

January 24, 2022

Richard Dwyer
Manager of Licensing
Nunavut Water Board

**Re: Agnico Eagle's response to CIRNAC Comments regarding the Whale Tail (2AM-WTP1830) –60-Day Notice
Whale Tail Emulsion Plant**

Dear Mr. Dwyer,

The following information are intended to address CIRNAC's comments regarding the Whale Tail (2AM-WTP1830) –60-Day Notice Whale Tail Emulsion Plant:

- Crown-Indigenous Relations and Northern Affairs Canada – December 20, 2021: Crown-Indigenous Relations and Northern Affairs Canada's (CIRNAC's) Review of the Commission and Construction of Whale Tail Emulsion Plant Proposal; Submitted by Agnico Eagle Mines (AEM) for Type A Water Licence No. 2AM-WTP1830

Should you have any questions or require further information, please do not hesitate to contact us at the below.

Regards,

Agnico Eagle Mines Limited – Meadowbank Complex

A handwritten signature in black ink, appearing to read 'Michel Groleau', with a stylized flourish at the end.

Michel Groleau
Superintendent, Permitting & Regulatory Affairs
Agnico Eagle Mines Limited

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1 Crown-Indigenous relations and Northern Affairs Canada (CIRNAC)

1.1 Signed and Stamped Issued For Construction (IFC)

Comment: CIRNAC understands that the attached engineering drawings to AEM's notification letter to the NWB for the proposed Whale Tail Emulsion Plant construction, was purposely issued for review by the NWB and intervening parties. Therefore, CIRNAC requests that AEM provide a site plan/drawing that includes the anticipated dimensions of the work areas.

Recommendation 1: CIRNAC recommends that AEM provide signed and stamped issued for construction (IFC) drawings by a registered engineer, showing anticipated work areas with dimensions, for the Whale Tail Emulsion Plant.

Agnico Eagle's Response: AEM has updated the engineering drawing of the existing and new installations (drawing 61-446-210-002_R2 For construction).

1.2 Detailed Foundation Plan

Comment: Having a clearer understanding of the foundation on which AEM plans to erect structural items anticipated to support the Emulsion Plant Super-Structure, is critical to understanding the anticipated impacts that the project would have on ground water.

CIRNAC has identified that the engineering drawings attached to Agnico Eagle's notification letter to the NWB for the proposed Whale Tail Emulsion Plant construction did not provide information on the design criteria. Ideally, these design criteria are supposed to include a description on how all the indicated foundations (i.e. hopper foundation and crane foundation), structural stand and 6" precast concrete; are originally planned to be put in place. CIRNAC is also identified that the provided grading plan in the notification letter, is not for construction.

Recommendation 2: CIRNAC recommends that AEM should provide a detailed foundation plan that clearly specifies all the structural items anticipated to support the Emulsion Plant super-structure in addition to an IFC version of the provided grading plan.

Agnico Eagle's Response:

Engineering drawings 61-446-230-002 & 61-446-230-003 has been updated will additional information. It's important to point out that the proposed foundation design is similar to the one supporting the existing Meadowbank Emulsion Plant and no issue has been observed over the last 12 years of operation.

Moreover, the building is not anticipated to have any effect on groundwater as it will be built on land. It's expected that the addition of the filling material required to build the foundation would increase the elevation of the active layer. Instead of the active layer being located only into the overburden, this one will be move up into the foundation. As the foundation is a relatively small surface area compared to the size of the hydrogeological modeling domain used for the Whale Tail Expansion Project, it's not expected that the construction of the foundation will result in any change into the groundwater flow regime.

1.3 Quality Control / Quality Assurance (QC/QA) Plan

Comment: CIRNAC notes that AEM's notification letter to the NWB for the proposed Whale Tail Emulsion Plant construction did not include any mention of what AEM anticipates for Quality Control and Quality Assurance during the construction phase of the project; in order to ensure that the new facility will be erected in accordance with engineering best practices.

CIRNAC requests that AEM provide its Quality Control/Quality Assurance narrative for the Emulsion Plant and that the narrative include protection for ground water and nearby water bodies within the Whale Tail Pit Project infrastructure footprint. This will ensure that the quality of anticipated structural items supporting the Emulsion Plant Super Structure are erected in accordance with engineering best practices and are capable of mitigating against potential impacts on both the underground and nearby water bodies.

