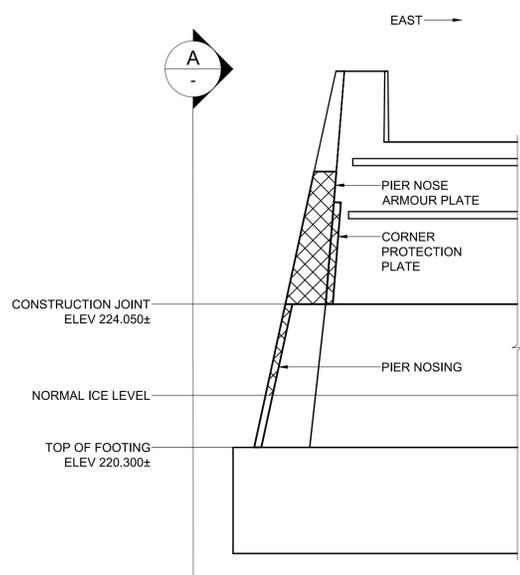
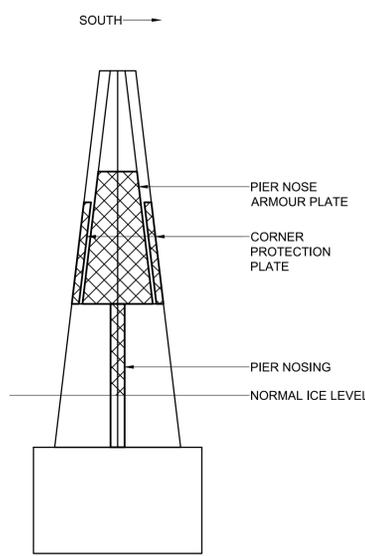


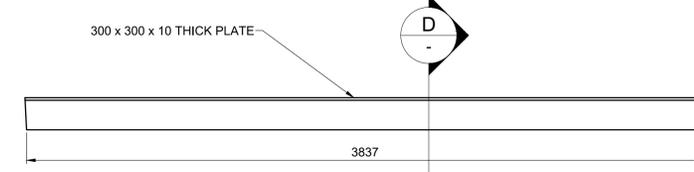
A1 SIZE 594mm x 841mm  
 PLOT: 8/13/2019 2:52:00 PM  
 P:2018180514900-Norwood Bridge.dwg  
 CAD07: Sheets180514900-MW-10.dwg  
 Last Saved: 7/16/2019 4:05 PM by ahppner  
 Plotted: 8/13/2019 2:52:00 PM by Alex Heppner



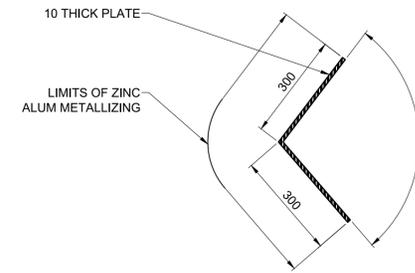
**PIER ELEVATION (TYP)**  
SCALE: 1:100



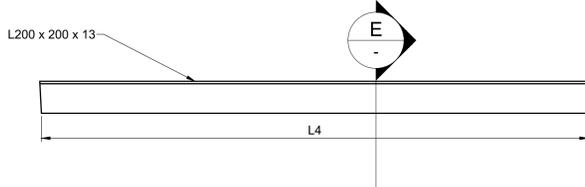
**VIEW - PIER FACE (TYP)**  
SCALE: 1:100



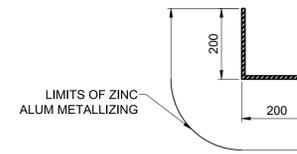
**PIER NOSING**  
SCALE: 1:20



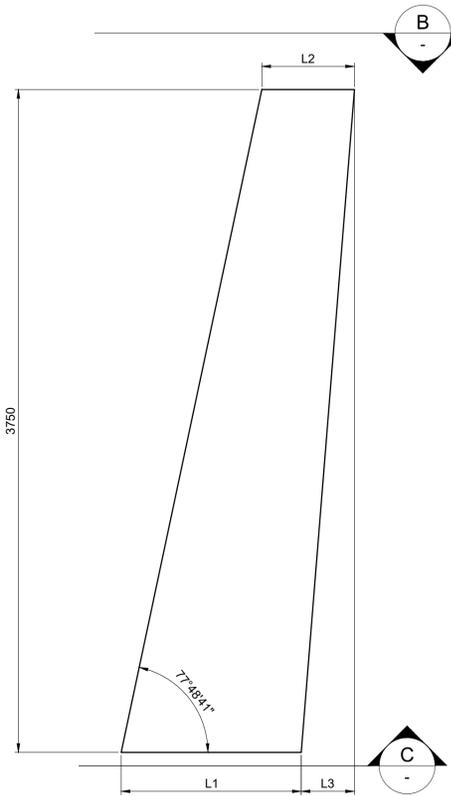
**SECTION D**  
SCALE: 1:10



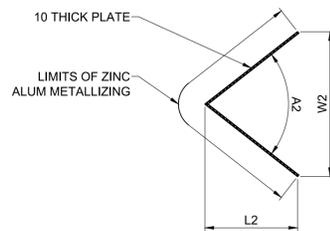
**CORNER PROTECTION ANGLE**  
SCALE: 1:20



