



Parks Canada  
Agency

L'Agence Parcs  
Canada

KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

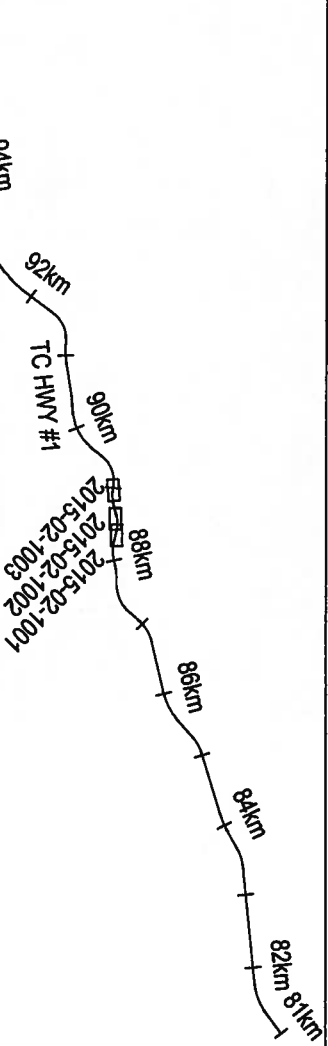
YOHO NATIONAL PARK  
BRITISH COLUMBIA

PCA PROJECT No.  
2015-02

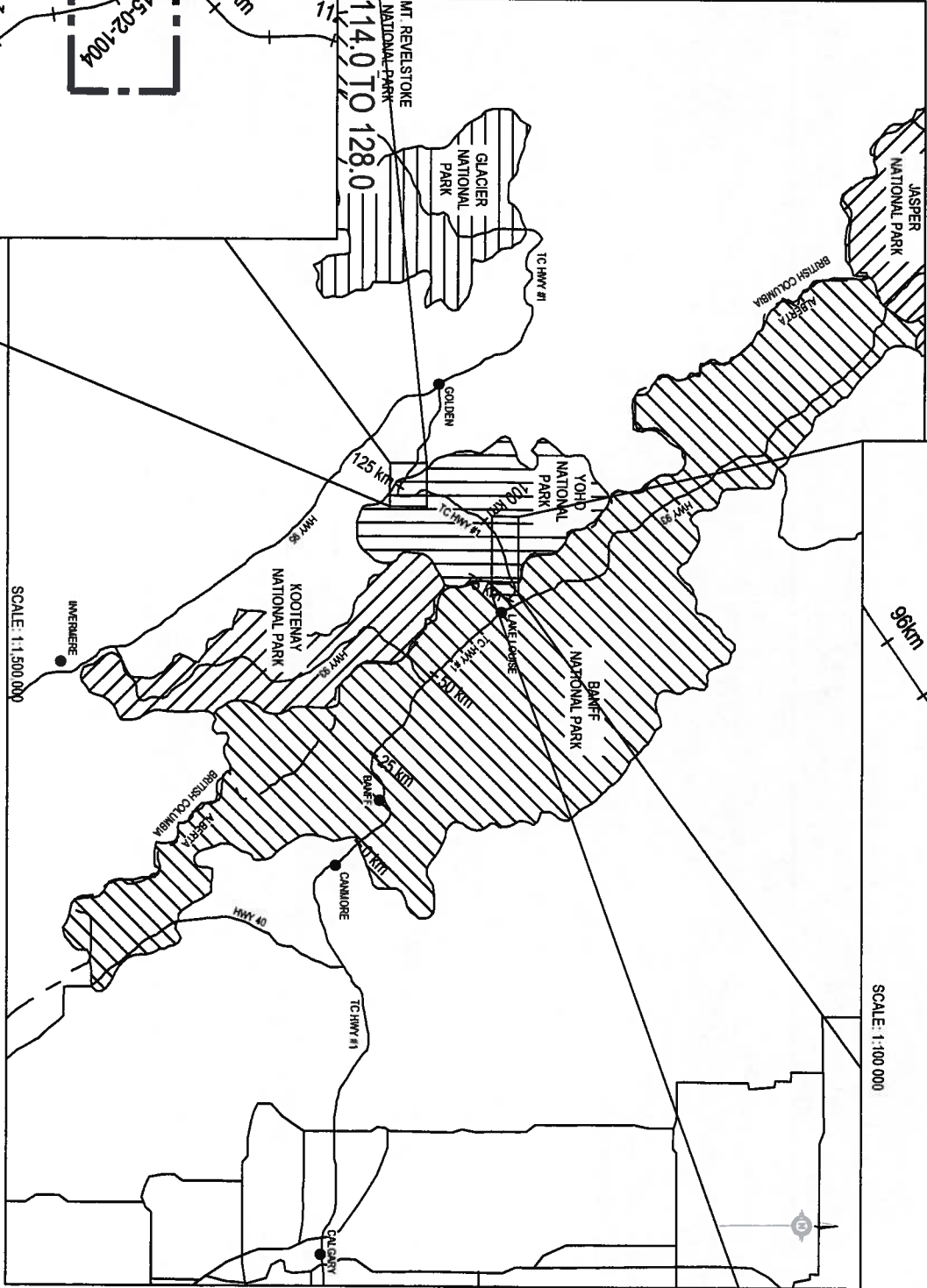


ISSUED FOR TENDER  
APRIL 2015

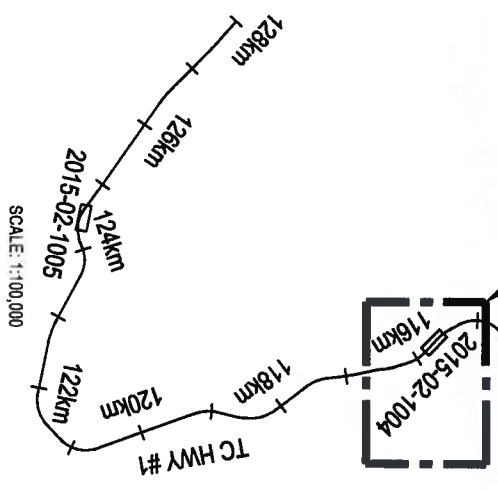
PROJECT KEY PLAN: KM 88.0 TO 91.0



PROJECT LOCATION PLAN



PROJECT KEY PLAN: KM 114.0 TO 128.0



Client/Client  
Parks Canada  
L'Agence Parcs  
Canada



ISSUED FOR TENDER

PCA PROJECT NO. 2015-02  
TETRA TECH EBA NO. V13403095  
V13403096

00	24/05/19	ISSUED FOR TENDER	AF	AD	AF
Description/Description			DTS	DWN	CHK

YOHO NATIONAL PARK  
BRITISH COLUMBIA  
KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

Designed by/Conçu par  
A. FRAPPELL  
Drawn by/Dessiné par  
A. DEEPWELL



Client/Client  
PARKS CANADA AGENCY  
Drawing title/Titre de dessin  
PROJECT LOCATION & KEY PLAN

Project No./No. du projet V13403095-01/ V13403096-01	Sheet/Feuille 2016-02-0001	Revision no./ 1 <sup>re</sup> Révision no. 00
--	-------------------------------	---





ISSUED FOR TENDER


Revisi on	Date/Date	Description/Description	AF	AD	AF
00	24/04/15	ISSUED FOR TENDER			

YHO NATIONAL PARK  
BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

Designed by/Concepé par  
**A. FRAPPELL**  
Drawn by/Dessiné par  
**A. DEEPWELL**



Client/Client  
**PARKS CANADA AGENCY**

Drawing title/Titre du dessin

GENERAL NOTES

Project No./No. du projet <b>V13403095-01/ V13403096-01</b>	Sheet/Feuille <b>2016-02-0002</b>	Revision no./ Lo Révision no. <b>00</b>
--	--------------------------------------	---

GENERAL:

- ALL COORDINATES ARE IN YCHO LOCAL COORDINATES SYSTEM AND ALL ELEVATIONS ARE TO MND 1983 SET AT 800 METRES. SEE DWG. 2015-02-0004 ESTABLISHMENT OF SURVEY MONUMENTS.
- ALL ELEVATIONS ARE IN METRES AND ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
- AZIMUTH IS MEASURED AS A POSITIVE ANGLE CLOCKWISE FROM NORTH.
- QUALITY OF CONSTRUCTION REQUIRED. PERFORMANCE LEVELS OF WORKMANSHIP, MANUFACTURING AND INDUSTRY STANDARDS, STRENGTH AND PHYSICAL REQUIREMENTS OF MATERIALS, CONFORMANCE TO CODES AND REGULATIONS, GUARANTEES AND OTHER PROJECT REQUIREMENTS ARE SPECIFIED IN THE SPECIFICATIONS.
- IF THE MATERIALS, QUANTITIES, STRENGTHS OR SIZES INDICATED BY THE DRAWINGS OR SPECIFICATIONS ARE NOT IN AGREEMENT WITH THESE NOTES, THE BETTER QUALITY AND/OR GREATER QUANTITY, STRENGTH OR SIZE INDICATED, SPECIFIED OR NOTED SHALL BE PROVIDED.
- PERFORM ALL WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS. ANY CHANGES PROPOSED BY THE CONTRACTOR TO THE STRUCTURAL SYSTEMS SHALL BE SUBMITTED TO DEPARTMENTAL REPRESENTATIVE FOR APPROVAL PRIOR TO BEGINNING THE WORK. WHERE APPLICABLE, DESIGN CHANGES SHALL BE SUBMITTED FOR APPROVAL AND DESIGN BY THE COMPANY REPRESENTATIVE. ALL DESIGN CHANGES SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN BRITISH COLUMBIA.
- IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE CONSTRUCTION PROCEDURE AND SEQUENCE TO ENSURE THE SAFETY OF THE WORKS AND ITS COMPONENT PARTS DURING CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE THAT RESULT IF DESIGN LOADS ARE EXCEEDED, AND SHALL NOTIFY THE DEPARTMENTAL REPRESENTATIVE IF THE DESIGN LOAD IS EXCEEDED.
- ALL DIMENSIONS AND ELEVATIONS SHOWN ON THE DRAWINGS SHALL BE FIELD VERIFIED BY THE CONTRACTOR WITH THE CONSTRUCTION EQUIPMENT AND MATERIALS TO CONFORM TO THE DESIGN REQUIREMENTS AND SUIT THE CONTRACTOR'S MEANS AND METHODS.
- EXISTING SITE INFORMATION SHOWN ON THESE DRAWINGS IS FROM AS-BUILT REFERENCE DRAWINGS AND A SURVEY PERFORMED BY MEL/ANNEX CONSULTING SERVICES LTD. THIS INFORMATION HAS BEEN PRESUMED TO BE AN ACCURATE REPRESENTATION OF THE CONDITIONS AT THE SITE. WORK PERFORMED AT EACH SITE OR WITHIN THE PUBLIC RIGHT-OF-WAY SINCE THE DATE OF THE SURVEY MAY NOT BE SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AT EACH SITE AND REPORT SIGNIFICANT DIFFERENCES, IF ANY, TO DEPARTMENTAL REPRESENTATIVE IMMEDIATELY.
- UNDERGROUND UTILITY LOCATIONS WERE IDENTIFIED THROUGH RECORDS PROVIDED BY BC ONE CALL. VERTICAL AND HORIZONTAL LOCATION AND SIZE OF UTILITIES MAY VARY FROM THE PLAN. PRE-MOBILIZATION SUBSURFACE UTILITY INVESTIGATIONS ARE REQUIRED TO LOCATE EXISTING UTILITIES AND STRUCTURES TO PERFORM THE WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR THE INVESTIGATION, LOCATION, SUPPORT, PROTECTION, AND RESTORATION OF EXISTING UTILITIES, STRUCTURES, AND APPURTENANCES WHETHER SHOWN ON THESE PLANS OR NOT. THE CONTRACTOR IS ALSO RESPONSIBLE FOR COORDINATION OF ANY NECESSARY RELOCATIONS WITH PARKS CANADA AGENCY (PCA).
- FINAL FACE TOLERANCE SHALL BE WITHIN 0.25 m FURTHER THAN THE HIGHWAY OR 0.25 m CLOSER TO THE HIGHWAY.
- EXISTING GRADE SHOWN IN PROFILE IS APPROXIMATE. CONTRACTOR TO FIELD VERIFY AS NECESSARY TO PERFORM WORK.
- REFER TO GEOTECHNICAL FACTUAL DATA REPORT (MARCH 2015) FOR ALL EXPLORATION DATA OBTAINED AS PART OF THIS CONTRACT.
- EXCAVATION LINES SHOWN ARE NOT INTENDED TO BE REPRESENTATIVE OF ANTICIPATED GROUND CONDITIONS OR AMOUNT OF OVERBREAK THAT MAY OCCUR DURING EXCAVATION. FOR AVAILABLE GEOLOGIC DATA, SEE THE GEOTECHNICAL DATA REPORT (MARCH 2015). FOR DISCUSSION OF ANTICIPATED CONDITIONS AND GROUND SUPPORT REQUIREMENTS, SEE THE GEOTECHNICAL DESIGN REPORT (APRIL 2015).

ROCK BLASTING

- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL SAFETY REQUIREMENTS AND WITH EXERCISING APPROPRIATE PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF THE GENERAL PUBLIC, CONSTRUCTION EMPLOYEES, AND VEHICULAR TRAFFIC. THE CONTRACTOR SHALL INITIATE, INSTALL, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR SHALL FURNISH AND MAINTAIN ADEQUATE LIGHTS, SIGNS AND BARRICADES AS MAY BE NECESSARY FOR THE WORK INCLUDING BUT NOT LIMITED TO, AREAS OF OPEN EXCAVATIONS THROUGHOUT THE PROJECT.
- WHERE REFERENCE DRAWINGS ARE LISTED ON A DRAWING, THE REFERENCED DRAWINGS MUST BE READ IN CONJUNCTION WITH THAT DRAWING.
- THE DRAWINGS IN GENERAL, ARE TO SCALE, BUT FIGURED DIMENSIONS AND COORDINATES SHALL ALWAYS BE FOLLOWED. DIMENSIONS AND ELEVATIONS SHALL NOT BE SCALED FROM DRAWINGS UNLESS OTHERWISE NOTED.
- UNLESS SPECIFIED DIFFERENTLY, ALL FILL SHALL BE WELL GRADED WITH C-14 AND 1-C-3 FOR GRAVEL AND C-25 AND 1-C-3 FOR SANDS.
- TRAFFIC HOLD TIMES SHALL BE LESS THAN 20 MINUTES OR LINE UPS LESS THAN 1 KM IN LENGTH.
- HOLD TIMES UP TO 45 MINUTES MAY BE TAKEN ON A TUESDAY, WEDNESDAY OR THURSDAY, WITH THE APPROVAL OF THE DEPARTMENTAL REPRESENTATIVE. IF NO OTHER CONTRACTUAL RESTRICTIONS APPLY, AND APPROPRIATE STAKEHOLDERS ARE NOTIFIED SEVEN (7) DAYS IN ADVANCE, EXTENDED HOLD TIME ARE AVAILABLE BETWEEN 08:00 AND 09:30 HOURS.
- PEAK PARTICLE VELOCITIES SHALL BE LESS THAN 50 mm/s AS MEASURED AT ANY CP RAIL INFRASTRUCTURE.
- ALL FLYROCK SHALL BE RETRIEVED FROM OUTSIDE OF THE WORK SITE AT THE EXPENSE OF THE CONTRACTOR.
- THE CONTRACTOR SHALL UNDERTAKE A PRE-CONSTRUCTION SURVEY WITH THE DEPARTMENTAL REPRESENTATIVE PRIOR TO WORK AT ANY LOCATION.
- HORIZONTAL BLAST HOLES SHALL ONLY BE CONSIDERED FOR PIONEERING ACCESS ROADS AT THE DEPARTMENTAL REPRESENTATIVES WRITTEN ACCEPTANCE.

ENVIRONMENTAL NOTES:

- THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION ENVIRONMENTAL PROTECTION PLAN (EPP) TO THE DEPARTMENTAL REPRESENTATIVE FOR REVIEW AND ACCEPTANCE PRIOR TO COMMENCEMENT OF CONSTRUCTION. THE EPP SHALL DESCRIBE DETAILED, SITE-SPECIFIC ENVIRONMENTAL MITIGATION AND MANAGEMENT MEASURES, AS WELL AS ENVIRONMENTAL EMERGENCY AND SPILL RESPONSE PROCEDURES, CONSISTENT WITH PCA'S CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN (EAMP). AS PER THE EAMP, THE INTENT OF THE EPP SHALL BE TO PROTECT EXISTING LAND, WATER, VEGETATION AND WILDLIFE VALUES IN THE PROJECT AREA, MINIMIZE ENVIRONMENTAL DISTURBANCE, AND PREVENT ANY ADVERSE ENVIRONMENTAL EFFECTS.
- THE CONTRACTOR SHALL RETAIN A QUALIFIED ENVIRONMENTAL PROFESSIONAL (QEP) WITH PROFESSIONAL EXPERTISE AND EXPERIENCE ON CONSTRUCTION PROJECTS OF A SIMILAR NATURE AND SCOPE TO ASSIST IN THE DEVELOPMENT AND IMPLEMENTATION OF ITS EPP. THE QEP SHALL BE AVAILABLE TO DELIVER TECHNICAL, ENVIRONMENTAL ADVICE, GUIDANCE, TAILORATE TRAINING SESSIONS FOR CONSTRUCTION CREWS, AND OVERSIGHT MONITORING SERVICES TO THE CONTRACTOR THROUGHOUT THE CONTRACT TERM.
- AS PART OF ITS CONSTRUCTION ENVIRONMENTAL MANAGEMENT PROGRAM, PCA WILL RETAIN A QUALIFIED ENVIRONMENTAL MONITOR(S) TO MONITOR CONTRACTOR COMPLIANCE WITH RESPECT TO REGULATORY REQUIREMENTS AND WORK PRACTICES AND PROCEDURES SET OUT IN THE EAMP AND EPP AND TO EVALUATE THE EFFECTIVENESS OF CONTRACTORS MITIGATION AND MANAGEMENT MEASURES, AND EMERGENCY RESPONSE PROCEDURES. THE CONTRACTOR IS ADVISED THAT THE ENVIRONMENTAL MONITOR WILL HAVE AUTHORITY TO MAKE DECISIONS REGARDING THE SELECTION AND USE OF ENVIRONMENTAL MITIGATION MEASURES AND TO DIRECT THAT CONSTRUCTION ACTIVITIES BE STOPPED IF THOSE ACTIVITIES POSE AN IMMEDIATE DETRIMENTAL RISK TO THE ENVIRONMENT AND/OR CONTRAVENE THE INTENT OF THE EAMP, EPP, REGULATORY REQUIREMENTS, OR RITA ENVIRONMENTAL STANDARDS.
- PCA'S CONSTRUCTION EAMP SETS OUT REQUIREMENTS TO BE FOLLOWED BY THE CONTRACTOR WITH RESPECT TO ISSUES INCLUDING, BUT NOT LIMITED TO:
  - ESTABLISHMENT OF ENVIRONMENTAL PROTECTION ZONES (EPZs)
  - PROTECTION OF SURFACE AND GROUNDWATER QUALITY
  - EROSION AND SEDIMENT CONTROL
  - MATERIALS AND WASTE MANAGEMENT
  - WILDLIFE PROTECTION
  - CONTROL OF DUST, NOISE AND VIBRATION
  - MANAGEMENT OF HAZARDOUS SUBSTANCES
  - BLASTING MANAGEMENT
  - SPILL PREVENTION AND EMERGENCY RESPONSE
  - CULTURAL RESOURCES
  - NATIONAL HISTORIC SITES
  - ARTIFACTS
- THROUGHOUT THE COURSE OF CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE ALL MEMBERS OF THE CONSTRUCTION CREW WITH ON-SITE TRAINING REGARDING BUT NOT LIMITED TO, PCA, DEPARTMENTAL REPRESENTATIVE, ENVIRONMENTAL STANDARDS APPLICABLE FEDERAL AND PROVINCIAL REGULATORY REQUIREMENTS, SITE-SPECIFIC ENVIRONMENTAL VALUES, IMPLEMENTATION OF PROJECT-SPECIFIC ENVIRONMENTAL MITIGATION AND SPILL RESPONSE MEASURES, AND ENVIRONMENTAL MONITORING / REPORTING PROTOCOLS AND PROCEDURES.







ISSUED FOR TENDER

00	24/04/15	ISSUED FOR TENDER	AF	AD	AF
Project Info/Info du projet			Drawn by/Dessiné par	Checked/Contrôlé par	UTS
			Date/Date		

YOHO NATIONAL PARK  
BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

Designed by/Conçu par <b>A. FRAPPELL</b>					
Drawn by/Dessiné par <b>A. DEEPWELL</b>					



Client/Client  
**PARKS CANADA AGENCY**

DRAWING INDEX & LEGEND

Project No./No. du projet <b>V13403095-01/ V13403096-01</b>	Sheet/Feuille <b>2016-02-0003</b>	Revision no./ Lo Révision no. <b>00</b>
--	--------------------------------------	---

LEGEND

MISCELLANEOUS ABBREVIATIONS

- BH - BORE HOLE
- BW - BACK OF SIDEWALK
- CB - CATCH BASIN
- C&G - CURB AND GUTTER
- C.I.P. - CAST IN PLACE
- CONCRETE
- CI - CULVERT INLET
- CO - CULVERT OUTLET
- DES - DESIGN
- EP - EDGE OF PAVEMENT
- EX - EXISTING
- LOG - LIP OF GUTTER
- LS - LIGHT STANDARD
- MH - MANHOLE
- PROP - PROPOSED
- PP - POWER POLE
- S - SANITARY
- ST - STORM
- W - WATER
- NB - NORTHBOUND
- SB - SOUTHBOUND
- EB - EASTBOUND
- WB - WESTBOUND
- N.I.C. - NOT IN CONTRACT

ROAD CONSTRUCTION

EXISTING	DESCRIPTION	PROPOSED
	TEST PIT & ID BORE HOLE & ID	
	CONTROL LINE AND STATIONING	
	ALIGNMENT TIE POINTS & STATIONING	
	EDGE OF PAVEMENT GRAVEL ROAD	
	EDGE OF PAVEMENT	
	EDGE OF PAVED SHOULDER	
	SHOULDER ELEVATION	
	THROUGH ROCK PAVING	
	CURB AND GUTTER	
	CONCRETE BARRIER	
	GUARD RAIL C/W POSTS	
	DRAINAGE BARRIER	
	DRAINAGE SIDE DITCH	
	DRAINAGE MEDIAN DITCH	
	DAY LIGHT LINE	
	CANADIAN PACIFIC RAILWAY	
	EXISTING PAVEMENT	
	PAVEMENT REMOVAL	
	SURVEY (200 mm D.I.)	
	TREE LINE	
	UNDERGROUND TEL & MANHOLE	
	WATER LINE	
	CULVERT	
	RETAINING WALL	
	DITCH BLOCK	
	DITCH DAM	
	SMALL CSP CULVERT	
	CATCH BASIN AND 300 mm Ø PIPE	
	WALL EFFECT FENCING	
	WILDERNESS ZONE BOUNDARY	
	CONTROL POINT	
	GATE	
	BARRIER DRAIN AND 300 mm PIPE	
	R.P. PIPE SPILLWAY	
	FOG LINE	
	CLEAR & GRUB	
	ROCK CUT FACE	

DRAWING INDEX

DRAWING No.	DESCRIPTION
2015-02-0000	COVER PAGE
2015-02-0001	PROJECT LOCATION & KEY PLAN
2015-02-0002	GENERAL NOTES
2015-02-0003	DRAWING INDEX & LEGEND
2015-02-0004	ESTABLISHMENT OF SURVEY MONUMENTS
2015-02-1001	SHERBROOKE CREEK ROCK SLOPE PLAN, STA 88+580 TO 88+820
2015-02-1002	SHERBROOKE CREEK ROCK SLOPE PLAN, STA 88+820 TO 89+110
2015-02-1003	LOWER SHERBROOKE ROCK SLOPE PLAN, STA 89+195 TO 88+435
2015-02-1004	LITTLE TOPPLE ROCK SLOPE PLAN, STA 115+660 TO 115+820
2015-02-1005	PHYLLITE ROCK SLOPE PLAN STA 124+234 TO 124+637
2015-02-1006	ROCK CUT CONSTRUCTION LAYOUT TYPICAL SECTIONS
2015-02-1007	CONTROL LINE LAYOUT AND WORK POINT TABLES
2015-02-1008	TYPICAL CROSS SECTIONS
2015-02-2001	ROCK SUPPORT TYPICAL DETAILS
2015-02-2002	CATCHMENT AND SLOPE DRAINAGE TYPICAL DETAILS
2015-02-2003	RESTORATION OR REMOVAL TYPICAL DETAILS
2015-02-3001	MT. VAUX STORAGE SITE
2015-02-3002	SHERBROOKE CROSS SECTIONS
2015-02-4001	SHERBROOKE CROSS SECTIONS
2015-02-4002	SHERBROOKE CROSS SECTIONS
2015-02-4003	SHERBROOKE CROSS SECTIONS
2015-02-4004	SHERBROOKE CROSS SECTIONS
2015-02-4005	SHERBROOKE CROSS SECTIONS
2015-02-4006	LOWER SHERBROOKE CROSS SECTIONS
2015-02-4007	LOWER SHERBROOKE CROSS SECTIONS
2015-02-4008	LOWER SHERBROOKE CROSS SECTIONS
2015-02-4009	LITTLE TOPPLE CROSS SECTIONS
2015-02-4010	LITTLE TOPPLE CROSS SECTIONS
2015-02-4011	PHYLLITE CROSS SECTIONS
2015-02-4012	PHYLLITE CROSS SECTIONS
2015-02-4013	PHYLLITE CROSS SECTIONS
2015-02-4014	PHYLLITE CROSS SECTIONS
2015-02-4015	PHYLLITE CROSS SECTIONS
2015-02-4016	PHYLLITE CROSS SECTIONS
2015-02-4017	PHYLLITE CROSS SECTIONS

[illegible]

**KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING**

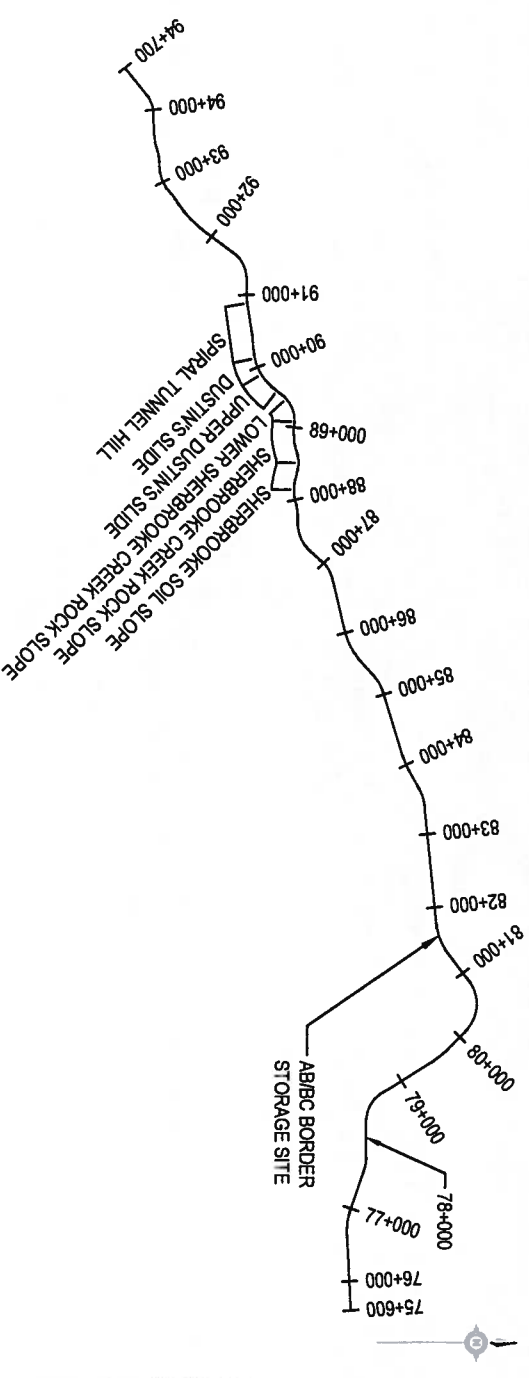
A. DEEPPWELL



Project No./No. of Project	Sheet/Total	Revision No./ to Revision No.
V13403095-01/ V13403096-01	2016-02-0004	00

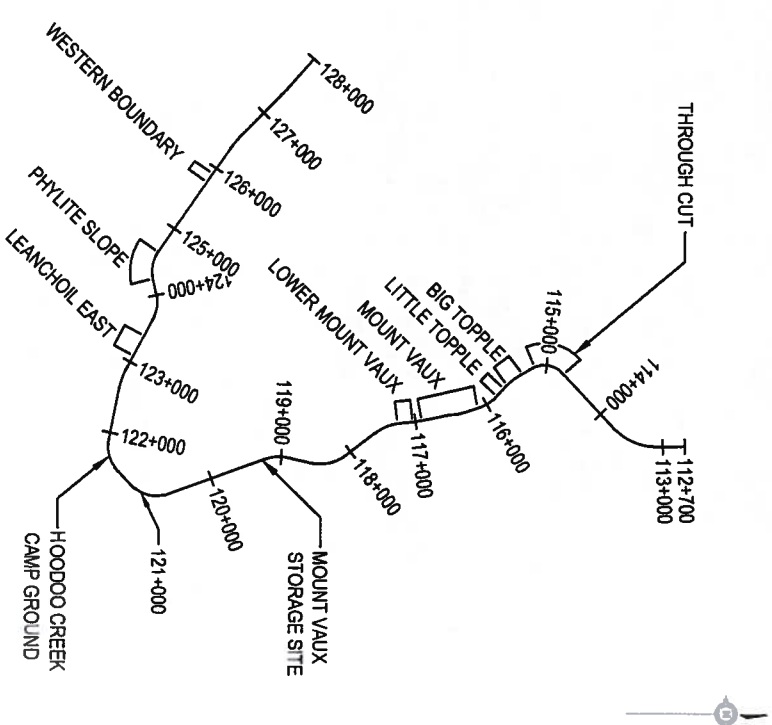
CONTROL MONUMENTS					
<u>MONUMENT NO.</u>	<u>NORTHING</u>	<u>EASTING</u>	<u>ELEVATION</u>	<u>STATIONS</u>	<u>LIST OF SLOPES</u>
				<u>KM 88 TO 91</u>	
1	*	*	*	88+300 TO 88+500	SHERBROOKE SOIL SLOPE
2	*	*	*	88+580 TO 89+110	SHERBROOKE CREEK ROCK SLOPE
3	*	*	*	88+195 TO 89+435	LOWER SHERBROOKE CREEK ROCK SLOPE
4	*	*	*	89+540 TO 89+900	UPPER DUSTY'S SLOPE
5	*	*	*	89+900 TO 90+150	DUSTY'S SLOPE
6	*	*	*	90+150 TO 90+900	SPRALL TUNNEL'S HILL
	*	*	*	<u>KM 114 TO 128</u>	
7	*	*	*	114+800 TO 115+020	THROUGH CUT (LEFT)
8	*	*	*	114+900 TO 115+050	THROUGH CUT (RIGHT)
9	*	*	*	115+380 TO 115+680	BIG TOPPLE
10	*	*	*	115+650 TO 115+860	LITTLE TOPPLE
11	*	*	*	116+150 TO 116+900	MOULIFF VALLEY
12	*	*	*	117+010 TO 117+170	LOWER MOULIFF VALLEY
13				116+470 TO 116+900	MOULIFF VALLEY
14	*	*	*	123+100 TO 123+400	LEANCHOIL, EAST
15	*	*	*	124+280 TO 124+680	PAVILLIE SLOPE
16	*	*	*	125+820 TO 125+940	WESTERN BOUNDARY

# OVERVIEW PLAN - KM 88.0 TO 91.0 - TC HWY #1



**SCALE: 100,000**

1. SURVEY CONTROL POINTS WILL BE ESTABLISHED BY HIGH-SURVEY AT EACH QUARRY AND ROCK CUT.
2. THE GRID COORDINATES ARE TRIANGULATION 11, MAND (GERS) AND ARE DERIVED FROM DTM, FREQUENCY ORS DIFFERENTIAL CARRIER-PHASE OBSERVATIONS TO BE ACQUIRED CONTROL POINTS BOUNDARY, 100.00.
3. ELEVATIONS ARE REFERENCED TO GEODETIC DYNAMIC OZGA.
4. THIS PLAN SHOWS GRID MEASURED DISTANCES TO COMPUTE GROUND LEVEL DISTANCES, SINCE GRID DISTANCES BY A CORRECTION FACTOR OF 0.99992763.



