

Lynn Lake Gold Project: MacLellan Mine Plan Amendment Notice of Alteration / Notice of Change

Federal Information Request Responses – Round 2

September 19, 2025

Prepared for:



Prepared by:
Stantec Consulting Ltd.



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Introduction

The MacLellan Gold Mine is regulated under the federal Decision Statement issued under Section 54 of the *Canadian Environmental Assessment Act*, 2012 (issued March 5, 2023, and amended July 28, 2024) and the conditions stipulated therein.

The Impact Assessment Agency of Canada (IAAC) provided a first round of information requests (IRs) on July 11, 2025, for the Lynn Lake Gold Project (LLGP) Notice of Change (NOC) – MacLellan Mine Plan Amendment, submitted by Alamos Gold Inc. (Alamos) on June 25, 2025. Upon review of the NOC, IAAC determined that additional information was required to proceed with the analysis of this proposed alteration. Alamos provided responses to the first round of IRs on August 5, 2025.

IAAC has then provided a second round of IRs, between August 13, 2025 and September 5, 2025. Alamos confirms that these additional IRs provided have been fully addressed and answered as clearly and succinctly as possible and Alamos has undertaken the following while responding to the IRs hereinafter and to date:

- Considered the context and rationale for the required information for each IR.
- Provided additional information (wherever possible) to address uncertainty and to provide clearly defined, detailed follow-up program measures, including additional proposed mitigation measures.
- Presented complete or summarized information and discussion within the IR responses, rather than limited responses referencing applicable reports.

This document relates specifically to follow-up on NOC-IR-14 and a fulsome response to the IR is provided in the following section in reference to the original request. Attachments to the response are provided in **Appendix A**. Follow up in relation to NOC-IR-12 will be forthcoming under separate cover. Alamos remains committed to discussing and resolving any further IRs throughout the NOC review process and welcomes any phone discussion, if and as required to clarify points.



Response to IAAC NOC IR-14-2

ID:	NOC IR-14-2
Topic	Water quality Mitigation Measures, Fish and Fish Habitat
Expert Department or Group:	ECCC IAAC
NOA/NOC reference:	Section 4.0 – Conclusions Appendix G – Surface Water Quality Figures Surface Water Management and Monitoring Plan (Version 0 – January 2025)
Information Request:	<p>IAAC Follow-Up Questions:</p> <p>a) Please describe which of the mitigation measures in Table E-1 were included in the modelling presented in the NOC that mitigate surface water impacts to the three water bodies where changes in magnitude are predicted in Table 3.24.</p> <p>b) Please explain why the specific additional adaptive management strategies you reference in section 3.3.5.3 (which references the measures on pg. 89-90 of the Jan 30th version of Surface Water Management Plan) can be relied on to effectively reduce residual water quality effects in Table 3.24 of the NOC to those predicted in Table 9-36 of the EIS.</p> <p>c) Which of these measures mentioned above (or any others) could be implemented proactively instead of relying on adaptive management. If none can be implemented proactively, please explain why.</p>
Response:	<p>a) Mitigation measures presented in Table E-1 that were included in the modelling presented in the NOC that mitigate surface water impacts were seepage collection ditches around the TMF and MRSA, however they were modelled to a uniform depth of 1 m and not modelled to the expected differing depths that are included in the engineering detailed design. No other mitigation measures were included in the modelling presented in the NOC. The results presented do not take into account any planned or adaptive mitigation measures, nor any flow-path attenuation or chemical changes that are expected to occur (reactive transport) as groundwater flows towards the three water bodies. The models also do not take into account the compaction of the underlying overburden (containing clay) with the weight of the tailings. On this basis, the seepage predictions and resulting predicted changes in magnitude are highly conservative.</p> <p>b) Mitigation measures including increasing the depth of seepage collection ditches and/or the installation of pump-back wells would both increase the capture of TMF and/or MRSA seepage that would otherwise report to surrounding lakes and</p>



ID:	NOC IR-14-2
	<p>streams. This reduction of seepage migration into the water bodies would reduce residual water quality effects.</p> <p>c) Discussions with engineers involved in the detailed design of the TMF and MRSA, have identified that there will be three seepage collection wells with a subsurface drain around the TMF as well as grout curtains installed from the top of bedrock to a depth of between 10 and 15 m through the upper fractured bedrock. Drawings are attached to this response. These five features – which were not modelled within the 3D groundwater model – were simulated with a 2D seepage model and show that the grout curtain addition halves the seepage towards the water bodies (in comparison to model results without the grout curtain in place).</p> <p>With the committed additions to the TMF and MRSA design, the implementation of the Management and Monitoring Plans (for early detection of potential issues requiring additional mitigation) and the ability for grout curtains to be deepened, pump-back wells to be installed, and/or other mitigative measures, the water quality effects to Payne Lake, Minton Lake, and Tributary KEE3-B are not predicted to be altered from the approved project effects.</p> <p>It is important to note that Alamos acquired MonitorPro Web by EHS Data (MonitorPro) as an environmental data management software designed to streamline regulatory compliance and environmental monitoring. MonitorPro is one of our mitigation tools, enabling proactive environmental data management by allowing us to react quickly based on real-time monitoring results and imported environmental sample data such as water, air, vibration, noise, and wildlife. As soon as laboratory or field data is submitted, the system imports the results, calculates and compares them against applicable regulatory limits, internal thresholds, and/or modelled predictions, issuing automated alerts and warning notifications when results approach or exceed set criteria. This real-time comparison allows potential exceedances or trends toward non-compliance to be immediately identified, giving us the ability to implement timely mitigation measures, amend or enhance existing practices, and apply adaptive management strategies before non-compliance occurs.</p> <p>With its web-based interface, MonitorPro provides accessible, accurate, and actionable data insights that builds a robust basis for continuous improvement in environmental performance.</p> <p>In addition, the Adaptive Management Framework within the Management & Monitoring Plans was developed with staged triggers to accommodate varying levels of concern and a diversity of actions. This allows timely and informative responses to be initiated before high impact thresholds are triggered. We have used groundwater quality trend analysis as the first trigger for groundwater, which is an early warning tool to determine potential for triggering subsequent thresholds. This means that a change in trend would trigger a review of data even if it is a meteorological effect, which allows early detection of changing conditions.</p>