Recommendation: CIRNAC recommends that AEM provide a detailed Quality Control / Quality Assurance (QC/QA) plan / narrative in a detailed report.

Agnico Eagle's Response:

All backfill materials visually approved for use by Agnico Eagle Construction prior to placement at the Emulsion Pad extension. Material place is NAG and Non-Metal leaching as per latest Agnico's Operational ARD/ML Sampling and testing Plan. Placement of backfill materials were observed to conform to the specifications (maximum lift heights, compaction) outlined in the design drawings. Work supervision by Agnico Eagle Construction engineer ensure that the placement of backfill conforms to the specifications (maximum lift heights, compaction) outlined in the design drawings.

1.4 Fill Materials plan

Comment: CIRNAC is not sure how AEM plans to put in place all the indicated fill materials for berm and anchor trenches (e.g. compaction lift thickness, soil compaction, machinery etc.). Also, CIRNAC identified that AEM did not provide specifications for the engineered fills indicated in the drawings and does not know how AEM plans to protect the ground water in the Emulsion Plant against contamination.

Recommendation 4: CIRNAC recommends that AEM provide:

- A detailed narrative on how it plans to put in place fill materials for berm and anchor trench (i.e. fill materials plan);

Agnico Eagle's Response:

Fill materials will be trucked from NAG stockpiles to the Emulsion Pad location and dump. Material is then spread to the required lift thickness, with a bulldozer and compacted with a 10-tonne vibratory roller. A surveyor assists the crew to guide and control the lift thickness. The anchor trench is excavated with an excavator to the required depth and the material is then re-compacted within the trench using hand compaction equipment. As described in response of Recommendation 1, the Emulsion Plant is located on permafrost and no impact to groundwater flow regime is expected.

- Specifications for engineered fills indicated in the attached drawings to AEM's notification letter to the NWB

Agnico Eagle's Response:

Minimum placement specifications for the engineered fills indicated in the drawings are located on 61-446-230-003 "446-Emulsion Plant Pad, 230-General Earthworks Detail and Sections", sealed by WSP July 22, 2021.

1.5 General Layout Site Map

Comment: CIRNAC would like to see a general layout / site map of the proposed Whale Tail Emulsion Plant construction site showing explosives quantity distances from the nearest water body.

Recommendation 5: CIRNAC recommends that AEM should revise the general layout / site map of the proposed Whale Tail Emulsion Plant construction site showing explosives quantity distances to include setback distance for the new construction from the nearest water body within the Whale Tail Pit project infrastructure footprint.

Agnico Eagle's Response: Agnico Eagle refers CIRNAC to the drawing 61-446-210-006.

1.6 Permafrost Degradation Prevention Plan

Comment: In the notification letter to the NWB and attached engineering drawings, CIRNAC could not find any reference as to how AEM plans to prevent permafrost degradation during the construction phase of the proposed Whale Tail Emulsion Plant Project

Recommendation 6: CIRNAC recommends that AEM should:

- a) Incorporate best practices to prevent or mitigate against permafrost degradation during the construction phase of the Whale Tail Emulsion Plant into the IFC design (i.e. permafrost degradation prevention plan) and;

Agnico Eagle's Response:

The design of the Emulsion Pad extension places a minimum of 1.5 m of thaw-stable rockfill over the existing tundra to support the construction of the new plant facility. This is a typical rockfill depth for various pads and roads across Agnico Eagle sites in Nunavut to prevent degradation of the underlying permafrost.

These practices are aligned with the mitigation measures described in the FEIS (Table 3-C-2) to reduce impacts of the project on the project during construction & operation phases.

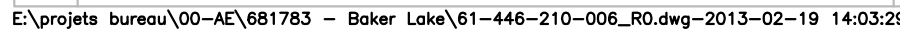
Project Activity	Planned Mitigation Measure (FEIS Table 3-C-2)
Mine Site Facilities Construction	Submission of all design drawings to the Nunavut Water Board for approval, prior to construction.
	Where possible, use thaw-stable road fills for construction.
	Road fill material will be placed directly over the existing soil layer without cutting, stripping, or grubbing to avoid disturbing the subgrade soils.
	Placement of the road construction materials during winter will minimize disturbance to the permafrost.
	Thick drifted snow greater than 1 m thick will be removed before the road fills are placed.

