



February 27th, 2017

Karen Kharatyan
Manager of Licensing
Nunavut Water Board
P.O Box 119
Gjoa Haven, NU X0B 1J0

Re: Water License 2AM-MEL1631 Part D, Item 3 / NIRB Project Certificate 11MN034
Condition 18 - Submission of Construction Summary Report for Channel 5

Mr. Kharatyan,

As per Water Licence 2AM-MEL1631, several berms and channels are required to manage the site contact water during pre-production, operation, and interim mine closure. Berm 3 and Channel 5 are two of the water management infrastructures required to be constructed before the spring freshet of 2017.

The construction of Channel5 started on November 17, 2016 and was completed on November 26, 2016.

The construction of Channel5 generally followed the design drawings, except for the followings:

1. From Station 0+010 (upstream start of Channel5) to Station 0+046, survey data could not be taken because the access was limited due to the presence of water. Photos taken during the channel construction show that the rip-rap fill and nonwoven geotextile were placed over the excavated channel bottom in this section.
2. The channel side slopes at some locations (Stations 0+040, 0+200 to 0+320) are slightly steeper (1.9(H):1(V) to 2.4(H):1(V)) than the design slope of 2.5(H):1(V), mainly due to the frozen conditions during the construction. It is not expected that this would significantly increase the potential risk of local channel slope instability at these locations, but should this happen during channel operation, local remediation measures (flattening the channel side slopes where required and re-placing the geotextile and rip-rap layers) can be undertaken.
3. The as-built drawings indicate that the minimum thickness of the rip-rap fill over the channel bottom is 0.2 m at some locations, which is less than the design value of 0.3 m. This is generally acceptable. If required during channel operation, additional rip-rap fill can be placed over the locations.
4. The channel bottom widths at some locations (Stations 0+060 to 0+220, 0+300 to 0+340) range from 2.3 m to 2.9 m, which is slightly less than the design value of 3.0 m. Due to the reduced channel bottom widths, the maximum water levels in the channel at these locations under an extreme flood event will be slightly higher than designed. This is manageable and acceptable because any water that may temporarily overflow the channel during an extreme flood event will be retained by Berm3 in the short term and then be drained through the channel into CP5; therefore, the water will not flow to the outside environment.



5. The as-built channel section drawings (see 65-695-230-230 and 65-695-230-231) indicate that the rip-rap fill materials on the channel side slope crests were over-built above the existing ground at most of sections. This is acceptable.

In accordance with Water License 2AM-MEL1631, Part D, Item 3 and Schedule D, and Project Certificate 11MN034 Condition 18, please find enclosed with this letter, a copy of the Construction Summary Report for Channel 5.

Should you have any questions regarding this submission, do not hesitate to contact me.

Regards,

Agnico Eagle Mines Limited – Meliadine Division

A handwritten signature in blue ink, appearing to read "Manon Turmel".

Manon Turmel
Environmental Compliance Counselor
manon.turmel@agnicoeagle.com
819-759-3555 x8025

cc: *Ian Parsons, Indigenous and Northern Affairs Canada*
Luis Manzo, Kivalliq Inuit Association
Jamie Quesnel, Environment Superintendant – Nunavut Service Group
Erika Voyer, Environment General Supervisor – Nunavut Service Group

Construction Summary (As-built) Report for Channel5, Meliadine Gold Project



PRESENTED TO
Agnico Eagle Mines Limited

FEBRUARY 24, 2017
ISSUED FOR USE
FILE: 704-ENG.EARC03076-01.WM14

AGNICO EAGLE DOCUMENT NUMBER: 6515-E-132-007-132-REP-008

REVISION: 0

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EXECUTIVE SUMMARY

Tetra Tech Canada Inc. (Tetra Tech) was retained by Agnico Eagle Mines Limited (Agnico Eagle) to prepare a construction summary (as-built) report for Channel5 at the Meliadine Gold Project, Nunavut. Tetra Tech previously prepared the design drawing for construction of Channel5 in September 2016.

Tetra Tech was not involved in the construction of Channel5. The information presented in this report was provided by Agnico Eagle.

The construction of Channel5 started on November 17, 2016 and was completed on November 26, 2016. The construction monitoring was managed by Agnico Eagle.

This report summarizes the construction as-built information for Channel5. This report is prepared to meet the requirements in the Type “A” Water Licence No. 2AM-MEL1631 – Agnico Eagle Mines Limited for the Meliadine Gold Project (Part D, item 3).

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LIMITATIONS OF REPORT

This report and its contents are intended for the sole use of Agnico Eagle Mines Limited and their agents. Tetra Tech Canada Inc. (Tetra Tech) does not accept any responsibility for the accuracy of any of the data, the analysis, or the recommendations contained or referenced in the report when the report is used or relied upon by any Party other than Agnico Eagle Mines Limited, or for any Project other than the proposed development at the subject site. Any such unauthorized use of this report is at the sole risk of the user. Use of this report is subject to the terms and conditions stated in Tetra Tech Canada Inc.'s Services Agreement. Tetra Tech's General Conditions are provided in Appendix D of this report.

1.0 INTRODUCTION

Tetra Tech Canada Inc. (Tetra Tech) was retained by Agnico Eagle Mines Limited (Agnico Eagle) to prepare a construction summary (as-built) report for Channel5 at the Meliadine Gold Project, Nunavut. Tetra Tech previously prepared the design drawing for construction of Channel5 in September 2016. Channel5 is located around UTM (NAD83, Zone 15) coordinate of 540,000E and 6,988,500N.

Tetra Tech was not involved in the construction of Channel5. The information presented in this report was provided by Agnico Eagle.

