BGC ENGINEERING INC.
AN APPLIED EARTH SCIENCES COMPANY

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY 2012
ANNUAL REVIEW

FINAL

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April 8, 2013

Project No.: 1197001

Luke Moger, Project Engineer
Mount Polley Mining Corporation
200 – 580 Hornby Street
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Dear Luke,

Re: Tailings Storage Facility 2012 Annual Review

Please find attached the abovementioned report. Should you have any questions or comments, please contact the undersigned.

Yours sincerely,

BGC ENGINEERING INC.
per:

Daryl Dufault, P.Eng.
Senior Geotechnical Engineer

SUMMARY

This report presents the annual review of the operation and performance of the Mount Polley Mine Corporation (MPMC) tailings storage facility (TSF) for 2012. This report has been prepared in accordance with the requirements of the British Columbia Ministry of Energy and Mines (MEM). The following points give a general summary of the 2012 TSF activities and key developments.

1. Classification of the dam(s) in terms of Consequence of Failure (ref. Canadian Dam Association, Dam Safety Guidelines [2007])

A formal dam safety review was conducted in 2006 (AMEC 2006). That review assigned a "Low" hazard classification based on 1999 Canadian Dam Association (CDA 1999) guidelines. CDA updated their Dam Safety Guidelines rating in 2007 (CDA 2007), and under the new classification the TSF is classified under "Significant" category (see Classification System Table ES-1). It is worth noting that the design criteria for the embankment dams at the Mount Polley TSF, in terms of earthquake and inflow design flood criteria, are consistent with a "high" consequence classification.

2. Embankment Design Changes

The 2012 Stage 8 TSF embankment raise design targeted an elevation of 963.5 m. In the early summer, MPMC requested an engineering design package for submission to the MEM supporting a raise of the embankment to a crest elevation of 965 m. The design package included the change in the alignment of the embankment core from the modified (upstream) centreline design (which was completed to El. 963.5 m) to a centreline core raise geometry above El. 963.5 m.

3. Embankment Instrumentation Summary

Locations of piezometers and inclinometers within the dam are shown on the AMEC drawings provided in Appendix A. Piezometer and inclinometer data plots are provided in Appendices D and E respectively. In 2012, two replacement inclinometers were installed along the Perimeter Embankment.

Table ES-2 summarizes previously and newly installed slope inclinometers.

Piezometer readings in 2012 indicated the following general trends for the TSF embankment:

- Pore pressures in foundation soils in and around the TSF embankment were noted as stable with minor fluctuations
- Pore pressures in the till core generally indicated a slightly increasing trend in response to the rising pond level.

- Pore pressures in the filters and drains downstream of the till core remained unchanged throughout the year.
- Pore pressures in the tailings and fill upstream of the core experienced an upward trend in response to the rising pond level. Piezometers installed at lower elevations within the tailings experienced lower response relative to the piezometers near the pond elevation, due the downward gradients resulting from the presence of the upstream under-drainage system.

Table ES- 1. CDA (2007) Consequence Classification Scheme.

Dam Class	Population at Risk [note 1]	Incremental Losses		
		Loss of Life [note 2]	Environmental and Cultural Values	Infrastructure and Economics
Low	None	0	Minimal short-term loss No long-term loss	Low economic losses; area contains limited infrastructure or services
Significant	Temporary only	Unspecified	No significant loss or deterioration of fish or wildlife habitat Loss of marginal habitat only Restoration or compensation in kind highly possible	Losses to recreational facilities, seasonal workplaces, and infrequently used transportation routes
High	Permanent	10 or fewer	Significant loss or deterioration of *important* fish or wildlife habitat Restoration or compensation in kind highly possible	High economic losses affecting infrastructure, public transportation, and commercial facilities
Very High	Permanent	100 or fewer	Significant loss or deterioration of *critical* fish or wildlife habitat Restoration or compensation in kind possible but impractical	Very high economic losses affecting important infrastructure or services (e.g. highway, industrial facility, storage facilities for dangerous substances)
Extreme	Permanent	More than 100	Major loss of *critical* fish or wildlife habitat Restoration or compensation in kind impossible	Extreme losses affecting critical infrastructure or services (e.g. hospital, major industrial complex, major storage facilities for dangerous substances)

Note 1. Definitions for population at risk:

None – There is no identifiable population at risk, so there is no possibility of loss of life other than through unforeseeable misadventure.

Temporary – People are only temporarily in the dam-breach inundation zone (e.g. seasonal cottage use, passing through on transportation routes, participating in recreational activities).

Permanent – The population at risk is ordinarily located in the dam-breach inundation zone (e.g. as permanent residents); three consequence classes (high, very high, extreme) are proposed to allow for more detailed estimates of potential loss of life (to assist in decision-making if the appropriate analysis is carried out).

Note 2. Implications for loss of life:

Unspecified – The appropriate level of safety required at a dam where people are temporarily at risk depends on the number of people, the exposure time, the nature of their activity, and other conditions. A higher class could be appropriate, depending on the requirements. However, the design flood requirement, for example, might not be higher if the temporary population is not likely to be present during the flood season.

Table ES- 2. Piezometer Summary.

Embankment	Installed Prior to 2011		2011 Installed	Total (Functional)
	(Functional)	(Non-functional)		
Main	40	26	15	55
Perimeter	10	9	5	15
South	8	2	3	11
Total	**58**	**37**	**23**	**81**

As part of the 2012 instrument installation program, two (2) additional inclinometers were installed in the embankment for a total of nine (9) functioning slope inclinometers as shown in Table ES-3. Newly installed slope inclinometers were not initialized until early 2013 and readings are therefore not included in this report. The last 2012 reading of the inclinometers was conducted on August 25, 2012, and is presented in Appendix E.

Table ES- 3. Slope Inclinometer Summary.

Embankment	Installed Prior to 2011		2012 Installed	Total (Functional)
	(Functional)	(Non-functional)		
Main	6	1	0	6
Perimeter	1	0	2	3
Total	**7**	**1**	**2**	**9**

4. Significant Changes to Dam Stability and/or Surface Water Control

There were no significant changes to dam stability. Based on limit equilibrium stability analyses, the 3.7 m Stage 8/8A crest raise had a negligible impact on the factor of safety of the dams, with values still in excess of 1.3 under static loading, short term construction conditions.

5. For major tailings impoundments, as described in Part 10.5.2 of the Health, Safety and Reclamation Code for Mines in British Columbia, all operating dams shall have a current Operations, Maintenance and Surveillance (OMS) Manual. The annual report shall indicate the latest revision date of the OMS Manual.

The OMS manual is a living document and was last updated by MPMC in 2012, to reflect the changes in instrumentation with the investigation and instrumentation installation program that was carried out in 2011.

6. Scheduled Date for formal Dam Safety Review (ref. Canadian Dam Association, Dam Safety Guidelines)

A formal Dam Safety Review (DSR) is planned to be conducted in 2016.

7. Summary of 2012 Construction

The 2012 raising of the dam is documented by AMEC (2013). AMEC was present on site for critical, non-routine aspects of foundation preparation and fill placement. During this period, AMEC's role was to verify that construction methods employed were consistent with design expectations, material specifications were adhered to, and monitoring and testing requirements were understood by MPMC personnel. AMEC's time on site was also used to verify that daily technical/progress reports were being completed properly, QA/QC roles and reporting responsibilities were thoroughly understood by all parties, and lines of communication between the site and AMEC office-based support were clearly established and functional. Once satisfied that the MPMC's field inspectors were fully trained and prepared to undertake the construction monitoring and reporting role with remote support required by AMEC, AMEC's monitoring presence was reduced to monthly visits, with monitoring of construction progress carried out via reports and photographs issued by MPMC. The timing of AMEC's site visits varied somewhat to align with key construction activities such as foundation preparation and approval, and till core trench approval.

Stage 8/8A construction involved raising the crest of the embankment approximately 3.7 m from El. 960.1 m to El. 963.8 m.

8. Overall Performance of the Tailings Management Facility

Observations and data obtained over the course of 2012 indicate that the tailings storage facility continues to perform in a satisfactory manner.

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LIMITATIONS

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1.0 INTRODUCTION

The Mount Polley Mine (MPM) is located in central British Columbia, approximately 60 km northeast of Williams Lake. The main access route is via Likely Road. The turnoff to the MPM is located approximately 1.5 km east of Morehead Lake with the MPM located another eleven km to the southeast, along the Bootjack Lake Forest Service Road. The MPM commenced production in June 13, 1997. Ore is crushed and processed by selective flotation to produce a copper-gold concentrate. The mill throughput rate is approximately 20,000 tonnes per day (approx. 7.3 million tonnes per year). Mill tailings are discharged as slurry into the Tailings Storage Facility (TSF) located on the south area of the Mine property.

Tailings slurry is conveyed from the concentrator to the TSF via a tailings discharge pipeline. The tailings are deposited into the impoundment through moveable or fixed spigots on the embankment crest. A floating reclaim pump recycles process water from the supernatant pond in the TSF for use in the mill processing circuit. Sediment ponds and seepage collection ponds are designed to intercept runoff from the surface and seepage from the embankment respectively. Drains, instrumentation and monitoring wells are constructed in and around the TSF to assist in monitoring the performance of the facility.

Figure 1-1 shows an aerial view of the site from September 6th, 2012. AMEC Environment and Infrastructure (AMEC) drawings provided in Appendix A provide a plan and instrumentation sections of the dam, based on the 2011 construction. The 2012 construction is documented by AMEC (2013). Drawing 2011AB.07 in Appendix A presents a plan of the MPM site as of the end of 2011 construction.

Mount Polley Mining Corporation (MPMC) milled approximately 36 M tonnes of ore between start-up in 1997 and October 2001. The mine entered into care and maintenance status for the period from October 2001 to February 2005, and operations re-started in March 2005.

The starter dam for the TSF embankment was constructed in 1996 to a crest elevation of 927.0 m. The starter dam comprised a homogeneous compacted till fill embankment. Discharge of the tailings into the impoundment commenced in the summer of 1997. The TSF embankment was raised in subsequent years as follows:

- To elevation 934.0 m in 1997.
- To elevation 936.0 m in 1998.
- To elevation 937.0 m in 1999.
- To elevation 941.0 m in 2000.
- To elevation 942.5 m in 2001.
- To elevation 944.0 m in 2004.
- To elevation 946.0 m in 2005.
- To elevation 949.0 m in 2006.
- To elevation 950.9 m in 2007.
- To elevation 951.9 m in 2008.
- To elevation 953.9 m in 2009.
- To elevation 958.0 m in 2010.
- To elevation 960.1 m in 2011.
- To elevation 963.8 m in 2012.

The TSF embankments are zoned earth and rockfill dams (see drawings 2011AB08 through 15 in Appendix A). In 2012, MPMC crews and equipment were responsible for the placement of Zone U, Zone T, and Zone C. Placement of Zone S and Zone F was performed by Peterson Contracting Ltd. (Contractor).

This report presents the 2012 annual review of the MPM TSF. The 2012 construction is documented by AMEC (2013).

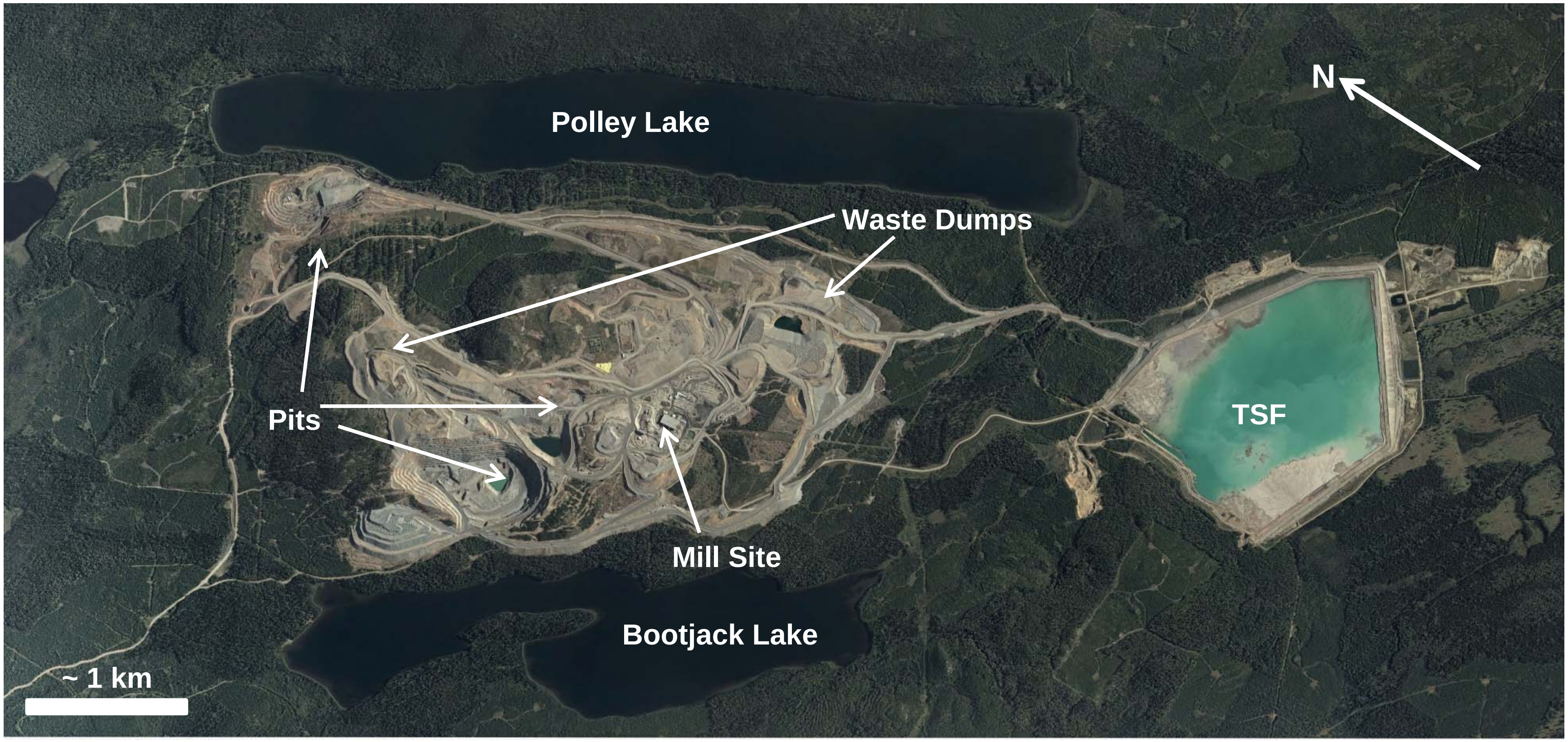

Figure 1-1. Aerial View of Mine Site: September 6, 2012.

2.0 PROJECT BACKGROUND

MPM is a copper and gold mine owned by Imperial Metals Corporation and operated by MPMC. The site is located 56 km northeast of Williams Lake, British Columbia. MPM began production in 1997 and operated until October 2001, when operations were suspended for economic reasons. In March 2005, the mine restarted production and has been in continuous operation since. The current mill throughput is approximately 20,000 tpd. Tailings are deposited as slurry into the TSF. The TSF is comprised of one overall embankment that is approximately 4.3 km in length. The embankment, based upon original separate embankments, is subdivided into three (3) sections; referred to as the Main Embankment, Perimeter Embankment and South Embankment.

The overall embankment has incorporated a staged expansion design utilizing a modified centerline (partial upstream) construction methodology through Stage 8 and transitioned to centreline construction with the initiation of Stage 8a in late 2012. The latest expansion was completed in October 2012, and entailed a 3.7 m embankment raise to a crest elevation of 963.8 m. The 2012 construction is documented by AMEC (2013). The AMEC drawings provided in Appendix A include sections illustrating the design of the dam. The dam section comprises a compacted till starter dam, above which the till core zone (Zone S) was raised, until Stage 8a, via a partial upstream shift (i.e. modified centerline) for each annual raise. Downstream of the core is a graded filter zone (Zone F), and a transition rockfill zone (Zone T), providing for a filter sequence between the Zone S and the Zone C (downstream shell of rockfill). Upstream support for the modified centerline raises of the till core is provided by Zone U (select fill, comprising tailings sand and waste rock).

A system of foundation drains underlies the downstream shell of the dam, and is installed within the base of the tailings deposit, and immediately to the upstream of the till core. These drainage features are discussed in Section 3.7.1.

The design and construction monitoring of the TSF embankments from mine start up to early 2011 was completed under the direction of Knight Piésold Limited (Knight Piésold). AMEC assumed the design consultant role for the TSF embankment as of January 28, 2011. AMEC's leads on the project were Todd Martin, P.Eng., and Daryl Dufault, P.Eng., both now with BGC Engineering Inc. (BGC), and co-authors of this annual review report.

3.0 OPERATION OF THE TAILINGS STORAGE FACILITY

3.1. General

The MPM TSF is comprised of one overall embankment that is currently approximately 4.3 km in length. The embankment is subdivided into three (3) sections; referred to as the Main Embankment, Perimeter Embankment and South Embankment. Heights vary along the embankment and are approximately 49 m, 31 m, and 21 m for the Main, Perimeter and South Embankments respectively. Sections of the embankment are shown on AMEC Drawings 2011AB.08 through 2011AB.15 in Appendix A.

3.2. Tailings Discharge and Beach Management

Tailings are transported from the mill to the impoundment via an approximately 7 km long HDPE pipeline. The pipeline design flow is 20,000 tpd at about 35% solids by dry weight.

In 2012, given the orientation of the gravity-fed tailings line, insufficient tailings line pressure prevented cell construction along the central portion of the Main Embankment. As shown in Figure 3-1, 2012 cell construction was carried out from Corner 5 advancing along the Perimeter Embankment to the Main Embankment, where single-point discharge was employed at Sta. 24+00 to facilitate the beach development. Cellular development was employed along the South Embankment and around Corner 3 where single-point discharge was resumed at Sta. 18+50. The tailings delivery line is currently being redesigned with the expectation that the new alignment will allow for upstream tailings cell construction to take place along the Main Embankment in 2013.

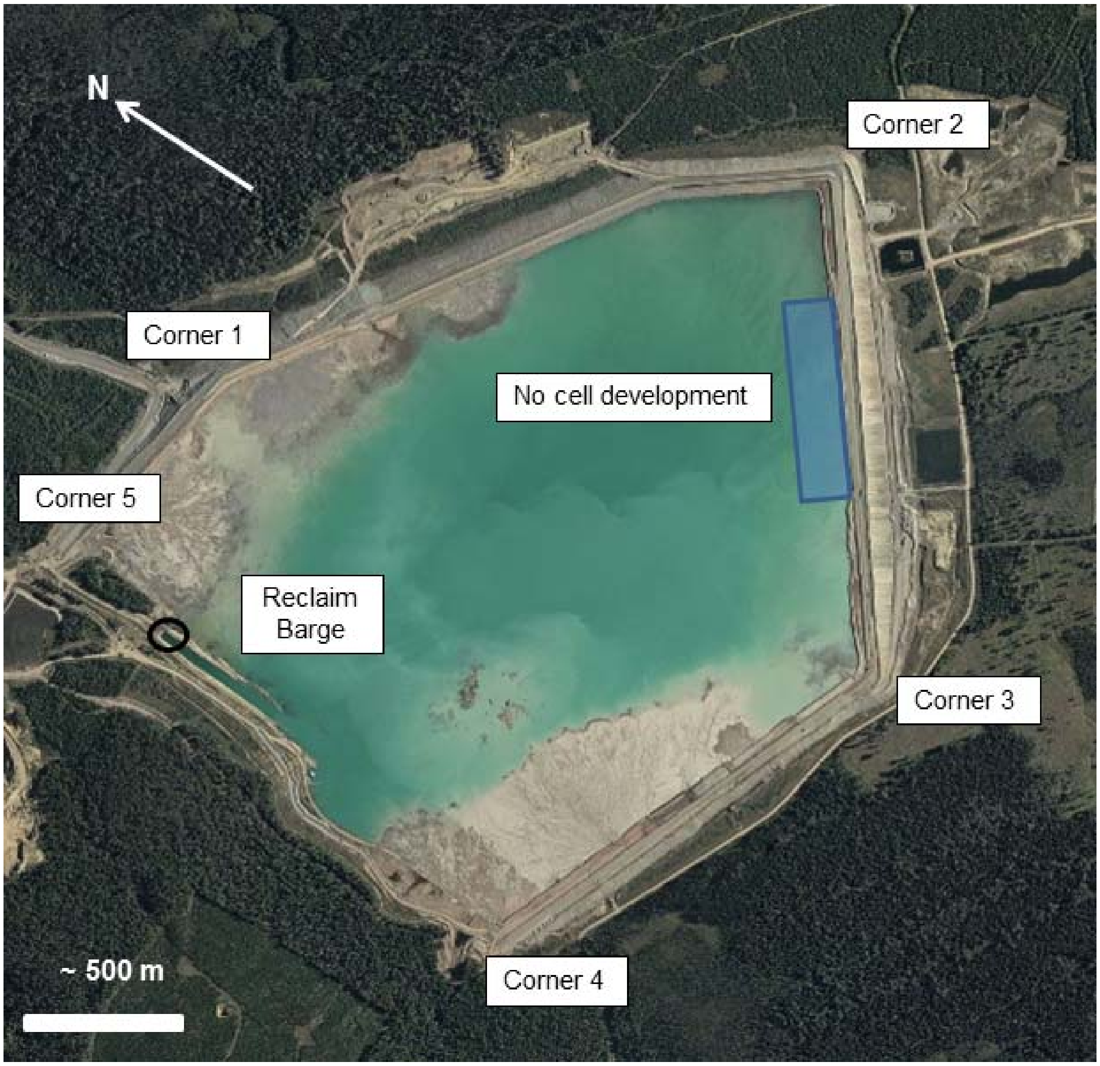

Figure 3-1. Tailings Storage Facility Plan.

3.3. Process Water Reclaim

The tailings pond supernatant is recycled to the mill for use as process water. It is transported via the reclaim pumping system, which consists of a barge mounted pump, pipeline and booster pump station.

3.4. Operations, Maintenance and Surveillance Manual

The Operations, Maintenance and Surveillance (OMS) Manual is a living document and was updated in 2012 to reflect the change in Engineer of Record and the addition of new instrumentation and the updated instrumentation surveillance and reporting plan.

3.5. Flood Storage and Freeboard Requirements

Flood storage and freeboard requirements for the TSF are outlined in the OMS manual and are as follows:

The TSF is required to have sufficient live storage capacity for containment of runoff from the entire contributing catchment area during a 24-hour Probable Maximum Precipitation (PMP) event. The TSF design also incorporates a freeboard allowance for wave run-up. Therefore, the normal and maximum operating pond levels are as follows:

- Normal Operating Level – Water level at least 1.3 meters below the embankment crest;
- Maximum Operating Level – Water level is 1 meter below the embankment crest, which also means the loss of storage capacity for a 24-hour PMP event.

Tailings deposition would cease if the pond level reaches maximum operating level and the removal of water from the pond would commence using the reclaim barge. The area downstream of the dam will also be evacuated and access restricted as per the Emergency Preparedness Plan.

The impoundment is operated without an emergency overflow spillway. As such, contingency measures are required such that emergency discharge of surplus water can be undertaken in the extremely unlikely event of the 24-hour PMP (or larger) runoff inflow event. One such contingency is the shutdown of the mill and evacuation of water using the reclaim barge.

3.6. Seepage Collection Ponds

Seepage collection ponds are located downstream of each of the three embankments that create the TSF. The seepage collection ponds collect seepage from the embankments, embankment drain discharge, and runoff from the embankment and reporting catchments. Records indicate that the ponds were excavated into glacial till of low hydraulic conductivity. The ponds were observed to be in good condition when visited in August 2012 by Daryl Dufault, P.Eng.

3.7. Drain Flow Data

3.7.1. Design Description

Drainage systems are installed upstream and downstream of the till core, as discussed in Section 2. Selected Knight Piésold figures and design drawings, from Knight Piésold (1995, 2005), illustrate the design and design intent of the drainage system, and are provided in Appendix B. Select photos of perimeter drains are included in Appendix C.

<u>Upstream Drainage System</u>

The design objective of the upstream drainage system is to lower the phreatic surface within the tailings in proximity to the dam, increasing embankment stability and seepage control, and facilitating consolidation of the upstream tailings to provide sufficient support for the modified centerline (slight upstream) raising geometry of the till core. This is illustrated in Knight Piésold Figure 6.7 (Appendix B). The upstream drainage system comprises:

- Basin groundwater drains upstream of the Main Embankment (see Knight Piésold Dwg. 1625.102, Appendix B). These drains extend below the Main Embankment, and discharge into the drain monitoring sump immediately upstream of the Main Embankment seepage collection pond.
- Upstream toe drains (see Knight Piésold Dwg. 1625.111, Appendix B) constructed level with the starter dam crest at El. 931 m.These drains extend below the Main Embankment at both abutments (see Knight Piésold Dwg. 110, Appendix B), and are conducted in pipes to the aforementioned drain monitoring sump.
- Upstream toe drains were also constructed within the Perimeter Embankment and the South Embankment portions of the dam.

Flow reporting to the upstream drainage system is channeled via pipes below the till core of the dam to the downstream seepage monitoring sumps and the Main Embankment seepage collection pond sump. Referring to the Knight Piésold design drawings in Appendix B, the details for the upstream drainage system pipes where they pass below the Zone S till core are as given in Table 3.1.

Table 3-1. Upstream drainage system: pipelines passing below the core.

Knight Piésold Drawing No.	Detail Reference	Description	Station
1625.109	Detail B	Basin groundwater drain outlets. 150 mm HDPE DR21 pipe, with a “seepage collar” of compacted till with 10% bentonite. Two such pipes indicated on the key plan on Drawing 1625.109.	20+50
1625.102 1625.111	Detail E Detail C	Main Embankment upstream toe drain outlets. 150 mm HDPE DR21 pipes. Two of these indicated on Drawing 1625.102 (key plan) and Drawing 110.	15+75 and 26+75
120 255	Plan Section	Perimeter Embankment upstream toe drain outlet. 150 mm HDPE DR21 pipe. Reinforced concrete encasement	46+75
230 240	Plan Section	South Embankment upstream toe drain outlet. 250 mm diameter steel pipe, reinforced concrete encasement	13+25

Downstream Drainage System

The downstream drainage system comprises a series of longitudinal perforated drain pipes to conduct collected seepage flow to the monitoring sumps and the collection ponds. The function of the drains is to reduce seepage pressures associated with upward hydraulic gradients within the foundation soils below the dam, on the downstream side of the till core. The locations of these drains, and the design details, are shown on the Knight Piésold drawings in Appendix B.

3.7.2. Flow Data

Flows from the upstream toe drains and downstream foundation drains of the Main Embankment are measured at the sump located at the Main Embankment seepage collection pond.

Upstream toe drains and downstream foundation drains from the Perimeter and South Embankments discharge into ditches which carry the flow to their respective seepage collection ponds where it is measured at the end of pipe. Water from the upstream toe and foundation drains is recycled to the TSF.

Measurement of drain flows into the Main Embankment seepage collection pond requires that the sediment control pond be pumped down to a low level to allow for safe entry into the sump. In 2011 and 2012, Main Embankment drain readings were not measured and MPMC was out of compliance with the OMS requirements. MPMC continues to work on revising the monitoring system in an attempt to capture drain flow readings in compliance with the OMS requirements. It is critical that this deficiency be rectified in 2013, as monitoring of drain flows is mandatory in terms of detecting changes in seepage conditions.

In 2012, frequency of drain flow readings from the South and Perimeter Embankments varied from monthly to bi-weekly as weather permitted. Frequency of historic readings varied similarly, with some gaps of a month or more. Main, South and Perimeter Embankment drain readings are presented in Figure 3-2.

Drain flows at the Main Embankment during the initial years of production were relatively steady at less than 1 l/s. In 2000, flow rates increased to approximately 5 l/s, likely in response to an increased pond elevation. Between 2001 and 2005, the mine was in care and maintenance and the pond elevation was relatively constant. Flow rates increased again shortly after production resumed in 2005, to between 10 l/s and 20 l/s again likely due to an increase in pond elevation. Drain flows at the Main Embankment have not been measured since 2010, as discussed above.

Drain flows at the Perimeter Embankment were measured starting in 2006, following construction of this portion of the embankment. Drain flows at the South Embankment were measured starting in 2011, following construction of this portion of the embankment. Flows reporting to the respective drains are influenced by the upstream sand cell placement activity with flow peaks coinciding with active placement in the respective sump areas, and by beach widths, which are typically at a minimum immediately following the freshet, which is when spikes in drain flows are apparent. There appears to be a step increase in flow rate measured at the perimeter drain between 2009 and 2011, from approximately 8 l/s to ranging from 20 l/s to 50 l/s; this is likely in response to an increase in pond elevation.

There is no note of any turbidity observed in the drain water.

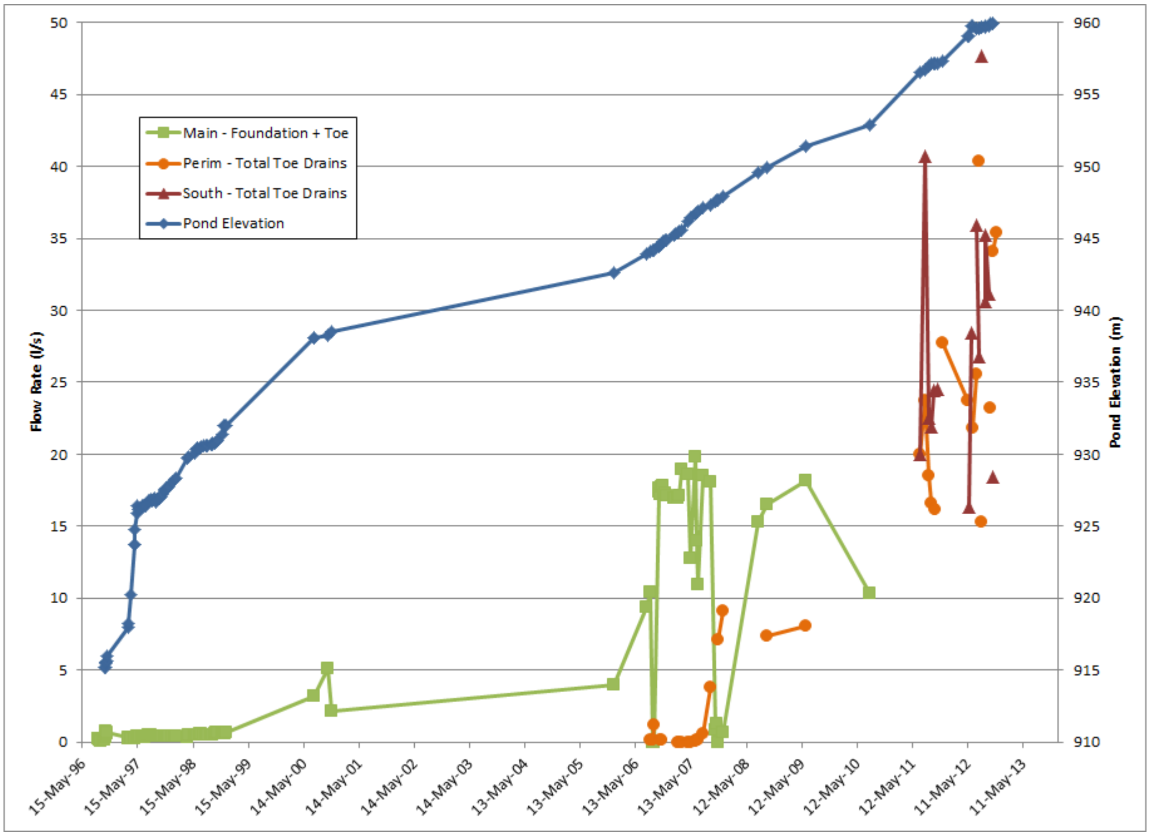

Figure 3-2. Drain Flow Readings.

4.0 SUMMARY OF 2012 CONSTRUCTION

The 2012 Stage 8 TSF embankment raise design was to an elevation of 963.5 m and the Stage 8A raise to an elevation of 965 m. Construction of the Stage 8 and partial completion of 8A raises entailed a raise of approximately 3.7 m from approximate El. 960.1 m to El. 963.8 m. Construction monitoring and quality control during the 2012 construction season was mainly carried out by MPMC personnel. AMEC undertook regular site visits and carried out quality assurance activities, as described in AMEC (2013). Select photos taken during 2012 construction are included in Appendix C.

5.0 EMBANKMENT INSPECTION AND MONITORING

5.1. General

The design and construction monitoring of the TSF embankments from mine start-up to early 2011 had been completed under the direction of Knight Piésold. AMEC assumed the role of Engineer of Record for the TSF embankment as of January 28, 2011. Knight Piésold provided the historical raw instrumentation data collected from the impoundment instrumentation. The raw data was reprocessed, and working piezometers renamed to simplify data management. The revised naming convention for piezometers is presented on AMEC Drawings 2011AB.08 through 2011AB.15. The piezometric data organized by planes is presented in Appendix D

5.2. New Instrumentation

In late 2012, a site wide groundwater monitoring well installation program was conducted. During the program, two additional slope inclinometers were installed downstream of the Perimeter Embankment, to supplement existing piezometers that indicated potential of being rendered inoperative in the near future.

Table 5-1 and Table 5-2 summarize the status of vibrating wire piezometers and inclinometers installed in the TSF.

Table 5-1. Piezometer Summary.

Embankment	Installed Prior to 2011		2011 Installed	Total (Functional)
	(Functional)	(Non-functional)		
Main	40	26	15	55
Perimeter	10	9	5	15
South	8	2	3	11
Total	**58**	**37**	**23**	**81**

Table 5-2. Inclinometer Summary.

Embankment	Installed Prior to 2011		2012 Installed	Total (Functional)
	(Functional)	(Non-functional)		
Main	6	1	0	6
Perimeter	1	0	2	3
Total	**7**	**1**	**2**	**9**

5.3. Vibrating Wire Piezometers

Piezometers are read by MPMC personnel. The piezometer data, in terms of piezometric elevation head, dam crest elevation, and pond level versus time, are presented in Appendix D. AMEC (2012b) provided recommended threshold levels for the piezometers on the basis of stability analyses, for piezometers installed within the foundation of the dam. The recommended threshold levels were as outlined in Table 5-3. It is important to note that a single piezometer in a given section indicating a yellow or red condition would not necessarily represent a concern, given that such conditions would need to be observed throughout the section in question to indicate unacceptable factor of safety conditions.

Table 5-3. Piezometers Threshold Levels (AMEC, 2012b).

Condition	Main Embankment Foundation Piezometer	
	Elevation (m)	Above original ground (m)
RED	> 925 m	>13 m
YELLOW	921 m to 925 m	9 m to 13 m
GREEN	< 921 m	< 9 m

As per AMEC (2012b), red, yellow, and green conditions were defined as follows:

- Red (factor of safety at or below 1.1) – If the foundation piezometers indicate a red condition, crest raising is to cease. The designer is to be informed immediately, and a corrective course of action will be implemented as per the designer's direction, including intensified monitoring, and placement of a stabilization buttress to flatten the overall slope in the embankment area of concern.
- Yellow (factor of safety above 1.1 and below 1.3) – If the foundation piezometers indicate a yellow condition, work should be temporarily suspended in around the embankment, the designer is to be informed, and a corrective action will be implemented as per direction of the designer. Access to the embankment should be limited to essential personnel.
- Green (factor of safety above 1.3) – If the foundation piezometers indicate a green condition, work in and around the embankment is to continue as needed.

All foundation piezometers remained within the "green" zone through 2012.

In 2012, the piezometers indicated the following general trends for the TSF embankment:

- Pore pressures in foundation soils in and around the TSF embankment were noted as stable with minor fluctuations. All foundation piezometric levels remained within the green limits given in Table 5-3.

- Pore pressures in the till core were found to be stable, with a slightly increasing trend in response to the rising pond level, and also possibly with some slight response to crest raising.
- Pore pressures in filter and drain zones remained unchanged throughout the year.
- Pore pressures in the tailings and upstream fill experienced an upward trend in response to the rising pond level. Piezometers installed at lower elevations within the upstream tailings experienced lower responses relative to the piezometers near the pond elevation, likely the result of proximity to the upstream under-drainage system, and indicative of continued downward gradients in the tailings as a result of the upstream drains.

5.4. Inclinometers

The inclinometers are read by MPMC personnel. Inclinometer data for 2012 is provided in Appendix E. The location of the inclinometers are shown in plan and sections on the AMEC drawings in Appendix A. The base of each inclinometer is seated within bedrock to provide a fixed bottom reference point for monitoring of horizontal displacements. The main point of interest is the response within the foundation glaciolacustrine/glaciofluvial unit to the ongoing raising of the dams. The portions of the inclinometers raised through the rockfill shell of the dam are inevitably affected by construction activity.

AMEC (2012) provided recommended threshold levels for the inclinometers, referring specifically to any zones of relatively concentrated shear within the foundation that would be indicative of incipient instability. The recommended threshold levels are given in Table 5-4.

Table 5-4. Inclinometers Threshold Levels (AMEC, 2012b).

Condition	Inclinometer movement rate (in defined depth intervals within the foundation soils)	
	(mm/day)	(bi-weekly)
RED	> 1 mm/day	>14mm
YELLOW	0.5 mm/day to 1.0 mm/day	7 mm to 14 mm
GREEN	< 0.5 mm/day	<7 mm

The threshold levels are defined as given in Table 5-5.

Table 5-5. Inclinometers Threshold Levels (AMEC, 2012b).

Category	Description	Action
Green	Movement rates are acceptably low and in line with previous movement rates noted in the dam foundation.	Nominal conditions, no actions required.
Yellow Light	Movement rates significantly higher than previously experienced in dam foundation.	Inform TSF designer and appropriate regulatory agencies immediately. Carry out more frequent monitoring of selected piezometers/inclinometers as directed by designer.
Red Light	Relatively rapid movement rates.	Inform TSF designer and appropriate regulatory agencies immediately. Cease construction in the problematic area. Designer to assess situation and the need for additional remedial construction measures, such as localized buttressing.

A summary of the inclinometer displacements is provided in Table 5-6.

SI11-04 has to date indicated an anomalous pattern of displacement suggestive of compression rather than net lateral displacement, although a faulty installation could be a contributor to the displacement pattern indicated. This slope inclinometer should be reinitialized when the compression displacement stabilizes. A replacement inclinometer was installed nearby in 2012, given concern that SI11-04 might soon become inoperative.

Apart from the anomalous behavior indicated by SI11-04, all movements remained well within the “green” zone given in Table 5-4.

Table 5-6. Inclinometer Data Summary

Inclinom. No.	Section/ Station	AMEC Dwg. No.	Zones of discrete shear in foundation?	Downstream displacement in 2012 (mm)	Overall displacement rate (mm/year) since installation	Other comments
SI01-02	K 24+60	AB2011.3	Yes, concentrated between 17-19 m depth	About 4 mm	4 mm/year	More significant movement in 2012 along the B-axis (i.e. parallel to the dam axis) than along the A-axis.
SI06-01	A 20+00	AB2011.11	No	Essentially none	About 1.3 mm/year	
SI06-02	Between A and B	Not on a section	No	Essentially none	About 0.7 mm/year	
SI06-03	B 22+40	AB2011.12	Yes, in glaciolacustrine at 15-16 m depth	3 mm	1.4 mm/year	
SI11-01	C 18+50	AB2011.10	None	None	Perhaps 1 mm per year overall	Displacement at top of casing is within fill, not foundation
SI11-02	K 24+60	AB2011.13	None	None	None	Some minor displacement indicated in the B-axis
SI11-04	D 39+90	AB2011.15	None	Unclear	Unclear – but no net downstream displacement indicated	Pattern is of compression of the inclinometer casing, possibly due to settlement. No net downstream displacement indicated. Replacement installed in 2012.

6.0 TAILINGS STORAGE FACILITY: WATER MANAGEMENT AND IMPOUNDMENT RAISING SCHEDULE

6.1. General

MPMC maintains the water/mass balance model which is updated monthly with actual tonnages (milled/mined), precipitation data and surveyed pond water elevations to maintain the accuracy of the model and pond level projections. The MPM balance has not been reviewed by BGC. This section therefore provides a general overview of the water balance and site water management as provided by MPMC.

It is BGC's understanding that currently the total inflow from precipitation and surface runoff exceeds losses from evaporation and storage of water within the voids of deposited tailings. Thus, MPM is operating under a net annual water balance surplus condition, with the accumulating surplus being stored in the TSF and the Cariboo Pit. MPMC transfers water as needed between the TSF and the Cariboo Pit.

6.2. Mass Balance

Survey and pond soundings of the impoundment area were last updated by MPMC personnel in July 2012. The updated survey data was used by MPMC to create a revised storage elevation curve for the tailings impoundment, which was incorporated into the mass balance model. The updated mass balance model was then used to predict average tailings and pond level/volume within the TSF. In turn, that level plus the PMF event determines the required dam crest elevations and the dam raising schedule.

The mass balance model is updated on a regular basis with actual tonnages (milled/mined) and surveyed pond water elevations to calibrate the model and increase the accuracy of pond level projections.

6.3. Overview of Mass Balance Model

The mass balance model projections are based on a number of parameters and assumptions, including those listed below:

- Tailings elevations predicted in the TSF are on the basis of the tailings tonnages projected by the design mine plan and assumed in-situ dry density.
- Predicted pond water levels do not take into account the water transferred between the TSF and the Cariboo Pit.

The TSF is required to have sufficient live storage capacity for containment of runoff from the entire contributing catchment area during a 24-hour PMP event. In addition, the TSF design also incorporates an allowance for wave run-up above the pond level that would result from the 24-hour PMP event.

6.4. Dam Raising Schedule

MPMC is managing the site water balance, and establishes the required dam raising schedule. It is understood that the 2013 Stage 9 Embankment raise is a planned 3.7 m to crest El. 967.5 m, targeted for completion by the end of September 2013. The impoundment filling curve with predicted and actual pond levels and embankment elevations through the 2014 season is presented in Figure 6-1.

6.5. Mine Planning

The 2016 Mine Plan remains unchanged and forms the basis for future dam raises. The TSF embankment is reaching the final crest elevation (El. 970 m) considered in the original design. Should additional capacity be needed for future mine expansion, additional design will need to be completed to raise the impoundment beyond El. 970 m.

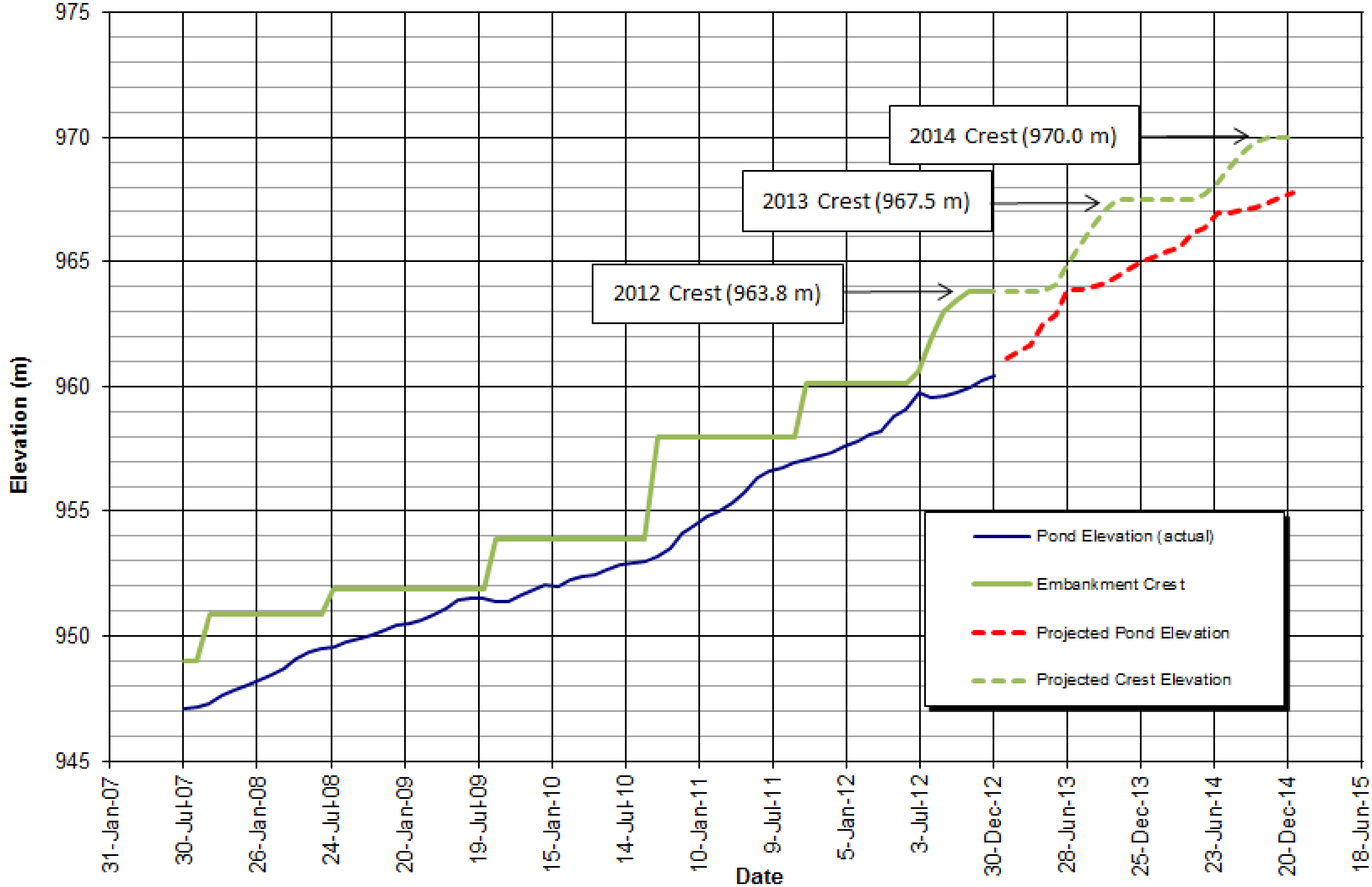

Figure 6-1. Impoundment Storage Elevation Curve.