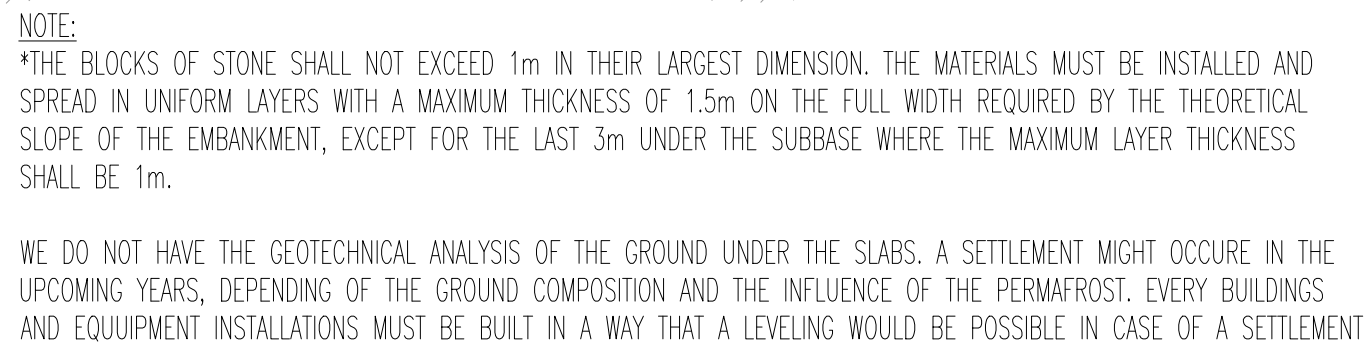
Table 1: Extract from 2020 Annual report - Table 12-32

- b) Report these best practices in future annual reports.

Agnico Eagle's Response:

Agnico Eagle will continue to report the effectiveness of the mitigation measures to reduce impact of the project on permafrost. This project will be discussed in the annual report, in the *Post-Environmental Assessment Monitoring Program (PEAMP) / Soil, Terrain, and Permafrost* section.