SCALE: 100,000

## OVERVIEW PLAN - KM 114.0 TO 128.0 - TC HWY #1





Transact Number	Date/Desc	Description/Description	Dr	Cr	Dr	Cr
00	24/04/15	ISSUED FOR TENDER	15	TT	AI	

Project title/Titre du projet

**YOHO NATIONAL PARK  
BRITISH COLUMBIA**

KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

Designed by/Concept: par  
A. FRAPPELL / E. YANG

Drawn by/Design  
**T. TAKEDA**



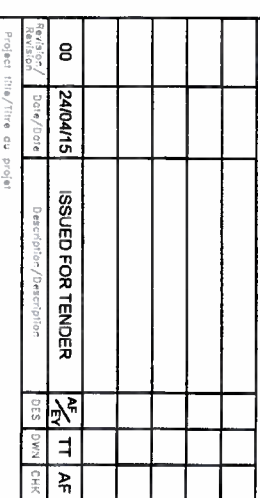
Client/client  
**PARKS CANADA AGENCY**

Drawing title/Titre du dessin

**SHERBROOKE CREEK  
ROCK SLOPE PLAN  
STA 88+580 TO 88+820**

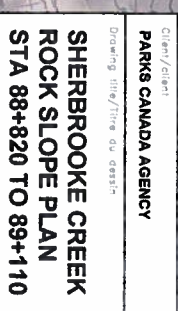
Project No./No. of project	Sheet/Feuille	Revision No./ La Revision no
V13403095-01	2015-02-1001	00





**KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING**

Drawn by/Designed by  
**T. TAKEDA**



V13403095-01	2015-02-1002	00
--------------	--------------	----





ISSUED FOR TENDER



00	24/04/15	ISSUED FOR TENDER	AF	TT	AF				
Revised/ Date/Obj		Description/Description	DES	DES	DES				
Project title/Titre du projet									

YOHO NATIONAL PARK  
BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

Designed by/Conçu par  
A. FRAPPELL / E. YANG  
Drawn by/Dessiné par  
T. TAKEDA



Client/Client  
PARKS CANADA AGENCY  
Drawing title/Titre du dessin  
LOWER SHERBROOKE CREEK  
ROCK SLOPE PLAN  
STA 89+196 TO 89+435

Project No./No. du projet	Sheet/Feuille	Revision no./ Lo Révision no.
V13403095-01	2015-02-1003	00





[illegible]

**YOHO NATIONAL PARK  
BRITISH COLUMBIA**

**KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING**

Designed by/Concepti par  
**A. FRAPPELL / E. YANG**

T. TAKEDA



**PARKS CANADA AGENCY**

Drawing title/Titre du dessin

**LITTLE TOPPLE  
ROCK SLOPE PLAN  
STA 115+660 TO 115+820**

Project No./No. du projet	Steel/Faillite	Revision - no./ to Revision - no.
V13403095-01	2015-02-1004	00





**ISSUED FOR TENDER**

[illegible]

Project title/Titre du projet:

YOHO NATIONAL PARK  
BRITISH COLUMBIA  
KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

Designed by/Concept par  
**A. FRAPPELL / E. YANG**

Drawn by/Dessine par  
**T. TAKEDA**



Client/client  
**PARKS CANADA AGENCY**

**PHYLLITE  
ROCK SLOPE PLAN  
STA 124+294 TO 124+637**

Project No./No. du projet	Sheet/Feuille	Revision no./ to Revision no.
V13403095-01	2015-02-1005	00





ISSUED FOR TENDER

00	24/04/15	ISSUED FOR TENDER	AF	TT	AF				
Revised / Révisé	Date / Date	Description / Description	AF	TT	AF				
Project title / Titre du projet									

YOHO NATIONAL PARK  
BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

Designed by/Conçu par  
A. FRAPPELL / E. YANG  
Drawn by/Dessiné par  
T. TAKEDA

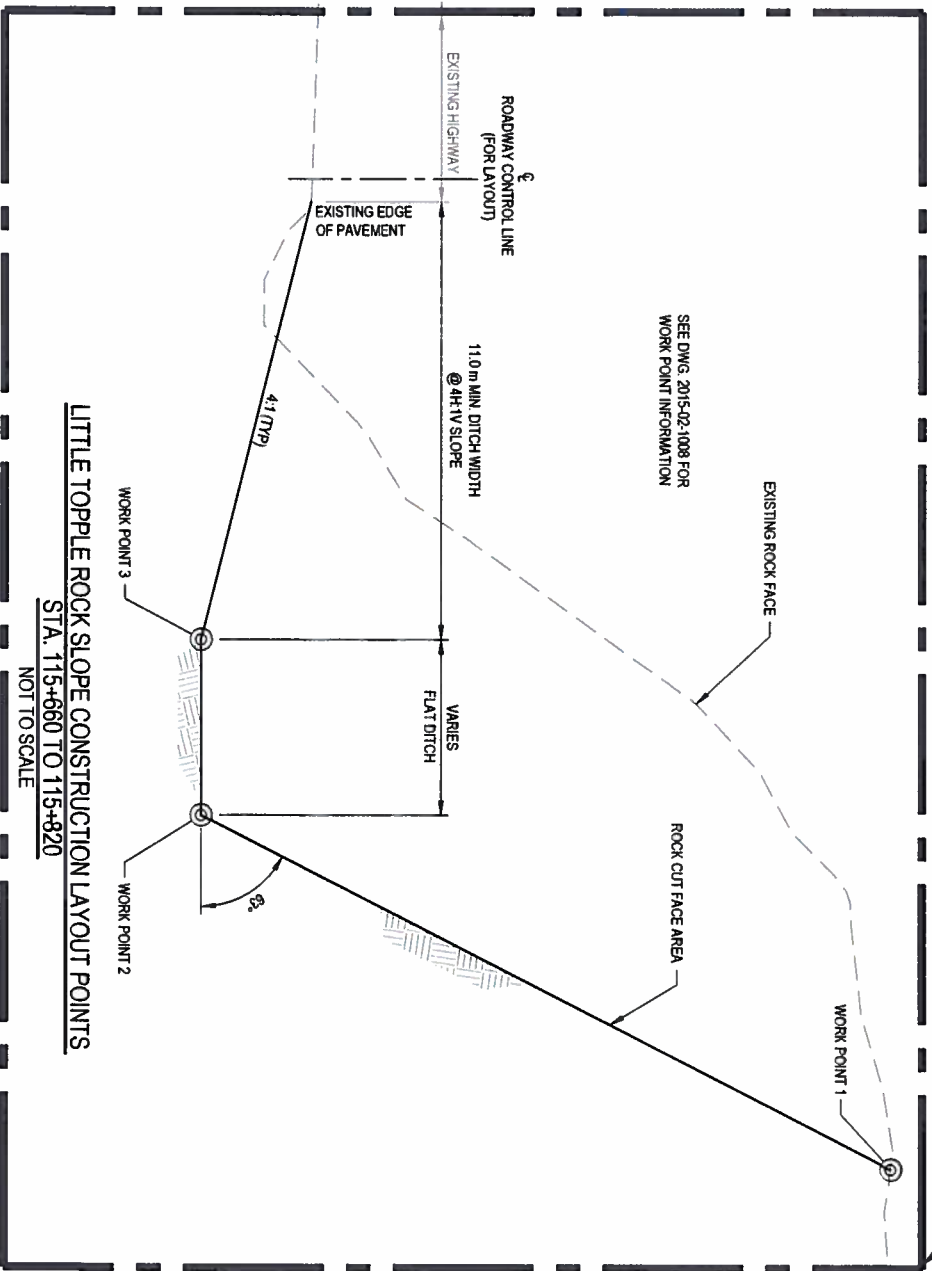


Client/Client  
PARKS CANADA AGENCY

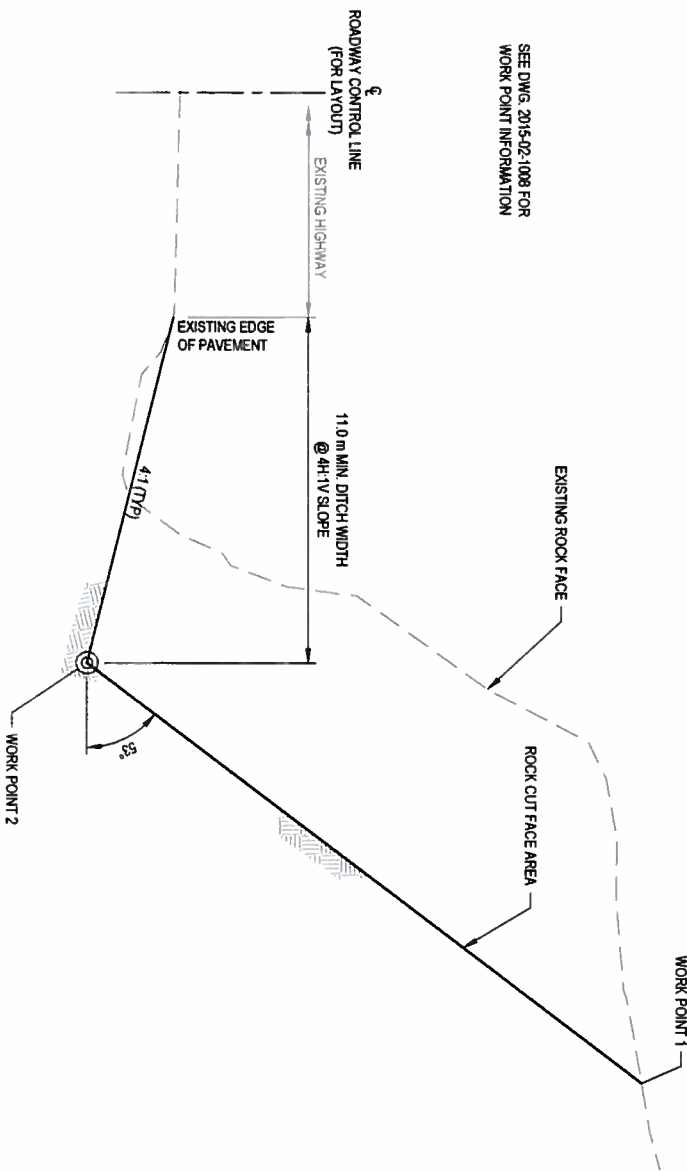
Drawn by/Dessiné par  
ROCK CUT CONSTRUCTION LAYOUT  
TYPICAL SECTIONS

Project No./No. du projet V13403095-01	Sheet/Feuille 2015-02-1006	Revision no./ Loi Révision no. 00
---	-------------------------------	---

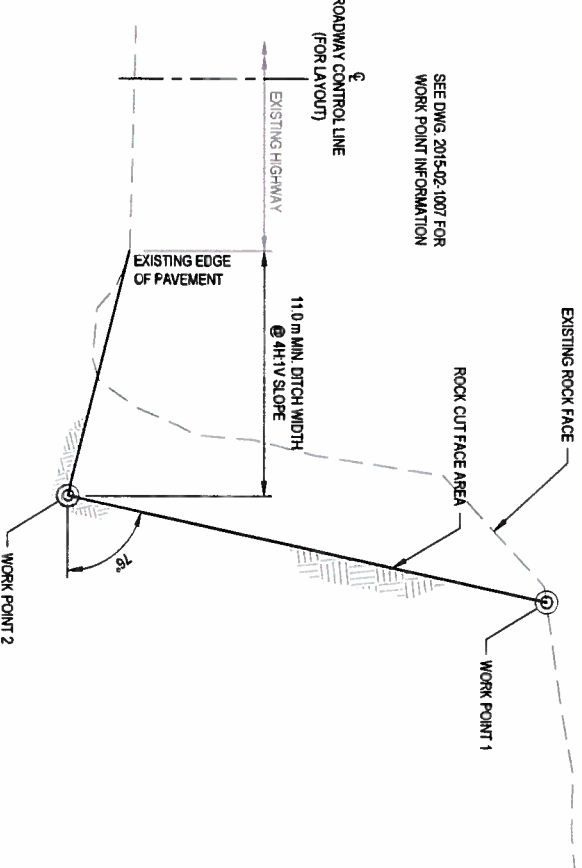
**FUTURE WORK**  
(NOT IN BILL OF QUANTITIES)



**SHERBROOKE CREEK ROCK SLOPE CONSTRUCTION LAYOUT POINTS**  
**STA. 88+580 TO 89+110**  
NOT TO SCALE



**PHYLLITE ROCK SLOPE CONSTRUCTION LAYOUT POINTS**  
**STA. 124+294 TO 124+637**  
NOT TO SCALE



**LOWER SHERBROOKE CREEK ROCK SLOPE CONSTRUCTION LAYOUT POINTS**  
**STA. 89+195 TO 89+435**  
NOT TO SCALE

- GENERAL NOTES:
1. ACCESS ROAD REMOVAL WILL OCCUR AT LOCATIONS WHERE THE OLD EXISTING HIGHWAY IS USED TO GET TO SLOPES (Eg. 115+050 TO 115+850 AND 116+150 TO 116+800).
  2. FOR RE-PLANTING SPECIES OF TREES AND SPACING REFER TO SPECIFICATION.
  3. LARGER TREES SAVED FROM STRIPPING WILL BE PLACED FOR HABITAT PURPOSES.
  4. NO EQUIPMENT, PERSONNEL, OR MATERIAL WILL ENTER SHERBROOKE CREEK.
  5. SILT FENCES OR OTHER SUITABLE CONTAINMENT MEASURES SHALL BE USED TO PROTECT CREEK DOWN RIDGE LINE.
  6. NO WORK TO OCCUR WITHIN RIPARIAN ZONE OF CREEKS (30 m OFFSET FROM CREEK BOUNDARY).





ISSUED FOR TENDER

STATION	OFFSET	ELEVATION	OFFSET	ELEVATION	STATION	OFFSET	ELEVATION	OFFSET	ELEVATION
88+195.892	10.507m	1529.848m	10.034m	1527.632m	88+200.000	12.945m	1531.839m	11.741m	1526.992m
88+210.000	17.562m	1536.501m	14.832m	1525.673m	88+220.000	20.281m	1539.798m	16.598m	1525.001m
88+230.000	20.928m	1541.288m	16.727m	1524.541m	88+240.000	20.928m	1539.747m	17.046m	1524.181m
88+250.000	20.928m	1539.628m	17.179m	1523.705m	88+260.000	20.928m	1537.201m	17.445m	1523.227m
88+270.000	20.928m	1534.442m	17.981m	1522.412m	88+280.000	20.928m	1534.086m	18.227m	1521.933m
88+290.000	22.652m	1538.767m	18.352m	1521.512m	88+300.000	22.805m	1538.112m	18.563m	1521.079m
88+310.000	22.805m	1539.098m	18.759m	1520.653m	88+320.000	23.435m	1536.781m	19.278m	1520.105m
88+330.000	23.435m	1534.161m	19.596m	1519.681m	88+340.000	23.733m	1533.147m	20.273m	1519.193m
88+350.000	23.733m	1530.361m	20.816m	1516.644m	88+360.000	23.823m	1529.280m	20.986m	1517.900m
88+370.000	23.823m	1528.170m	20.846m	1516.320m	88+380.000	23.864m	1526.934m	21.279m	1517.462m
88+390.000	23.864m	1526.529m	21.435m	1517.025m	88+400.000	23.864m	1524.529m	21.435m	1516.595m
88+410.000	24.278m	1529.534m	20.556m	1516.603m	88+420.000	24.278m	1525.138m	19.515m	1516.683m
88+430.000	24.278m	1525.138m	18.315m	1516.761m	88+440.000	24.278m	1520.028m	17.357m	1516.590m
88+450.000	24.278m	1516.550m	17.105m	1516.625m					

STATION	OFFSET	ELEVATION	OFFSET	ELEVATION	STATION	OFFSET	ELEVATION	OFFSET	ELEVATION
88+195.892	10.507m	1529.848m	10.034m	1527.632m	88+200.000	12.945m	1531.839m	11.741m	1526.992m
88+210.000	17.562m	1536.501m	14.832m	1525.673m	88+220.000	20.281m	1539.798m	16.598m	1525.001m
88+230.000	20.928m	1541.288m	16.727m	1524.541m	88+240.000	20.928m	1539.747m	17.046m	1524.181m
88+250.000	20.928m	1539.628m	17.179m	1523.705m	88+260.000	20.928m	1537.201m	17.445m	1523.227m
88+270.000	20.928m	1534.442m	17.981m	1522.412m	88+280.000	20.928m	1534.086m	18.227m	1521.933m
88+290.000	22.652m	1538.767m	18.352m	1521.512m	88+300.000	22.805m	1538.112m	18.563m	1521.079m
88+310.000	22.805m	1539.098m	18.759m	1520.653m	88+320.000	23.435m	1536.781m	19.278m	1520.105m
88+330.000	23.435m	1534.161m	19.596m	1519.681m	88+340.000	23.733m	1533.147m	20.273m	1519.193m
88+350.000	23.733m	1530.361m	20.816m	1516.644m	88+360.000	23.823m	1529.280m	20.986m	1517.900m
88+370.000	23.823m	1528.170m	20.846m	1516.320m	88+380.000	23.864m	1526.934m	21.279m	1517.462m
88+390.000	23.864m	1526.529m	21.435m	1517.025m	88+400.000	23.864m	1524.529m	21.435m	1516.595m
88+410.000	24.278m	1529.534m	20.556m	1516.603m	88+420.000	24.278m	1525.138m	19.515m	1516.683m
88+430.000	24.278m	1525.138m	18.315m	1516.761m	88+440.000	24.278m	1520.028m	17.357m	1516.590m
88+450.000	24.278m	1516.550m	17.105m	1516.625m					

YOHO NATIONAL PARK  
BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

Designed by/Concédé par <b>A. FRAPPELL / E. YANG</b>
Drawn by/Dessiné par <b>T. TAKEDA</b>



Client/Client  
**PARKS CANADA AGENCY**

Drawing Title/Titre du dessin  
**CONTROL LINE LAYOUT AND  
WORK POINT TABLES**

Project No./No. du projet <b>V13403095-01</b>	Sheet/Feuille <b>2016-02-1007</b>	Revision No./ Lo Révision No. <b>00</b>
--	--------------------------------------	---

CONTROL LINE DATA - km 88 - km 91

SEGMENT #	RADIUS	LENGTH	LINE / CHORD BEARING	SPIRAL A	BC STATION	EC STATION	Δ / OS	PI COORD
L7		23.825	267° 00' 16"					
S13	Inside	70.000		187.283	88+483.825	88+625.825	4° 00' 39"	
C7	500	182.584	270° 19' 44"		88+625.825	88+216.378	18° 37' 38"	N 558953.466 E 543829.436
S14	Outside	70.000		187.283	88+216.378	88+286.378	4° 00' 39"	
L8		67.876	265° 39' 12"					
S1	Inside	70.000		187.283	88+354.054	88+424.054	4° 00' 39"	
C1	500	183.961	268° 06' 09"		88+424.054	88+688.015	21° 04' 48"	N 558954.196 E 543824.276
S2	Outside	70.000		187.283	88+688.015	88+678.015	4° 00' 39"	
L1		54.441	254° 33' 05"					
S3	Inside	80.000		187.517	88+732.456	88+612.456	5° 12' 31"	
C2	440	92.275	265° 46' 05"		88+612.456	88+904.731	12° 00' 57"	N 558952.248 E 543720.114
S4	Outside	80.000		187.517	88+904.731	88+984.731	5° 12' 31"	
L2		11.028	276° 59' 05"					
S5	Inside	80.000		187.517	88+985.789	88+075.789	5° 12' 31"	
C3	440	374.845	247° 22' 13"		88+075.789	88+450.514	48° 48' 41"	N 558954.387 E 542954.480
S6	Outside	80.000		187.517	88+450.514	88+530.514	5° 12' 31"	
L3		88.151	217° 46' 21"					
S7	Inside	80.000		201.990	88+619.765	88+679.765	2° 31' 40"	
C4	680	506.049	241° 36' 11"		88+679.765	90+185.814	42° 38' 20"	N 558922.841 E 542229.544
S8	Outside	60.000		201.990	90+185.814	90+245.814	2° 31' 40"	
L4		129.632	265° 27' 01"					
S9	Inside	60.000		244.949	90+374.846	90+434.846	1° 42' 08"	
C5	1000	21.866	265° 07' 41"		90+434.846	90+455.912	1° 12' 25"	N 559798.778 E 541720.982
S10	Outside	60.000		244.949	90+455.912	90+515.912	1° 42' 08"	
L5		329.474	260° 48' 20"					
S11	Inside	60.000		244.949	90+845.386	90+905.386	1° 42' 08"	
C6	1000	111.253	265° 42' 42"		90+905.386	91+016.639	6° 22' 28"	N 559798.348 E 541721.107
S12	Outside	60.000		244.949	91+016.639	91+076.639	1° 42' 08"	
L6		83.361	270° 37' 04"					

SHEERROCKE ROCK CUT CONSTRUCTION LAYOUT											
	WORK POINT #1		WORK POINT #2		WORK POINT #3						
STATION	OFFSET	ELEVATION	OFFSET	ELEVATION	OFFSET	ELEVATION	OFFSET	ELEVATION	OFFSET	ELEVATION	
88+690.000	17.651m	1566.232m	16.352m	1561.024m	1561.024m	14.072m	1560.910m				
88+690.000	19.465m	1569.935m	17.089m	1560.423m	1560.423m	11.611m	1560.149m				
88+690.000	21.173m	1572.530m	18.034m	1559.939m	1559.939m	11.069m	1559.591m				
88+610.000	22.018m	1577.108m	17.620m	1559.466m	1559.466m	10.320m	1559.101m				
88+620.000	22.649m	1580.058m	17.258m	1558.989m	1558.989m	11.589m	1558.678m				
88+630.000	23.087m	1581.565m	17.282m	1558.311m	1558.311m	10.128m	1557.953m				
88+640.000	23.151m	1583.380m	17.314m	1557.709m	1557.709m	9.511m	1557.319m				
88+650.000	24.369m	1584.935m	17.459m	1557.244m	1557.244m	9.131m	1556.827m				
88+660.000	24.726m	1584.881m	17.855m	1556.601m	1556.601m	8.608m	1556.171m				
88+670.000	25.035m	1584.284m	17.882m	1556.588m	1556.588m	8.231m	1556.510m				
88+680.000	24.924m	1581.389m	18.349m	1556.528m	1556.528m	7.934m	1556.107m				
88+690.000	24.915m	1580.627m	18.528m	1556.010m	1556.010m	8.621m	1554.514m				
88+700.000	24.980m	1579.820m	18.708m	1554.745m	1554.745m	8.761m	1554.248m				
88+710.000	24.881m	1578.164m	18.888m	1554.127m	1554.127m	9.155m	1553.640m				
88+720.000	26.003m	1579.701m	19.556m	1553.649m	1553.649m	8.889m	1553.171m				
88+730.000	27.042m	1580.679m	20.162m	1553.168m	1553.168m	9.510m	1552.634m				
88+740.000	27.888m	1581.158m	20.827m	1552.791m	1552.791m	10.780m	1552.287m				
88+750.000	27.495m	1577.853m	21.104m	1552.220m	1552.220m	11.153m	1551.722m				
88+760.000	27.480m	1576.642m	21.311m	1551.889m	1551.889m	13.318m	1551.459m				
88+770.000	27.916m	1576.812m	21.591m	1551.470m	1551.470m	14.890m	1551.134m				
88+780.000	28.368m	1577.278m	21.850m	1551.136m	1551.136m	15.340m	1550.811m				
88+790.000	28.874m	1578.406m	21.948m	1550.628m	1550.628m	14.846m	1550.273m				
88+800.000	28.341m	1577.155m	21.619m	1550.196m	1550.196m	14.712m	1549.851m				
88+810.000	28.225m	1579.361m	21.107m	1548.311m	1548.311m	13.480m	1548.412m				
88+820.000	27.895m	1577.945m	20.814m	1548.534m	1548.534m	11.426m	1548.055m				
88+830.000	27.261m	1576.846m	20.302m	1548.593m	1548.593m	10.217m	1548.457m				
88+840.000	26.216m	1575.244m	19.571m	1548.591m	1548.591m	11.053m	1548.165m				
88+850.000	25.682m	1574.176m	18.777m	1548.091m	1548.091m	11.447m	1547.697m				
88+860.000	24.761m	1571.815m	18.777m	1547.813m	1547.813m	11.267m	1547.437m				
88+870.000	24.682m	1569.752m	19.058m	1547.279m	1547.279m	9.052m	1546.779m				
88+880.000	24.908m	1567.771m	19.712m	1546.534m	1546.534m	8.475m	1546.373m				
88+890.000	24.984m	1565.972m	20.147m	1546.571m	1546.571m	9.955m	1546.062m				
88+900.000	24.924m	1564.414m	20.362m	1546.116m	1546.116m	9.856m	1545.594m				
88+910.000	24.777m	1562.865m	20.522m	1546.600m	1546.600m	9.322m	1546.040m				
88+920.000	24.504m	1560.785m	20.624m	1546.232m	1546.232m	10.245m	1544.713m				
88+930.000	23.287m	1555.702m	20.548m	1544.719m	1544.719m	9.852m	1544.184m				
88+940.000	21.355m	1550.536m	19.801m	1544.049m	1544.049m	12.046m	1544.016m				
88+950.000	19.956m	1546.702m	18.924m	1543.880m	1543.880m	11.599m	1543.533m				
88+960.000	19.328m	1546.200m	17.843m	1543.433m	1543.433m	11.077m	1543.086m				
88+970.000	19.127m	1548.733m	17.727m	1543.162m	1543.162m	11.281m	1542.889m				
88+980.000	18.144m	1545.573m	17.688m	1542.889m	1542.889m	10.515m	1542.444m				
88+990.000	18.074m	1544.865m	17.194m	1542.380m	1542.380m	12.990m	1541.215m				
88+000.000	17.637m	1544.958m	16.535m	1541.821m	1541.821m	12.714m	1541.614m				
88+010.000	16.789m	1542.270m	16.255m	1541.434m	1541.434m	15.263m	1541.317m				