This report is prepared to meet the requirements in the Type "A" Water Licence No. 2AM-MEL1631 – Agnico Eagle Mines Limited for the Meliadine Gold Project (Part D, item 3).

2.0 CONSTRUCTION SCHEDULE AND MONITORING

The construction of Channel5 started on November 17, 2016 and was completed on November 26, 2016. The Channel5 construction schedule is attached in Appendix A. Construction monitoring was managed by Agnico Eagle.

Appendix B presents photos (provided by Agnico Eagle) taken during the construction of Channel5.

3.0 AS-BUILT DRAWING AND MATERIAL QUANTITIES

The as-built drawings for Channel5 were developed based on the as-built survey data provided by Agnico Eagle on January 9, 2017 and are presented in Appendix C.

Table 1 summarizes the design and as-built construction material quantities.

Table 1: Construction Material Quantities

Item	Estimated In-Place Quantity from Design	As-built In-Place Quantity from As-built Survey Drawings
Channel Excavation (m ³)	1,894	1,874
Nonwoven Geotextile (m ²)	2,737	2,860
Rip-rap Fill (m ³)	601	696

4.0 CONSTRUCTION DEVIATIONS FROM DESIGN

The construction of Channel5 generally followed the design drawings, except for the following:

- From Station 0+010 (upstream start of Channel5) to Station 0+046, survey data could not be taken because the access was limited due to the presence of water. Photos taken during the channel construction show that the rip-rap fill and nonwoven geotextile were placed over the excavated channel bottom in this section.
- The channel side slopes at some locations (Stations 0+040, 0+200 to 0+320) are slightly steeper (1.9(H):1(V) to 2.4(H):1(V)) than the design slope of 2.5(H):1(V), mainly due to the frozen conditions during the construction. It is not expected that this would significantly increase the potential risk of local channel slope instability at these

locations, but should this happen during channel operation, local remediation measures (flattening the channel side slopes where required and re-placing the geotextile and rip-rap layers) can be undertaken.

- The as-built drawings indicate that the minimum thickness of the rip-rap fill over the channel bottom is 0.2 m at some locations, which is less than the design value of 0.3 m. This is generally acceptable. If required during channel operation, additional rip-rap fill can be placed over the locations.
- The channel bottom widths at some locations (Stations 0+060 to 0+220, 0+300 to 0+340) range from 2.3 m to 2.9 m, which is slightly less than the design value of 3.0 m. Due to the reduced channel bottom widths, the maximum water levels in the channel at these locations under an extreme flood event will be slightly higher than designed. This is manageable and acceptable because any water that may temporarily overflow the channel during an extreme flood event will be retained by Berm3 in the short term and then be drained through the channel into CP5; therefore, the water will not flow to the outside environment.
- The as-built channel section drawings (see 65-695-230-230 and 65-695-230-231) indicate that the rip-rap fill materials on the channel side slope crests were over-built above the existing ground at most of sections. This is acceptable.

5.0 CLOSURE

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

Respectfully submitted,
Tetra Tech Canada Inc.



Prepared by:
Guangwen (Gordon) Zhang, Ph.D., P.Eng.
Principal Specialist, Arctic Region
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/jf



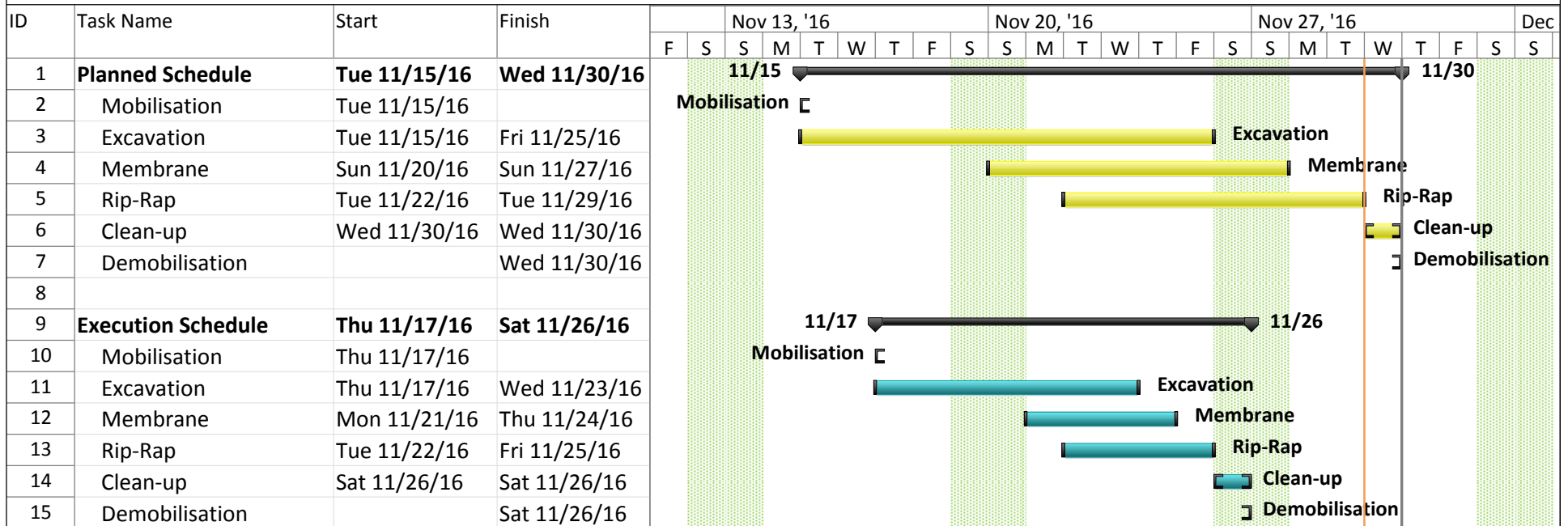
Reviewed by:
Kevin W. Jones, P.Eng.
Vice President, Arctic Development
Direct Line: 780.451.2130 x271
Kevin.Jones@tetrattech.com

