALL SUBMIT THE MATERIAL TEST REPORT TO THE ENGINEER FOR REVIEW. IMMEDIATELY AFTER REMOVAL OF THE EXISTING TURNED BOLT, INSTALL A NEW TEMPORARY 7/8" DIA. ASTM A449 BOLT IN PLACE OF THE REMOVED TURNED BOLT.
- WHERE THE EXISTING TRUNNION HUB TURNED BOLT IS REMOVED FOR MATERIAL TESTING, THE CONTRACTOR SHALL FIELD VERIFY DIMENSIONS OF THE EXISTING BOLT HOLE IN BOTH TRUNNION HUBS AND IN THE WEB OF THE BASCULE GIRDER. THESE DIMENSIONS SHALL BE USED FOR FABRICATING THE NEW TRUNNION HUB TURNED BOLTS. NEW TRUNNION HUB TURNED BOLTS SHALL HAVE AN ANSI LT4 FIT WITH THE TRUNNION HUBS AND BASCULE GIRDER WEB. AS EACH TRUNNION HUB BOLT IS REMOVED, THE CONTRACTOR SHALL MEASURE THE EXISTING BOLT HOLE DIAMETER AND THE NEW TURNED BOLT DIAMETER. NOTIFY THE ENGINEER IF ANY BOLT HOLE HAS A CLEARANCE OR INTERFERENCE THAT EXCEEDS THE LT4 FIT LIMITS.
- THE EXISTING TURNED BOLTS MAY HAVE A SLIGHT INTERFERENCE FIT WITH THE TRUNNION HUB AND GIRDER WEB. BOLTS SHALL BE REMOVED VIA MECHANICAL METHODS ONLY. ONLY 1 PERMANENT TRUNNION HUB TURNED BOLT MAY BE REMOVED AT A TIME. THE BRIDGE SHALL NOT BE OPERATED WHILE ANY TRUNNION BOLT IS NOT INSTALLED.
- HEATING OF THE BASCULE GIRDER / TRUNNION HUBS FOR REMOVAL OR INSTALLATION OF TURNED BOLTS IS NOT PERMITTED.

REPAIR

- M2 REPLACE THE WEST TRUNNION HUB TURNED BOLTS. CLEAN AND SPOT PAINT TRUNNION ASSEMBLIES, MAIN PINION BEARING BOLTS, AND THE RACK BOLTS.

T201707005	FRONT STREET
615625 - INITIAL REPAIRS AT BRIDGE 3-151	
REPAIR M2 (1 OF 2)	



WEST RACK SUPPORT - OUTBOARD SIDE

NOTE: EAST RACK SUPPORT SYMMETRICAL ABOUT CENTERLINE OF BRIDGE



TYPICAL MAIN PINION BEARING

NOTES: WEST OUTBOARD SIDE MAIN PINION BEARING SHOWN. THE 3 OTHER MAIN PINION BEARINGS ARE SIMILAR.



TYPICAL RACK FASTENERS INSIDE THE RACK SUPPORT

NOTES: 2 LOCATIONS

NOTES:

1. ALL ITEMS ON THIS DRAWING SHALL BE PAID UNDER SECTION 615625 "INITIAL REPAIRS AT BRIDGE 3-151."
2. REFER TO THE SPECIAL PROVISIONS FOR ADDITIONAL REQUIREMENTS.
3. THE RACK SUPPORT FASTENERS SHALL BE CLEANED AND SURFACES PREPARED FOR PAINTING USING HAND TOOLS AND ACCESSED VIA THE HAND HOLES IN THE RACK SUPPORTS. IF THE RACK FASTENER SURFACES CAN NOT BE ADEQUATELY PREPARED FOR PAINTING USING HAND TOOLS, THE CONTRACTOR SHALL PROPOSE ANOTHER METHOD FOR THE ENGINEER TO REVIEW.

