JERICHO PROJECT
LONG LAKE DIVIDER DYKE
DESIGN REPORT

Project No. 1100060.004

JUNE 2005

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LONG LAKE DIVIDER DYKE
DESIGN REPORT

Submitted to:

TAHERA DIAMOND CORPORATION

Prepared by:

EBA ENGINEERING CONSULTANTS LTD.
EDMONTON, ALBERTA

Project No. 1100060.004

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1.0 INTRODUCTION

Tahera Diamond Corporation is presently developing the Jericho Diamond Mine, Nunavut, located approximately 420 km northeast of Yellowknife. Processed kimberlite will be deposited in a small lake as described in the report titled “Design of the Processed Kimberlite Containment Area" (SRK, 2004). The Processed Kimberlite Containment Area (PKCA) consists of several perimeter dams and cross-lake divider dykes as shown in Drawing DD-1.

This document describes the design and construction of the PKCA Divider Dyke A. Further details of the PKCA will be described in a PKCA management plan that is currently being prepared.

Divider Dyke A will be a semi-pervious internal structures situated within the PKCA. It will retain fine processed kimberlite solids (fine PK) in the eastern portion of the PKCA and pass water to the western portion of the PKCA. The western portion of the PKCA will perform as a ‘polishing pond’ to facilitate the settlement of any remaining suspended solids so that excess water can be discharged to Stream C3 during the spring, summer and fall.

The divider dyke will be constructed in stages. The first stage will be sufficient to retain processed kimberlite and water for at least the first year of operation. The dyke will be raised as required during subsequent mine operations.

This report summarizes available site geotechnical data and discusses the basis for selecting dyke design concepts. Reduced size construction drawings are presented in Appendix B of this report. Construction specifications are presented in a separate document.

2.0 DESIGN INTENT

The design criteria for the divider dyke are as follows:

- The dyke should retain the fine PK solids, to the extent practical. It will not be possible, or necessary, to prevent the movement of colloidal particles through the dyke. These particles will combine and settle in the deposition cell following flocculation.

- The dyke should allow the movement of water from upstream (east) to downstream (west), as seepage flow through the dyke. In the event that seepage is impeded by the development of frozen zones or filter blinding, a surface overflow channel will be constructed in the dyke.

- The dyke will remain physically stable during the operational life of the mine and following mine closure.

- Divider Dyke A construction will begin in 2005 and will be raised as required during mine operations. A second dyke, Divider Dyke B, will be constructed during future mine operations as the area upstream of Divider Dyke A fills with fine PK or as required for water quality.

- Divider Dyke A will be used a haul road for the construction of the West Dam.

2.1 Dyke Siting and Alignment Selection

Two dykes are proposed. Dyke A is located in the eastern portion of Long Lake, and Dyke B is located in the western portion of Long Lake. The divider dykes will be situated in narrow parts of the Long Lake basin as shown on Drawing DD-1. The lake bathymetry indicates that the maximum depth is approximately 2 m and 4 m at the Dyke A and Dyke B locations respectively. The lake it is approximately 55 m and 60 m wide at the Dyke A and Dyke B locations respectively.

2.2 Foundation Conditions

The estimated surficial geology of the PKCA is shown in Drawing DD-2. Limited geotechnical information is available at the dyke locations. Bedrock outcrops are expected at both the north abutments of Dyke A and Dyke B. A combination of bedrock outcrops and till and colluvium is expected at the south abutments.

Boreholes drilled at the PKCA West Dam and Settling Pond Dam locations encountered 4 to 5 m of till overlying rock. The till was generally logged as cobbles and boulders in a sand and gravel matrix with some silt. Low ice contents were logged in some boreholes with moisture contents ranging from 5% to 15%.

Local data suggests that the soils present in the exposed portions of Long Lake valley typically consist of granular till and colluvium. Lacustrine sediment is present on the lakebed however the deposit thickness is thin because of the small catchment area of the lake and coarse nature of the local soils. Three test probes were pushed into the lakebed at locations as shown in Drawing DD-2. The probes consisted of pushing a steel rod into the lakebed. The measured thickness of soft sediments is listed in Table 1.

TABLE 1
LONG LAKE DIVIDER DYKE PROBE RESULTS

Probe Location	Lakebed Elevation	Solid Strata Elevation	Estimated Thickness of Soft Sediments (m)
P 1101	510.86	510.48	.36
P 1102	511.53	511.53	minimal
P 1103	512.16	512.16	minimal

Note: Probes pushed on March 7, 2005. Ice elevation was 514.96 m

A talik is expected in the center of the lake; however, the talik is expected to be relatively shallow because of the narrow width of the lake.

Additional site characterization will be carried out during the open water season to further evaluate: the sediment thickness at the Dyke A location, the extent of open boulder cover on the lakebed, and foundation conditions at the abutments.

2.3 Lake and Tailings Level Projections

The natural water level in Long Lake is approximately 515.4 m. The water level in the PKCA will be governed by the west dam and pumping to maintain the water level below elevation 523 m.

The average final solids level in the east portion of the facility will be 523 m. It is intended to construct the divider dyke in stages as required.

The initial portion of Divider Dyke A will be constructed in the summer and fall of 2005 to the level required for mine operations in the summer of 2006. The solids level in the pond will be at an approximate elevation of 516 m at this time.

The dyke's filter layer may freeze during the winter thereby restricting water flow through the dyke until the active layer develops the following spring. The initial portion of the divider dyke will be constructed to elevation to retain an initial spring freshet. It has been assumed that the lake level will be drawn down 2 m prior to plant start up to provide excess water storage capacity in the PKCA. During average conditions the net total runoff, precipitation, and tailings inflow will add 300,000 m^3 to the facility between January and June. Assuming no flow through the dyke the water level would reach elevation 520 m in the spring of 2006.

It is recommended that the starter dyke be initially constructed to elevation 521 m thereby providing a 1 m freeboard. A low sill may be placed in the dyke at elevation 520 to pass potential overflow water over the dyke if required.

3.0 DESIGN CROSS-SECTIONS

The planned layouts and profiles of the intermediate dykes are in Drawings DD-3 and DD-4.

The upstream slopes of the rockfill shells are overlain with filters sand and gravel bedded on transition materials of crushed granite.

The rockfill shells are designed to be constructed with 1.5H:1V slopes on both the upstream and downstream sides. The rockfill shell crest width is 8 m. A portion of the dykes are within Long Lake and filling will take place by advancing rockfill into open water.

Transition materials will be placed on the upstream slopes of the rockfill to act as transitional bedding for the filters. The transition material will be constructed with 1.75H:1V slopes on the upstream side with a 3 m wide crest. Where the transition slope is deposited into open water, a variation to slopes of 1.5H:1V can be accommodated.

Filter material will be placed over the transition on the upstream slope. The outside slope of the filter should be no steeper than 2H:1V and have a minimum crest width of 3 m. A layer of rip-rap shall be placed over the filter material.

Along the shore abutment portion where existing terrain is covered by boulder fields, a key trench will be excavated beneath the upstream filter, transition and rip-rap zones.

4.0 SLOPE STABILITY

4.1 Analysis Methodology

Limit equilibrium analyses have been carried out to determine the factors of safety for slope stability during construction and operation of the intermediate dykes. All analyses were conducted using the commercial, two-dimensional, slope stability computer program, SLOPE-W. The factors of safety have been computed using the Modified Bishop method.

The general criteria established for deep seated stability is that the computed minimum factors of safety must equal or exceed values of 1.5 under static loading conditions and 1.1 under earthquake loading conditions (in accordance with the Canadian Dam Association (CDA) Guidelines). Since the dykes are internal to the tailings disposal facility and failure of the dykes would cause no loss of life and would generally limit economic, social and environmental losses to the Owner's property, the dykes can be classified in a very low consequence category.

The assumed material properties of the embankment and foundation soils for the stability analyses are presented in Table 1. These properties have been selected based on experience with similar materials.

TABLE 1
MATERIAL PROPERTIES USED IN STABILITY ANALYSIS

Material	Angle of Internal Friction	Cohesion (kPa)	Drained Unit Weight (kN/m^3)	Saturated Unit Weight (kN/m^3)
Rockfill	42°	-	20.6	22.6
Filter	35°	-	19.4	21.0
Transition	38°	-	20.0	21.6
Overburden (Lakebed)	30°	-	20.5	20.5

The stability analyses were carried out for the deepest dyke cross-section which is considered to be the worst cases in evaluating intermediate dyke stability. The analyses were carried out without tailings upstream of the dyke, with no tailings at the downstream toe of the dyke.

4.2 Seismicity

The project area lies in a region of low seismicity, but magnitude 4+ earthquakes have recently occurred within a similar part of the shield. NRCan (NRCan 2003a and NRCan 2003b) recommends that a probabilistic approach should be adopted to estimate the peak ground accelerations (PGA); particularly the new proposed National Building Code of Canada (NBCC) PGA values.

The CDA indicates that the usual minimum criterion for the design earthquake for a dam which coincides with the "low" consequence category would be an earthquake with an annual exceedance with return periods of 100 and 1,000 years. NRCan (2003a and 2003b) indicates that the 1000 year event has a peak acceleration of 0.016 g. However, in conjunction with proposed changes to the NBCC, NRCan indicates that performance of the dams be designed for an earthquake with a 2,475 year return period which has a peak ground acceleration of 0.06 g. This has been adopted as the design earthquake.

