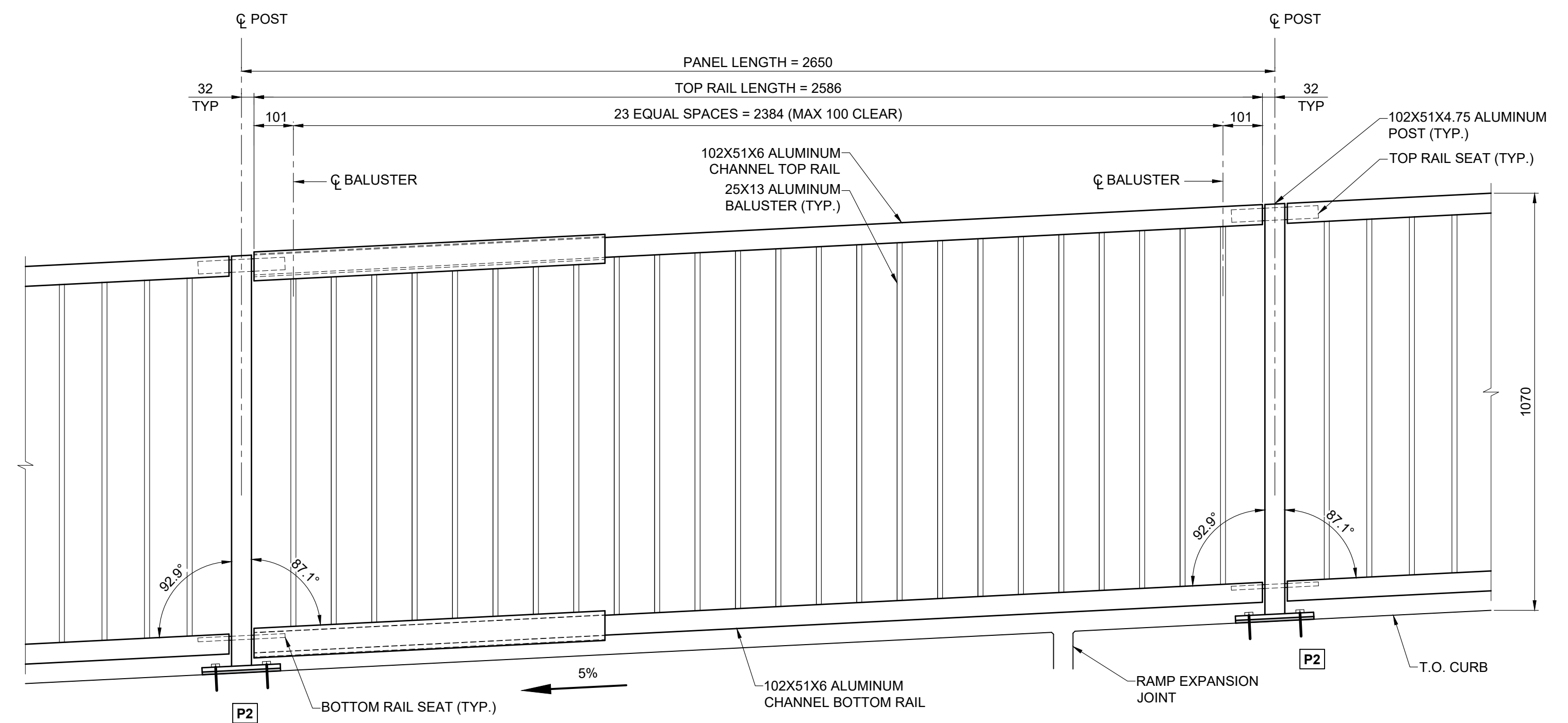
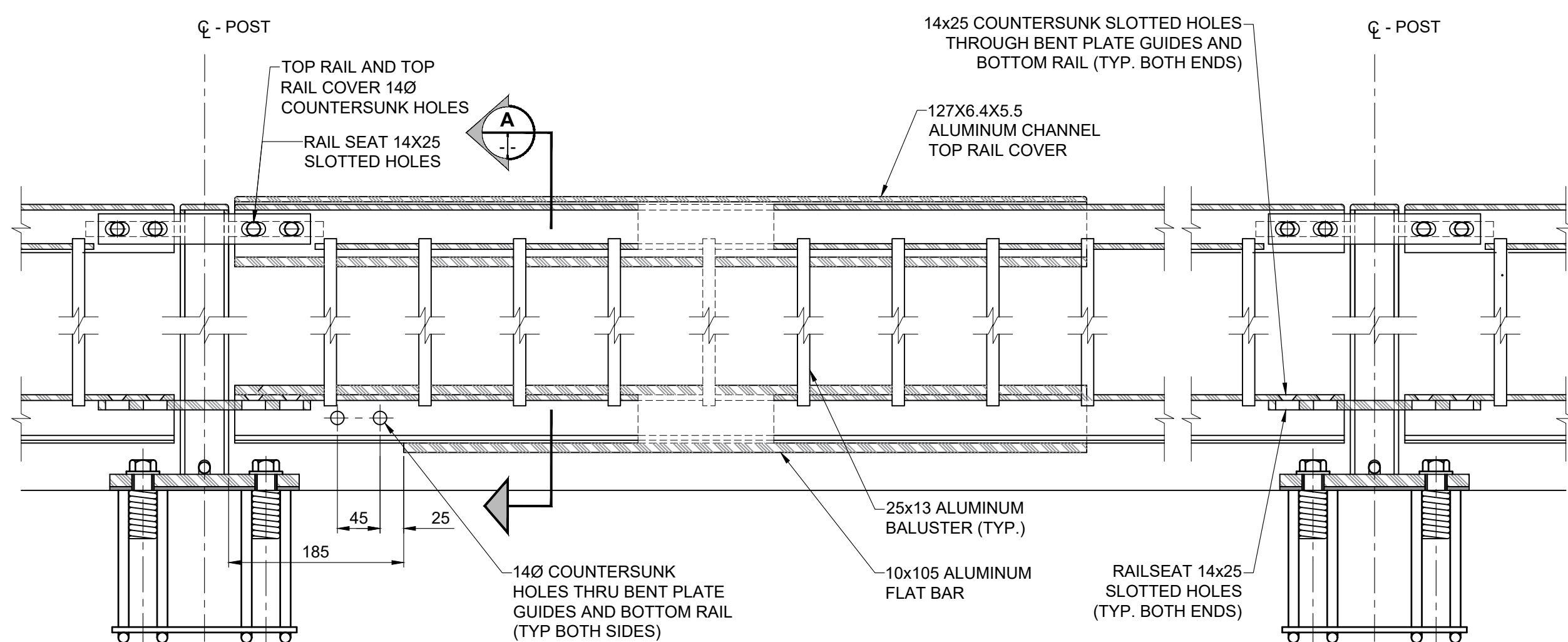


