

X:\P\2024\24012200C-2024 Main St & Norwood Bridges\09 CAD\07 Sheets\24012200_MN-NRWUD_GN.dwg Last Saved: 5/7/2024 12:14 PM by AScott Plotted: 5/9/2024 9:48 AM by Allan Scott PLOT: 5/9/2024 9:48:57 AM A1 SIZE 594mm x 841mm

GENERAL

1. GEOMETRY, REINFORCEMENT AND LAYOUT OF THE EXISTING STRUCTURE ARE BASED ON EXISTING DESIGN INFORMATION AND LIMITED FIELD SURVEY DATA. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY ALL NECESSARY DIMENSIONS SUCH THAT WORK CAN BE CONSTRUCTED AS SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE CONTRACT ADMINISTRATOR PRIOR TO CONSTRUCTION.
2. WHOLE DIMENSIONS SHOWN ON THESE DRAWINGS ARE IN MILLIMETERS. DECIMAL DIMENSIONS ARE IN METRES.
3. THE SCALES SHOWN ON THESE DRAWINGS ARE BASED ON A1 SIZED DRAWING SHEETS. DO NOT DETERMINE DIMENSIONS BY SCALING OFF DRAWINGS.
4. EXCEPT WHERE INDICATED OTHERWISE THESE DRAWINGS SHOW DETAILS FOR THE COMPLETED STRUCTURES. THE CONTRACTOR IS RESPONSIBLE FOR THE SAFETY OF WORKERS AND THE DESIGN AND STABILITY OF ANY TEMPORARY WORKS DURING CONSTRUCTION. CONSTRUCTION METHODS REQUIRING THE TEMPORARY INSTALLATION OF SHORING, SCAFFOLDING, BRACING, ETC. SHALL BE SUBMITTED TO THE CONTRACT ADMINISTRATOR FOR REVIEW AND ACCEPTANCE PRIOR TO PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL RETAIN A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF MANITOBA TO PERFORM AND TAKE RESPONSIBILITY FOR ANY SUCH DESIGNS NECESSARY TO COMPLETE THE CONSTRUCTION AND AS REQUIRED BY THE CONTRACT DOCUMENTS.
5. CONTRACTOR TO REPORT ALL UNSOUND CONDITIONS IMMEDIATELY TO THE CONTRACT ADMINISTRATOR.

SCOPE OF MAINTENANCE WORK & SEQUENCE NOTES:

SCOPE OF MAINTENANCE WORK: THE SCOPE OF WORK INCLUDES REINFORCED CONCRETE MAINTENANCE TO THE NORWOOD BRIDGES (NB AND SB), REMOVAL AND RE-INSTALLATION OF TOP 50MM OF SE APPROACH SLAB AND SOUTH EXPANSION JOINT BLOCKOUT, REMOVAL OF ASPHALT AND TRANSVERSE WICK DRAIN AT BOTH ENDS OF THE NB NORWOOD BRIDGE ABUTMENT AND ASPHALT INSTALLATION, VARIOUS ASPHALT REPAIRS, NE BARRIER REPAIR, ROADWAY JOINT REMOVALS AND REPAIRS, BARRIER REPAIR, REMOVAL AND INSTALLATION OF NEW CRASH ATTENUATOR, LEVELLING OF MAIN STREET BRIDGES PAVER STONES.

GIRDER REPAIR WORKS HAVE BEEN SUB-CATEGORIZED INTO TYPES, AS DESCRIBED BELOW. LOCATIONS AND EXTENTS TO BE MARKED BY THE CONTRACT ADMINISTRATOR IN THE FIELD:

- a. CONCRETE PATCH REPAIRS NORWOOD NB - REMOVE DELAMINATED CONCRETE 25mm PAST THE EXISTING REINFORCEMENT, SURFACE PREPARATION BY ABRASIVE BLASTING, INSTALLATION OF XPT ANODE CATHODIC PROTECTION, INSTALL MESH AND PERFORM FORMED AND PRESSURE Poured GROUT PATCH REPAIR.
- b. CONCRETE PATCH REPAIR WITH MESH NORWOOD SB - REMOVE DELAMINATED CONCRETE, DRILL HOLES AND INSTALL EPOXY THREADED RODS, SURFACE PREPARATION BY ABRASIVE BLASTING, INSTALLATION OF XPT ANODE CATHODIC PROTECTION, INSTALLATION OF STAINLESS STEEL WIRE MESH, AND PERFORM FORMED AND PRESSURE Poured GROUT PATCH REPAIR.