4.3 Analyses Results

The results of the stability analyses are presented in Appendix A, illustrating the analyzed surfaces with the lowest factors of safety. A summary of the minimum factors of safety is presented in Table 2.

TABLE 2
MINIMUM FACTORS OF SAFETY

Case	Minimum Factor of Safety
Upstream – Static Shallow Surface	1.56
Upstream – Static Deep Surface	1.57
Upstream - Seismic	1.32
Downstream – Static Shallow Surface	1.50
Downstream – Static Deep Surface	1.55
Downstream - Seismic	1.32

The minimum factors of safety meet the requirement set forth by the Canadian Dam Association.

The south dyke abutments will be constructed on till permafrost. The permafrost under the dyke toes will thaw as it is submerged. Excess pore pressures generated due to thawing of the till under the dyke toe are considered negligible because thaw would progress relatively slowly into the till foundation and the till has a high coefficient of consolidation (it is non plastic). Under these conditions, the thaw consolidation parameter (Morgenstern and Nixon, 1971) is very low, indicating that the excess pore pressures in the till would be negligible.

4.4 Worst Case Failure Scenario

The environmental impact of a hypothetical worst case failure scenario must be considered should the dykes fail. The prime purposes of the divider dykes are to retain tailings to facilitate the orderly placement of tailings and to systematically control water movement. The divider dykes are not the last line of defense against release of water and tailings into the environment, as this is the role of the impervious perimeter dams.

Should a catastrophic failure and/or the uncontrolled release of water occur through one of the divider dykes, the dyke could be reconstructed, the flow could be retrieved from the downstream cell and returned to an upstream cell by if necessary.

5.0 SETTLEMENT

The portion of the dyke within the lake is founded on unfrozen lacustrine deposits. The maximum measured thickness of soft deposits was 0.36 m at the location of Dyke B. These deposits are soft and displacement is expected during rockfill placement. Significant settlement in the lakebed soils is not anticipated

The abutments are founded on shallow rock or till and colluvium. Drilling in the till and colluvium indicated low ice contents. Continuously submerged abutment areas will thaw. Soil conditions vary along the alignment of the dyke; therefore, thaw settlements are expected to be non-uniform. The till foundation in these areas is not considered to be highly ice-rich and is generally thin, limiting expected movements. Furthermore, the thaw will progress slowly into the till foundation and will cease once the areas are covered by tailings and freezeback begins to occur. The divider dyke is designed as flexible rockfill structures which will adjust to substantial settlements. It is recommended to monitor dyke settlements following construction and when water levels rise. Design modifications or operation modifications can be made to limit thaw settlements in the unlikelihood of excessive movements.

6.0 MATERIAL PROPERTIES

6.1 Filter

The PKCA will retain the fine processed kimberlite (fine PK). The fine PK is approximately 15% of the total PK product by weight. The fine PK will have particle sizes less than 0.1 mm. Initial particle size testing indicate an average D85 particle size of 0.0315 mm and D50 of 0.0125 mm (85% smaller than 0.0315 mm, 50% smaller than 0.0125 mm). The samples had an average of 24% of the particles smaller than 0.002 mm.

The divider dyke filter has been designed to prevent a significant flow of fine PK through the filter. A filter has been based on a criteria of:

- D15 of the filter <5 * D85 of the fine PK,

The recommended filter gradation curve is shown in Figure 1.

The filter is not designed to retain all fines in the supernatant. A filter to retain all fine particles would quickly blind off, rendering it ineffective since the supernatant would then have to be pumped over the divider dyke.

No samples of the fine PK or supernatant were available for filter testing for the dyke. It is recommended that testing be carried out during the initial plant start up to evaluate the expected filter effectiveness.

6.2 Slope Protection

The divider dyke will be exposed to open water for the short summer season. The original fetch length for Dyke A is 450 m; however the fetch length will decrease over time as the fine PK is deposited from the east end of the facility.

There is limited wind data from the Jericho site; therefore the design wind speeds for the PKCA have been based on the maximum hourly wind speeds observed at the Contwoyto Lake weather station located approximately 75 km south of the Jericho site. The slope protection has been designed based on a maximum wind speed of 74 km at the ground surface.

The maximum wave height is estimated to be 0.36 m. A protective layer of dense, angular, quarried rock with a D50 of 155 mm is required to minimize erosion of the filter material.

The protective layer must also satisfy the gradation criteria between protective layer and the underlying filter layer to prevent smaller particle sizes in the filter from washing out. The criteria used in this design are as follows:

- D15 of the rip-rap < 5 * D85 of the filter

The recommended gradation of the rip-rap layer is shown on Figure 1. The recommended gradation is somewhat smaller than that required for full wave heights; however, the rip-rap layer is thick. Surface erosion may occur, leaving the larger particles to protect the dyke.

6.3 Transition

A transition layer is required between the filter and the run of mine rock fill to prevent the filter from piping into the dyke rockfill. The criteria used in this design are as follows:

- D15 of the transition < 5 * D85 of the filter
- D15 of the rockfill < 5 * D85 of the transition

The recommended gradation of the Transition layer is shown on Figure 1.

7.0 CONSTRUCTION

7.1 Materials

The dyke embankments comprise four material zones: filter, transition, rockfill shell and rip-rap. The transition and rip-rap zones will be constructed using processed and/or selected rock fill. The shell will be constructed using run of mine rock.

- **Filter**

The filter material must be well graded with sufficient fines to retain the fine PK. The maximum aggregate size should be 20 mm with a recommended gradation as shown on Figure 1. The filter could be constructed of processed crushed granite or blended esker material and till. Based on the testpit samples carried out to date, the esker material and till is variable therefore it will be difficult to maintain a gradation which meets the filter requirements. It is recommended that trial blending and/or crushing be carried out prior to construction to determine the most suitable and cost effective method of producing the filter material.

- **Rip-rap**

The rip-rap material will be well graded crushed rockfill with a 300 mm maximum aggregate size with a recommended gradation as shown on Figure 1.

- **Transition**

The transition material will be well graded crushed rockfill with a 200 mm maximum aggregate size with a recommended gradation as shown on Figure 1.

- **Shell**

The shell materials will be run of mine rock and have a maximum size of 1000 mm.

- **Key Trench**

A key trench is required beneath the upstream filter and transition base through open boulder areas that exist at some locations on land and in some shallow water. Key trench excavation depths will vary depending on conditions encountered during construction and the extent of the key trench should be determined by the on site engineer.

Table 3 presents the in place quantities of material required for each zone of the intermediate dykes if constructed as per design geometry. The quantities of material do not include any contingency for waste. The stockpiled volumes for dyke construction should be approximately 20% larger than the in place to account for material bulking.

TABLE 3
INTERMEDIATE DYKES MATERIAL QUANTITIES

Structure	Crest Elevation (m)	Filter (m^3)	Transition (m^3)	Rock Fill Shell (m^3)	Rip-rap (m^3)	Estimated Total Volume of Materials (m^3)
Divider Dyke A	521 – 2005 Construction	1,800	1,800	13,000	1,000	17,600
	524 – Final Increment Volume from 521 to 524	3,000	3,000	11,000	2,700	19,700
Total Volume (m^3)		4,800	4,800	24,000	3,700	37,300

7.2 Construction Requirements

The following subsections describe a construction plan for the dyke embankments that satisfies requirements for a structure end product that will perform in accordance with the design intent. The purpose of including this information is to demonstrate a feasible construction plan; it is not the intent to specifically recommend a procedure for placing the dam embankment materials. In fact, it is anticipated that the contractor will develop their own plan. Additional requirements for the placement and compaction processes can be found in the detailed Construction Specifications.

The construction plan must satisfy the following requirements for the structure to meet the design intent.

- The excavation of key trench in existing terrain covered by washed out boulder fields must be either to competent intact rock, till or stiff lacustrine sediments.
- Filter placement and compaction should take place in above freezing temperatures.
- Fill material placed above water should be densified to achieve maximum inherent strength from grain-to-grain contact.
- Placement of subaqueous fill should be carried out to prevent segregation of materials and to avoid mounding or uneven distribution of the material zones.
- A quality assurance program must be implemented that will provide data on fill properties, density and uniformity. The program must be structured to provide information that can be used to control material placement.

7.3 Foundation Preparation

Lake ice, open graded boulders, organic soils and other deleterious materials must be removed below the filter and transition zone footprint. Lake ice and snow must be removed from the rockfill shell footprint.

7.4 Material Placement

7.4.1 Shell Placement

The shell will be angular run of mine waste rock. This material should be as well graded as possible. The shell material placed in open water will assume its natural angle of repose. The shell material placed above water should be placed and compacted in 1.5 m lifts. It is anticipated that the material gradation can be controlled to some degree by varying the blasting pattern. The shell material should be placed and spread as much as possible from upstream to downstream such that coarse boulders are selectively pushed to the downstream edge. This will provide a surfacing of select material (rip-rap) on the exposed downstream slope and provide finer material close to the upstream transition.