7.0 SURFACE WATER MANAGMENT

Currently, the total inflow into the TSF from precipitation and surface runoff exceeds losses from evaporation and storage of water within the voids of deposited tailings. Thus, MPM is operating under a net annual water surplus condition, with the accumulating surplus being stored in the TSF and the Cariboo Pit. MPMC transfers water as needed between the TSF and the Cariboo Pit. Some water is reclaimed (recycled) in the milling process, while all excess mine-influenced water is collected and reports to the TSF. Ditch and sump systems are in place such that any and all mine-influenced water is collected and contained.

Wherever possible, clean (non-mine-influenced) water is separated from mine-influenced water and returned to the surrounding receiving environment.

In addition to the seepage directed to the Main, South and Perimeter sumps, two zones of seepage were observed. Near Corner 3, seepage was observed exiting the toe of the embankment, flowing north along the toe and disappearing into the ground near the Main Embankment sump. Site personnel indicated that there was a foundation drain installed near the south abutment of the Main Embankment during the early stages of construction and for several years no flow had been observed and flow monitoring was discontinued. The seepage was sampled in 2012, and tested and was shown to have a similar chemistry to tailings pond effluent. In consideration that the Corner 3 seepage is likely tailings effluent and does not report to the Main Embankment sump, MPMC has implemented temporary measures (ditching) to capture this seepage and transfer it to the Main Embankment sump.

The second zone of seepage was observed from where the upgraded mine haul road intersects the Perimeter Embankment near Corner 1. The area where this seepage was observed was different than in previous years and it was determined that the recent haul road upgrade has impacted the flow path of the seepage flow. However, the seepage is captured and continues to flow to the Perimeter Embankment sump.

8.0 CONCLUSIONS AND RECOMMENDATIONS

Conclusions drawn on the basis of this annual review are as follows:

1. The TSF embankment was raised to a minimum crest elevation (till core) of 963.8 m in 2012.
2. Monitoring of the TSF embankment via instrumentation and visual inspections indicated the following:
   a. Surveys of inclinometers within the downstream shell of the dam indicate that movements are minor and well within tolerable limits.
   b. Foundation pore pressures have been stable.
   c. Pore pressures in the till fill of the dam have increased slightly due to the pore pressure increase of the tailings.
   d. The TSF embankment is performing in accordance with its design intent.

Recommendations made on the basis of this annual review and as-built report are as follows:

1. Toe drain flows need to be measured and recorded per requirements described in the OMS manual.
2. The current design for the TSF is to a crest elevation of 970 m, which is currently planned for completion in 2014. A new design for the TSF will be required should mining continue past 2014.

9.0 CLOSURE

We trust the above satisfies your requirements at this time. Should you have any questions or comments, please do not hesitate to contact us.

Yours sincerely,

BGC ENGINEERING INC.
per:

Todd Martin, P.Eng., P.Geo.
Senior Geotechnical Engineer

Daryl Dufault, P.Eng.
Senior Geotechnical Engineer

Reviewed by:

Thomas G. Harper, P.E.
Senior Civil Engineer

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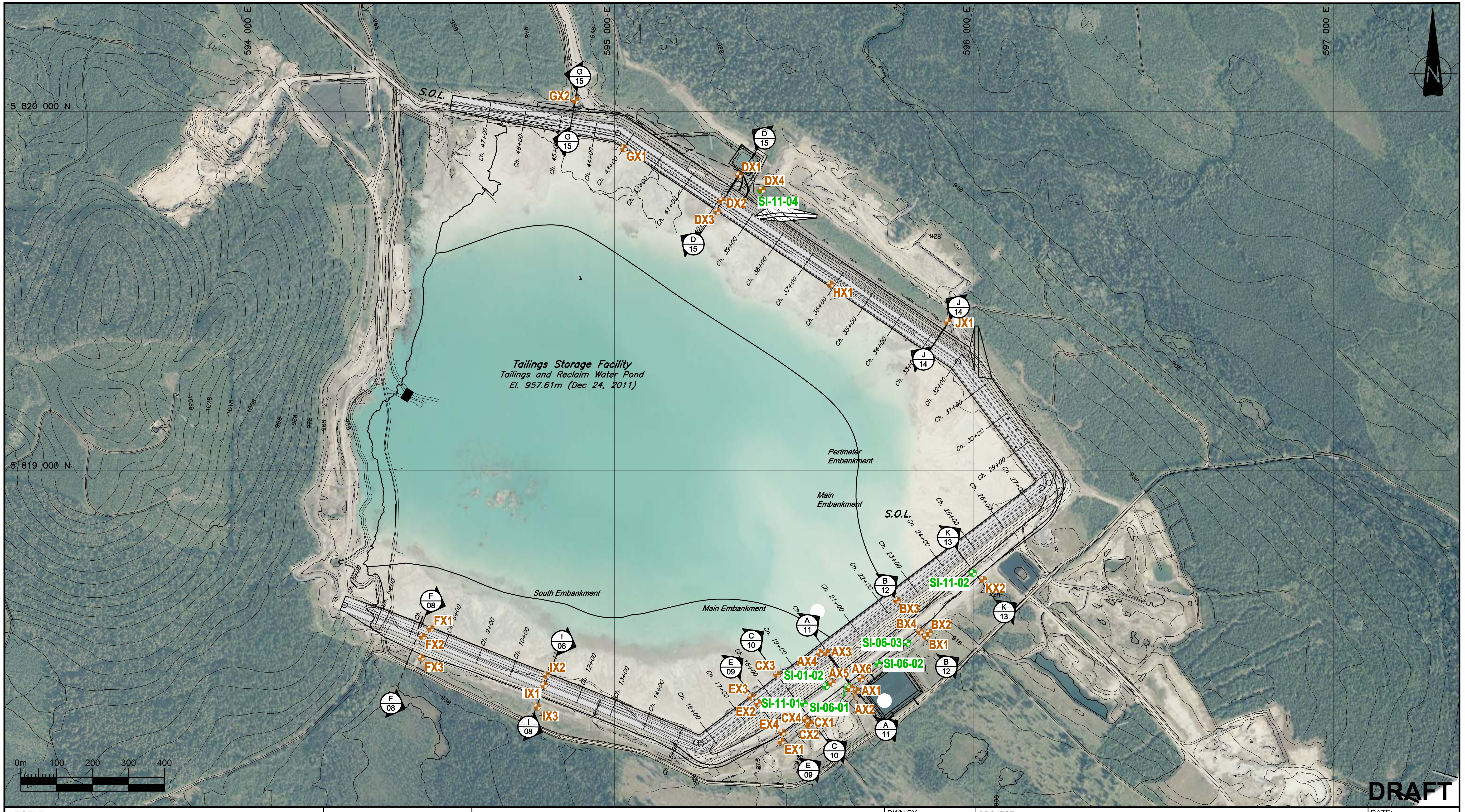
APPENDIX A
AMEC DRAWINGS



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- Slope Inclinometer Location
- Vibrating Wire Location

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2. S.O.L. - SETTING OUT LINE

CLIENT LOGO: Imperial Metals

CLIENT: IMPERIAL METALS

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DWN BY:	BB
CHK'D BY:	DO
DATUM:	NAD83
PROJECTION:	UTM Zone 10
SCALE:	AS SHOWN

PROJECT: MOUNT POLLEY MINE TAILING STORAGE FACILITY

TITLE: MONITORING STATIONS TAILINGS EMBANKMENT PLAN VIEW

DATE:	MARCH 2012
PROJECT NO:	VM00560
REV. NO:	A
FIGURE NO:	AB2011.07

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- D DRAINAGE GRAVEL

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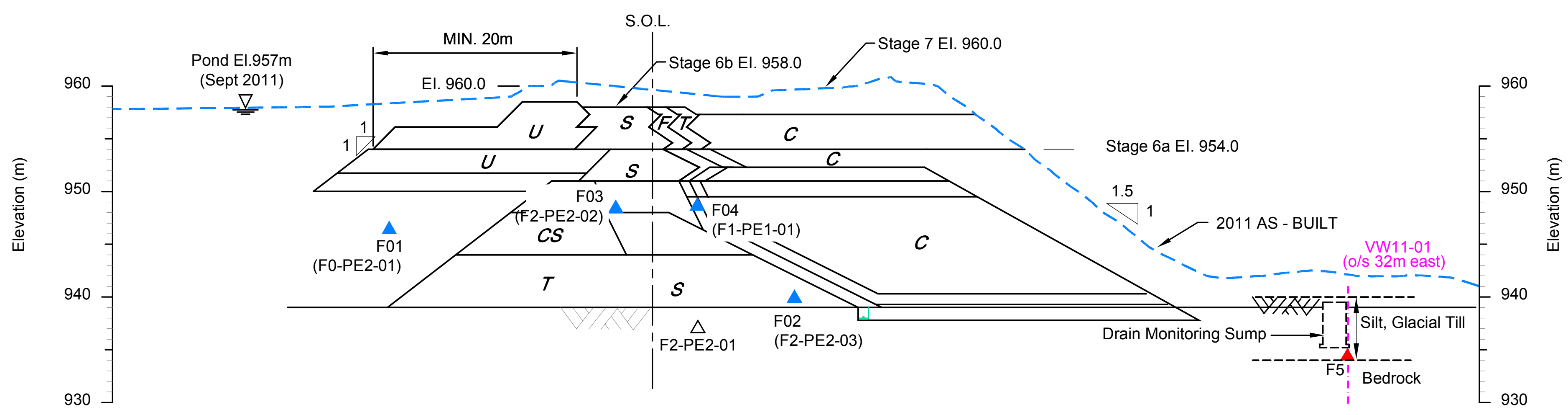

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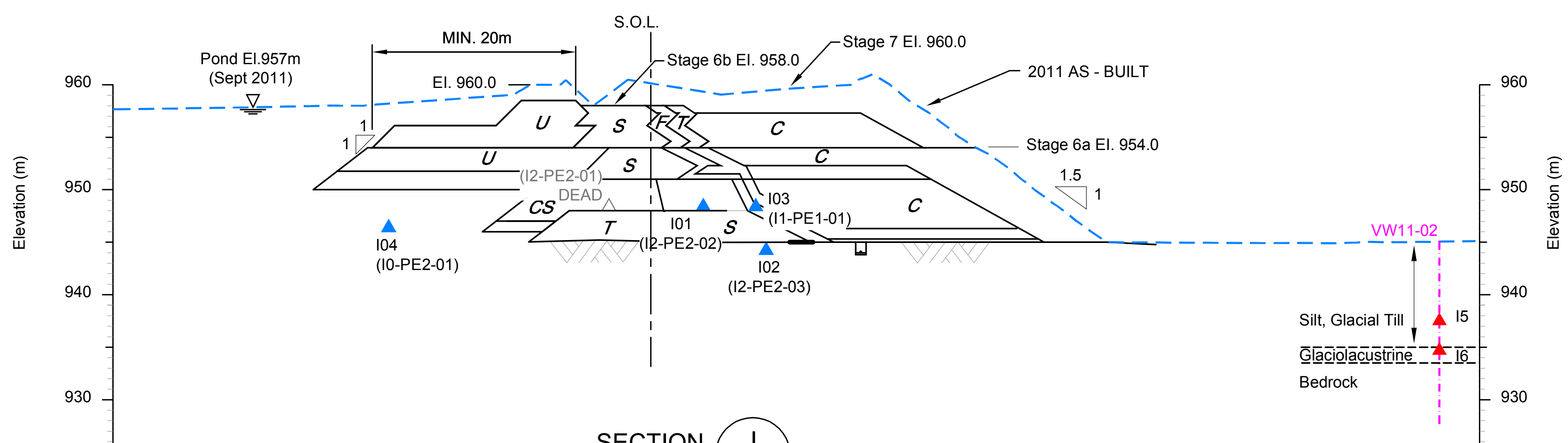

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CLIENT:	IMPERIAL METALS
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DWN BY:	YC/BB
CHK'D BY:	DO
DATUM:	N/A
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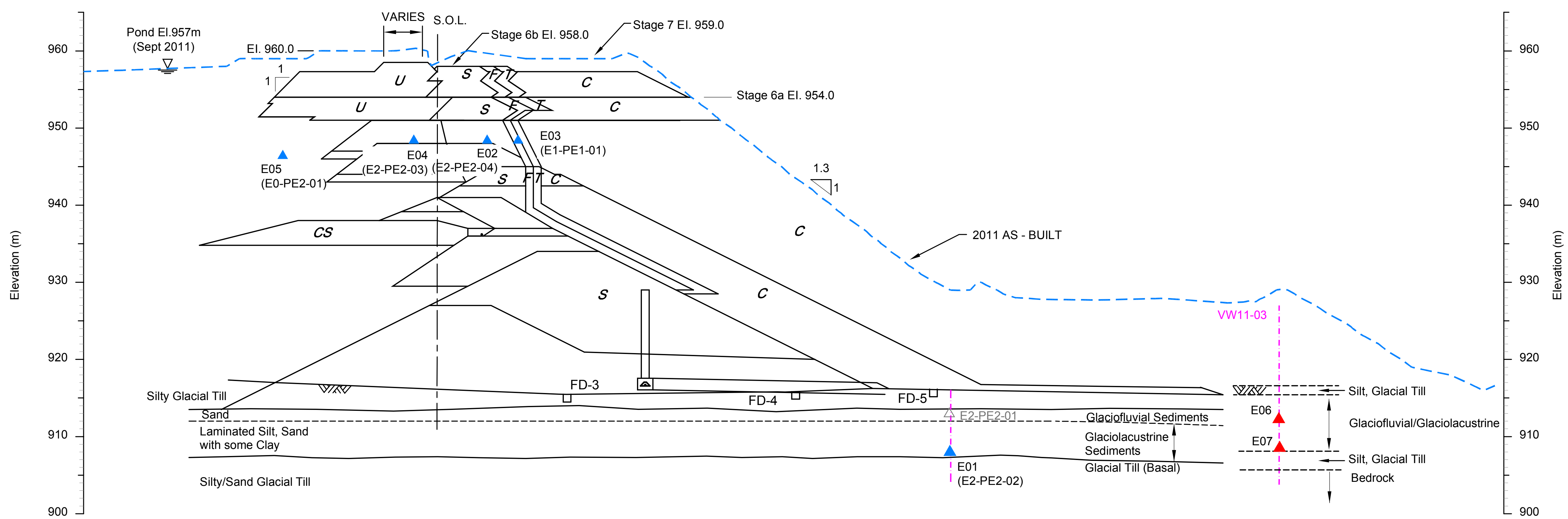

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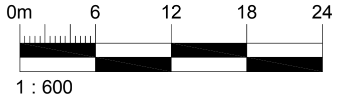

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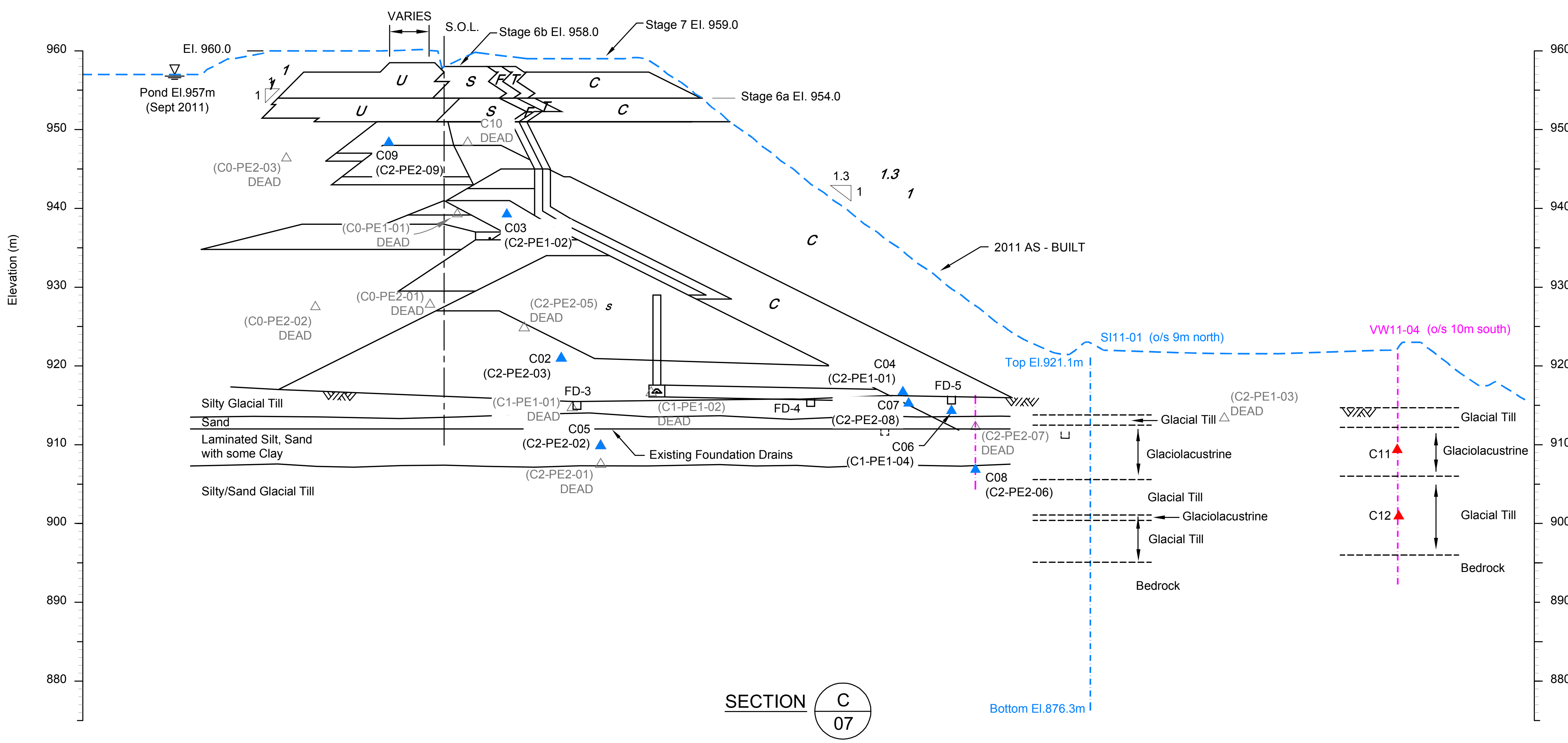

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PROJECT: MOUNT POLLEY MINE
TAILING STORAGE FACILITY

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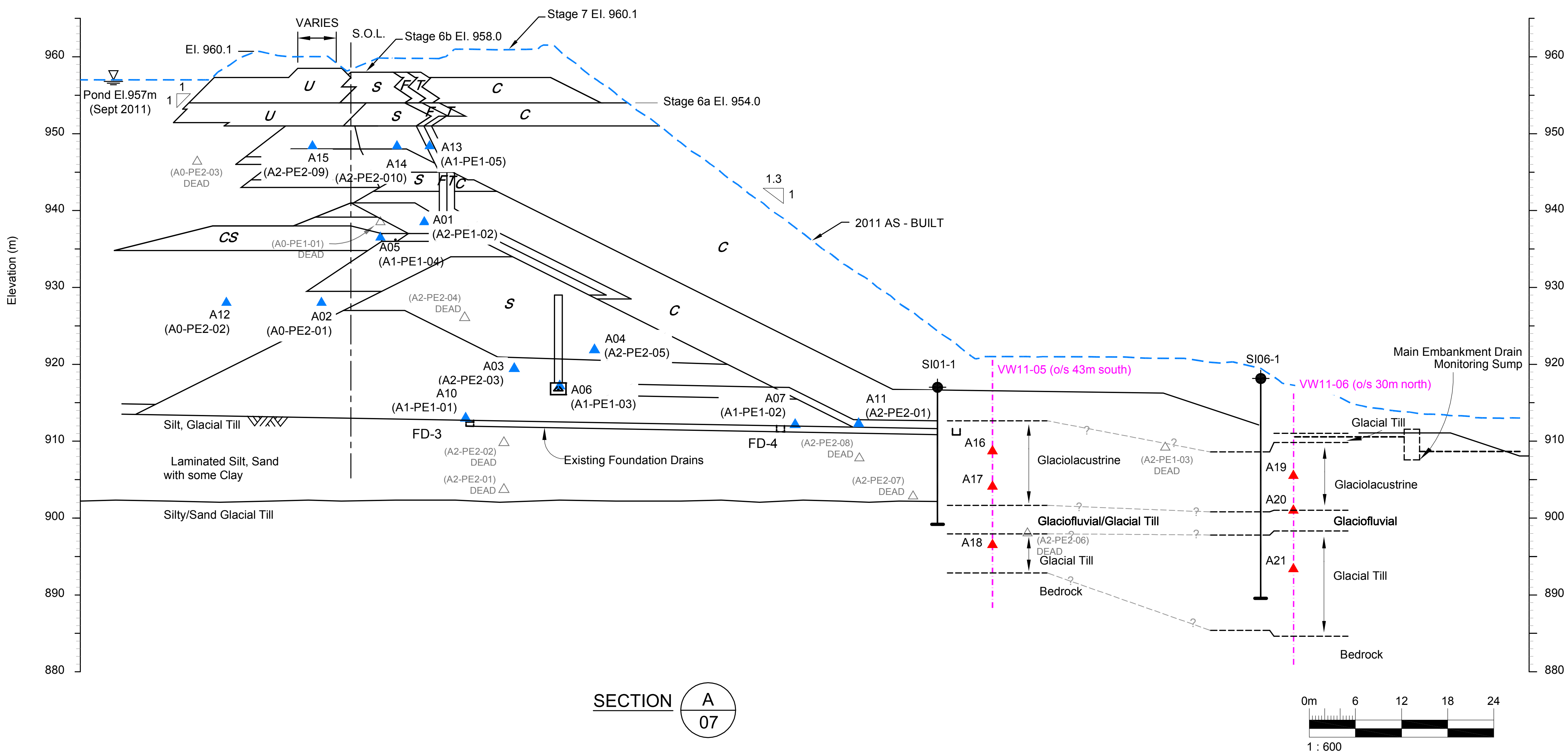

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PROJECT: MOUNT POLLEY MINE TAILING STORAGE FACILITY

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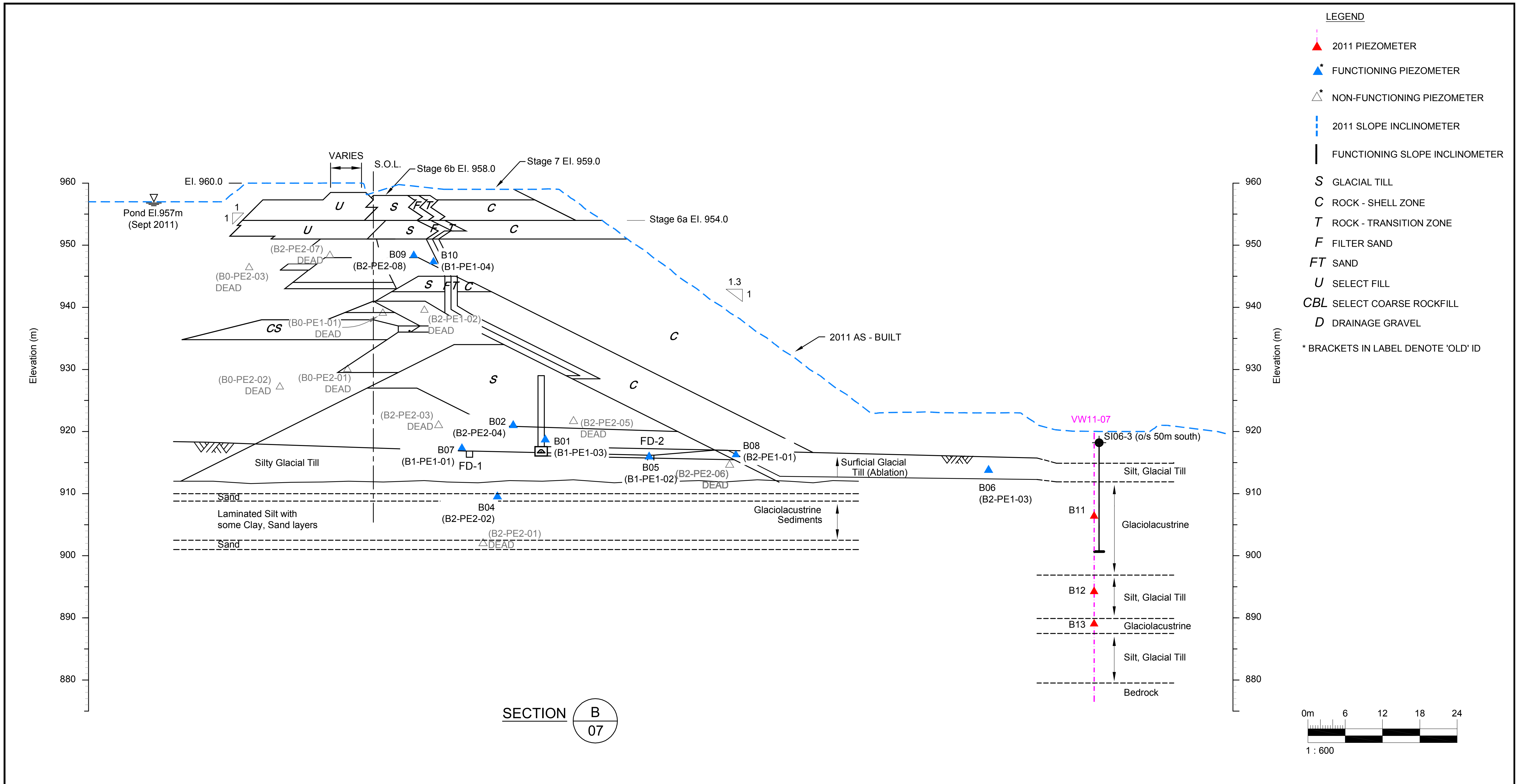

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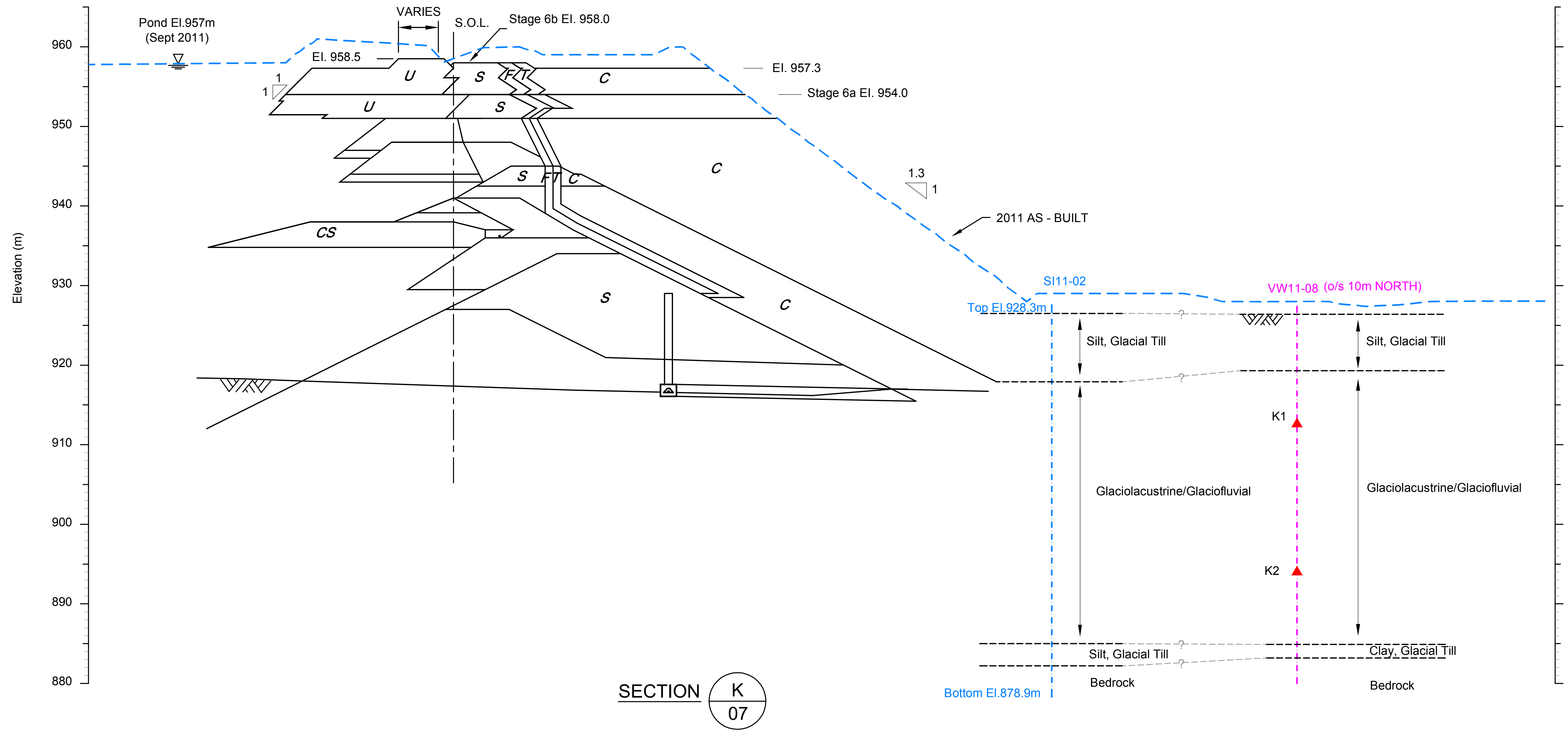

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TAILING STORAGE FACILITY

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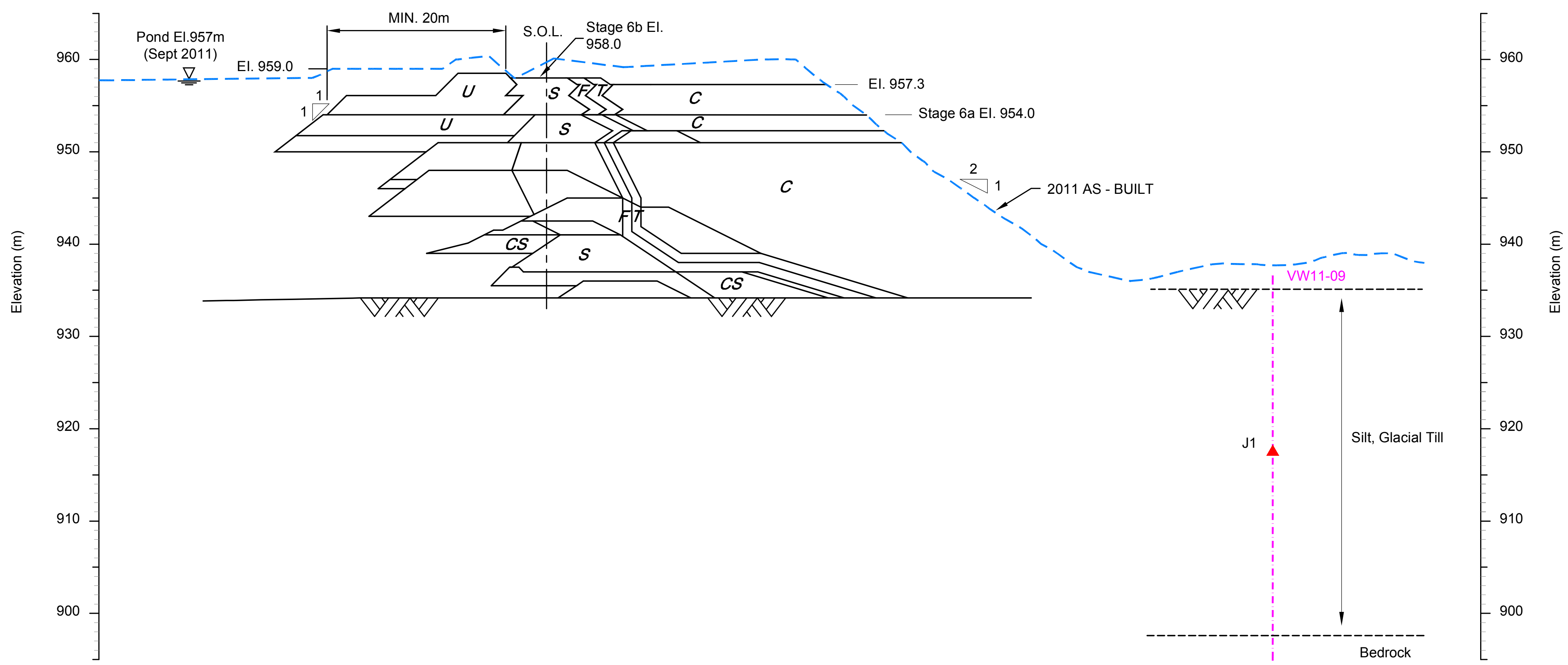

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CLIENT: IMPERIAL METALS

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DWN BY:	YC/BB
CHK'D BY:	DO
DATUM:	N/A
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PROJECT: MOUNT POLLEY MINE
TAILING STORAGE FACILITY

TITLE: SECTION J 32+80
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PROJECT NO:	VM00560
REV. NO:	A
FIGURE NO:	AB2011.14

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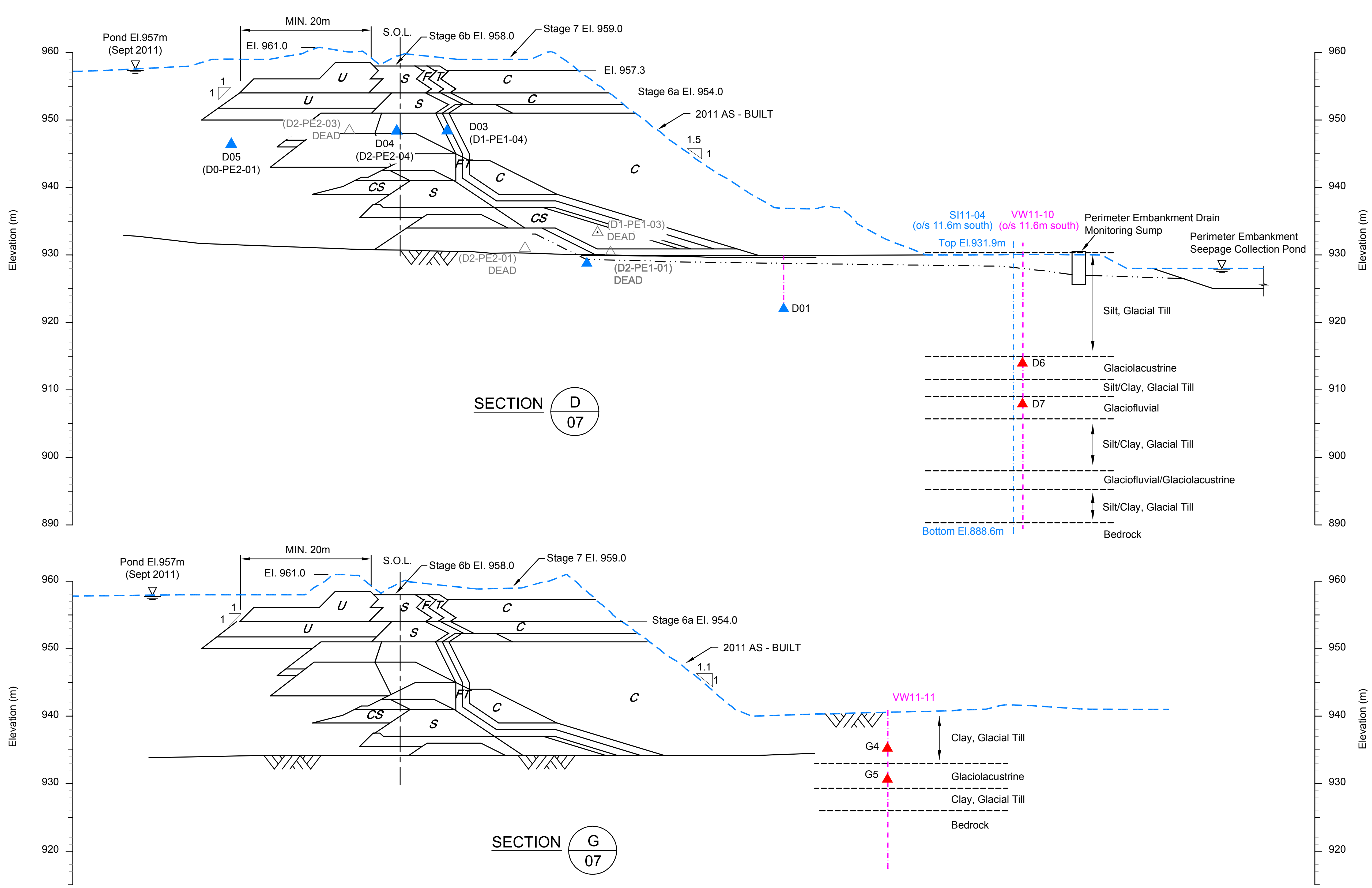

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DWN BY:	YC/BB
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PROJECTION:	N/A
SCALE:	AS SHOWN

PROJECT: MOUNT POLLEY MINE TAILING STORAGE FACILITY

TITLE: SECTIONS D 39+90 & G 44+70 PERIMETER EMBANKMENT INSTRUMENTATION

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APPENDIX B
SELECTED KNIGHT PIÉSOLD DESIGN DRAWINGS

1625.36

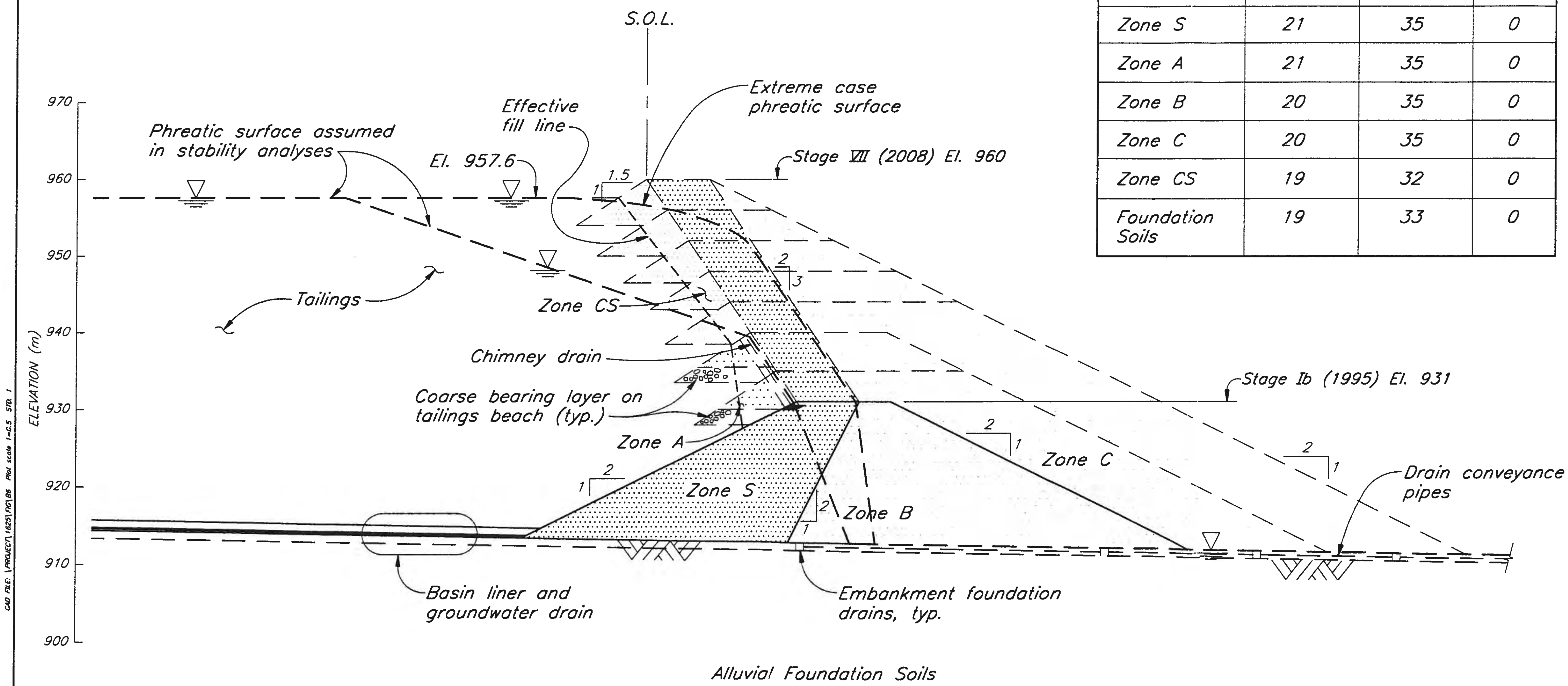
IMPERIAL METALS CORPORATION

MT. POLLEY PROJECT

EMBANKMENT STABILITY ANALYSES

GEOMETRY AND MATERIAL PARAMETERS

MATERIAL TYPE	UNIT Wt. (kN/m^3)	ϕ' (degrees)	c_u, c' (kPa)
Partially Consolidated Tailings	18	–	10–55
Consolidated Tailings	19	30	0
Zone S	21	35	0
Zone A	21	35	0
Zone B	20	35	0
Zone C	20	35	0
Zone CS	19	32	0
Foundation Soils	19	33	0