PERMIT TO PRACTICE TETRA TECH CANADA INC.	
Signature	
Date	FEB. 24, 2017
PERMIT NUMBER: P 018 NT/NU Association of Professional Engineers and Geoscientists	

APPENDIX A

CHANNEL5 CONSTRUCTION SCHEDULE

C-230-003 Aggregate Preparation - Inukshuk ECN-002 Channel #5



APPENDIX B

CHANNEL5 CONSTRUCTION PHOTOS



Photo 1: Channel5 Construction on November 19, 2016



Photo 2: Channel5 Construction on November 20, 2016



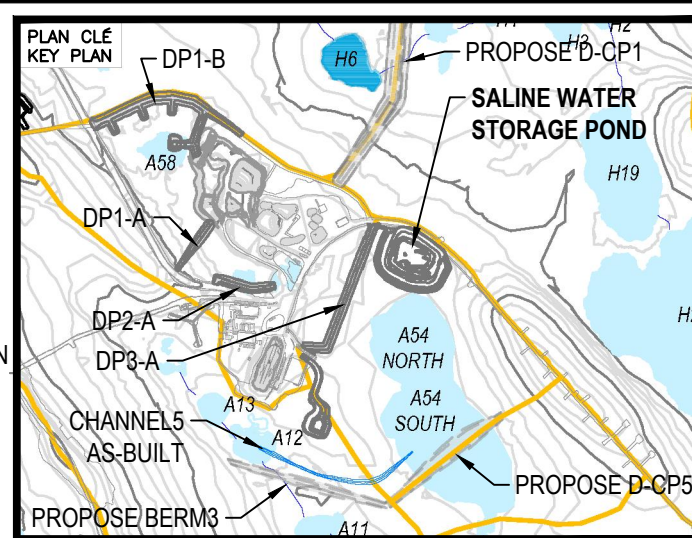
Photo 3: Channel5 Construction on November 21, 2016



Photo 4: Channel5 Construction November 21, 2016

APPENDIX C

CHANNEL5 AS-BUILT DRAWINGS



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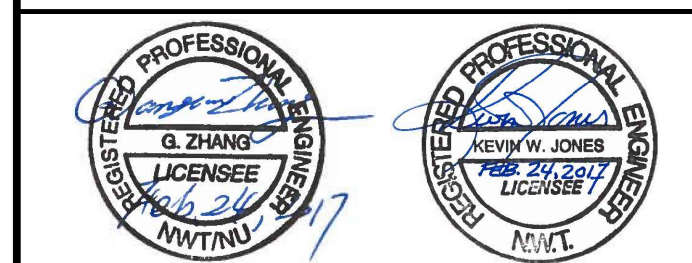
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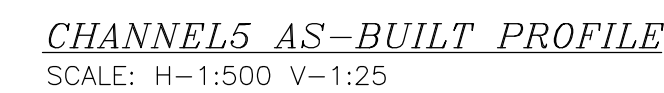
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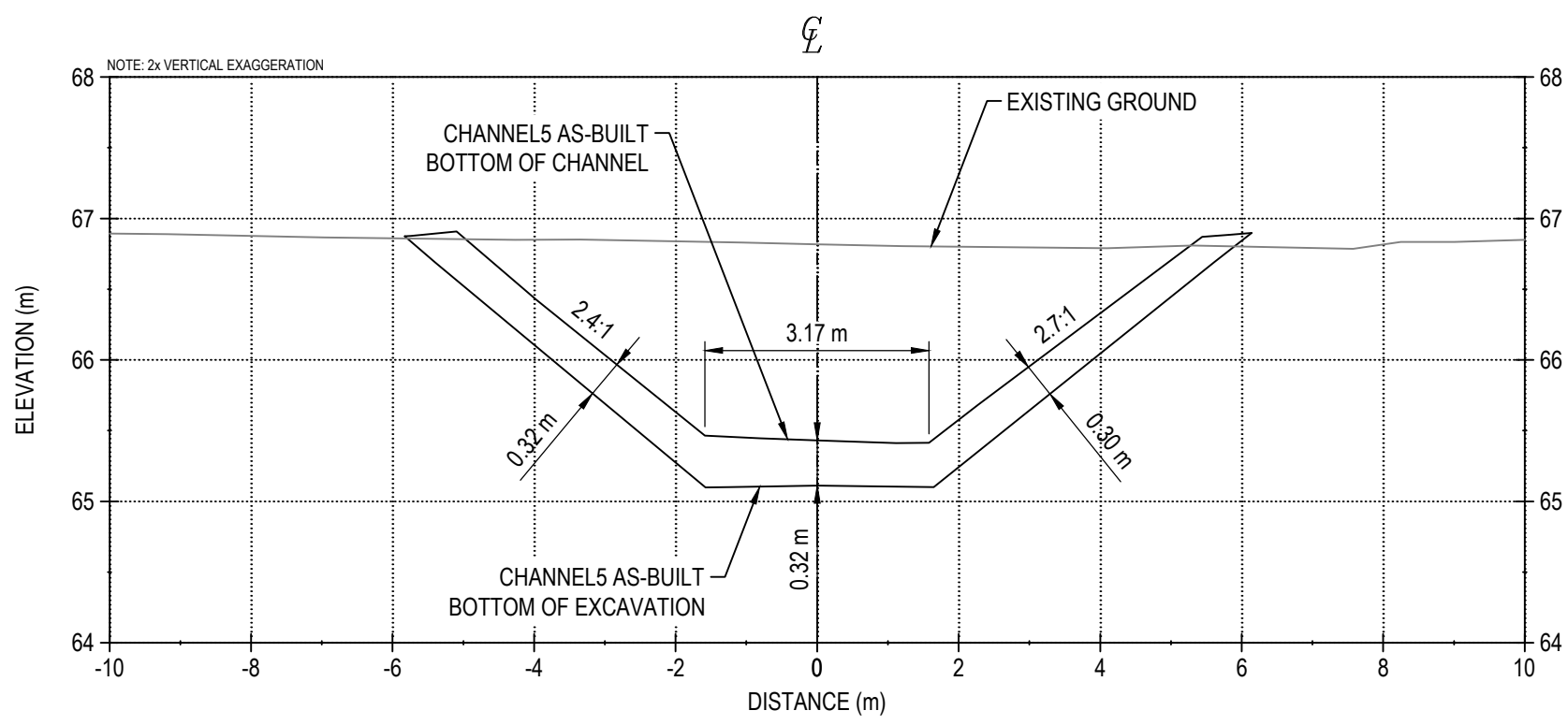