DESIGN NOTES:

DESIGN STANDARD: CANADIAN HIGHWAY BRIDGE DESIGN CODE S6-19.

MATERIAL NOTES:

1. **CONCRETE:**
 - a. FOR STRUCTURAL APPROACH SLABS, BRIDGE DECK SHEAR KEYS, DELAMINATION REPAIRS, AND HEADER REPAIRS: TYPE C-XL, 50MPa @ 56 DAYS, 10MM MAXIMUM AGGREGATE SIZE, AIR CONTENT CATEGORY 1, SYNTHETIC FIBRES WITH RI = 0.15.
 - b. FOR ROADWAY SLABS, PLANTER PANEL, BARRIER, AND CRASH ATTENUATOR SLAB: TYPE C-1, 35MPa @ 28 DAYS, 20MM MAXIMUM AGGREGATE SIZE, AIR CONTENT CATEGORY 1, SYNTHETIC FIBRES WITH RI = 0.15.
2. **GROUT:** MASTEREMACO S 440 MC LOW-SHRINK HIGH-EARLY STRENGTH CONCRETE GROUT OR ACCEPTED EQUIVALENT. MINIMUM COMPRESSIVE STRENGTH OF GROUT CUBE: 40 MPa @ 7 DAYS; 50 MPa @ 28 DAYS.
3. **ASPHALT:** FOR ALL LIFTS: ASPHALT TYPE MS1, WITH GRADE PG58-34P.
4. **REINFORCING STEEL:** ASTM A1035 CS GRADE 100 LOW-CARBON CHROMIUM CHROMX 9100 STEEL OR ACCEPTED EQUIVALENT.
5. **STAINLESS STEEL WELDED WIRE MESH:** CONFORMING TO AISI 304 OR ACCEPTED EQUIVALENT.
6. **POST-INSTALLED FASTENINGS:**
 - a. INSTALLATION OF POST-INSTALLED FASTENINGS BY TRAINED PERSONNEL TO MANUFACTURER'S INSTRUCTIONS.
 - b. USE ADHESIVE ANCHOR SYSTEMS UNLESS NOTED OTHERWISE.
 - c. EPOXY ADHESIVE SHALL BE TWO-PART INJECTABLE ADHESIVE SPECIFICALLY DESIGNED FOR STRUCTURALLY CONNECTING ANCHORS TO EXISTING CONCRETE. BASIS OF DESIGN: HILTI RE500 OR ACCEPTED EQUIVALENT.
7. **CORROSION CONTROL SYSTEM:** EMBEDDED GALVANIC ANODE GALVASHIELD XPT 60g ZINC PER ANODE SUPPLIED BY VECTOR CORROSION TECHNOLOGIES OR ACCEPTED EQUIVALENT.

TIMBER FORMWORK NOTES:

1. FORMWORK SHALL BE DESIGNED BY THE CONTRACTOR TO MEET THE REQUIREMENTS OF CAN/CSA S269.1-16.
2. DESIGN FORMWORK TO RESIST THE FULL HYDROSTATIC PRESSURE OF GROUT.
3. REPAIR ALL FORM-TIE HOLES USING AN ACCEPTED TROWEL-ON PATCHING MATERIAL. SUBMIT PROPOSED PRODUCT FOR CONTRACT ADMINISTRATOR'S REVIEW AND ACCEPTANCE.
4. OBSERVE THE FOLLOWING LIMITS ON MECHANICALLY ANCHORED FORM TIE PLACEMENT WITH RESPECT TO EXISTING GIRDERS AND WALLS:
 - a. FORM TIES REQUIRING COMPLETE PENETRATIONS THROUGH GIRDERS OR WALLS SHALL NOT BE PERMITTED.
 - b. REMOVE ALL TEMPORARY MECHANICAL ANCHORS FOLLOWING COMPLETION OF THE WORK, AND REPAIR HOLES. ANY ANCHOR COMPONENTS TO BE LEFT-IN-PLACE MUST BE STAINLESS STEEL.
5. MINIMUM PLYWOOD THICKNESS 20 mm. MAXIMUM STUD SPACING 450 mm CENTRE TO CENTRE. MAXIMUM WHALER SPACING 760 mm CENTRE TO CENTRE.