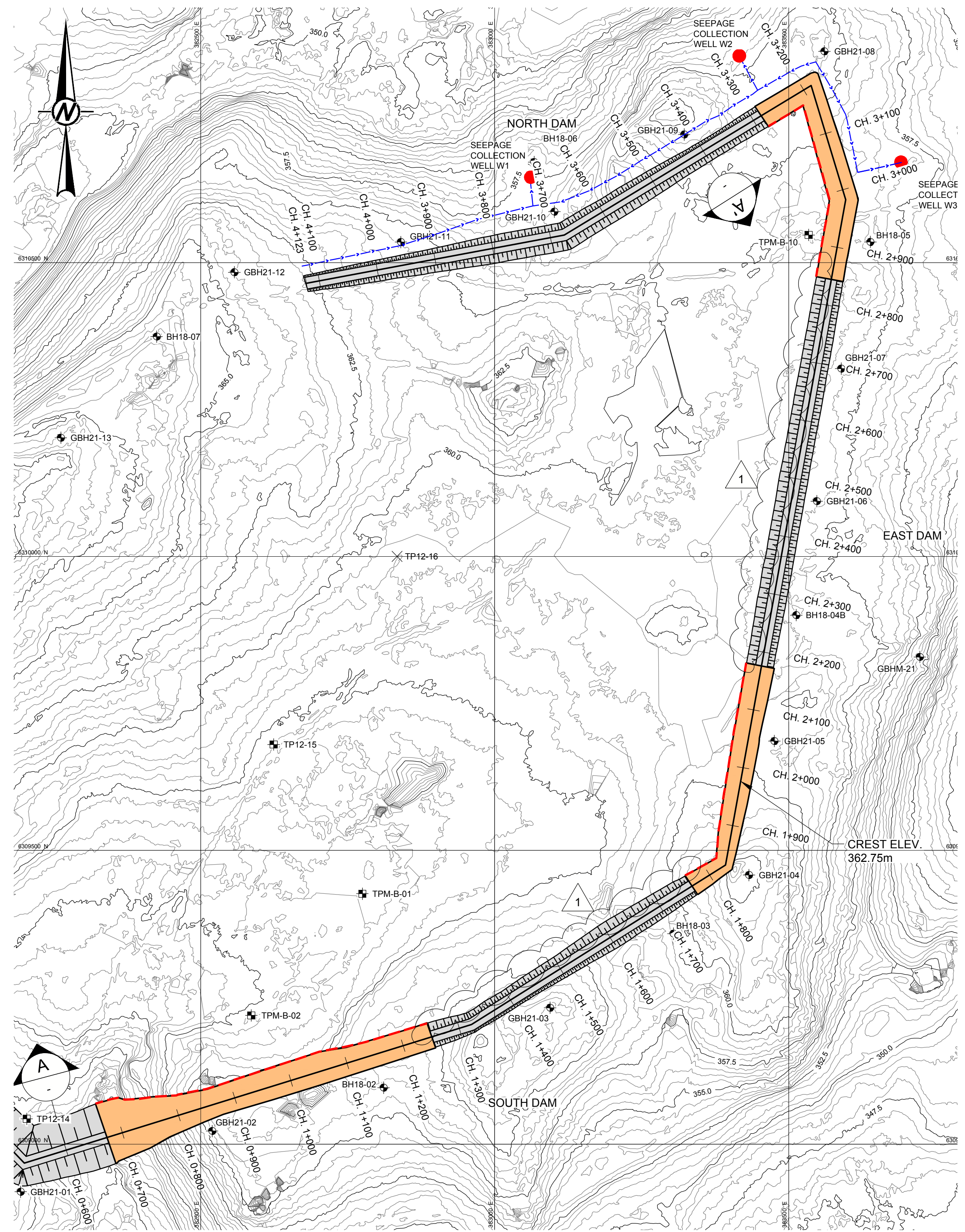
ID:	NOC IR-14-2
	During operation, the mean travel time is 13 years. During closure, this increases to 60 years. This means that there will be time to detect, intervene, and mitigate (as required) any potential water quality issues beyond that predicted in the EIS.
Attachment	Yes – see Appendix A



