

BSO A1 - 594mm x 841mm  
 O:\Winnipeg\Proj\W160034\Drawings\06\_Sheets\Detailed Design\Structural\W160034\_DD\_SS.dwg  
 Last Saved: 9/6/2018 9:59 PM by: A.Higginer  
 Plotted: 9/6/2018 10:01 PM by: Alex Higginer

**SCOPE OF WORK:**

**OVERPASS REHABILITATION WORKS**

**SUPERSTRUCTURE:**

1. IMPLEMENT TRAFFIC CONTROLS/STAGING ON EMPRESS STREET OVERPASS AND MOBILIZE.
2. REMOVE EPOXY LAYER ON DECK SURFACE (STAGED AS SHOWN ON SHEETS 101 & 102).
3. REMOVE EXISTING TRAFFIC BARRIERS (EAST, MEDIAN AND WEST BARRIERS) ON BRIDGE DECK AND APPROACH SLABS AS SHOWN ON SHEET 104.
4. REMOVE TOP CONCRETE LAYER ON DECK AND APPROACH SLABS USING HYDRO-DEMOLITION AS SHOWN ON SHEET 104.
5. FULLY REMOVE SEALS OF BOTH EXPANSION JOINTS.
6. REMOVE PART OF BOTH EXISTING EXPANSION JOINTS ON THE WEST SIDE OF THE BRIDGE AS SHOWN ON SHEET 110.
7. INSTALL CORROSION PROTECTION SYSTEM OVER DECK AS SHOWN ON SHEET 105.
8. BUILD THREE ROWS OF NEW CONCRETE TRAFFIC BARRIERS (EAST, MEDIAN, AND WEST BARRIERS) AND EAST CURB ON DECK AND APPROACH SLABS AS SHOWN ON SHEETS 106, 107 & 108.
9. OVERLAY STRUCTURAL CONCRETE ON DECK AND APPROACH SLABS TO THICKNESS AS INDICATED ON SHEETS 106 & 107.
10. INSTALL ALUMINUM BICYCLE RAILING ON NEW CURB ON EAST SIDE OF DECK AND APPROACH SLABS.
11. INSTALL EXPANSION JOINT ON BOTH NORTH AND SOUTH ENDS OF BRIDGE DECK AS SHOWN ON SHEETS 110 & 111.
12. INSTALL ROADWAY EXPANSION SLABS, AS SHOWN ON SHEET 112.
13. INSTALL WATERPROOFING LAYER OVER BRIDGE DECK (STAGED AS SHOWN ON SHEETS 101 & 102).
14. OVERLAY ASPHALT LAYER ON ROADWAYS AND CYCLING PATH BRIDGE DECK & ON CYCLING PATH ONLY ON APPROACH SLABS AS PER SHEET 109.
15. REMOVE TRAFFIC CONTROL/STAGING ON EMPRESS AVENUE OVERPASS AND DEMOBILIZE.