REPAIR TASK NOTES:

1. **PROTECTION OF THE ENVIRONMENT:**
 - a. UNDER NO CIRCUMSTANCES IS ANY MATERIAL OR DEBRIS PERMITTED TO GO INTO THE EXISTING WATERWAY. ALL MATERIAL AND DEBRIS SHALL BE CONTAINED AND DISPOSED OF PROPERLY.
 - b. CONTRACTOR TO SUBMIT DEBRIS CATCHMENT PLAN.
2. **GIRDER PATCH REPAIR ACCESS**
 - a. ACCESS FOR GIRDER REPAIRS TO BE DONE BY MEANS OF AN ACCESS PLATFORM OFF THE MEDIAN LANES OF THE NORWOOD BRIDGES.
 - b. ACCESS PLATFORM IS TO BE CAPABLE OF PROVIDING ACCESS FOR ALL GIRDER REPAIR WORKS AND INSURE NO DEBRIS ENTERS THE WATERWAY.
 - c. CRASH BARRIERS OR SIMILAR SAFETY MEASURES ARE TO BE USED TO PREVENT VEHICULAR COLLISION WITH THE ACCESS PLATFORM.
 - d. ACCESS PLATFORMS ARE TO BE DESIGNED AND SEALED BY AN ENGINEER REGISTERED TO PRACTICE IN THE PROVINCE OF MANITOBA.
3. **PROPOSED SEQUENCE - CONCRETE PATCH REPAIRS**
 - a. CONDUCT REMOVALS AS SHOWN ON THE DRAWINGS AND AS DIRECTION BY THE CONTRACT ADMINISTRATOR & ABRASIVE BLASTING.
 - b. ABRASIVE BLAST EXPOSED REINFORCING STEEL AND CONCRETE.
 - c. INSTALL STAINLESS STEEL WIRE MESH OR INSTALL REINFORCING BARS AS REQUIRED ON THE DRAWINGS
 - d. INSTALL XPT ANODES AND MAKE ELECTRICAL CONNECTIONS TO ALL EXPOSED REINFORCEMENT.
 - e. PERFORM FORMED AND PRESSURE Poured GROUTED PATCH REPAIRS FOR GIRDERS.
 - f. PERFORM FORMED AND GRAVITY Poured CONCRETE REPAIRS FOR OTHER REPAIRS AND CURE FOR MINIMUM 7 DAYS.
4. **PROPOSED SEQUENCE - STRUCTURAL APPROACH SLAB AND EXPANSION JOINT BLOCKOUTS REPAIRS**
 - a. DIAMOND GRIND 40 mm OF WITH THE REMAINING REMOVALS COMPLETED WITH CHIPPING HAMMERS UNTIL SOUND CONCRETE IS REACHED. IF REINFORCEMENT IS ENCOUNTERED, CONTRACTOR MAY USE HYDRODEMOLITION. REMOVALS AT SHEAR KEYS TO BE 125 mm DEEP.
 - b. ABRASIVE BLAST EXPOSED REINFORCING STEEL AND CONCRETE.
 - c. INSTALL XPT ANODES AND MAKE ELECTRICAL CONNECTIONS TO ALL EXPOSED REINFORCEMENT.
 - d. PLACE NEW CONCRETE AND CURE FOR MINIMUM 7 DAYS.
5. **PROPOSED SEQUENCE - ROADWAY SLAB JOINT RENEWALS**
 - a. SAWCUT AND REMOVE CONCRETE AS SHOWN ON THE DRAWINGS.
 - b. COMPLETE REMOVALS ON BARRIERS WITH CHIPPING HAMMERS UNTIL SOUND CONCRETE IS REACHED AND TO EXTENTS SHOW ON DRAWINGS.
 - c. ABRASIVE BLAST EXPOSED REINFORCING STEEL AND CONCRETE.
