

| REF.                                                                            | LOCATION                                                                           | PHOTO REF. | DRAWING REF. | DESCRIPTION OF DEFECT                                                                                                                                           | NO. OF DEFECTS          | DEFECT REF. | INDICATIVE DEFECT SIZE (mm) | REPAIR TYPE | INDICATIVE REPAIR SIZE (mm) |
|---------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------|-----------------------------|-------------|-----------------------------|
| SPAN 4 - PLAN VIEW - DEFECTS SCHEDULE AND REPAIR PROPOSAL                       |                                                                                    |            |              |                                                                                                                                                                 |                         |             |                             |             |                             |
| R1                                                                              | FIRST TRUSS VERTICAL NEAR IS3 - SOUTH TRUSS                                        | -          | 000004       | SECTION LOSS TO DOWNSTAND OF TOP FLANGE 100mm                                                                                                                   | 1                       | D1          | -                           | A           | -                           |
| R2                                                                              | BALLAST PLATE NEAR IS4 - NORTH TRUSS AND SOUTH TRUSS                               | -          | 000004       | SIGNIFICANT DELAMINATION AND 1-2mm SECTION LOSS TO BALLAST PLATE                                                                                                | 1                       | D2          | -                           | A           | -                           |
| R3                                                                              | ALL OVERHEAD BEAMS                                                                 | -          | 000004       | DELAMINATION TO TOP FLANGE OF OVERHEAD RESTRAINT BEAMS                                                                                                          | 1                       | D3          | ALL OVERHEAD BEAMS          | G           | ALL OVERHEAD BEAMS          |
| R4                                                                              | BETWEEN ADJACENT OVERHEAD BEAMS                                                    | -          | 000004       | MOSS FORMATION TO TOP FLANGE OF TRUSS (TOP AND BOTTOM) BETWEEN OVERHEAD BEAMS                                                                                   | 1                       | D4          | -                           | A           | -                           |
| R5                                                                              | TYPICAL CROSS GIRDERS                                                              | -          | 000005       | SURFACE RUST RASH TO SOFFIT OF CROSS GIRDERS                                                                                                                    | -                       | D5          | -                           | A           | -                           |
| R6                                                                              | IS3 - SOUTH PIER                                                                   | -          | 000005       | MOVEMENT AT THE SOUTH WEST BEARING                                                                                                                              | 1                       | D6          | -                           | H           | -                           |
| R7                                                                              | OVER IS3                                                                           | -          | 000005       | SECTION LOSS TO TOP FLANGE OF TOP BOOM; DAMAGED 100mm                                                                                                           | -                       | D7          | -                           | A           | -                           |
| R8                                                                              | DECK PLATE SOFFIT                                                                  | 77         | 000005       | SURFACE CORROSION TO 30% OF DECK SOFFIT AREA                                                                                                                    | -                       | D8          | -                           | A           | -                           |
| R9                                                                              | DECK PLATE STIFFENERS                                                              | -          | 000005       | SURFACE CORROSION TO ALL DECK STIFFENERS                                                                                                                        | -                       | D9          | -                           | A           | -                           |
| R10                                                                             | XGI OVER IS4 - NORTH TRUSS                                                         | 79         | 000005       | 50% L.O.S TO XGI BOTTOM FLANGE WIDTH WITH KNIFE EDGING 100mm LONG                                                                                               | 1                       | D10         | 455mm x 100mm               | B           | 457mm x 150mm               |
| R11                                                                             | LSI (RAIL BEARERS)                                                                 | 77         | 000005       | SURFACE CORROSION TO 80% OF ALL LSI BOTTOM FLANGES (THROUGHOUT LENGTH)                                                                                          | -                       | D11         | -                           | A           | -                           |
| R12                                                                             | RAIL BEARER OVER CENTRAL PIVOT SUPPORT IS4                                         | 84, 85     | 000005       | SIGNIFICANT DELAMINATION TO LSI BOTTOM FLANGE (60% PENETRATING 3-4mm)                                                                                           | 1                       | D12         | -                           | A           | -                           |
| R13                                                                             | RAIL BEARER OVER CENTRAL PIVOT SUPPORT IS4                                         | 82         | 000005       | LOSS OF FULL SECTION TO LSI BOTTOM CRANK AT INTERFACE WITH CROSS GIRDER                                                                                         | -                       | D13         | -                           | A           | -                           |
| SPAN 4 - SOUTH TRUSS TRACKSIDE ELEVATION - DEFECTS SCHEDULE AND REPAIR PROPOSAL |                                                                                    |            |              |                                                                                                                                                                 |                         |             |                             |             |                             |
