FINAL REPORT

CONSTRUCTION SUMMARY (AS-BUILT) REPORT FOR RANKIN INLET ITIVIA SITE FUEL STORAGE AND CONTAINMENT FACILITIES MELIADINE PROJECT, NUNAVUT

PRESENTED TO

Agnico Eagle Mines Ltd.

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REVISION FOLLOW-UP

REVISION	DATE	DESCRIPTION	PREPARED BY
0	February 2018	Interim report issued for use	Christopher Morin
1	March 2018	Interim report issued for use	Christopher Morin
2	February 2019	Final report issued for use	Christopher Morin

EXECUTIVE SUMMARY

Tetra Tech was retained by Agnico Eagle Mines Limited (Agnico Eagle) to prepare a construction summary (as-built) report for the Rankin Inlet Itivia Site fuel storage and containment facility at the Meliadine Gold Project, Nunavut. Tetra Tech and WSP Canada Inc. previously prepared the construction drawings and specifications as well as the design report for the fuel storage and containment facilities for the Project (AEM No 6515-E-132-004-132-REP-003). The facilities include two (2) main fuel storage tanks located at Rankin Inlet Itivia site and four (4) fuel storage tanks located at the Meliadine site.

This revision of the as-built report summarizes the work executed at Rankin Inlet Itivia Site fuel storage and containment facility where the field erected fuel storage Tank #1 (20 ML) was completed and commissioned in July 2018. The completion and commissioning of Tank #2 (13.5 ML) was in October 2017 and was summarized in revision 1 of this report.

Tetra Tech was not involved in the construction of the fuel farm facilities. The information presented in this report was provided by Agnico Eagle.

The construction monitoring and quality assurance was managed by Agnico Eagle.

APPENDICES

ACRONYMS & ABBREVIATIONS

ACRONYMS	
API	American Petroleum Institute
CCME	Canadian Council of Ministers of the Environment
CEC	Canadian Electrical Code
CL	Centerline
CSA	Canadian Standards Association
HDPE	High-Density Polyethylene
ITP	Inspection Test Plan
NAD83	North American Datum of 1983
NBCC	National Building Code of Canada
NFCC	National Fire Code of Canada
NFPA	National Fire Protection Association
NWT	Northwest Territories
PLC	Programmable Logic Controller
RRNWT	Revised Regulations of the Northwest Territories
RTD	Resistance Temperature Detector
UTM	Universal Transverse Mercator
V:H	Vertical : Horizontal
VSD	Variable Speed Drive

UNITS	
km	Kilometer
m	Meter
cm	Centimeter
mm	Millimeter
ft	Feet
in	Inches
ML	Megaliter
kL	Kiloliter
s	Second
V	Volt
mA	Milliamp

1.0 INTRODUCTION

Agnico Eagle Mines Ltd. (Agnico Eagle) retained the services of Tetra Tech and WSP Canada Inc. to carry out the planning and design works associated with the surface infrastructures for the Meliadine project, a gold mine located approximately 25 km north from Rankin Inlet, and 80 km southwest from Chesterfield Inlet in the Kivalliq Region of Nunavut. These works include the fuel storage and containment facilities for both Rankin Inlet and Meliadine. These components are part of the Meliadine Project.

Tetra Tech and WSP Canada Inc. previously prepared the design report and drawings for construction related to the fuel storage and containment facilities for the Project including one fuel storage facility at the Rankin Inlet Itivia site and two facilities at the Meliadine site (Industrial Site and Mine Site).

As required by the Water Licence A (No. 2AM-MEL1631), this revision of the report summarizes the construction work executed at Rankin Inlet Itivia Site fuel storage and containment facility where the field erected fuel storage Tank #1 (20 ML) was completed and commissioned in July 2018. The completion of the secondary containment for the fuel farm, pumping station and ancillaries, and field erection and commissioning of Tank #2 (13.5 ML), as well as the Rankin Itivia culvert was in October 2017 and was summarized in revision 1 of this report (namely the Interim Report). Included in this report is:

- A summary of the characteristics of the Rankin Inlet Itivia Site fuel storage and containment facility;
- Documentation on field decisions that deviate from original plans and non-conformance / corrective action reports;
- As-built drawings;
- Survey drawings conducted during and after the construction of the Rankin Inlet Itivia Site fuel storage and containment facility and Rankin Inlet Itivia Culvert;
- Photographs of the Rankin Inlet Itivia Site fuel storage and containment facility and Rankin Inlet Itivia Culvert;
- Inspection reports and quality control documents for the offsite and onsite fabrication and fuel modules;
- Inspection report for the inspection test plan (ITP), and handover package of Tank #1 and Tank #2;
- Inspection reports for the tank farm area final wall, blasting operations, and the quality control of the geomembrane installation; and
- Particle Size Summary of 30 mm minus and 20 mm minus material.

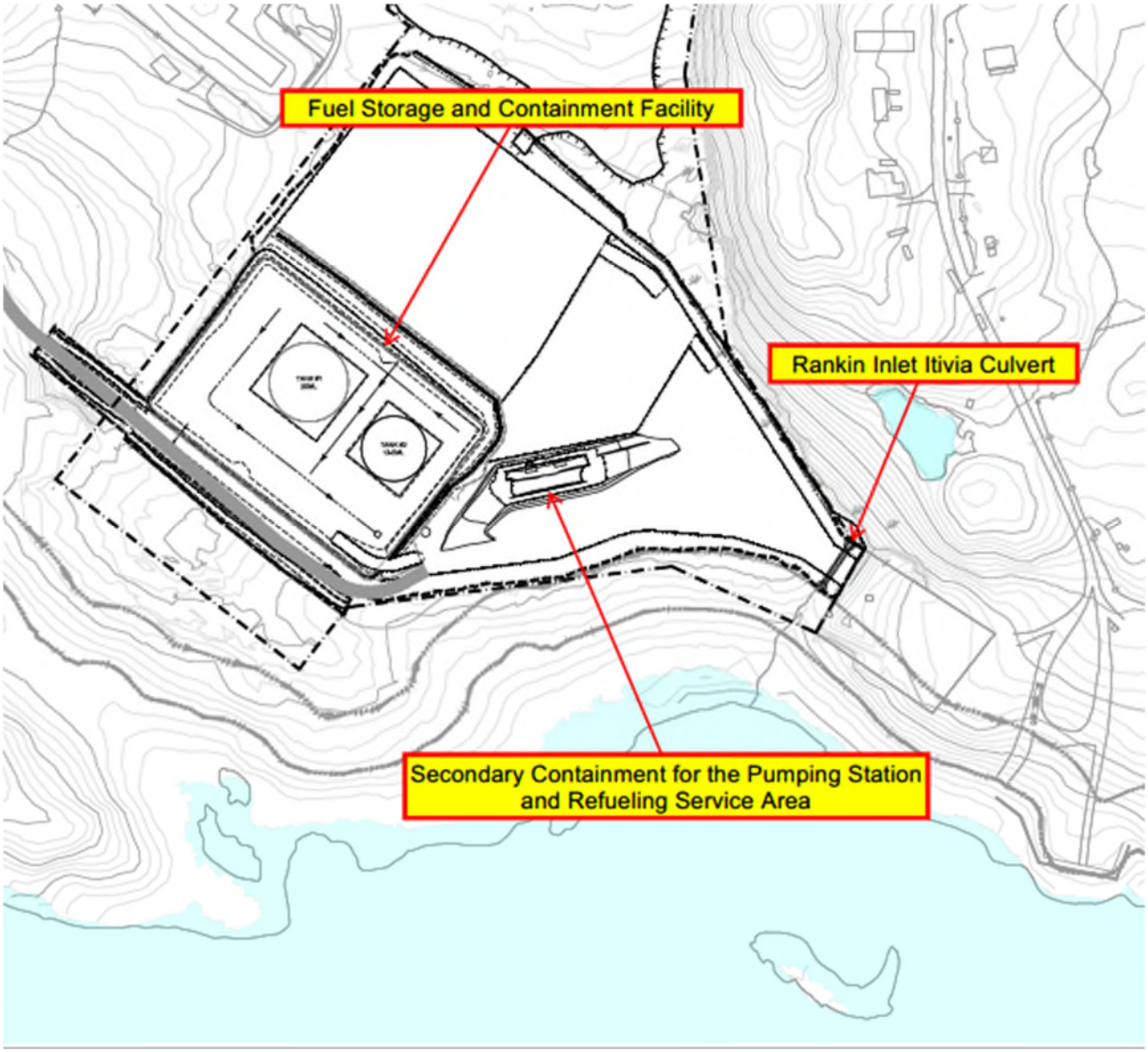
Construction summary reports detailing the other fuel storage and containment facilities will be provided under separate covers.

2.0 SUMMARY OF THE CONSTRUCTION

2.1 Site Location Plan

The figure below presents the site location plan for the Rankin Inlet Itivia Site fuel storage and containment facility, pumping station, and Rankin Inlet Itivia Culvert. Tank #2 (13.5 ML) was erected, commissioned, and has been operating since October 2017 while Tank #1 (20 ML) was completed and commissioned in July 2018. The Rankin Itivia Culvert was installed at the southwestern portion of the laydown area where the laydown connects with the existing road.

Figure 2.1: Rankin Inlet Itivia Site Location Plan



2.2 Construction Schedule

Construction activities at the Rankin Inlet Itivia Site fuel storage and containment facility were conducted between March 2017 and October 2018. Both tanks were being erected in 2017 but only Tank #2 was completed for service as planned in 2017 while Tank #1 was completed for service in 2018. Construction was completed according to the milestone dates shown in Table 2.1.

Table 2.1: Rankin Inlet Itivia Site Construction Milestone Dates

Item	Date
Site Preparation	April 25th to May 2nd, 2017
Drill/Blast	April 27th to June 6th, 2017
Excavation	May 1st to June 25th, 2017
Rock Face Scaling	June 19th to 22nd, 2017
Overburden Pushback and Protection Berm	July 15th to August 1st, 2017
Under Liner Material Placement	June 10th to September 26th, 2017
Containment Berm	June 24th to September 26th, 2017
Liner System Installation	July 14th to October 6th, 2017
Tank #2 Erection	July 29th to September 8th, 2017
Overliner Material Placement	July 16th to October 9th, 2017
Marine Pipeline Installation	August 17th to October 14th, 2017
Miscellaneous Steel Elements to Pumping Station	September 2nd to October 14th, 2017
Rankin Inlet Facility Testing	September 2nd to October 14th, 2017
Commissioning of Tank #2	October 17th, 2017
Piping Interrelated to Pumping Station	September 16th to October 21st, 2017
Electrical Construction	September 16th to October 21st, 2017
System Operational for Tank #2	October 21st, 2017
Tank #1 Erection Completion	May to June 2018
Piping Installation to Connect Tank #1	July 2018
Commissioning of Tank #1	July 2018
Corrective Measure on Flexible Ducting for Scrubber	July 2018
Painting of both Tank #1 and Tank #2	July to August 2018
Modification of Secondary Containment to increase capacity and allow for both tanks in operations	September 2018
Corrective Measure for Double Wall Underground Pipe	November 2018

2.3 As-Built Drawings and Photographs

Sealed as-built drawings completed by Tetra Tech and WSP, and as-built binder for Tank #1 and Tank #2 prepared by Inukshuk are presented in Appendix A.

Survey drawings conducted during and after the construction of the Rankin Inlet Itivia Site fuel storage and containment facility and Rankin Inlet Itivia Culvert can be found in Appendices B and C, respectively.

Photographs of the Rankin Inlet Itivia Site fuel storage and containment facility and Rankin Inlet Itivia Culvert during and after construction are shown in Appendices D and E, respectively.

3.0 CODES AND STANDARDS

3.1 Compliance for Field Erected Fuel Tanks

The systems comply with all codes and standards related to the project (Federal, Territorial, Municipal, NBCC, NFCC, CEC, CSA, NFPA, and API) as well as the directives of the authorities having jurisdiction over the project, including specific codes such as R-125-95 NWT, Mine Health and Safety Act, and RRMWT 1990, C F-12 Fire Prevention Regulations. A summary of the compliance requirements are shown in Table 3.1 below.

Table 3.1: Rankin Inlet Itivia Site Field Erected Fuel Tanks As-Built

Fuel Farm Description	Rankin Inlet Itivia Site Field Erected Fuel Tanks	
	Tank #1	Tank #2
Comply with CCME	Yes	Yes
Equipped with Overfill Protection	Yes	Yes
Underground Piping Double Wall	Yes	Yes
Underground Piping Installed to Collect Leak into an Accessible Sump	Yes	Yes
Connections for Filling/Emptying Storage Tanks Kept Close	Yes	Yes
Material	G40.21M-260WT	G40.21M-260WT
Product	Diesel	Diesel
Volume	20 ML	13.5 ML
Diameter	43.00 m	35.10 m
Height	14 m	14 m

* A portion of the marine pipeline (single wall) intended to be aboveground was temporarily buried and the covering material had frozen in 2017 and was corrected in 2018. An appropriate remedial measure was done to remove the covering material as soon as the material thawed in 2018, a section was also replaced for a double wall pipe.

3.2 Compliance for Secondary Containment

The secondary containment for aboveground storage tanks complies to NFCC standards. The base and walls of the containment basin were constructed to withstand a full hydrostatic head and has a permeability of 1_E^{-13} cm/s while the required permeability is 1_E^{-6} cm/s. The tanks are located entirely within the diked area, with an impermeable membrane covered with a non-combustible material.

Table 3.2: Rankin Inlet Itivia Site Secondary Containment As-Built

Parameters	Description		Compliance
Enclosed Tanks	Tank #1	Tank #2	-
Volume	20 ML	13.5 ML	-
Containment Requirement (for Tank #2 only)	14.850 ML		Yes
Containment Capacity when only Tank #2 was in service (2017/18)	21.868 ML		Yes
Containment Requirement (for both tanks)	22.000 ML		Yes*
Actual Containment Capacity	22.033 ML		Yes
Base and Wall Membrane to Withstand Hydrostatic Head	HDPE		Yes
Permeability (1_E^{-6} cm/s min.)	1_E^{-13} cm/s		Yes
Tanks Located Entirely Within the Diked Area	Tank #1 and Tank #2		Yes

As shown in Table 3.2 above, the initial total capacity of the Rankin Inlet Itivia Site fuel farm containment in 2017/2018 was 21 868 m^3 which was sufficient to operate only Tank #2 (requiring a minimum containment capacity of 14 850 m^3). For both Tank #1 and Tank #2 to be in operation, the required containment capacity is 22 000 m^3. The fill material over the liner was remodelled in 2018 to reach the current volumetric capacity of 22 033 m^3, which is slightly greater than the required capacity thus both Tank #1 and Tank #2 are able to be operated simultaneously.

3.3 Distance Restrictions As-Built

The minimum clearances that were required or recommended by the *Design Rationale for Fuel Storage and Distribution Facility* by Public Works and Services of the Government of the Northwest Territories and NFPA-30 were met and are listed on Table 3.3 below:

Table 3.3: Distances Restrictions

Item	Minimum Required	Tank #1	Tank #2
Distance Between Tanks	¼ (D1 + D2) = 19.5 m Min. Where D1=43 m, D2=35.1 m	19.56 m	
Distance Between Tank and Toe of the Dike	1.50 m Min.	15.42 m	12.43 m
Distance Between Tank and CL of the Dike	½ (Height of Tank) = 7.0 m Min. Where Height = 14 m	27.91 m	19.33 m
Distance Between Property Limit (that can be built upon) and Tank	Tanks with 3 000 001 gallons or more: 175 ft. = 53.34 m Min.	54.20 m	64.26 m
Distance Between Property Limit and Exterior Toe of the Dike	3.0 m Min.	4.27 m	
Distance Between Tank and Public Roads	60 ft. = 18.3 m Min.	115 m	166.30 m
Distance Between Fuel Farm and High Water Line of Melvin Bay	31.0 m Min.	37.76 m	

4.0 FIELD DECISIONS FOR THE FIELD ERECTED FUEL TANK #1 AND TANK #2 AND SURROUNDING FACILITIES (STRUCTURAL, MECHANICAL, AND ELECTRICAL)

4.1 Documentation on Field Decisions that Deviate from Original Plans

This section documents variations from original design which were approved by the designer and/or the field engineer on site for the field erected fuel tank and piping systems.

A construction summary was prepared for the structural, and the mechanical and electrical systems. See Appendix F and G, respectively.

The construction work led to slight variations from the original design in the structural, mechanical, and electrical aspects of Tank #1 and Tank #2 of the Rankin Itivia Site fuel farm. The designed intent of the structure was not compromised with the changes to the original design.

4.1.1 Structural

- The handrails were changed to steel angle of 55 mm x 55 mm x 6 mm instead of a pipe handrail, approved by the designer.

4.1.2 Mechanical

- All horizontal welds inspection test for leaks for both Tank #1 and Tank #2 were changed to a liquid penetrant test, as approved by the designer.
- Vent valves were installed at the top of the dike section in the pipeline for both Tank #1 and Tank #2.
- An OPW loading arm replaced the Emco loading arm and was approved by the designer due to the time constraints of the delivery.
- Two odour control scrubbers with a vent were installed, approved by the designer.
- Tripods were replaced by cement blocks underneath the pump and electrical stations, approved by the designer.
- Structural framing was added to the pumping station to reinforce the structure beneath the motor and pump. This addition was approved by the designer.
- The diesel marine line double walled section did not conform in 2017 as per Federal regulations. Monitoring gauge and ball valves must be accessible and the double wall pipe section must be visible on both ends. Corrective actions were taken in 2018 to remedy the situation, see the non-compliance report provided in Appendix M and the photographs of the corrective measures in Appendix U.
- The flexible connection for the odor scrubber ducting did not respect the piping and instrumentation diagram in 2017. Corrective action was put in place and the piping arrangement now fully respects the original P&ID.
- A change of routing was done for the piping between the tanks and pumping station to allow the addition of the secondary containment in the refuelling service area, it is shown in the as-built drawings of the fuel modules presented in Appendix L.

4.1.3 Electrical

- The installation of Rankin Inlet's main electrical entry and the buried cable and electrical pole were added and approved by the designer.
- Cabletray and its supports were required to be installed on instrumentation and lighting cables, approved by the engineer.
- One switch per variable speed drive (VSD) was installed per pump. The 600 V power junction boxes were removed, approved by the designer and control cables were installed between cabinets and the VSD.
- Four (4) additional unit heaters were added to the filter containers. A 45 kVA transformer and a 120/208 V panel with 42 circuits replaced the 30 kVA transformer and the 120/208 V panel with 30 circuits, approved by the designer.
- Additional exterior lighting and fixtures were installed upon approval by the field engineer. One emergency lighting fixture and one 120 V receptacle in each operator room.

- To avoid adding a resistance temperature detector (RTD) card to the programmable logic controller (PLC), a 4-20 mA signal from all RTD temperature sensor were added.
- A temperature sensor was installed on both Tank #1 and Tank #2.
- Grounding and bonding connections were added to the buried grid for all metallic equipment, as approved by the designer.
- The outer housing material was substituted for NEMA 4x Aluminum or Stainless Steel rather than the specified 3R to prevent any rust damage. This change was approved by the designer.

4.2 Maintenance, Inspection, Construction Monitoring, and Inspection Reports

The construction monitoring was managed by Agnico Eagle. Several activities were conducted during construction to ensure the quality of the work. Here is a description of the reports prepared to summarize the quality control, monitoring, and/or inspections performed during the construction of key activities.

- *Rankin Inlet Offsite and Onsite Fabrication Quality Control Documents* dated June 6th, 2017 prepared by Nuqsana Promec Mining, see Appendix K. Quality control was done throughout the construction and fabrication the project, including but not limited to, the catwalk, piping, and mechanical fixtures.
- *Fuel Module Quality Control Documents* dated November 27th, 2017 prepared by Nuqsana Promec Mining, see Appendix L. Documentation for inspection and test plan for mechanical, piping, and also red line are included in this document.
- *Handover Package of Tank #1* dated January 3rd, 2019 prepared by Inukshuk Construction Limited, see Appendix I. Testing was done throughout the erection of Tank #1 and the installation of the mechanical and electrical systems. See Table 4.1 for a summary of the inspections.
- *Handover Package of Tank #2* dated October 30th, 2017 prepared by Inukshuk Construction Limited, see Appendix J. Testing was done throughout the erection of Tank #2 and the installation of the mechanical and electrical systems. See Table 4.1 for a summary of the inspections.

During the first filling process of Tank #2, two (2) minor fuel leaks were observed. The first leak occurred on October 17th 2017, as fuel seeped out from the pressure test port on the fueling nozzle neck reinforcement plate. The second leak occurred on October 18th 2017, with minor weeping between the manhole welding joint and the tank reinforcement plate. Both of these leaks were promptly reported to the installation contractor who repaired the leaks with temporary welding from the tank exterior. Regular visual inspections were made thereafter to ensure no further leaks occurred. Two (2) Non-Compliance Reports were completed to cover these defects, see Appendix M. At the time of the interim report the permanent corrective measures had not yet been finalized by the contractor. The permanent repairs from within the interior of the tank will be done during 2019 summer season.

All of the inspections done during and after the construction of Tank #1 and Tank #2 at the Rankin Inlet Itivia Site fuel storage and containment facility were shown to comply with API standard 650. Table 4.1 shows the inspections that were done during the fabrication and erection of the tanks as provided in the Handover Packages.

Table 4.1: Rankin Tank As-Built Inspections

Description	Test Method	Tank #1 Result	Tank #2 Result
Floor Welding	Visual	Acceptable	Acceptable
Floor Welding	Vacuum Box	Acceptable	Acceptable
Shell to Floor Welding	Visual	Acceptable	Acceptable
Shell to Bottom Welding	Visual	Acceptable	Acceptable
Tank #2 Roundness	Visual	Acceptable	Acceptable
1st Horizontal Banding	Measure	Acceptable	Acceptable
2nd Horizontal Banding	Measure	Acceptable	Acceptable
3rd Horizontal Banding	Measure	Acceptable	Acceptable
4th Horizontal Banding	Measure	Acceptable	Acceptable
SR1 Vertical	Measure	Acceptable	Acceptable
SR2 Vertical	Measure	Acceptable	Acceptable
SR3 Vertical	Measure	Acceptable	Acceptable
SR4 Vertical	Measure	Acceptable	Acceptable
SR5 Vertical	Measure	Acceptable	Acceptable
Tank Shell Plumbness	Measure	Acceptable	Acceptable
1st Horizontal and Vertical Leaks	Visual	Acceptable	Acceptable
2nd Horizontal and Vertical Leaks	Visual	Acceptable	Acceptable
3rd Horizontal and Vertical Leaks	Visual	Acceptable	Acceptable
4th Horizontal and 4th and 5th Vertical Leaks	Visual	Acceptable	Acceptable
Compression Ring Welding	Visual	Acceptable	Acceptable
Tank #2 Roof Welding	Visual	Acceptable	Acceptable
Roof Columns Plumbness	Measure	Acceptable	Acceptable
Roof Structure Welding and Bolting	Visual	Acceptable	Acceptable
Tank Shell Plumbness	Measure	Acceptable	Acceptable
Shell Nozzle Welding	Visual	Acceptable	Acceptable
Nozzle Repad Leaks	Air Test	Acceptable	Acceptable
Shell Manway Welding	Visual	Acceptable	Acceptable
Tank #2 Shell Plumbness	Measure	Acceptable	Acceptable
Manway Leaks	Visual	Acceptable	Acceptable
Internal Column Repads and Pipe Support Welding	Visual	Acceptable	Acceptable
External Brackets and Cable Tray Welding	Visual	Acceptable	Acceptable
Roof Painter Post Welding	Visual	Acceptable	Acceptable
Staircase Support Bracket and Repad Welding	Visual	Acceptable	Acceptable
Stairs and Platforms Welding	Visual	Acceptable	Acceptable

5.0 FIELD DECISIONS FOR THE SECONDARY CONTAINMENT FACILITY

5.1 Documentation on Field Decisions that Deviate from Original Plans

This section documents variations from original design which were approved by the designer and/or the field engineer on site.

A construction summary of the earthworks for the secondary containment facility was prepared for the Rankin Inlet Itivia Site fuel storage and containment facility, see Appendix N.

The construction work led to slight variations from the original design in the geometry of the Rankin Inlet fuel farm. The designed intent of the structure was not compromised with the changes to the original design. Table 5.1 and the following sections summarize the changes between the proposed and final works.

5.1.1 Excavation and Blasting

- The rock slope excavation is 1V:0.1H instead of the original 1V:0.75H. It was approved by the geotechnical engineer.

5.1.2 Dike and Secondary Containment for Fuel Tank Farm

- Within the northeast corner and extending along the east wall the bedrock elevation was found to be below 9.45 m or non-existent at the designed floor elevation. The blast was drilled to bedrock or the designed floor in this area, 4 m back from the designed highwall to allow additional berm structure to be constructed.
- The dimensions of the dike CL to CL are greater by 1.6 m length and 2.6 m width.
- The average top width of the dike crest is 1.4 m which is an increase of 0.4 m from the original 1 m design.
- The containment height was reduced by 0.08 m to a height of 1.57 m.
- The depth of fill placed over the liner was increased by 0.01 m to an average depth of 0.31 m. This depth is the result of the secondary containment floor regrading done in 2018 to increase the volume capacity of the containment area.
- The riprap was removed from the ditch, approved by the designer. The geometry of the ditch was changed due to constructability issues and approved by the field engineer. The overall water management of the containment facility was unaffected, sloping toward the sump area where the clean water will be pumped out of the fuel farm.

5.1.3 Dike and Secondary Containment for Refuelling Service Area

- A secondary containment was added to the original design of the refueling service area as an additional measure to improve the potential spill management as shown in the as-built drawings, see Appendix A. The capacity of this additional secondary containment area is 366 m^3.

Table 5.1: Rankin Inlet Itivia Site fuel storage and containment facility Geometry and Characteristics

Item	Proposed		Actual		Difference
	Tank #1	Tank #2	Tank #1	Tank #2	
Secondary Containment Permeability (max.)	1_E^{-6} cm/s		1_E^{-13} cm/s		- 10_E^{-7} cm/s
Dike: length, width (CL to CL) (avg.)	154 m x 104.3 m		155.6 m x 106.9 m		+ 1.6 m / + 2.6 m
Dike Height (avg.)	1.8 m		1.8 m		-
Containment Height (avg.)	1.65 m		1.57 m		- 0.08 m
Dike Flat Top Width (avg.)	1.0 m		1.4 m		+ 0.4 m
Dike Embankment Slope (avg.)	1V:2H		1V:2H		-
Impervious Area	16 050 m^2		17 051 m^2		+ 1 001 m^2
Tank Foundation Pad (avg.)	45.4 m x 45.4 m	37.5 m x 37.5 m	45.4 m x 45.4 m	37.5 m x 37.5 m	-
Tank Foundation Thickness (min.)	900 mm	900 mm	950 mm	1.02 m	+ 50 mm / + 102 mm
Tank Foundation Shoulder (min.)	1.2 m	1.2 m	1.2 m	1.2 m	-
Tank Foundation Pad Embankment Slope (avg.)	1V:2H	1V:2H	1V:2H	1V:2H	-
Tank Foundation Pad Slope (avg.)	1V:120H	1V:120H	1V:120H	1V:120H	-
Tank Foundation Pad Thickness, Above Surrounding Ground (m)	0.4	0.4	0.4	0.4	-
Depth of Liner Under Fill (avg.)	0.3 m		0.31 m		+ 0.01 m
Containment Capacity	22 000 m^3		22 033 m^3		+ 33 m^3

5.2 Commissioning, Inspection, Construction Monitoring, and Inspection Reports

The construction monitoring was managed by Agnico Eagle. Several activities were conducted during construction to ensure the quality of the work. Here is a description of the reports prepared to summarize the quality control, monitoring, and/or inspections performed during the construction of key activities.

- Several particle size analyses were conducted for the 30 mm minus material to be used for the tank foundation and liner system. It was approved by the field engineer and the results and summary can be found in Appendix O.
- *Visit Reports for Final Wall Inspection* dated June 21st and 29th, 2017 prepared by Vanessa Smith, see Appendix P. A visual inspection was conducted and a fault was discovered in the rock which may reduce the long term stability of the wall, but overall the condition of the rock was good.
- *Blasting Operation, Survey and Monitoring* dated October 6th, 2017 prepared by Explotech Engineering Ltd, see Appendix Q. A pre-blast and post-blast inspection were done including vibration monitoring during blasting. No notable changes were observed related to the blasting or construction operations in the surrounding buildings and facilities.
- *Quality Control Final Report for Geomembrane Installation* prepared by Texel Geosol for Nuna Kivalliq Earthworks Inc, see Appendix R. Testing, both non-destructive and destructive, was performed to ensure the quality of the installation of the geosynthetic materials, including welding. Texel Geosol certified that all materials were installed according to the project plans and specifications.
- *Inspection Test Plan* (ITP) dated October 29th, 2017 prepared by MTKSL, see Appendix H.

6.0 FIELD DECISIONS FOR THE RANKIN INLET ITIVIA CULVERT

6.1 Documentation on Field Decisions that Deviate from Original Plans

This section documents variations from original design which were approved by the designer and/or the field engineer on site. The designed intent of the structure was not compromised with the changes to the original design. Table 6.1 below presents the changes between the proposed and final works.

6.1.1 Culvert

- The culvert slope was decreased on site to a slope of 1.33% to follow the natural ground slope, and is still adequate to carry the water flow.
- The riprap around the Rankin Itivia Culvert will be installed at a later date.
- Temporary culverts were replaced by final culverts in November 2017 as indicated in the Construction Summary of Rankin Inlet Itivia Laydown Area Culvert, see Appendix T.

Table 6.1: Rankin Itivia Culvert Geometry and Characteristics

Culvert Description	Proposed	Actual	Difference
Length	30 m	30 m	-
Diameter	900 mm	900 mm	-
Slope	3.61%	1.33%	- 2.28%
Number of pipes	2	2	-

6.2 Commissioning, Inspection, Construction Monitoring, and Inspection Reports

The construction monitoring was managed by Agnico Eagle. Several activities were conducted during construction to ensure the quality of the work. Here is a description of the reports prepared to summarize the quality control, monitoring, and/or inspections performed during the construction of key activities.

- Particle size analyses were conducted for the 20 mm minus material to be used for the culvert bedding. It was approved by the field engineer and the results and summary can be found in Appendix S.

7.0 EARTH WORKS

A shortage of on-site granular material and construction constraints led to slight changes in the materials. These changes were approved by the designer and/or the field engineer as per multiple requests for information (6515-C-230-005-RFI-001, 6515-C-230-005-RFI-007 and 6515-C-230-009-RFI-012), see Appendix V:

- The original material specified for the Rankin Inlet Itivia Site fuel storage and containment facility was 200 mm minus granular material. It was replaced with Class A Borrow Pit or 600 mm minus granular fill graded to a particle size of ≤ 200 mm outside of the tank pedestal areas.
- The fill thickness of the 30 mm minus granular fill over and under the liner system was changed to 300 mm and 200 mm respectively, approved by the designer. This change was to allow the heavy equipment required for construction to access the site. This change did not affect the total material quantities.
- A 100 mm layer of sand between the geotextile and geomembrane replaced the 30 mm minus in the Tank #1 containment area, minus the tank pedestal. This was due to construction constraints and to avoid potentially damaging the liner system during tank erection. The substitution was approved by the designer.

The as-built material quantities for the Rankin Inlet fuel storage and containment facilities and the Rankin Inlet Itivia Culvert are presented in the following Table 7.1.

Table 7.1: As-Built Material Quantities

Item	Proposed*	Actual	Difference
Sand	180	1 744 m^3	+ 1 564 m^3
30 mm minus	10 590 m^3	6 908 m^3	- 3 682 m^3
Borrow Pit CL-A or Granular Fill (Graded to < 200 mm)	7 670 m^3	4 510 m^3	- 3 160 m^3
Borrow Pit CL-A or Granular Fill (600 mm minus)	7 160 m^3	12 440 m^3	+ 5 280 m^3
Riprap (50 mm to 300 mm)	30 m^3	-	- 30 m^3
Total Fill	**25 630 m^3**	**25 602 m^3**	**-28 m^3**
540 g/m^2 Non-Woven Geotextile for tank farm area only	33 600 m^2	34 102 m^2	+ 502 m^2
HDPE Geomembrane for tank farm area only	16 800 m^2	17 051 m^2	+ 251 m^2
Length Culvert, 2 CSP Ø 900 mm, 2.0 mm thick	30 m	30 m	-
Excavation of Overburden	18 480 m^3	43 445 m^3	+ 24 965 m^3
Drill and Blast Excavation of Bedrock	68 400 m^3	78 500 m^3	+ 10 100 m^3

* The proposed item names and values in the table vary from the Design Report and have been taken from the latest drawing that was issued for construction, 65-131-230-200 revision 1.

- The geotextile and geomembrane quantities associated to the refuelling secondary containment area added are not provided.
- The as-built excavation volume is greater than design because of the natural ground variations from the contour lines.

8.0 LIMITATIONS OF REPORT

This report and its contents are intended for the sole use of Agnico Eagle Mines Ltd. and their agents. Tetra Tech does not accept any responsibility for the accuracy of any of the data, the analysis, or the recommendations contained or referenced in the report when the report is used or relied upon by any Party other than Agnico Eagle Mines Ltd., or for any Project other than the proposed development at the subject site. Any such unauthorized use of this report is at the sole risk of the user. Tetra Tech accepts no responsibility for losses, claims, expenses or damages, if any, suffered by a third party as a result of any decisions made or actions based on this report. Use of this report is subject to the terms and conditions stated in Tetra Tech's Services Agreement.

While it is believed that the information contained herein is reliable under the conditions and subject to the limitations set forth in the report, this report is based on information not within the control of Tetra Tech, nor has said information been verified by Tetra Tech, and Tetra Tech therefore cannot and does not guarantee its sufficiency and accuracy. The comments in the report reflect Tetra Tech's best judgment in light of the information available to it at the time of preparation.

Use of this Document acknowledges acceptance of the foregoing conditions.

9.0 CLOSURE

We trust this report meets your present requirements. If you have any questions or comments, please contact the undersigned.

Respectfully submitted,
Tetra Tech

PERMIT TO PRACTICE
TETRA TECH INDUSTRIES, INC.
O/A TETRA TECH
Signature
Date 2019-02-25
PERMIT NUMBER: P 1029
NT/NU Association of Professional Engineers and Geoscientists

REGISTERED PROFESSIONAL ENGINEER
J.M.I.F. ALARIE
LICENSEE
NT/NU

2019-02-25

Prepared by:
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Christopher.Morin@tetratech.com

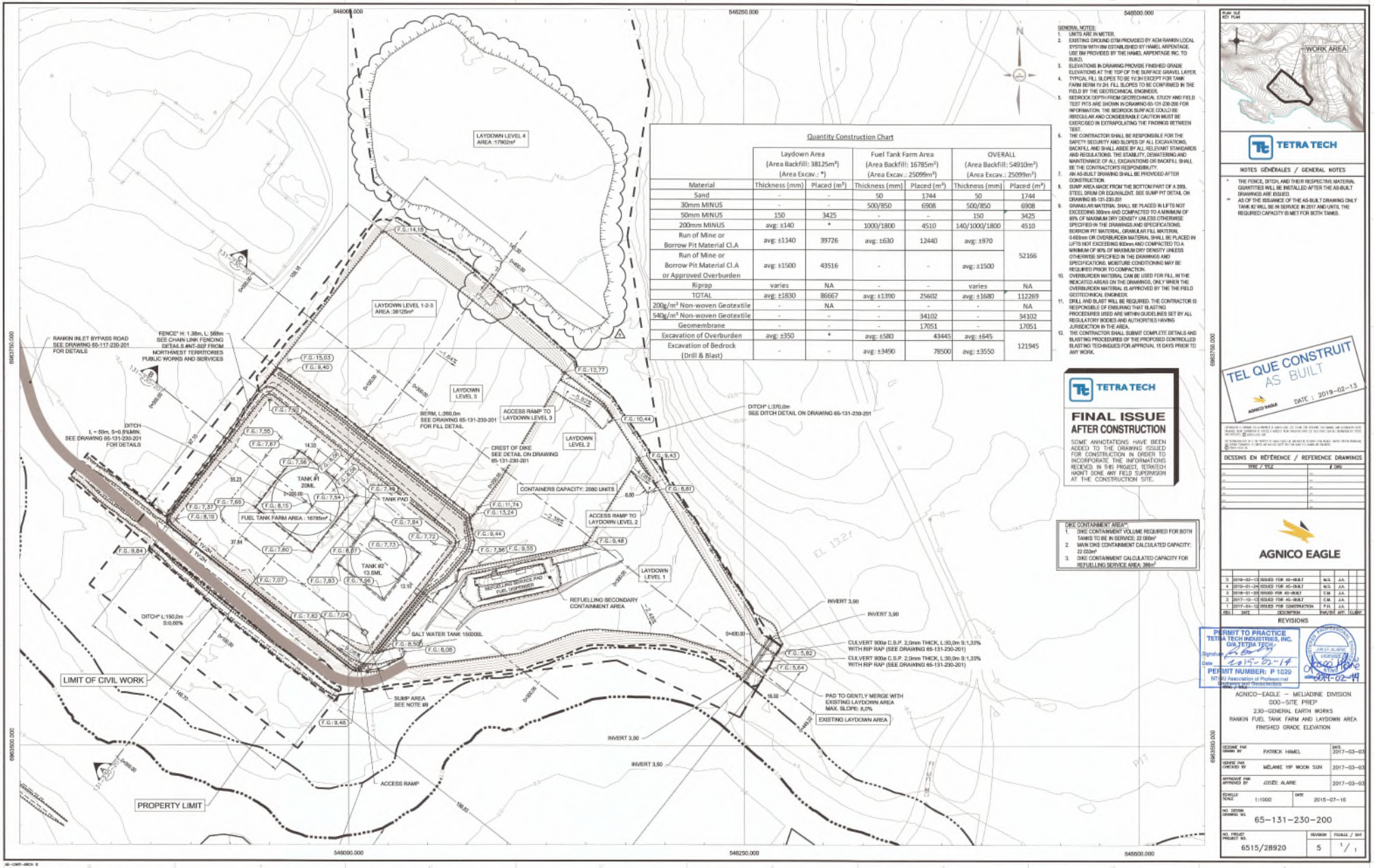
Reviewed by:
Josée Alarie, P.Eng.
Direct Line: 514.257.2427 x3323
Josee.Alarie@tetratech.com

APPENDIX A

As-Built Drawings of Rankin Inlet Itivia Site fuel storage and containment facility

NU. DESSIN DRAWING NO. 65-131-230-200TO202_R5-

FORMAT ARCH D



Quantity Construction Chart

	Laydown Area (Area Backfill: 38125m²) (Area Excav.: *)		Fuel Tank Farm Area (Area Backfill: 16785m²) (Area Excav.: 25099m²)		OVERALL (Area Backfill: 54910m²) (Area Excav.: 25099m²)	
Material	Thickness (mm)	Placed (m³)	Thickness (mm)	Placed (m³)	Thickness (mm)	Placed (m³)
Sand	-	-	50	1744	50	1744
30mm MINUS	-	-	500/850	6908	500/850	6908
50mm MINUS	150	3425	-	-	150	3425
200mm MINUS	avg: ±140	*	1000/1800	4510	140/1000/1800	4510
Run of Mine or Borrow Pit Material Cl.A	avg: ±1140	39726	avg: ±630	12440	avg: ±970	52166
Run of Mine or Borrow Pit Material Cl.A or Approved Overburden	avg: ±1500	43516	-	-	avg: ±1500	
Riprap	varies	NA	-	-	varies	NA
TOTAL	avg: ±1830	86667	avg: ±1390	25602	avg: ±1680	112269
200g/m² Non-woven Geotextile	-	NA	-	-	-	NA
540g/m² Non-woven Geotextile	-	-	-	34102	-	34102
Geomembrane	-	-	-	17051	-	17051
Excavation of Overburden	avg: ±350	*	avg: ±580	43445	avg: ±645	121945
Excavation of Bedrock (Drill & Blast)	-	-	avg: ±3490	78500	avg: ±3550	

GENERAL NOTES:
1. UNITS ARE IN METER.
2. EXISTING GROUND DTM PROVIDED BY AEM RANKIN LOCAL SYSTEM WITH BM ESTABLISHED BY HAMEL ARPENTAGE. USE BM PROVIDED BY THE HAMEL ARPENTAGE INC. TO BUILD.
3. ELEVATIONS IN DRAWING PROVIDE FINISHED GRADE ELEVATIONS AT THE TOP OF THE SURFACE GRAVEL LAYER.
4. TYPICAL FILL SLOPES TO BE 1V:3H EXCEPT FOR TANK FARM BERM 1V:2H. FILL SLOPES TO BE CONFIRMED IN THE FIELD BY THE GEOTECHNICAL ENGINEER.
5. BEDROCK DEPTH FROM GEOTECHNICAL STUDY AND FIELD TEST PITS ARE SHOWN IN DRAWING 65-131-230-200 FOR INFORMATION. THE BEDROCK SURFACE COULD BE IRREGULAR AND CONSIDERABLE CAUTION MUST BE EXERCISED IN EXTRAPOLATING THE FINDINGS BETWEEN TEST.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY SECURITY AND SLOPES OF ALL EXCAVATIONS, BACKFILL AND SHALL ABIDE BY ALL RELEVANT STANDARDS AND REGULATIONS. THE STABILITY, DEWATERING AND MAINTENANCE OF ALL EXCAVATIONS OR BACKFILL SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
7. AN AS-BUILT DRAWING SHALL BE PROVIDED AFTER CONSTRUCTION.
8. SUMP AREA MADE FROM THE BOTTOM PART OF A 205L STEEL DRUM OR EQUIVALENT. SEE SUMP PIT DETAIL ON DRAWING 65-131-230-201
9. GRANULAR MATERIAL SHALL BE PLACED IN LIFTS NOT EXCEEDING 300mm AND COMPACTED TO A MINIMUM OF 95% OF MAXIMUM DRY DENSITY UNLESS OTHERWISE SPECIFIED IN THE DRAWINGS AND SPECIFICATIONS. BORROW PIT MATERIAL, GRANULAR FILL MATERIAL 0-80mm OR OVERBURDEN MATERIAL SHALL BE PLACED IN LIFTS NOT EXCEEDING 800mm AND COMPACTED TO A MINIMUM OF 90% OF MAXIMUM DRY DENSITY UNLESS OTHERWISE SPECIFIED IN THE DRAWINGS AND SPECIFICATIONS. MOISTURE CONDITIONING MAY BE REQUIRED PRIOR TO COMPACTION.
10. OVERBURDEN MATERIAL CAN BE USED FOR FILL, IN THE INDICATED AREAS ON THE DRAWINGS, ONLY WHEN THE OVERBURDEN MATERIAL IS APPROVED BY THE THE FIELD GEOTECHNICAL ENGINEER.
11. DRILL AND BLAST WILL BE REQUIRED. THE CONTRACTOR IS RESPONSIBLE OF ENSURING THAT BLASTING PROCEDURES USED ARE WITHIN GUIDELINES SET BY ALL REGULATORY BODIES AND AUTHORITIES HAVING JURISDICTION IN THE AREA.
12. THE CONTRACTOR SHALL SUBMIT COMPLETE DETAILS AND BLASTING PROCEDURES OF THE PROPOSED CONTROLLED BLASTING TECHNIQUES FOR APPROVAL 15 DAYS PRIOR TO ANY WORK.

TETRA TECH

FINAL ISSUE
AFTER CONSTRUCTION

SOME ANNOTATIONS HAVE BEEN ADDED TO THE DRAWING ISSUED FOR CONSTRUCTION IN ORDER TO INCORPORATE THE INFORMATIONS RECEIVED IN THIS PROJECT. TETRATECH HADN'T DONE ANY FIELD SUPERVISION AT THE CONSTRUCTION SITE.

DIKE CONTAINMENT AREA**:
1. DIKE CONTAINMENT VOLUME REQUIRED FOR BOTH TANKS TO BE IN SERVICE: 22 000m³
2. MAIN DIKE CONTAINMENT CALCULATED CAPACITY: 22 032m³
3. DIKE CONTAINMENT CALCULATED CAPACITY FOR REFUELLING SERVICE AREA: 300m³

PLAN CLÉ
KEY PLAN

TETRA TECH

NOTES GÉNÉRALES / GENERAL NOTES

* THE FENCE, DITCH, AND THEIR RESPECTIVE MATERIAL QUANTITIES WILL BE INSTALLED AFTER THE AS-BUILT DRAWINGS ARE ISSUED.
** AS OF THE ISSUANCE OF THE AS-BUILT DRAWING ONLY TANK #2 WILL BE IN SERVICE IN 2017 AND UNTIL THE REQUIRED CAPACITY IS MET FOR BOTH TANKS.

TEL QUE CONSTRUIT
AS BUILT
AGNICO EAGLE
DATE : 2019-02-13

DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TYPE / TYP.	# DWG

AGNICO EAGLE

REV.	DATE	DESCRIPTION	DWN/DIT	APP.	CLIENT
5	2019-02-13	ISSUED FOR AS-BUILT	M.S.	J.A.	
4	2019-01-24	ISSUED FOR AS-BUILT	M.S.	J.A.	
3	2018-01-25	ISSUED FOR AS-BUILT	C.M.	J.A.	
2	2017-10-13	ISSUED FOR AS-BUILT	C.M.	J.A.	
1	2017-04-13	ISSUED FOR CONSTRUCTION	P.H.	J.A.	

REVISIONS

PERMIT TO PRACTICE
TETRA TECH INDUSTRIES, INC.
OA/TETRA TECH
Signature
Date 2019-02-14
PERMIT NUMBER: P 1029
NT/NU Association of Professional Engineers and Geoscientists

JOSÉE ALARIE
LICENSED PROFESSIONAL ENGINEER
NUNAVUT
2019-02-14

AGNICO—EAGLE – MEADOWBANK DIVISION
000—SITE PREP
230—GENERAL EARTH WORKS
RANKIN FUEL TANK FARM AND LAYDOWN AREA
FINISHED GRADE ELEVATION

DESSINÉ PAR / DRAWN BY	PATRICK HAMEL	DATE 2017-03-03
VÉRIFIÉ PAR / CHECKED BY	MELANIE YIP MOON SUN	2017-03-03
APPROUVÉ PAR / APPROVED BY	JOSÉE ALARIE	2017-03-03
ÉCHELLE / SCALE	1:1000	DATE 2015-07-16
NO. DESSIN / DRAWING NO.	65-131-230-200	
NO. PROJET / PROJECT NO.	6515/28920	REVISION 5 FEUILLE / SHT 1/1

NO. DESSIN / DRAWING NO. 65-131-230-200T0202_R5

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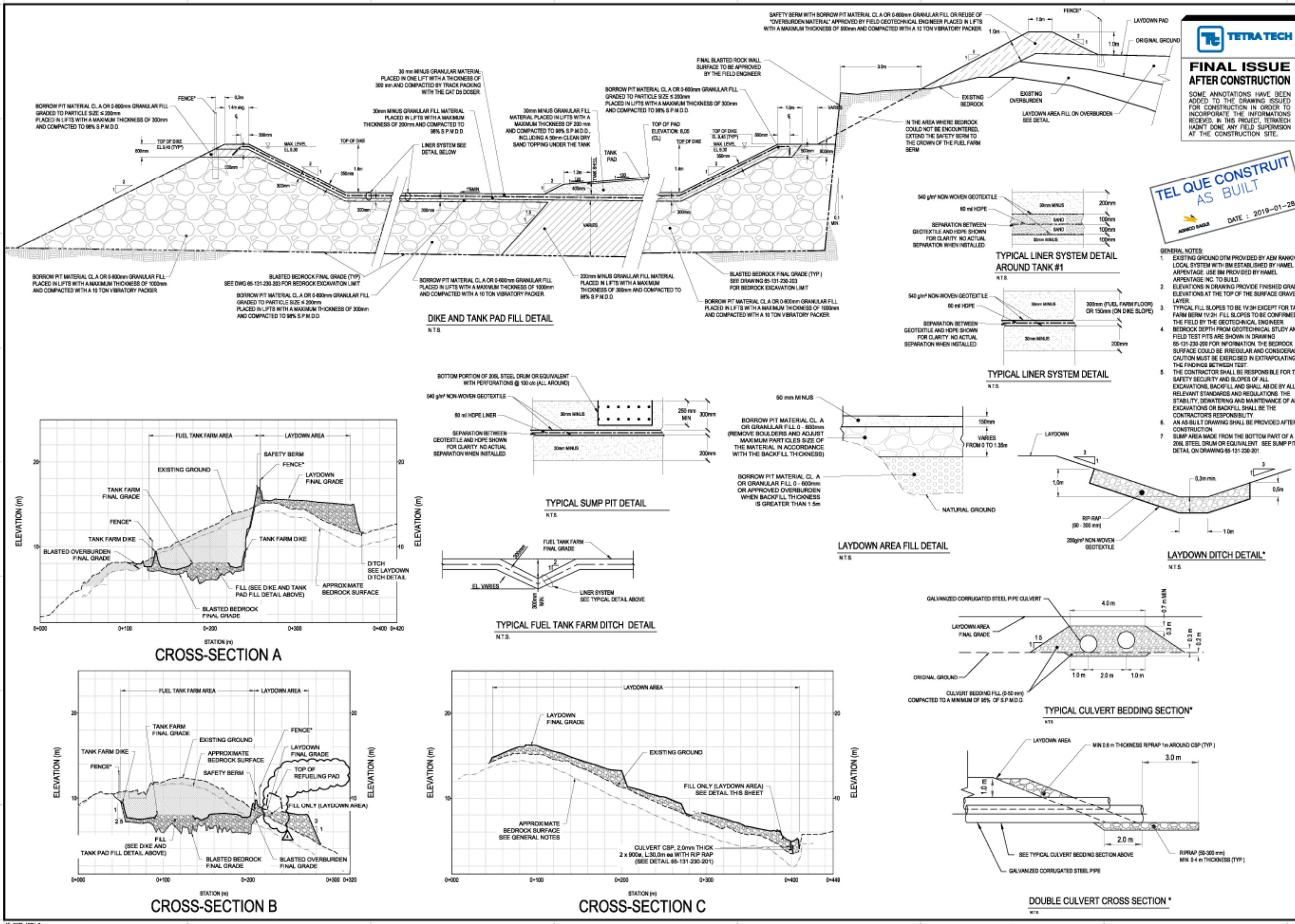


TETRA TECH

FINAL ISSUE AFTER CONSTRUCTION

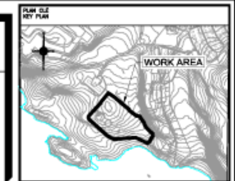
SOME ANNOTATIONS HAVE BEEN ADDED TO THE DRAWING ISSUED FOR CONSTRUCTION IN ORDER TO INCORPORATE THE INFORMATIONS RECEIVED. IN THIS PROJECT, TETRATECH HADN'T DONE ANY FIELD SUPERVISION AT THE CONSTRUCTION SITE.

TEL QUE CONSTRUIT / AS BUILT
AGNICO EAGLE DATE : 2019-01-28

GENERAL NOTES:

1. EXISTING GROUND DTM PROVIDED BY AEM RANKIN LOCAL SYSTEM WITH BM ESTABLISHED BY HAMEL ARPENTAGE. USE BM PROVIDED BY HAMEL ARPENTAGE INC. TO BUILD.
2. ELEVATIONS IN DRAWING PROVIDE FINISHED GRADE ELEVATIONS AT THE TOP OF THE SURFACE GRAVEL LAYER.
3. TYPICAL FILL SLOPES TO BE 1V:3H EXCEPT FOR TANK FARM BERM 1V:2H. FILL SLOPES TO BE CONFIRMED IN THE FIELD BY THE GEOTECHNICAL ENGINEER.
4. BEDROCK DEPTH FROM GEOTECHNICAL STUDY AND FIELD TEST PITS ARE SHOWN IN DRAWING 65-131-230-200 FOR INFORMATION. THE BEDROCK SURFACE COULD BE IRREGULAR AND CONSIDERABLE CAUTION MUST BE EXERCISED IN EXTRAPOLATING THE FINDINGS BETWEEN TEST.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY SECURITY AND SLOPES OF ALL EXCAVATIONS, BACKFILL AND SHALL ABIDE BY ALL RELEVANT STANDARDS AND REGULATIONS. THE STABILITY, DEWATERING AND MAINTENANCE OF ALL EXCAVATIONS OR BACKFILL SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
6. AN AS-BUILT DRAWING SHALL BE PROVIDED AFTER CONSTRUCTION.
7. SUMP AREA MADE FROM THE BOTTOM PART OF A 205L STEEL DRUM OR EQUIVALENT. SEE SUMP PIT DETAIL ON DRAWING 65-131-230-201.

PLAN CLÉ / KEY PLAN



TETRA TECH

NOTES GÉNÉRALES / GENERAL NOTES

8. GRANULAR MATERIAL SHALL BE PLACED IN LIFTS NOT EXCEEDING 300mm AND COMPACTED TO A MINIMUM OF 95% OF MAXIMUM DRY DENSITY (STANDARD PROCTOR) UNLESS OTHERWISE SPECIFIED IN THE DRAWINGS AND SPECIFICATIONS. BORROW PIT MATERIAL, GRANULAR FILL MATERIAL 0-600mm OR OVERBURDEN MATERIAL SHALL BE PLACED IN LIFTS NOT EXCEEDING 600mm AND COMPACTED TO A MINIMUM OF 90% OF MAXIMUM DRY DENSITY (STANDARD PROCTOR) UNLESS OTHERWISE SPECIFIED IN THE DRAWINGS AND SPECIFICATIONS. MOISTURE CONDITIONING MAY BE REQUIRED PRIOR TO COMPACTION.
9. OVERBURDEN MATERIAL CAN BE USED FOR FILL, IN THE INDICATED AREAS ON THE DRAWINGS, ONLY WHEN THE OVERBURDEN MATERIAL IS APPROVED BY THE THE FIELD GEOTECHNICAL ENGINEER.
10. DRILL AND BLAST WILL BE REQUIRED. THE CONTRACTOR IS RESPONSIBLE OF ENSURING THAT BLASTING PROCEDURES USED ARE WITHIN GUIDELINES SET BY ALL REGULATORY BODIES AND AUTHORITIES HAVING JURISDICTION IN THE AREA.
11. THE CONTRACTOR SHALL SUBMIT COMPLETE DETAILS AND BLASTING PROCEDURES OF THE PROPOSED CONTROLLED BLASTING TECHNIQUES FOR APPROVAL 15 DAYS PRIOR TO ANY WORK.

* THE FENCE, DITCH, AND THEIR RESPECTIVE MATERIAL QUANTITIES WILL BE INSTALLED AFTER THE AS BUILT DRAWINGS ARE ISSUED.

DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TYPE / TITLE	# DWG
–	–
–	–
–	–
–	–
–	–

AGNICO EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
4	2019-01-28	ISSUED AS-BUILT	C.M.	J.A.	
3	2018-01-25	ISSUED AS-BUILT	C.M.	J.A.	
2	2017-10-13	ISSUED AS-BUILT	C.M.	J.A.	
1	2017-04-12	ISSUED FOR CONSTRUCTION	P.H.	J.A.	
0	2017-03-28	ISSUED FOR CONSTRUCTION	P.H.	J.A.	
H	2017-02-24	ISSUED FOR TENDER	JG.M.	J.A.	

REVISIONS

PERMIT TO PRACTICE
TETRA TECH INDUSTRIES, INC.
O/A TETRA TECH
Signature
Date 2019-01-28
PERMIT NUMBER: P 1029
NT/NU Association of Professional Engineers and Geoscientists

TITRE / TITLE
AGNICO-EAGLE – MELIADINE DIVISION
000-SITE PREP
230-GENERAL EARTH WORKS
RANKIN FUEL TANK FARM AND LAYDOWN AREA
CROSS-SECTIONS AND DETAILS

DESSINÉ PAR / DRAWN BY	PATRICK HAMEL	DATE 2017-03-28
VÉRIFIÉ PAR / CHECKED BY	MÉLANIE YIP WOON SUN	2017-03-28
APPROUVÉ PAR / APPROVED BY	JOSÉE ALARIE	2017-03-28
ÉCHELLE / SCALE H 1:2000, V 1:200	DATE 2015-07-16	
NO. DESSIN / DRAWING NO.	65-131-230-201	
NO. PROJET / PROJECT NO. 6515/28920	RÉVISION 4	FEUILLE / SHT 1 / 1

NO. DESSIN / DRAWING NO. 65-116-275-201_R1_ABD

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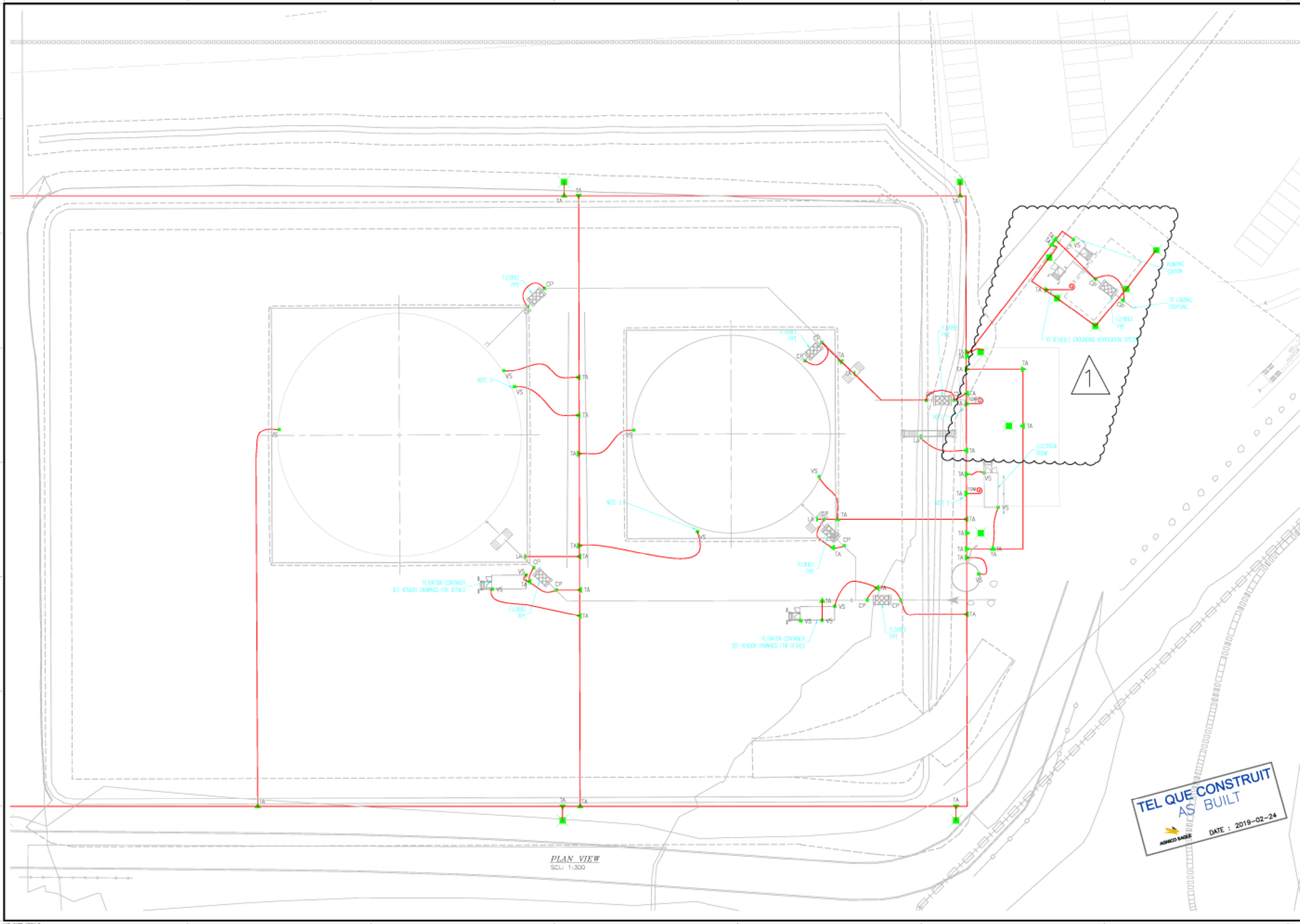

1075, 3e AVENUE EST
VAL-D'OR (QUÉBEC) CANADA J9P 0J7
TÉL. : 819 825-4274 | TÉLÉC. : 819 824-1514 | WWW.WSPGROUP.COM
Ref. 151-08440-40

NOTES GÉNÉRALES / GENERAL NOTES

1. GROUND EQUIPMENT INSIDE THE PUMPING STATION AT THE CONNECTION POINT.
2. GROUND THE MAIN SAFETY SWITCH IN THE ELECTRICAL ROOM CONTAINER.
3. GROUND THE STAIRWELL OF THE TANK.

- GROUND ALL THE PROTECTION BOLLARDS.
- GROUND ALL METALLIC ELEMENTS IN THE RETENTION BASIN AREA AND IN TRUCK LOADING AREA.
- THE LOCATION OF THE GROUND CONNECTIONS AND CONDUCTORS ARE APROXIMATIVE AND SHALL BE COORDINATED WITH OTHER CONTRACTORS.
- THE LOCATION OF CONTAINERS SHALL BE COORDINATED WITH OTHER CONTRACTORS.

DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG
GROUNDING LAYOUT	65-103-275-201
LEGEND, TABLES & DETAILS	65-116-275-200

AGNICO EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
1	2019-02-24	AS BUILD	J.C.L.	E.L.	
0	2017-07-10	ISSUED FOR CONSTRUCTION	F.M.G.	L.S.	

