BURRITTS RAPIDS
SWING BRIDGE REHABILITATION

LIST of DRAWINGS:

CIVIL
C1 DETOUR
C2 STAGING AND ACCESS
C3 APPROACH WORKS

STRUCTURAL
S1 GENERAL ARRANGEMENT
S2 STRUCTURAL STEEL DETAILS
S3 WOOD DECKING AND CURB DETAIL
S4 STRINGER AND DECK BOARD DETAIL
S5 CONCRETE REPAIR AT RAIL
S6 MASONRY REPAIRS
S7 MASONRY DETAILS

MECHANICAL
M002 RAIL MOUNTING AND STOP
M003 GEAR SYSTEM
M004 WHEEL RAIL PLAN

Ontario Waterways Unit
Parks Canada
Parcs Canada

Project: 30029204 September, 2017
NOTES:

- ON SCALE DRAWINGS:

- THE LOCATION OF OBJECTS AND APPARENT
  DISTANCES ARE APPROXIMATE

- THE SCALE OF DRAWINGS
  MAY NOT BE ACCURATE.

- ALL VOLUMES ARE
  CALCULATED IN
  ACCORDANCE WITH
  CANADA'S

- ALL INTERSECTIONS ARE
  APPROXIMATELY 50m
  EITHER SIDE OF

- TREE TRIMMING AT
  SWING BRIDGE

- TREE TRIMMING
  TO IMPROVE

- EXISTING 5 TONNE LOAD
  SIGN TO REMAIN

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**NEW COUNTERWEIGHT RAILS SHALL BE CUT AND RAILS AND TIE BEAMS TO ALLOW WATER TO WEIGHT TIE COUNTERBALANCE BALANCE ANGLES PLATES BEAMS BEAM EAST WEST TRUSSES**

* ACTUAL SIZE AND ANGLE DIMENSIONS TO BE CONFIRMED IN THE FIELD PRIOR TO FABRICATING.

**NEW BALANCE BEAM CROSS BRACING ROD ATTACHMENT**

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<th>BEAM</th>
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**PLAN ATTACHMENT OF NEW COUNTERWEIGHT CROSS TO FLOOR BEAMS AND PRIMARY GIRDERS**

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**SECTION ATTACHMENT OF NEW COUNTERWEIGHT CROSS TO FLOOR BEAMS AND PRIMARY GIRDERS**

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**NORTH WEST EXTERIOR COUNTERWEIGHT**

**UNDERSIDE OF COUNTERWEIGHT**

**COUNTERWEIGHT LOCATION BETWEEN STRINGERS**

---

**EXISTING STRUCTURAL STEEL PLAN**

**EXISTING STRUCTURAL STEEL ELEVATION**

**NEW BALANCE BEAM CROSS BRACING ROD ATTACHMENT**

- The original arrangement shown for structural steel is to be verified by the Structural Engineer.
- Users working on or around structural steel should consult the Spec for the required materials and connections.
- All connections must be verified with the project team before proceeding.
- Refer to Section 01 91 37 of the Specification Requirements.

**Steel Replacement Table**

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**Notes:**

- All BOLTS are 3/4" Diameter unless otherwise specified.
- All NUTS are 3/4" UNF unless otherwise specified.
APPLY SECTIONS OF Wa-33L AND Wa-33R TO ENDS OF CURBS
N.T.S.

203x203 WOOD CURB CUT Wa-33L
CUT Wa-33R ATTACH WITH COMMON GALVANIZED SCREWS

MAXIMUM CENTRE TO CENTRE
900
150
600
150
150
600

ELEVATION OF CURB JOINT TREATMENT
N.T.S.
END OF CURBS CONFIGURED LIKE HALF OF SPLICE DETAIL Wa33 L&R CUT AND ATTACHED TO ENDS OF CURBS.

PRESSURE TREATED 203x203 HEMLOCK CURB
PRESSURE TREATED 203x102x600 HEMLOCK SPACER BLOCK
5/8" DIA GALVANIZED BOLTS
100x100x12 GALVANIZED PLATE EACH END, TYP.

PRESSURE TREATED 70x305 HEMLOCK WOOD DECK BOARDS
5/8" DIA GALVANIZED BOLTS TO ATTACH CURB, AND SPACER TO BRIDGE DECK. WHEN POSITIONING BOLTS KEEP 25mm FROM EDGE OF DECK BOARDS TO PREVENT SPLITTING.

DECK STRINGER ATTACHMENT DETAIL

PRESSURE TREATED 70x305 HEMLOCK DECK BOARDS
51x203 HEMLOCK RUNNING BOARDS (NOT TREATED)

SALVAGE EXISTING LATCH MECHANISM AND REFURBISH IN ACCORDANCE WITH SECTION 13 10 00 OF THE SPECIFICATION

CUT NEW CURB TO MATCH EXISTING DIMENSIONS TO RECEIVE THE LATCH MECHANISM LEVER AND FRAME

NEW WOODEN PEDESTRIAN RAILS TO BE ATTACHED THROUGH FULL LENGTH WOOD BLOCKING AND EXISTING TRUSS MEMBERS CONFIGURATION UTILIZING 5/8 " DIAM. BOLTS COMPLETE WITH WASHERS.