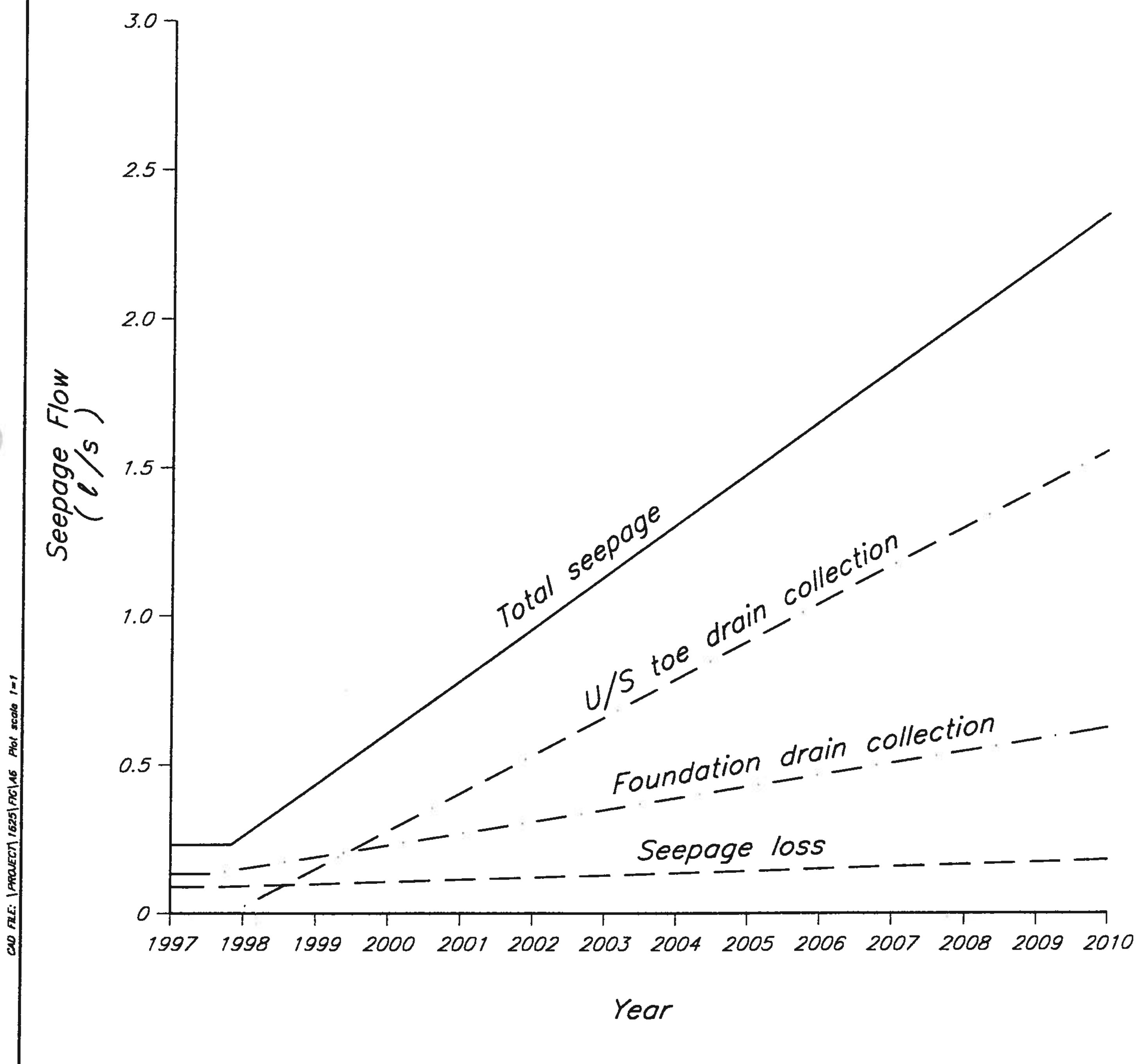


May 24, 1995

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

FIGURE 6.7

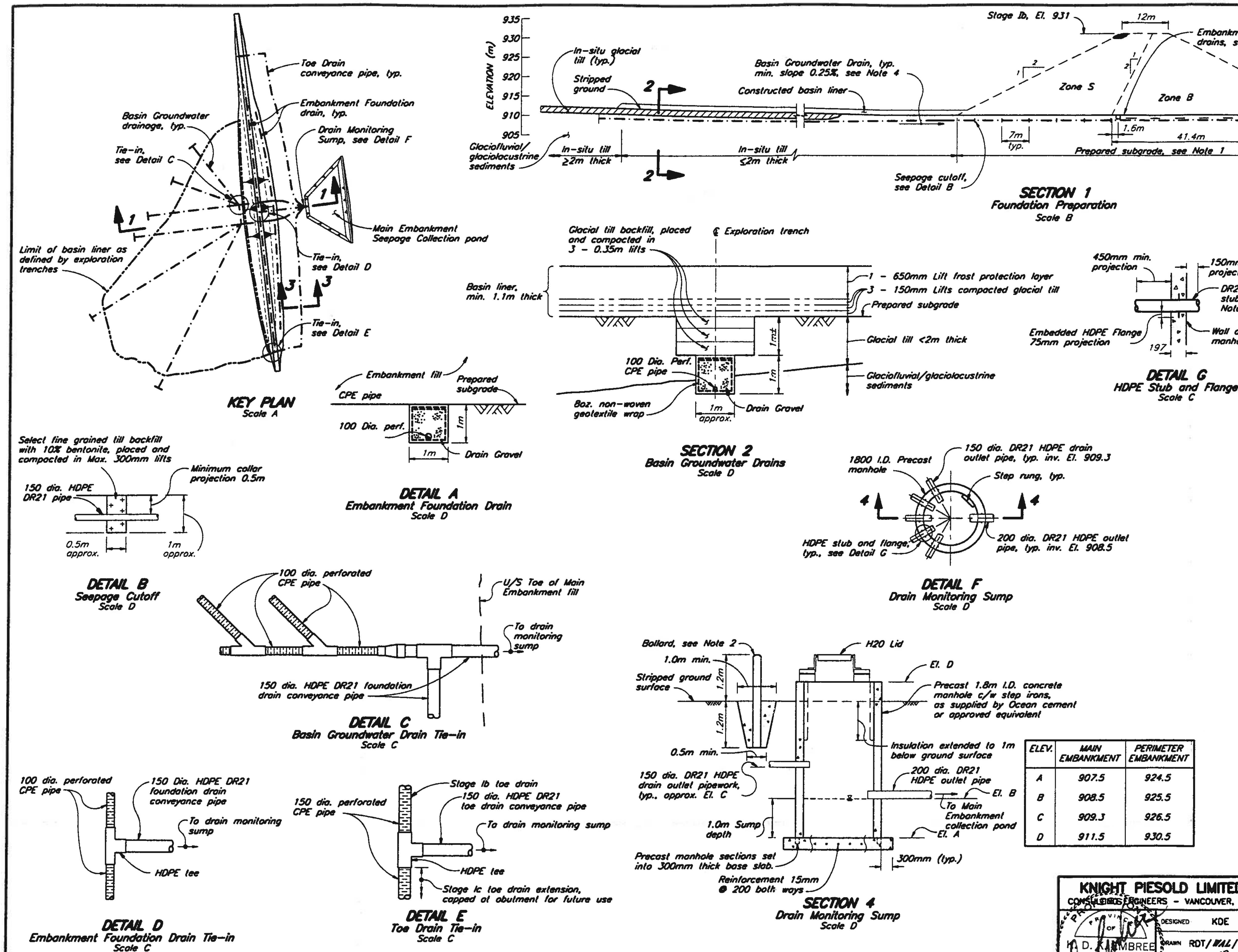
IMPERIAL METALS CORPORATION
MT. POLLEY PROJECT
SEEPAGE FLOW DEVELOPMENT
MAIN EMBANKMENT



March 31, 1995

KNIGHT PIESOLD LTD.
CONSULTING ENGINEERS

FIGURE 7.2



ELEV.	MAIN EMBANKMENT	PERIMETER EMBANKMENT
A	907.5	924.5
B	908.5	925.5
C	909.3	926.5
D	911.5	930.5

NOTES

1. Subgrade preparation to comprise stripping of topsoil and organics and removing saturated materials to establish a competent, bearing surface for fill placement as directed by the Engineer.
2. Three bollards required at 120°, 1.0m from sump. Bollards to be 200 dia. Std. Weight steel pipe filled with concrete.
3. Basin groundwater drains to be installed with a minimum continuous slope of 0.25% and without isolated low spots.
4. HDPE stubs and flanges to be cast into manhole.
5. For Main Embankment drain monitoring sump 150 dia. pipe stubs @ invert El. 909.3, 5 required. 200 dia. pipe stub @ invert El. 908.5, 1 required.
6. For Perimeter Embankment drain monitoring sump 150 dia. pipe stub, 1 required. 200 dia. pipe stub, 1 required.
7. Drain monitoring sump invert elevations may be adjusted in the field by the Engineer.
8. Buried pipework to be clearly marked by a line of stakes.

D: 1 0.5 0 1 2 3 4 5 m
C: 1 0.5 0 1 2 m
B: 10 0 10 20 30 40 50 m
A: 100 0 100 200 300 400 500 m

DRG. NO.	DESCRIPTION
REFERENCE DRAWINGS	

REV.	DATE	DESCRIPTION	APPROVED
1	MAY 26/95	ISSUED FOR DESIGN REPORT	KJB
0	APR. 6/95	ISSUED FOR REVIEW	

REVISIONS

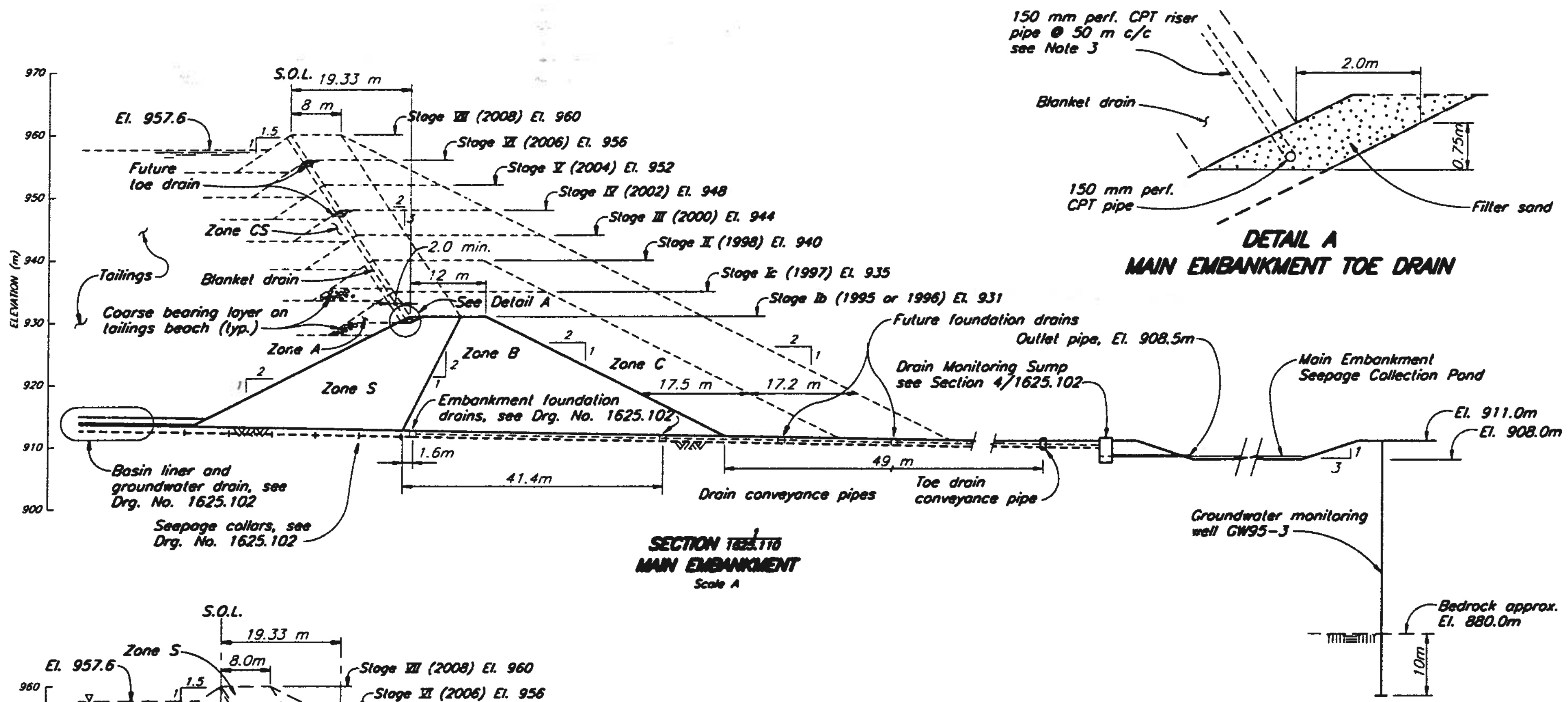
KNIGHT PIESOLD LIMITED
CONSULTING ENGINEERS - VANCOUVER, B.C.

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — K. D. KLAMBREE

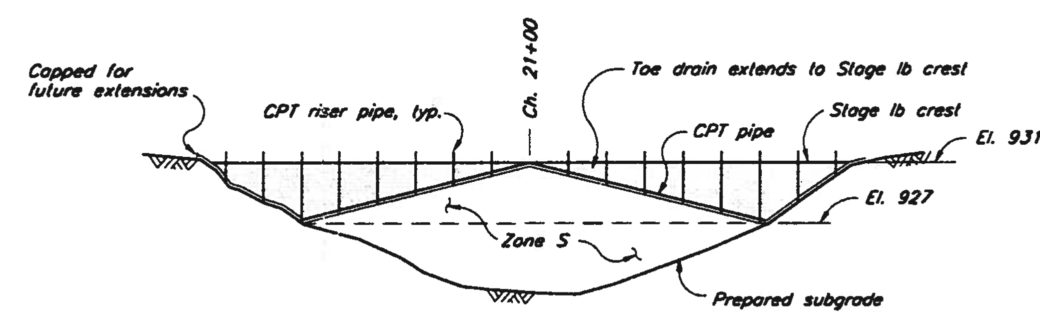
DESIGNED KDE
DRAWN RDT/WAL/NSD
CHECKED
APPROVED KJB

IMPERIAL METALS CORPORATION
MT. POLLEY PROJECT
TAILINGS STORAGE FACILITY FOUNDATION PREPARATION AND BASIN LINER SECTION AND DETAILS

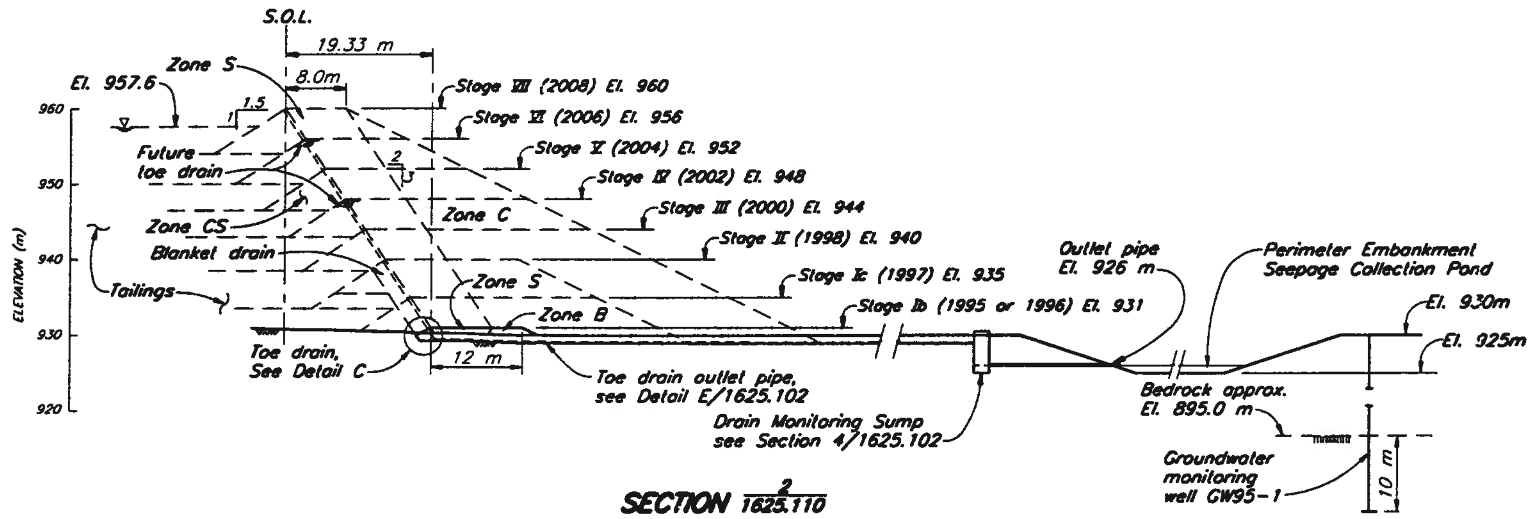
DATE APRIL 6, 1995 | SCALE AS SHOWN | DRG. NO. 1625.102 | REV. 1



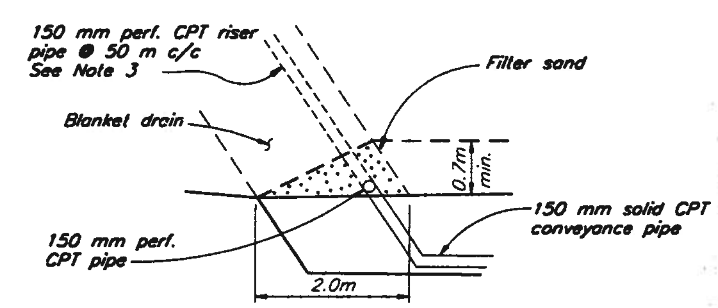
SECTION 1/1625.110
MAIN EMBANKMENT
Scale A



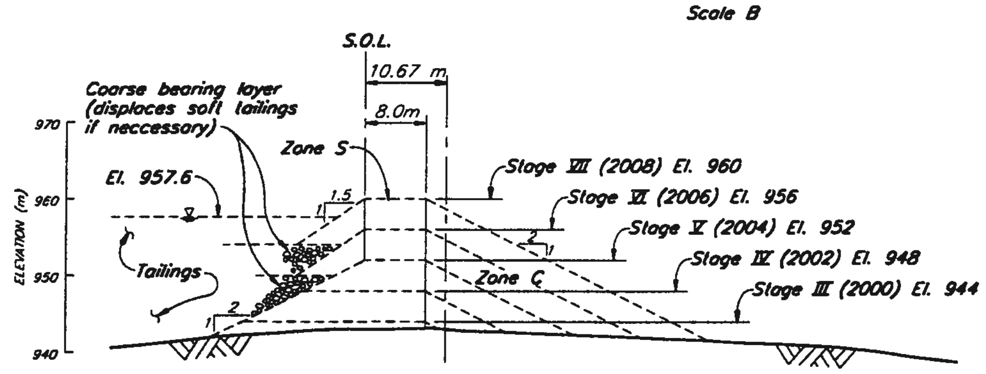
DETAIL B
UPSTREAM VIEW OF STAGE 1b
MAIN EMABNKMENT
N.T.S.



SECTION 2/1625.110
PERIMETER EMBANKMENT
Scale B



DETAIL C
PERIMETER EMBANKMENT TOE DRAIN



SECTION 3/1625.110
SOUTH EMBANKMENT

ZONE	MATERIAL TYPE	PLACEMENT AND COMPACTION REQUIREMENTS
Coarse Bearing Layer	Free draining durable waste rock fill or coarse sandy gravel	Placed and spread in maximum 1.0 m thick layers. Compaction as directed by the Engineer.
Chimney/Toe Drain	Filter sand	Placed and spread in maximum 1.0 m thick layers. Vibratory compaction as directed by the Engineer.
Drains	Drain Gravel	Placed and compacted as shown on the Drawings
S	Glacial till	Placed, moisture conditioned and spread in maximum 300 mm thick layers (after compaction). Vibratory compaction to 95% of modified proctor maximum dry density.
A	Glacial till	Placed, moisture conditioned and spread in maximum 600 mm thick layers (after compaction). Vibratory compaction to 90% of modified proctor maximum dry density.
B	Glacial till	Placed, moisture conditioned and spread in maximum 600 mm thick layers (after compaction). Vibratory compaction to 90% of modified proctor maximum dry density.
C	Random fill	Glacial till or other approved material placed in maximum 600 mm thick layers (after compaction). Vibratory compaction as required by the Engineer.
CS	Cycloned sand	Placed and spread in maximum 1.0 m thick layers. Vibratory compaction as directed by the Engineer.

NOTES

1. Groundwater monitoring wells to be insalled by Others.
2. Perimeter Embankment slopes 2H:1V as per Main Embankment.
3. Perimeter Embankment seepage collection pond to be located in the field by the Engineer. Pipework invert elevations may be adjusted in the field by the Engineer.
4. CPT Riser pipes to be installed for extensions during future embankment raises. Stages IV and VI will include a toe drain that is connected to existing outlet pipework. Additional outlet pipework to seepage ponds will be included if required.

A 10 5 0 10 20 30 40 50 m

CAD FILE:\PROJECT\1625\D1\D1 1:500 Pad 1=0.5 MAY 25, 1995

DRG. NO.	DESCRIPTION
1625.102	TAILINGS STORAGE FACILITY - FOUNDATION PREPARATION AND BASIN LINER - SECTIONS AND DETAILS
1625.110	TAILINGS STORAGE FACILITY - STAGE Ia/Ib TAILINGS IMPOUNDMENT - GENERAL ARRANGEMENT

REFERENCE DRAWINGS

REV.	DATE	DESCRIPTION	APPROVED

REVISIONS

REV.	DATE	DESCRIPTION	APPROVED
1	MAY 26/95	ISSUED FOR DESIGN REPORT	KJB
0	APR. 6/95	ISSUED FOR REVIEW	

REVISIONS

KNIGHT PIESOLD LIMITED
CONSULTING ENGINEERS - VANCOUVER, B.C.

PROVINCE OF BRITISH COLUMBIA
K. D. K. EMBREE
ENGINEER

DESIGNED KDE
DRAWN WAL/YY
CHECKED
APPROVED KJB

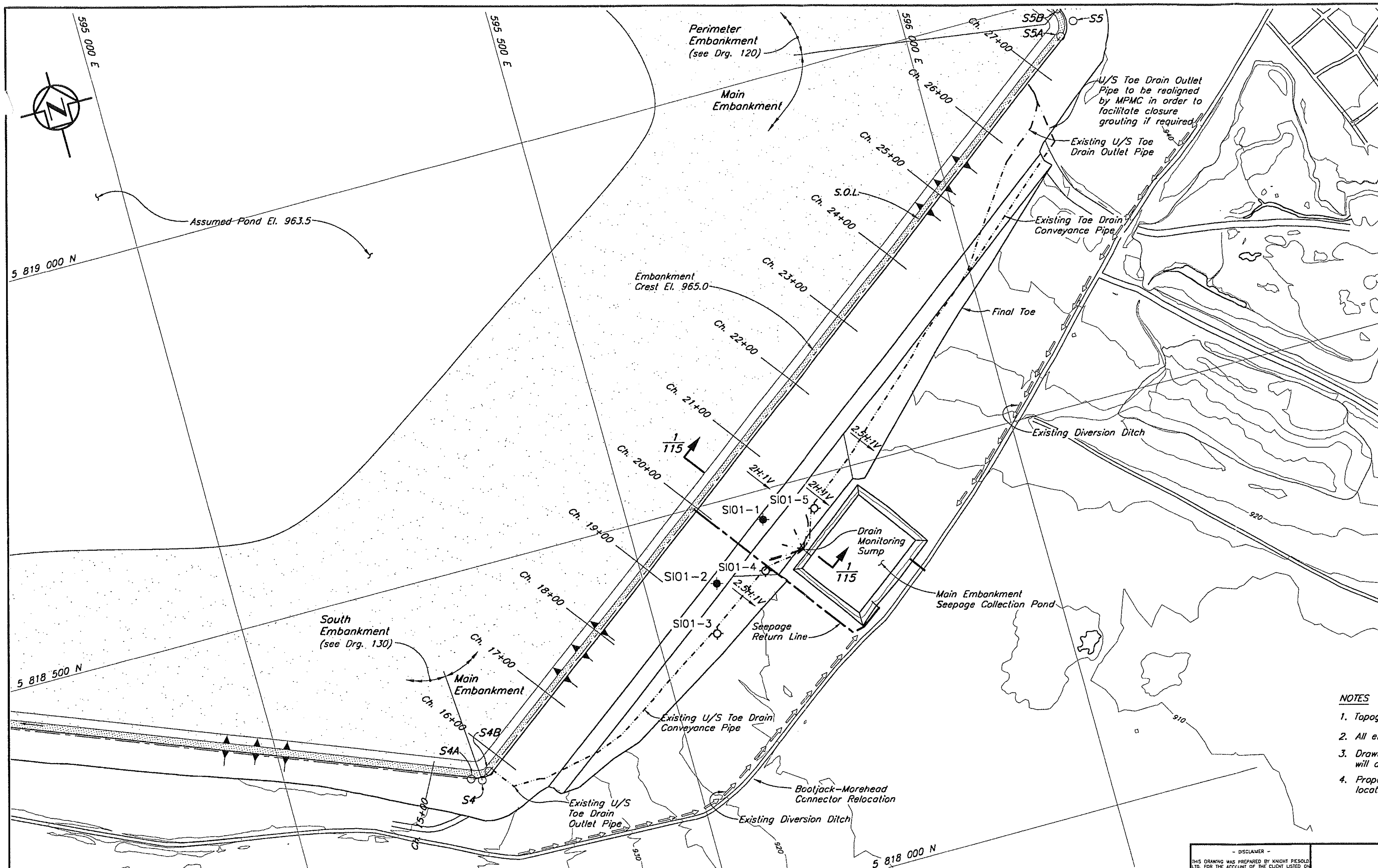
IMPERIAL METALS CORPORATION

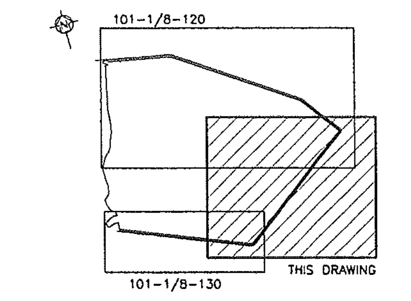
MT. POLLEY PROJECT

TAILINGS STORAGE FACILITY
TAILINGS EMBANKMENT
SECTIONS AND DETAILS

DATE APRIL 6, 1995 | SCALE AS SHOWN | DRG. NO. 1625.111 | REV. 1

AMEC010406_0048





KEY PLAN

NOTES

1. Topography from 2004 flyover.
2. All elevations in metres, unless noted otherwise.
3. Drawing is for reference only. Actual configuration will depend on construction as-builts.
4. Proposed locations for slope inclinometers. Actual locations will be determined after ongoing reviews.

LEGEND

- Existing Inclinometer
- Proposed Inclinometer

NOT FOR CONSTRUCTION

Scale 50 0 50 100 150 200 250 Metres

DRG. NO.	DESCRIPTION
130	ULTIMATE SOUTH EMBANKMENT - PLAN
120	ULTIMATE PERIMETER EMBANKMENT - PLAN
115	ULTIMATE MAIN EMBANKMENT - SECTION

REFERENCE DRAWINGS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D

REVISIONS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
0	09MAR'05	ISSUED FOR REPORT	AT	JT		KJB

REVISIONS

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
L.J. GALBRAITH
25493

Knight Piésold
CONSULTING

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

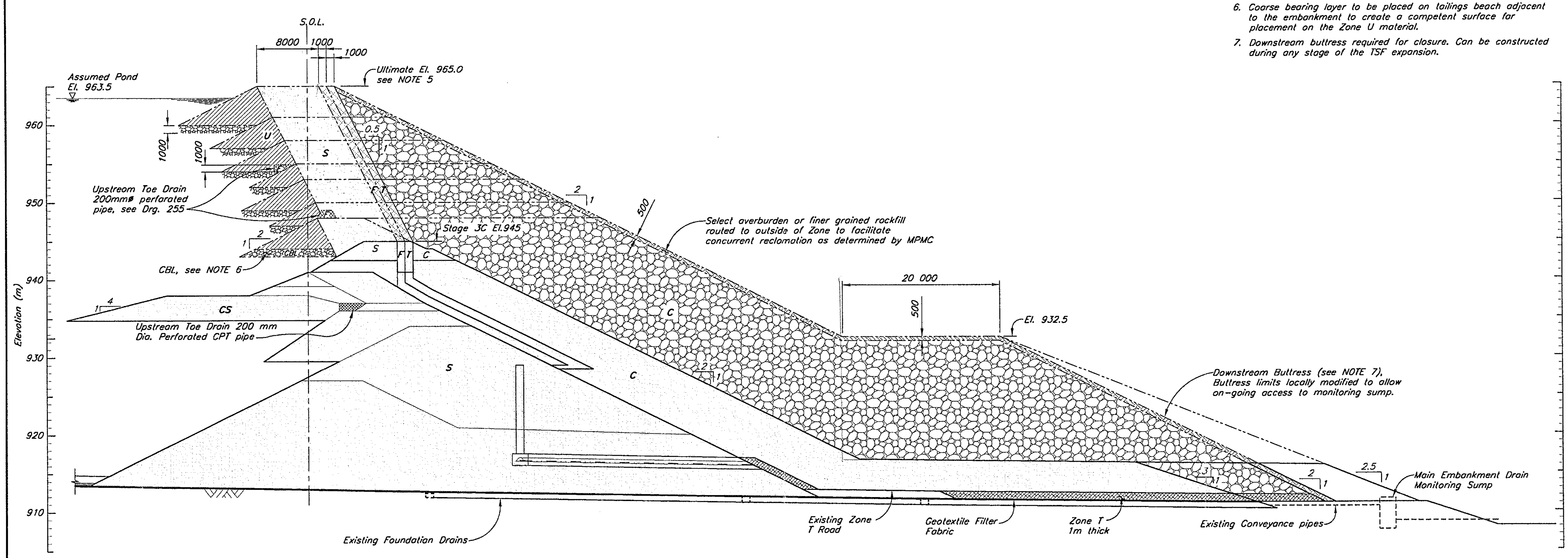
TAILINGS STORAGE FACILITY
ULTIMATE MAIN EMBANKMENT
PLAN

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/8	110	0

XREF FILE : Topo2004_GA, Ultimate Plan

NOTES

1. *For zone material specifications and legend see Drg. 104.*
2. *All dimensions in millimetres and elevations in metres, unless noted otherwise.*
3. *Minimum lines and grades shown. Lines and grades may be extended upstream and downstream during Stage 4 construction.*
4. *Drawing is for reference only. IFC drawings will be issued for each stage construction.*
5. *Crest details to be revised to suit final reclamation objectives. A suitable wearing course, topsoil cover and revegetation are anticipated.*
6. *Coarse bearing layer to be placed on tailings beach adjacent to the embankment to create a competent surface for placement on the Zone U material.*
7. *Downstream buttress required for closure. Can be constructed during any stage of the TSF expansion.*



SECTION $\frac{1}{110}$

NOT FOR CONSTRUCTION

Scale 5 0 5 10 15 20 25 m

DRG. NO.	DESCRIPTION
110	ULTIMATE MAIN EMBANKMENT – PLAN
104	ULTIMATE TAILINGS EMBANKMENT – MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D

REVISIONS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
0	09MAR'05	ISSUED FOR REPORT	AT	JT		

REVISIONS

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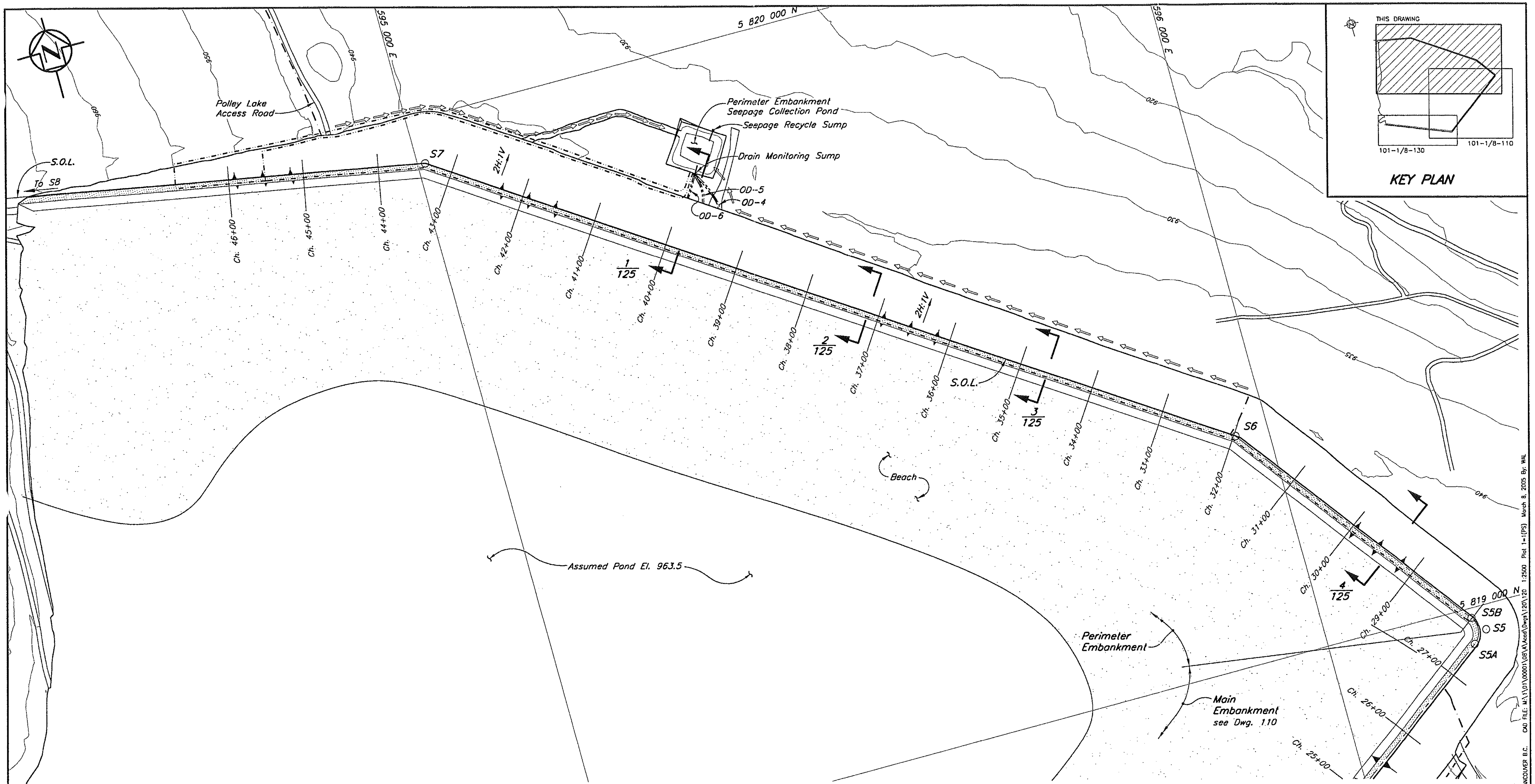
MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
ULTIMATE MAIN EMBANKMENT
SECTION

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/8	115	0

VANCOUVER B.C.



EMBANKMENT SETTING OUT POINTS			
Point	Northing	Easting	Chainage
S1	5 818 626.163	594 249.555	5+00.00
S4A	5 818 243.621	595 227.361	15+49.97
S4B	5 818 246.923	595 251.497	15+77.87
S4	5 818 238.539	595 240.350	15+63.92
S5A	5 818 951.971	596 188.906	27+50.83
S5B	5 818 986.958	596 193.873	28+00.78
S5	5 818 966.983	596 208.866	27+75.80
S6	5 819 304.035	595 955.881	31+97.23
S7	5 819 939.748	595 010.249	43+36.69
S8	5 820 053.034	594 396.471	49+60.83

NOTES

1. Topography from 2004 Flyover.
2. All dimensions in millimetres and elevations in metres, unless noted otherwise.
3. Drawing is for reference only.

NOT FOR CONSTRUCTION

Scale 50 0 50 100 150 200 250 m

DRG. NO.	DESCRIPTION
125	ULTIMATE PERIMETER EMBANKMENT – SECTIONS
110	ULTIMATE MAIN EMBANKMENT – PLAN

REFERENCE DRAWINGS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D

REVISIONS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
0	09MAR'05	ISSUED FOR REPORT	AT	JT		KJB

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PROVINCE OF BRITISH COLUMBIA
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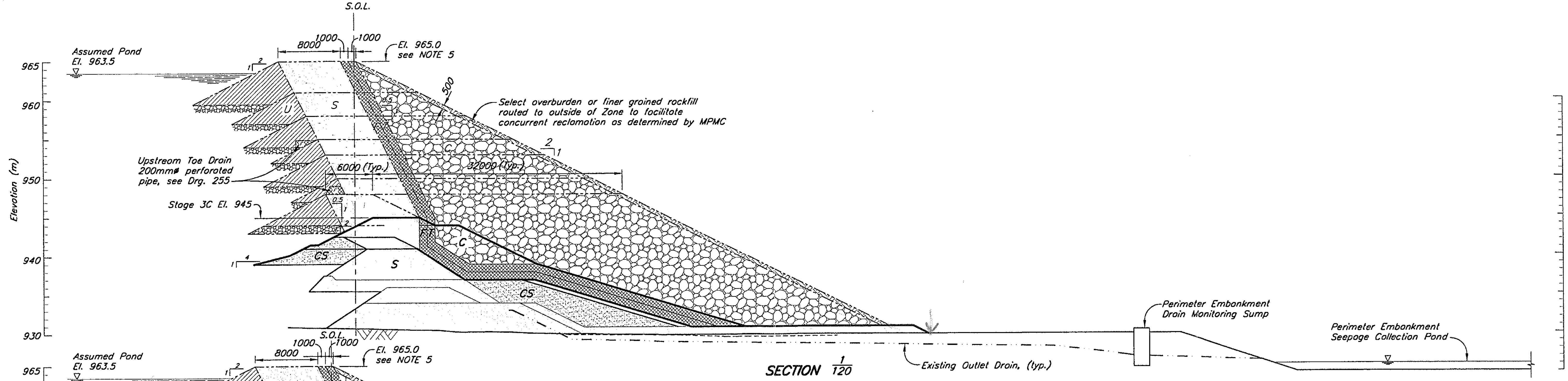
MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
ULTIMATE PERIMETER EMBANKMENT
PLAN

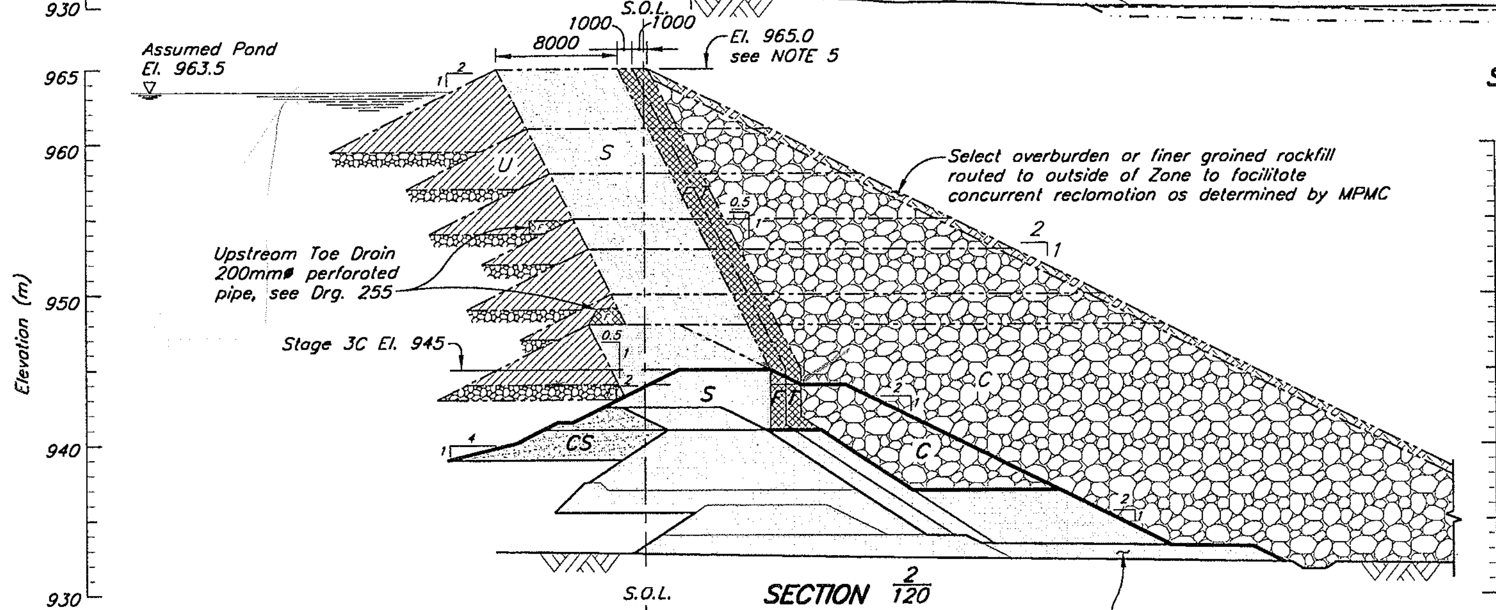
PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/8	120	0

XREF FILE : Topo2004_ _Plan

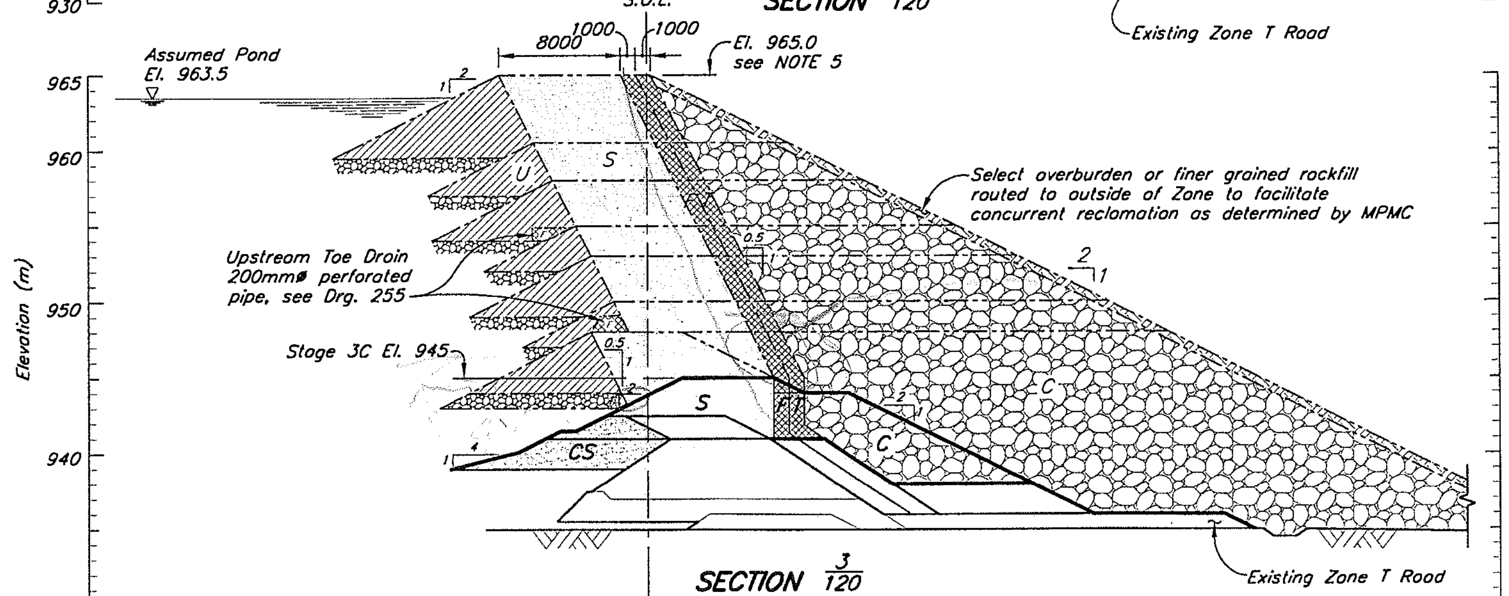
VANCOUVER B.C. CAD FILE: M:\1\01\00001\08\A\Acad\Dwgs\120\120 1:2500 Plot 1=1(PS) March 8, 2005 By: WAL



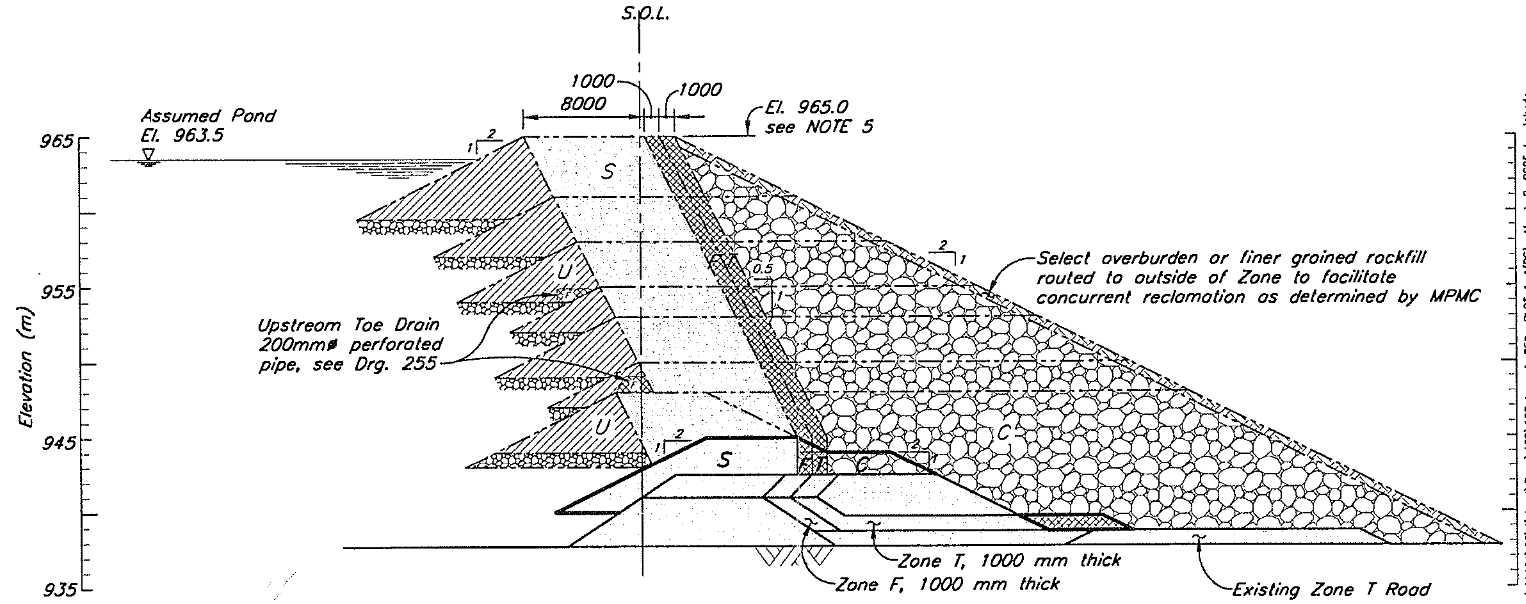
SECTION 1/120



SECTION 2/120



SECTION 3/120



SECTION 4/120

NOTES

1. For zone material specifications and legend see Drg. 104.
2. All dimensions in millimetres and elevations in metres, unless noted otherwise.
3. Minimum lines and grades shown. Lines and grades may be extended upstream and downstream during Stage 4 construction.
4. Drawing is for reference only. IFC drawings will be issued for each Construction Stage.
5. Crest details to be revised to suit final reclamation objectives. A suitable wearing course, topsoil cover and revegetation are anticipated.
6. Coarse bearing layer to be placed on tailings beach adjacent to the embankment to create a competent surface for placement on the Zone U material.