7.4.2 Transition Placement

The transition material should be placed so as to achieve the design slopes. The transition material advanced into open water will tend to assume its angle of repose, and mound on the exposed rockfill shell and filter slopes. The preferred placement procedure is to use extended reach placement techniques such as a long armed backhoe to drop the material to its desired location. The transition material placed above water should be placed and compacted in 0.5 m lifts.

7.4.3 Filter Placement

The filter material is the most performance sensitive material to be placed. Special care must be taken to achieve the design slopes. Again, the filter material pushed into open water will tend to assume its angle of repose, segregate and mound on the exposed transition slopes. An extended reach placement system should be used to minimize these problems by dropping the material directly to its appropriate location. The filter material placed above water should be placed in 0.3 m lifts and compacted to a density of 95% of the maximum dry density as determined in the laboratory using standard compactive effort (ASTM D698).

7.4.4 Rip-rap Placement

The Rip-rap should be placed as uniformly and tight knit as possible on the upstream slope of the dyke, overlying the filter material. Placement in 0.5 m lifts should be achieved with a large backhoe below water and a bulldozer above water.

7.5 Quality Assurance

The construction quality assurance program must be structured to ensure that construction-sensitive features of the design are achieved. The elements of the program will include:

- Careful surveying to establish material quantities and allow preparation of as-built drawings.
- Specific engineering approvals at critical times such as abutment preparation, removal of deleterious materials, and key trench excavation.
- Monitoring, field and laboratory testing of fill materials.
- Specific approval of construction procedures for moisture conditioning and placement of embankment materials.
- Observation and approval of contractors proposed material placement sequences and preparation of the surface of each lift before placing the next lift.
- Defined procedures for reporting with identified responsibilities for decision-making during construction.

Specific requirements and testing frequencies for the Quality Assurance process during construction are set out in the Construction Specifications.

8.0 LONG-TERM MONITORING

8.1 Purpose

Performance is an integral part of the design, construction and operation of any water/tailings retention structure. This section describes a recommended minimum monitoring program for the construction and operation phases of the project. A program should be developed to:

- monitor the effectiveness of the filters by water quality testing of collected water in the tailings disposal facility cells, as described in the Tailing Management Plan,
- monitor movements of the dykes, including those sections built on permafrost foundations with potential thaw settlements, and
- satisfy regulatory requirements for dyke performance.

8.2 Annual Inspection

It is recommended that an annual site inspection be performed by the design team to document the performance of the divider dykes. These visits should take place at the end of the summer when the maximum annual thaw has developed. The specific tasks of these visits include:

- observation of the upstream and downstream slopes for any signs of distress,
- observation of the crest of the dykes for any signs of transverse cracking, and
- observation for any signs of excess seepage, particularly if carrying unfiltered tailings solids.

Respectfully submitted,
EBA Engineering Consultants Ltd.

REGISTERED PROFESSIONAL ENGINEER
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LICENSEE
June 24, 2005
N.W.T.

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PERMIT NUMBER
June 24/05
P 018
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WTH:ln