T201707005	FRONT STREET
615625 - INITIAL REPAIRS AT BRIDGE 3-151	
REPAIR M2 (2 OF 2)	



FURNISH AND ADD LABEL "DISCONNECT SWITCH & MOTOR FED FROM MULTIPLE SOURCES, LOCK-OUT ALL EQUIPMENT PRIOR TO SERVICING"

SPAN MOTOR DISCONNECT SWITCH

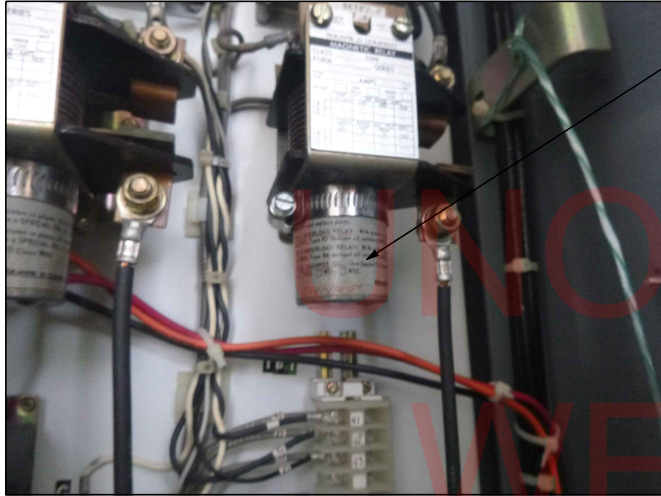
QTY: 1 DISCONNECT SWITCH

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NOTES:

1. THE LABEL SHALL NOT BE HANDWRITTEN.
2. REFER TO THE SPECIAL PROVISIONS FOR REQUIREMENTS.

T201707005	FRONT STREET
615625 - INITIAL REPAIRS AT BRIDGE 3-151	
REPAIR E1	



REPLACE THE MOTOR
OVERLOADS

TYPICAL MOTOR OVERLOAD INSIDE THE MOTOR
CONTROL PANEL SHOWING SIGNS OF OIL LEAKS

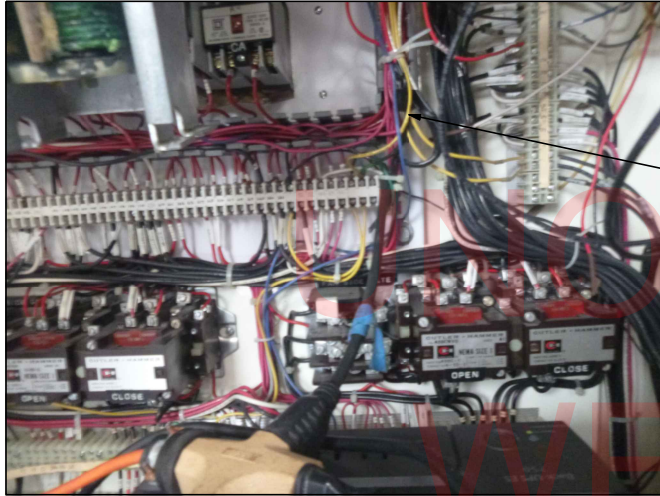
QTY: 3 MOTOR OVERLOADS

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NOTES:

1. CLEAN OIL RESIDUE THAT HAS LEAKED ONTO COMPONENTS INSIDE THE MOTOR CONTROL PANEL.
2. REFER TO THE SPECIAL PROVISIONS FOR REQUIREMENTS.

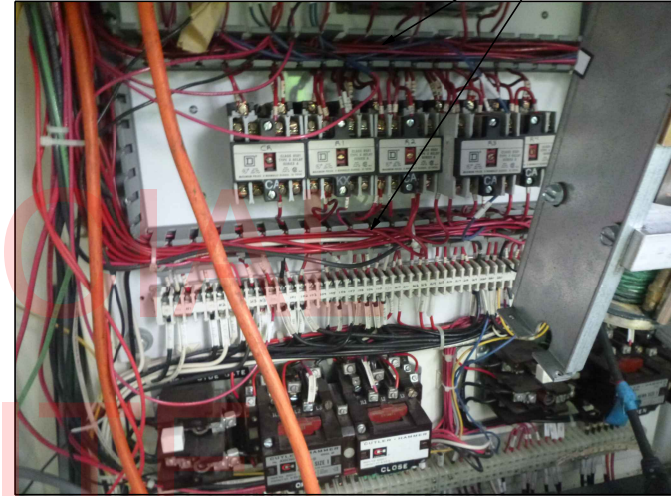
T201707005	FRONT STREET
615625 - INITIAL REPAIRS AT BRIDGE 3-151	
REPAIR E2	