| R14                                                                             | OVER IS5 SUPPORT                                                                   | 49         | 000007       | SURFACE RUST RASH WITH GRAFFITI OVER STEELWORK                                                                                                                  | 1                       | D14         | -                           | A           | -                           |
| R15                                                                             | TOP BOOM OVER IS3, VERTICAL NO. 17, DIAGONAL NO. 18                                | -          | 000007       | L.O.S DUE TO SURFACE CORROSION (1-2mm)                                                                                                                          | -                       | D15         | -                           | A           | -                           |
| R16                                                                             | DIAGONAL NO. 3, 7 AND VERTICAL NO. 8                                               | -          | 000007       | LOOSE PLATE                                                                                                                                                     | 3                       | D16         | -                           | F           | -                           |
| R17                                                                             | VERTICAL NO. 4                                                                     | -          | 000007       | RIVET HEADS MISSING                                                                                                                                             | 2                       | D17         | 4 NOS. RIVETS TOTAL         | C           | 4 NOS. BOLTS                |
| R18                                                                             | DIAGONAL NO. 20                                                                    | -          | 000007       | MISSING RIVETS                                                                                                                                                  | 3                       | D18         | 3 NOS. RIVETS TOTAL         | C           | 3 NOS. BOLTS                |
| R19                                                                             | VERTICAL NO. 13                                                                    | 51         | 000007       | VEGETATION PRESENT                                                                                                                                              | 1                       | D19         | -                           | A           | -                           |
| R20                                                                             | TOP BOOM - AT ST2 AND ST3                                                          | -          | 000007       | SLIGHT CORROSION TO PORTION OF WEB BETWEEN ANGLE AND GUSSET                                                                                                     | 3                       | D20         | -                           | A           | -                           |
| R21                                                                             | TOP BOOM - BETWEEN ST9 AND ST10                                                    | 61         | 000007       | 60mm DEPTH OF TOP BOOM WEB FULLY CORRODED FOR APPROX. 200mm                                                                                                     | 1                       | D21         | 60mm x 200mm                | I           | 75mm x 225mm                |
| R22                                                                             | TOP BOOM - NODE ST5 TO NODE ST7                                                    | 60         | 000007       | HORIZONTAL LEG OF ANGLE CORRODED FULLY UP TO APPROX. 50mm WIDTH                                                                                                 | 3 NOS. NODES            | D22         | 10685mm                     | J           | 11000mm LONG                |
| R23                                                                             | NODE SB2                                                                           | -          | 000007       | 100% SECTION LOSS TO OUTSTANDING LEG OF OUTSIDE ANGLES AND 1-2mm SURFACE CORROSION TO INNER ANGLE.                                                              | 2                       | D23         | 1650mm                      | A,D         | -                           |
| R24                                                                             | DIAGONAL NO. 5                                                                     | -          | 000007       | LOCALISED SECTION LOSS TO OUTSTANDING LEG OF ANGLE                                                                                                              | 1                       | D24         | 1198mm                      | D           | 1200mm                      |
| R25                                                                             | VERTICAL NO. 6, DIAGONAL NO. 14                                                    | -          | 000007       | 2-3mm L.O.S TO BOTH LEGS OF INNER ANGLES                                                                                                                        | 6 PAIRS OF INNER ANGLES | D25         | -                           | A           |                             |
| R26                                                                             | SB10, ST6, ST7, ST9, ST10                                                          | -          | 000007       | 100% L.O.S TO OUTSTANDING LEG OF ANGLE                                                                                                                          | 8                       | D26         | 10335mm                     | K           | 8000mm APPROX. TOTAL        |
| R27                                                                             | ST5                                                                                | -          | 000007       | OUTSTANDING LEG OF ANGLE CORRODED ACROSS THE FULL WIDTH                                                                                                         | 2                       | D27         | 2425mm                      | K           | 1500mm                      |
| R28                                                                             | SB4                                                                                | 53         | 000007       | 50% L.O.S TO OUTSTANDING LEG OF ANGLE                                                                                                                           | 1                       | D28         | 691mm                       | A           | 700mm                       |
| R29                                                                             | INTERSECTION OF DIAGONALS 11 AND 12                                                | 54         | 000007       | 50% OF BOTH LEGS OF INSIDE ANGLES CORRODED                                                                                                                      | 2                       | D29         | -                           | A           | -                           |