**SUBSTRUCTURE:**

16. IMPLEMENT TRAFFIC CONTROL/STAGING METHODS ON EASTBOUND AND WESTBOUND PORTAGE AVENUE MEDIAN LANES AND MOBILIZE.
17. COMPLETE MISCELLANEOUS REPAIRS TO THE CENTRE PIER CAP.
18. EXCAVATE AREA AROUND CENTRE PIER TO EXPOSE PILE CAP.
19. REMOVE CONCRETE ON CENTRE PIER COLUMNS UP TO EXISTING SPIRAL REINFORCEMENT.
20. INSTALL DAS CORROSION PROTECTION SYSTEM AND CONNECT TO EXISTING REINFORCEMENT.
21. INSTALL REINFORCEMENT CONFINEMENT CAGE ON CENTRE PIER COLUMNS.
22. FORM AND PRESSURE POUR NEW CONCRETE JACKET OVERBUILD ON CONCRETE PIER COLUMNS.
23. RE-CONSTRUCT EXCAVATED MEDIAN LANES ON PORTAGE AVENUE.
24. INSTALL AND BEGIN TO PERFORM ECE ON CENTRE PIER CAP.
25. TEMPORARILY REMOVE TRAFFIC CONTROL/STAGING MEASURES AT CENTRE PIER DURING PERFORMANCE OF ECE AND DEMOBILIZE.
26. IMPLEMENT TRAFFIC CONTROL/STAGING AT NORTH AND SOUTH PIERS AND ABUTMENTS.
27. COMPLETE MISCELLANEOUS REPAIRS AT NORTH AND SOUTH PIERS AND ABUTMENTS.
28. TEMPORARILY REMOVE TRAFFIC CONTROL/STAGING METHODS AT NORTH AND SOUTH PIERS DURING MISCELLANEOUS REPAIRS CURING TIME.
29. RE-IMPLEMENT TRAFFIC CONTROL/STAGING METHODS AT NORTH AND SOUTH PIERS ONCE MISCELLANEOUS REPAIRS HAVE CURED.
30. INSTALL AND BEGIN TO PERFORM ECE ON NORTH AND SOUTH PIERS AND ABUTMENTS.
31. TEMPORARILY REMOVE TRAFFIC CONTROL METHODS AT NORTH AND SOUTH PIERS AND ABUTMENTS DURING PERFORMANCE OF ECE.
32. RE-IMPLEMENT TRAFFIC CONTROL/STAGING METHODS AT CENTRE PIER ONCE ECE IS COMPLETE.
33. REMOVE ECE FROM CENTRE PIER.
34. REMOVE TRAFFIC CONTROL/STAGING METHODS AT CENTRE PIER.
35. RE-IMPLEMENT TRAFFIC CONTROL/STAGING METHODS AT NORTH AND SOUTH PIERS AND ABUTMENTS ONCE ECE IS COMPLETE.
36. REMOVE ECE AT NORTH AND SOUTH PIERS AND ABUTMENTS.
37. REMOVE TRAFFIC CONTROL/STAGING METHODS AT NORTH AND SOUTH PIERS AND ABUTMENTS.