 - d. INSTALL XPT ANODES AND MAKE ELECTRICAL CONNECTIONS TO ALL EXPOSED REINFORCEMENT.
 - e. PLACE NEW CONCRETE AND CURE FOR MINIMUM 7 DAYS.
 - f. INSTALL STYROFOAM AND EMSEAL BEJS SYSTEM IN ROADWAY SLAB GAPS.
6. **PROPOSED SEQUENCE - PLANTER WALL AND BARRIER REPAIRS**
 - a. SAWCUT AND REMOVE CONCRETE AS SHOWN ON THE DRAWINGS.
 - b. COMPLETE REMOVALS ON BARRIERS WITH CHIPPING HAMMERS UNTIL SOUND CONCRETE IS REACHED AND TO EXTENTS SHOW ON DRAWINGS.
 - c. INSTALL NEW REINFORCEMENT IN PLANTER WALL.
 - d. ABRASIVE BLAST EXPOSED REINFORCING STEEL AND CONCRETE.
 - e. INSTALL XPT ANODES AND MAKE ELECTRICAL CONNECTIONS TO ALL EXPOSED REINFORCEMENT.
 - f. FORM AND PLACE NEW CONCRETE AND CURE FOR MINIMUM 7 DAYS.
7. **PROPOSED SEQUENCE - CRASH ATTENUATOR SLAB**
 - a. DISASSEMBLE AND SALVAGE ALUMINUM POSTS AND GUARDRAILS.
 - b. REMOVE EAST BARRIER SYSTEM.
 - c. SALVAGE EXISTING PAVING STONES.
 - d. SAWCUT AS SHOWN ON THE DRAWINGS AND REMOVE CONCRETE MEDIAN CURB AND SUPPORT SLAB.
 - e. EXCAVATE FOR ANCHOR BLOCK.
 - f. DRILL AND EPOXY DOWELS INTO ADJACENT ROAD SLABS AS SHOWN ON THE DRAWINGS.
 - g. PLACE NEW UNREINFORCED CONCRETE SLAB AND ANCHOR BLOCK AND CURE FOR MINIMUM 7 DAYS.
8. **PROPOSED SEQUENCE - PAVING STONES**
 - a. RE-GRADE IN ACCORDANCE WITH CITY OF WINNIPEG SPECIFICATION CW 3330 AND AS SHOWN ON THE DRAWINGS.
9. **PROPOSED SEQUENCE - ASPHALT RENEWALS AT HEADERS**
 - a. PERFORM FULL DEPTH REMOVALS OF ASPHALT WITHOUT DAMAGING THE WATERPROOFING MEMBRANE.
 - b. REMOVE TRANSVERSE WICK DRAINS.
 - c. PLACE FULL DEPTH ASPHALT IN ACCORDANCE TO THE DRAWINGS AND APPENDIX A OF THE CONTRACT DOCUMENTS.
 - d. TOP OF ASPHALT ELEVATION TO MATCH EXISTING GRADES.
10. **PROPOSED SEQUENCE - ASPHALT MILL AND FILL**
 - a. PERFORM 50 mm DEEP MILL AND FILL OF ASPHALT.
 - b. PLACE ASPHALT IN ACCORDANCE TO THE DRAWINGS AND APPENDIX A OF THE CONTRACT DOCUMENTS.
 - c. TOP OF ASPHALT ELEVATION TO MATCH EXISTING GRADES.
11. **REMOVALS:**
 - a. CONDUCT ALL REMOVALS IN THE PRESENCE OF THE CONTRACT ADMINISTRATOR, BY MEANS AND METHODS REVIEWED AND ACCEPTED BY THE CONTRACT ADMINISTRATOR.
 - b. USE A REBAR LOCATOR TO LOCATE EXISTING REINFORCING PRIOR TO GIRDER REMOVALS.

