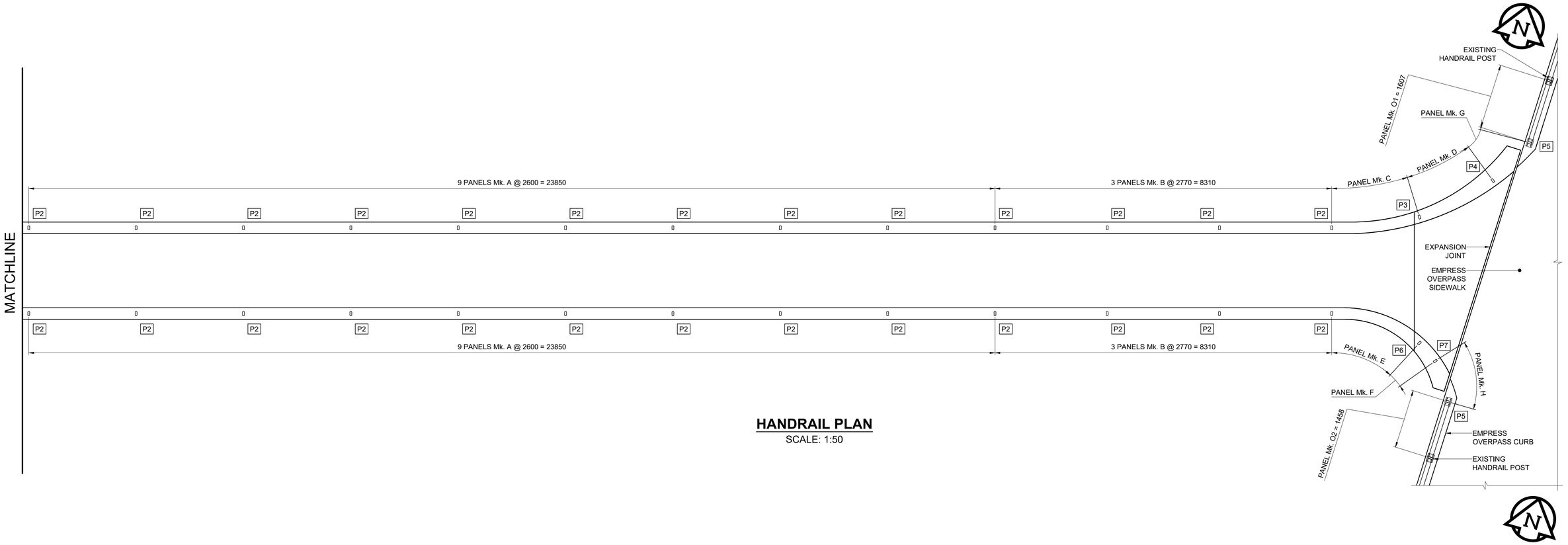
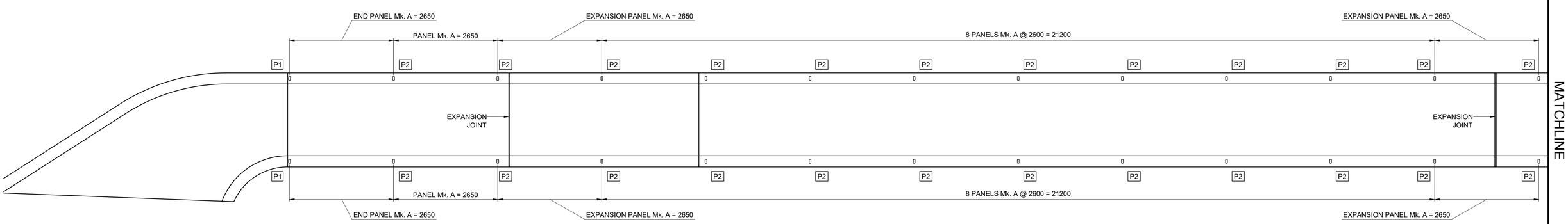
ISO A1 - 594mm x 841mm



HANDRAIL PLAN

SCALE: 1:50



HANDRAIL PLAN

SCALE: 1:50

ALUMINUM PEDESTRIAN HANDRAIL QUANTITIES

PANEL Mk.	NO.
A	36
END A	2
EXPANSION A	4
B	6
C	1
D	1
E	1
F	1
G	1
H	1
O1	1
O2	1
TOTAL NUMBER OF PANELS = 56	

ALUMINUM POST QUANTITIES

POST Mk.	QTY	REMARK
P1	2	END POST
P2	50	INTERMEDIATE POST
P3	1	INTERMEDIATE POST
P4	1	CANTILEVER PANEL POST
P5	2	CANTILEVER PANEL POST
P6	1	INTERMEDIATE POST
P7	1	CANTILEVER PANEL POST
TOTAL NUMBER OF POSTS = 58		

NOTES:
1. ALUMINUM EXTRUSIONS SHALL CONFORM TO ASTM B221 ALLOY 6351-T6.
2. THE M.I.G. PROCESS OF WELDING SHALL BE USED.
3. RAIL POSTS AND BALUSTERS SHALL BE SET PLUMB.
4. PLACE NEOPRENE PAD UNDER EACH POST BETWEEN BASE PLATE OR SHIM AND CONCRETE SURFACE. ALUMINUM SHIMS MAY BE REQUIRED FOR VERTICAL ALIGNMENT.
5. HANDRAIL ANCHOR INSERTS SHALL BE ACROW-RICHMOND TYPE DGRS-1.

BID OPPORTUNITY No. 602-2018

ENGINEERS GEOSCIENTISTS MANITOBA
Certificate of Authorization
MORRISON HERSHFIELD
No. 1736

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.

BM
ELEV

No.	REVISIONS	YY/MM/DD	BY
B	ISSUED FOR TENDER	18/09/04	BAP
A	ISSUED FOR 95% DESIGN REVIEW	18/08/07	BAP

MORRISON HERSHFIELD

DESIGNED BY	ALP	CHECKED BY	BAP
DRAWN BY	ALP	APPROVED BY	BE
HOR SCALE	AS SHOWN	RELEASED FOR CONSTRUCTION	
VERT SCALE	AS SHOWN	N/A	
DATE		DATE	

PROFESSIONAL'S SEAL
PROVINCE OF MANITOBA
B.A.F. PHILLPS
Member
32723
REGISTERED PROFESSIONAL ENGINEER

CONSULTANT FILE NAME
W160034 - DD NR HANDRAIL.DWG

Winnipeg
THE CITY OF WINNIPEG
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

EMPRESS STREET PROJECT
PEDESTRIAN ACCESSIBILITY RAMPS
NORTH RAMP
PEDESTRIAN HANDRAIL PLAN

CITY DRAWING NUMBER: P-3494-154
SHEET 154 OF 168
DRAWING No. 154 REV B

O:\Winnipeg\Proj\W160344 Design\1 Drawings\06 Sheets\Detailed Design\Structural\W160034 - DD NR HANDRAIL.dwg Last Saved: 9/6/2018 5:00 PM by AHeppner Plotted: 9/6/2018 9:42 PM by Alex Heppner