**PEDESTRIAN ACCESSIBILITY RAMPS**

**NORTH RAMP:**

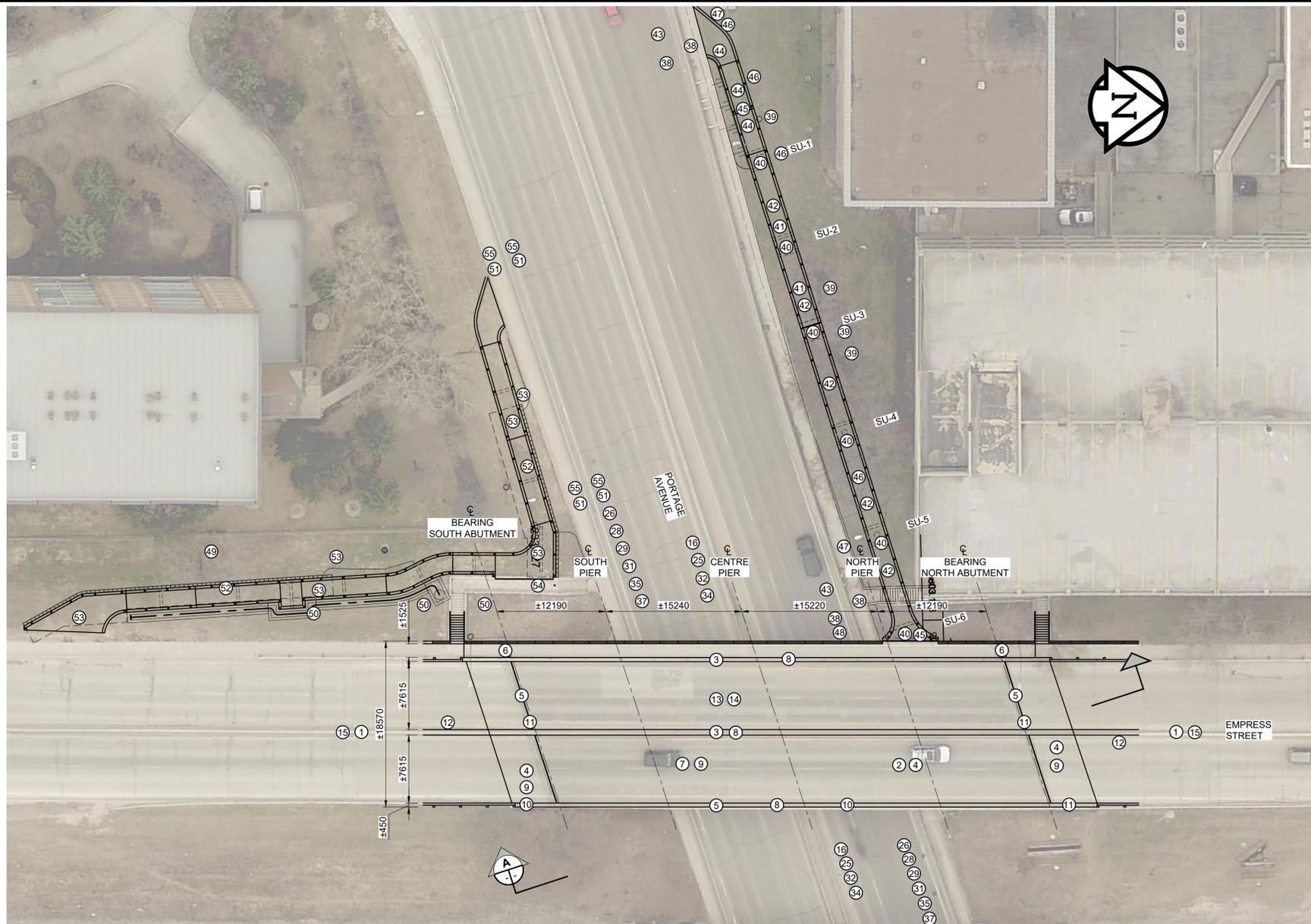
38. IMPLEMENT TRAFFIC CONTROL/STAGING METHODS ON WESTBOUND PORTAGE AVENUE NORTH CURB LANE AND SIDEWALK AND MOBILIZE.
39. RELOCATE STREET LIGHTING AND TRIM OR REMOVE TREES AS REQUIRED.
40. CONSTRUCT CAST-IN-PLACE REINFORCED CONCRETE ROCK-SOCKETED CAISSONS, CAST-IN-PLACE REINFORCED CONCRETE PIERS AND CAST-IN-PLACE REINFORCED CONCRETE PIER CAPS.
41. COMPLETE SLOPE PAVING FROM SU-1 TO SU-3 (REFER TO SHEETS 138 - 159).
42. DELIVER/ERECT PRECAST PRESTRESSED SLABS AND POUR CAST-IN-PLACE REINFORCED CONCRETE CLOSURE SLABS.
43. REMOVE TRAFFIC CONTROL/STAGING METHODS ON WESTBOUND PORTAGE AVENUE NORTH CURB LANE.
44. CONSTRUCT EMBANKMENT AND CAST-IN-PLACE REINFORCED CONCRETE SLAB-ON-GRADE.
45. PARTIALLY REMOVE AND MODIFY EMPRESS OVERPASS WEST HANDRAIL & CURB AT NORTH RAMP JUNCTION.
46. INSTALL EXPANSION JOINTS, HANDRAILS, AND DRAINAGE.
47. COMPLETE SITE GRADING, INSTALL TURF REINFORCEMENT MATS AND COMPLETE SEEDING.
48. REMOVE TRAFFIC CONTROL/STAGING METHODS ON WESTBOUND PORTAGE AVENUE NORTH SIDEWALK.

**SOUTH RAMP:**

49. TRIM OR REMOVE TREE AS REQUIRED.
50. CONSTRUCT STEEL DRAINAGE CULVERT, CATCH BASIN AND CAST-IN-PLACE REINFORCED CONCRETE DRAINAGE CHANNEL.
51. IMPLEMENT TRAFFIC CONTROL/STAGING METHODS ON WESTBOUND PORTAGE AVENUE SOUTH CURB LANE AND SIDEWALK AND MOBILIZE.
52. EXCAVATE MODULAR BLOCK RETAINING WALL AREAS, CONSTRUCT MODULAR BLOCK RETAINING WALL AND SUB-DRAIN, AND INSTALL RAMP DRAINAGE.
53. CONSTRUCT CAST-IN-PLACE REINFORCED CONCRETE SLAB ON GRADE, INSTALL HANDRAILS, COMPLETE SITE GRADING, AND COMPLETE SEEDING.
54. PARTIALLY REMOVE AND MODIFY SOUTH STAIRWAY HANDRAIL & CURB ON WEST SIDE OF LANDING.
55. REMOVE TRAFFIC CONTROL/STAGING METHODS ON WESTBOUND PORTAGE AVENUE SOUTH CURB LANE AND SIDEWALK.

