

ISSUED FOR TENDER
21/05/2015



Parks Canada
Asset Management
Western and Northern Region

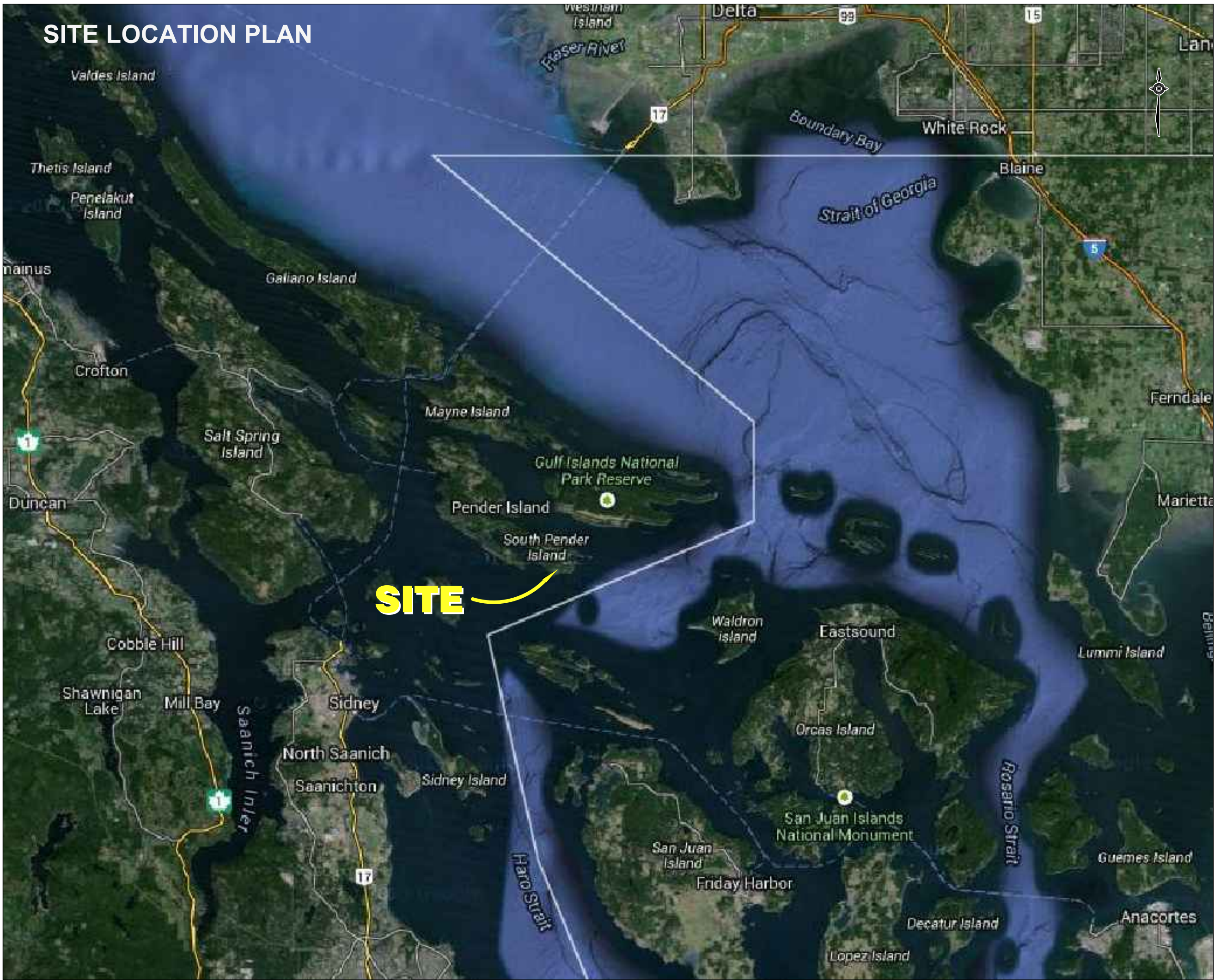
Parcs Canada
Gestion des biens
Région de l'Ouest et du Nord

ACCESS AND EMBANKMENT REHABILITATION
GREENBURN LAKE

GULF ISLAND NATIONAL PARK, South Pender Island, British Columbia

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Canada

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Contractor to verify all dimensions & conditions on site and immediately notify the engineer of all discrepancies.

L'entrepreneur doit vérifier toutes les dimensions et conditions sur le site et aviser immédiatement l'ingénieur de toute divergence.

revisions	description	date
A	A detail no. no. du détail	A
C	B location drawing no. sur dessin no. C drawing no. dessin no.	B C

Consultants Name Nom de l'expert - conseil

TETRA TECH EBA
ENGINEERING PRACTICE

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Kelowna, BC

project projet

GREENBURN LAKE DAM
REHABILITATION

GULF ISLAND NATIONAL PARK, BC
K13103348-01-001

drawing dessin

COVER PAGE

Designed By	R. HALLEY	Conçu par
Date	2015/03/28	(yyyy/mm/dd)
Drawn By	R. HALLEY	Dessiné par
Date	2015/03/28	(yyyy/mm/dd)
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Date	2015/03/30	(yyyy/mm/dd)
Approved By		Approuvé par
Date		(yyyy/mm/dd)
Tender		Soumission

Project Manager Administrateur de projets

Project no. No. du projet

5P420-14-5097/A

Drawing no. No. du dessin

C-3348-01

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STRUCTURAL DEMOLITION

SECTION INCLUDES

THE WORK COVERED BY THIS SPECIFICATION SHALL CONSIST OF STRUCTURE DEMOLITION WITHIN THE LIMITS OF CONSTRUCTION INCLUDING BUT NOT LIMITED TO DEMOLITION OF THE EXISTING SPILLWAY. FOR COMPREHENSIVE PROJECT DETAILS SEE SECTION 03 41 16 STRUCTURAL DEMOLITION.

1.0 QUALITY ASSURANCE

- 1.1 REGULATORY REQUIREMENTS: ENSURE WORK IS PERFORMED IN COMPLIANCE WITH APPLICABLE PROVINCIAL AND MUNICIPAL REGULATIONS.

2.0 SITE CONDITIONS

- 2.1 ENVIRONMENTAL PROTECTION:
- 2.2 ENSURE WORK IS DONE IN ACCORDANCE WITH SECTION 01 35 43 - ENVIRONMENTAL PROCEDURES.
- 2.3 ENSURE WORK DOES NOT ADVERSELY AFFECT ADJACENT WATERCOURSES, GROUNDWATER AND WILDLIFE, OR CONTRIBUTE TO EXCESS AIR AND NOISE POLLUTION.
- 2.4 FIRES AND BURNING OF WASTE OR MATERIALS IS NOT PERMITTED ON SITE.
- 2.5 DO NOT BURY RUBBISH WASTE MATERIALS.
- 2.6 DO NOT DISPOSE OF WASTE OR VOLATILE MATERIALS INCLUDING BUT NOT LIMITED TO: MINERAL SPIRITS, OIL, PETROLEUM BASED LUBRICANTS, OR TOXIC CLEANING SOLUTIONS INTO WATERCOURSES, STORM OR SANITARY SEWERS.
- 2.7 ENSURE PROPER DISPOSAL PROCEDURES ARE MAINTAINED THROUGHOUT PROJECT.
- 2.8 DO NOT PUMP WATER CONTAINING SUSPENDED MATERIALS INTO WATERCOURSES, STORM OR SANITARY SEWERS, OR ONTO ADJACENT PROPERTIES.
- 2.9 CONTROL DISPOSAL OR RUNOFF OF WATER CONTAINING SUSPENDED MATERIALS OR OTHER HARMFUL SUBSTANCES AS DIRECTED BY DEPARTMENTAL REPRESENTATIVE.
- 2.10 PROTECT TREES, PLANTS AND FOLIAGE ON SITE AND ADJACENT PROPERTIES WHERE INDICATED.
- 2.11 PREVENT EXTRANEOUS MATERIALS FROM CONTAMINATING AIR BEYOND APPLICATION AREA, BY PROVIDING TEMPORARY ENCLOSURES DURING DEMOLITION WORK.
- 2.12 COVER OR WET DOWN DRY MATERIALS AND WASTE TO PREVENT BLOWING DUST AND DEBRIS. CONTROL DUST ON ALL TEMPORARY ROADS.

CONCRETE FORMING AND ACCESSORIES

SECTION INCLUDES

THE WORK COVERED BY THIS SPECIFICATION SHALL CONSIST OF CONCRETE FORMING AND ACCESSORIES. FOR COMPREHENSIVE PROJECT DETAILS SEE SECTION 03 10 00 CONCRETE FORMING ACCESSORIES.

1.0 FABRICATION AND ERECTION

- 1.1 VERIFY LINES, LEVELS AND CENTRES BEFORE PROCEEDING WITH FORMWORK FALSEWORK AND ENSURE DIMENSIONS AGREE WITH DRAWINGS.
- 1.2 OBTAIN DEPARTMENTAL REPRESENTATIVE'S APPROVAL FOR USE OF EARTH FORMS FRAMING OPENINGS NOT INDICATED ON DRAWINGS.
- 1.3 HAND TRIM SIDES AND BOTTOMS AND REMOVE LOOSE EARTH FROM EARTH FORMS BEFORE PLACING CONCRETE.
- 1.4 FABRICATE AND ERECT FALSEWORK IN ACCORDANCE WITH CSA S289.1.
- 1.5 DO NOT PLACE SHORES AND MUD SILLS ON FROZEN GROUND.
- 1.6 PROVIDE SITE DRAINAGE TO PREVENT WASHOUT OF SOIL SUPPORTING MUD SILLS AND SHORES.
- 1.7 FABRICATE AND ERECT FORMWORK IN ACCORDANCE WITH CAN/CSA S289.3 TO PRODUCE FINISHED CONCRETE CONFORMING TO SHAPE, DIMENSIONS, LOCATIONS AND LEVELS INDICATED WITHIN TOLERANCES REQUIRED BY CSA A23.1/A23.2.
- 1.8 ALIGN FORM JOINTS AND NAME WATERSTOP:
- 1.8.1 KEEP FORM JOINTS TO MINIMUM.
- 1.9 USE 25 MM CHAMFER STRIPS ON EXTERNAL CORNERS AND EXPOSED EDGES.
- 1.10 FORM CHASES, SLOTS, OPENINGS, DRIPS, RECESSES, EXPANSION AND CONTROL JOINTS AS INDICATED.
- 1.11 BUILD IN ANCHORS, SLEEVES, AND OTHER INSERTS REQUIRED TO ACCOMMODATE WORK SPECIFIED IN OTHER SECTIONS.
- 1.11.1 ENSURE THAT ANCHORS AND INSERTS WILL NOT PROTRUDE BEYOND SURFACES DESIGNATED TO RECEIVE APPLIED FINISHES, INCLUDING PAINTING.
- 1.12 CLEAN FORMWORK IN ACCORDANCE WITH CSA A23.1/A23.2, BEFORE PLACING CONCRETE.

2.0 REMOVAL AND RESHORING

- 2.1 LEAVE FORMWORK IN PLACE FOR FOLLOWING MINIMUM PERIODS OF TIME AFTER PLACING CONCRETE.
- 2.1.1 3 DAYS FOR WALLS AND SIDES OF BEAMS.
- 2.1.2 14 DAYS FOR BEAM SOFFITS, SLABS, DECKS AND OTHER STRUCTURAL MEMBERS, OR 7 DAYS WHEN REPLACED IMMEDIATELY WITH ADEQUATE SHORING TO STANDARD SPECIFIED FOR FALSEWORK.
- 2.1.3 1 DAY FOR FOOTINGS AND ABUTMENTS.
- 2.2 REMOVE FORMWORK WHEN CONCRETE HAS REACHED 65 % OF ITS DESIGN STRENGTH OR MINIMUM PERIOD NOTED ABOVE, WHICHEVER COMES LATER, AND REPLACE IMMEDIATELY WITH ADEQUATE RESHORING.
- 2.3 PROVIDE NECESSARY RESHORING OF MEMBERS WHERE EARLY REMOVAL OF FORMS MAY BE REQUIRED OR WHERE MEMBERS MAY BE SUBJECTED TO ADDITIONAL LOADS DURING CONSTRUCTION AS REQUIRED.
- 2.4 SPACE RESHORING IN EACH PRINCIPAL DIRECTION AT NOT MORE THAN (3000) MM APART.
- 2.5 RE-USE FORMWORK AND FALSEWORK SUBJECT TO REQUIREMENTS OF CSA A23.1/A23.2.

CONCRETE REINFORCING

SECTION INCLUDES

THE WORK COVERED BY THIS SPECIFICATION SHALL CONSIST OF CONCRETE REINFORCING. FOR COMPREHENSIVE PROJECT DETAILS SEE SECTION 03 20 00 CONCRETE REINFORCING.

1.0 FIELD BENDING

- 1.1 DO NOT FIELD BEND OR FIELD WELD REINFORCEMENT EXCEPT WHERE INDICATED OR AUTHORIZED BY DEPARTMENTAL REPRESENTATIVE.
- 1.2 WHEN FIELD BENDING IS AUTHORIZED, BEND WITHOUT HEAT, APPLYING SLOW AND STEADY PRESSURE.
- 1.3 REPLACE BARS, WHICH DEVELOP CRACKS OR SPLITS.

2.0 PLACING REINFORCEMENT

- 2.1 PLACE REINFORCING STEEL AS INDICATED ON PLACING DRAWINGS IN ACCORDANCE WITH CSA A23.1/A23.2.
- 2.2 PRIOR TO PLACING CONCRETE, OBTAIN DEPARTMENTAL REPRESENTATIVE'S APPROVAL OF REINFORCING MATERIAL AND PLACEMENT.
- 2.3 ENSURE COVER TO REINFORCEMENT IS MAINTAINED DURING CONCRETE POUR.

3.0 CLEANING

- 3.1 PROGRESS CLEANING
- 3.2 LEAVE WORK AREA CLEAN AT END OF EACH DAY.
- 3.3 FINAL CLEANING: UPON COMPLETION REMOVE SURPLUS MATERIALS, RUBBISH, TOOLS AND EQUIPMENT IN ACCORDANCE WITH SECTION 01 74 11 - CLEANING.
- 3.4 WASTE MANAGEMENT: SEPARATE WASTE MATERIALS.