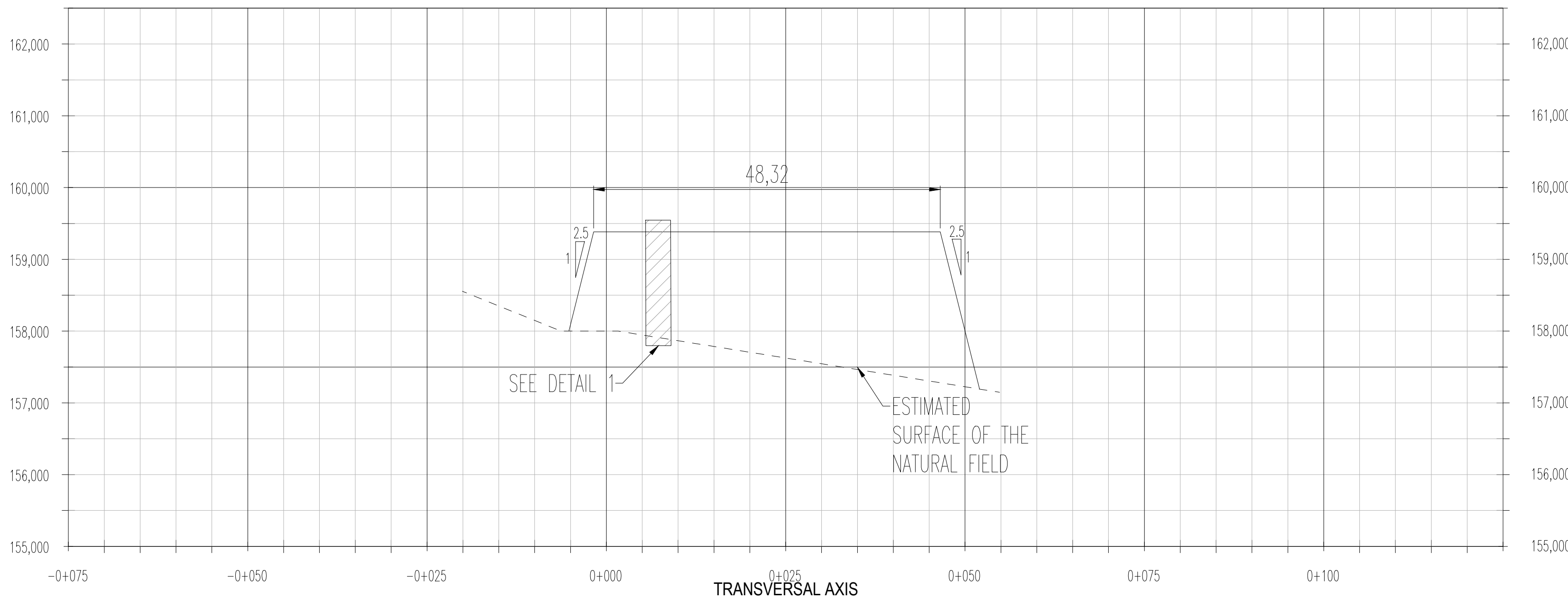
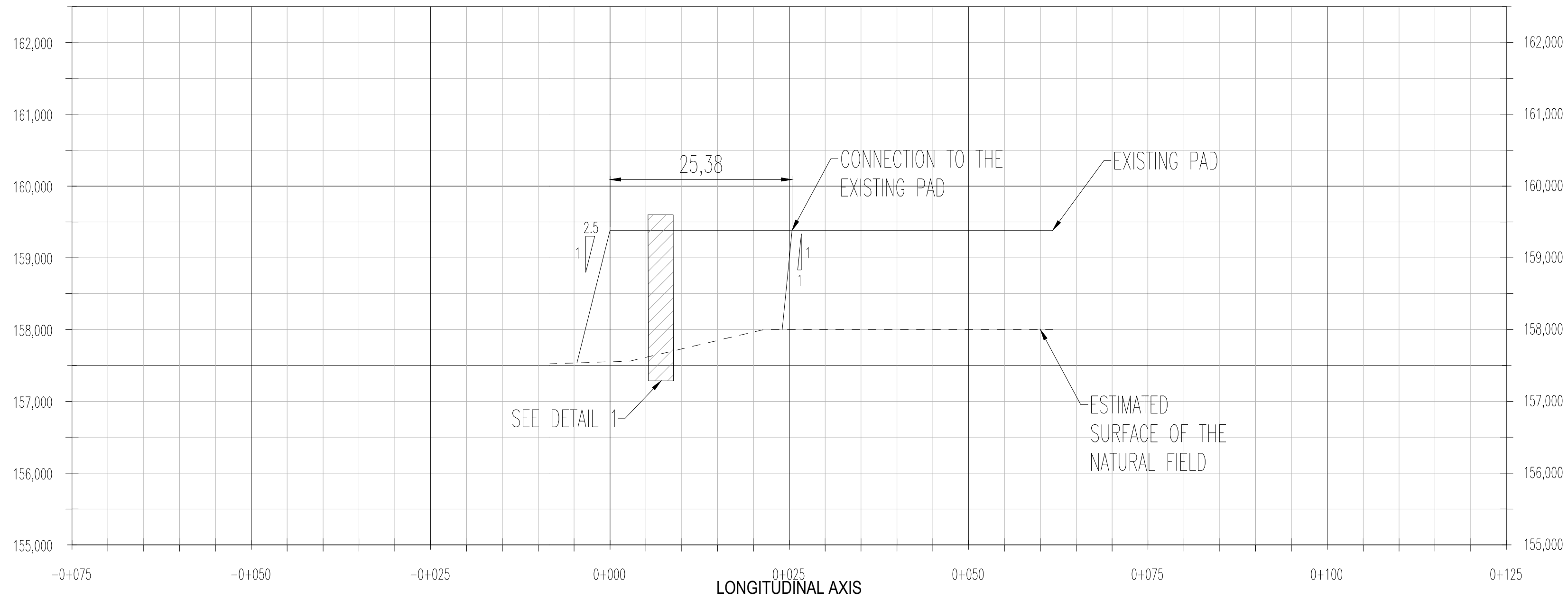