MARK THE EXISTING
GROUND CONDUCTOR
WITH GREEN TAPE

GROUND CONDUCTOR INSIDE THE CONTROL DESK
WITHOUT IDENTIFIABLE MARKINGS

QTY: AS REQUIRED



FURNISH AND
INSTALL WIRING
DUCTS COVERS

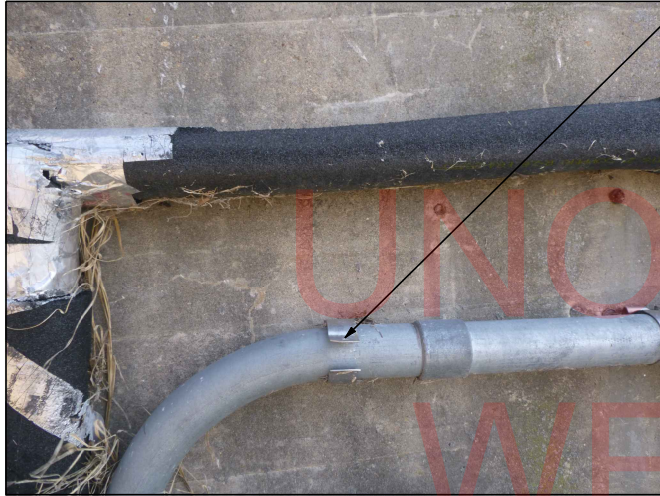
TYPICAL WIRE DUCTS INSIDE THE CONTROL
DESK WITHOUT COVERS

QTY: 1 LOCATION

NOTES:

1. ALL WIRING IN THE WIRE DUCTS SHALL BE NEATLY INSERTED IN THE SLOTS BEFORE PLACING THE COVERS.
2. REFER TO THE SPECIAL PROVISIONS FOR REQUIREMENTS.

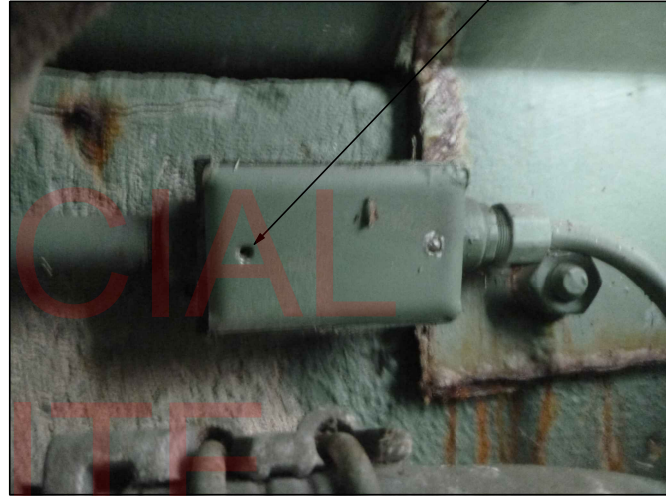
T201707005	FRONT STREET
615625 - INITIAL REPAIRS AT BRIDGE 3-151	
REPAIR E3	



FURNISH AND
INSTALL NEW S. S
CONDUIT CLAMP
FASTENER

CONDUIT CLAMP AT THE NORTHWEST APPROACH
WITH A MISSING FASTENER

QTY: 1 LOCATION



FURNISH AND
INSTALL A NEW S. S
FASTENER FOR THE
JUNCTION BOX

WEST DROOP CABLE JUNCTION BOX WTH MISSING
A FASTENER ON THE MACHINERY PLATFORM

QTY: 2 LOCATIONS

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COPY

NOTES:

1. ALL HARDWARE SHALL BE TYPE 316 S. S.
2. REFER TO THE SPECIAL PROVISIONS FOR REQUIREMENTS.

T201707005	FRONT STREET
615625 - INITIAL REPAIRS AT BRIDGE 3-151	
REPAIR E4 (1 OF 2)	



