

CAPITAL PROJECTS UPDATE: NOVEMBER 2025



Settle down.

Version 1.0

2025-11-04

PRESENTATION OUTLINE

- South Ruckle Project
- FMP Costs to Date
- FMP Capital Plan
- 3rd Street Sewer Repair
- 2nd Street Sidewalk
- East Zone Reservoir



STATUS UPDATE: WP3, SOUTH RUCKLE DIKE AND DRAINAGE WORK

- A. Dike Phase 1&2 (62nd Ave to Grand Forks Rail Line) complete and providing permanent flood protection
- B. Sheetpile installation completed October 1st
- C. Restoring public and private property impacted by construction
- D. Design complete for Phase 2b (drainage work)
- E. Preparing to begin Phase 2b drainage work
- F. Working with Interfor and Tech Safety BC on drainage network adjacent railway





Settle down.

SOUTH RUCKLE, MAY 2018

Version 1.0

2025-11-04



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SOUTH RUCKLE, MAY 2025

Version 1.0

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WP3 - SOUTH RUCKLE DIKE AND DRAINAGE PHASE 2 SHEET PILE INSTALLATION





WP3 - SOUTH RUCKLE DIKE AND DRAINAGE PHASE 2 SHEET PILE INSTALLATION





WP3 - SOUTH RUCKLE DIKE AND DRAINAGE PHASE 2 CLEARING





WP3 - SOUTH RUCKLE DIKE AND DRAINAGE PHASE 2 PROPERTY RESTORATION





WP3 - SOUTH RUCKLE DIKE AND DRAINAGE PHASE 2 - EARTH BERM DIKE CONSTRUCTION





WP3 - SOUTH RUCKLE DIKE AND DRAINAGE PHASE 2 - EARTH BERM DIKE CONSTRUCTION



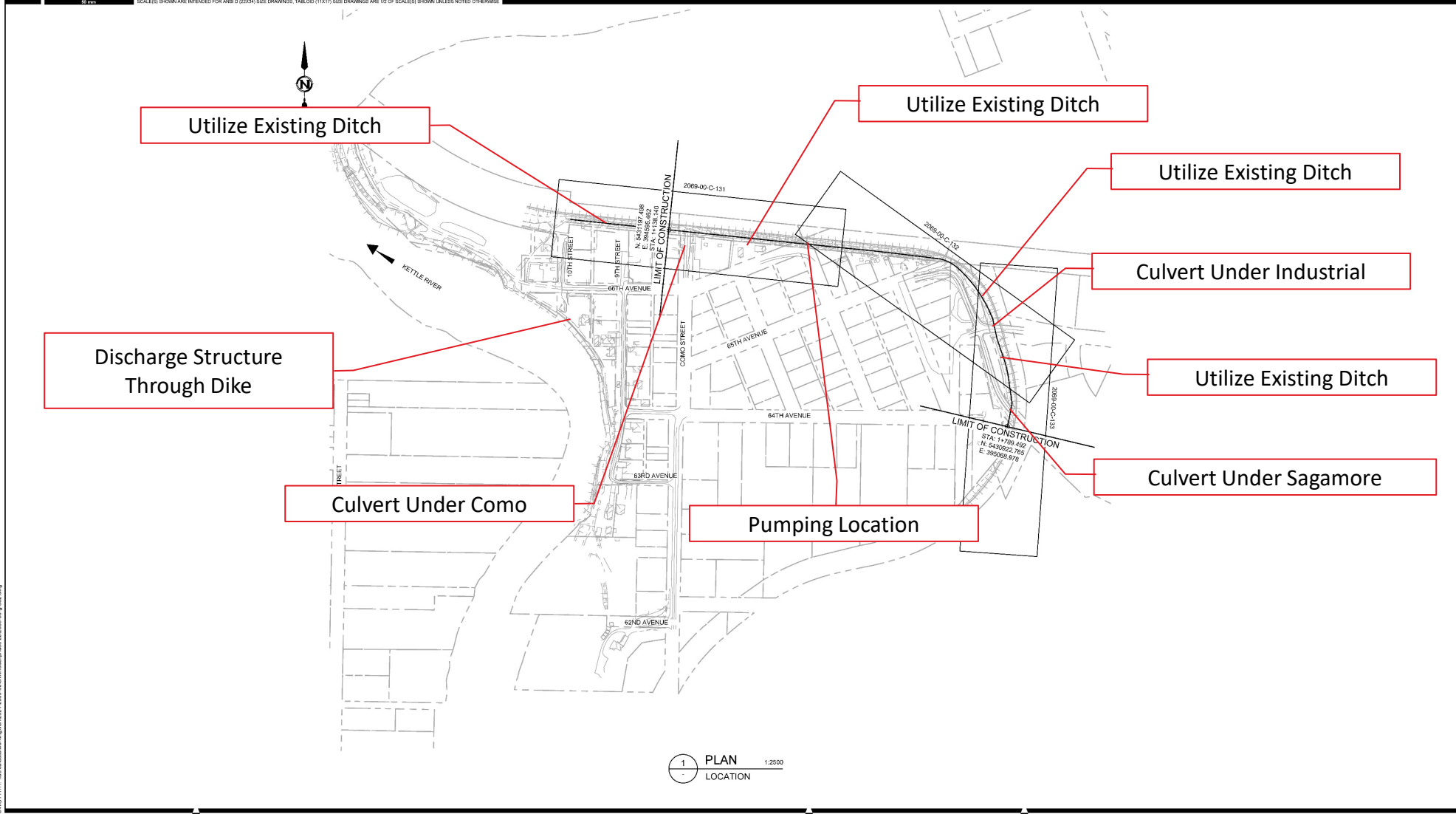


WP3 - SOUTH RUCKLE DIKE AND DRAINAGE COMMUNITY GARDEN TRAIL CULVERTS AND PAVING



IF NOT 50 mm ADJUST SCALES

SCALE(S) SHOWN ARE INTENDED FOR AFD (2)2X SIZE DRAWINGS. TABLED (1)1X SIZE DRAWINGS ARE 1/2 OF SCALE(S) SHOWN UNLESS NOTED OTHERWISE



PLT DATE: 2025-10-29 3:28:02 PM