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FIGURES

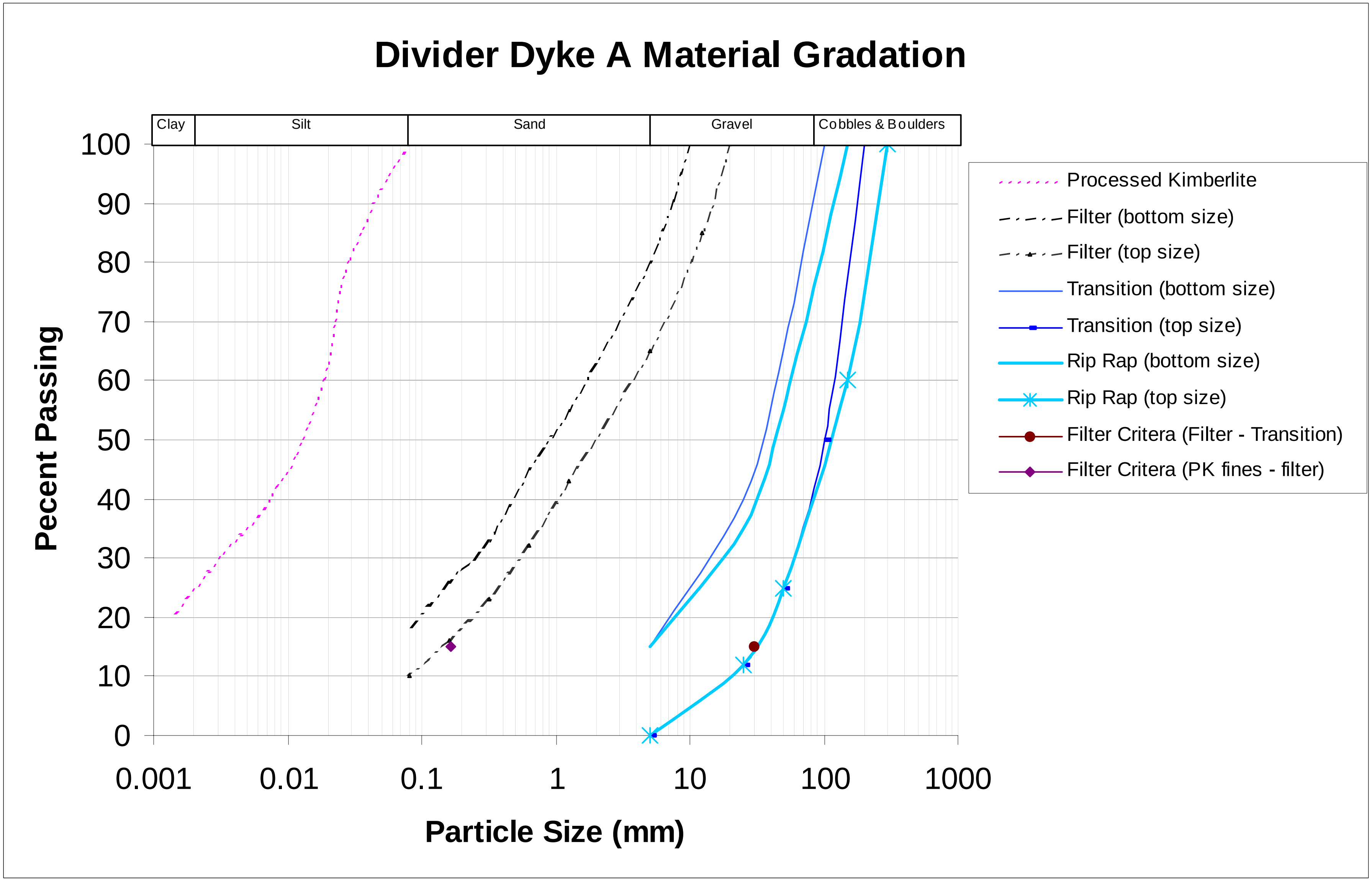


Figure 1
Divider Dyke Gradation Specifications

APPENDIX A

STABILITY ANALYSIS RESULTS

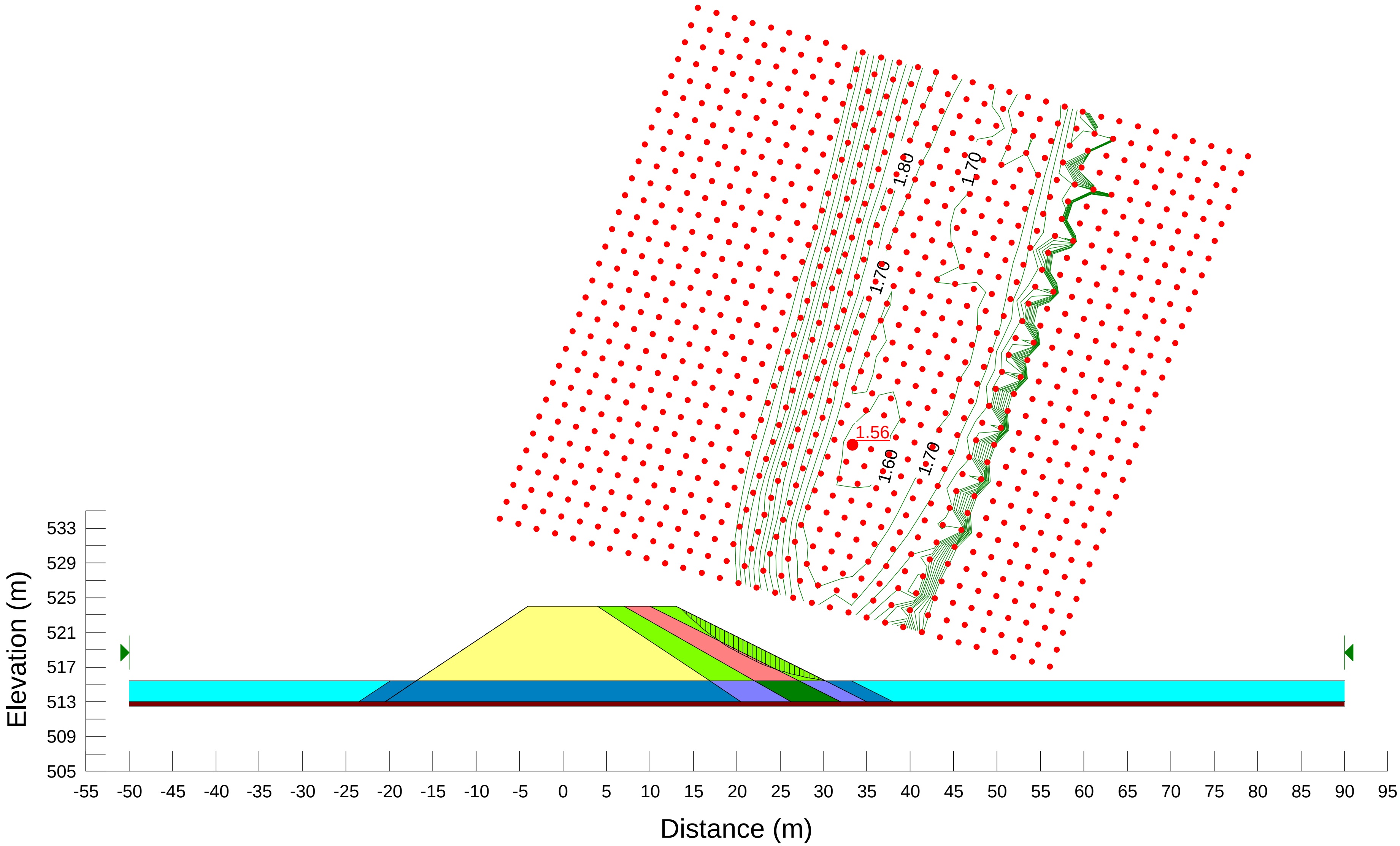


Figure A1

Stability Analysis - Upstream, Static, Shallow Slip Surface

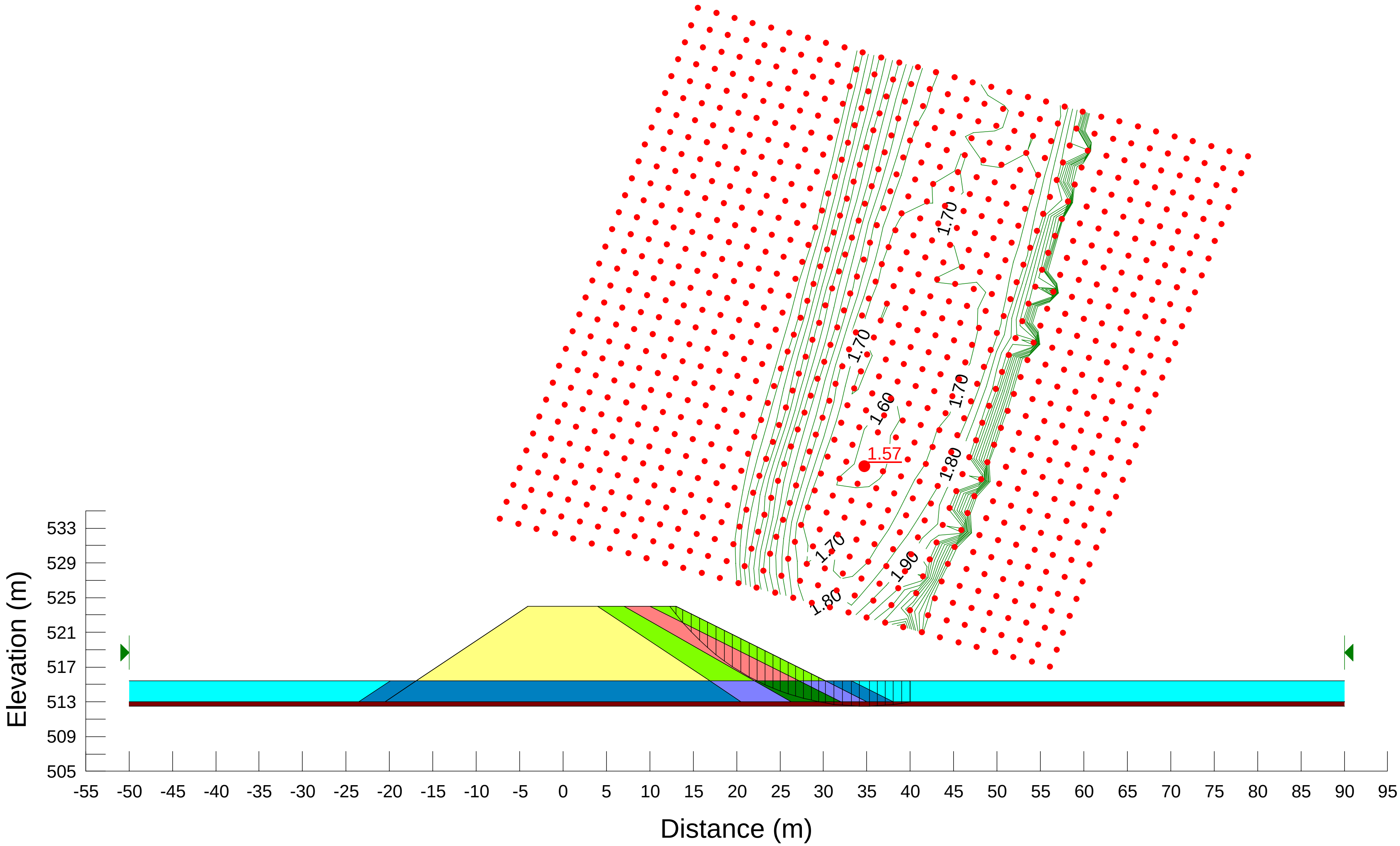


Figure A2

Stability Analysis - Upstream, Static, Deep Seated Slip Surface

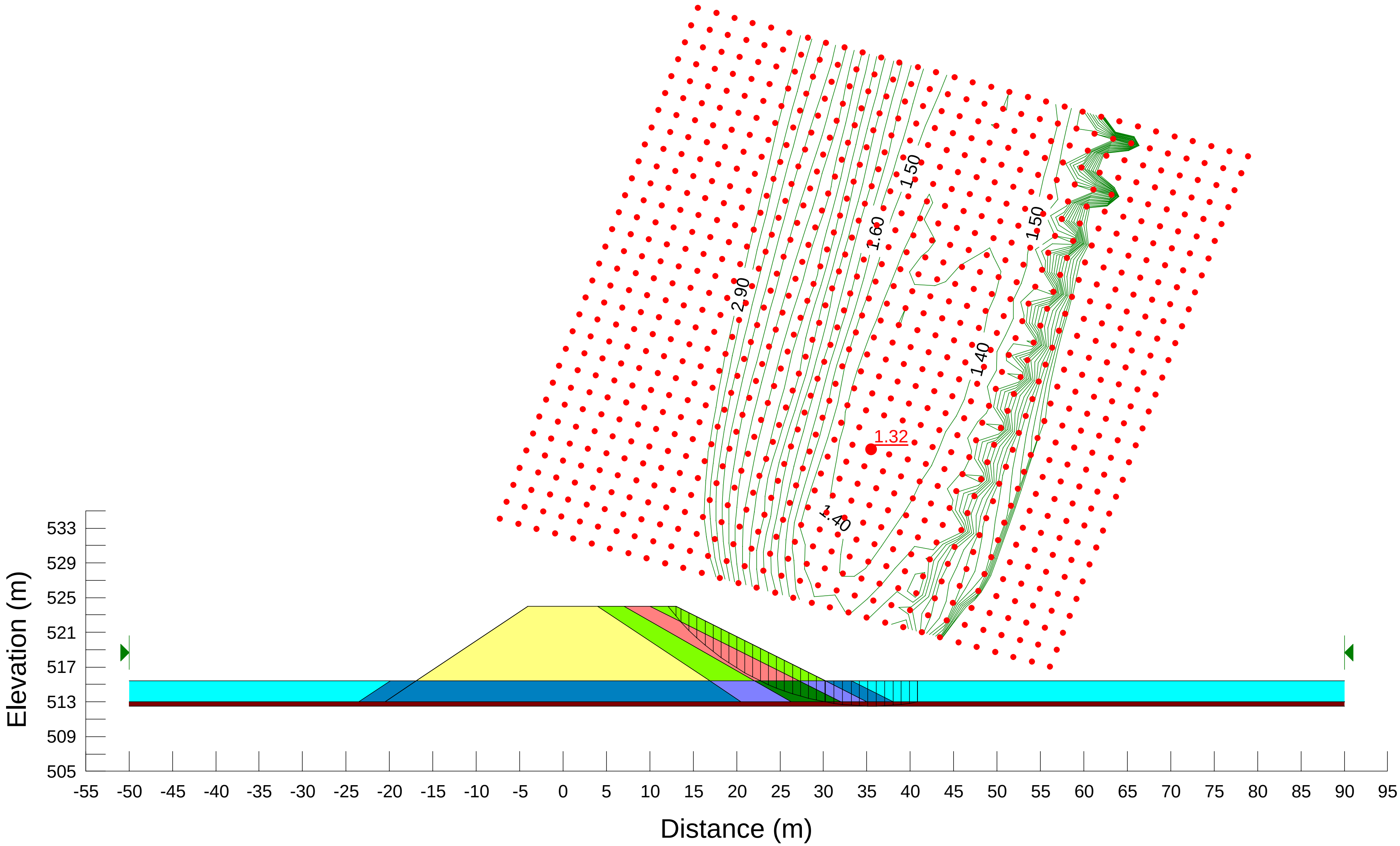


Figure A3

Stability Analysis - Upstream, Seismic, Deep Seated Slip Surface