CAST-IN-PLACE CONCRETE

SECTION INCLUDES

THE WORK COVERED BY THIS SPECIFICATION SHALL CONSIST OF CAST-IN-PLACE CONCRETE AND SHALL INCLUDE BUT NOT BE LIMITED TO THE SPILLWAY AND BRIDGE DECK. FOR COMPREHENSIVE PROJECT DETAILS SEE SECTION 03 30 00 CAST-IN-PLACE CONCRETE.

1.0 DELIVERY, STORAGE AND HANDLING

- 1.1 DELIVERY AND ACCEPTANCE REQUIREMENTS
- 1.1.1 CONCRETE Hauling Time: DELIVER TO SITE OF WORK AND DISCHARGED WITHIN 120 MINUTES MAXIMUM AFTER BATCHING.
- 1.1.1.1 DO NOT MODIFY MAXIMUM TIME LIMIT WITHOUT RECEIPT OF PRIOR WRITTEN AGREEMENT FROM DEPARTMENTAL REPRESENTATIVE AND CONCRETE PRODUCER AS DESCRIBED IN CSA A23.1/A23.2.
- 1.1.2 SPEC NOTE: SPECIFY THE DELIVERY RATE ACCORDING TO THE PROJECT SIZE.
- 1.2 CONCRETE DELIVERY: ENSURE CONTINUOUS CONCRETE DELIVERY FROM PLANT MEETS CSA A23.1/A23.2.

2.0 MATERIALS

- 2.1 PORTLAND CEMENT: TO CSA A3001, TYPE HS.
- 2.2 BLENDED HYDRAULIC CEMENT: TYPE HS8 TO CSA A3001.
- 2.3 WATER: TO CSA A23.1.
- 2.4 AGGREGATES: TO CSA A23.1/A23.2.
- 2.5 ADMIXTURES:
- 2.6 AIR ENTRAINING ADMIXTURE: TO ASTM C260.
- 2.7 CHEMICAL ADMIXTURE: DEPARTMENTAL REPRESENTATIVE TO APPROVE ACCELERATING OR SET RETARDING ADMIXTURES DURING COLD AND HOT WEATHER PLACING.
- 3.0 MIXES
- 3.1 ALTERNATIVE 1 - PERFORMANCE METHOD FOR SPECIFYING CONCRETE: TO MEET DEPARTMENTAL REPRESENTATIVE PERFORMANCE CRITERIA TO CSA A23.1/A23.2.
- 3.2 ENSURE CONCRETE SUPPLIER MEETS PERFORMANCE CRITERIA AS ESTABLISHED BELOW AND PROVIDE VERIFICATION OF COMPLIANCE AS IN QUALITY CONTROL PROGRAM.
- 3.3 PROVIDE CONCRETE MIX TO MEET FOLLOWING HARD STATE REQUIREMENTS:
- 3.4 COMPRESSIVE STRENGTH AT 28 DAYS: 30 MPa MINIMUM.
- 3.5 AGGREGATE SIZE 35 MM MAXIMUM.
- 3.6 AGGREGATE NORMAL - DENSITY
- 3.7 CLASS OF EXPOSURE CATEGORY 5-2 - HS
- 3.8 AIR CONTENT 5-4%
- 3.9 CONCRETE SUPPLIER'S CERTIFICATION: BOTH BATCH PLANT AND MATERIALS MEET CSA A23.1 REQUIREMENTS.

CLEARING AND GRUBBING

SECTION INCLUDES

THE WORK COVERED BY THIS SPECIFICATION SHALL CONSIST OF EARTHWORKS PREPARATION CLEARING AND GRUBBING OF WORKS OUTLINED WITHIN PROJECT. FOR COMPREHENSIVE PROJECT DETAILS SEE SECTION 31 11 00 CLEARING AND GRUBBING.

ROUGH GRADING

SECTION INCLUDES

THE WORK COVERED BY THIS SPECIFICATION SHALL CONSIST OF EARTHWORKS ROUGH GRADING OF WORKS OUTLINED WITHIN PROJECT. FOR COMPREHENSIVE PROJECT DETAILS SEE SECTION 31 22 13 ROUGH GRADING.

RIPRAP

SECTION INCLUDES

THE WORK COVERED BY THIS SPECIFICATION SHALL CONSIST OF RIPRAP AND CONSTRUCTION PROCEDURES OF WORKS OUTLINED WITHIN PROJECT. FOR COMPREHENSIVE PROJECT DETAILS SEE SECTION 31 37 00 RIPRAP.

1.0 RIPRAP

- 1.1 RIPRAP SHALL CONSIST OF SOUND, HARD, DURABLE PARTICLES FREE FROM SILT, CLAY, SHALE, SANDSTONE, FLAKY PARTICLES, TOPSOIL, ORGANIC MATTER, AND OTHER DELETERIOUS MATERIAL.
- 1.2 RIPRAP PARTICLES SHALL BE AND FREE FROM CRACKS, SEAMS, AND OTHER DEFECTS THAT WOULD INCREASE POTENTIAL FOR DEGRADATION FROM FROST AND WATER ACTION.
- 1.3 THE RATIO OF MAXIMUM TO MINIMUM DIMENSIONS OF INDIVIDUAL PIECES SHALL NOT EXCEED 3:0.
- 1.4 GRADATION LIMITS SHALL BE AS FOLLOWS REFERENCED BY UNIT WEIGHT:
- 1.5 CLASS 50 (5) RIPRAP:
- 1.6 NOT MORE THAN 15% OF TOTAL VOLUME OF STONES WITH INDIVIDUAL SIZE LESS THAN 100 MM.
- 1.7 NOT LESS THAN 50% OF TOTAL VOLUME OF STONES WITH INDIVIDUAL SIZE OF 300 MM OR MORE.
- 1.8 REMAINING PERCENTAGE OF TOTAL VOLUME TO HAVE UNIFORM DISTRIBUTION OF STONES BETWEEN 50 AND 300 MM SIZE.
- 2.0 GEOTEXTILE FILTER
- 2.1 GEOTEXTILE, IN ACCORDANCE WITH SECTION 31 32 10 01 - GEOTEXTILES.

3.0 RIPRAP PLACEMENT

- 3.1 SURFACES TO RECEIVE RIPRAP MAY BE FROZEN.
- 3.2 PLACE RIPRAP BY BACKHOE, OR SIMILAR LIFTING EQUIPMENT. DO NOT END DUMP AND PUSH RIPRAP AND RIPRAP BEDDING INTO PLACE ON SLOPES.
- 3.3 DO NOT CAUSE SEGREGATION, PARTICLE DAMAGE, BREAKDOWN, OR EXCESSIVE DISPLACEMENT OF THE PREVIOUSLY PLACED RIPRAP. REPLACE OR REPAIR DAMAGED OR DISPLACED MATERIAL.
- 3.4 OBTAIN THE SPECIFIED DISTRIBUTION OF THE VARIOUS SIZES OF PARTICLES THROUGHOUT THE MASS BY USING SELECTIVE LOADING, BY CONTROLLED DUMPING OF SUCCESSIVE LOADS DURING PLACING, OR USING OTHER METHODS.
- 3.5 COMMENCE PLACEMENT OF RIPRAP FROM THE TOE OF THE SLOPE AND PROCEED UP SLOPE.
- 3.6 PLACE RIPRAP TO ITS FULL THICKNESS IN ONE OPERATION.
- 3.7 COMPACTION OF RIPRAP IS NOT REQUIRED.
- 3.8 PLACE RIPRAP IN A CLOSELY PACKED ARRANGEMENT SUCH THAT SMALLER ROCKS FILL THE VOIDS BETWEEN LARGER ROCKS AND THERE ARE NO UNFILLED SPACES THAT WOULD PERMIT THE ESCAPE OF UNDERLYING LAYERS OF PLACED MATERIALS. INTERLOCK PARTICLES AND DRESS SLOPES AS REQUIRED.
- 3.9 REARRANGE ROCKS, AS REQUIRED, TO ELIMINATE ANY TENDENCY OF THE ROCKS TO MOVE OR SLIDE AFTER PLACEMENT.
- 3.10 DO NOT BREAK RIPRAP PARTICLES AFTER PLACEMENT.
- 3.11 EQUIPMENT SHALL NOT TRAVEL ON RIPRAP.
- 3.12 TOLERANCES
- 3.12.1 PLACE RIPRAP WITHIN A TOLERANCE OF +100 mm OF THE SPECIFIED THICKNESS, AND WITHIN A TOLERANCE OF +100 mm OF THE SPECIFIED LINES, GRADES, AND ELEVATIONS.

EXCAVATION AND BACKFILLING

SECTION INCLUDES

THE WORK COVERED BY THIS SPECIFICATION SHALL CONSIST OF EARTHWORKS CONSTRUCTION PROCEDURES OF WORKS OUTLINED WITHIN PROJECT. FOR COMPREHENSIVE PROJECT DETAILS SEE SECTION 31 32 33.01 EXCAVATION AND BACKFILLING.

1.0 COMMON FILL

- 1.1 COMMON FILL IS GENERALLY INTENDED FOR BACKFILL WITH LIMITED PERFORMANCE REQUIREMENTS.
- 1.2 COMMON FILL SHALL HAVE A MAXIMUM PARTICLE SIZE OF 200 mm AND A SMOOTH GRADATION CURVE.

2.0 LOW PERMEABILITY FILL

- 2.1 LOW PERMEABILITY FILL SHALL BE NATIVE CLAYEY SILT SOIL, WITH SUFFICIENT FINES CONTENT TO LIMIT THE MATERIAL PERMEABILITY.
- 2.2 MATERIAL SHALL BE 20 MM MAXIMUM SIZE WITH A MINIMUM OF 50% PASSING THE 60 µm SIEVE.
- 2.3 CLAYEY SILT SHALL BE LOW TO MEDIUM PLASTICITY AS CLASSIFIED BY THE UNITED SOILS CLASSIFICATION SYSTEM, WITH A MINIMUM PLASTICITY INDEX OF 7% AS DETERMINED BY ASTM D418.
- 2.4 DO NOT USE HIGH PLASTICITY CLAYS WITH A LIQUID LIMIT GREATER THAN 50%.

3.0 SAND FILTER

- 3.1 FILTER MATERIAL SHALL BE WELL-GRADED SAND WITH A TRACE OF GRAVEL, CONFORMING TO THE FOLLOWING GRADATION LIMITS

SEIVE SIZE	PERCENT PASSING BY MASS
9.5 mm	100%
4.75 mm	90% - 100%
3.35 mm	80% - 100%
1.18 mm	50% - 90%
600 µm	20% - 60%
300 µm	0% - 30%
150 µm	0% - 10%

- 3.2 CONCRETE FINE AGGREGATE WILL LIKELY MEET THESE REQUIREMENTS

- 3.3 THE SLOPE OF A PLOT OF THE ACTUAL PERCENT PASSING BY MASS FOR ANY CHOSEN SIEVE SIZE LARGER THAN 600 µm AND A SECOND SIEVE SIZE THAT IS FIVE (5) TIMES THE CHOSEN SIEVE SIZE SHALL BE FLATTER THAN 15%.

4.0 100 mm GRANULAR FILL

- 4.1 GRANULAR FILL MATERIALS SHALL BE WELL-GRADED SAND AND GRAVEL, CONFORMING TO ONE OF THE FOLLOWING GRADATION LIMITS REFERENCED BY MAXIMUM PARTICLE SIZE

SEIVE SIZE	PERCENT PASSING BY MASS
100 mm (3") GRANULAR FILL:	
100 mm	100%
75 mm	85% - 100%
40 mm	70% - 100%
25 mm	55% - 78%
10 mm	20% - 60%
5 mm	10% - 25%
1.25 mm	0% - 10%

5.0 DRAIN ROCK

- 5.1 DRAIN ROCK SHALL BE WASHED MATERIAL CONFORMING TO THE FOLLOWING GRADATION LIMITS:

SEIVE SIZE	PERCENT PASSING BY MASS
40 mm	100%
20 mm	75% - 100%
10 mm	50% - 100%
4.75 mm	15% - 55%
2.36 mm	5% - 30%
1.18 mm	0% - 15%

6.0 WASTE FILL

- 6.1 WASTE FILL SHALL BE EXCESS EXCAVATED MATERIAL AND MATERIAL NOT SUITABLE FOR USE AS SPECIFIED FOR EARTHWORKS CONSTRUCTION.

7.0 SURFACING GRAVEL

- 7.1 SURFACING GRAVEL SHALL CONFORM TO THE FOLLOWING REQUIREMENTS.
- 7.2 THE MATERIAL SHALL CONSIST OF HARD DURABLE PARTICLES FREE FROM CLAY LUMPS, FROZEN MATERIALS, ORGANIC MATTER (MAX 1% BY VOLUME, MAX 2% FINE ORGANIC MATTER WHEN TESTED IN ACCORDANCE WITH ASTM D2954) AND OTHER DELETERIOUS MATERIALS.
- 7.3 WHEN TESTED IN ACCORDANCE WITH ASTM C136, OR LATEST ISSUES, THE MATERIAL SHALL HAVE A GRADATION CONFORMING TO THE FOLLOWING GRADATION LIMITS:

SEIVE SIZE	PERCENT PASSING BY MASS
19 mm	100%
12.5 mm	70% - 100%
4.75 mm	40% - 70%
2.50 mm	20% - 50%
0.425 mm	7% - 25%
0.075 mm	3% - 6%

7.0 TOPSOIL

- 7.1 SHALL BE ORGANIC MATERIAL STRIPPED FROM THE NATIVE GROUND DURING STRIPPING AND TEMPORARILY STOCKPILED FOR LATER RE-USE. TOPSOIL SHALL BE FREE OF ROCKS > 25 MM IN DIAMETER AND OTHER DEBRIS HINDERING GOOD VEGETATIVE GROWTH.

8.0 COMPACTION

- 8.1 LIFT THICKNESS, COMPACTION REQUIREMENTS, AND DENSITIES SHALL CONFORM TO THE FOLLOWING UNLESS SPECIFIED OTHERWISE.