**ISSUED FOR TENDER**

[illegible]

Project title/Titre du projet

YOHO NATIONAL PARK  
BRITISH COLUMBIA

**KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING**

**A. FRAPPELL / E. YANG**

T. TAKEDA

pad

Client/client:  
**PARKS CANADA AGENCY**

Drawing title/Titre du dessin

## CONTROL LINE LAYOUT AND WORK POINT TABLES

Project No./no. du projet	Sheet/Feuille	Revision no. La Revision
V13403095-01	2015-02-1008	00

CONTROL LINE DATA - km 113 - km 118								
SEGMENT #	RADIUS	LENGTH	LINE / CHORD BEARING	SPIRAL A	BC STATION	EC STATION	A / Os	PI COORD.
19		405.038	2°57' 44" 16"					
S15	Incurve	60.000		244.949	114+206.038	114+265.038	1° 43' 08"	
C8	1000	69.917	2°07' 27" 35"		114+265.038	114+324.955	4° 00' 21"	N 45265.872 E 52065.819
S16	Outcurve	60.000		244.949	114+324.955	114+384.955	1° 43' 08"	
L10		177.039	2°34' 10" 54"					
S17	Incurve	80.000		102.517	114+571.984	114+651.984	5° 12' 31"	
C9	440	554.627	1°52' 51" 42"		114+651.984	115+206.551	72° 13' 20"	N 55601.1506 E 52788.405
S18	Outcurve	80.000		102.517	115+206.591	115+206.591	5° 12' 31"	
L11		76.653	1°51' 32" 31"					
S19	Incurve	60.000		219.089	115+363.244	115+423.244	2° 08' 55"	
C10	800	203.964	1°42' 05" 22"		115+423.244	115+627.208	1° 35' 28"	N 55762.912 E 52062.425
S20	Outcurve	60.000		219.089	115+627.208	115+687.208	2° 08' 55"	
L12		146.265	1°22' 38" 15"					
S21	Incurve	90.000		173.205	115+833.453	115+883.453	3° 26' 16"	
C11	500	197.028	1°47' 21" 49"		115+883.453	116+080.461	22° 34' 40"	N 56720.904 E 52062.894
S22	Outcurve	60.000		173.205	116+080.461	116+150.461	3° 26' 16"	
L13		174.319	1°52' 05" 25"					
S23	Incurve	60.000		162.481	116+324.800	116+384.800	3° 54' 24"	
C12	440	29.710	1°57' 55" 52"		116+384.800	116+414.510	3° 52' 05"	N 56703.1958 E 52069.241
S24	Outcurve	60.000		162.481	116+414.510	116+474.510	3° 54' 24"	
L14		33.454	1°73' 46" 19"					
S25	Incurve	60.000		219.089	116+507.964	116+567.964	2° 08' 55"	
C13	800	26.466	1°07' 40" 30"		116+567.964	116+604.460	1° 53' 45"	N 56703.241 E 52070.952
S26	Outcurve	60.000		219.089	116+604.460	116+664.460	2° 08' 55"	
L15		174.242	1°57' 34" 41"					
S27	Incurve	60.000		346.410	116+829.392	116+889.392	0° 51' 34"	
C14	2000	162.078	1°07' 45" 32"		116+889.392	117+051.471	4° 38' 35"	N 56703.384 E 52072.775
S28	Outcurve	60.000		346.410	117+051.471	117+111.471	0° 51' 34"	
L16		106.428	1°73' 56" 24"					
S29	Incurve	60.000		189.737	117+217.888	117+277.888	2° 51' 53"	
C15	600	267.103	1°58' 19" 19"		117+277.888	117+645.001	25° 30' 23"	N 567310.074 E 52063.744
S30	Outcurve	60.000		189.737	117+645.001	117+685.001	2° 51' 53"	
L17		284.899	1°42' 42" 14"					

**FUTURE WORK**  
(NOT IN BILL OF QUANTITIES)

LITTLE TOPPLE ROCK CUT CONSTRUCTION LAYOUT						
STATION	WORK POINT #1		WORK POINT #2		WORK POINT #3	
	OFFSET	ELEVATION	OFFSET	ELEVATION	OFFSET	ELEVATION
115+650.000	-16.536m	1119.825m	-	-	-16.406m	1119.574m
115+670.000	-17.676m	1122.117m	-	-	-16.234m	1119.280m
115+672.150	-16.575m	1123.432m	-	-	-16.405m	1119.174m
115+680.000	-21.241m	1127.345m	-11.025m	1119.072m	-16.332m	1119.072m
115+690.000	24.152m	1132.049m	-17.567m	1119.125m	-16.015m	1119.125m
115+700.000	26.258m	1134.980m	-18.103m	1119.095m	-16.743m	1119.095m
115+710.000	27.826m	1138.262m	-17.959m	1118.953m	-16.733m	1118.953m
115+720.000	30.148m	1142.971m	-17.851m	1118.844m	-14.387m	1118.844m
115+730.000	31.247m	1144.949m	-17.955m	1118.822m	-14.156m	1118.822m
115+740.000	31.270m	1144.737m	-18.019m	1118.732m	-13.947m	1118.732m
115+750.000	31.117m	1144.643m	-17.870m	1118.644m	-13.739m	1118.644m
115+760.000	30.946m	1144.523m	-17.720m	1118.567m	-13.589m	1118.567m
115+770.000	30.436m	1144.361m	-17.628m	1118.485m	-13.476m	1118.485m
115+780.000	28.336m	1139.432m	-17.538m	1118.262m	-13.363m	1118.262m
115+790.000	26.191m	1134.713m	-16.827m	1118.289m	-13.265m	1118.289m
115+800.000	22.394m	1129.628m	-16.080m	1118.235m	-13.158m	1118.235m
115+810.000	-16.824m	1124.000m	-13.886m	1118.256m	-13.231m	1118.256m
115+820.000	-16.436m	1122.425m	-13.969m	1118.319m	-13.358m	1118.319m
115+830.000	-11.811m	1118.561m	-	-	-11.086m	1118.307m

SEGMENT #	RADIUS	LENGTH	LINE / CHORD BEARING	SPIRAL A	BC STATION	EC STATION	Δ / 6S	PI COORD.
L18		140.821	226° 31' 29"					
S31	Incurve	80.000		187.617	121+440.821	121+520.821	5° 12' 31"	
C16	440	341.879	253° 59' 39"		121+520.821	121+682.589	44° 31' 07"	N 5617384.187 E 530766.987
S32	Outcurve	80.000		187.617	121+682.589	121+942.589	5° 12' 31"	
L19		662.304	281° 27' 34"					
S33	Incurve	60.000		244.949	122+666.003	122+666.003	1° 43' 06"	
C17	1000	232.653	289° 50' 56"		122+666.003	122+897.867	13° 20' 32"	N 5571704.920 E 528070.238
S34	Outcurve	60.000		244.949	122+897.867	122+957.867	1° 43' 06"	
L20		642.537	288° 14' 22"					
S35	Incurve	80.000		187.617	123+000.404	123+080.404	5° 12' 31"	
C18	440	300.150	273° 17' 35"		123+080.404	123+983.553	39° 28' 22"	N 5517108.858 E 527562.004
S36	Outcurve	90.000		187.617	123+983.553	124+063.553	5° 12' 31"	
L21		22.841	248° 20' 48"					
S37	Incurve	80.000		187.617	124+063.594	124+166.594	5° 12' 31"	
C19	440	367.897	277° 27' 24"		124+166.594	124+533.491	47° 48' 09"	N 5571504.804 E 526181.922
S38	Outcurve	60.000		187.617	124+533.491	124+613.491	5° 12' 31"	
L22		206.500	306° 33' 59"					

PHILLIPS TOWER CRUISE CONSTRUCTION LOGOUT				WORK POINT #2			
STATION		OFFSET	ELEVATION	WORK POINT #1		OFFSET	ELEVATION
124-353.556	64.525m	130.956m	63.871m	124-353.556	64.525m	130.956m	63.871m
124-350.000	68.180m	131.400m	64.357m	124-350.000	68.180m	131.400m	64.357m
124-310.000	71.010m	135.944m	64.961m	124-310.000	71.010m	135.944m	64.961m
124-320.000	72.551m	137.657m	64.727m	124-320.000	72.551m	137.657m	64.727m
124-330.000	72.551m	133.000m	64.628m	124-330.000	72.551m	133.000m	64.628m
124-340.000	72.015m	140.420m	62.986m	124-340.000	72.015m	140.420m	62.986m
124-350.000	71.950m	144.127m	61.502m	124-350.000	71.950m	144.127m	61.502m
124-360.000	69.858m	143.724m	59.980m	124-360.000	69.858m	143.724m	59.980m
124-380.000	69.127m	146.161m	55.567m	124-380.000	69.127m	146.161m	55.567m
124-380.000	68.409m	146.572m	52.298m	124-380.000	68.409m	146.572m	52.298m
124-400.000	68.389m	151.330m	50.864m	124-400.000	68.389m	151.330m	50.864m
124-430.000	68.654m	151.046m	49.344m	124-430.000	68.654m	151.046m	49.344m
124-450.000	68.654m	145.589m	47.858m	124-450.000	68.654m	145.589m	47.858m
124-460.000	65.163m	156.989m	44.157m	124-460.000	65.163m	156.989m	44.157m
124-470.000	61.651m	156.277m	40.458m	124-470.000	61.651m	156.277m	40.458m
124-480.000	60.573m	156.204m	38.613m	124-480.000	60.573m	156.204m	38.613m
124-490.000	59.431m	156.539m	37.445m	124-490.000	59.431m	156.539m	37.445m
124-500.000	58.301m	156.509m	36.213m	124-500.000	58.301m	156.509m	36.213m
124-510.000	56.729m	155.566m	35.313m	124-510.000	56.729m	155.566m	35.313m
124-520.000	55.242m	155.453m	34.016m	124-520.000	55.242m	155.453m	34.016m
124-530.000	53.765m	155.834m	32.397m	124-530.000	53.765m	155.834m	32.397m
124-540.000	52.093m	152.759m	31.832m	124-540.000	52.093m	152.759m	31.832m
124-550.000	51.000m	152.666m	30.763m	124-550.000	51.000m	152.666m	30.763m
124-560.000	50.943m	153.407m	29.898m	124-560.000	50.943m	153.407m	29.898m
124-570.000	49.924m	155.763m	29.110m	124-570.000	49.924m	155.763m	29.110m
124-580.000	47.261m	146.919m	28.726m	124-580.000	47.261m	146.919m	28.726m
124-590.000	45.769m	144.171m	28.248m	124-590.000	45.769m	144.171m	28.248m
124-600.000	44.855m	144.265m	27.706m	124-600.000	44.855m	144.265m	27.706m
124-610.000	43.820m	138.280m	26.801m	124-610.000	43.820m	138.280m	26.801m
124-620.000	42.535m	133.321m	25.356m	124-620.000	42.535m	133.321m	25.356m
124-630.000	28.401m	119.569m	24.045m	124-630.000	28.401m	119.569m	24.045m
124-640.000	24.931m	112.635m	22.727m	124-640.000	24.931m	112.635m	22.727m
124-650.000	21.753m	112.933m	21.381m	124-650.000	21.753m	112.933m	21.381m
124-661.233	21.658m	112.938m	21.217m	124-661.233	21.658m	112.938m	21.217m



Revision/ Révision	Date/Date	Description/Description	AF / DT	TT	AF
00	24/04/15	ISSUED FOR TENDER	DES	DWN	CHK

**KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING**

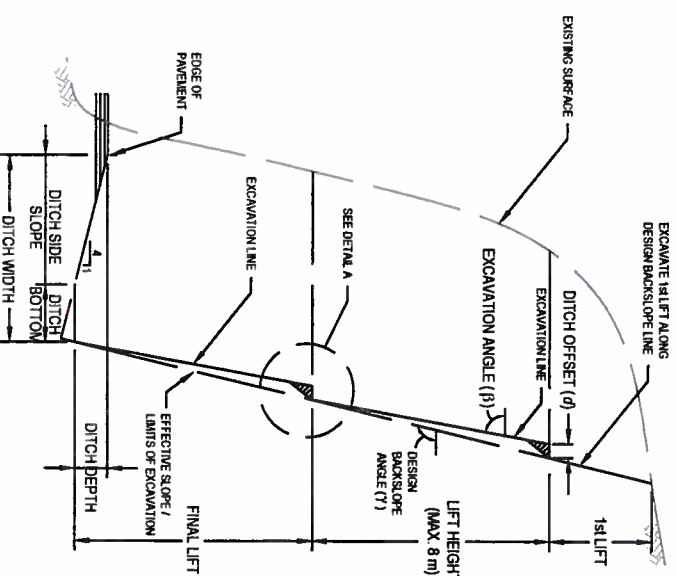
### TYPICAL CROSS SECTION

Project No./No. du projet	Street No.	Rev. or No./ Revision No.
V13403095-01	2015-02-2001	00

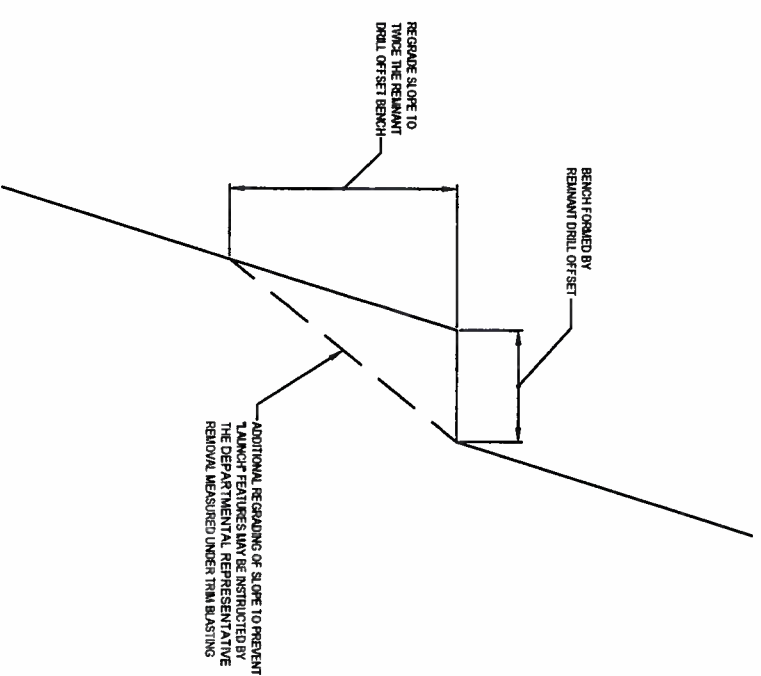


- 
- The diagram illustrates a layout for half barrels. It features a horizontal axis labeled "SLOPE AZIMUTH" with arrows at both ends. A vertical dimension line on the left indicates a "MIN 5 m" distance between two groups of barrels. The top group is labeled "HIGHEST HALF BARREL ELEVATION" and the bottom group is labeled "LOWEST". A dashed rectangular box encloses the top group, with a label "VISUAL AREA NOT TO EXCEED 4 m²" pointing to it. The bottom group is labeled "HALF BARREL" and "VISUAL AREA (GROUP OF HALF BARRELS)".

HALF BARREL OR DRILL HOLE ACCEPTABILITY  
(ELEVATION VIEW OF ROCK FACE)  
NOT TO SCALE



**CALCULATION OF BACKSLOPE EXCAVATION ANGLE**  
**NOT TO SCALE**  
**FOR INFORMATION PURPOSES**



**DETAIL A: REMOVAL OF DRILL OFFSET BENCHES**  
**NOT TO SCALE**





ISSUED FOR TENDER

- GENERAL NOTES:
- THE 3 m SET BACK AT THE CREST IS SET FOR INSPECTION AND SAFETY. THE TOLERANCE ON THIS SET BACK IS  $\pm 0.5$  m.
  - LARGER TREES SAVED FROM STRIPPING WILL BE PLACED FOR HABITAT PURPOSES.
  - LENGTH OF BAR LESS THAN 1 m SHALL NOT BE COUPLED TO FORM LONGER ANCHORS.

00	24/04/15	ISSUED FOR TENDER	AF	TT	AF				
Revised/Revisé	Date/Date	Description/Description	AF	TT	AF				
			OTS	DWN	CHK				

Project name/Name du projet  
YHOHO NATIONAL PARK  
BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

Designed by/Conçu par  
A. FRAPPELL / E. YANG  
Drawn by/Dessiné par  
T. TAKEDA

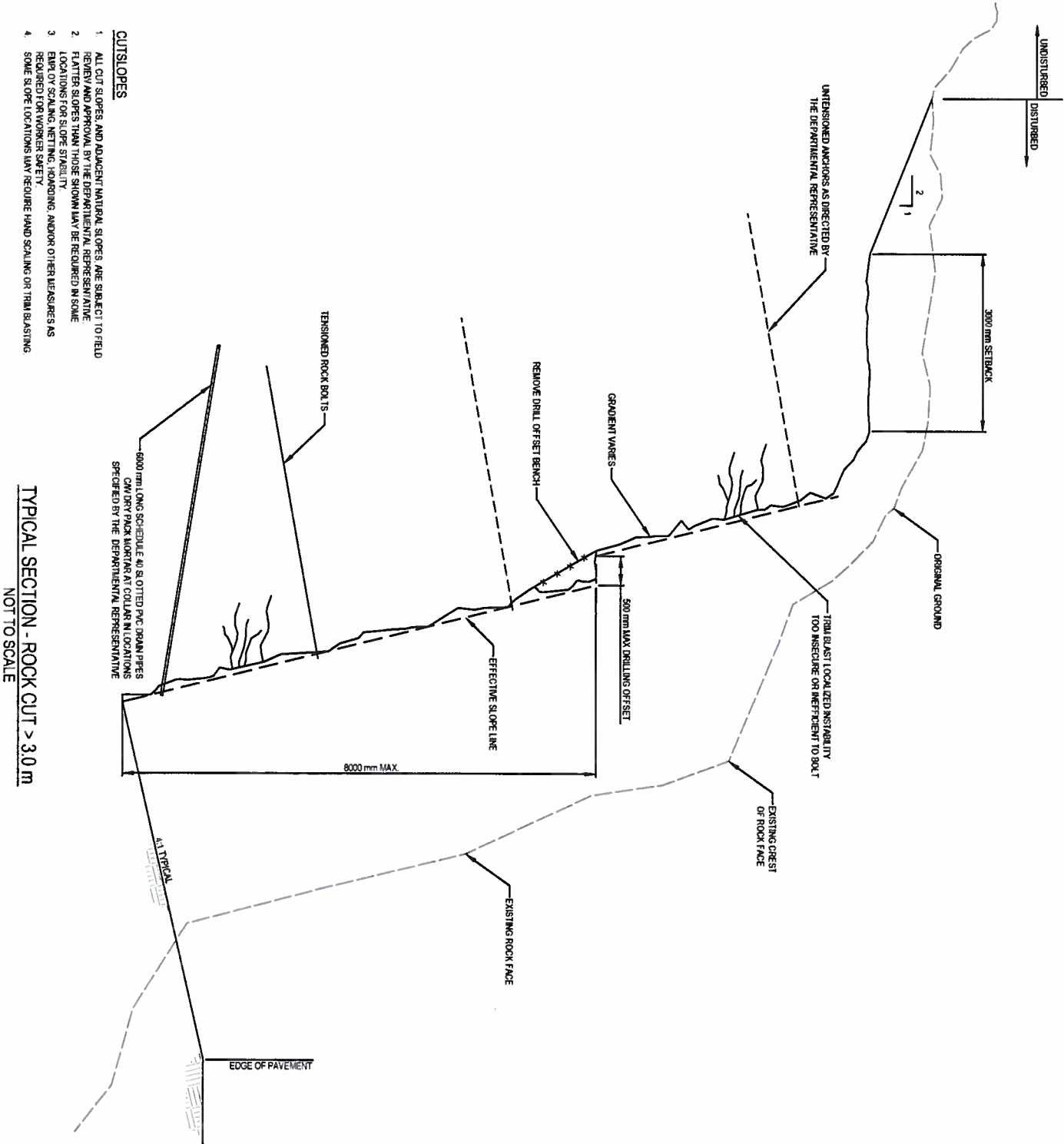


Client/Client  
PARKS CANADA AGENCY

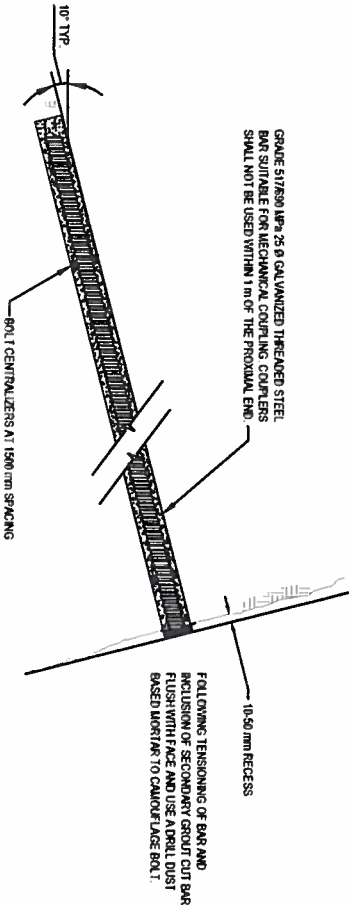
Drawing title/Title du dessin  
ROCK SUPPORT TYPICAL DETAILS

Project No./No. du projet V13403095-01	Sheet/Feuille 2015-02-2002	Revision no./ La Révision no. 00
---	-------------------------------	--

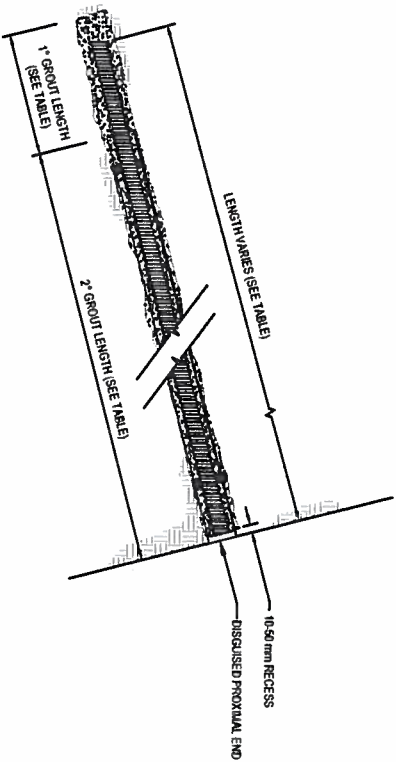
- NOTES
- INSTALL ROCK SUPPORT AND MAKE SPECIFIED TREATMENTS AS DIRECTED BY THE DEPARTMENTAL REPRESENTATIVE.
  - FIXED BOLT LENGTHS SHALL BE VERIFIED BY THE DEPARTMENTAL REPRESENTATIVE BASED ON SITE CONDITIONS AT EACH APPLICATION LOCATION.
  - ROCK SUPPORT INSTALLATION SHALL BE SEQUENCED WITH THE EXCAVATION.
  - PVC PIPES SHALL CONFORM TO ASTM D1784, AND SHALL HAVE SLOTS CUT AT 2% OF SURFACE AREA AND BE GREY.



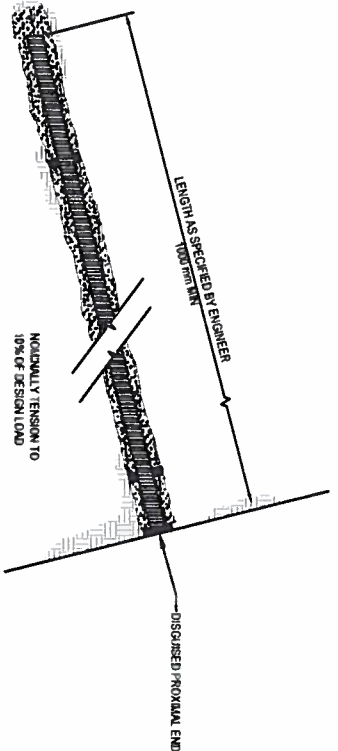
TYPICAL SECTION - ROCK CUT > 3.0 m  
NOT TO SCALE



TYPICAL ANCHOR  
NOT TO SCALE



TENSIONED ROCK BOLT  
NOT TO SCALE



UNTENSIONED ROCK BOLT  
NOT TO SCALE

ROCK BOLT LENGTH (m)	1° GROUT LENGTH (m)	2° GROUT LENGTH (m)	TENSION LOAD <sup>a</sup> (kN)
3	1.5	1.5	100
4	1.8	2.2	120
5	2.2	2.8	130
6	2.5	3.5	150





**ISSUED FOR TENDER**

[illegible]

YOHO NATIONAL PARK  
BRITISH COLUMBIA

**KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING**

Designed by/Concept per  
**A. FRAPPELL / E. YANG**

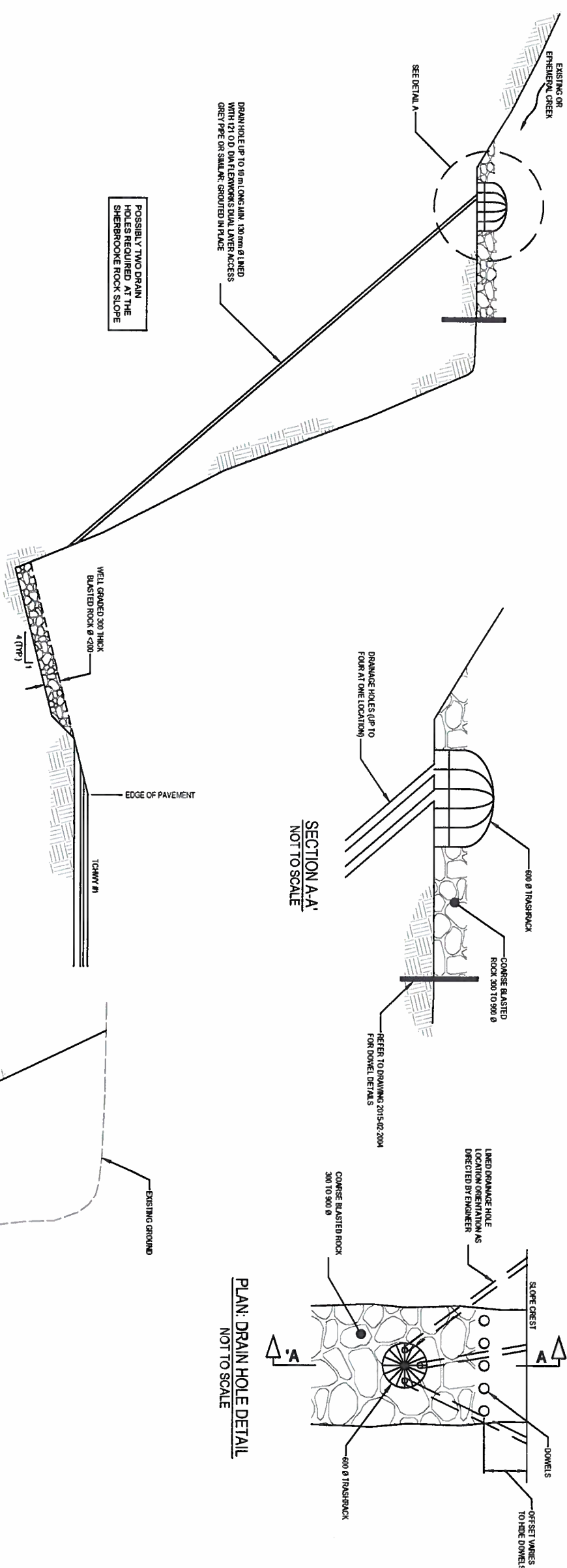
**T. TAKEDA**



Client/client  
**PARKS CANADA AGENCY**

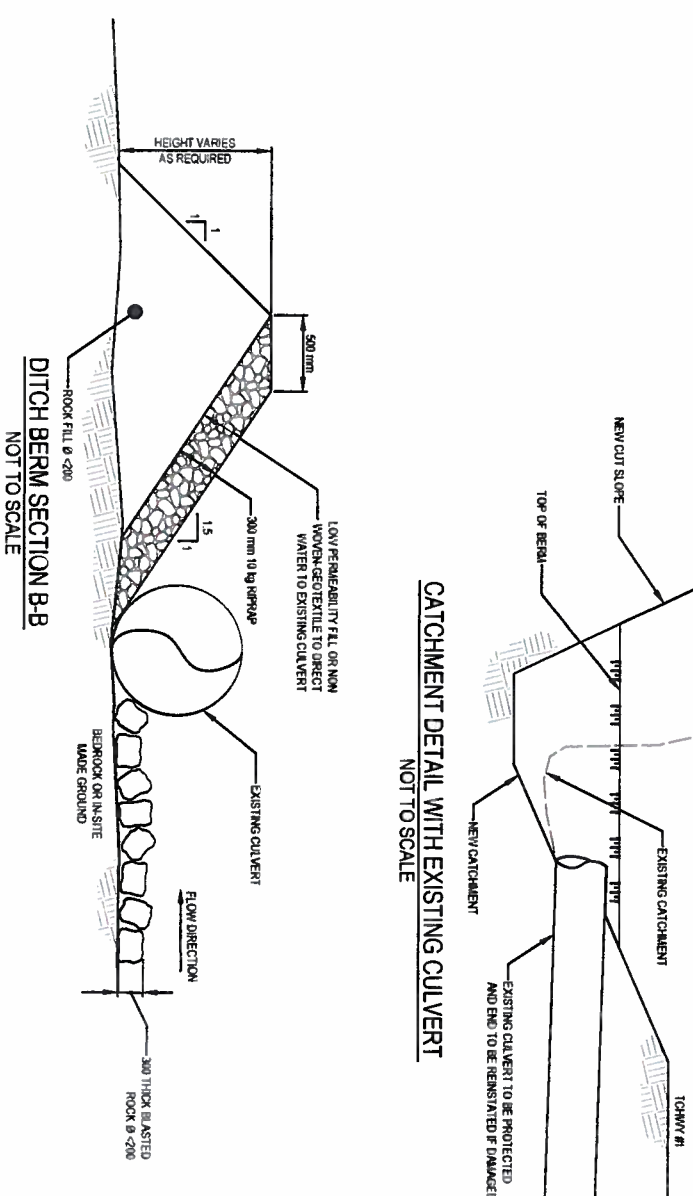
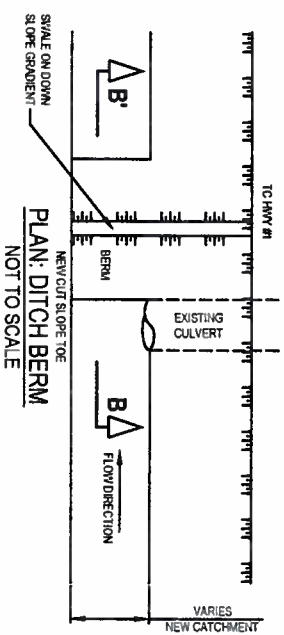
## CATCHMENT AND SLOPE DRAINAGE TYPICAL DETAILS

Project No./No. du projet	Sheet/Feuille	Revision no./ Lo Revision no.
V13403095-01	2015-02-2003	00



**DRAIN HOLE DETAIL &  
TYPICAL CATCHMENT DETAIL.**  
**NOT TO SCALE**

- GENERAL NOTES:
1. BLASTED ROCK TO BE PLACED IN CATCHMENT LOOSELY TAMPAED WITH EXCAVATOR BUCKET.
  2. AT LOCATION OF WORKING CULVERTS, THESE SHOULD BE PROTECTED DURING COURSE OF THE WORK. IF DAMAGED ENDS SHOULD BE REPLACED AT THE DRAINAGE. A SHALE WILL BE CONSTRUCTED IN THE CATCHMENT TO ENSURE AT LOCATIONS OF LOW CREEK FLOW, DRAIN HOLES WILL BE INSTRUCTED TO CONTROL FLOW OF WATER DOWN SLOPE AS DIRECTED BY THE DEPARTMENT REPRESENTATIVE.
  - 3.



