



NOTES: GENERAL CONTRACTOR TO VERIFY ALL DIMENSIONS WITH FINAL ARCHITECTURAL AND MECHANICAL DRAWINGS. NOTIFY THE ENGINEERS OF ANY ERRORS AND/OR OMISSIONS PRIOR TO CONSTRUCTION FOR DIRECTION. DO NOT SCALE THIS DRAWING.

GENERAL NOTES

WALL TYPES

@ 610 O.C.

PRE-FINISHED METAL CLADDING 19x64 HORIZONTAL WOOD STRAPPING

VERTICAL Z-GIRTS @ 610 mm O.C.

AIR / VAPOUR BARRIER MEMBRANE

38 x 38 HORZ. WOOD STRAPPING

12.5 mm OSB SHEATHING

9.5 mm OSB SHEATHING

2 - 38 x 140 STUDS @ 400 O.C

PRE-FINISHED METAL LINER

2 HOUR FIRE RATED WALL

PREFINISHED METAL LINER

2 -38 x 140 STUDS @ 400 O.C.

PREFINISHED METAL LINER

PRE-FINISHED METAL CLADDING

VERTICAL Z-GIRTS @ 610 mm O.C.

38 x 38 HORZ. WOOD STRAPPING

12.5 mm OSB SHEATHING

2 - 38 x 140 STUDS @ 400 O.C. 9.5 mm OSB SHEATHING 12 mm CEMENT-FIBRE BOARD

PREFINISHED METAL LINER

2 - 38 x 140 STUDS @ 400 O.C.

12 mm CEMENT-FIBRE BOARD

*** THE JOINTS OF THE OUTER LAYER OF FINISH

ON BOTH SIDES OF THE WALL SHALL BE TAPED AND FINISHED. FASTENER TYPES AND SPACING SHALL CONFORM TO CSA A82.31-M, "GYPSUM

9.5 mm OSB SHEATHING

9.5 mm OSB SHEATHING

BOARD APPLICATION"

9.5 mm OSB SHEATHING

9.5 mm OSB SHEATHING

@ 610 O.C.

@ 610 O.C.

VAPOUR PERMEABLE WEATHER BARRIER

38 mm RIGID INSULATION - RSI 1.32 (R7.5)

(NBC - DESIGN W2d NON-LOADBEARING)

2 -15.9 mm TYPE X GYPSUM BOARD***

2 - 15.9 mm TYPE X GYPSUM BOARD***

19x64 HORIZONTAL WOOD STRAPPING

VAPOUR PERMEALE WEATHER BARRIER

38 mm RIGID INSULATION - RSI 1.32 (R7.5) AIR / VAPOUR BARRIER MEMBRANE

75 mm RIGID INSULATION - RSI 2.64 (R15) ON

75 mm RIGID INSULATION - RSI 2.64 (R15) ON

DOOR TYPES

DOOR CLOSER

FLUSH BOLTS

DOOR CLOSER

DOOR SWEEP

PANIC HARDWARE

ASTRAGAL

TWO INSULATED METAL DOORS PAINTED, 900 x 2150 x45

1-1 PR. HEAVY DUTY HINGES

WEATHER STRIPPING

ALUMINUM THRESHOLD

PAINTED, 900 x 2150 x45

WEATHER STRIPPING

ALUMINUM THRESHOLD

LEVERED PASSAGE SET

INSULATED METAL DOOR

1-1 PR. HEAVY DUTY HINGES

300 mm WIDE X 600 mm HIGH WINDOW

C/W GEORGIAN WIRE GLASS

PAINTED, 900 x 2150 x45

WEATHER STRIPPING

PANIC HARDWARE

LEVERED LOCKSET

WINDOW TYPES

ALUMINUM THRESHOLD

DOOR CLOSER

DOOR SWEEP

1-1/2 PR. HEAVY DUTY HINGES

- 1. Check all dimensions on structural drawings with other drawings. Report any inconsistencies before proceeding with the work. DO NOT SCALE THESE DRAWINGS.
- 2. All work shall comply with current provisions of the National Building Code, the Workplace Safety and Insurance Board and best trade practices. Work shall comply with all local and provincial regulations and with applicable C.S.A. standards. In all cases, the latest editions of codes and standards shall apply.
- 3. Structural design complies with the minimum standards of Part 9 of the National Building Code 2010.
- 4. Before submitting tenders contractors shall carefully examine existing conditions to establish the extent of the work.
- 5. Locate all buried services prior to excavation. The contractor shall be responsible for all temporary bracing, shoring and dewatering necessary to undertake the work.
- 6. The contractor is responsible for removing excess materials and cleaning up on completion of the work.
- 7. The contractor shall verify dimensions before construction and report discrepancies before proceeding with the work.