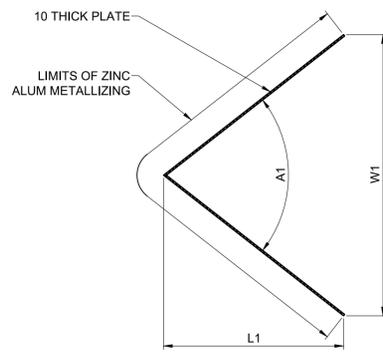
**SECTION E**  
SCALE: 1:10



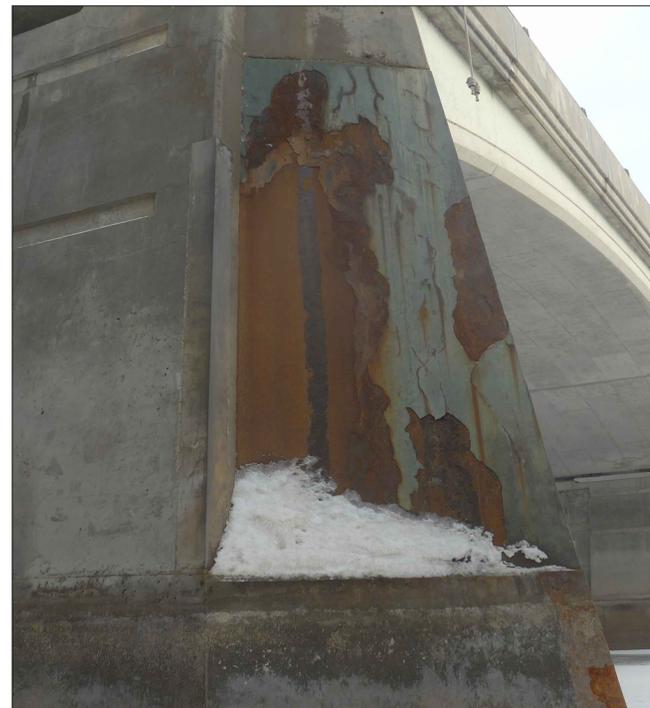
**PIER NOSE ARMOUR PLATE ELEVATION**  
SCALE: 1:20



**VIEW - TOP OF PLATE**  
SCALE: 1:20



**VIEW - BOTTOM OF PLATE**  
SCALE: 1:20



TYPICAL NORTHBOUND FACE OF PIER



TYPICAL NORTHBOUND FACE OF PIER

NORTHBOUND STRUCTURE DIMENSIONS AND QUANTITIES										
	A1	A2	A3	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	W1 (mm)	W2 (mm)	ZINC ALUM AREA (m <sup>2</sup> )
PIER 1	80°04'59"	75°22'49"	95°03'32"	1190	690	310	2880	2000	1065	12.70
PIER 2	77°51'47"	74°20'18"	89°18'27"	1665	1165	310	2880	2690	1765	17.10
PIER 3	79°46'11"	74°29'42"	96°20'44"	1065	560	305	2580	1780	855	11.20
PIER 4	78°36'47"	72°53'04"	97°54'02"	910	400	305	1475	1490	890	8.70

**GENERAL NOTES:**

- METALLIZING WORK EXTENTS INCLUDE PIER ARMOUR PLATE, PIER NOSING, AND CORNER PROTECTION ANGLES ON THE WEST SIDE OF EACH PIER.
- METALLIZING WORK TO TAKE PLACE DURING WINTER MONTHS AND ONLY TO EXPOSED STEEL ABOVE THE ICE. ICE MUST BE THICK ENOUGH TO SUPPORT ALL LOADING.
- EXISTING COPPER METALLIZING TO BE REMOVED BY MEANS OF GRINDING, ABRASIVE BLASTING, OR METHOD APPROVED BY THE CONTRACT ADMINISTRATOR. ALL DEBRIS TO BE CONTAINED.
- SANDBLAST EXPOSED STEEL PRIOR TO METALLIZING. ALL DEBRIS TO BE CONTAINED.
- APPLY ZINC ALUM METALLIZING TO EXPOSED STEEL. THICKNESS OF METALLIZING TO BE 8 TO 12 MILS. NACP-2 QUALITY CONTROL IS REQUIRED AT ALL TIMES FOR METALLIZING. ALL DEBRIS TO BE CONTAINED.

	COPPER REMOVAL AND ZINC ALUM METALLIZING EXTENTS
--	--



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

**LOCATION APPROVED**  
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.

DESIGNED BY	AGG	CHECKED BY	BAP
DRAWN BY	AH	APPROVED BY	BE
HOR SCALE	AS SHOWN	RELEASED FOR CONSTRUCTION	
VERT SCALE	AS SHOWN		
ISSUED FOR TENDER	19/08/14	BY	BE
No. REVISIONS	YYMMDD	BY	DATE

**MORRISON HERSHFIELD**

CONSULTANT FILE NAME  
180514900-MW-10.dwg

PROFESSIONAL'S SEAL  
 PROVINCE OF MANITOBA  
**A.D.G. GILARSKI**  
 ORIGINAL SIGNED  
 19/08/14  
 32144  
 REGISTERED PROFESSIONAL ENGINEER

TENDER No. 685-2019

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

**2019 BRIDGE MAINTENANCE**  
**NORWOOD AND MAIN STREET BRIDGES**

NORWOOD BRIDGE NORTHBOUND  
PIER METALLIZING

CITY DRAWING NUMBER  
B103-19-10

SHEET 10 OF 12

DRAWING No. REV  
10 0