FURNISH AND
INSTALL NEW S. S
FASTENER

CORRODED FASTENERS AT THE JUNCTION BOX ON
THE MACHINERY PLATFORM

QTY: 2 FASTENERS

NOTES:

1. ALL HARDWARE SHALL BE TYPE 316 S. S.
2. REFER TO THE SPECIAL PROVISIONS FOR REQUIREMENTS.

T201707005	FRONT STREET
615625 - INITIAL REPAIRS AT BRIDGE 3-151	
REPAIR E4 (2 OF 2)	



FURNISH AND
INSTALL TERMINAL
BLOCK AND
TERMINATE LOOSE
CONDUCTORS

**SOUTHWEST APPROACH JUNCTION BOX WITH
DISCONNECTED WIRING INSIDE**

QTY: ASSUME 6 CONDUCTORS

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NOTES:

1. ADD NEW TERMINAL BLOCK INSIDE THE EXISTING ENCLOSURE NEW BACKPANEL.
2. REFER TO THE SPECIAL PROVISIONS FOR REQUIREMENTS.

T201707005	FRONT STREET
615625 - INITIAL REPAIRS AT BRIDGE 3-151	
REPAIR E5	



REMOVE CORROSION
AND DEBRIS WITH
WIRE BRUSH AND
APPLY PAINT ON
THE ROTARY CAM
HOUSING

CORROSION ON THE ROTARY CAM LIMIT SWITCH
HOUSING

QTY: 1

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COPY

NOTES:

1. DO NOT PAINT FLEXIBLE CONDUIT, PVC OR S.S. EQUIPMENT.
2. PROTECT ALL PINS AND MOVING PARTS FROM PAINT.
3. REFER TO THE SPECIAL PROVISIONS FOR REQUIREMENTS.

T201707005	FRONT STREET
615625 - INITIAL REPAIRS AT BRIDGE 3-151	
REPAIR E6	



ADJUST AND ROTATE EXISTING PIER LIGHTS TO MEET USCG REQUIREMENTS 33 CFR 118.65

TYPICAL FENDER PIER LIGHTS NOT ALIGNED WITH THE CHANNEL

QTY: 4



RELOCATE THE NAVIGATION LIGHT TO THE TIP OF THE SPAN.

NEW LOCATION FOR SPAN NAVIGATION LIGHTS. FURNISH AND INSTALL SUPOPRTS FOR NAVIGATION LIGHTS AS REQUIRED (TYP.)

TYPICAL SPAN MOUNTED NAVIGATION LIGHT LOCATED AT THE CENTER OF THE SPAN

QTY: 2

NOTES:

1. REFER TO THE SPECIAL PROVISIONS FOR REQUIREMENTS.
2. FURNISH AND INSTALL NEW CONDUIT AND CONDUIT FITTINGS TO BE ROUTED TO THE NEW LOCATION OF THE SPAN NAVIGATION LIGHT.
3. ALL HARDWARE SHALL BE TYPE 316 S. S.
4. NEW CONDUIT AND WIRE FOR THE NAVIGATION LIGHTS SHALL BE 3/4" C, 2*12 AWG, 1*12 AWG, AND 1 GND.

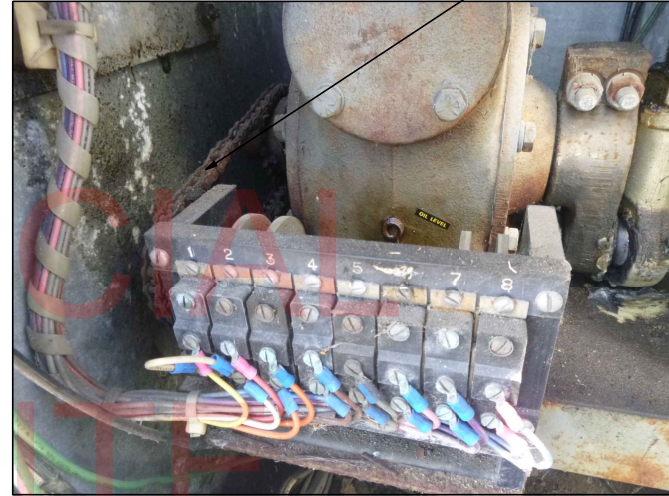
T201707005	FRONT STREET
615625 - INITIAL REPAIRS AT BRIDGE 3-151	
REPAIR E7	