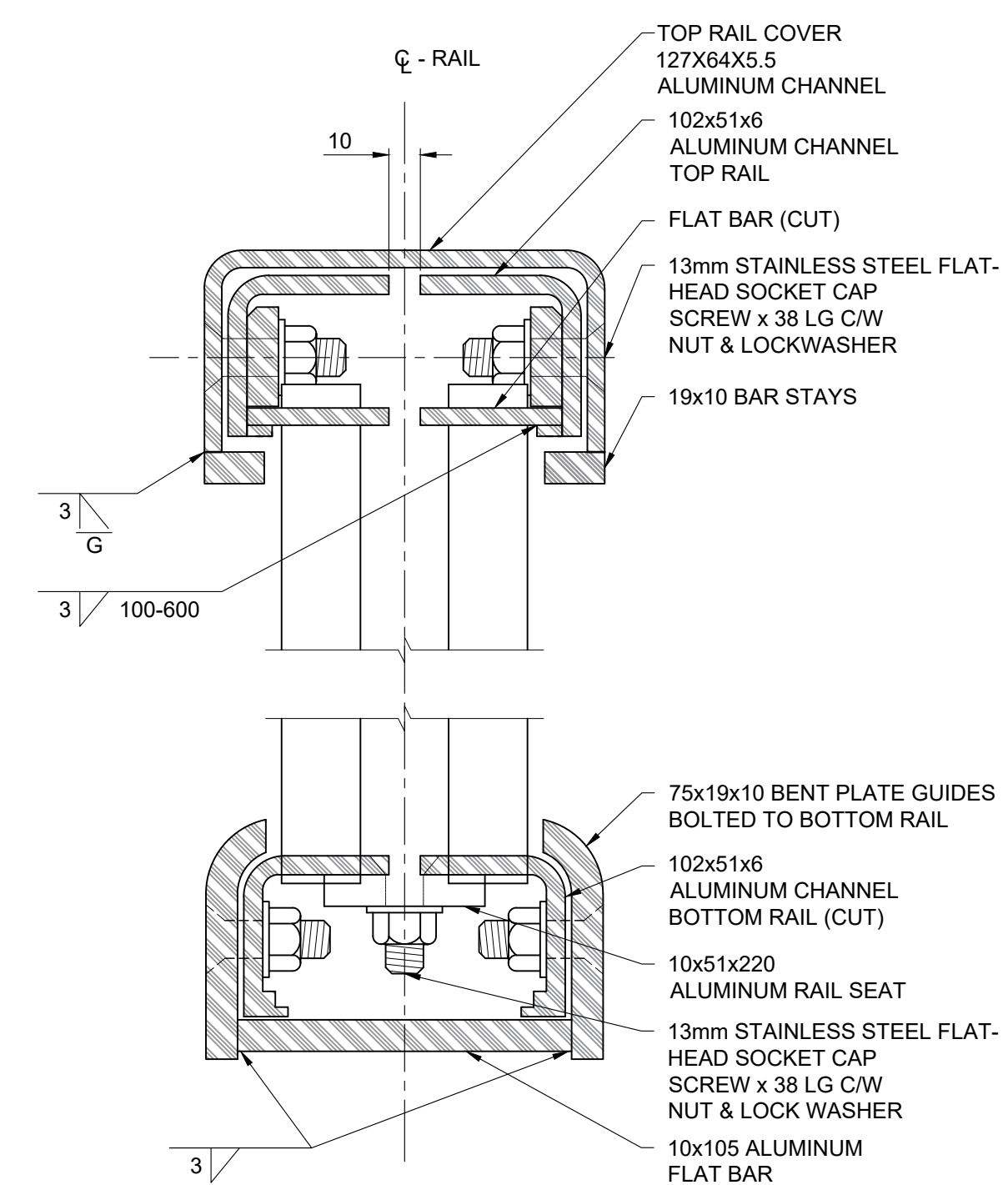
EXPANSION PANEL LOWER RAIL PLAN
SCALE: 1:5