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PERMIT TO PRACTICE
ASSOCIATED ENGINEERING (B.C.) LTD.
PERMIT NUMBER: 1000163
Engineers & Geoscientists BC



CITY OF GRAND FORKS



FLOOD MITIGATION PROGRAM
WP3 - SOUTH RUCKLE DIKE AND
DRAINAGE SYSTEM - PHASE 2B
2024-2069-00

GENERAL
KEY AND LOCATION PLAN

REV	DATE	DESIGN	DRAWN	DESCRIPTION
0	2025OCT29	C. O'BRIEN	K. KOPEL	ISSUED FOR CONSTRUCTION

SCALE: AS SHOWN

DRAWING	REVISION	SHEET
2069-00-G-032	0	2



SOUTH RUCKLE DRAINAGE NETWORK DESIGN

WP3 PERMITTING UPDATE

Permit Name	South Ruckle Dike (North of 63 rd Ave)	South Ruckle Dike (South of 63 rd Ave)
Heritage Inspection Permit (HIP)	In Hand	In Hand
Archeological Impact Assessment (AIA)	Complete	Complete
Site Alteration Permit (SAP)	Confirmed as not required	Amended to include new site
Dike Maintenance Act Permit (DMA)	Received	Received
Letter of Advice (LOA) from Fisheries	Received. Extended to 2026.	LOA Received July 22 nd , 2025
Fish Act Authorization (FAA)/ Fish Collection Permit	Confirmed as not required	Confirmed as not required
Species at Risk Act (SARA) Permit	Covered by LOA	Covered by LOA
Water Sustainability Act (WSA) Permission	S11 not required for dike. Confirmed also not required for outfalls.	S11 not required since work is away from the river.
License of Occupation (LOO)	New LOO in place. LOO for 2019 revetment now superseded.	In place. No longer relevant due to private property boundary adjustment.
Statutory Right-Of-Way (SRW) over Crown Land	Required within 6 years to replace LOO	Not required
Statutory Right-Of-Way (SRW) over Private Land	In place	In place
Interfor SRW, Grand Forks Rail, TSBC, Rail tie-in Approval	Complete	Not required