REVISIONS

TITRE / TITLE
AGNICO EAGLE – MELIADINE DIVISION
116 – FUEL TANK FARM
275 – POWER ELECTRICAL
GROUNDING LAYOUT
PLAN VIEW

DESSINÉ PAR / DRAWN BY	RÉMI HÉNAULT, Tech.	DATE 2016-06-22
VÉRIFIÉ PAR / CHECKED BY	RÉMI HÉNAULT, Tech.	2016-06-22
APPROUVÉ PAR / APPROVED BY	LUC SÉNÉCAL, P.Eng.	2017-07-10
ÉCHELLE / SCALE	INDICATED	DATE 2016-01-25

NO. DESSIN / DRAWING NO. 65-116-275-201

NO. PROJET / PROJECT NO.	RÉVISION	FEUILLE / SHT
6515	1	1 / 1

FILE NO. 65-116-275-201_R1_ABD.dwg

NO. DESSIN / DRAWING NO. 65-116-275-202_R1_ABD

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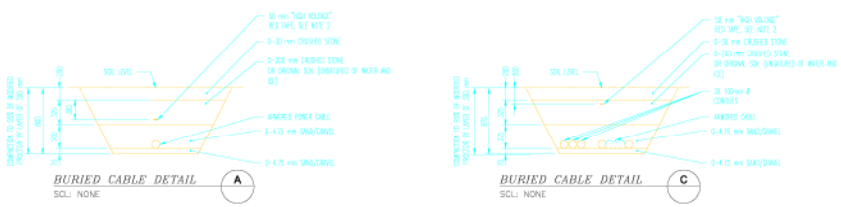
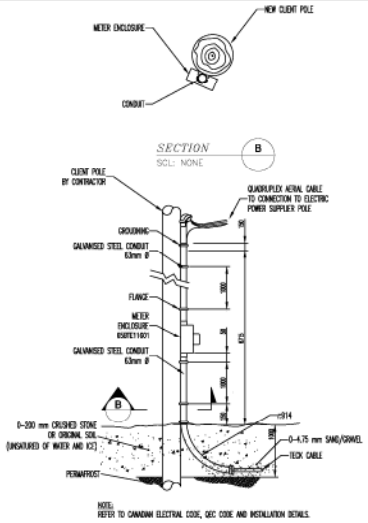
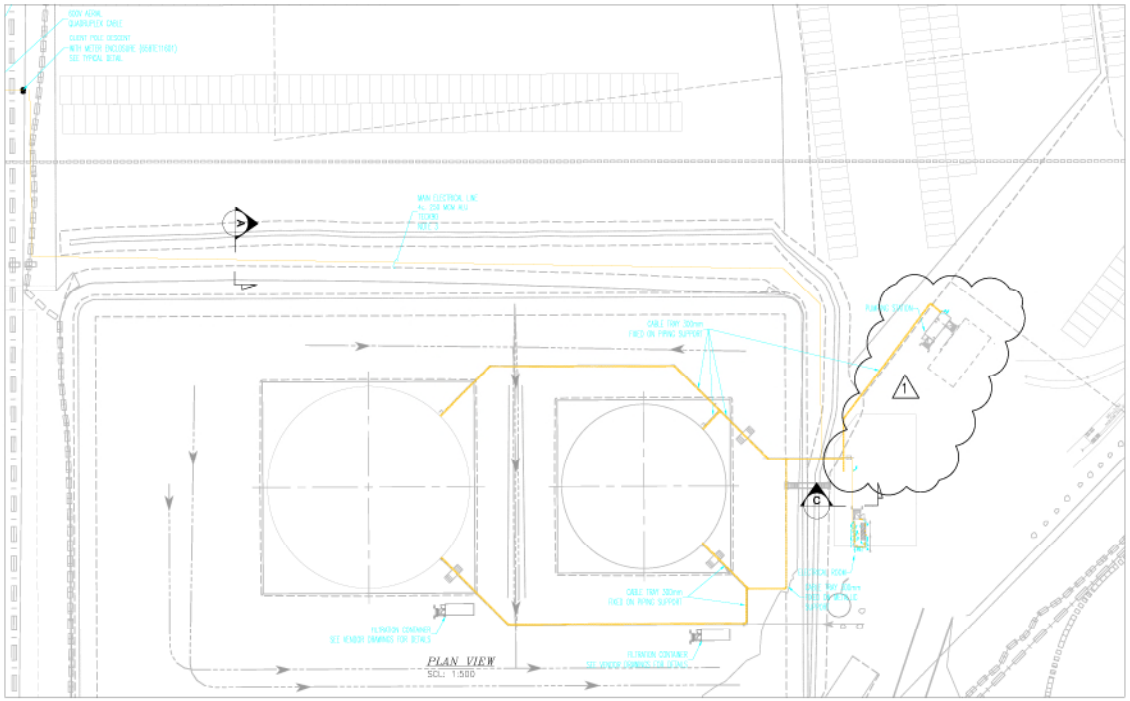
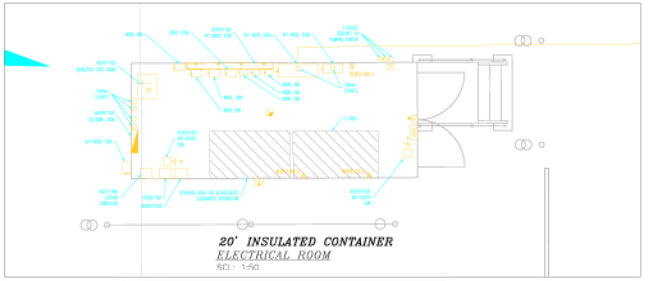
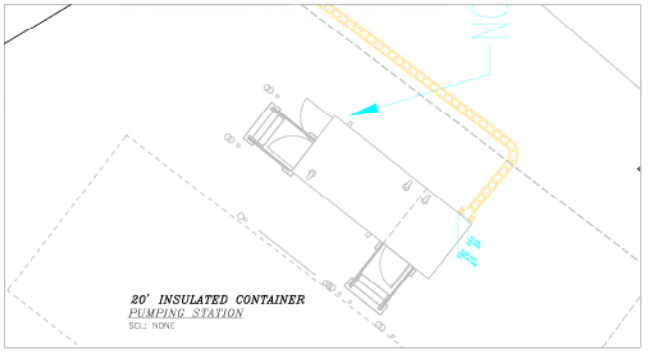


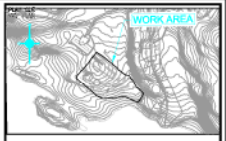
TEL QUE CONSTRUIT
AS BUILT
AGNICO EAGLE
DATE : 2019-02-24











WSP
1300, 3e AVENUE EST
VAL-D'OR (QUÉBEC) CANADA J9P 0J7
TÉL. : 819 825-4274 ; TÉLÉC. : 819 824-1514 | WWW.WSPGROUP.COM
Réf. 151-08443-40

NOTES GÉNÉRALES / GENERAL NOTES

1. THE PUMPING STATION CONTAINER COMES PREWIRED WITH THOSE JONCTION BOXES. ELECTRICAL CONTRACTOR SHALL CONNECT THOSE JONCTION BOXES TO THE RIGHT SERVICES IN THE ELECTRICAL CONTAINER. ALL CABLES BETWEEN CONTAINERS SHALL BE TECK TYPE AND INSTALLED BURIED IN TRENCH. INSTALL 3X 100mm Ø CONDUITS FOR FUTURE CABLES.
2. THE RED TAPES SHALL BE INSTALLED ABOVE THE ELECTRICAL CABLES AND FOLLOW ALL THE BURIED PART OF THEM.
3. COORDINATE THE EXACT LOCATION AND DEPTH OF THE MAIN FEEDER CABLE.

- THE LOCATION OF PIPING IS APPROXIMATE AND SHALL BE COORDINATE WITH OTHER MECHANICAL DRAWINGS.

DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG
EQUIPMENT LAYOUT, DETAILS AND SERVICES PANEL	65-103-275-202
LIGHTING	65-116-280-201
LEGENDS, TABLES & DETAILS	65-116-275-200
SINGLE LINE DIAGRAM	65-116-275-203

AGNICO EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
1	2019-03-04	AS BUILT	J.G.L.	E.L.	
0	2017-07-10	ISSUED FOR CONSTRUCTION	F.M.D.	L.S.	

REVISIONS

TITRE / TITLE:
AGNICO EAGLE – MELIADINE DIVISION
116 – FUEL TANK FARM
275 – POWER ELECTRICAL
EQUIPMENT LAYOUT, DETAILS AND SERVICES PANEL
PLAN VIEW

DESSINÉ PAR / DRAWN BY	BRIAN FILDES, Tech.	2018-06-22
VÉRIFIÉ PAR / CHECKED BY	RÉMI HÉNAULT, Tech.	2018-06-22
APPROUVÉ PAR / APPROVED BY	LUC SIÉMÉCAL, P.Eng.	2017-07-10
ÉCHELLE / SCALE	INDICATED	DATE 2016-01-25
NO. DESSIN / DRAWING NO.	65-116-275-202	
NO. PROJET / PROJECT NO.	6515	REVISION 1 / FEUILLE / SHT 1 / 1

AE-CNST-ARCH D

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FILE NO. 65-116-275-202_R1_ABD.dwg

AS BUILT DRAWING BINDER TANK 1 – 20,000CUM

AEM PURCHASE ORDER: OC-568510
AEM PACKAGE NO.: 6515-C-260-002
PACKAGE TITLE: FUEL TANKS (SUPPLY & INSTALL)

ICL Project No.: 295
ICL Document No.: 295-B1 As-Built
AEM Document No.: 6515-C-260-002-141-QCR-0007_Sub001
Revision: 0

OWNER:

Agnico Eagle Mines Limited
145 King St. East, Suite 400
Toronto, ON
M5C 2Y7

GENERAL CONTRACTOR:

Inukshuk Construction Limited
PO Box 654
Rankin Inlet, NU
X0C 0G0

Contact: David Mosher

PH: (867) 645-4030
FX: (902) 429-7762

Submitted by: Inukshuk Construction Limited
Date Submitted: January 3, 2019

AGNICO EAGLE

Vendor Document Status

1 ☐ Proceed to next submission and status.

2 ☐ Proceed with exceptions as noted to next submission and status.

3 ☐ Do not proceed.
Revise as noted and resubmit next submission and status.

4 ☐ Complete, no further submission required.

By: Date:

Review and authorization to fabricate are only for general conformance with the design concept of the Project as expressed in the Contract Documents. Sole responsibility for the accuracy and completeness of this document, including but not limited to dimensions and quantities, remains with the Supplier/Contractor. Agnico Eagle does not warrant the accuracy or completeness of any of the information contained herein, nor does Agnico Eagle authorize or approve any construction means, methods, techniques, sequences or any safety precautions or procedures.

Agnico Eagle No. 6515-C-260-002-141-QCR-0007 R: Sub001

DOCUMENT FOR INFORMATION

Index Tank No. 1 - 20,000CUM

Drawing No.	Description	Sheet No.	Rev
TK#1ITP	Inspection & Test Plan	1, 2	B
TK#1FAST.	Fastener List	1	0
65-116-210-200	Rankin Inlet Fuel Tank Farm Fuel Distribution Plan General Arrangement (Reference Only)	1	0
295-M1	Floor & Roof Layouts	1, 2	1
295-M7	Shell Plates and Angle Rolling Details	1	4
295-M8	Reinforcing Plate Details	1, 2, 13	4
295-M9	Erection Drawing	1–7	6
295-M15	Manholes Details	1, 2	3
295-M16	Nozzles Detail	1-3, 8, 13-16, 18-22	3
295-M17	Pipe Support, Misc. Bracket, Grounding Lugs	1-5	2
295-M18	Manhole Cover Davit	1	0
17-03-1-001	Mid Platform Detail	1	0
17-03-1-002	Inside Stringer	1	0
17-03-1-003	Outside Stringer Detail	1	0
17-03-1-004	Stair Stringer Supports	1	0
17-03-1-005	Top Platform Detail	1	0
17-03-1-006	Stair Handrail Detail	1	0

INSPECTION & TEST PLAN

Client:	AGNICO EAGLE	**Tank Tag:**	TK #1	**Document:**	TK#1 ITP
Project ID:	MELIADINE GOLD MINE	**Work Order:**	295	**Revision:**	B

Item	Component	Activity	ITP Type	Documentation	Acceptance Criteria	Notes	Witness, Hold, Review Points	
							Client Sign/Date	Q.C. Sign/Date
1	Kick-Off Meeting	Kickoff Meeting	N/A	Meeting Minutes	N/A			H
2	Signature Log	Verify	N/A	Signature Log	N/A			H
3	Welder Qualification	Verify	N/A	Individual Welder Qualifications / Welder Log	API-650 / ASME IX			H
4	Inspector Qualification	Verify	N/A	In house Inspector & 3rd Party Qualifications	API-650			H
5	Weld Procedures	Verify	N/A	Approved Weld Procedures	API-650 / ASME IX, CWB W47.1			H
6	Welding Consumable	Electrode Storage	N/A	N/A	Manufacturer's Instructions			R
7	Foundation	Foundation Survey	DC	Foundation Acceptance Report, Compaction Report & Survey from 3rd Party	API-650 Para 7.5.5			H
8	Floor	Materials	FI	MTR Confirmation to Dwg	Drawing & API-650 Sect. 4	MTR of all plate under shell.		
		Fit up	VE, DC	As Built Drawing	Drawing	per API-650 5.1.5.4 - bottom plates under the shell shall have the outer ends of the joints fitted and lap-welded to form a smooth bearing surface.		R
		Welding	VE	Weld Map, Visual Report	API–650 Para 7.2 & 8.5 & WPS			R
		Vacuum Test	VB	Vacuum Box Test Report	API-650 Para 7.3.3(a) & 8.6			W
9	Shell to Floor Seams	Initial Weld Pass	VE	Weld Map, Visual Report	API-650 Para 8.5, 7.2.4.1			R
		Final Weld Pass	VE	Weld Map, Visual Report	API-650 Para 8.5, 7.2.4.1			R
		Vacuum Test	VB	Vacuum Box Test Report	API-650 Para 7.2.4.3 & 8.6			W
10	Shell	Materials	FI	MTR Confirmation to Dwg	Drawing & API-650 Sect. 4	MTR of all plate		H
		Fit up 1st Course	VE, DC	As Built Drawing	Drawing			R
		Roundness	DC	Dimension Report	API-650 Para 7.5.3			H
		Welding	VE	Weld Map, Visual Report	API–650 Para 7.2, 7.5, 8.5 & WPS			R
		Tolerance Check – Plumbness & Local Deviations	DC	Dimension Report	API-650 Para 7.5			H
		Diesel Test Shell Welds	NDT	Leak Test Report	API-650 Para 7.3.6 2)a)i)			W
		UT – All Shell	NDT	UT report / Log / Map	API-650 Para Annex U	Shell less than 3/8" shall be intrepreted as 3/8" as a modification of API-650. All T joint UT.		H
11	Compression Ring	Fit up	VE, DC	As Built Drawing	Drawing			R
		Welding	VE	Weld Map, Visual Report	API–650 Para 7.2 & 8.5 & WPS			R
12	Roof	Fit up	VE, DC	As Built Drawing	Drawing			R
		Welding	VE	Visual Report	API–650 Para 7.2 & 8.5 & WPS			R
13	Roof Structure	Fit up	VE, DC	As Built Drawing	Drawing			R
		Column Plumbness	DC	Dimension Report	API–650 Para 7.5.2 b)			H
		Welding	VE	Visual Report	API–650 Para 7.2 & 8.5 & WPS			R

Item	Component	Activity	ITP Type	Documentation	Acceptance Criteria	Notes	Witness, Hold, Review Points	
							Client Sign/Date	Q.C. Sign/Date
14	Nozzles	Layout	VE, DC	As Built Drawing	Drawing			H
		Fit up	VE, DC	As Built Drawing	Drawing			R
		Welding	VE	Weld Map, Visual Report	API–650 Para 7.2 & 8.5 & WPS			R
		Tolerance Check – Plumbness & Local Deviations	DC	Dimension Report	API-650 Para 7.5			H
		Shell Nozzle Repad Air test	AT	Leak Test Report	API-650 Para 7.3.5			W
		MPI	NDT	MPI Report	API-650 Para 7.2.3.6	All welds of Shell Nozzles		W
15	Manway	Layout	VE, DC	As Built Drawing	Drawing			H
		Fit up	VE, DC	As Built Drawing	Drawing			R
		Welding	VE	Weld Map, Visual Report	API–650 Para 7.2 & 8.5 & WPS			R
		Tolerance Check – Plumbness & Local Deviations	DC	Dimension Report	API-650 Para 7.5			H
		Shell Manway Repad Air test	AT	Leak Test Report	API-650 Para 7.3.5			W
		MPT	NDT	MPI Report	API-650 Para 7.2.3.6	All welds of Shell Manways		R
16	Internals	Layout / Fit up	VE, DC	As Built Drawing	Drawing			R
		Welding	VE	Visual Report	API–650 Para 7.2 & 8.5 & WPS			R
		Stillwell Plumbness	DC	Dimension Report	API–650 Para H.4.5			R
		MPI or LP	NDT	NDT Report	Sump Welds (if applicable) 7.3.4	MPI all welds		H
17	Externals	Layout / Fit up	VE, DC	As Built Drawing	Drawing			R
	Externals	Welding	VE	Visual Report	API–650 Para 7.2 & 8.5 & WPS			R
18	Stairs & Platforms	Fit up	VE, DC	As Built Drawing	Drawing			R
		Welding	VE	Visual Report	API–650 Para 7.2 & 8.5 & WPS			R
19	Bolts & Nuts	Inspection	VE, DC	As Built Drawing	Drawing	Bolt Torque		W
20	Final	Name Plate Verification	N/A	Scan of Name Plate	Drawings			H
		Final Inspection	FI	As Built Drawings, Data Sheet, Manufacturer's Certification (3rd Party), Punch List	Drawings			H

DEFINITIONS:

W - WITNESS: Specified activity to be observed by an outlined party. QC to provide the applicable party 24 hours notice of witness point.

H - HOLD: Specified component or installation to be inspected by an outlined party. No further activities specific to the component or installation may proceed until inspection is carried out. QC to provide the applicable party 24 hours notice of hold point.

R - REVIEW: Specified documentation and specifications applicable to a particular component and/or installation to be examined by an outlined party.

AT - AIR TEST: Specified component and/or installation to be air tested according to specified documentation and specifications.

DC - DIMENSION CHECK: Physical dimensions of component and/or installation to be verified according to specified documentation and specifications.

FI - FINAL INSPECTION: Specified inspection procedures to be executed prior to release of the component and/or installation and verified according to specified documentation and specifications.

NDT - NON DESTRUCTIVE TESTING: Specified component and/or installation to be inspected using a named non destructive testing method according to specified documentation and specifications.

VE - VISUAL Examination: Specified component and/or installation to be examined visually according to specified documentation and specification.

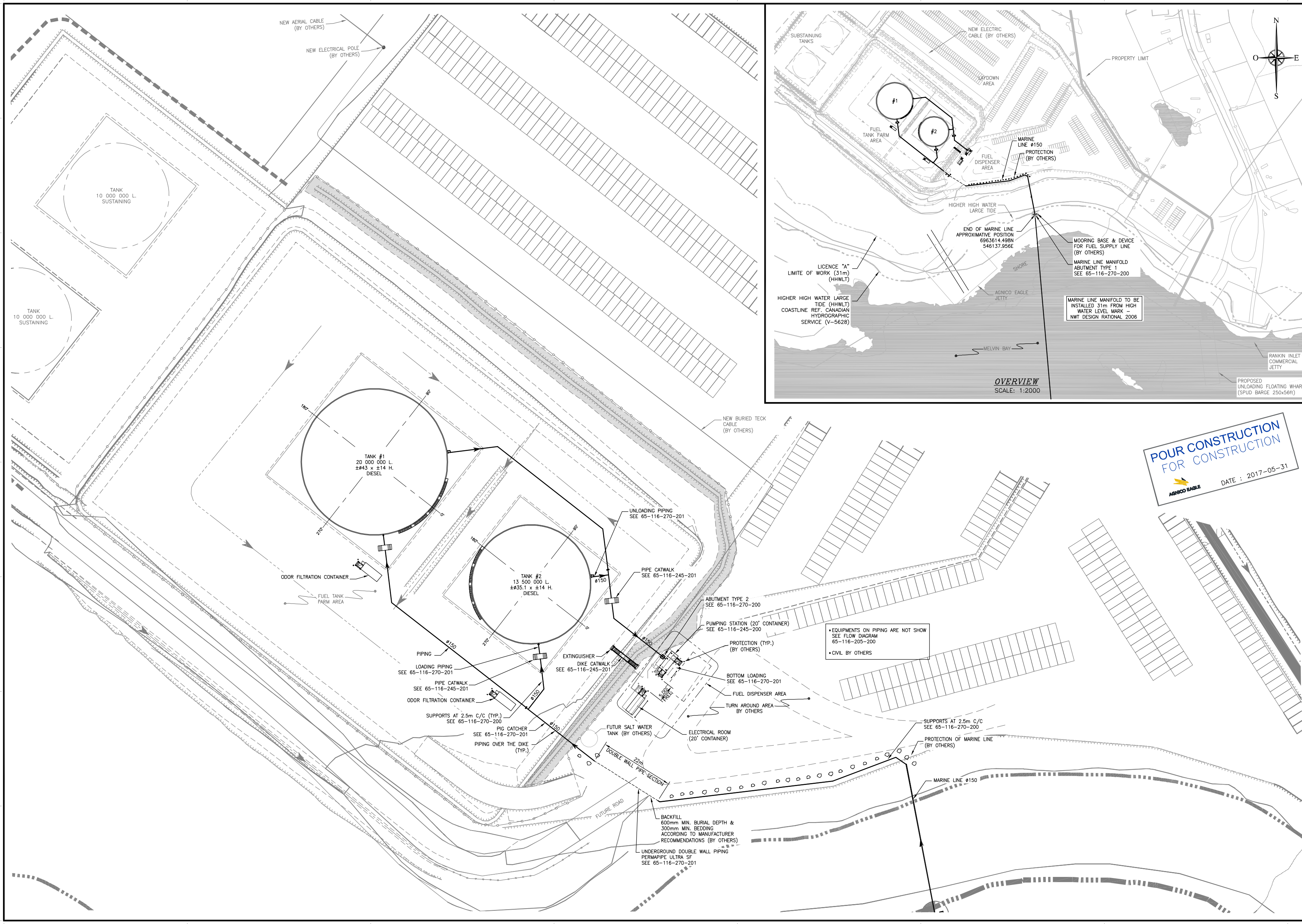
VB - VACUUM-BOX TEST: Specified component and/or installation to be vacuum box tested according to specified documentation and specifications.

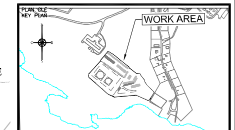
Fastener List

Tank #	qty	Qty of Component	Connection	Description	Lght (in)
1	140.00	70	Shell to Rafter Connection	Bolt, Structural A325, 3/4"	2
1	70.00	35	Rafter to Center Column	Bolt, Structural A325, 3/4"	3.5
1	14.00	105	Rafter to intermediate beam	Bolt, Structural A325, 3/4"	2.25
1	112.00	7	Beam to top plate and intermediate colun	Bolt, Structural A325, 3/4"	2.5
1	336.00			Nut, Structural heavy hex 3/4"	
1	672.00			Washer, type A, 3/4"	
1	168.00	4	36"Shell Manhole	Stud, L7, 3/4"	3 3/4
1	16.00	2	8" in/out Nozzle	Stud, L7, 3/4"	4 1/4
1	48.00	6	6" in/out Nozzle	Stud, L7, 3/4"	4
1	-	0	3" Water Drawoff	Stud, L7, 5/8"	3 1/2
1	60.00	3	24" Roof manhole	Stud, L7, 5/8"	2 1/4
1	20.00	1	24" Roof manhole emergency vent	Stud, L7, 5/8"	9.5
1	16.00	1	16" Vent	Stud, L7, 1"	5 1/4
1	8.00	1	8" Roof Nozzle	Stud, L7, 3/4"	4 1/4
1	8.00	1	6" Gauge Hatch	Stud, L7, 3/4"	4
1	8.00	1	4" Roof Nozzle	Stud, L7, 5/8"	3.5
1	32.00			Nut, A194, Gr. 4, 1"	
1	496.00			Nut, A194, Gr. 4, 3/4"	
1	176.00			Nut, A194, Gr. 4, 5/8"	
1	4.00	4	36"Shell Manhole	Gasket, Ring, Durlon 8500, 1/8", 1051 o.d.x 914 i.d.	
1	2.00	2	8" in/out Nozzle	Gasket, Ring, Durlon 8500,1/8" x 8" x 150#	
1	6.00	6	6" in/out Nozzle	Gasket, Ring, Durlon 8500,1/8" x 6" x 150#	
1	-	6	3" Water Drawoff	Gasket, Ring, Durlon 8500,1/8" x 3" x 150#	
1	4.00	4	24" Roof manhole	Gasket, Ring, Durlon 8500, 1/16" x 762 x 610	
1	1.00	1	16" Vent	Gasket, Ring, Durlon 8500, 1/16" x 150#, 16"	
1	1.00	1	8" High Level	Gasket, Ring, Durlon 8500, 1/16" x 150#, 8"	
1	1.00	1	6" Gauge Hatch	Gasket, Full Face, Durlon 8500, 1/16" x 150#, 6"	
1	1.00	1	4" Roof Nozzle	Gasket, Full Face, Durlon 8500, 1/16" x 150#, 4"	
1	1.00	1	4" Roof Nozzle	Gasket, Full Face, Durlon 8500, 1/16" x 150#, 4"	

NO. DESSIN
DRAWING NO. 65–116–210–200

FORMAT ARCHD





WSP
1075, 3e AVENUE EST
VAL-D'OR (QUÉBEC) CANADA J9P 0J7
TÉL. : 819 825-4274 | TÉLÉC. : 819 824-1514 | WWW.WSPGROUP.COM
Ref. 151-06440-40

NOTES GÉNÉRALES / GENERAL NOTES

1. TANK DIMENSIONS ADJUSTED ACCORDING TO INFORMATION PROVIDED BY CONTRACTOR
2. REPLACE DRAWING : 65–103–210–200

DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG

AGNICO EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
0	2017–05–31	ISSUED FOR CONSTRUCTION	J.M.	D.T.	

REVISIONS

TITRE / TITLE
AGNICO EAGLE – MELIADINE DIVISION
116 – FUEL TANK FARM
210 – GENERAL ARRANGEMENT
FUEL DISTRIBUTION
PLAN VIEWS

DESSINÉ PAR / DRAWN BY	G. CORNUT	DATE 2017–05–29
VERIFIÉ PAR / CHECKED BY	J. MORLIÈRE, tech.	2017–05–29
APPROUVÉ PAR / APPROVED BY	D. THIBODEAU, P. Eng.	2017–05–29
ÉCHELLE / SCALE	INDICATED	DATE 2017–05–29

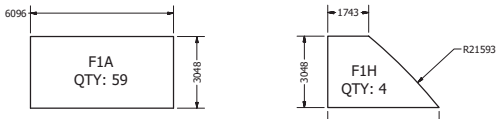
NO. DESSIN / DRAWING NO. 65–116–210–200

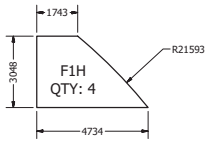
NO. PROJET / PROJECT NO.	REVISION	FEUILLE / SHT
6515	0	1 / 1

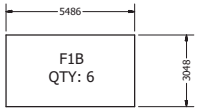
AE-CART-ARCH D

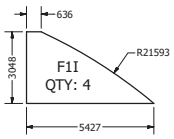
\\CAMTL1OAT01\projets\2015\1\151-06440-40\Genie Nordique\Das\65-116-210-200_R0.dwg-2013-02-19 14:03:29

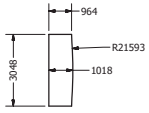
FILE NO. 65–116–210–200_R0.dwg

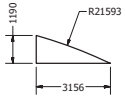


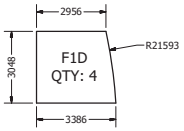


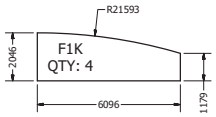


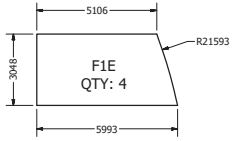


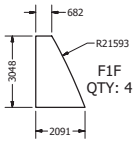


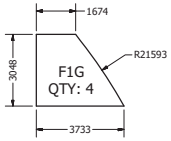


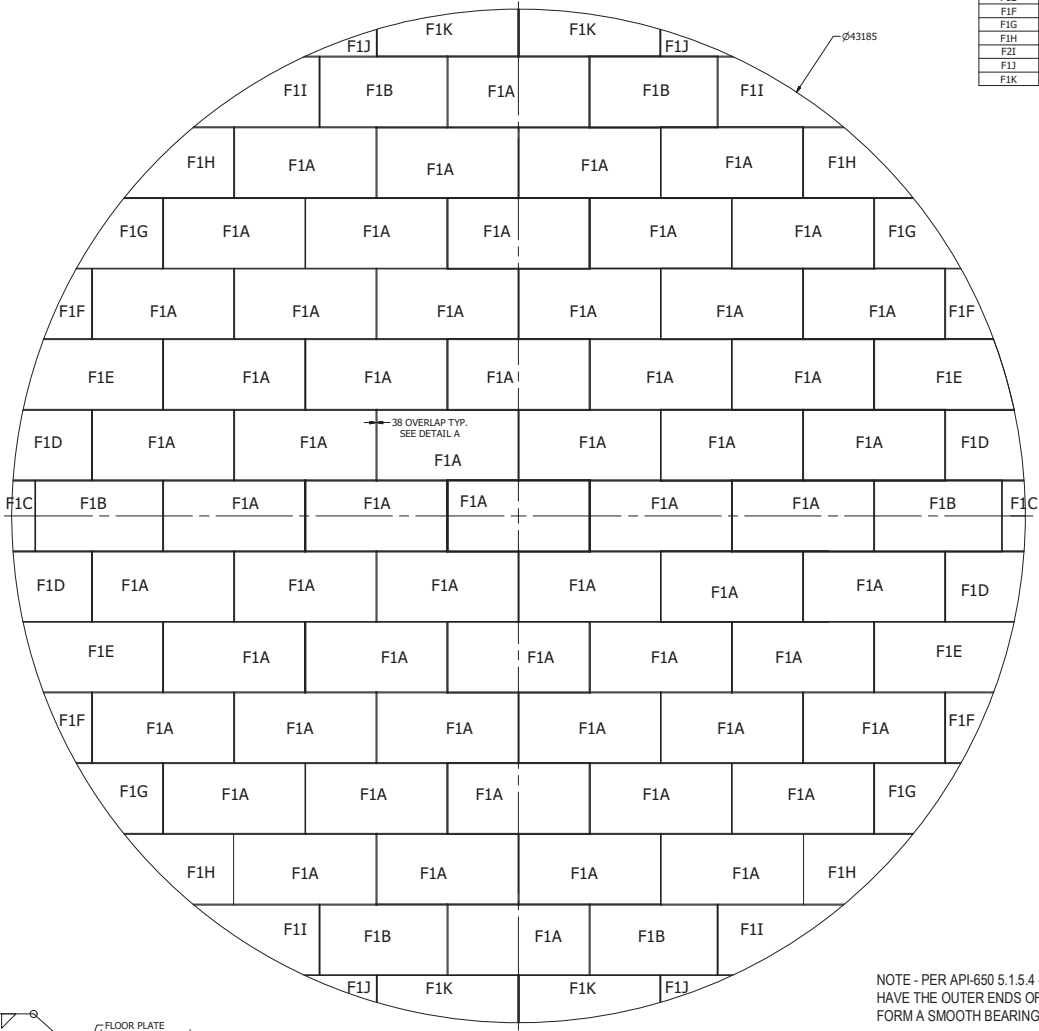












TANK 1 (20ML) FLOOR LAYOUT
SCALE 1 / 100

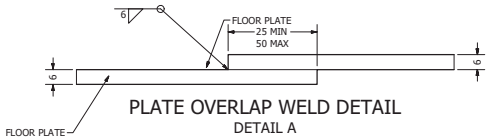


PLATE OVERLAP WELD DETAIL
DETAIL A

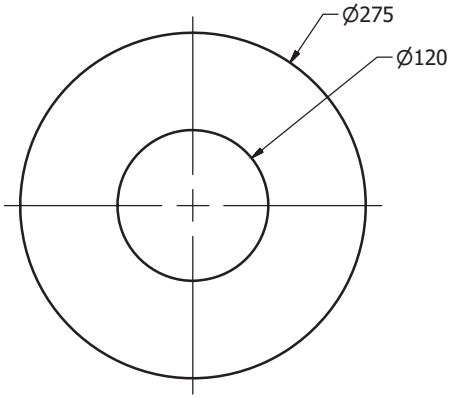
PARTS LIST			
ITEM	QTY	DESCRIPTION	MATERIAL
F1A	59	PL 6.35 X 3048 X 6096	G40.21M-260WT
F1B	6	PL 6.35 X 3048 X 5486	G40.21M-260WT
F1C	2	PL 6.35 X 3048 X 1018	G40.21M-260WT
F1D	4	PL 6.35 X 3048 X 3386	G40.21M-260WT
F1E	4	PL 6.35 X 3048 X 5993	G40.21M-260WT
F1F	4	PL 6.35 X 3048 X 2091	G40.21M-260WT
F1G	4	PL 6.35 X 3048 X 3733	G40.21M-260WT
F1H	4	PL 6.35 X 3048 X 4734	G40.21M-260WT
F2I	4	PL 6.35 X 3048 X 5427	G40.21M-260WT
F1J	2	PL 6.35 X 3156 X 1190	G40.21M-260WT
F1K	4	PL 6.35 X 6096 X 2046	G40.21M-260WT

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/25

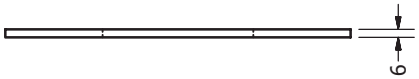
NOTE - PER API-650 5.1.5.4 - BOTTOM PLATES UNDER THE SHELL SHALL HAVE THE OUTER ENDS OF THE JOINTS FITTED AND LAP-WELDED TO FORM A SMOOTH BEARING SURFACE.

19-Jul-2017
Permit Number: P471

DRAWN	JACOB SAUNDERS	1/5/2017	TK #1 (20ML) - FLOOR LAYOUT
CHECKED	MARC LOSIER	3/14/2017	TITLE: MELIADINE FIELD ERECTED TANK NO. 1 (20ML) - FLOOR AND ROOF LAYOUT
QA			
MFG			
APPROVED			
SIZE: A1	DWG NO: 295-M1	REV: 1	
SCALE		SHEET 1 OF 2	

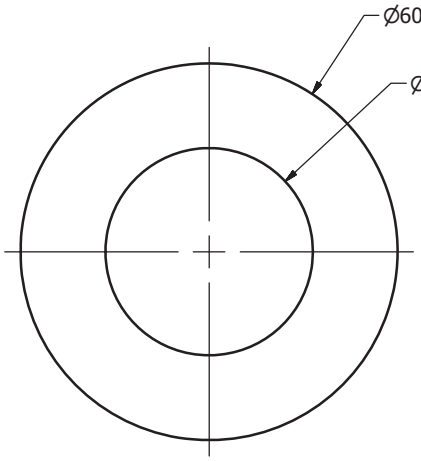


M81201 QTY	
Tank No.	QTY
1	1
2	1
3	1
4	1
5	1
6	1
TOTAL	6



REINFORCING PLATE
100NS ROOF NOZZLE
QTY: 6
1 PER TANK
MARK 81201
SCALE 1/4

MATERIAL:
STEEL CSA G40.21-300W



M81202 QTY	
Tank No.	QTY
1	2
2	1
3	0
4	0
5	0
6	0
TOTAL	10

REINFORCING PLATE
300NS ROOF NOZZLE FOR PV VENT
QTY: 10
MARK 81202
SCALE 1/8

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/25

Permit Number: P471

REVISION HISTORY		
REV	DESCRIPTION	DATE
4	THIS SHEET ADDED	7/7/2017

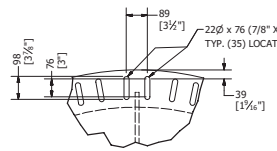
DRAWN Jacob Saunders	2/2/2017	REINFORCING PAD FOR ECN-001
CHECKED Marc Losier	3/16/2017	TITLE: REINFORCING PLATE DETAILS
QA		
MFG		
APPROVED		

SIZE	DWG NO	REV
A3	295-M8	4

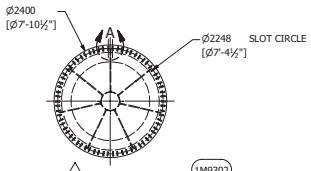
SCALE 1/4 SHEET 13 OF 13

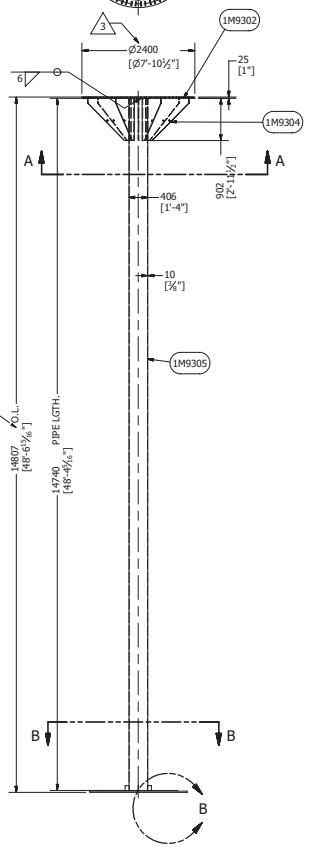
PARTS LIST CENTER COLUMN				
ITEM	ITEM QTY	DESCRIPTION	MATERIAL	MASS
1M9301	1	16 [5/8"]THK X 1676 [5'-6"] DIA	G40.21M - 300W	275.061 kg
1M9302	1	25 [1"] THK X 2400 [7'-10 1/2"] DIA	G40.21M - 300W	873.193 kg
1M9303	1	25 [1"] THK X 2083 [6'-10"] DIA.	G40.21M-300W	679.342 kg
1M9304	7	16 [5/8"] THK X 902 [2'-11 1/2"] WD X 902 [2'-11 1/2"] LG	G40.21M - 300W	7.795 kg
1M9305	1	PIPE 406 [16"] DIA SCH30 X 14740 [48' - 4 3/16"] LG	ASTM A53 GR-B	3029.530 lbmass
1M9306	4	6 [1/4"] THK X 76 [3"] WD X 102 [4"] LG	G40.21M - 300W	0.851 lbmass

PARTS LIST FOR ONE INTERMEDIATE COLUMN (7 REQUIRED)				
ITEM	ITEM QTY	DESCRIPTION	MATERIAL	MASS
1M9308	1	13 [1/2"] THK X 1473 [4'-10"] DIA	G40.21M - 300W	169.937 kg
1M9309	1	13 [1/2"] THK X 434 [1'-5 1/8"] WD X 702 [2'-3 5/8"] LG	G40.21M 300W	18.624 kg
1M9310	1	HSS 324 X 9.4 (12.75" O.D X 3/8") 13684 [44'-10 3/4"] LG	G40.21M 350W CLASS H	2236.487 lbmass
1M9311	2	PL 10 (3/8") THK 164 [6 1/2"] WD x 164 [6 1/2"] LG	G40.21M 300W	0.789 kg
1M9312	1	25 [1"] THK X 1422 [4'-8"] DIA	G40.21M - 300W	523.752 kg
1M9313	4	6 [1/4"] THK X 76 [3"] WD X 102 [4"]LG	G40.21M - 300W	0.851 lbmass

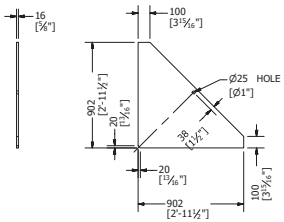


DETAIL A
SCALE 1/10

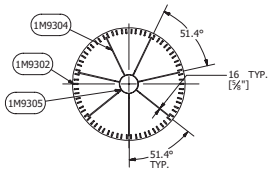




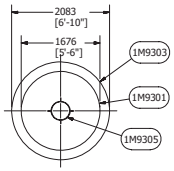
CENTER COLUMN
SCALE 1/50



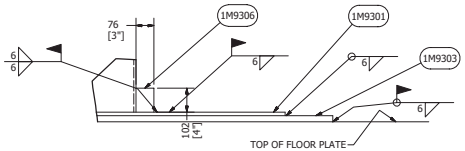
Pc 1M91304
SCALE 1/20



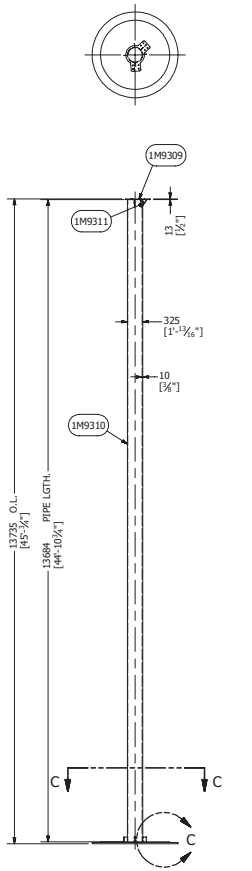
SECTION A-A
SCALE 1/50



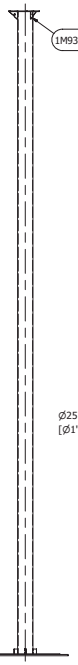
SECTION B-B
SCALE 1/50

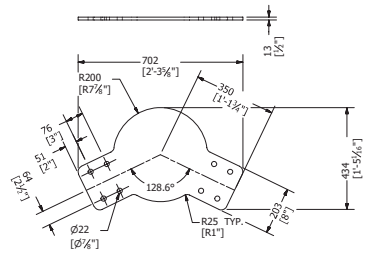


DETAIL B
SCALE 1 / 10

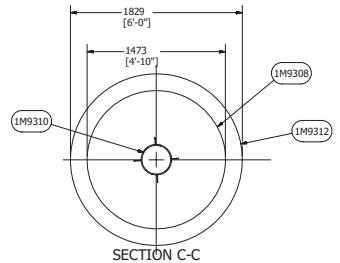


INTERMEDIATE COLUMN
QTY: 7
SCALE 1/50

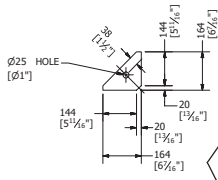




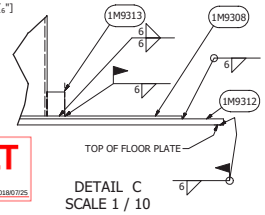
Pc 1M9309 DETAIL
SCALE 1/10



SECTION C-C
SCALE 1/25



Pc 1M9311
SCALE 1/10



DETAIL C
SCALE 1 / 10

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/25

17-Jul-2017
Permit Number: P471

REVISION HISTORY			
ZONE	REV	DESCRIPTION	DATE
	3	DOLLAR PLATE DIA CHG.	4/5/2017
C12, H11	3	CENTER COLUMN PIPE LENGTH INCREASED BY 14MM	4/10/17

DRAWN	MARC LOSIER	3/17/2017
CHECKED		
QA		
MFG		
APPROVED		

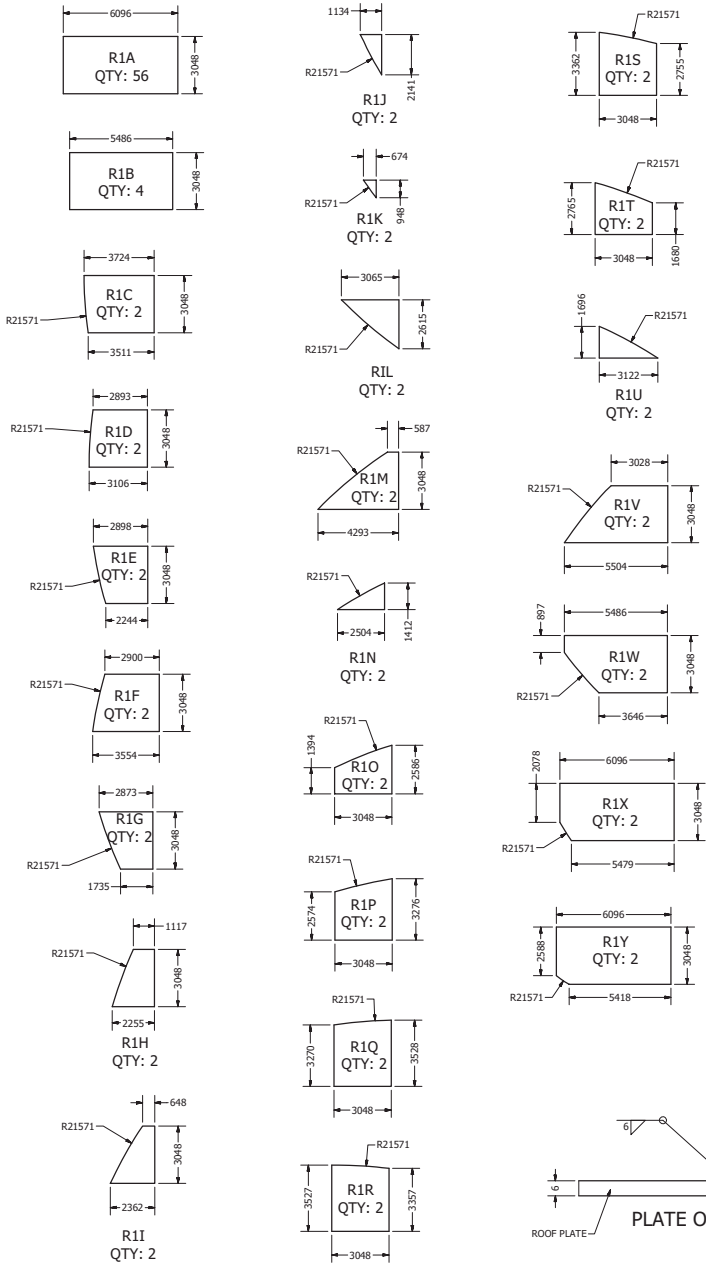
CENTER AND INTERMEDIATE COLUMN DETAILS

TITLE
AGNICO EAGLE -MELIADINE GOLD MINE -
TK #1 - 20,000CUM TANK 43M DIA X 14M H

SIZE	DWG NO	REV
A1	295-M9	6

SCALE

SHEET 3 OF 7



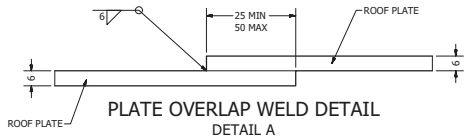
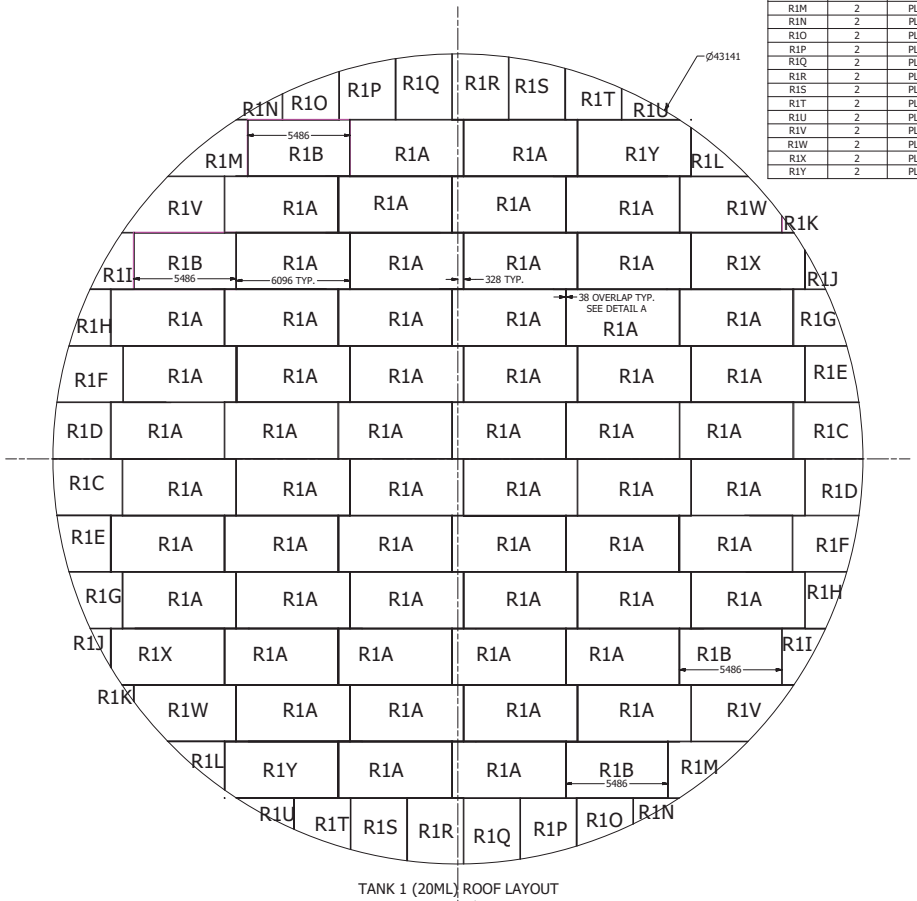


PLATE OVERLAP WELD DETAIL
DETAIL A



TANK 1 (20ML) ROOF LAYOUT
SCALE 1 / 125

PARTS LIST

ITEM	QTY	DESCRIPTION	MATERIAL
R1A	56	PL 6.35 X 3048 X 6096	G40.21M-260WT
R1B	4	PL 6.35 X 3048 X 5486	G40.21M-260WT
R1C	2	PL 6.35 X 3048 X 3724	G40.21M-260WT
R1D	2	PL 6.35 X 3048 X 3106	G40.21M-260WT
R1E	2	PL 6.35 X 3048 X 2898	G40.21M-260WT
R1F	2	PL 6.35 X 3048 X 3554	G40.21M-260WT
R1G	2	PL 6.35 X 3048 X 2873	G40.21M-260WT
R1H	2	PL 6.35 X 3048 X 2255	G40.21M-260WT
R1I	2	PL 6.35 X 3048 X 2362	G40.21M-260WT
R1J	2	PL 6.35 X 2141 X 1134	G40.21M-260WT
R1K	2	PL 6.35 X 948 X 674	G40.21M-260WT
R1L	2	PL 6.35 X 2615 X 3065	G40.21M-260WT
R1M	2	PL 6.35 X 3048 X 4293	G40.21M-260WT
R1N	2	PL 6.35 X 2504 X 1412	G40.21M-260WT
R1O	2	PL 6.35 X 3048 X 2586	G40.21M-260WT
R1P	2	PL 6.35 X 3048 X 3276	G40.21M-260WT
R1Q	2	PL 6.35 X 3048 X 3528	G40.21M-260WT
R1R	2	PL 6.35 X 3048 X 3357	G40.21M-260WT
R1S	2	PL 6.35 X 3048 X 3362	G40.21M-260WT
R1T	2	PL 6.35 X 3048 X 2765	G40.21M-260WT
R1U	2	PL 6.35 X 1696 X 3122	G40.21M-260WT
R1V	2	PL 6.35 X 3048 X 5504	G40.21M-260WT
R1W	2	PL 6.35 X 3048 X 5486	G40.21M-260WT
R1X	2	PL 6.35 X 3048 X 6096	G40.21M-260WT
R1Y	2	PL 6.35 X 3048 X 6096	G40.21M-260WT

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/25

19-Jul-2017
Permit Number: P471

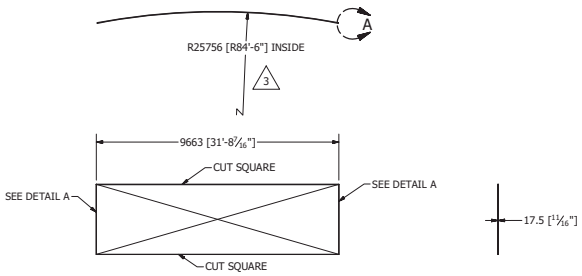
DRAWN	JACOB SAUNDERS	1/5/2017
CHECKED	MARC LOSIER	3/14/2017
QA		
MFG		
APPROVED		

TITLE: TK #1 (20ML) ROOF LAYOUT

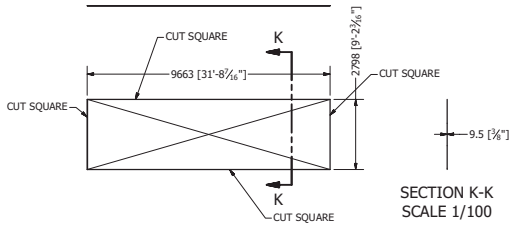
MELIADINE FIELD ERECTED TANK NO. 1 (20ML) - FLOOR AND ROOF LAYOUT

SIZE A1 | DWG NO 295-M1 | REV 1

SCALE | SHEET 2 OF 2

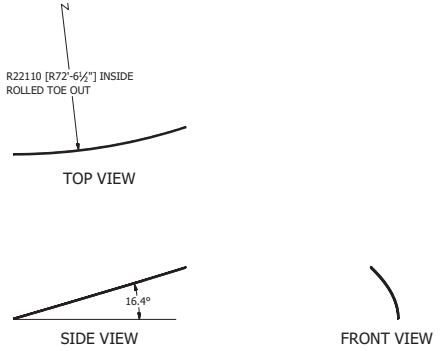


DEVELOPED VIEW
COURSE NO. 1 (BOTTOM) 17.5mm THK (11/16")
CUT FROM PLATE 2874mm x 9729mm
QTY: 14
MARK 7101

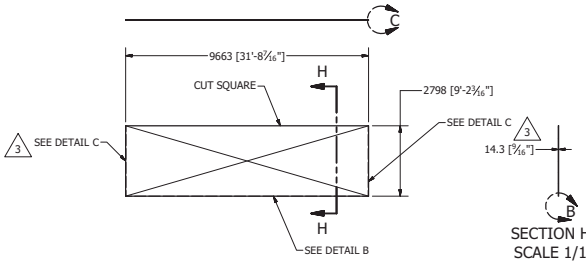


DEVELOPED VIEW
COURSE NO. 5 (TOP) 9.5mm THK (3/8")
CUT FROM PLATE 2874mm X 9729mm
QTY: 14
MARK 7104

SECTION K-K
SCALE 1/100

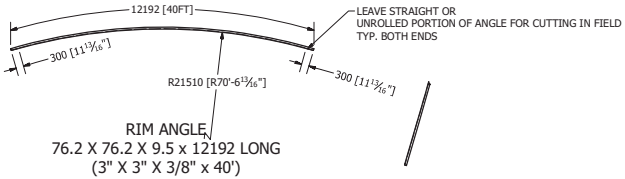


STAIRWAY HANDRAIL ANGLE
50.8 X 50.8 X 6.4 X 6096MM
(2" X 2" X 1/4" X 20' LONG)
STEEL CSA G40.21M 350W
QTY: 6
MARK 7107

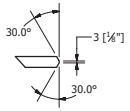


DEVELOPED VIEW
COURSE NO. 2 - 14.3mm THK (9/16")
CUT FROM PLATE 2874mm x 9729mm
QTY: 14
MARK 7102

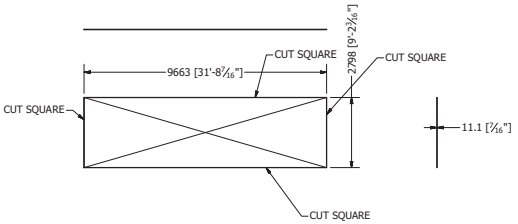
SECTION H-H
SCALE 1/100



RIM ANGLE
76.2 X 76.2 X 9.5 x 12192 LONG
(3" X 3" X 3/8" x 40')
STEEL CSA G40.21M 350W
ROLLED TOE OUT
QTY: 12
MARK 7105

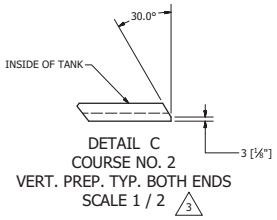


DETAIL A
COURSE NO. 1
VERT PREP. TYP. BOTH ENDS
SCALE 1 / 4

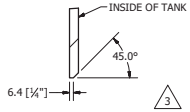


DEVELOPED VIEW
COURSE 3 & 4 - 11.2MM THK (7/16")
FROM PLAE 2874mm x 9729mm
QTY: 28
MARK 7103

ROOF TOP HANDRAIL ANGLE
50.8 X 50.8 X 6.4 (2" X 2" X 1/4")
STEEL CSA G40.21M 350W
ROLLED TOE OUT
QTY: 12
MARK 7106



DETAIL C
COURSE NO. 2
VERT. PREP. TYP. BOTH ENDS
SCALE 1 / 2



DETAIL B
COURSE NO. 2 BOTTOM
EDGE PREP.

NOTES:

ONLY COURSE NO. 1 SHELL PLATES REQUIRE SHOP ROLLING FOR TANK NO.1

SHELL PLATES TO BE CHECKED
CORNER TO CORNER FOR SQUARENESS

STEEL PLATES: 38WT SUPPLIED BY MEL
STEEL SHAPES: 350W SUPPLIED BY FORMATECH

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/25

23-Jul-2017
Permit Number: P471

REVISION HISTORY			
ZONE	REV	DESCRIPTION	DATE
3D, 3B	3	DETAIL A & B MODIFIED	2/14/2017
11H, 4C	3	COURSE NO. 1 ROLLING RAD. CHANGED. DETAIL C ADDED (VERT. COURSE NO. 2 EDGE PREP.)	