Appendix A Attachments to NOC-IR-14-2

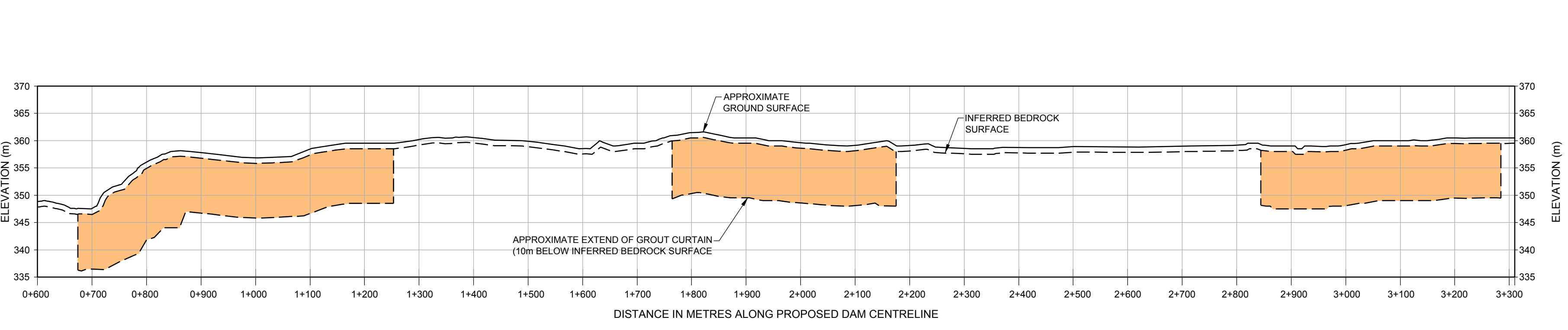


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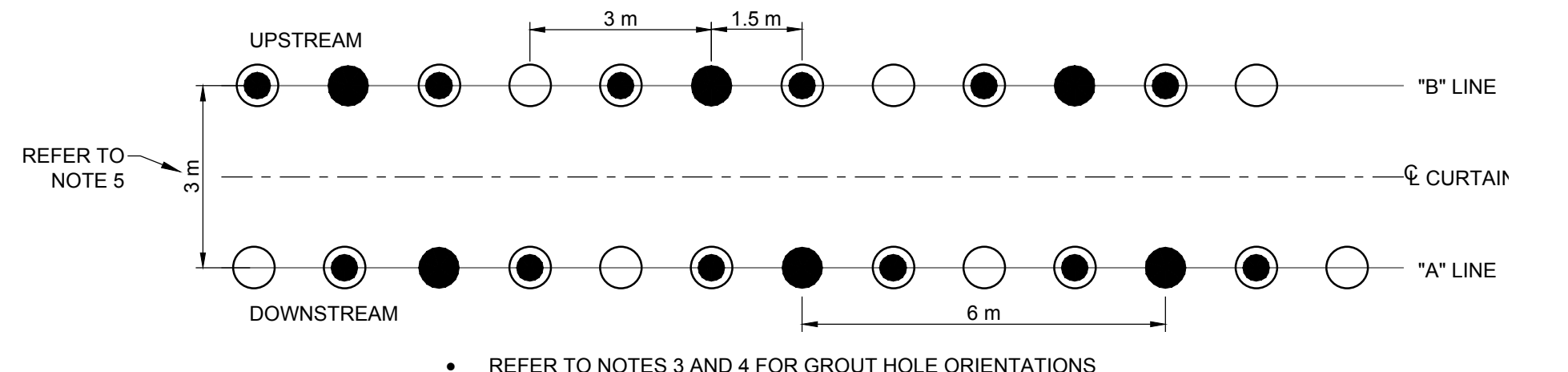
GROUT CURTAIN LOCATION IN PLAN

0 200 400
1:5,000 METRES

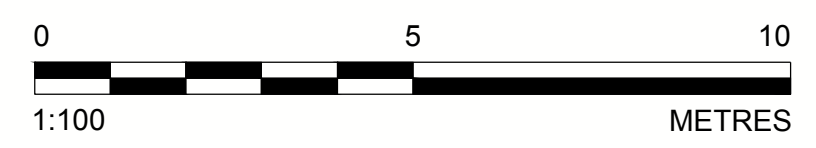


CHAINAGE FOR ZONES OF GROUTING (m)
0+674 TO 1+243
1+763 TO 2+175
2+844 TO 3+285

SCALE 1:6,000 m
VERT. SCALE 1:600
A PROFILE A - A': GROUT CENTRELINE



TYPICAL GROUT HOLE SPACING



- LEGEND**
- GROUT CURTAIN LOCATION IN PLAN
 - GROUTING CENTRELINE
 - PRIMARY HOLES (6.0m SPACING)
 - SECONDARY HOLES (3.0m SPACING)
 - TERTIARY HOLES (1.5m FROM PRIMARY HOLES)
 - SEEPAGE COLLECTION WELL
 - SEEPAGE COLLECTION DITCH
 - BOREHOLE LOCATION (GOLDER)
 - TESTPIT LOCATION (GOLDER)
 - STAGE 1 TAILINGS DAM
 - TOPOGRAPHIC CONTOUR (0.5 m INTERVAL)