FOUNDATIONS (PILES)

- 1. Refer to Geotechnical Report No. OTT-00208308-A0 prepared by exp Services Inc. and dated January 3, 2013.
- 2. Pile installation to be monitored by a qualified Geotechnical Engineer or Technologist.
- 3. Pile holes should be installed when the active layer is frozen. This will allow clean, dry holes to be drilled.
- 4. The pile shall be vibrated to insure a continuous column sand slurry around the outside of the pile.
- 5. Maintain accurate records of slurry volumes and pile
- 6. Once the pile has been installed, a wedge can be used to ensure plumbness and line.
- 7. Ensure that the pile and bracing portion within the active zone have a bond breaker system installed.
- 8. Freeze back around the piles may take 2 3 months. Do not apply structural loads until pile freezeback is complete.
- 9. Contractor to confirm with equipment suppliers, dimensions and all other critical details prior to construction. Report discrepancies and obtain approval prior to proceeding with construction.

MATERIALS SPECIFICATIONS

- 1. Pipe piles: Hollow structural steel sections, minimum yield strength of 350 MPa, size and wall thickness as indicated on the drawings. 141 mm diameter x 6.4 mm thickness, sandblasted.
- 2. Sand slurry: shall not contain particles greater than 5mm or have less than 10% fines passing No. 200 sieve size. The sand should have a salinity of less than
- 3. Water for slurry : potable with a placement temperature less than 10° C.
- Concrete materials to CSA-A23.1-14. Compressive strength minimum 35 MPa. 6% +/- 1% entrained air for concrete. Slump 70 +/- 20mm. Maximum water/cement ratio: 0.43. Maximum aggregate size 20 mm. Type GU cement. Exposure Class: C1
- 5. Formwork to CSA-A23.1-14. Use only new forming materials for architecturally exposed surfaces. Form release agent shall be nonstaining, compatible with finishes where applicable.
- 6. Rebar deformed billet steel bars to CSA G30.18M-09, Grade 400. Type W for welded rebar.
- 7. Mesh welded wire fabric to ASTM A1064/A1064M-14.
- 8. Rolled structural steel shapes General requirements to CSA S16-14, rolled shapes to CSA G40.21-13, 350W minimum. Channels, angles and plates 300W.
- Hollow structural sections to CSA-G40.20-13/G40.21-13, 350W, Class H.
- 10. Bolts, nuts and washers General requirements to CSA-S16-14, ASTM A325M-09. Hot dipped galvanized
- 11. Welding: to CSA W59-13, E480XXCH or LH basic electrodes conforming to CSA W48-14. Welding shall be performed only by companies certified by Canadian Welding Bureau as follows: Fusion Welding - certified to CSA W47.1-09(2014); Resistance Welding - certified to CSA W55.3-08(2013). Workmanship to best trade practices for cold weather
- 12. Prime paint to Structural Steel to CISC/CPMA STANDARD 2-75, one shop coat, one touch up field coat.
- 13. Wood Framing Material SPF Grade No. 1 or 2. All lumber in direct contact with concrete, soil or moisture to be pressure treated.

installations.

- 14. Rough Carpentry Timber Construction shall conform to Part 9 of NBC 2010 and CSA 086-14.
- 15. Nails and Staples materials to ASTM F1667-13. Common and spiral ardox nails to be galvanized.
- 16. Prefinished Metal Roofing Sheet steel to ASTM A653/A653M-13, commercial quality, galvanized, Z275 coating, designation, factory precoated with paint finish.

Colour: White White QC8317 Profile: Ideal Roofing Pocket Rib Thickness: 0.53 mm base metal thickness

17. Preformed Cladding/Siding - Sheet steel to ASTM A653/A653M-13, grade A, galvanized, Z275 coating designation, factory precoated with paint finish, 2 coat system dry paint film thickness of 0.025 mm +/- 0.005 mm both faces conforming to film test procedures described in CSSB1 Bulletin No. 5 and ASTM D1005-95 (2013), Stelco 10000 Series or equal.