DRAWN	Marc Losier	2/2/2017
CHECKED	Jacob Saunders	2/2/2017
QA		
MFG		
APPROVED		

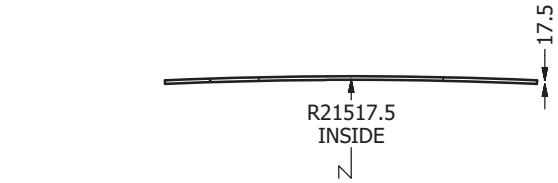
TANK NO. 1 - 20,000 CUM

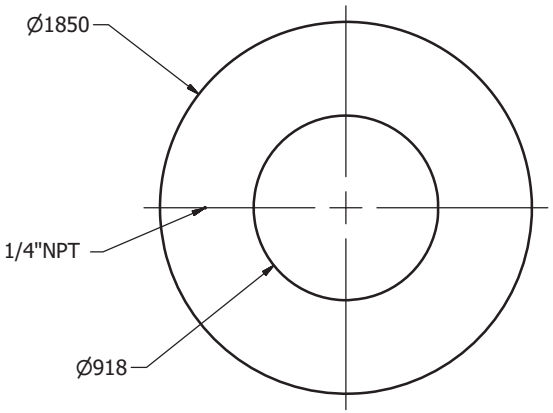
TITLE: MELIADINE FIELD ERECTED TANKS - SHELL PLATES AND ANGLES ROLLING DETAILS

SIZE	DWG NO	REV
A1	295-M7	4

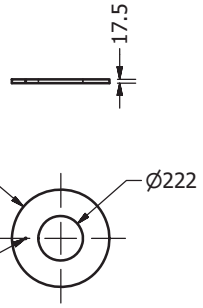
SCALE

SHEET 1 OF 6

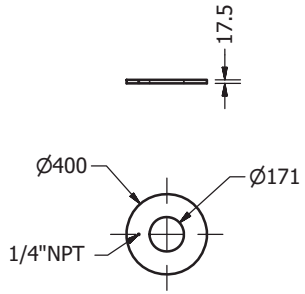




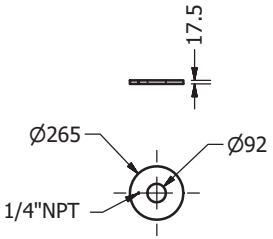
REINFORCING PLATE
SHELL MANHOLE 900MM (36")
TANK NO. 1 - 20ML
MARK: 8101
QTY: 4



REINFORCING PLATE
SHELL NOZZLE LOADING 200MM (8")
TANK NO. 1 - 20ML
MARK: 8102
QTY: 1



REINFORCING PLATE
SHELL NOZZLE UNLOADING 150MM (6")
TANK NO. 1 - 20ML
MARK: 8103
QTY: 3



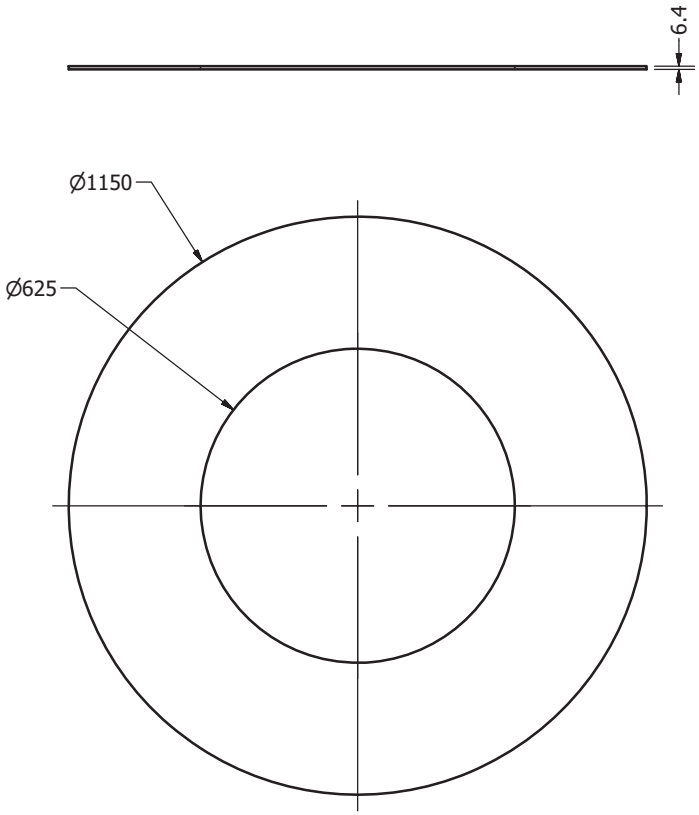
REINFORCING PLATE
SHELL WATER DRAW OFF 75MM (3")
TANK NO. 1 - 20ML
MARK: 8104
QTY: 6

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/25

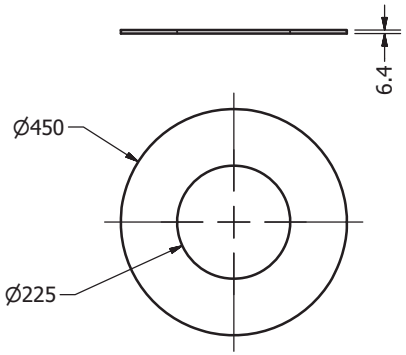
MATERIAL:
STEEL CSA G40.21-38WT
NORMALIZED
TRANSVERSE CHARPY: TCVN 13FT/LBS@-45F
LONGITUDINAL CHARPY: LCVN 15FT/LBS@-45F

Permit Number: P471

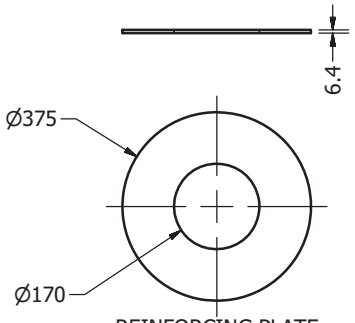
DRAWN Jacob Saunders	2/2/2017	TANK NO. 1 (20ML) SHELL	
CHECKED Marc Losier	3/16/2017	TITLE REINFORCING PLATE DETAILS	
QA			
MFG			
APPROVED			
		SIZE A3	DWG NO 295-M8 / REV 3
		SCALE 1/25	SHEET 1 OF 12



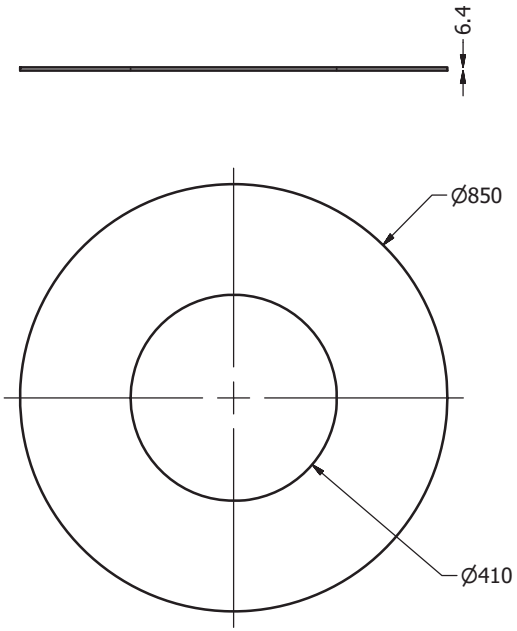
REINFORCING PLATE
ROOF MANHOLE 600MM
TANK NO. 1 - 20ML
MARK: 8105
QTY: 4



REINFORCING PLATE
ROOF NOZZLE 200MM
TANK NO. 1 - 20ML
MARK 8106
QTY: 1



REINFORCING PLATE
ROOF GAUGE HATCH 150MM
TANK NO. 1 - 20ML
MARK: 8107
QTY: 1



REINFORCING PLATE
ROOF VENT 400MM
TANK NO. 1 - 20ML
MARK: 8108
QTY: 1

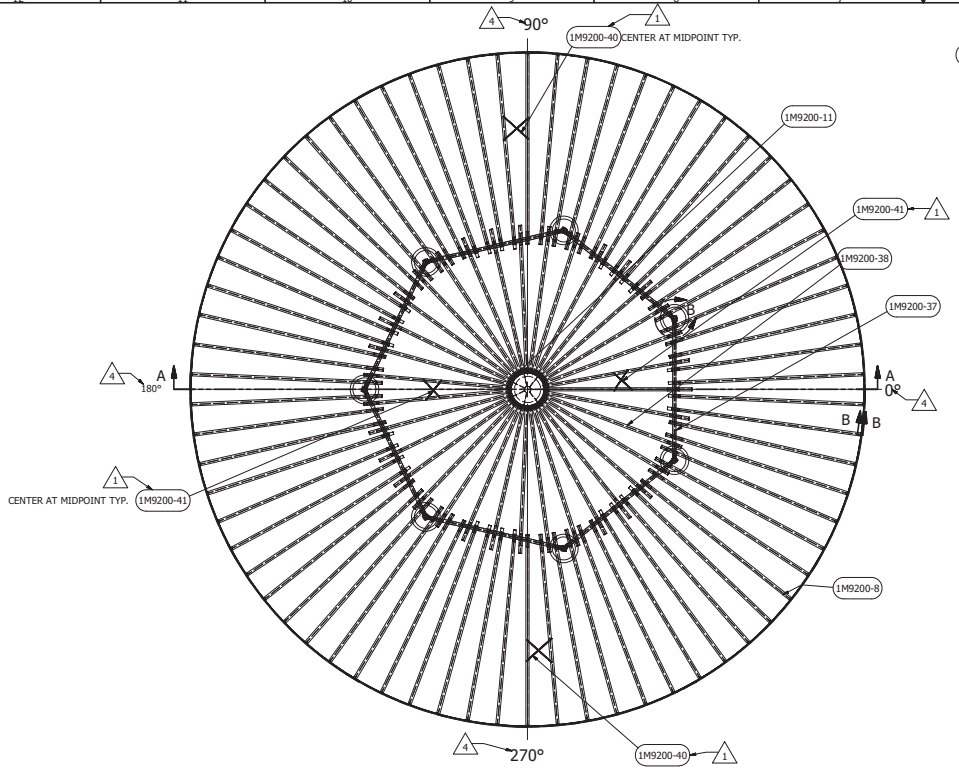
AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/25

23-Jul-2017
Permit Number: P471

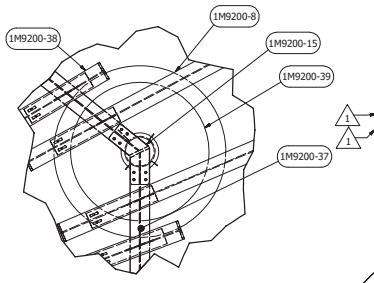
MATERIAL:
STEEL CSA G40.21-38WT
NORMALIZED
TRANSVERSE CHARPY: TCVN 13FT/LBS@-45F
LONGITUDINAL CHARPY: LCVN 15FT/LBS@-45F

DRAWN Jacob Saunders	2/2/2017	TANK NO. 1 (20ML) ROOF
CHECKED Marc Losier	3/16/2017	TITLE: REINFORCING PLATE DETAILS
QA		
MFG		
APPROVED		
SIZE A3	DWG NO 295-M8	REV 3
SCALE 1/10		SHEET 2 OF 12

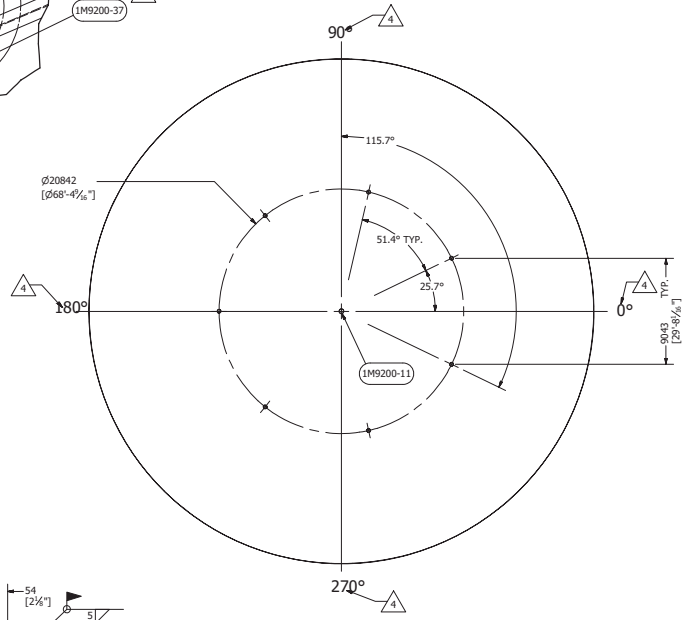
PARTS LIST			
ITEM	ITEM QTY	Description	MATERIAL
1M9200-8	70	OUTER RAFTER - SEE SHT. 2	G40.21M - 350W
1M9200-10	70	SHELL CLIP - SEE SHT. 2	G40.21M - 300W
1M9200-11	1	CENTER COLUMN - SEE SHT. 3	
1M9200-15	7	TOP INTERMEDIATE GIRDER CONNECTION PLATE - SEE SHT. 2	G40.21M - 300W
1M9200-37	7	INTERMEDIATE GIRDER BEAM ASSY - SEE SHT. 2	
1M9200-38	35	INNER RAFTER - SEE SHT. 2	G40.21M - 350W
1M9200-39	7	INTERMEDIATE COLUMN - SEE SHT. 3	
1M9200-40	4	FB50X6 [FB2"X1/4"] - 2184 [7'-2"] LG	G40.21M - 300W
1M9200-41	4	FB50X6 [FB2"X1/4"] - 1574 [5'-2"] LG	G40.21M - 300W



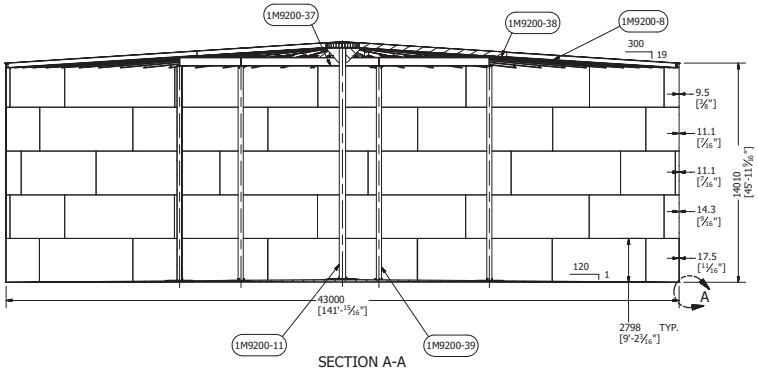
RAFTER LAYOUT
PLAN VIEW
ROOF REMOVED FOR CLARITY
SCALE 1/150



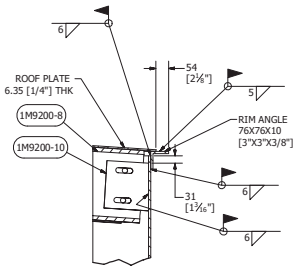
DETAIL B
SCALE 1/25



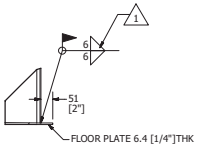
COLUMNS LAYOUT DETAILS
SCALE 1/200



SECTION A-A
SCALE 1/150



SECTION B-B
SHELL CLIP FITTING DETAIL
SCALE 1 / 10



DETAIL A
SCALE 1 / 10

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/25

17-Jul-2017
Permit Number: P471

REVISION HISTORY			
ZONE	REV	DESCRIPTION	DATE
G7, D8, H8, E12, B5	1	RAFTER BRACE ADDED, WELDING DETAIL ADDED IN DETAIL A	3/31/2017
F7, H9, F11, D9, F1, G3, F5, D3	4	REFERENCE ANGLES CHANGED	4/24/2017

DRAWN	MARC LOSIER	3/17/2017
CHECKED		
QA		
MFG		
APPROVED		

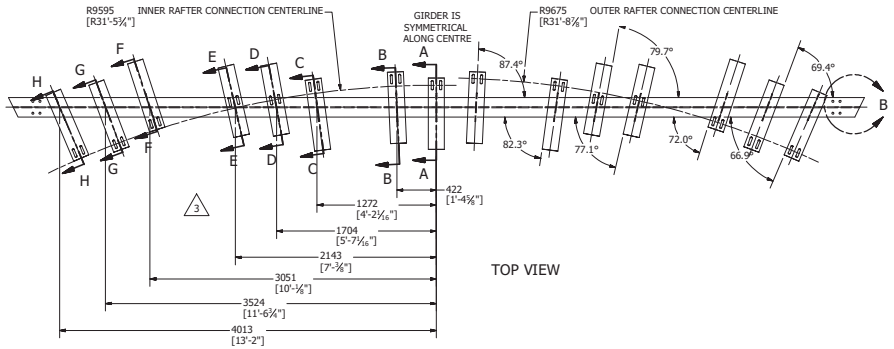
RAFTER AND COLUMN LAYOUT

TITLE
AGNICO EAGLE -MELIADINE GOLD MINE -
TK #1 - 20,000CUM TANK 43M DIA X 14M H

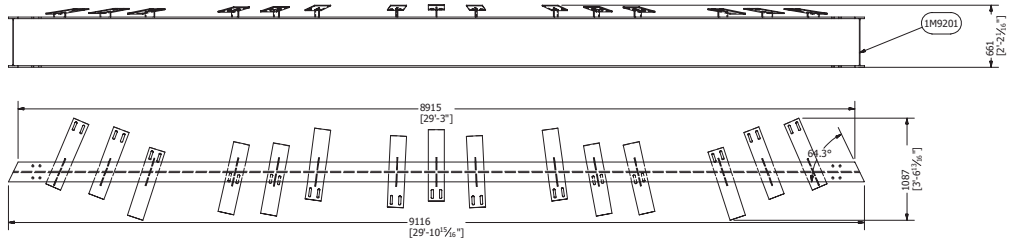
SIZE	DWG NO	REV
A1	295-M9	6

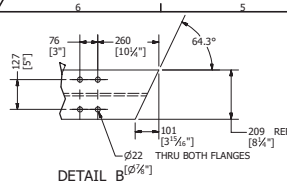
SCALE

SHEET 1 OF 7



TOP VIEW

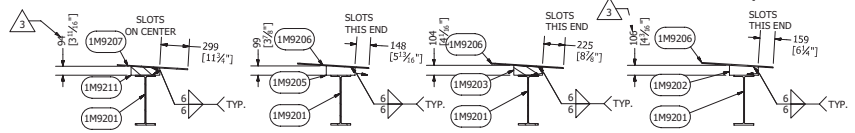




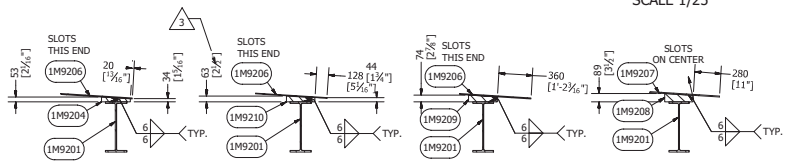
DETAIL B
SCALE 1/10

PARTS LIST				
ITEM	ITEM QTY	DESCRIPTION	MATERIAL	MASS
1M9201	1	W530X92 [W21"X62] X 9116 [29'-10 7/8"] LG	G40.21M-350W	832.884 kg
1M9202	1	10 [3/8"] THK X 106 [4 3/16"] WD X 305 [1'-0"] LG	G40.21M-300W	2.187 kg
1M9203	2	10 [3/8"] THK X 104 [4 1/8"] WD X 305 [1'-0"] LG	G40.21M-300W	2.146 kg
1M9204	2	10 [3/8"] THK X 53 [2 1/16"] WD X 305 [1'-0"] LG	G40.21M-300W	0.985 kg
1M9205	2	10 [3/8"] THK X 99 [3 1/8"] WD X 305 [1'-0"] LG	G40.21M-300W	2.034 kg
1M9206	11	10 [3/8"] THK X 171 [6 3/4"] WD X 762 [2'-6"] LG	G40.21M-300W	9.462 kg
1M9207	4	10 [3/8"] THK X 171 [6 3/4"] WD X 762 [2'-6"] LG	G40.21M-300W	9.462 kg
1M9208	2	10 [3/8"] THK X 89 [3 1/2"] WD X 305 [1'-0"] LG	G40.21M-300W	1.816 kg
1M9209	2	10 [3/8"] THK X 74 [2 7/8"] WD X 305 [1'-0"] LG	G40.21M-300W	1.458 kg
1M9210	2	10 [3/8"] THK X 63 [2 1/2"] WD X 305 [1'-0"] LG	G40.21M-300W	1.227 kg
1M9211	2	10 [3/8"] THK X 94 [3 11/16"] WD X 305 [1'-0"] LG	G40.21M-300W	1.926 kg

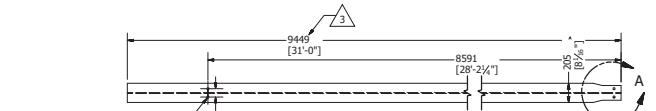
BILLING FOR ONE GIRDER ASSEMBLY SHOWN
TOTAL SEVEN GIRDER ASSEMBLIES REQUIRED



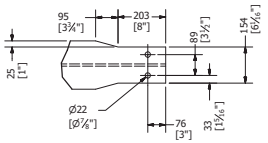
SECTION D-D SCALE 1/25
SECTION C-C SCALE 1/25
SECTION B-B SCALE 1/25
SECTION A-A SCALE 1/25



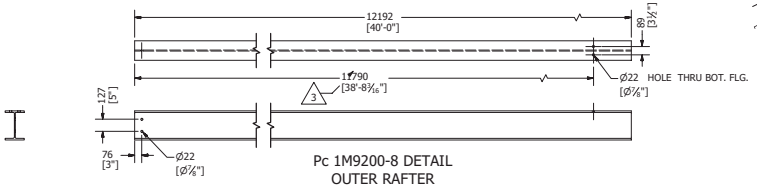
SECTION H-H SCALE 1/25
SECTION G-G SCALE 1/25
SECTION F-F SCALE 1/25
SECTION E-E SCALE 1/25



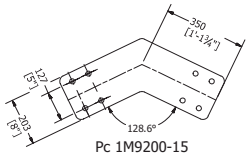
Pc 1M9200-38 DETAIL
INNER RAFTER
SCALE 1 / 25



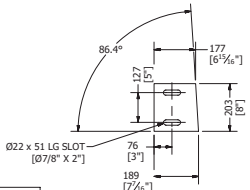
DETAIL A
SCALE 1/10



Pc 1M9200-8 DETAIL
OUTER RAFTER
SCALE 1 / 25

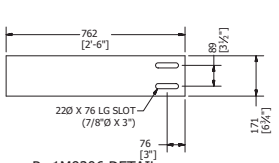


Pc 1M9200-15
TOP BEAM CONNECTION PLATE
SCALE 1/10

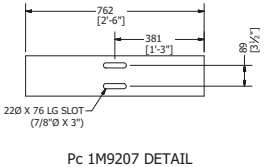


Pc 1M9200-10
SHELL CLIP
SCALE 1/10

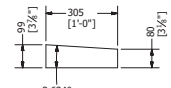
PARTS LIST				
ITEM	ITEM QTY	DESCRIPTION	MATERIAL	MASS
1M9200-8	70	W310X74 [W12"X50#] X 12192 [40'-0"] LG OUTER RAFTER	G40.21M - 350W	1986.765 lbmass
1M9200-10	70	10 [3/8"] THK X 164 [6 1/2"] WD x 203 [8"] LG - SHELL CLIP	G40.21M - 300W	2.553 kg
1M9200-15	7	13 [1/2"] THK X 428 [1'-4 7/8"] WD x 637 [2'-1 1/8"] LG - TOP INTERMEDIATE GIRDER CONNECTION PLATE	G40.21M - 300W	13.812 kg
1M9200-38	35	W310x74 [W12"x50#] x 9449 [31'-0"] LG INNER RAFTER	G40.21M - 350W	1532.411 lbmass



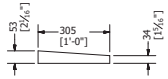
Pc 1M9206 DETAIL
SCALE 1/10



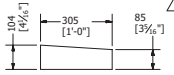
Pc 1M9207 DETAIL
SCALE 1/10



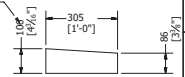
Pc 1M9205 DETAIL
SCALE 1/10



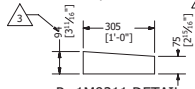
Pc 1M9204 DETAIL
SCALE 1/10



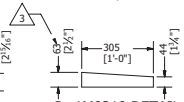
Pc 1M9203 DETAIL
SCALE 1/10



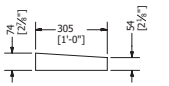
Pc 1M9202 DETAIL
SCALE 1/10



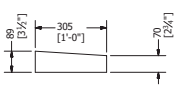
Pc 1M9211 DETAIL
SCALE 1/10



Pc 1M9210 DETAIL
SCALE 1/10



Pc 1M9209 DETAIL
SCALE 1/10



Pc 1M9208 DETAIL
SCALE 1/10

REVISION HISTORY			
ZONE	REV	DESCRIPTION	DATE
D10, G11, B10	3	INNER RAFTER LENTGH REDUCED, DIMENSIONS LOCATING RAFTER SUPPORT ADDED ON BEAM, HOLES IN INNER RAFTER OUTER HOLE LOCATION RELOCATED TO SUIT NEW DOLLAR PLATE DIA	4/3/2017
C4, C5, D2, F6, G6, G2, H4, G4	3	MODIFIED SECTION AA, DD, GG, AND DETAILS PC: 1M9202, 1M9210, 1M9211	4/10/2017

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/05

17-Jul-2017
Permit Number: P471

DRAWN	MARC LOSIER	3/17/2017
CHECKED		
QA		
MFG		
APPROVED		

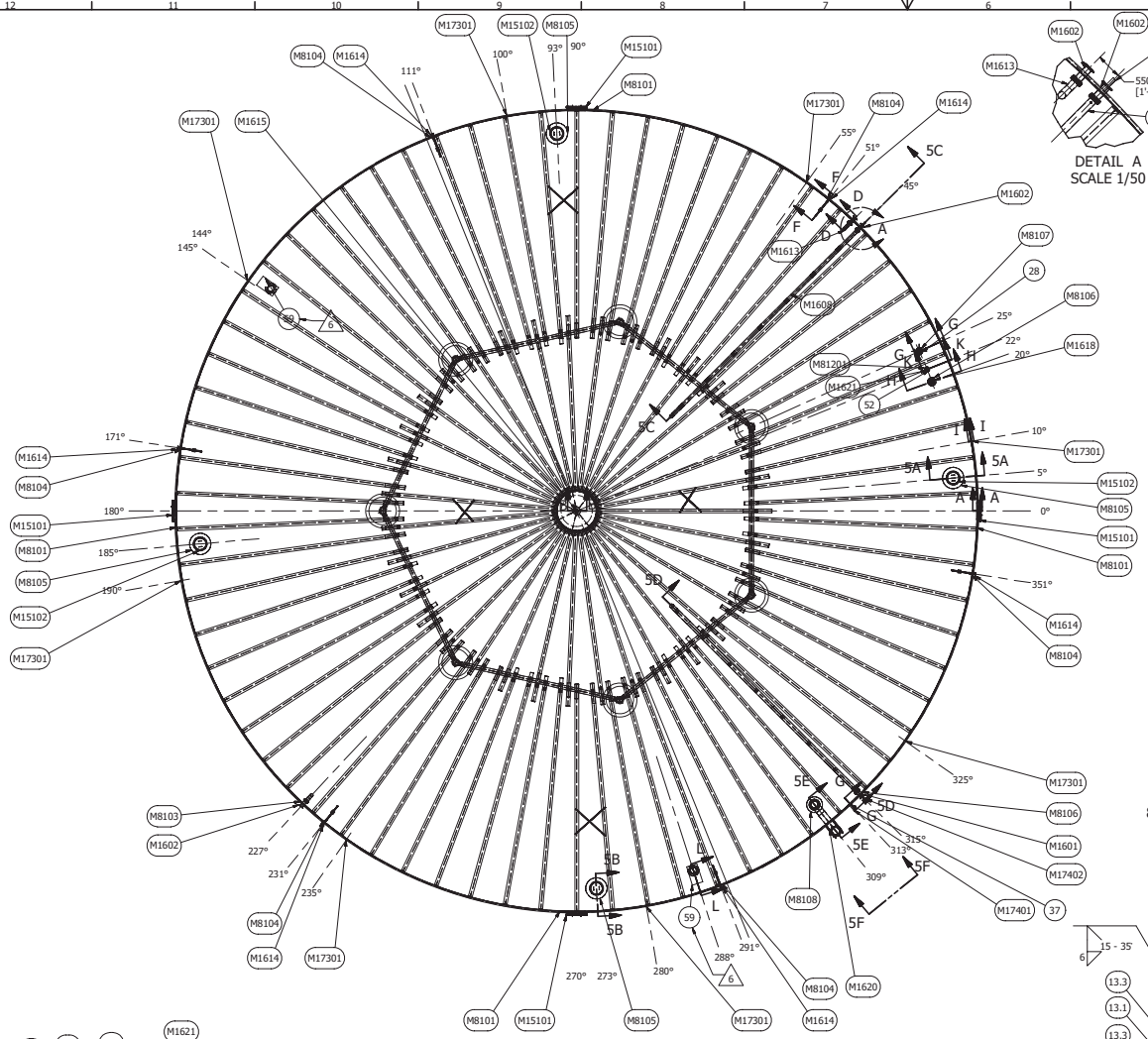
TITLE: INTERMEDIATE GIRDER AND RAFTER DETAILS

AGNICO EAGLE -MELIADINE GOLD MINE - TK #1 - 20,000CUM TANK 43M DIA X 14M H

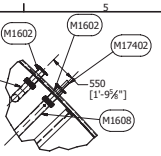
SIZE A1 | DWG NO 295-M9 | REV 6

SCALE

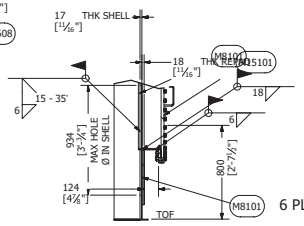
SHEET 2 OF 7



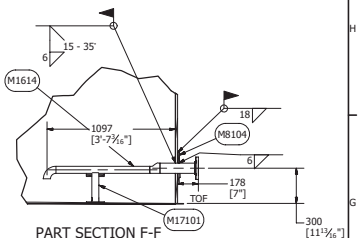
PLAN VIEW
ROOF PLATE NOT SHOWN FOR CLARITY
SCALE 1/125



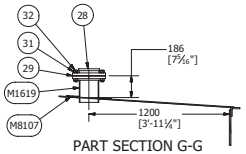
DETAIL A
SCALE 1/50



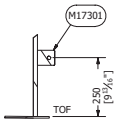
PART SECTION A-A
900NS MANHOLE
TYP. 4 PLACES: 0°, 90°, 180°, 270°
SCALE 1/20



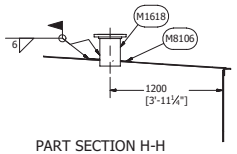
PART SECTION F-F
75MM [3"] WATER DRAWOFF
6 PLACES @ 51°, 111°, 171°, 231°, 291°351°
SCALE 1/20



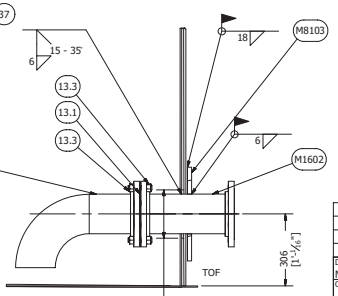
PART SECTION G-G
150NS [6"] GAUGE HATCH
SCALE 1/20



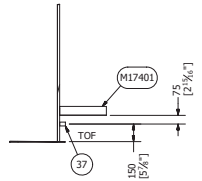
PART SECTION I-I
GROUNDING LUG
8 PLACES AT 10°, 55°, 100°, 145°, 190°, 235°, 280°, 325°
SCALE 1/10



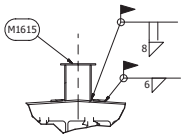
PART SECTION H-H
200NS [8"] OVERFILL PROTECTION
SCALE 1/25



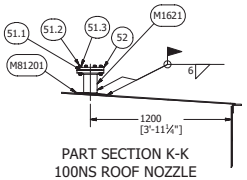
PART SECTION D-D
150NS [6"] LOW SUCTION
2 PLACES AT 47°, 227°
SCALE 1/10



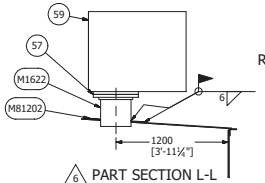
PART SECTION J-J
20NS [3/4"] TEMPERATURE
SENSOR CONNECTION
SCALE 1/20



PART SECTION B-B
PAINTERS POST
SCALE 1/10



PART SECTION K-K
100NS ROOF NOZZLE
SCALE 1/20



PART SECTION L-L
PV VENT 300NS
5 PLACES AT 0°, 72°,144,216°, 288°
SCALE 1/25

NOTES:
ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
TOF DENOTES TOP OF FLOOR

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/25

23-Jul-2017
Permit Number: P471

REVISION HISTORY		
REV	DESCRIPTION	DATE
6	THIS SHEET ADDED	6/23/2017
6	MODIFIED AS PER ECN-001	7/7/2017

DRAWN	MARC LOSIER	3/17/2017
CHECKED		
QA		
MFG		
APPROVED		

TITLE
AGNICO EAGLE -MELIADINE GOLD MINE -
TK #1 - 20,000CUM TANK 43M DIA X 14M H

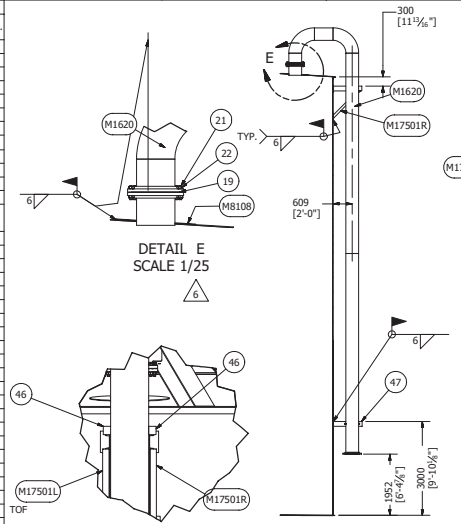
SIZE	DWG NO	REV
A1	295-M9	6

SCALE
SHEET 4 OF 7

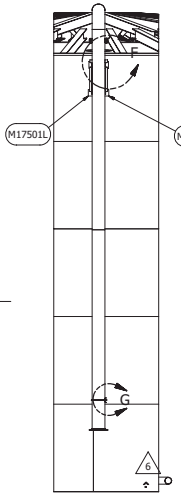
PARTS LIST

ITEM	ITEM QTY	DESCRIPTION	MATERIAL	FAB. DRG. NO.
13	3	150NS [6"] JOINT MATERIAL COMPRISING:		
13.1	1	150NS [6"] GASKET 150#, RING 3.2 [1/8"] THK.	DURLON 8500	
13.2	8	3/4" UNC X 4" STUD	L7	
13.3	16	3/4"-10 UNC HEAVY HEX NUTS	A194 GR.4	
15	1	200NS [8"] JOINT MATERIAL COMPRISING:		
15.1	1	200NS [8"] GASKET, 150#, RING, 3.2 [1/8"]THK.	DURL8500	
15.2	8	3/4" UNC X 4 1/4" LONG	L7	
15.3	16	3/4"-10 UNC HEAVY HEX NUTS	Steel, Mild	
19	1	400NS [16"] GASKET, RING, 1.6 [1/16"] THK	DURLON 8500	
21	16	1" UNC X 5 3/4" STUD	L7	
22	32	1" UNC HEAVY HEX NUT	A194 GR. 4	
26	2	25NS [1"] NPT COUPLING, 3000#, PRV PIPING CONNECION	A320LF2	
28	1	150NS [6"] GAUGE HATCH, SHANG AND JURS MODEL NO. 95010-02-00	ALUMINUM	
29	1	150NS [6"] GASKET, FULL FACE, 1.6 [1/16"] THK.	DURLON 8500	
31	16	3/4"-10 UNC HEAVY HEX NUTS	A194 GR. 4	
32	8	3/4" UNC X 4 1/4" LONG	L7	
37	1	20NS [3/4"] NPT COUPLING, 3000#, (TEMPERATURE SENSOR)	A350 LF2	
46	2	Pipe, XH, 3"NS X 3" LG	A53	
47	1	C150X12	G40.21M 350W	
48	1	U-BOLT 7/8"DIA FOR 400NS PIPE	Steel	
49	4	Hex Nuts (Inch Series) Heavy Hex Nut 7/8" UNC	A194 GR 4	
51	1	100NS JOINT COMPRISING		
51.1	1	GASKET, RING, 150#, 1.6 [1/16"] thk., 100NS [4"]	Garlok Gylon 3545	
51.2	8	STUD, 5/8" X 3 1/2" LONG	L7	
51.3	16	Hex Nut, HEAVY, 5/8" UNC	A194 GR 4	
52	1	Pipe Flanges - Flange Blind - Class 150.Inch	Steel	
57	2	GASKET, FLAT FACE, 1.6THK [1/16"], 300NS [12"]	Rubber	
59	2	PV Vent 300ns, SET PRESSURE: 1.35 oz/sqin	ENARDO 950	
M1601	1	200NS [8"] DOUBLE FLANGE SHELL NOZZLE		M16
M1602	3	150NS [6"] DOUBLE FLANGE SHELL NOZZLE		M16
M1603	1	200NS [8"] FIXED PIPE LOADING 14.3M LG		M16
M1608	1	150NS [6"] FIXED PIPE UNLOADING 14.3M LG		M16
M1613	2	Ø150 NS PIPING LOW LEVEL		M16
M1614	6	75NS [3"] WATER DRAWOFF VALVE SPOOL		M16
M1615	1	100NS [4"] PAINTERS POST		M16
M1616	1	400NS [16"] ROOF NOZZLE FOR VENT		M16
M1618	1	200NS [8"] ROOF NOZZLE FOR OVERFILL PROTECTION		M16
M1619	1	150NS [6"] ROOF NOZZLE FOR GAUGE HATCH		M16
M1620	1	400NS [16"] VENT RETURN BEND PIPE		M16
M1621	1	100NS ROOF NOZZLE AS PER ECN-001		M16
M1622	2	300NS ROOF NOZZLE		M16
M8101	4	900NS [36"] SHELL MANHOLE REINFORCING PAD		M8
M8102	1	200NS [8"] SHELL REINFORCING PAD FOR LOADING PIPE NOZZLE		M8
M8103	3	150NS [6"] SHELL NOZLLE REINFORCING PAD	Steel	M8
M8104	6	75NS [3"] SHELL NOZZLE REINFORCING PLATE FOR WATER DRAWOFF VALVE	Steel	M8
M8105	4	600NS [24"] ROOF MANHOLE REINFORCING PLATE		M8
M8106	1	200NS [8"] ROOF NOZZLE REINFORCING PLATE	Steel	M8
M8107	1	150NS [6"] ROOF NOZZLE REINFORCING PLATE FOR GAUGE HATCH	Steel, Mild	M8
M8108	1	400NS [16"] ROOF NOZZLE REINFORCING PLATE FOR VENT	Steel	M8
M15101	4	900NS [36"] SHELL MANHOLE		M15
M15102	4	600NS [24"] ROOF MANHOLE		M15
M17101	6	PIPE SUPPORT		M17
M17101	2	PIPE SUPPORT		M17
M17101	2	PIPE SUPPORT		M17
M17101	2	PIPE SUPPORT		M17
M17101	2	PIPE SUPPORT		M17
M17101	6	PIPE SUPPORT		M17
M17301	8	GROUNDING LUG	Stainless Steel, Austenitic	M17
M17401	1	L100X100X6 [L4"X4"X1/4"] 400 [15 3/4"] LG (TEMPERATURE SENSOR)		M17
M17402	14	L75X75X6 [L3"X3"X1/4"] 400 [15 3/4"] BRACKET FOR PIPING OR ELECTRICAL CONDUIT	Steel, Mild	M17
M81201	1	100NS ROOF NOZZLE REINFORCING PAD	Steel, Mild	M8
M81202	2	300NS ROOF NOZZLE REINFORCING PAD FOR PV VENT	Steel, Mild	M8
M17501L	1	PIPE SUPPORT 400NS VENT LEFT		M17
M17501R	1	PIPE SUPPORT 400NS VENT RIGHT		M17

DETAIL E
SCALE 1/25



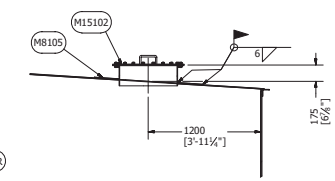
SECTION 5E-5E
SCALE 1/75



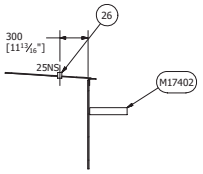
SECTION 5F-5F
SCALE 1/75

DETAIL F
SCALE 1/25

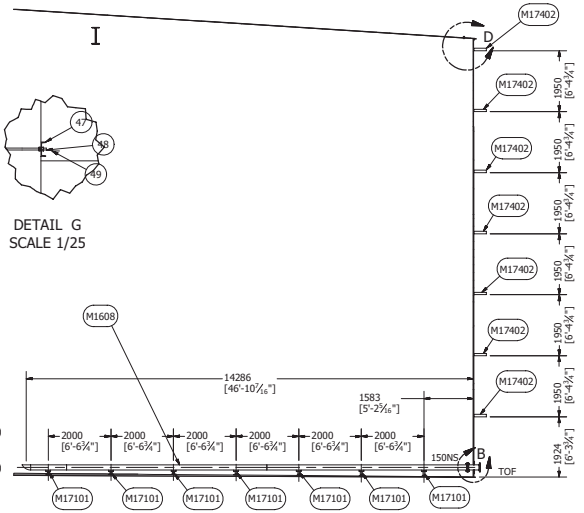
DETAIL G
SCALE 1/25



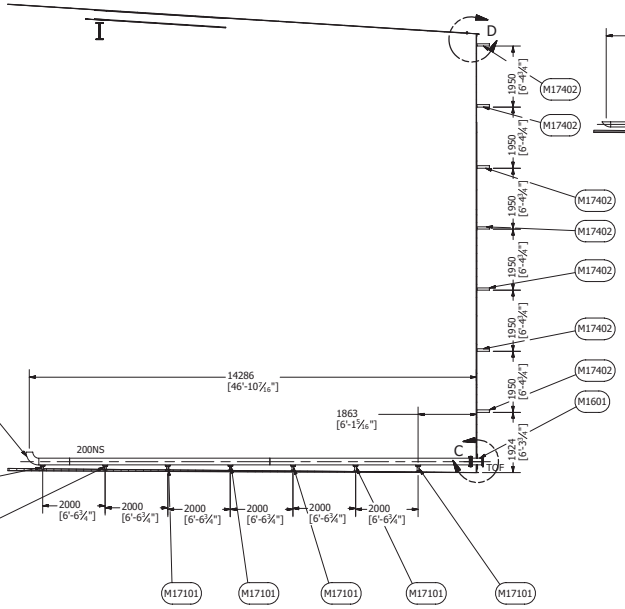
PART SECTION 5A-5A
600NS [24"] ROOF MANHOLE
4 PLACES AT 5°, 93°, 185°, 273°
SCALE 1/25



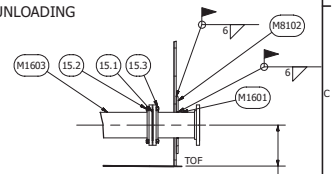
DETAIL D
SCALE 1/25



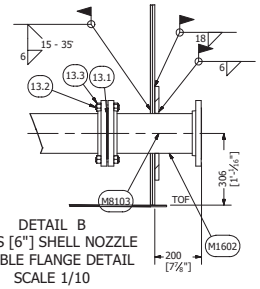
SECTION 5C-5C
150NS [6"] FIXED PIPE UNLOADING
SCALE 1/75



SECTION 5D-5D
200NS [8"] FIXED PIPE LOADING
SCALE 1/75



DETAIL C
200NS [8"] SHELL NOZZLE
DOUBLE FLANGE DETAIL
SCALE 1/20



DETAIL B
150NS [6"] SHELL NOZZLE
DOUBLE FLANGE DETAIL
SCALE 1/10

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/25

Permit Number: P471
23-Jul-2017

NOTES:
ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
TOF DENOTES TOP OF FLOOR

REVISION HISTORY		
REV	DESCRIPTION	DATE
6	THIS SHEET ADDED	6/23/2017
6	MODIFIED AS PER ECN-001	7/7/17

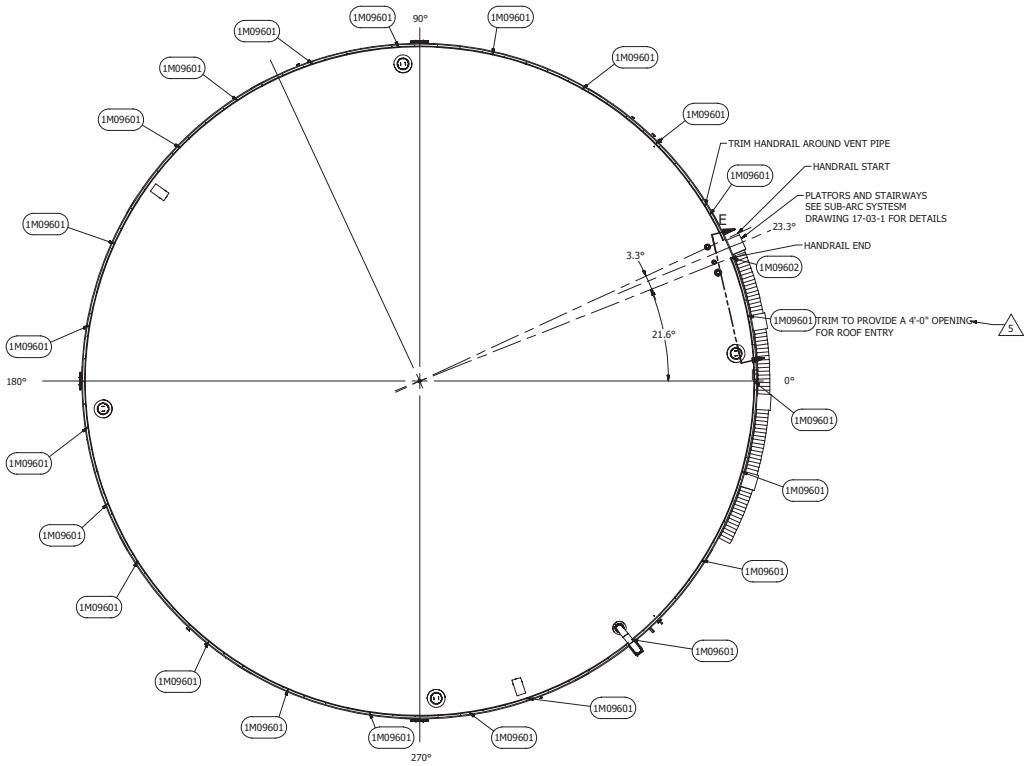
DRAWN	MARC LOSIER	3/17/2017
CHECKED		
QA		
MFG		
APPROVED		

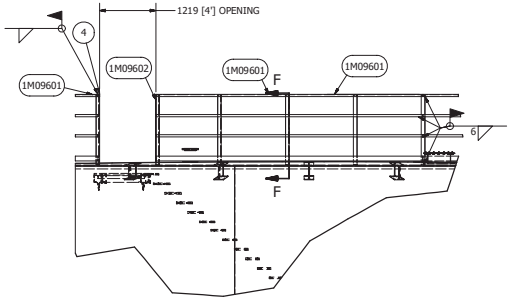
TITLE
AGNICO EAGLE -MELIADINE GOLD MINE -
TK #1 - 20,000CUM TANK 43M DIA X 14M H

SIZE	DWG NO	REV
A1	295-M9	6

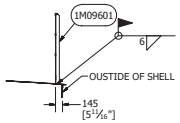
SCALE
SHEET 5 OF 7

PARTS LIST			
ITEM	ITEM QTY	DESCRIPTION	MASS
1M09601	23	PREFABRICATED ROOF TOP SECTION. SEE DETAIL	122.184 kg
1M09602	1	HANDRAIL POST = L75X75X6 [L3"X3"X1/4"] X 1479 [4'-10 1/4"]	23.905 lbmass
4	1	L50X50X6 [L2"X2"X1/4"] 38 [1 1/2"] LG	0.402 lbmass
6	1		1889.380 kg



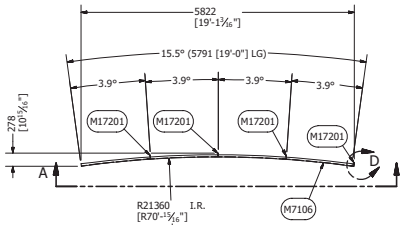


PART SECTION E-E
SCALE 1/50

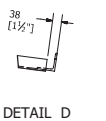


SECTION F-F
SCALE 1/50

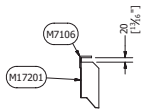
PARTS LIST FOR ONE SECTION 23 REQUIRED						
ITEM	ITEM QTY	CUT (MM)	DESCRIPTION	PRE-FAB DRG #	MATERIAL	MASS
M17201	4	1479	L76X76X6 [3"X3"X1/4"]	M17	G40X21M 350W	23.905 lbmass
M7106	1	5791	L50X50X6[L2"X2"X6] ROOF HANDRAIL ROLLED ANGLE	M7	G40.21M 350W	27.482 kg
3	2	5791	FB50X6 [FB2"X1/4"]		G40.21M 300W	14.649 kg
4	1	5791	FB100X5 [4"X3/16"]		G40.21M 300W	22.033 kg



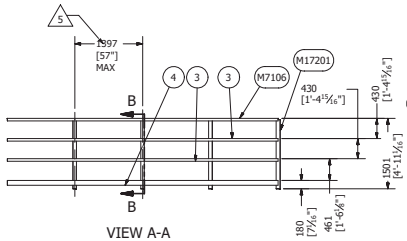
VIEW A-A
SCALE 1/50

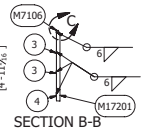


DETAIL D
SCALE 1/10



DETAIL C
SCALE 1/10





SECTION B-B
SCALE 1/50

Pc 1M09601
PREFABRICATED ROOF TOP HANDRAIL SECTION
QTY: 23
SCALE 1/50

FINISH:
SSPC SURFACE PREPERATION FOR PAINTING: SP6 COMMERCIAL SANDBLASTING
ONE COAT OF POLYVAL 390

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/25

23-Jul-2017
Permit Number: P471

REVISION HISTORY			
ZONE	REV	DESCRIPTION	DATE
	4	THIS SHEET ADDED	4/25/2017
6F, 3F	5	NOTE ADDED AT ROOF ENTRY, MAX DIST. BTW POST ADDED	5/2/2017

DRAWN	MARC LOSIER	3/17/2017
CHECKED		
QA		
MFG		
APPROVED		

ROOF HANDRAIL DETAIL

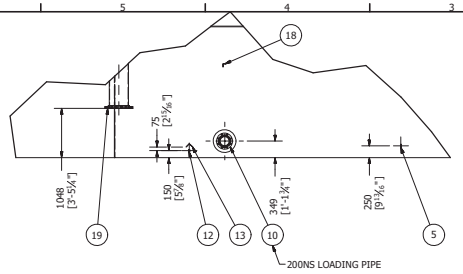
TITLE
AGNICO EAGLE -MELIADINE GOLD MINE -
TK #1 - 20,000CUM TANK 43M DIA X 14M H

SIZE	DWG NO	REV
A1	295-M9	6

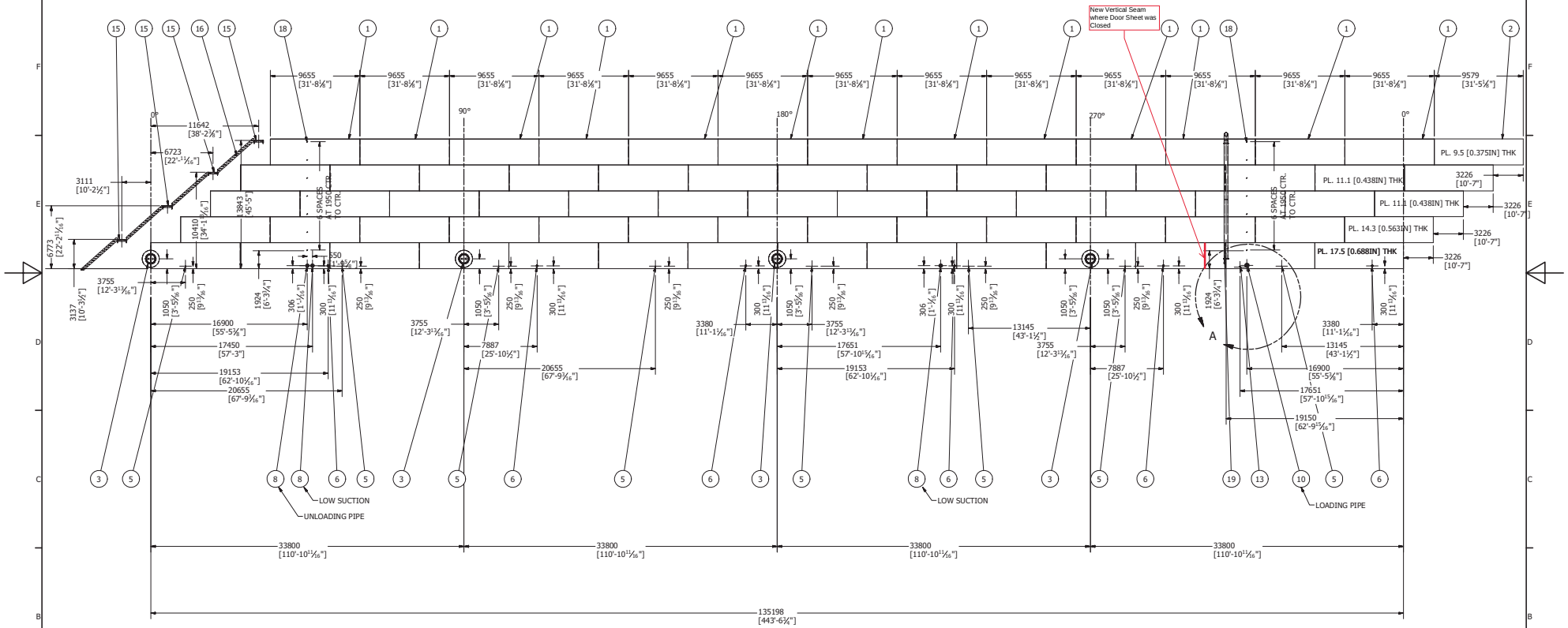
SCALE

SHEET 6 OF 7

PARTS LIST		
ITEM	ITEM QTY	PART NUMBER
1	65	SHELL PLATE 2798 X 9655
2	5	LAST SHELL PLATE PER COURSE 2798 X 9579 (TRIMMED AT SITE)
3	4	900NS SHELL MANHOLE
5	8	GROUNDING LUG
6	6	75NS WATER DRAWOFF VALVE
8	3	150NS SHELL NOZZLE
10	1	200NS SHELL NOZZLE
12	1	20NS TEMPERATURE SENSOR CONNECTION
13	1	AISC - L 4 x 4 x 1/4 - 15.748031 TEMPERATURE SENSOR PROTECTION
15	4	PLATFORM
16	68	STEPS
18	14	AISC - L 3 x 3 x 1/4 - 15.748031 PRV PIPE SUPPORTS
19	1	400NS VENT



DETAIL A
SCALE 1/50



SHELL DEVELOP VIEW
SCALE 1/200

NOTES:
ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
ALL DIMENTIONS ARE TAKEN FROM THE OUTER SIDE OF THE SHELL

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/25

17-Jul-2017
Permit Number: P471

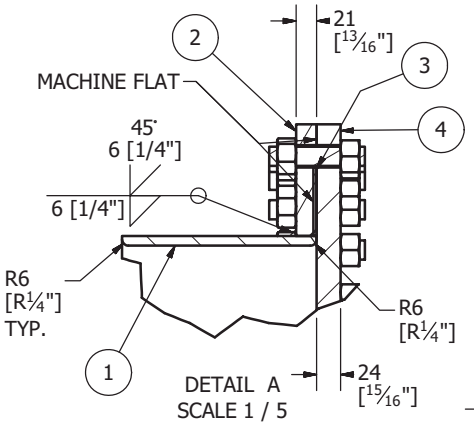
REVISION HISTORY		
REV	DESCRIPTION	DATE
6	THIS SHEET ADDED	7/15/2017

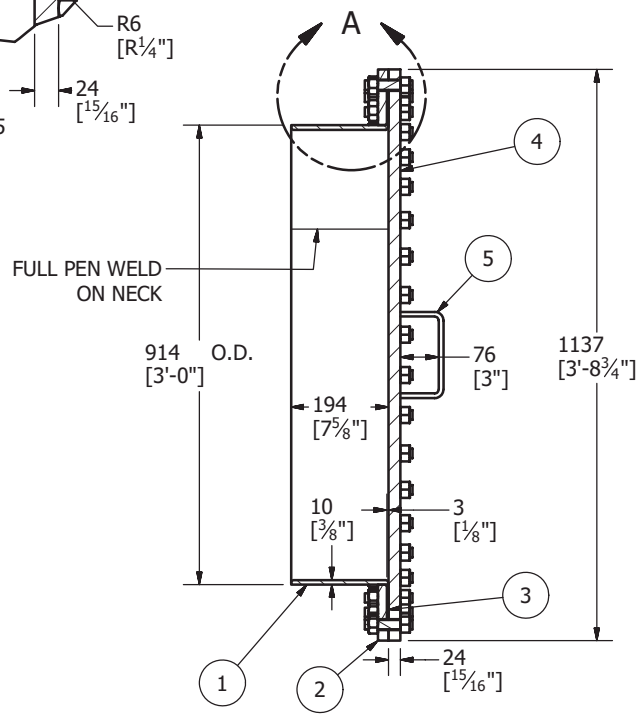
DRAWN MARC LOSIER 3/17/2017
CHECKED
QA
MFG
APPROVED

TITLE
AGNICO EAGLE -MELIADINE GOLD MINE -
TK #1 - 20,000CUM TANK 43M DIA X 14M H

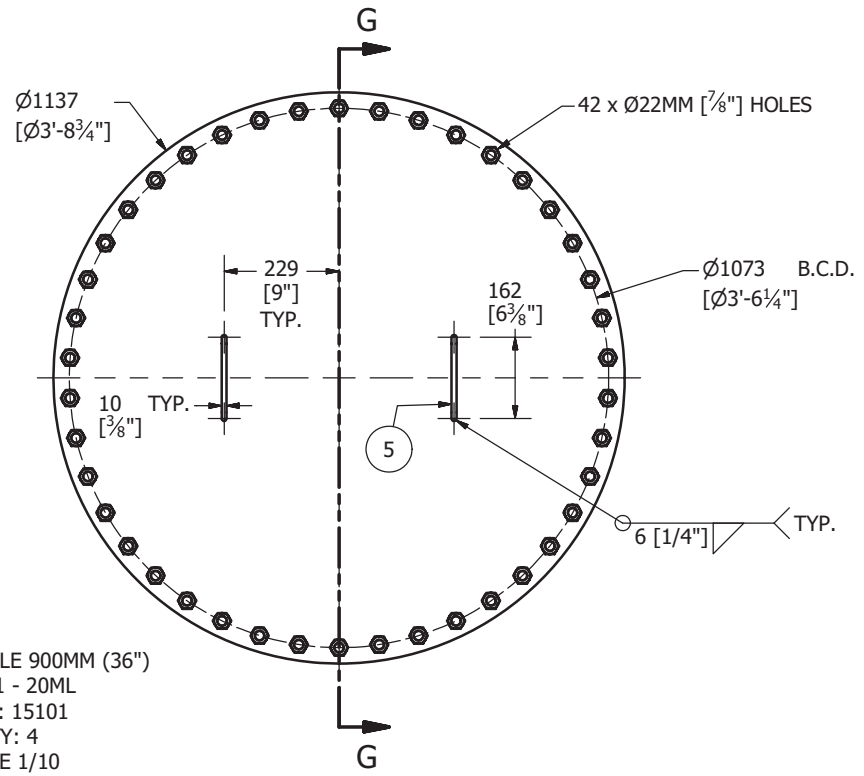
SIZE A1 | DWG NO 295-M9 | REV 6
SCALE
SHEET 7 OF 7

PARTS LIST					
ITEM	ITEM QTY	PART NUMBER	DESCRIPTION	MATERIAL	MASS
1	1	T1-2-4 SHELL NECK	10 [3/8"] THK X 194 [7 5/8"] WD. X 2842 [9'-3 7/8"] LONG	G40.21M - 350WT CAT. 4	40.783 kg
2	1	T1-2-4 SHELL BOLTING FLANGE	22 [7/8"] THK X 1137 [3'-8 3/4"] O.D. X 914 [3'-0"] I.D.	G40.21M - 350WT CAT. 4	54.904 kg
3	1	T1-2-4 SHELL GASKET	3 [1/8"] THK X 1051 [3'-5 3/8"] O.D. X 914 [3'-0"] I.D.	DURLON 8500	0.622 kg
4	1	T1-2-4 SHELL COVER PLATE	25 [1"] THK X 1137 [3'-8 3/4"] O.D.	G40.21M - 350WT CAT. 4	186.633 kg
5	2	T1-2-4 SHELL HANDLE ROD	10 [3/8"] THK X 314 [12 3/8"] LONG	MILD STEEL	0.175 kg
6	42	STUDS	STUD, 3/4" X 95 [3 3/4"] LG. NC	A320 L7	0.213 kg
7	84	NUTS	NUT, HEX HEAVY, 3/4" NC	A194A GR4	0.096 kg





SECTION G-G
SCALE 1/10



SHELL MANHOLE 900MM (36")
TANK 1 - 20ML
MARK: 15101
QTY: 4
SCALE 1/10

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/25

Permit Number: P471

ALTERNATE MATERIAL: ALL 350WT STEEL MAY BE SUBSTITUTED WITH 260WT IF EASIER TO SOURCE

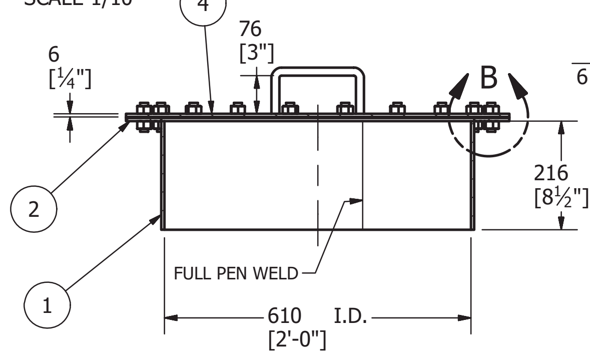
DRAWN Jacob Saunders	3/22/2017	T1 (20ML) SHELL MANHOLE
CHECKED Marc Losier	3/27/2017	TITLE: MELIADINE FIELD ERECTED TANK - MANHOLES
QA		
MFG		
APPROVED		

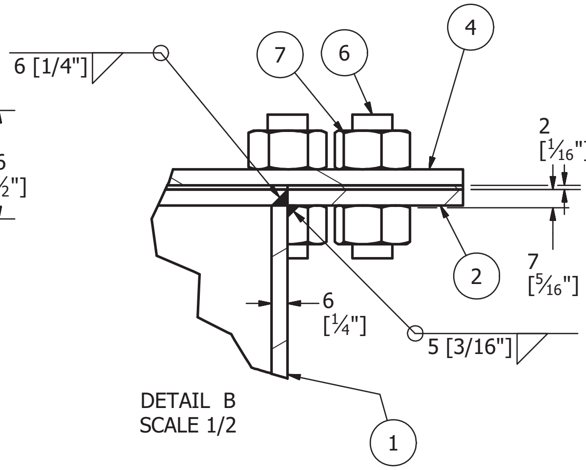
SIZE	DWG NO	REV
A3	295-M15	3

SCALE | SHEET 1 OF 12

PARTS LIST BILLING FOR ONE MANHOLE 4 REQUIRED					
ITEM	ITEM QTY	PART NUMBER	DESCRIPTION	MATERIAL	MASS
1	1	ROOF NECK	6 [1/4'"] THK X 216 [8 1/2"] WD X 1935 [6' - 4 3/16"] LG	G40.21M 300W	20.825 kg
2	1	ROOF BOLTING FLANGE	6 [1/4"] THK X 762 [2'-6"] O.D. X 622 [2'-1/2"] I.D.	G40.21M 300W	7.287 kg
4	1	ROOF COVER PLATE	6 [1/4"] THK X 762 [2'-6"] DIA	G40.21M 300W	22.448 kg
5	2	ROOF HANDLE ROD	16 [5/8"] DIA X 314 [12 3/8"] LG.	Steel, MILD	0.506 kg
6	20	STUDS	STUD, 5/8" X 57 [2 1/4"] LG. NC	A320 L7	0.089 kg
7	40	NUTS	NUT, HEX HEAVY, 5/8"	A194A GR4	0.059 kg
8	1	295-P1 Gasket 24in (600mm)		Rubber	0.216 kg

SECTION H-H
SCALE 1/10



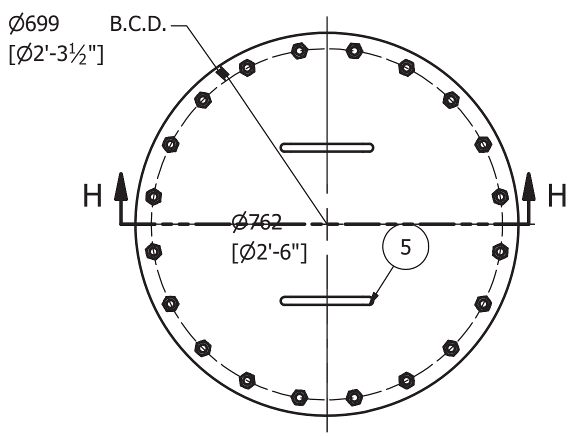


DETAIL B
SCALE 1/2

3

AS-BUILT

BY Inukshuk Construction Ltd. DATE 2018/07/25



ROOF MANHOLE 600MM (24")
TANK 1 - 20ML
MARK: 15102
QTY: 4
SCALE 1/10

ALTERNATE MATERIAL: ALL 350WT STEEL MAY BE SUBSTITUTED WITH 260WT IF EASIER TO SOURCE

REVISION HISTORY			
ZONE	REV	DESCRIPTION	DATE
	2	EMERGENCY VENT/MANHOLE DETAIL ADDED	4/13/2017
	3	EMERGENCY VENT/MANHOLE DETAIL ADDED	7/9/2017

PROFESSIONAL ENGINEER
G. BROWN
LICENSEE
NT/NU
23-Jul-2017

Permit Number: P471

DRAWN Jacob Saunders	3/22/2017	T1 (20ML) ROOF MANHOLE
CHECKED Marc Losier	3/27/2017	TITLE
QA		MELIADINE FIELD ERECTED TANK - MANHOLES
MFG		
APPROVED		SIZE A3 — DWG NO 295-M15 — REV 3
		SCALE — SHEET 2 OF 12