MATERIAL	MAXIMUM LOOSE LIFT THICKNESS (mm)	DENSITY LIMITS
IN SITU FOUNDATION:		
CHAMBER FILL:	300	98% SPMD0
LOW PERMEABILITY FILL:	300	98% SPMD0
SAND FILTER:	300	88% TO 100% SPMD0
SURFACING GRAVEL:	150	98% SPMD0

- 8.2 COMPACTED DENSITY LIMITS, IN CLAUSE 1.5.1, SHALL BE TO STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMD0) AS DETERMINED BY ASTM D496, OR MAXIMUM VIBRATED DENSITY (MVD0) AS DETERMINED BY ASTM D4253.

LEGEND

- --- Denotes Standard Iron Post Found
- --- Denotes Standard Iron Post Set
- --- Denotes Lead Plug Found
- × --- Denotes Lead Plug Set
- --- Denotes Standard Concrete Post Found
- --- Denotes Standard Concrete Post Set
- --- Denotes Standard Rock Post Found
- --- Denotes Standard Rock Post Set
- --- Denotes Standard Capped Post Found
- --- Denotes Standard Capped Post Set
- × --- Denotes Wood Post Found
- × --- Denotes Wood Post Set
- × --- Denotes Old Pattern Dominion Iron Post Found
- --- Denotes Non-Standard Iron Post Found
- ▲ --- Denotes Control Monument Found
- ◆ --- Denotes Aluminium Post Found
- △ --- Denotes Angle Iron Found
- ▲ --- Denotes Traverse Station Found
- △ --- Denotes Traverse Station Set
- △ --- Denotes Air Valve
- --- Denotes Sewer Cleanout
- --- Denotes Drain Cleanout
- --- Denotes Cleanout
- (M) --- Denotes Manhole
- (S) --- Denotes Sewer Manhole
- (D) --- Denotes Drain Manhole
- (W) --- Denotes Water Service
- (Sh) --- Denotes Shaw Service
- (T) --- Denotes Telus Service
- (H) --- Denotes Hydro Service
- (G) --- Denotes Gas Service
- (S) --- Denotes Sewer Service
- (D) --- Denotes Drain Service
- (Sh) --- Denotes Shaw Junction Box
- (T) --- Denotes Telus Junction Box
- (H) --- Denotes Hydro Junction Box
- --- Denotes Proposed Hydrant Location
- --- Denotes Proposed Utility Pole Location
- + --- Denotes Typical Spot Elevation
- 11.12
- Denotes Hydrant
- --- Denotes Utility Pole
- --- Denotes Utility Pole Anchor
- --- Denotes Coniferous Tree
- --- Denotes Deciduous Tree
- --- Denotes Well
- --- Denotes Monitoring Well
- --- Denotes Bore Hole
- --- Denotes Perc Hole
- --- Denotes Test Hole
- --- Denotes Lamp Standard
- --- Denotes Garden Lamp
- --- Denotes Sprinkler Head
- --- Denotes Track Switch
- --- Denotes Catch Basin
- --- Denotes Utility Box
- --- Denotes Street Sign
- --- Denotes Water Valve Box
- --- Denotes Chainlink Fence
- --- Denotes Wood Fence
- ×¹⁵⁴ --- Denotes Typical Numbered Wooden Stake Set
- Denotes Edge of Treeline
- Denotes Boundary of October 2005 Field Survey
- Denotes CL Railway Track
- Denotes Legal Boundaries
- Denotes Overhead Hydro Lines
- Denotes Underground Water Line
- Denotes Underground Storm Drain
- Denotes Building Setback Lines
- Typical Tree Description
- 100 (Shot #) OAK (Species) 700mm (Trunk Diameter)
- --- Denotes Section Location Plan
- --- Denotes Section and details scale/detail number and drawing number
- SECTION SCALE: 1:50
- --- Denotes Detail - Section Letter/ number /Scale and drawing number
- ELEVATION 1:25
- --- Denotes Spot Elevation (m)
- Denotes Weld Type and Length
- --- Denotes Detail - Section Letter/ number /Scale and drawing number

DIVERSION CHANNEL

- Fill area
- Cut area
- Blend to existing ground & maintain positive drainage
- Riprap channel
- Berm crest (3 m wide)
- Toe of channel
- Approximate grading limits
- Stripping area (clear & grub organics to 150 mm depth)
- Existing ground
- Proposed channel centerline profile
- INflow design flood level
- 200 year flood level

SPILLWAY

- Denotes Spot Elevation (m)
- Denotes Weld Type and Length

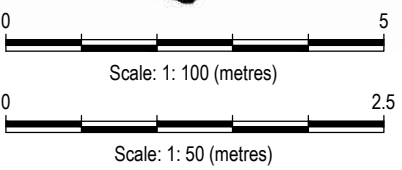
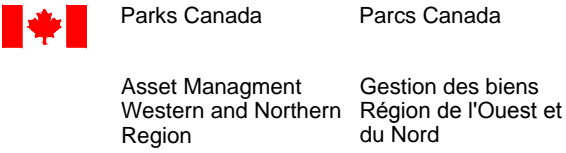
ELEVATION

- --- Denotes Detail - Section Letter/ number /Scale and drawing number



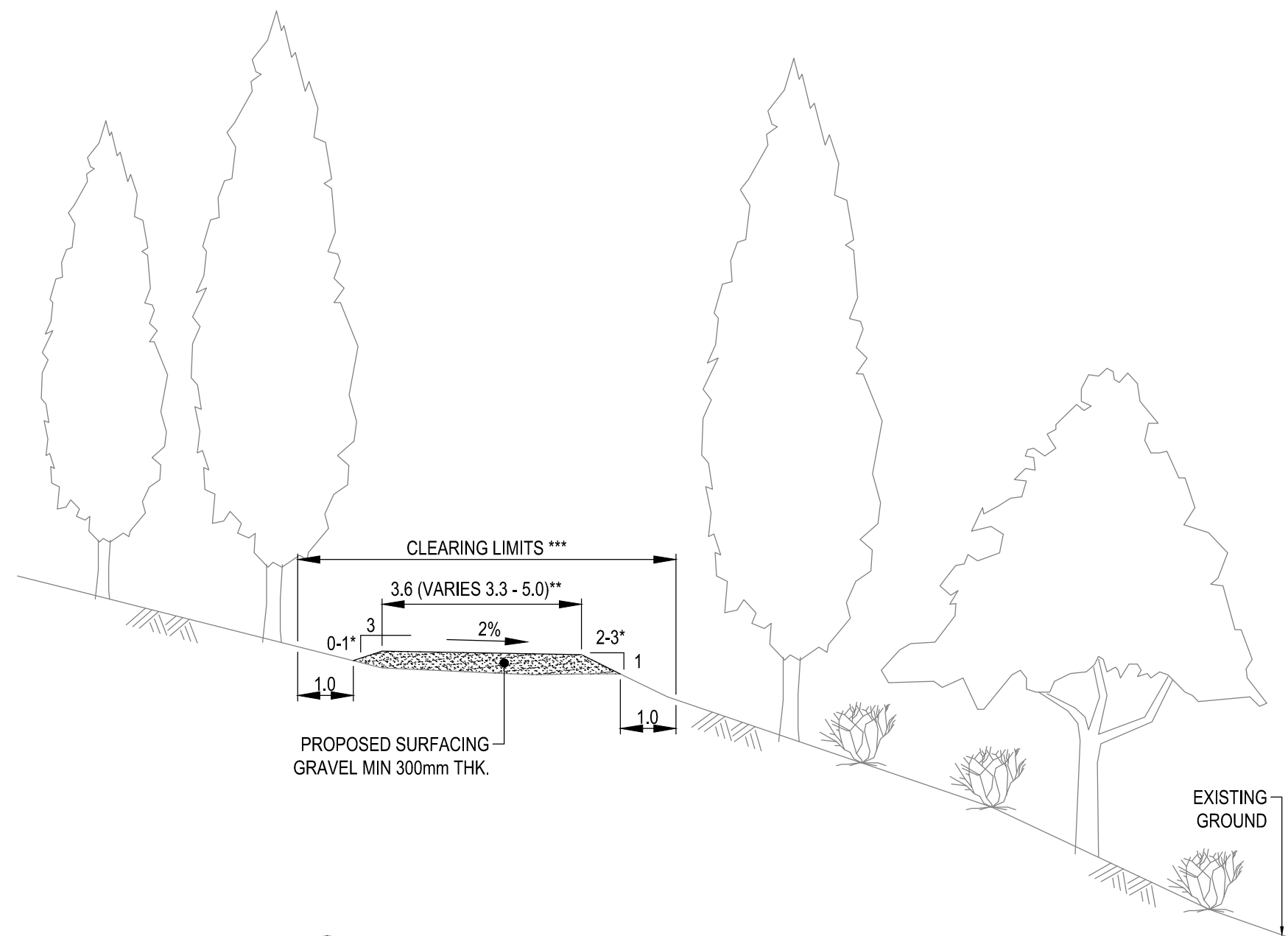
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0 10 20mm 40 60 80 100 120 140 160 180 200mm



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SECTION 1 TYPICAL SECTION PROPOSED SURFACING GRAVEL
SCALE: 1:100 SECTION TYPICAL STA. 1+000 TO STA. 1+775 (EXCLUDING SECTION 2 AND SECTION 3 AREAS)
SECTION DRAWN AT STA. 1+550

- * SLOPE OF SURFACING GRAVEL TO CONFORM TO FIELD CONDITIONS AND AS DIRECTED BY THE DEPARTMENTAL REPRESENTATIVE.
- ** 5.9m to 7.0m FROM STA. 1+000 - STA. 1+020.
- *** CLEAR ALL SHRUBS, BRUSH, AND TREES (WITH DIAMETER AT BASE < 100 mm) WITHIN CLEARING LIMITS (STA. 1+000 - STA. 1+775).

NOTES:

1. DIMENSIONS, COORDINATES, ELEVATIONS ARE SHOWN IN METRES UNLESS NOTED.
2. PROFILE DRAWN AT 10x VERTICAL EXAGGERATION
3. SURVEY BASE PLAN PROVIDED BY: J E ANDERSON & ASSOCIATES, DEC 22, 2014
4. COORDINATE SYSTEM: UTM NAD 83 ZONE 10
5. ELEVATIONS ARE GEODETIC REFERENCED TO THE CVG02013 DATUM

A	ISSUED FOR REVIEW	2015/03/20
revisions	description	date

A detail no.
no. du detail

B location drawing no.
sur dessin no.

C drawing no.
dessin no.

Consultants Name	Nom de l'expert - conseil
------------------	---------------------------

**TETRA TECH EBA
ENGINEERING PRACTICE**

**150, 1715 Dickson Ave.
Kelowna, BC**

project	projet
---------	--------

GREEN BURNLAKE DAM REHABILITATION

GULF ISLAND NATIONAL PARK, BC
K13103348-01-001

drawing	dessin
---------	--------

ACCESS ROAD TYPICAL SECTIONS (SHEET 1 OF 2)

Designed By	A. LUDWIG	Conçu par
-------------	-----------	-----------

Date 2015/04/23 (yyyy/mm/dd)

Drawn By A.HORWOOD / Y.TABATA Dessiné par

Date 2015/04/23 (yyyy/mm/dd)

Reviewed By	R. LIU	Examiné par
-------------	--------	-------------

Date	2015/04/23	(yyyy/mm/dd)
------	------------	--------------

Approved By	Approuvé par
-------------	--------------

Date	(yyyy/mm/dd)
Tender	Soumission

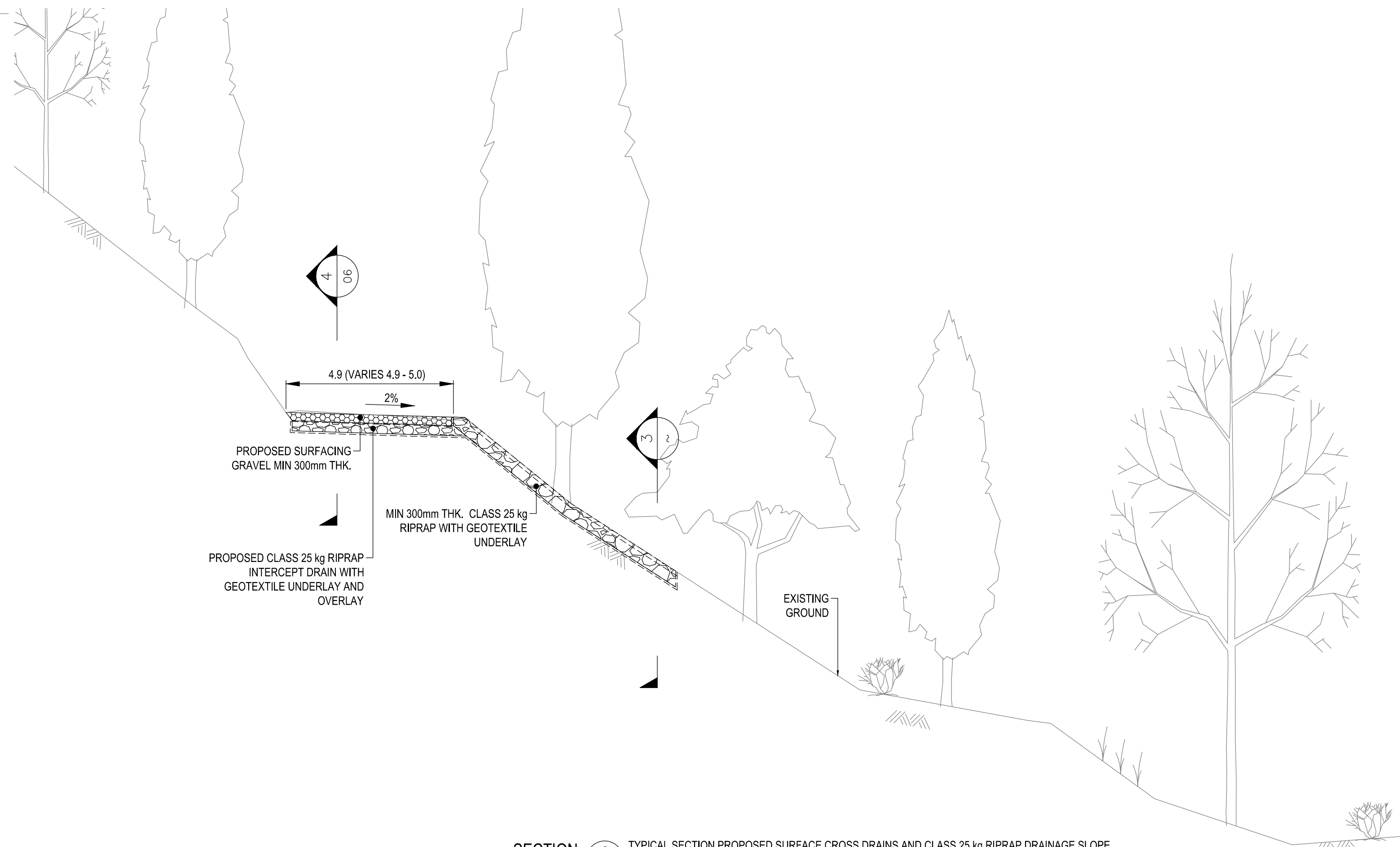
Tender	Commission
--------	------------

Project Manager	Administrateur de projets
-----------------	---------------------------

5P420-14-5097/A

Drawing no.	No. du dessin
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C-3348-05

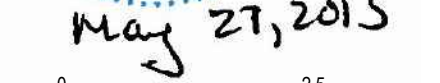


SECTION 2 TYPICAL SECTION PROPOSED SURFACE CROSS DRAINS AND CLASS 25 kg RIPRAP DRAINAGE SLOPE
SCALE: 1:100 SECTION TYPICAL STA. 1+070, STA. 1+185, STA. 1+270, STA. 1+365
SECTION DRAWN AT STA. 1+070



SECTION 3 TYPICAL SECTION PROPOSED CLASS 25 kg RIPRAP DRAINAGE SLOPE
SCALE: 1:50





Contractor to verify all dimensions & conditions on site and immediately notify the engineer of all discrepancies.