CHANNEL5 AS-BUILT
PLAN AND PROFILE

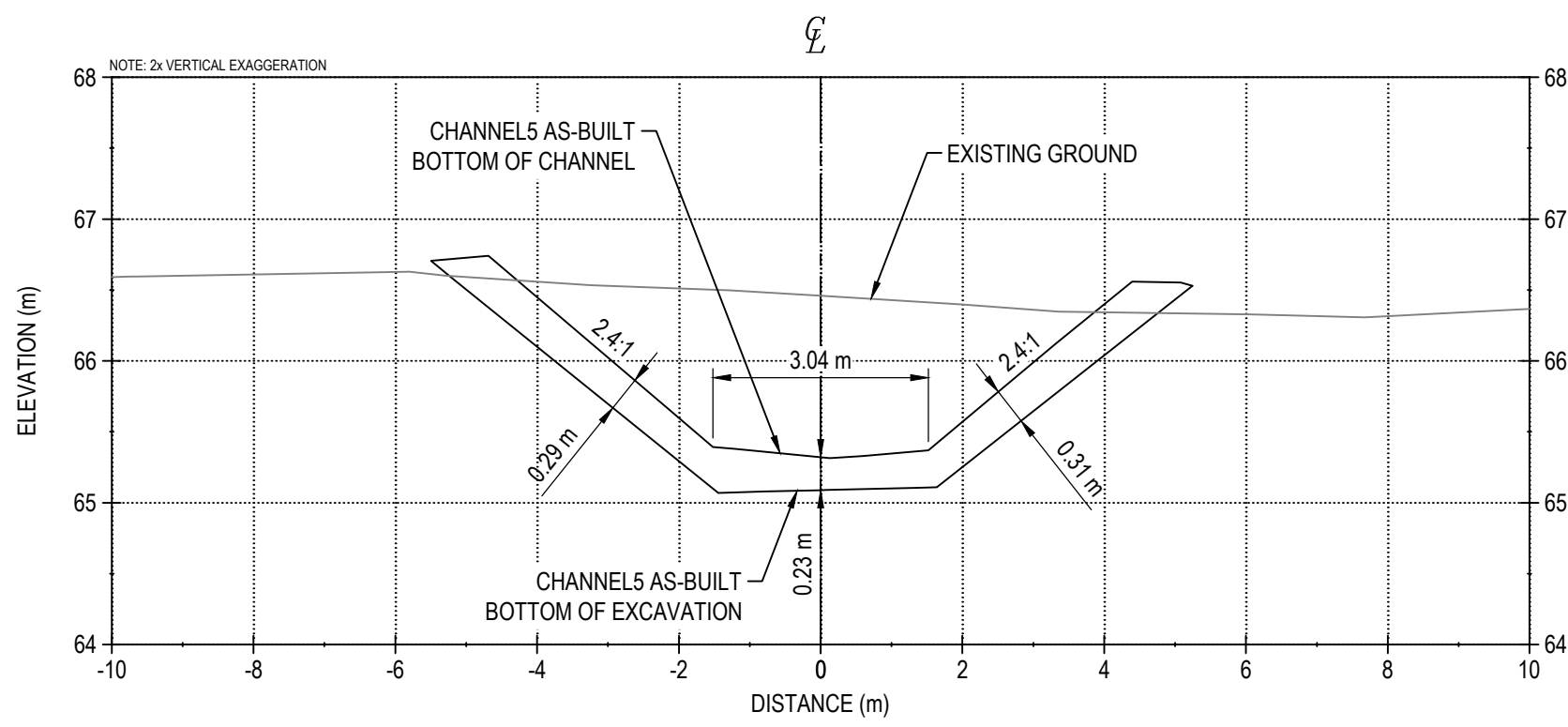
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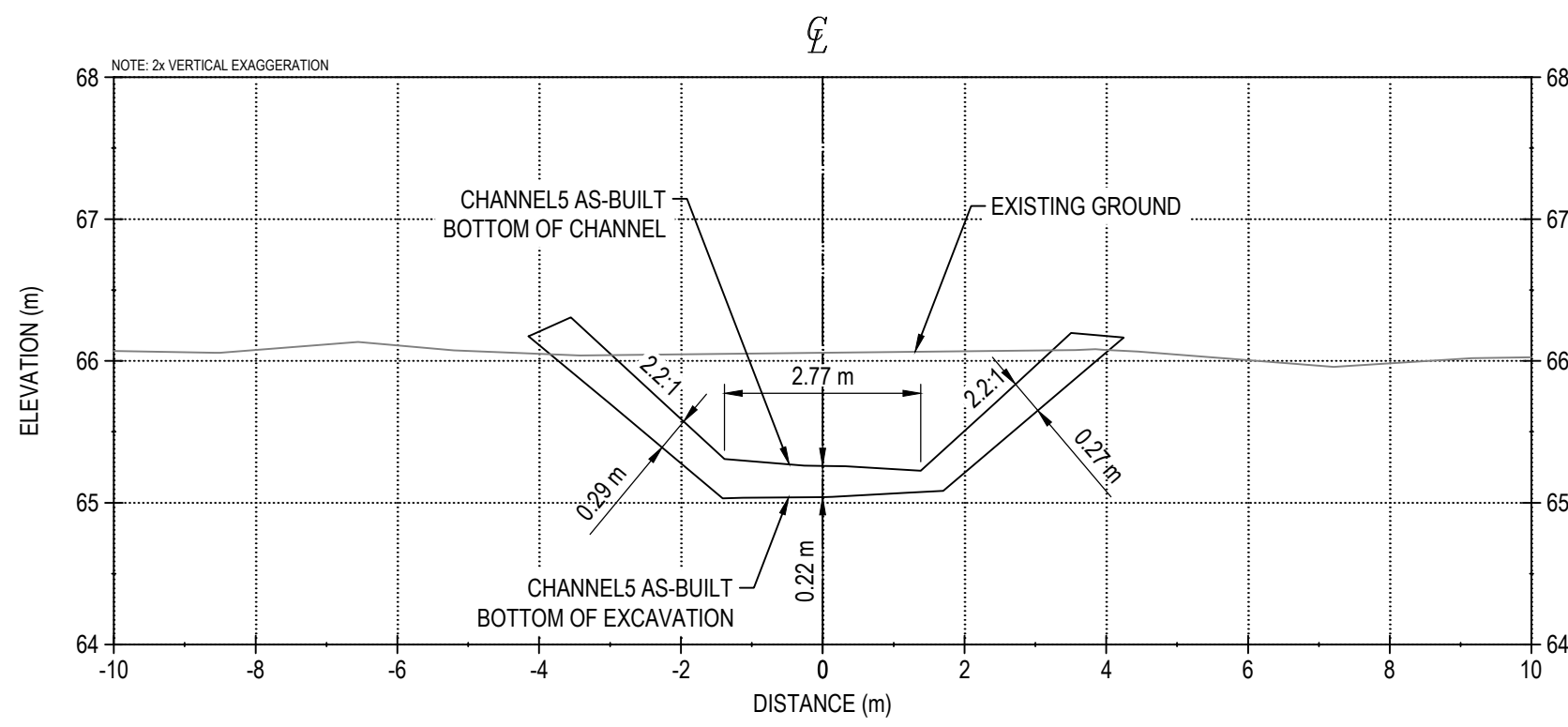