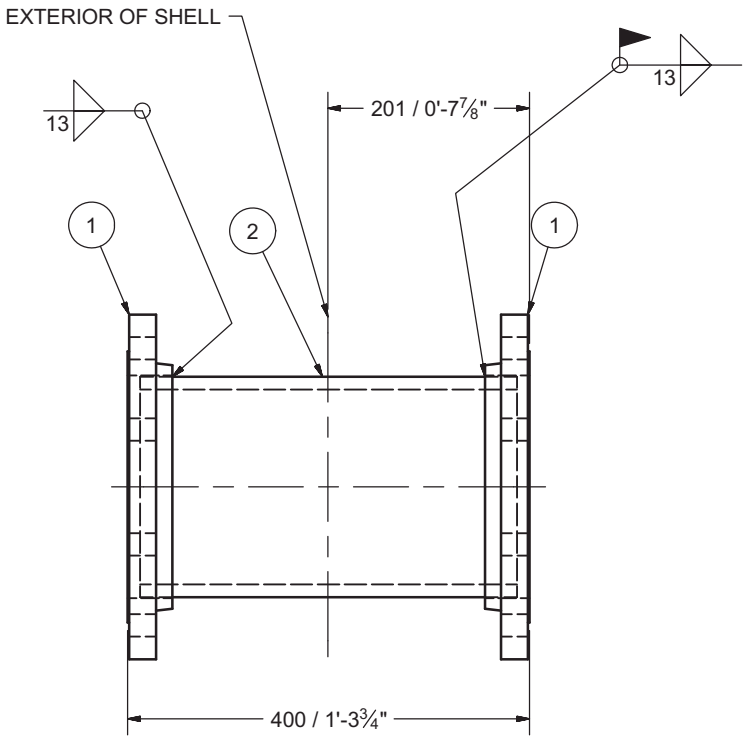
Parts List				
ITEM	ITEM QTY	CUT (MM)	PART NUMBER	MATERIAL
1	2		ASME B16.5 Flange Slip-On Welding - Class 150 8	A350 LF2
2	1	375	Pipe 8 - Schedule 80 - 14.76378	A333 GR. 6

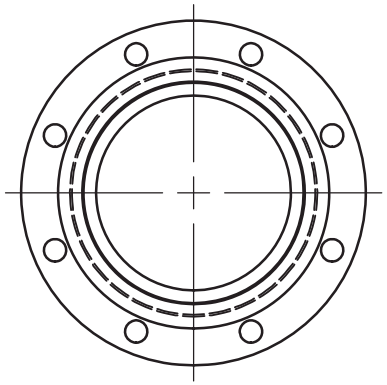
Ø200 NS DOUBLE FLANGE SHELL LOADING
MARK: M1601
QTY: 2

WEIGHT/SPOOL: 48.2KG

M1601 QTY	
Tank No.	QTY
1	1
2	1
3	0
4	0
5	0
6	0
TOTAL	2

NOTES:
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
2. FINISH: SANDBLAST TO SSP-6





AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/25

PROFESSIONAL ENGINEERS
G.G. BROWN
LICENSEE
NT/NU
16-Jul-2017
Permit Number: P471

REVISION HISTORY		
REV	DESCRIPTION	DATE
3	ALL SHEETS REVISED AS PER ENGINEER COMMENTS	5/1/2017

DRAWN Jacob Saunders	4/13/2017	AEM Meliadine Fuel Storage Tanks
CHECKED		
QA		TITLE: M1601 - 200NS DOUBLE FLG. SHELL
MFG		
APPROVED		SIZE A3 / DWG NO 295-M16 / REV 3
		SCALE / SHEET 1 OF 22

Parts List				
ITEM	ITEM QTY	CUT (MM)	PART NUMBER	MATERIAL
1	2		ASME B16.5 Flange Slip-On Welding - Class 150 6	A350 LF2
2	1	375	Pipe 6 - Schedule 80 - 14.76378	A333 GR. 6

Ø150 NS DOUBLE FLANGE SHELL LOADING/UNLOADING

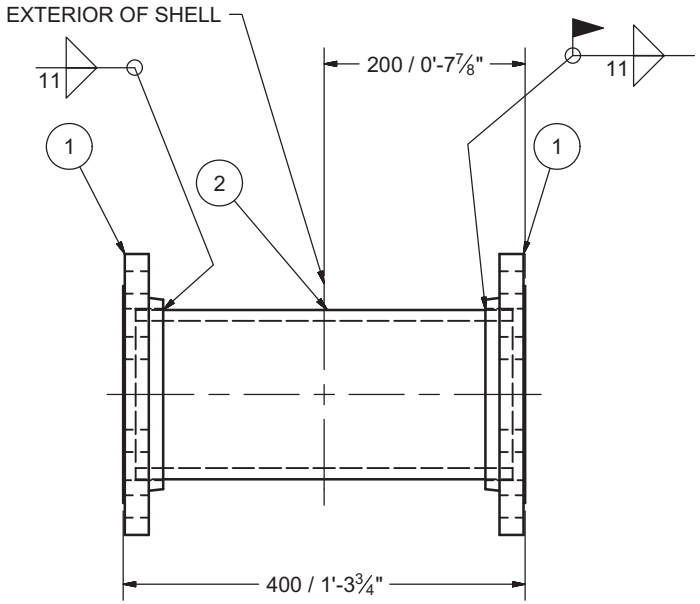
MARK: M1602

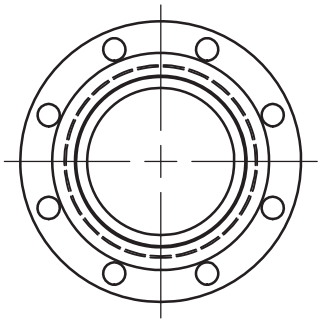
QTY: 26

WEIGHT/SPOOL: 30.8KG

M1602 QTY	
Tank No.	QTY
1	3
2	3
3	5
4	5
5	5
6	5
TOTAL	26

NOTES:
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
2. FINISH: SANDBLAST TO SSP-6





AS-BUILT

BY Inukshuk Construction Ltd. DATE 2018/07/25

ASSOCIATION OF PROFESSIONAL ENGINEERS, GEOLOGISTS AND GEOPHYSICISTS OF THE NWT AND NUNAVUT
J.C. BROWN
LICENSEE
NT/NU
16-Jul-2017

Permit Number: P471

DRAWN Jacob Saunders	4/13/2017	AEM Meliadine Fuel Storage Tanks	
CHECKED			
QA		TITLE M1602 - 150NS DOUBLE FLG. SHELL	
MFG			
APPROVED		SIZE A3 / DWG NO 295-M16 / REV 3	
		SCALE	SHEET 2 OF 22

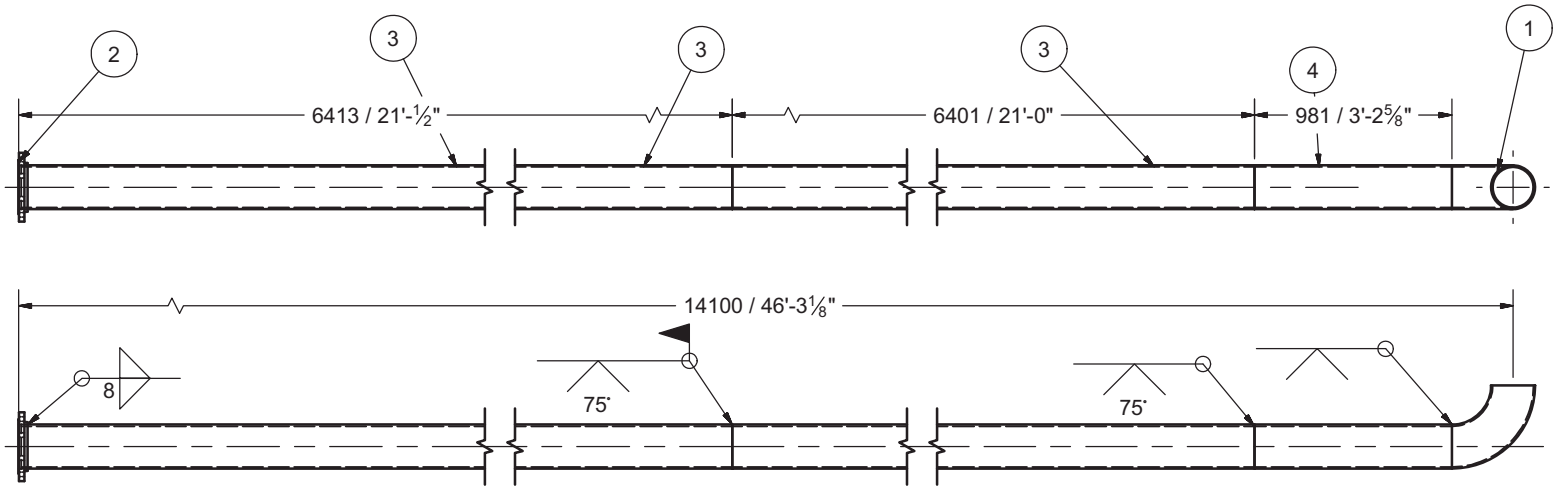
Parts List				
ITEM	ITEM QTY	CUT (MM)	PART NUMBER	MATERIAL
1	1		ASME B16.9 Long Radius 90 Deg Elbow (Inch) 8 x 0.322 SCH40	A420 WPL6
2	1		ASME B16.5 Flange Slip-On Welding - Class 150 8	A350 LF2
3	2	6401	Pipe 8 - Schedule 40 - 542.64	A333 GR. 6
4	1	981	ASTM A 53/A 53M Pipe 8 - Schedule 40 - 38.64	Steel

Ø200 NS FIXED PIPE LOADING
TANK 1 (20ML)
MARK: M1603
QTY: 1

WEIGHT/SPOOL: 619KG

M1603 QTY	
Tank No.	QTY
1	1
2	0
3	0
4	0
5	0
6	0
TOTAL	1

NOTES:
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
2. FINISH: BARE



REVISION HISTORY		
REV	DESCRIPTION	DATE
2	NOTE 2 CHANGED, PIPE BROKEN IN SECTIONS	5/11/2017

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/25

16-Jul-2017
Permit Number: P471

DRAWN Jacob Saunders	4/13/2017	AEM Meliadine Fuel Storage Tanks
CHECKED		
QA		
MFG		TITLE: M1603 - 200 NS FIXED PIPE LOADING
APPROVED		
		SIZE A3 / DWG NO 295-M16 / REV 3
		SCALE / SHEET 3 OF 22

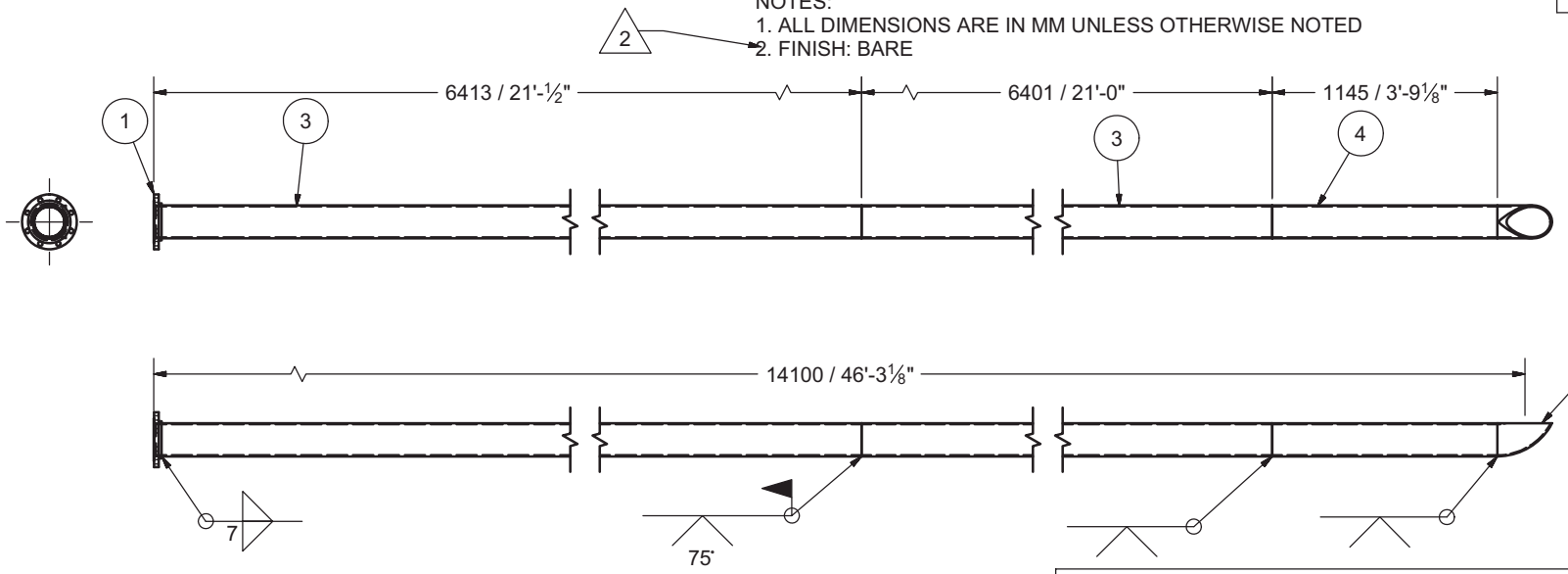
Parts List				
ITEM	ITEM QTY	CUT (MM)	PART NUMBER	MATERIAL
1	1		ASME B16.5 Flange Slip-On Welding - Class 150 6	A350 LF2
2	1		ASME B16.9 Long Radius 90 Deg Elbow (Inch) 6 x 0.28 SCH40	A420 WPL6
3	2	6401	Pipe 6 - Schedule 40 - 549.09512	A333 GR. 6
4	1	1145	Pipe 6 - Schedule 40 - 45.095118	A333 GR. 6

Ø150 NS FIXED PIPE UNLOADING
TANK 1 (20ML)
MARK: M1608
QTY: 1

WEIGHT/SPOOL: 407KG

M1608 QTY	
Tank No.	QTY
1	1
2	0
3	0
4	0
5	0
6	0
TOTAL	1

NOTES:
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
2. FINISH: BARE



REVISION HISTORY		
REV	DESCRIPTION	DATE
2	NOTE 2 CHANGED, PIPE BROKEN IN SECTIONS	5/11/2017

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/25

REGISTERED PROFESSIONAL ENGINEER J.D. BROWN LICENSEE NT/NU
16-Jul-2017
Permit Number: P471

DRAWN Jacob Saunders	4/13/2017	AEM Meliadine Fuel Storage Tanks
CHECKED		
QA		TITLE M1608 - 150NS FIXED PIPE UNLOADING
MFG		
APPROVED		SIZE A3 / DWG NO 295-M16 / REV 3
		SCALE / SHEET 8 OF 22

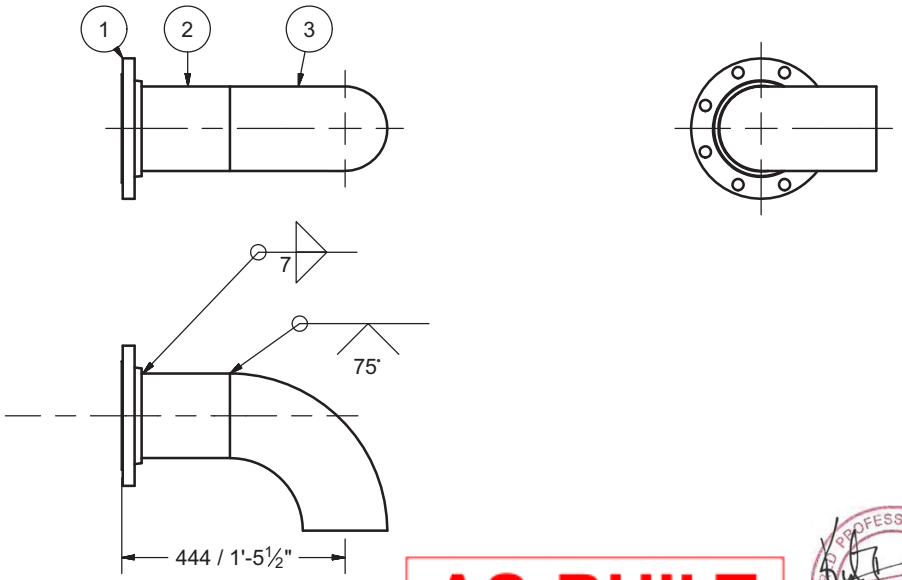
Parts List				
ITEM	ITEM QTY	CUT (MM)	PART NUMBER	MATERIAL
1	1		ASME B16.5 Flange Slip-On Welding - Class 150 6	A350 LF2
2	1	203	Pipe 6 - Schedule 40 - 8	A333 GR. 6
3	1		ASME B16.9 Long Radius 90 Deg Elbow - 6 SCH40	A420 WPL6

Ø150 NS PIPING LOW LEVEL
MARK: M1613
QTY: 16

WEIGHT/SPOOL: 23.3KG

M1613 QTY	
Tank No.	QTY
1	2
2	2
3	3
4	3
5	3
6	3
TOTAL	16

NOTES:
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
2. FINISH: BARE



AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/25

PROFESSIONAL ENGINEERS
J.S. BROWN
LICENSEE
NT/NU
16-Jul-2017
Permit Number: P471

REVISION HISTORY		
REV	DESCRIPTION	DATE
2	NOTE 2 CHANGED	5/11/2017

DRAWN Jacob Saunders	4/13/2017	AEM Meliadine Fuel Storage Tanks
CHECKED		
QA		
MFG		TITLE: M1613 - 150NS PIPING LOW LEVEL
APPROVED		
SIZE A3	DWG NO 295-M16	REV 3
SCALE		SHEET 13 OF 22

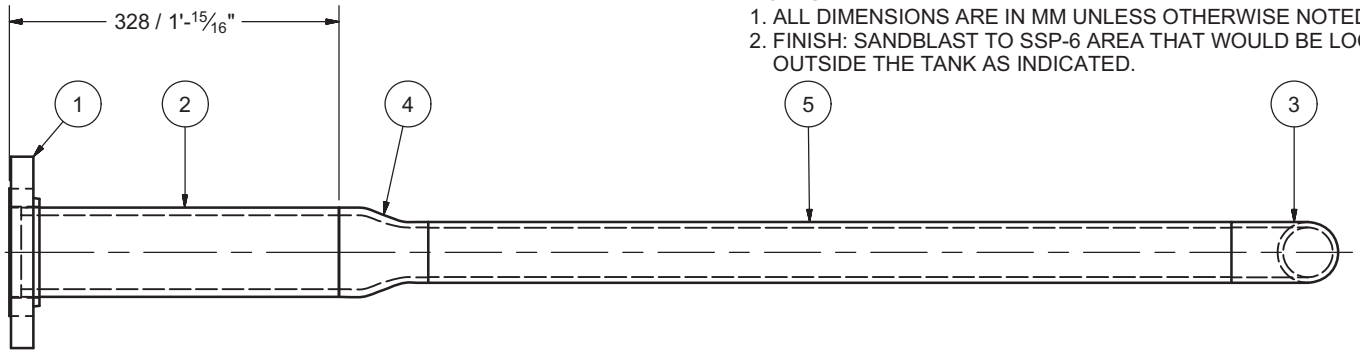
Ø75 NS WATER DRAW OFF
MARK: M1614
QTY: 32

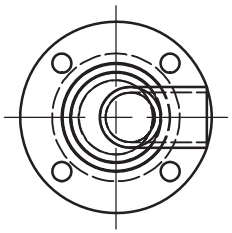
WEIGHT/SPOOL: 16.6KG

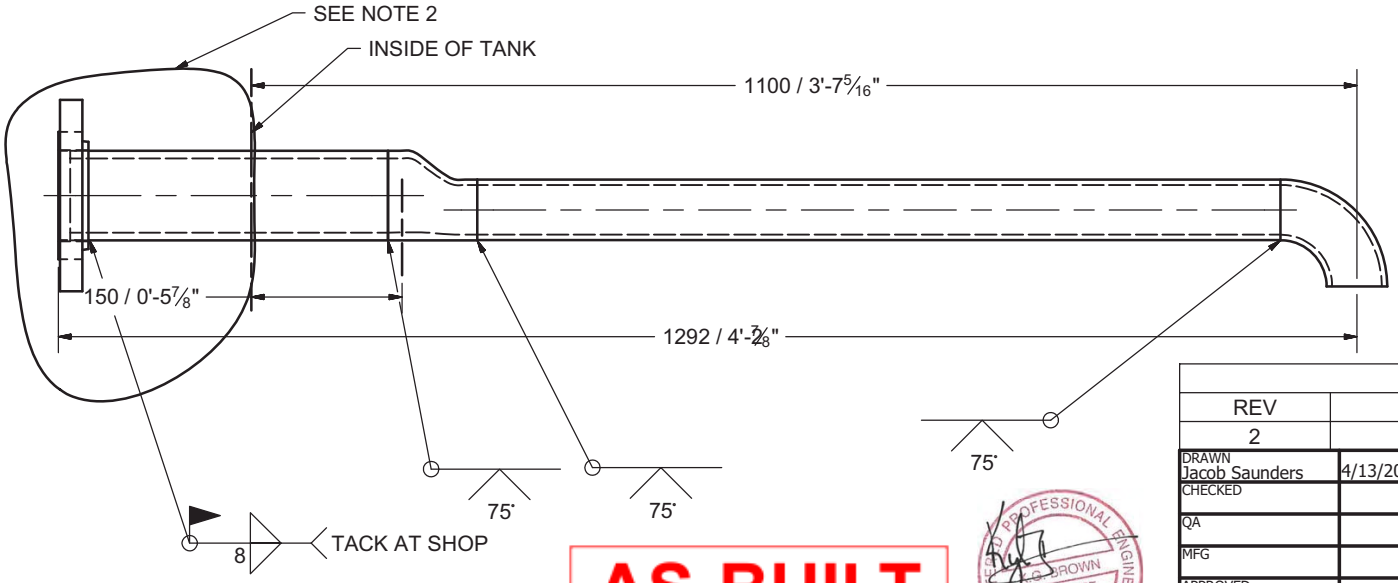
Parts List				
ITEM	ITEM QTY	CUT (MM)	PART NUMBER	MATERIAL
1	1		ASME B16.5 Flange Slip-On Welding - Class 150 3	A350 LF2
2	1	316	Pipe 3 - Schedule 80 - 12.440945	A333 GR. 6
3	1		ASME B16.9 Long Radius 90 Deg Elbow (Inch) 2 x 0.218 SCH80	A420
4	1		ASME B16.9 Eccentric Reducer 3 x 2 - Schedule 80	A420
5	1	799	Pipe 2 - Schedule 80 - 31.456693	A333 GR. 6

NOTES:
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
2. FINISH: SANDBLAST TO SSP-6 AREA THAT WOULD BE LOCATED OUTSIDE THE TANK AS INDICATED.

M1614 QTY	
Tank No.	QTY
1	6
2	6
3	6
4	6
5	4
6	4
TOTAL	32







AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/25

16-Jul-2017
Permit Number: P471

REVISION HISTORY		
REV	DESCRIPTION	DATE
2	NOTE 2 CHANGED	5/11/2017

DRAWN Jacob Saunders	4/13/2017	AEM Meliadine Fuel Storage Tanks
CHECKED		
QA		TITLE M1614 - 75NS WATER DRAW OFF
MFG		
APPROVED		SIZE A3 / DWG NO 295-M16 / REV 3
		SCALE / SHEET 14 OF 22

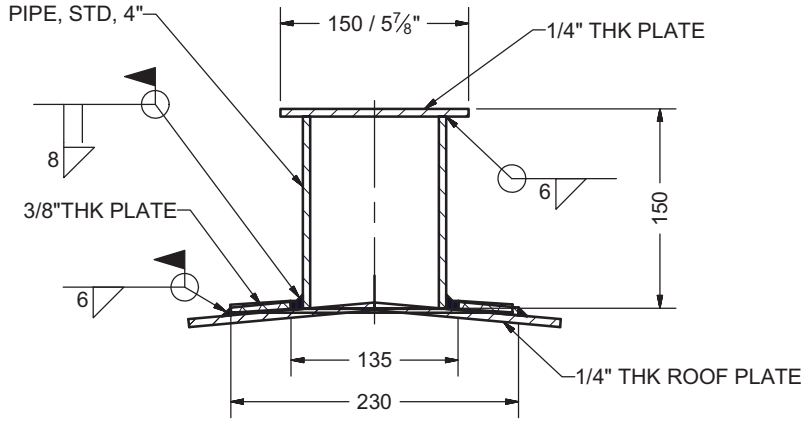
Parts List					
ITEM	ITEM QTY	CUT (MM)	PART NUMBER	DESCRIPTION	MATERIAL
1	1		Plate, 1/4" Thick x 152 Dia	Steel, Mild	G40.21M 300W
2	1	152	PIPE SCH40 ANSI - 4 x .237 - 6	Pipe	A53
3	1		Painters Post Reinforcing Plate	Plate, Mild Steel, 3/8" thk x 133 I.D. x 229 O.D.	G40.21M 300W

Ø100 NS PAINTERS SCAFFOLD CABLE SUPPORT
MARK: M1615
QTY: 6

WEIGHT/SPOOL: 3.4KG

M1615 QTY	
Tank No.	QTY
1	1
2	1
3	1
4	1
5	1
6	1
TOTAL	6

NOTES:
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
2. FINISH: SANDBLAST TO SSP-6



AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/25

PROFESSIONAL ENGINEER
BROWN
LICENSEE
NT/NU
16-Jul-2017
Permit Number: P471

MOSHER ENGINEERING LIMITED
-GRAVEL CRUSHING
-EARTHWORK
-PROCESS PIPE WELDING
-INDUSTRIAL CONTRACTING

1358 QUEEN ST
HALIFAX, NS
B3J 2H5
PH: (902) 429-0272
FAX: (902) 429-7762

DRAWN	Jacob Saunders	4/13/2017
CHECKED		
QA		
MFG		
APPROVED		

AEM Meliadine Fuel Storage Tanks

TITLE
M1615 - PAINTERS SCAFFOLD CABLE SUPPORT

SIZE	DWG NO	REV
A3	295-M16	3

SCALE

SHEET 15 OF 22

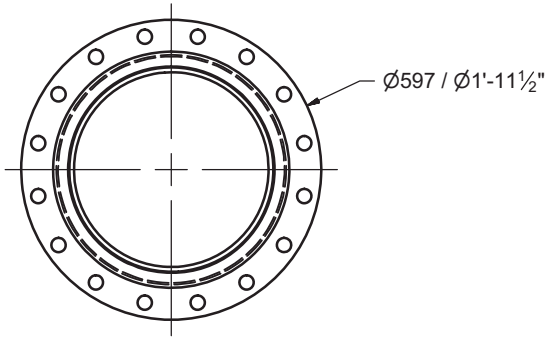
Parts List				
ITEM	ITEM QTY	CUT (MM)	PART NUMBER	MATERIAL
1	1		ASME B16.5 Flange Slip-On Welding - Class 150 16	A350 LF2
2	1	330	Pipe 16 - Schedule 30, 3/8" wall - 13"LG	A106

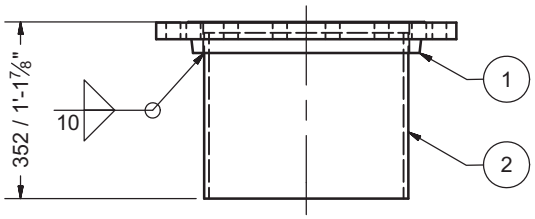
Ø400 NS ROOF NOZZLE
MARK: M1616
QTY: 6

WEIGHT/SPOOL: 83.5KG

M1616 QTY	
Tank No.	QTY
1	1
2	1
3	1
4	1
5	1
6	1
TOTAL	6

NOTES:
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
2. FINISH: SANDBLAST TO SSP-6





AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/25

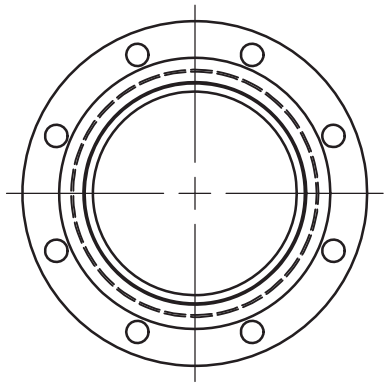
16-Jul-2017
Permit Number: P471

DRAWN Jacob Saunders	4/13/2017	AEM Meliadine Fuel Storage Tanks
CHECKED		
QA		TITLE M1616 - Ø400 NS ROOF NOZZLE
MFG		
APPROVED		SIZE A3 / DWG NO 295-M16 / REV 3
		SCALE / SHEET 16 OF 22

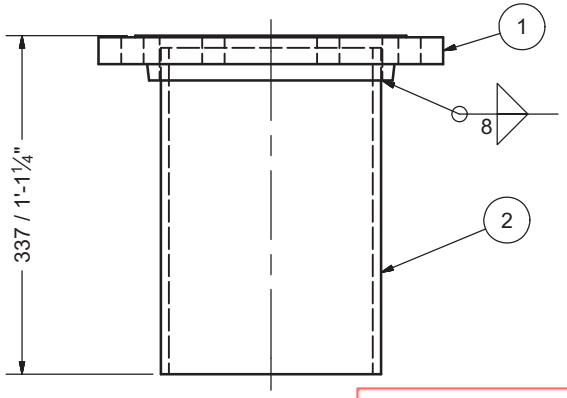
Parts List				
ITEM	ITEM QTY	CUT (MM)	PART NUMBER	MATERIAL
1	1		ASME B16.5 Flange Slip-On Welding - Class 150 8	A350 LF2
2	1	325	Pipe 8 - Schedule 40 - 12.795276	A333 GR. 6

Ø200 NS ROOF NOZZLE FOR OVERFILL PROT.
MARK: M1618
QTY: 6

WEIGHT/SPOOL: 25.8KG



NOTES:
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
2. FINISH: SANDBLAST TO SSP-6



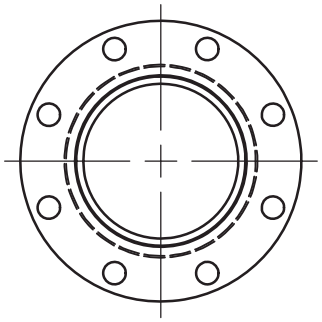
M1618 QTY	
Tank No.	QTY
1	1
2	1
3	1
4	1
5	1
6	1
TOTAL	6

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/25

PROFESSIONAL ENGINEERS G.G. BROWN LICENSEE NT/NU
16-Jul-2017
Permit Number: P471

DRAWN Jacob Saunders	4/13/2017	AEM Meliadine Fuel Storage Tanks
CHECKED		
QA		TITLE M1618 - 200NS ROOF NOZZLE FOR OVERFILL PROT.
MFG		
APPROVED		SIZE A3 / DWG NO 295-M16 / REV 3
		SCALE / SHEET 18 OF 22

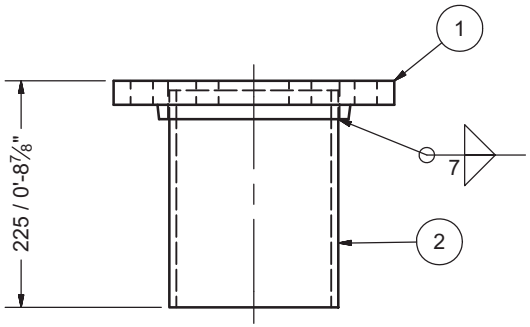
Parts List				
ITEM	ITEM QTY	CUT (MM)	PART NUMBER	MATERIAL
1	1		Flange 6in Flat Face, Slip On 150#, A105	A350 LF2
2	1	216	PIPE ANSI - 6 x .280" WALL SCH40	A333 GR. 6



Ø150 NS ROOF NOZZLE FOR GAUGE HATCH
MARK: M1619
QTY: 6

WEIGHT/SPOOL: 13.3KG

NOTES:
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
2. FINISH: SANDBLAST TO SSP-6



M1619 QTY	
Tank No.	QTY
1	1
2	1
3	1
4	1
5	1
6	1
TOTAL	6

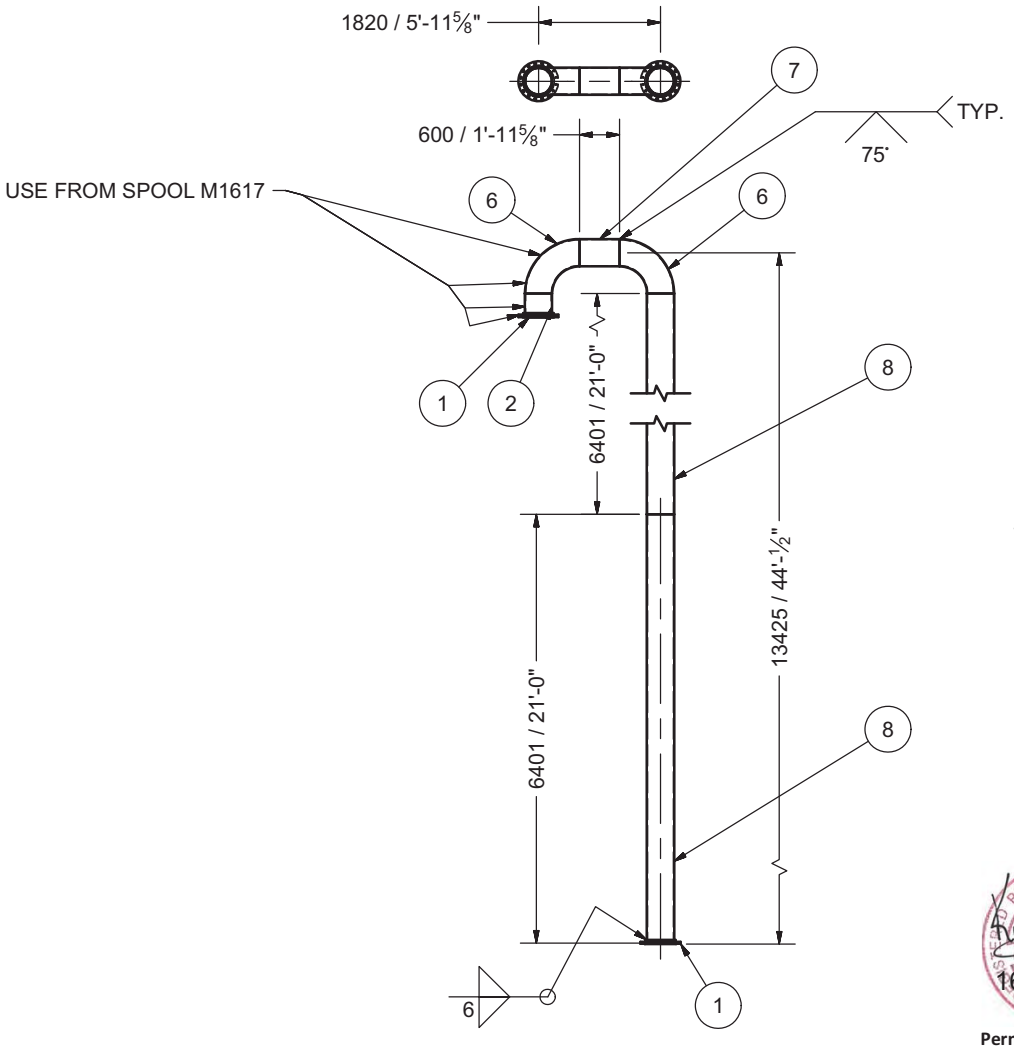
AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/25

Permit Number: P471

DRAWN Jacob Saunders	4/13/2017	AEM Meliadine Fuel Storage Tanks
CHECKED		
QA		TITLE M1619 - 150 NS ROOF NOZZLE FOR GAUGE HATCH
MFG		
APPROVED		SIZE A3 / DWG NO 295-M16 / REV 3
		SCALE / SHEET 19 OF 22

Parts List				
ITEM	ITEM QTY	CUT (MM)	PART NUMBER	MATERIAL
1	2		ASME B16.5 Flange Slip-On Welding - Class 150 16	A350 LF2
2	1	330	Pipe 16 - Schedule 10 - 13	A106
6	2		ASME B16.9 Long Radius 90 Deg Elbow (Metric) 16 x 9.5	A234
7	1	600	Pipe 16 - Schedule 10 - 23.622047	A106
8	2	6401	Pipe 16 - Schedule 10 - 252	A106

M1620 QTY	
Tank No.	QTY
1	1
2	1
3	0
4	0
5	0
6	0
TOTAL	2



Ø400 NS VENT (RETURN BEND) FOR TANK NO. 1 & 2 AS PER ECN NO. 1

MARK: M1620

QTY: 2

WEIGHT/SPOOL: 1134KG

AS-BUILT

BY Inukshuk Construction Ltd. DATE 2018/07/25

REVISION HISTORY		
REV	DESCRIPTION	DATE
3	THIS SHEET ADDED	7/7/2017

DRAWN Jacob Saunders	4/13/2017	AEM Meliadine Fuel Storage Tanks
CHECKED		
QA		TITLE M1620 - 400 NS VENT TANK NO. 1 & 2
MFG		
APPROVED		SIZE A3 / DWG NO 295-M16 / REV 3
		SCALE / SHEET 20 OF 22

Permit Number: P471

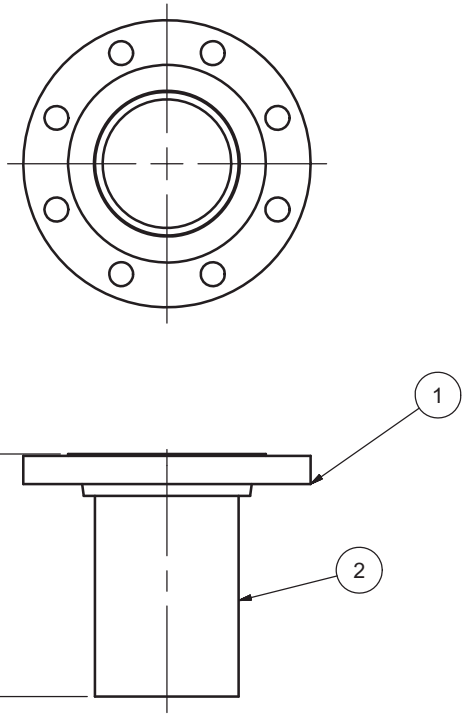
Parts List

ITEM	ITEM QTY	CUT (MM)	PART NUMBER	DESCRIPTION	STOCK NUMBER	MATERIAL
1	1		ASME B16.5 Flange Slip-On Welding - Class 150 4	FLANGE, R.F., SLIP ON, 150#, 100NS [4"]		A350 LF2
2	1	184	ASTM A 53/A 53M Pipe 4 - Schedule 40 - 7.2440945	PIPE, STD, 100NS [4"]	ASTM A 53/A 53M Pipe 4 - Schedule 40	A53

Ø100 NS ROOF NOZZLE
AS PER ECN NO. 1

MARK: M1621
QTY: 6

WEIGHT/SPOOL: 9 KG



M1621 QTY	
Tank No.	QTY
1	1
2	1
3	1
4	1
5	1
6	1
TOTAL	6

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/25

Permit Number: P471

REVISION HISTORY		
REV	DESCRIPTION	DATE
3	THIS SHEET ADDED AS PER ECN-001	7/7/2017

DRAWN Jacob Saunders	4/13/2017	AEM Meliadine Fuel Storage Tanks
CHECKED		
QA		
MFG		TITLE: M1621 - 100NS ROOF NOZZLE
APPROVED		

SIZE	DWG NO	REV
A3	295-M16	3

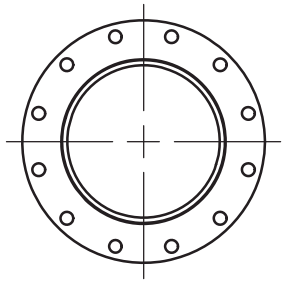
SCALE

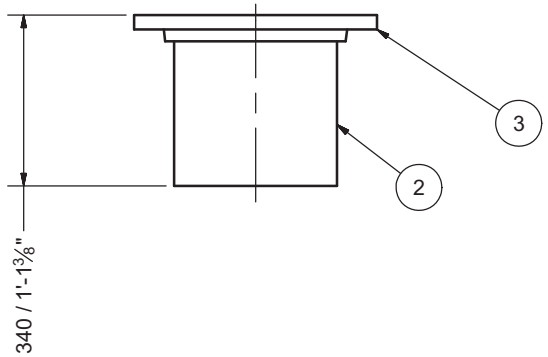
SHEET 21 OF 22

Parts List				
ITEM	ITEM QTY	CUT (MM)	PART NUMBER	MATERIAL
2	1	330	ASTM A 53/A 53M Pipe 12 - Schedule 40 - 12.992126	A53
3	1		ASME B16.5 Flange Slip-On Welding - Class 150 12 Flate Face	A106

Ø300 NS ROOF NOZZLE
FOR PRESSURE VACUUM VENT
AS PER ECN NO. 1

MARK: M1622
QTY: 3
WEIGHT/SPOOL: 51 KG





M1622 QTY	
Tank No.	QTY
1	2
2	1
3	0
4	0
5	0
6	0
TOTAL	3

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/25

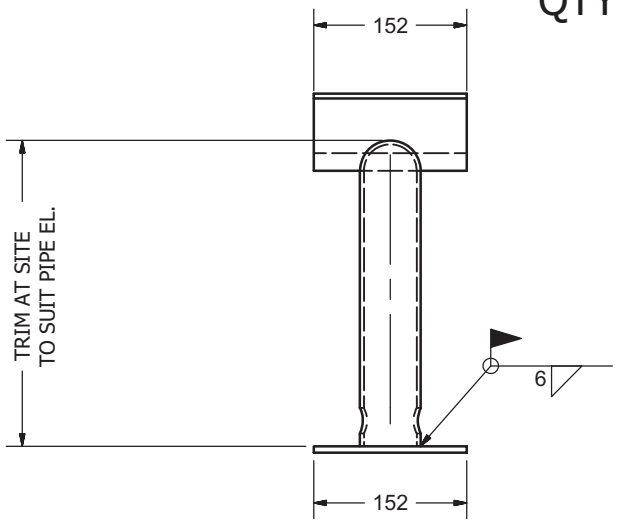
Permit Number: P471

REVISION HISTORY		
REV	DESCRIPTION	DATE
3	THIS SHEET ADDED AS PER ECN-001	7/7/2017

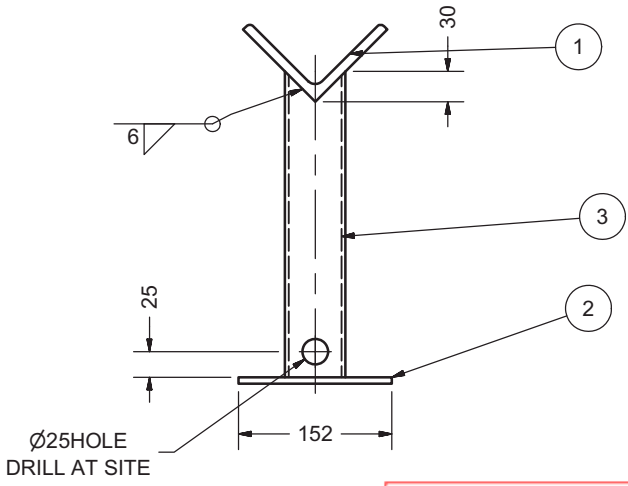
DRAWN Jacob Saunders	4/13/2017	AEM Meliadine Fuel Storage Tanks
CHECKED		
QA		TITLE: M1622 - 300NS ROOF NOZZLE
MFG		
APPROVED		SIZE A3 / DWG NO 295-M16 / REV 3
		SCALE / SHEET 22 OF 22

Parts List				
ITEM	ITEM QTY	CUT (MM)	DESCRIPTION	MATERIAL
1	1	152	L100X100X10 [4"X4"X3/8"]	G40.21M 350W
2	1	152	FB150X6 [6"X1/4"]	G40.21M 300W
3	1	305	50NS [2"] PIPE SCH. 40	A53 ERW

PIPE SUPPORT TYPE 1
MARK: M17101
QTY: 72



PIPE SUPPORT
SCALE 1/5



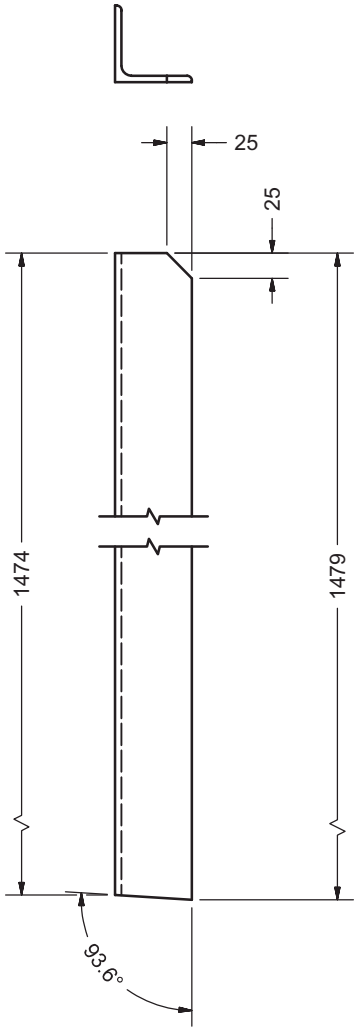
QTY PER TANK	
Tank No.	QTY
1	20
2	16
3	12
4	12
5	6
6	6
TOTAL	72

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/25

16-Jul-2017
Permit Number: P471

NOTE:
ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED

DRAWN Jacob Saunders	4/13/2017	PIPE SUPPORT	
CHECKED			
QA		TITLE MISC. SUPPORTS AND BRACKETS	
MFG			
APPROVED		SIZE A3	DWG NO 295-M17
			REV 2
		SCALE	SHEET 1 OF 5



QTY PER TANK	
Tank No.	QTY
1	93
2	77
3	41
4	53
5	21
6	21
TOTAL	306

ROOF HANDRAIL POST
MARK M17201
QTY: 310
L76x76X6 [L3"X3"X1/4"] G40.21M 350W
SCALE 1/5

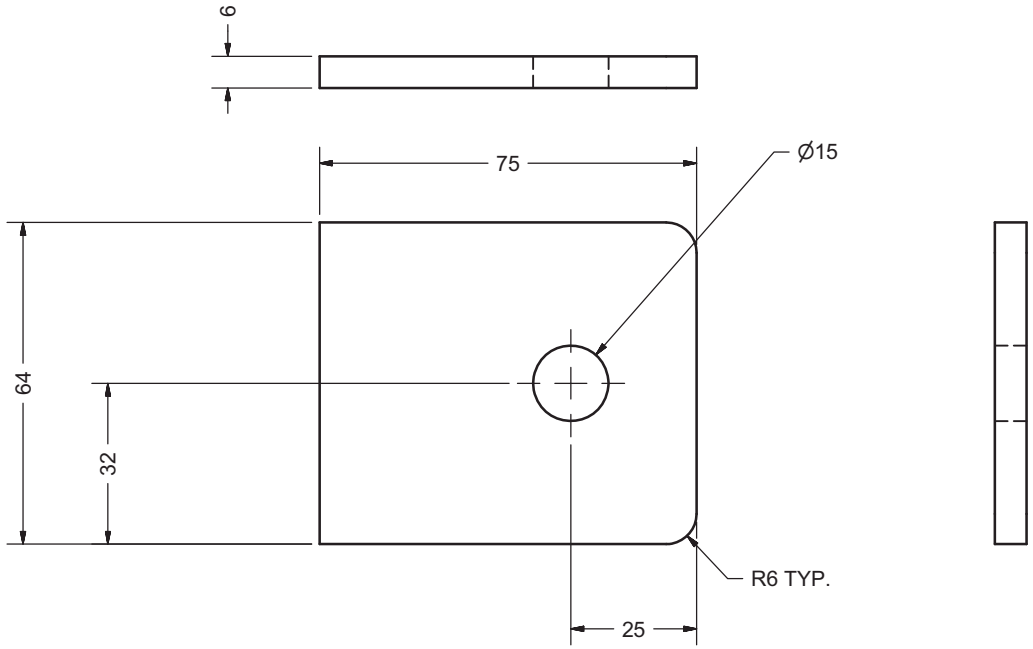
1

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/25

ASSOCIATION OF PROFESSIONAL ENGINEERS J.G. BROWN LICENSEE NT/NU
16-Jul-2017
Permit Number: P471

REVISION HISTORY		
REV	DESCRIPTION	DATE
1	ANGLE SIZE CHG TO 76X76X6 (3"X3"X1/4")	4/27/2017

DRAWN Jacob Saunders	4/13/2017	ROOF TOP HANDRAIL POST
CHECKED		
QA		TITLE
MFG		MISC. SUPPORTS AND BRACKETS
APPROVED		
SIZE A3	DWG NO 295-M17	REV 2
SCALE		SHEET 2 OF 5



QTY PER TANK	
Tank No.	QTY
1	8
2	8
3	6
4	6
5	4
6	4
TOTAL	36

GROUNDING LUG
MARK M17301
QTY: 36
FB 75X6 [3"X1/4"]
STAINLESS STEEL 316
SCALE 1 : 1

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/25

ASSOCIATION OF PROFESSIONAL ENGINEERS G.G. BROWN LICENSEE NT/NU
16-Jul-2017
Permit Number: P471

DRAWN Jacob Saunders	4/13/2017	GROUNDING LUG	
CHECKED		TITLE MISC. SUPPORTS AND BRACKETS	
QA			
MFG			
APPROVED		SIZE A3	DWG NO 295-M17
		SCALE	REV 2
			SHEET 3 OF 5

CUT LIST					UNIT QTY PER TANK					
MARK	QTY	CUT MM	DESCRIPTION	MATERIAL	TK #1	TK #2	TK #3	TK #4	TK #5	TK #6
M17401	6	400	L100X100X6 [L4"X4"X1/4"] TEMPERATOR SENSOR	G40.21M 350W	1	1	1	1	1	1
M17402	45	400	L75X75X6 [L3"X3"X1/4"] PIPING & ELECTRICAL BRACKET	G40.21M 350W	14	14	6	7	2	2

AS-BUILT

BY Inukshuk Construction Ltd. DATE 2018/07/25

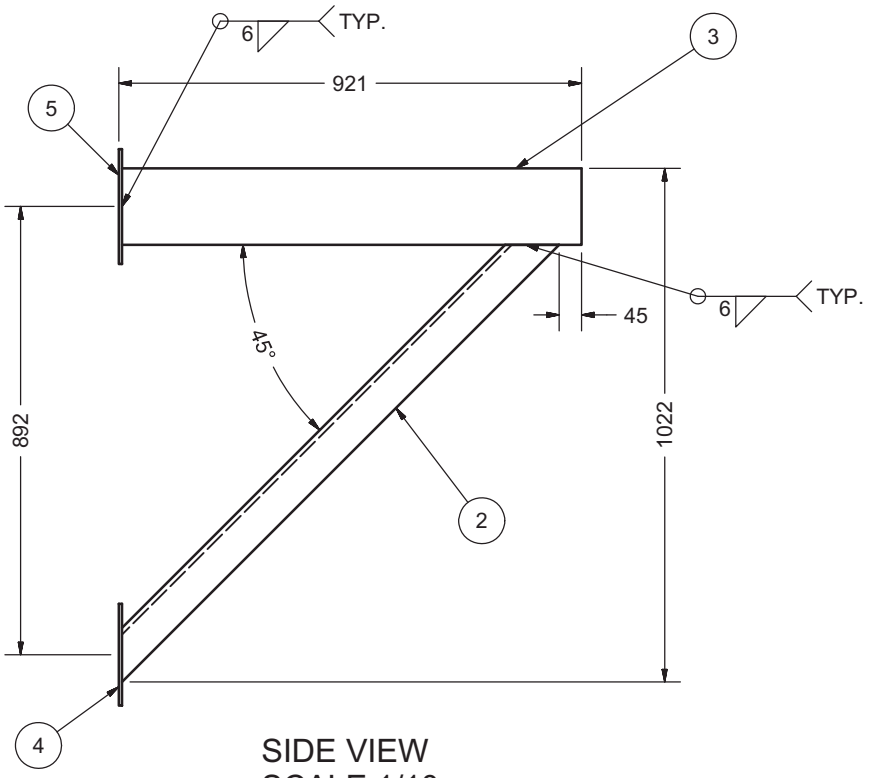
Permit Number: P471

DRAWN Jacob Saunders	4/13/2017	MISC BRACKETS	
CHECKED			
QA		TITLE MISC. SUPPORTS AND BRACKETS	
MFG			
APPROVED		SIZE A3	DWG NO 295-M17 REV 2
		SCALE	SHEET 4 OF 5

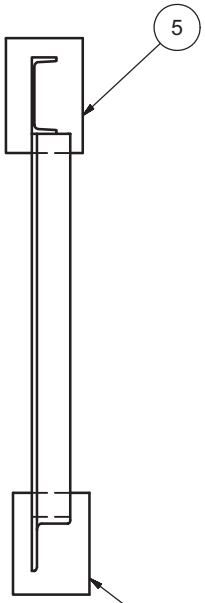
Parts List

ITEM	ITEM QTY	CUT (MM)	PART NUMBER	DESCRIPTION	STOCK NUMBER	MATERIAL
2	1	1230	AISC - L 3 x 3 x 3/8 - 48.426	Angle Steel	L 3 x 3 x 3/8	G40.21 350w
3	1	914	AISC - C 6 x 8.2 - 36	U-Shape	C 6 x 8.2	G40.21 350w
4	1	203	AISC - 6x1/4 - 8	Flat Bar Steel	6x1/4	G40.21 350w
5	1	229	AISC - 6x1/4 - 9	Flat Bar Steel	6x1/4	G40.21 350w

TOP VIEW
SCALE 1/10



SIDE VIEW
SCALE 1/10



END VIEW
SCALE 1/10

PIPE SUPPORT FOR 400NS
VENT SUPPORT FOR TANK NO. 1 & 2
MARK: M17501
QTY: 4
2 AS SHOWN
2 MIRROR

FINISH: SHOP SANDBLAST

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/25

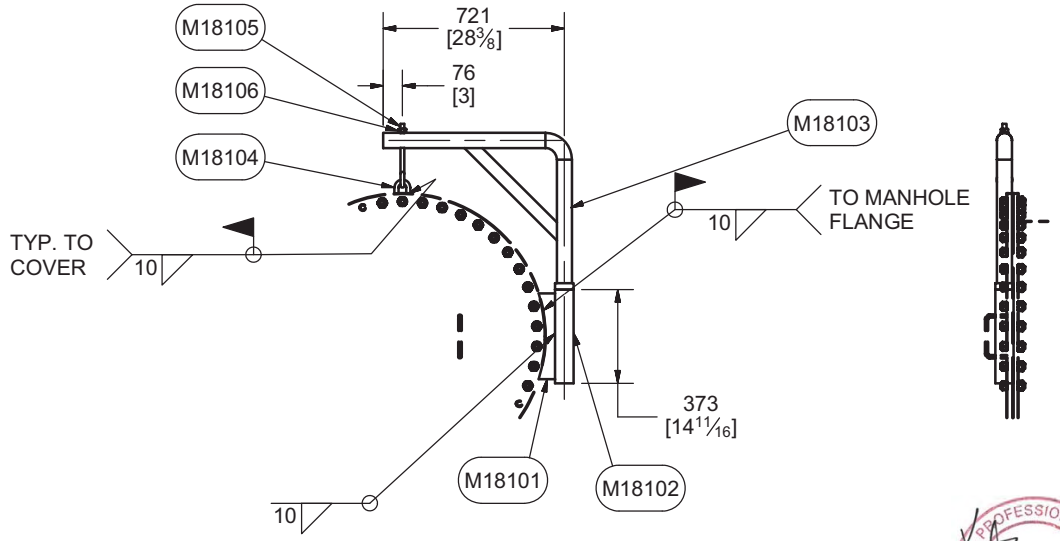
PROFESSIONAL ENGINEER
K. G. BROWN
LICENSEE
NT/NU
16-Jul-2017
Permit Number: P471

REVISION HISTORY		
REV	DESCRIPTION	DATE
2	THIS SHEET ADDED	7/7/2017

DRAWN Jacob Saunders	4/13/2017	
CHECKED		
QA		TITLE: MISC. SUPPORTS AND BRACKETS
MFG		
APPROVED		
		SIZE A3 / DWG NO 295-M17 / REV 2
		SCALE / SHEET 5 OF 5

PARTS LIST FOR ONE (1) ASSY, SIXTEEN (16) REQUIRED				
ITEM	ITEM QTY	CUT (MM)	DESCRIPTION	MATERIAL
M18101	1	341	5/8"THK X 66 WIDE PLATE, SEE DETAIL	G40.21M 300W
M18102	1	373	2 1/2" STD PIPE	A53
M18103	1		DAVIT ARM, SEE DETAIL	
M18104	1	198	16 [5/8"] DIA LG SEE DETAIL	Steel
M18105	1		EYE-BOLT 5/8"DIA X 12" LG CROSBY G291	FORGED STEEL
M18106	2		5/8"-11UNC Hex Nuts (Inch Series) Heavy Hex Nut	A194 GR4

PARTS LIST FOR ONE (1) DAVIT ARM, FOUR (4) REQ'D				
ITEM	ITEM QTY	CUT (MM)	DESCRIPTION	MATERIAL
M18108	1	645	2"NS XXH PIPE	A53
M18109	1	25	2 1/2"NS STD PIPE	A53
M18110	1		2"NS XXH ELBOW BW 90DEG L.R.	A234
M18111	1	890	2"NS XXH PIPE	A53
M18112	1	520	FB10X50 [3/8"X2"]	G40.21M 300W

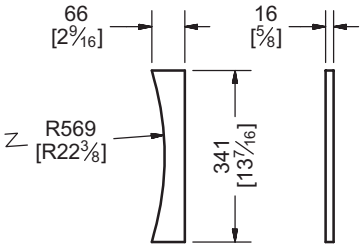


DAVIT ASSEMBLY
QTY: 16
SCALE 1/20

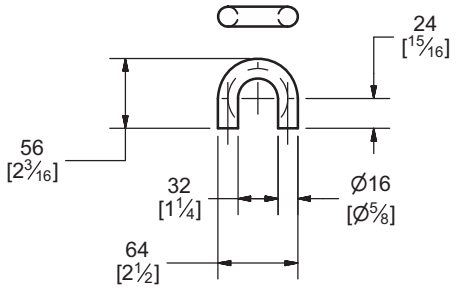
AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/25

REGISTERED PROFESSIONAL ENGINEER
G. BROWN
LICENSEE
NT/NU
04-May-2017

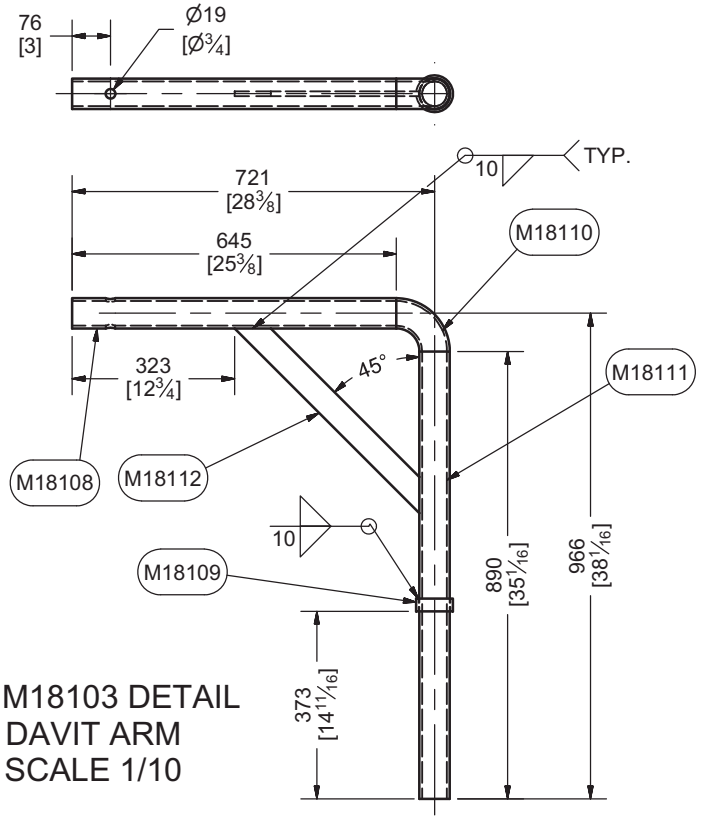
Permit Number: P471



Pc M18101 DETAIL
SCALE 1/10



Pc M18104 DETAIL
SCALE 1/4



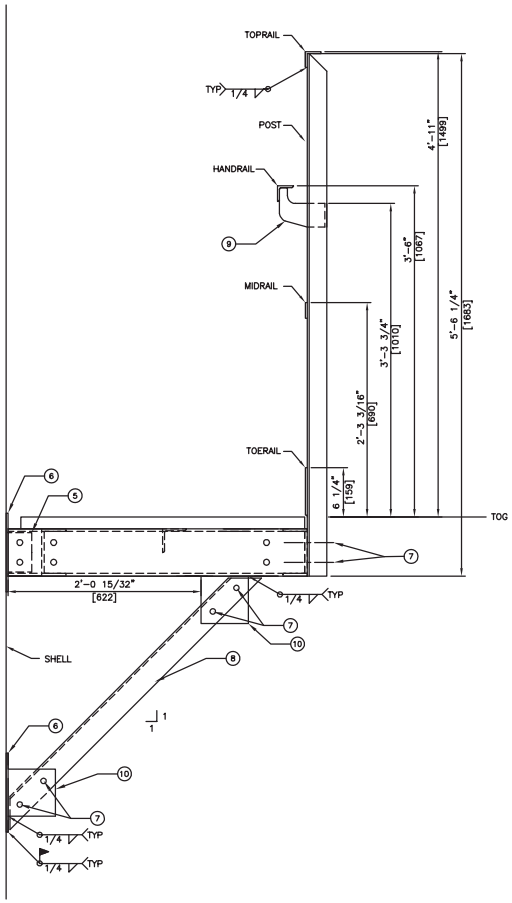
Pc. M18103 DETAIL
DAVIT ARM
SCALE 1/10

DRAWN MARC LOSIER	4/13/2017	900MM [36"] NS FOR TK1, 2, 3, 4	
CHECKED			
QA		TITLE	
MFG		MANHOLE COVER DAVIT	
APPROVED		SIZE A3	DWG NO 295-M18 REV
		SCALE	SHEET 1 OF 1

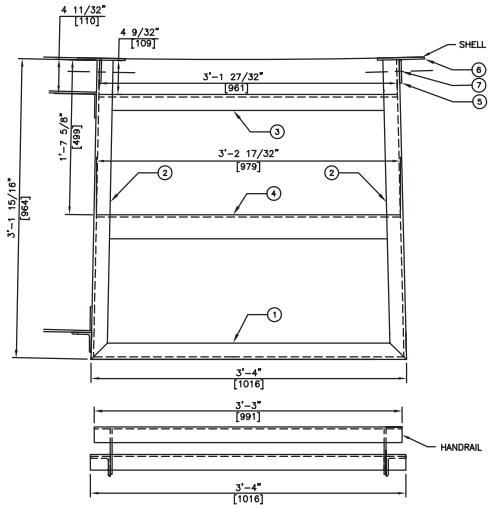
BILL OF MATERIALS

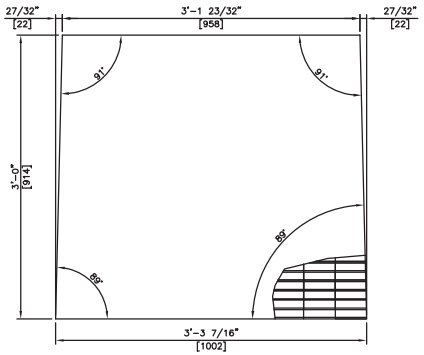
MARK	QTY.	DESCRIPTION	MATERIAL	MTR	WT #'s
1	1	C6Ø10.5# x 3'-4" LG (CBE)	G40.21-300W	C	–
2	2	C6Ø10.5# x 3'-1 15/16" LG (COE/POE)	G40.21-300W	C	–
3	1	C6Ø10.5# x 3'-1 27/32" LG (CBE)	G40.21-300W	C	–
4	1	3/8" x 3" x 3" ANGLE x 3'-2 17/32" LG (CBE)	G40.21-300W	C	–
5	2	3/8" THK x 3" x 5"	G40.21-260W	C	–
6	4	1/4" THK x 6" x 10" c/w 2" RADIUS CORNERS	G40.21-260W	C	–
7	16	5/8"Ø x 1 3/4" LG HEX HD BOLT c/w (1) NUT & LOCK WASHER AND (2) FLAT WASHERS	A325 GALV	C	–
8	2	3/8" x 3" x 3" ANGLE x 3'-9 1/2" LG (CBE)	G40.21-300W	C	–
9	2	1/4" THK x 5" x 5 3/4" SEE DETAIL	G40.21-260W	C	–
10	4	1/4" THK x 6" x 6"	G40.21-260W	C	–

BILLING FOR ONE TANK SHOWN, THREE (3) REQUIRED

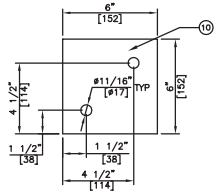


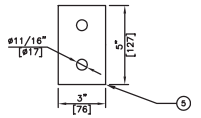
PLATFORM ELEVATION DETAIL

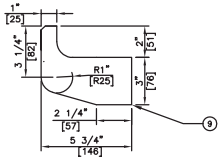


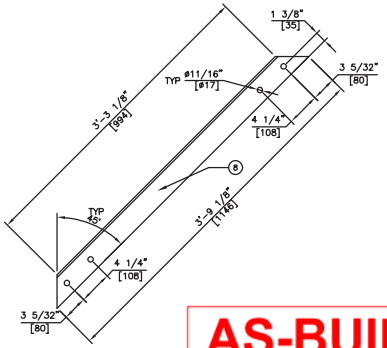


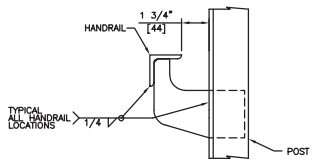
GRATING DETAIL











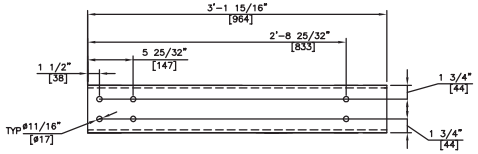
TYPICAL HANDRAIL/POST DETAIL

TYPICAL HANDRAIL DETAIL

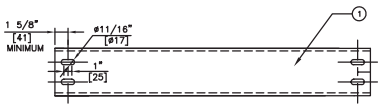
TOPRAIL – 1/4" x 2" x 2" ANGLE
HANDRAIL – 1/4" x 2" x 2" ANGLE
MIDRAIL – 1/4" x 2" FLATBAR
TOERAIL – 1/4" x 6" FLATBAR
POST – 1/4" x 2 1/2" x 2 1/2" ANGLE
GRATING – 19-W-4 1 1/2" DEEP x 3/16" GALVANIZED SERRATED BAR GRATING

**HANDRAIL LOCATED ON OUTSIDE ONLY – BOLTED TO PLATFORM

**ALL GRATING TO BE SECURED TO PLATFORM FRAME USING SADDLE CLIPS (BOLTED).



MARK 2 – RIGHT HAND SHOWN
LEFT HAND OPPOSITE



SLOTS MAY BE SHOP LOCATED TO MATCH HANDRAIL POST

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/25

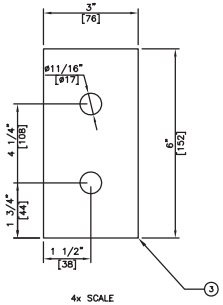
PROFESSIONAL ENGINEERS
L.C. BROWN
LICENSEE
NT/NU
23-Jul-2017

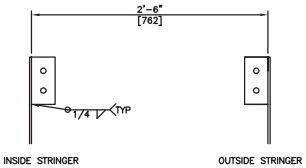
REV.	DATE	DRWN.	APP'D.	DESCRIPTION
0	5-MAY-17	ME	KB	ISSUED FOR CONSTRUCTION
B	11-APR-17	ME	KB	ISSUED FOR APPROVAL
A	8-APR-17	ME	KB	ISSUED FOR APPROVAL

REVISIONS

SUB-ARC SYSTEMS INC.