FLOOD MITIGATION PROGRAM COSTS TO DATE

Scope	Actuals to Oct 31st, 2025
WP1 - Downtown	\$ 23,465,477
Riverside Drive Stormwater Interceptor	\$ 4,742,080
WP2 a&b - North Ruckle	\$ 8,400,889
WP2c - Rockwool	\$ 5,188,786
WP3 – South Ruckle	\$ 5,020,220
WP 5 - Johnson Flats	\$ 1,850,019
WP 6 – Rural Erosion (Phase 1), by RDKB	\$ 576,586
WP 7 - Floodplain Restoration	\$ 2,125,861
Haz-mat Assessments	\$ 70,311
Demolition	\$ 1,326,080
Capital Projects Subtotal	\$ 52,766,280
Property (land)	\$ 6,662,181
Property (improvements)	\$ 7,392,035
Add. City Contributions (LAP)	\$ 3,468,814
Property Subtotal	\$ 17,523,030
Additional City Contributions (non-LAP)	\$ 1,382,358
Grand Total	\$ 71,671,668



CURRENT FLOOD MITIGATION CAPITAL PLAN

2024+ Capital Plan

Project	Scope	April 2024 Reforecast (BAC)	Actual Costs (AC) to Oct 31st, 2025	Estimate to Complete (ETC)	Estimate at Completion (EAC) = AC + ETC	Variance at Completion (VAC) = BAC - EAC	Percent Complete
WP1	Program Wide Schematic Design; Downtown Dikes and Pump Stations	\$ 23,591,822	\$ 23,465,447	\$ 126,374	\$ 23,591,822	\$ -	99.5%
WP1	Riverside Drive Stormwater Interceptor	\$ 4,761,540	\$ 4,742,080	\$ 19,461	\$ 4,761,540	\$ -	99.6%
WP2 a&b	North Ruckle Trail Dike	\$ 8,439,271	\$ 8,400,889	\$ 38,381	\$ 8,439,271	\$ -	99.5%
WP2c	Rockwool Trail Dike	\$ 5,683,726	\$ 5,188,786	\$ 47,253	\$ 5,236,039	\$ 447,687	99.1%
WP3	South Ruckle Dike and Drainage Network	\$ 5,509,846	\$ 5,020,220	\$ 489,626	\$ 5,509,846	\$ -	91.1%
WP5	Johnson Flats Erosion Protection	\$ 1,850,019	\$ 1,850,019	\$ -	\$ 1,850,019	\$ -	100.0%
WP6	Rural Erosion Protection (Phase 1), by RDKB	\$ 814,992	\$ 576,586	\$ 187,346	\$ 763,933	\$ 51,059	75.5%
WP7	Floodplain Naturalization and Habitat Offsetting	\$ 2,130,999	\$ 2,125,861	\$ 5,138	\$ 2,130,999	\$ -	99.8%
All	Haz-mat Assessments	\$ 70,311	\$ 70,311	\$ -	\$ 70,311	\$ -	100.0%
All	Demolition	\$ 1,328,080	\$ 1,326,080	\$ -	\$ 1,326,080	\$ 2,000	100.0%
	Totals	\$ 54,180,607	\$ 52,766,280	\$ 913,580	\$ 53,679,860	\$ 500,746	98.3%





COMPLETED

3RD STREET SEWER REPAIR



Settle down.