| R30                                                                             | SB10                                                                               | 52         | 000007       | ACCUMULATION OF DEBRIS                                                                                                                                          | 1                       | D30         | -                           | E           | -                           |
| SPAN 4 - SOUTH TRUSS OUTSIDE ELEVATION - DEFECTS SCHEDULE AND REPAIR PROPOSAL   |                                                                                    |            |              |                                                                                                                                                                 |                         |             |                             |             |                             |
| R31                                                                             | ST4                                                                                | -          | 000007       | PITTING CORROSION TO INNER FACE OF WEB OF TOP BOOM AND INSIDE ANGLES WHILE VIEWED FROM TRACK SIDE                                                               | 1                       | D31         | -                           | A           | -                           |
| R32                                                                             | VERTICAL NO. 21                                                                    | -          | 000007       | KNIFE EDGING                                                                                                                                                    | 1                       | D32         | -                           | D           | -                           |
| R33                                                                             | OUTER ANGLE OF TOP / BOTTOM BOOM OVER IS3                                          | -          | 000007       | SEVERE CORROSION TO OUTSIDE ANGLE AT ENDS                                                                                                                       | 1                       | D33         | 4258mm                      | A           | ALL ACCESSIBLE STEELWORK    |
| R34                                                                             | BOTTOM BOOM - AROUND SB1 AND AROUND SB2                                            | 68         | 000007       | SIGNIFICANT CORROSION TO CONNECTED LEG OF OUTER ANGLE WITH LOSS OF MULTIPLE RIVETS                                                                              | 3                       | D34         | 5981mm                      | A           | ALL ACCESSIBLE STEELWORK    |
| R35                                                                             | BOTTOM BOOM - SB3 TO SB10                                                          | 63         | 000007       | SURFACE CORROSION TO CONNECTED LEG OF OUTER ANGLE WITH SIGNIFICANT LOSS TO RIVET HEADS                                                                          | 8                       | D35         | 19105mm                     | A           | ALL ACCESSIBLE STEELWORK    |
| R36                                                                             | TOP OUTER ANGLE OF BOTTOM BOOM NEAR SB10                                           | -          | 000007       | OUTSTANDING LEG OF ANGLE OF BOTTOM BOOM CORRODED FOR 50% OF WIDTH AND DISLODGED FROM OTHER LEG                                                                  | 1                       | D36         | 1647mm                      | A, M        | 1700mm                      |
| R37                                                                             | TOP OUTER ANGLE OF BOTTOM BOOM BETWEEN SB9 AND SB10                                | 67         | 000007       | LOCALISED L.O.S TO ANGLE LEG                                                                                                                                    | 3                       | D37         | -                           | A, M        | 500mm APPROX.               |
| R38                                                                             | TOP BOOM AT ST10                                                                   | 62         | 000007       | BOTH LEGS OF OUTSIDE ANGLE CORRODED, LEADING TO REDUCTION IN LEG LENGTH. VERTICAL LEG LENGTH REDUCED UP TO THE NEAREST LINE OF RIVETS, FOR UP TO 12 Nos. RIVETS | 1                       | D38         | 3455mm                      | J, C        | 3500mm                      |
| R39                                                                             | ST5 TO ST9                                                                         | -          | 000007       | SEVERE CORROSION TO VERTICAL LEG OF OUTER ANGLE, LEADING TO REDUCTION IN LEG LENGTH UP TO NEAREST LINE OF RIVETS                                                | 5                       | D39         | 10673mm                     | J, C        | 11000mm LONG                |
| R40                                                                             | NEAR ST5                                                                           | -          | 000007       | SIGNIFICANT PITTING TO INSIDE ANGLE; BOTH LEGS FULLY CORRODED                                                                                                   | 1                       | D40         | -                           | A           | -                           |
| R41                                                                             | DIAGONAL NO. 9 (TOP), VERTICAL NO. 10 (TOP) AND VERTICAL NO. 21 (BOTTOM)           | -          | 000007       | 100% L.O.S TO OUTSTANDING LEG OF ANGLE                                                                                                                          | 3                       | D41         | 2466mm                      | K           | 2000mm                      |
| R42                                                                             | TOP OF DIAGONALS NO. 18 AND 20                                                     | -          | 000007       | 100% L.O.S TO HALF WIDTH OF OUTSTANDING LEG OF ANGLE                                                                                                            |                         | D42         | 2493mm                      | A, D        | -                           |
| R43                                                                             | DIAGONAL NO. 14 (TOP)                                                              | -          | 000007       | LOCALISED L.O.S TO FULL WIDTH OF OUTSTANDING LEG OF ANGLE                                                                                                       | 1                       | D43         | 326mm                       | A           | -                           |
| R44                                                                             | VERTICAL NO. 17 AND VERTICAL NO. 19                                                | -          | 000007       | 100% L.O.S TO BOTH LEGS OF ANGLE                                                                                                                                | 2                       | D44         | 2434mm                      | A, D        | -                           |
| R45                                                                             | INTERSECTION OF DIAGONALS 11 AND 12                                                | -          | 000007       | PITTING CORROSION TO INSIDE ANGLES AT THE JOINT BETWEEN DIAGONALS                                                                                               | 2                       | D45         | -                           | A           | -                           |