- NOTES:**
1. GRID IS REFERENCED TO NAD83 ZONE 14. ELEVATIONS ARE GEODETIC.
 2. THIS DRAWING IS TO READ IN CONJUNCTION WITH THE ACCOMPANYING REPORT.
 3. DRILLING AND GROUTING ARE TO BE CARRIED OUT FROM THE EXPOSED BEDROCK SURFACE.
 4. GROUT HOLES IN THE "A" AND "B" LINES SHALL GENERALLY BE DRILLED AT AN INCLINATION OF 30° FROM VERTICAL.
 5. THE FINAL GROUT HOLE AZIMUTHS SHALL BE BASED ON BEDROCK MAPPING. IN GENERAL, GROUT HOLES SHALL BE DRILLED AT AN AZIMUTH OF NO MORE THAN 40° FROM THE GROUT CURTAIN ALIGNMENT AND AS DIRECTED BY THE ENGINEER.
 6. THE "A" AND "B" LINES SHALL BE GENERALLY BE SPACED 1m APART, HOWEVER, THIS MAY BE VARIED BY THE ENGINEER AS A RESULT OF FIELD CONDITIONS.
 7. VERIFICATION HOLES SHALL BE LOCATED MIDWAY BETWEEN THE "A" AND "B" LINES AT LOCATIONS AND ORIENTATIONS AS DIRECTED BY THE ENGINEER BASED ON RESULTS OF THE PROGRAM.
 8. GROUTING EXTENTS ARE APPROXIMATELY ONLY AND MAY VARY IN THE FIELD AS A RESULT BEDROCK CONDITIONS ENCOUNTERED.
 9. THE GROUT CURTAIN CENTRE LINE IS ALONG THE CONCRETE PLINTH CENTRE LINE.

REFERENCE:
0.5m LIDAR MAPPING PROVIDED BY CLIENT FILENAME ACAD-Lynn Lake MacLellan 50cm Contours KBM.dwg.

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
1	2025-09-09	ISSUED FOR CONSTRUCTION	RMC	MM		
0	2024-09-11	ISSUED FOR CONSTRUCTION	RMC	TDR	RMC	WPM