NOT FOR CONSTRUCTION

Scale 5 0 5 10 15 20 25 m

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TAILINGS STORAGE FACILITY
ULTIMATE PERIMETER EMBANKMENT
SECTIONS

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/8	125	0

DRG. NO.	DESCRIPTION
120	ULTIMATE PERIMETER EMBANKMENT - PLAN
104	ULTIMATE TAILINGS EMBANKMENT - MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D

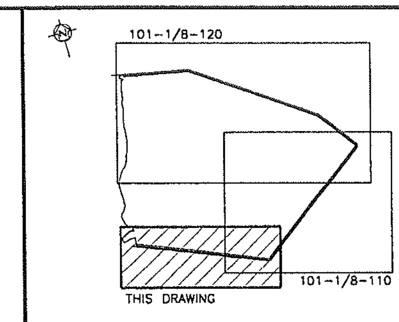
REVISIONS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
0	09MAR'05	ISSUED FOR REPORT	AT	JT	[illegible]	KJB

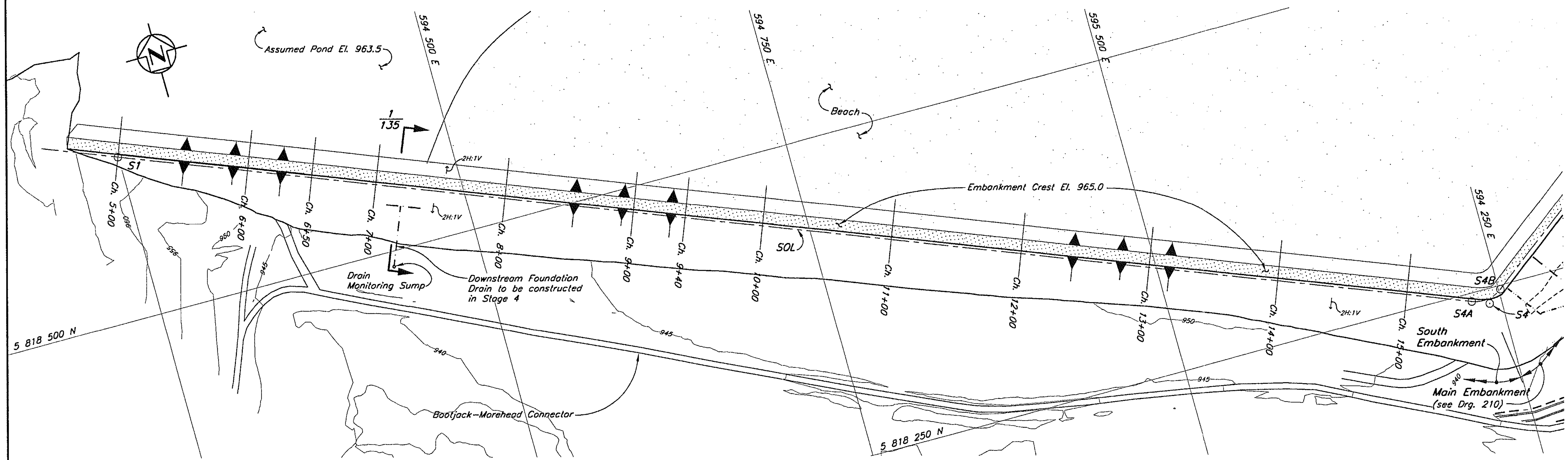
REVISIONS

XREF FILE: -

VANCOUVER B.C. CAD FILE: M:\1\01\00001\08\A\Acad\Dwgs\125\125.dwg 1=250 PLOT 1=1(PS) March 8, 2005 by:kdoda



KEY PLAN



NOT FOR CONSTRUCTION

Scale 30 0 30 60 90 120 150 m

NOTES

1. Topography from 2004 Flyover.
2. All dimensions in millimetres and elevations in metres, unless noted otherwise.
3. Drawing is for reference only.

DRG. NO.	DESCRIPTION
135	ULTIMATE SOUTH EMBANKMENT - SECTION
120	ULTIMATE PERIMETER EMBANKMENT - PLAN
110	ULTIMATE MAIN EMBANKMENT - PLAN
104	ULTIMATE TAILINGS EMBANKMENT - MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D

REVISIONS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
0	09MAR'05	ISSUED FOR REPORT	AT	JT		KJB

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MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
ULTIMATE SOUTH EMBANKMENT
PLAN

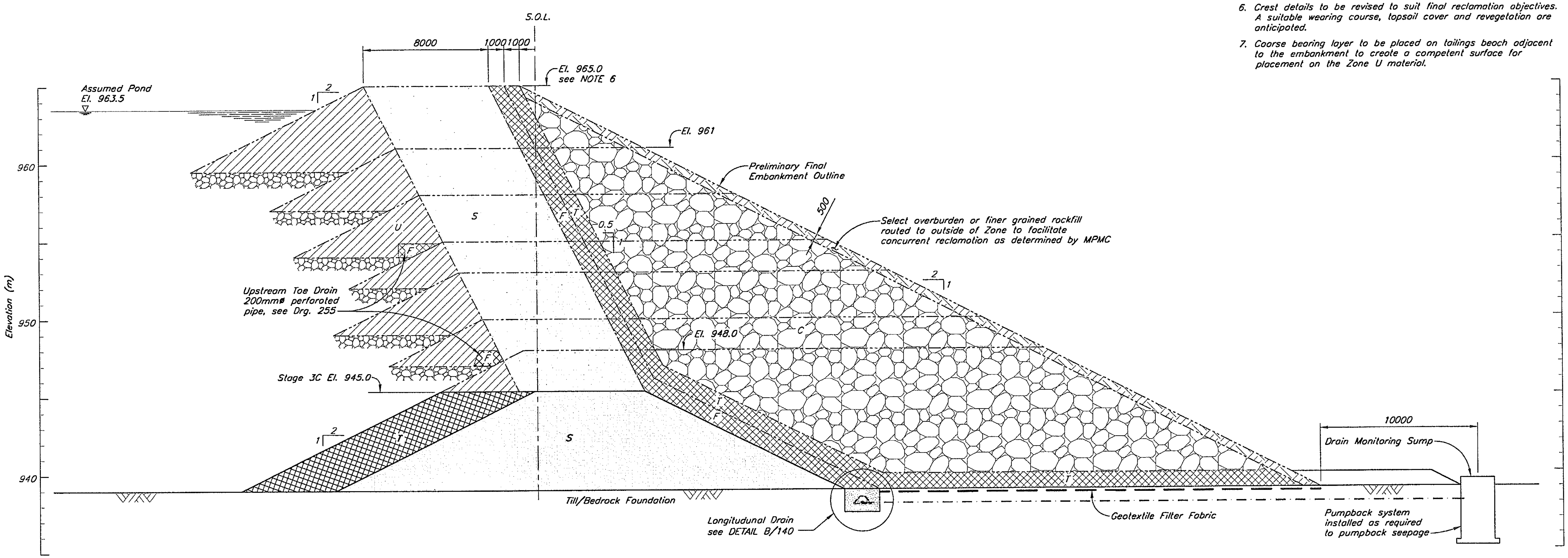
PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/8	130	0

XREF FILE: Topo2004_CA, Ultimate_Plan

VANCOUVER B.C. CAD FILE: M:\1\01\00001\08\A\Acad\Dwgs\130\130 1=1500 Plot 1=1(PS) Feb.18, 2005 By:WML

NOTES

1. *For zone material specifications and legend see Drg. 104*
2. *All dimensions in millimetres and elevations in metres, unless noted otherwise.*
3. *Minimum lines and grades shown. Lines and grades may be extended upstream and downstream during Stage 4 construction.*
4. *Outlet drain/downstream foundation drain to be constructed in Stage 4*
5. *Drawing is for reference only. IFC drawings will be issued for each stage construction.*
6. *Crest details to be revised to suit final reclamation objectives. A suitable wearing course, topsoil cover and revegetation are anticipated.*
7. *Coarse bearing layer to be placed on tailings beach adjacent to the embankment to create a competent surface for placement on the Zone U material.*



SECTION $\frac{1}{130}$

NOT FOR CONSTRUCTION

Scale 2 0 2 4 6 8 10 m

DRG. NO.	DESCRIPTION
130	ULTIMATE SOUTH EMBANKMENT – PLAN
104	ULTIMATE TAILINGS EMBANKMENT – MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D

REVISIONS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
0	09MAR'05	ISSUED FOR REPORT	AT	JT		KJB

REVISIONS

PROFESSIONAL ENGINEER – PROVINCE OF BRITISH COLUMBIA – 25493

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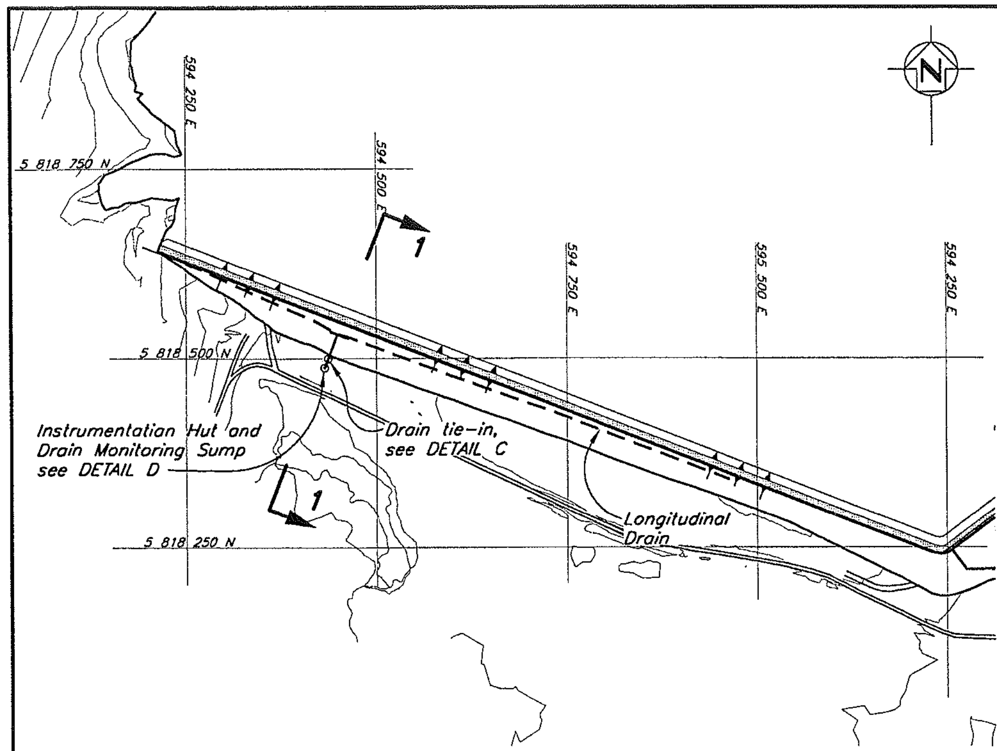
CONSULTING

MOUNT POLLEY MINING CORPORATION

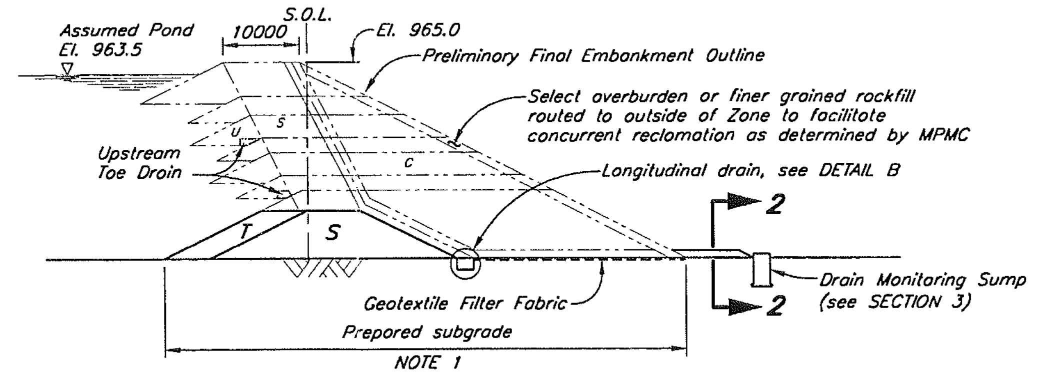
MOUNT POLLEY MINE

**TAILINGS STORAGE FACILITY
ULTIMATE SOUTH EMBANKMENT
SECTION**

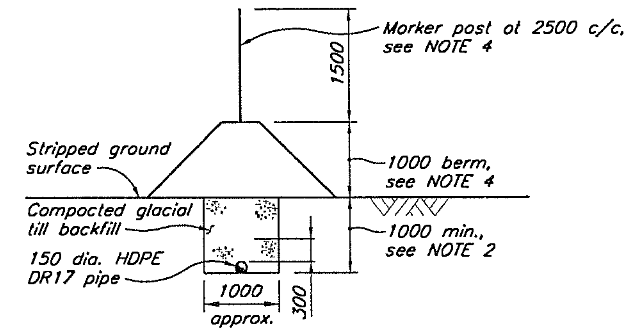
PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/8	135	0



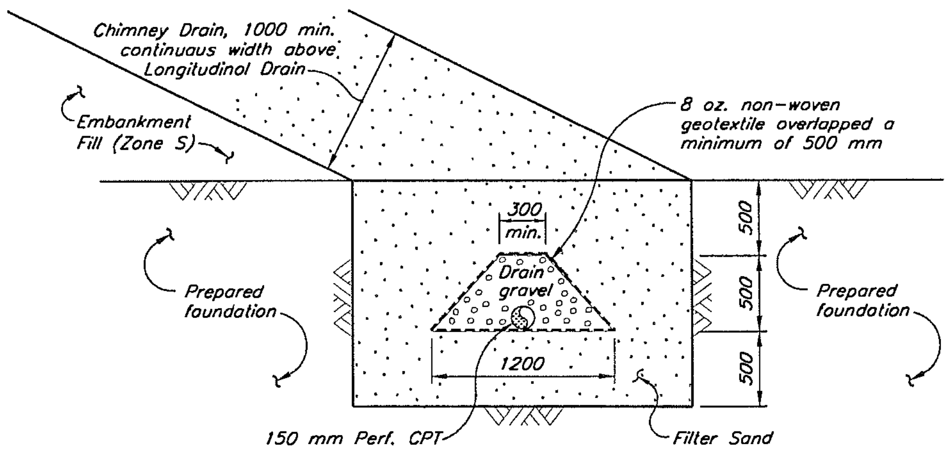
SOUTH EMBANKMENT PLAN
Scale A



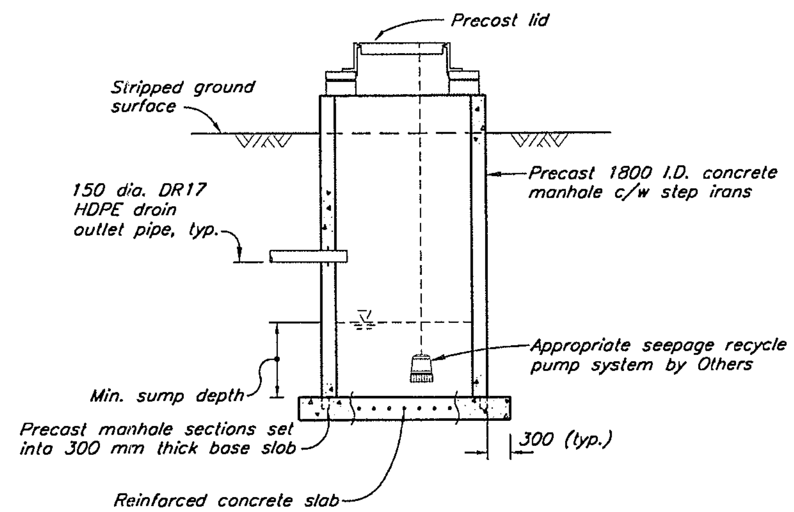
SECTION 1
Scale B



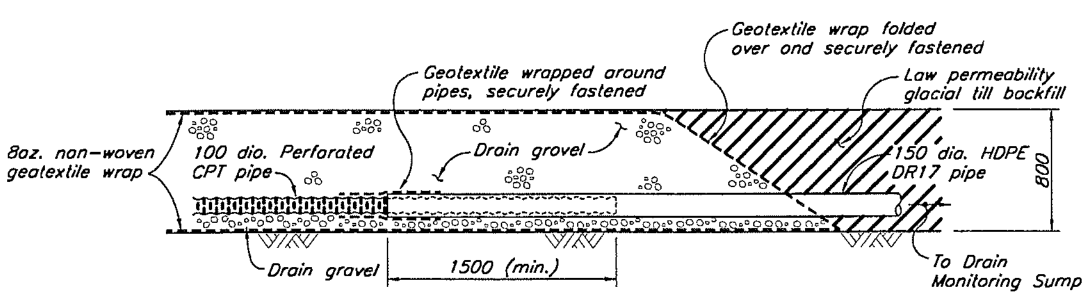
SECTION 2
Scale D



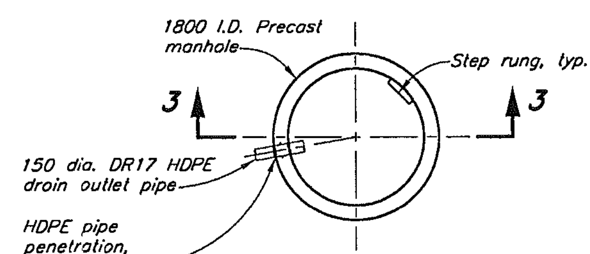
DETAIL B , $\frac{B}{135}$
LONGITUDINAL DRAIN
Scale C



SECTION 3
Scale D



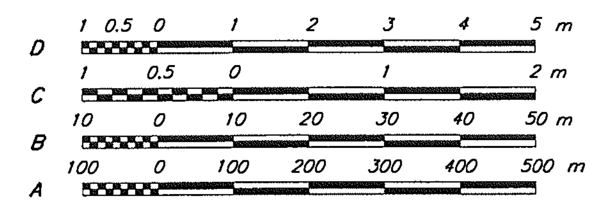
DETAIL C
EMBANKMENT FOUNDATION DRAIN TIE-IN (IN SECTION)
Scale C



DETAIL D
DRAIN MONITORING SUMP
Scale D

NOTES

1. Subgrade preparation to comprise stripping of topsoil and organics and removing saturated materials to establish a competent, bearing surface for fill placement as directed by the Engineer.
2. All pipework to have a minimum of 1 m of cover for frost protection.
3. All HDPE pipe penetrations to be water tight.
4. Buried pipework to be covered by a berm and clearly marked by a line of stakes.
5. Drain Monitoring Sump is conceptual only. Details to be provided in the Stage 4 design of the TSF.



NOT FOR CONSTRUCTION

DRG. NO.	DESCRIPTION
135	ULTIMATE SOUTH EMBANKMENT - SECTION
130	ULTIMATE SOUTH EMBANKMENT - PLAN

REFERENCE DRAWINGS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
0	09MAR'05	ISSUED FOR REPORT	AT	ND		

REVISIONS

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PROVINCE OF BRITISH COLUMBIA
L.J. GALBRAITH
25493

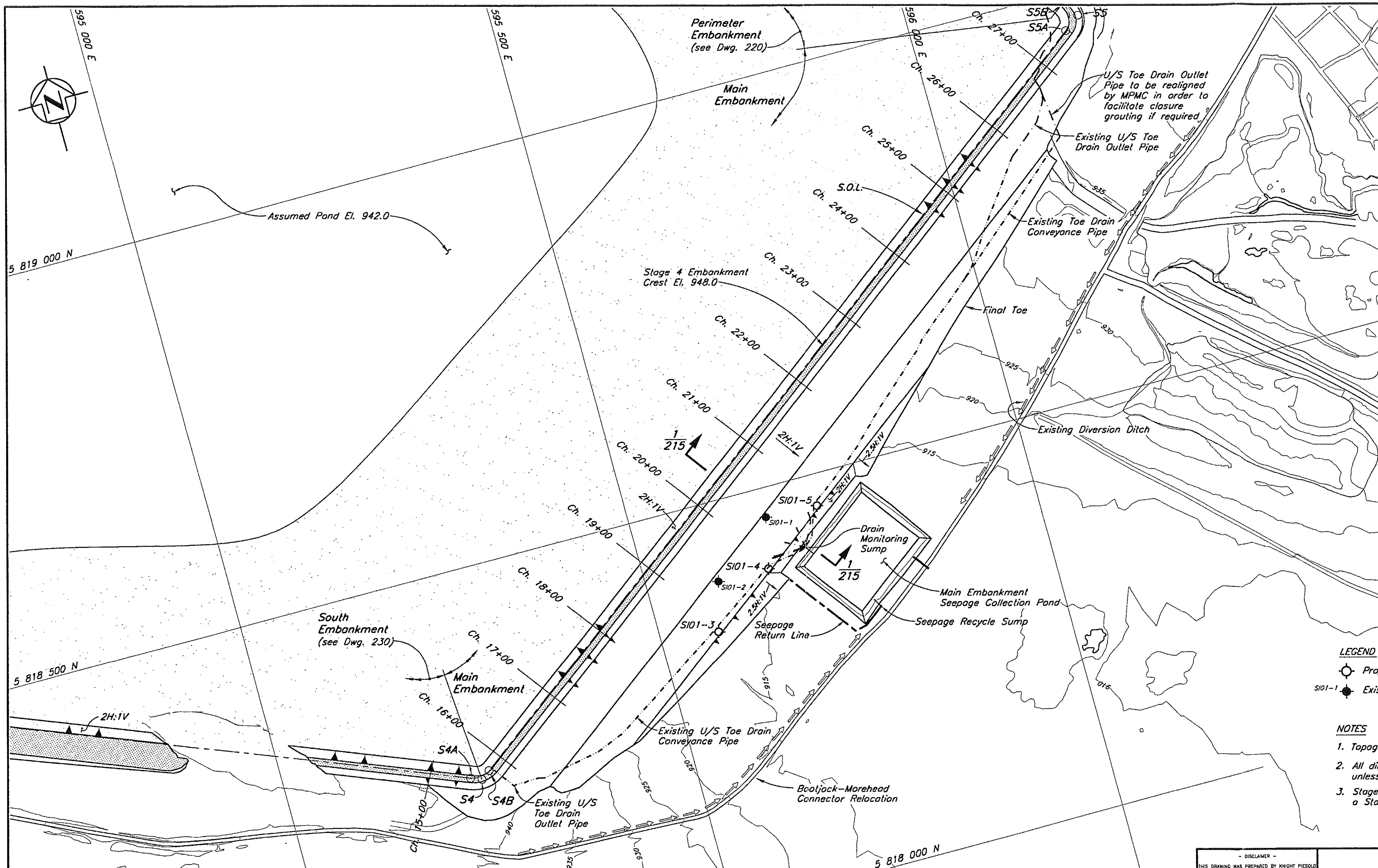
Knight Piésold
CONSULTING

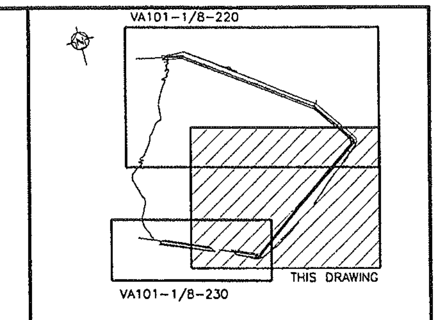
MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
SOUTH EMBANKMENT
LONGITUDINAL AND FOUNDATION DRAIN
SECTIONS AND DETAILS

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/8	140	0





KEY PLAN

LEGEND

Proposed Inclinometer

SI01-1 Existing Inclinometer

NOTES

1. Topography from 2004 flyover
2. All dimensions in millimetres and elevations in metres, unless noted otherwise.
3. Stage 4 construction dimensions and volumes assume a Stage 3C crest elevation of El. 945m.

NOT FOR CONSTRUCTION

Scale 50 0 50 100 150 200 250 Metres

DRG. NO.	DESCRIPTION
230	STAGE 4 SOUTH EMBANKMENT – PLAN
220	STAGE 4 PERIMETER EMBANKMENT – PLAN
215	STAGE 4 MAIN EMBANKMENT – SECTIONS AND DETAILS

REFERENCE DRAWINGS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D

REVISIONS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
0	09MAR'05	ISSUED FOR REPORT	AT	JT	[signature]	[signature]

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Knight Piésold
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MOUNT POLLEY MINING CORPORATION

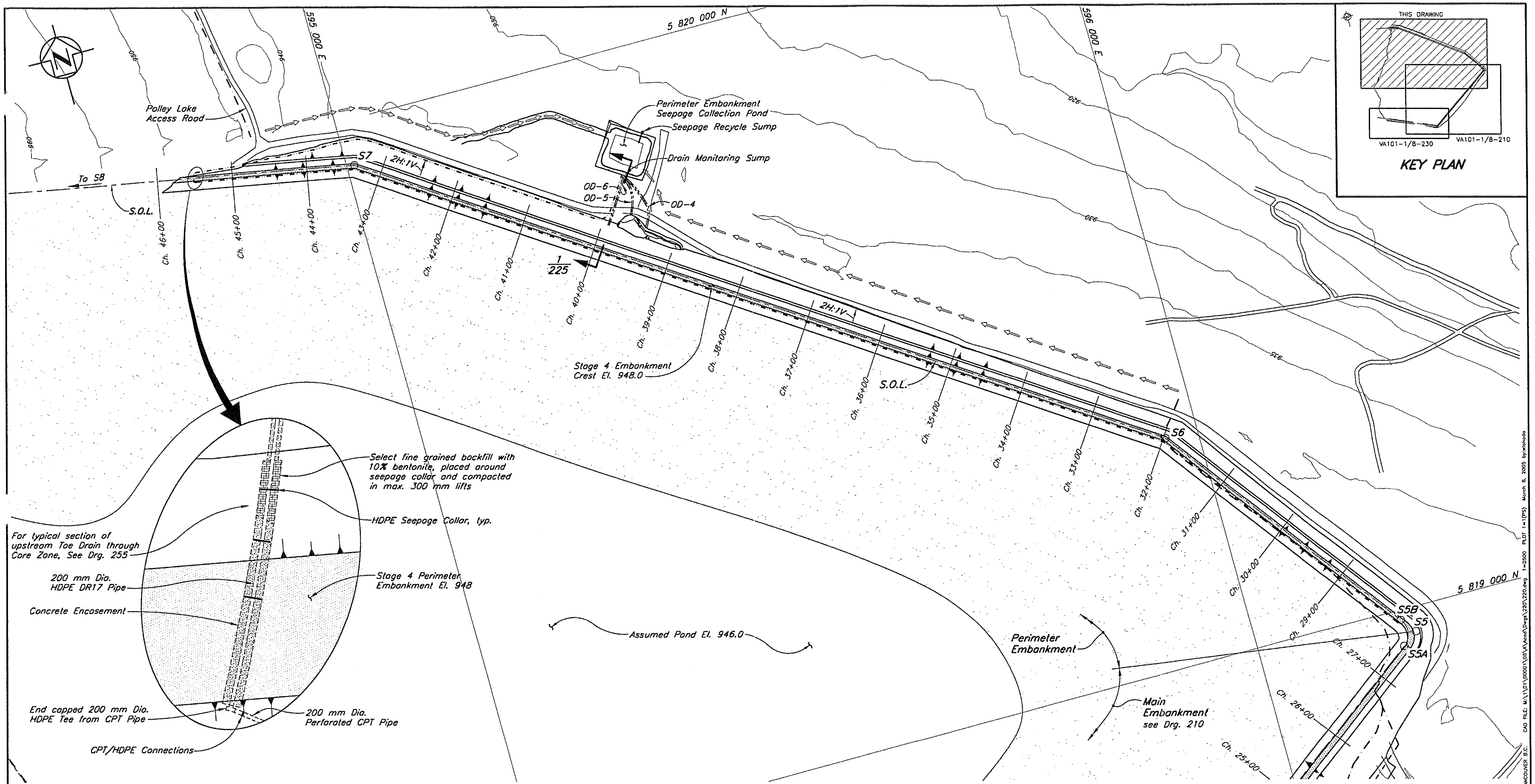
MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 4 MAIN EMBANKMENT
PLAN

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/8	210	0

XREF FILE : Topo2004_GA, Stage4_Plan

VANCOUVER B.C. CAD FILE: M:\1\01\00001\08\A\Acad\Dwgs\210\210.dwg 1=2500 PLOT 1=1(PS) March 8, 2005 by:aktnodo



EMBANKMENT SETTING OUT POINTS			
Point	Northing	Easting	Chainage
S1	5 818 626.163	594 249.555	5+00.00
S4A	5 818 243.621	595 227.361	15+49.97
S4B	5 818 246.923	595 251.497	15+77.87
S4	5 818 238.539	595 240.350	15+63.92
S5A	5 818 951.971	596 188.906	27+50.83
S5B	5 818 986.958	596 193.873	28+00.78
S5	5 818 966.983	596 208.866	27+75.80
S6	5 819 304.035	595 955.881	31+97.23
S7	5 819 939.748	595 010.249	43+36.69
S8	5 820 053.034	594 396.471	49+60.83

NOTES

1. Topography from 2004 flyover.
2. All dimensions in millimetres and elevations in metres, unless noted otherwise.
3. Stage 4 construction dimensions and volumes assume a Stage 3C crest elevation of El. 945m.
4. Upstream toe drain pipe to be realigned by MPMC in order to facilitate closure grouting if required.

NOT FOR CONSTRUCTION

Scale 50 0 50 100 150 200 250 m

DRG. NO.	DESCRIPTION
230	STAGE 4 SOUTH EMBANKMENT – PLAN
225	STAGE 4 PERIMETER EMBANKMENT – SECTIONS
210	STAGE 4 MAIN EMBANKMENT – PLAN

REFERENCE DRAWINGS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
0	09MAR'05	ISSUED FOR REPORT	AT	JT		

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PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA L.J. GALBRAITH 25493

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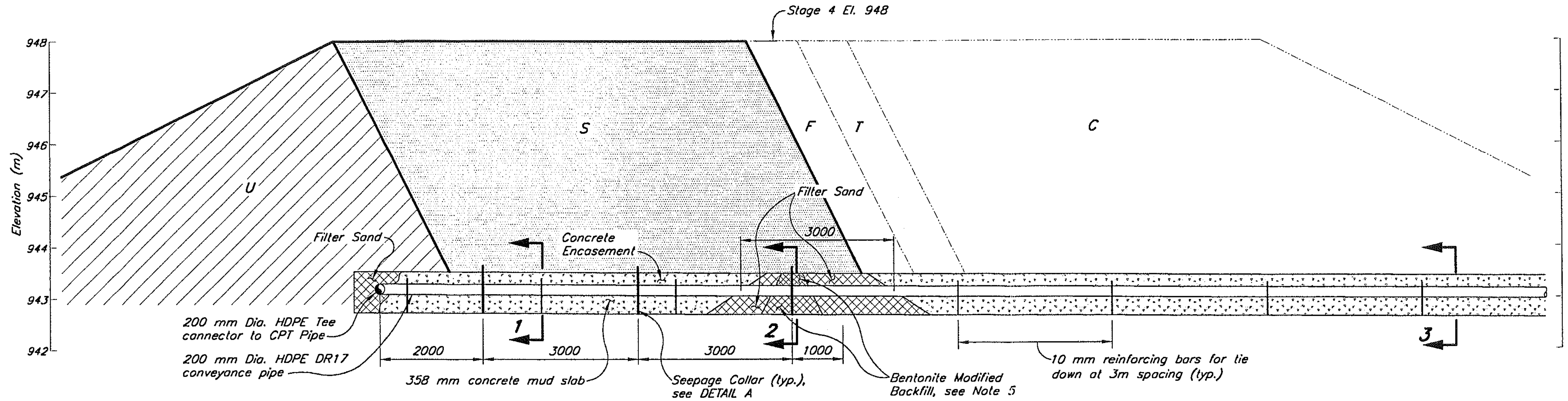
MOUNT POLLEY MINING CORPORATIOIN

MOUNT POLLEY MINE

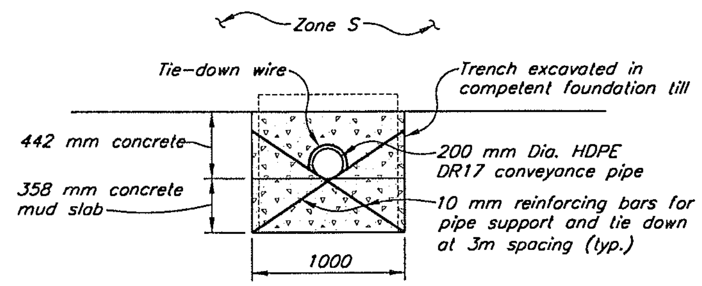
TAILINGS STORAGE FACILITY
STAGE 4 PERIMETER EMBANKMENT
PLAN

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/8	220	0

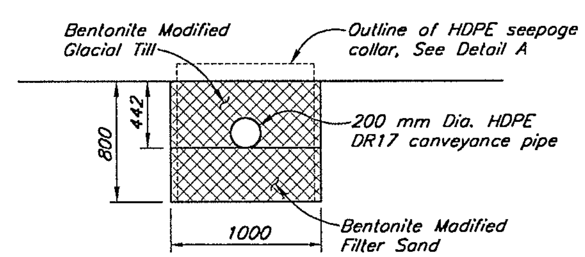
AMEC010406_0057



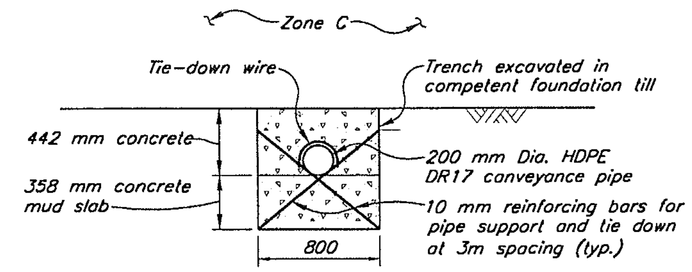
TYPICAL SECTION OF UPSTREAM TOE DRAIN AT ABUTMENTS
Scale A



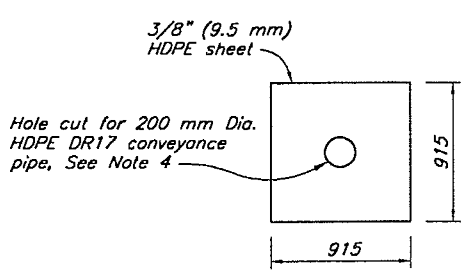
SECTION 1
Scale B



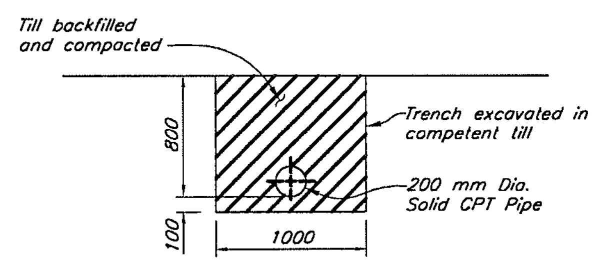
SECTION 2
Scale B



SECTION 3
Scale B



DETAIL A
HDPE Seepage Collar
Scale B

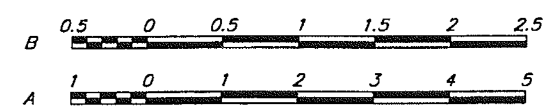


DETAIL $\frac{B}{T25}$
Scale B

NOTES

1. Subgrade preparation comprised stripping of topsoil and organics and removing saturated materials to establish a competent bearing surface for fill placement as directed by the Engineer.
2. All downstream pipeworks have a minimum of 1 m of cover for frost protection.
3. All HDPE pipe penetrations to be water tight.
4. HDPE seepage collar fabricated and welded to pipe prior to delivery to site.
5. Select fine grained backfill and filter sand below with 10% bentonite, placed and compacted in max. 300 mm lifts.
6. Locations of Toe Drains to be in competent foundation materials as determined by the Engineer.