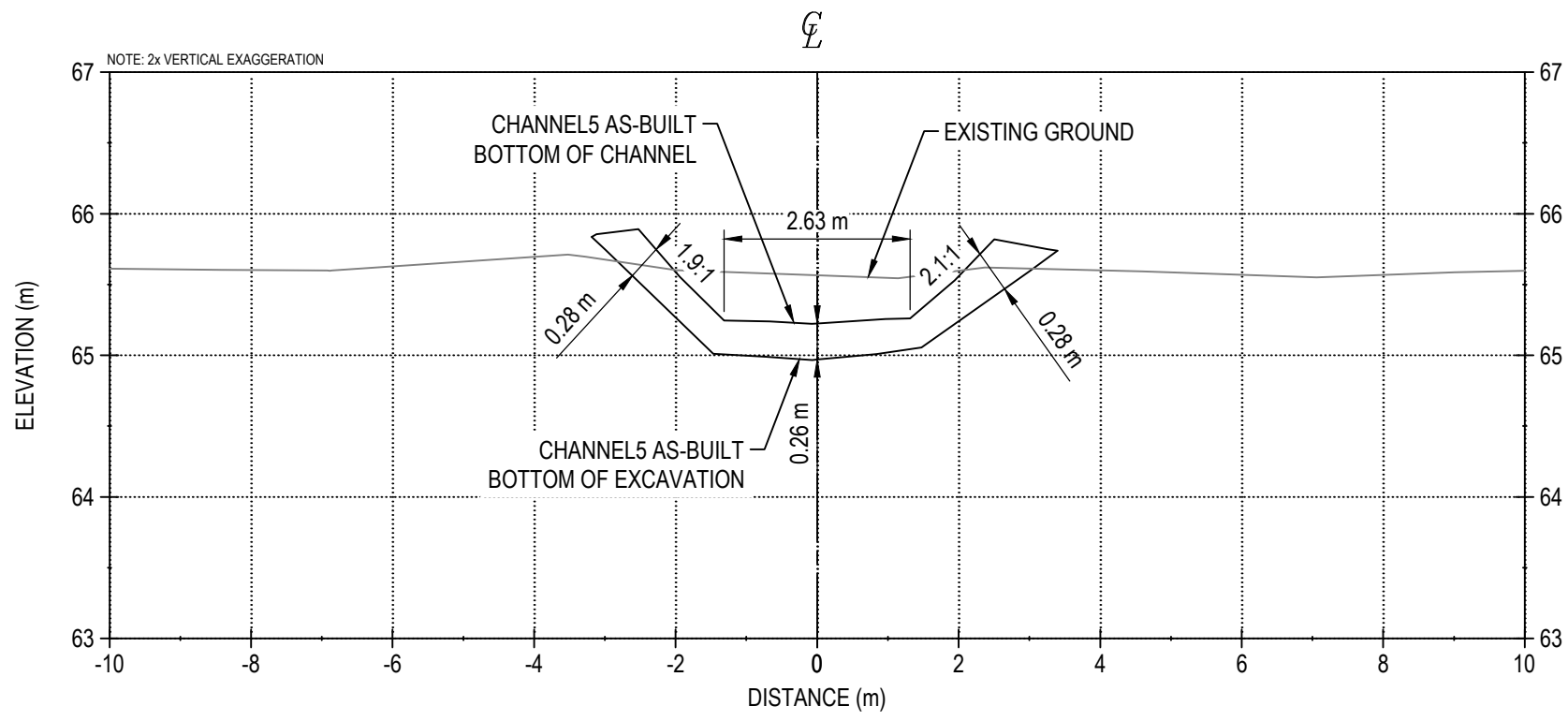
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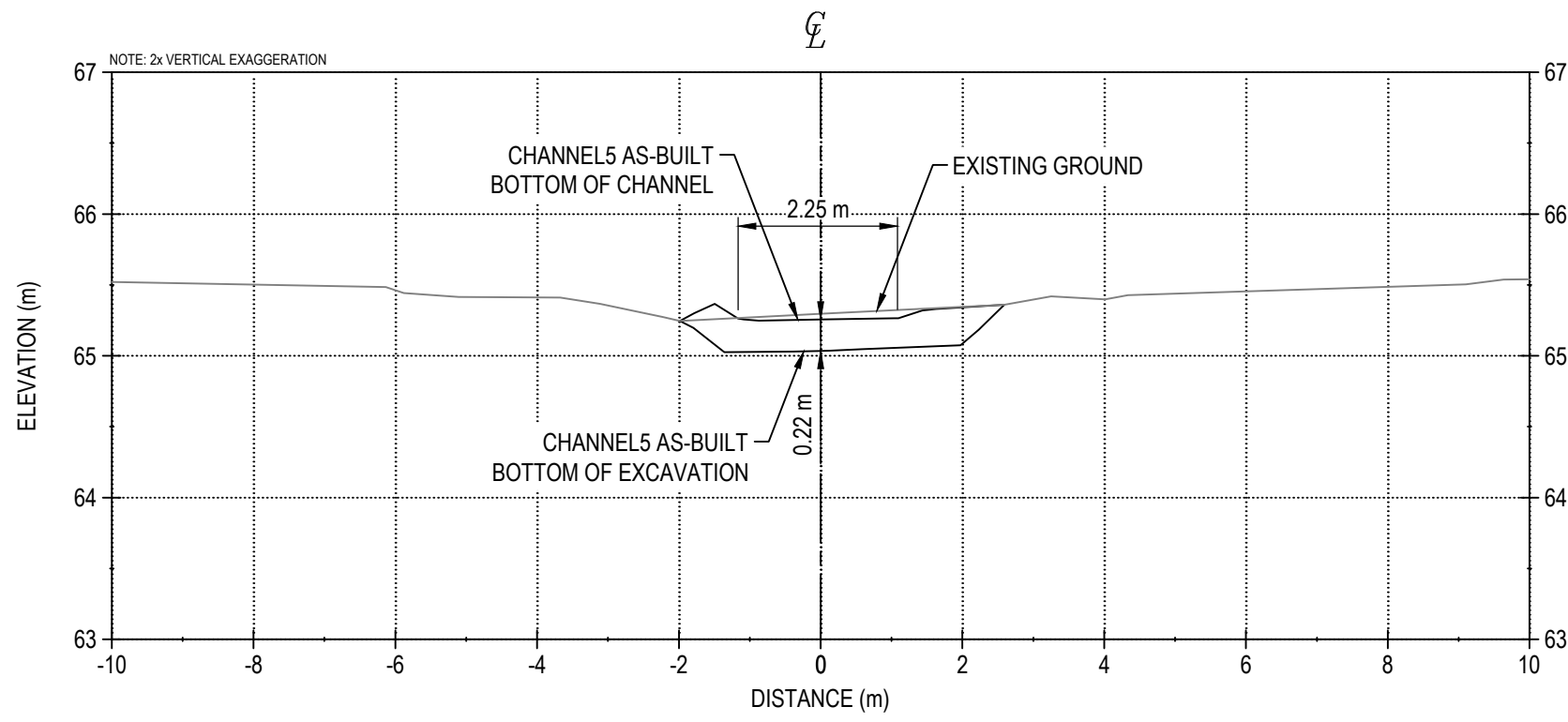
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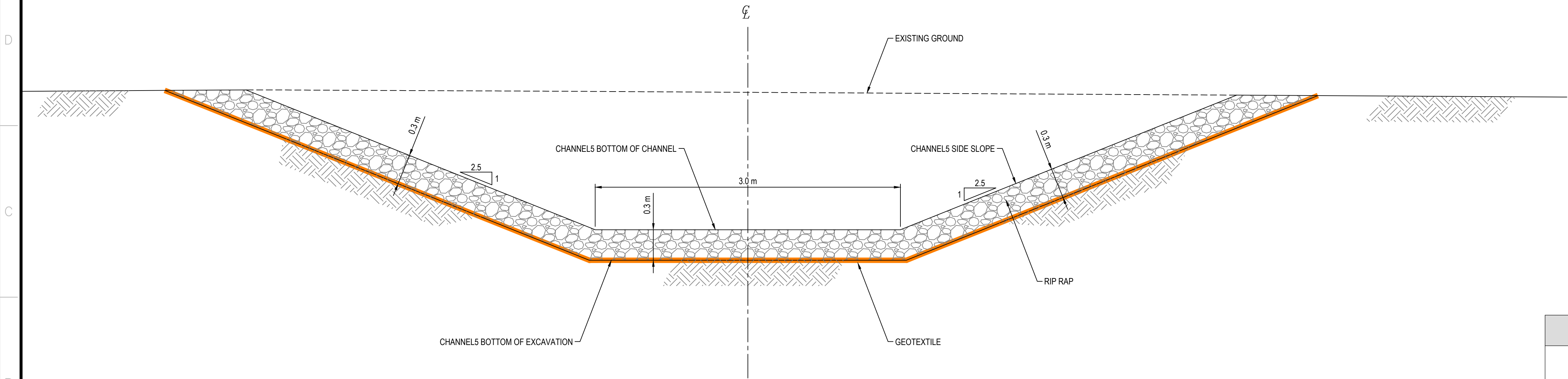