Colour: White White QC16076 Profile: 36 mm deep x 190 mm flute spaces, preformed interlocking joints, acceptable material Vic West CL622R with rib profile or equal Thickness: 0.61 mm base metal thickness Fascia and Trims: same colour and thickness as cladding

- 18. Wall and Roof Insulation: Rigid closed cell polystyrene: to CAN/ULC-S701-11, type 4, compressive strength 210 kPa, thermal resistance of 0.87 RSI/25 mm, thicknesses as specified, square shiplapped edges. Acceptable material Styrofoam SM or approved equal.
- 19. Underside Rigid Insulation: Rigid closed cell polystyrene: to CAN/ULC-S701-11, type 4, compressive strength (210 kPa, thermal resistance of 0.87 RSI/25 mm, thicknesses as specified, square shiplapped edges. Standard of Acceptance Styrofoam SM or approved equivalent.
- 20. Girts: "Z" profile, minimum 1.3 mm thick, height to suit insulation thickness, formed from galvanized sheet steel to ASTM A653/A653M-13, Grade A, with zinc coating designation Z275, with 50 mm wide bottom flange and 64 mm wide top flange. Terminations: perimeter framing of "L" or "C" profiles to match "Z" girts.
- 21. Fasteners for girts: epoxy coated 4mm dia. steel screws of sufficient length to penetrate through deck.
- 22. Fasteners for metal roofing: self-drilling cadmium plated steel purpose made, head colour same as exterior steel roofing, neoprene washer exposure.
- 23. Fasteners for metal cladding: cadmium plated steel purpose made, head colour same as exterior sheet, dished steel/neoprene.
- 24. Sealants: single component acrylic, colour to match roofing/

25. Polyethylene Sheets - 0.25 mm (10 mil) clear polyethylene film.

REINFORCEMENT PLACEMENT

- 1. Minimum clear cover - For concrete placed against earth......75 mm - For concrete placed in forms but in contact with earth and weather.....50 mm - Interior slabs and walls..... - Curb ...
- 2. Laps

- lap all bars 36 bar diameters or 450 mm minimum, whichever is greater, unless otherwise indicated.

3. Chairs for support of slab reinforcing spaced at maximum of 1.0 m in either direction. Supply support bars, chairs and carriers.

DESIGN SERVICE LOADS

DEAD LOADS FLOOR 4.8 kPa ROOF (Self weight) 1.35 kPa Superimposed Loads (Mech. Allowance) 0.5 kPa **LIVE LOADS** 7.2 kPa **FLOOR ROOF SNOW LOAD** Ss = 3.4 kPaSr = 0.2 kPa

Is = 1.25 ULS Is = 0.9 SLSS = Is [Ss (Cb Cw Cs Ca) + Sr = 1.25 [3.4 (0.8)(1.0)(1.0)(1.0) + 0.2]

LATERAL LOADING WIND LOAD (Governs) P= Iw q Ce Cp Cg q(1:50) = 0.64 kPa

Cp Cg = 1.95 for walls

Cp Cg = 2.0 for roof

= 3.6 kPa

Iw = 1.25 ULS Iw = 0.75 SLS

WIND EAST - WEST = 21 kN

Ce = 0.9

WIND NORTH - SOUTH = 49 kN

EARTHQUAKE LOAD Site Classification

Sa(0.2) = 0.188

Sa(0.5) = 0.095Sa(1.0) = 0.052Sa(2.0) = 0.015Fa = 1.0Fv = 1.0S(T = 0.2) = 0.1880

S(T = 0.5) = 0.0950S(T = 1.0) = 0.0520S(T = 2.0) = 0.0150S(T > 4.0) = 0.0075

I_E = 1.5 ULS No Irregularities $V=\frac{2}{3}$ S(0.2) I_E W/ Rd Ro) = 2/3 (0.188)(1.5) W/(3.0)(1.7)

 $R_D = 1.7$

 $R_D = 3.0$

= 0.0369WNorth-South or East-West V = 10.5 kN

ROOF & WALL SHEATHING

Plywood / OSB Nailing Requirements Wall Sheathing (OSB, thickness as indicated) Walls along Grid Lines (A) and (B), (1), (A), (A) and (5) Wall Sheathing (Both Faces) @ Panel Edges 150 mm O.C. @ Intermediate Framing 300 mm O.C.

Roof Sheathing (Douglas Fir Plywood, thickness as indicated, use H-Clips as required). 150 mm O.C.

@ Panel Edges @ Intermediate Framing

76 mm (3") Long Common Wire Nails 3.66 mm (Diameter)

300 mm O.C.