EXPANSION PANEL Mk. A ELEVATION
SCALE: 1:10



EXPANSION PANEL SECTION AT CENTRELINE OF RAILS
SCALE: 1:5



SECTION - HANDRAIL POST
SCALE: 1:2

- NOTES:**
1. ALUMINUM EXTRUSIONS SHALL CONFORM TO ASTM B221 ALLOY 6351-T6.
 2. ALUMINUM PLATES SHALL CONFORM TO ASTM B221 ALLOY 5083.
 3. THE M.I.G. PROCESS OF WELDING SHALL BE USED.
 4. RAIL POSTS AND BALUSTERS SHALL BE SET PLUMB.
 5. PLACE NEOPRENE PAD UNDER EACH POST BETWEEN BASE PLATE OR SHIM AND CONCRETE SURFACE. ALUMINUM SHIMS MAY BE REQUIRED FOR VERTICAL ALIGNMENT.
 6. HANDRAIL ANCHOR INSERTS SHALL BE ACROW-RICHMOND TYPE DGRS-1.



METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

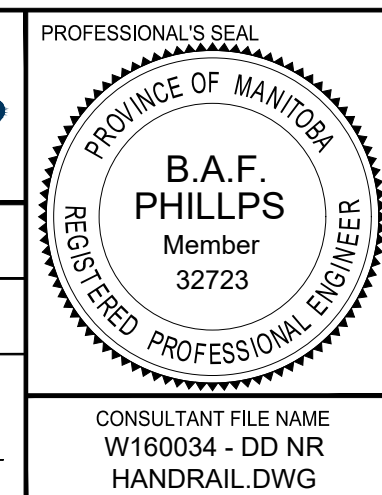
LOCATION APPROVED UNDERGROUND STRUCTURES

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
C	ISSUED FOR ADDENDUM 1	18/10/05	BAP
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		RELEASED FOR CONSTRUCTION	
HOR SCALE: AS SHOWN		VERT SCALE: AS SHOWN		DATE: _____	



THE CITY OF WINNIPEG PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION

EMPRESS STREET PROJECT PEDESTRIAN ACCESSIBILITY RAMPS NORTH RAMP PEDESTRIAN HANDRAIL DETAILS 3

CITY DRAWING NUMBER: P-3494-157
SHEET 157 OF 169
DRAWING No. 157 REV C