REMOVE CORROSION ON THE GATE HOUSING AND APPLY PAINT

NORTH WARNING GATE HOUSING WITH CORROSION

QTY: 1



CLEAN THE CHAIN AND APPLY LUBRICATION. CLEAN AND REMOVE DEBRIS INSIDE WARNING GATE

NORTH WARNING GATE INTERIOR

QTY: 1

NOTES:

1. CLEAN THE WARNING GATE INTERIOR AND REMOVE EXCESSIVE LUBRICATION ON COMPONENTS.
2. REFER TO THE SPECIAL PROVISIONS FOR REQUIREMENTS.

T201707005	FRONT STREET
615625 - INITIAL REPAIRS AT BRIDGE 3-151	
REPAIR E8	



FURNISH AND
INSTALL A NEW
MOUNTING CLAMP

CORRODED CLAMP FOR THE WARNING BELL ON
THE NORTH TRAFFIC SIGNAL POLE

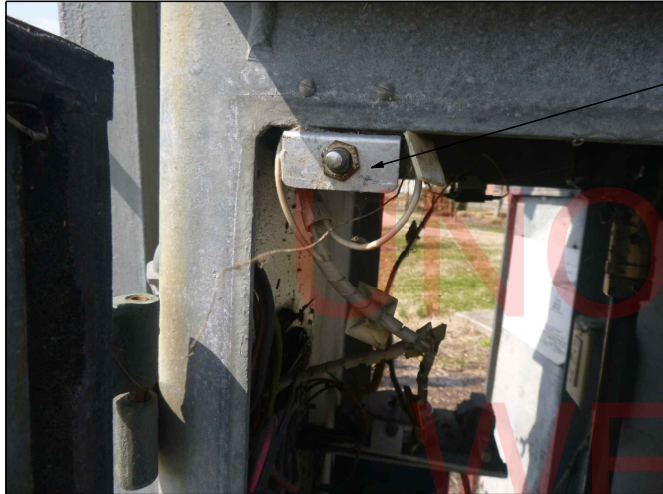
QTY: 1

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COPY

NOTES:

1. ALL HARDWARE SHALL BE TYPE 316 S.S.
2. REFER TO THE SPECIAL PROVISIONS FOR REQUIREMENTS.

T201707005	FRONT STREET
615625 - INITIAL REPAIRS AT BRIDGE 3-151	
REPAIR E9	



FURNISH AND
INSTALL A NEW
DOOR SAFETY
SWITCH AND
CONNECT ALL
WIRING
CONNECTIONS

DISCONNECTED/BYPASSED SAFETY DOOR SWITCH
AT THE NORTH WARNING GATE

QTY: 1



REPLACE CORRODED
HARDWARE

TYPICAL CORRODED HARDWARE ON THE NORTH
WARNING GATE DOOR STRAP

QTY: 8

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COPY

NOTES:

1. ALL HARDWARE SHALL BE TYPE 316 S.S.
2. REFER TO THE SPECIAL PROVISIONS FOR REQUIREMENTS.

T201707005	FRONT STREET
615625 - INITIAL REPAIRS AT BRIDGE 3-151	
REPAIR E10	



ADJUST CABLE LENGTH. FURNISH AND INSTALL BRACKET HANGERS TO SUPPORT DROOP CABLES

TYPICAL UNSUPPORTED DROOP CABLES

QTY: 2

UNOFFICIAL
WEBSITE
COPY

NOTES:

1. ALL HARDWARE SHALL BE TYPE 316 S. S.
2. REFER TO THE SPECIAL PROVISIONS FOR REQUIREMENTS.

T201707005	FRONT STREET
615625 - INITIAL REPAIRS AT BRIDGE 3-151	
REPAIR E11	



REMOVE EXISTING
MANUAL TRANSFER
SWITCH. FURNISH
AND INSTALL A NEW
MANUAL TRANSFER
SWITCH FOR THE
PORTABLE GENERATOR
WITH RECEPTACLE AT
THE BASE OF THE
ENCLOSURE

EXISTING SERVICE
DISCONNECT SWITCH

**MANUAL TRANSFER SWITCH WITH GENERATOR
CORD**

QTY: 1

NOTES:

1. ALL HARDWARE SHALL BE TYPE 316 S. S.
2. WATERTIGHT AND DUST-TIGHT NEMA 3R ENCLOSURE WITH A RATING OF 200A.
3. DOUBLE POLE, DOUBLE THROW SAFETY SWITCH WITH A RATING OF 200A RECEPTACLE.
4. REFER TO THE SPECIAL PROVISIONS FOR REQUIREMENTS.