- c. DO NOT DAMAGE EXISTING REINFORCING DURING REMOVALS UNLESS REMOVAL IS CALLED FOR ON THE DRAWINGS.
 - d. PROVIDE SAWCUTS WHERE NECESSARY TO LIMIT THE EXTENTS OF DEMOLITION. SAWCUT DEPTH SHALL NOT EXCEED 25 mm ON GIRDERS AND 40mm ELSEWHERE, EXCEPT FOR FULL DEPTH SAWCUTS OF THE PLANTER WALL.
 - e. PERFORM REMOVALS WITH CHIPPING HAMMERS NO HEAVIER THAN NOMINAL 7 kg CLASS FOR GIRDERS.
 - f. REMOVAL FOR STRUCTURAL APPROACH SLABS MAY BE COMPLETED USING 40 mm DEEP DIAMOND GRINDING, WITH THE REMAINING REMOVALS COMPLETED WITH CHIPPING HAMMERS UNTIL SOUND CONCRETE IS REACHED. IF REINFORCEMENT IS ENCOUNTERED, CONTRACTOR MAY USE HYDRODEMOLITION.
 - g. ALL OTHER REMOVALS TO BE COMPLETED WITH CHIPPING HAMMERS.
 - h. GIRDER REMOVALS SHALL BE TYPICALLY TO AT LEAST THE FACE OF EXISTING REINFORCEMENT AND THE DEPTH OF DELAMINATED CONCRETE FOR NORWOOD SB REPAIRS. REMOVALS BEYOND THE FACE OF EXISTING REINFORCEMENT FOR NORWOOD SB SHALL PROCEED ONLY IN THE PRESENCE OF THE CONTRACT ADMINISTRATOR.
 - i. GIRDER REMOVALS SHALL BE TYPICALLY AT LEAST 25mm PAST THE BACK OF EXISTING REINFORCEMENT AND THE DEPTH OF DELAMINATED CONCRETE FOR NORWOOD NB REPAIRS. REMOVALS GREATER THAN 150mm IN DEPTH FOR NORWOOD NB SHALL PROCEED ONLY IN THE PRESENCE OF THE CONTRACT ADMINISTRATOR.
 - j. OTHER REMOVALS SHALL BE AS SHOWN ON THE DRAWINGS AND AS DIRECTED BY THE CONTRACTOR ADMINISTRATOR.
 - k. FOR NORWOOD SB, CONDUCT ADDITIONAL REMOVALS BEHIND EXISTING MILD STEEL REINFORCEMENT WHICH IS EXPOSED IN THE PATCH AREA, TO FORM A GAP BEHIND THE EXISTING REINFORCEMENT WITH A CLEAR OFFSET OF 20 mm OVER THE RADIUS OF THE REINFORCEMENT FOR GALVANIC ANODE PLACEMENT.
 - l. ALL DEBRIS SHALL BE COLLECTED AND DISPOSED OF AT AN APPROPRIATE FACILITY OFF-SITE.
12. **SURFACE PREPARATION OF COLD JOINTS FOLLOWING REMOVALS - ABRASIVE BLASTING:**
 - a. BLASTING ABRASIVE SHALL BE NON-METALLIC AND FREE OF CORROSION PRODUCING CONTAMINANTS AND OIL.
 - b. ALL SURFACES OF THE COLD JOINT INTERFACE INCLUDING CONCRETE AND EXPOSED REINFORCING STEEL ARE TO BE ABRASIVELY BLASTED TO THE REQUIREMENTS OF SSPC-SP6/ NACE NO.3 COMMERCIAL BLAST CLEANING TO REVEAL A CLEAN SUBSTRATE AND KEPT CLEAN UNTIL CONCRETE PATCH PLACEMENT.
 - c. ABRASIVE BLASTING SHALL BE FOLLOWED BY A HIGH PRESSURE WATER WASH TO REMOVE ALL RESIDUES.
 - d. THE PREPARED SURFACE SHALL BE INSPECTED BY THE CONTRACT ADMINISTRATOR'S REPRESENTATIVE PRIOR TO CLOSING UP FORMS.
 13. **CONCRETE REPAIRS:**
 - a. INSTALL STAINLESS STEEL MESH OR REINFORCING BARS FOR REPAIR AREAS, AS REQUIRED. IF DIRECTED BY THE CONTRACT ADMINISTRATOR, DRILL SUPPLEMENTARY ANCHORS AND/OR ATTACH SUPPLEMENTARY STAINLESS STEEL REINFORCING MESH. REFER TO REPAIR DETAILS.
 - b. INSTALL EMBEDDED GALVANIC ANODES, TIE TO EXISTING REINFORCEMENT, CONFIRM ELECTRICAL CONTINUITY.
 - c. FOR GIRDERS, APPLY WATER TO THE COLD JOINT INTERFACE PRIOR TO CLOSING FORMS IN ORDER TO ACHIEVE A SATURATED SURFACE DRY CONDITION. CONDUCT PATCH REPAIR WITHIN 12 HOURS OF CLOSING FORMS. ENSURE WATERTIGHTNESS OF FORMWORK.
 - d. INSTALL FORMWORK.
 - e. FOR REPAIRS OTHER THAN GIRDERS, APPLY BONDING GROUT TO THE COLD JOINT INTERFACE IMMEDIATELY PRIOR TO POURING
 - f. FORMS SHALL BE INSPECTED BY THE CONTRACT ADMINISTRATOR AND BY THE PUMPING CONTRACTOR PRIOR TO CONDUCTING THE REPAIRS. ENSURE TUBES ARE POSITIONED TO ALLOW ALL AIR TO ESCAPE FROM FORMS FOR GIRDER REPAIRS.
 - g. PREPARE AND PLACE GROUT OR CONCRETE ACCORDING TO THE TENDER DOCUMENTS.
 - h. PUMP GROUT INTO FORMS FOR GIRDERS. CAP INLET AND OUTLET TUBES ONCE PRESENCE OF GROUT THROUGHOUT PATCH CONFIRMED.
 - i. CURE REPAIRS FOR MINIMUM 7 DAYS.