COMPLETED

2ND STREET SIDEWALK REPLACEMENT

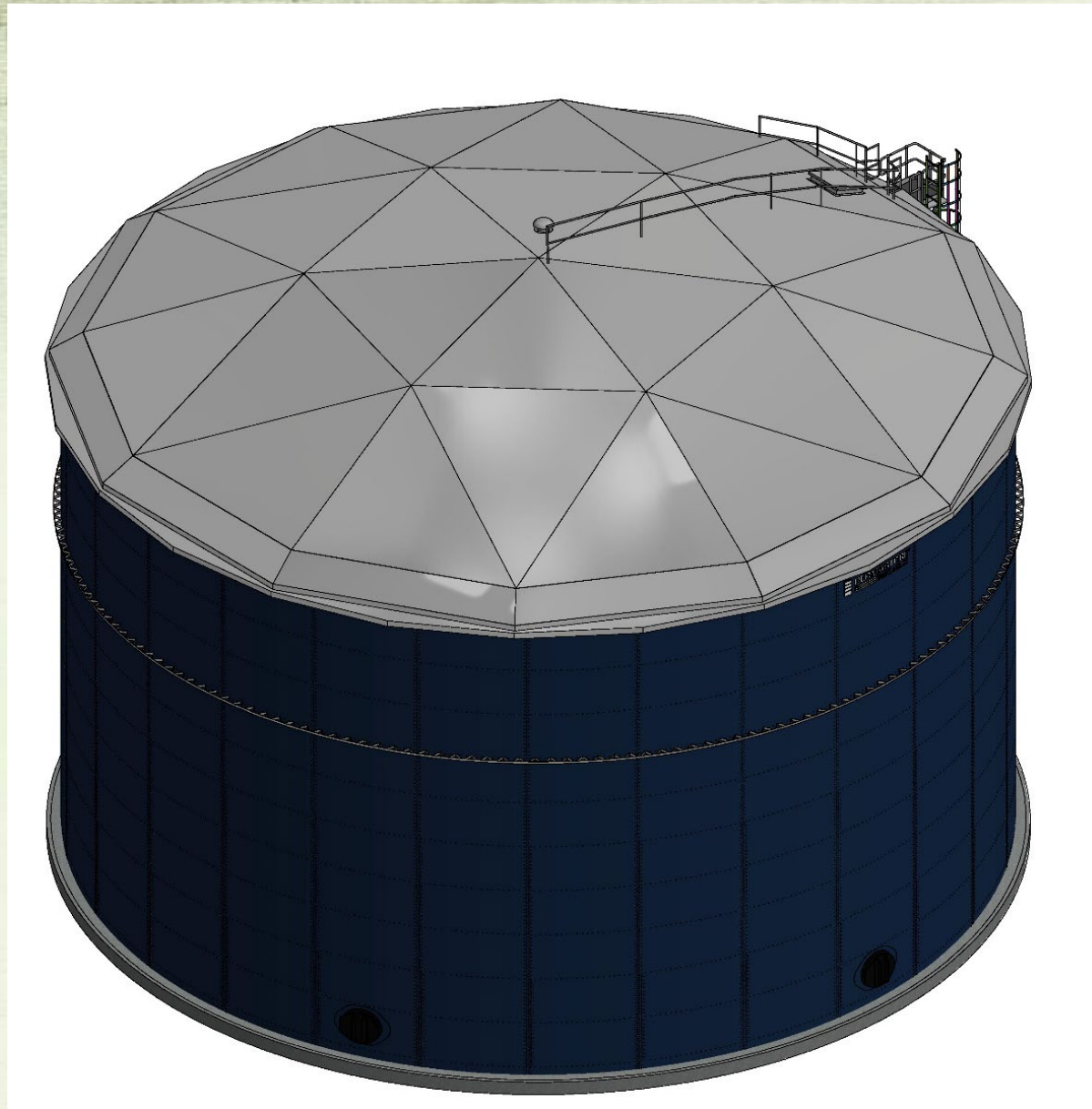


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STATUS UPDATE: WATER SYSTEM IMPROVEMENTS PROJECT

- A. Tank size and configuration selected (14.2m high x 23m wide; 5,854 cubic meters)
- B. Reservoir pad preparation work complete – no rock encountered, site successfully lowered by an additional 1.0m
- C. Confirming pump upgrades required to support new reservoir Top Water Level (TWL) elevation
- D. Finalizing detailed design for reservoir site works (work outside tank footprint)
- E. Developing Request for Proposals (RFP) for reservoir site works
- F. Tank shop drawings complete by fabricator in UK and under review by Canadian engineers



RESERVOIR TANK DESIGN



Settle down.