NOT FOR CONSTRUCTION



DRG. NO.	DESCRIPTION
125	ULTIMATE PERIMETER EMBANKMENT – SECTIONS
120	ULTIMATE PERIMETER EMBANKMENT – PLAN

REFERENCE DRAWINGS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
0	09MAR'05	ISSUED FOR REPORT	AT	JT		

REVISIONS

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L.J. GALBRAITH
25493
PROFESSIONAL ENGINEER

Knight Piésold CONSULTING

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
UPSTREAM TOE DRAIN
GENERAL DETAILS AND SECTIONS

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/8	255	0

XREF FILE: T0P099

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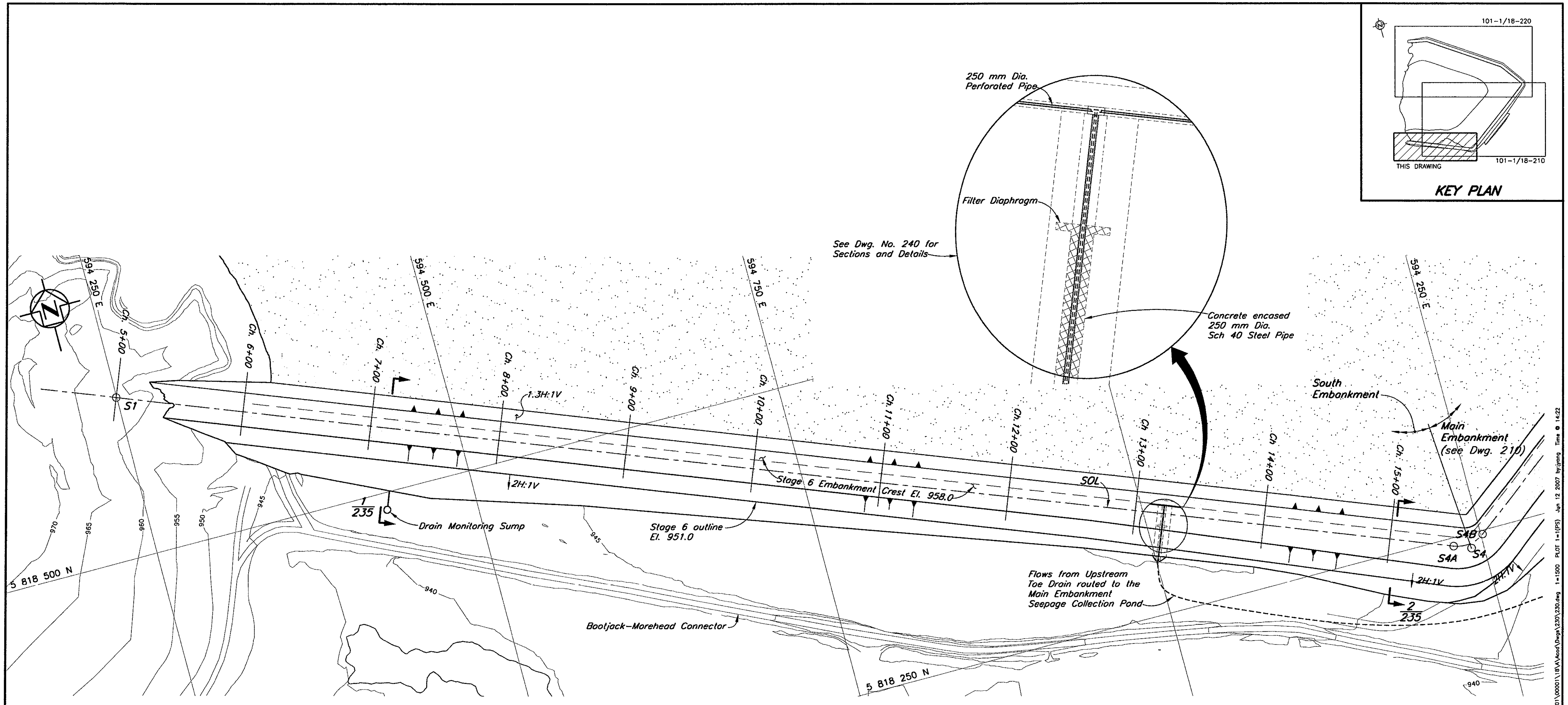
AMEC010406_0058



PLAN

Scale 30 0 30 60 90 120 150 m

KEY PLAN

NOT FOR CONSTRUCTION

NOTES

1. Topography from 2004 flyover.
2. All dimensions in millimetres and elevations in metres, unless noted otherwise.

DRG. NO.	DESCRIPTION
235	STAGE 6 SOUTH EMBANKMENT – SECTIONS
220	STAGE 6 PERIMETER EMBANKMENT – PLAN
210	STAGE 6 MAIN EMBANKMENT – PLAN
104	STAGE 6 TAILINGS EMBANKMENT – MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D

REVISIONS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
0	08JUN'07	ISSUED FOR STAGE 6 PERMITTING	LJG	JY	BB	

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MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 6 SOUTH EMBANKMENT
PLAN

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/18	230	0

XREF FILE: -

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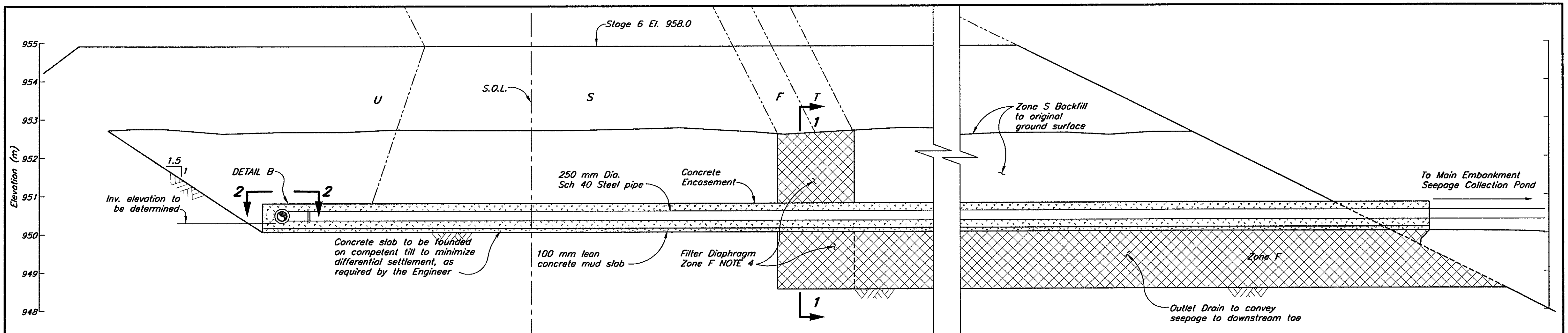
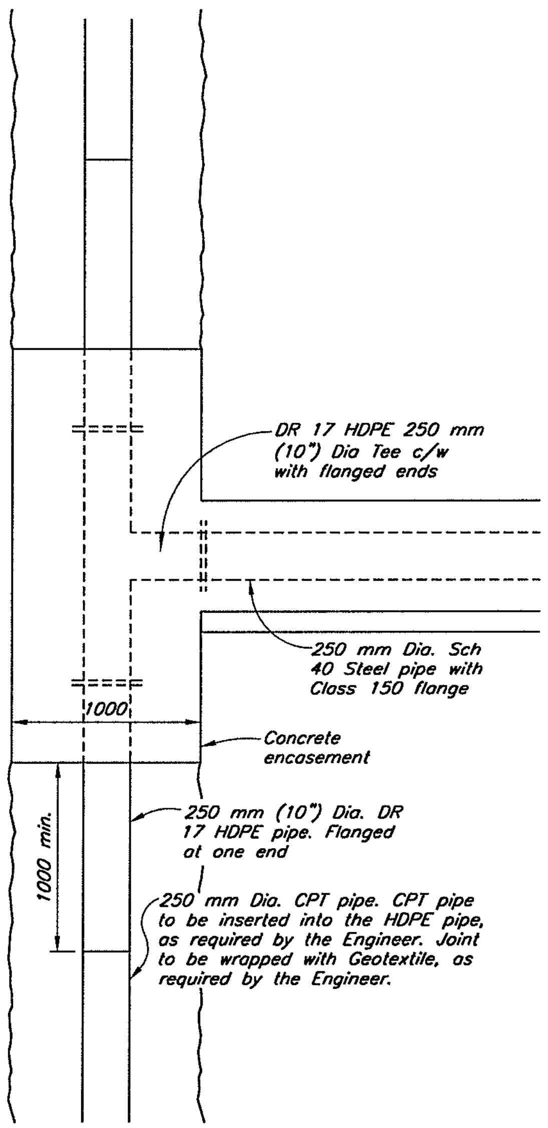
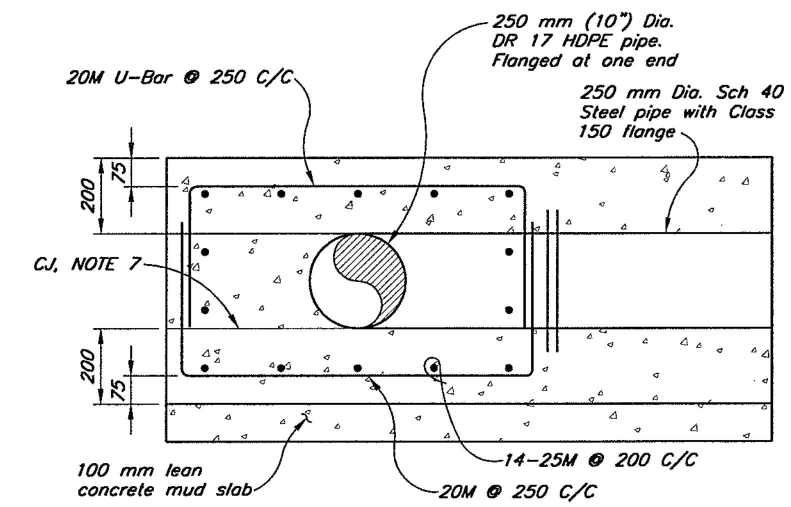


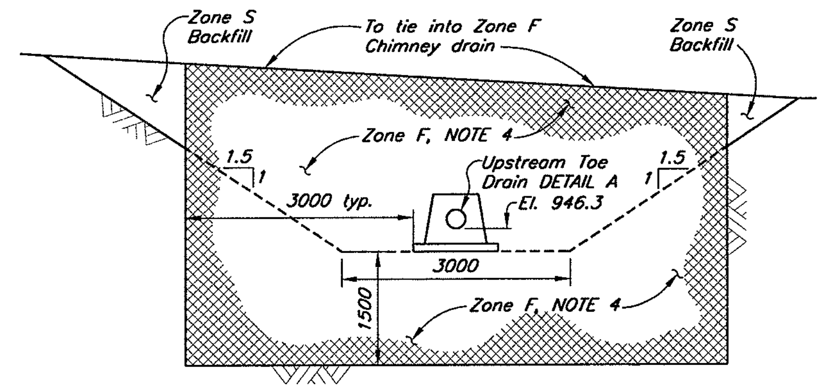
TYPICAL SECTION OF UPSTREAM TOE DRAIN AT ABUTMENTS
Scale A



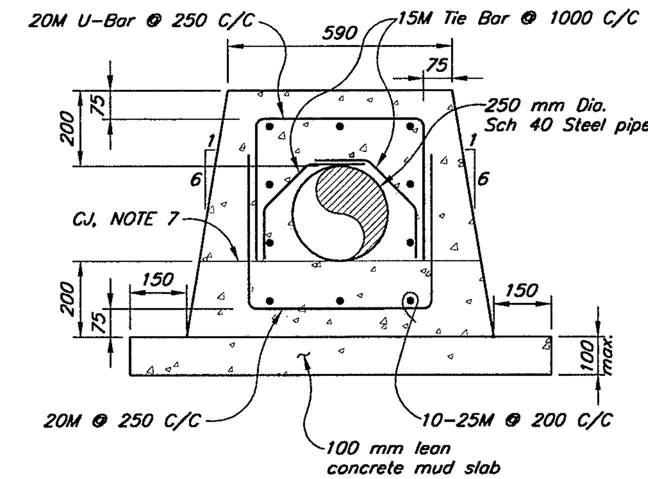
SECTION 2
UPSTREAM TOE DRAIN TO OUTLET DRAIN CONNECTION
Scale C



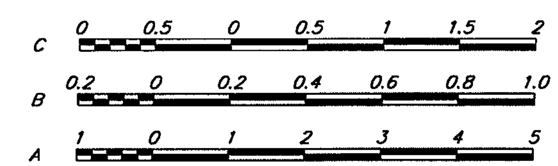
DETAIL B – UPSTREAM TOE DRAIN
CONCRETE ENCASEMENT REINFORCEMENT DETAILS
Scale B



SECTION 1 – FILTER DIAPHRAGM
Scale A



DETAIL A – OUTLET DRAIN
CONCRETE ENCASEMENT REINFORCEMENT DETAILS
Scale B



NOT FOR CONSTRUCTION

NOTES

1. Concrete strength: Type C30-20 (30 MPa with 20 mm course aggregate).
2. Minimum concrete cover 40mm.
3. Reinforcement steel to CSA G30.18 Grade 400R.
4. Zone F to be placed and spread in maximum 300 mm thick layers and compacted as appproved by the Engineer.
5. All dimensions in millimetres and elevations in metres, unless noted otherwise.
6. Upstream Toe Drain Steel pipe and HDPE elbows to be pressure tested for 2 hours at 640 kPa (100 psi.) prior to and after encasing in concrete.
7. After casting first pour and once concrete has achieved initial set, pressure blast horizontal construction joint surface to remove all laitance and expose top surface of coarse aggregate. Do not over-blast or undercut coarse aggregate. Remove all dirt, dust, rubbish and other deleterious material from surface of construction joint prior to casting second pour.

DRG. NO.	DESCRIPTION
220	STAGE 6 PERIMETER EMBANKMENT – PLAN
125	ULTIMATE PERIMETER EMBANKMENT – SECTIONS
120	ULTIMATE PERIMETER EMBANKMENT – PLAN

REFERENCE DRAWINGS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D

REVISIONS

REV.	DATE	DESCRIPTION	DESIGN	DRAWN	CHK'D	APP'D
0	08JUN'07	ISSUED FOR STAGE 6 PERMITTING	LJG	JY	BB	KJB

REVISIONS

PROFESSIONAL ENGINEER – PROVINCE OF BRITISH COLUMBIA – J. GALBRAITH – 25493
June 18/07

Knight Piésold
CONSULTING

MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
STAGE 6 – SOUTH EMBANKMENT
UPSTREAM TOE DRAIN
SECTIONS AND DETAILS

PROJECT/ASSIGNMENT NO.	DRAWING NO.	REVISION
VA101-1/18	240	0

VANCOUVER B.C. CAD FILE: M:\1\01\00001\18\A\Acad\Dwgs\240\240.dwg 1=50 PLOT 1=1(PS) Jun 12 2007 by:jyong Time @ 14:26

XREF FILE: -

APPENDIX C
SITE PHOTOGRAPHS

Photo 1: South embankment fill placement near corner 4.

Photo 2: South embankment abutment tie-in

Photo 3: Zone U sand cell construction along South embankment.

Photo 4: Compacted and trimmed Zone S (glacial till) along South embankment

Photo 5: South embankment Zone C (downstream shell), looking west. Drain extension shown.

Photo 6: South embankment Zone C (downstream shell), looking west. Drain pumpback to impoundment shown.

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Fax. (604) 684-5909

Mount Polley Mine Tailings Storage Facility 2012 Annual Review Photos	DATE PREPARED: March 2013 SCALE: NTS PREPARED BY: D.Dufault PROJECT No: 1197	**Photos 1 to 6** **South Embankment**	Taken: August 2012

Photo 7: Main embankment, looking north.

Photo 8: Main embankment, looking north at Main embankment collection pond.

Photo 9: Main embankment downstream toe, looking south at Main embankment collection pond.

Photo 10: Main embankment downstream toe, looking north at ABR pond and Main embankment sump.

Photo 11: Corner 3 seep

Photo 12: Corner 3 seep flow, evidence of previous monitoring

BGC ENGINEERING INC. AN APPLIED EARTH SCIENCES COMPANY Suite 800 – 1045 Howe Street Vancouver, BC, CANADA, V6Z 2A9 Tel. (604) 684-5900 Fax. (604) 684-5909	**Mount Polley Mine** Tailings Storage Facility 2012 Annual Review Photos	DATE PREPARED: March 2013 SCALE: NTS PREPARED BY: D.Dufault PROJECT No: 1197	**Photos 7 to 11** **Main Embankment** Taken: August 2012

Photo 12: Perimeter embankment new access at Corner 1, looking northeast.

Photo 13: Perimeter drain discharge as impacted by haul road connection.

Photo 14: Perimeter embankment downstream looking east northeast.

Photo 15: Perimeter embankment crest looking east.

Photo 16: Perimeter embankment toe, looking west.

Photo 17: Perimeter embankment toe, looking west.

BGC ENGINEERING INC. AN APPLIED EARTH SCIENCES COMPANY Suite 800 – 1045 Howe Street Vancouver, BC, CANADA, V6Z 2A9 Tel. (604) 684-5900 Fax. (604) 684-5909	**Mount Polley Mine** Tailings Storage Facility 2012 Annual Review Photos	DATE PREPARED: March 2013 SCALE: NTS PREPARED BY: D.Dufault PROJECT No: 1197	**Photos 12 to 17** **Perimeter Embankment** Taken: August 2012

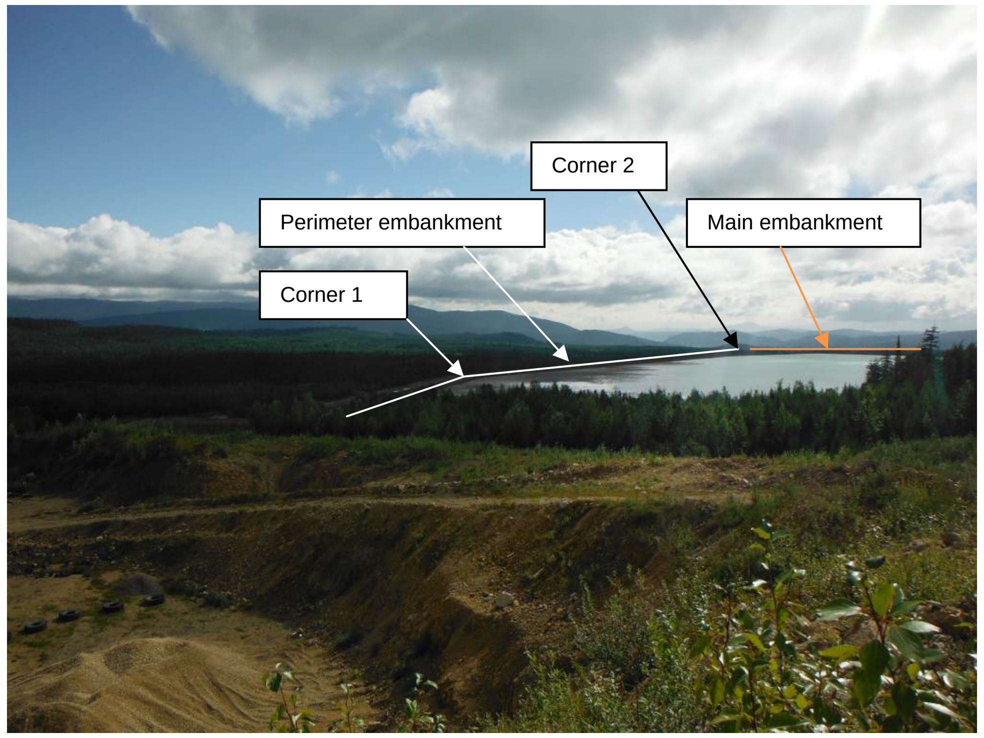

Photo 18: looking northeast at the Perimeter embankment and north end of Main embankment.

Photo 19: Glaciolacustrine unit (GLU) encountered in Perimeter borrow pit.

Photo 20: 'Punchy' GLU material, unsuitable for use as Zone S core.

Photo 21: Perimeter borrow pit

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Mount Polley Mine

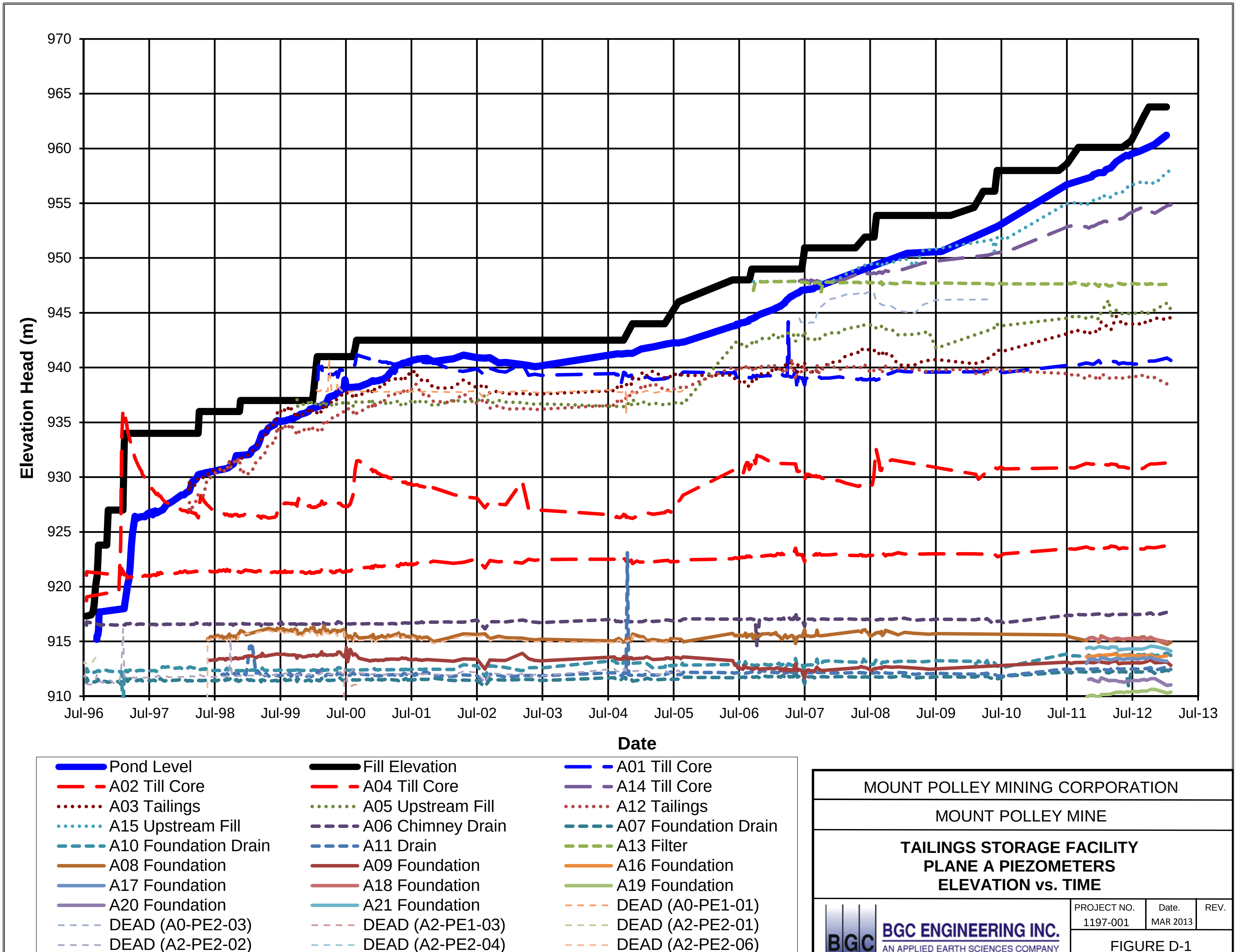
Tailings Storage Facility
2012 Annual Review Photos

DATE PREPARED: March 2013
SCALE: NTS
PREPARED BY: D.Dufault
PROJECT No: 1197

Photos 18 to 21
General

Taken: August 2012

APPENDIX D
PIEZOMETER DATA PLOTS



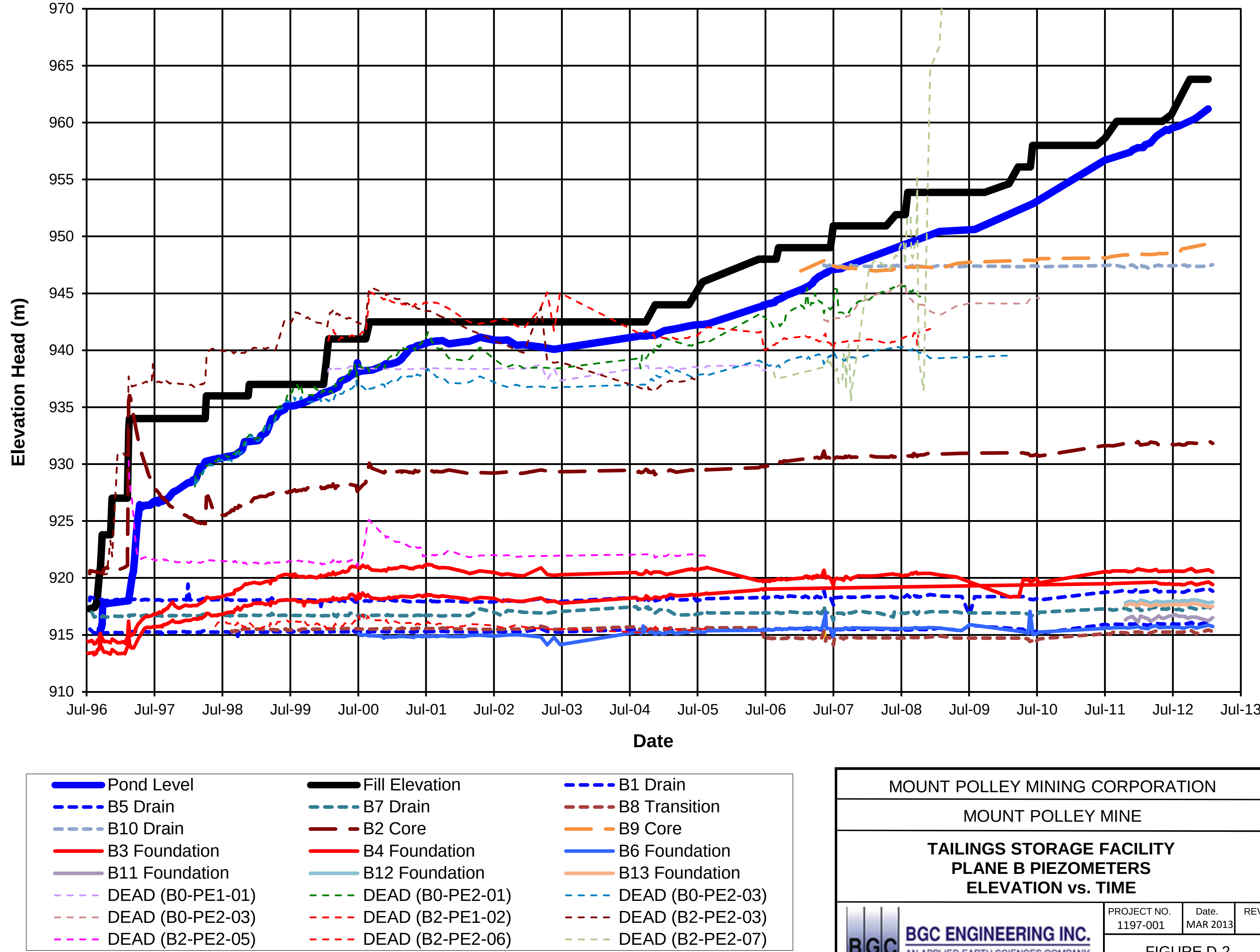
MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
PLANE A PIEZOMETERS
ELEVATION vs. TIME

BGC ENGINEERING INC. AN APPLIED EARTH SCIENCES COMPANY	PROJECT NO. 1197-001	Date. MAR 2013	REV.
	FIGURE D-1		

AMEC010406_0067



MOUNT POLLEY MINING CORPORATION		
MOUNT POLLEY MINE		
TAILINGS STORAGE FACILITY PLANE B PIEZOMETERS ELEVATION vs. TIME		
PROJECT NO. 1197-001	Date. MAR 2013	REV.
FIGURE D-2		

BGC ENGINEERING INC.
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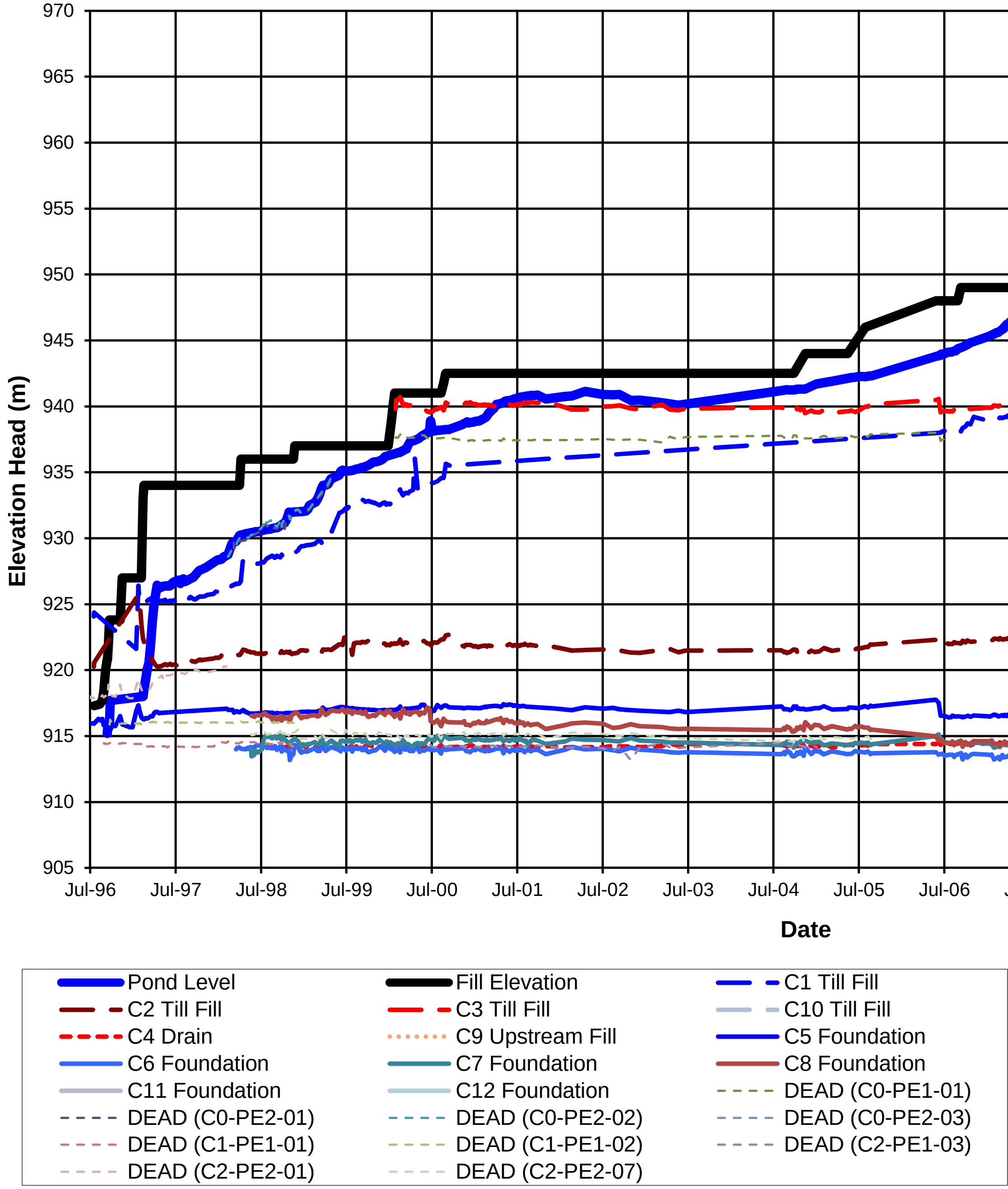
AMEC010406_0068



MOUNT POLLEY MINING CORPORATION

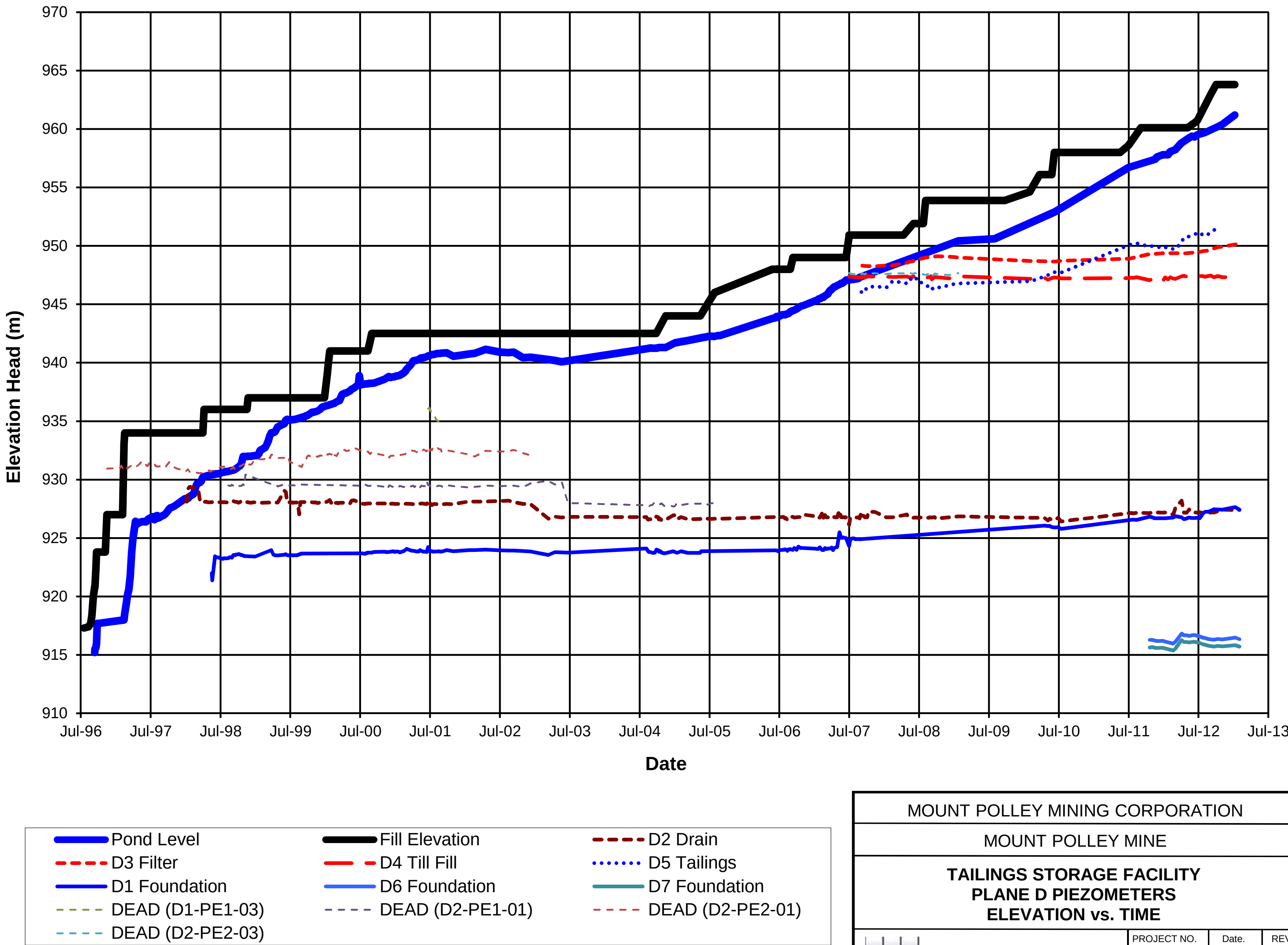
MOUNT POLLEY MINE

TAILINGS STORAGE FACILITY
PLANE C PIEZOMETERS
ELEVATION vs. TIME

BGC ENGINEERING INC.
AN APPLIED EARTH SCIENCES COMPANY

PROJECT NO.	Date.	REV.
1197-001	MAR 2013	
FIGURE D-3		

AMEC010406_0069



MOUNT POLLEY MINING CORPORATION

MOUNT POLLEY MINE

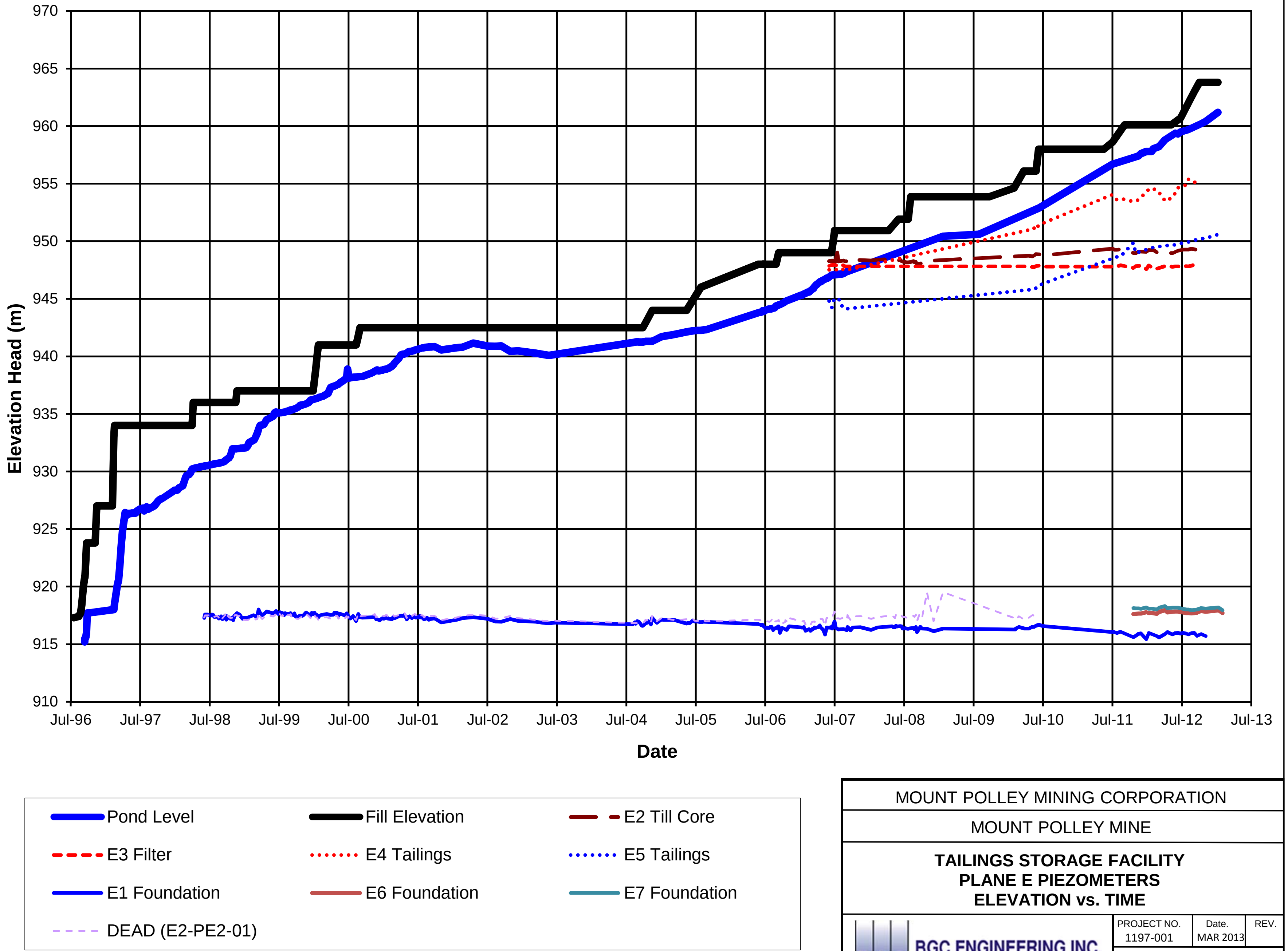
TAILINGS STORAGE FACILITY
PLANE D PIEZOMETERS
ELEVATION vs. TIME

BGC ENGINEERING INC.
AN APPLIED EARTH SCIENCES COMPANY

PROJECT NO.	Date.	REV.
1197-001	MAR 2013	

FIGURE D-4

AMEC010406_0070



MOUNT POLLEY MINING CORPORATION		
MOUNT POLLEY MINE		
TAILINGS STORAGE FACILITY PLANE E PIEZOMETERS ELEVATION vs. TIME		
PROJECT NO. 1197-001	Date. MAR 2013	REV.
FIGURE D-5		

BGC ENGINEERING INC.
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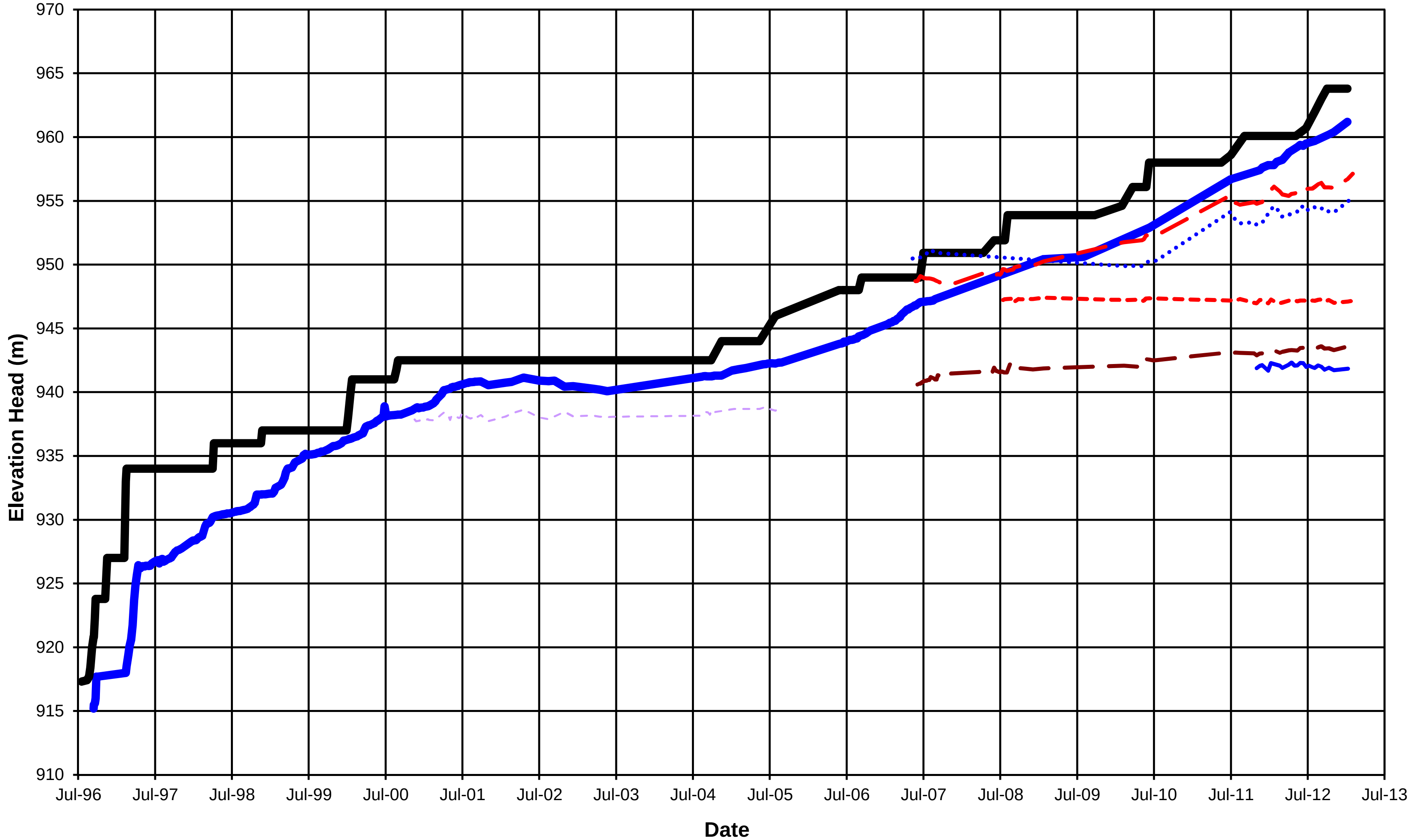
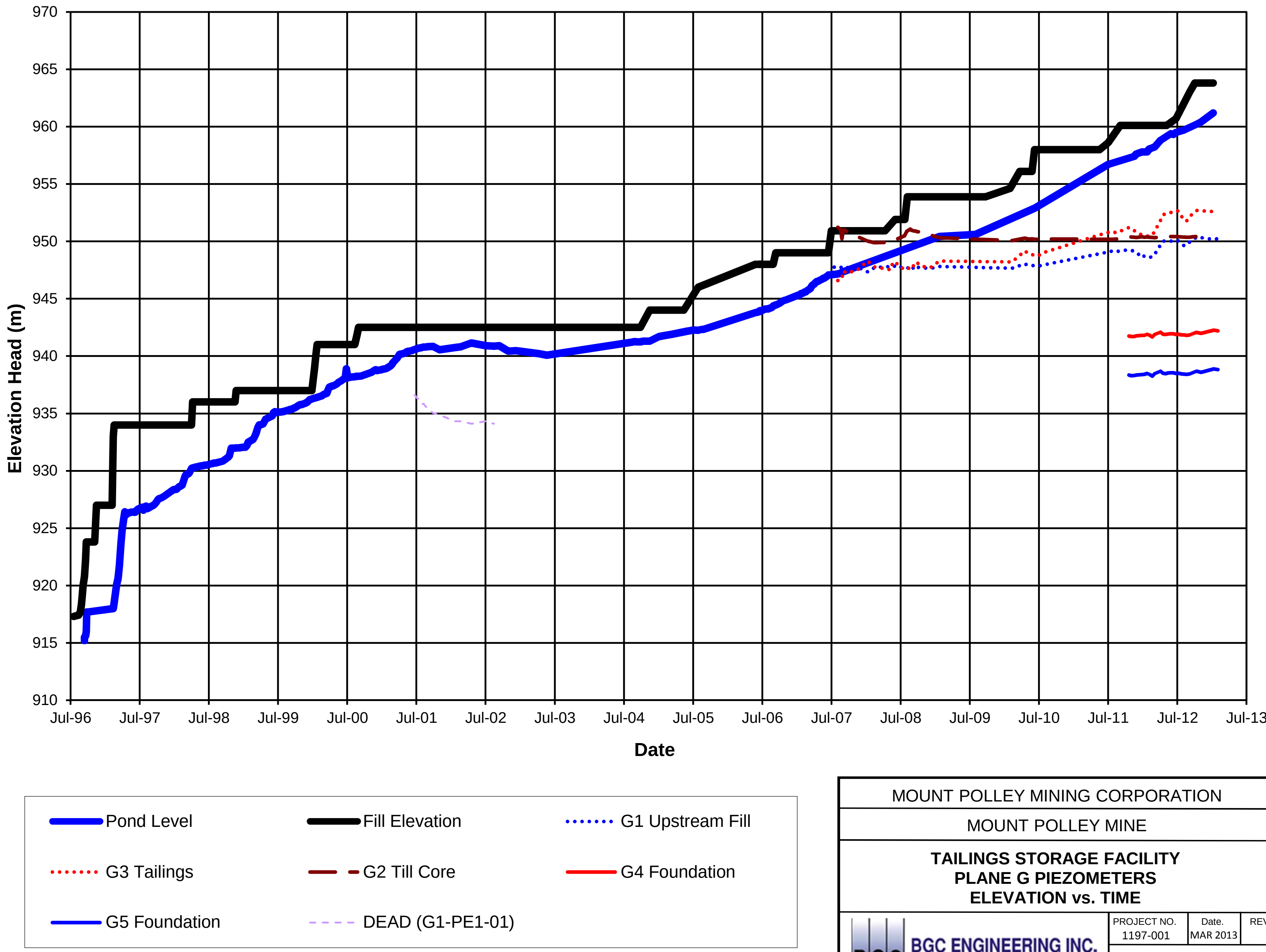
AMEC010406_0071