L'entrepreneur doit vérifier toutes les dimensions et conditions sur le site et aviser immédiatement l'ingénieur de toute divergence.

[illegible]

A	ISSUED FOR REVIEW	2015/03/20
visions	description	date

A detail no.
no. du detail

B location drawing no.
sur dessin no.

C drawing no.
dessin no.

Consultants Name	Nom de l'expert - conseil
------------------	---------------------------

**TETRA TECH EBA
ENGINEERING PRACTICE**

**150, 1715 Dickson Ave.
Kelowna, BC**

project	projet
---------	--------

GREEN BURNLAKE DAM REHABILITATION

GULF ISLAND NATIONAL PARK, BC
K13103348-01-001

drawing	dessin
---------	--------

ACCESS ROAD TYPICAL SECTIONS (SHEET 2 OF 2)

Designed By	A.HORWOOD	Conçu par
Date	2015/04/23	(yyyy/mm/dd)

Drawn By	A.HORWOOD / Y.TABATA	Dessiné par
Date	2015/04/23	(yyyy/mm/dd)

Reviewed By	R.LIU	Examiné par
Date	2015/04/23	(yyyy/mm/dd)

Approved By	Approuvé par
Date	(yyyy/mm/dd)

ender	Soumission
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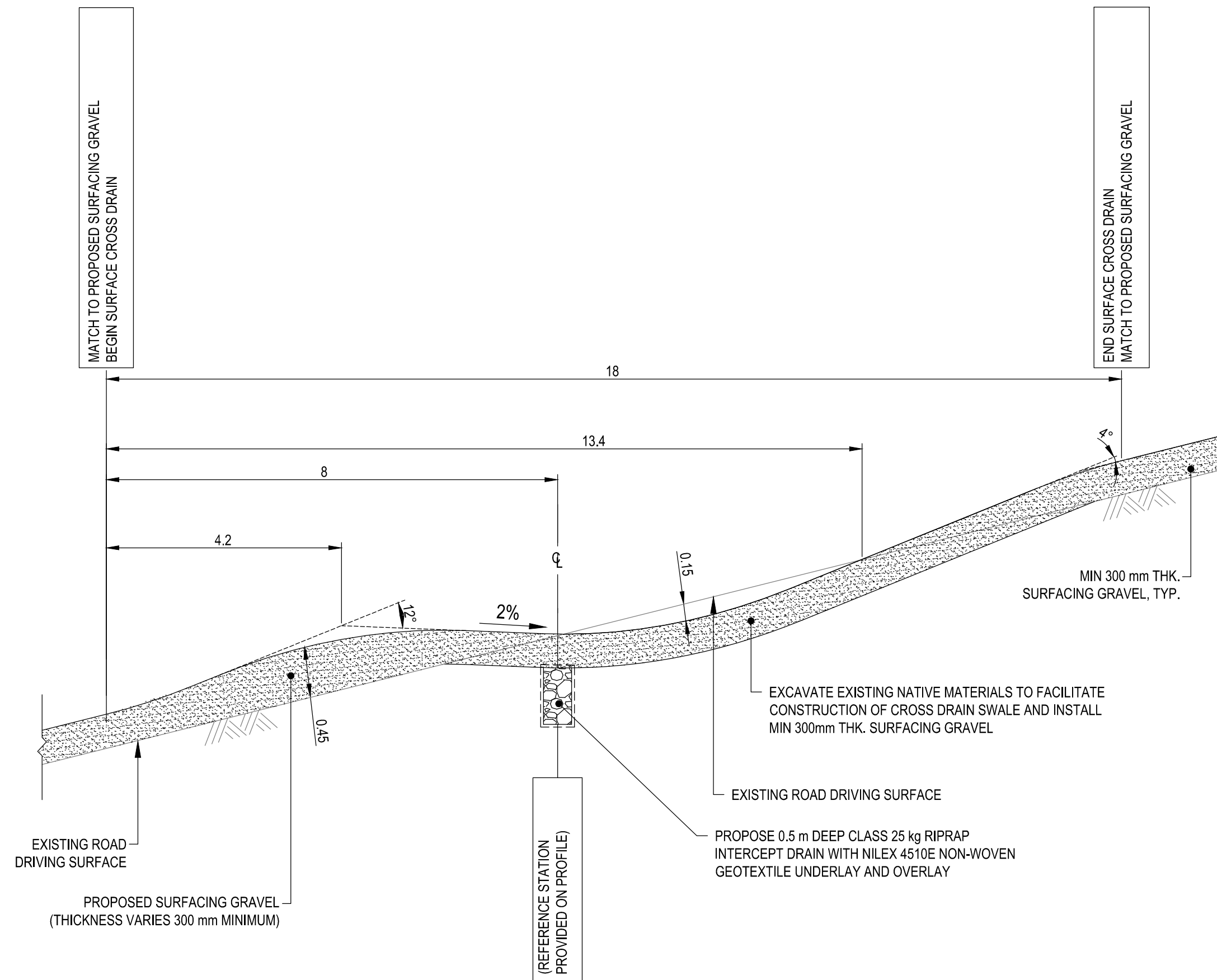
Project Manager	Administrateur de projets
-----------------	---------------------------

project no.	No. du projet
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5P420-14-5097/A

rawing no.	No. du dessin
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C-3348-06



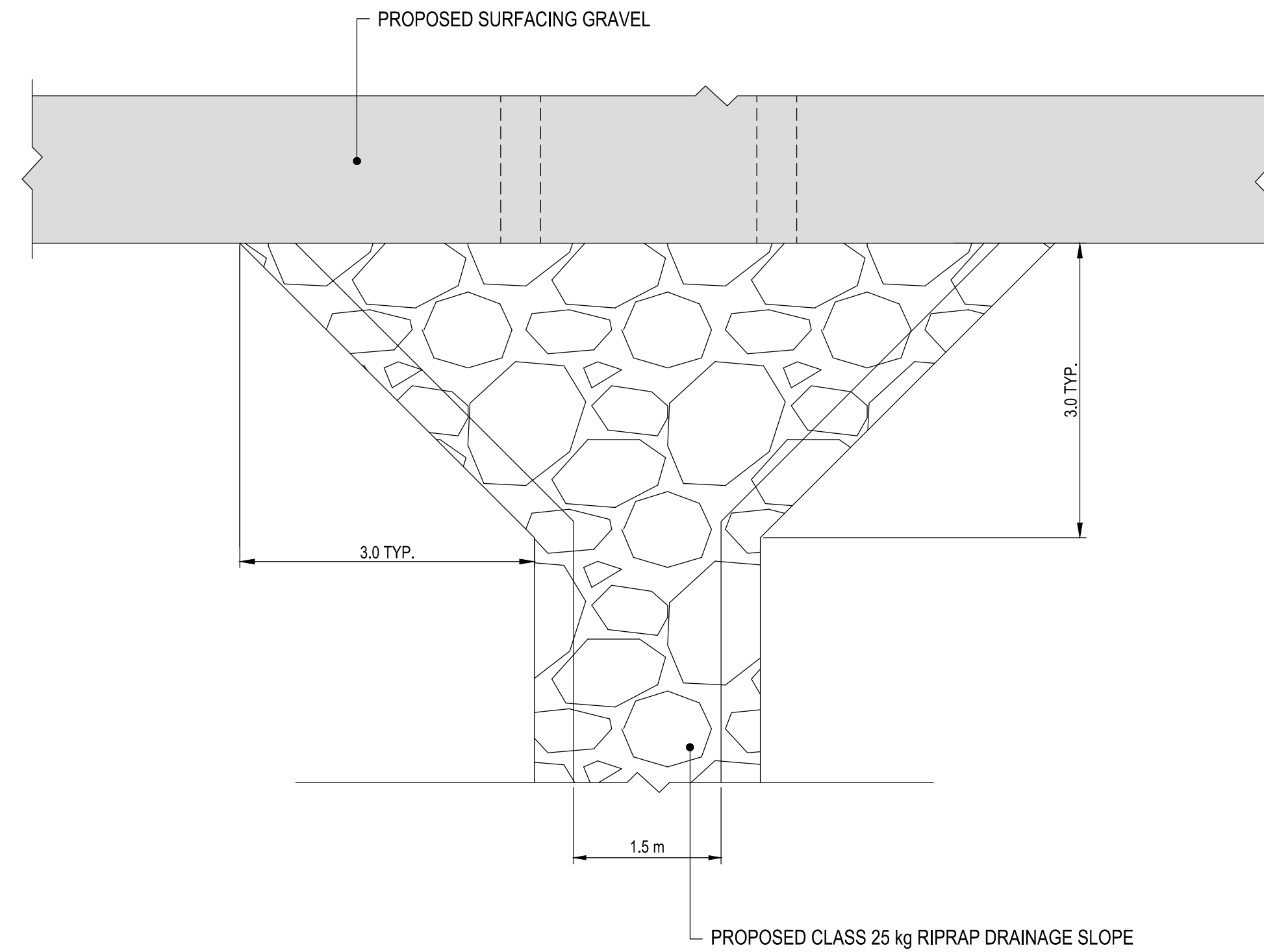
SECTION

SCALE: H: 1:75
V: 2 x EXAGGERATION

4
03

TYPICAL SECTION PROPOSED SURFACE CROSS DRAIN
SECTION TYPICAL OF CROSS DRAINS STA. 1+070, STA. 1+185, STA. 1+270, STA. 1+365
SECTION DRAWN AT STA. 1+065 TO STA. 1+079

* 8° AT PROPOSED SURFACE CROSS DRAIN STA. 1+365.



DETAIL

SCALE : 1:50

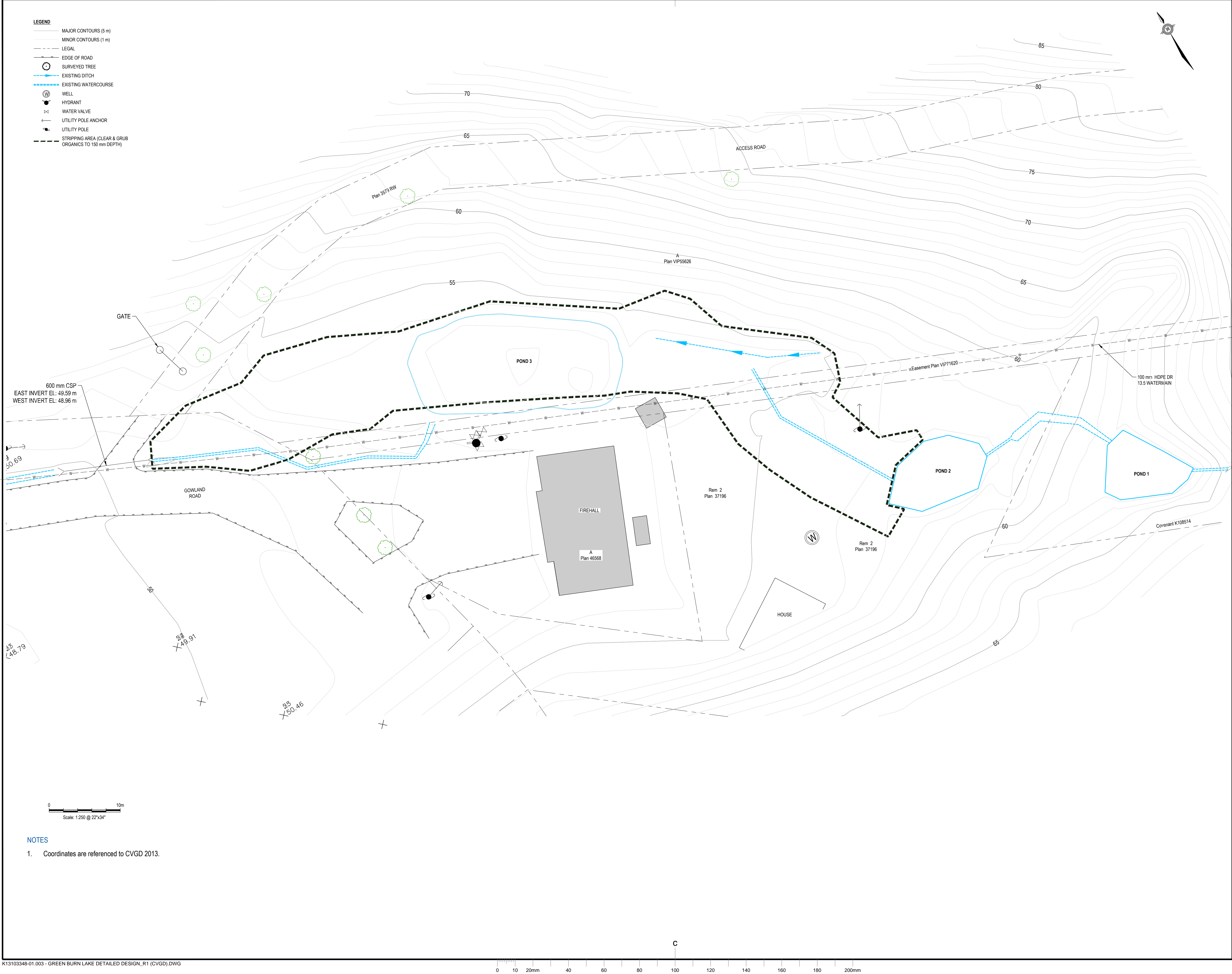
1

03

TYPICAL DETAIL OF RIPRAP DRAINAGE
SLOPE ADJACENT TO ACCESS ROAD

NOTES:

1. DIMENSIONS, COORDINATES, ELEVATIONS ARE SHOWN IN METRES UNLESS NOTED.
2. PROFILE DRAWN AT 10x VERTICAL EXAGGERATION
3. SURVEY BASE PLAN PROVIDED BY: J E ANDERSON & ASSOCIATES, DEC 22, 2014
4. COORDINATE SYSTEM: UTM NAD 83 ZONE 10
5. ELEVATIONS ARE GEODETIC REFERENCED TO THE CVG02013 DATUM



Parcs Canada

Asset Management
Western and Northern
Region

Gestion des biens
Région de l'Ouest et
du Nord

Contractor to verify all dimensions & conditions on site and immediately notify the engineer of all discrepancies.
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revisions	description	date
A	A detail no. du detail	A
C	B location drawing no. sur dessin no.	B
	C drawing no. dessin no.	C

Consultants Name

Nom de l'expert - conseil

**TETRA TECH EBA
ENGINEERING PRACTICE**

150, 1715 Dickson Ave.
Kelowna, BC

project

projet

**GREENBURN LAKE DAM
REHABILITATION**

GULF ISLAND NATIONAL PARK, BC
K13103348-01-001

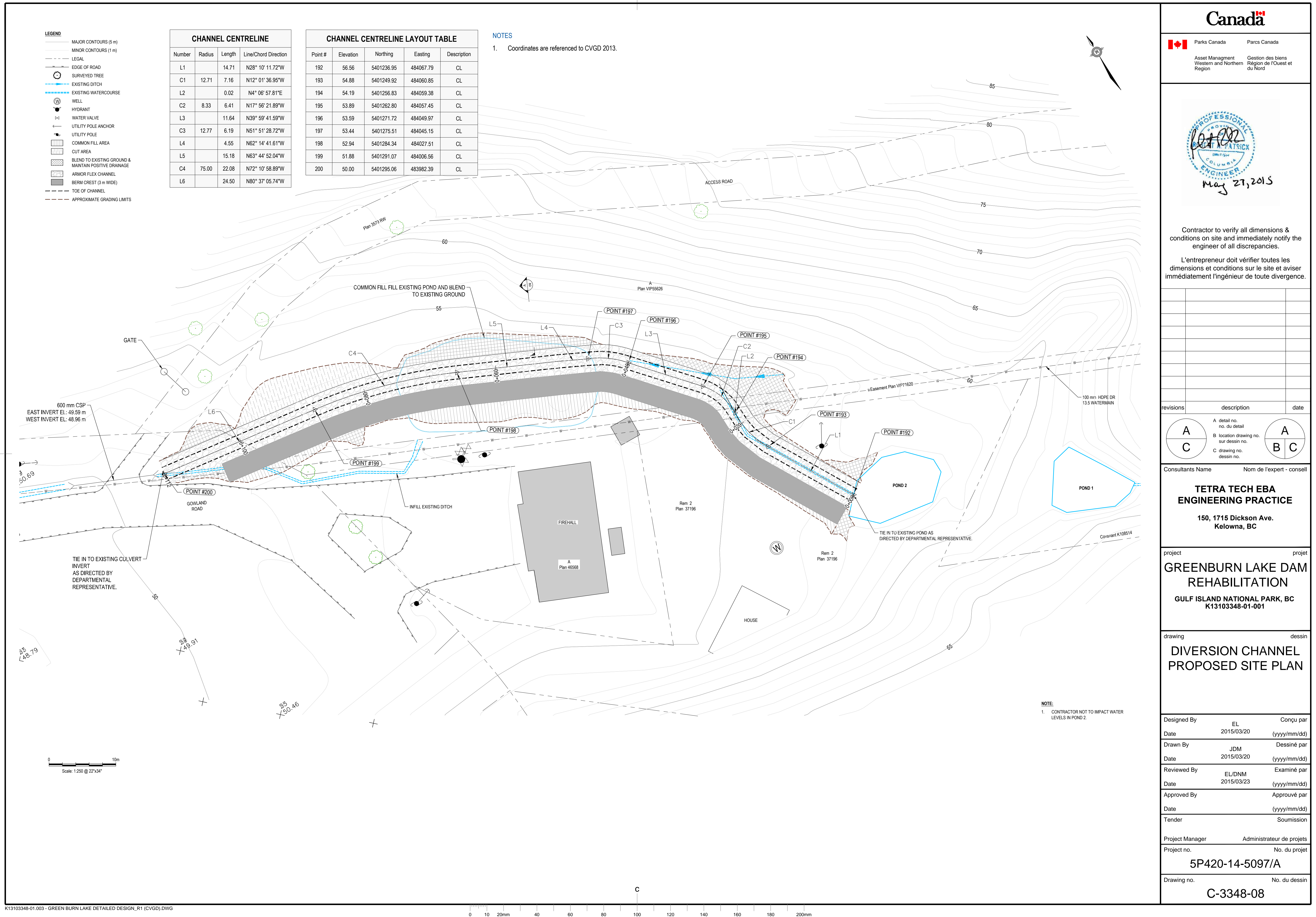
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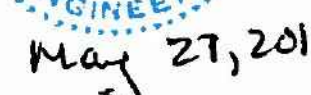
dessin

**DIVERSION CHANNEL
EXISTING SITE PLAN**

Designed By	EL	Conçu par
Date	2015/03/20	(yyyy/mm/dd)
Drawn By	JDM	Dessiné par
Date	2015/03/20	(yyyy/mm/dd)
Reviewed By	EL/DNM	Examiné par
Date	2015/03/23	(yyyy/mm/dd)
Approved By		Approuvé par
Date		(yyyy/mm/dd)
Tender		Soumission
Project Manager	Administrateur de projets	
Project no.	No. du projet	
5P420-14-5097/A		
Drawing no.	No. du dessin	
C-3348-07		









L'entrepreneur doit vérifier toutes les dimensions et conditions sur le site et aviser immédiatement l'ingénieur de toute divergence

[illegible]

revisions	description	date
	<p>A detail no. no. du detail</p> <p>B location drawing no. sur dessin no.</p> <p>C drawing no. dessin no.</p>	

**TETRA TECH EBA
ENGINEERING PRACTICE**

150, 1715 Dickson Ave.
Kelowna, BC

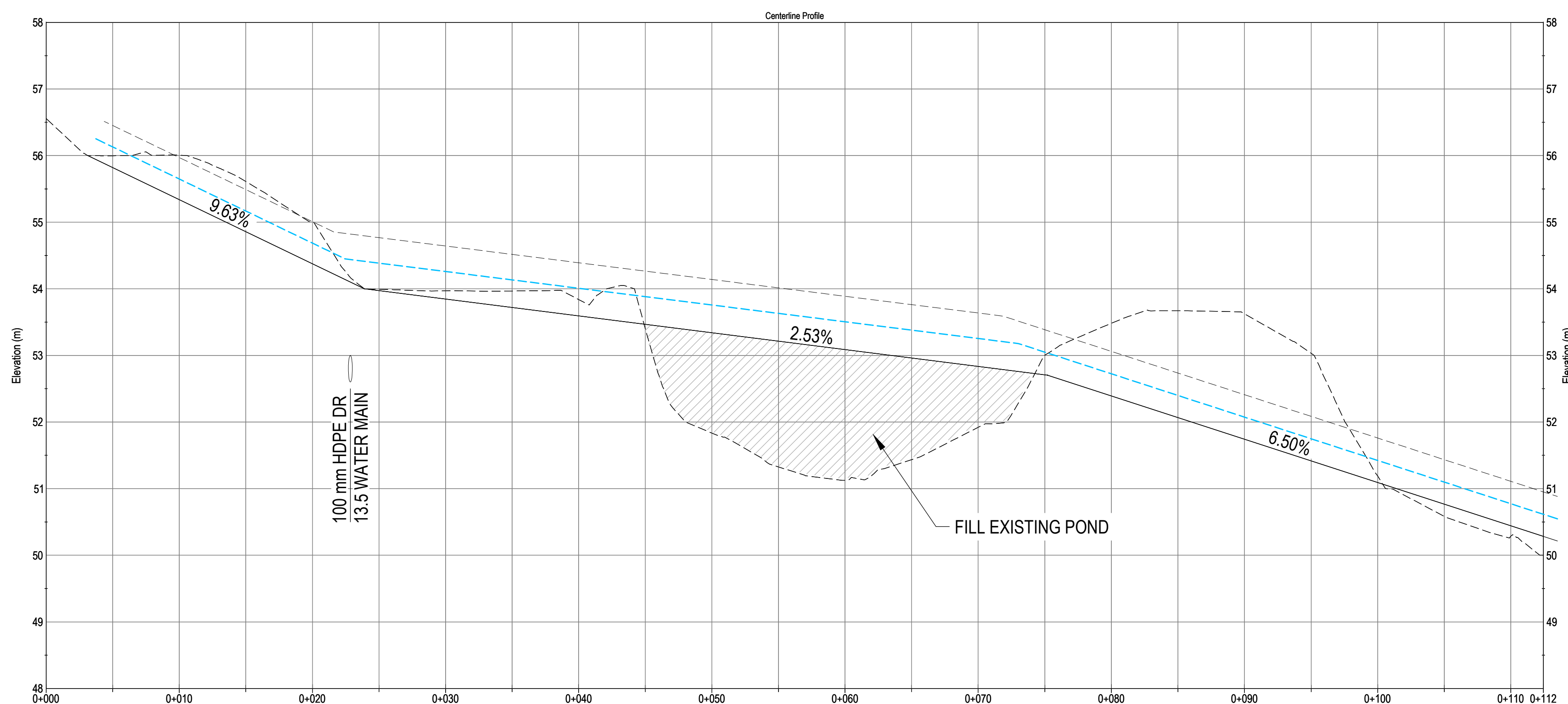
GREENBURN LAKE DAM REHABILITATION

GULF ISLAND NATIONAL PARK, BC
K13103348-01-001

DIVERSION CHANNEL CENTERLINE PROFILE AND TYPICAL SECTION

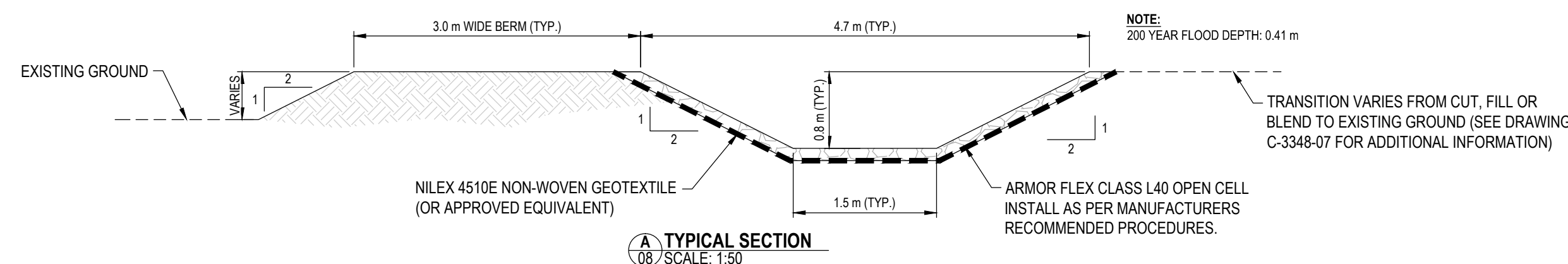
01-420-14-009177A

C-3348-09



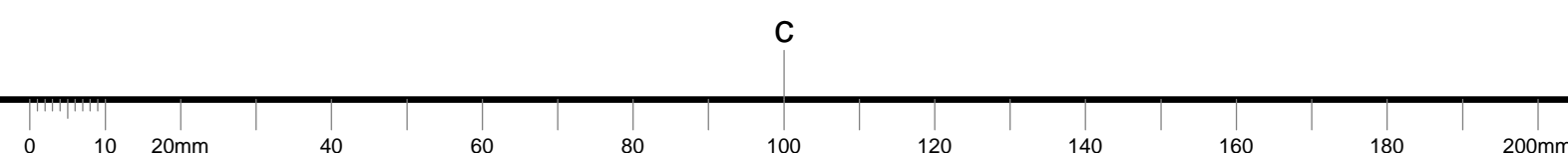
1 PROPOSED BYPASS CHANNEL PROFILE
C.2 SCALE: 1:500 HORIZ. 1:50 VERT.