**EMPRESS STREET RETAINING WALL**

56. IMPLEMENT TRAFFIC CONTROL/STAGING ON EMPRESS STREET & MOBILIZE.
57. COMPLETE RETAINING WALL EXCAVATION.
58. INSTALL STEEL PILES TO BEDROCK OR REFUSAL.
59. FORM AND CAST CONCRETE PILE CAP BEAM AND RETAINING WALL.
60. INSTALL BICYCLE RAILING.
61. REMOVE TRAFFIC CONTROL/STAGING METHODS ON EMPRESS STREET.



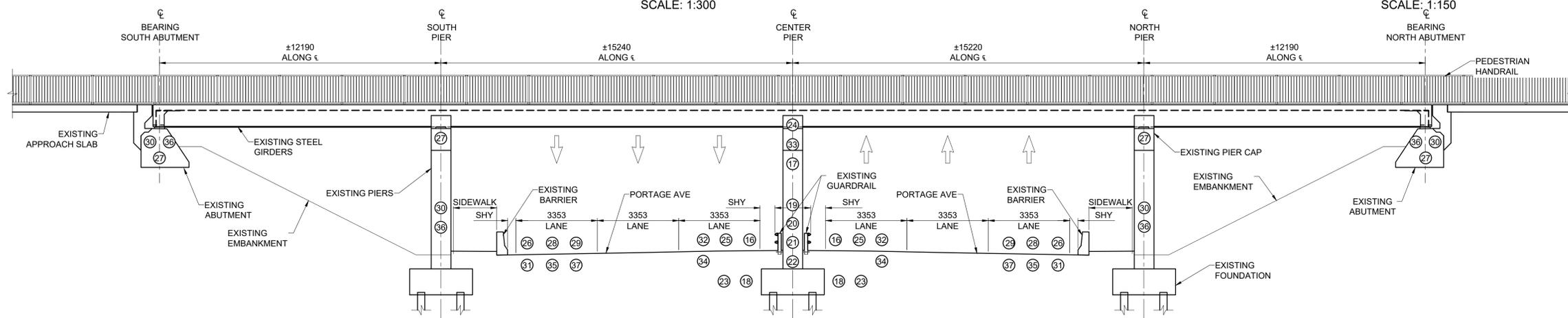
**PEDESTRIAN ACCESSIBILITY RAMPS & OVERPASS PLAN**

SCALE: 1:300



**EMPRESS STREET RETAINING WALL PLAN**

SCALE: 1:150



**SECTION**

SCALE: 1:100



**METRIC**  
WHOLE NUMBERS INDICATE MILLIMETRES  
DECIMALIZED NUMBERS INDICATE METRES

**LOCATION APPROVED**  
UNDERGROUND STRUCTURES

COMMITTEE DATE

NOTE:  
LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

| No. | REVISIONS                          | DATE     | BY  |
|-----|------------------------------------|----------|-----|
| D   | ISSUED FOR TENDER                  | 18/09/04 | BAP |
| C   | ISSUED FOR 95% DESIGN REVIEW       | 18/08/07 | BAP |
| B   | ISSUED FOR 50% DESIGN REVIEW REV 1 | 18/06/28 | AF  |
| A   | ISSUED FOR 50% DESIGN REVIEW       | 18/04/03 | AF  |

**MORRISON HERSHFIELD**

DESIGNED BY: AF/AG/YM  
CHECKED BY: AF/AG/YM  
DRAWN BY: AH  
APPROVED BY: BAP

HOR SCALE: AS SHOWN  
VERT SCALE: AS SHOWN

RELEASED FOR CONSTRUCTION  
N/A

CONSULTANT FILE NAME  
W160034 - DD SS DWG

**THE CITY OF WINNIPEG**  
PUBLIC WORKS DEPARTMENT  
ENGINEERING DIVISION

**EMPRESS STREET PROJECT**  
STRUCTURAL WORKS  
GENERAL ARRANGEMENT AND  
SCOPE OF WORK

CITY DRAWING NUMBER  
P-3494-86

SHEET 86 OF 168

DRAWING No. 86 REV D

BID OPPORTUNITY No. 602-2018