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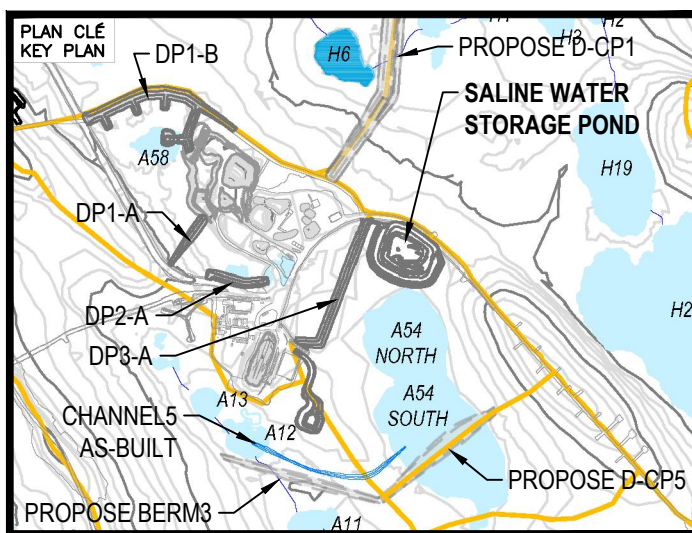
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TYPICAL CHANNEL5 DESIGN SECTION
N.T.S.