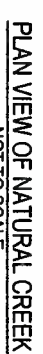


[illegible]

**KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING**

A.E.G. FRAPPELL  
# 38249  
STATE OF CALIFORNIA  
Professional Engineer  
EXPIRES 12/31/2015

Project No./No. du projet	Sheet/Feuille	Revision no./ Lo Revision no.
V13403095-01	2015-02-2004	00



1. GENERAL NOTES:
2. THE OUTSIDE EDGE OF THE ACCESS ROAD FORMS THE EDGE OF THE ROCK CUT.
3. THE 3 M SET BACK AT THE CREST IS SET FOR INSPECTION AND SAFETY
4. THE TOLERANCE ON THIS SET BACK IS  $\pm 0.5$  M.
5. ACCESS ROAD REMOVAL WILL OCCUR AT LOCATION WHERE THE OLD EXISTING HIGHWAY IS USED TO GET TO SLOPES (Eg. 115669 TO 157850 AND 161150 TO 116300).
6. SLOPES SHALL BE RECONSTRUCTED TO MEET THE DESIGN CRITERIA FOR EROSION PROTECTION.
7. LARGER TREES SAVED FROM STRIPPING WILL BE REPOSITIONED FOR LANDSCAPE PURPOSES.
8. DRILL OFFSETS SHALL BE REMOVED.
9. OVERBURDEN SLOPES SHALL BE SLOPED AT 2H:1V UNLESS DIRECTED BY THE DEPARTMENTAL REPRESENTATIVE

NOTE: NONE ANTICIPATED AT PRESENT, HOWEVER IF EPHEMERAL CREEKS ARE ENCOUNTERED THIS DETAIL WILL BE USED TO DRAW FROM THE PRIME COST SUM



ISSUED FOR TENDER

00	24/04/15	ISSUED FOR TENDER	AS/	TT	AF				
Revision/	Date/Date	Description/Description	DES	OWN	CHK				

Project title/Titre du projet

YOHO NATIONAL PARK  
BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

Designed by/Conçeur par  
A. FRAPELLE / E. YANG

Drawn by/Dessiné par  
T. TAKEDA

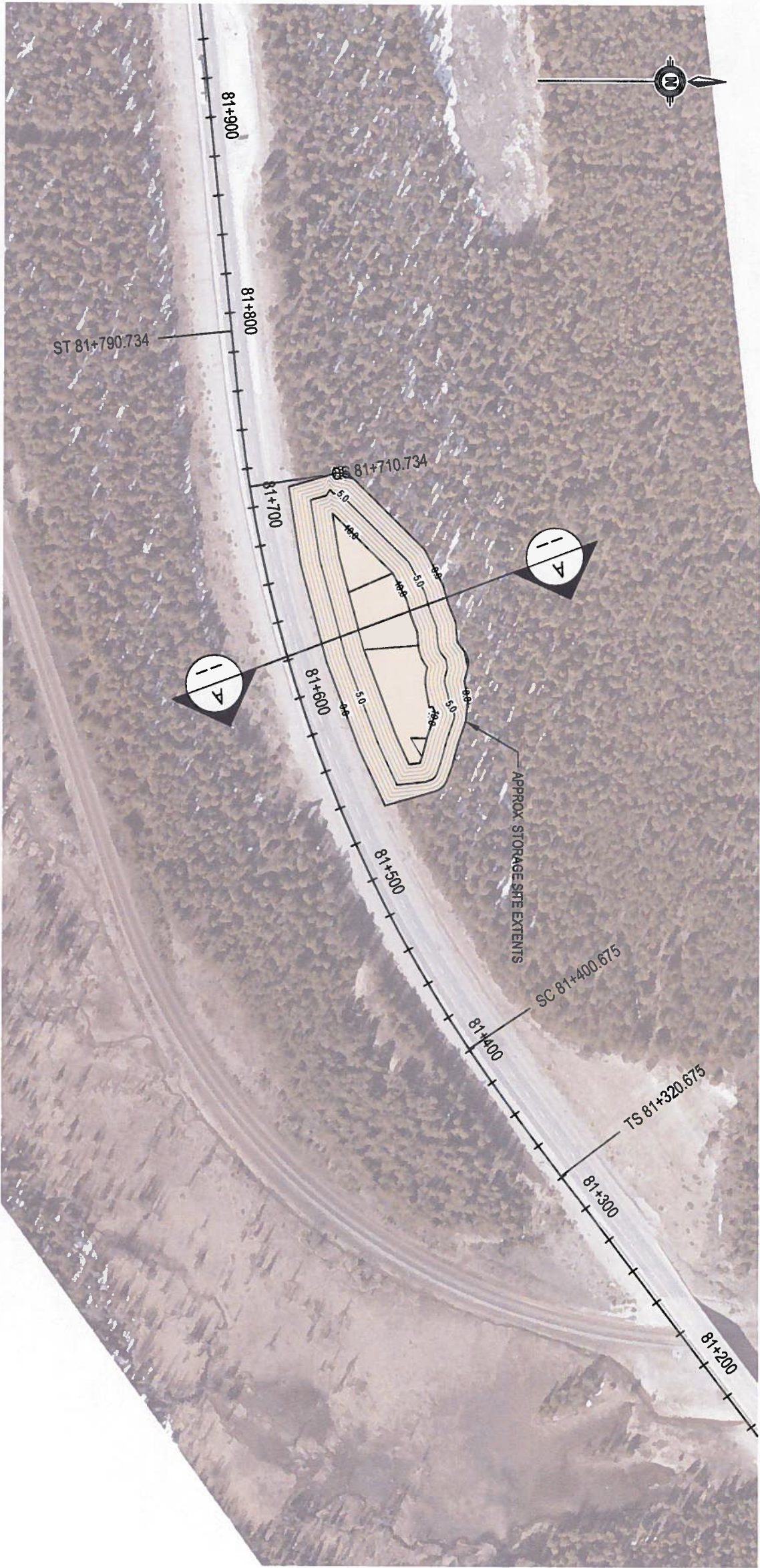


Client/Client  
PARKS CANADA AGENCY

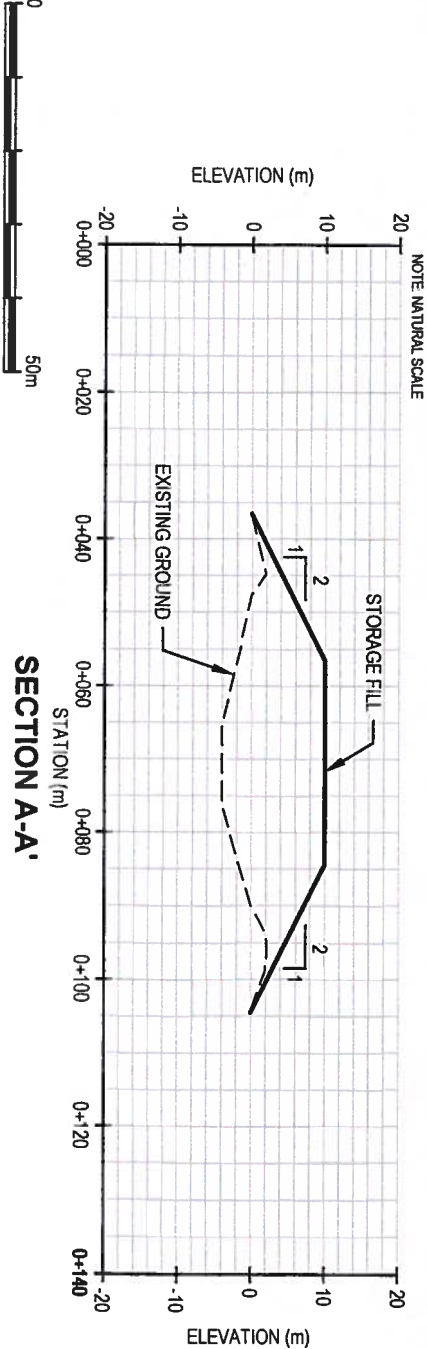
Drawing title/Titre du dessin

PLAN / PROFILE  
AB / BC BORDER STORAGE SITE

Project No./No. du projet V13403095-01	Sheet/Feuille 2015-02-3001	Revision No./ La révision No. 00
---	-------------------------------	--



PLAN - AB / BC BORDER - STORAGE SITE 1



QUANTITIES:

1. 2D SURFACE AREA OF STORAGE (AT BASE) = 9,538 m<sup>2</sup>
2. 3D SURFACE AREA OF STORAGE (AT BASE) = 10,353 m<sup>2</sup>
3. FILL VOLUME = 65,416 m<sup>3</sup>

NOTE:

1. CONFIGURATIONS AND DISPOSAL QUANTITIES ARE APPROXIMATE AND WILL BE CONFIRMED THROUGH ADDITIONAL SURVEY BEFORE WORK STARTS. ALL ELEVATIONS SHOWN ON THIS DRAWING ARE RELATIVE
2. STRIP ORGANICS AND TOPSOIL PRIOR TO PLACING MATERIAL





YHO NATIONAL PARK  
BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

Designed by/Conceded por  
A. FRAPPELL / E. YANG

Drawn by/Trasada por  
T. TAKEDA

**A. FRAPPELL / E. YANG**

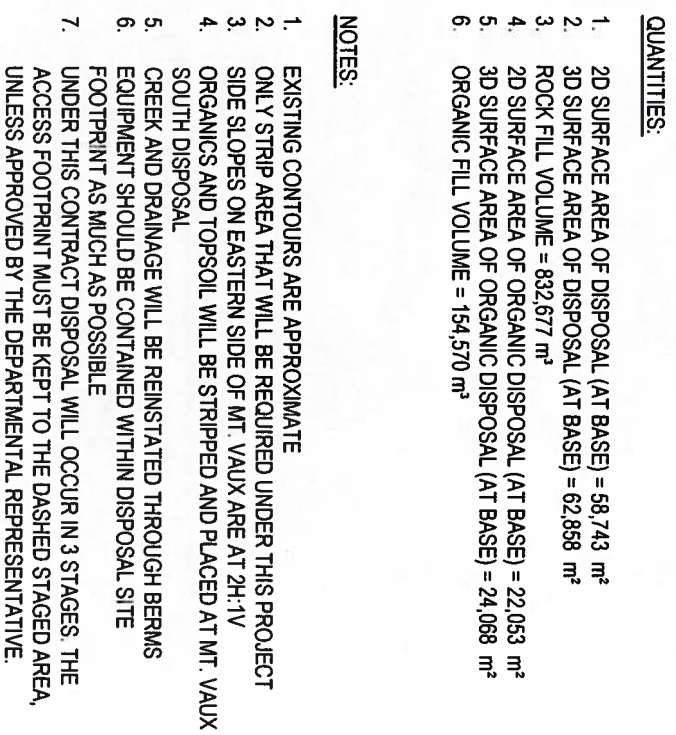
---

Drawn by / Dessiné par  
**T. TAKEDA**

Client/client  
**PARKS CANADA AGENCY**

V13403095-01	2015-02-3002	00
--------------	--------------	----

V13403095-01	2015-02-3002	00
--------------	--------------	----



1. EXISTING CONTOURS ARE APPROXIMATE
2. ONLY STRIP AREA THAT WILL BE REQUIRED UNDER THIS PROJECT
3. SIDE SLOPES ON EASTERN SIDE OF MT. VAUX ARE AT 2H:1V
4. ORGANICS AND TOPSOIL WILL BE STRIPPED AND PLACED AT MT. VAUX SOUTH DISPOSAL
5. CREEK AND DRAINAGE WILL BE REINSTATED THROUGH BERMS
6. EQUIPMENT SHOULD BE CONTAINED WITHIN DISPOSAL SITE
7. FOOTPRINT AS MUCH AS POSSIBLE

UNDER THIS CONTRACT DISPOSAL WILL OCCUR IN 3 STAGES. THE ACCESS FOOTPRINT MUST BE KEPT TO THE DASHED STAGED AREA, UNLESS APPROVED BY THE DEPARTMENTAL REPRESENTATIVE.





ISSUED FOR TENDER



00	24/04/15	ISSUED FOR TENDER	AF	TT	AF
Revision / Révision	Date/Date	Description/Description	DES	DWN	CHK

Project title/Titre du projet

YOHO NATIONAL PARK  
BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

Designed by/Conçeu par  
A. FRAPPELL / E. YANG  
Drawn by/ Dessiné par  
T. TAKEDA

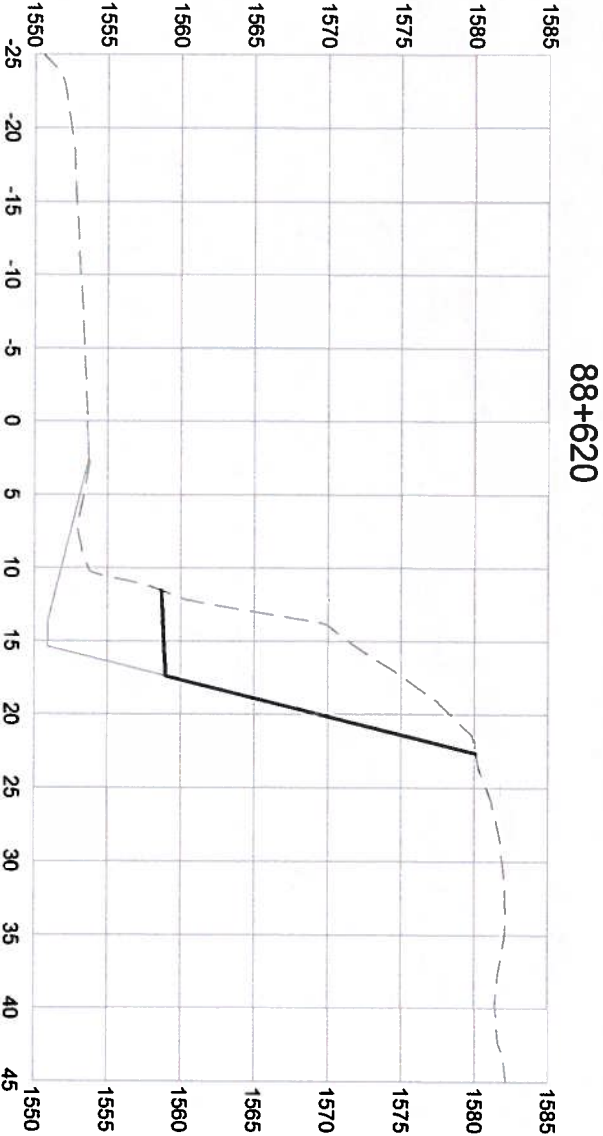
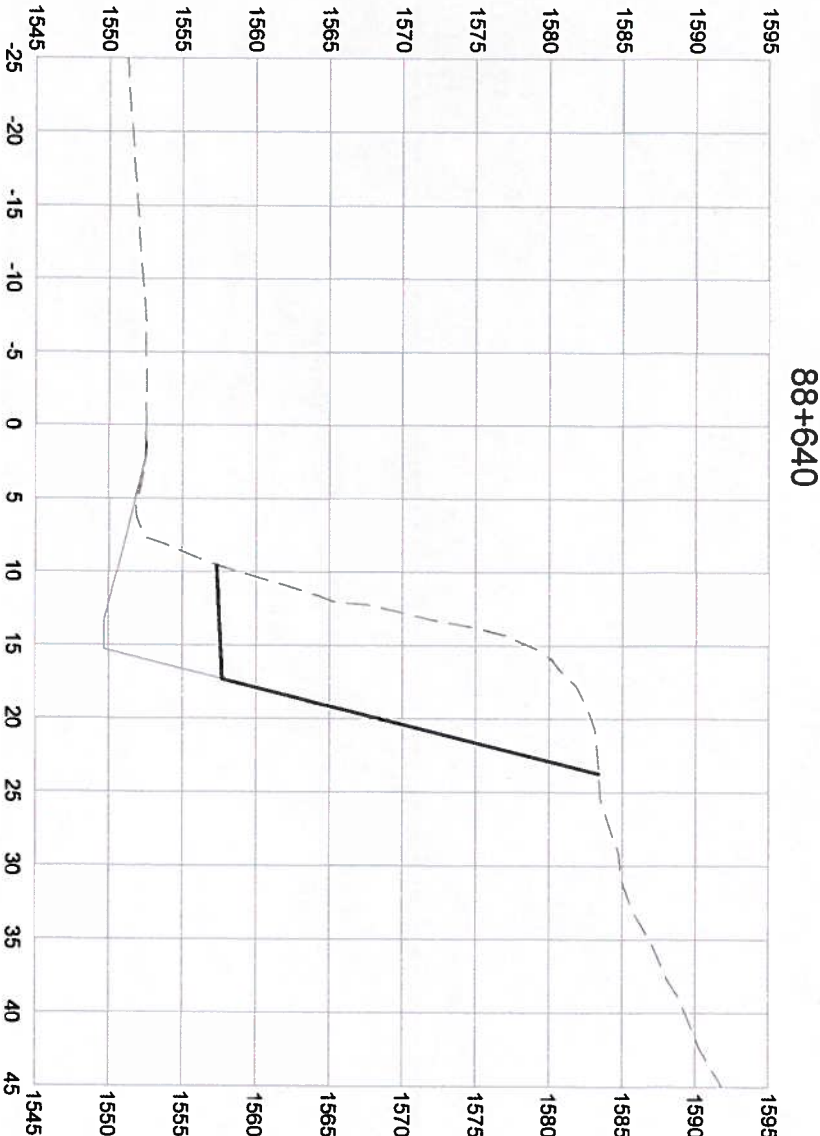
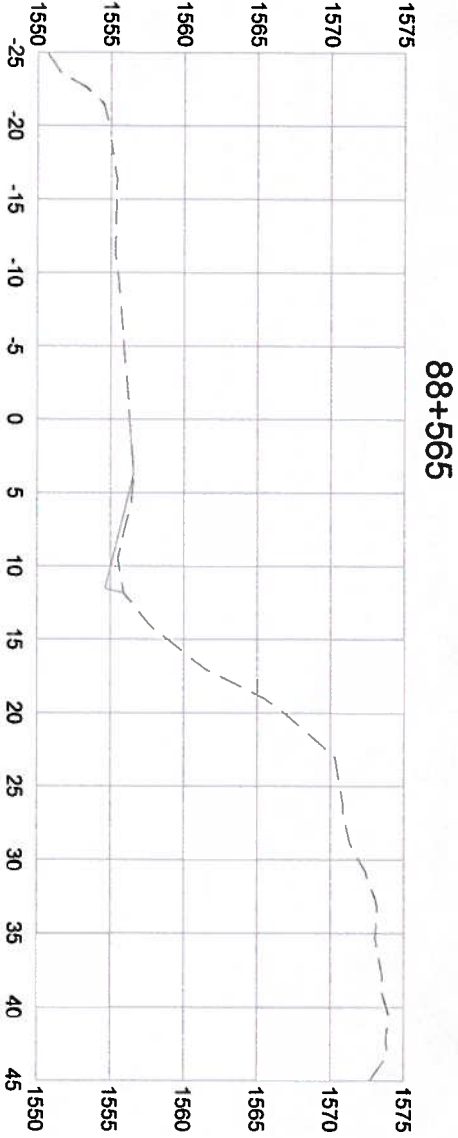
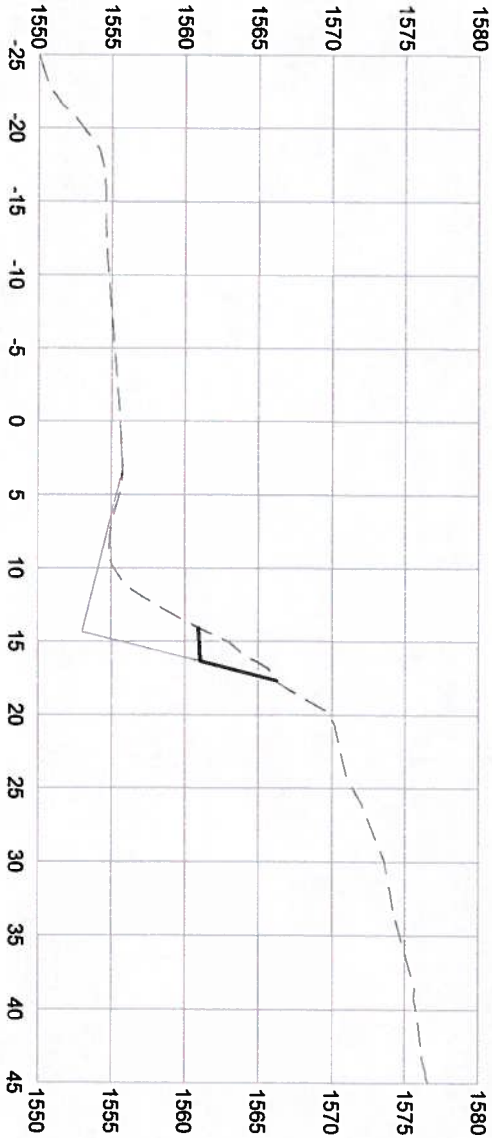
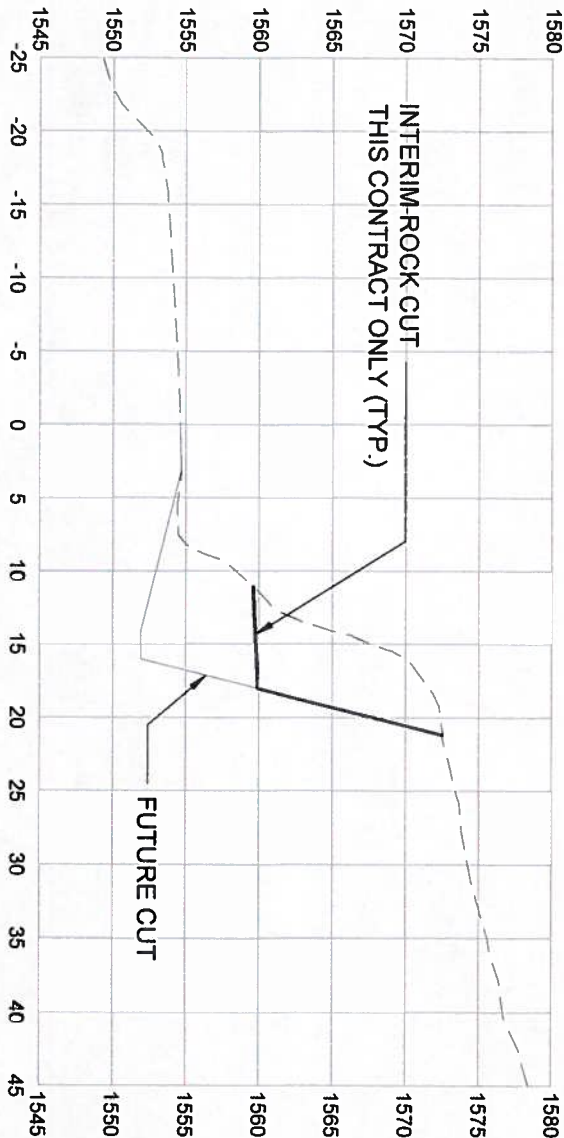


Client/Client  
PARKS CANADA AGENCY

Drawing title/Titre du dessin

SHERBROOKE ROCK SLOPE  
CROSS SECTIONS  
STA. 88+565 TO 88+640

Project No./No. du projet	Sheet/Feuille	Revision no./ Le Révision no.
V13403096-01	2015-02-4001	00







ISSUED FOR TENDER



00	24/04/15	ISSUED FOR TENDER	AF	TT	AF
Revised/	Date/Date	Description/Description	AF	TT	AF
Revised/	Date/Date	Description/Description	DTS	DWN	CHK