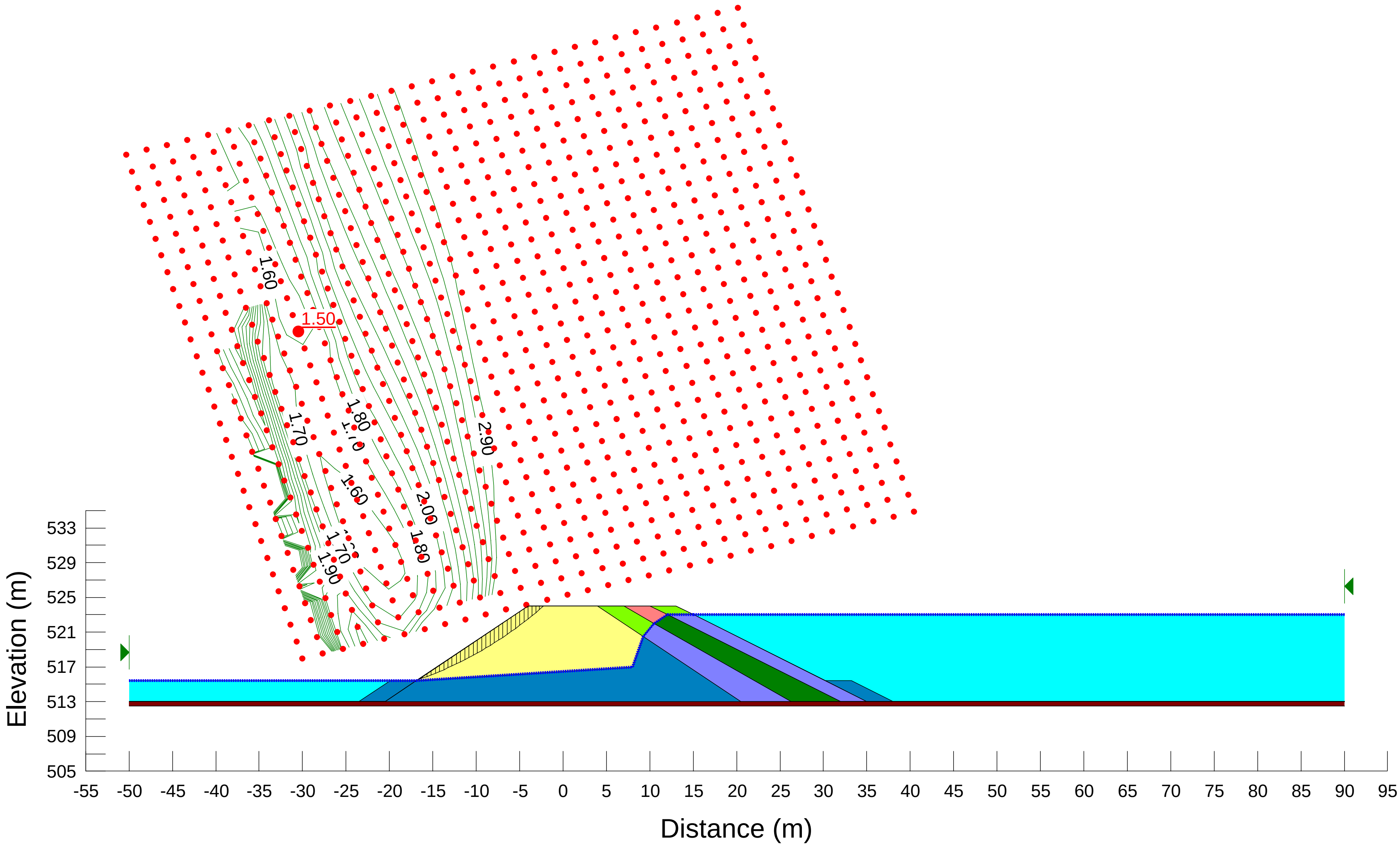


Figure A4

Stability Analysis - Downstream, Static, Shallow Slip Surface

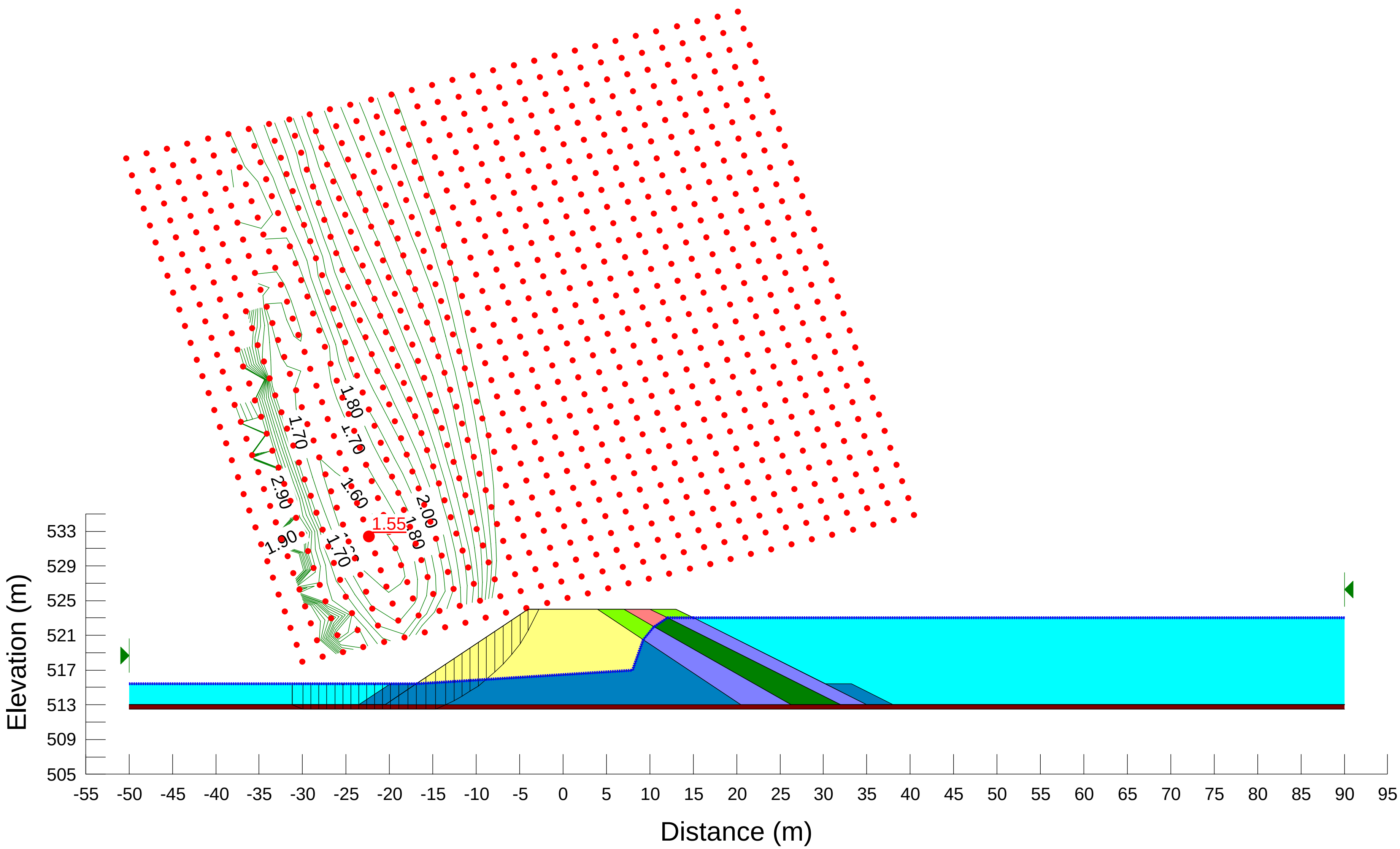


Figure A5

Stability Analysis - Downstream, Static, Deep Seated Slip Surface

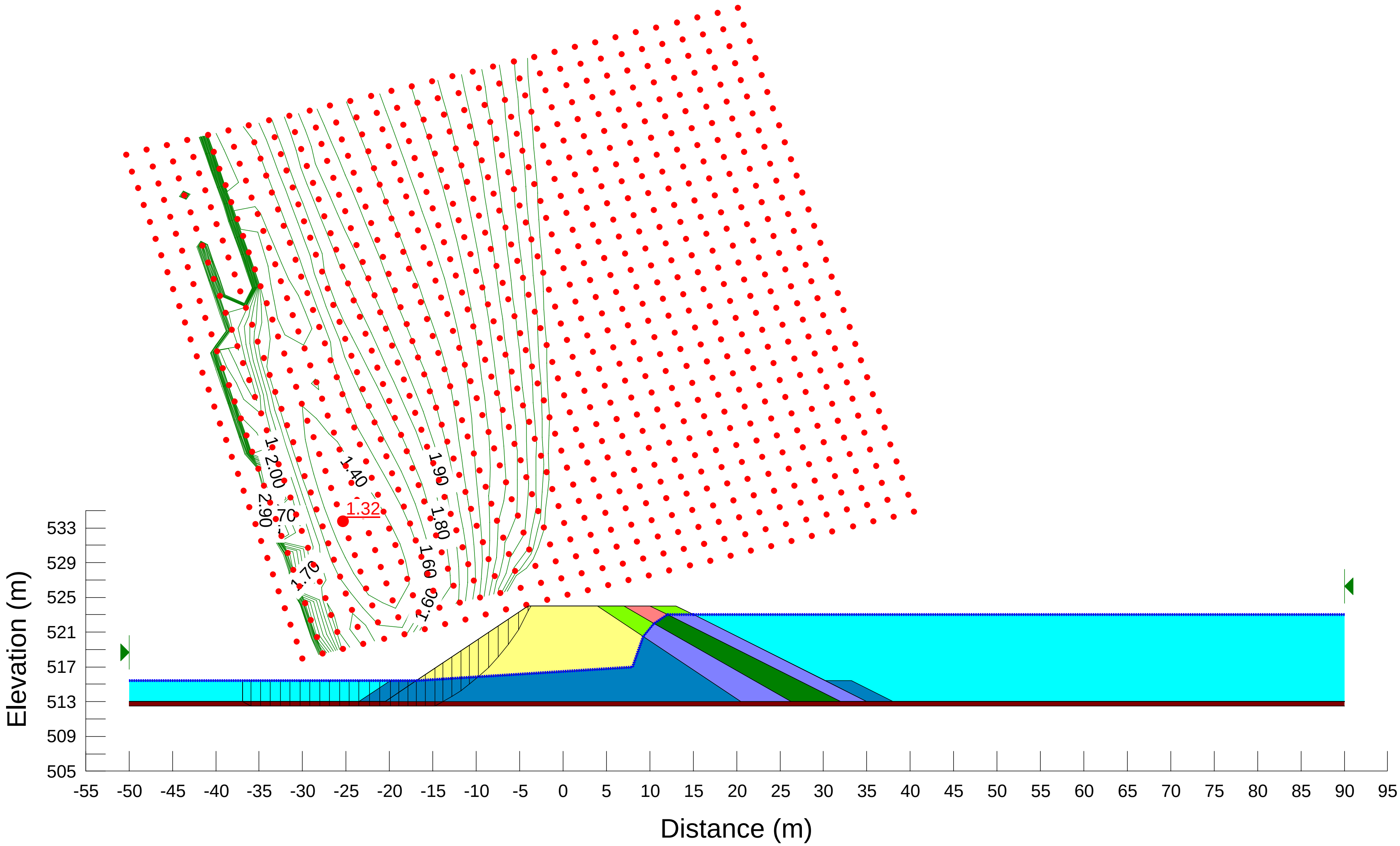


Figure A6

Stability Analysis - Downstream, Seismic, Deep Seated Slip Surface

APPENDIX B

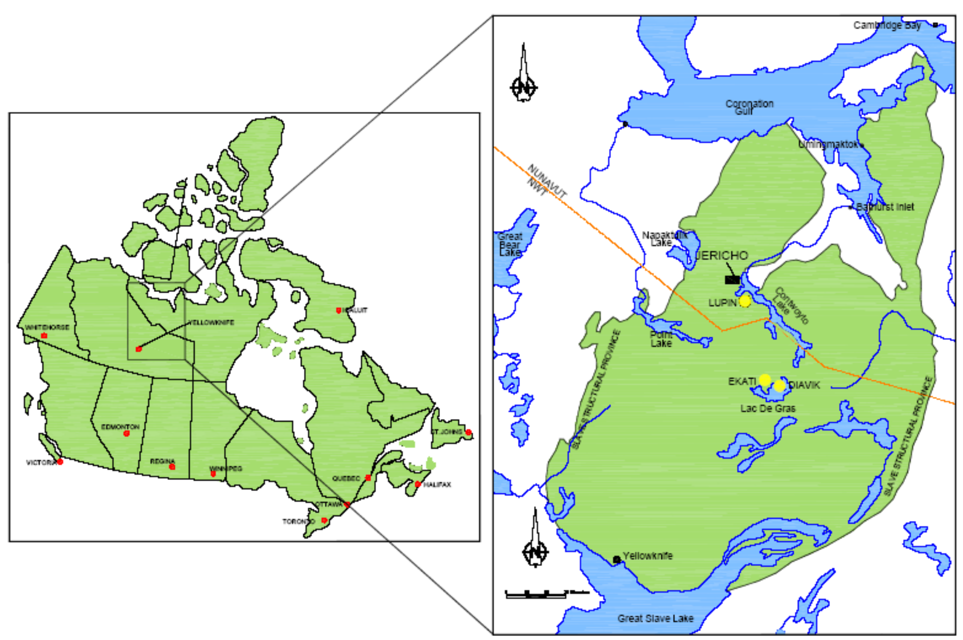
CONSTRUCTION DRAWINGS

TAHERA Diamond Corporation

JERICHO PROJECT

DIVIDER DYKE A

DESIGN DRAWINGS



LOCATION PLAN

DRAWING LIST

DRAWING	DRAWING TITLE