CUSTOMER: AGNICO EAGLE MINES LIMITED – MELIADINE PROJECT
TITLE: MID PLATFORM DETAIL
PROJECT NO.: 6515
LOCATION: RANKIN INLET, NUNAVUT
TANK NO.: TANK TAG: TK #1
SCALE: 3/4" = 1'-0"
W.O.: 17-03
DWG. No.: 17-03-1-001
Rev.: 0
DATE: 8-APR-17



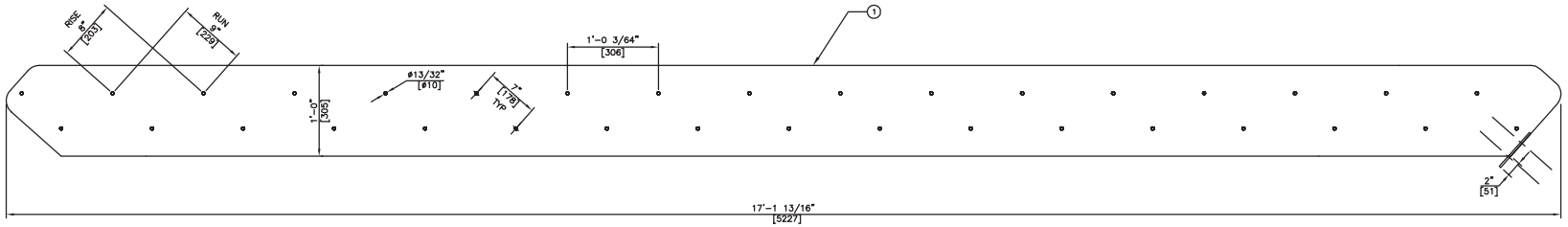


STRINGER CLIP TO PLATFORM

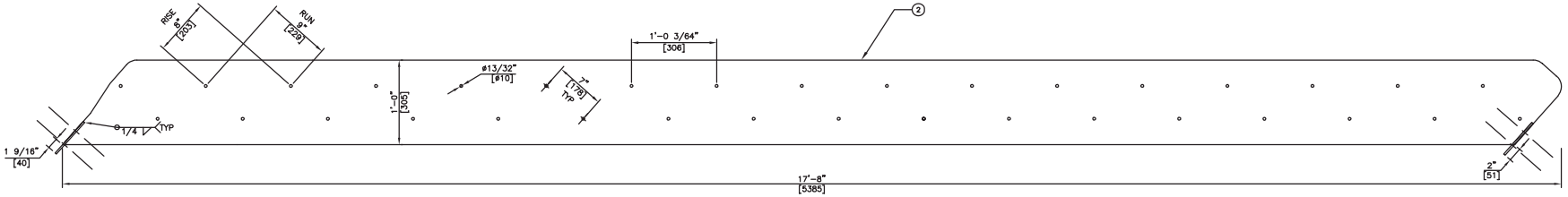
BILL OF MATERIALS

MARK	QTY.	DESCRIPTION	MATERIAL	MTR	WT #'s
1	1	1/4" THK x 12" x 17'-1 13/16" LG SEE DETAIL	G40.21-260W	C	–
2	3	1/4" THK x 12" x 17'-8" LG SEE DETAIL	G40.21-260W	C	–
3	14	1/4" THK x 3" x 6"	G40.21-260W	C	–
4	28	5/8"ø x 1 3/4" LG HEX HD BOLT c/w (1) NUT & LOCK WASHER AND (2) FLAT WASHERS	A325 GALV	C	–

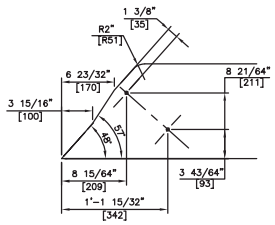
BILLING FOR ONE TANK SHOWN, ONE REQUIRED



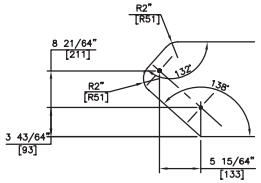
INSIDE BOTTOM STRINGER



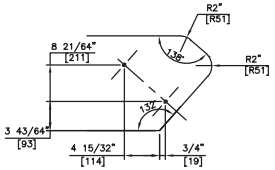
INSIDE STRINGER – THREE SECTIONS REQUIRED



BOTTOM @ PLATFORM



BOTTOM



TOP

AS-BUILT

BY Inukshuk Construction Ltd. DATE 2018/07/25

NOTE: MARK 3 IS PLACED SAME SIDE AS STAIR.

REV.	DATE	DRWN.	APP'D.	DESCRIPTION
0	5-MAY-17	ME	KB	ISSUED FOR CONSTRUCTION
B	11-APR-17	ME	KB	ISSUED FOR APPROVAL
A	8-APR-17	ME	KB	ISSUED FOR APPROVAL

REVISIONS

SUB-ARC SYSTEMS INC.

CUSTOMER: AGNICO EAGLE MINES LIMITED – MELIADINE PROJECT

TITLE: INSIDE STRINGER DETAIL

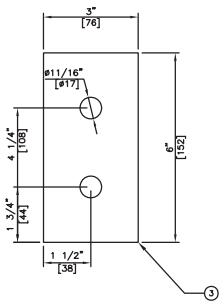
LOCATION: RANKIN INLET, NUNAVUT

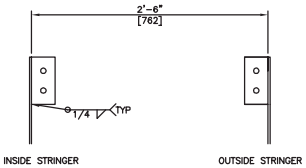
PROJECT NO.: 6515

TANK NO.: TANK TAG: TK #1

SCALE: 3/4" = 1'-0" | W.O.: 17-03 | DRWG. No.: 17-03-1-002 | Rev.: 0

DATE: 8-APR-17



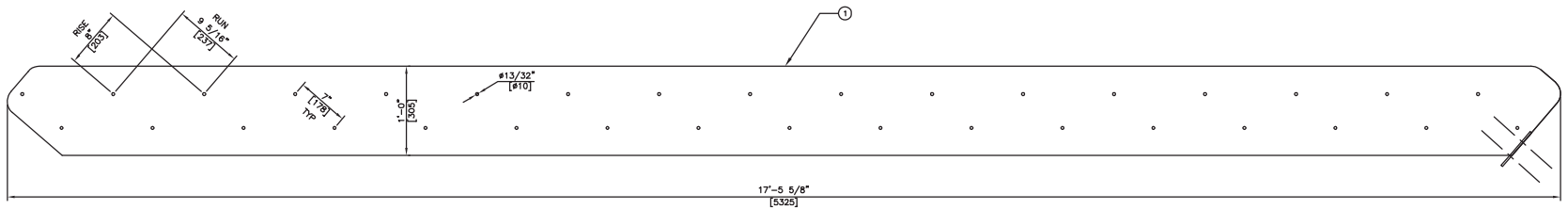


STRINGER CLIP TO PLATFORM

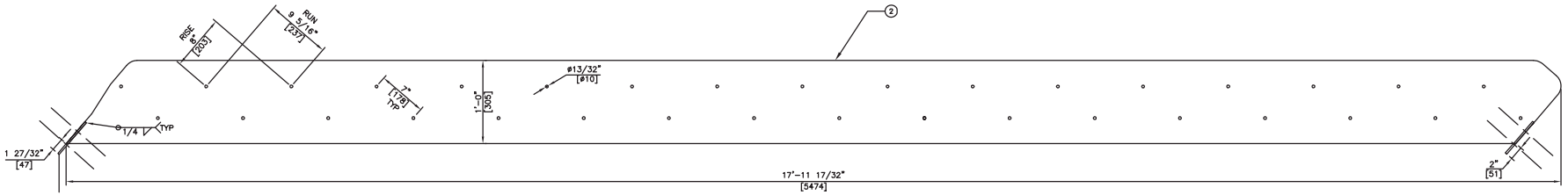
BILL OF MATERIALS

MARK	QTY.	DESCRIPTION	MATERIAL	MTR	WT #'s
1	1	1/4" THK x 12" x 17'-5 5/8" LG SEE DETAIL	G40.21-260W	C	–
2	3	1/4" THK x 12" x 17'-11 17/32" LG SEE DETAIL	G40.21-260W	C	–
3	14	1/4" THK x 3" x 6"	G40.21-260W	C	–
4	28	5/8"ø x 1 3/4" LG HEX HD BOLT c/w (1) NUT &	A325 GALV	C	–
		SERRATED BAR GRATING c/w CHECKER PLATE NOSE			
5	68	STAIR TREAD 9 3/4" WIDE x 30" LG x 1 1/2" x 3/16"	G40.21-260W	C	–
		SERRATED c/w CHECKER PLATE NOSE			
6	272	3/8"ø x 1 1/2" LG HEX HD BOLT c/w (1) NUT &	A325 GALV	C	–
		LOCK WASHER AND (2) FLAT WASHERS			

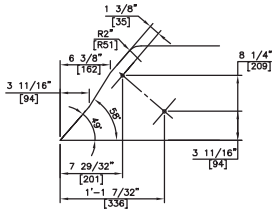
BILLING FOR ONE TANK SHOWN, ONE REQUIRED



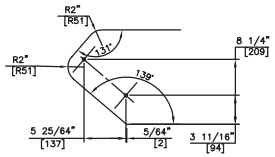
OUTSIDE BOTTOM STRINGER



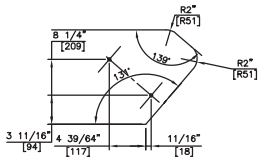
OUTSIDE STRINGER – THREE SECTIONS REQUIRED



BOTTOM @ PLATFORM



BOTTOM



TOP

AS-BUILT

BY Inukshuk Construction Ltd. DATE 2018/07/25

NOTE: MARK 3 IS PLACED SAME SIDE AS STAIR.

REV.	DATE	DRWN.	APP'D.	DESCRIPTION
0	5-MAY-17	ME	KB	ISSUED FOR CONSTRUCTION
B	11-APR-17	ME	KB	ISSUED FOR APPROVAL
A	8-APR-17	ME	KB	ISSUED FOR APPROVAL

REVISIONS

SUB-ARC SYSTEMS INC.

CUSTOMER: AGNICO EAGLE MINES LIMITED – MELIADINE PROJECT

TITLE: OUTSIDE STRINGER DETAIL

PROJECT NO.: 6515

LOCATION: RANKIN INLET, NUNAVUT

TANK NO.: TANK TAG: TK #1

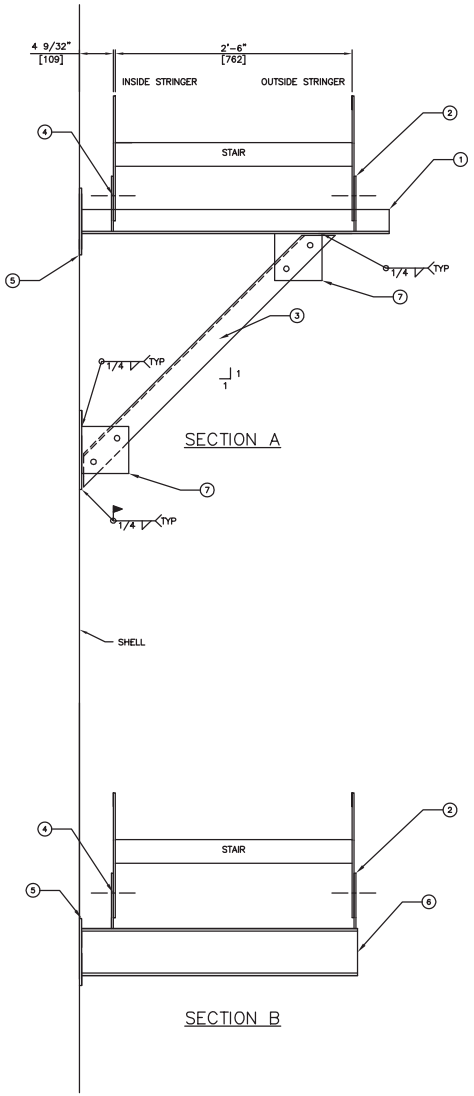
SCALE: 3/4" = 1'-0" | W.O.: 17-03 | DWG. No.: 17-03-1-003 | Rev.: 0

DATE: 8-APR-17

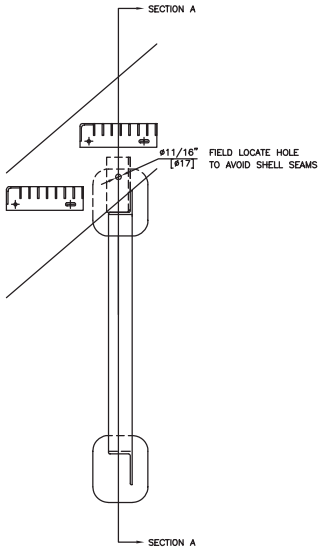
BILL OF MATERIALS

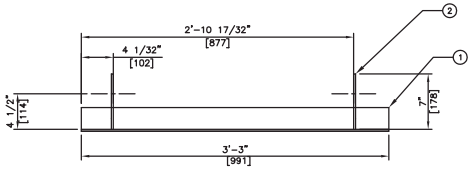
MARK	QTY.	DESCRIPTION	MATERIAL	MTR	WT #'s
1	8	3/8" x 3" x 3" ANGLE x 3'-3" LG (PBE)	G40.21-300W	C	–
2	18	1/4" THK x 2 5/8" x 7" LG	G40.21-260W	C	–
3	8	3/8" x 3" x 3" ANGLE x 3'-9 1/8" LG	G40.21-300W	C	–
4	50	5/8"ø x 1 3/4" LG HEX HD BOLT c/w (1) NUT & LOCK WASHER AND (2) FLAT WASHERS	A325 GALV	C	–
5	17	1/4" THK x 6" x 10" c/w 2" RADIUS CORNERS	G40.21-260W	C	–
6	1	C6@10.5# x 2'-11" LG	G40.21-300W	C	–
7	16	1/4" THK x 6" x 6"	G40.21-260W	C	–

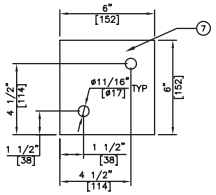
BILLING FOR ONE TANK SHOWN, ONE REQUIRED

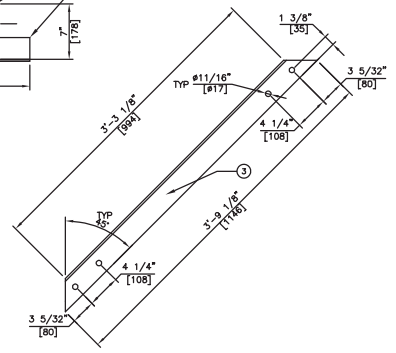


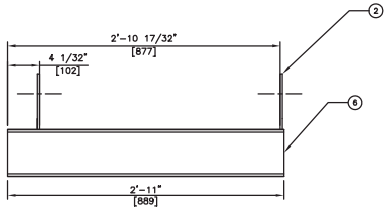
SECTION A



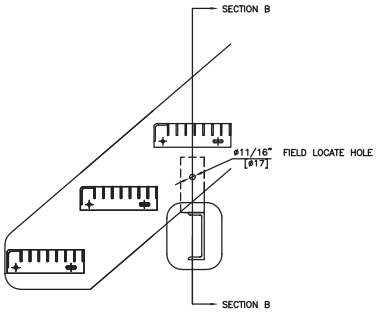








SECTION B



CHANNEL SUPPORT IS FOR BOTTOM OF STAIRS ONLY.

NOTE: MAXIMUM SUPPORT SPACING IS EVERY 7 STAIRS.

AS-BUILT

BY Inukshuk Construction Ltd. DATE 2018/07/25

REV.	DATE	DRWN.	APP'D.	DESCRIPTION
0	5-MAY-17	ME	KB	ISSUED FOR CONSTRUCTION
B	11-APR-17	ME	KB	ISSUED FOR APPROVAL
A	8-APR-17	ME	KB	ISSUED FOR APPROVAL

REVISIONS

SUB-ARC SYSTEMS INC.

CUSTOMER: AGNICO EAGLE MINES LIMITED – MELIADINE PROJECT

TITLE: STAIR STRINGER SUPPORTS

PROJECT NO.: 6515

LOCATION: RANKIN INLET, NUNAVUT

TANK NO.: TANK TAG: TK #1

SCALE: 3/4" = 1'-0"

W.O.: 17-03

DWG. No.: 17-03-1-004

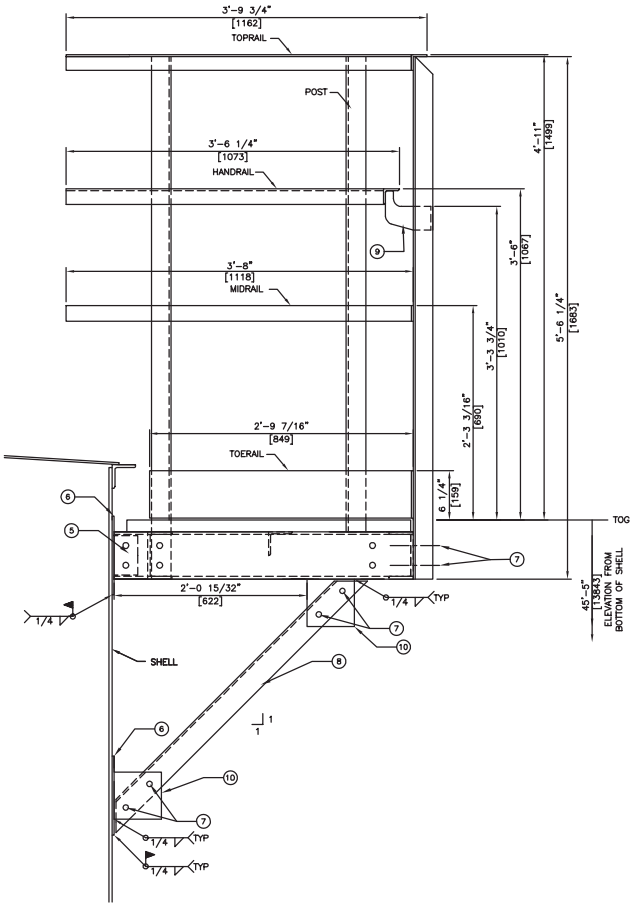
Rev.: 0

DATE: 8-APR-17

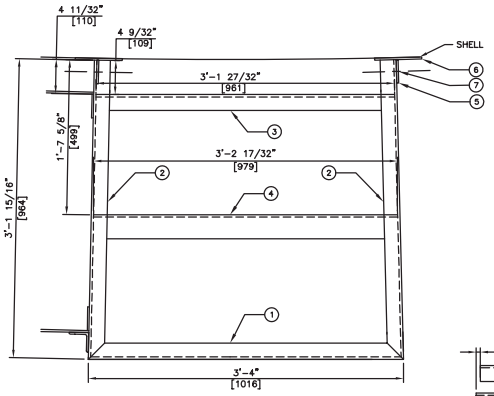
BILL OF MATERIALS

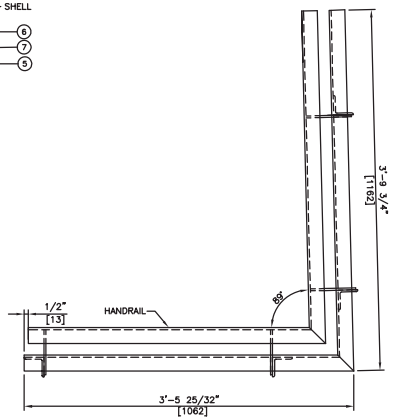
MARK	QTY.	DESCRIPTION	MATERIAL	MTR	WT #'s
1	1	C6⊕10.5# x 3'-4" LG (CBE)	G40.21-300W	C	–
2	2	C6⊕10.5# x 3'-1 15/16" LG (COE/POE)	G40.21-300W	C	–
3	1	C6⊕10.5# x 3'-1 27/32" LG (CBE)	G40.21-300W	C	–
4	1	3/8" x 3" x 3" ANGLE x 3'-2 17/32" LG (CBE)	G40.21-300W	C	–
5	2	3/8" THK x 3" x 5"	G40.21-260W	C	–
6	4	1/4" THK x 6" x 10" c/w 2" RADIUS CORNERS	G40.21-260W	C	–
7	20	5/8"⊕ x 1 3/4" LG HEX HD BOLT c/w (1) NUT &	A325 GALV	C	–
		LOCK WASHER AND (2) FLAT WASHERS			
8	2	3/8" x 3" x 3" ANGLE x 4' - 0 27/32" LG (CBE)	G40.21-300W	C	–
9	4	1/4" THK x 5" x 5 3/4" SEE DETAIL	G40.21-260W	C	–

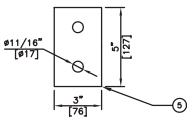
BILLING FOR ONE TANK SHOWN, ONE (1) REQUIRED

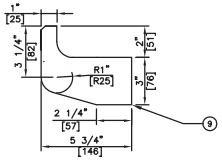


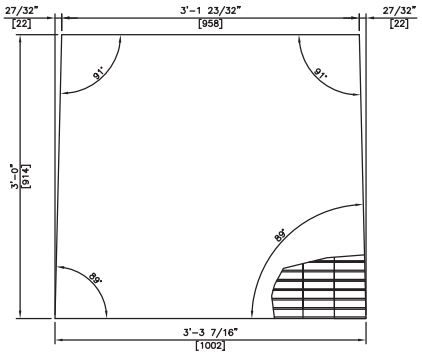
PLATFORM ELEVATION DETAIL



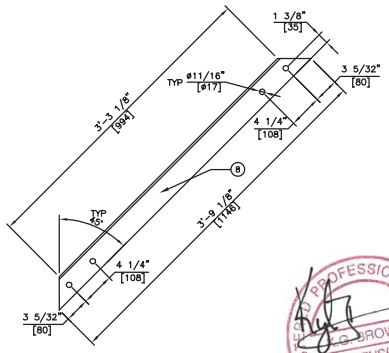


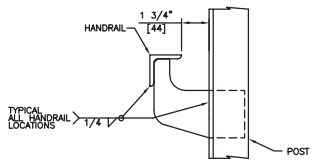






GRATING DETAIL





TYPICAL HANDRAIL/POST DETAIL

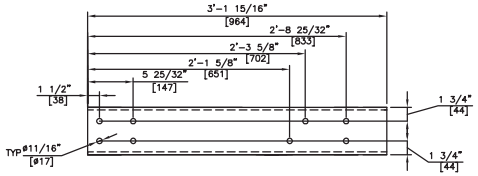
TYPICAL HANDRAIL DETAIL

TOPRAIL – 1/4" x 2" x 2" ANGLE
HANDRAIL – 1/4" x 2" x 2" ANGLE
MIDRAIL – 1/4" x 2" FLATBAR
TOERAIL – 1/4" x 6" FLATBAR
POST – 1/4" x 2 1/2" x 2 1/2" ANGLE
GRATING – 19–W–4 1 1/2" DEEP x 3/16" GALVANIZED SERRATED BAR GRATING

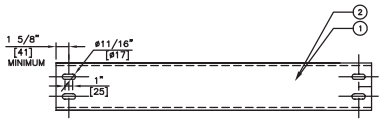
**HANDRAIL LOCATED ON OUTSIDE ONLY – BOLTED TO PLATFORM

**ALL GRATING TO BE SECURED TO PLATFORM FRAME USING SADDLE CLIPS (BOLTED).

FIELD TO TRIM HANDRAIL OVER TANK ROOF TO MATE WITH PERIMETER HANDRAIL



MARK 2 – RIGHT HAND SHOWN
LEFT HAND OPPOSITE



SLOTS MAY BE SHOP LOCATED TO MATCH HANDRAIL POST

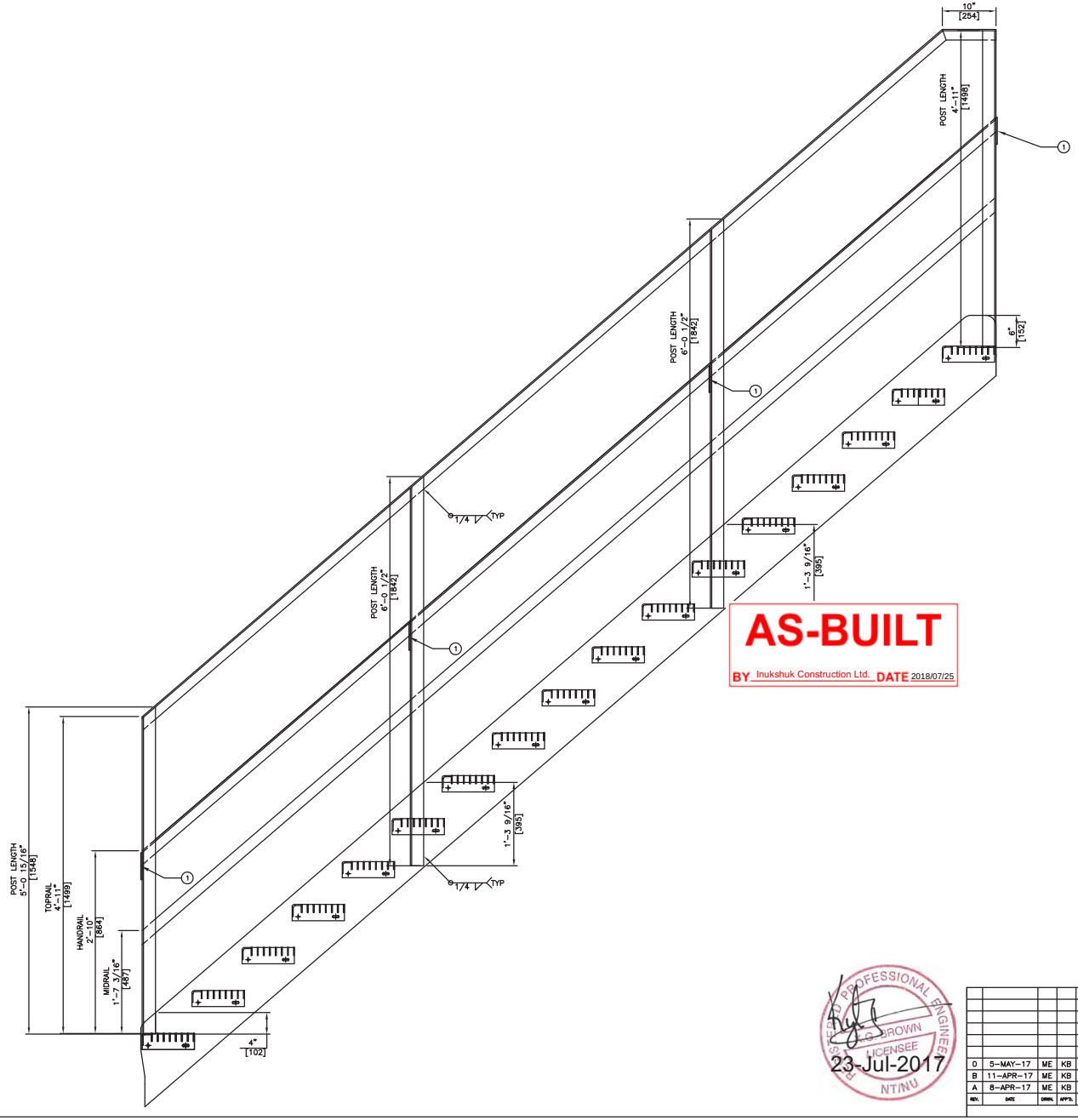
AS-BUILT
BY Inukshuk Construction Ltd. DATE 2018/07/25

REV.	DATE	DRWN.	APP'D.	DESCRIPTION
0	5–MAY–17	ME	KB	ISSUED FOR CONSTRUCTION
B	11–APR–17	ME	KB	ISSUED FOR APPROVAL
A	8–APR–17	ME	KB	ISSUED FOR APPROVAL

REVISIONS

SUB–ARC SYSTEMS INC.

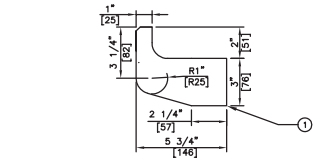
CUSTOMER: AGNICO EAGLE MINES LIMITED – MELIADINE PROJECT
TITLE: TOP PLATFORM DETAIL
PROJECT NO.: 6515
LOCATION: RANKIN INLET, NUNAVUT
TANK NO.: TANK TAG: TK #1
SCALE: 3/4" = 1'-0"
W.O.: 17-03
DRWG. No.: 17-03-1-005
Rev.: 0
DATE: 8–APR–17

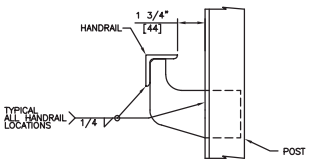


BILL OF MATERIALS

MARK	QTY.	DESCRIPTION	MATERIAL	MTR	WT #'s
1	4	1/4" THK x 5" x 5 3/4" SEE DETAIL	G40.21–260W	C	–

BILLING FOR ONE TANK SHOWN, FOUR (4) REQUIRED





TYPICAL HANDRAIL/POST DETAIL

TYPICAL HANDRAIL DETAIL

TOPRAIL – 1/4" x 2" x 2" ANGLE
HANDRAIL – 1/4" x 2" x 2" ANGLE
MIDRAIL – 1/4" x 2" FLATBAR

POST – 1/4" x 2 1/2" x 2 1/2" ANGLE
POST SHALL BE SQUARE TO THE STAIR HOLES
1 POST AT EACH END, 2 POSTS EQUAL SPACE ON STRINGER

**HANDRAIL LOCATED ON OUTSIDE ONLY

PROFESSIONAL ENGINEER S. G. BROWN LICENSEE NT/NU
23-Jul-2017

REV.	DATE	DRWN.	APP'D.	DESCRIPTION
0	5–MAY–17	ME	KB	ISSUED FOR CONSTRUCTION
B	11–APR–17	ME	KB	ISSUED FOR APPROVAL
A	8–APR–17	ME	KB	ISSUED FOR APPROVAL

REVISIONS

SUB–ARC SYSTEMS INC.

CUSTOMER: AGNICO EAGLE MINES LIMITED – MELIADINE PROJECT
TITLE: STAIR HANDRAIL DETAIL
PROJECT NO.: 6515
LOCATION: RANKIN INLET, NUNAVUT
TANK NO.: TANK TAG: TK #1
SCALE: 3/4" = 1'-0" | W.O.: 17–03 | DRWG. No.: 17–03–1–006 | Rev.: 0
DATE: 8–APR–17

Drawing Binder Tank 2 – 13,500CUM

AEM PURCHASE ORDER: OC-568510
AEM PACKAGE NO.: 6515-C-260-002
PACKAGE TITLE: FUEL TANKS (SUPPLY & INSTALL)

ICL Project No.: 295
ICL Document No.: 295-B2-AB
AEM Document No.: 6515-C-260-002-141-QCR-0008_Sub001
Revision: 0

OWNER:

Agnico Eagle Mines Limited
145 King St. East, Suite 400,
Toronto, Ontario M5C 2Y7

GENERAL CONTRACTOR:

Inukshuk Construction Limited
PO Box 654
Rankin Inlet NU
X0C 0G0

Contact: David Mosher

PH:(867)645-4030
FX: (902)429-7762

Submitted by: Inukshuk Construction Limited
Submitted: October 30, 2017

AGNICO EAGLE

Vendor Document Status

1 ☐	Proceed to next submission and status.
2 ☐	Proceed with exceptions as noted to next submission and status.
3 ☐	Do not proceed. Revise as noted and resubmit next submission and status.
4 ☐	Complete, no further submission required.

By: Date:

Review and authorization to fabricate are only for general conformance with the design concept of the Project as expressed in the Contract Documents. Sole responsibility for the accuracy and completeness of this document, including but not limited to dimensions and quantities, remains with the Supplier/Contractor. Agnico Eagle does not warrant the accuracy or completeness of any of the information contained herein, nor does Agnico Eagle authorize or approve any construction means, methods, techniques, sequences or any safety precautions or procedures.

Agnico Eagle No. 6515-C-260-002-141-QCR-0008 R: Sub001

DOCUMENT FOR INFORMATION

AS-BUILT

BY Inukshuk Construction Ltd. DATE 2017/10/02

Index Tank No. 2 - 13,500CUM

Drawing No.	Description	Sheet No.	Rev
TK#2ITP	Inspection & Test Plan	1, 2	0
TK#2FAST.	Fastener List	1	0
65-116-210-200	Rankin Inlet Fuel Tank Farm Fuel Distribution Plan General Arrangement (Reference Only)	1	0
295-M2	Floor & Roof Layouts	1, 2	2
295-M7	Shell Plates and Angle Rolling Details	2	4
295-M8	Reinforcing Plate Details	3, 4, 13	4
295-M10	Erection Drawing	1–7	7
295-M15	Manholes Details	3, 4	3
295-M16	Nozzles Detail	1, 2, 4, 9,13-16, 18-22	4
295-M17	Pipe Support, Misc. Bracket, Grounding Lugs	1-5	2
295-M18	Manhole Cover Davit	1	0
17-03-2-001	Mid Platform Detail	1	0
17-03-2-002	Inside Stringer	1	0
17-03-2-003	Outside Stringer Detail	1	0
17-03-2-004	Stair Stringer Supports	1	0
17-03-2-005	Top Platform Detail	1	0
17-03-2-006	Stair Handrail Detail	1	0

INSPECTION & TEST PLAN

Client:	AGNICO EAGLE	**Tank Tag:**	TK #2	**Document:**	TK#2 ITP
Project ID:	MELIADINE GOLD MINE	**Work Order:**	295	**Revision:**	0

Item	Component	Activity	ITP Type	Documentation	Acceptance Criteria	Notes	Witness, Hold, Review Points	
							Client Sign/Date	Q.C. Sign/Date
1	Kick-Off Meeting	Kickoff Meeting	N/A	Meeting Minutes	N/A			H
2	Signature Log	Verify	N/A	Signature Log	N/A			H
3	Welder Qualification	Verify	N/A	Individual Welder Qualifications / Welder Log	API-650 / ASME IX			H
4	Inspector Qualification	Verify	N/A	In house Inspector & 3rd Party Qualifications	API-650			H
5	Weld Procedures	Verify	N/A	Approved Weld Procedures	API-650 / ASME IX, CWB W47.1			H
6	Welding Consumable	Electrode Storage	N/A	N/A	Manufacturer's Instructions			R
7	Foundation	Foundation Survey	DC	Foundation Acceptance Report, Compaction Report & Survey from 3rd Party	API-650 Para 7.5.5			H
8	Floor	Materials	FI	MTR Confirmation to Dwg	Drawing & API-650 Sect. 4	MTR of all plate under shell.		
		Fit up	VE, DC	As Built Drawing	Drawing	per API-650 5.1.5.4 - bottom plates under the shell shall have the outer ends of the joints fitted and lap-welded to form a smooth bearing surface.		R
		Welding	VE	Weld Map, Visual Report	API–650 Para 7.2 & 8.5 & WPS			R
		Vacuum Test	VB	Vacuum Box Test Report	API-650 Para 7.3.3(a) & 8.6			W
9	Shell to Floor Seams	Initial Weld Pass	VE	Weld Map, Visual Report	API-650 Para 8.5, 7.2.4.1			R
		Final Weld Pass	VE	Weld Map, Visual Report	API-650 Para 8.5, 7.2.4.1			R
		Diesel Test	NDT	Leak Test Report	API-650 Para 7.2.4.1 d)			W
10	Shell	Materials	FI	MTR Confirmation to Dwg	Drawing & API-650 Sect. 4	MTR of all plate		H
		Fit up 1st Course	VE, DC	As Built Drawing	Drawing			R
		Roundness	DC	Dimension Report	API-650 Para 7.5.3			H
		Welding	VE	Weld Map, Visual Report	API–650 Para 7.2, 7.5, 8.5 & WPS			R
		Tolerance Check – Plumbness & Local Deviations	DC	Dimension Report	API-650 Para 7.5			H
		Diesel Test Shell Welds	NDT	Leak Test Report	API-650 Para 7.3.6 2)a)i)			W
		UT – All Shell	NDT	UT report / Log / Map	API-650 Para Annex U	Shell less than 3/8" shall be intrepreted as 3/8" as a modification of API-650. All T joint UT.		H
11	Compression Ring	Fit up	VE, DC	As Built Drawing	Drawing			R
		Welding	VE	Weld Map, Visual Report	API–650 Para 7.2 & 8.5 & WPS			R
12	Roof	Fit up	VE, DC	As Built Drawing	Drawing			R
		Welding	VE	Visual Report	API–650 Para 7.2 & 8.5 & WPS			R
13	Roof Structure	Fit up	VE, DC	As Built Drawing	Drawing			R
		Column Plumbness	DC	Dimension Report	API–650 Para 7.5.2 b)			H
		Welding	VE	Visual Report	API–650 Para 7.2 & 8.5 & WPS			R

Item	Component	Activity	ITP Type	Documentation	Acceptance Criteria	Notes	Witness, Hold, Review Points	
							Client Sign/Date	Q.C. Sign/Date
14	Nozzles	Layout	VE, DC	As Built Drawing	Drawing			H
		Fit up	VE, DC	As Built Drawing	Drawing			R
		Welding	VE	Weld Map, Visual Report	API–650 Para 7.2 & 8.5 & WPS			R
		Tolerance Check – Plumbness & Local Deviations	DC	Dimension Report	API-650 Para 7.5			H
		Shell Nozzle Repad Air test	AT	Leak Test Report	API-650 Para 7.3.5			W
		MPI	NDT	MPI Report	API-650 Para 7.2.3.6	All welds of Shell Nozzles		W
15	Manway	Layout	VE, DC	As Built Drawing	Drawing			H
		Fit up	VE, DC	As Built Drawing	Drawing			R
		Welding	VE	Weld Map, Visual Report	API–650 Para 7.2 & 8.5 & WPS			R
		Tolerance Check – Plumbness & Local Deviations	DC	Dimension Report	API-650 Para 7.5			H
		Shell Manway Repad Air test	AT	Leak Test Report	API-650 Para 7.3.5			W
		MPT	NDT	MPI Report	API-650 Para 7.2.3.6	All welds of Shell Manways		R
16	Internals	Layout / Fit up	VE, DC	As Built Drawing	Drawing			R
		Welding	VE	Visual Report	API–650 Para 7.2 & 8.5 & WPS			R
		Stillwell Plumbness	DC	Dimension Report	API–650 Para H.4.5			R
		MPI or LP	NDT	NDT Report	Sump Welds (if applicable) 7.3.4	MPI all welds		H
17	Externals	Layout / Fit up	VE, DC	As Built Drawing	Drawing			R
	Externals	Welding	VE	Visual Report	API–650 Para 7.2 & 8.5 & WPS			R
18	Stairs & Platforms	Fit up	VE, DC	As Built Drawing	Drawing			R
		Welding	VE	Visual Report	API–650 Para 7.2 & 8.5 & WPS			R
19	Bolts & Nuts	Inspection	VE, DC	As Built Drawing	Drawing	Bolt Torque		W
20	Final	Name Plate Verification	N/A	Scan of Name Plate	Drawings			H
		Final Inspection	FI	As Built Drawings, Data Sheet, Manufacturer's Certification (3rd Party), Punch List	Drawings			H

DEFINITIONS:

W - WITNESS: Specified activity to be observed by an outlined party. QC to provide the applicable party 24 hours notice of witness point.

H - HOLD: Specified component or installation to be inspected by an outlined party. No further activities specific to the component or installation may proceed until inspection is carried out. QC to provide the applicable party 24 hours notice of hold point.

R - REVIEW: Specified documentation and specifications applicable to a particular component and/or installation to be examined by an outlined party.

AT - AIR TEST: Specified component and/or installation to be air tested according to specified documentation and specifications.

DC - DIMENSION CHECK: Physical dimensions of component and/or installation to be verified according to specified documentation and specifications.

FI - FINAL INSPECTION: Specified inspection procedures to be executed prior to release of the component and/or installation and verified according to specified documentation and specifications.

NDT - NON DESTRUCTIVE TESTING: Specified component and/or installation to be inspected using a named non destructive testing method according to specified documentation and specifications.

VE - VISUAL Examination: Specified component and/or installation to be examined visually according to specified documentation and specification.

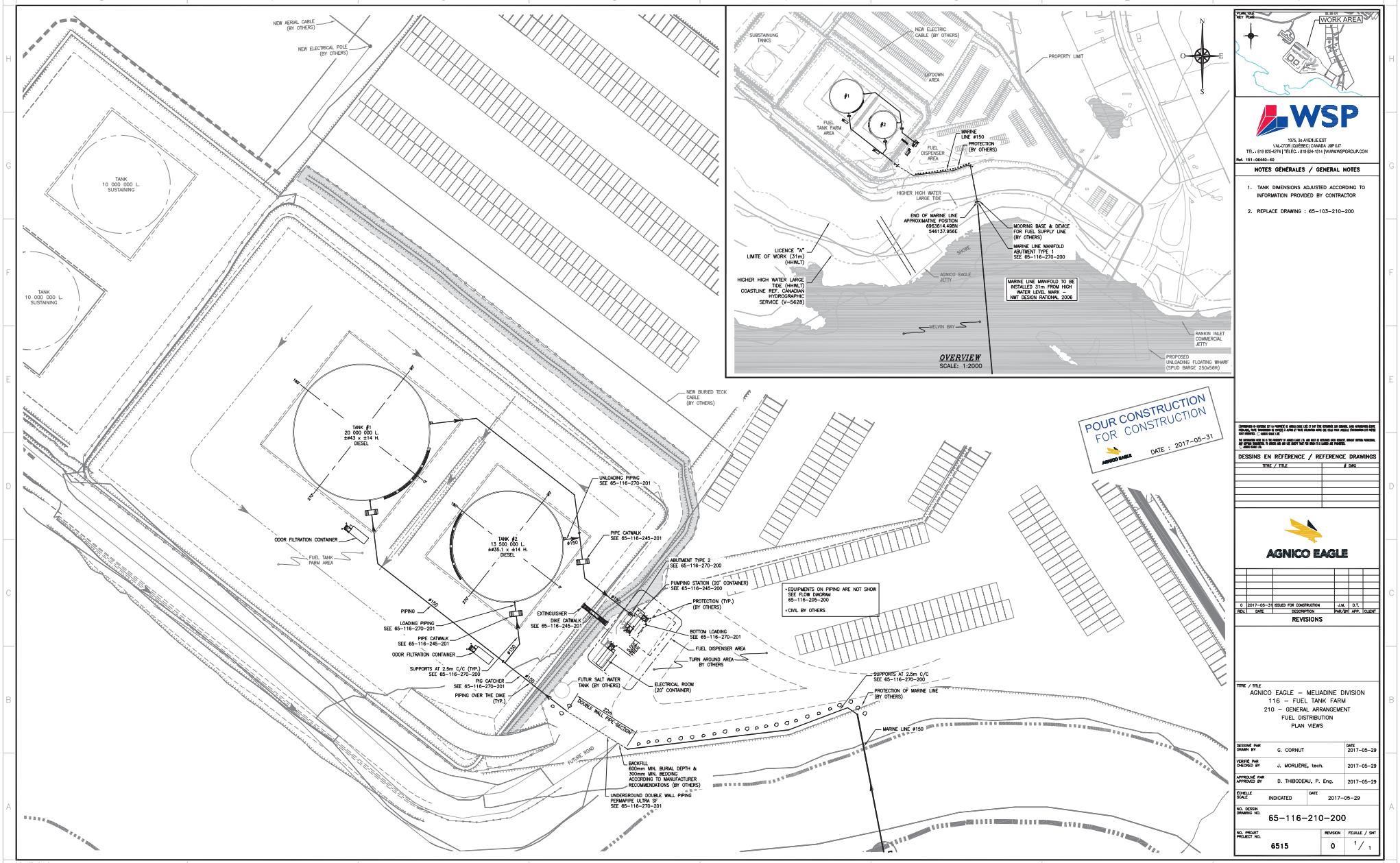
VB - VACUUM-BOX TEST: Specified component and/or installation to be vacuum box tested according to specified documentation and specifications.

Fastener List

Tank #	qty	Qty of Component	Connection	Description	Lght (in)
2	128.00	64	Shell to Rafter Connection	Bolt, Structural A325, 3/4"	2
2	64.00	32	Rafter to Center Column	Bolt, Structural A325, 3/4"	3.5
2	14.00	96	Rafter to intermediate beam	Bolt, Structural A325, 3/4"	2.25
2	112.00	7	Beam to top plate and intermediate colun	Bolt, Structural A325, 3/4"	2.5
2	318.00			Nut, Structural heavy hex 3/4"	
2	636.00			Washer, type A, 3/4"	
2	168.00	4	36"Shell Manhole	Stud, L7, 3/4"	3 3/4
2	16.00	2	8" in/out Nozzle	Stud, L7, 3/4"	4 1/4
2	48.00	6	6" in/out Nozzle	Stud, L7, 3/4"	4
2	-	6	3" Water Drawoff	Stud, L7, 5/8"	3 1/2
2	60.00	3	24" Roof manhole	Stud, L7, 5/8"	2 1/4
2	20.00	1	24" Roof manhole emergency vent	Stud, L7, 5/8"	9.5
2	16.00	1	16" Vent	Stud, L7, 1"	5 1/4
2	8.00	1	8" Roof Nozzle	Stud, L7, 3/4"	4 1/4
2	8.00	1	6" Gauge Hatch	Stud, L7, 3/4"	4
2	8.00	1	4" Roof Nozzle	Stud, L7, 5/8"	3.5
2	32.00			Nut, A194, Gr. 4, 1"	
2	496.00			Nut, A194, Gr. 4, 3/4"	
2	176.00			Nut, A194, Gr. 4, 5/8"	
2	4.00	4	36"Shell Manhole	Gasket, Ring, Durlon 8500, 1/8", 1051 o.d.x 914 i.d.	
2	2.00	2	8" in/out Nozzle	Gasket, Ring, Durlon 8500,1/8" x 8" x 150#	
2	6.00	6	6" in/out Nozzle	Gasket, Ring, Durlon 8500,1/8" x 6" x 150#	
2	-	6	3" Water Drawoff	Gasket, Ring, Durlon 8500,1/8" x 3" x 150#	
2	4.00	4	24" Roof manhole	Gasket, Ring, Durlon 8500, 1/16" x 762 x 610	
2	1.00	1	8" High Level	Gasket, Ring, Durlon 8500, 1/16" x 150#, 8"	
2	1.00	1	6" Gauge Hatch	Gasket, Full Face, Durlon 8500, 1/16" x 150#, 6"	

NO. DESSIN
DRAWING NO. 65-116-210-200

FORMAT ARCH D



POUR CONSTRUCTION
FOR CONSTRUCTION
DATE : 2017-05-31
AGNICO EAGLE

PLAN TITLE
KEY PLAN

WSP
1075, 3e AVENUE EST
VAL-D'OR (QUÉBEC) CANADA J9P 0J7
TÉL. : 819 825-4274 | TÉLÉC. : 819 824-1514 | WWW.WSPGROUP.COM

Ref. 151-06440-40

NOTES GÉNÉRALES / GENERAL NOTES

1. TANK DIMENSIONS ADJUSTED ACCORDING TO INFORMATION PROVIDED BY CONTRACTOR
2. REPLACE DRAWING : 65-103-210-200

DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG

AGNICO EAGLE

REV.	DATE	DESCRIPTION	DWN./DR.	APP.	CLIENT
0	2017-05-31	ISSUED FOR CONSTRUCTION	J.M.	D.T.	