YOHO NATIONAL PARK  
BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

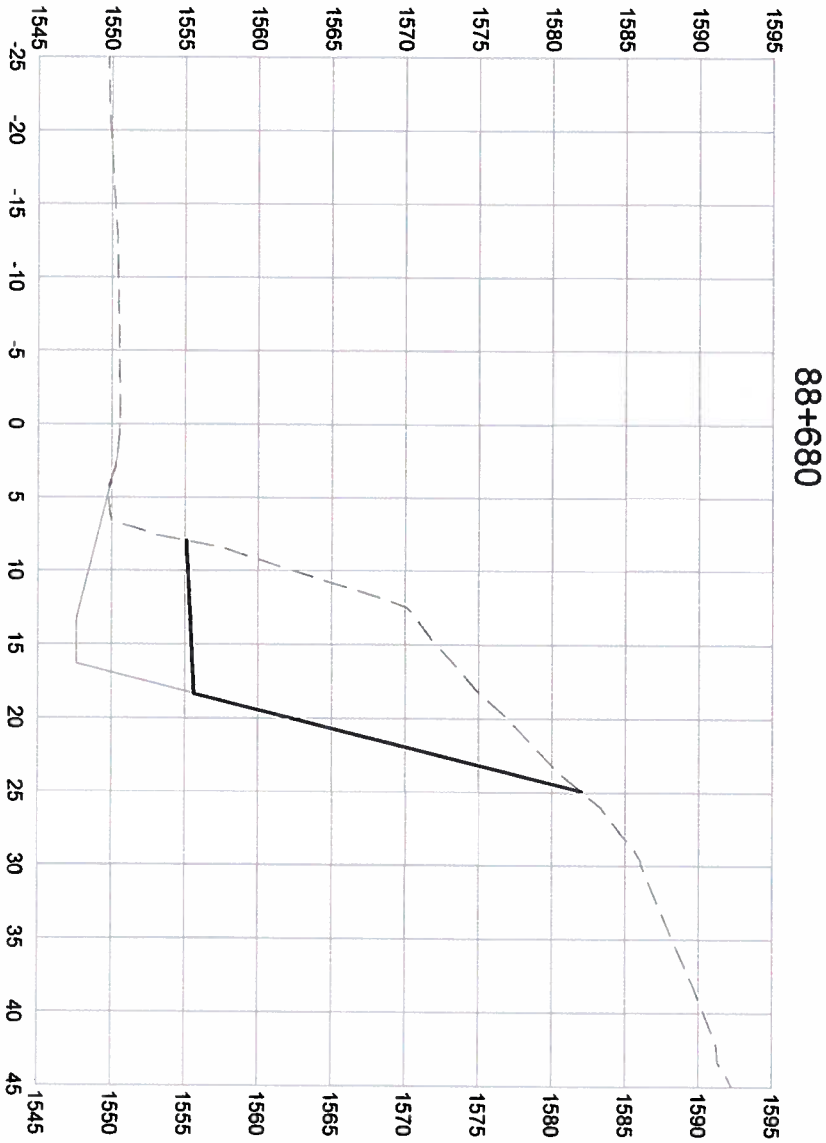
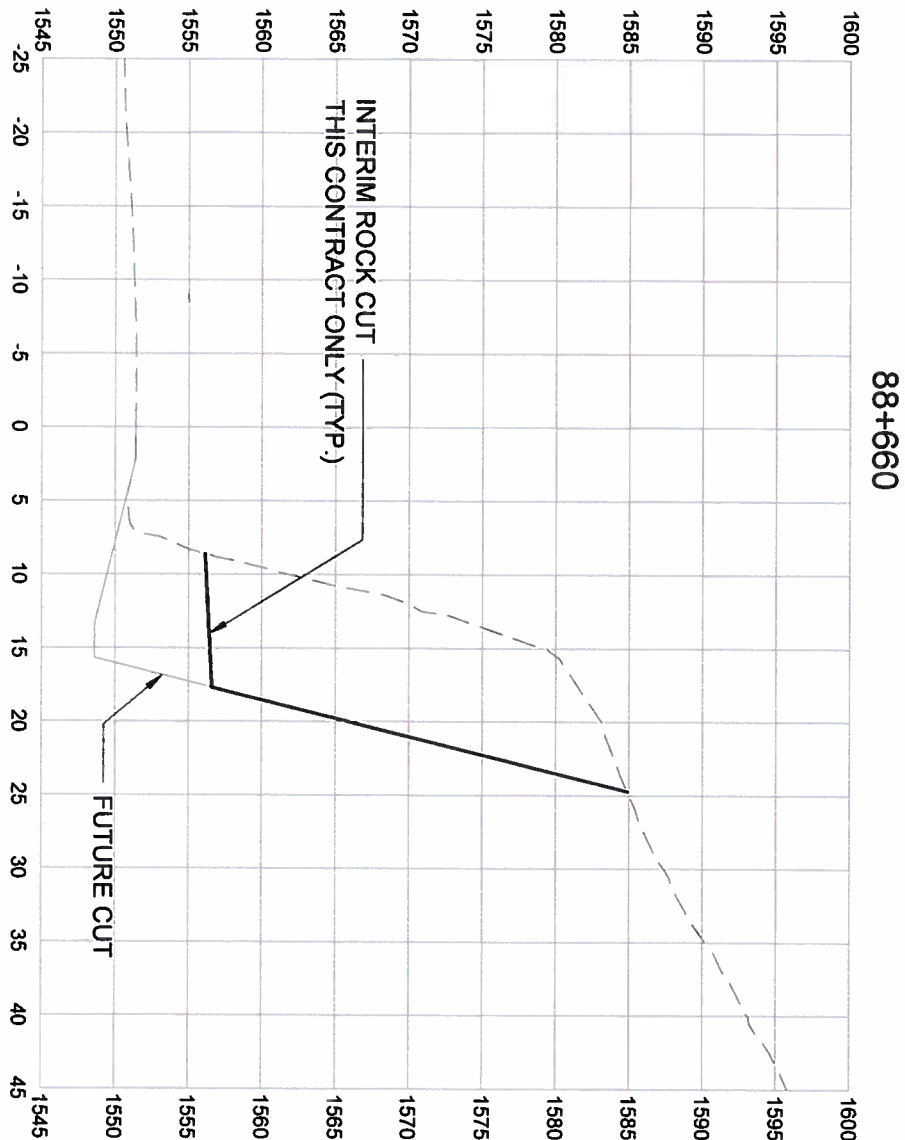
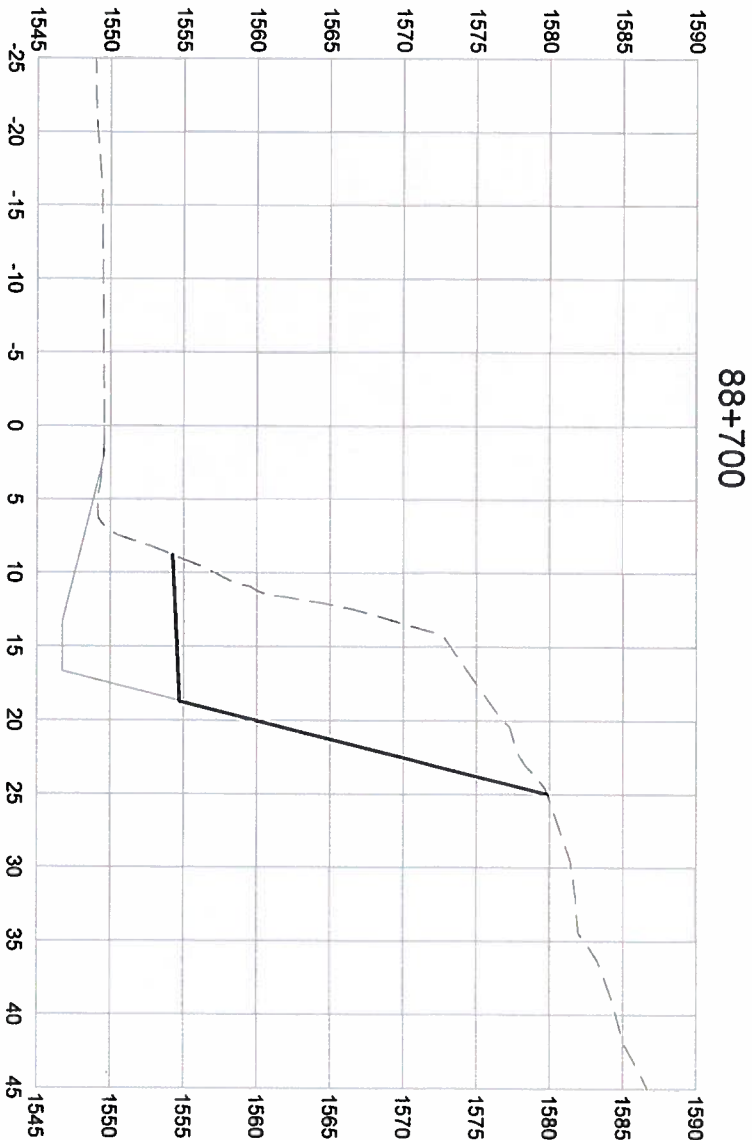
Designed by/Concepé par  
A. FRAPPELL / E. YANG  
Drawn by/Dessiné par  
T. TAKEDA



Client/Client  
PARKS CANADA AGENCY

Drawing title/Titre du dessin  
SHERBROOKE ROCK SLOPE  
CROSS SECTIONS  
STA. 88+660 TO 88+700

Project No./No. du projet V13403095-01	Sheet/Feuille 2015-02-4002	Revision no./ La Révision no. 00
---	-------------------------------	--







ISSUED FOR TENDER



00	24/04/15	ISSUED FOR TENDER	AF	TT	AF
Revisio/	Date/Date	Description/Description	DTS	DWN	CHK

YOHO NATIONAL PARK  
BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

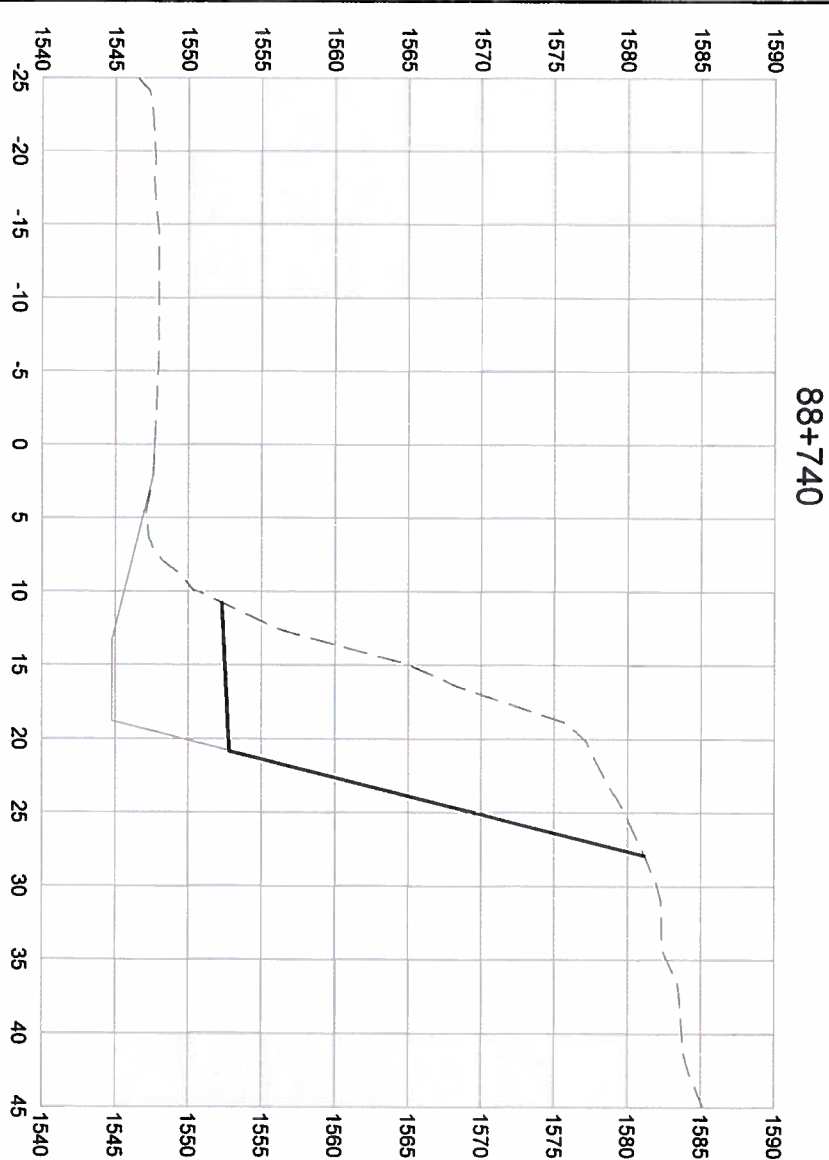
Designed by/Concept par  
A. FRAPPELL / E. YANG  
Drawn by/Dessiné par  
T. TAKEDA



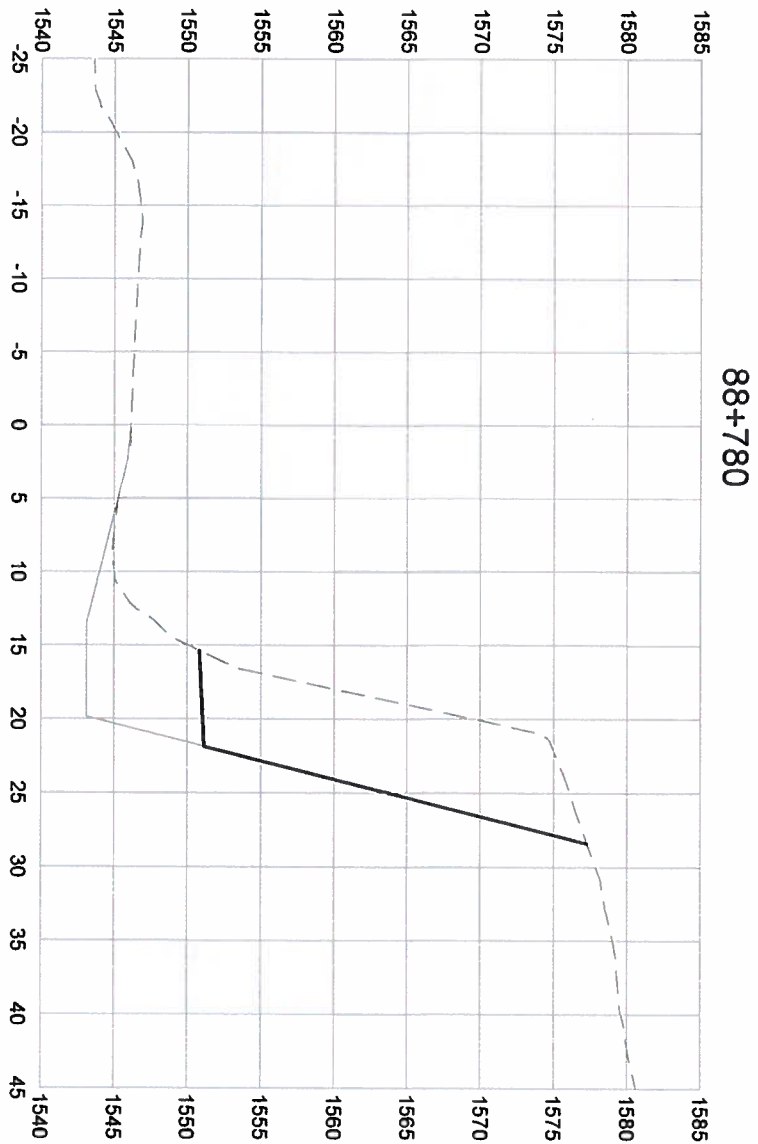
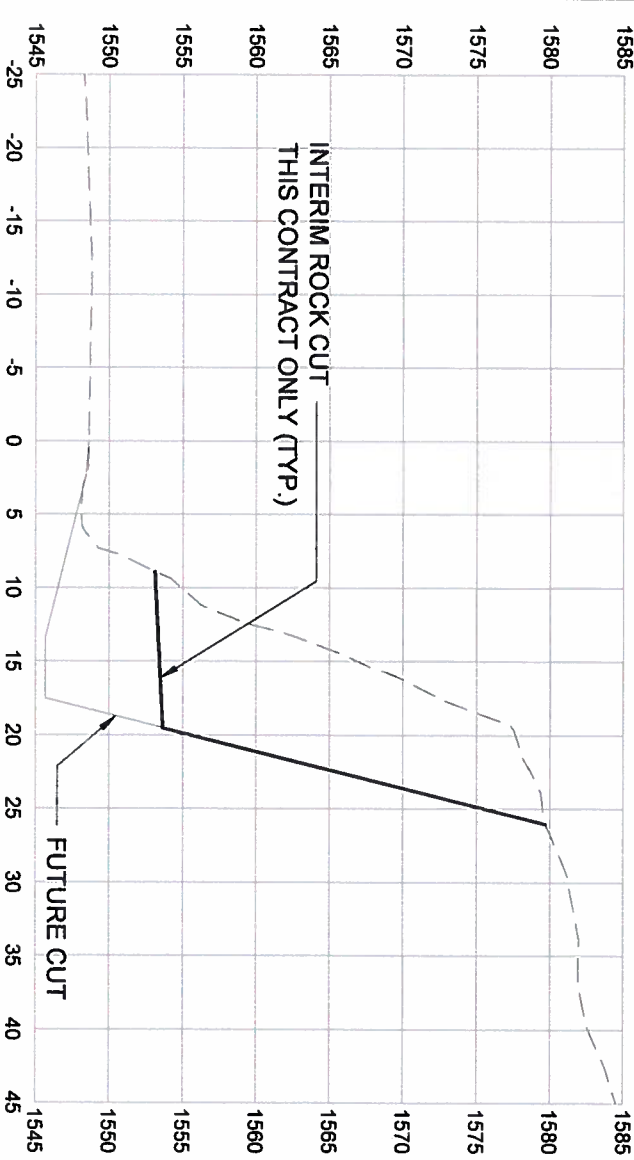
Client/Client  
PARKS CANADA AGENCY

Drawing title/Titre du dessin  
SHERBROOKE ROCK SLOPE  
CROSS SECTIONS  
STA. 88+720 TO 88+780

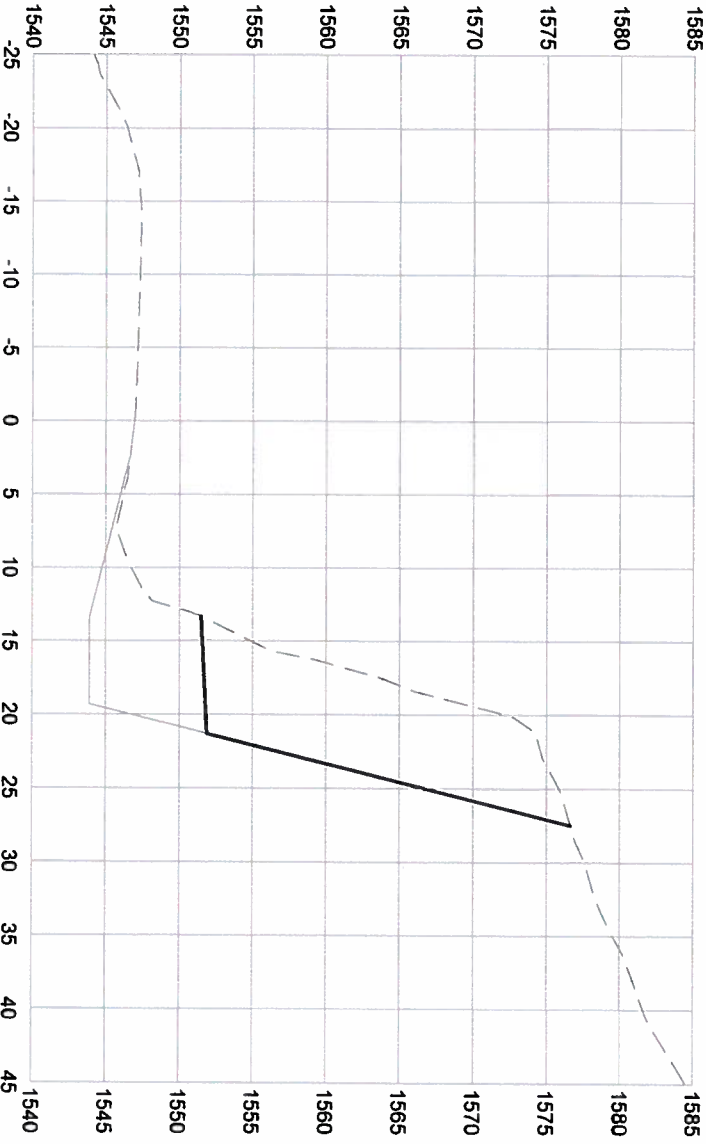
Project No./No. du projet V13403096-01	Sheet /Feuille 2015-02-4003	Revision no./ La Révision no. 00
---	--------------------------------	--



88+720



88+760







**ISSUED FOR TENDER**

[illegible]

Project title/Titre du projet

**YOHO NATIONAL PARK  
BRITISH COLUMBIA**

**KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING**

Designed by/Concept par  
**A. FRAPPELL / E. YANG**

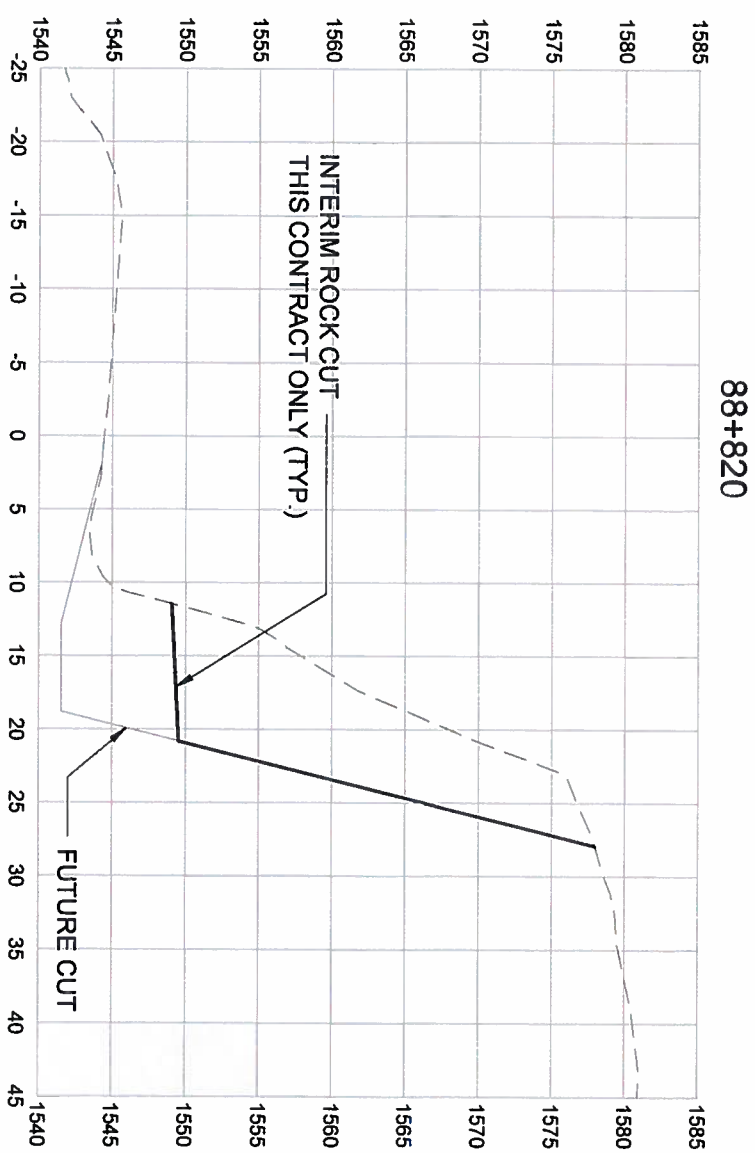
Drawn by/Dessiné par  
**T. TAKEDA**



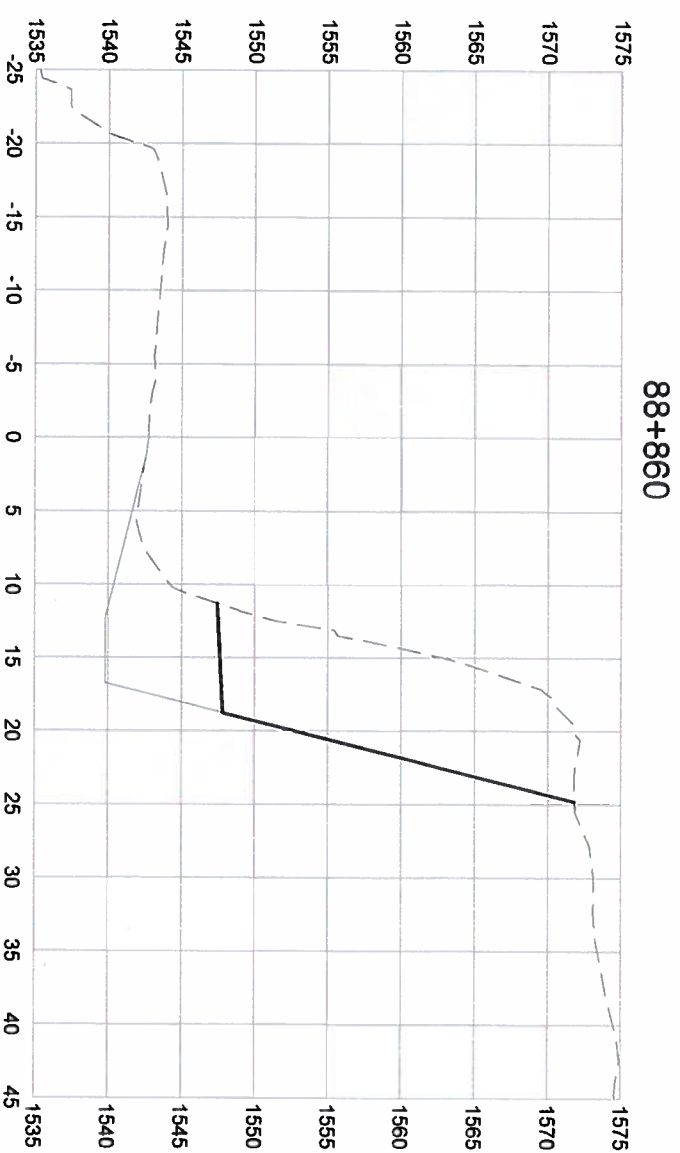
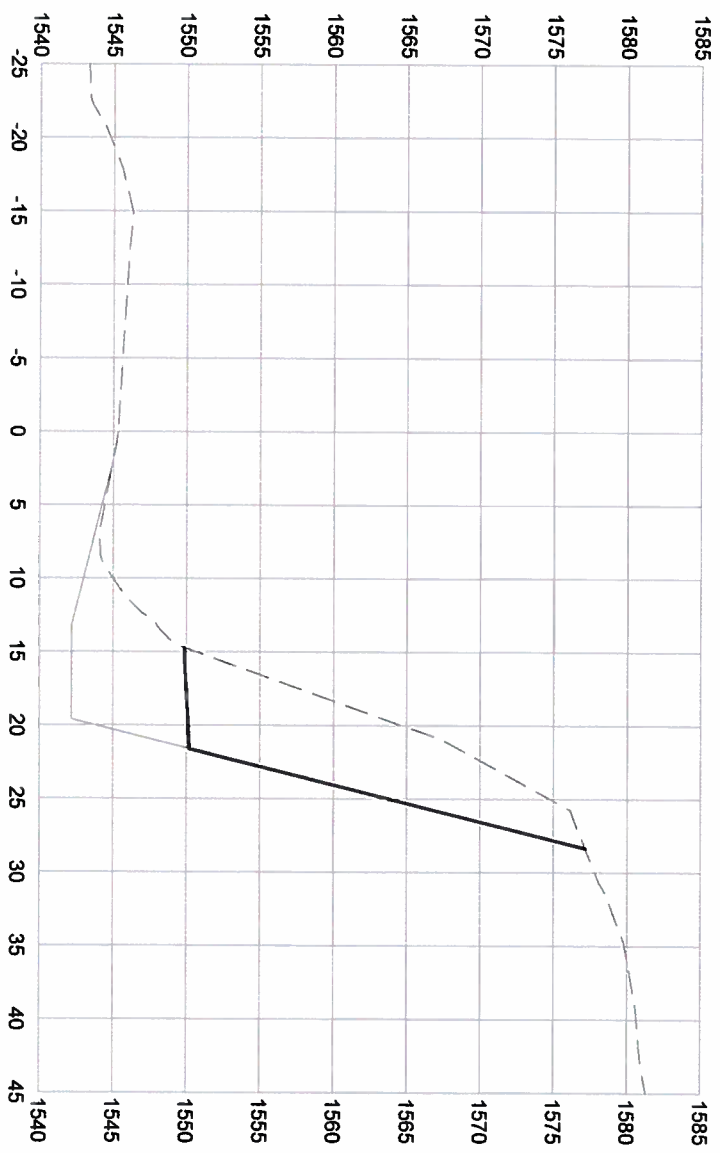
Client/client  
**PARKS CANADA AGENCY**