DETAIL

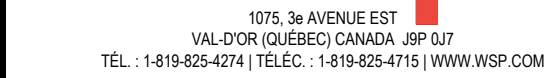
NO SCALE

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EMULSION PLANT PAD SIDE VIEWS
SCALE : 1:500



NOTES GÉNÉRALES / GENERAL NOTES

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1	2021-07-22	FOR CONSTRUCTION	S.D.	S.D.		
0	2021-07-21	FOR CONSTRUCTION	S.D.	S.D.		
REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT	

REVISIONS

TITRE / TITLE
AGNICO EAGLE - DIVISION AMAL
446 - EMULSION PLANT PA
230 - GENERAL EARTHWORKS
DETAIL AND SECTIONS

DESSINÉ PAR DRAWN BY	BENOIT COLLIN, tech.	DATE 2021-07-22
VÉRIFIÉ PAR CHECKED BY	STÉPHAN DUPUIS, P. Eng	2021-07-22
APPROUVÉ PAR APPROVED BY	STÉPHAN DUPUIS, P. Eng	2021-07-22

ÉCHELLE SCALE	INDICATED	DATE	2021-07-22
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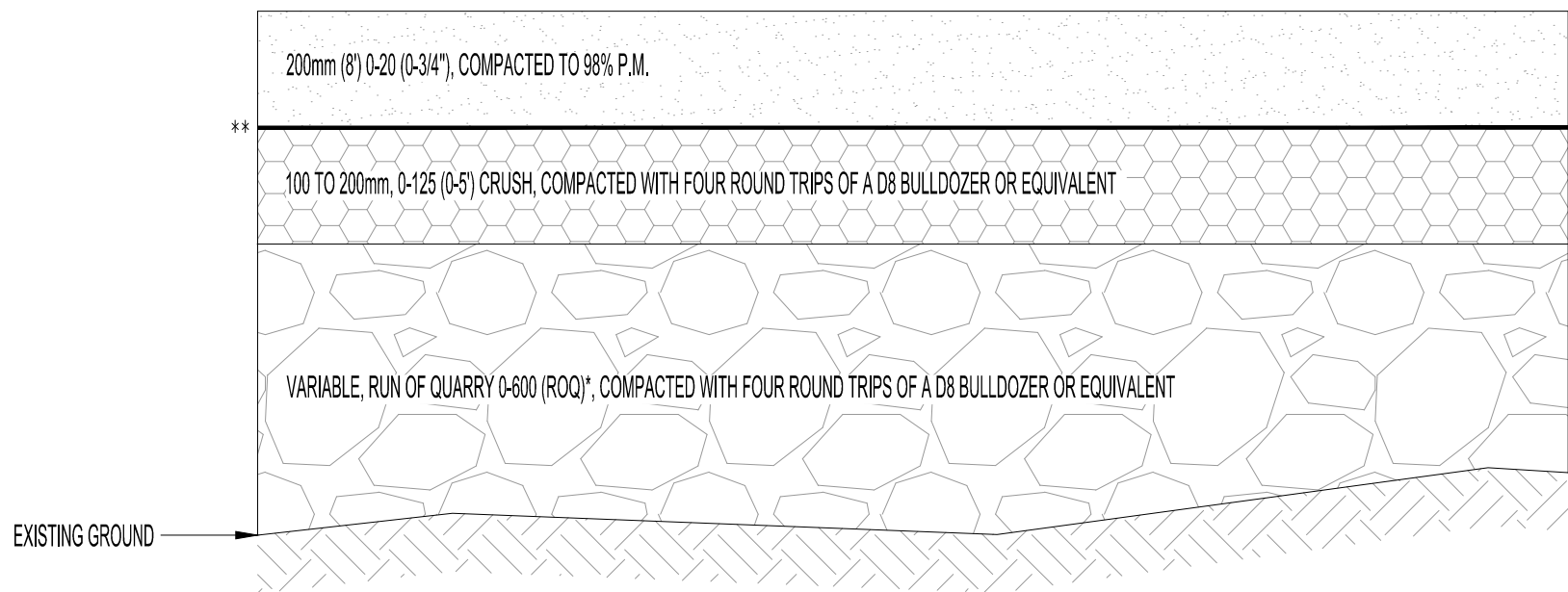
NO. PROJ PROJECT NO.	REVISION	FEUILLE / SHT
	1	1 / 1