SEAL

CLIENT

ALAMOS GOLD INC.
CONSULTANT

wsp

MISSISSAUGA OFFICE
6925 CENTURY AVENUE
MISSISSAUGA, ONTARIO
CANADA
[+1] (905) 567 4444

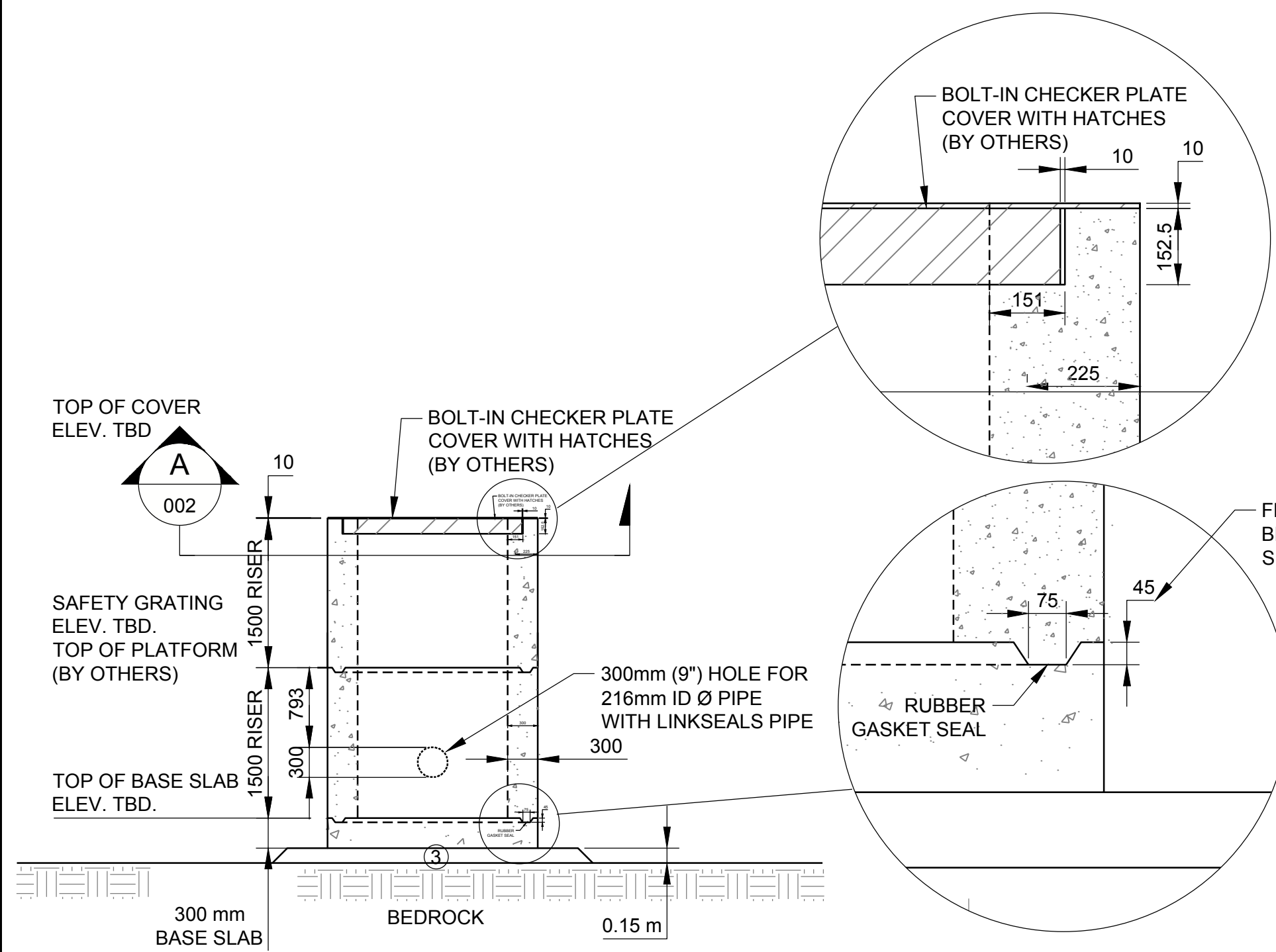
PROJECT
TMF - STAGE 1 DETAILED DESIGN
MACLELLAN MINE
LYNN LAKE, MANITOBA

TITLE
BEDROCK GROUTING PLAN, PROFILE AND CROSS-SECTIONS

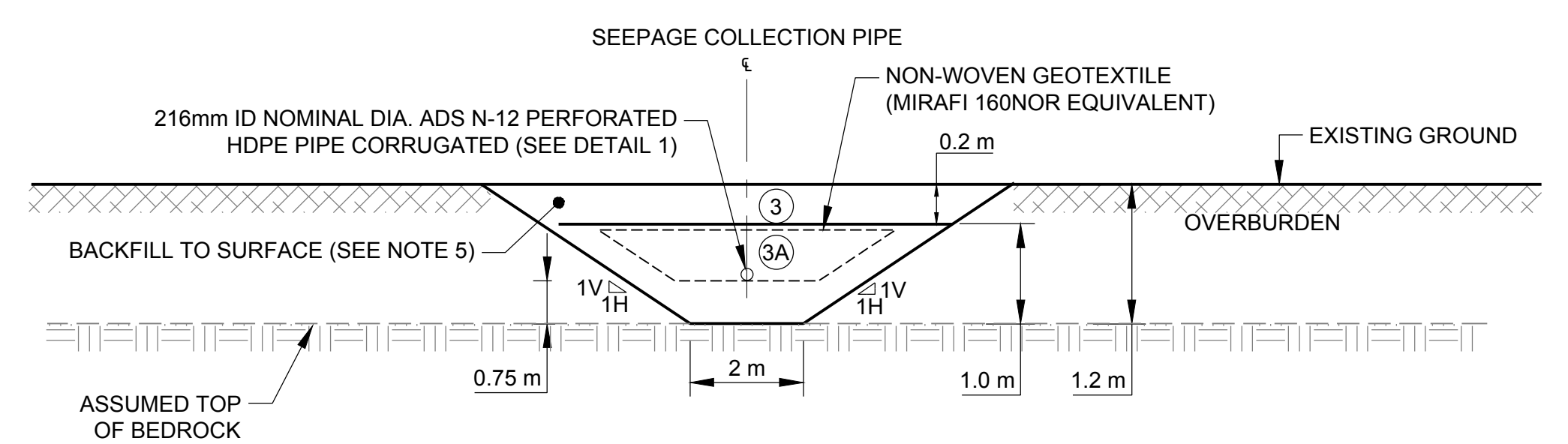
PROJECT NO.	CONTROL	REV.	13 of 14	DRAWING
22516342	0004	1		13