T201707005	FRONT STREET
615625 - INITIAL REPAIRS AT BRIDGE 3-151	
REPAIR E12	



FURNISH AND
INSTALL NEW FULLY
CLOSED LIMIT
SWITCH AND LEVER
ARM

TYPICAL FULLY CLOSED LIMIT SWITCH
NONFUNCTIONAL LEVER ARM

QTY: 2

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NOTES:

1. ALL HARDWARE SHALL BE TYPE 316 S. S.
2. LIMIT SWITCH PART NO. EA780-10100.
3. REFER TO THE SPECIAL PROVISIONS FOR REQUIREMENTS.

T201707005	FRONT STREET
615625 - INITIAL REPAIRS AT BRIDGE 3-151	
REPAIR E13	



ADJUST GATE ARM
WARNING LIGHT
CIRCUITS AND
FLASHER TO
ALTERNATE
FLASHING LIGHTS
AND ONE STEADY
LIGHT AT THE TIP
OF THE GATE ARM

NORTH WARNING GATE ARM WARNING LIGHTS NOT
IN COMPLIANCE WITH THE MUTCD

QTY: 1 GATE ARM



FURNISH AND INSTALL NEW
FLEXIBLE CABLE 4C #12
AWC, 1#12 GND. TERMINATE
ALL WIRING TO EXISTING
FLASHER

DAMAGED SOW CABLE FOR THE NORTH WARNING
GATE FLASHER

QTY: 1

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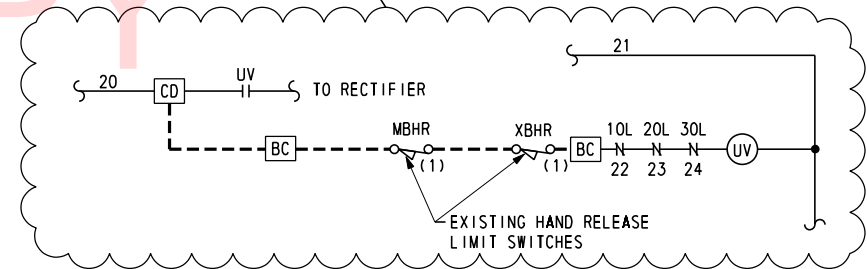
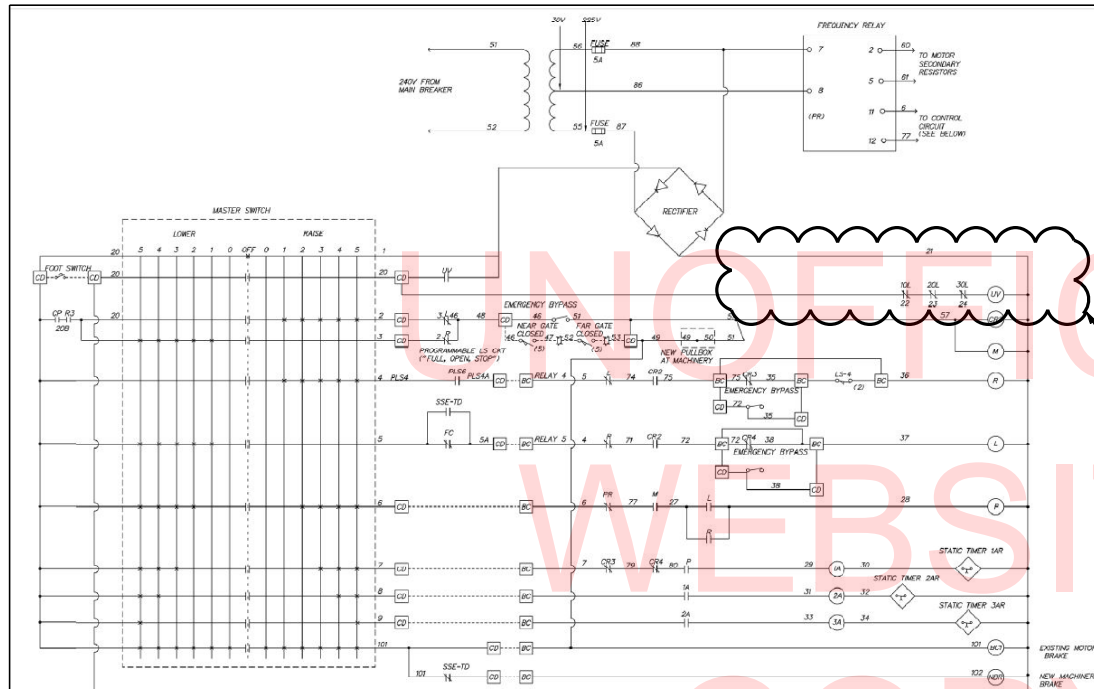
NOTES:

1. FURNISH AND INSTALL NEW FITTING FOR THE SOW CABLE.
2. ALL HARDWARE SHALL BE 316 TYPE S. S.
3. REFER TO THE SPECIAL PROVISIONS FOR REQUIREMENTS.

T201707005	FRONT STREET
615625 - INITIAL REPAIRS AT BRIDGE 3-151	
REPAIR E14	

SCOPE OF WORK:

1. CONNECT THE EXISTING MOTOR BRAKE AND MACHINERY BRAKE HAND-RELEASED LIMIT SWITCHES AS SHOWN.
2. CONNECT AND INTEGRATE BOTH LIMIT SWITCHES INTO THE EXISTING CONTROL CIRCUIT.
3. ALL WIRING, TERMINAL BLOCKS, CONNECTORS, AND WIRE LABELS SHALL BE AS SHOWN.
4. PERFORM OPERATIONAL TESTING TO CONFIRM THE BRAKES HAND-RELEASED LIMIT SWITCHES INTERRUPT THE SPAN OPERATION WHENEVER EITHER ONE OF THE LIMIT SWITCHES IS IN THE OPEN POSITION (ENGAGED).



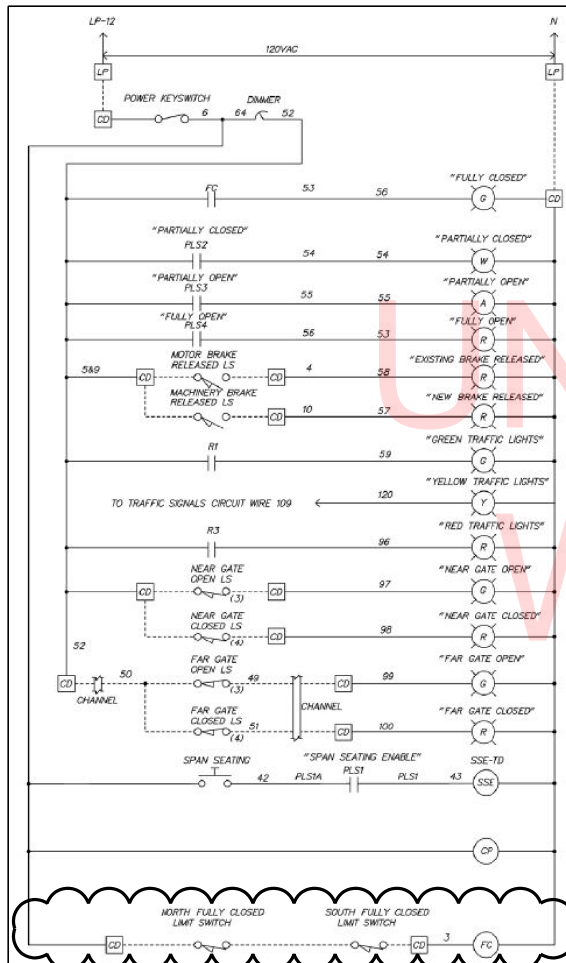
NOTES:

1. REFER TO THE SPECIAL PROVISIONS FOR REQUIREMENTS.
2. NEW FIELD WIRING SHALL BE #12 AWG TYPE XHHW. NEW CABINET WIRING SHALL BE #14 AWG TYPE SIS.