**AGNICO EAGLE****INSPECTION AND TESTING PLAN**Project: Emulsion plant expansionPrepare by: Raphaël LachanceDate: 1/17/2022App. by: Bruno Roy

Step	Description	Specifications, reference documents, acceptance criteria	Frequency / Moment	Registration	Registration to be completed	Inspection type	Resp.	Completed and compliant	
								By	Date
1	<u>Documents to produce / submit for approval:</u> - Product specifications - Stamped earthwork drawings - Stamped foundation drawings - Stamped structural drawings	As per AEM request and Dyno Nobel guidelines	Before production and/or mobilization	Approved by AEM	No		AEM		
2	<u>Nonconformance (NCR)</u> Provide a report of non-conformance when an error is detected	All components/aspects of the job that are non-conforming with the guidelines and/or contractual requirements must be documented and resolved before continuation of the job	Whenever a non-conformity is detected	AEM NRC Form	Yes		AEM DN		
3	<u>Construction technical deviations / Site instructions</u>	Ensure that all technical deviations and site instructions are on installation drawings. If not, red lined the drawings and ensure that site installation team have all information in hand to comply with those modifications	Throughout the project	Red lined drawings	Yes	Visual, measurements, Survey	AEM		
4	<u>Material reception & verification</u>	- Ensure all materials is in good condition - Ensure quantities are conform with the bill of material and purchase order - Use appropriate methods to handle material	For each material reception	AEM damage material report	Yes	Visual	AEM DN		
5	<u>Storage and handling</u>	Storage and material handling space is to be assigned by the site supervisor	Throughout the project Prepare storage space before the first delivery	N/A	No		AEM DN		
6	<u>Cleanliness on site</u>	During the entire length of the project, keep all areas clean of debris and materials to ensure safe working conditions	Throughout the work	N/A	No		AEM DN		
7	<u>Earthworks</u>	Perform as per stamped drawing specifications	Visual inspection of the backfill material Material placement inspection by surveyor	As-built drawings	Yes	Land survey	AEM		
8	<u>Foundation installation</u>	Install as per requirements on stamped drawings	Quick inspection after each step Complete inspection after foundation is finished	N/A	N/A		AEM		
9	<u>Building expansion erection</u>	Install as per Dyno Nobel and stamped drawings	Inspection after every major component is put in place	N/A	N/A		AEM DN		
10	<u>Mechanical equipment installation</u>	Install as per Dyno Nobel drawings		POV sheets	Yes	Mechanical inspection	AEM DN		
11	<u>Piping fabrication and installation</u>	Install as per stamped drawings	After installation	POV sheets	Yes	Pressure test	AEM		
12	<u>List of work to be completed or corrected "Punch List"</u>	Remaining works to be completed to have substantial work completion form signed	Walk down with all parties Inspection of entire building and area	Work completion	Yes	Walk down	AEM		
13	<u>As-built drawings</u>	Site works done on site are annotated on installation drawings if different than planned	Annotations throughout the installation Drawings released at the end of the project	As-built drawings	Yes		AEM		
14	<u>Quality documentation</u>	Quality binder complete Inspection reports 100% completed and signed	At the end of the project	Quality folder	Yes		AEM DN		

GEOTECHNICAL NOTE :

- WE DO NOT HAVE THE GEOTECHNICAL ANALYSIS OF THE EXISTING GROUND UNDER THE GRANULAR FONDATION, DEPENDING OF THE GROUND COMPOSITION AND THE INFLUENCE OF THE PERMAFROST A SETTLEMENT MIGHT OCCURE IN THE UPCOMING YEARS. EVERY BUILDINGS AND EQUIPMENT INSTALLATIONS MUST BE BUILT IN A WAY THAT A LEVELING WOULD BE POSSIBLE IN THAT CASE, THE EQUIPMENT SUPPLIER SHOULD ALSO BE INFORM OF THAT SITUATION.
- AEM, NEEDS TO DO AN ANNUAL SURVEY OT THE GROUND LEVEL TO MAKE SURE THAT ANY SETTLEMENT IS CORRECTED.
- AFTER FIVE YEARS, A NEW ANALYSIS OF THE GROUND STRUCTURE WILL BE REQUIRED