REVISIONS

TITRE / TITLE
AGNICO EAGLE – MEL IADINE DIVISION
116 – FUEL TANK FARM
210 – GENERAL ARRANGEMENT
FUEL DISTRIBUTION
PLAN VIEWS

DESSINÉ PAR / DRAWN BY	G. CORNUT	2017-05-29
VÉRIFIÉ PAR / CHECKED BY	J. MORLIÈRE, tech.	2017-05-29
APPROUVÉ PAR / APPROVED BY	D. THIBODEAU, P. Eng.	2017-05-29

ÉCHELLE / SCALE: INDICATED
DATE: 2017-05-29

NO. DESSIN / DRAWING NO.: 65-116-210-200

NO. PROJET / PROJECT NO.: 6515

RÉVISION: 0

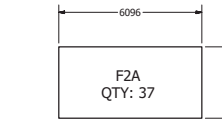
FEUILLE / SHT: 1 / 1

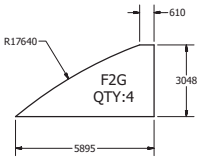
AE-CART-ARCH D

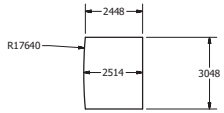
\\CAMTL1DATA01\projets\2015\1\151-06440-40\Genie Nordique\Dao\65-116-210-200_R0.dwg-2013-02-19 14:03:29

FILE NO. 65-116-210-200_R0.dwg

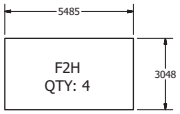
PARTS LIST			
ITEM	QTY	DESCRIPTION	MATERIAL
F2A	37	PL 6.35 X 3048 X 6096	G40.21M-260WT
F2B	2	PL 6.35 X 3048 X 2514	G40.21M-260WT
F2C	4	PL 6.35 X 3048 X 5480	G40.21M-260WT
F2D	4	PL 6.35 X 3048 X 1931	G40.21M-260WT
F2E	4	PL 6.35 X 3048 X3866	G40.21M-260WT
F2F	4	PL 6.35 X 3048 X 5094	G40.21M-260WT
F2G	4	PL 6.35 X 3048 X 5895	G40.21M-260WT
F2H	4	PL 6.35 X 3048 X 5485	G40.21M-260WT
F2I	4	PL 6.35 X 3131 X 845	G40.21M-260WT
F2J	2	PL 6.35 X 838 X 6096	G40.21M-260WT

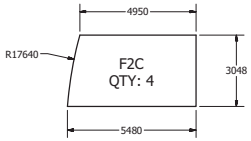


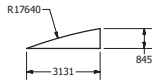




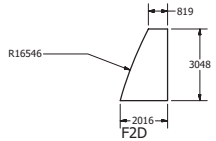
F2B
QTY: 2



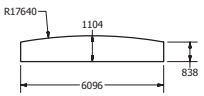




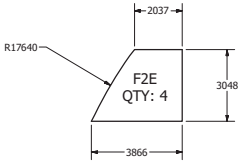
F2I
QTY: 4

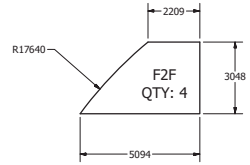


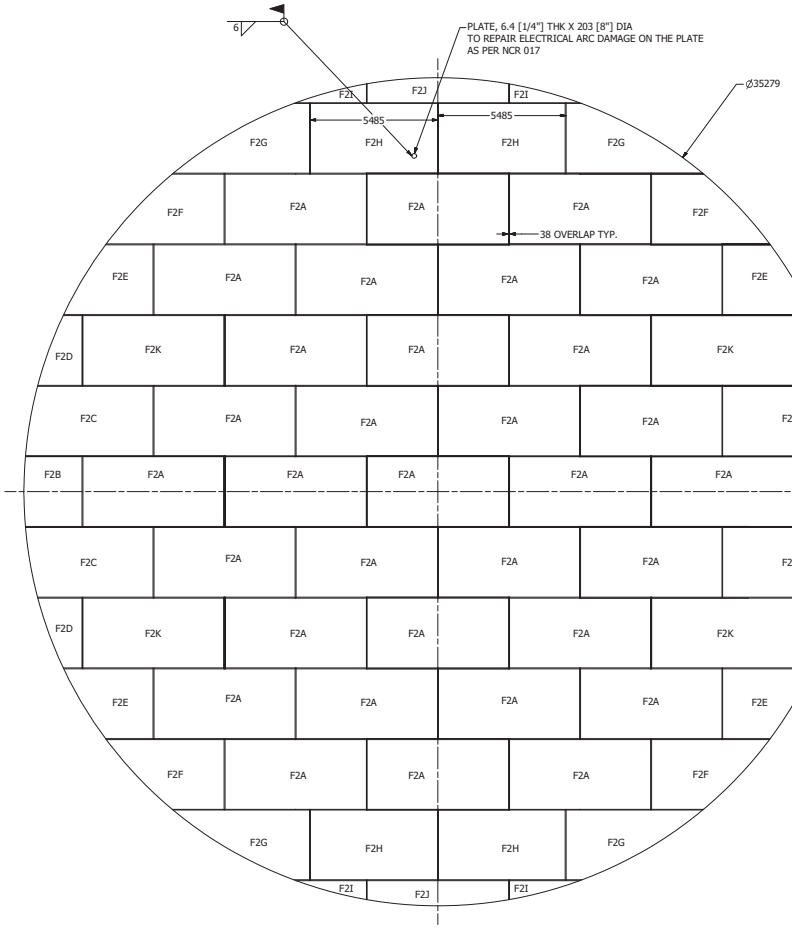
F2D
QTY: 4



F2J
QTY: 2







TANK 2 (13.5ML) FLOOR LAYOUT
SCALE 1 / 100

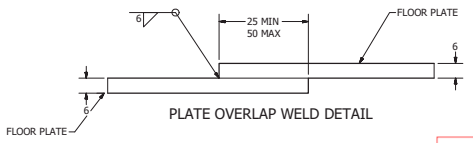


PLATE OVERLAP WELD DETAIL

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2017/10/02

30-Sep-2017
Permit Number: P471

REVISION HISTORY		
REV	DESCRIPTION	DATE
2	INCORPORATE FIELD MODIFICATION	9/27/2017

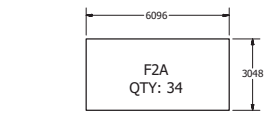
DRAWN	JACOB SAUNDERS	1/10/2017
CHECKED	MARC LOSIER	3/14/2017
QA		
MFG		
APPROVED		

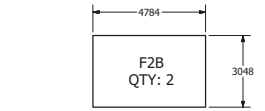
TITLE: TK #2 (13.5ML) - FLOOR LAYOUT

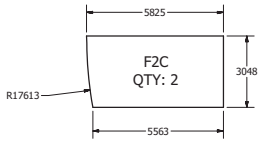
MELIADINE FIELD ERECTED TANKS - TANK #2 (13.5ML) FLOOR AND ROOF LAYOUT

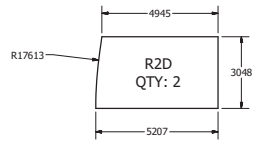
SIZE	DWG NO	REV
A1	295-M2	2

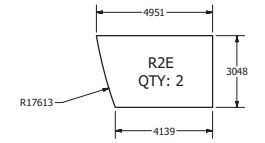
SCALE 1 / 100 SHEET 1 OF 2

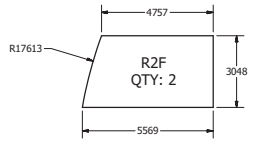


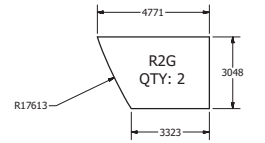


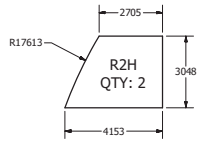


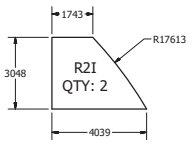


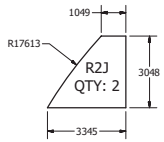


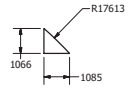




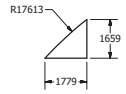




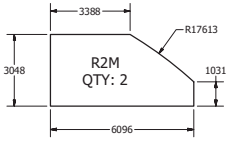


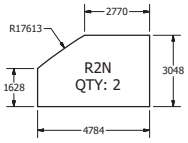


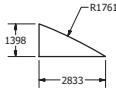
R2K
QTY: 2



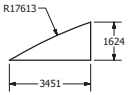
R2L
QTY: 2



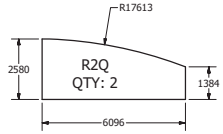


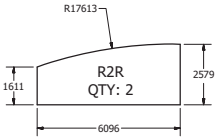


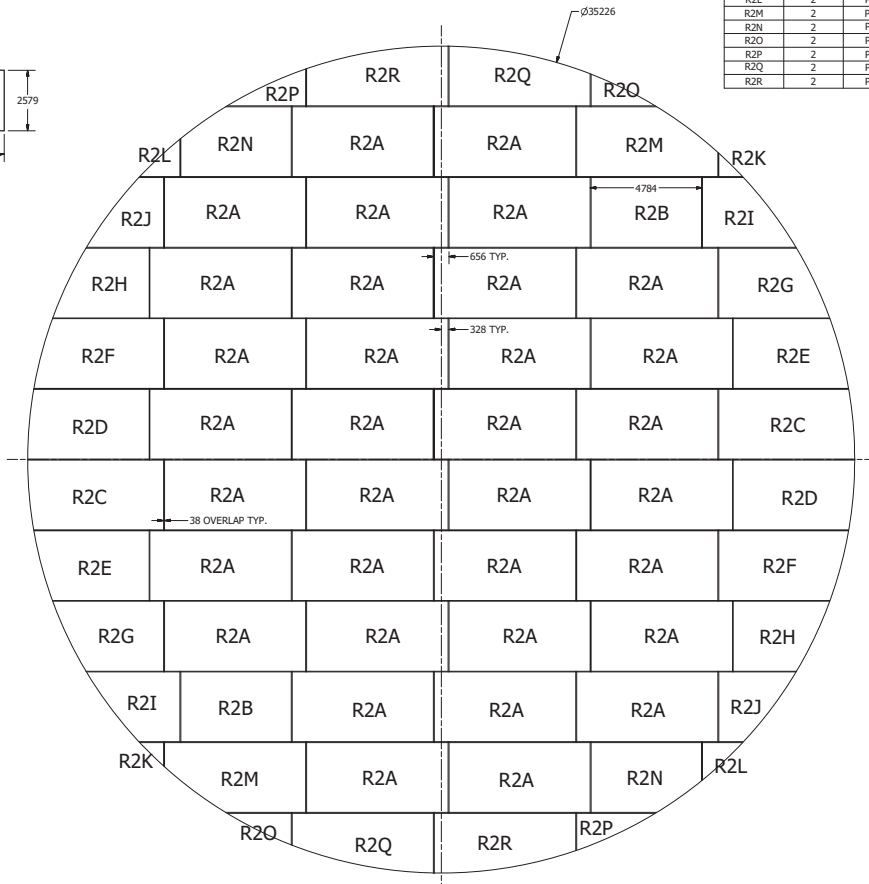
R2O
QTY: 2



R2P
QTY: 2







TANK 2 (13.5ML) ROOF LAYOUT
SCALE 1 / 100

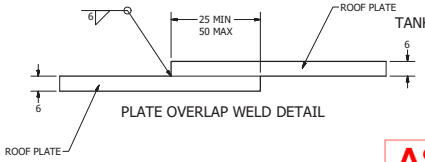


PLATE OVERLAP WELD DETAIL

PARTS LIST

ITEM	QTY	DESCRIPTION	MATERIAL
R2A	34	PL 6.35 X 3048 X 6096	G40.21M-260WT
R2B	2	PL 6.35 X 3048 X 4784	G40.21M-260WT
R2C	2	PL 6.35 X 3048 X 5825	G40.21M-260WT
R2D	2	PL 6.35 X 3048 X 5825	G40.21M-260WT
R2E	2	PL 6.35 X 3048 X 4951	G40.21M-260WT
R2F	2	PL 6.35 X 3048 X 5569	G40.21M-260WT
R2G	2	PL 6.35 X 3048 X 4771	G40.21M-260WT
R2H	2	PL 6.35 X 3048 X 4153	G40.21M-260WT
R2I	2	PL 6.35 X 3048 X 4039	G40.21M-260WT
R2J	2	PL 6.35 X 3048 X 3345	G40.21M-260WT
R2K	2	PL 6.35 X 1066 x 1085	G40.21M-260WT
R2L	2	PL 6.35 X 1659 x 1779	G40.21M-260WT
R2M	2	PL 6.35 X 3048 X 6096	G40.21M-260WT
R2N	2	PL 6.35 X 3048 x 4784	G40.21M-260WT
R2O	2	PL 6.35 X 2833 x 1398	G40.21M-260WT
R2P	2	PL 6.35 X 3451 x 1624	G40.21M-260WT
R2Q	2	PL 6.35 X 2580 x 6096	G40.21M-260WT
R2R	2	PL 6.35 X 2579 x 6096	G40.21M-260WT

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2017/10/02

30-Sep-2017
Permit Number: P471

REVISION HISTORY		
REV	DESCRIPTION	DATE
2	INCORPORATE FIELD MODIFICATION	9/27/2017

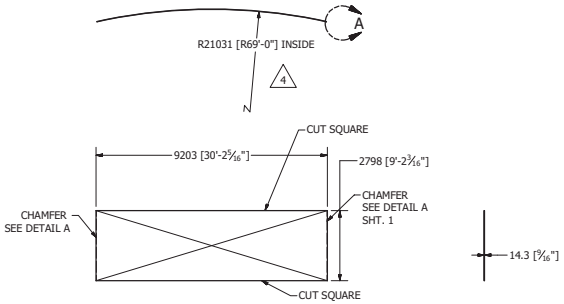
DRAWN	JACOB SAUNDERS	1/10/2017
CHECKED	MARC LOSIER	3/14/2017
QA		
MFG		
APPROVED		

TK 2 (13.5ML) - ROOF LAYOUT

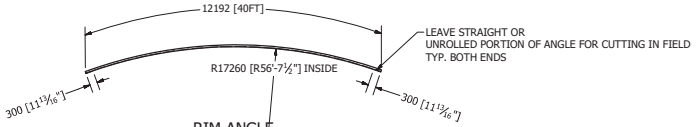
TITLE
MELIADINE FIELD ERECTED TANKS - TANK #2 (13.5ML) FLOOR AND ROOF LAYOUT

SIZE	DWG NO	REV
A1	295-M2	2

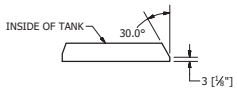
SCALE 1 / 100 SHEET 2 OF 2



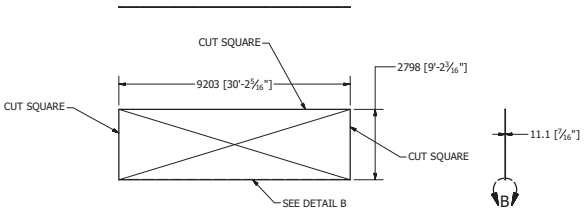
DEVELOP VIEW
COURSE NO. 1 (BOTTOM) 14.3mm THK (9/16")
CUT FROM PLATE 2874mm x 9269mm
QTY: 12
MARK 7201



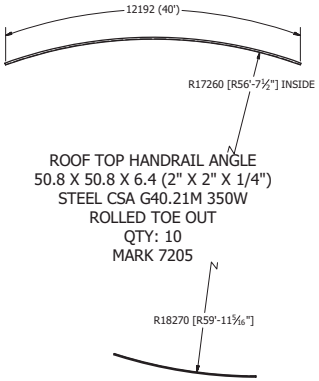
RIM ANGLE
76.2 X 76.2 X 9.5 x 12192 LONG
(3" X 3" X 3/8" x 40')
STEEL CSA G40.21M 350W
ROLLED TOE OUT
QTY: 10
MARK 7204



DETAIL A
COURSE NO. 1 VERT. PREP.
TYP. BOTH ENDS
SCALE 1 / 2

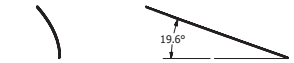


DEVELOP VIEW
COURSE NO. 2 - 11.1mm THK (7/16")
CUT FROM PLATE 2874mm x 9269mm
QTY: 12
MARK 7202

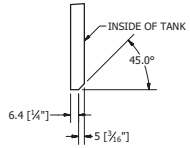


ROOF TOP HANDRAIL ANGLE
50.8 X 50.8 X 6.4 (2" X 2" X 1/4")
STEEL CSA G40.21M 350W
ROLLED TOE OUT
QTY: 10
MARK 7205

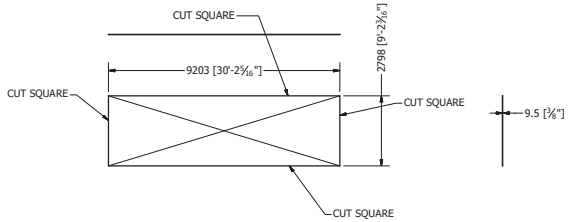
TOP VIEW



FRONT VIEW SIDE VIEW



DETAIL B
COURSE NO. 2
BOTTOM EDGE PREP.
SCALE 1 / 2



DEVELOP VIEW
COURSE NO. 3,4, & 5 - 9.5mm THK (3/8")
CUT FROM PLATE 2874mm x 9269mm
QTY: 36
MARK 7203

STAIRWAY HANDRAIL ANGLE
50.8 X 50.8 X 6.4 X 6096MM
(2" X 2" X 1/4" X 20' LONG)
STEEL CSA G40.21M 350W
QTY: 5
MARK 7206

NOTES:

ONLY COURSE NO. 1 SHELL PLATES REQUIRE SHOP ROLLING FOR TANK NO.2

SHELL PLATES TO BE CHECKED CORNER TO CORNER FOR SQUARENESS

STEEL PLATES: 38WT SUPPLIED BY MEL
STEEL SHAPES: 350W SUPPLIED BY FORMATECH

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2017/10/02

REVISION HISTORY			
ZONE	REV	DESCRIPTION	DATE
2D, 2F, 10B, 10D, 10G	3	DETAIL A & B MODIFIED, COURSE NO. 2 VERT EDGE PREP. REM., COURSE NO. 3, 4, 5 HOR. EDGE PREP. REM.	2/14/2017
10H	4	COURSE NO. 1 RAD. CHANGED	2/14/2017

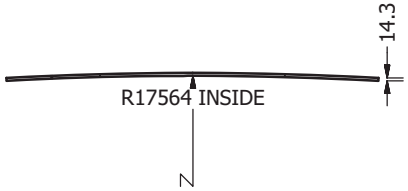
DRAWN	Marc Losier	2/2/2017
CHECKED	Jacob Saunders	2/2/2017
QA		
MFG		
APPROVED		

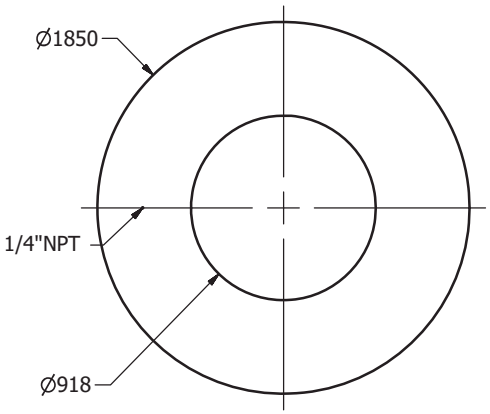
TANK NO. 2 - 13,500 CUM

TITLE: MELIADINE FIELD ERECTED TANKS - SHELL PLATES AND ANGLES ROLLING DETAILS

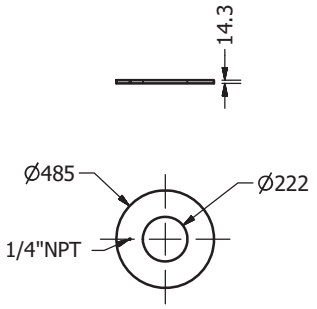
SIZE A1 | DWG NO 295-M7 | REV 4 | SCALE | SHEET 2 OF 6

30-Sep-2017
Permit Number: P471

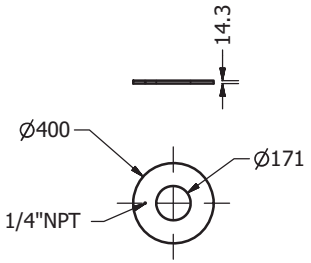




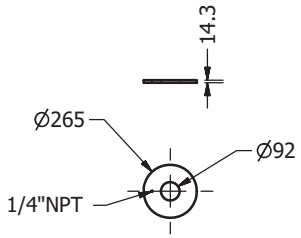
REINFORCING PLATE
SHELL MANHOLE 900MM (36")
TANK NO. 2 - 13.5ML
MARK: 8201
QTY: 4



REINFORCING PLATE
SHELL NOZZLE LOADING 200MM (8")
TANK NO. 2 - 13.5ML
MARK: 8202
QTY: 1



REINFORCING PLATE
SHELL NOZZLE UNLOADING 150MM (6")
TANK NO. 2 - 13.5ML
MARK: 8203
QTY: 3



REINFORCING PLATE
SHELL WATER DRAW OFF 75MM (3")
TANK NO. 2 - 13.5ML
MARK: 8204
QTY: 6

MATERIAL:
STEEL CSA G40.21-38WT
NORMALIZED
TRANSVERSE CHARPY: TCVN 13FT/LBS@-45F
LONGITUDINAL CHARPY: LCVN 15FT/LBS@-45F

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2017/10/02

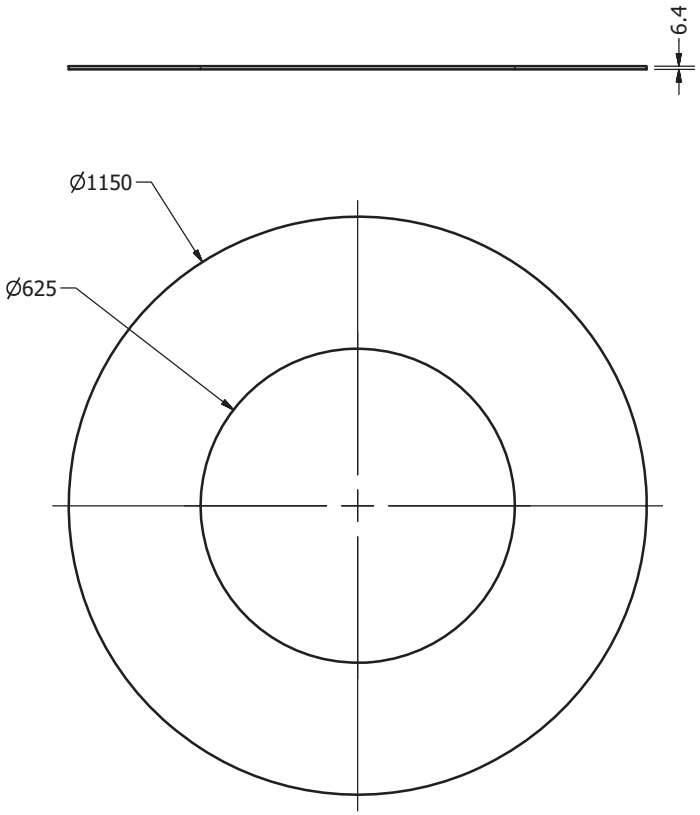
30-Sep-2017

Permit Number: P471

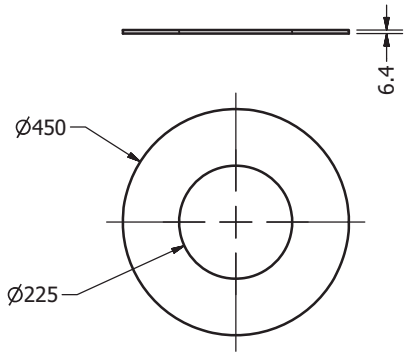
DRAWN Jacob Saunders	2/2/2017	TANK NO. 2 (13.5ML) SHELL
CHECKED Marc Losier	3/16/2017	TITLE: REINFORCING PLATE DETAILS
QA		
MFG		
APPROVED		

SIZE	DWG NO	REV
A3	295-M8	4

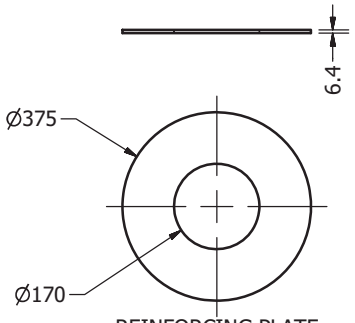
SCALE 1/25 SHEET 3 OF 12



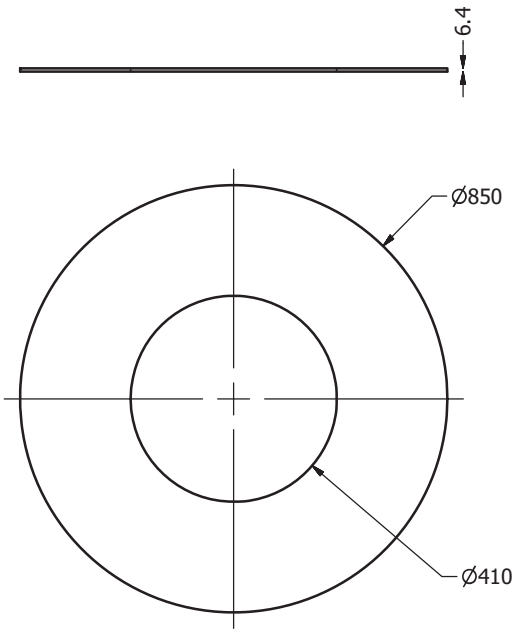
REINFORCING PLATE
ROOF MANHOLE 600MM
TANK NO. 2 - 13.5ML
MARK: 8205
QTY: 4



REINFORCING PLATE
ROOF NOZZLE 200MM
TANK NO. 2 - 13.5ML
MARK 8206
QTY: 1



REINFORCING PLATE
ROOF GAUGE HATCH 150MM
TANK NO. 2 - 13.5ML
MARK: 8207
QTY: 1



REINFORCING PLATE
ROOF VENT 400MM
TANK NO. 2 - 13.5ML
MARK: 8208
QTY: 1

Permit Number: P471

MATERIAL:
STEEL CSA G40.21-38WT
NORMALIZED
TRANSVERSE CHARPY: TCVN 13FT/LBS@-45F
LONGITUDINAL CHARPY: LCVN 15FT/LBS@-45F

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2017/10/02

DRAWN	Jacob Saunders	2/2/2017
CHECKED	Marc Losier	3/16/2017
QA		
MFG		
APPROVED		

TANK NO. 2 (13.5ML) ROOF

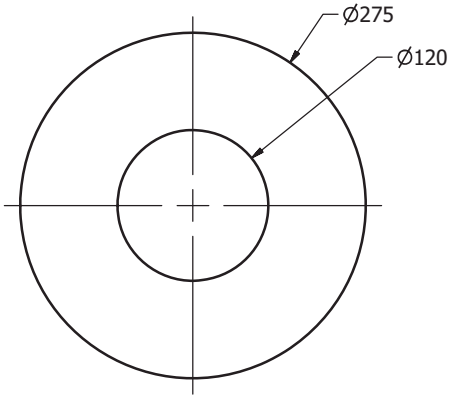
TITLE

REINFORCING PLATE DETAILS

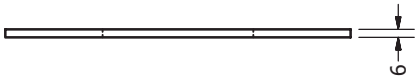
SIZE	DWG NO	REV
A3	295-M8	4

SCALE 1 / 10

SHEET 4 OF 12

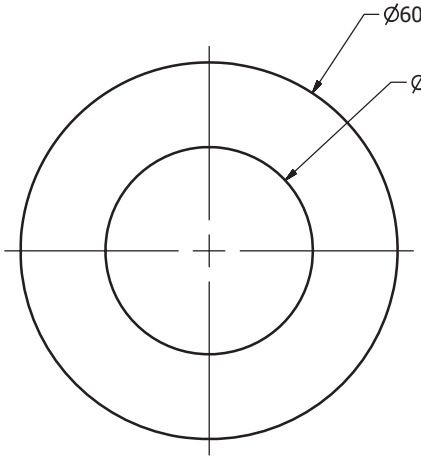


M81201 QTY	
Tank No.	QTY
1	1
2	1
3	1
4	1
5	1
6	1
TOTAL	6



REINFORCING PLATE
100NS ROOF NOZZLE
QTY: 6
1 PER TANK
MARK 81201
SCALE 1/4

MATERIAL:
STEEL CSA G40.21-300W



M81202 QTY	
Tank No.	QTY
1	2
2	1
3	0
4	0
5	0
6	0
TOTAL	10

REINFORCING PLATE
300NS ROOF NOZZLE FOR PV VENT
QTY: 10
MARK 81202
SCALE 1/8

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2017/10/02

PROFESSIONAL ENGINEER
J.S. BROWN
LICENSEE
NT/NU
30-Sep-2017
Permit Number: P471

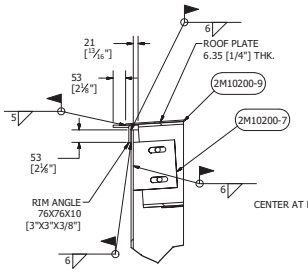
REVISION HISTORY		
REV	DESCRIPTION	DATE
4	THIS SHEET ADDED	7/7/2017

DRAWN Jacob Saunders	2/2/2017	REINFORCING PAD FOR ECN-001
CHECKED Marc Losier	3/16/2017	TITLE
QA		REINFORCING PLATE DETAILS
MFG		
APPROVED		

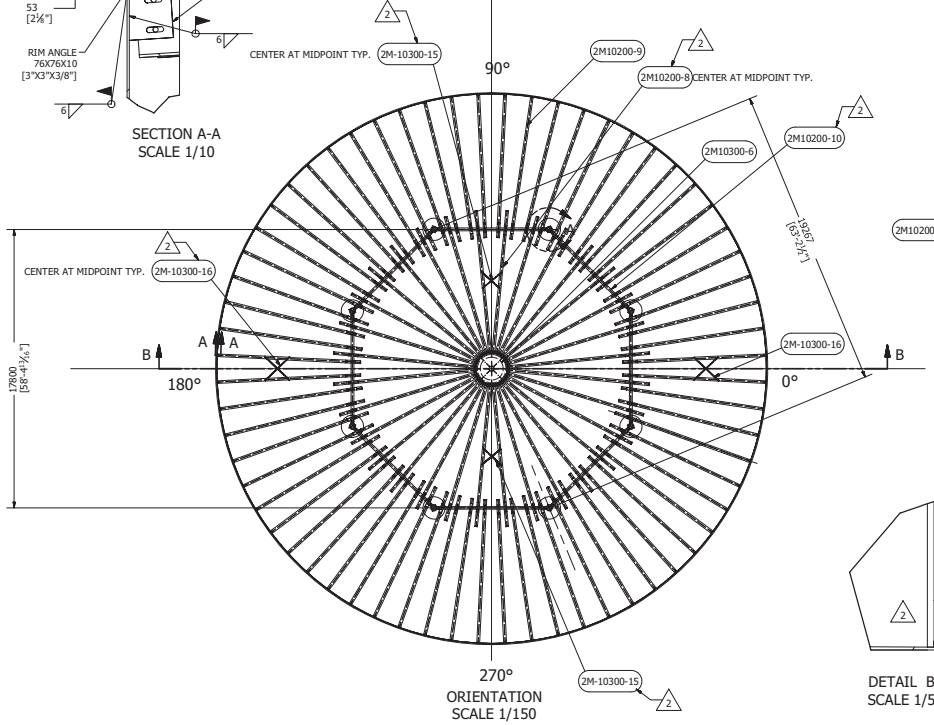
SIZE		DWG NO	REV
A3		295-M8	4

SCALE 1/4 SHEET 13 OF 13

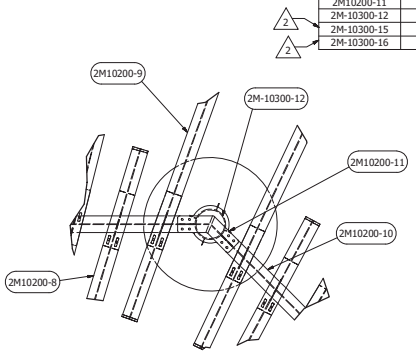
PARTS LIST				
ITEM	ITEM QTY	DESCRIPTION	MATERIAL	MASS
2M10300-6	1	CENTER COLUMN - SEE SHT 3		2804.467 kg
2M10200-7	64	SHELL CLIP - SEE SHT 2	G40.21M-300W	2.553 kg
2M10200-8	32	INNER RAFTER - SEE SHT 2	G40.21M-350W	1021.718 lbmass
2M10200-9	64	OUTER RAFTER - SEE SHT 2	G40.21M-350W	1021.776 lbmass
2M10200-10	8	INTERMEDIATE GIRDER - SEE SHT 2		551.240 kg
2M10200-11	8	INTERMEDIATE GIRDER TOP CONNECTION PLATE - SEE SHT 2	G40.21M-300W	12.051 kg
2M-10300-12	8	INTERMEDIATE COLUMN - SEE SHT 3		1421.921 kg
2M-10300-15	4	FB50X50X6 [FB2"X2"X1/4"] X 1575 [5'-2"] LG	G40.21M-300W	8.792 lbmass
2M-10300-16	4	FB50X50X6 [FB2"X2"X1/4"] X 2184 [7'-2"] LG	G40.21M-300W	12.195 lbmass



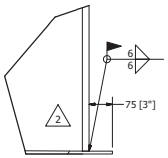
SECTION A-A
SCALE 1/10



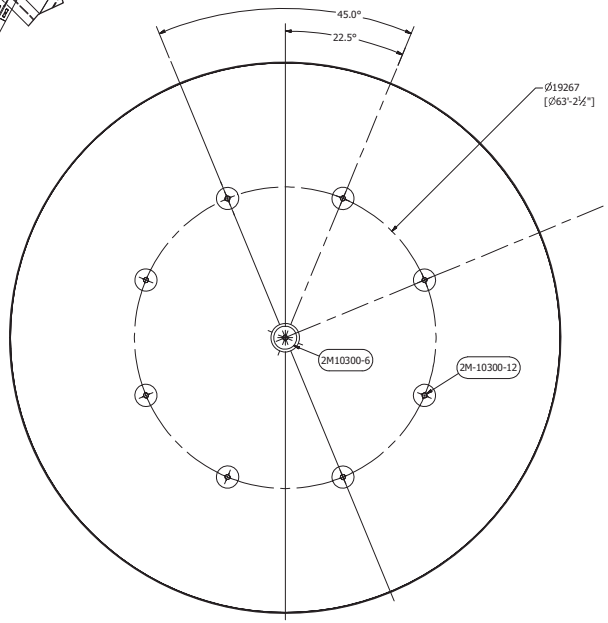
270°
ORIENTATION
SCALE 1/150



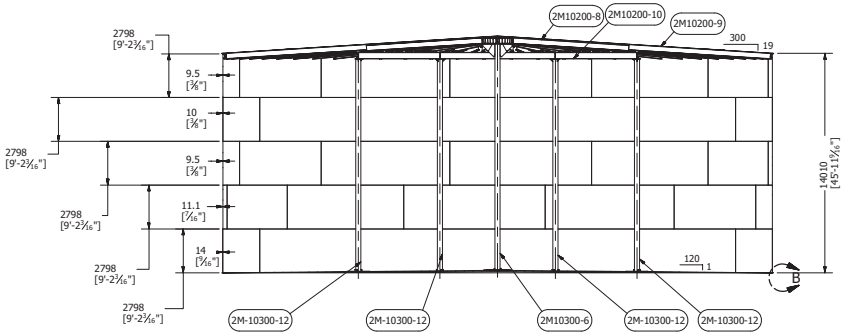
DETAIL A
SCALE 1/25



DETAIL B
SCALE 1/5



COLUMNS LAYOUT DETAIL
SCALE 1/150



SECTION B-B
SCALE 1/150

NOTES:
ALL DIMENSIONS ARE IN MILLIMETRE UNLESS OTHERWISE NOTED

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2017/10/02

Permit Number: P471

30-Sep-2017

REVISION HISTORY			
ZONE	REV	DESCRIPTION	DATE
F11, G10, G7, C8, D6	2	RAFTER BRACING ADDED, DETAIL B ADDED, WELDING DETAIL ADDED IN SECITON A-A	3/31/2017
	7	INCORPORATE FIELD MODIFICATION	9/27/2017

DRAWN	MARC LOSIER	3/9/2017
CHECKED		
QA		
MFG		
APPROVED		

RAFTER AND COLUMN LAYOUT

TITLE
AGNICO EAGLE - MELIADINE GOLD MINE - TK #2 - 13,500CUM 35.1M DIA X 14M H

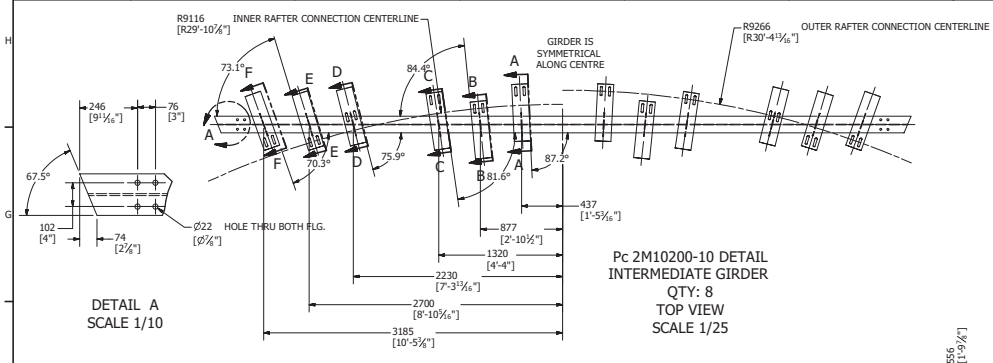
SIZE	DWG NO	REV
A1	295-M10	7

SCALE

SHEET 1 OF 7

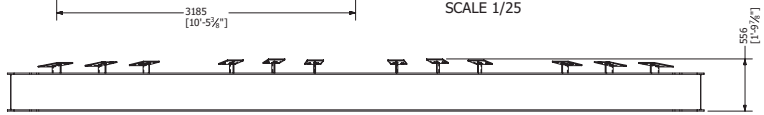
BILL OF MATERIAL - INTERMEDIATE GIRDER ASSEMBLY				
MARK	ITEM QTY	DESCRIPTION	MATERIAL	MASS
2M10201	1	W410X60 [W16"X40#] X 7420 [24'- 4 1/8"]	G40.21M-350W	437.619 kg
2M10202	2	10 [3/8"] THK X 127 [5"] WD X 250 [9 7/8"]	G40.21M-300W	2.230 kg
2M10203	2	10 [3/8"] THK X 125 [4 7/8"] WD X 250 [9 7/8"]	G40.21M-300W	2.192 kg
2M10204	2	10 [3/8"] THK X 121 [4 3/4"] WD X 250 [9 7/8"]	G40.21M-300W	2.113 kg
2M10205	2	10 [3/8"] THK X 110 [4 3/8"] WD X 250 [9 7/8"]	G40.21M-300W	1.904 kg
2M10206	2	10 [3/8"] THK X 101 [4"] WD X 250 [9 7/8"]	G40.21M-300W	1.748 kg
2M10207	2	10 [3/8"] THK X 92 [3 5/8"] WD X 250 [9 7/8"]	G40.21M-300W	1.576 kg
2M10208	10	10 [3/8"] THK X 171 [6 3/4"] WD X 610 [2'-0"]	G40.21M-300W	7.508 kg
2M10209	2	10 [3/8"] THK X 171 [6 3/4"] WD X 610 [2'-0"]	G40.21M-300W	7.508 kg

BILLING FOR ONE GIRDER ASSEMBLY SHOWN
TOTAL EIGHT GIRDER ASSEMBLIES REQUIRED

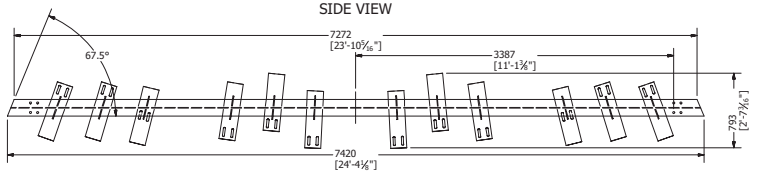


DETAIL A
SCALE 1/10

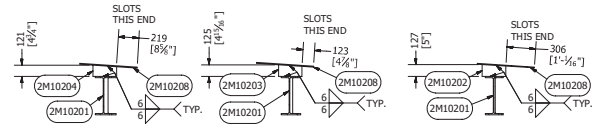
Pc 2M10200-10 DETAIL
INTERMEDIATE GIRDER
QTY: 8
TOP VIEW
SCALE 1/25



SIDE VIEW



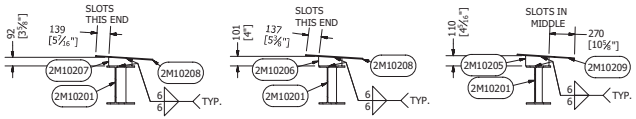
BOTTOM VIEW



SECTION C-C
SCALE 1/25

SECTION B-B
SCALE 1/25

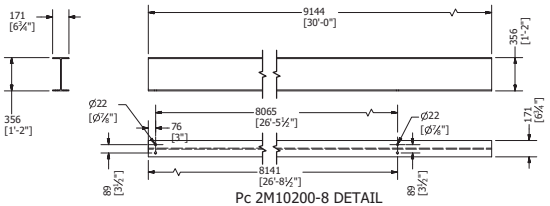
SECTION A-A
SCALE 1/25



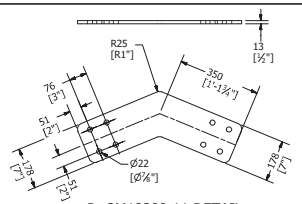
SECTION F-F
SCALE 1/25

SECTION E-E
SCALE 1/25

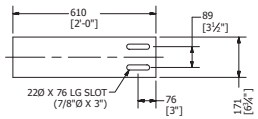
SECTION D-D
SCALE 1/25



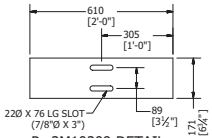
Pc 2M10200-8 DETAIL
INNER RAFTER
SCALE 1/25



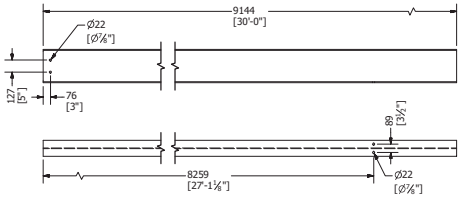
Pc 2M10200-11 DETAIL
INTERMEDIATE GIRDER BEAM
TOP CONNECTION PLATE
SCALE 1/10



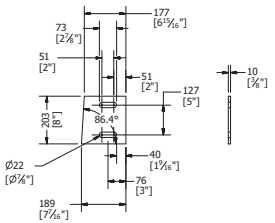
Pc 2M10208 DETAIL
SCALE 1/10



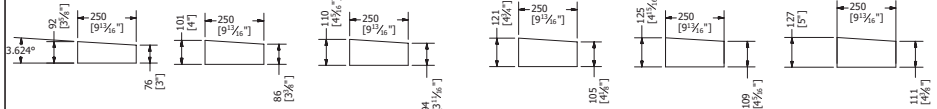
Pc 2M10209 DETAIL
SCALE 1/10



Pc 2M10200-9 DETAIL
OUTER RAFTER
SCALE 1/25



Pc 2M10200-7 DETAIL
SHELL CLIP
SCALE 1/10



Pc 2M10207 DETAIL
SCALE 1/10

Pc 2M10206 DETAIL
SCALE 1/10

Pc 2M10205 DETAIL
SCALE 1/10

Pc 2M10204 DETAIL
SCALE 1/10

Pc 2M10203 DETAIL
SCALE 1/10

Pc 2M10202 DETAIL
SCALE 1/10

BILL OF MATERIAL				
ITEM	ITEM QTY	DESCRIPTION	MATERIAL	MASS
2M10200-7	64	10 [3/8"] THK X 189 [7 1/2"] WD X 203 [8"] LG	G40.21M-300W	2.553 kg
2M10200-8	32	W360X51 [W14"X34#] 9144 [30'-0"]	G40.21M-350W	1021.718 lbmass
2M10200-9	64	W360X51 [W14"X34#] 9144 [30'-0"]	G40.21M-350W	1021.776 lbmass
2M10200-11	8	13 [1/2"] THK X 357 [1'-2"] WD X 573 [1'-10 1/2"] LG	G40.21M-300W	12.051 kg

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2017/10/02

30-Sep-2017
Permit Number: P471

NOTE:
ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED

DRAWN	MARC LOSIER	3/9/2017
CHECKED		
QA		
MFG		
APPROVED		

INTERMEDIATE GIRDER AND RAFTER DETAIL

TITLE
AGNICO EAGLE - MELIADINE GOLD MINE - TK #2 - 13,500CUM 35.1M DIA X 14M H

SIZE	DWG NO	REV
A1	295-M10	7

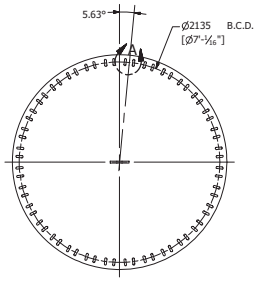
SCALE

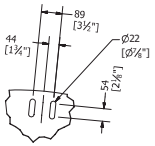
SHEET 2 OF 7

BILL OF MATERIAL - CENTER COLUMN				
MARK	ITEM QTY	DESCRIPTION	MATERIAL	MASS
2M10301	1	25 [1"] THK X 2286 [7'-6"] DIA	G40.21M-300W	798.104 kg
2M10302	1	13 [1/2"] THK X 1473 [4'-10"] DIA.	G40.21M-300W	169.937 kg
2M10303	8	10 [3/8"] x 750 [2'-5 1/2"] WD x 750 [2'-5 1/2"] LG	G40.21M-300W	30.566 kg
2M10304	4	6 [1/4"] THK X 76 [3"] X 102 [4"]	G40.21M-300W	0.851 lbmass
2M10305	1	25 [1"] THK X 1828 [6'-0"] DIA.	G40.21M-300W	523.752 kg
2M10306	1	HSS 324 [12 3/4"] O.D. X 9.5 [3/8"] WALL x 14426 [47'-3 15/16"] LG	G40.21M-350W CLASS H	2348.230 lbmass
2M10307	1	19 [3/4"] THK X 89 [3 1/2"] WD X 203 [8"] LG	G40.21M-300W	1.461 kg

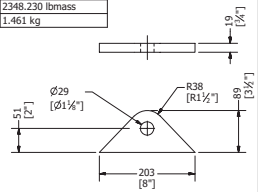
PARTS LIST				
ITEM	ITEM QTY	DESCRIPTION	MATERIAL	MASS
2M10321	1	13 [1/2"] THK x 407 [1'-4"] WD x 696 [2'-3 3/8"] LG	G40.21M-300W	17.744 kg
2M10322	1	HSS324 [12 3/4"] O.D. X 10 [3/8"] WALL x 13557 [44'-5 3/4"] LG	G40.21M-350W CLASS H	2215.665 lbmass
2M10323	1	32 [1 1/4"] THK X 1422 [4'-8"] DIA.	G40.21M-300W	396.047 kg
2M10324	4	6 [1/4"] THK X 76 [3"] WD X 102 [4"] LG	G40.21M-300W	0.851 lbmass
2M10325	2	6 [1/4"] THK X 164 [6 1/2"] WD X 164 [6 1/2"] LG	G40.21M-300W	0.789 kg

BILLING FOR ONE INTERMEDIATE COLUMN ASSEMBLY SHOWN
TOTAL EIGHT INTERMEDIATE COLUMN ASSEMBLIES REQUIRED

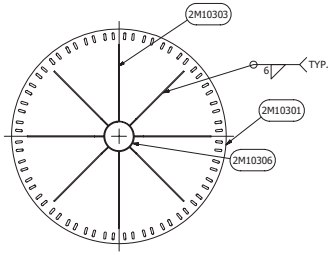




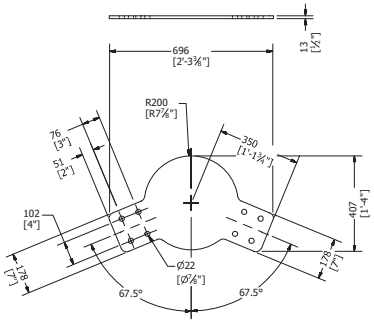
DETAIL A
TYPICAL (32) LOCATIONS EQ. SPACED
SCALE 1/10



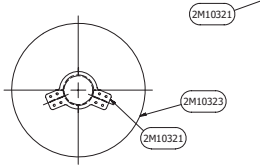
2M10307
SCALE 1/5

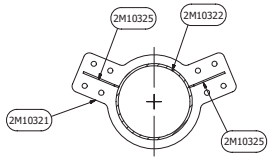


SECTION A-A
SCALE 1/25

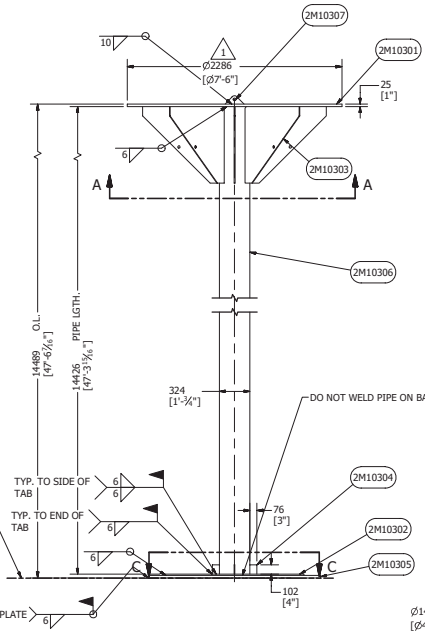


Pc 2M10321 DETAIL
INTERMEDIATE COLUMN CAP PLATE
SCALE 1/10

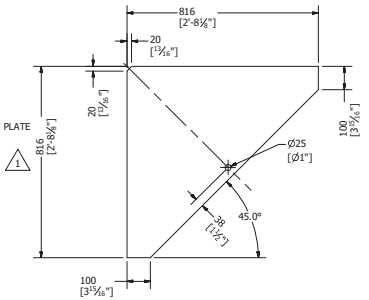




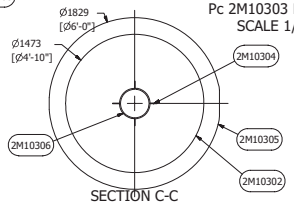
SECTION B-B
SCALE 1/10



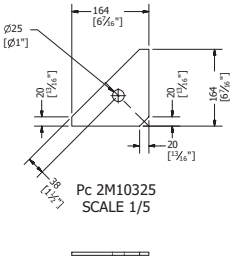
Pc 2M10300-6 DETAIL
CENTER COLUMN
SCALE 1/25



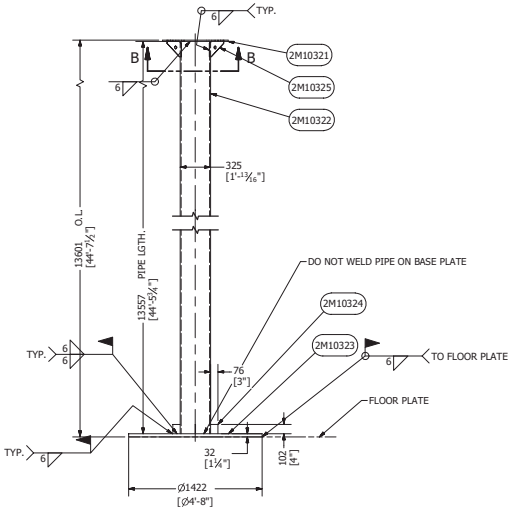
Pc 2M10303 DETAIL
SCALE 1/10



SECTION C-C
SCALE 1/25



Pc 2M10325
SCALE 1/5



Pc 2M10300-12
INTERMEDIATE COLUMN
QTY: 8
SCALE 1/25

REVISION HISTORY			
ZONE	REV	DESCRIPTION	DATE
3H, 10H	1	CENTER COLUMN PIPE AND INTERMEDIATE COLUMN PIPE LGTH. CHG. TO SUITE SLOPE 1/120, INTERMEDIATE COLUMN PIPE CHG. FROM 10.75"X1/2"WALL TO 12.75"X 3/8"	3/13/2017

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2017/10/02
30-Sep-2017
Permit Number: P471

NOTE:
ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED

DRAWN	MARC LOSIER	3/9/2017
CHECKED		
QA		
MFG		
APPROVED		

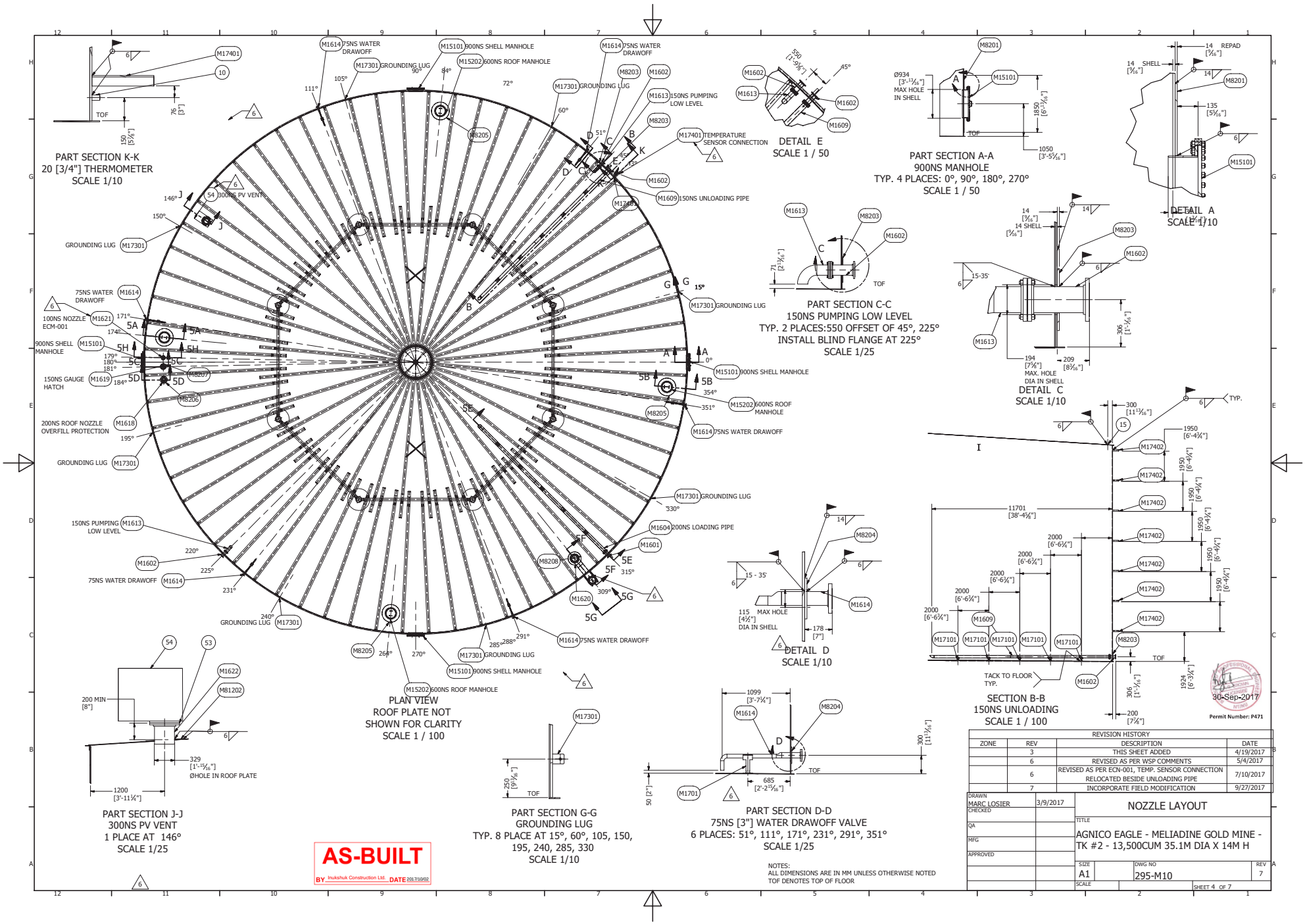
CENTER AND INTERMEDIATE COLUMN DETAILS

TITLE: AGNICO EAGLE - MELIADINE GOLD MINE - TK #2 - 13,500CUM 35.1M DIA X 14M H

SIZE	DWG NO	REV
A1	295-M10	7

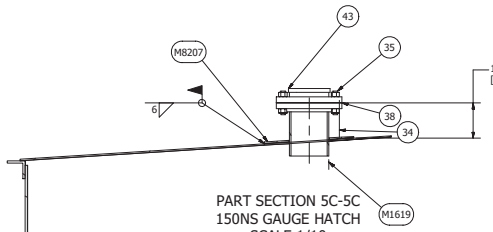
SCALE

SHEET 3 OF 7

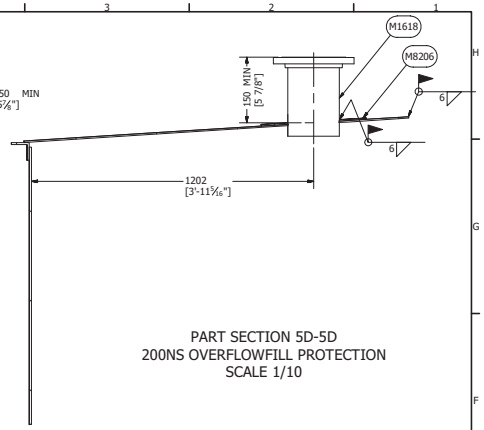

PART SECTION K-K
20 [3/4"] THERMOMETER
SCALE 1/10
PLAN VIEW
ROOF PLATE NOT
SHOWN FOR CLARITY
SCALE 1 / 100
DETAIL E
SCALE 1 / 50
PART SECTION A-A
900NS MANHOLE
TYP. 4 PLACES: 0°, 90°, 180°, 270°
SCALE 1 / 50
DETAIL A
SCALE 1/10
PART SECTION C-C
150NS PUMPING LOW LEVEL
TYP. 2 PLACES:550 OFFSET OF 45°, 225°
INSTALL BLIND FLANGE AT 225°
SCALE 1/25
DETAIL C
SCALE 1/10
DETAIL D
SCALE 1/10
SECTION B-B
150NS UNLOADING
SCALE 1 / 100
PART SECTION J-J
300NS PV VENT
1 PLACE AT 146°
SCALE 1/25
PART SECTION G-G
GROUNDING LUG
TYP. 8 PLACE AT 15°, 60°, 105°, 150,
195, 240, 285, 330
SCALE 1/10
PART SECTION D-D
75NS [3"] WATER DRAWOFF VALVE
6 PLACES: 51°, 111°, 171°, 231°, 291°, 351°
SCALE 1/25
AS-BUILT
BY Inukshuk Construction Ltd. DATE 2017/10/02
30-Sep-2017
Permit Number: P471
NOTES:
ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
TOP DENOTES TOP OF FLOOR
REVISION HISTORY
ZONE | REV | DESCRIPTION | DATE
3 | THIS SHEET ADDED | 4/19/2017
6 | REVISED AS PER WSP COMMENTS | 5/4/2017
6 | REVISED AS PER ECN-001, TEMP. SENSOR CONNECTION RELOCATED BESIDE UNLOADING PIPE | 7/10/2017
7 | INCORPORATE FIELD MODIFICATION | 9/27/2017
DRAWN MARC LOSIER 3/9/2017
CHECKED
QA
MFG
APPROVED
NOZZLE LAYOUT
AGNICO EAGLE - MELIADINE GOLD MINE -
TK #2 - 13,500CUM 35.1M DIA X 14M H
SIZE A1
DWG NO 295-M10
REV 7
SCALE
SHEET 4 OF 7

PARTS LIST FOR NOZZLE LAYOUT SHT 4

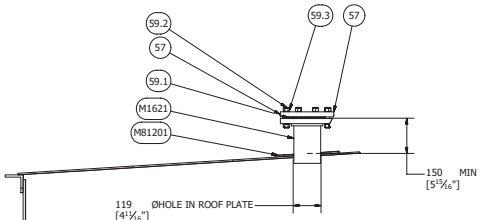
ITEM	ITEM QTY	DESCRIPTION	FAB. DRG. NO.	MATERIAL
10	1	20NS [3/4"] NPT COUPLING, 3000#, (TEMPERATURE SENSOR)		ASTM A350 LF2
15	2	COUPLING, 3000#, THREADED, 1"NPT PRV LINE CONNECTION		ASTM A350 LF2
31	1	400NS GASKET RUBBER 1.6 [1/16"] THK.		DURLON 8500
33	3	150NS [6"] X 3.2 [1/8"]THK GASKET		DURLON 8500
34	66	3/4" UNC HEAVY HEX NUT		A194 GR4
35	25	3/4"UNC X 4" LG STUD, L7		A320 L7
37	8	3/4"UNC X 4 3/4" LG STUD L7		A320 L7
38	1	150NS [6"] X 1.6 [1/16"] THK GASKET RUBBER 150#		Rubber
43	1	150NS GAUGE HATCH, SHANG AND JURS MODEL NO. 95010-02-00		ALUMINUM
44	16	1"UNC X 5 3/4" LG STUD L7		A320 I7
45	32	1" UNC HEAVY HEX NUT		A194 GR4
48	2	75NS [3"] PIPE, A53, 76 [3"] LG		Steel
49	1	C150X12 X 914 [36"] LG		350W
50	1	400NS [16"] UBOLT		Steel
51	4	5/8" UNC HEAVY HEX NUT		Steel, Mild
53	1	300NS [12"] GASKET, 150#, RING, 1.6 [1/16"] THK.		DURLON 8500
54	1	300NS [12"] PV Vent, SET PRESSURE = 0.48 KPAG = 1.00 oz/sqin, SET VACUUM = 0.22 KPA = 0.5 oz/sqin		ENARDO 950
57	1	100NS [4"] BLIND FLANGE, 150#		A320 LF2
59	1	100NS [4"] JOINT MATERIAL COMPRISING:		
59.1	1	100NS [4"] GASKET, RING, 150#, 1.6 [1/16"]		DURLON 8500
59.2	8	5/8"UNC X 3 1/2" LG, STUD		L7
59.3	16	5/8" UNC NUT		A194 GR.4
M1601	1	200NS [8"] DOUBLE FLANGE SHELL NOZZLE	M16	
M1602	3	150NS [6"] DOUBLE FLANGE SHELL NOZZLE	M16	
M1604	1	200NS [8"] X 11.7M [38'- 4 5/8"] LG LOADING PIPE	M16	
M1609	1	150NS [6"] X 11.7M [38'- 4 5/8"] LG UNLOADING PIPE	M16	
M1613	2	150NS [6"] PUMPING LOW LEVEL	M16	
M1614	6	75NS [3"] WATER DRAWOFF NOZZLE	M16	
M1615	1	100NS [4"] PAINTERS SCAFFOLD CABLE SUPPORT	M16	
M1616	1	400NS ROOF NOZZLE	M16	
M1618	1	200NS [6"] ROOF NOZZLE FOR OVERFILL PROTECTION	M16	
M1619	1	150NS [6"] ROOF NOZZLE FOR GAUGE HATCH	M16	
M1620	1	400NS [16"] ROOF VENT	M16	
M1621	1	100NS [4"] ROOF NOZZLE		
M1622	1	300NS [12"] ROOF NOZZLE	M16	
M8201	4	900NS [36"] REINFORCING PAD	M8	
M8202	1	200NS [8"] SHELL NOZZLE REINFORCING PAD	M8	
M8203	3	150NS [6"] SHELL NOZZLE REINFORCING PAD	M8	
M8204	6	75NS [3"] SHELL WATER DRAWING NOZZLE REINFORCING PAD	M8	
M8205	4	600NS [24"] ROOF MANHOLE REINFORCING PLATE	M8	
M8206	1	200NS [8"] ROOF NOZZLE REINFORCING PLATE	M8	
M8207	1	150NS [6"] ROOF NOZZLE REINFORCING PLATE	M8	
M8208	1	400NS [16"] REINFORCING PAD	M8	Steel
M15101	4	900NS [36"] SHELL MANHOLE	M15	
M15202	4	600NS [24"] ROOF MANHOLE	M15	
M17101	16	PIPE SUPPORT TYPE 1	M17	
M17301	8	GROUNDING LUG 76X65X6 [3"X2 1/2"X1/4"]	M17	Stainless Steel, Austenitic
M17401	1	L100X100X6 [L4"X4"X1/4"] 400 [15 3/4"] LG (TEMPERATURE SENSOR)	M17	G40.21M 350W
M17402	14	L75X75X6 [L3"X3"X1/4"] 400 [15 3/4"] BRACKET FOR PIPING OR ELECTRICAL CONDUIT	M17	G40.21M 350W
M81201	1	100NS ROOF NOZZLE REINFORIING PAD	M8	Steel, Mild
M81202	1	300 NS ROOF NOZZLE REINFORCING PAD	M8	Steel, Mild
M17501L	1	PIPE SUPPORT 400NS VENT LEFT	M17	
M17501R	1	PIPE SUPPORT 400NS VENT RIGHT	M17	



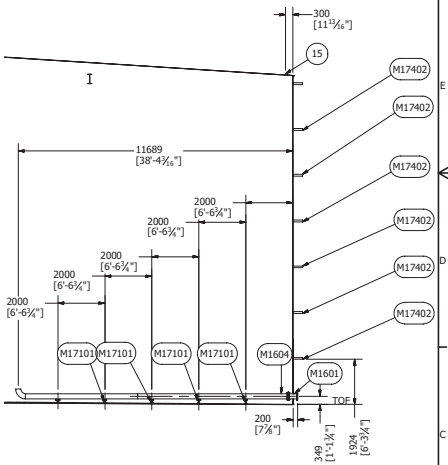
PART SECTION 5C-5C
150NS GAUGE HATCH
SCALE 1/10



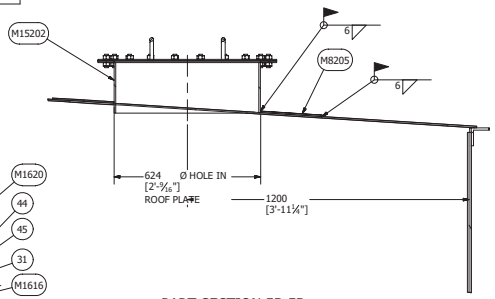
PART SECTION 5D-5D
200NS OVERFLOWFILL PROTECTION
SCALE 1/10



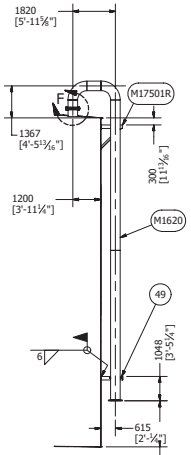
PART SECTION 5H-5H
100NS NOZZLE
1 PLACE AT 179°
ECN-001
SCALE 1/10



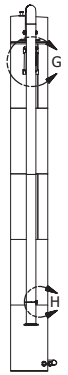
SECTION 5E-5E
200NS LOADING
SCALE 1 / 100



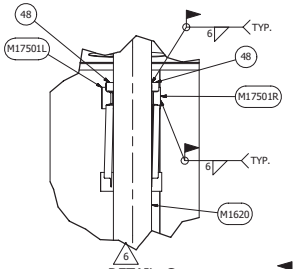
PART SECTION 5B-5B
600NS [24"} ROOF MANHOLE
4 PLACES AT 84°, 174°, 264°, 354°
SCALE 1/10



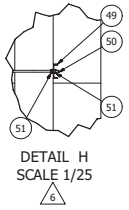
SECTION 5F-5F
SCALE 1 / 100



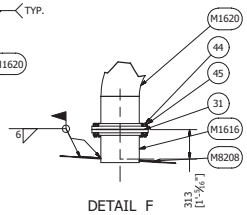
SECTION 5G-5G
SCALE 1 / 100
6



DETAIL G
SCALE 1/25



DETAIL H
SCALE 1/25
6



DETAIL F
SCALE 1/25

NOTE:
ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED

REVISION HISTORY			
ZONE	REV	DESCRIPTION	DATE
	3	THIS SHEET ADDED	4/20/2017
	4	DIST ROOF MANHOLE FROM SHELL CHG FROM 1553 TO 1700	
	6	REVISED AS PER WSP COMMENTS	5/4/2017
	6	MODIFIED AS PER ECN-001	7/9/2017

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2017/10/02

30-Sep-2017
Permit Number: P471

DRAWN	MARC LOSIER	3/9/2017
CHECKED		
QA		
MFG		
APPROVED		

TITLE: NOZZLES LAYOUT PARTS LIST

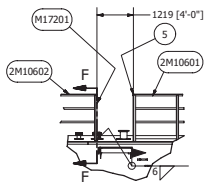
AGNICO EAGLE - MELIADINE GOLD MINE - TK #2 - 13,500CUM 35.1M DIA X 14M H

SIZE	DWG NO	REV
A1	295-M10	7

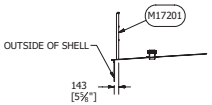
SCALE

SHEET 5 OF 7

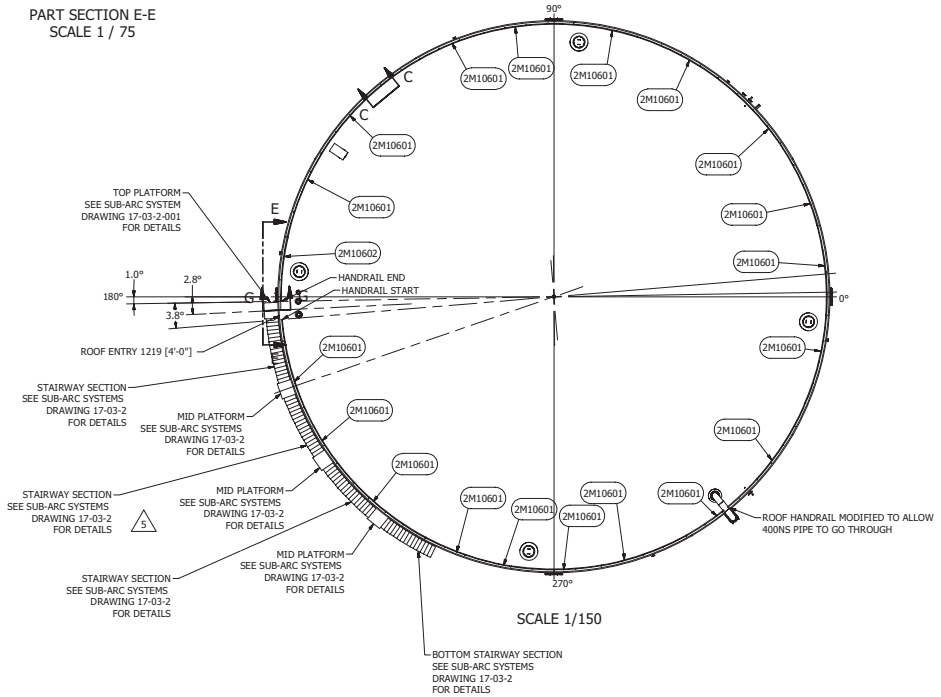
PARTS LIST			
ITEM	ITEM QTY	PART NUMBER	DESCRIPTION
2M10601	18	T2 Roof Top Handrail Section	PREFABRICATED ROOF TOP HANDRAIL SECITON SEE DETAIL
2M10602	1	T2 Roof Top Handrail Section (3)	PREFABRICATED ROOF TOP HANDRAIL SECITON SEE DETAIL Pc 1M10601 TRIM AT SITE
M17201	1	AISC - L 3 x 3 x 1/4 - 58.228346	Angle Steel
5	1	AISC - L 2 x 2 x 1/4 - 1.5	Angle Steel
6	1	TK 2 Platforms and Stairways	