1100060–01	Divider Dyke A, SITE PLAN
1100060–02	SURFICIAL GEOLOGY and TERRAIN MAP
1100060–03	Divider Dyke A, PLAN VIEW
1100060–03	Divider Dyke A, PROFILE and CROSS–SECTIONS

JUNE 2005

EBA ENGINEERING CONSULTANTS LTD.

CONSULTANTS REFERENCE NO.: 1100060.005

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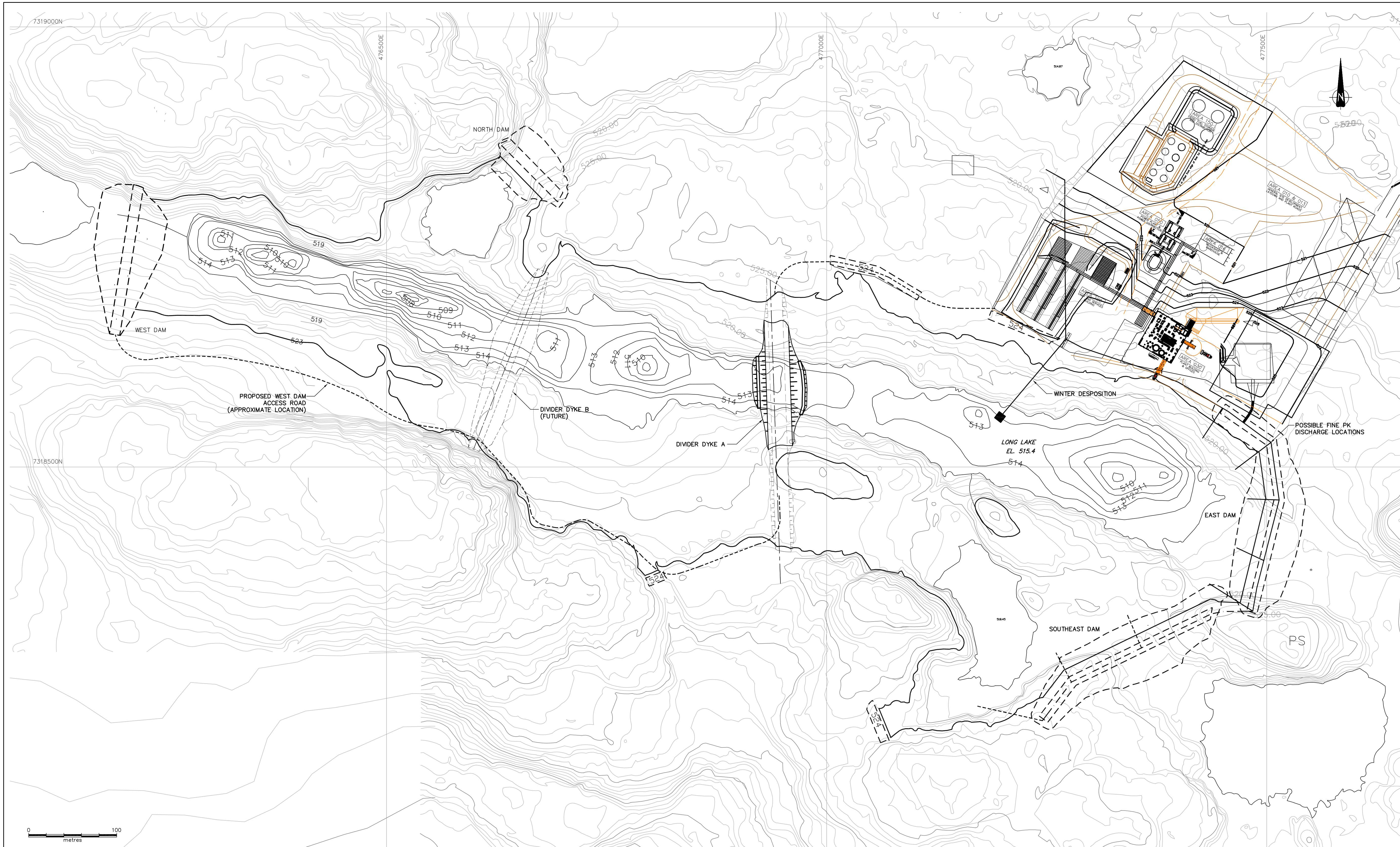


DRAWING No.	DRAWING TITLE	DATE	REV
–	–	DD/MM/YY	

REFERENCE DRAWINGS

No.	DESCRIPTION	DATE	APPROVED
B	ISSUED FOR REGULATORY APPROVAL	24/06/05	WTH
A	ISSUED FOR REVIEW	JUNE/05	WTH

REVISION

EBA ENGINEERING CONSULTANTS LTD.