1. Profile view is exaggerated by 5 times vertically



LEGEND

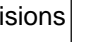

- — — — EXISTING GROUND
- PROPOSED CHANNEL CENTERLINE PROFILE
- — — — INFLOW DESIGN FLOOD LEVEL
- — — — 200 YEAR FLOOD LEVEL





L'entrepreneur doit vérifier toutes les dimensions et conditions sur le site et aviser immédiatement l'ingénieur de toute divergence

[illegible]

revisions	description	date
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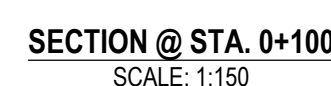
**TETRA TECH EBA
ENGINEERING PRACTICE**

**150, 1715 Dickson Ave.
Kelowna, BC**

drawing
dessi

DIVERSION CHANNEL 20 METER CROSS SECTIONS

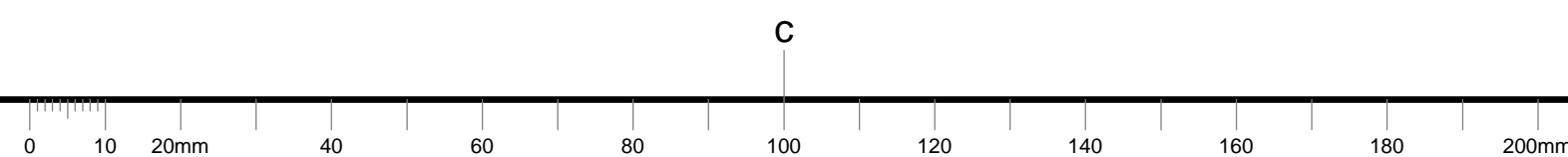
Drawing no.	No. du dessin
C-3348-10	

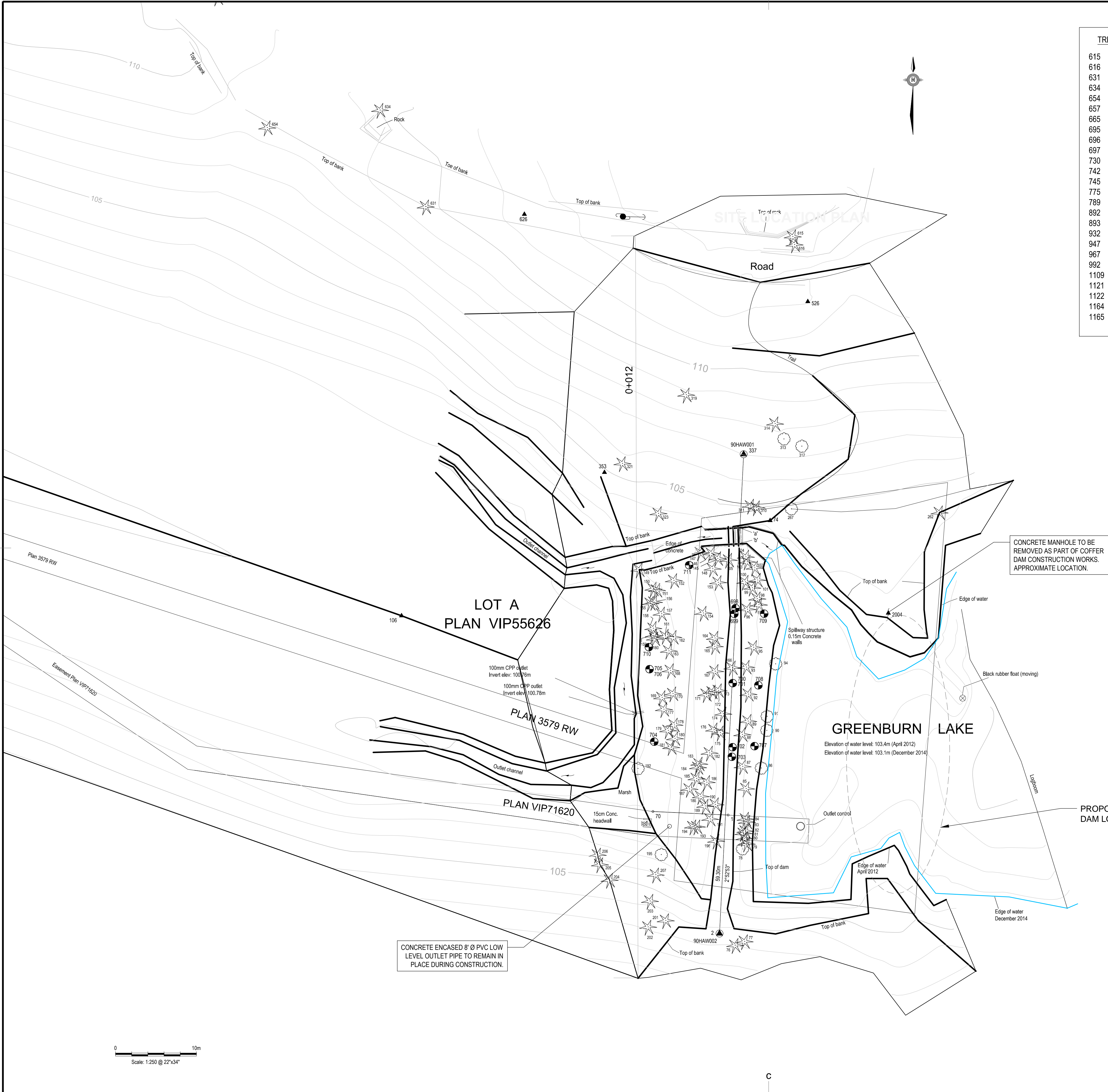


LEGEND

--- Existing Ground

— Design Channel





TREE TABLE 2014	
615	Fir 45cm
616	Fir 50cm
631	Fir 65cm
634	Fir 80cm
654	Fir 25cm
657	Cedar 75cm
665	Cedar 72cm
695	Fir 32cm
696	Fir 60cm
697	Fir 35cm
730	Fir 130cm
742	Fir 70cm
745	Cedar 110cm
775	Fir 65cm
789	Fir 50cm
892	Fir 30cm
893	Fir 30cm
932	Cedar 75cm
947	Fir 50cm
967	Fir 70cm
992	Cedar Twin 50cm
1109	Fir 90cm
1121	Fir 40cm
1122	Cedar 55cm
1164	Maple Twin 80cm
1165	Maple 70cm

TREE TABLE 2012	
76	Cedar 40cm
77	Fir 30cm
78	Alder 20cm
79	Fir 7cm
80	Cedar 13cm
81	Fir 10cm
82	Fir 11cm
83	Fir 8cm
84	Fir 11cm
86	Alder 30cm
87	Fir 10cm
88	Fir 20cm
89	Fir 24cm
90	Alder 2x10cm
91	Alder 3x15cm
92	Fir 12cm
93	Fir 10cm
94	Alder 20cm
95	Fir 20cm
96	Fir 23cm
97	Fir 20cm
98	Fir 60cm
99	Fir 20cm
100	Fir 18cm
101	Fir 12cm
102	Fir 17cm
103	Fir 10cm
104	Fir 15cm
105	Fir 25cm
144	Fir 25cm
145	Fir 15cm
146	Fir 17cm
147	Fir 6cm
148	Fir 17cm
149	Fir 22cm
150	Fir 14cm
151	Fir 12cm
152	Fir 30cm
153	Fir 22cm
154	Fir 27cm
155	Fir 10cm
156	Fir 10cm
157	Fir 8cm
158	Fir 10cm
159	Fir 15cm
160	Fir 17cm
161	Fir 17cm
162	Fir 14cm
163	Fir 14cm
164	Fir 23cm
165	Fir 20cm
166	Fir 22cm
167	Fir 30cm
168	Fir 20cm
169	Fir 23cm
170	Fir 10cm
171	Fir 20cm
172	Fir 20cm
173	Fir 20cm
174	Fir 15cm
175	Fir 8cm
176	Fir 2x15cm
177	Fir 10cm
178	Fir 16cm
179	Fir 16cm
180	Fir 7cm
181	Fir 8cm
182	Fir 23cm
183	Fir 15cm
184	Fir 20cm
185	Fir 10cm
186	Fir 20cm
187	Fir 14cm
188	Fir 8cm
189	Cedar 10cm
190	Fir 10cm
191	Fir 15cm
192	Alder 50cm
193	Fir 10cm
194	Fir 7cm
195	Alder 50cm
196	Cedar 6cm
201	Fir 70cm
202	Fir 25cm
203	Cedar 20cm
204	Fir 15cm
205	Fir 30cm
206	Fir 35cm
207	Fir 30cm
262	Fir 20cm
263	Fir 20cm
267	Cherry 10cm
310	Fir 50cm
311	Fir 27cm
312	Cherry 7cm
313	Decid. 2x13cm
314	Fir 50cm
319	Fir 50cm
321	Fir 70cm

Asset Management
Western and Northern
Region

Gestion des biens
Région de l'Ouest et
du Nord

COORDINATE SYSTEM REFERENCED TO:
UTM with NAD83 datum, Zone 12, Meter;
Central Meridian 111d W

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conditions on site and immediately notify the
engineer of all discrepancies.

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dimensions et conditions sur le site et aviser
immédiatement l'ingénieur de toute divergence.

revisions	description	date
A	A detail no. no. du detail	A
C	B location drawing no. sur dessin no. C drawing no. dessin no.	B C

Consultants Name

Nom de l'expert - conseil

**TETRA TECH EBA
ENGINEERING PRACTICE**

**150, 1715 Dickson Ave.
Kelowna, BC**

project

projet

**GREENBURN LAKE DAM
REHABILITATION**

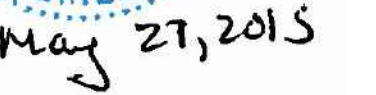
**GULF ISLAND NATIONAL PARK, BC
K13103348-01-001**

drawing

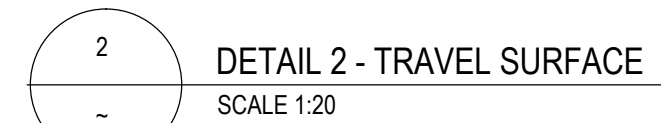
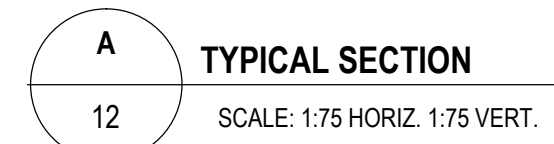
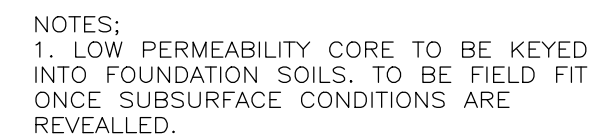
dessin



**EMBANKMENT
EXISTING SITE PLAN
UPDATED
TOPOGRAPHY**

Designed By	R. HALLEY	Conçu par
Date	2015/03/28	(yyyy/mm/dd)
Drawn By	R. HALLEY	Dessiné par
Date	2015/03/28	(yyyy/mm/dd)
Reviewed By	B. PATRICK	Examiné par
Date	2015/14/20	(yyyy/mm/dd)
Approved By		Approuvé par
Date		(yyyy/mm/dd)
Tender		Soumission
Project Manager	Administrateur de projets	
Project no.	No. du projet	
	5P420-14-5097/A	
Drawing no.	No. du dessin	
	C-3348-11	



L'entrepreneur doit vérifier toutes les dimensions et conditions sur le site et aviser immédiatement l'ingénieur de toute divergence.




 A detail no.
no. du detail
 B location drawing no.
sur dessin no.
 C drawing no.
dessin no.
 

**150, 1715 Dickson Ave.
Kelowna, BC**

GULF ISLAND NATIONAL PARK, BC
K13103348-01-001

EMBANKMENT TYPICAL SECTION & CONSTRUCTION DETAILS

5P420-14-5097/A

C-3348-13



May 27, 2015

Contractor to verify all dimensions & conditions on site and immediately notify the engineer of all discrepancies.

L'entrepreneur doit vérifier toutes les dimensions et conditions sur le site et aviser immédiatement l'ingénieur de toute divergence.

revisions	description	date
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A	A detail no. no. du détail	A
C	B location drawing no. sur dessin no.	B
	C drawing no. dessin no.	C

Consultants Name Nom de l'expert - conseil

**TETRA TECH EBA
ENGINEERING PRACTICE**150, 1715 Dickson Ave.
Kelowna, BC

project project

**GREENBURN LAKE DAM
REHABILITATION**GULF ISLAND NATIONAL PARK, BC
K13103348-01-001

drawing dessin

**SPILLWAY
EXISTING STRUCTURE
AND AS BUILT
SECTIONS**Designed By P. ALDRIDGE Conçu par
Date 2015/03/21 (yyyy/mm/dd)Drawn By A. FRY Dessiné par
Date 2015/03/24 (yyyy/mm/dd)Reviewed By R. SLOPEK Examiné par
Date 2015/03/25 (yyyy/mm/dd)Approved By Approuvé par
Date (yyyy/mm/dd)

Tender Soumission

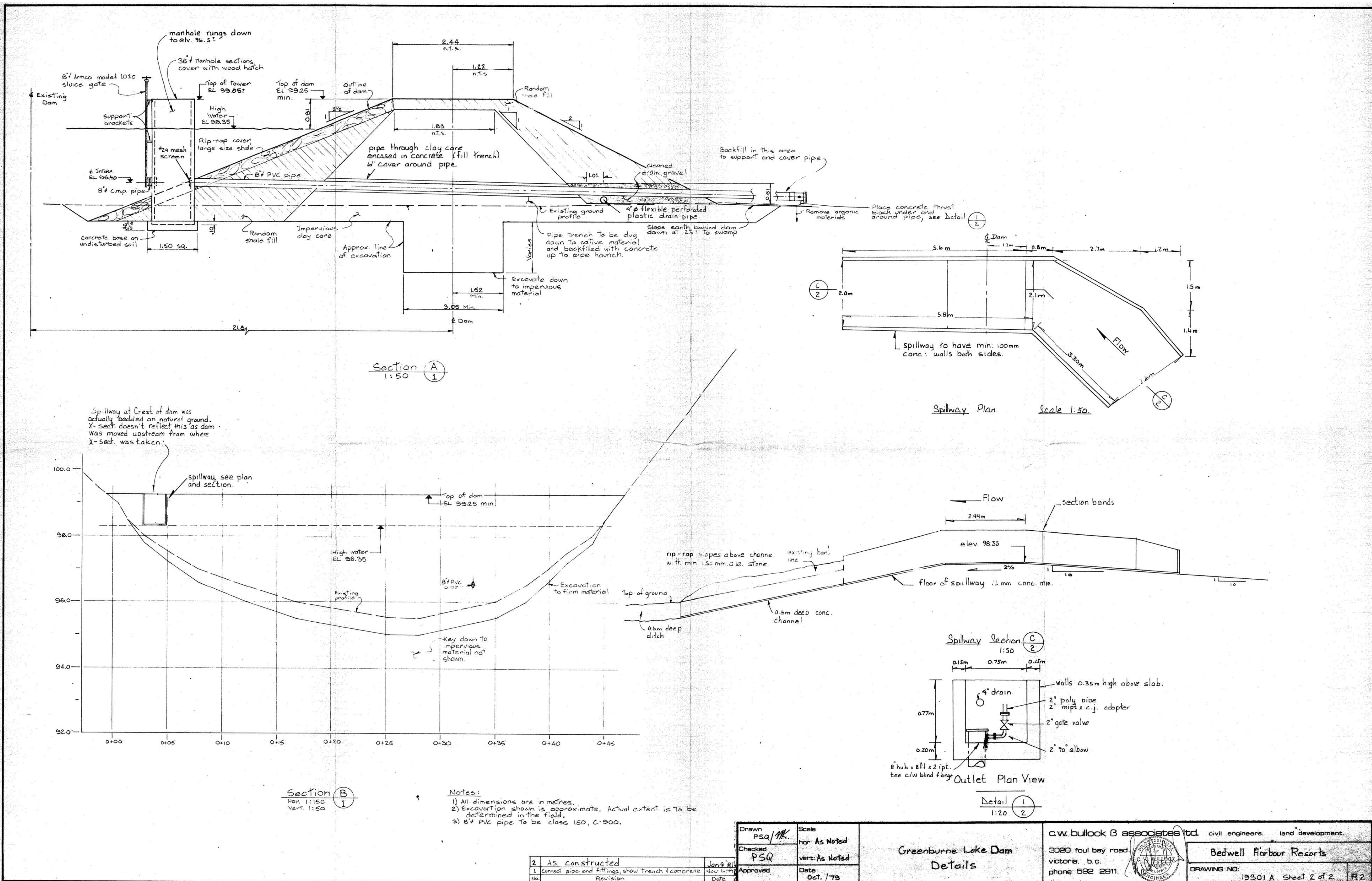
Project Manager Administrateur de projets