| R46                                                                             | DIAGONAL NO. 3 (MIDDLE)                                                            | -          | 000007       | PITTING LEADING TO FULL L.O.S TO ANGLE (BOTH LEGS)                                                                                                              | 1                       | D46         | 1564mm                      | A           | -                           |
| R47                                                                             | DIAGONAL NO. 5                                                                     | -          | 000007       | SIGNIFICANT CORROSION TO WEB, ANGLE AND FLANGE ON THE INNER SIDE                                                                                                | 1                       | D47         | -                           | A           | -                           |
| R48                                                                             | BOTTOM OF VERTICAL NO. 6                                                           | -          | 000007       | HEAVY CORROSION TO LEG OF INSIDE ANGLE                                                                                                                          | 1                       | D48         | -                           | A           | -                           |
| R49                                                                             | BOTTOM PORTION OF DIAGONAL NO. 20                                                  | -          | 000007       | SIGNIFICANT DELAMINATION TO INSIDE ANGLE                                                                                                                        | 1                       | D49         | -                           | A           | -                           |
| R50                                                                             | BOTTOM PORTION OF DIAGONAL NO. 14                                                  | -          | 000007       | DELAMINATION TO INSIDE ANGLE WITH SECTION LOSS TO RIVET HEADS                                                                                                   | 1                       | D50         | -                           | A, C        | -                           |
| R51                                                                             | BOTTOM PORTION OF DIAGONAL NO. 09                                                  | -          | 000007       | SIGNIFICANT DELAMINATION TO INSIDE ANGLE (BOTH LEGS)                                                                                                            | 1                       | D51         | -                           | A           | -                           |
| R52                                                                             | TOP OF VERTICAL NO. 4                                                              | -          | 000007       | HEAVY DELAMINATION TO INSIDE ANGLE                                                                                                                              | 1                       | D52         | -                           | A           | -                           |
| R53                                                                             | BOTTOM PORTION OF DIAGONAL NO. 18                                                  | -          | 000007       | SURFACE RUST RASH                                                                                                                                               | 1                       | D53         | -                           | A           | -                           |
| R54                                                                             | ELEMENTS NO. 3, 5 AND 15                                                           | -          | 000007       | LOOSE PLATE                                                                                                                                                     | 3                       | D54         | -                           | F           | -                           |
| SPAN 4 - NORTH TRUSS TRACKSIDE ELEVATION - DEFECTS SCHEDULE AND REPAIR PROPOSAL |                                                                                    |            |              |                                                                                                                                                                 |                         |             |                             |             |                             |
| R55                                                                             | MIDDLE OF DIAGONAL NO. 18                                                          | 50         | 000007       | SURFACE CORROSION WITH MISSING RIVETS                                                                                                                           | 1                       | D55         | -                           | A, C        | -                           |
| R56                                                                             | ELEMENTS NO. 3, 7, 15 AND 17                                                       | -          | 000007       | LOOSE PLATE                                                                                                                                                     | 4                       | D56         | -                           | F           | -                           |
| R57                                                                             | DIAGONAL NO. 3                                                                     | -          | 000007       | KNIFE EDGING                                                                                                                                                    | 2                       | D57         | -                           | D           | -                           |
| R58                                                                             | ELEMENTS NO. 4, 7 AND 12                                                           | -          | 000007       | 1No. RIVET MISSING AT MID HEIGHT                                                                                                                                | 3                       | D58         | 4 NOS. RIVETS TOTAL         | C           | 4 NOS. BOLTS                |
| R59                                                                             | TOP BOOM - NEAR NT1, BETWEEN NT1 / NT2, BETWEEN NT2 / NT3, AT NT8, AT NT9, AT NT10 | -          | 000007       | 100% L.O.S TO ANGLE SECTION                                                                                                                                     | 6                       | D59         | 7942mm                      | J           | 6000mm                      |
| R60                                                                             | TOP BOOM - AT NT4 AND AT NT6                                                       | -          | 000007       | 3-5mm L.O.S TO VERTICAL LEG OF ANGLE                                                                                                                            | 2                       | D60         | 2201mm                      | J           | 2500mm                      |