DESIGNED BY:	WTH
DRAWN BY:	RGR
DATE:	17/06/05
SCALE:	AS SHOWN
PROJECT No.:	1100060.005
ACAD FILENAME:	1100060005R01D.dwg

ORIGINAL
SIGNED AND SEALED

Seal: William T. Horne, P.Eng. Date: June 24, 2005
Permit: Kevin W. Jones, P.Eng. Date: June 24, 2005

The signed Professional Seal and Permit to Practice stamps reside on the executed drawing which is held and controlled by EBA Engineering Consultants Ltd.

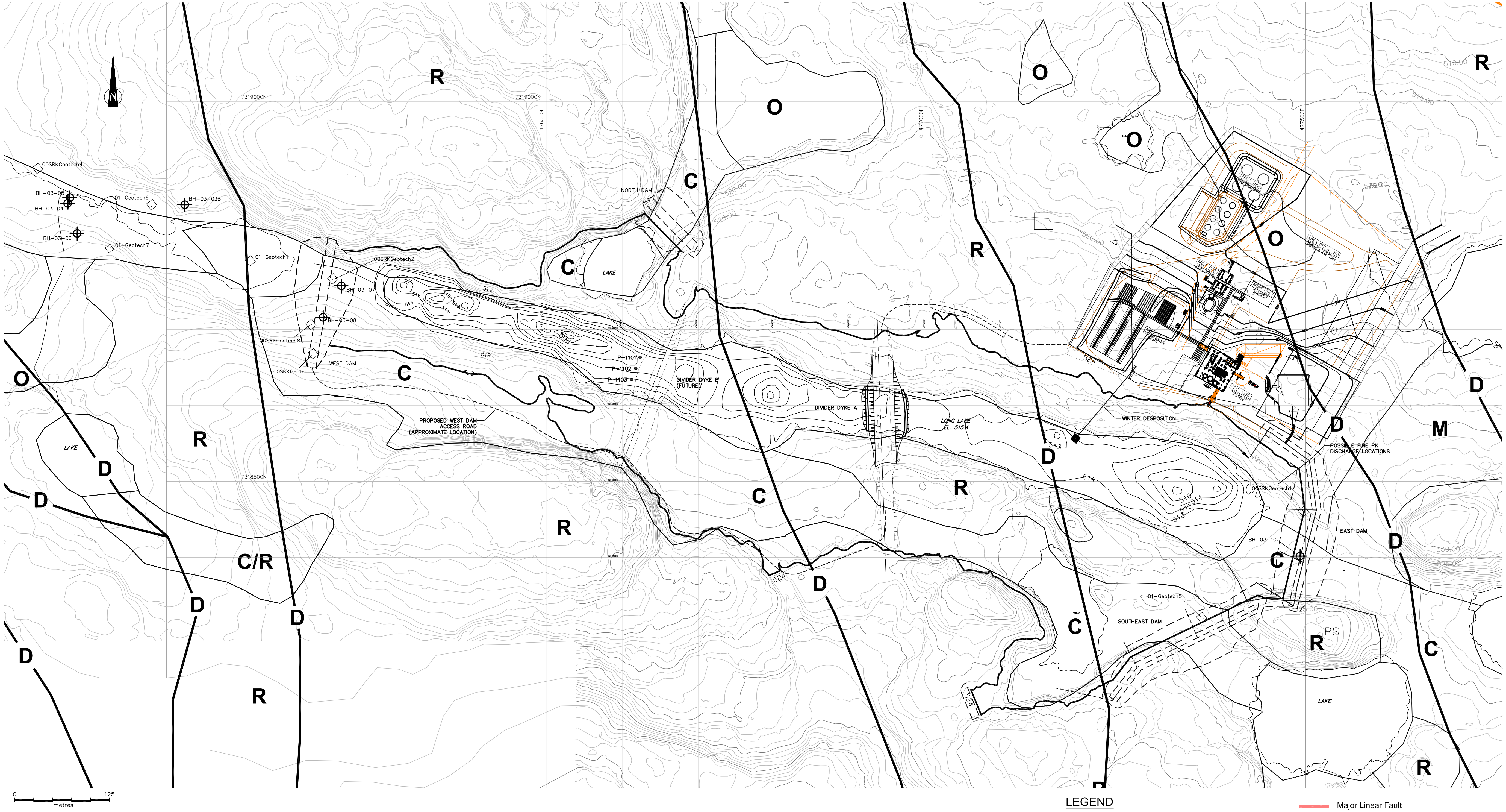
TAHERA
Diamond Corporation

JERICHO PROJECT

DIVIDER DYKE A
LOCATION PLAN

REVISION ISSUE: B

DRAWING No.: DD–1



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Scale of Photography: 1:5,000
Survey control supplied by: Canamera Geological Ltd.
Survey control based on: UTM Projection, NAD 27, Zone 12
Compiled by The ORTHOSHOP, Calgary, October 1995.
WO 7423

Surficial Geology by Thurber (2003)
Surficial Geology is approximate. Actual conditions will vary.

LEGEND

Quaternary Holocene Deposits
- A — River and creek deposits.
- C — Colluvium.
- O — Organic deposits.

Quaternary Pleistocene Deposits
- F^G — Fluvioglacial sediment.
- M — Till. Silt, sand, gravel, cobbles and boulders.

Pre-Cambrian Bedrock
- R — Undifferentiated metamorphic and volcanic bedrock.

- Major Linear Fault
- EW Oriented Amphibolite Dykes
- -D- NNW Oriented Diabase Dykes (Mackenzie)
- Less Magnetic Dykes with Variable Orientation
- Borehole Location
- Borehole Location
- Probehole Location

DRAWING No.	DRAWING TITLE	DATE	REV
–	–	DD/MM/YY	

REFERENCE DRAWINGS

No.	DESCRIPTION	DATE	APPROVED
B	ISSUED FOR REGULATORY APPROVAL	24/06/05	WTH
A	ISSUED FOR REVIEW	JUNE/05	WTH

REVISION

EBA ENGINEERING CONSULTANTS LTD.

DESIGNED BY:	WTH
DRAWN BY:	RGR
DATE:	17/06/05
SCALE:	AS SHOWN
PROJECT No.:	1100060.005
ACAD FILENAME:	1100060005R04F.dwg

ORIGINAL
SIGNED AND SEALED

Seal: William T. Horne, P.Eng. Date: June 24, 2005
Permit: Kevin W. Jones, P.Eng. Date: June 24, 2005

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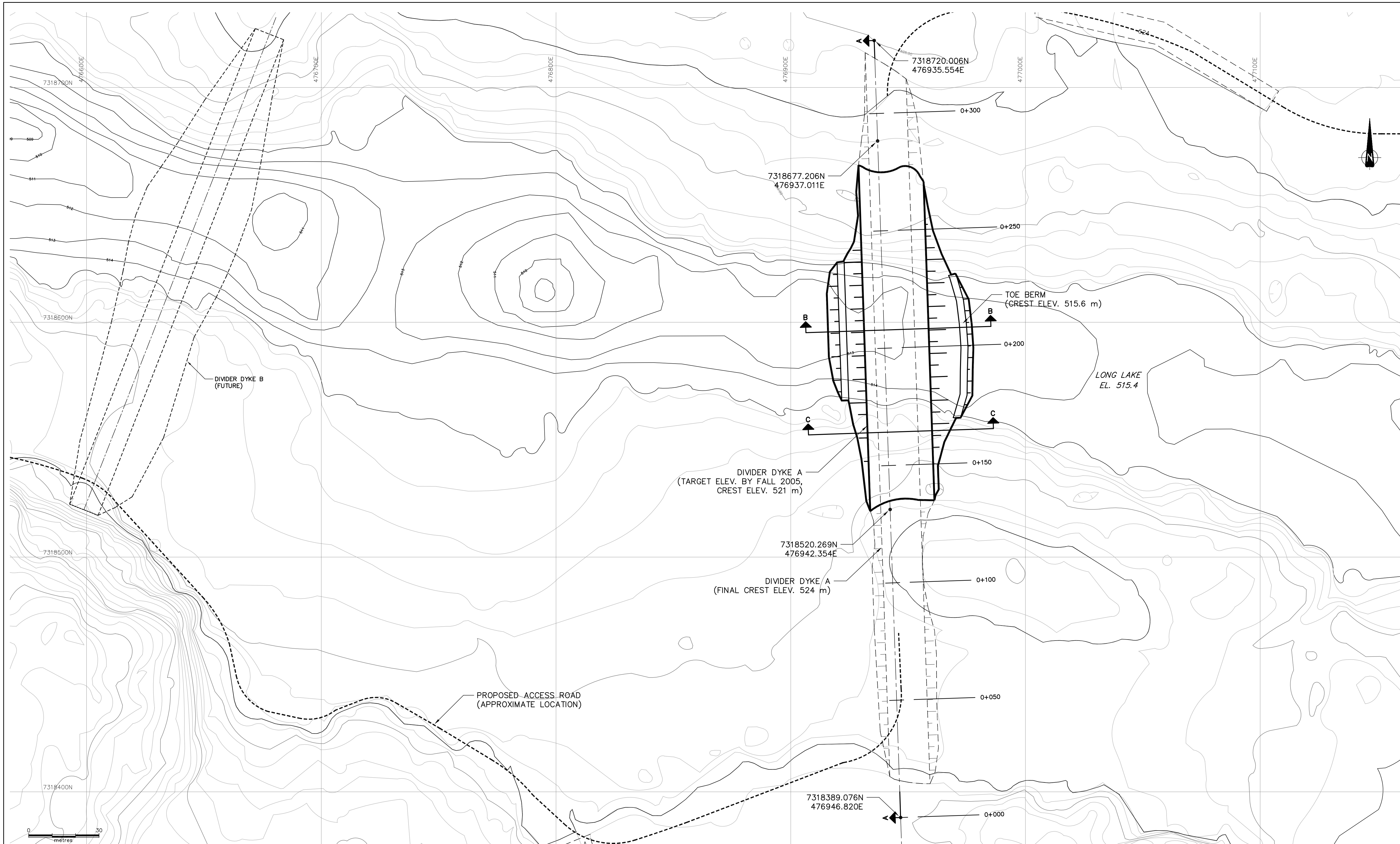
JERICHO PROJECT