Project no. No. du projet

5P420-14-5097/A

Drawing no. No. du dessin

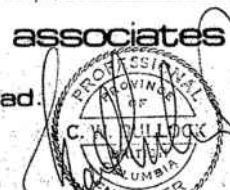
C-3348-14



Drawn PSQ/MK	Scale hor: As Noted vert: As Noted
Checked PSQ	Date Oct. / 79
Approved	

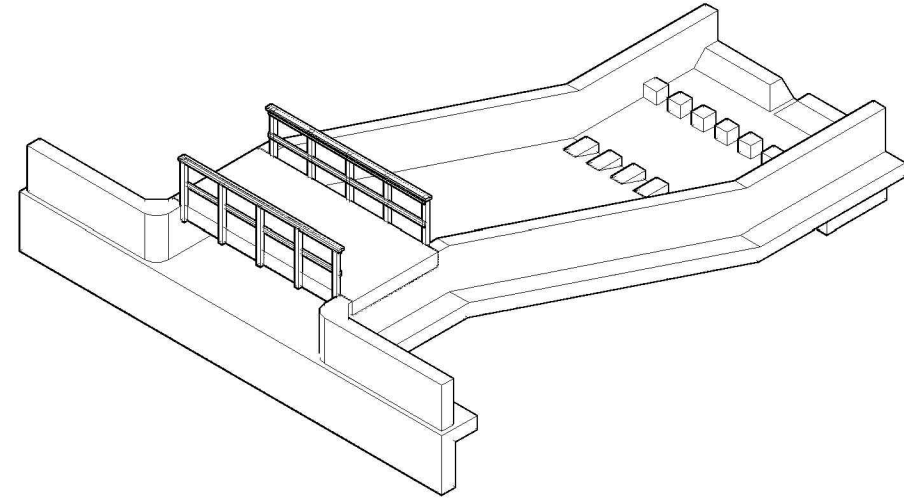
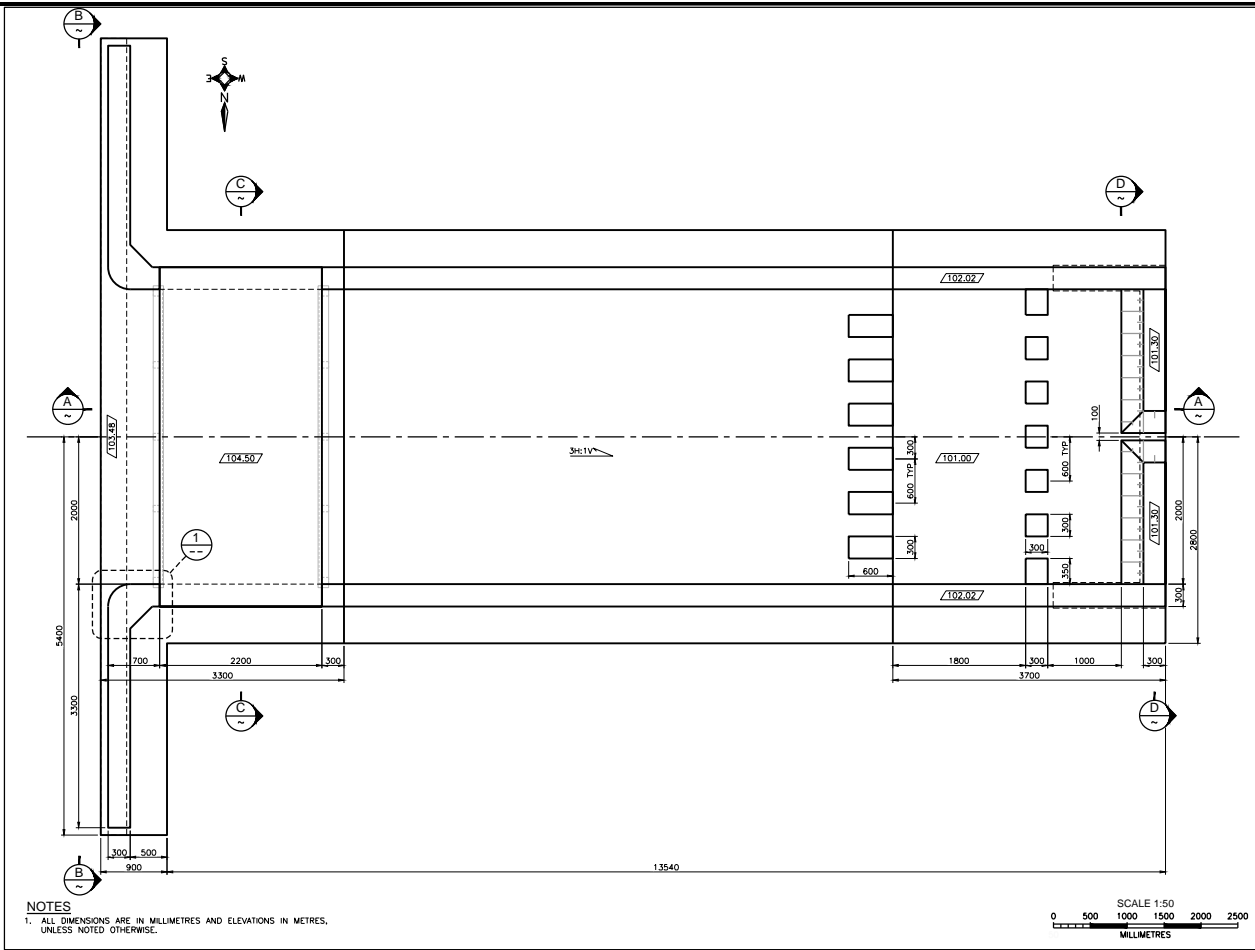
Greenburn Lake Dam
Details

c.w. bullock & associates ltd. civil engineers. land development.

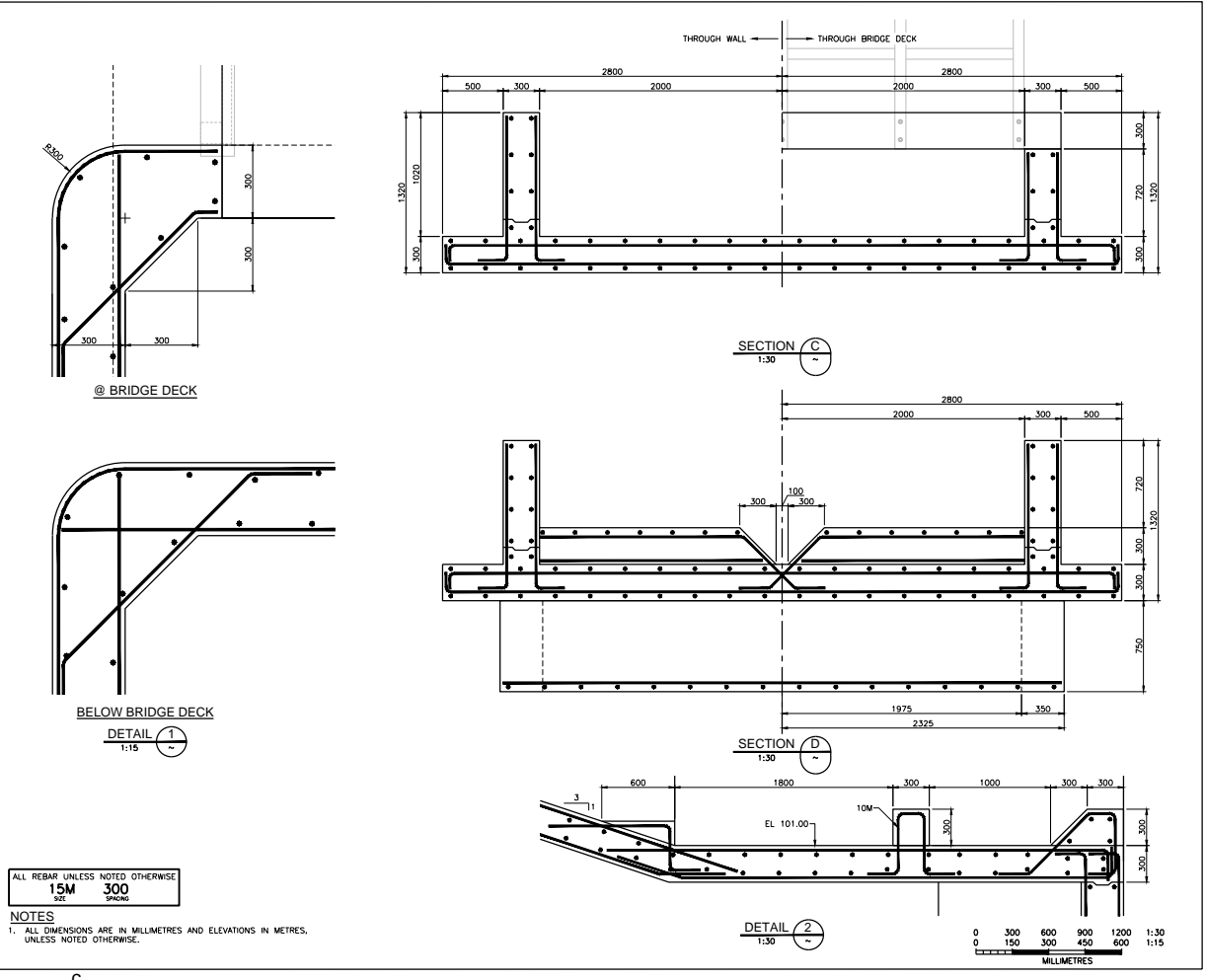
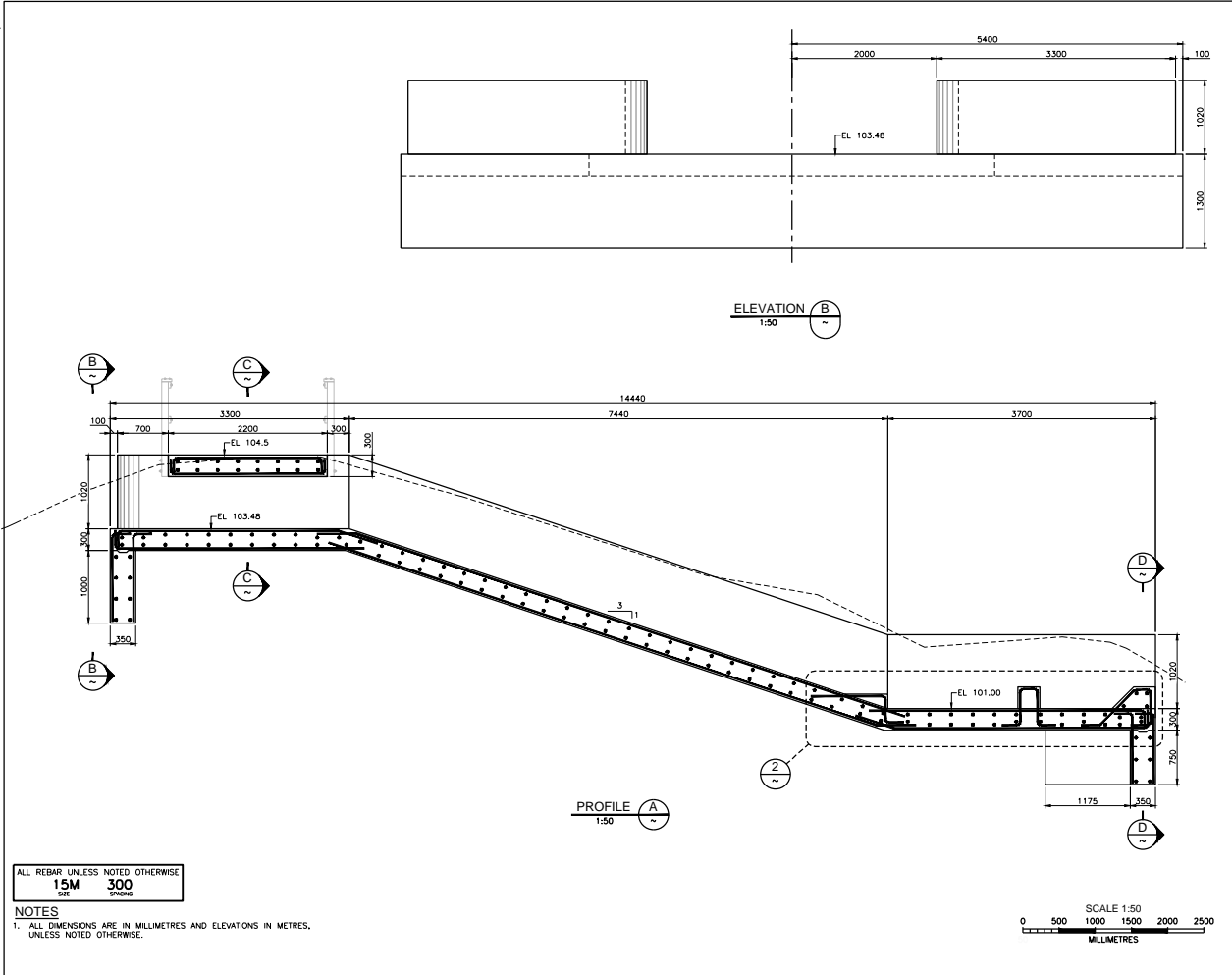
3020 foul bay road
victoria, b.c.
phone 592 2911.