PART SECTION E-E
SCALE 1 / 75

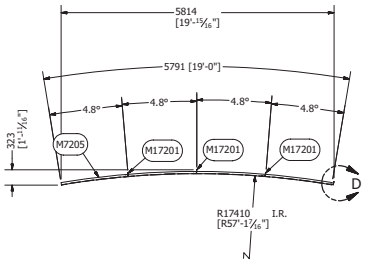


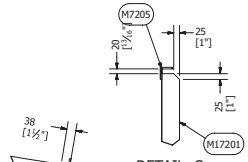
SECTION F-F
SCALE 1 / 75



SCALE 1/150

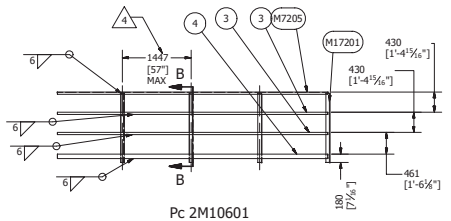
PARTS LIST						
ITEM	ITEM QTY	CUT (MM)	DESCRIPTION	PRE-FAB DRG #	MATERIAL	MASS
M17201	4	1479	L76X76X6 [3"X3"X1/4"] X 1474 [58 1/4"]	M17	G40X21M 350W	23.905 lbmass
M7205	1	5791	L50X50X6[L2"X2"X6] ROOF HANDRAIL ROLLED ANGLE	M7	G40.21M 300W	27.480 kg
3	2	5791	FB50X6 [FB2"X1/4"] X 5791[19'] LG		G40.21M 300W	14.646 kg
4	1	5791	FB100X5 [4"X3/16"] x 5791 [19']LG		G40.21M 300W	22.029 kg



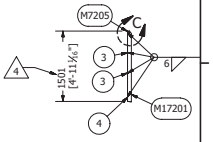


DETAIL C
SCALE 1/10

DETAIL D
SCALE 1/10

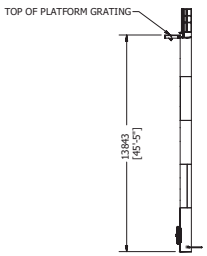


Pc 2M10601
PREFABRICATED ROOF TOP HANDRAIL SECTION
QTY: 19
SCALE 1/50



SECTION B-B
SCALE 1/50

FINISH:
SSPC SURFACE PREPERATION FOR PAINTING: SP6 COMMERCIAL SANDBLASTING
ONE COAT OF POLYVAL 390



SECTION G-G
SCALE 1/150
5

NOTE:
ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED

REVISION HISTORY			
ZONE	REV	DESCRIPTION	DATE
	3	THIS SHEET ADDED	4/20/2017
4D, 2D	4	MAX. DIST. BTW POST ADDED, HEIGHT SECTION B-B CHG TO 1501	5/2/2017
11F, 10A	5	PLATORMS AND STAIRWAY ADDED	6/28/2017

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2017/10/02

30-Sep-2017
Permit Number: P471

DRAWN	MARC LOSIER	3/9/2017
CHECKED		
QA		
MFG		
APPROVED		

ROOF TOP HANDRAIL LAYOUT

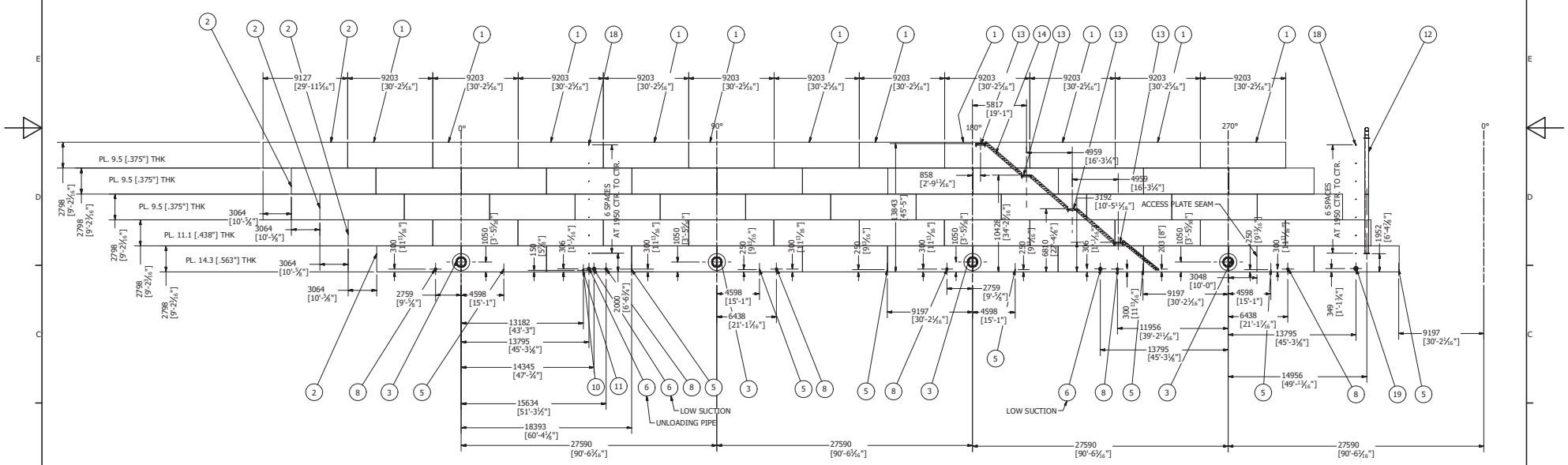
TITLE
AGNICO EAGLE - MELIADINE GOLD MINE -
TK #2 - 13,500CUM 35.1M DIA X 14M H

SIZE	DWG NO	REV
A1	295-M10	7

SCALE

SHEET 6 OF 7

PARTS LIST		
ITEM	ITEM QTY	PART NUMBER
1	55	SHELL PLATE 2798 X 9203 THICKNESS
2	5	SHELL PLATE LAST ON COURSE 2798 X 9127 (TRIM AT SITE)
3	4	900ns SHELL MANHOLE
5	8	Grounding Lug
6	3	150NS SHELL NOZZLE
8	6	75NS WATER DRAWOFF
10	1	20NS THERMOMETER CONNECTION
11	1	AISC - L 4 x 4 x 1/4 - 15.748031 TEMPERATURE CONNECTION PROTECTION
12	1	400NS VENT
13	4	PLATFORM
14	115	STEPS
18	14	AISC - L 3 x 3 x 1/4 - 15.748031 PRV PIPE SUPPORT
19	1	200NS SHELL NOZZLE - FIX LOADING PIPE



SHELL DEVELOPED VIEW
SCALE 1/200

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2017/10/02

30-Sep-2017

Permit Number: P471

REVISION HISTORY		
REV	DESCRIPTION	DATE
6	THIS SHEET ADDED	7/12/2017
7	INCORPORATE FIELD MODIFICATION	9/27/2017

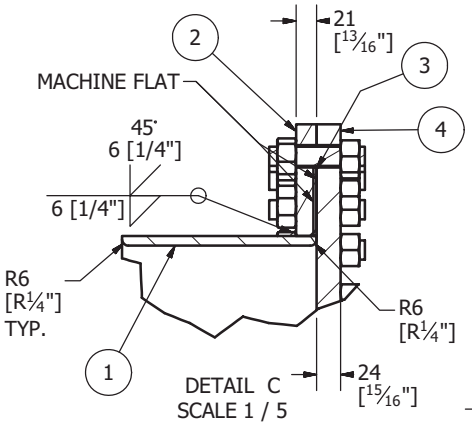
DRAWN MARC LOSIER 3/9/2017
CHECKED
QA
MFG
APPROVED

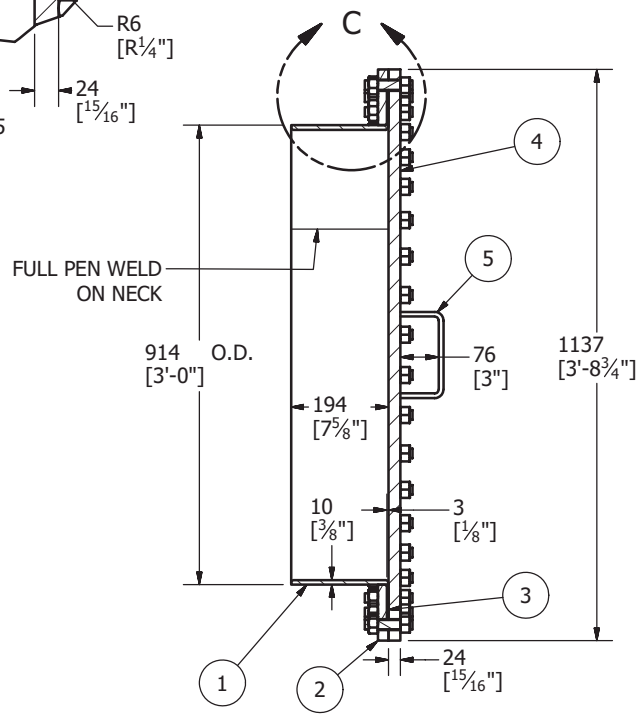
DEVELOP VIEW

TITLE
AGNICO EAGLE - MELIADINE GOLD MINE - TK #2 - 13,500CUM 35.1M DIA X 14M H

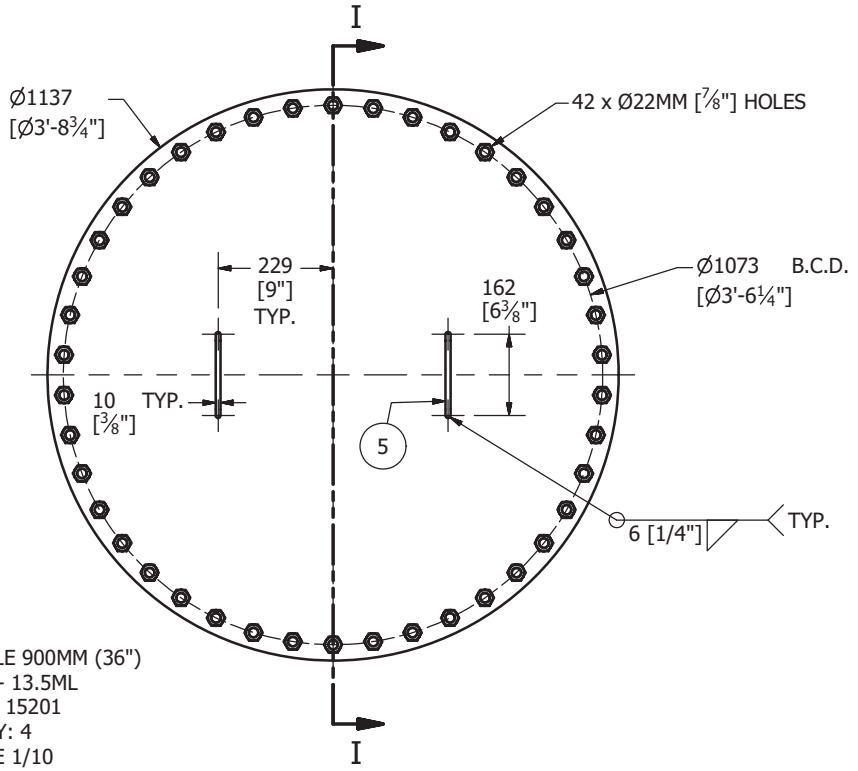
SIZE A1 | DWG NO 295-M10 | REV 7
SCALE
SHEET 7 OF 7

PARTS LIST					
ITEM	ITEM QTY	PART NUMBER	DESCRIPTION	MATERIAL	MASS
1	1	T1-2-4 SHELL NECK	10 [3/8"] THK X 194 [7 5/8"] WD. X 2842 [9'-3 7/8"] LONG	G40.21M - 350WT CAT. 4	40.783 kg
2	1	T1-2-4 SHELL BOLTING FLANGE	22 [7/8"] THK X 1137 [3'-8 3/4"] O.D. X 914 [3'-0"] I.D.	G40.21M - 350WT CAT. 4	54.904 kg
3	1	T1-2-4 SHELL GASKET	3 [1/8"] THK X 1051 [3'-5 3/8"] O.D. X 914 [3'-0"] I.D.	DURLON 8500	0.622 kg
4	1	T1-2-4 SHELL COVER PLATE	25 [1"] THK X 1137 [3'-8 3/4"] O.D.	G40.21M - 350WT CAT. 4	186.633 kg
5	2	T1-2-4 SHELL HANDLE ROD	10 [3/8"] THK X 314 [12 3/8"] LONG	MILD STEEL	0.175 kg
6	42	STUDS	STUD, 3/4" X 95 [3 3/4"] LG. NC	A320 L7	0.213 kg
7	84	NUTS	NUT, HEX HEAVY, 3/4" NC	A194A GR4	0.096 kg





SECTION I-I
SCALE 1/10



SHELL MANHOLE 900MM (36")
TANK 2 - 13.5ML
MARK: 15201
QTY: 4
SCALE 1/10

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2017/10/02

30-Sep-2017
Permit Number: P471

ALTERNATE MATERIAL: ALL 350WT STEEL MAY BE SUBSTITUTED WITH 260WT IF EASIER TO SOURCE

DRAWN	Jacob Saunders	3/22/2017
CHECKED	Marc Losier	3/27/2017
QA		
MFG		
APPROVED		

T2 (13.5ML) SHELL MANHOLE

TITLE
MELIADINE FIELD ERECTED TANK - MANHOLES

SIZE	DWG NO	REV
A3	295-M15	3

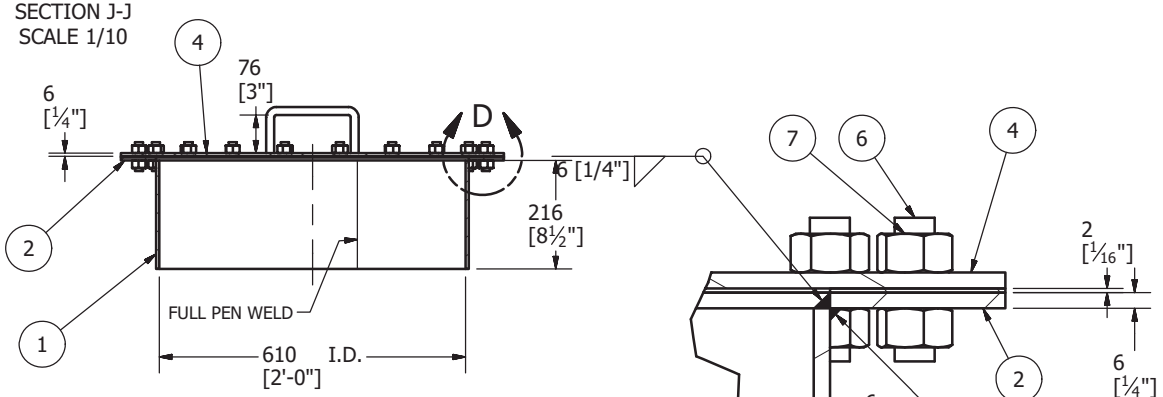
SCALE

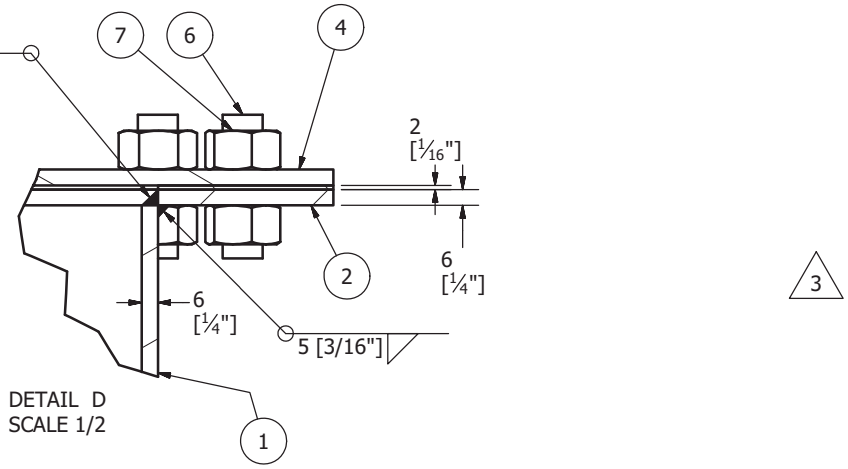
SHEET 3 OF 12

PARTS LIST

ITEM	ITEM QTY	PART NUMBER	DESCRIPTION	MATERIAL	MASS
1	1	ROOF NECK	6 [1/4"'] THK X 216 [8 1/2"] WD X 1935 [6' - 4 3/16"] LG	G40.21M 300W	20.825 kg
2	1	ROOF BOLTING FLANGE	6 [1/4"] THK X 762 [2'-6"] O.D. X 622 [2'-1/2"] I.D.	G40.21M 300W	7.287 kg
4	1	ROOF COVER PLATE	6 [1/4"] THK X 762 [2'-6"] DIA	G40.21M 300W	22.448 kg
5	2	ROOF HANDLE ROD	16 [5/8"] DIA X 314 [12 3/8"] LG.	Steel, MILD	0.506 kg
6	20	STUDS	STUD, 5/8" X 57 [2 1/4"] LG. NC	A320 L7	0.089 kg
7	40	NUTS	NUT, HEX HEAVY, 5/8"	A194A GR4	0.059 kg
8	1	295-P1 Gasket 24in (600mm)		Rubber	0.216 kg

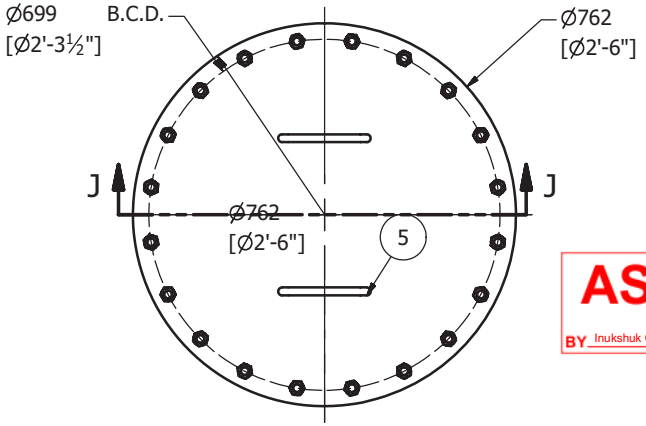
SECTION J-J
SCALE 1/10





DETAIL D
SCALE 1/2

3



ROOF MANHOLE 600MM (24")
TANK 2 - 13.5ML
MARK: 15202
QTY: 4
SCALE 1/10

ALTERNATE MATERIAL: ALL 350WT STEEL MAY BE SUBSTITUTED WITH 260WT IF EASIER TO SOURCE

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2017/10/02

Permit Number: P471

REVISION HISTORY

ZONE	REV	DESCRIPTION	DATE
	2	EMERGENCY VENT/MANHOLE DETAIL ADDED	4/13/2017
	3	EMERGENCY VENT/MANHOLE DETAIL REMOVED	7/9/2017

DRAWN	Jacob Saunders	3/22/2017
CHECKED	Marc Losier	3/27/2017
QA		
MFG		
APPROVED		

T2 (13.5ML) ROOF MANHOLE

TITLE

MELIADINE FIELD ERECTED TANK - MANHOLES

SIZE	DWG NO	REV
A3	295-M15	3

SCALE

SHEET 4 OF 12

SHOP DRAWING DATA SHEET

Affixing this stamp confirms that an administrative approval and/or a verification of compliance with shop drawings or specifications was made, but does not entail the liability of the author of the work or its owner with regards to this shop drawing or data sheet, for which the contractor is the sole responsible.

☑ Reviewed ☐ Reviewed as noted

☐ Rejected ☐ Filed for records

The contractor, supplier and/or sub-contractor is responsible for: comfirming and coordinating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordinating his or her work with that of all other trades and performing all work in a safe and satisfactory manner.

By: J. morliere Date: 2017/07/14

Project #: 151-06440-40

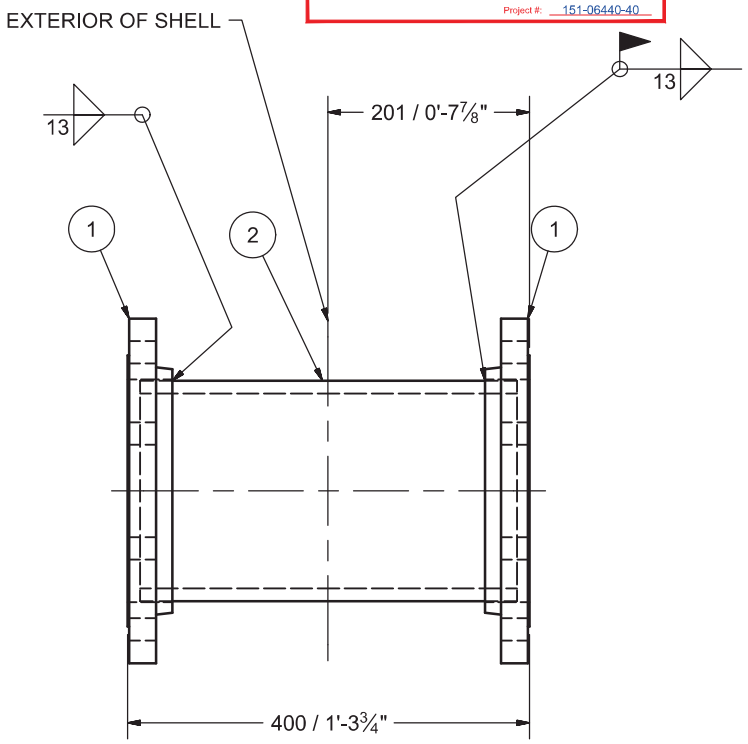
Parts List				
ITEM	ITEM QTY	CUT (MM)	PART NUMBER	MATERIAL
1	2		ASME B16.5 Flange Slip-On Welding - Class 150 8	A350 LF2
2	1	375	Pipe 8 - Schedule 80 - 14.76378	A333 GR. 6

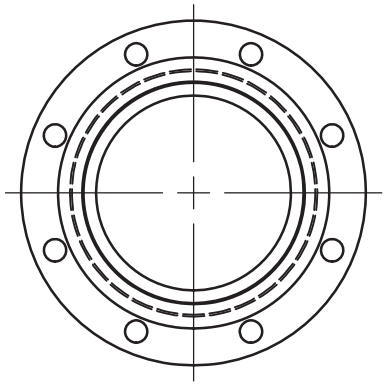
Ø200 NS DOUBLE FLANGE SHELL LOADING
MARK: M1601
QTY: 2

WEIGHT/SPOOL: 48.2KG

M1601 QTY	
Tank No.	QTY
1	1
2	1
3	0
4	0
5	0
6	0
TOTAL	2

NOTES:
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
2. FINISH: SANDBLAST TO SSP-6





AS-BUILT

BY Inukshuk Construction Ltd. DATE 2017/10/02

PROFESSIONAL ENGINEERS J.J. BROWN LICENSEE NT/NU

16-Jul-2017

Permit Number: P471

REVISION HISTORY		
REV	DESCRIPTION	DATE
3	ALL SHEETS REVISED AS PER ENGINEER COMMENTS	5/1/2017

DRAWN Jacob Saunders	4/13/2017	AEM Meliadine Fuel Storage Tanks
CHECKED		
QA		TITLE
MFG		M1601 - 200NS DOUBLE FLG. SHELL
APPROVED		
		SIZE A3 / DWG NO 295-M16 / REV 3
		SCALE / SHEET 1 OF 22

Parts List				
ITEM	ITEM QTY	CUT (MM)	PART NUMBER	MATERIAL
1	2		ASME B16.5 Flange Slip-On Welding - Class 150 6	A350 LF2
2	1	375	Pipe 6 - Schedule 80 - 14.76378	A333 GR. 6

Ø150 NS DOUBLE FLANGE SHELL LOADING/UNLOADING

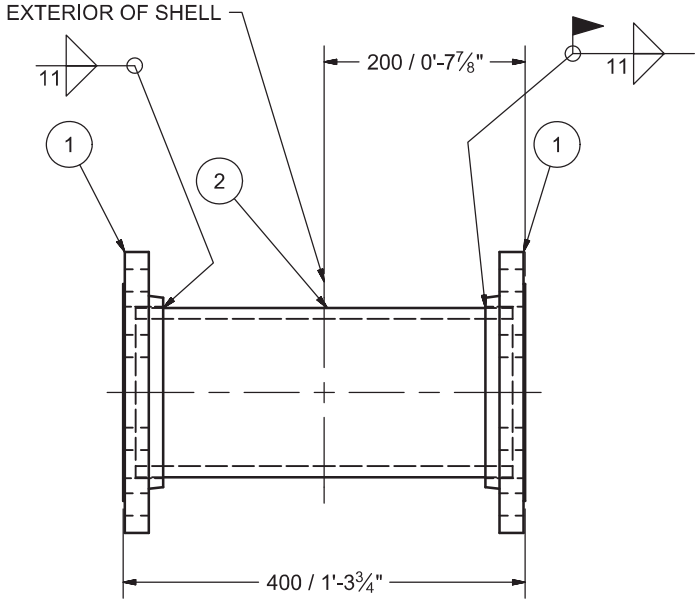
MARK: M1602

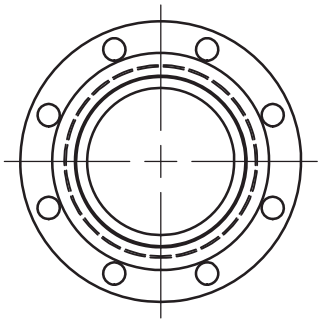
QTY: 26

WEIGHT/SPOOL: 30.8KG

M1602 QTY	
Tank No.	QTY
1	3
2	3
3	5
4	5
5	5
6	5
TOTAL	26

NOTES:
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
2. FINISH: SANDBLAST TO SSP-6





AS-BUILT

BY Inukshuk Construction Ltd. DATE 2017/10/02

16-Jul-2017

Permit Number: P471

DRAWN Jacob Saunders	4/13/2017	AEM Meliadine Fuel Storage Tanks	
CHECKED		TITLE M1602 - 150NS DOUBLE FLG. SHELL	
QA			
MFG			
APPROVED			
		SIZE A3	DWG NO 295-M16 / REV 3
		SCALE	SHEET 2 OF 22

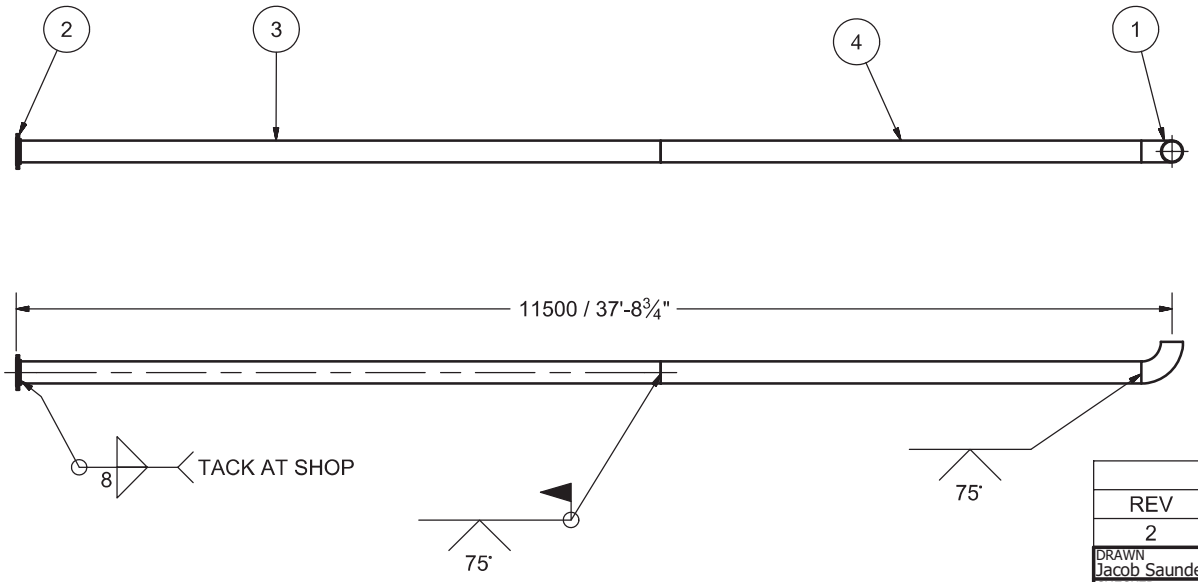
Ø200 NS FIXED PIPE LOADING
TANK 2 (13.5ML)
MARK: M1604
QTY: 1

WEIGHT/SPOOL: 508.5KG

Parts List				
ITEM	ITEM QTY	CUT (MM)	PART NUMBER	MATERIAL
1	1		ASME B16.9 Long Radius 90 Deg Elbow (Inch) 8 x 0.322 SCH40	A420 WPL6
2	1		ASME B16.5 Flange Slip-On Welding - Class 150 8	A350 LF2
3	1	6401	Pipe 8 - Schedule 40 - 440.28	A333 GR. 6
4	1	4782	ASTM A 53/A 53M Pipe 8 - Schedule 40 - 188.27764	Steel

M1604 QTY	
Tank No.	QTY
1	0
2	1
3	0
4	0
5	0
6	0
TOTAL	1

NOTES:
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
2. FINISH: BARE



AS-BUILT
BY Inukshuk Construction Ltd. DATE 2017/10/02

Permit Number: P471

REVISION HISTORY		
REV	DESCRIPTION	DATE
2	NOTE 2 CHANGED, PIPE BROKEN IN SECTIONS	5/11/2017

DRAWN Jacob Saunders	4/13/2017	AEM Meliadine Fuel Storage Tanks
CHECKED		
QA		TITLE: M1604 - 200NS FIXED PIPE LOADING
MFG		
APPROVED		

SIZE	DWG NO	REV
A3	295-M16	3

SCALE

SHEET 4 OF 22

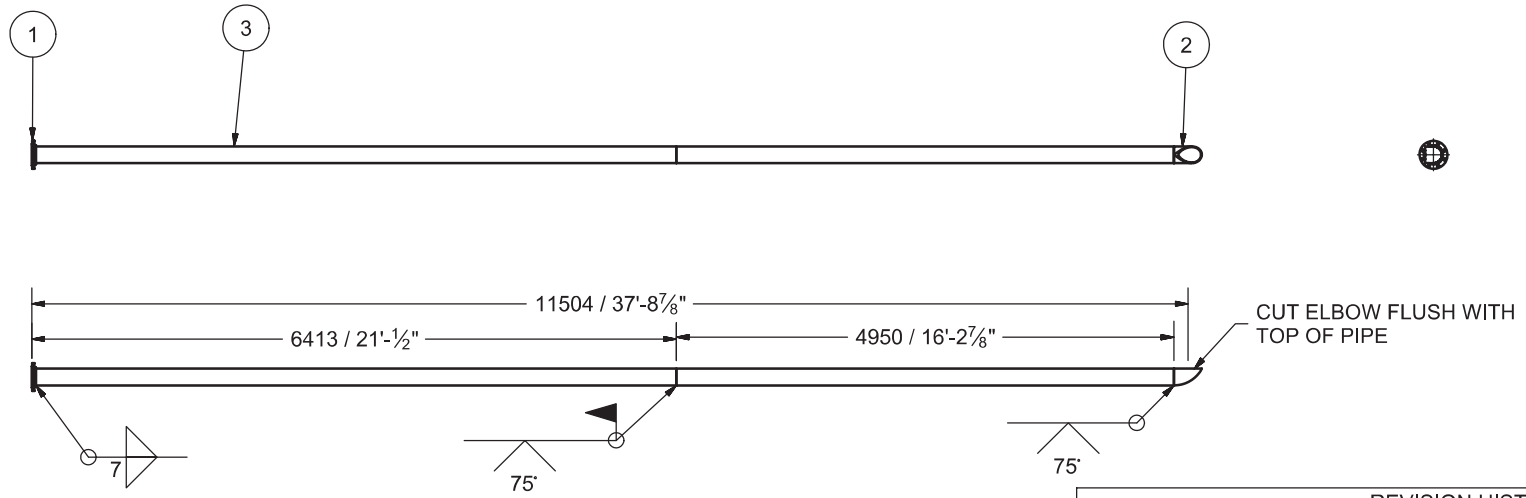
Parts List				
ITEM	ITEM QTY	CUT (MM)	PART NUMBER	MATERIAL
1	1		ASME B16.5 Flange Slip-On Welding - Class 150 6	A350 LF2
2	1		ASME B16.9 Long Radius 90 Deg Elbow (Inch) 6 x 0.28 SCH40	A420 WPL6
3	1	6401	Pipe 6 - Schedule 40 - 446.88977	A333 GR. 6
4	1	4950	Pipe 6 - Schedule 40 - 194.88976	A333 GR. 6

Ø150 NS FIXED PIPE UNLOADING
TANK 2 (13.5ML)
MARK: M1609
QTY: 1

WEIGHT/SPOOL: 326.1KG

M1609 QTY	
Tank No.	QTY
1	0
2	1
3	0
4	0
5	0
6	0
TOTAL	1

NOTES:
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
2. FINISH: BARE



REVISION HISTORY		
REV	DESCRIPTION	DATE
2	NOTE 2 CHANGED, PIPE BROKEN IN SECTIONS	5/11/2017

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2017/10/02

16-Jul-2017
Permit Number: P471

DRAWN Jacob Saunders	4/13/2017	AEM Meliadine Fuel Storage Tanks
CHECKED		
QA		
MFG		TITLE: M1609 - 150NS FIXED PIPE UNLOADING
APPROVED		
SIZE A3	DWG NO 295-M16	REV 3
SCALE		SHEET 9 OF 22

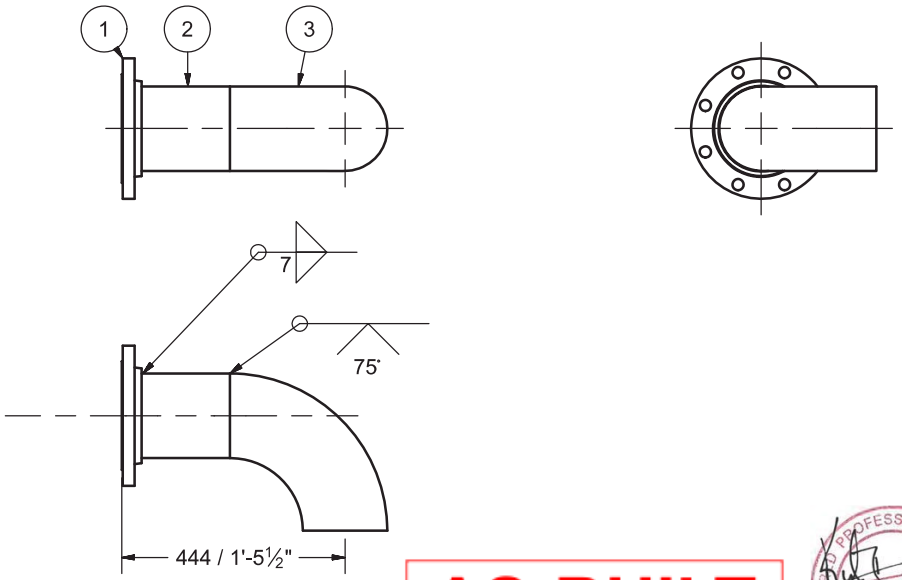
Parts List				
ITEM	ITEM QTY	CUT (MM)	PART NUMBER	MATERIAL
1	1		ASME B16.5 Flange Slip-On Welding - Class 150 6	A350 LF2
2	1	203	Pipe 6 - Schedule 40 - 8	A333 GR. 6
3	1		ASME B16.9 Long Radius 90 Deg Elbow - 6 SCH40	A420 WPL6

Ø150 NS PIPING LOW LEVEL
MARK: M1613
QTY: 16

WEIGHT/SPOOL: 23.3KG

M1613 QTY	
Tank No.	QTY
1	2
2	2
3	3
4	3
5	3
6	3
TOTAL	16

NOTES:
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
2. FINISH: BARE



AS-BUILT
BY Inukshuk Construction Ltd. DATE 2017/10/02

PROFESSIONAL ENGINEERS
J.S. BROWN
LICENSEE
NT/NU
16-Jul-2017
Permit Number: P471

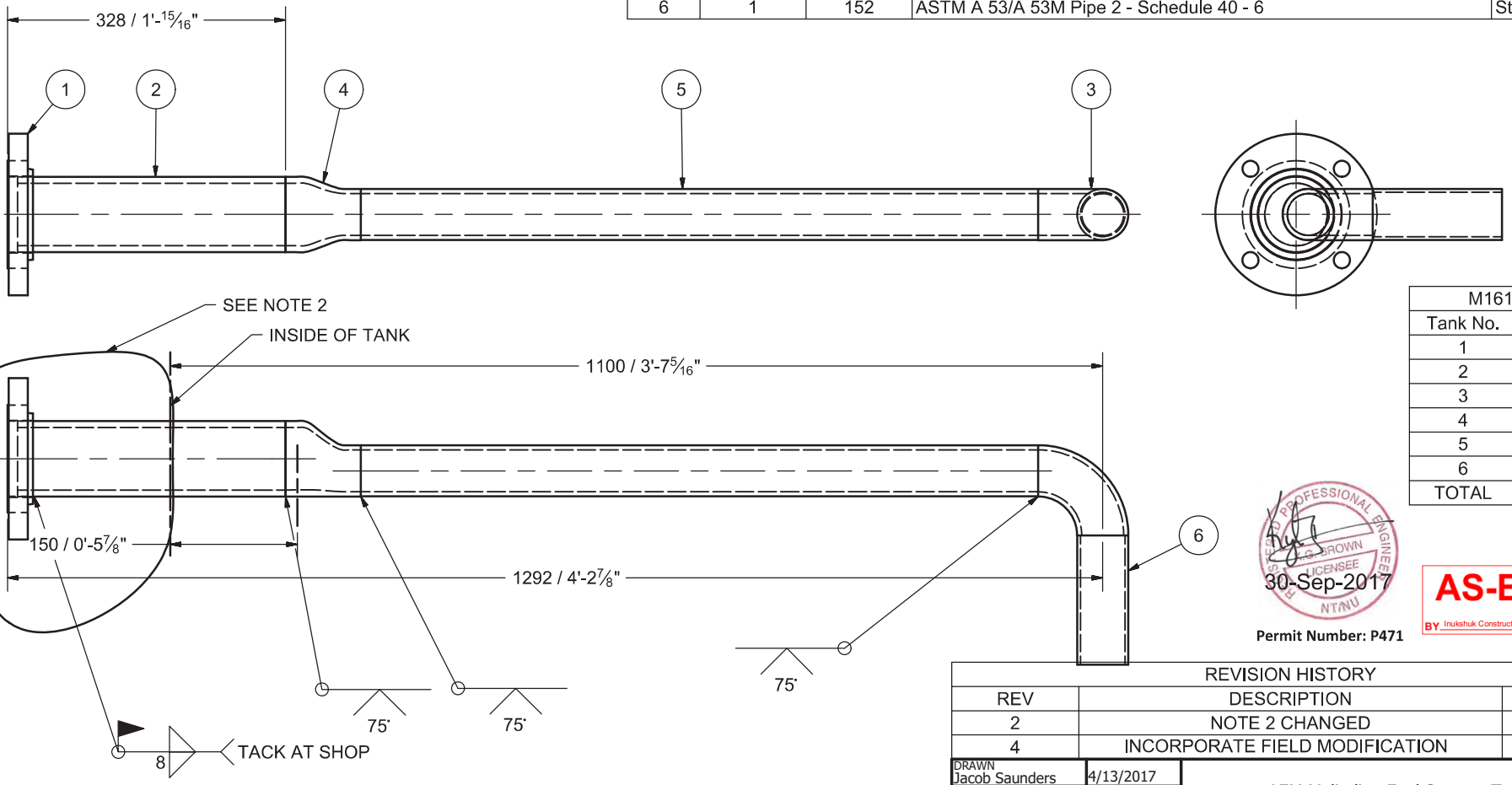
REVISION HISTORY		
REV	DESCRIPTION	DATE
2	NOTE 2 CHANGED	5/11/2017

DRAWN Jacob Saunders	4/13/2017	AEM Meliadine Fuel Storage Tanks
CHECKED		
QA		
MFG		TITLE: M1613 - 150NS PIPING LOW LEVEL
APPROVED		
		SIZE A3 / DWG NO 295-M16 / REV 3
		SCALE / SHEET 13 OF 22

Ø75 NS WATER DRAW OFF
MARK: M1614
QTY: 32

WEIGHT/SPOOL: 16.6KG

Parts List				
ITEM	ITEM QTY	CUT (MM)	PART NUMBER	MATERIAL
1	1		ASME B16.5 Flange Slip-On Welding - Class 150 3	A350 LF2
2	1	316	Pipe 3 - Schedule 80 - 12.440945	A333 GR. 6
3	1		ASME B16.9 Long Radius 90 Deg Elbow (Inch) 2 x 0.218 SCH80	A420
4	1		ASME B16.9 Eccentric Reducer 3 x 2 - Schedule 80	A420
5	1	799	Pipe 2 - Schedule 80 - 31.456693	A333 GR. 6
6	1	152	ASTM A 53/A 53M Pipe 2 - Schedule 40 - 6	Steel



M1614 QTY	
Tank No.	QTY
1	6
2	6
3	6
4	6
5	4
6	4
TOTAL	32

30-Sep-2017

Permit Number: P471

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2017/10/02

NOTES:
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
2. FINISH: SANDBLAST TO SSP-6 AREA THAT WOULD BE LOCATED OUTSIDE THE TANK AS INDICATED.

REVISION HISTORY		
REV	DESCRIPTION	DATE
2	NOTE 2 CHANGED	5/11/2017
4	INCORPORATE FIELD MODIFICATION	9/27/2017

DRAWN Jacob Saunders	4/13/2017	AEM Meliadine Fuel Storage Tanks
CHECKED		
QA		TITLE: M1614 - 75NS WATER DRAW OFF
MFG		
APPROVED		SIZE A3 / DWG NO 295-M16 / REV 4
		SCALE / SHEET 14 OF 22

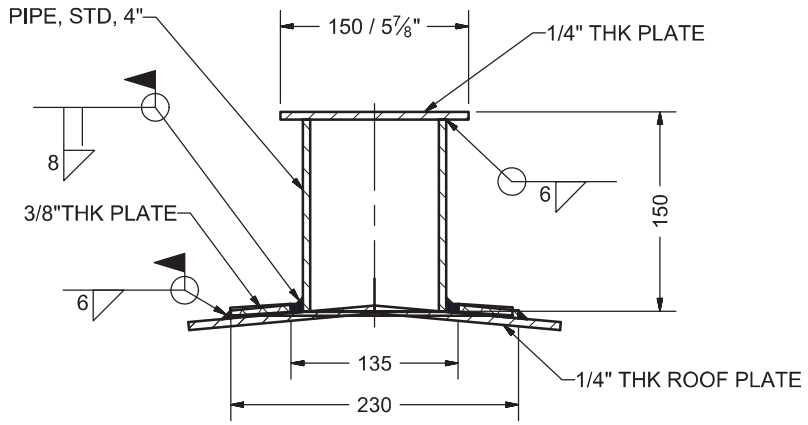
Parts List					
ITEM	ITEM QTY	CUT (MM)	PART NUMBER	DESCRIPTION	MATERIAL
1	1		Plate, 1/4" Thick x 152 Dia	Steel, Mild	G40.21M 300W
2	1	152	PIPE SCH40 ANSI - 4 x .237 - 6	Pipe	A53
3	1		Painters Post Reinforcing Plate	Plate, Mild Steel, 3/8" thk x 133 I.D. x 229 O.D.	G40.21M 300W

Ø100 NS PAINTERS SCAFFOLD CABLE SUPPORT
MARK: M1615
QTY: 6

WEIGHT/SPOOL: 3.4KG

M1615 QTY	
Tank No.	QTY
1	1
2	1
3	1
4	1
5	1
6	1
TOTAL	6

NOTES:
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
2. FINISH: SANDBLAST TO SSP-6



AS-BUILT
BY Inukshuk Construction Ltd. DATE 2017/10/02

16-Jul-2017
Permit Number: P471

MOSHER ENGINEERING LIMITED
-GRAVEL CRUSHING
-EARTHWORK
-PROCESS PIPE WELDING
-INDUSTRIAL CONTRACTING

1358 QUEEN ST
HALIFAX, NS
B3J 2H5
PH: (902) 429-0272
FAX: (902) 429-7762

DRAWN	Jacob Saunders	4/13/2017
CHECKED		
QA		
MFG		
APPROVED		

AEM Meliadine Fuel Storage Tanks

TITLE
M1615 - PAINTERS SCAFFOLD CABLE SUPPORT

SIZE	DWG NO	REV
A3	295-M16	3

SCALE

SHEET 15 OF 22

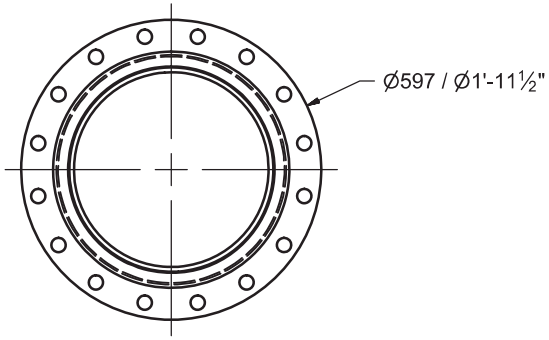
Parts List				
ITEM	ITEM QTY	CUT (MM)	PART NUMBER	MATERIAL
1	1		ASME B16.5 Flange Slip-On Welding - Class 150 16	A350 LF2
2	1	330	Pipe 16 - Schedule 30, 3/8" wall - 13"LG	A106

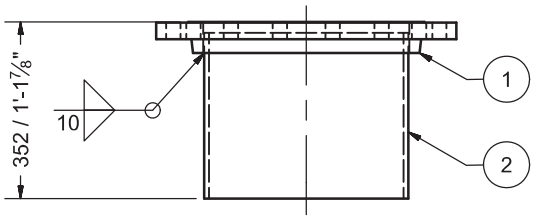
Ø400 NS ROOF NOZZLE
MARK: M1616
QTY: 6

WEIGHT/SPOOL: 83.5KG

M1616 QTY	
Tank No.	QTY
1	1
2	1
3	1
4	1
5	1
6	1
TOTAL	6

NOTES:
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
2. FINISH: SANDBLAST TO SSP-6





AS-BUILT
BY Inukshuk Construction Ltd. DATE 2017/10/02

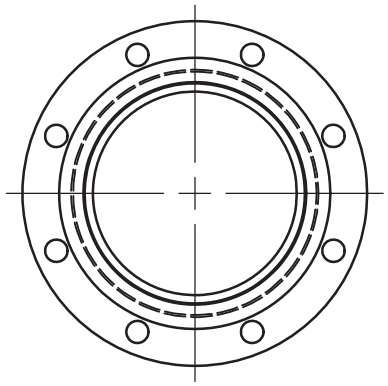
16-Jul-2017
Permit Number: P471

DRAWN Jacob Saunders	4/13/2017	AEM Meliadine Fuel Storage Tanks
CHECKED		
QA		TITLE M1616 - Ø400 NS ROOF NOZZLE
MFG		
APPROVED		SIZE A3 / DWG NO 295-M16 / REV 3
		SCALE / SHEET 16 OF 22

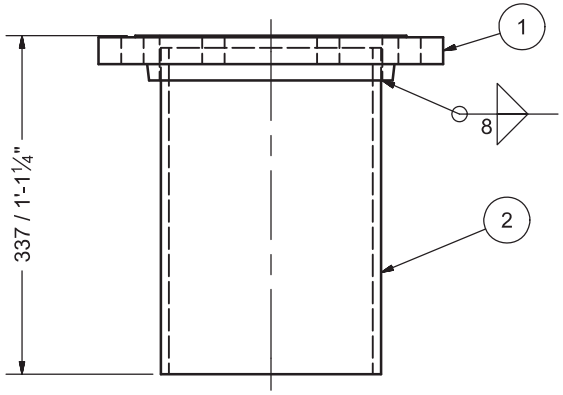
Parts List				
ITEM	ITEM QTY	CUT (MM)	PART NUMBER	MATERIAL
1	1		ASME B16.5 Flange Slip-On Welding - Class 150 8	A350 LF2
2	1	325	Pipe 8 - Schedule 40 - 12.795276	A333 GR. 6

Ø200 NS ROOF NOZZLE FOR OVERFILL PROT.
MARK: M1618
QTY: 6

WEIGHT/SPOOL: 25.8KG



NOTES:
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
2. FINISH: SANDBLAST TO SSP-6



M1618 QTY	
Tank No.	QTY
1	1
2	1
3	1
4	1
5	1
6	1
TOTAL	6

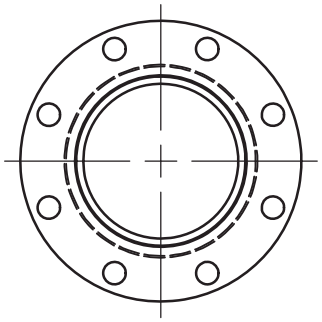
AS-BUILT
BY Inukshuk Construction Ltd. DATE 2017/10/02

PROFESSIONAL ENGINEERS G.G. BROWN LICENSEE NT/NU
16-Jul-2017

Permit Number: P471

DRAWN Jacob Saunders	4/13/2017	AEM Meliadine Fuel Storage Tanks
CHECKED		
QA		TITLE M1618 - 200NS ROOF NOZZLE FOR OVERFILL PROT.
MFG		
APPROVED		SIZE A3 / DWG NO 295-M16 / REV 3
		SCALE / SHEET 18 OF 22

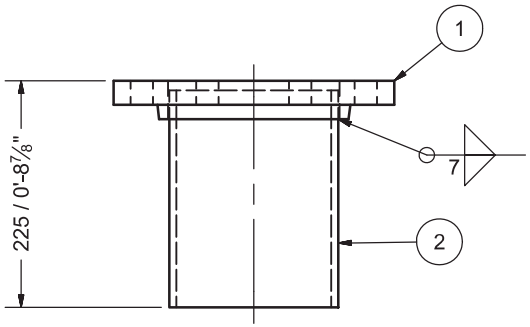
Parts List				
ITEM	ITEM QTY	CUT (MM)	PART NUMBER	MATERIAL
1	1		Flange 6in Flat Face, Slip On 150#, A105	A350 LF2
2	1	216	PIPE ANSI - 6 x .280" WALL SCH40	A333 GR. 6



Ø150 NS ROOF NOZZLE FOR GAUGE HATCH
MARK: M1619
QTY: 6

WEIGHT/SPOOL: 13.3KG

NOTES:
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED
2. FINISH: SANDBLAST TO SSP-6



M1619 QTY	
Tank No.	QTY
1	1
2	1
3	1
4	1
5	1
6	1
TOTAL	6

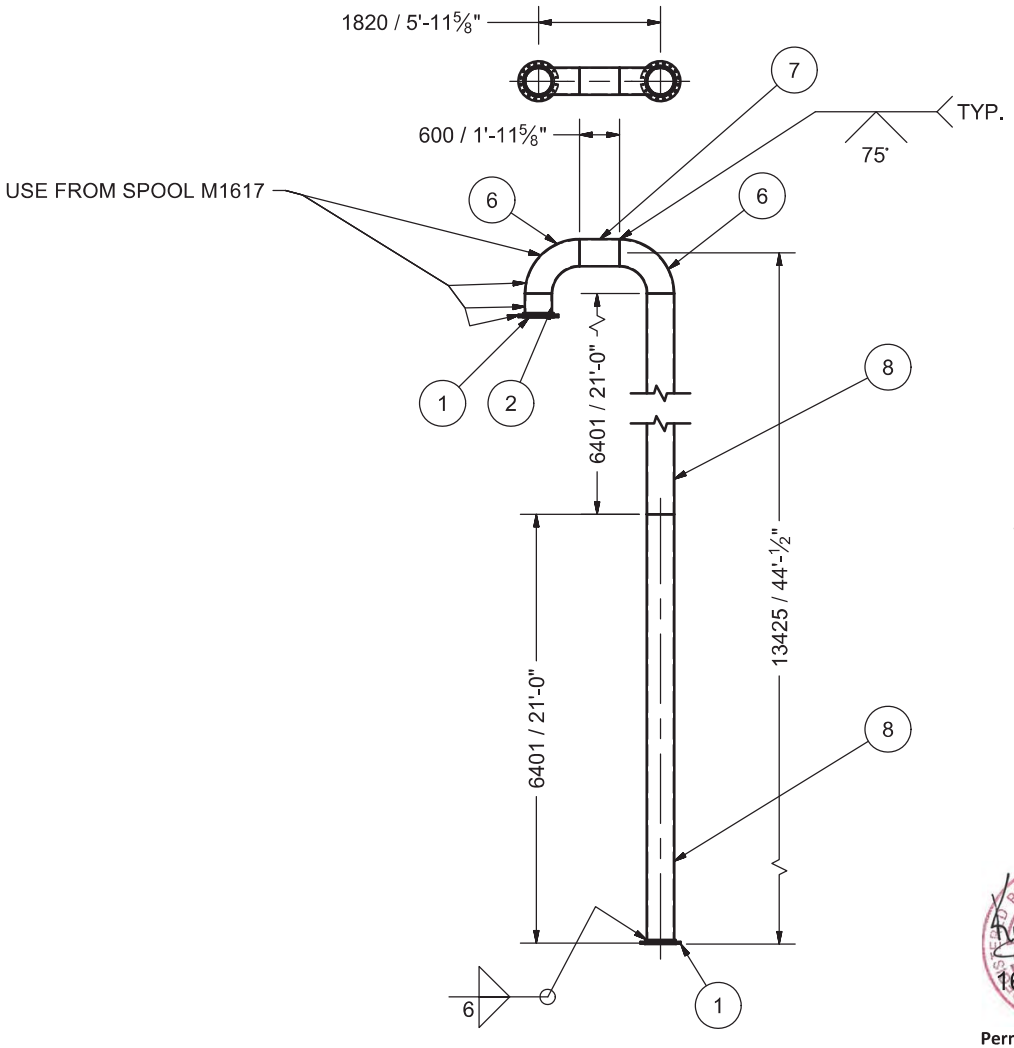
AS-BUILT
BY Inukshuk Construction Ltd. DATE 2017/10/02

Permit Number: P471

DRAWN Jacob Saunders	4/13/2017	AEM Meliadine Fuel Storage Tanks
CHECKED		
QA		TITLE M1619 - 150 NS ROOF NOZZLE FOR GAUGE HATCH
MFG		
APPROVED		SIZE A3 / DWG NO 295-M16 / REV 3
		SCALE / SHEET 19 OF 22

Parts List				
ITEM	ITEM QTY	CUT (MM)	PART NUMBER	MATERIAL
1	2		ASME B16.5 Flange Slip-On Welding - Class 150 16	A350 LF2
2	1	330	Pipe 16 - Schedule 10 - 13	A106
6	2		ASME B16.9 Long Radius 90 Deg Elbow (Metric) 16 x 9.5	A234
7	1	600	Pipe 16 - Schedule 10 - 23.622047	A106
8	2	6401	Pipe 16 - Schedule 10 - 252	A106

M1620 QTY	
Tank No.	QTY
1	1
2	1
3	0
4	0
5	0
6	0
TOTAL	2



Ø400 NS VENT (RETURN BEND) FOR TANK NO. 1 & 2 AS PER ECN NO. 1

MARK: M1620

QTY: 2

WEIGHT/SPOOL: 1134KG

AS-BUILT

BY Inukshuk Construction Ltd. DATE 2017/10/02

REVISION HISTORY		
REV	DESCRIPTION	DATE
3	THIS SHEET ADDED	7/7/2017

DRAWN Jacob Saunders	4/13/2017	AEM Meliadine Fuel Storage Tanks
CHECKED		
QA		TITLE M1620 - 400 NS VENT TANK NO. 1 & 2
MFG		
APPROVED		SIZE A3 / DWG NO 295-M16 / REV 3
		SCALE / SHEET 20 OF 22

Permit Number: P471

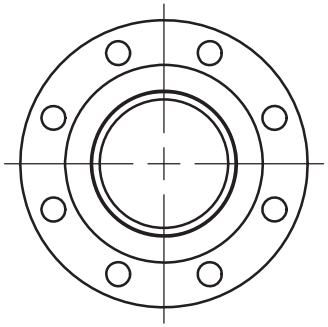
Parts List

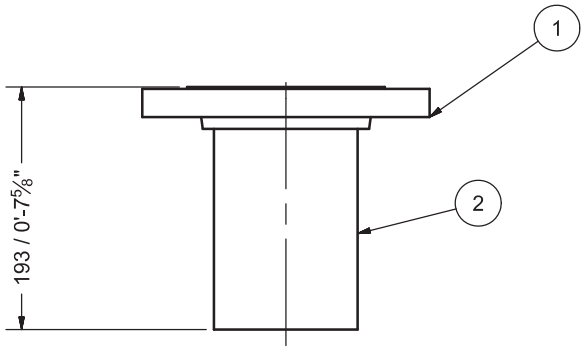
ITEM	ITEM QTY	CUT (MM)	PART NUMBER	DESCRIPTION	STOCK NUMBER	MATERIAL
1	1		ASME B16.5 Flange Slip-On Welding - Class 150 4	FLANGE, R.F., SLIP ON, 150#, 100NS [4"]		A350 LF2
2	1	184	ASTM A 53/A 53M Pipe 4 - Schedule 40 - 7.2440945	PIPE, STD, 100NS [4"]	ASTM A 53/A 53M Pipe 4 - Schedule 40	A53

Ø100 NS ROOF NOZZLE
AS PER ECN NO. 1

MARK: M1621
QTY: 6

WEIGHT/SPOOL: 9 KG





M1621 QTY	
Tank No.	QTY
1	1
2	1
3	1
4	1
5	1
6	1
TOTAL	6

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2017/10/02

Permit Number: P471

REVISION HISTORY		
REV	DESCRIPTION	DATE
3	THIS SHEET ADDED AS PER ECN-001	7/7/2017

DRAWN Jacob Saunders	4/13/2017	AEM Meliadine Fuel Storage Tanks
CHECKED		
QA		
MFG		TITLE: M1621 - 100NS ROOF NOZZLE
APPROVED		

SIZE	DWG NO	REV
A3	295-M16	3

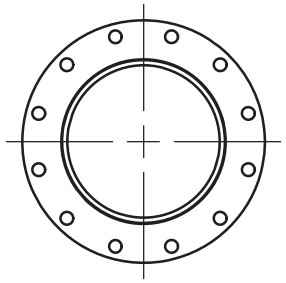
SCALE

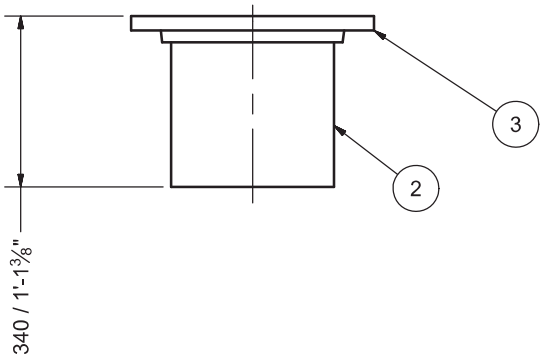
SHEET 21 OF 22

Parts List				
ITEM	ITEM QTY	CUT (MM)	PART NUMBER	MATERIAL
2	1	330	ASTM A 53/A 53M Pipe 12 - Schedule 40 - 12.992126	A53
3	1		ASME B16.5 Flange Slip-On Welding - Class 150 12 Flate Face	A106

Ø300 NS ROOF NOZZLE
FOR PRESSURE VACUUM VENT
AS PER ECN NO. 1

MARK: M1622
QTY: 3
WEIGHT/SPOOL: 51 KG





M1622 QTY	
Tank No.	QTY
1	2
2	1
3	0
4	0
5	0
6	0
TOTAL	3

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2017/10/02

Permit Number: P471

REVISION HISTORY		
REV	DESCRIPTION	DATE
3	THIS SHEET ADDED AS PER ECN-001	7/7/2017

DRAWN Jacob Saunders	4/13/2017	AEM Meliadine Fuel Storage Tanks
CHECKED		
QA		TITLE: M1622 - 300NS ROOF NOZZLE
MFG		
APPROVED		SIZE A3 / DWG NO 295-M16 / REV 3
		SCALE / SHEET 22 OF 22

Parts List				
ITEM	ITEM QTY	CUT (MM)	DESCRIPTION	MATERIAL
1	1	152	L100X100X10 [4"X4"X3/8"]	G40.21M 350W
2	1	152	FB150X6 [6"X1/4"]	G40.21M 300W
3	1	305	50NS [2"] PIPE SCH. 40	A53 ERW

wsp

SHOP DRAWING
DATA SHEET

Affixing this stamp confirms that an administrative approval and/or a verification of compliance with shop drawings or specifications was made, but does not entail the liability of the author of the work or its owner with regards to this shop drawing or data sheet, for which the contractor is the sole responsible.