25 mm IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

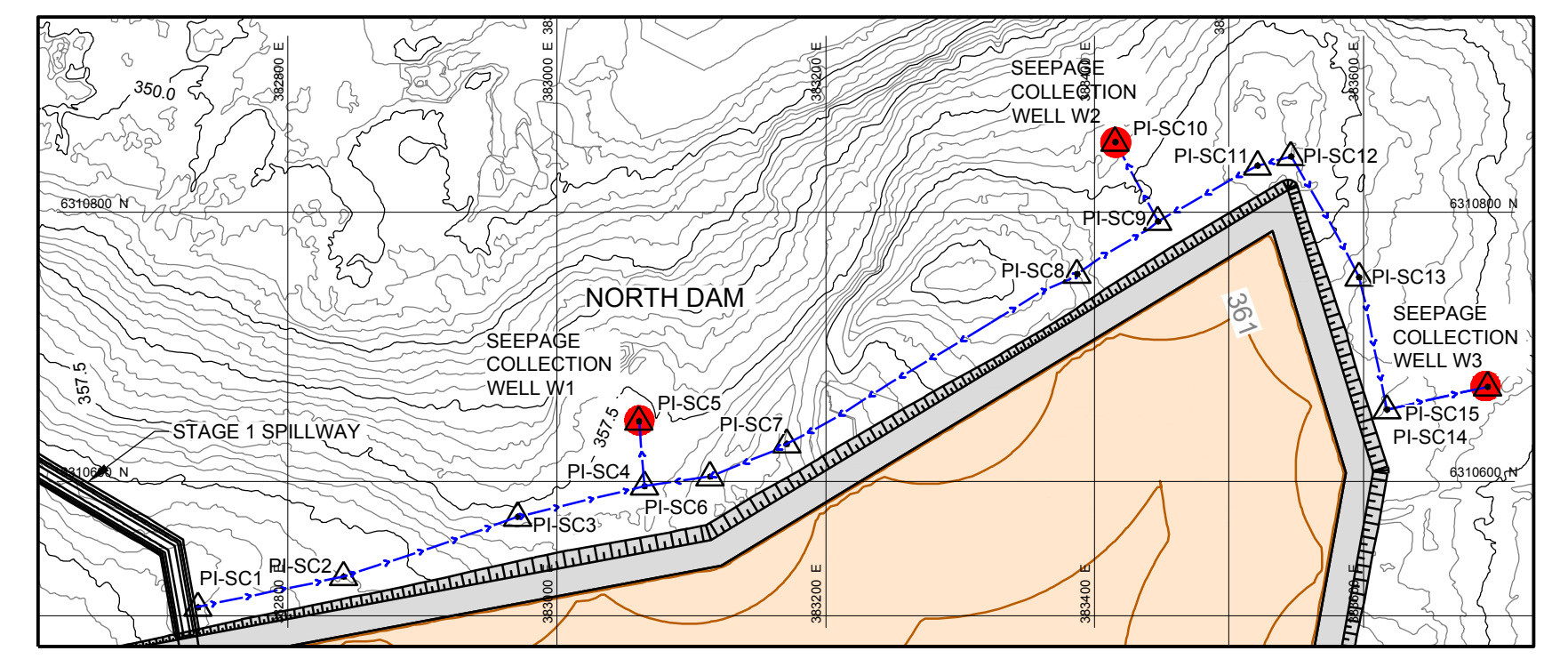
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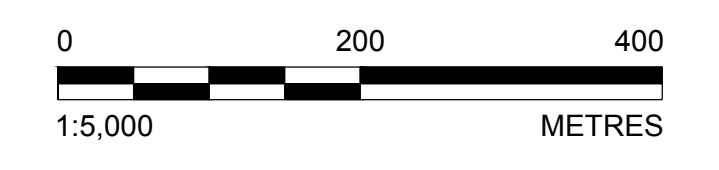
ELEVATION VIEW - TYPICAL SEEPAGE COLLECTION WELL
SCALE 1:50 m



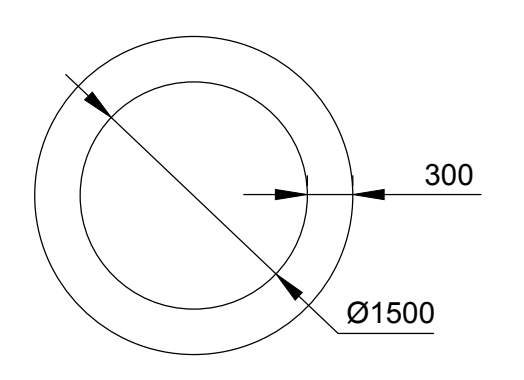
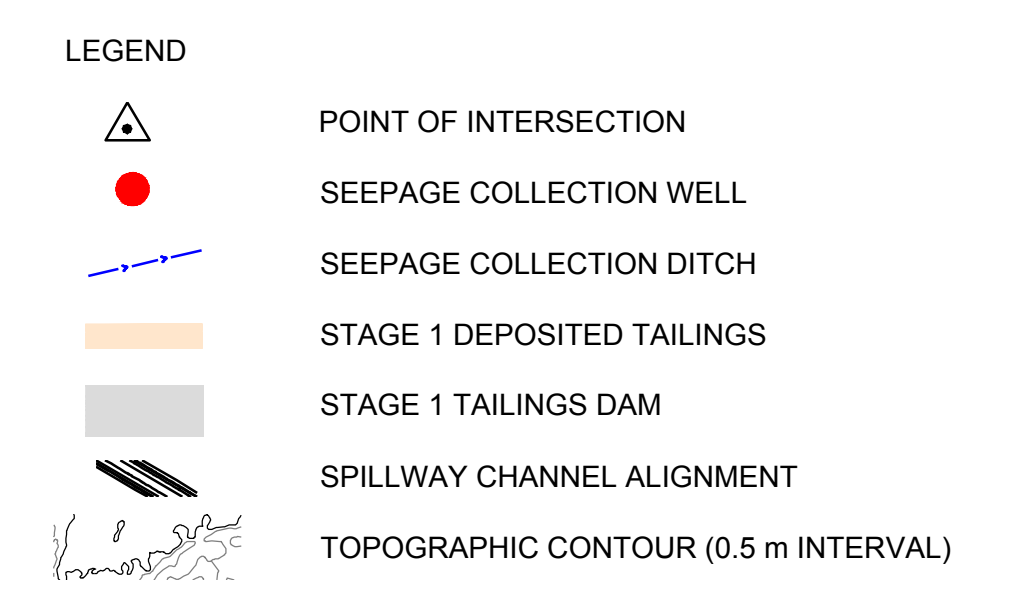
TYPICAL SECTION OF SEEPAGE COLLECTION DITCH
SCALE 1:100 m