Drawing title/Titre du dessin

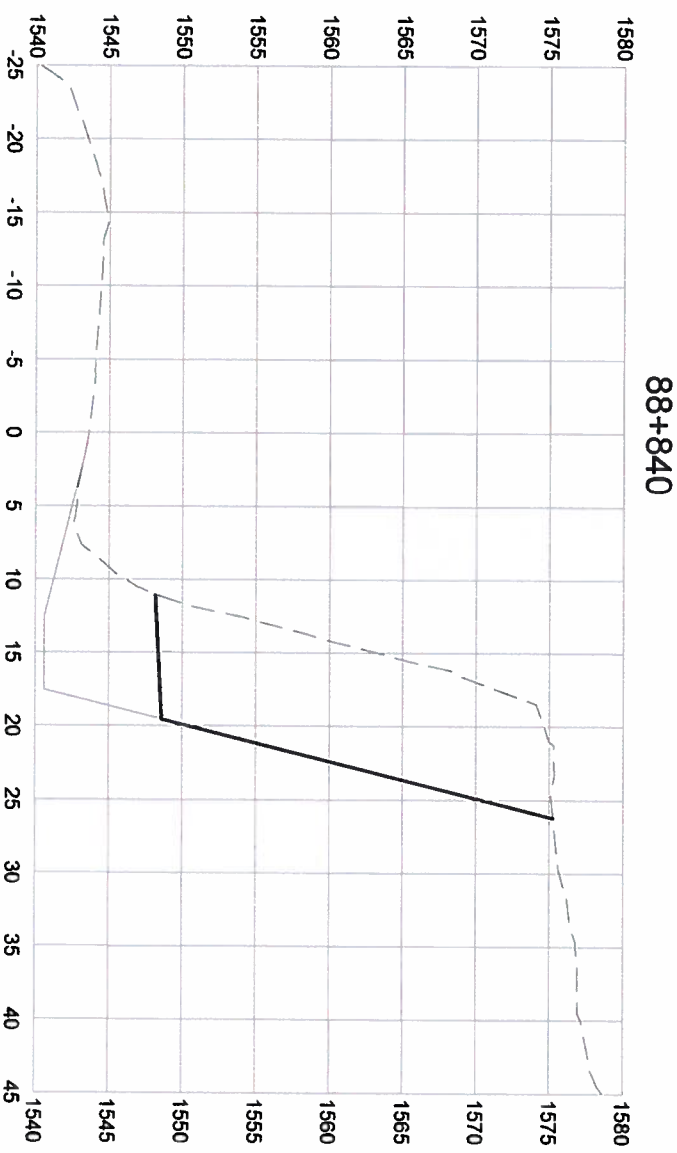
**SHERBROOKE ROCK SLOPE  
CROSS SECTIONS  
STA. 88+800 TO 88+860**



008+808



88+860



88+840





ISSUED FOR TENDER



00	24/04/15	ISSUED FOR TENDER	AF	TT	AF
Reviser/	Date/Date	Description	DES	DWN	CHK

Project title/ titre du projet

YOHO NATIONAL PARK  
BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

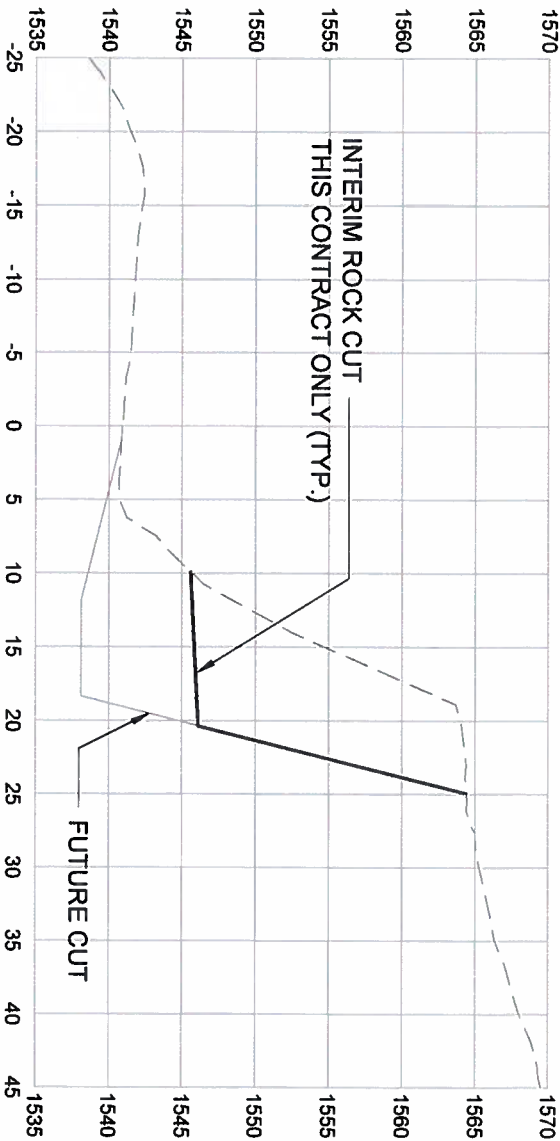
Designed by/Concepé par  
A. FRAPPELL / E. YANG  
Drawn by/Dessiné par  
T. TAKEDA



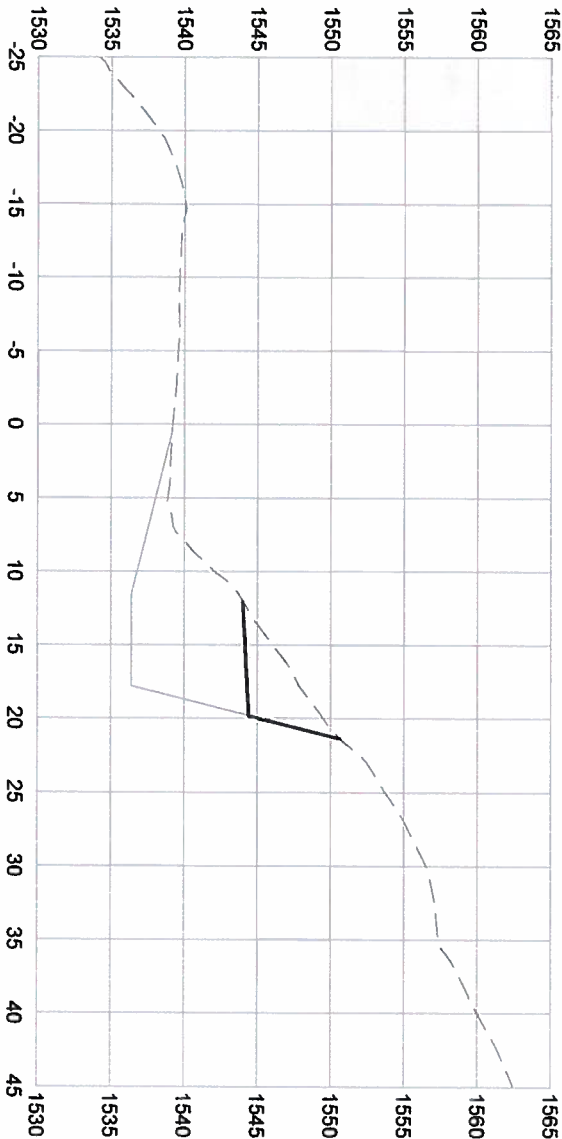
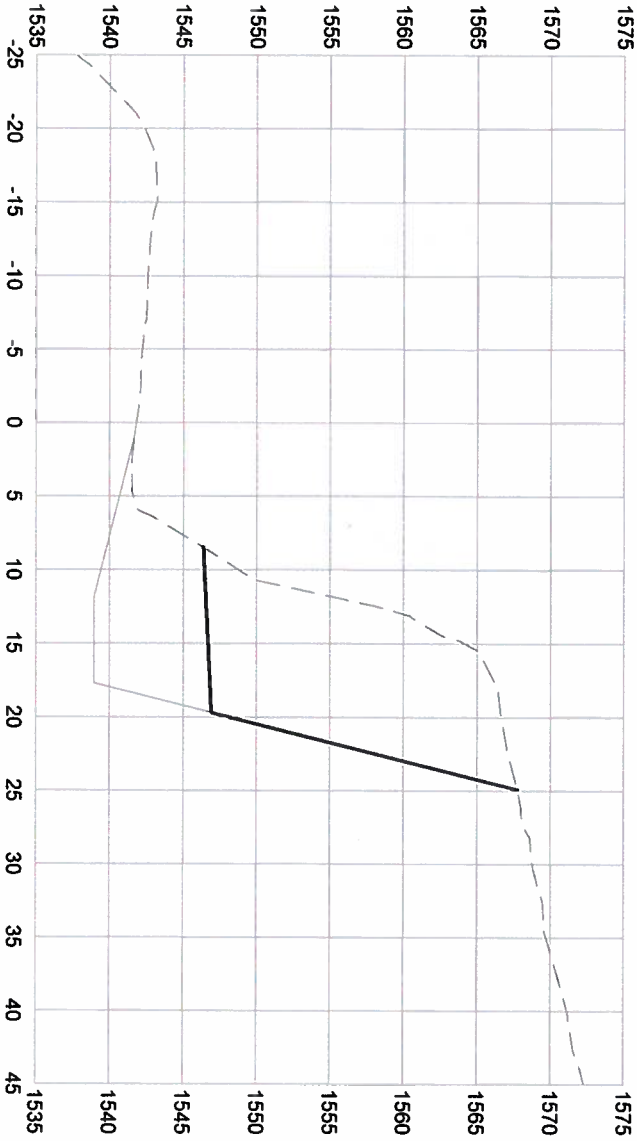
Client/Client  
PARKS CANADA AGENCY

Drawing title/ titre du dessin  
SHERBROOKE ROCK SLOPE  
CROSS SECTIONS  
STA. 88+880 TO 88+940

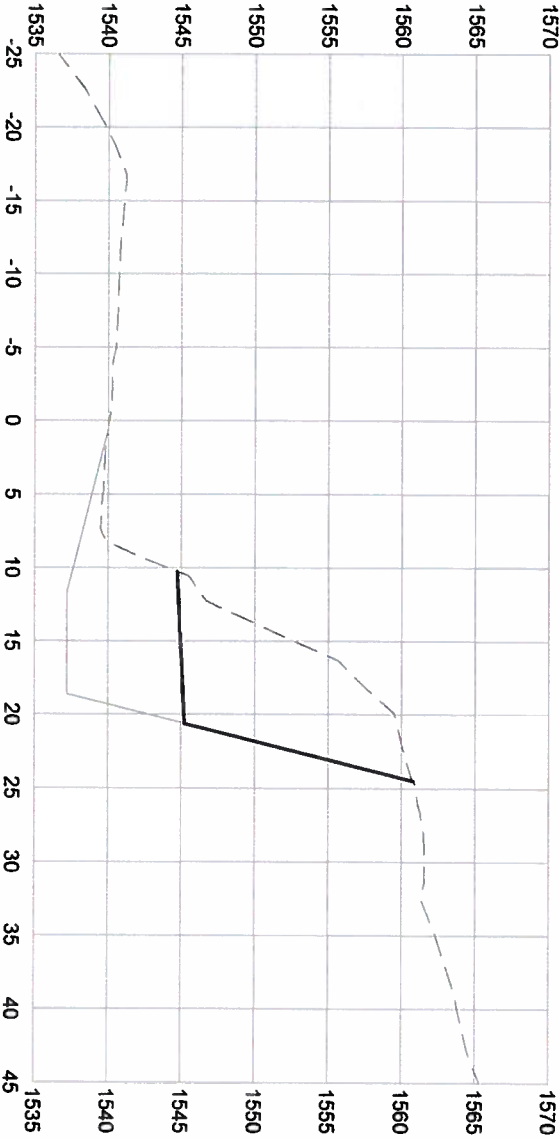
Project No./No. du projet	Sheet/Feuille	Revision no./ Lo Révision no.
V13403095-01	2015-02-4005	00



88+880



88+920







ISSUED FOR TENDER



00	24/04/15	ISSUED FOR TENDER	AF	TT	AF
Revision /		Description / Description	DES	DWN	CHK
Project title / Titre du projet					

YOHO NATIONAL PARK  
BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

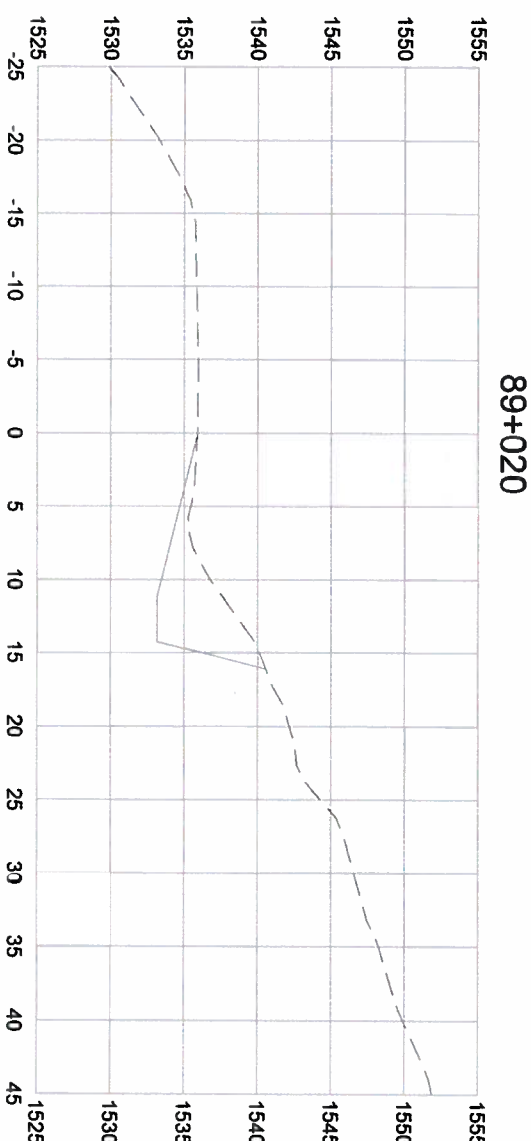
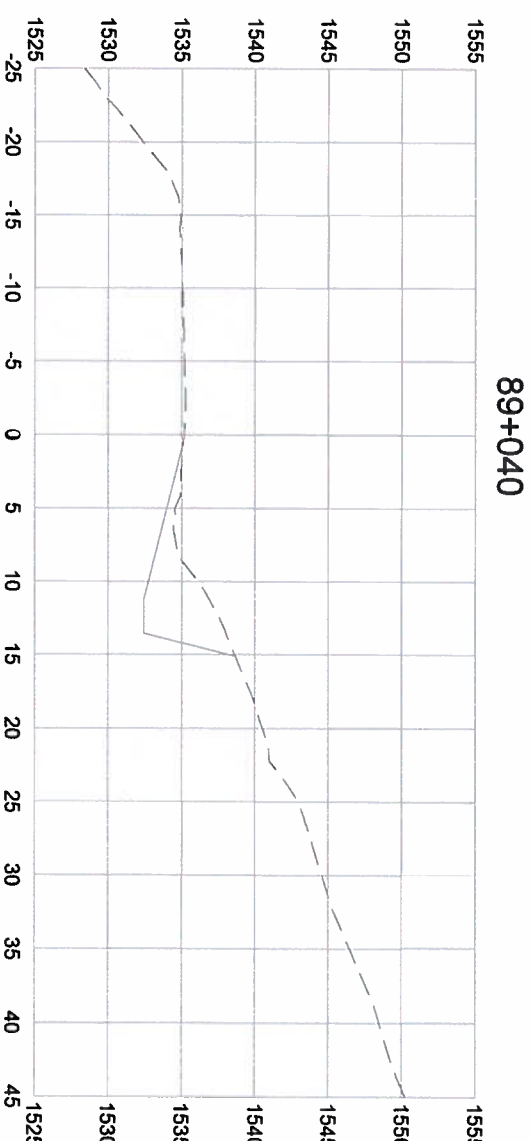
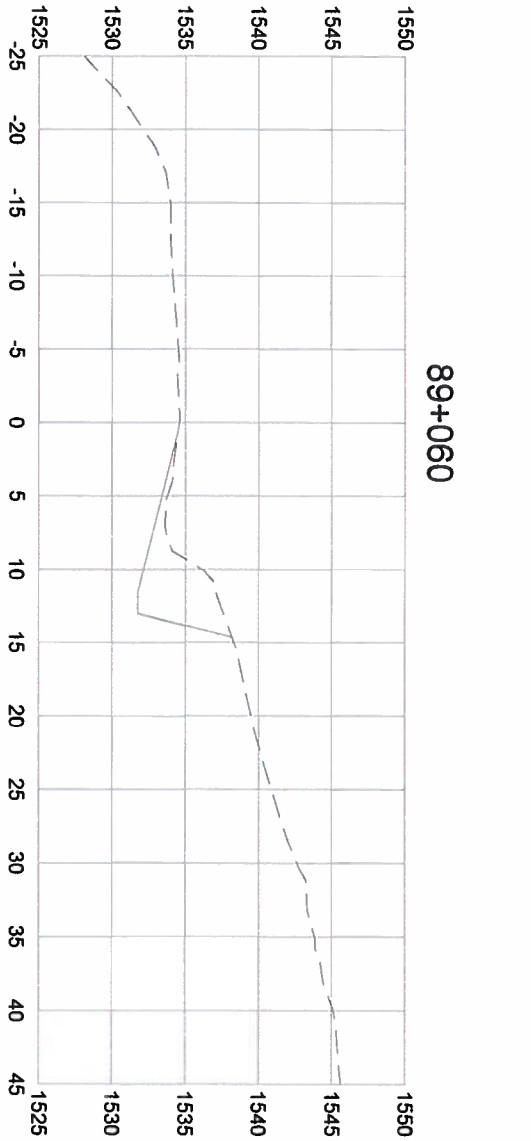
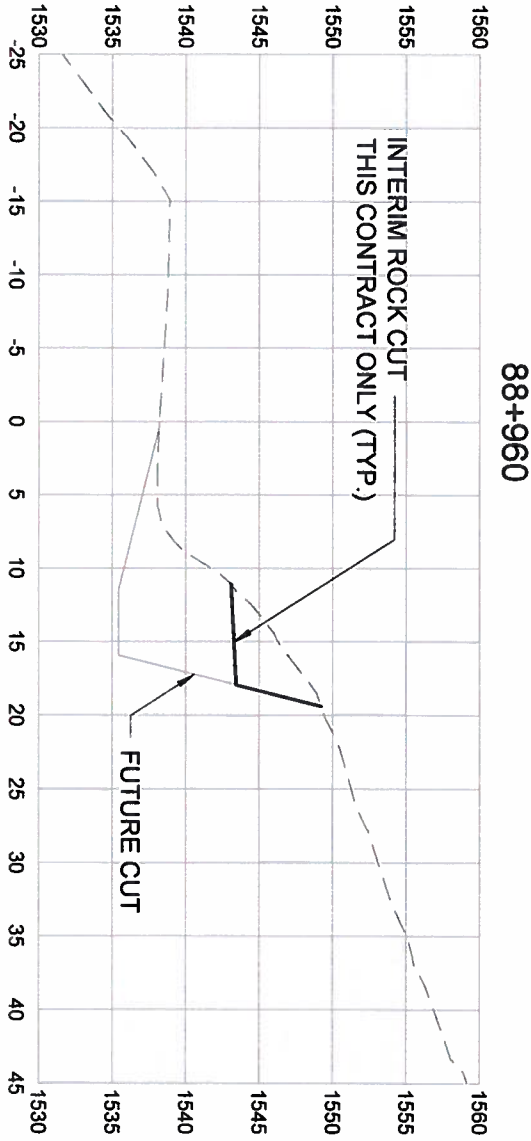
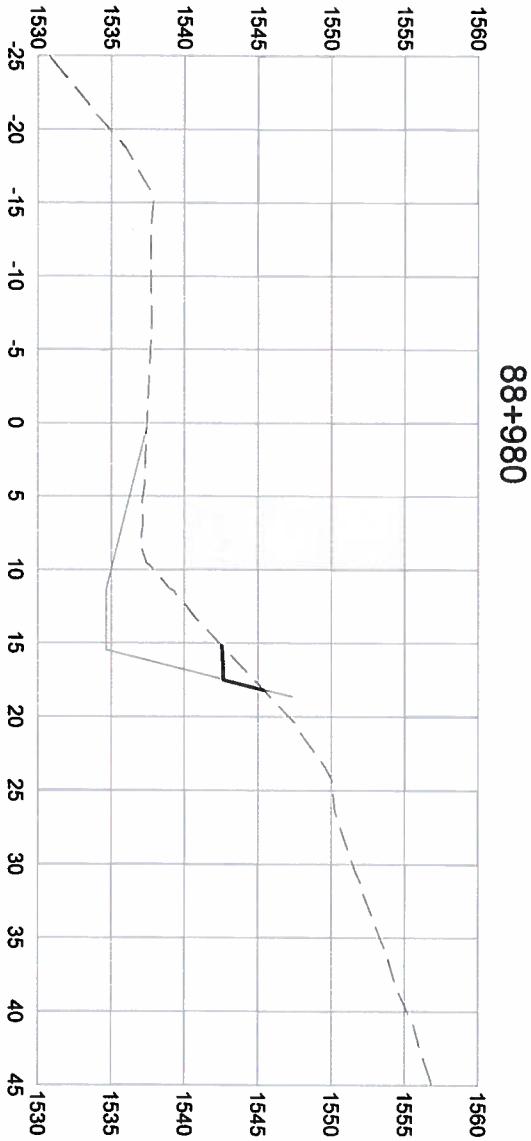
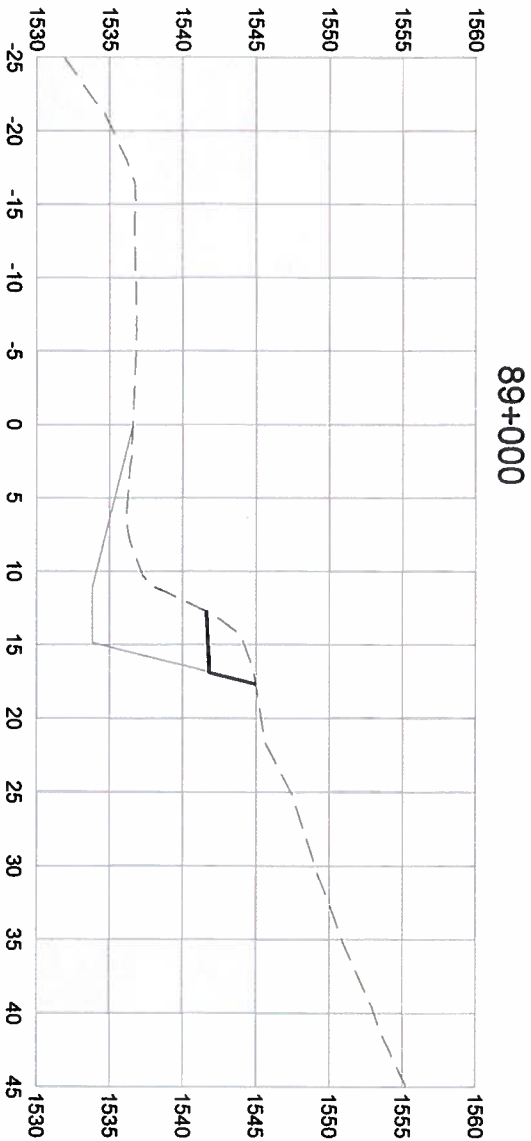
Designed by/Conçepé par  
A. FRAPPELL / E. YANG  
Drawn by/Dessiné par  
T. TAKEDA



Client/Client  
PARKS CANADA AGENCY

Drawing title/Titre du dessin  
SHERBROOKE ROCK SLOPE  
CROSS SECTIONS  
STA. 88+960 TO 89+060

Project No./No. du projet	Sheet/Feuille	Revision no./ La Révision no.
V13403096-01	2015-02-4006	00





ISSUED FOR TENDER



00	24/04/15	ISSUED FOR TENDER	AF	TT	AF	
Revision / Révision	Date/Date	Description/Description	AF EV	TT DOWN	AF CHG	