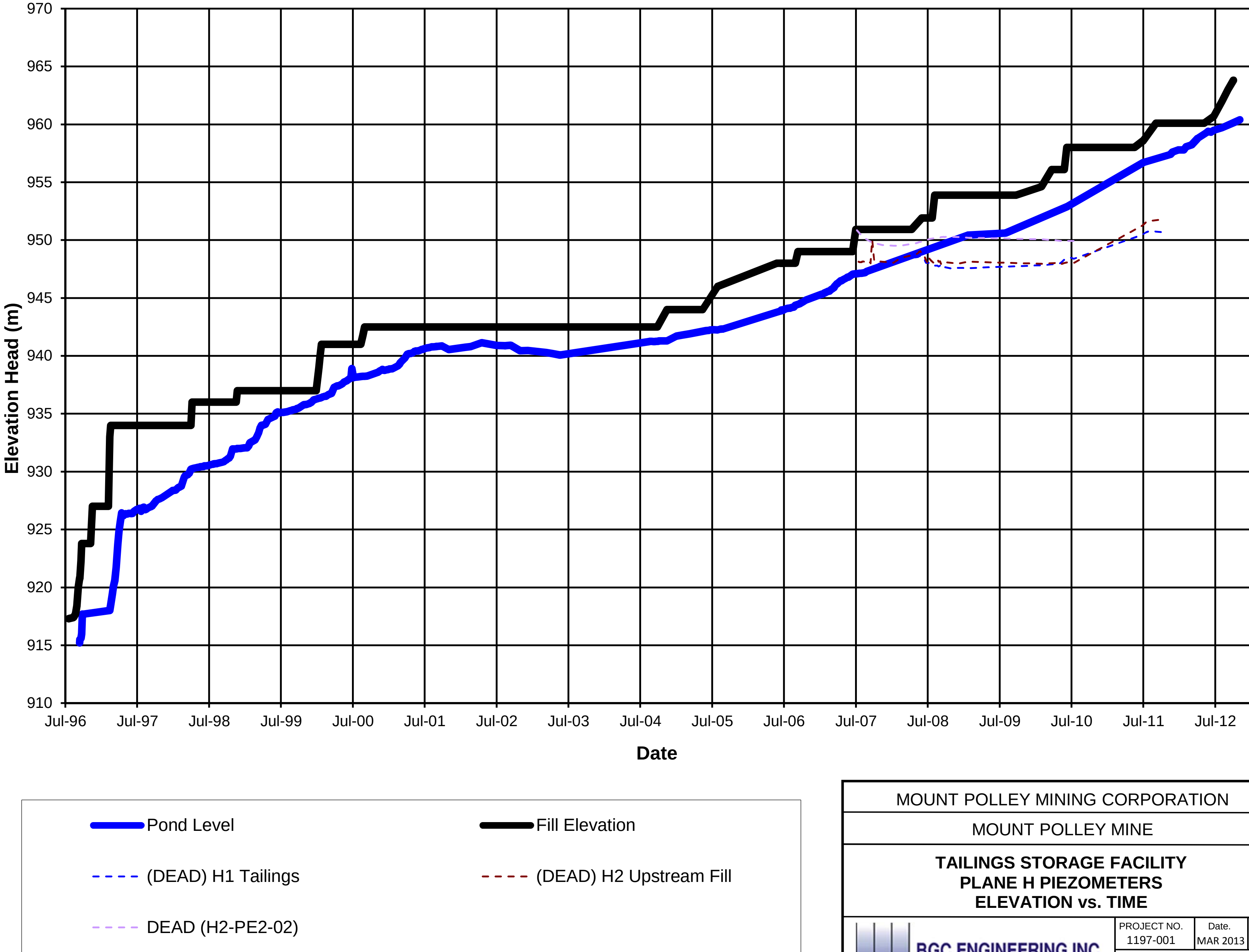


MOUNT POLLEY MINING CORPORATION			
MOUNT POLLEY MINE			
TAILINGS STORAGE FACILITY PLANE F PIEZOMETERS ELEVATION vs. TIME			
BGC ENGINEERING INC. AN APPLIED EARTH SCIENCES COMPANY	PROJECT NO. 1197-001	Date. MAR 2013	REV.
	FIGURE D-6		



MOUNT POLLEY MINING CORPORATION			
MOUNT POLLEY MINE			
TAILINGS STORAGE FACILITY PLANE G PIEZOMETERS ELEVATION vs. TIME			
BGC ENGINEERING INC. AN APPLIED EARTH SCIENCES COMPANY	PROJECT NO. 1197-001	Date. MAR 2013	REV.
	FIGURE D-7		

AMEC010406_0073



MOUNT POLLEY MINING CORPORATION		
MOUNT POLLEY MINE		
TAILINGS STORAGE FACILITY **PLANE H PIEZOMETERS** **ELEVATION vs. TIME**		
PROJECT NO. 1197-001	Date. MAR 2013	REV.
FIGURE D-8		

BGC ENGINEERING INC.
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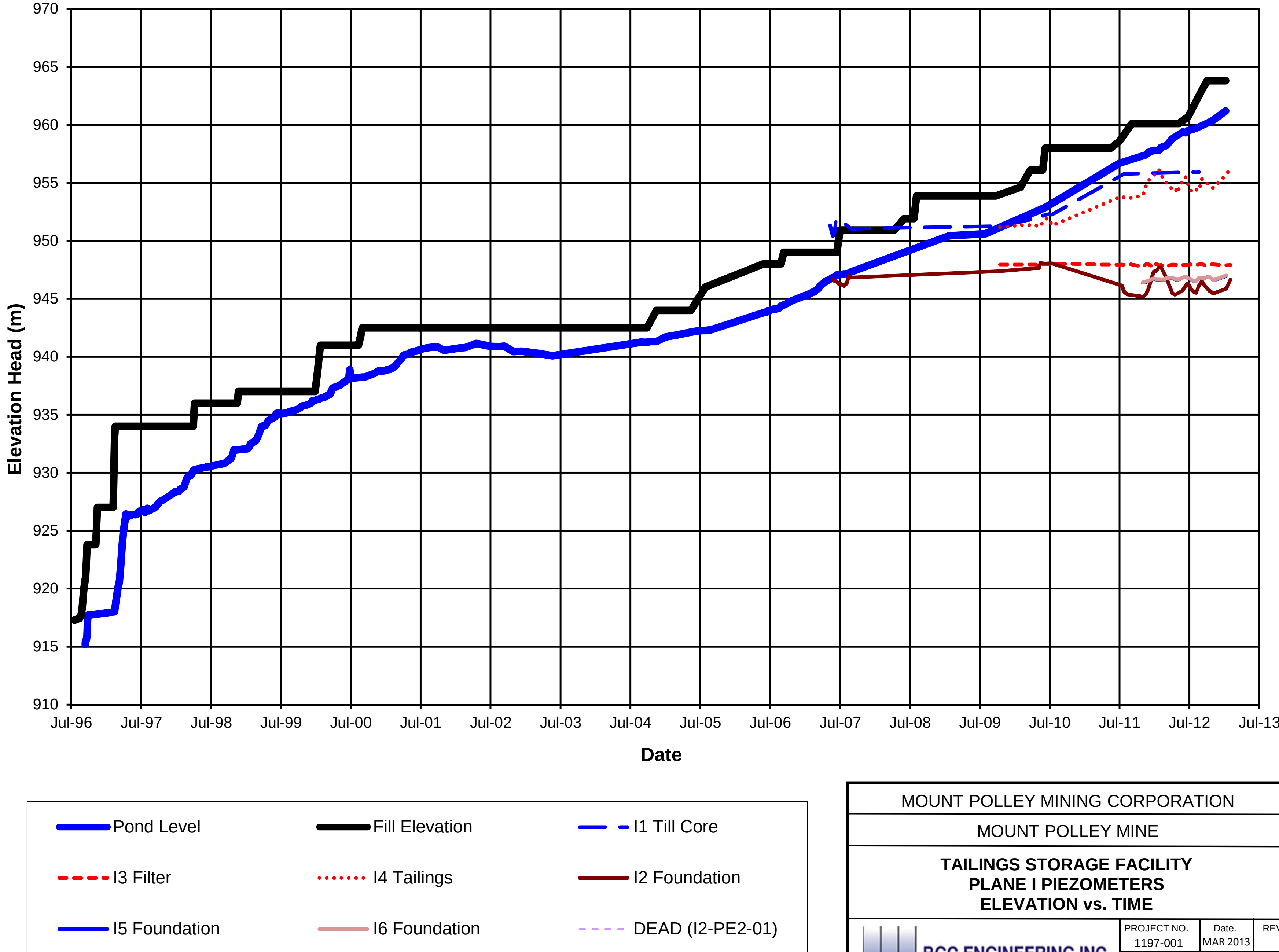
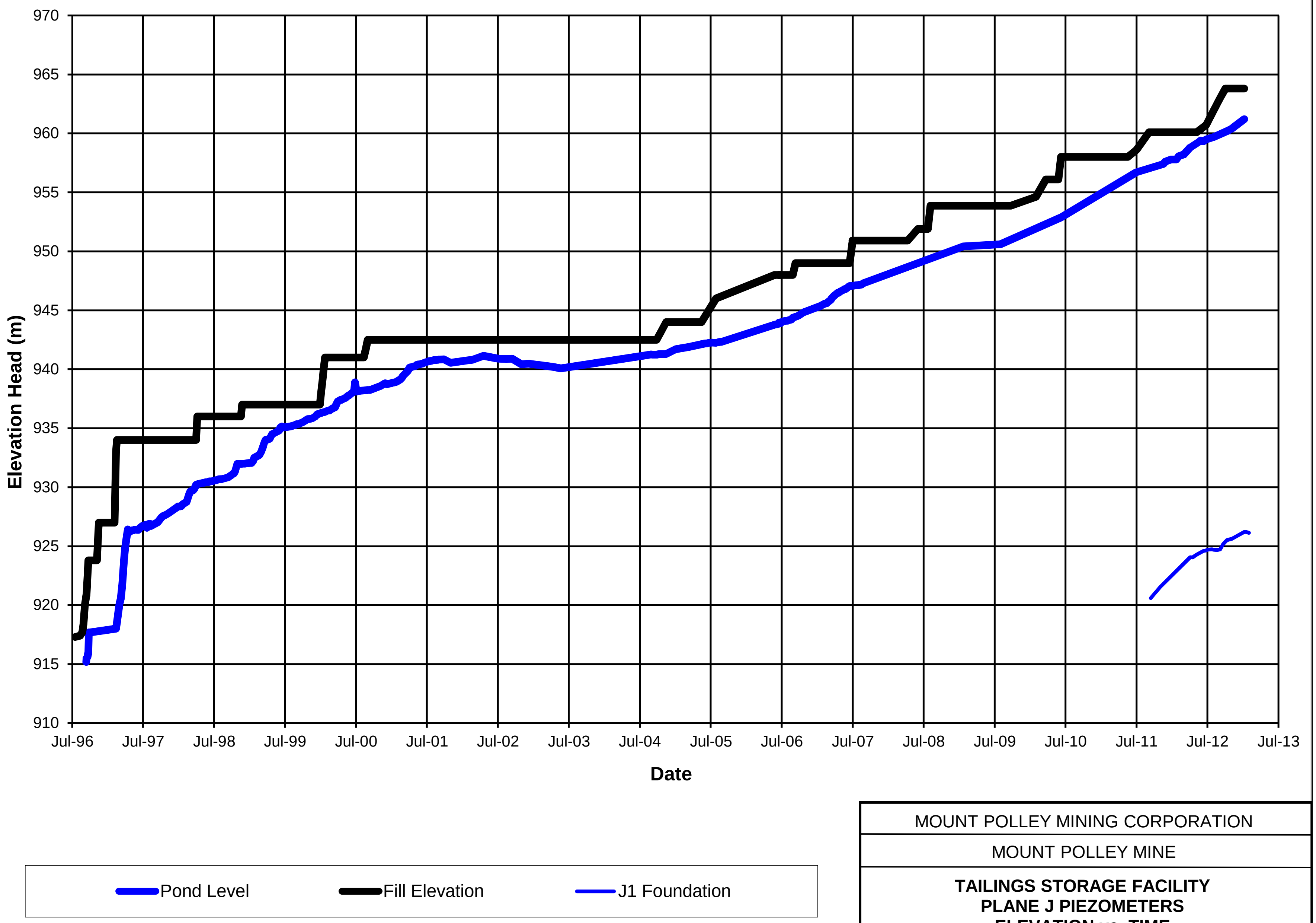
AMEC010406_0074



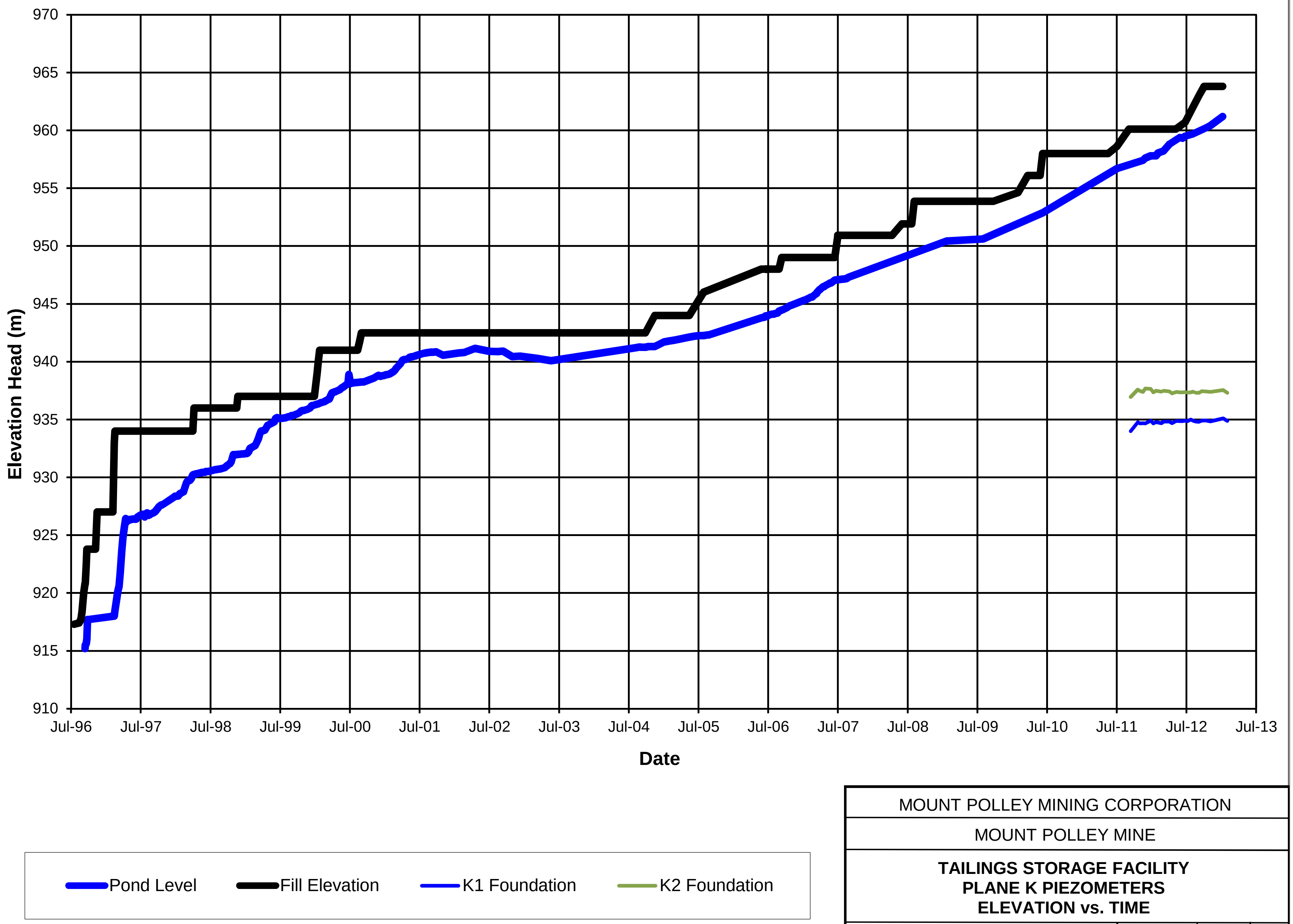
MOUNT POLLEY MINING CORPORATION		
MOUNT POLLEY MINE		
TAILINGS STORAGE FACILITY PLANE I PIEZOMETERS ELEVATION vs. TIME		
BGC ENGINEERING INC. AN APPLIED EARTH SCIENCES COMPANY	PROJECT NO. 1197-001	Date. MAR 2013	REV.
	FIGURE D-9		

AMEC010406_0075



MOUNT POLLEY MINING CORPORATION			
MOUNT POLLEY MINE			
TAILINGS STORAGE FACILITY **PLANE J PIEZOMETERS** **ELEVATION vs. TIME**			
BGC ENGINEERING INC. AN APPLIED EARTH SCIENCES COMPANY	PROJECT NO. 1197-001	Date. MAR 2013	REV.
	FIGURE D-10		

AMEC010406_0076



MOUNT POLLEY MINING CORPORATION			
MOUNT POLLEY MINE			
TAILINGS STORAGE FACILITY PLANE K PIEZOMETERS ELEVATION vs. TIME			
BGC ENGINEERING INC. AN APPLIED EARTH SCIENCES COMPANY	PROJECT NO. 1197-001	Date. MAR 2013	REV.
	FIGURE D-11		

AMEC010406_0077

APPENDIX E
INCLINOMETER DATA PLOTS

Mt. Polley
Cumulative & Time Displacement
SI01-02 A-Axis

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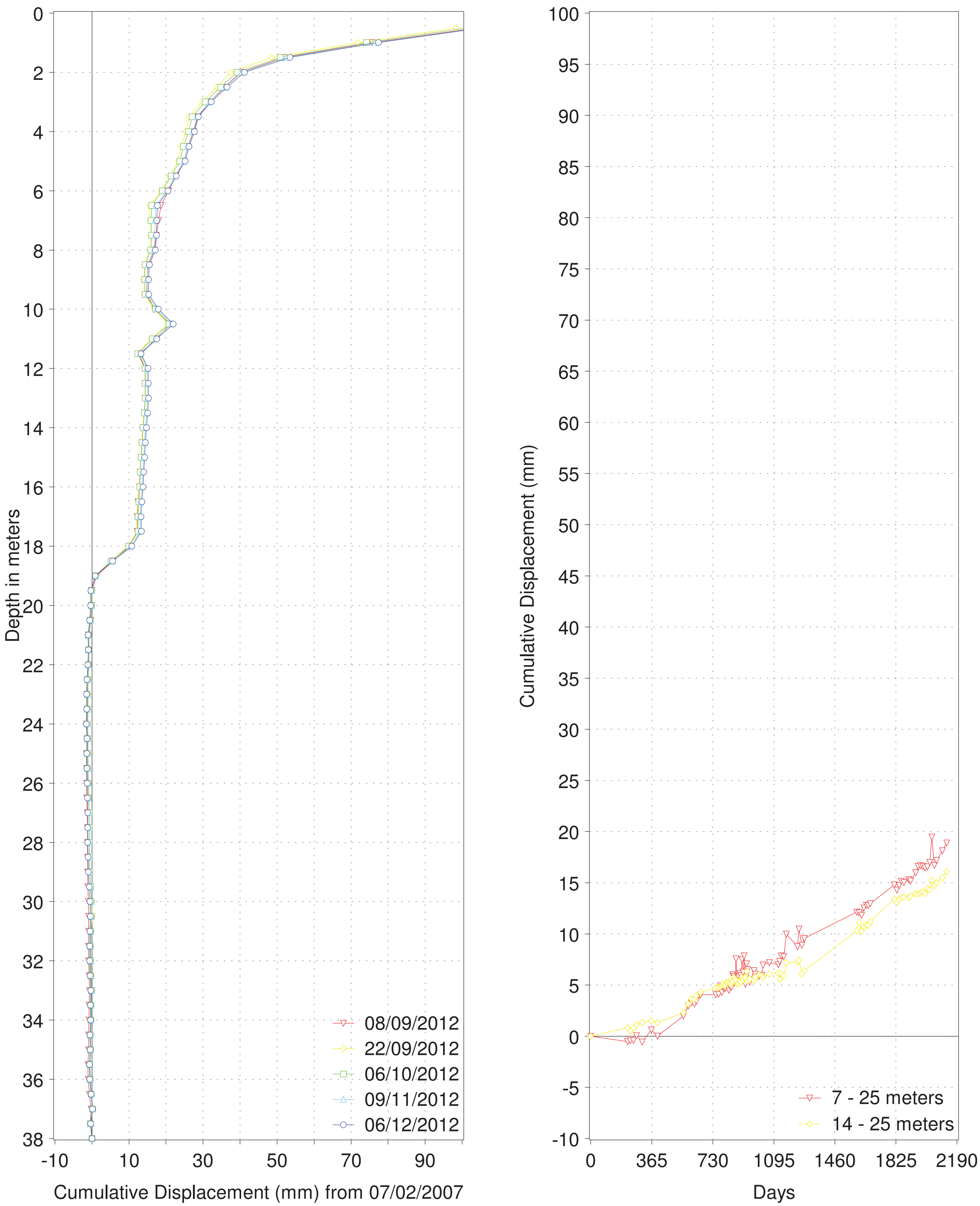
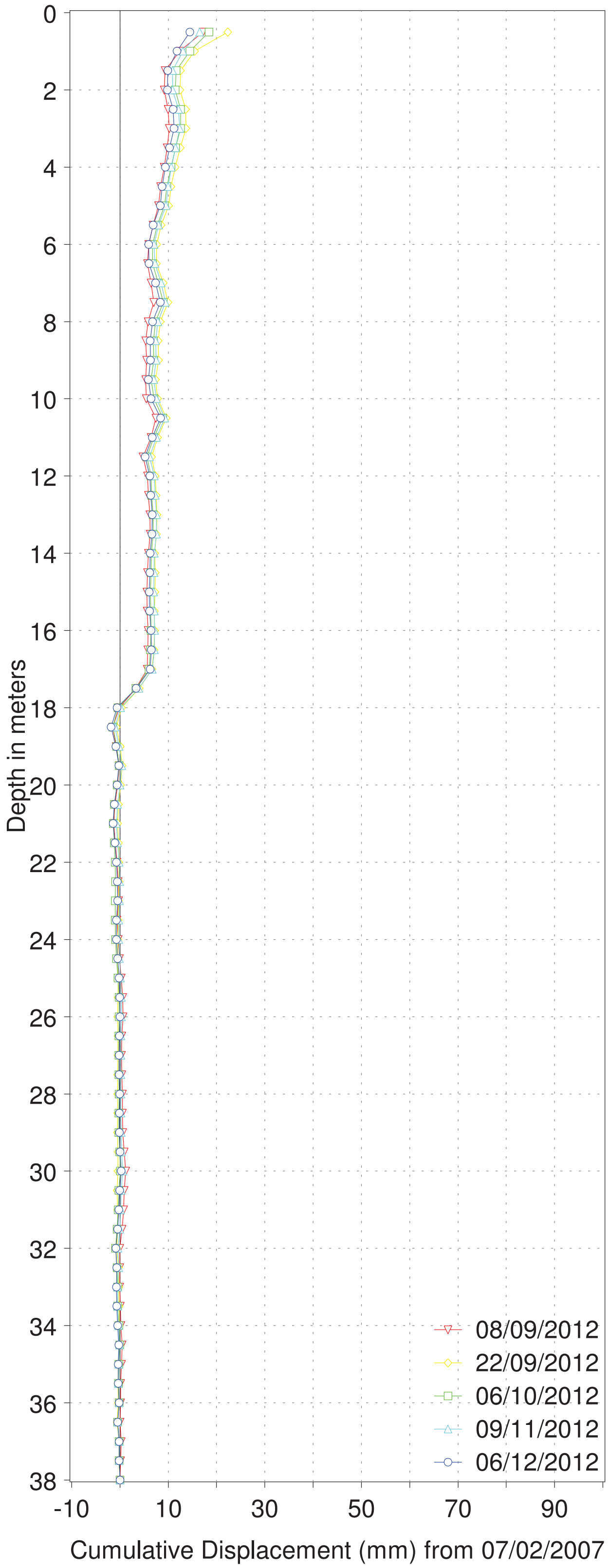
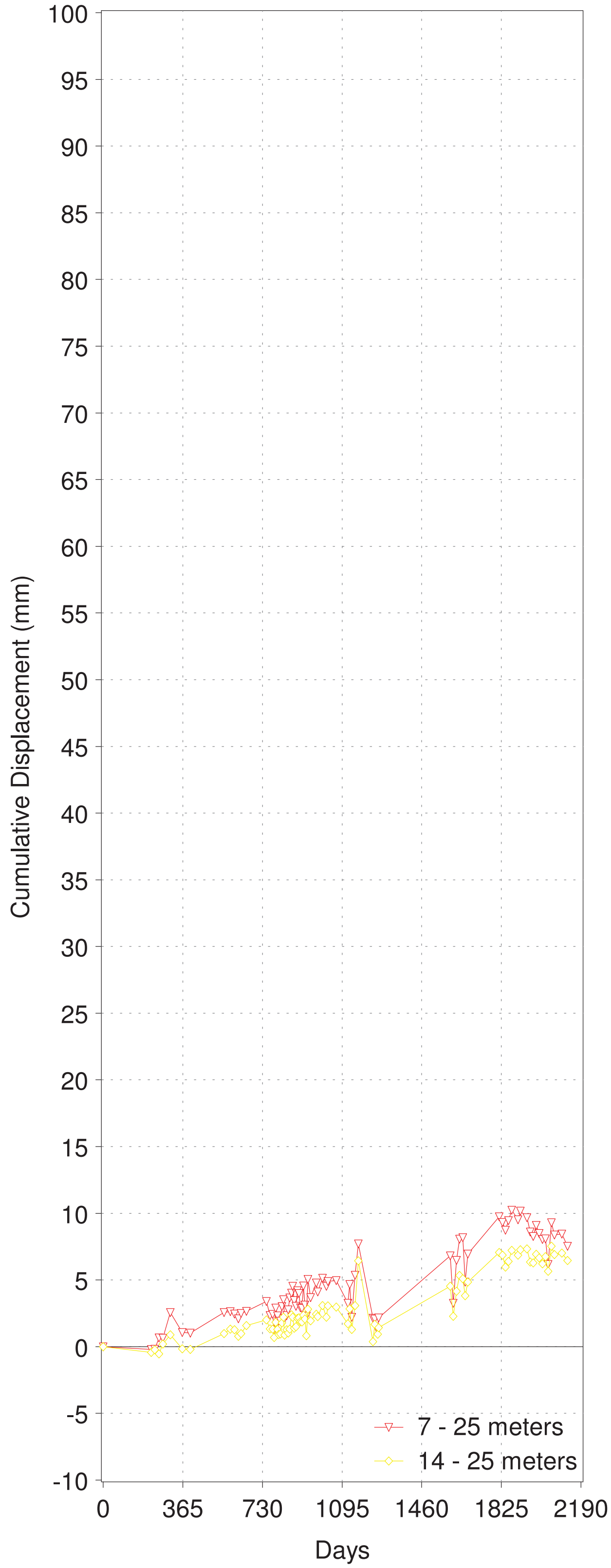


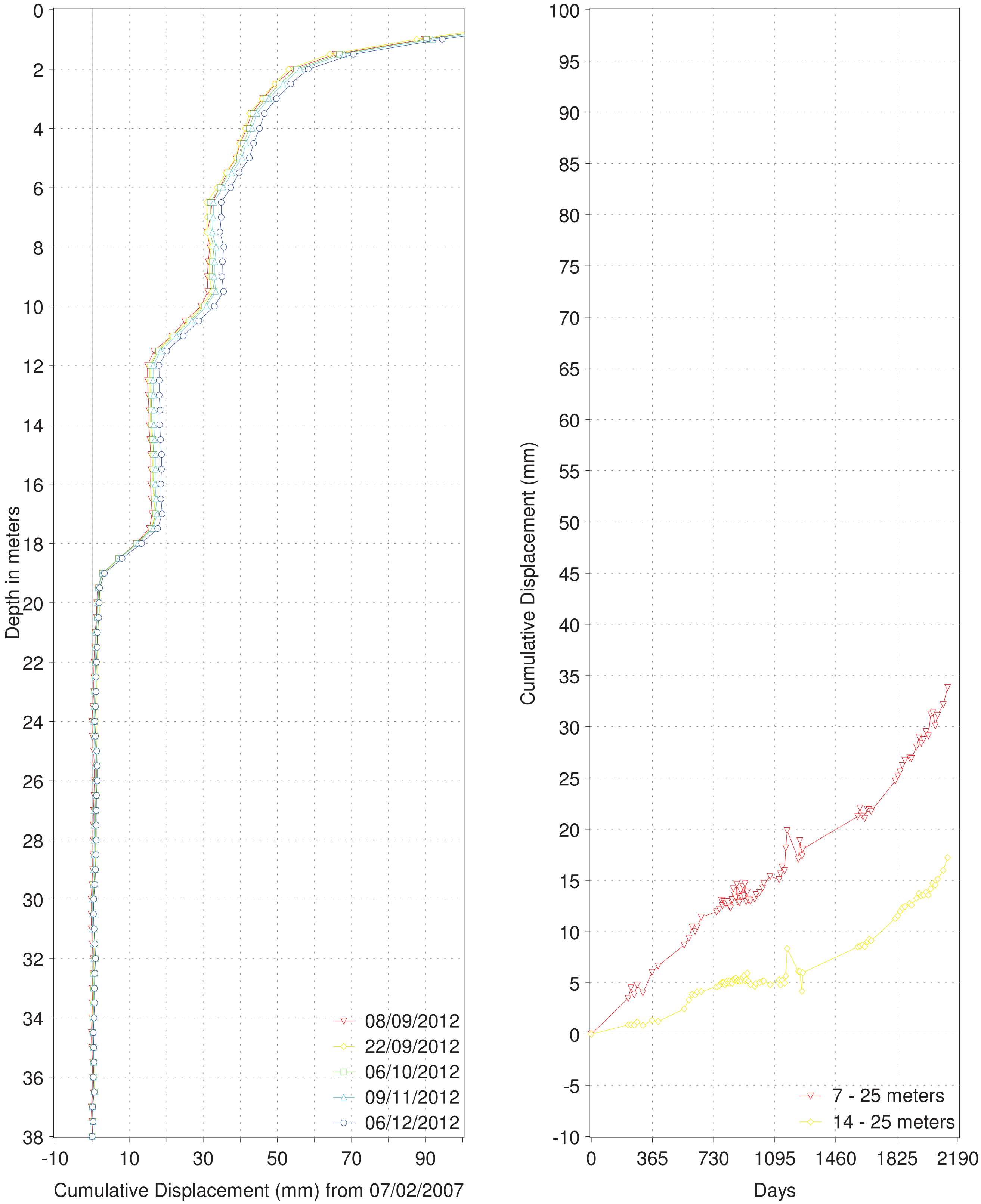
AMEC010406_0079

Mt. Polley
Cumulative & Incremental Displacement
SI01-02 B-Axis

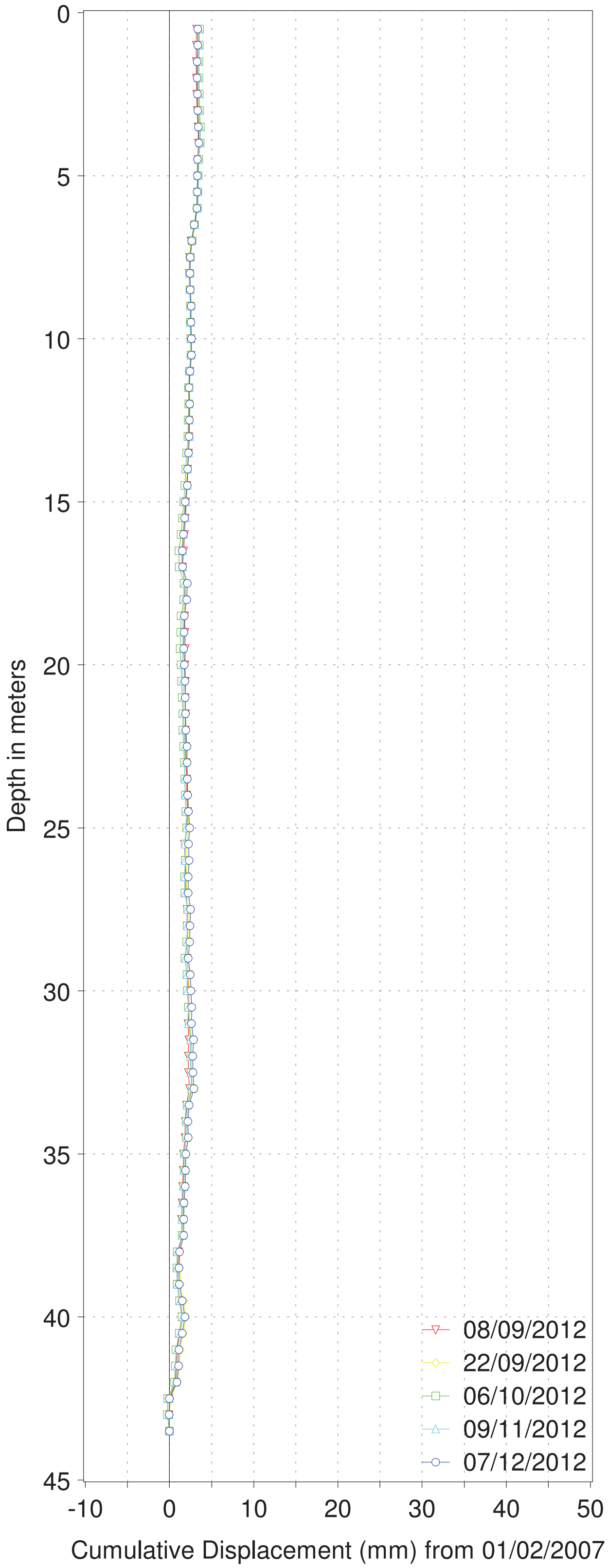


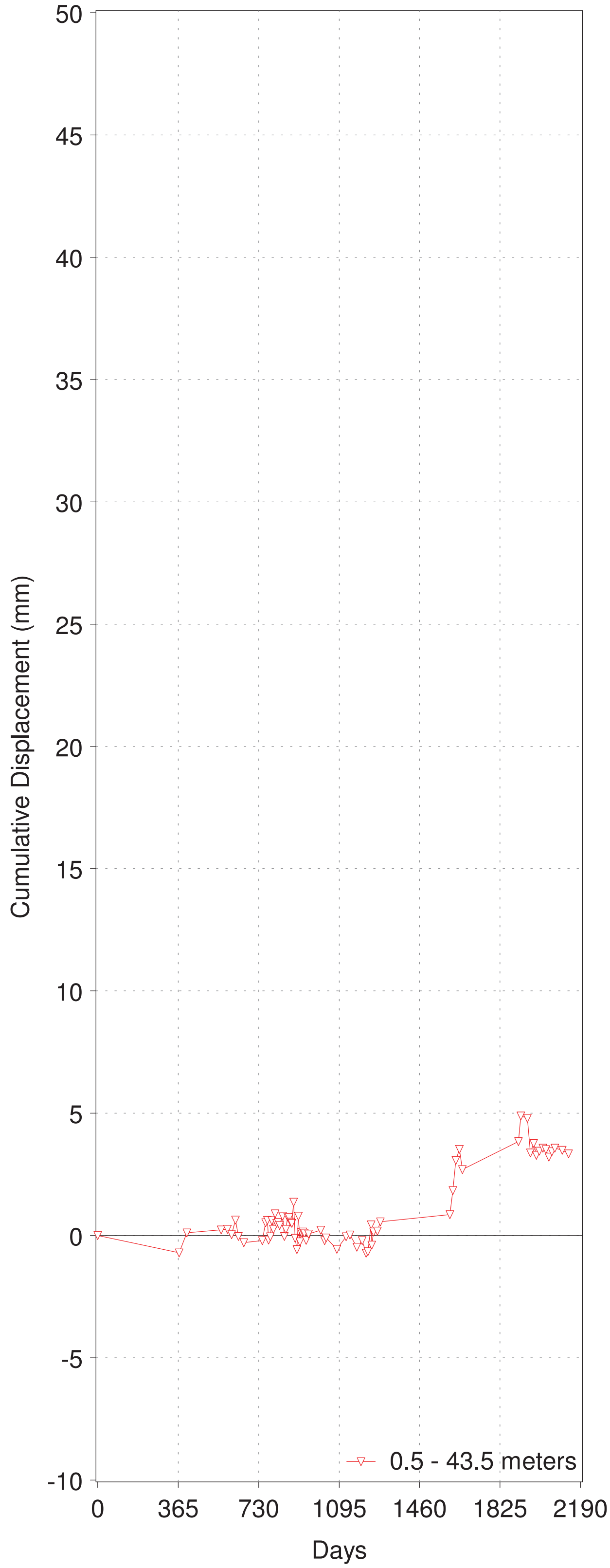


Mt. Polley
Cumulative & Incremental Displacement
SI01-02 AB-Axis



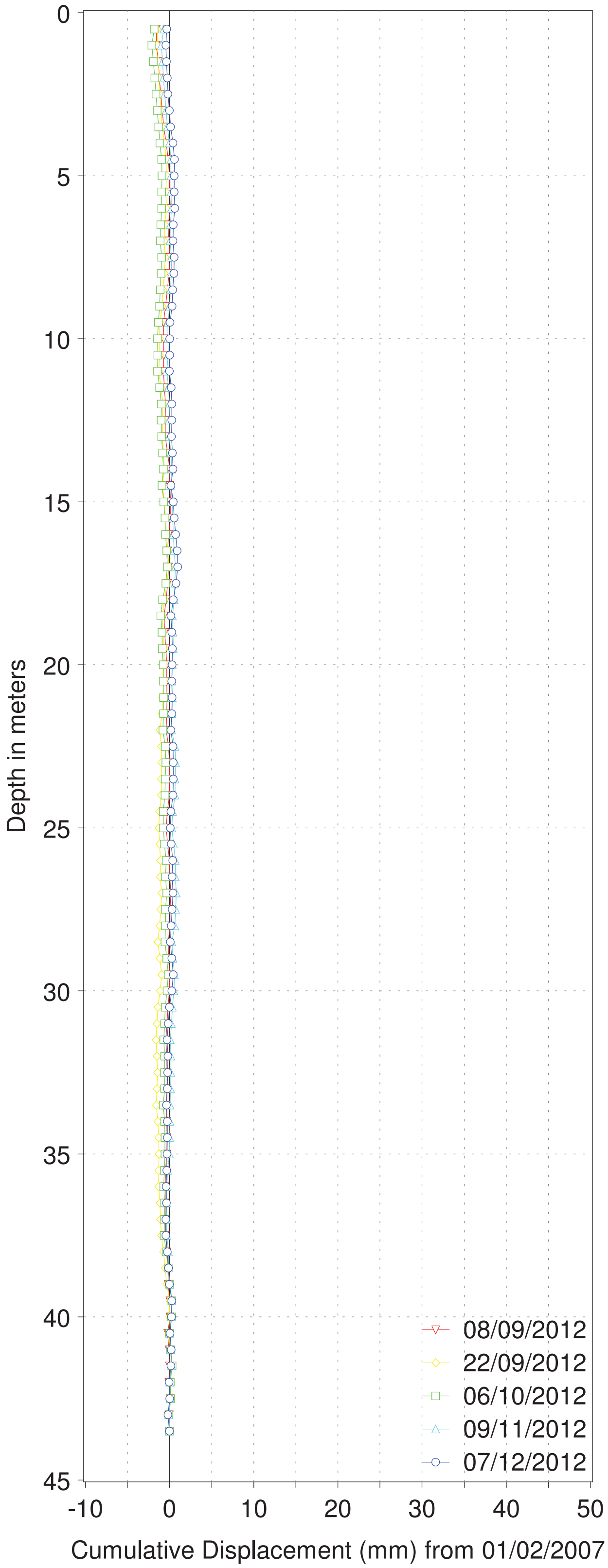
Mt. Polley
Cumulative & Time Displacement
SI06-01 A-Axis