ISSUED FOR CONSTRUCTION 20/05/2016 M.N. K.A.B. REISSUED FOR TENDER 18/11/2015 M.N. K.A.B. ISSUED FOR TENDER 11/12/2014 M.N. K.A.B. DESCRIPTION DATE BY APP'D REVISIONS



PERMIT OF PRACTICE EXP SERVICES INC. nature Maren a. Bah 2016/05/20 PERMIT NUMBER: P483 NT/NU Association of Professional Engineers and Geoscientists



exp Services Inc. t +1.613.688.1899 | f: +1.613.225.7337 2650 Queensview Drive, Suite 100 Ottawa, ON K2B 8H6 Canada

www.exp.com • BUILDINGS • EARTH & ENVIRONMENT • ENERGY • • INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •

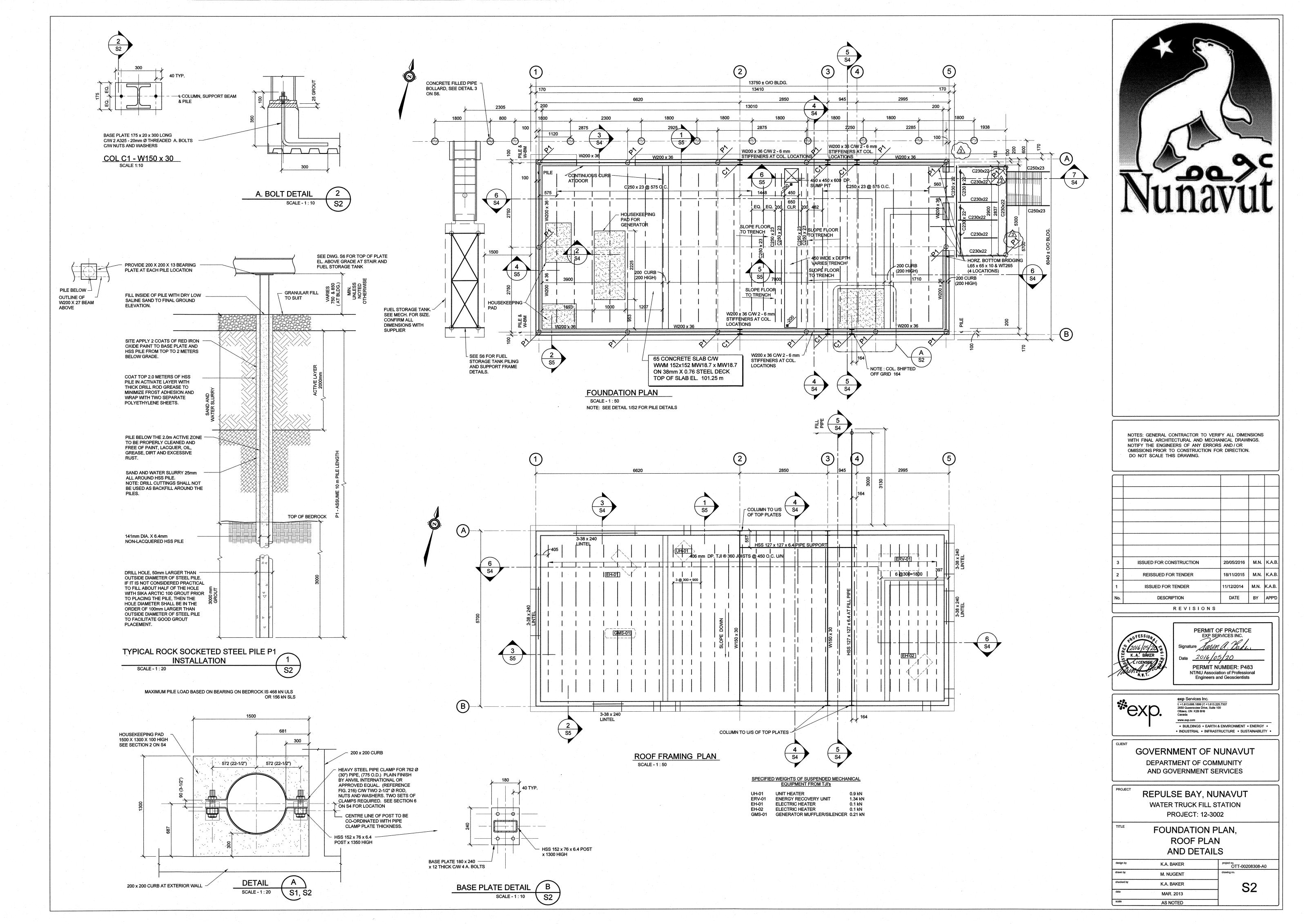
GOVERNMENT OF NUNAVUT DEPARTMENT OF COMMUNITY AND GOVERNMENT SERVICES

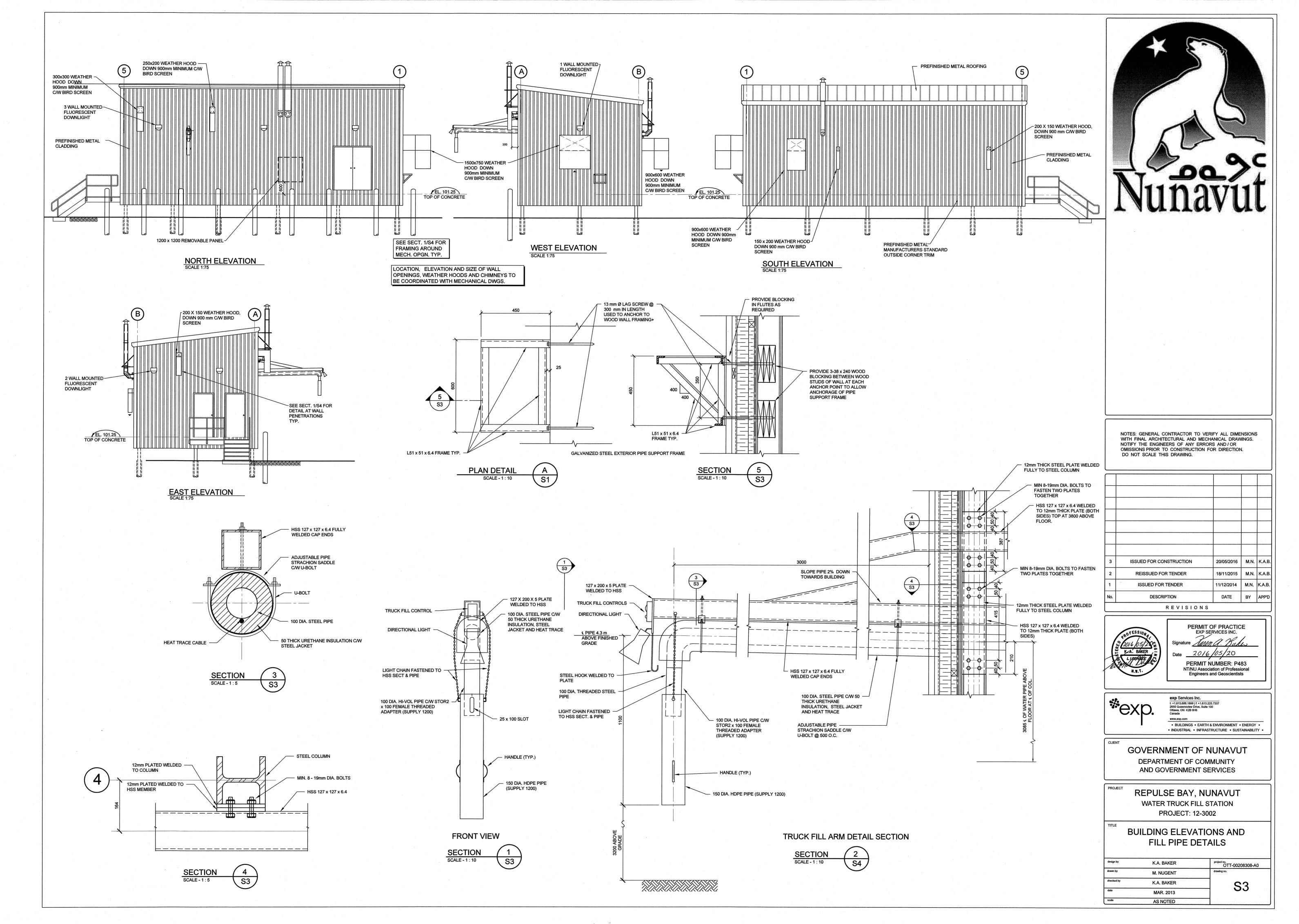
REPULSE BAY, NUNAVUT WATER TRUCK FILL STATION