Project title/Titre du projet

YOHO NATIONAL PARK  
BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

Designed by/Conçue par  
A. FRAPPELL / E. YANG

Drawn by/Dessiné par  
T. TAKEDA



Client/Client  
PARKS CANADA AGENCY

Drawing title/Titre du dessin

LOWER SHERBROOKE  
ROCK SLOPE  
CROSS SECTIONS  
STA. 89+195 TO 89+300

Project No./No. du projet

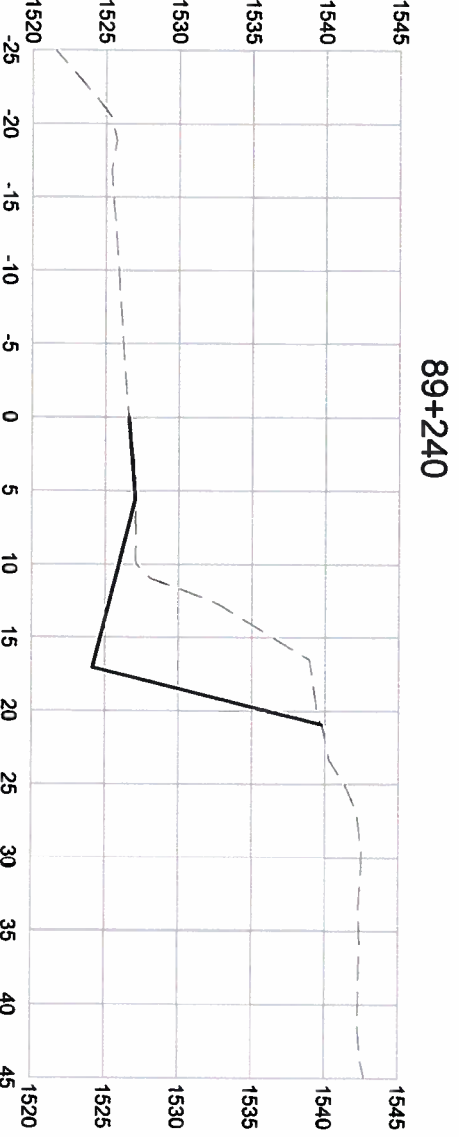
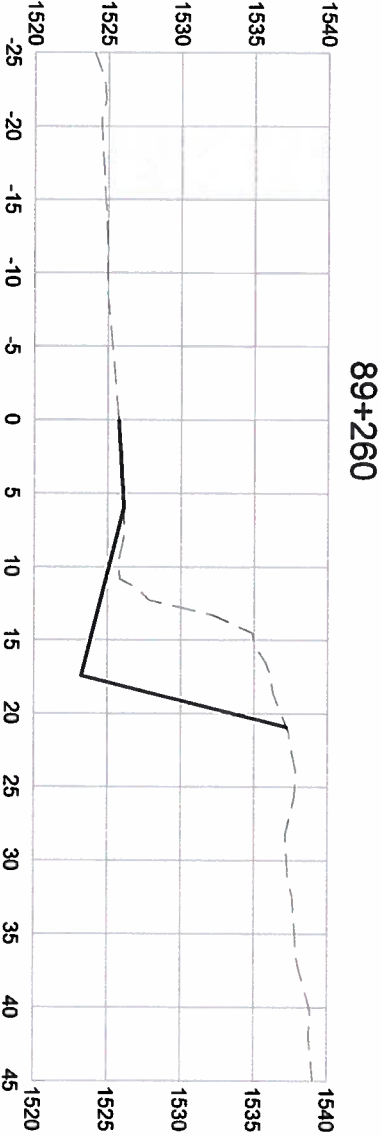
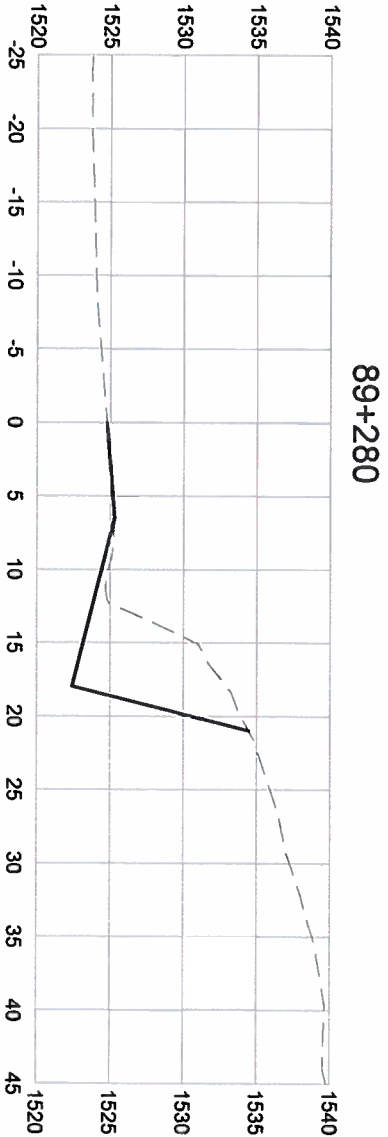
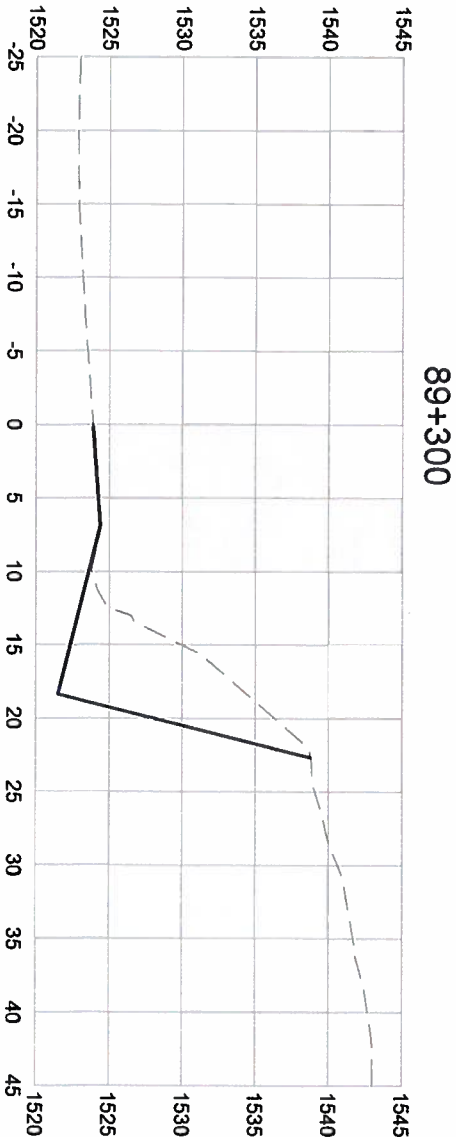
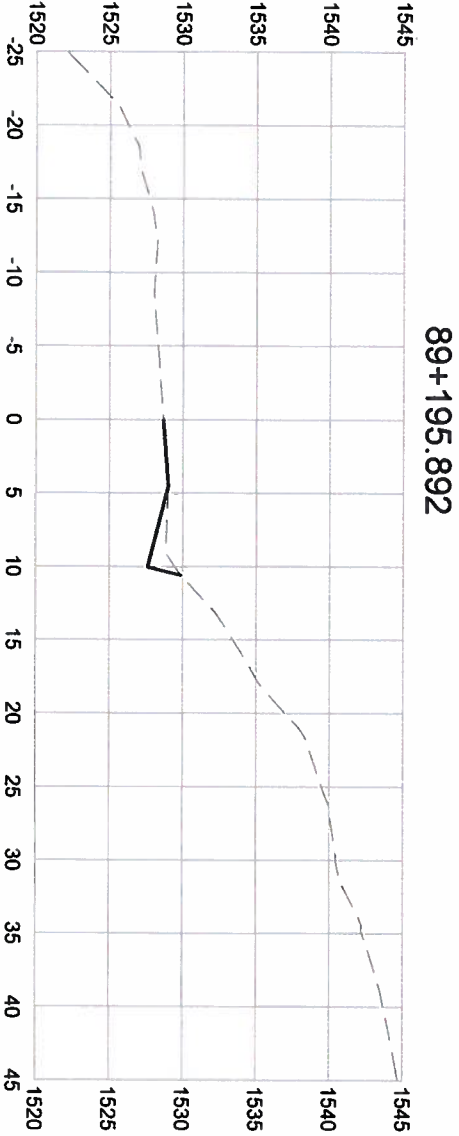
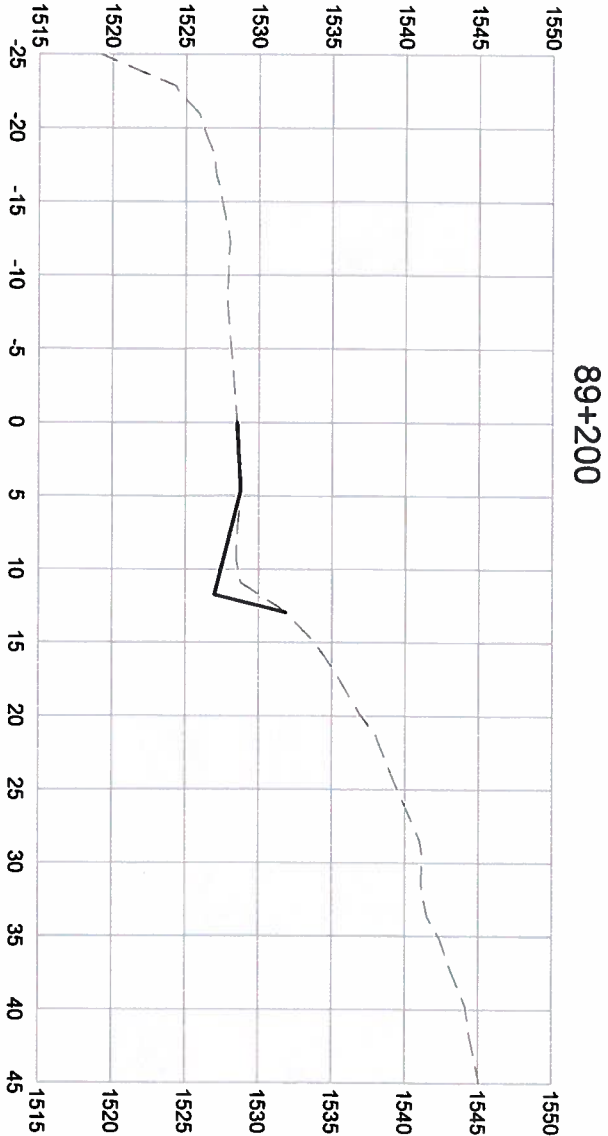
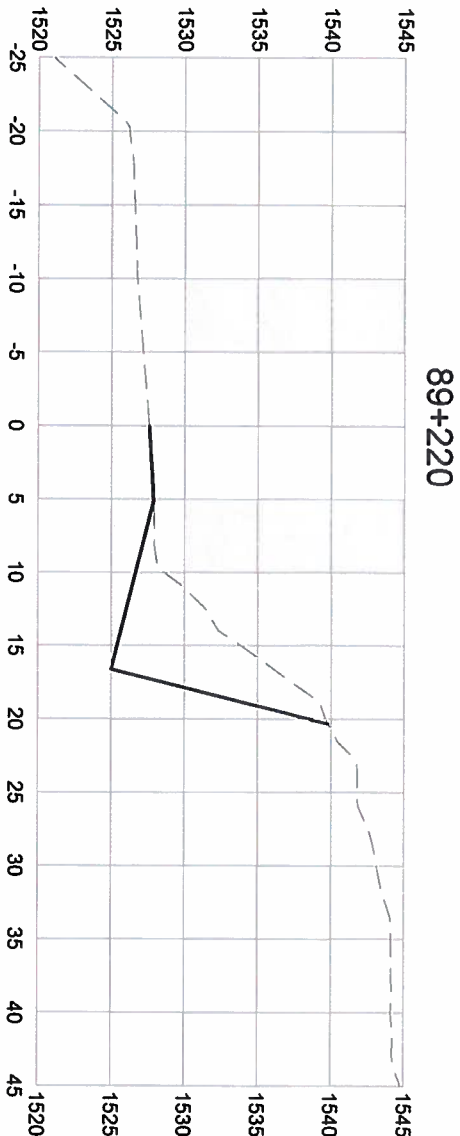
Sheet/Feuille

Revision no./  
Le Révision no.

V13403095-01

2015-02-4007

00







**ISSUED FOR TENDER**

[illegible]

Project title/Titre du projet:

**YOHO NATIONAL PARK  
BRITISH COLUMBIA**

**KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING**

Designed by/Concept por  
**A. FRAPPELL / E. YANG**

**T. TAKEDA**

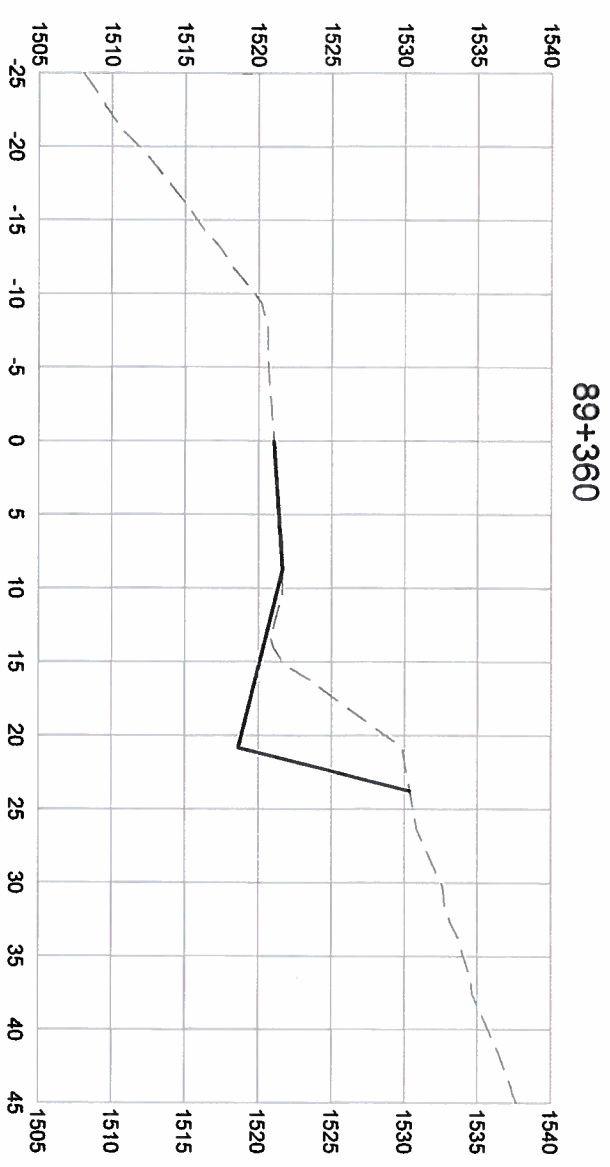


Client/client  
**PARKS CANADA AGENCY**

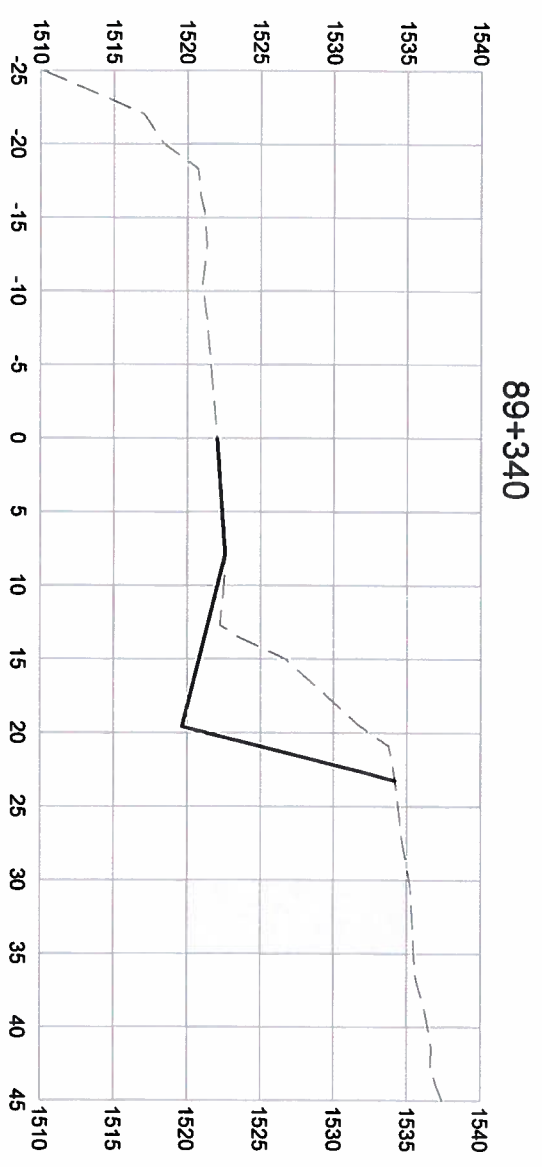
Drawing title/Titre du dessin:

**LOWER SHERBROOKE  
ROCK SLOPE  
CROSS SECTIONS  
STA. 89+320 TO 89+420**

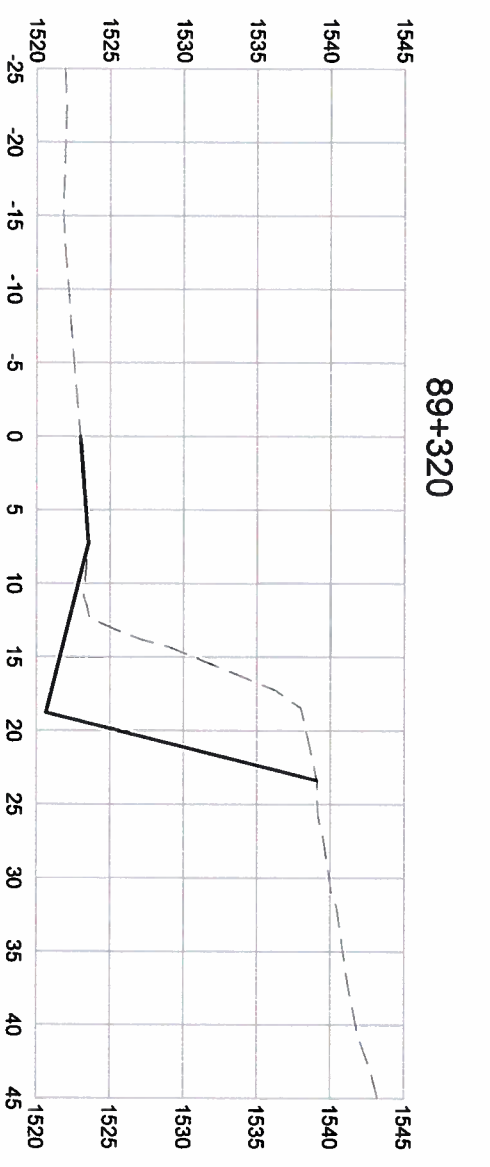
Project No./No. du projet	Steel/Acier	Revision no./ La revision no.
V13403095-01	2015-02-4008	00



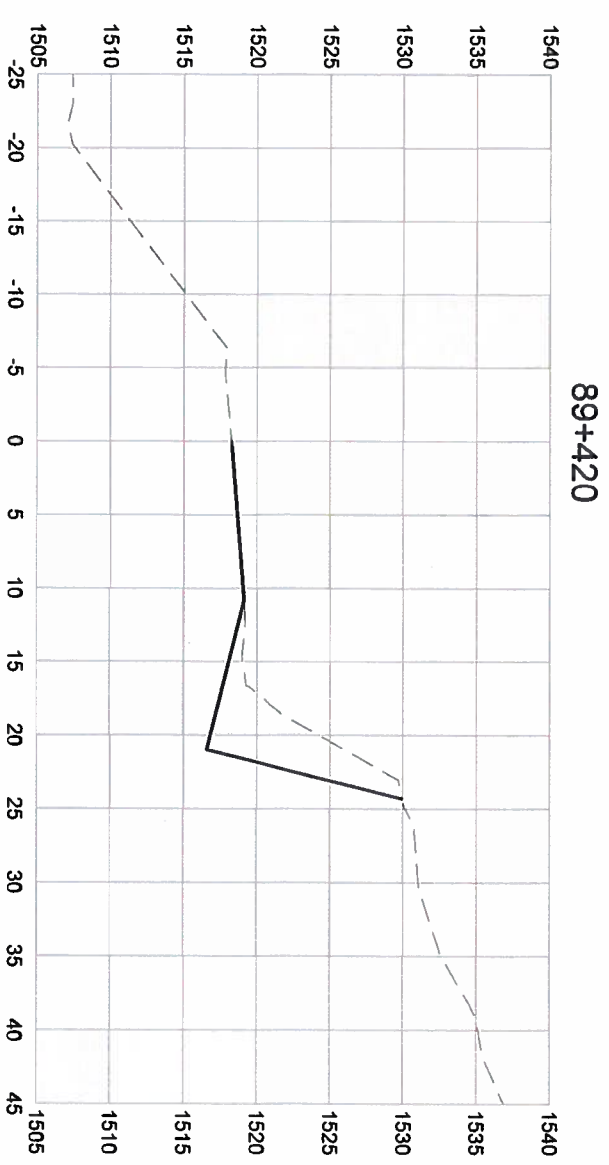
89+360



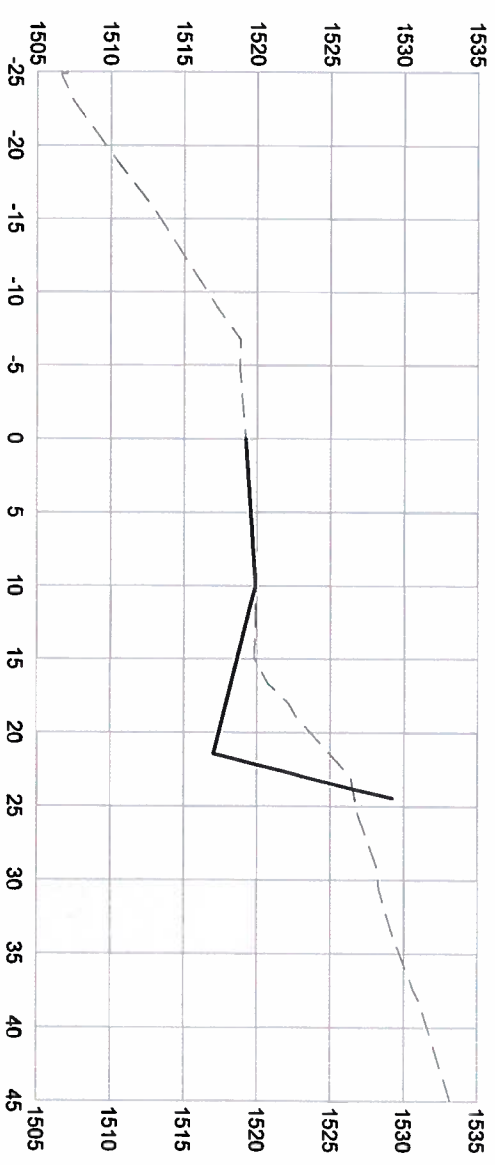
89+340



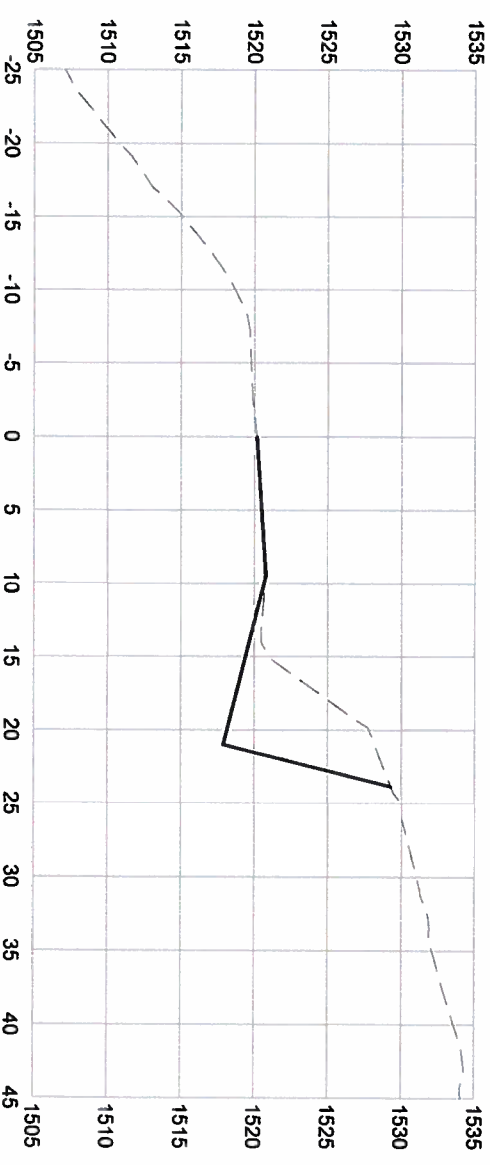
89+320



89+420



89+400



89+380





**ISSUED FOR TENDER**

[illegible]

YOHO NATIONAL PARK  
BRITISH COLUMBIA

**KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING**

Designed by/concepto por  
**A. FRAPPELL / E. YANG**

---

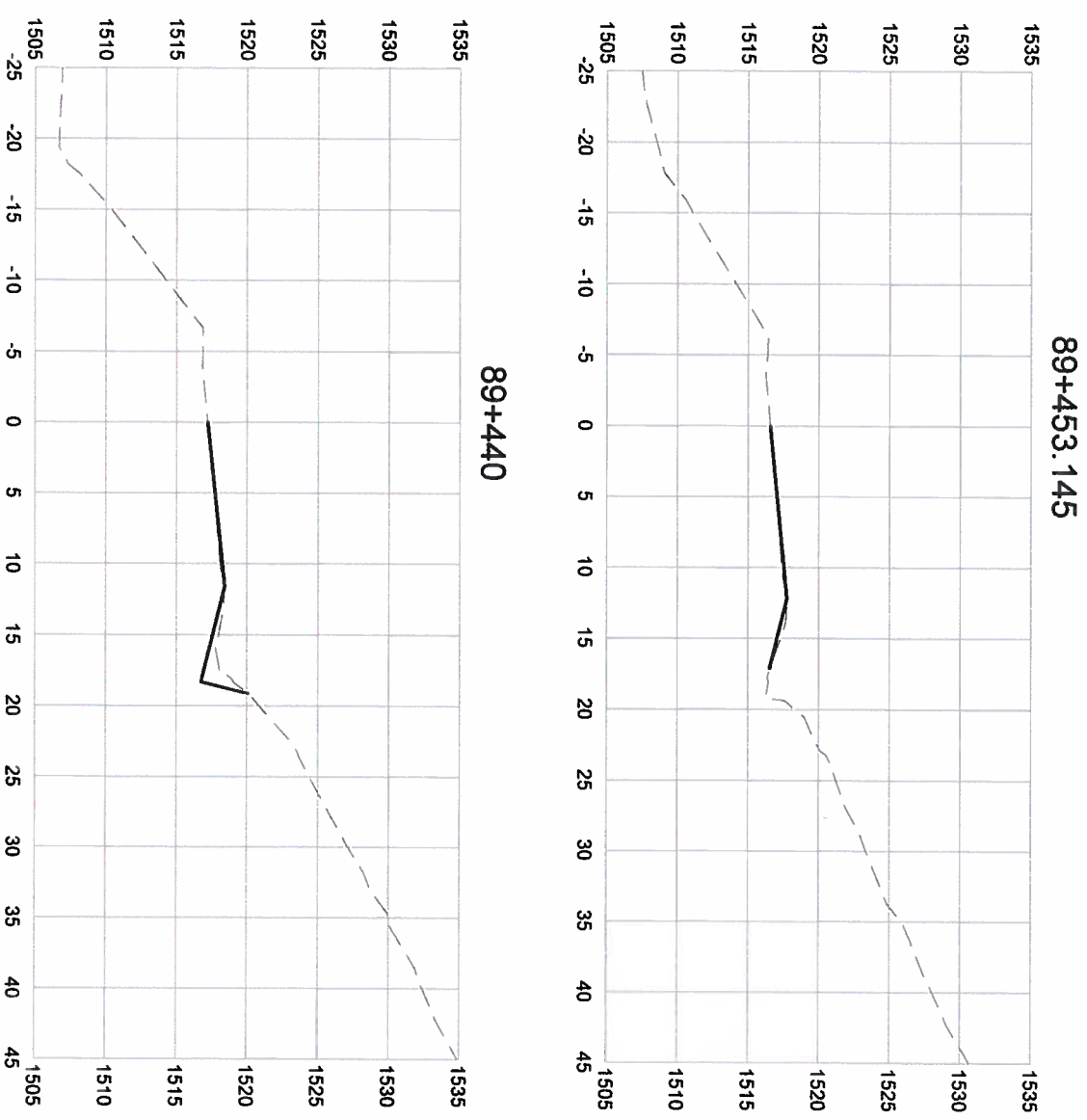
Diseño: by/concepto por  
**T. TAKEDA**



Client/client:  
**PARKS CANADA AGENCY**

**LOWER SHERBROOKE  
ROCK SLOPE  
CROSS SECTIONS  
STA. 89+440 TO 89+453.145**

Project No./No. du projet	Speed/Leuille	Revision - no./ Lo Revision no.
V13403095-01	2015-02-4009	00







ISSUED FOR TENDER



00	24/04/15	ISSUED FOR TENDER	AF	TT	AF
Revision/	Date/Date	Description/Description	DES	DWN	CHK

YOHO NATIONAL PARK  
BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

Designed by/Concept par  
A. FRAPPELL / E. YANG

Drawn by/Dessiné par  
T. TAKEDA

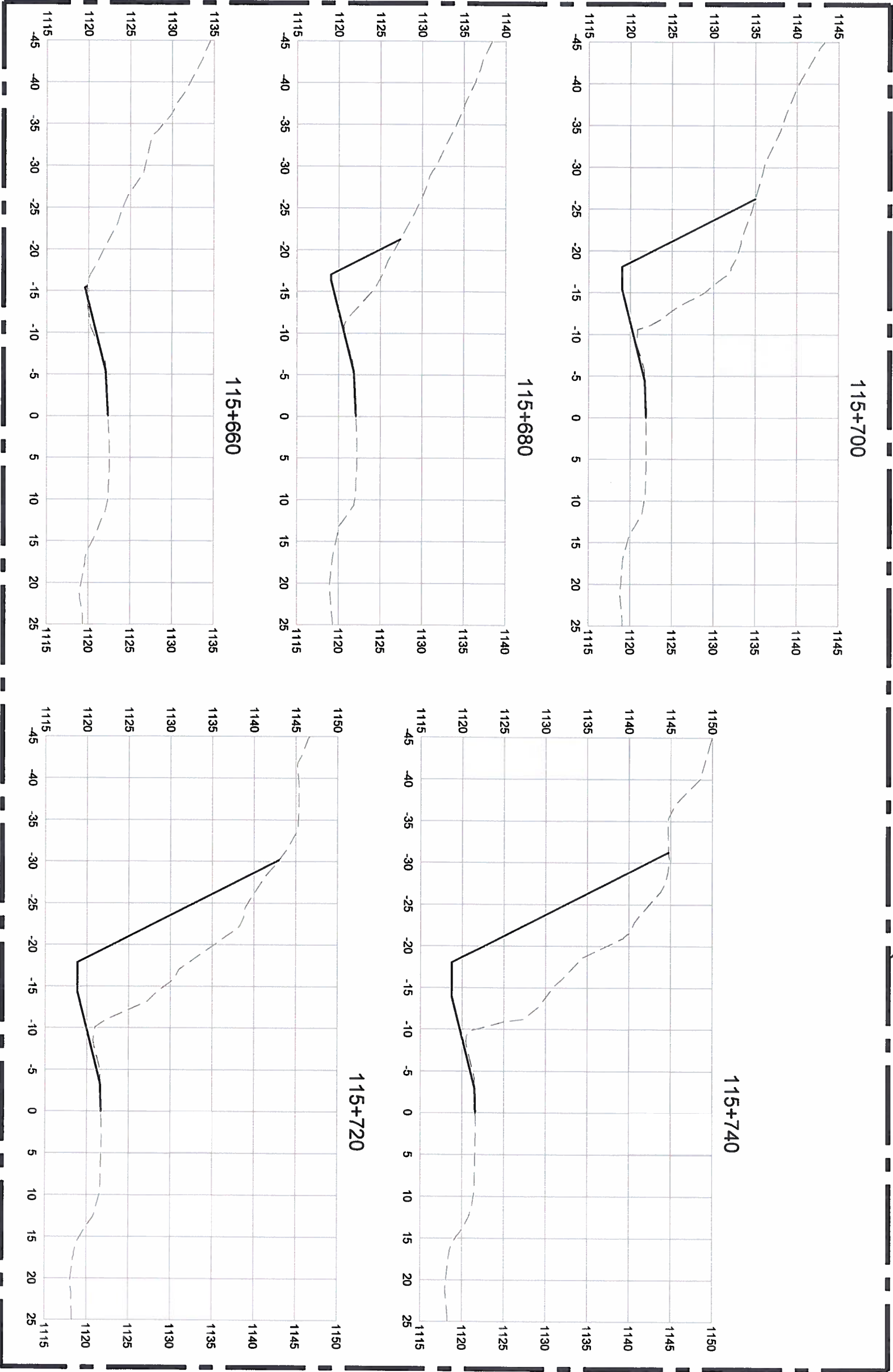


Client/Client  
PARKS CANADA AGENCY

Drawing title/Titre du dessin  
LITTLE TOPPLE ROCK SLOPE  
CROSS SECTIONS  
STA. 115+660 TO 115+740

Project No./No. du projet	Sheet/Feuille	Revision no./ Le Révision no.
V13403095-01	2015-02-4010	00

FUTURE WORK  
(NOT IN BILL OF QUANTITIES)