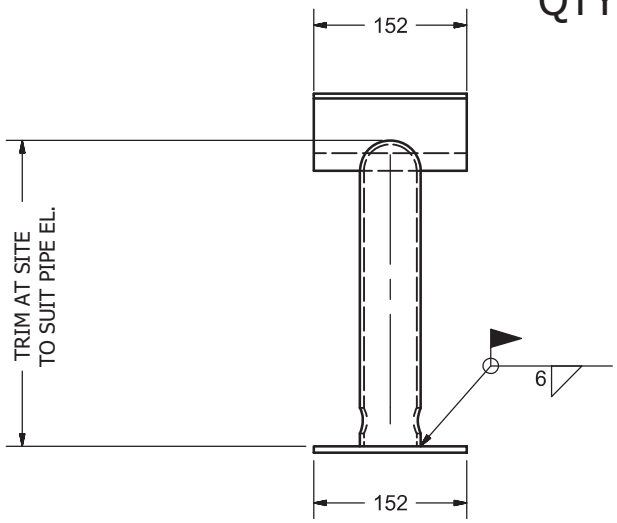
☑ Reviewed ☐ Reviewed as noted
☐ Rejected ☐ Filed for records

The contractor, supplier and/or sub-contractor is responsible for: comfirming and coordinating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordinating his or her work with that of all other trades and performing all work in a safe and satisfactory manner.

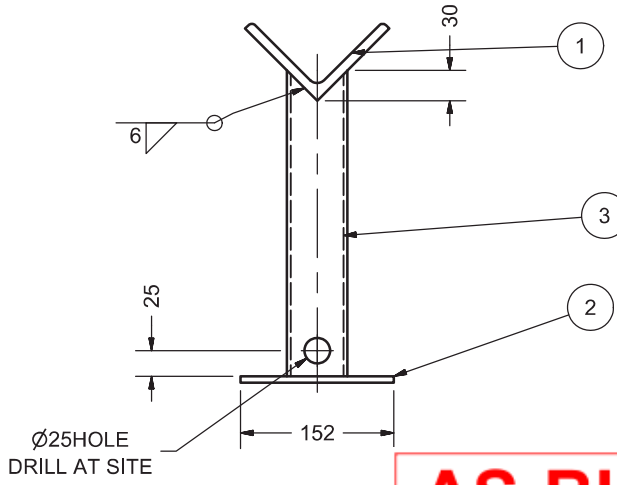
By: J. morliere Date: 2017/07/14

Project #: 151-06440-40

PIPE SUPPORT TYPE 1
MARK: M17101
QTY: 72



PIPE SUPPORT
SCALE 1/5



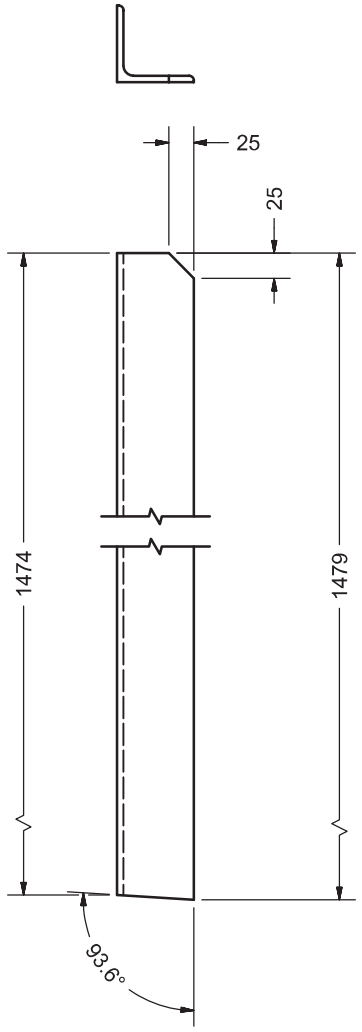
QTY PER TANK	
Tank No.	QTY
1	20
2	16
3	12
4	12
5	6
6	6
TOTAL	72

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2017/10/02

ASSOCIATION OF PROFESSIONAL ENGINEERS & GEOSCIENTISTS NT/NU
K.C. BROWN
LICENSEE
16-Jul-2017
Permit Number: P471

NOTE:
ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED

DRAWN Jacob Saunders	4/13/2017	PIPE SUPPORT	
CHECKED		TITLE MISC. SUPPORTS AND BRACKETS	
QA			
MFG			
APPROVED		SIZE A3	DWG NO 295-M17
			REV 2
		SCALE	SHEET 1 OF 5



QTY PER TANK	
Tank No.	QTY
1	93
2	77
3	41
4	53
5	21
6	21
TOTAL	306

ROOF HANDRAIL POST
MARK M17201
QTY: 310
L76x76X6 [L3"X3"X1/4"] G40.21M 350W
SCALE 1/5

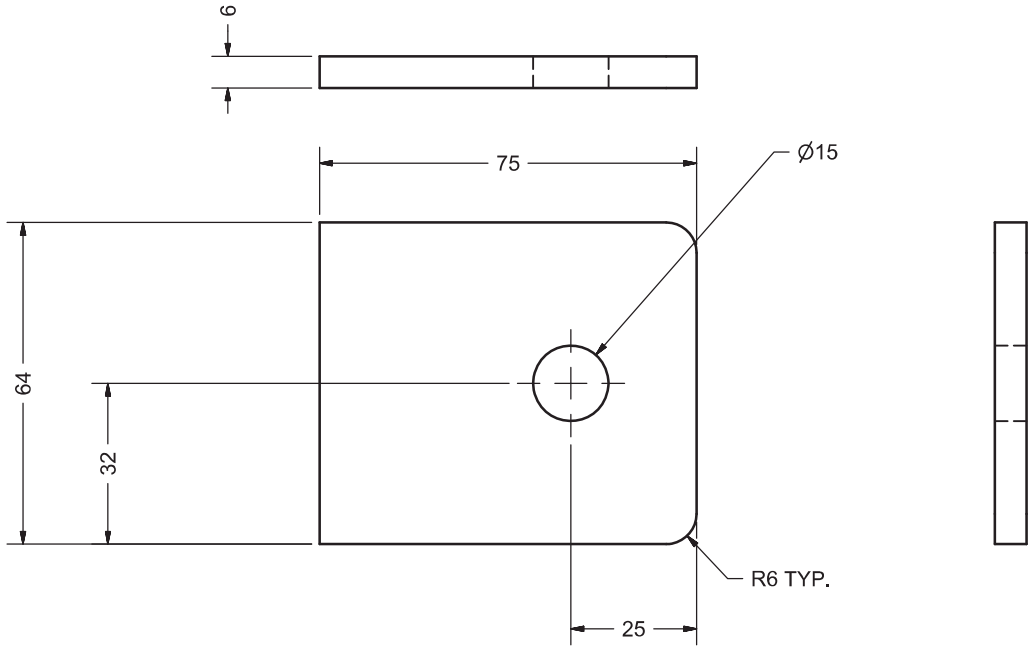
1

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2017/10/02

PROFESSIONAL ENGINEER
J.G. BROWN
LICENSEE
NT/NU
16-Jul-2017
Permit Number: P471

REVISION HISTORY		
REV	DESCRIPTION	DATE
1	ANGLE SIZE CHG TO 76X76X6 (3"X3"X1/4")	4/27/2017

DRAWN Jacob Saunders	4/13/2017	ROOF TOP HANDRAIL POST
CHECKED		
QA		TITLE
MFG		MISC. SUPPORTS AND BRACKETS
APPROVED		
		SIZE A3 / DWG NO 295-M17 / REV 2
		SCALE / SHEET 2 OF 5



QTY PER TANK	
Tank No.	QTY
1	8
2	8
3	6
4	6
5	4
6	4
TOTAL	36

GROUNDING LUG
MARK M17301
QTY: 36
FB 75X6 [3"X1/4"]
STAINLESS STEEL 316
SCALE 1 : 1

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2017/10/02

ASSOCIATION OF PROFESSIONAL ENGINEERS G.G. BROWN LICENSEE NT/NU
16-Jul-2017
Permit Number: P471

DRAWN Jacob Saunders	4/13/2017	GROUNDING LUG	
CHECKED			
QA		TITLE	
MFG		MISC. SUPPORTS AND BRACKETS	
APPROVED		SIZE A3	DWG NO 295-M17 / REV 2
		SCALE	SHEET 3 OF 5

CUT LIST					UNIT QTY PER TANK					
MARK	QTY	CUT MM	DESCRIPTION	MATERIAL	TK #1	TK #2	TK #3	TK #4	TK #5	TK #6
M17401	6	400	L100X100X6 [L4"X4"X1/4"] TEMPERATOR SENSOR	G40.21M 350W	1	1	1	1	1	1
M17402	45	400	L75X75X6 [L3"X3"X1/4"] PIPING & ELECTRICAL BRACKET	G40.21M 350W	14	14	6	7	2	2

AS-BUILT

BY Inukshuk Construction Ltd. DATE 2017/10/02

PROFESSIONAL ENGINEERS
G. BROWN
LICENSEE
NT/NU
16-Jul-2017

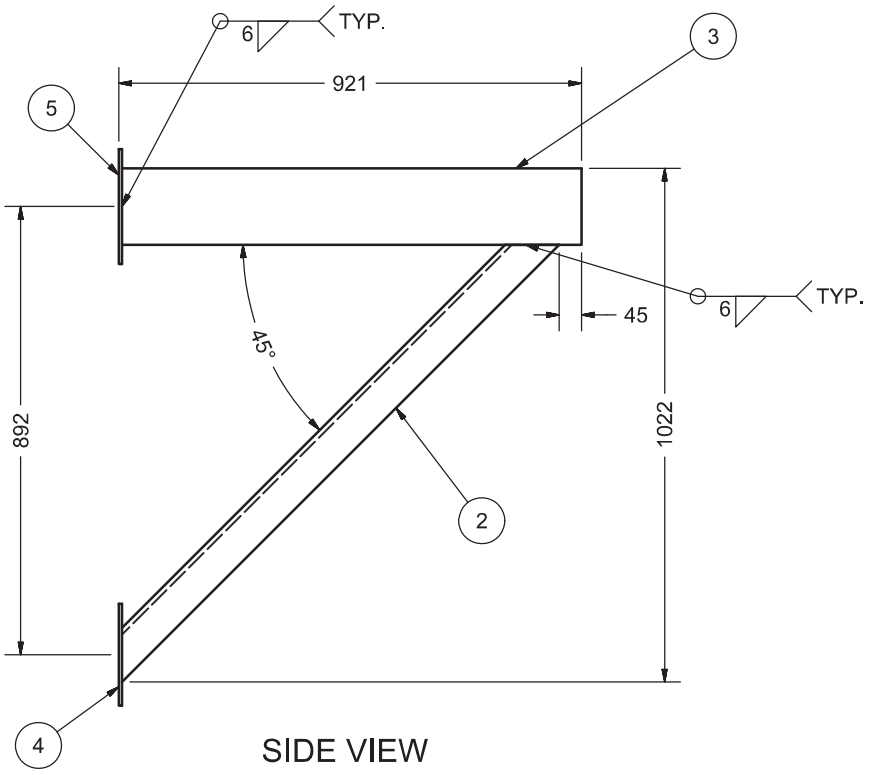
Permit Number: P471

DRAWN Jacob Saunders	4/13/2017	MISC BRACKETS
CHECKED		
QA		TITLE
MFG		MISC. SUPPORTS AND BRACKETS
APPROVED		
		SIZE A3 / DWG NO 295-M17 / REV 2
		SCALE / SHEET 4 OF 5

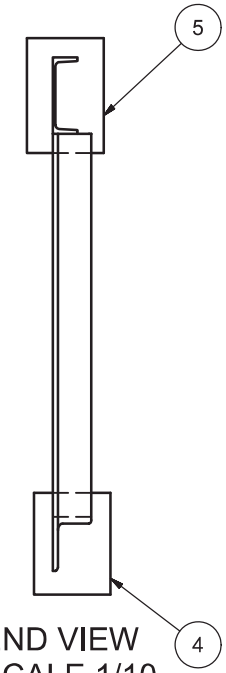
Parts List

ITEM	ITEM QTY	CUT (MM)	PART NUMBER	DESCRIPTION	STOCK NUMBER	MATERIAL
2	1	1230	AISC - L 3 x 3 x 3/8 - 48.426	Angle Steel	L 3 x 3 x 3/8	G40.21 350w
3	1	914	AISC - C 6 x 8.2 - 36	U-Shape	C 6 x 8.2	G40.21 350w
4	1	203	AISC - 6x1/4 - 8	Flat Bar Steel	6x1/4	G40.21 350w
5	1	229	AISC - 6x1/4 - 9	Flat Bar Steel	6x1/4	G40.21 350w

TOP VIEW
SCALE 1/10



SIDE VIEW
SCALE 1/10



END VIEW
SCALE 1/10

PIPE SUPPORT FOR 400NS
VENT SUPPORT FOR TANK NO. 1 & 2
MARK: M17501
QTY: 4
2 AS SHOWN
2 MIRROR

FINISH: SHOP SANDBLAST

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2017/10/02

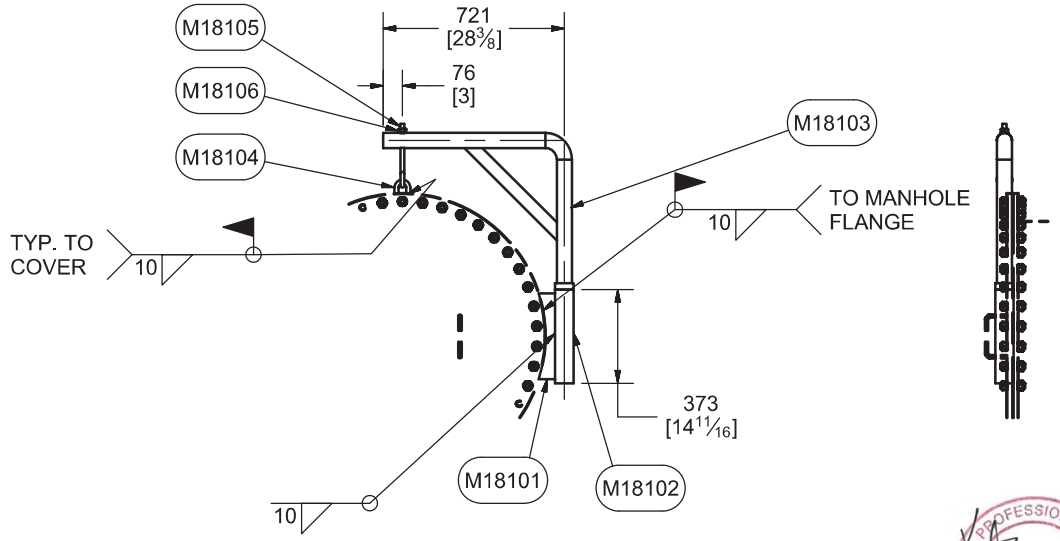
PROFESSIONAL ENGINEER
K. G. BROWN
LICENSEE
NT/NU
16-Jul-2017
Permit Number: P471

REVISION HISTORY		
REV	DESCRIPTION	DATE
2	THIS SHEET ADDED	7/7/2017

DRAWN Jacob Saunders	4/13/2017	
CHECKED		
QA		
MFG		TITLE: MISC. SUPPORTS AND BRACKETS
APPROVED		
		SIZE A3 / DWG NO 295-M17 / REV 2
		SCALE / SHEET 5 OF 5

PARTS LIST FOR ONE (1) ASSY, SIXTEEN (16) REQUIRED				
ITEM	ITEM QTY	CUT (MM)	DESCRIPTION	MATERIAL
M18101	1	341	5/8"THK X 66 WIDE PLATE, SEE DETAIL	G40.21M 300W
M18102	1	373	2 1/2" STD PIPE	A53
M18103	1		DAVIT ARM, SEE DETAIL	
M18104	1	198	16 [5/8"] DIA LG SEE DETAIL	Steel
M18105	1		EYE-BOLT 5/8"DIA X 12" LG CROSBY G291	FORGED STEEL
M18106	2		5/8"-11UNC Hex Nuts (Inch Series) Heavy Hex Nut	A194 GR4

PARTS LIST FOR ONE (1) DAVIT ARM, SIXTEEN (16) REQ'D				
ITEM	ITEM QTY	CUT (MM)	DESCRIPTION	MATERIAL
M18108	1	645	2"NS XXH PIPE	A53
M18109	1	25	2 1/2"NS STD PIPE	A53
M18110	1		2"NS XXH ELBOW BW 90DEG L.R.	A234
M18111	1	890	2"NS XXH PIPE	A53
M18112	1	520	FB10X50 [3/8"X2"]	G40.21M 300W

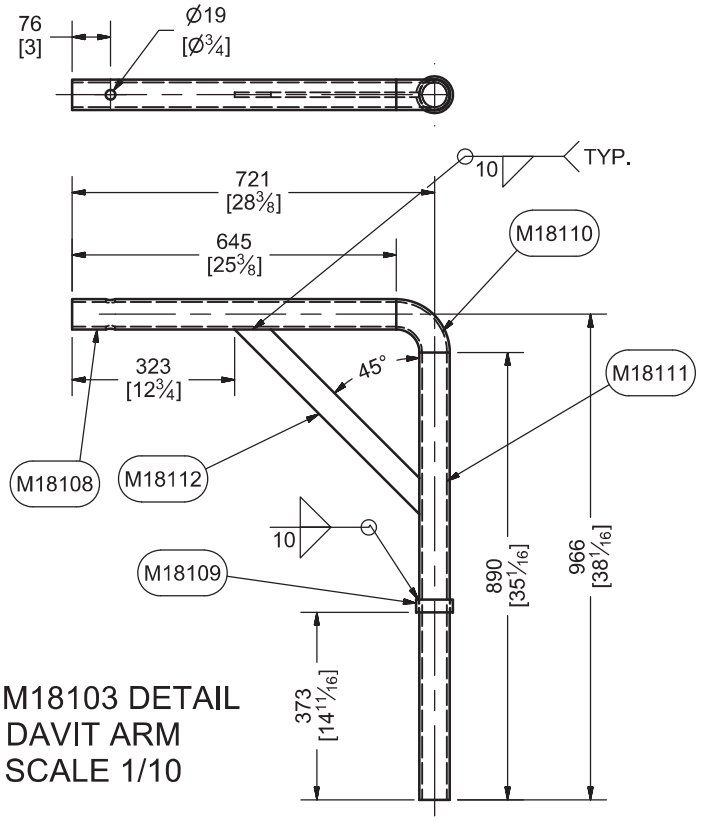


DAVIT ASSEMBLY
QTY: 16
SCALE 1/20

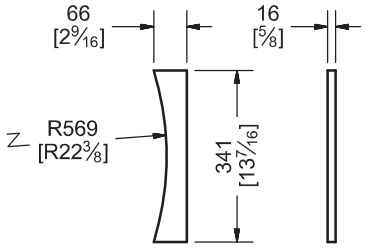
AS-BUILT
BY Inukshuk Construction Ltd. DATE 2017/10/02

04-May-2017

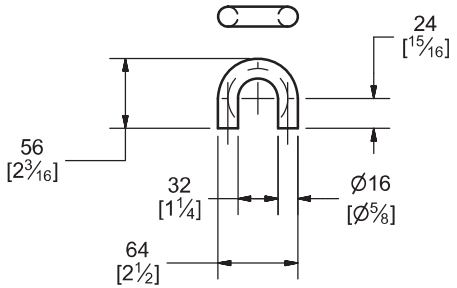
Permit Number: P471



Pc. M18103 DETAIL
DAVIT ARM
SCALE 1/10



Pc M18101 DETAIL
SCALE 1/10



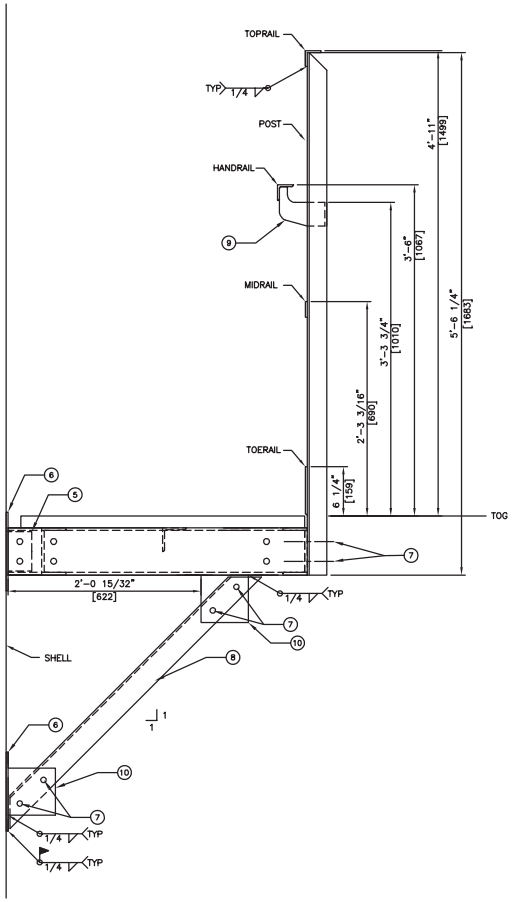
Pc M18104 DETAIL
SCALE 1/4

DRAWN MARC LOSIER	4/13/2017	900MM [36"] NS FOR TK1, 2, 3, 4
CHECKED		
QA		TITLE
MFG		MANHOLE COVER DAVIT
APPROVED		SIZE A3 / DWG NO 295-M18 / REV
		SCALE / SHEET 1 OF 1

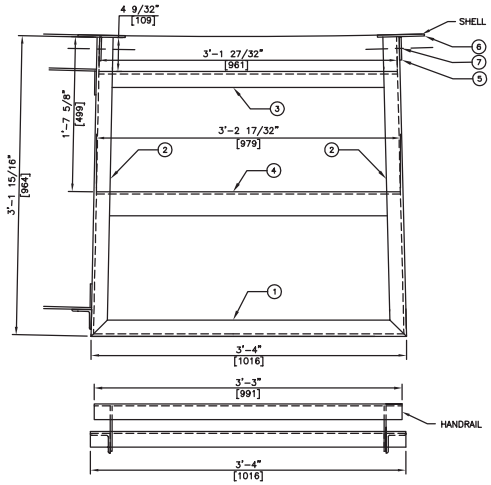
BILL OF MATERIALS

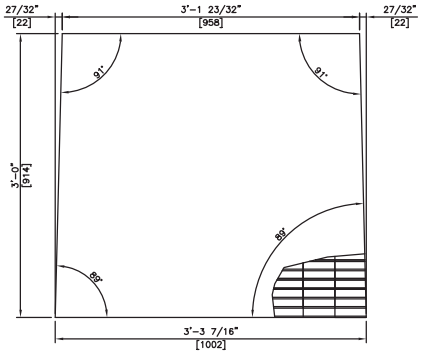
MARK	QTY.	DESCRIPTION	MATERIAL	MTR	WT #'s
1	1	C6Ø10.5# x 3'-4" LG (CBE)	G40.21-300W	C	–
2	2	C6Ø10.5# x 3'-1 15/16" LG (COE/POE)	G40.21-300W	C	–
3	1	C6Ø10.5# x 3'-1 27/32" LG (CBE)	G40.21-300W	C	–
4	1	3/8" x 3" x 3" ANGLE x 3'-2 17/32" LG (CBE)	G40.21-300W	C	–
5	2	3/8" THK x 3" x 5"	G40.21-260W	C	–
6	4	1/4" THK x 6" x 10" c/w 2" RADIUS CORNERS	G40.21-260W	C	–
7	16	5/8"Ø x 1 3/4" LG HEX HD BOLT c/w (1) NUT &	A325 GALV	C	–
		LOCK WASHER AND (2) FLAT WASHERS			
8	2	3/8" x 3" x 3" ANGLE x 3'-9 1/8" LG (CBE)	G40.21-300W	C	–
9	2	1/4" THK x 5" x 5 3/4" SEE DETAIL	G40.21-260W	C	–
10	4	1/4" THK x 6" x 6"	G40.21-260W	C	–

BILLING FOR ONE TANK SHOWN, THREE (3) REQUIRED

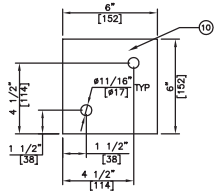


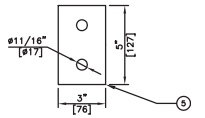
PLATFORM ELEVATION DETAIL

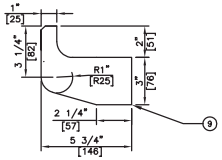


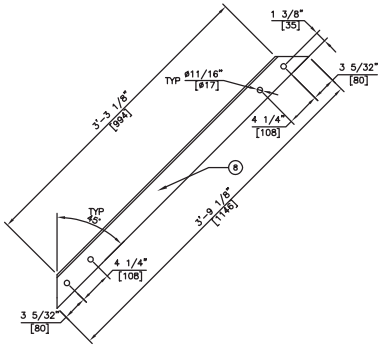


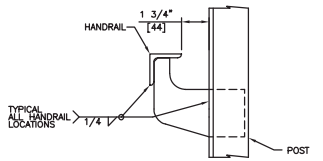
GRATING DETAIL











TYPICAL HANDRAIL/POST DETAIL

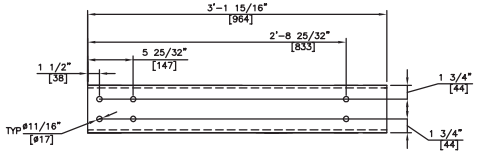
TYPICAL HANDRAIL DETAIL

TOPRAIL – 1/4" x 2" x 2" ANGLE
HANDRAIL – 1/4" x 2" x 2" ANGLE
MIDRAIL – 1/4" x 2" FLATBAR
TOERAIL – 1/4" x 6" FLATBAR
POST – 1/4" x 2 1/2" x 2 1/2" ANGLE
GRATING – 19-W-4 1 1/2" DEEP x 3/16" GALVANIZED SERRATED BAR GRATING

**HANDRAIL LOCATED ON OUTSIDE ONLY – BOLTED TO PLATFORM

**ALL GRATING TO BE SECURED TO PLATFORM FRAME USING SADDLE CLIPS (BOLTED).

PLATFORM IS CAPABLE OF SUPPORTING A MOVING CONCENTRATED LOAD OF 1000LBS, AND HANDRAIL LOAD OF 200LBS IN ANY DIRECTION.



MARK 2 – RIGHT HAND SHOWN
LEFT HAND OPPOSITE

SLOTS MAY BE SHOP LOCATED TO MATCH HANDRAIL POST

AS-BUILT
BY Inukshuk Construction Ltd. DATE 2017/10/02

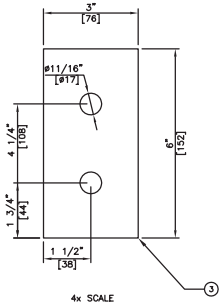
PROFESSIONAL ENGINEER
K.G. BROWN
LICENSEE
NT/NU
30-Sep-2017

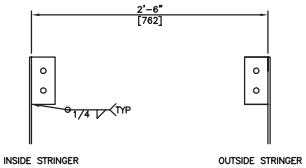
REV.	DATE	DRWN.	APP'D.	DESCRIPTION
0	5-MAY-17	ME	KB	ISSUED FOR CONSTRUCTION
A	17-APR-17	ME	KB	ISSUED FOR APPROVAL

REVISIONS

SUB-ARC SYSTEMS INC.

CUSTOMER: AGNICO EAGLE MINES LIMITED – MELIADINE PROJECT
TITLE: MID PLATFORM DETAIL
PROJECT NO.: 6515
LOCATION: RANKIN INLET, NUNAVUT
TANK NO.: TANK TAG: TK #2
SCALE: 3/4" = 1'-0"
W.O.: 17-03
DWG. No.: 17-03-2-001
Rev.: 0
DATE: 17-APR-17



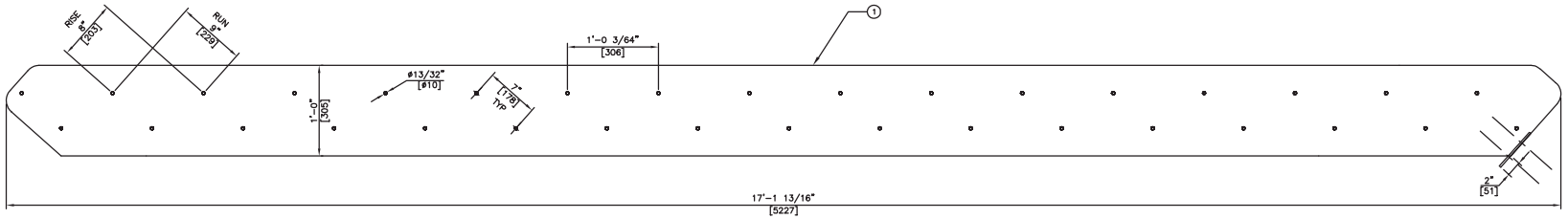


STRINGER CLIP TO PLATFORM

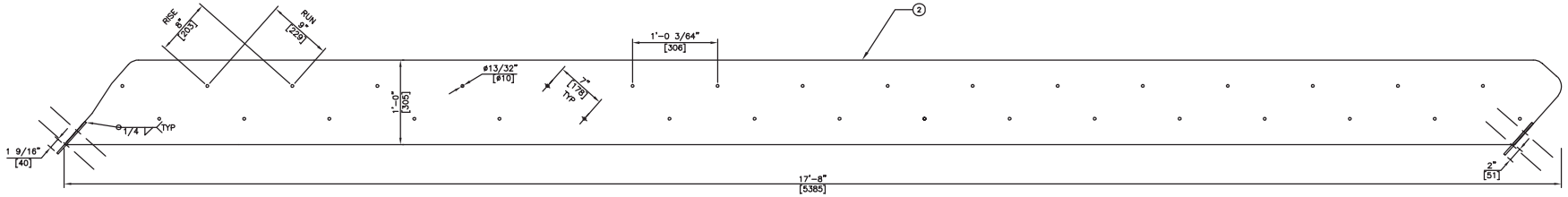
BILL OF MATERIALS

MARK	QTY.	DESCRIPTION	MATERIAL	MTR	WT #'s
1	1	1/4" THK x 12" x 17'-1 13/16" LG SEE DETAIL	G40.21-260W	C	–
2	3	1/4" THK x 12" x 17'-8" LG SEE DETAIL	G40.21-260W	C	–
3	14	1/4" THK x 3" x 6"	G40.21-260W	C	–
4	28	5/8"ø x 1 3/4" LG HEX HD BOLT c/w (1) NUT & LOCK WASHER AND (2) FLAT WASHERS	A325 GALV	C	–

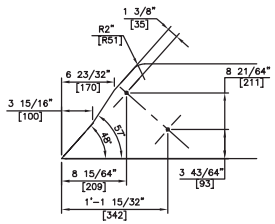
BILLING FOR ONE TANK SHOWN, ONE REQUIRED



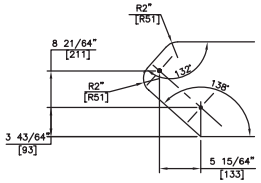
INSIDE BOTTOM STRINGER



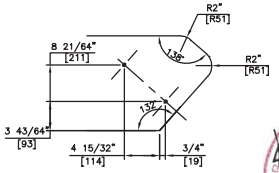
INSIDE STRINGER – THREE SECTIONS REQUIRED



BOTTOM @ PLATFORM



BOTTOM



TOP

AS-BUILT

BY Inukshuk Construction Ltd. DATE 2017/10/02

NOTE: MARK 3 IS PLACED SAME SIDE AS STAIR.

REV.	DATE	DRWN.	APP'D.	DESCRIPTION
0	5-MAY-17	ME	KB	ISSUED FOR CONSTRUCTION
A	17-APR-17	ME	KB	ISSUED FOR APPROVAL

REVISIONS

SUB-ARC SYSTEMS INC.

CUSTOMER: AGNICO EAGLE MINES LIMITED – MELIADINE PROJECT

TITLE: INSIDE STRINGER DETAIL

PROJECT NO.: 6515

LOCATION: RANKIN INLET, NUNAVUT

TANK NO.: TANK TAG: TK #2

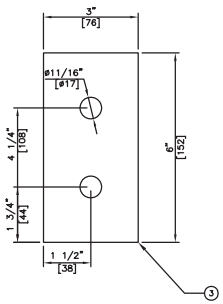
SCALE: 3/4" = 1'-0"

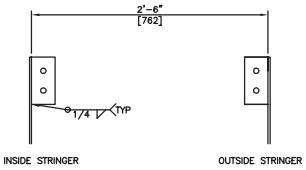
DATE: 17-APR-17

E.O.: 17-03

DRWG. No.: 17-03-2-002

Rev.: 0



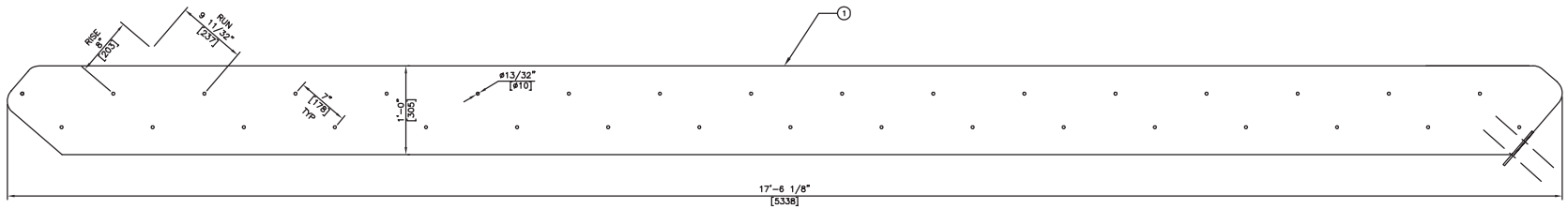


STRINGER CLIP TO PLATFORM

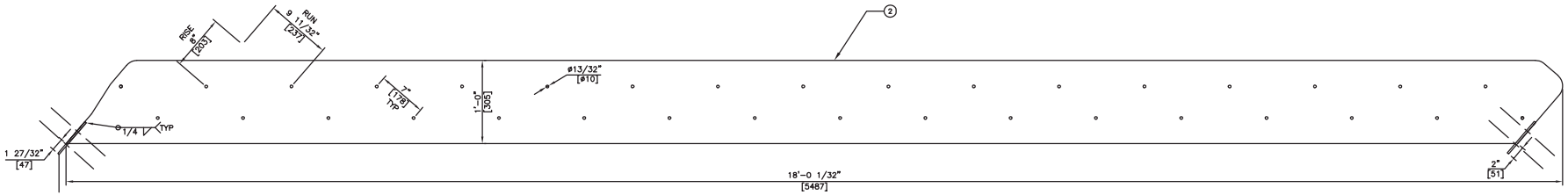
BILL OF MATERIALS

MARK	QTY.	DESCRIPTION	MATERIAL	MTR	WT #'s
1	1	1/4" THK x 12" x 17'-5 5/8" LG SEE DETAIL	G40.21-260W	C	–
2	3	1/4" THK x 12" x 17'-11 17/32" LG SEE DETAIL	G40.21-260W	C	–
3	14	1/4" THK x 3" x 6"	G40.21-260W	C	–
4	28	5/8"ø x 1 3/4" LG HEX HD BOLT c/w (1) NUT &	A325 GALV	C	–
		SERRATED BAR GRATING c/w CHECKER PLATE NOSE			
5	68	STAIR TREAD 9 3/4" WIDE x 30" LG x 1 1/2" x 3/16"	G40.21-260W	C	–
		SERRATED c/w CHECKER PLATE NOSE			
6	272	3/8"ø x 1 1/2" LG HEX HD BOLT c/w (1) NUT &	A325 GALV	C	–
		LOCK WASHER AND (2) FLAT WASHERS			

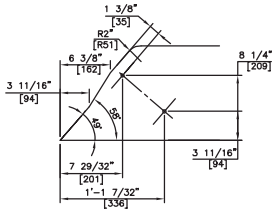
BILLING FOR ONE TANK SHOWN, ONE REQUIRED



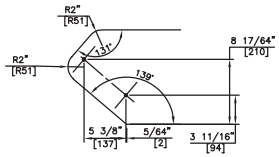
OUTSIDE BOTTOM STRINGER



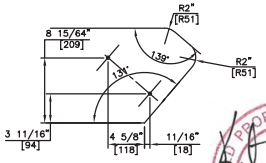
OUTSIDE STRINGER – THREE SECTIONS REQUIRED



BOTTOM @ PLATFORM



BOTTOM



TOP

AS-BUILT

BY Inukshuk Construction Ltd. DATE 2017/10/02

NOTE: MARK 3 IS PLACED SAME SIDE AS STAIR.

REV.	DATE	DRWN.	APP'D.	DESCRIPTION
0	5-MAY-17	ME	KB	ISSUED FOR CONSTRUCTION
A	17-APR-17	ME	KB	ISSUED FOR APPROVAL

REVISIONS

SUB-ARC SYSTEMS INC.

CUSTOMER: AGNICO EAGLE MINES LIMITED – MELIADINE PROJECT

TITLE: OUTSIDE STRINGER DETAIL

PROJECT NO.: 6515

LOCATION: RANKIN INLET, NUNAVUT

TANK NO.: TANK TAG: TK #2

SCALE: 3/4" = 1'-0"

DATE: 17-APR-17

E.O.: 17-03

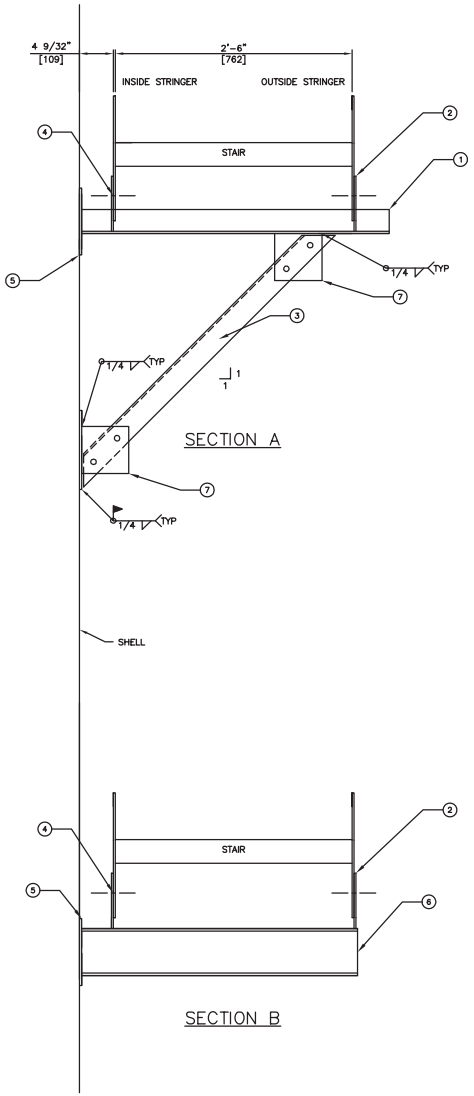
DRWG. No.: 17-03-2-003

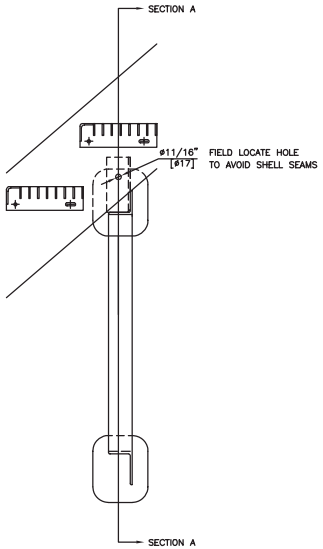
Rev.: 0

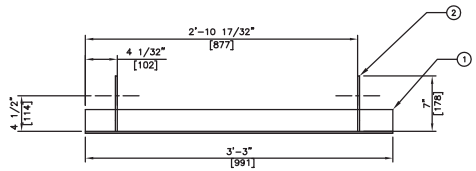
BILL OF MATERIALS

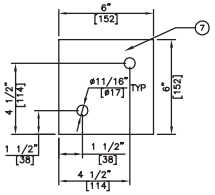
MARK	QTY.	DESCRIPTION	MATERIAL	MTR	WT #'s
1	8	3/8" x 3" x 3" ANGLE x 3'-3" LG (PBE)	G40.21-300W	C	–
2	18	1/4" THK x 2 5/8" x 7" LG	G40.21-260W	C	–
3	8	3/8" x 3" x 3" ANGLE x 3'-9 1/8" LG	G40.21-300W	C	–
4	50	5/8"ø x 1 3/4" LG HEX HD BOLT c/w (1) NUT & LOCK WASHER AND (2) FLAT WASHERS	A325 GALV	C	–
5	17	1/4" THK x 6" x 10" c/w 2" RADIUS CORNERS	G40.21-260W	C	–
6	1	C6@10.5# x 2'-11" LG	G40.21-300W	C	–
7	16	1/4" THK x 6" x 6"	G40.21-260W	C	–

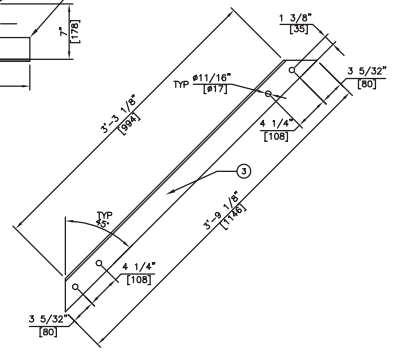
BILLING FOR ONE TANK SHOWN, ONE REQUIRED

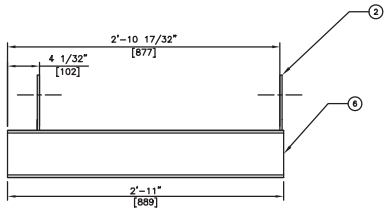


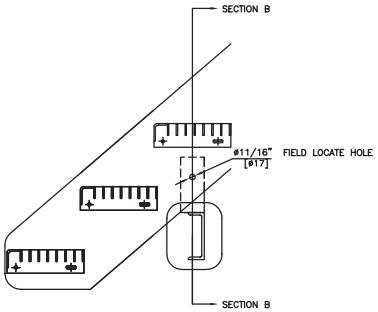












CHANNEL SUPPORT IS FOR BOTTOM OF STAIRS ONLY.

NOTE: MAXIMUM SUPPORT SPACING IS EVERY 7 STAIRS.

AS-BUILT

BY Inukshuk Construction Ltd. DATE 2017/10/02

REV.	DATE	DRWN.	APP'D.	DESCRIPTION
0	5-MAY-17	ME	KB	ISSUED FOR CONSTRUCTION
A	17-APR-17	ME	KB	ISSUED FOR APPROVAL

REVISIONS

SUB-ARC SYSTEMS INC.

CUSTOMER: AGNICO EAGLE MINES LIMITED – MELIADINE PROJECT

TITLE: STAIR STRINGER SUPPORTS

PROJECT NO.: 6515

LOCATION: RANKIN INLET, NUNAVUT

TANK NO.: TANK TAG: TK #2

SCALE: 3/4" = 1'-0"

DATE: 17-APR-17

S.O.: 17-03

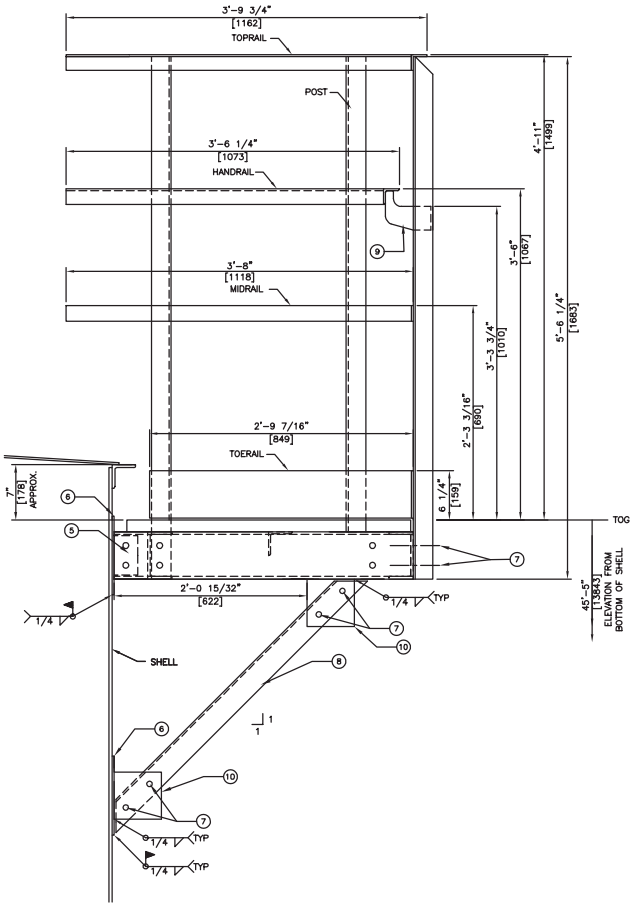
DRWG. No.: 17-03-2-004

Rev.: 0

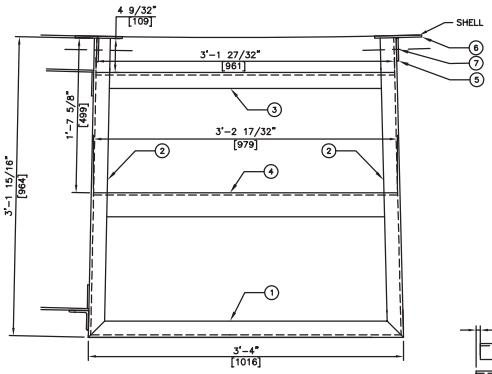
BILL OF MATERIALS

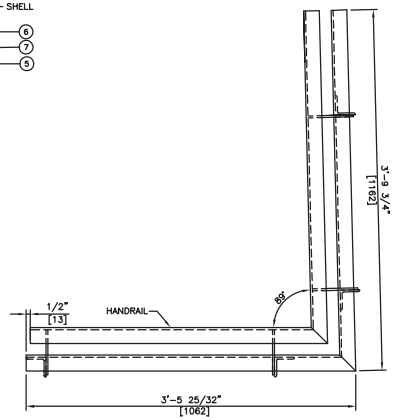
MARK	QTY.	DESCRIPTION	MATERIAL	MTR	WT #'s
1	1	C6Ø10.5# x 3'-4" LG (CBE)	G40.21-300W	C	–
2	2	C6Ø10.5# x 3'-1 15/16" LG (COE/POE)	G40.21-300W	C	–
3	1	C6Ø10.5# x 3'-1 27/32" LG (CBE)	G40.21-300W	C	–
4	1	3/8" x 3" x 3" ANGLE x 3'-2 17/32" LG (CBE)	G40.21-300W	C	–
5	2	3/8" THK x 3" x 5"	G40.21-260W	C	–
6	4	1/4" THK x 6" x 10" c/w 2" RADIUS CORNERS	G40.21-260W	C	–
7	20	5/8"Ø x 1 3/4" LG HEX HD BOLT c/w (1) NUT &	A325 GALV	C	–
		LOCK WASHER AND (2) FLAT WASHERS			
8	2	3/8" x 3" x 3" ANGLE x 3' - 9 1/8" LG (CBE)	G40.21-300W	C	–
9	4	1/4" THK x 5" x 5 3/4" SEE DETAIL	G40.21-260W	C	–

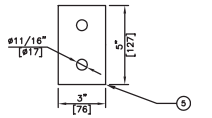
BILLING FOR ONE TANK SHOWN, ONE (1) REQUIRED

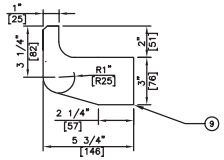


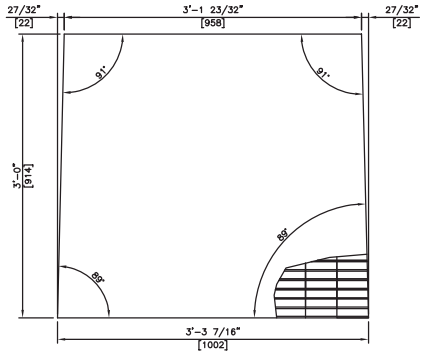
PLATFORM ELEVATION DETAIL



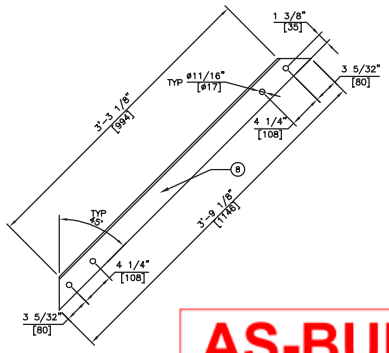


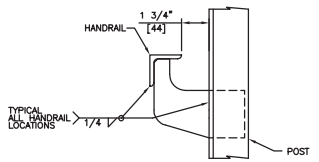






GRATING DETAIL





TYPICAL HANDRAIL/POST DETAIL

TYPICAL HANDRAIL DETAIL

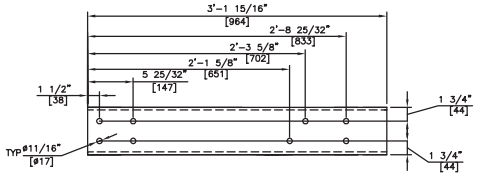
TOPRAIL – 1/4" x 2" x 2" ANGLE
HANDRAIL – 1/4" x 2" x 2" ANGLE
MIDRAIL – 1/4" x 2" FLATBAR
TOERAIL – 1/4" x 6" FLATBAR
POST – 1/4" x 2 1/2" x 2 1/2" ANGLE
GRATING – 19-W-4 1 1/2" DEEP x 3/16" GALVANIZED SERRATED BAR GRATING

**HANDRAIL LOCATED ON OUTSIDE ONLY – BOLTED TO PLATFORM

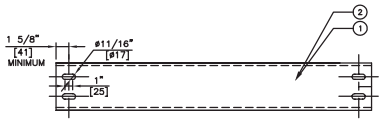
**ALL GRATING TO BE SECURED TO PLATFORM FRAME USING SADDLE CLIPS (BOLTED).

FIELD TO TRIM HANDRAIL OVER TANK ROOF TO MATE WITH PERIMETER HANDRAIL

PLATFORM IS CAPABLE OF SUPPORTING A MOVING CONCENTRATED LOAD OF 1000LBS, AND HANDRAIL LOAD OF 200LBS IN ANY DIRECTION.



MARK 2 – RIGHT HAND SHOWN
LEFT HAND OPPOSITE



SLOTS MAY BE SHOP LOCATED TO MATCH HANDRAIL POST

AS-BUILT

BY Inukshuk Construction Ltd. DATE 2017/10/02

REGISTERED PROFESSIONAL ENGINEER
K.G. BROWN
LICENSEE
NT/NU
30-Sep-2017

REV.	DATE	DRWN.	APP'D.	DESCRIPTION
0	5-MAY-17	ME	KB	ISSUED FOR CONSTRUCTION
A	17-APR-17	ME	KB	ISSUED FOR APPROVAL

REVISIONS

SUB-ARC SYSTEMS INC.

CUSTOMER: AGNICO EAGLE MINES LIMITED – MELIADINE PROJECT

TITLE: TOP PLATFORM DETAIL

PROJECT NO.: 6515

LOCATION: RANKIN INLET, NUNAVUT

TANK NO.: TANK TAG: TK #2

SCALE: 3/4" = 1'-0" W.O.: 17-03

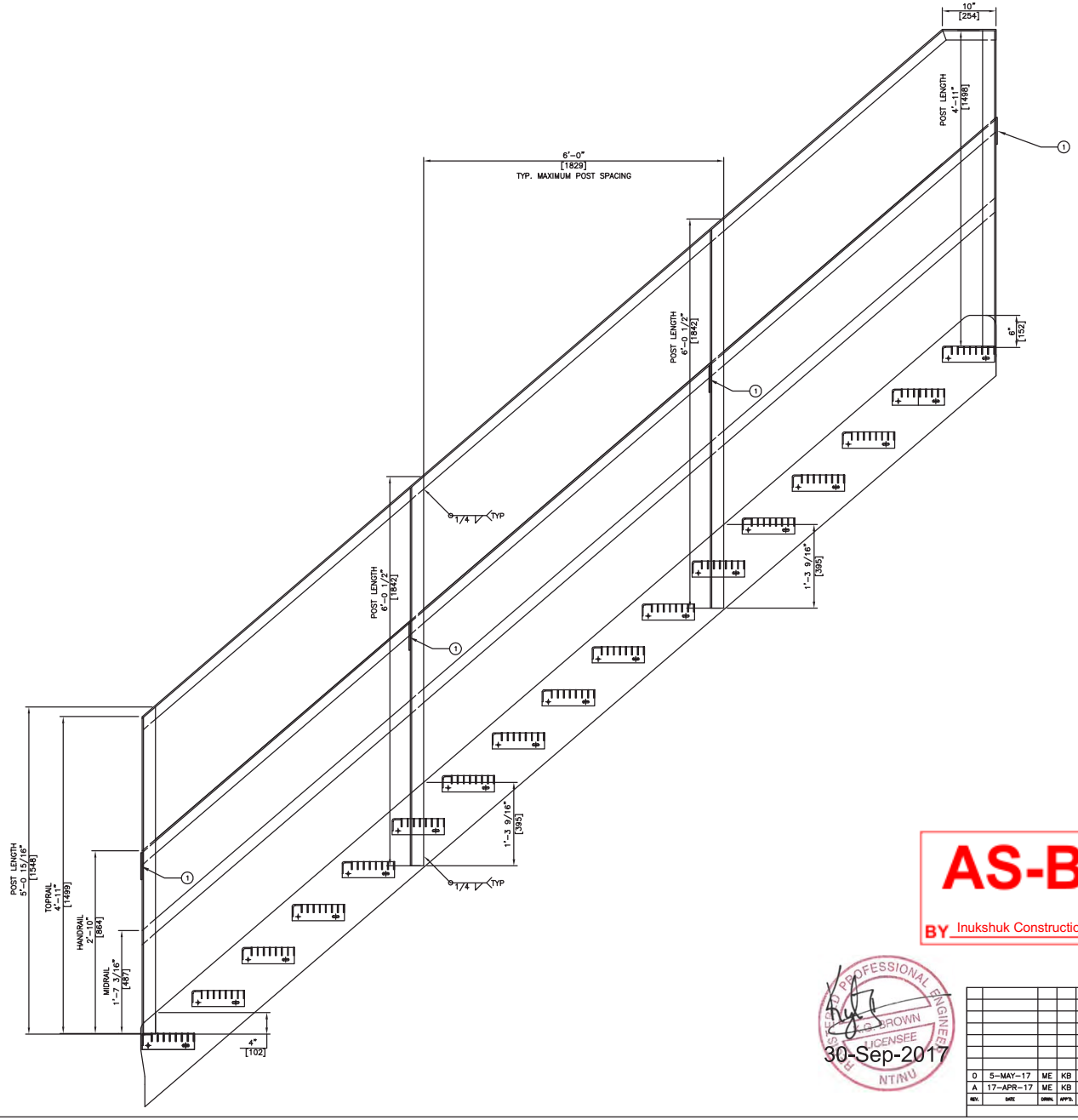
DATE: 17-APR-17

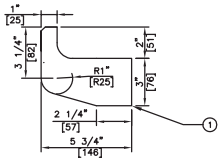
DRWG. No.: 17-03-2-005 Rev.: 0

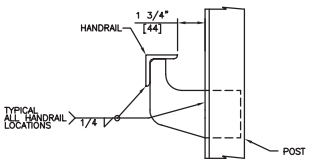
BILL OF MATERIALS

MARK	QTY.	DESCRIPTION	MATERIAL	MTR	WT #'s
1	4	1/4" THK x 5" x 5 3/4" SEE DETAIL	G40.21–260W	C	–

BILLING FOR ONE TANK SHOWN, FOUR (4) REQUIRED







TYPICAL HANDRAIL/POST DETAIL

TYPICAL HANDRAIL DETAIL

TOPRAIL – 1/4" x 2" x 2" ANGLE
HANDRAIL – 1/4" x 2" x 2" ANGLE
MIDRAIL – 1/4" x 2" FLATBAR

POST – 1/4" x 2 1/2" x 2 1/2" ANGLE
POST SHALL BE SQUARE TO THE STAIR HOLES
1 POST AT EACH END, 2 POSTS EQUAL SPACE ON STRINGER

**HANDRAIL LOCATED ON OUTSIDE ONLY

STAIRS ARE CAPABLE OF SUPPORTING A MOVING CONCENTRATED LOAD OF 1000LBS, AND HANDRAIL LOAD OF 200LBS IN ANY DIRECTION.

AS-BUILT

BY Inukshuk Construction Ltd. DATE 2017/10/02

REV.	DATE	DRWN.	APP'D.	DESCRIPTION
0	5–MAY–17	ME	KB	ISSUED FOR CONSTRUCTION
A	17–APR–17	ME	KB	ISSUED FOR APPROVAL

REVISIONS

SUB–ARC SYSTEMS INC.

CUSTOMER: AGNICO EAGLE MINES LIMITED – MELIADINE PROJECT

TITLE: STAIR HANDRAIL DETAIL

PROJECT NO.: 6515

LOCATION: RANKIN INLET, NUNAVUT

TANK NO.: TANK TAG: TK #2

SCALE: 3/4" = 1'–0"

DATE: 17–APR–17

E.O.: 17–03

DRWG. No.: 17–03–2–006

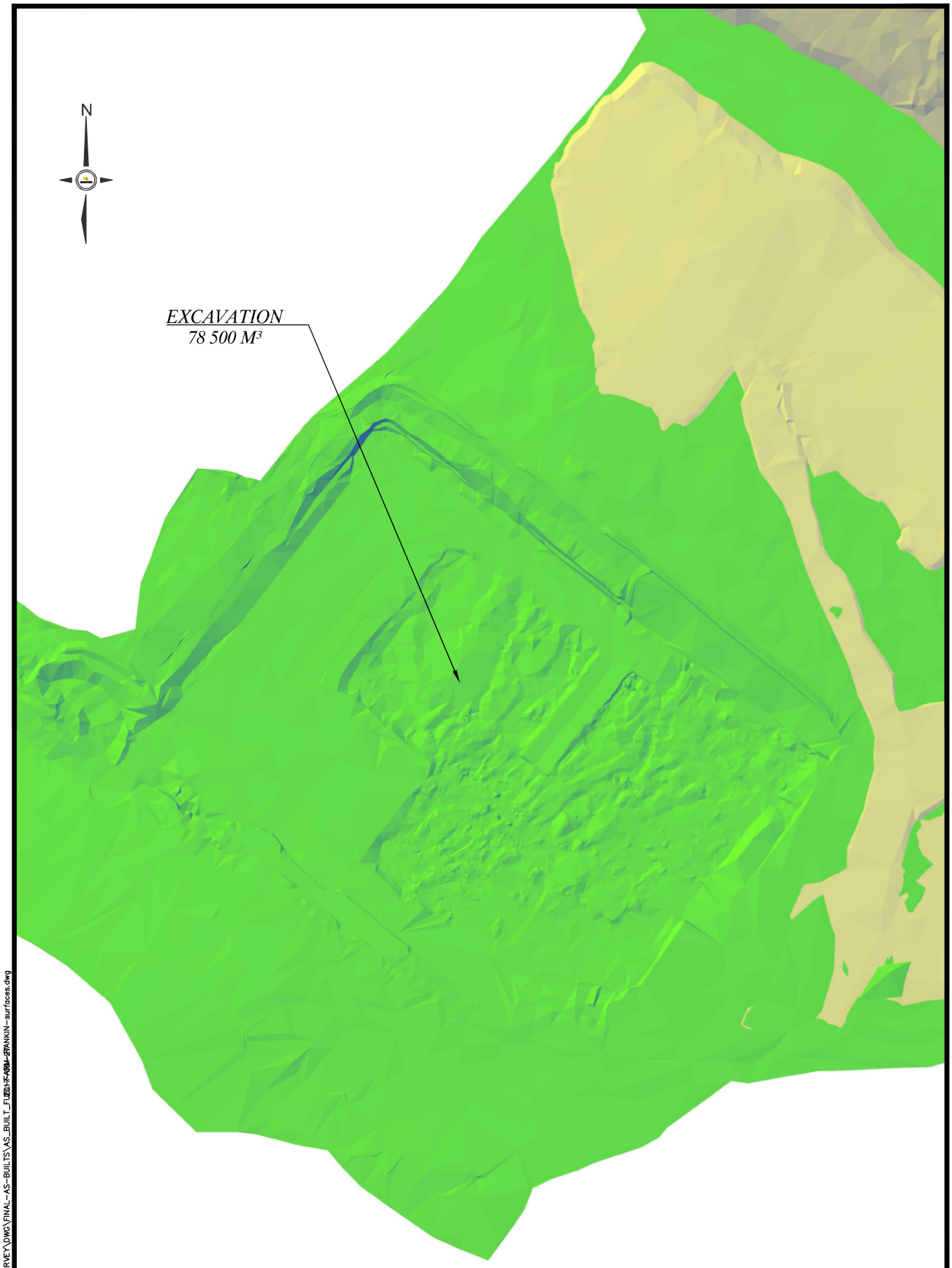
REV.: 0

APPENDIX B

Survey Drawings of Rankin Inlet Itivia Site fuel storage and containment facility

HAMELARPENTAGE	AGNICO EAGLE	WORK EXECUTION DATE : 2017-10-13	EMISSION DATE : 2017-10-25
	COORD. SYSTEME: UTM15 NAD83	AS BUILT RANKIN FUEL FARM	DRAWN BY: R.CLOUATRE
	SCALE: 1:2000	PLAN NO.: 131-RANKIN-FUEL-FARM-QT-171025-01	APPROVED BY: Hamel arpentage

C:\Users\Utilisateur\Desktop\RANKIN INLET\SURVEY\DWG\FINAL-AS-BUILTS\AS_BUILT_FUEL_FARM-RANKIN-surfaces.dwg



HAMELARPENTAGE	AGNICO EAGLE	WORK EXECUTION DATE : 2017-10-13	EMISSION DATE : 2017-10-25
	COORD. SYSTEME: UTM15 NAD83	AS BUILT EXCAVATION RANKIN FUEL FARM	DRAWN BY: R.CLOUATRE
	SCALE: 1:1000	PLAN NO.: 131-RANKIN-FUEL-FARM-QT-171025-02	APPROVED BY: Hamel arpentage

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HAMELARPENTAGE	AGNICO EAGLE	WORK EXECUTION DATE : 2017-10-13	EMISSION DATE : 2017-10-25
	COORD. SYSTEME: UTM15 NAD83	AS BUILT OVERBURDEN RANKIN FUEL FARM	DRAWN BY: R.CLOUATRE
	SCALE: 1:2000	PLAN NO.: 131-RANKIN-FUEL-FARM-QT-171025-03	APPROVED BY: Hamel arpentage

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