SUMMARY OF QUANTITIES FOR CONSTRUCTION OF CHANNELS			
ITEM	UNIT	ESTIMATED IN-PLACE QUANTITY FROM DESIGN ⁽¹⁾	AS-BUILT QUANTITY ⁽²⁾
CHANNEL EXCAVATION	m ³	1,894	1,874
RIP-RAP FILL	m ³	601	696
NONWOVEN GEOTEXTILE	m ²	2,737 ⁽³⁾	2,860

⁽¹⁾ MATERIAL QUANTITIES WERE ESTIMATED BASED ON THE ASSUMPTION OF 2.5H TO 1V EXCAVATION SIDE SLOPE
⁽²⁾ MATERIAL QUANTITY FOR GEOTEXTILE LINER DOES NOT INCLUDE OVERLAPS OF EXCESS
⁽³⁾ MATERIAL QUANTITIES WERE BASED ON SURVEY DATA PROVIDED BY AGNICO EAGLE ON JANUARY 9, 2017



NOTES GÉNÉRALES / GENERAL NOTES

- AS-BUILT SURVEY PROVIDED BY AGNICO EAGLE ON JANUARY 9, 2017.

PERMIT TO PRACTICE
TETRA TECH CANADA INC.
Signature: [Signature]
Date: Feb. 24, 2017
PERMIT NUMBER: P 018
NT/NU Association of Professional
Engineers and Geoscientists



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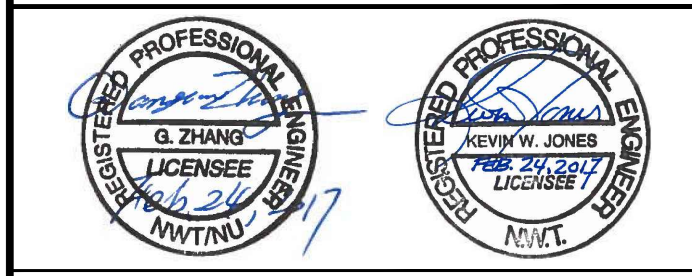
DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

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0	2017-02-24	ISSUED FOR USE	EL	GZ	
A	2017-02-15	ISSUED FOR REVIEW	EL	GZ	

REVISIONS



TITRE / TITLE
AGNICO EAGLE MELIADINE GOLD PROJECT

CHANNELS AS-BUILT SECTIONS
STATION 0+260 TO 0+340
TYPICAL DESIGN SECTION AND QUANTITIES

DESSINÉ PAR DRAWN BY	EL	DATE 2017-02-24
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APPROUVÉ PAR APPROVED BY	KJ	2017-02-24
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APPENDIX D

TETRA TECH'S GENERAL CONDITIONS

GENERAL CONDITIONS

GEOTECHNICAL REPORT

This report incorporates and is subject to these "General Conditions".

1.1 USE OF REPORT AND OWNERSHIP

This geotechnical report pertains to a specific site, a specific development and a specific scope of work. It is not applicable to any other sites nor should it be relied upon for types of development other than that to which it refers. Any variation from the site or development would necessitate a supplementary geotechnical assessment.

This report and the recommendations contained in it are intended for the sole use of TETRA TECH's Client. TETRA TECH does not accept any responsibility for the accuracy of any of the data, the analyses or the recommendations contained or referenced in the report when the report is used or relied upon by any party other than TETRA TECH's Client unless otherwise authorized in writing by TETRA TECH. Any unauthorized use of the report is at the sole risk of the user.