NOTES:

1.

ALL DIMENSIONS ARE IN MILLIMETRES AND LEVELS ARE IN METRES ADD UNLESS NOTED OTHERWISE.
2.

STEELWORK TO BE REINSPECTED IMMEDIATELY AFTER GRIT BLASTING TO CONFIRM FULL EXTENT OF REPAIR REQUIRED AND EXACT DIMENSIONS. CONTRACTOR/FABRICATOR TO MEASURE UP FOR ALL REPAIRS/REPLACEMENT TO EXISTING STEEL ELEMENTS AND RIVETS PRIOR TO FABRICATION.
3.

ONCE ALL STEELWORK REPAIRS HAVE BEEN UNDERTAKEN, ALL EXISTING STEELWORK TO HAVE SURFACE PROTECTIVE SYSTEM M20/M34 (AS SPECIFIED) IN ACCORDANCE WITH NR/L3/CIV/039 "SPECIFICATION FOR THE ASSESSMENT AND CERTIFICATION OF PROTECTIVE COATINGS AND SEALANTS" AND NR/GN/CIV/002 "THE USE OF PROTECTIVE COATINGS AND SEALANTS".
4.

ALL VEGETATION WITHIN 3m OF STRUCTURE TO BE REMOVED. ALL TREE AND STUMPS TO BE TREATED TO PREVENT REGROWTH. HERBICIDE TO BE USED IN ACCORDANCE WITH NETWORK RAIL STANDARD NR/L2/CIV/140"MODEL CLAUSES FOR SPECIFYING RAIL ENGINEERING WORKS".
5.

PHOTOS REFERENCED WITHIN TABLE CAN BE FOUND IN THE INSPECTION REPORT REF.152093-ARC-REP-ECV-000001-A02.
6.

FOR NODE NUMBERING OF TRUSS NODES AND ELEMENT NUMBERING OF TRUSS VERTICALS / DIAGONALS, REFER TO DRAWING NO.152093-ARC-DRG-ECV-000007.
7.

BOLTS TO BE INSTALLED IF POST GRIT BLAST INSPECTION REVEALS SIGNIFICANT LOSS OF RIVETS IN EXISTING STEELWORK.
8.

THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE THE FOLLOWING DRAWINGS

EXISTING GA DRAWINGS:-

152094-ARC-DRG-ECV-000004,  
152094-ARC-DRG-ECV-000005,  
152094-ARC-DRG-ECV-000007,  
152094-ARC-DRG-ECV-000009,  
152094-ARC-DRG-ECV-000012,  
152094-ARC-DRG-ECV-000014,

STRENGTHENING DRAWINGS:-

152094-ARC-DRG-ECV-000015 TO 22

GENERAL NOTES DRAWING:-

152094-ARC-DRG-ECV-000023.

|        |                     |                          |       |      |      |
|--------|---------------------|--------------------------|-------|------|------|
|        |                     |                          |       |      |      |
| A02    | 12.06.2020          | UPDATED TO DRN COMMENTS  | T.A   | B.K  | J.L  |
| A01    | 24.04.2020          | FOR FORM 001 REVIEW      | N.M   | B.K  | J.L  |
| Rev    | Date                | Description of Revisions | Drawn | Chkd | Appr |
| Status | FOR FORM 001 REVIEW |                          |       |      | S3   |



Contractor(s):



Project:

RIVER NEATH SWING  
BRIDGE GRIP 4

Drawing Title:

PROPOSED REPAIRS SCHEDULE  
(SPAN 4)  
(SHEET 1 OF 3)

|          |           |        |     |      |            |
|----------|-----------|--------|-----|------|------------|
| Designed | S. ALURU  | Signed | S.A | Date | 12.06.2020 |
| Drawn    | N.MANISHA | Signed | N.M | Date | 12.06.2020 |
| Checked  | B. KING   | Signed | B.K | Date | 12.06.2020 |
| Approved | J. LYNN   | Signed | J.L | Date | 12.06.2020 |

|                       |                           |               |                |
|-----------------------|---------------------------|---------------|----------------|
| Scale(s)              | AS SHOWN @ A1             | ELR & Mileage | SDI1 207m 63ch |
| Alternative Reference | 152093                    | Sheet         | 1 of 3         |
| Drawing Number        | 152093-ARC-DRG-ECV-000028 | Revision      | A02            |