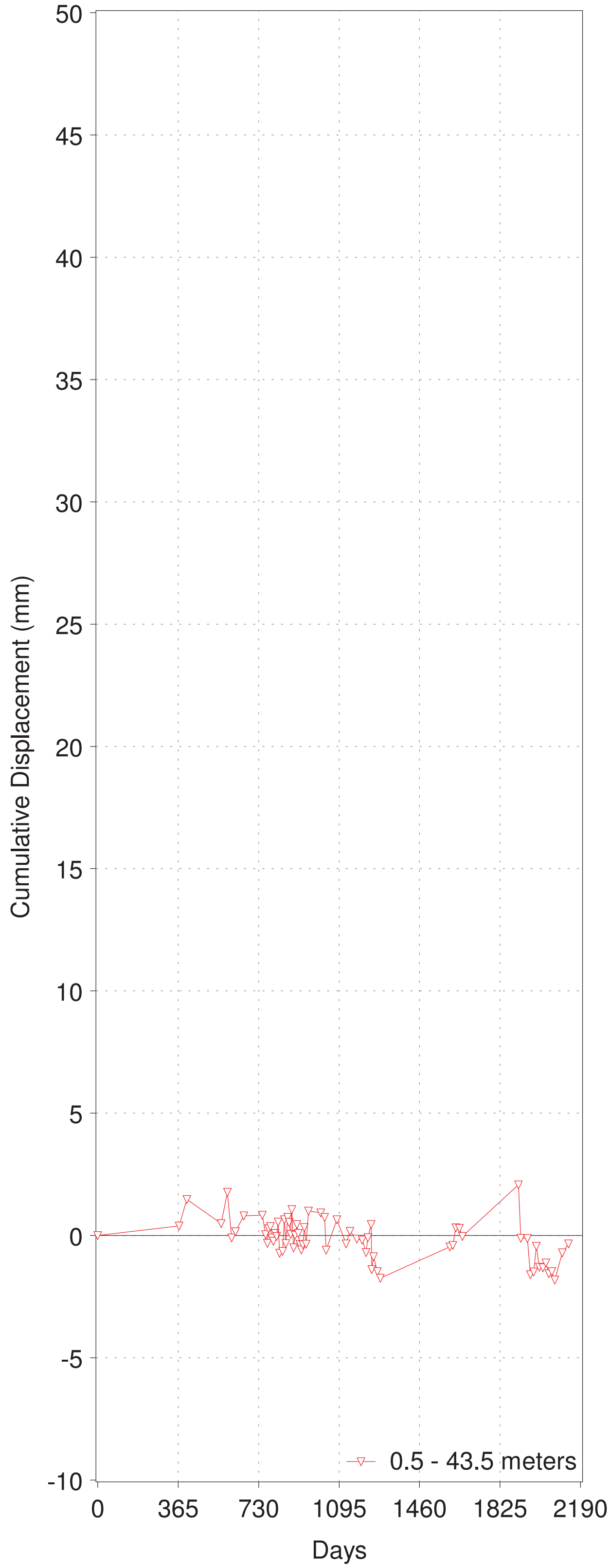




AMEC010406_0082

Mt. Polley
Cumulative & Time Displacement
SI06-01 B-Axis





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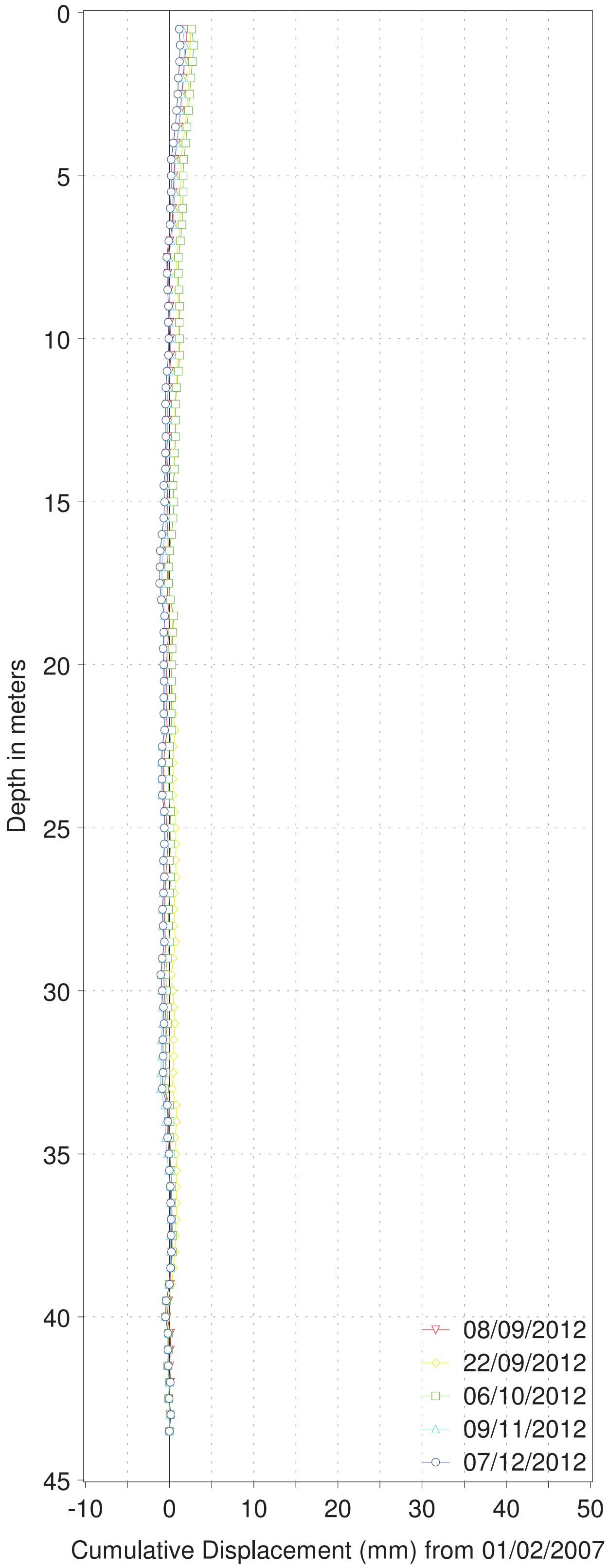
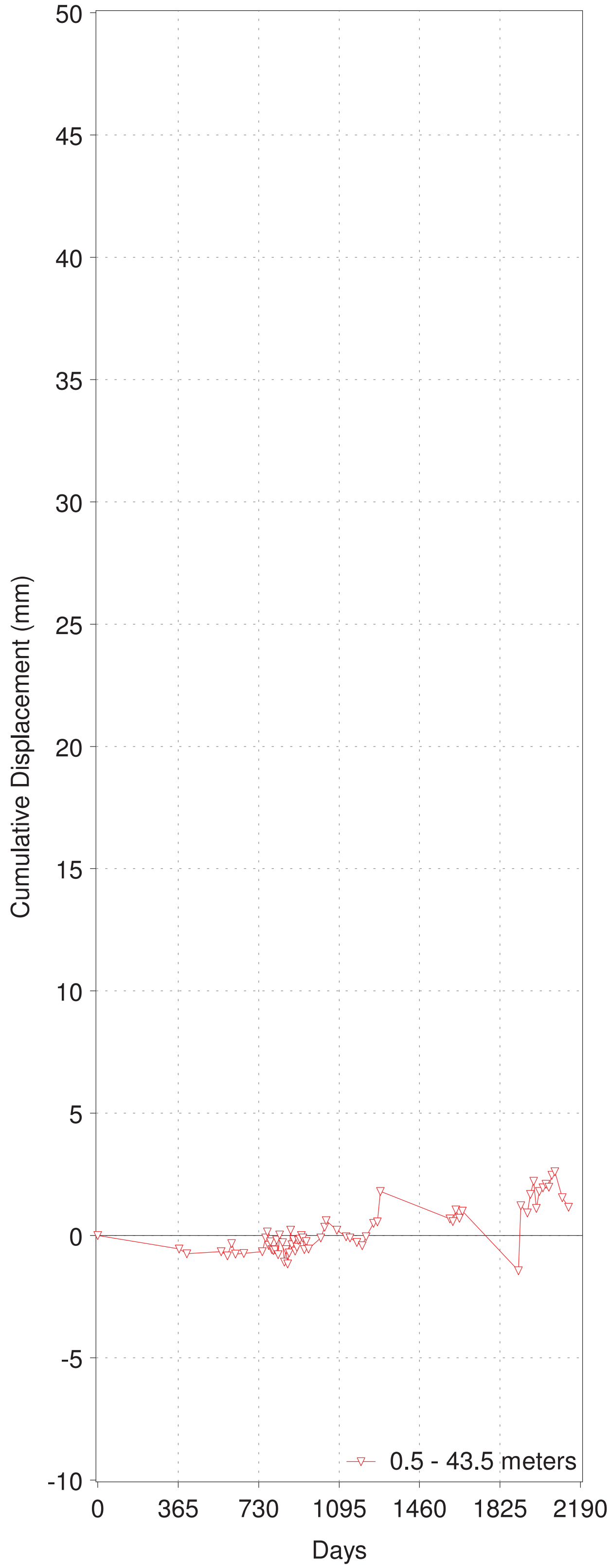
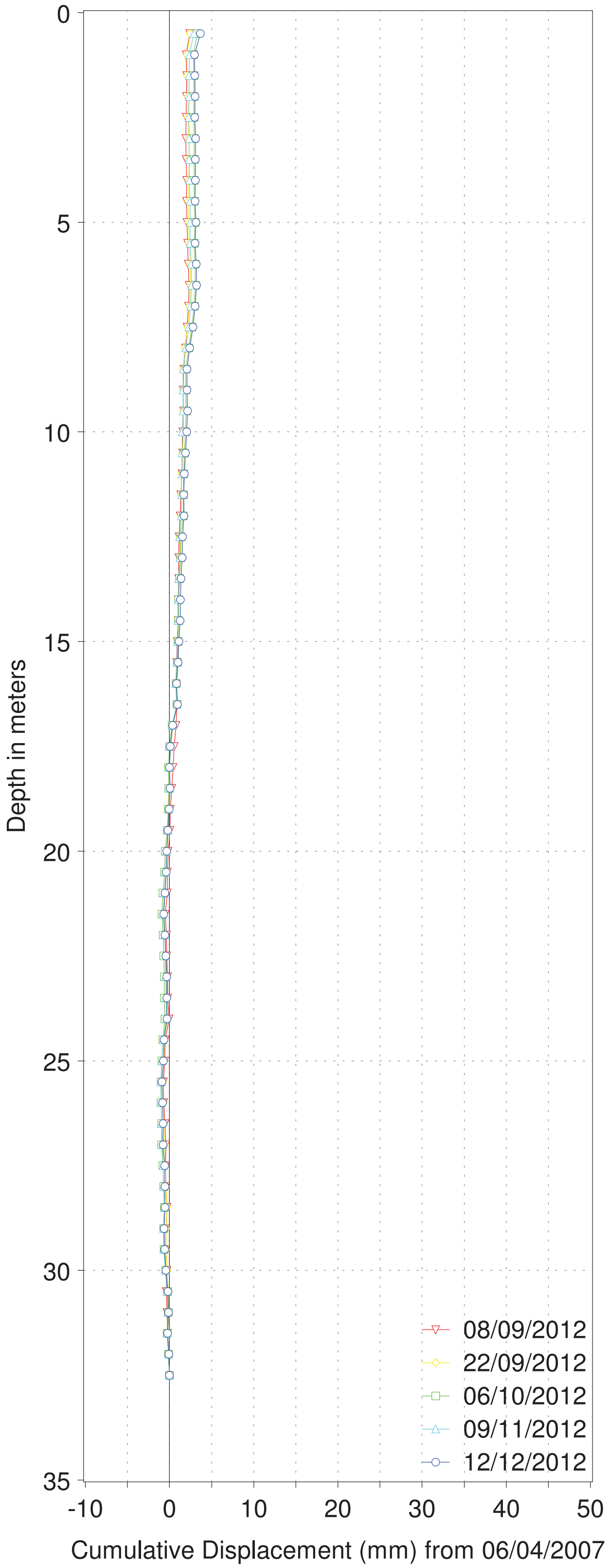
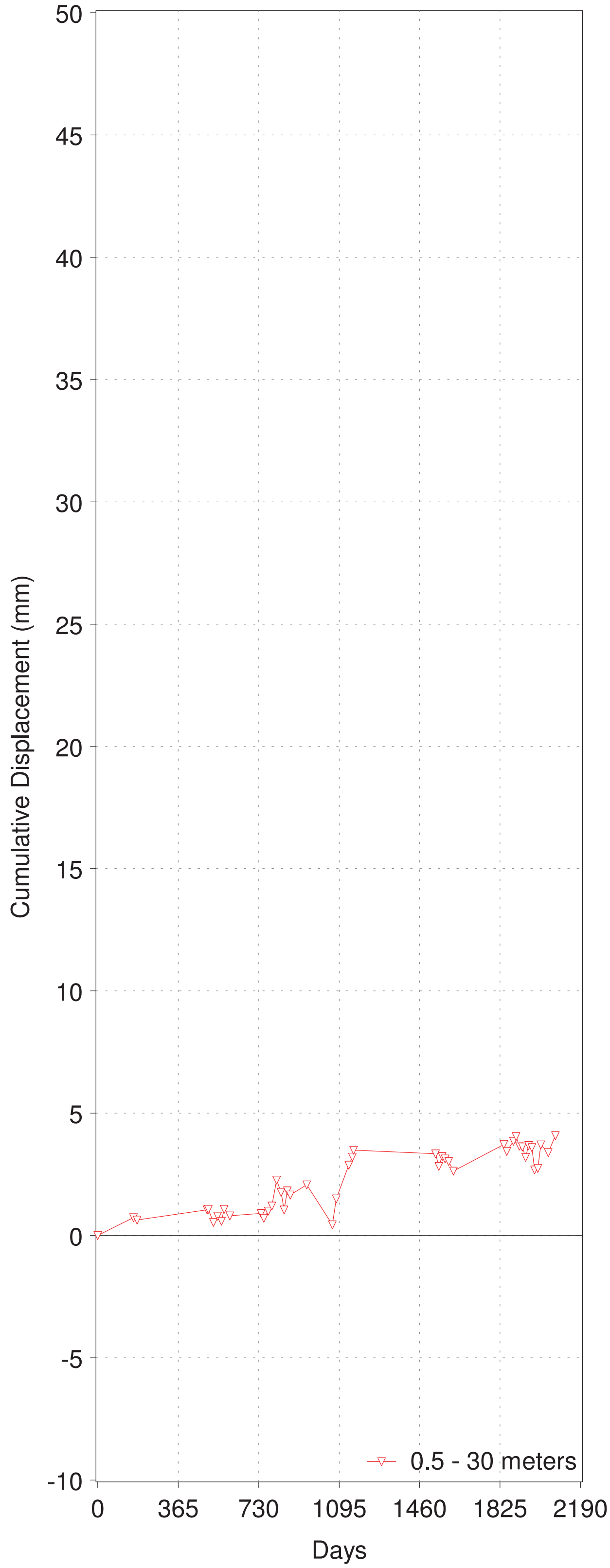
Mt. Polley
Cumulative & Time Displacement
SI06-01 AB-Axis





Mt. Polley
Cumulative & Time Displacement
SI06-02 A-Axis





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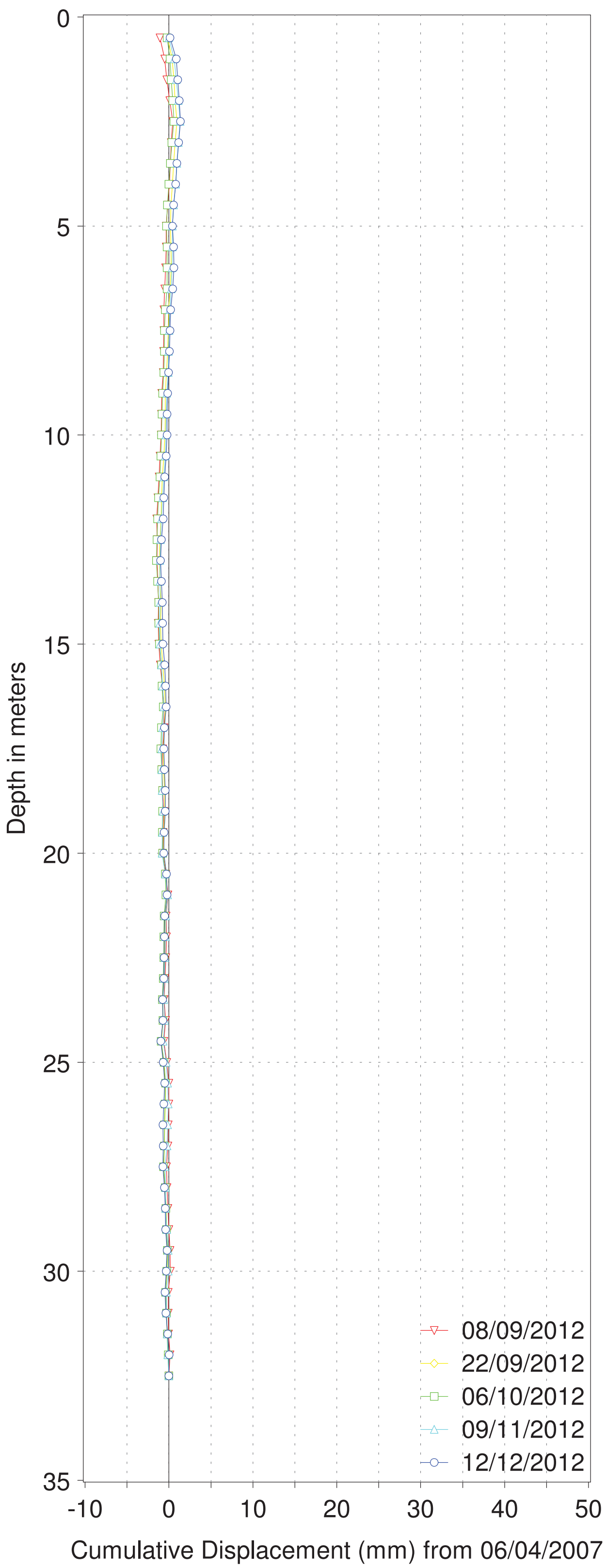
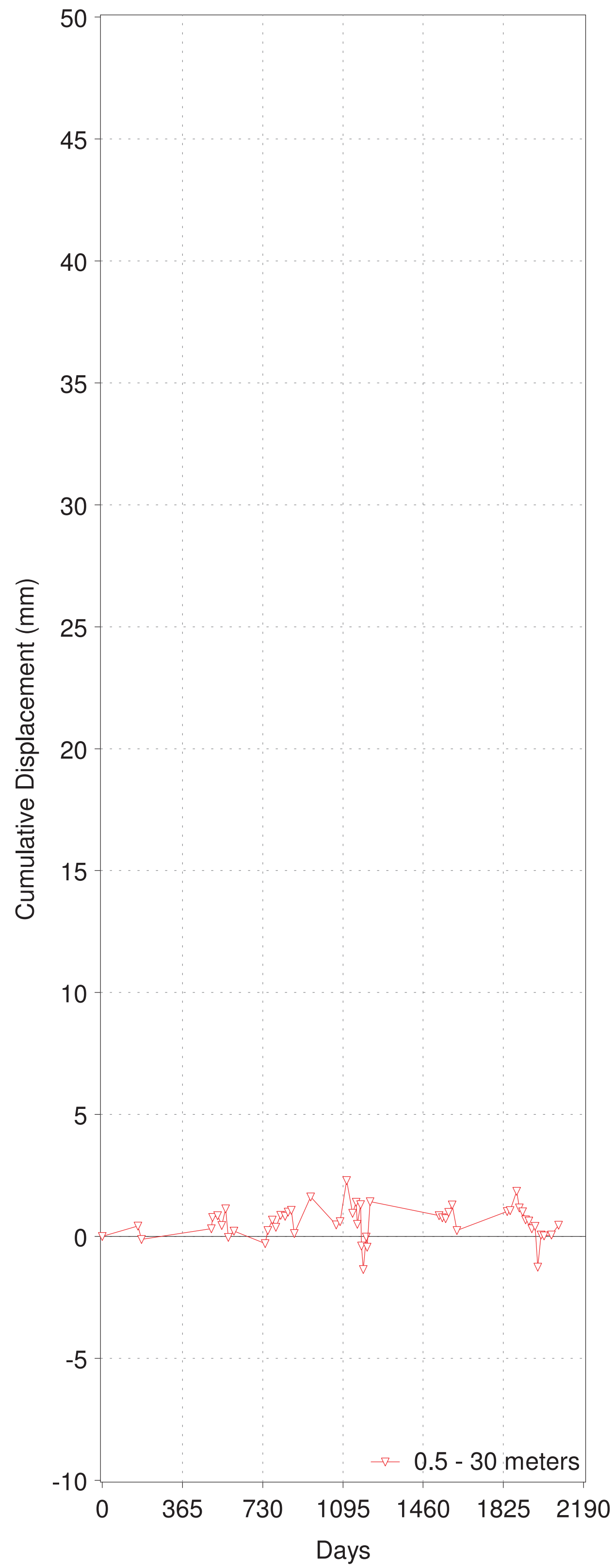
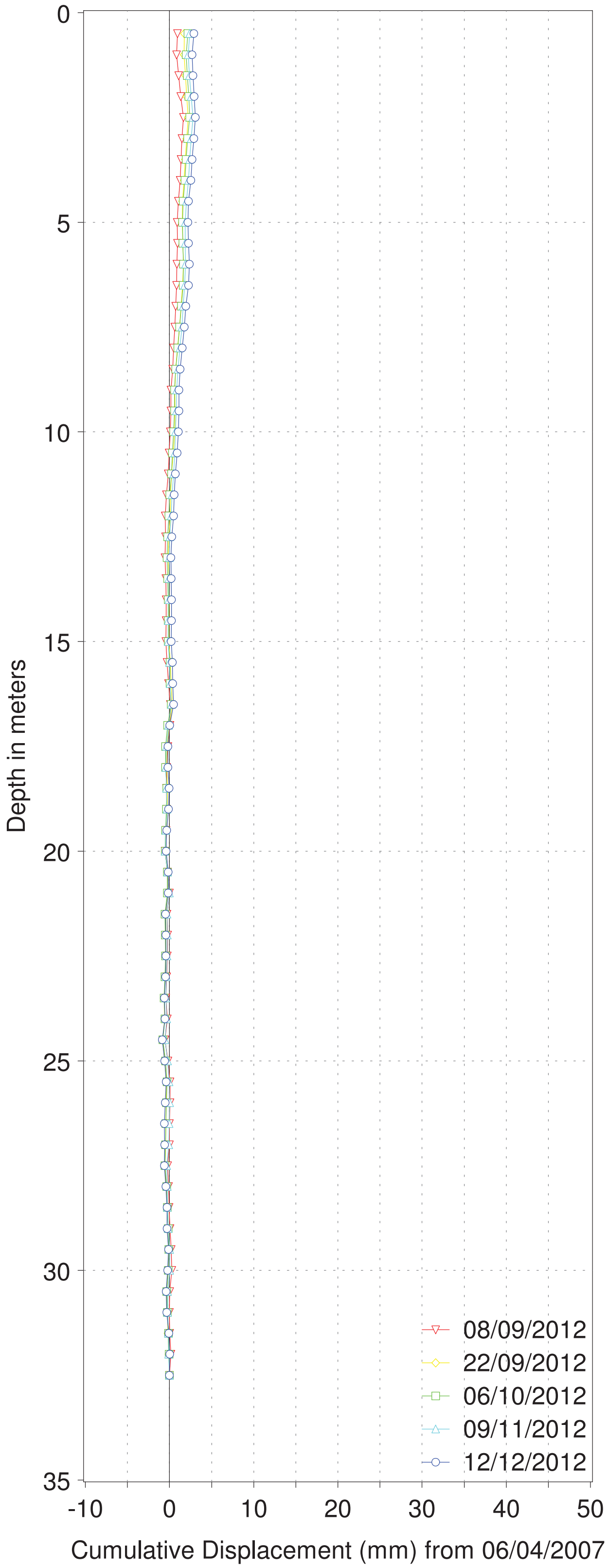
AMEC010406_0085

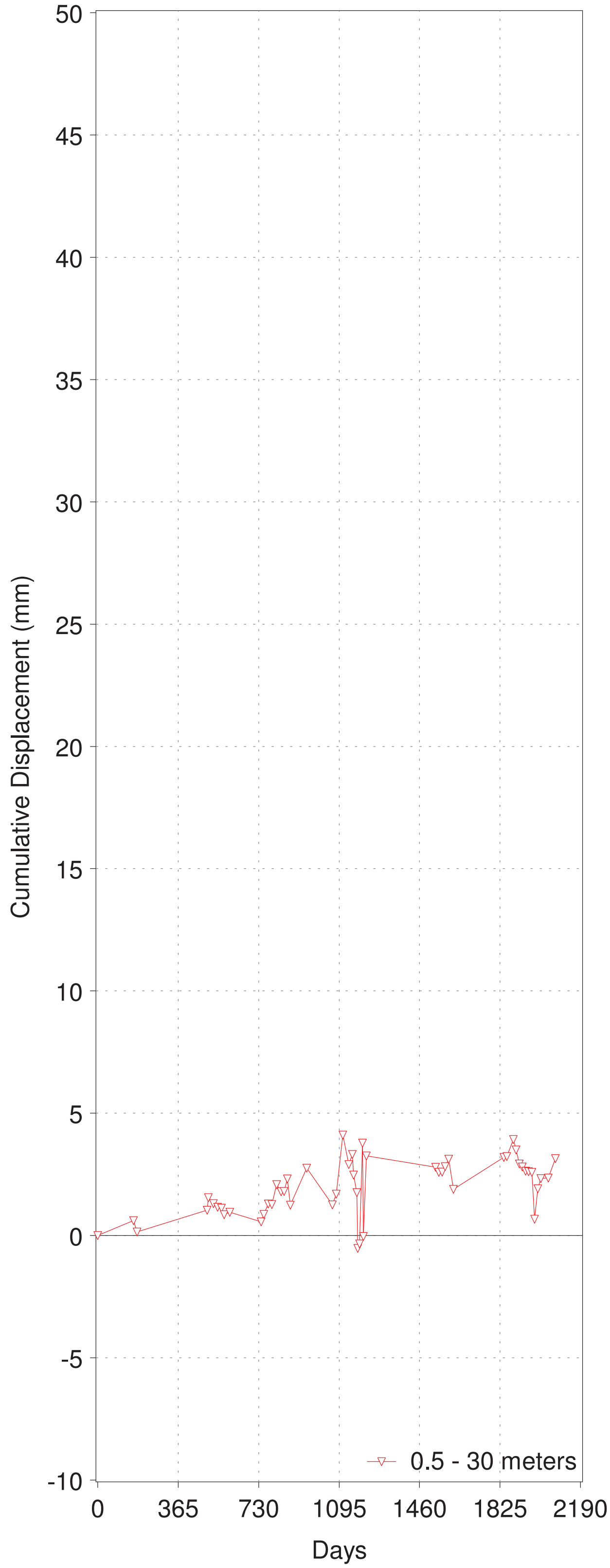
Mt. Polley
Cumulative & Time Displacement
SI06-02 B-Axis



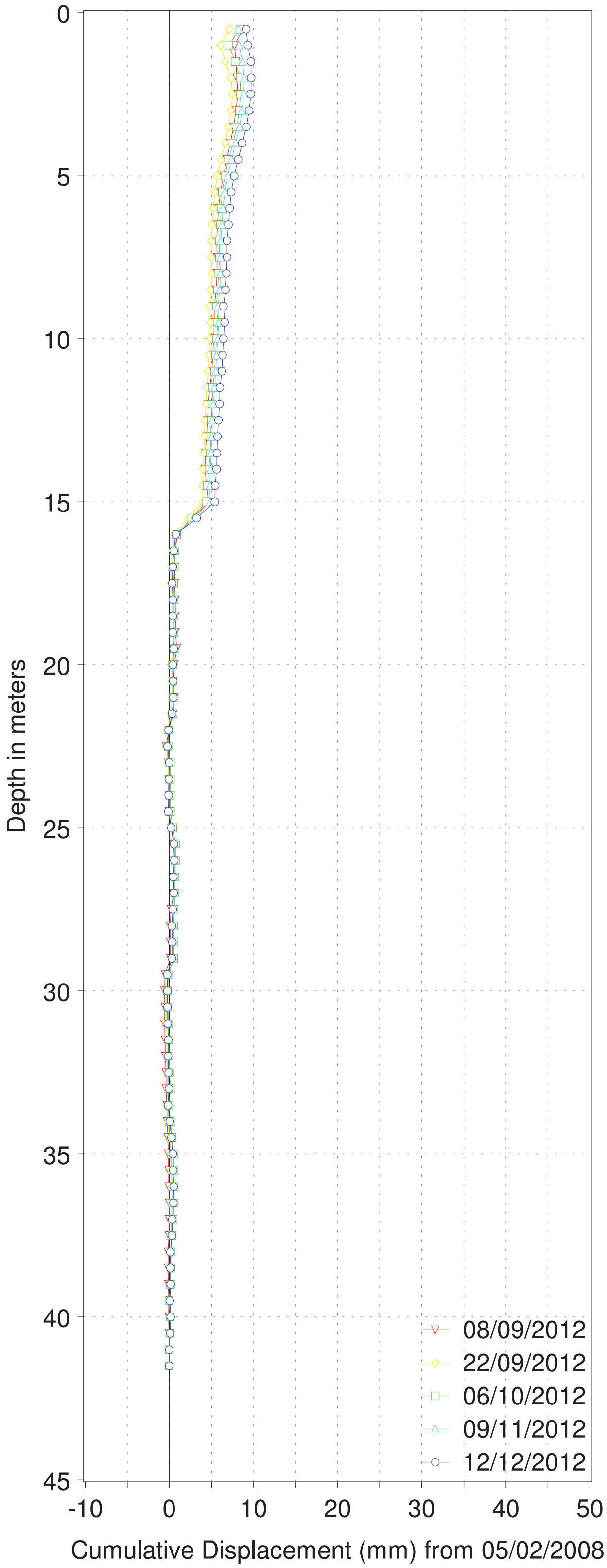


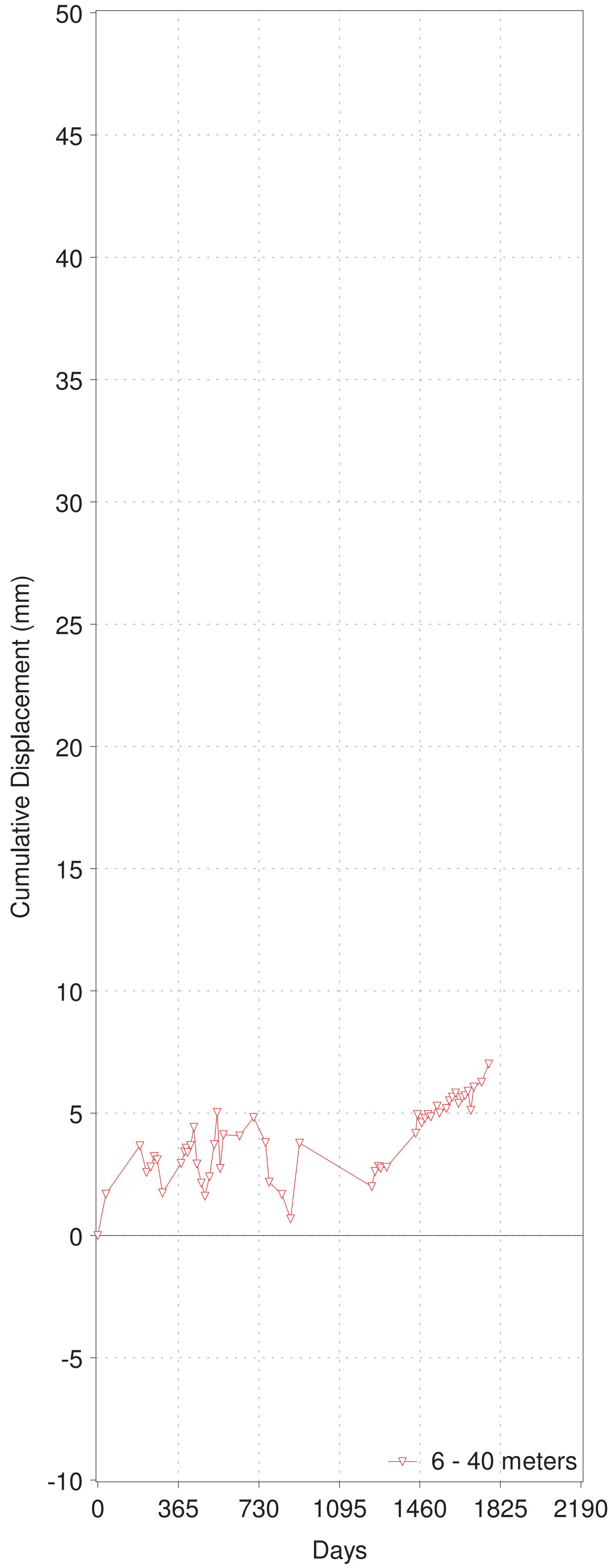
Mt. Polley
Cumulative & Time Displacement
SI06-02 AB-Axis





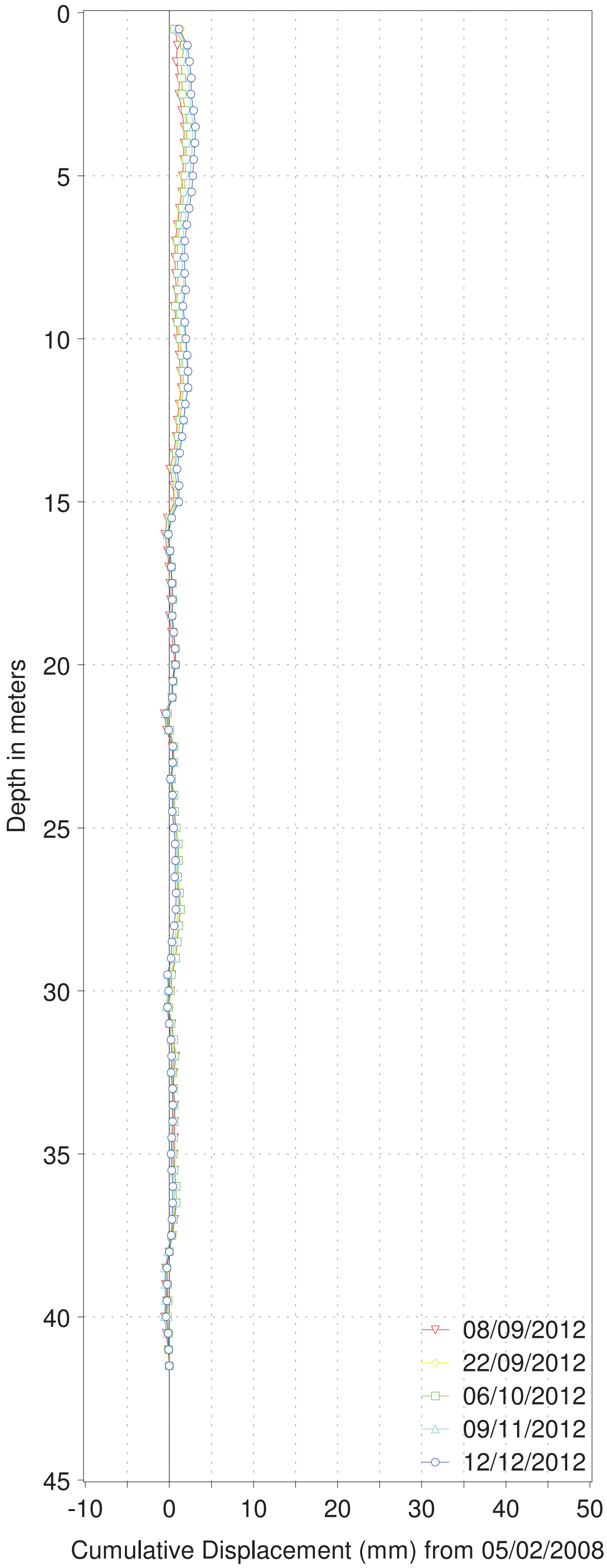
Mt. Polley
Cumulative & Time Displacement
SI06-03 A-Axis

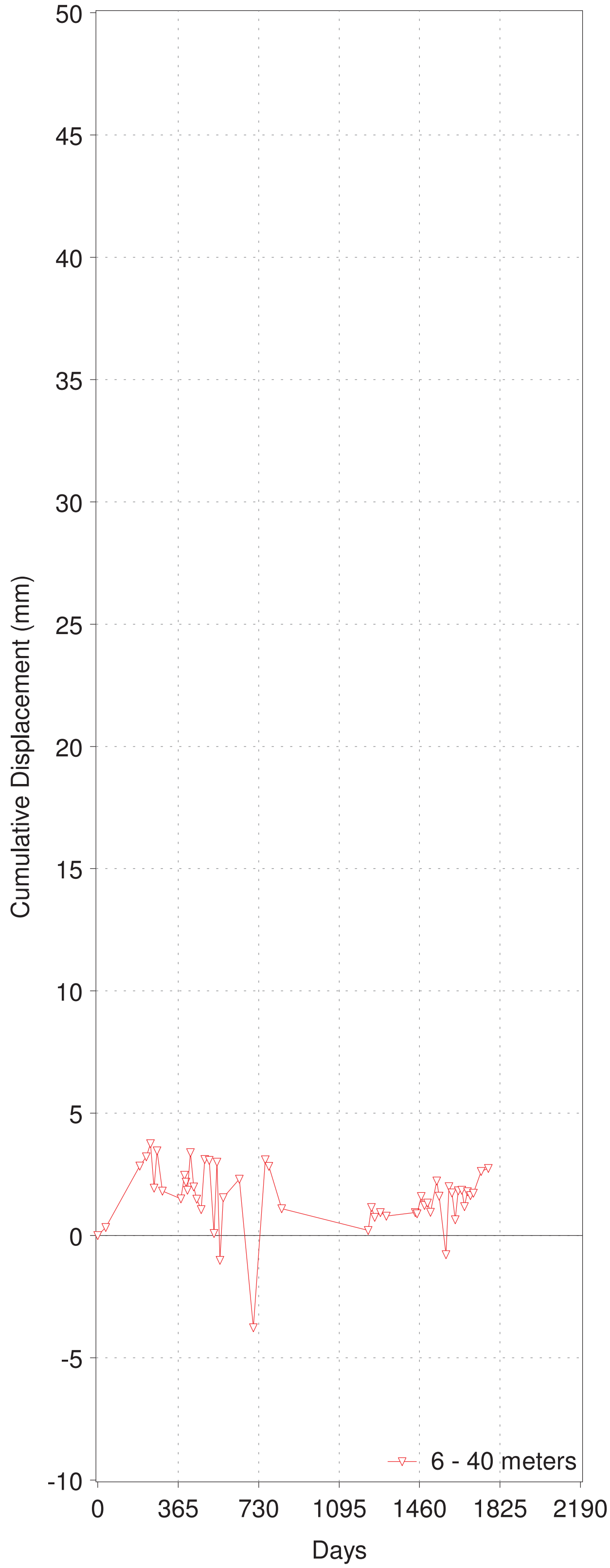




AMEC010406_0088

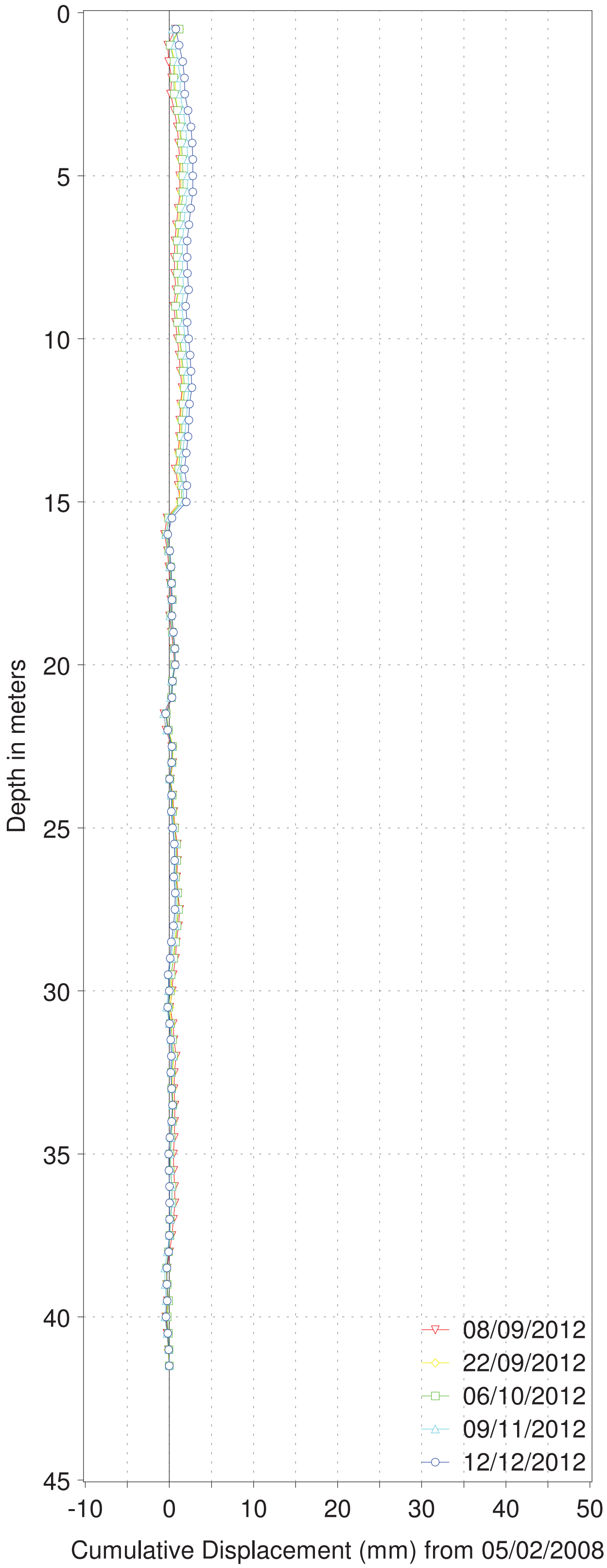
Mt. Polley
Cumulative & Time Displacement
SI06-03 B-Axis