This report is subject to copyright and shall not be reproduced either wholly or in part without the prior, written permission of TETRA TECH. Additional copies of the report, if required, may be obtained upon request.

1.2 ALTERNATE REPORT FORMAT

Where TETRA TECH submits both electronic file and hard copy versions of reports, drawings and other project-related documents and deliverables (collectively termed TETRA TECH's instruments of professional service); only the signed and/or sealed versions shall be considered final and legally binding. The original signed and/or sealed version archived by TETRA TECH shall be deemed to be the original for the Project.

Both electronic file and hard copy versions of TETRA TECH's instruments of professional service shall not, under any circumstances, no matter who owns or uses them, be altered by any party except TETRA TECH. TETRA TECH's instruments of professional service will be used only and exactly as submitted by TETRA TECH.

Electronic files submitted by TETRA TECH have been prepared and submitted using specific software and hardware systems. TETRA TECH makes no representation about the compatibility of these files with the Client's current or future software and hardware systems.

1.3 ENVIRONMENTAL AND REGULATORY ISSUES

Unless stipulated in the report, TETRA TECH has not been retained to investigate, address or consider and has not investigated, addressed or considered any environmental or regulatory issues associated with development on the subject site.

1.4 NATURE AND EXACTNESS OF SOIL AND ROCK DESCRIPTIONS

Classification and identification of soils and rocks are based upon commonly accepted systems and methods employed in professional geotechnical practice. This report contains descriptions of the systems and methods used. Where deviations from the system or method prevail, they are specifically mentioned.

Classification and identification of geological units are judgmental in nature as to both type and condition. TETRA TECH does not warrant conditions represented herein as exact, but infers accuracy only to the extent that is common in practice.

Where subsurface conditions encountered during development are different from those described in this report, qualified geotechnical personnel should revisit the site and review recommendations in light of the actual conditions encountered.

1.5 LOGS OF TESTHOLES

The testhole logs are a compilation of conditions and classification of soils and rocks as obtained from field observations and laboratory testing of selected samples. Soil and rock zones have been interpreted. Change from one geological zone to the other, indicated on the logs as a distinct line, can be, in fact, transitional. The extent of transition is interpretive. Any circumstance which requires precise definition of soil or rock zone transition elevations may require further investigation and review.

1.6 STRATIGRAPHIC AND GEOLOGICAL INFORMATION

The stratigraphic and geological information indicated on drawings contained in this report are inferred from logs of test holes and/or soil/rock exposures. Stratigraphy is known only at the locations of the test hole or exposure. Actual geology and stratigraphy between test holes and/or exposures may vary from that shown on these drawings. Natural variations in geological conditions are inherent and are a function of the historic environment. TETRA TECH does not represent the conditions illustrated as exact but recognizes that variations will exist. Where knowledge of more precise locations of geological units is necessary, additional investigation and review may be necessary.

1.7 PROTECTION OF EXPOSED GROUND

Excavation and construction operations expose geological materials to climatic elements (freeze/thaw, wet/dry) and/or mechanical disturbance which can cause severe deterioration. Unless otherwise specifically indicated in this report, the walls and floors of excavations must be protected from the elements, particularly moisture, desiccation, frost action and construction traffic.

1.8 SUPPORT OF ADJACENT GROUND AND STRUCTURES

Unless otherwise specifically advised, support of ground and structures adjacent to the anticipated construction and preservation of adjacent ground and structures from the adverse impact of construction activity is required.

1.9 INFLUENCE OF CONSTRUCTION ACTIVITY

There is a direct correlation between construction activity and structural performance of adjacent buildings and other installations. The influence of all anticipated construction activities should be considered by the contractor, owner, architect and prime engineer in consultation with a geotechnical engineer when the final design and construction techniques are known.

1.10 OBSERVATIONS DURING CONSTRUCTION

Because of the nature of geological deposits, the judgmental nature of geotechnical engineering, as well as the potential of adverse circumstances arising from construction activity, observations during site preparation, excavation and construction should be carried out by a geotechnical engineer. These observations may then serve as the basis for confirmation and/or alteration of geotechnical recommendations or design guidelines presented herein.

1.11 DRAINAGE SYSTEMS

Where temporary or permanent drainage systems are installed within or around a structure, the systems which will be installed must protect the structure from loss of ground due to internal erosion and must be designed so as to assure continued performance of the drains. Specific design detail of such systems should be developed or reviewed by the geotechnical engineer. Unless otherwise specified, it is a condition of this report that effective temporary and permanent drainage systems are required and that they must be considered in relation to project purpose and function.

1.12 BEARING CAPACITY

Design bearing capacities, loads and allowable stresses quoted in this report relate to a specific soil or rock type and condition. Construction activity and environmental circumstances can materially change the condition of soil or rock. The elevation at which a soil or rock type occurs is variable. It is a requirement of this report that structural elements be founded in and/or upon geological materials of the type and in the condition assumed. Sufficient observations should be made by qualified geotechnical personnel during construction to assure that the soil and/or rock conditions assumed in this report in fact exist at the site.

1.13 SAMPLES

TETRA TECH will retain all soil and rock samples for 30 days after this report is issued. Further storage or transfer of samples can be made at the Client's expense upon written request, otherwise samples will be discarded.

1.14 INFORMATION PROVIDED TO TETRA TECH BY OTHERS

During the performance of the work and the preparation of the report, TETRA TECH may rely on information provided by persons other than the Client. While TETRA TECH endeavours to verify the accuracy of such information when instructed to do so by the Client, TETRA TECH accepts no responsibility for the accuracy or the reliability of such information which may affect the report.