NOTE:
*THE BLOCKS OF STONE SHALL NOT EXCEED 1m IN THEIR LARGEST DIMENSION. THE MATERIALS MUST BE INSTALLED AND SPREAD IN UNIFORM LAYERS WITH A MAXIMUM THICKNESS OF 1.5m ON THE FULL WIDTH REQUIRED BY THE THEORETICAL SLOPE OF THE EMBANKMENT. EXCEPT FOR THE LAST 3m UNDER THE SUBBASE WHERE THE MAXIMUM LAYER THICKNESS SHALL BE 1m.

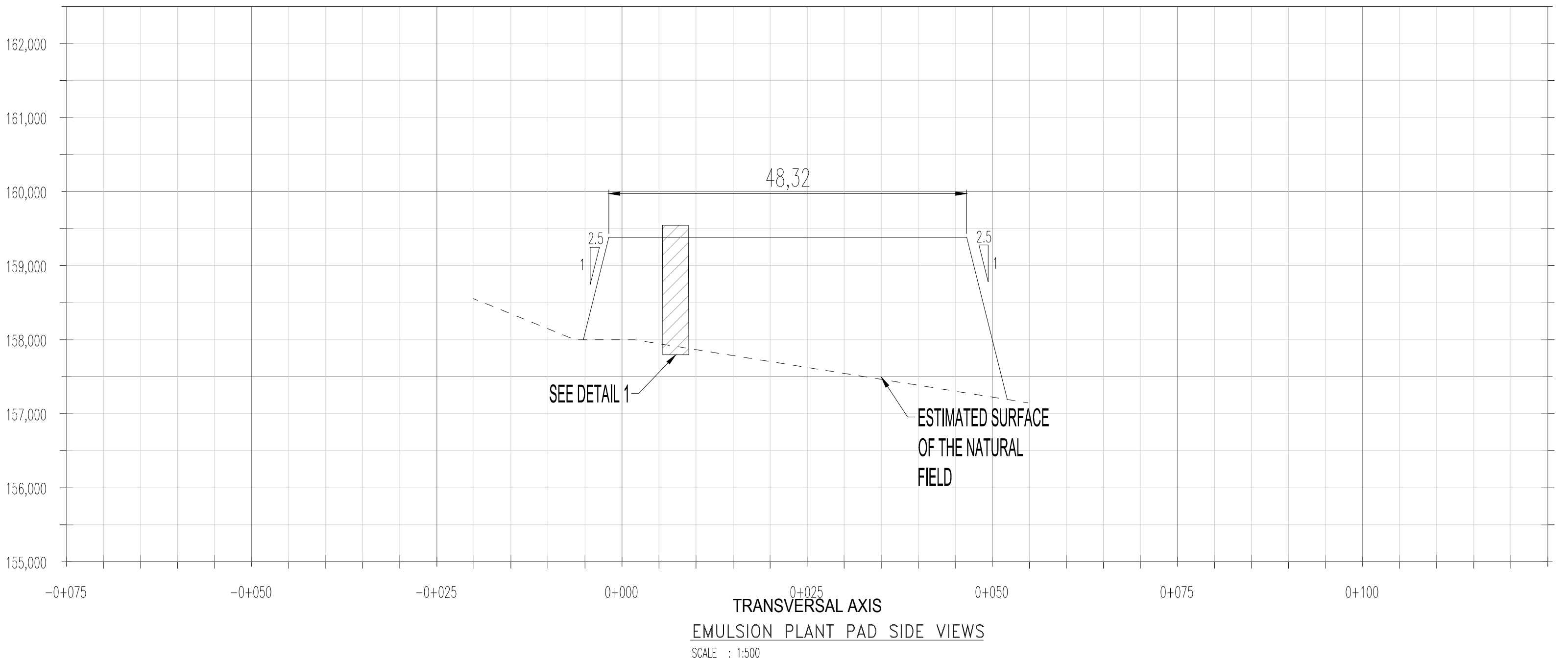
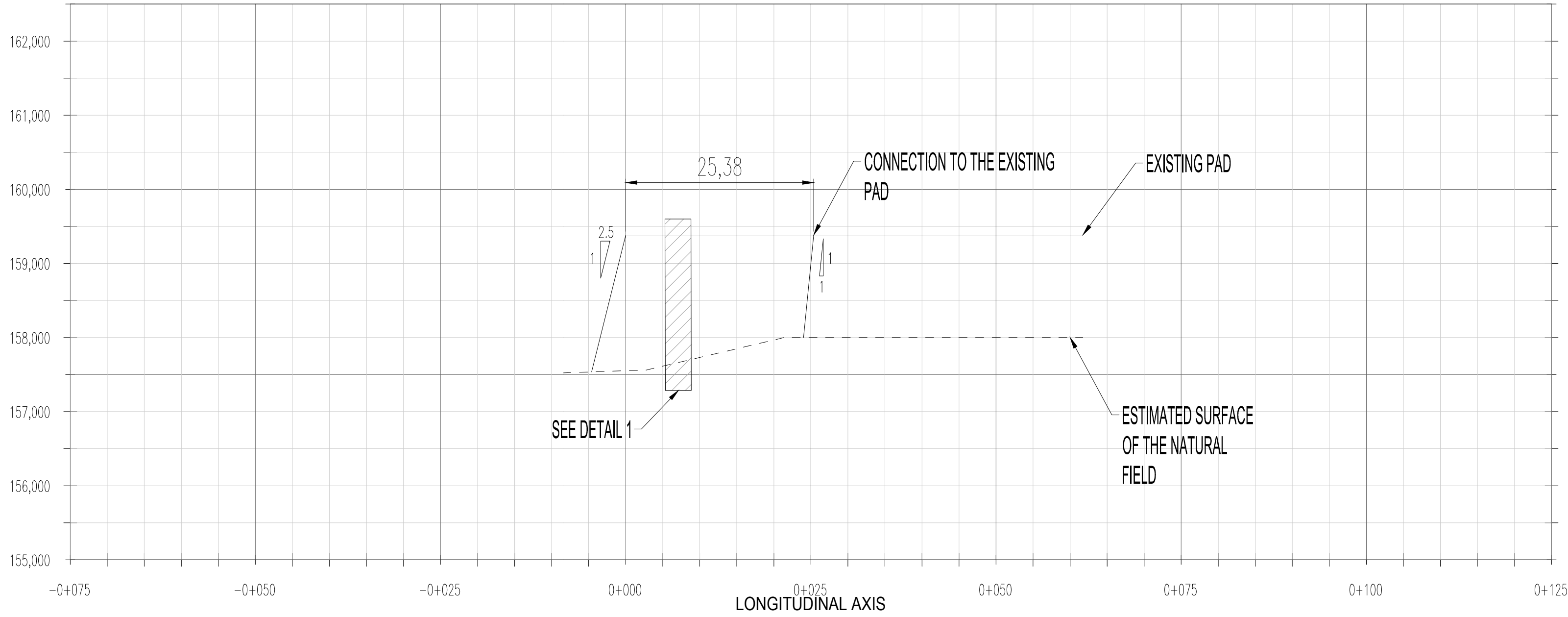
** UNDER THE BUILDINGS, A MEMBRANE NEED TO BE INSTALLED BETWEEN THE FIRST TWO LAYERS TO PREVENT MATERIAL MIGRATION.

DETAIL

NO SCALE

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PLAN CLE

KEY PLAN



1075, 36 AVENUE EST
VAL-D'OR (QUEBEC) CANADA J8P 6J7
TEL : 1-819-825-4274 / TELEC : 1-819-825-4715 / WWW.WSP.COM

R#1: 201-01560-02

NOTES GÉNÉRALES / GENERAL NOTES

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DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG
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AGNICO EAGLE

REV	DATE	DESCRIPTION	PAR/EN	APP.	CLIENT
2	2022-01-21	FOR CONSTRUCTION	S.D.	S.D.	
1	2021-07-22	FOR CONSTRUCTION	S.D.	S.D.	
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ÉCHELLE SCALE	INDICATED	DATE 2022-01-21
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NO. DESSIN
DRAWING NO. 61-446-230-003

NO. PROJET PROJECT NO.	REVISION	FEUILLE / SHIT
61	1	1 / 1

