1 TYPICAL HANDRAIL DETAILS
SCALE: NOT TO SCALE

2 TYPICAL HANDRAIL CONNECTION PLATE
SCALE: NOT TO SCALE

3 TYPICAL LANDING TO WALL CONNECTION
SCALE: NOT TO SCALE

8 TYPICAL MSU HATCH
SCALE: NOT TO SCALE

NOTES:
1. ALL ELEVATIONS ARE IN METERS AND ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
2. SERRATED ALUMINUM GRATING C/W 6063-T6 BEARING BARS AND 6063-T5 CROSS BARS. ALL ALUMINUM GRATING IS TO BE CLIPPED TO SUPPORTING MEMBERS.
3. ALL INTERIOR MEMBERS TO BE STRUCTURAL ALUMINUM ALLOY 6061-T6. EXTERIOR TO BE STEEL UNLESS NOTED OTHERWISE.
4. COORDINATE SIZE AND LOCATION OF OPENINGS THROUGH SLAB AND GRATING WITH MECHANICAL AND PROCESS PLANS.
5. ANCHOR END POST TO ADJACENT WALL WHERE RAILING ENDS AT WALL.

4 TYPICAL GRATING SLAB SUPPORT
SCALE: NOT TO SCALE

5 TYPICAL GRATING CHANNEL SUPPORT
SCALE: NOT TO SCALE

6 TYPICAL GRATING SUPPORT
SCALE: NOT TO SCALE

7 TYPICAL GRATING EMBEDDED SUPPORT
SCALE: NOT TO SCALE

NO.	DRAWING NUMBER	REFERENCE DRAWING TITLE
10		
9		
8		
7		
6		
5		
4		
3		
2		
1		

REFERENCE DRAWINGS

METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES
UNLESS OTHERWISE NOTED

ENGINEERS GEOSCIENTISTS MANITOBA
Certificate of Authorization
MPE, A DIVISION OF ENGLOBE CORP.
No. 4968

B.M.
ELEV.

NO.	REVISIONS	DATE	BY
0	ISSUED FOR CONSTRUCTION	2024.03.18	

MPE a division of Englobe

DESIGNED BY	M. BAKER	CHECKED BY	B. BAKER
DRAWN BY	D. MCMILLAN	APPROVED BY	M. BAKER
SCALE: HORIZONTAL / VERTICAL	AS SHOWN	RELEASED FOR CONSTRUCTION	
DATE	2024-03-18	DATE	

PLOT DATE: 2024 03 18

PROVINCE OF MANITOBA
M.J. BAKER
Member 43540
REGISTERED PROFESSIONAL ENGINEER
MARCH 18, 2024
CONSULTANT DRAWING NUMBER

BID OPPORTUNITY: --

Winnipeg
THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
ENGINEERING DIVISION

RENFREW OUTFALL GATE CHAMBER
2024 UPGRADES
STRUCTURAL DETAILS

CITY DRAWING NUMBER 1-0240G-S006-001
SHEET 9 OF 41

FILE PATH: M:\N-Data\84\00 City of Winnipeg\006 - Renfrew Outfall Gate Chamber Upgrades\AutoDesk\ACAD\
FILE NAME: s4.1 - s4.3 details.dwg