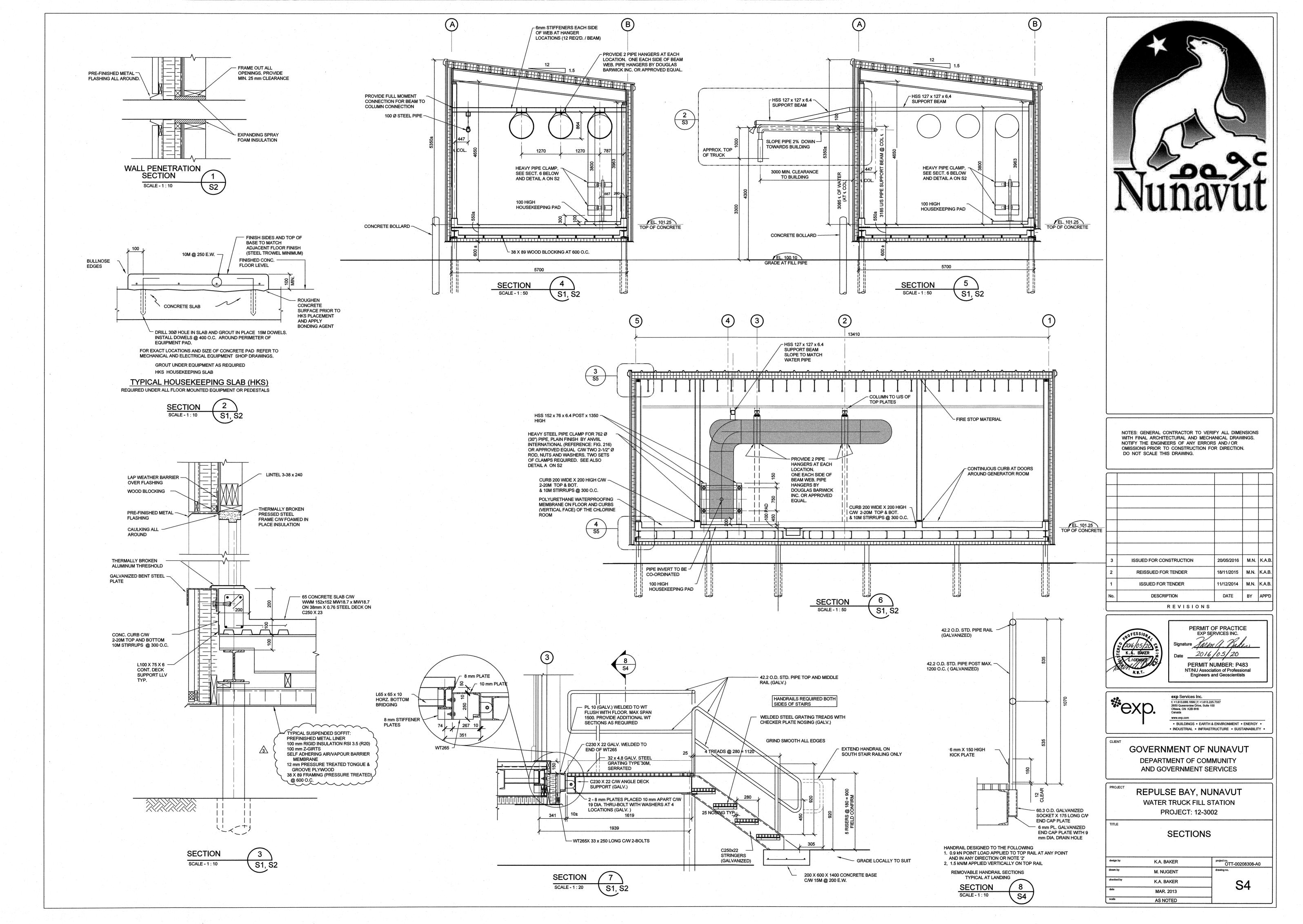
PROJECT: 12-3002

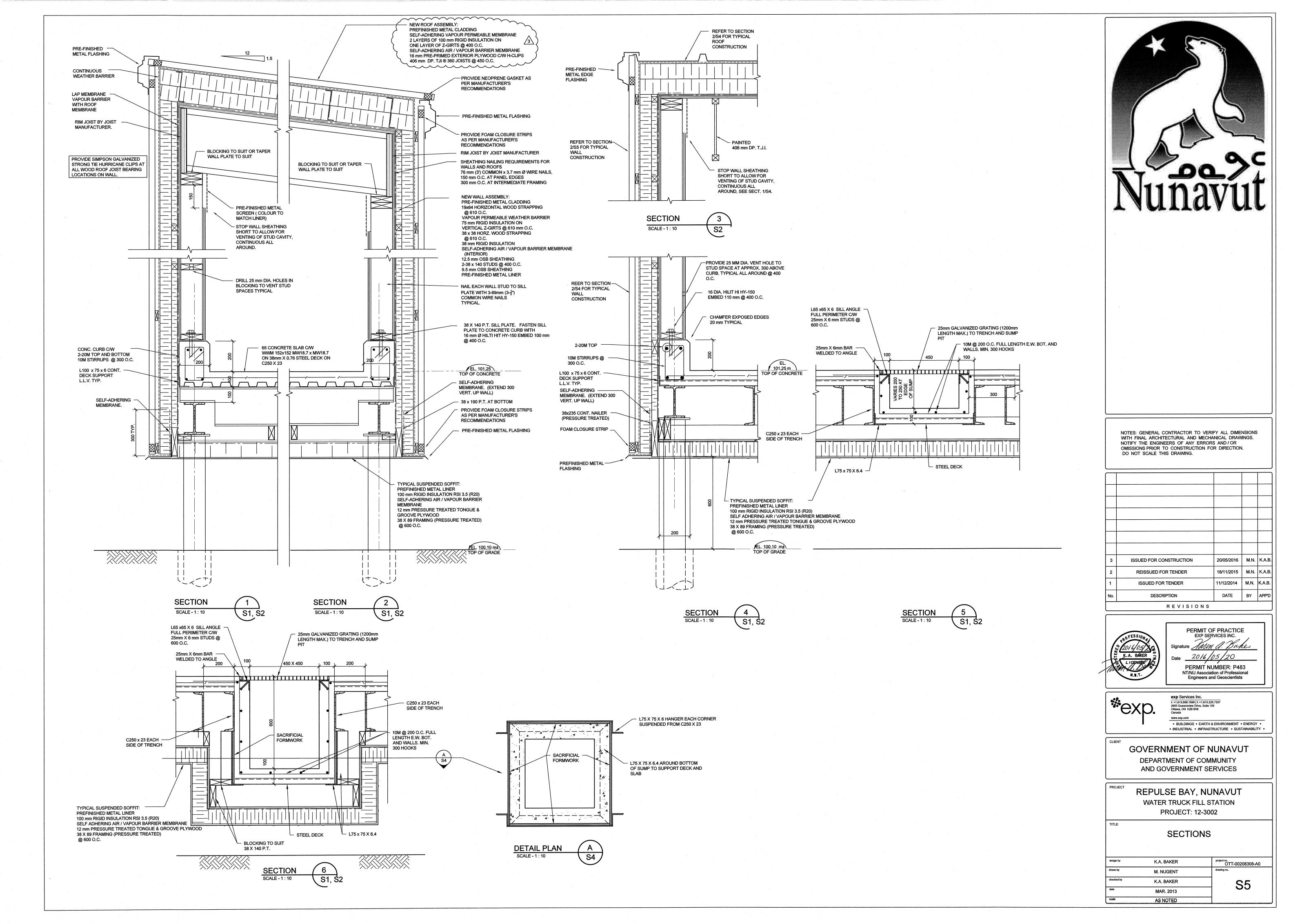
GROUND FLOOR PLAN AND GENERAL NOTES