64x140 HANDRAILS TO BE CONNECTED TO WOODEN MEMBER THAT IS ATTACHED TO STEEL TRUSS BRIDGE DECK CURB

EXISTING LATCH MECHANISM

EXISTING BRIDGE KEY, AND BRIDGE MECHANISM CAP LOCATION

SECTION:COUNTERWEIGHT MEMBRANE DETAIL

PRESSURE TREATED 105x290 SELECT STRUCTURAL DOUGLAS FIR STRINGER
VARIES

19mm CUT OUT OF 105x290 HEMLOCK STRINGER TO INSERT 19x89 PRESSURE TREATED SPF STRAPPING, THEN WATERPROOFING MEMBRANE

2940mm TO BE CENTERED BETWEEN FLOOR BEAMS A AND C

SALVAGE, BLAST, AND PAINT EXISTING BRIDGE KEY AND FABRICATE A DUPLICATE (SPARE) OF THE ORIGINAL

CONTRACTOR TO SUBMIT SHOP DRAWINGS SHOWING BRACKET ATTACHMENT TO THE RAILING THAT WILL HOLD AND SECURE BRIDGE KEY. THE INTENTION IS TO INSTALL A BRACKET AND UTILIZE A SIMILAR CHAIN AND PADLOCK ARRANGEMENT TO SECURE KEY

BLAST CLEAN AND PAINT WIGWAG POST, BASE PLATE AND ASSOCIATED COMPONENTS IN ALL FOUR QUADRANTS OF THE BRIDGE

EXISTING FEATURES TO REMAIN FROM BLASTING AND PAINTING OVER SPRAY EXISTING STEEL WIGWAG POST
EXISTING LATCH MECHANISM
EXISTING BRIDGE KEY, AND BRIDGE MECHANISM CAP LOCATION

BLEND AND DISPLAY OF BEATTING WOOD RAILS AND ASSOCIATED COMPONENTS
LEAVE AS IS AND INSTALL NEW PROTECTIVE RAILS. INSTALL A TOTAL LENGTH BEATTING PROTECTIVE RAILING WITH A 1/2" WIDE GAP CLEAR OF WOOD RAILS AT ALL FOUR CORNERS UNDERNAMES THE NEW RAILING POST

REMOV E AND DISPOSE OF EXISTING WOOD RAILING AND ASSOCIATED COMPONENTS SUPPLY AND INSTALL NEW PEDESTRIAN RAILING END POSTS (4 TOTAL). CONNECT SIMILAR CONFIGURATION WITH 2-5/8" DIA. GALVANIZED BOLTS INTO THE CURB AND 2-5/8" DIA. GALVANIZED BOLTS INTO THE CURB SPACER BLOCKS.

EXISTING 64x140 POST TO BE REPLACED WITH PRESSURE TREATED 64x140 SPF STRINGER

PRESSURE TREATED 64x140 SPF STRINGER

BLAST CLEAN AND PAINT WIGWAG POST, BASE PLATE AND ASSOCIATED COMPONENTS IN ALL FOUR QUADRANTS OF THE BRIDGE

PRESSURE TREATED 290x70 SPF STRAPPING
19

PRESSURE TREATED 19x89 SPF STRAPPING

WATERPROOFING MEMBRANE TO MATCH THE EXTENT OF STRAPPING

PRESSURE TREATED 105x290 SELECT STRUCTURAL DOUGLAS FIR STRINGER

PRESSURE TREATED 19x89 SPF STRAPPING

PRESSURE TREATED 105x290 SELECT STRUCTURAL DOUGLAS FIR STRINGER

PRESSURE TREATED 70x305 HEMLOCK WOOD DECK BOARDS

PRESSURE TREATED 19x89 SPF STRAPPING

PRESSURE TREATED 105x290 SELECT STRUCTURAL DOUGLAS FIR STRINGER

PRESSURE TREATED 105x290 SELECT STRUCTURAL DOUGLAS FIR STRINGER

PRESSURE TREATED 105x290 SELECT STRUCTURAL DOUGLAS FIR STRINGER
ONE LIFT OF FINISH MORTAR

IF LOOSE MATERIAL IS ENCOUNTERED THIS JOINT CONDITION SHALL BE TREATED AS A MORTAR JOINT LARGER THAN 13mm

NOTE:

POINTING MORTAR SHALL BE PlACED IN ONE LIFT

ROUGHEN SURFACE TO MECHANICALLY STRENGTHEN LIFT BONDING IF NOT REMOVED, TYPICAL

TYPICAL STONE MASONRY JOINT FINISHES

SPECIAL STONE MASONRY JOINT FINISH

SPECIAL STONE MASONRY JOINT FINISH (SKYWARD FACING)

ELEVATION

SECTION

TYPICAL 'FULL DUTCHMAN' REPAIR

UNDERWATER MASONRY JOINT FINISH

REPORT ANY AREAS WHERE EXISTING JOINT MATERIAL IS MORE THAN 100mm FROM FACE OF STONE

DO NOT REMOVE EXISTING JOINT MATERIAL

INSTALL NEW 'DUTCHMAN' STONE TO MATCH EXISTING STONE IN TYPE, SHAPE AND FINISH