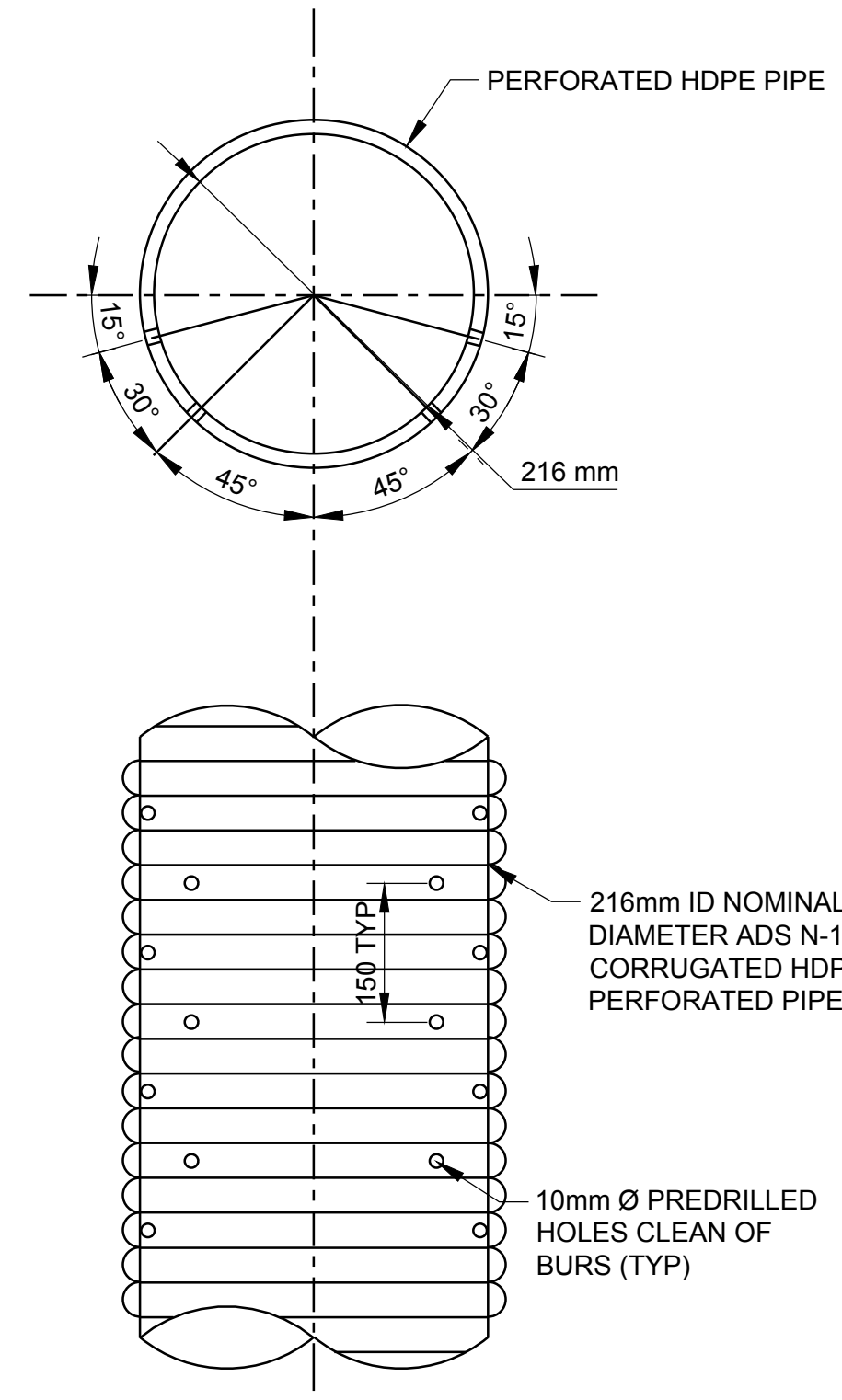
KEY PLAN



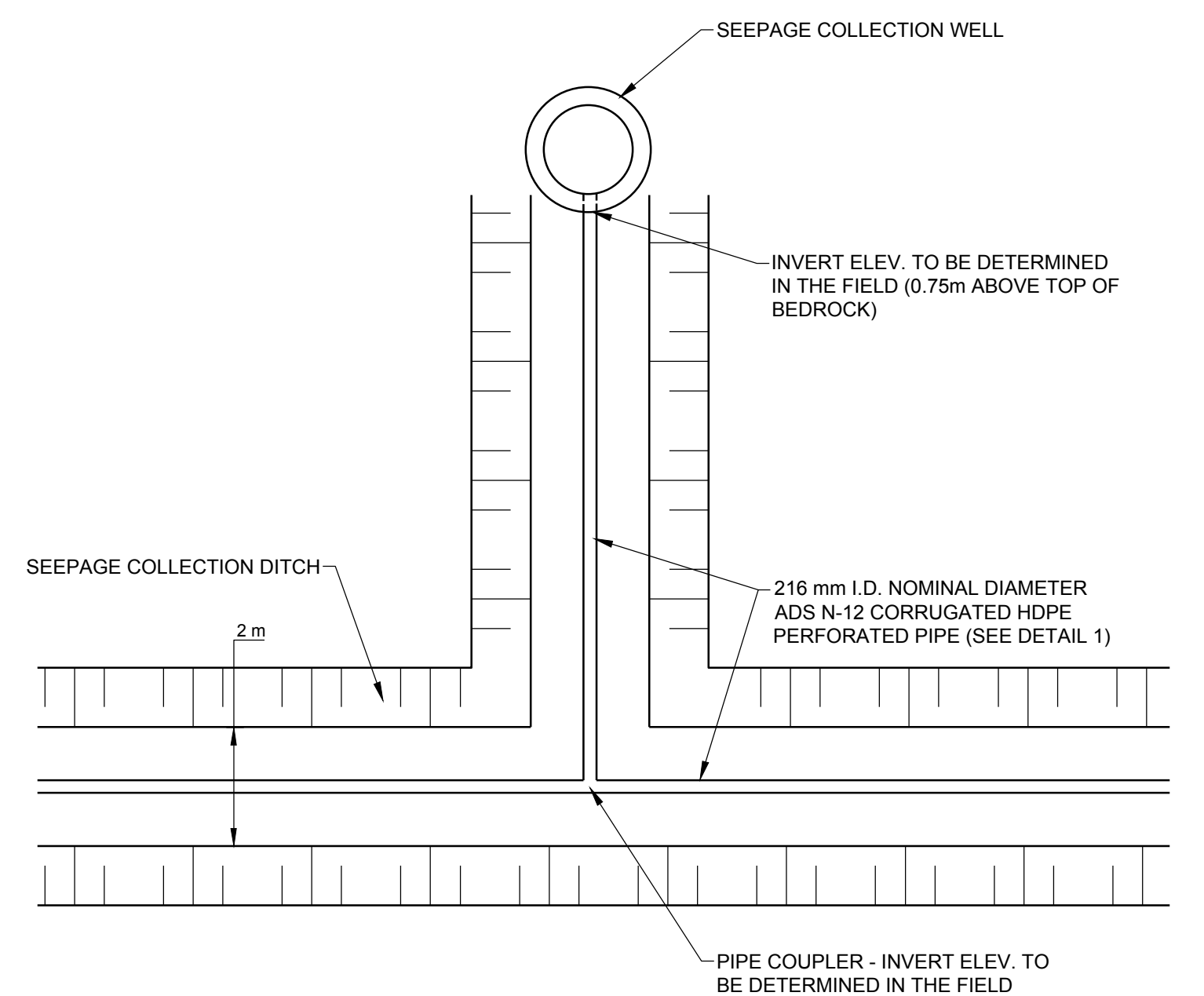
PI LOCATIONS FOR STAGE 1 SEEPAGE COLLECTION SYSTEM		
PI#	NORTHING (m)	EASTING (m)
PI-SC1	6310506.4	382733.0
PI-SC2	6310529.3	382841.4
PI-SC3	6310573.6	382971.0
PI-SC4	6310596.5	383065.2
PI-SC5	6310644.7	383061.2
PI-SC6	6310603.6	383114.0
PI-SC7	6310627.8	383171.0
PI-SC8	6310754.0	383387.1
PI-SC9	6310793.2	383447.2
PI-SC10	6310852.2	383415.5
PI-SC11	6310834.5	383521.4
PI-SC12	6310841.4	383546.2
PI-SC13	6310751.8	383596.9
PI-SC14	6310653.3	383617.5
PI-SC15	6310670.3	383692.4



CONCRETE MANHOLE DIMENSIONS UPPER SECTION
SCALE 1:50 m



DETAIL 1 - CORRUGATED HDPE PERFORATED DRAIN PIPE
SCALE N.T.S.



DETAIL 2 - SEEPAGE COLLECTION DITCH TO SEEPAGE COLLECTION WELL
SCALE N.T.S.

- NOTES:**
- GRID IS REFERENCED TO NAD83 ZONE 14. ELEVATIONS ARE GEODETIC.
 - THIS DRAWING IS TO READ IN CONJUNCTION WITH THE ACCOMPANYING REPORT.
- REFERENCE:**