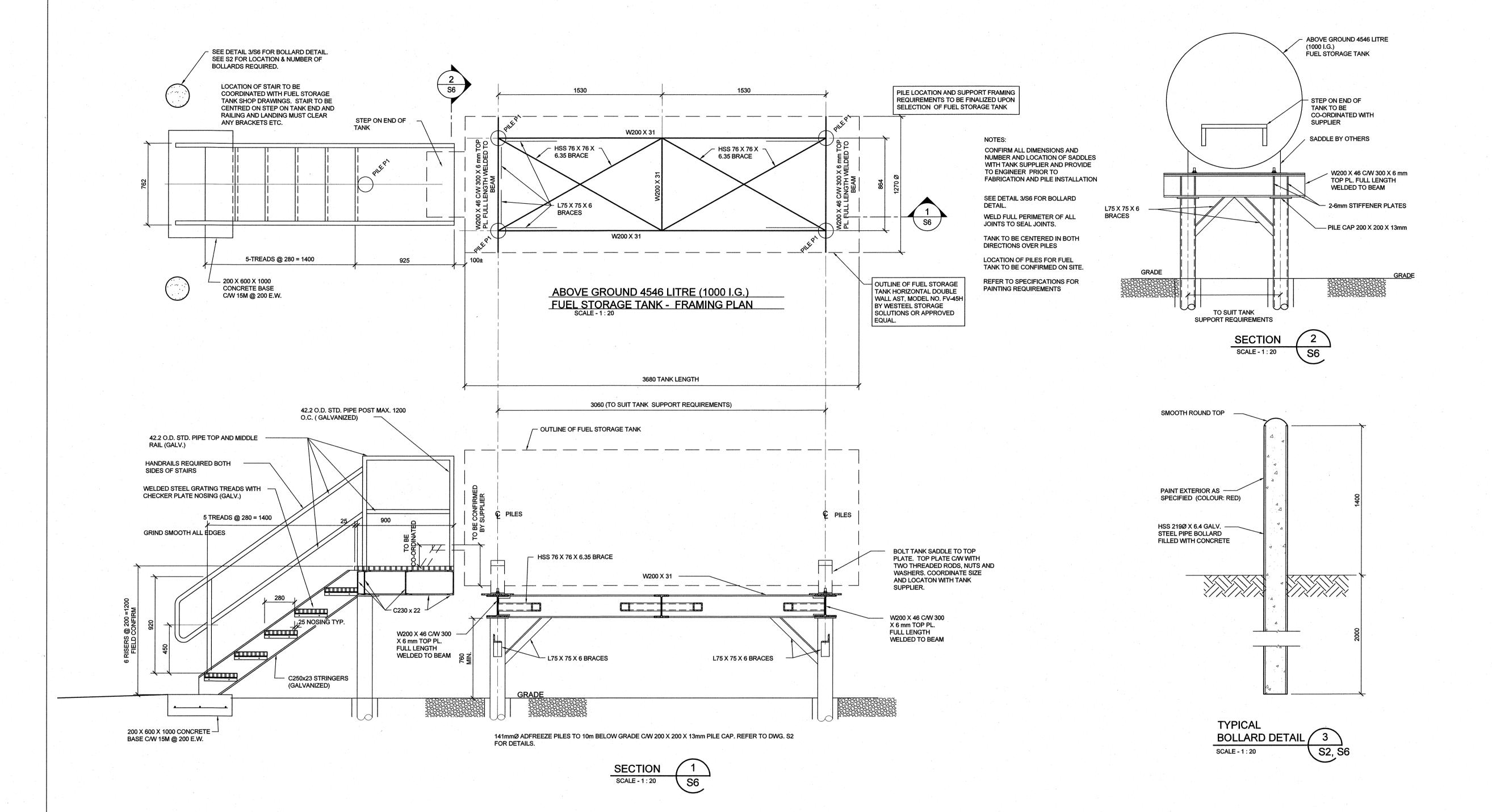
OTT-00208308-A0 K.A. BAKER M. NUGENT K.A. BAKER S1 MAR. 2013 AS NOTED