Bedwell Harbour Resorts

DRAWING NO: 19301 A Sheet 2 of 2 R2



ISOMETRIC
NTS



Parks Canada

Parcs Canada

Asset Management
Western and Northern
Region

Gestion des biens
Région de l'Ouest et
du Nord

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revisions	description	date

A
C

A detail no.
no. du détail

B
C

B location drawing no.
sur dessin no.

C
C

C drawing no.
dessin no.

Consultants Name

Nom de l'expert - conseil

**TETRA TECH EBA
ENGINEERING PRACTICE**

150, 1715 Dickson Ave.
Kelowna, BC

project

projet

**GREENBURN LAKE DAM
REHABILITATION**

GULF ISLAND NATIONAL PARK, BC
K13103348-01-001

drawing

dessin

**SPILLWAY STRUCTURE
CONCRETE**

Designed By

P. ALDRIDGE

Conçu par

Date

2015/03/21

(yyyy/mm/dd)

Drawn By

A. FRY

Dessiné par

Date

2015/03/24

(yyyy/mm/dd)

Reviewed By

R. SLOPEK

Examiné par

Date

2015/03/25

(yyyy/mm/dd)

Approved By

Approuvé par

Date

(yyyy/mm/dd)

Tender

Soumission

Project Manager

Administrateur de projets

Project no.

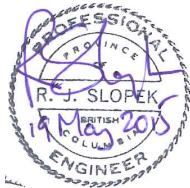
No. du projet

5P420-14-5097/A

Drawing no.

No. du dessin

C-3348-16



Contractor to verify all dimensions & conditions on site and immediately notify the engineer of all discrepancies.

L'entrepreneur doit vérifier toutes les dimensions et conditions sur le site et aviser immédiatement l'ingénieur de toute divergence.

revisions	description	date
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A detail no.
no. du detail
B location drawing no.
sur dessin no.
C drawing no.
dessin no.



Consultants Name
Nom de l'expert - conseil

TETRA TECH EBA
ENGINEERING PRACTICE

150, 1715 Dickson Ave.
Kelowna, BC

project
projet

GREENBURN LAKE DAM
REHABILITATION

GULF ISLAND NATIONAL PARK, BC
K13103348-01-001

drawing
dessin

SPILLWAY STRUCTURE
STEEL GUARDRAILS
AND FLOW METER

Designed By
Conçu par

P. ALDRIDGE

Date
(yyyy/mm/dd)

2015/03/21

Drawn By
Dessiné par

A. FRY

Date
(yyyy/mm/dd)

2015/03/24

Reviewed By
Examiné par

R. SLOPEK

Date
(yyyy/mm/dd)

2015/03/25

Approved By
Approuvé par

Date
(yyyy/mm/dd)

Tender
Soumission

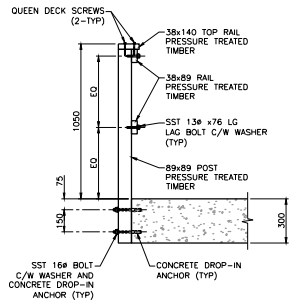
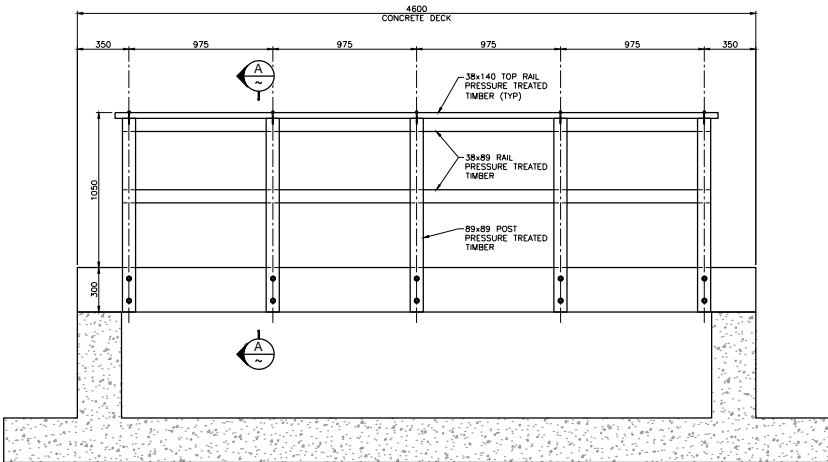
Project Manager
Administrateur de projets

Project no.
No. du projet

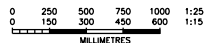
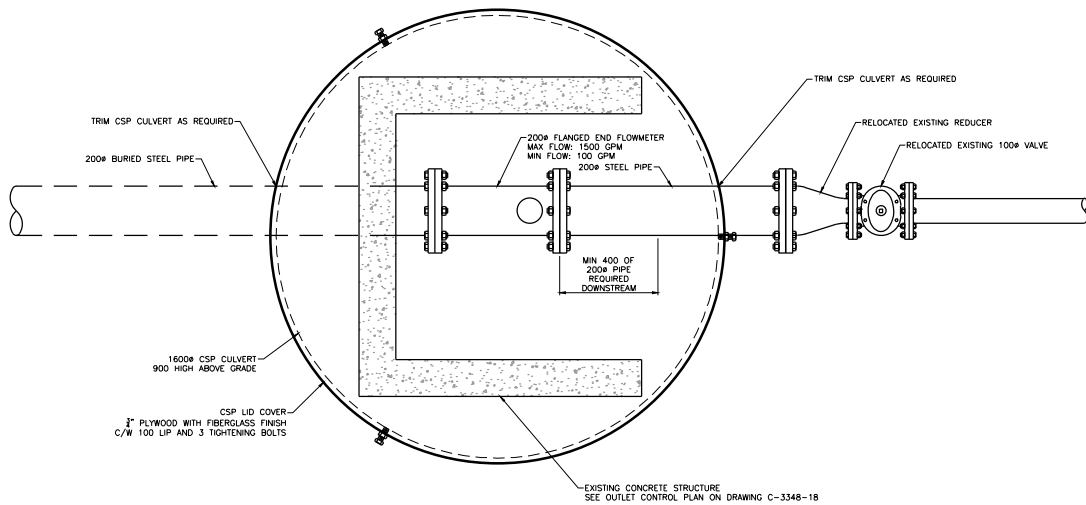
5P420-14-5097/A

Drawing no.
No. du dessin

C-3348-17



STEEL GUARDRAILS





1. ALL DIMENSIONS ARE IN MILLIMETRES
AND ELEVATIONS IN METRES, UNLESS
NOTED OTHERWISE.



Contractor to verify all dimensions & conditions on site and immediately notify the engineer of all discrepancies.

L'entrepreneur doit vérifier toutes les dimensions et conditions sur le site et aviser immédiatement l'ingénieur de toute divergence

[illegible]

revisions	description	date
	A detail no. no. du detail B location drawing no. sur dessin no. C drawing no. dessin no.	

Consultants Name	Nom de l'expert - conseil
------------------	---------------------------

**TETRA TECH EBA
ENGINEERING PRACTICE**

**150, 1715 Dickson Ave.
Kelowna, BC**

project project

GREENBURN LAKE DAM REHABILITATION

GULF ISLAND NATIONAL PARK, BC
K13103348-01-001

drawing dessin

OUTLET CONTROL AND STEEL WALKWAY

Designed By B. ALBRIDGE Conçu par _____

Date 2015/03/21 (yyyy/mm/dd)

Drawn By C. BARON Dessiné par

Date 2015/03/24 (yyyy/mm/dd)

Reviewed By B. SLOREK Examiné par _____

Date 2015/03/25 (yyyy/mm/dd)

Approved By _____ Approuvé par _____

Date (yyyy/mm/dd)

Tender	Soumission
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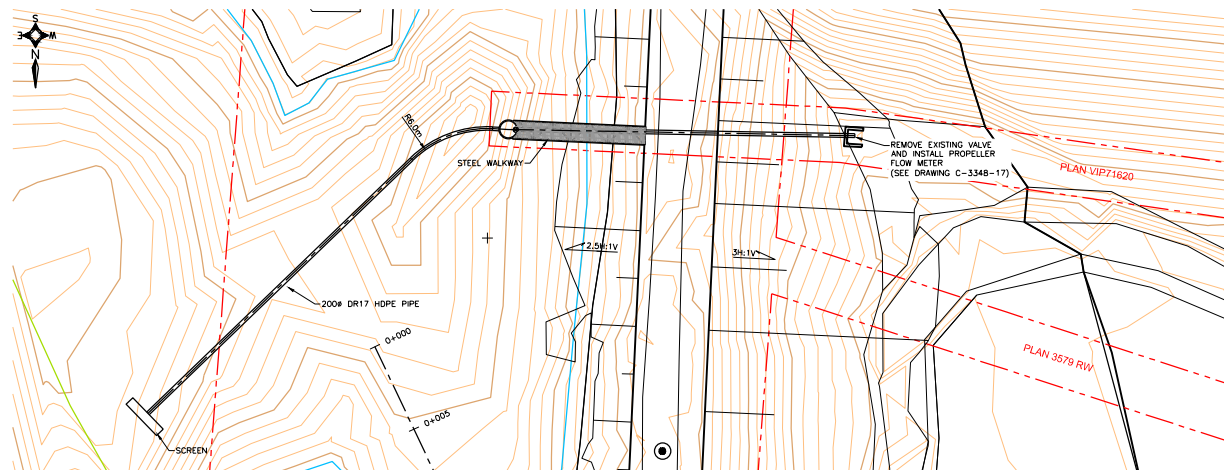
Daniel Maignan Administrateur de sociétés

Project no	No. du projet
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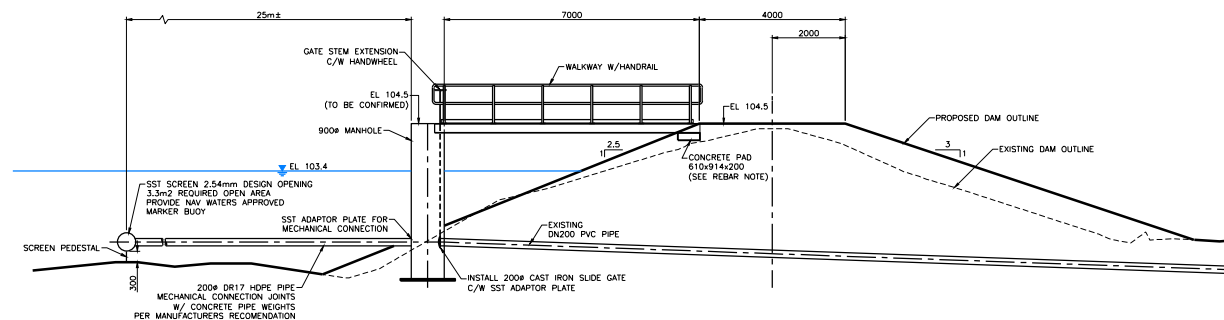
5P420-14-5097/A

Drawing no.	No. du dessin
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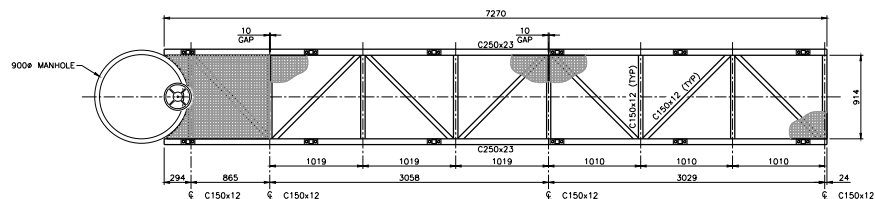
C-3348-18



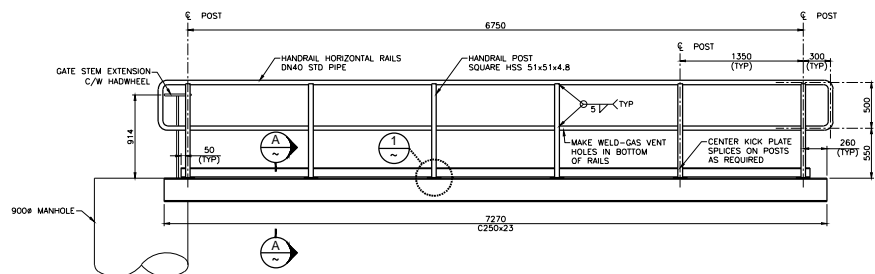
OUTLET CONTROL - PLAN
1:200



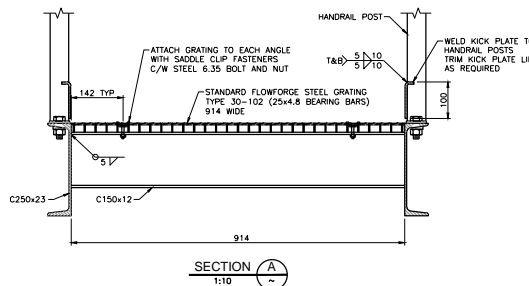
OUTLET CONTROL - PROFILE
1:100



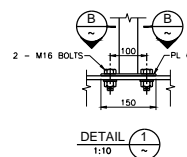
STEEL WALKWAY - PLAN



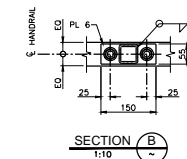
STEEL WALKWAY - ELEVATION
1:40



SECTION A
1:10 ~



DETAIL 1
1:10



SECTION 1:10

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES AND ELEVATIONS ARE IN METRES, UNLESS NOTED OTHERWISE.
2. 0.2m INTERVAL CONTOURS.