PERMADOME® GEODESIC DOME ROOF

HANDRAIL FROM CENTRE TO EDGE

TOP STIFFENER ANGLE
100X100X10
DOUBLE PUNCHED

GALVANISED MILD STEEL 1m2
PLATFORM AT EAVES
DESIGNED TO OSHA 1910.23

H2FLOW LOGO

PERMASTOCK
TANKS & SLUR

ALUMINIUM LADDER
DESIGNED TO OSHA 1910.23

DOUBLE WEB TRUSS
70x6

14595 HEIGHT OVER ANGLES
14295 HEIGHT ABOVE CONCRETE

300

MANWAY SHOWN FOR
PICTORIAL PURPOSE ONLY

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PICTORIAL PURPOSE ONLY

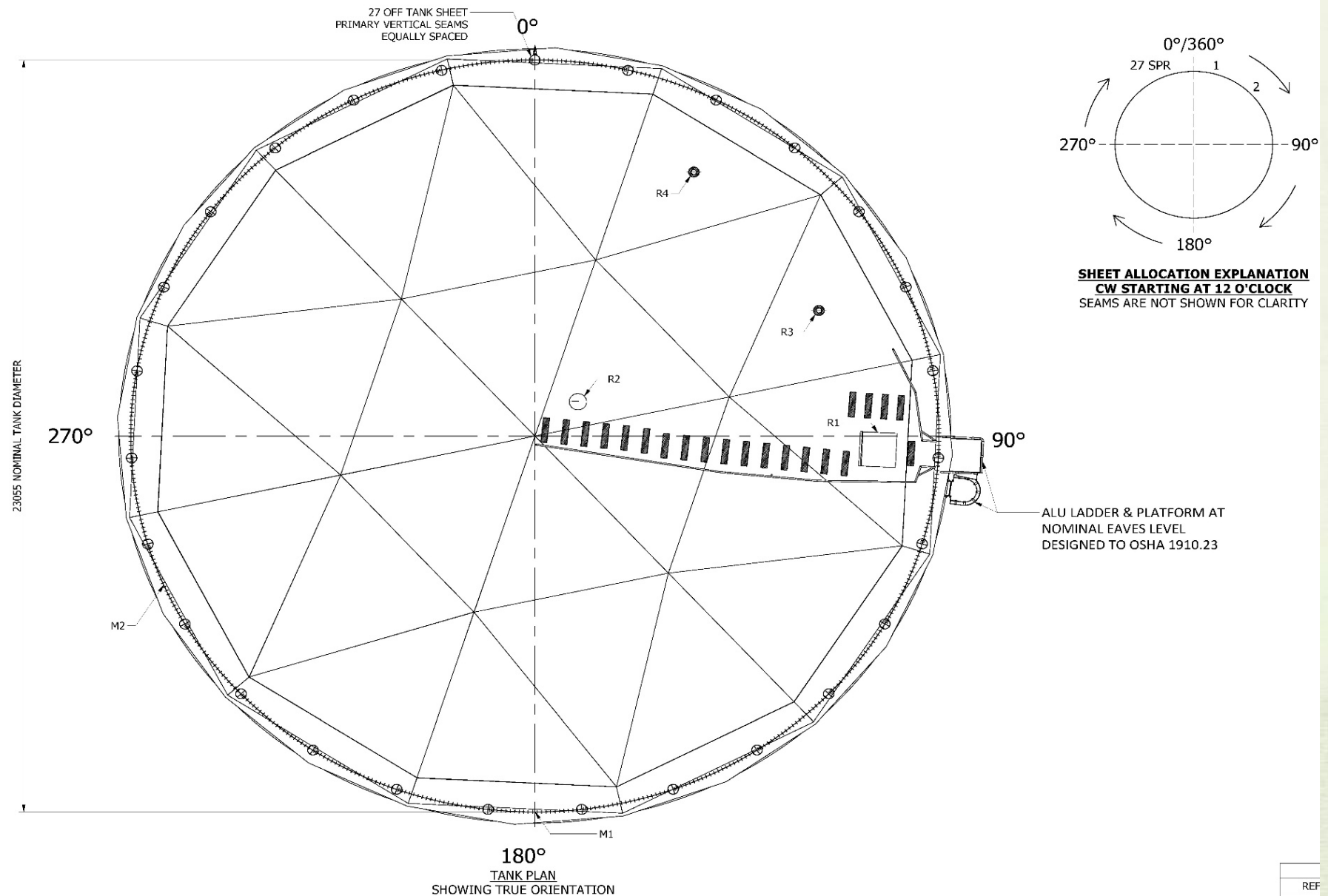
FOUNDATION ANGLE
50X50X5
SEE DETAILS

TANK ELEVATION
FOR TRUE ORIENTATION SEE PLAN



Settle down.