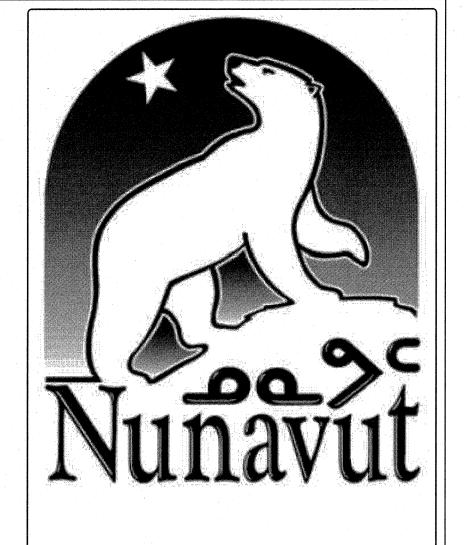






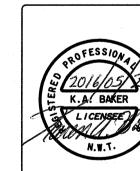






NOTES: GENERAL CONTRACTOR TO VERIFY ALL DIMENSIONS WITH FINAL ARCHITECTURAL AND MECHANICAL DRAWINGS. NOTIFY THE ENGINEERS OF ANY ERRORS AND/OR OMISSIONS PRIOR TO CONSTRUCTION FOR DIRECTION. DO NOT SCALE THIS DRAWING.

			. '	
3	ISSUED FOR CONSTRUCTION	20/05/2016	M.N.	K.A.B.
3	ISSUED FOR CONSTRUCTION REISSUED FOR TENDER	20/05/2016	M.N.	K.A.B.
2	REISSUED FOR TENDER	18/11/2015	M.N.	K.A.B.



PERMIT OF PRACTICE
EXP SERVICES INC.

Signature A. Bakes

Date 2016 05/20

PERMIT NUMBER: P483

NT/NU Association of Professional Engineers and Geoscientists



exp Services Inc. t: +1.613.688.1899 | f: +1.613.225.7337 2650 Queensview Drive, Suite 100 Ottawa, ON K2B 8H6 Canada

BUILDINGS • EARTH & ENVIRONMENT • ENERGY •
INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •

GOVERNMENT OF NUNAVUT

DEPARTMENT OF COMMUNITY

AND GOVERNMENT SERVICES

REPULSE BAY, NUNAVUT
WATER TRUCK FILL STATION
PROJECT: 12-3002

FUEL STORAGE TANK PLAN AND SECTIONS

design by	K.A. BAKER	project no. OTT-00208308-A0	
lrawn by	M. NUGENT	drawing no.	
checked by	K.A. BAKER	S6	
date	MAR. 2013		
	AS NOTED		