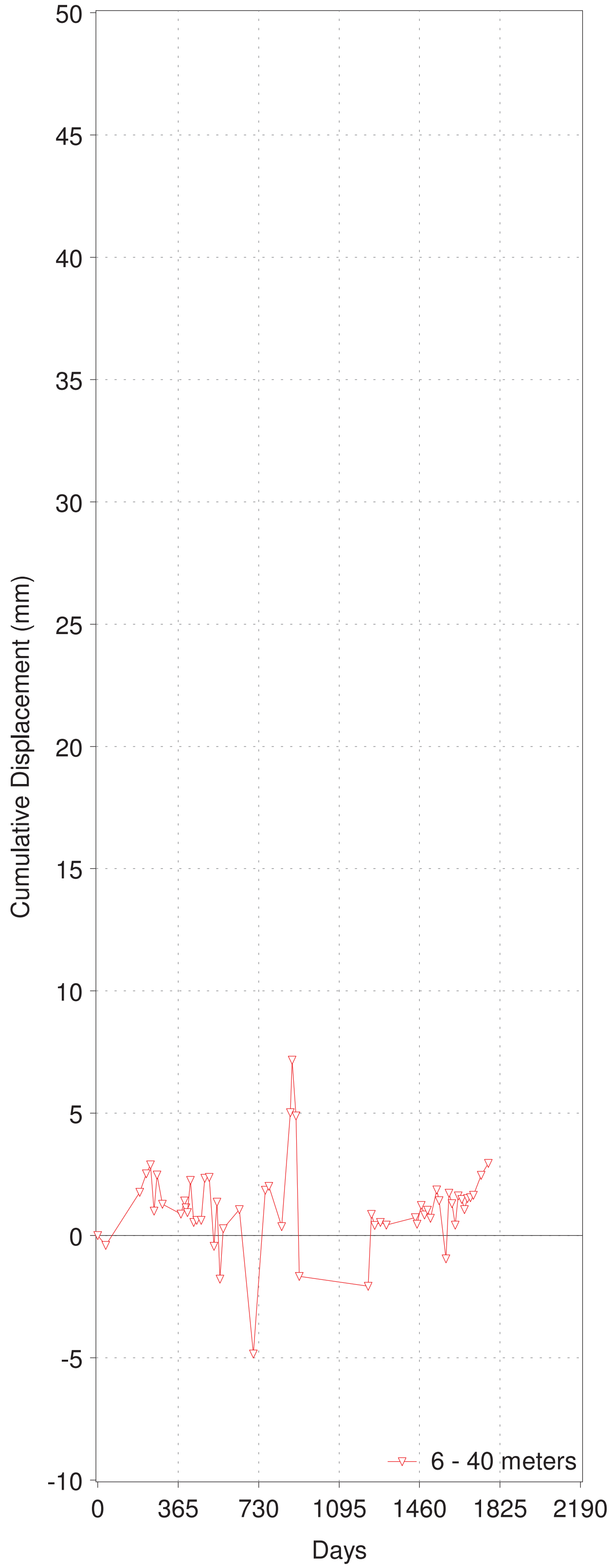




AMEC010406_0089

Mt. Polley
Cumulative & Time Displacement
SI06-03 AB-Axis





AMEC010406_0090

Mt. Polley
Cumulative & Time Displacement
SI11-01 A-Axis

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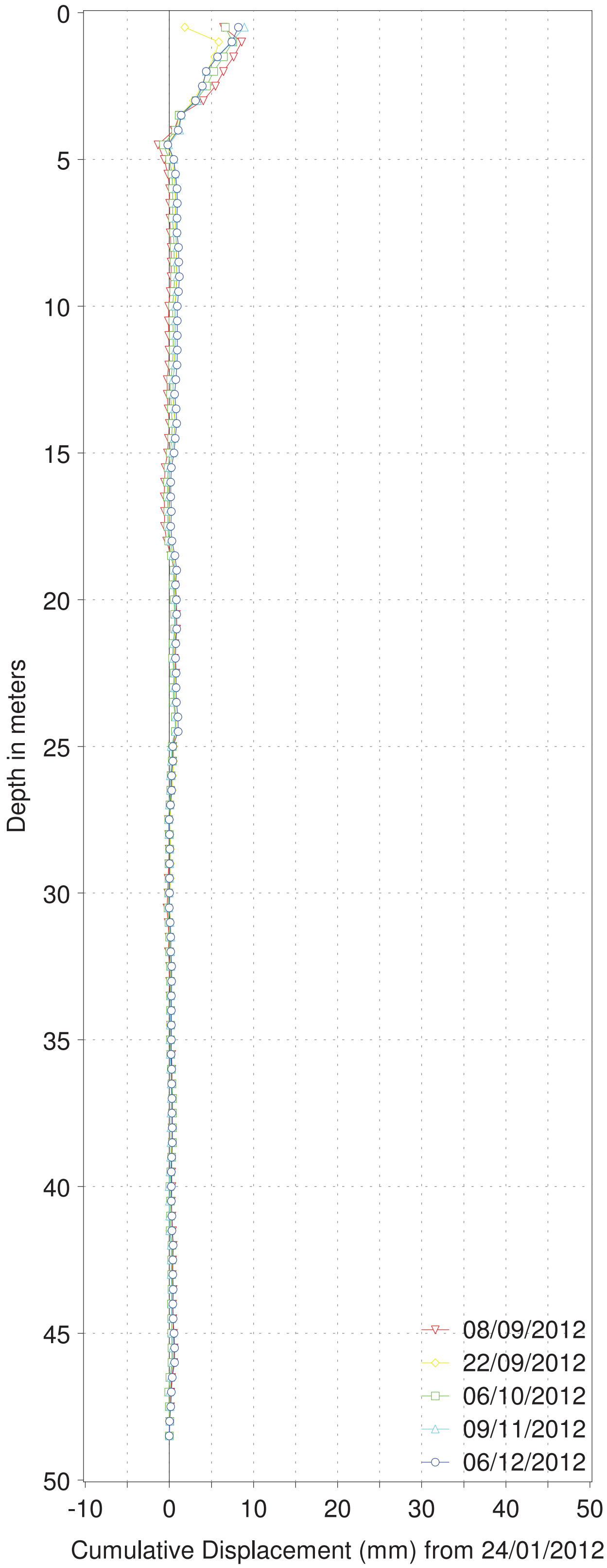
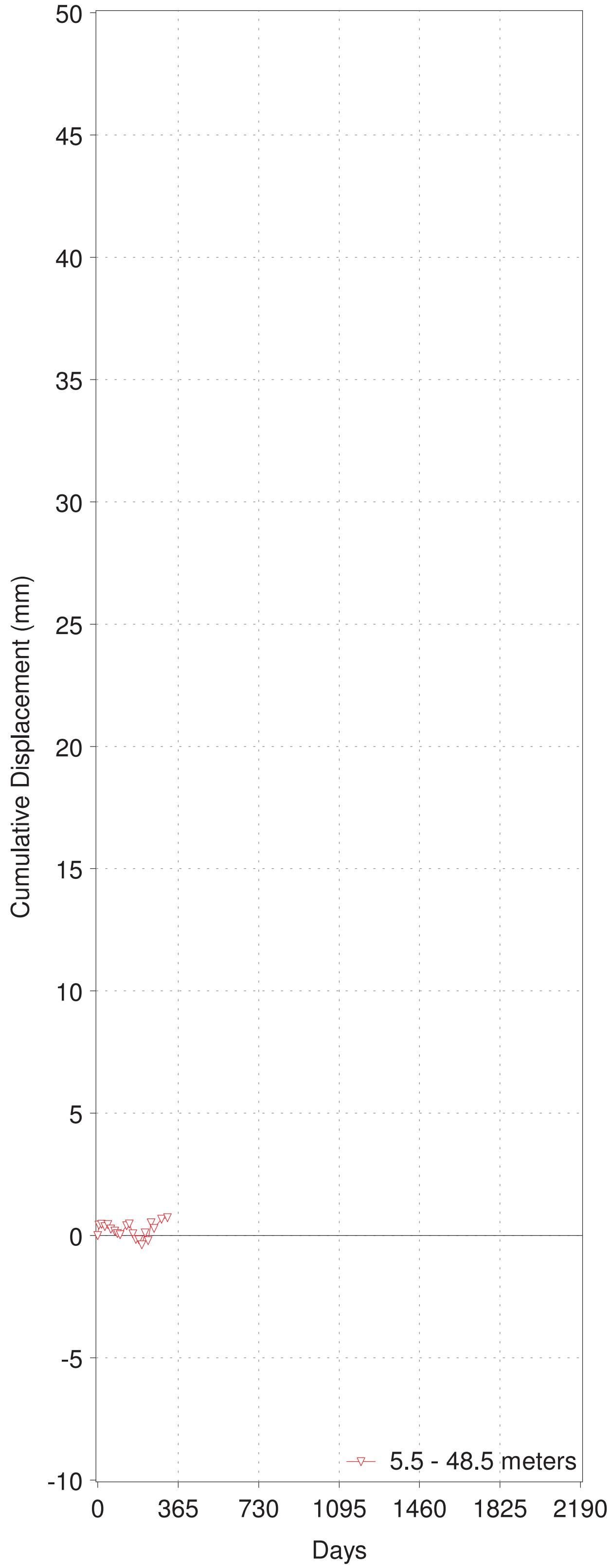
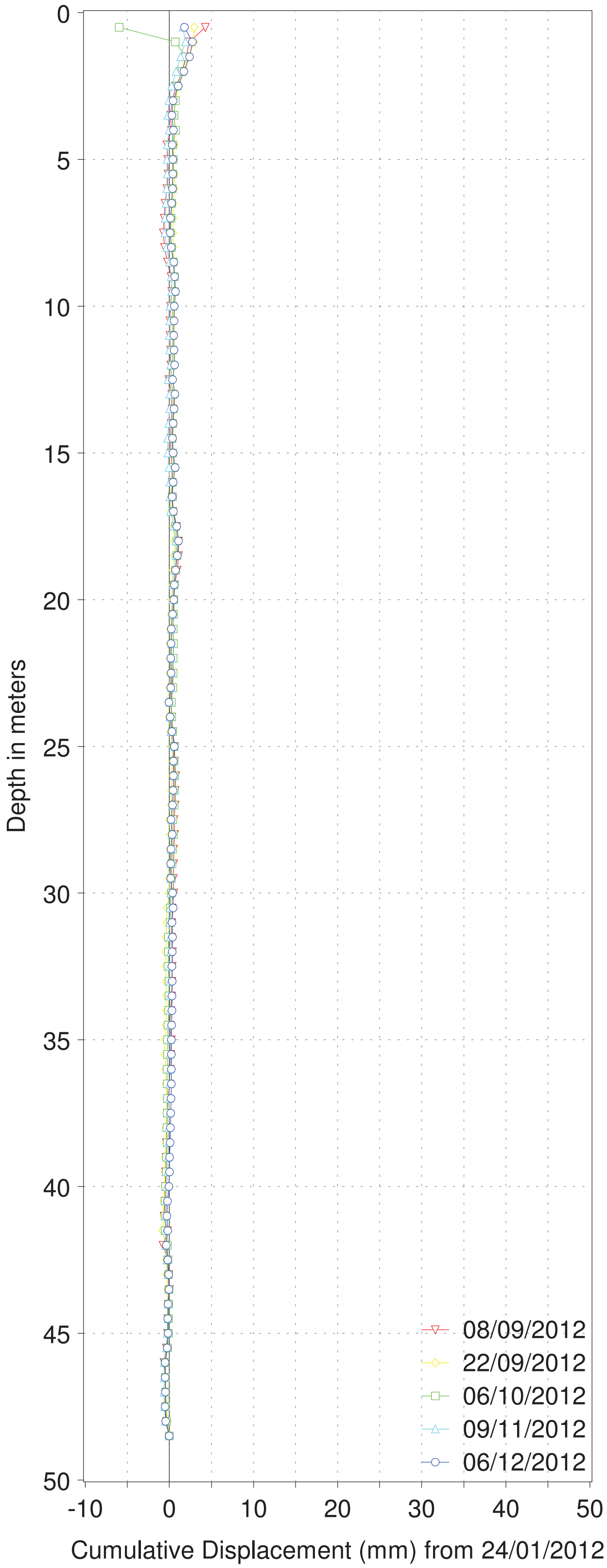
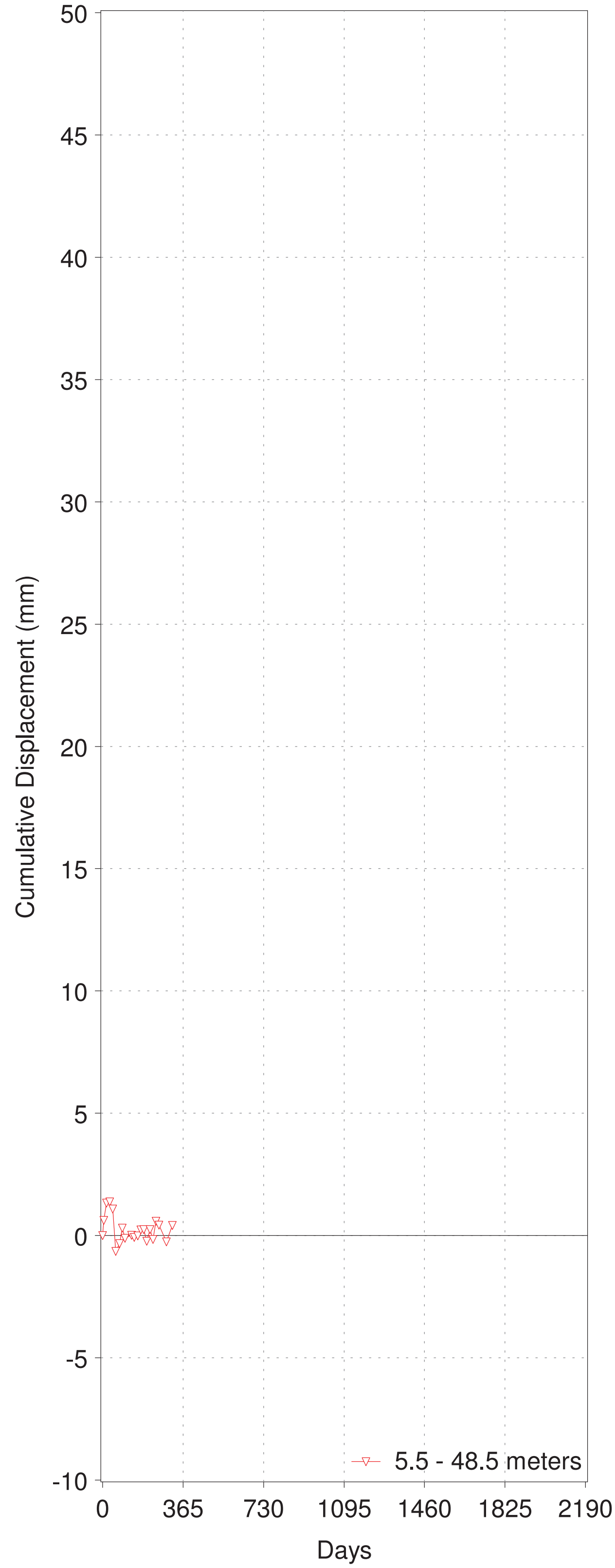




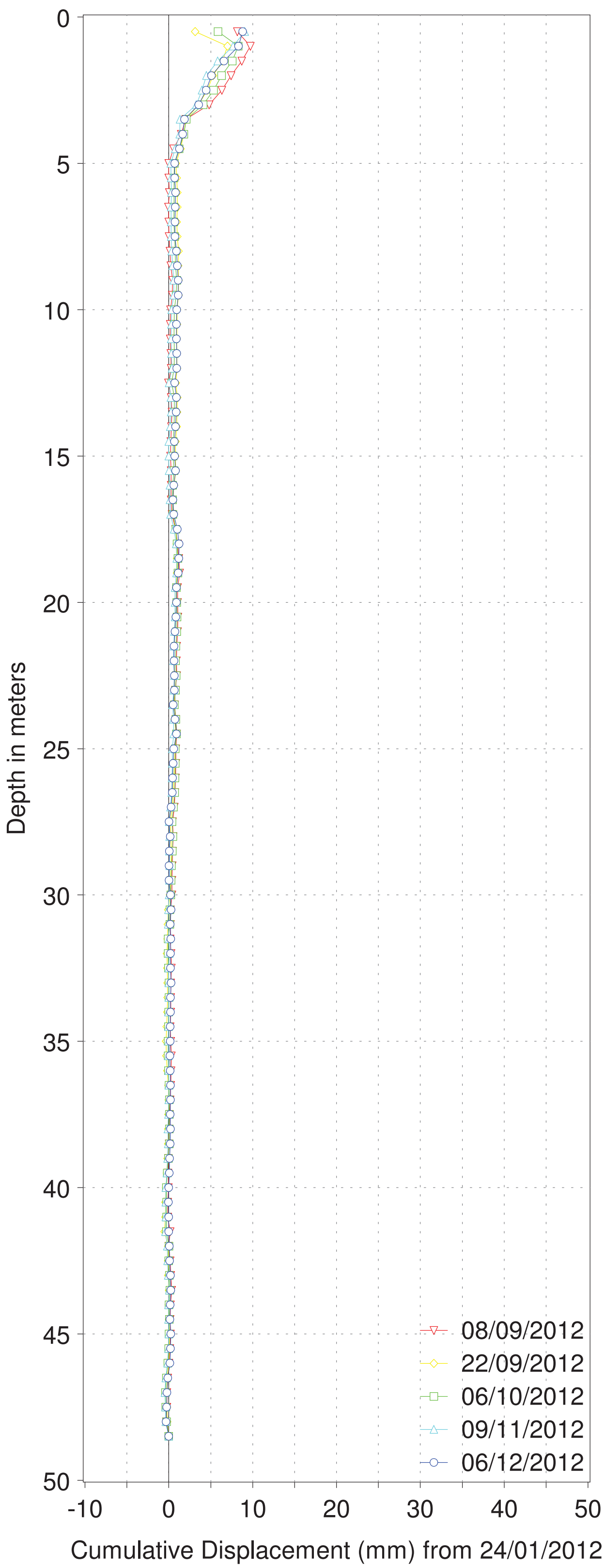
AMEC010406_0091

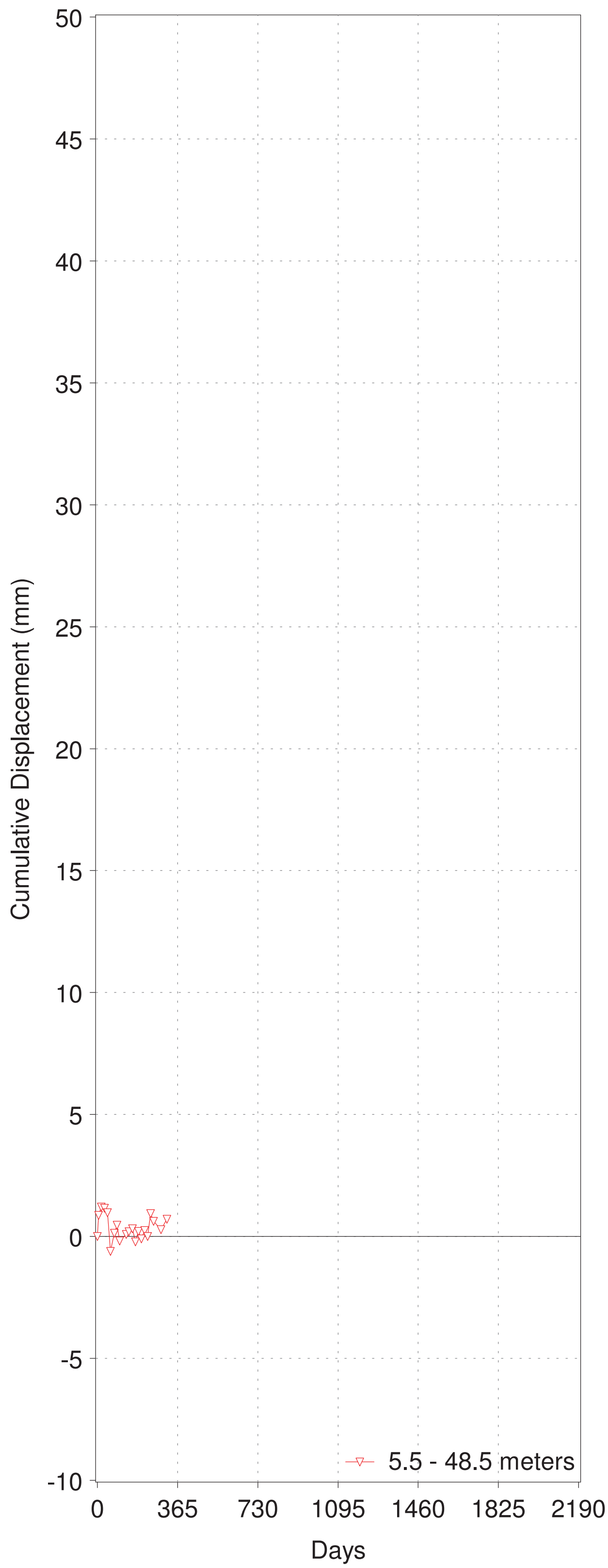
Mt. Polley
Cumulative & Time Displacement
SI11-01 B-Axis





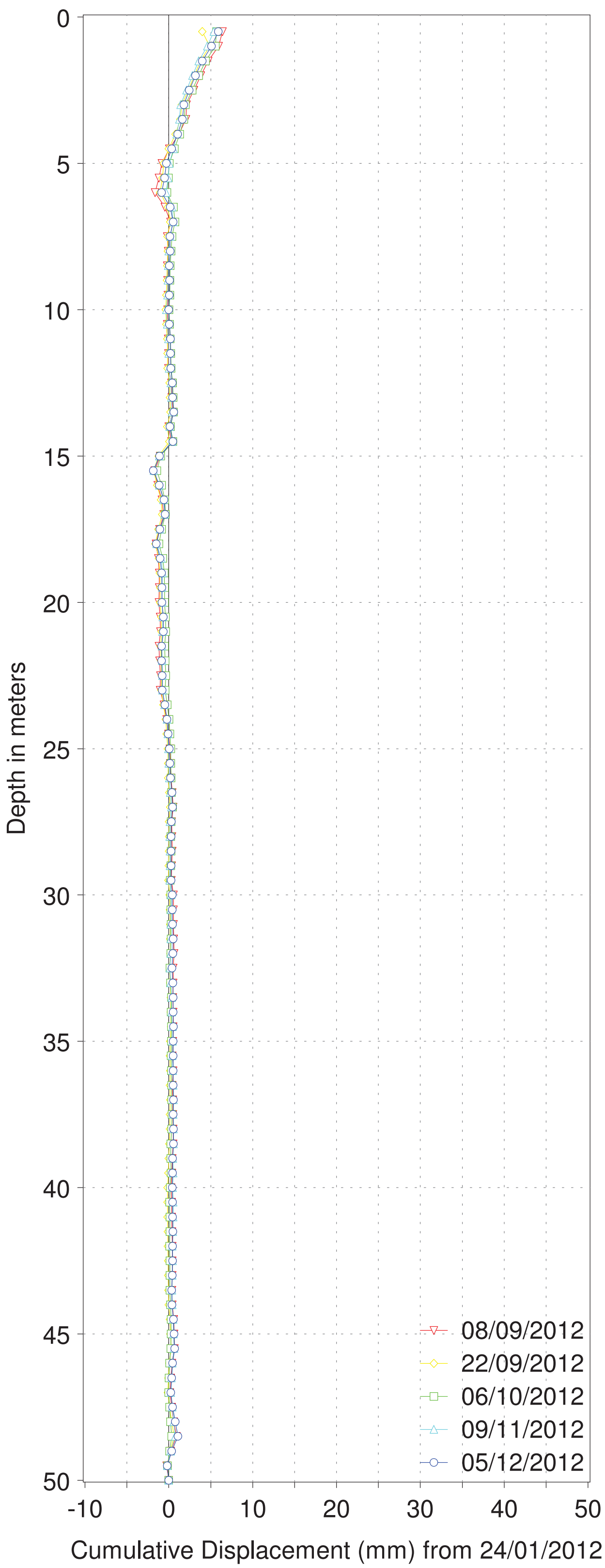
Mt. Polley
Cumulative & Time Displacement
SI11-01 AB-Axis

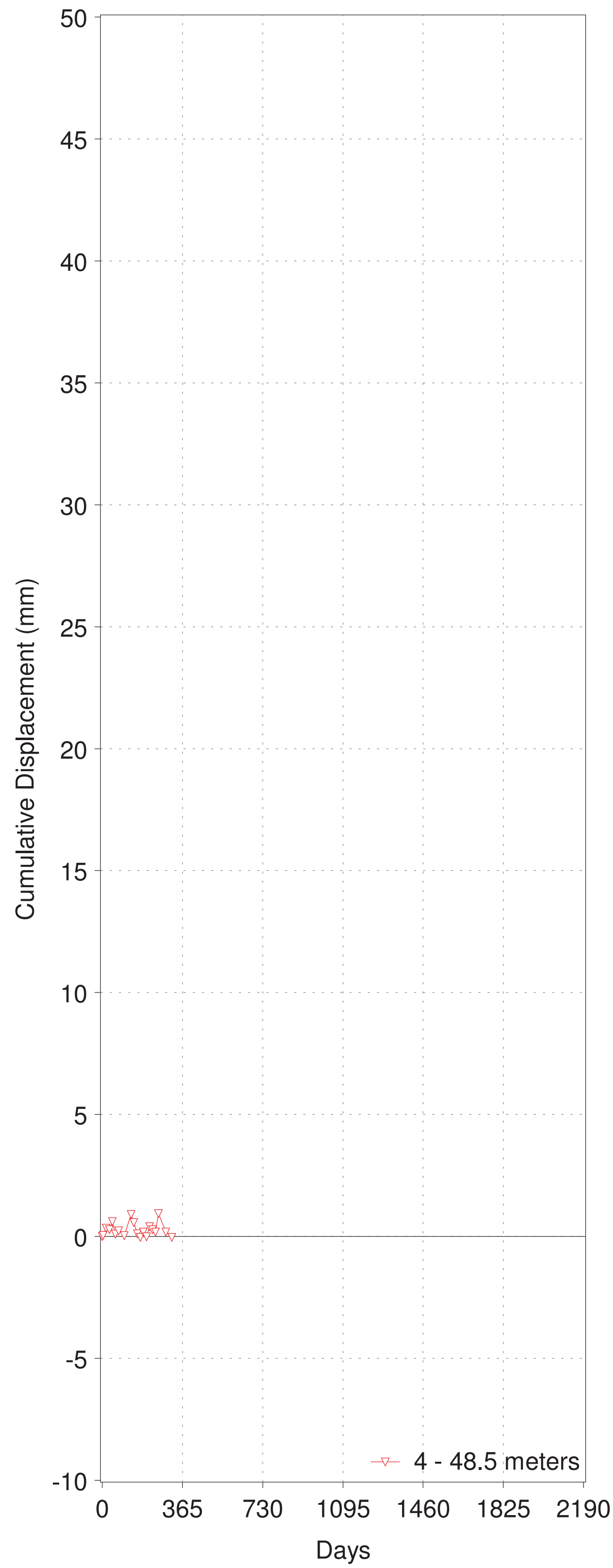




AMEC010406_0093

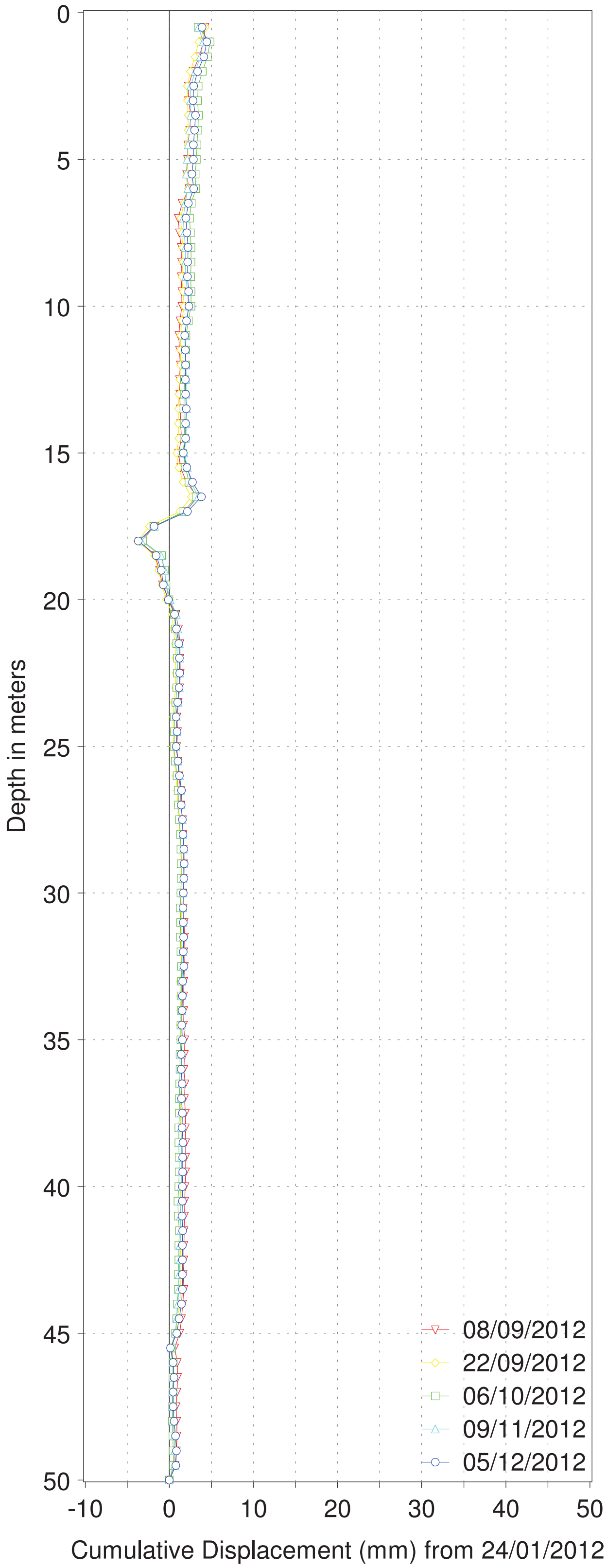
Mt. Polley
Cumulative & Time Displacement
SI11-02 A-Axis

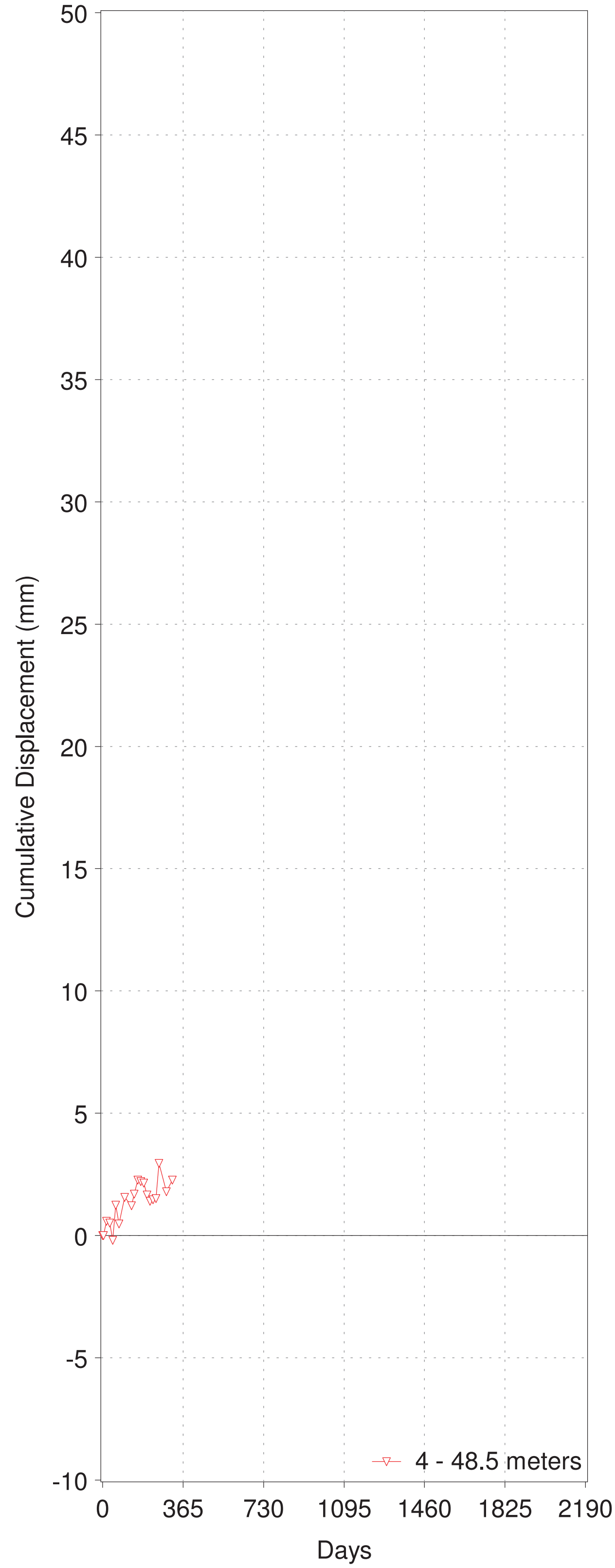




AMEC010406_0094

Mt. Polley
Cumulative & Time Displacement
SI11-02 B-Axis





AMEC010406_0095

Mt. Polley
Cumulative & Time Displacement
SI11-02 AB-Axis

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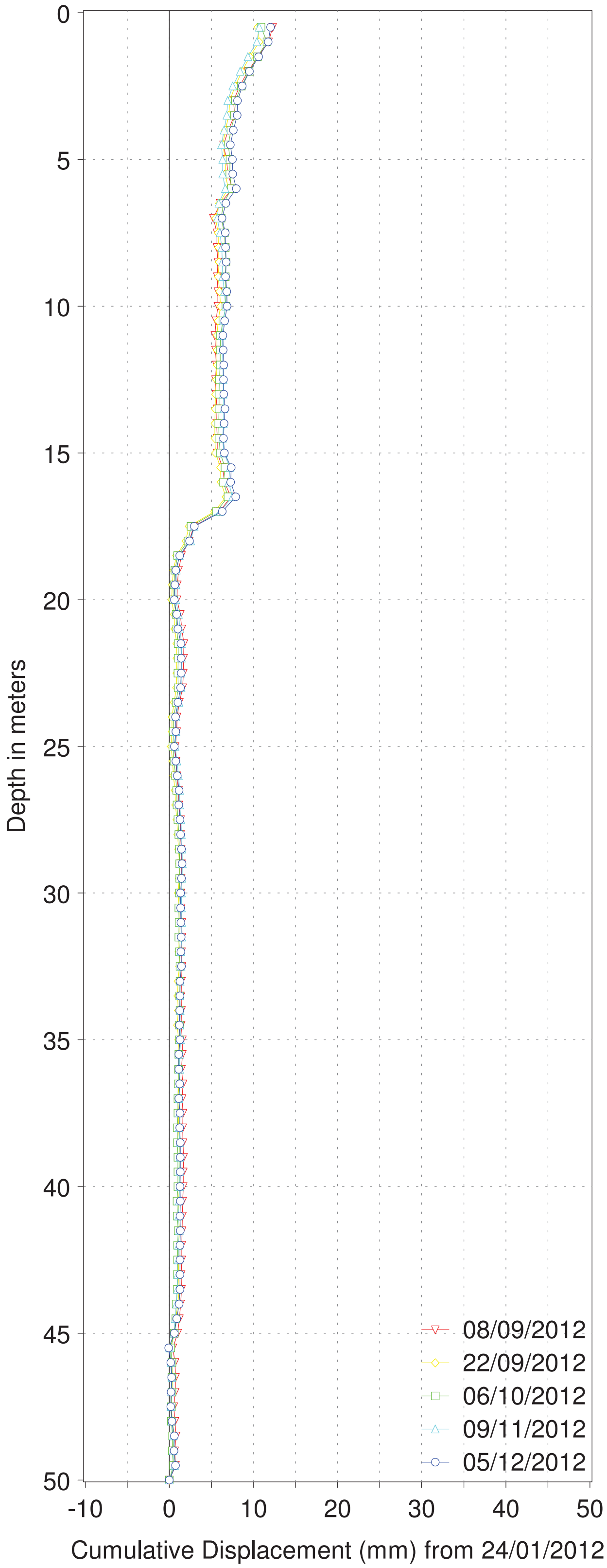
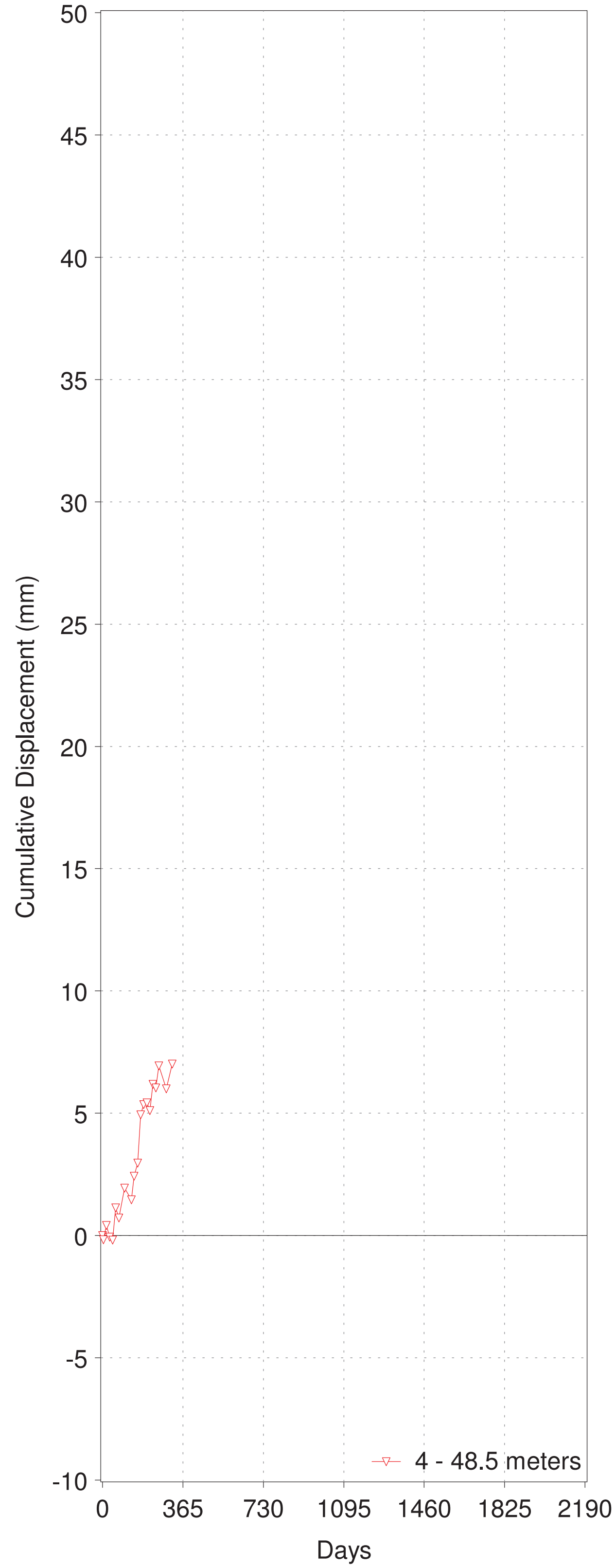
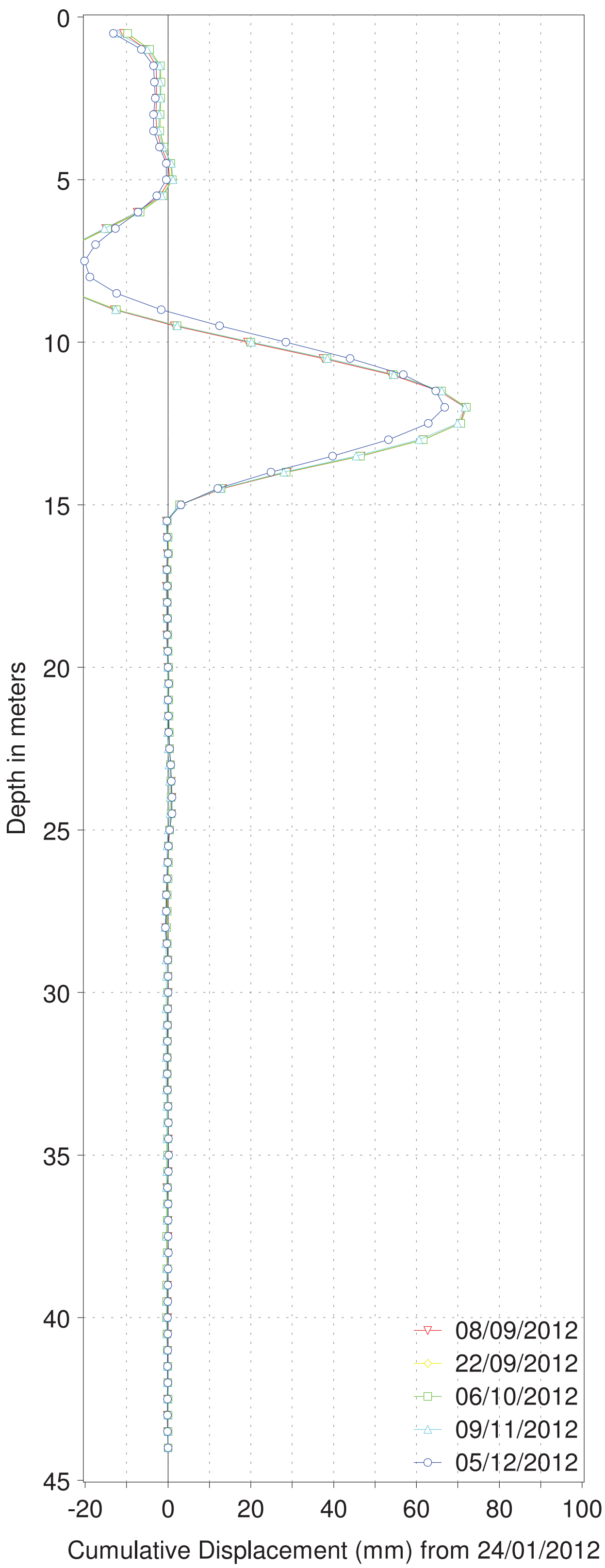
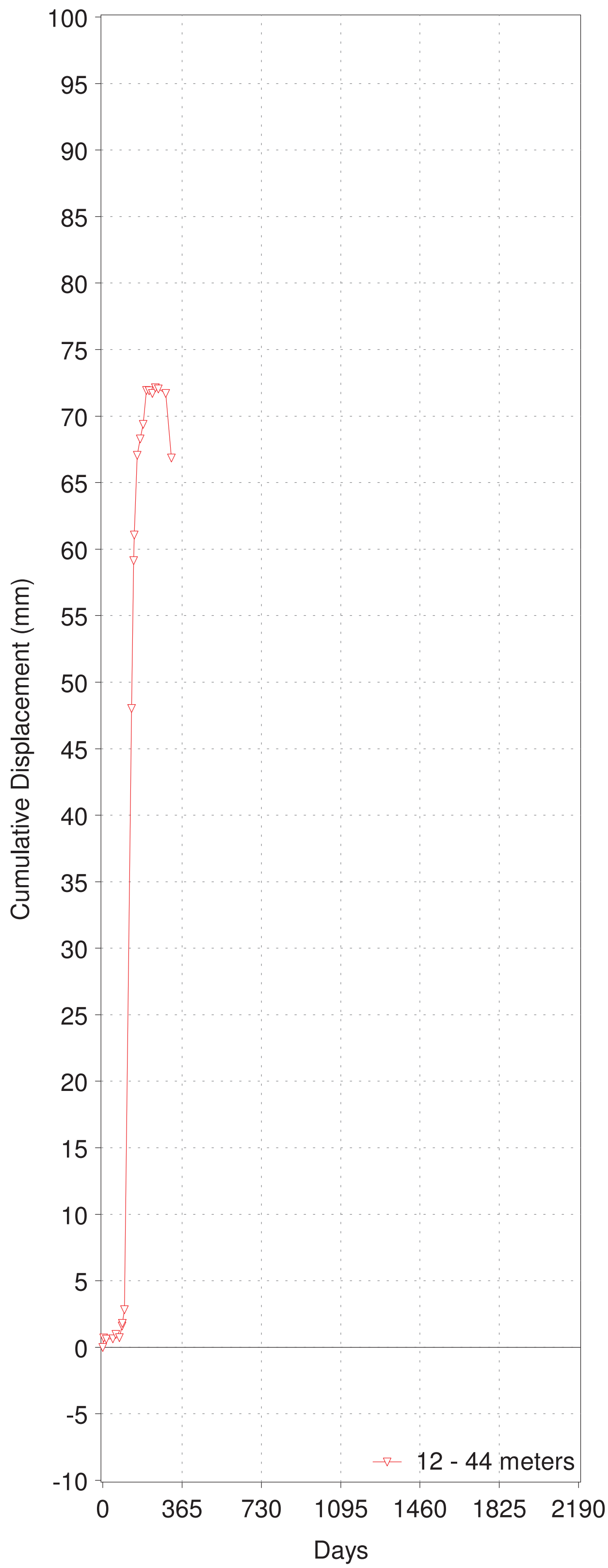




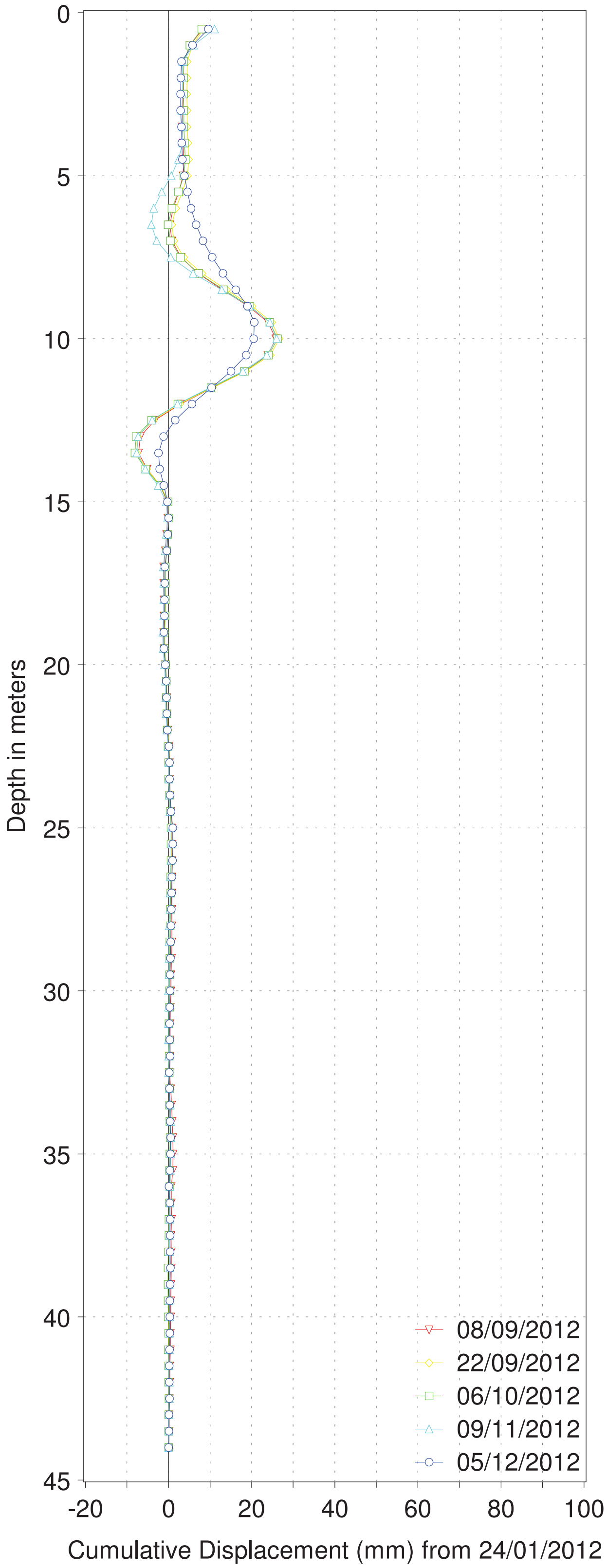
Mt. Polley
Cumulative & Time Displacement
SI11-04   A-Axis

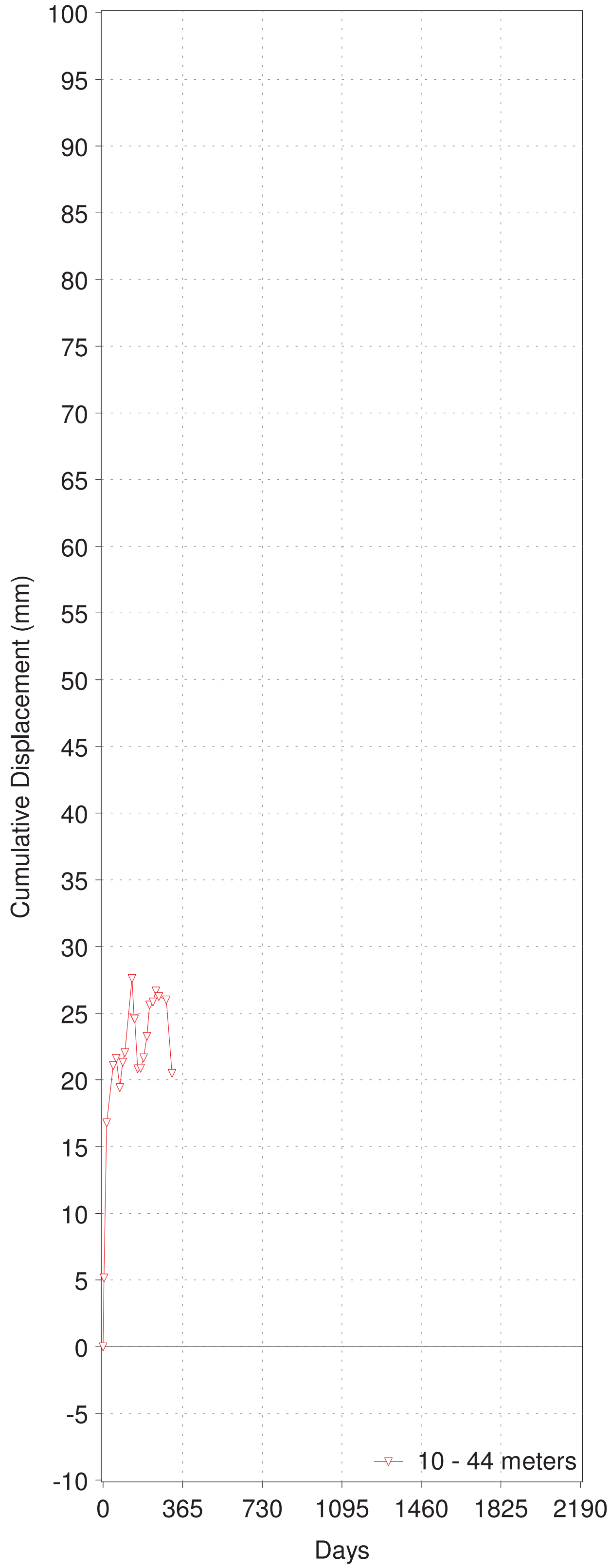




AMEC010406_0097

Mt. Polley
Cumulative & Time Displacement
SI11-04 B-Axis





Mt. Polley
Cumulative & Time Displacement
SI11-04 AB-Axis

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