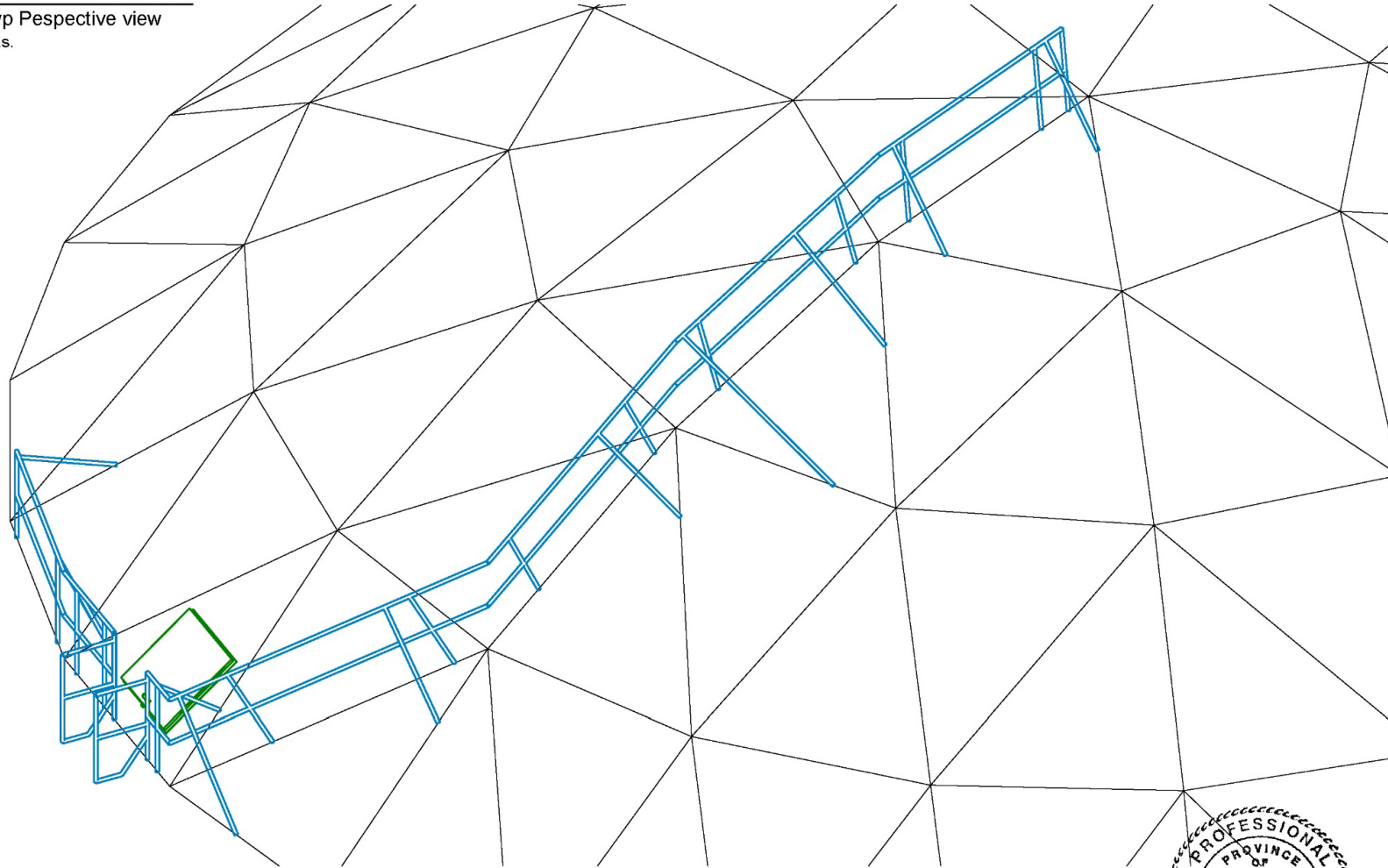
RESERVOIR TANK DESIGN



RESERVOIR TANK DESIGN

RADIAL HANDRAIL

Typ Perspective view
n.t.s.



HANDRAIL ASSEMBLY EXAMPLE

(Typ.) Perspective view
n.t.s.



Settle down.

RESERVOIR TANK DESIGN