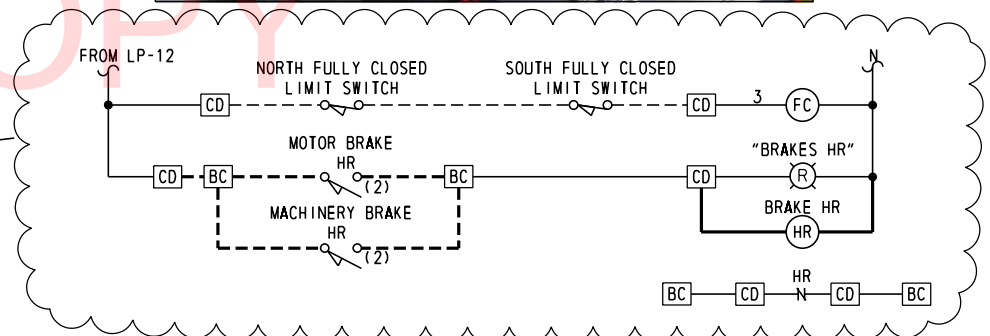
T201707005	FRONT STREET
615625 - INITIAL REPAIRS AT BRIDGE 3-151	
REPAIR E15 (1 OF 2)	

SCOPE OF WORK:

1. CONNECT THE EXISTING MOTOR BRAKE AND MACHINERY BRAKE HAND-RELEASED LIMIT SWITCHES AS SHOWN.
2. CONNECT BOTH EXISTING LIMIT SWITCHES TO THE NEW INDICATING LIGHT AND INTEGRATE THEM WITH THE EXISTING CIRCUITS AS SHOWN AND MODIFY WIRING AS REQUIRED.
3. FURNISH NEW RELAY AND CONNECT TO EXISTING CIRCUITS AS SHOWN.
4. FURNISH AND INSTALL NEW NAMEPLATE "BRAKES HAND-RELEASED" ABOVE THE NEW INDICATING LIGHT.
5. PERFORM OPERATIONAL TESTING TO CONFIRM THE INDICATING LIGHT ILLUMINATES WHEN EITHER N.O. HAND-RELEASED LIMIT SWITCH FOR THE BRAKES IS CLOSED.



LOCATION FOR THE NEW MOTOR BRAKES HAND-RELEASED INDICATING LIGHT



NOTE:

1. REFER TO THE SPECIAL PROVISIONS FOR REQUIREMENTS.

T201707005	FRONT STREET
615625 - INITIAL REPAIRS AT BRIDGE 3-151	
REPAIR E15 (2 OF 2)	



REVISE AND CORRECT THE PUSH TO TEST CIRCUIT SUCH THAT THE NEAR OPEN GATE AND GREEN TRAFFIC LIGHTS PUSH TO TEST CONNECTIONS ARE CONNECTED INDEPENDENTLY

NEAR GATE OPEN AND GREEN TRAFFIC LIGHTS
PUSH TO TEST CIRCUIT IN THE SAME
CONNECTIONS

QTY: 3

NOTE:

1. REFER TO THE SPECIAL PROVISIONS FOR REQUIREMENTS.

T201707005	FRONT STREET
615625 - INITIAL REPAIRS AT BRIDGE 3-151	
REPAIR E16	



FURNISH AND
INSTALL A NEW
REAR GALVANIZED
GATE DOOR.
FURNISH AND
INSTALL NEW
HARDWARE

DAMAGED REAR DOOR AT THE NORTH WARNING GATE

QTY: 1



TIGHTEN LOOSE
ANCHOR BOLT

LOOSE ANCHOR AT THE BASE OF THE SOUTH WARNING GATE

QTY: 1

NOTES:

1. ALL HARDWARE SHALL BE 316 TYPE S. S.
2. REFER TO THE SPECIAL PROVISIONS FOR REQUIREMENTS.

T201707005	FRONT STREET
615625 - INITIAL REPAIRS AT BRIDGE 3-151	
REPAIR E17	