TRAFFIC SIGNAGE & STAGING NOTES:

1. ALL TEMPORARY SIGNAGE AND SIGN PLACEMENT TO BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF TEMPORARY TRAFFIC CONTROL ON CITY STREETS.
2. CONTRACTOR TO MAINTAIN 2 LANES IN EACH DIRECTION OF TRAFFIC ON MAIN ST / ST MARY'S RD AT ALL TIMES.
3. PROPERLY EQUIPPED FLAG PERSONS WILL BE REQUIRED WHEN MOVING ANY CONSTRUCTION VEHICLE INTO OR OUT OF TRAFFIC.
4. CONTRACTOR TO MAINTAIN ACCESS TO ALL SIDE STREETS, PRIVATE APPROACHES AT ALL TIMES. ANY DISRUPTION TO BE APPROVED BY THE CONTRACT ADMINISTRATOR AND THE CONTRACTOR IS TO ADVISE THE OWNER.
5. MAINTAIN BUS STOPS AT CURRENT LOCATIONS. DURING ALL CLOSURES AS NEEDED, CONTRACTOR IS TO PROVIDE TEMPORARY BUS PLATFORMS WITH A NON-SLIP SURFACE AND SMOOTH TRANSITION TO SIDEWALK AS PER FIGURE 19 OF THE MANUAL OF TEMPORARY TRAFFIC CONTROL ON CITY STREETS AT NO ADDITIONAL COST TO THE PROJECT.
6. MAINTAIN PEDESTRIAN CROSSINGS AT ALL TIMES. TEMPORARY RAMPS TO BE PROVIDED IF CROSSING IS UNDER CONSTRUCTION ON MAIN ST / ST MARY'S RD AND ALL SIDE STREET CROSSINGS.
7. POSTED SPEED ON MAIN ST / ST MARY'S RD - 60 km/hr. CORRESPONDING DISTANCES TO BE USED FROM THE MANUAL OF TEMPORARY TRAFFIC CONTROL ON CITY STREETS.

LEGEND

-  WORK AREA
-  TRAFFIC
-  PEDESTRIAN
-  CHANNELIZATION BARREL
TC-63
-  TALL CONE (POLY POST)
-  ROAD CLOSED BARRICADE (NO EXIT)
REFLECTORIZED LIGHT BARRICADE
ROAD CLOSED BARRICADE
-  ROADWORK
TC-2
-  TEMPORARY LANE CLOSED AHEAD (RIGHT VERSION)
TC-SR
-  TEMPORARY LANE CLOSED AHEAD (LEFT VERSION)
TC-SL
-  DOUBLE ARROW
WD-A17
-  DOUBLE ARROW WITH LEFT TURN LANE
WD-A17L
-  THROUGH TRAFFIC PROHIBITED
RB-10
-  YIELD
RA-2
-  KEEP RIGHT
RB-25R
-  KEEP LEFT
RB-25L

**ENGINEERS
GEO-SCIENTISTS**
MANITOBA
Certificate of Authorization
MORRISON HERSHFELD
No. 1736

TENDER No. 291-2024

THE CITY OF WINNIPEG
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

2024 BRIDGE MAINTENANCE
MAIN STREET AND NORWOOD BRIDGES

CITY DRAWING NUMBER
B-103-24-02 / B-104-24-02
SHEET 02 OF 23
DRAWING NUMBER
02

LOCATION APPROVED		BM	ELEV
UNDERGROUND STRUCTURES			
SUPR. U/G 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.			
0	ISSUED FOR TENDER	24/05/09	AGG
No.	REVISIONS	YY/MM/DD	BY

DESIGNED BY	AGG	CHECKED BY	BE
DRAWN BY	AH	APPROVED BY	BE
HOR SCALE	AS SHOWN	RELEASED FOR CONSTRUCTION	
VERT SCALE	AS SHOWN		
DATE	May 09, 2024	DATE	

MORRISON HERSHFELD now **Stantec**

PROFESSIONAL'S SEAL

CONSULTANT FILE NAME
24012200_MN-NRWUD_GN.dwg

GENERAL NOTES