- 0.5m LIDAR MAPPING PROVIDED BY CLIENT FILENAME ACAD-Lynn Lake MacLellan 50cm Contours KBM.dwg.
- NOTE(S)**
- ALL DIMENSION ARE IN mm UNLESS OTHERWISE SHOWN.
 - SEEPAGE COLLECTION WELLS MEET OPSD STANDARDS FOR 1500mm DIAMETER PRECAST CONCRETE MAINTENANCE HOLES.
 - HEIGHT OF SECOND CONCRETE RISER FOR THE WELL MAY VARY BASED ON THE DEPTH TO BEDROCK.
- MATERIALS:**
- ③ TRANSITION (MINUS 37.5mm)
 - ③A CLEARSTONE (12mm TO 20mm)

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
0	2024-09-11	ISSUED FOR CONSTRUCTION	RMC	TDR	RMC	WPM

SEAL

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wsp

MISSISSAUGA OFFICE
6925 CENTURY AVENUE
MISSISSAUGA, ONTARIO
CANADA
[+1] (905) 567 4444

PROJECT
TMF - STAGE 1 DETAILED DESIGN
MACLELLAN MINE
LYNN LAKE, MANITOBA

TITLE
SEEPAGE COLLECTION SYSTEM PLAN AND DETAILS

PROJECT NO. 22516342 CONTROL 0004 REV. 0 14 of 14 DRAWING 14

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