SURFICIAL GEOLOGY AND
TERRAIN MAP

REVISION ISSUE: B

DRAWING No.: DD-2



DRAWING No.	DRAWING TITLE	DATE	REV
–	–	DD/MM/YY	

REFERENCE DRAWINGS

No.	DESCRIPTION	DATE	APPROVED
B	ISSUED FOR REGULATORY APPROVAL	24/06/05	WTH
A	ISSUED FOR REVIEW	JUNE/05	WTH

REVISION

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PROJECT No.: 1100060.005
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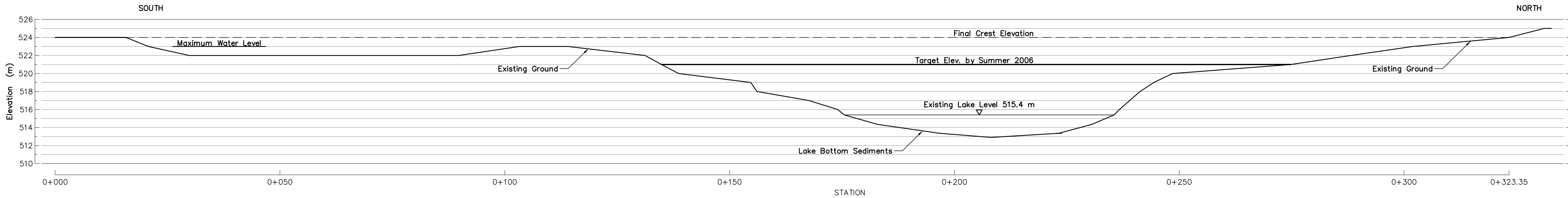
DIVIDER DYKE A
SITE PLAN

REVISION ISSUE: B

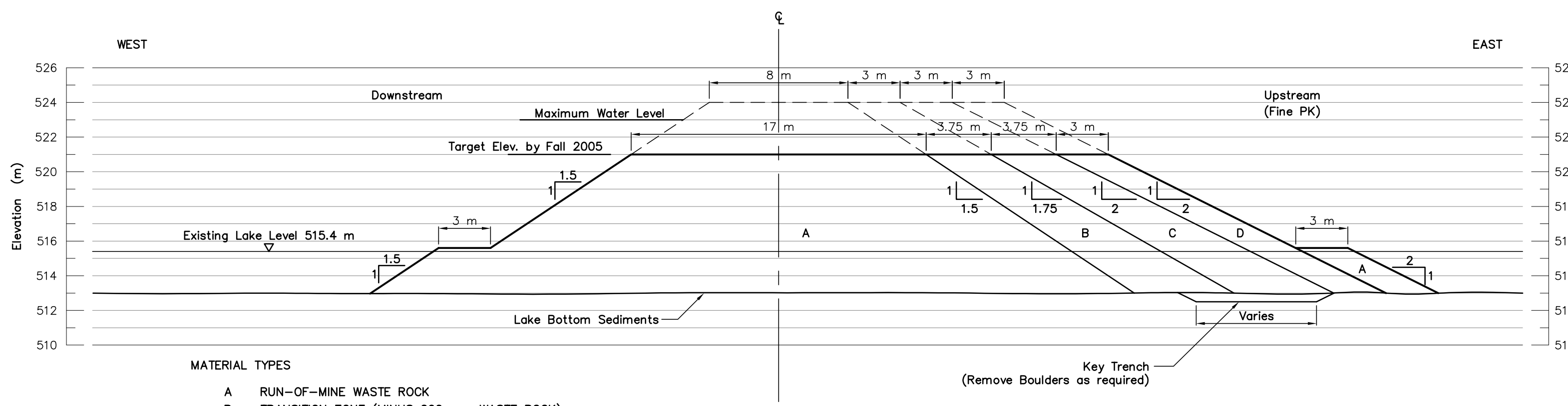
DRAWING No.: DD-3



2 X VERTICAL EXAGGERATION

PROFILE A–A

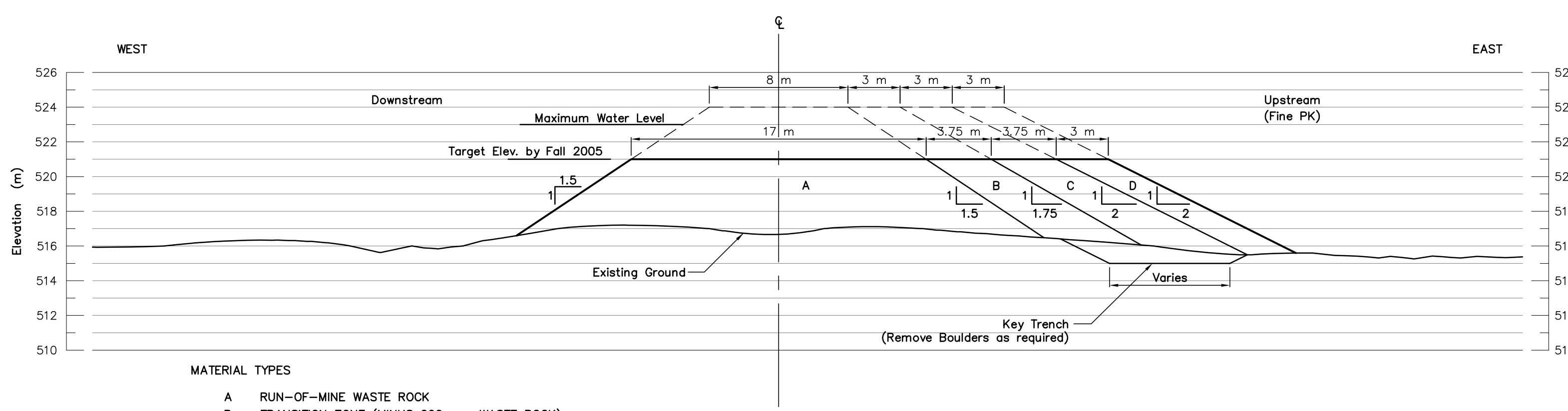
0 25 metres



MATERIAL TYPES

- A RUN–OF–MINE WASTE ROCK
- B TRANSITION ZONE (MINUS 200 mm WASTE ROCK)
- C FILTER ZONE (ESKER ZONE)
- D RIP RAP

CROSS–SECTION B–B



MATERIAL TYPES

- A RUN–OF–MINE WASTE ROCK
- B TRANSITION ZONE (MINUS 200 mm WASTE ROCK)
- C FILTER ZONE (ESKER ZONE)
- D RIP RAP

CROSS–SECTION C–C

0 10 metres

DRAWING No.	DRAWING TITLE	DATE	REV
–	–	DD/MM/YY	

REFERENCE DRAWINGS

No.	DESCRIPTION	DATE	APPROVED
B	ISSUED FOR REGULATORY APPROVAL	24/06/05	WTH
A	ISSUED FOR REVIEW	JUNE/05	WTH

REVISION

EBA ENGINEERING CONSULTANTS LTD.

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DATE: 17/06/05
SCALE: AS SHOWN
PROJECT No.: 1100060.005
ACAD FILENAME: 1100060005R03F.dwg

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JERICHO PROJECT

DIVIDER DYKE A
PROFILE and CROSS–SECTIONS

REVISION ISSUE: B

DRAWING No.: DD–4