ISSUED FOR TENDER



00	24/04/15	ISSUED FOR TENDER	AF	TT	AF
TRANS/	Date/Date	Description	DES	DWN	CHK

Project title/Title du projet

YOHO NATIONAL PARK  
BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

Designed by/Concept par  
A. FRAPPELL / E. YANG

Drawn by/Dessiné par  
T. TAKEDA



Client/Client  
PARKS CANADA AGENCY

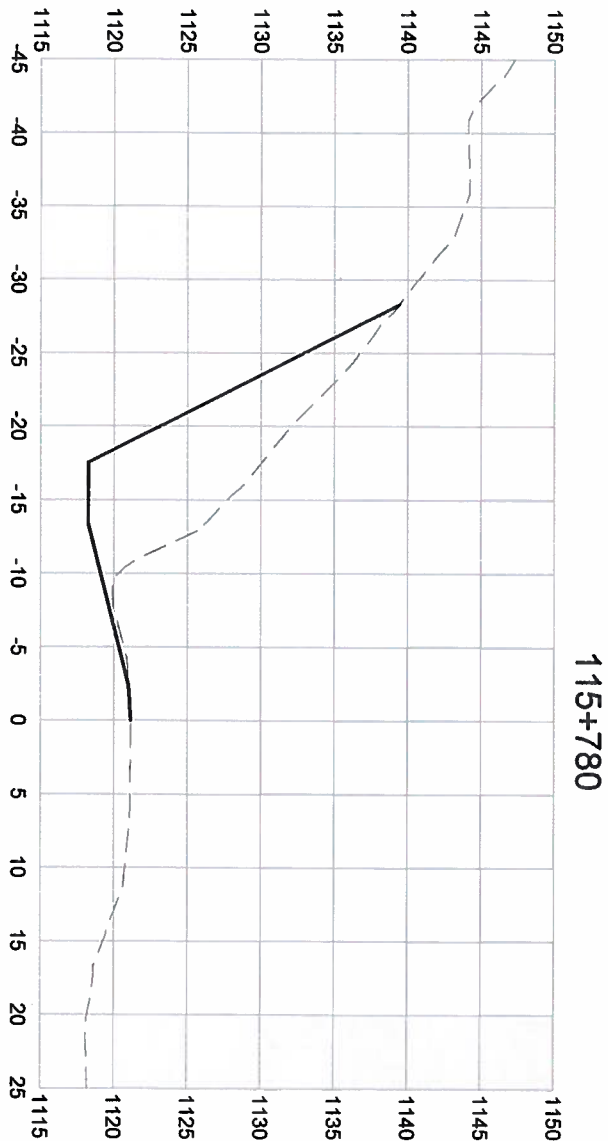
Drawing title/Title du dessin  
LITTLE TOPPLE ROCK SLOPE  
CROSS SECTIONS  
STA. 115+760 TO 115+820

Project No./No. du projet  
V13403095-01

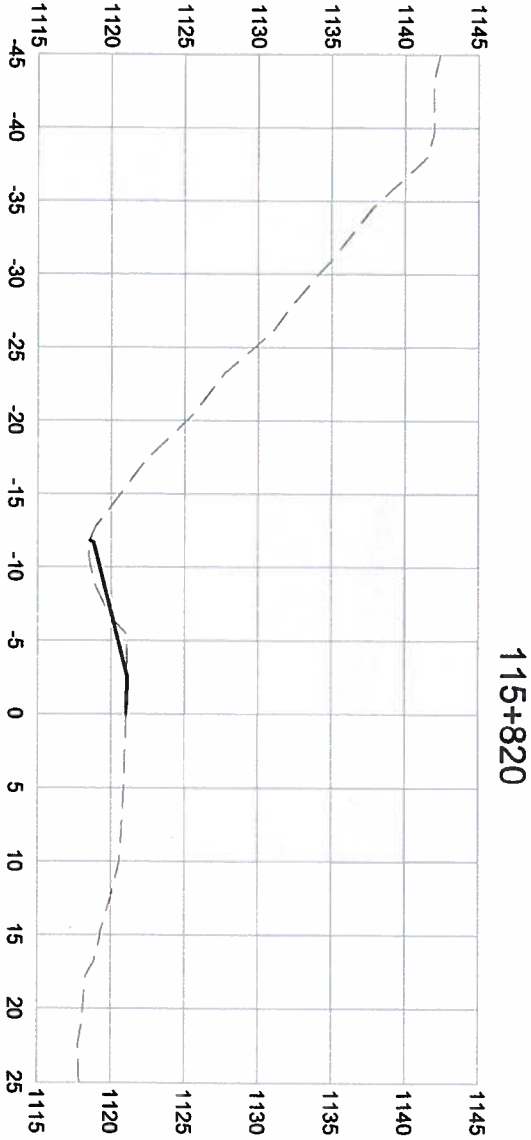
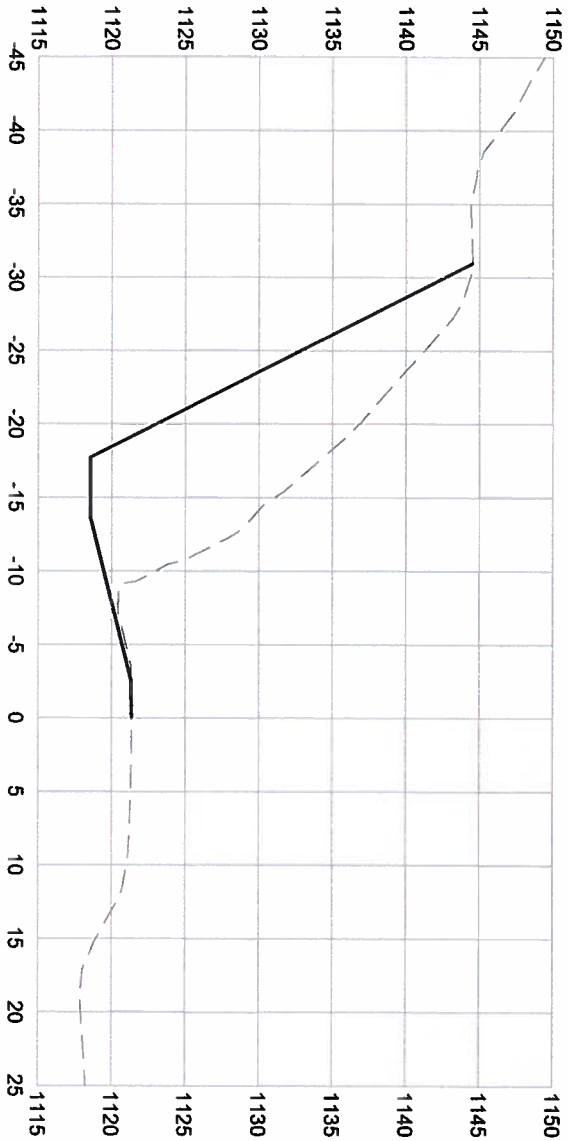
Sheet/Feuille  
2015-02-4011

Revision no./  
La Révision no.  
00

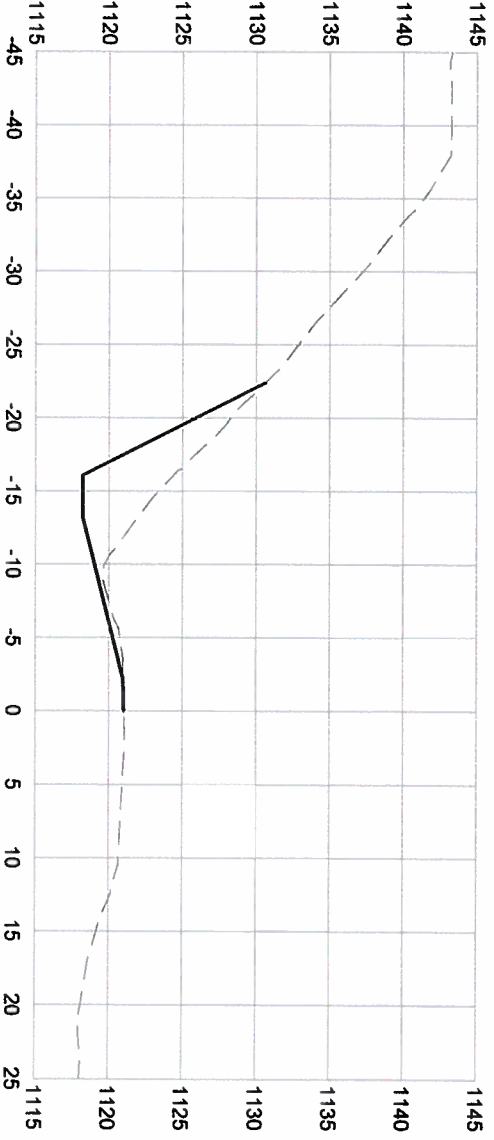
FUTURE WORK  
(NOT IN BILL OF QUANTITIES)



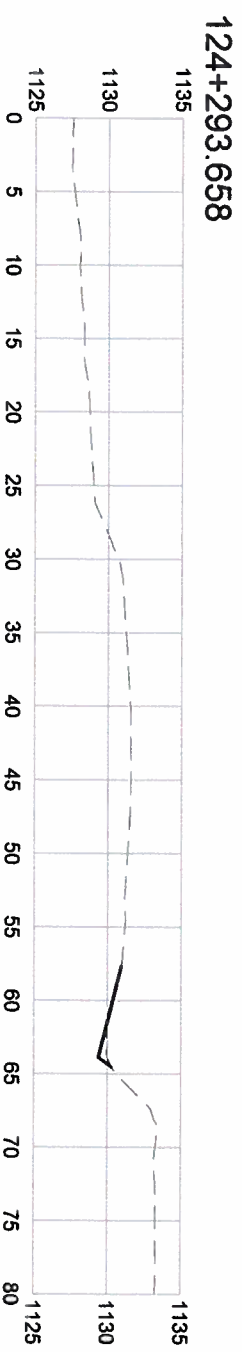
115+760



115+800





Revision no. /  
La Revision no.



ISSUED FOR TENDER



00	24/04/15	ISSUED FOR TENDER	AF	TT	AF
Revision / Révision	Date/Date	Description/Description	DES	DWN	CHK

Project title/Titre du projet

YOHO NATIONAL PARK  
BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

Designed by/Concepté par  
A. FRAPPELL / E. YANG

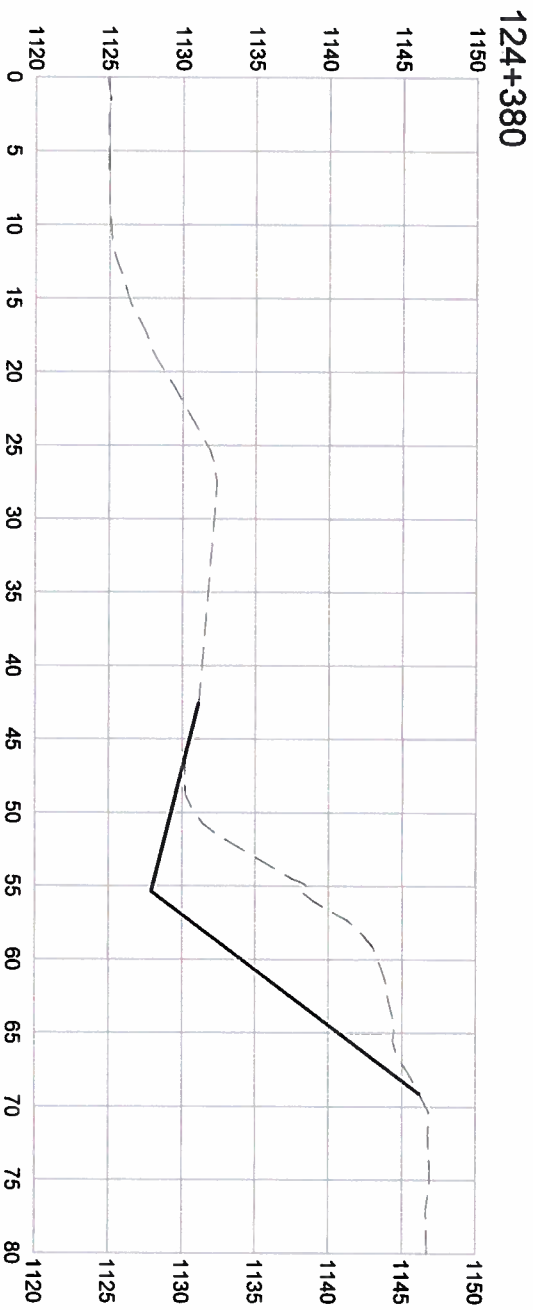
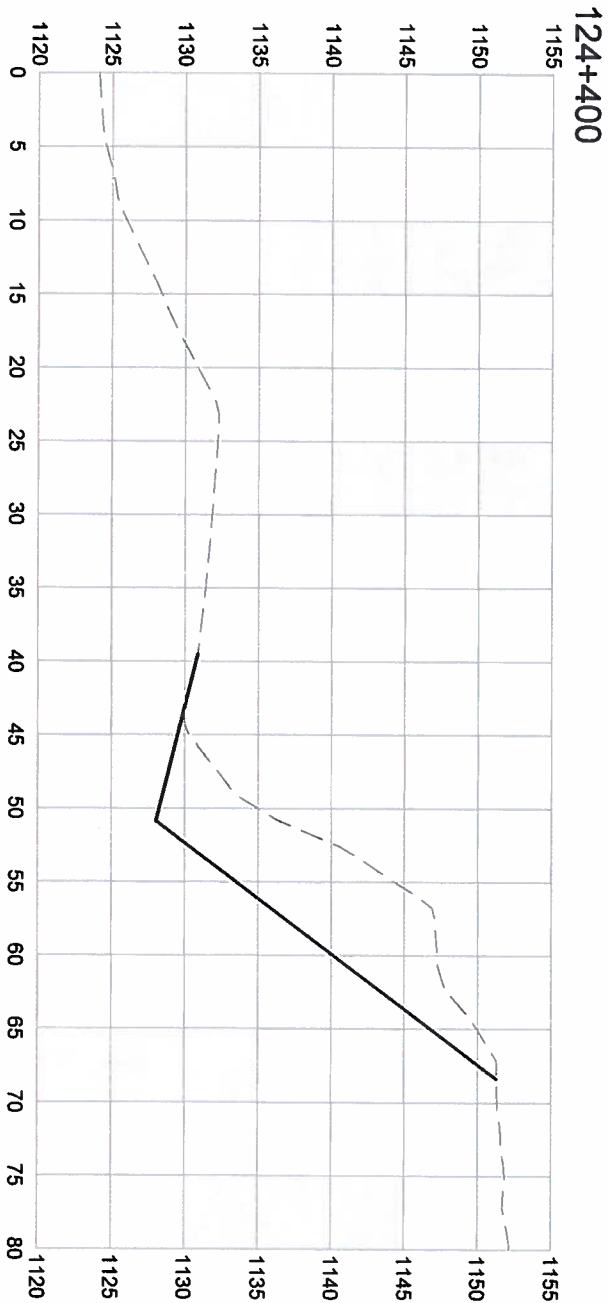
Drawn by/Dessiné par  
T. TAKEDA



Client/Client  
PARKS CANADA AGENCY

Drawing title/Titre du dessin:  
PHYLLITE ROCK SLOPE  
CROSS SECTIONS  
STA. 124+380 TO 124+400

Project No./No. du projet	Sheet/Feuille	Station 22/ 1st Revision No.
V13403095-01	2015-02-4013	00





ISSUED FOR TENDER



00	24/04/15	ISSUED FOR TENDER	AE/TT/AF	EV	AF
Revision/	Date/Date	Description/Description	DTS	DWN	CHK

Project title/Titre du projet

YOHO NATIONAL PARK  
BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

Designed by/Conçue par

A. FRAPPEL / E. YANG

Drawn by/Dessiné par

T. TAKEDA



Client/Client

PARKS CANADA AGENCY

Drawing title/Titre du dessin

PHYLITE ROCK SLOPE  
CROSS SECTIONS  
STA. 124+420 TO 124+440

Project No./No. du projet	Sheet/Feuille	Revision no./ L'Édition no.
V13403095-01	2015-02-4014	00







ISSUED FOR TENDER



00	24/04/15	ISSUED FOR TENDER	AF	TT	AF
Revised/ Révisé	Date/Date	Description	DTS	DWN	CHK

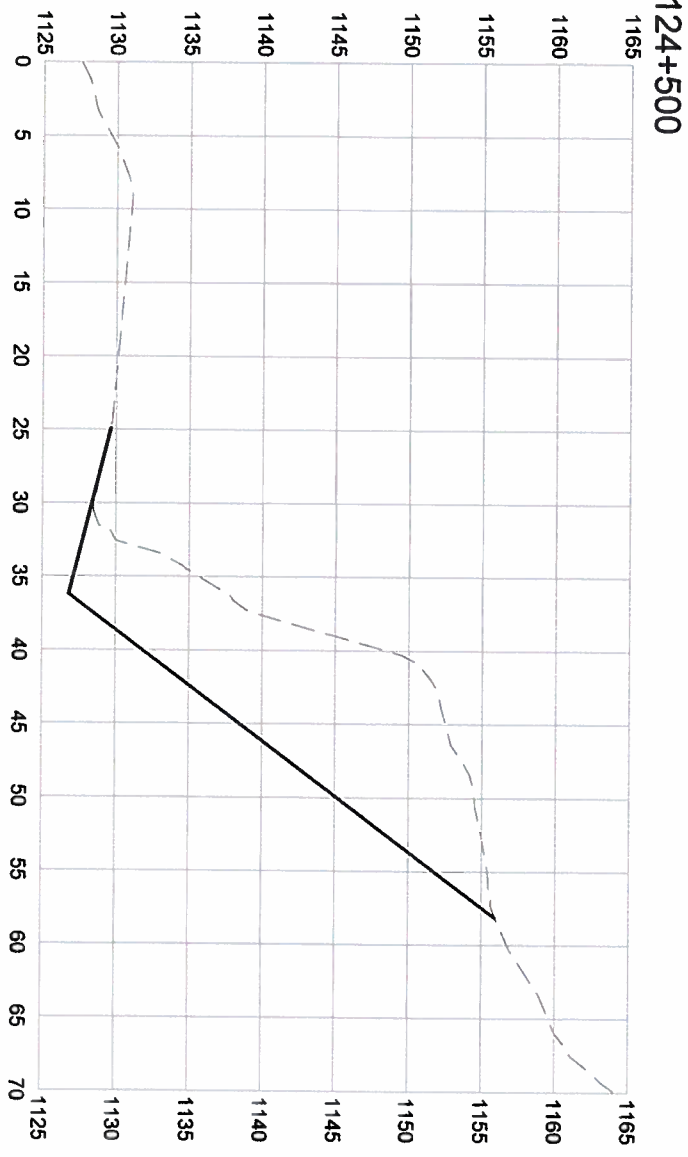
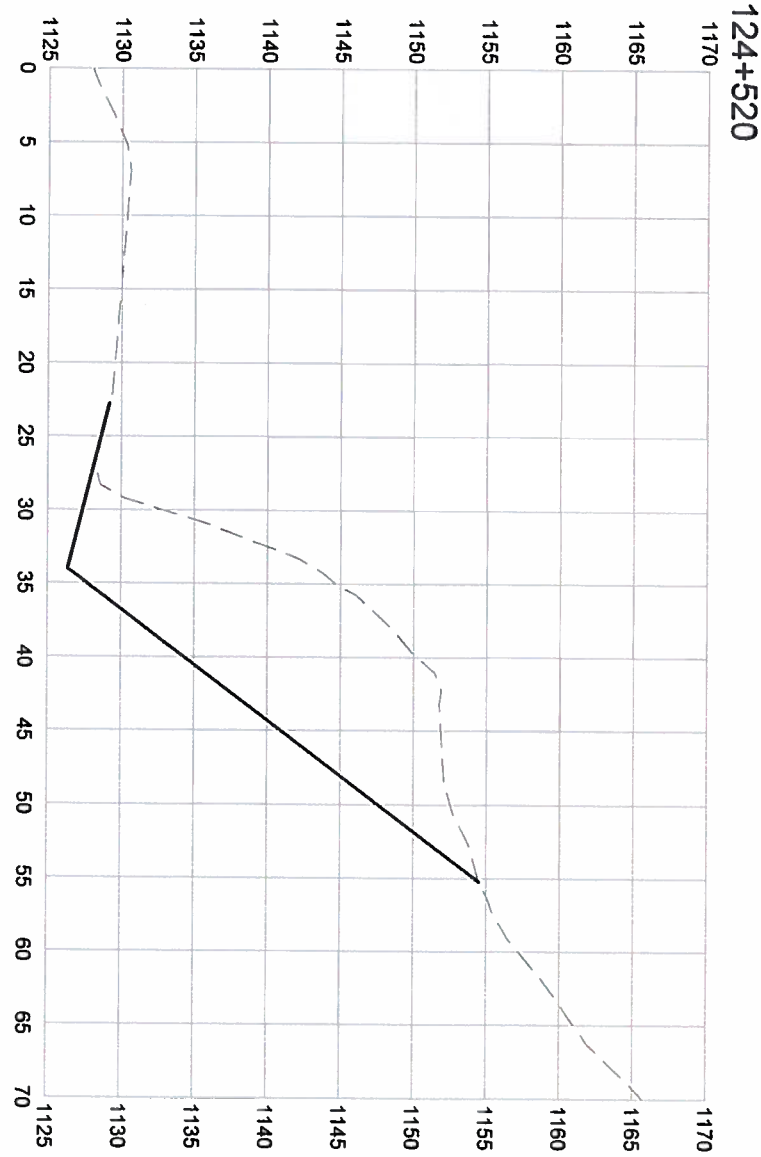
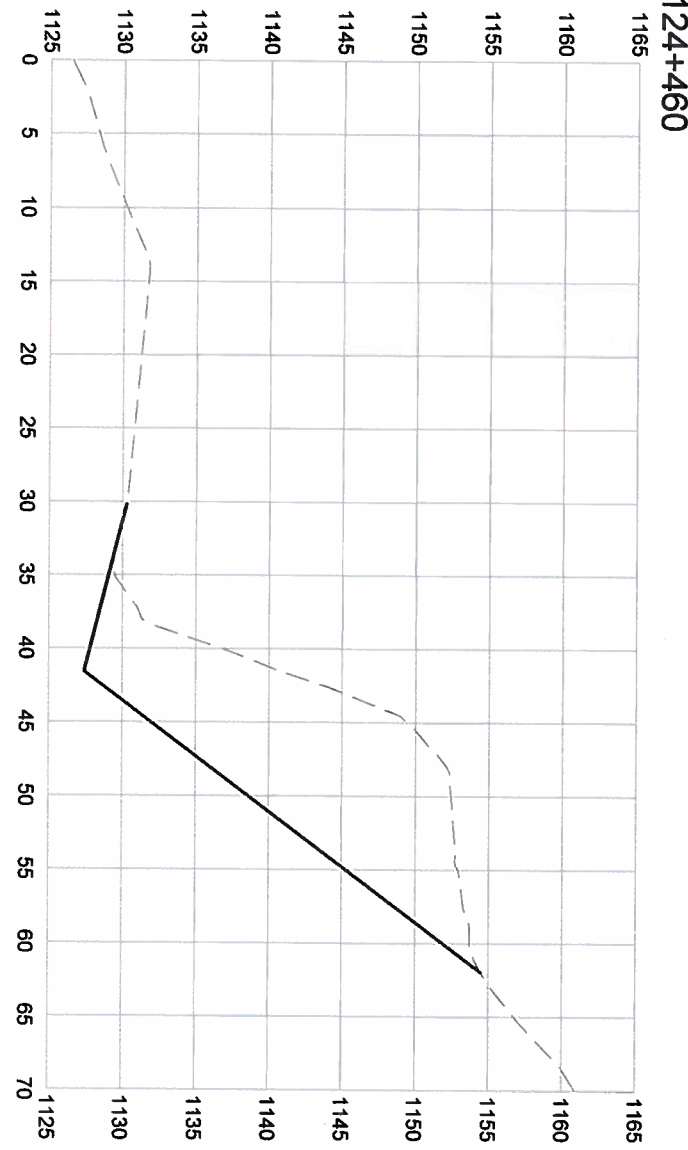
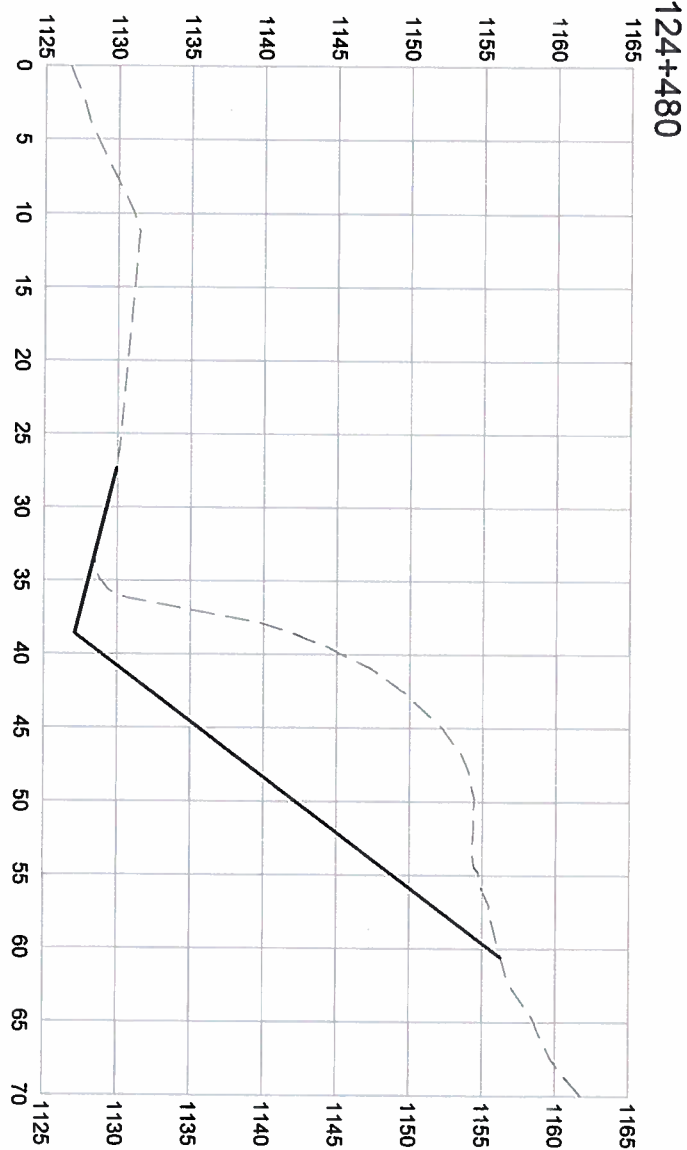
YOHO NATIONAL PARK  
BRITISH COLUMBIA  
  
KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

Designed by/Conçepé par  
A. FRAPPELL / E. YANG  
  
Drawn by/Dessiné par  
T. TAKEDA

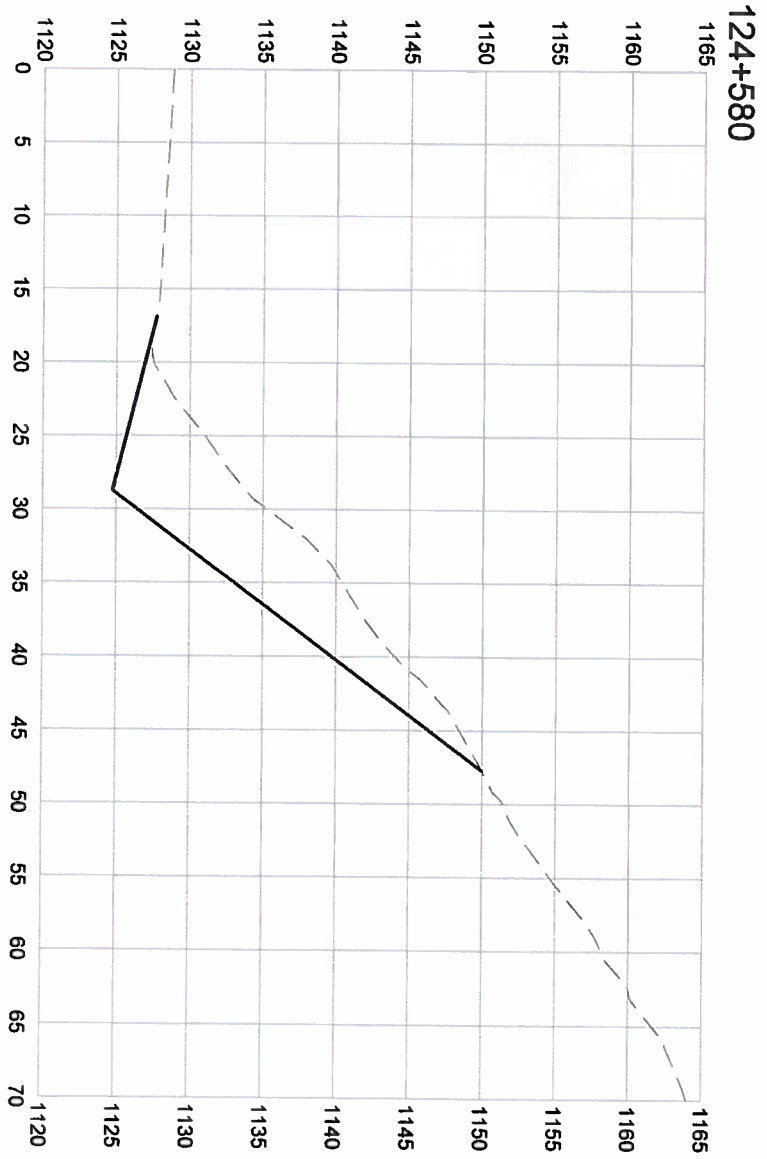
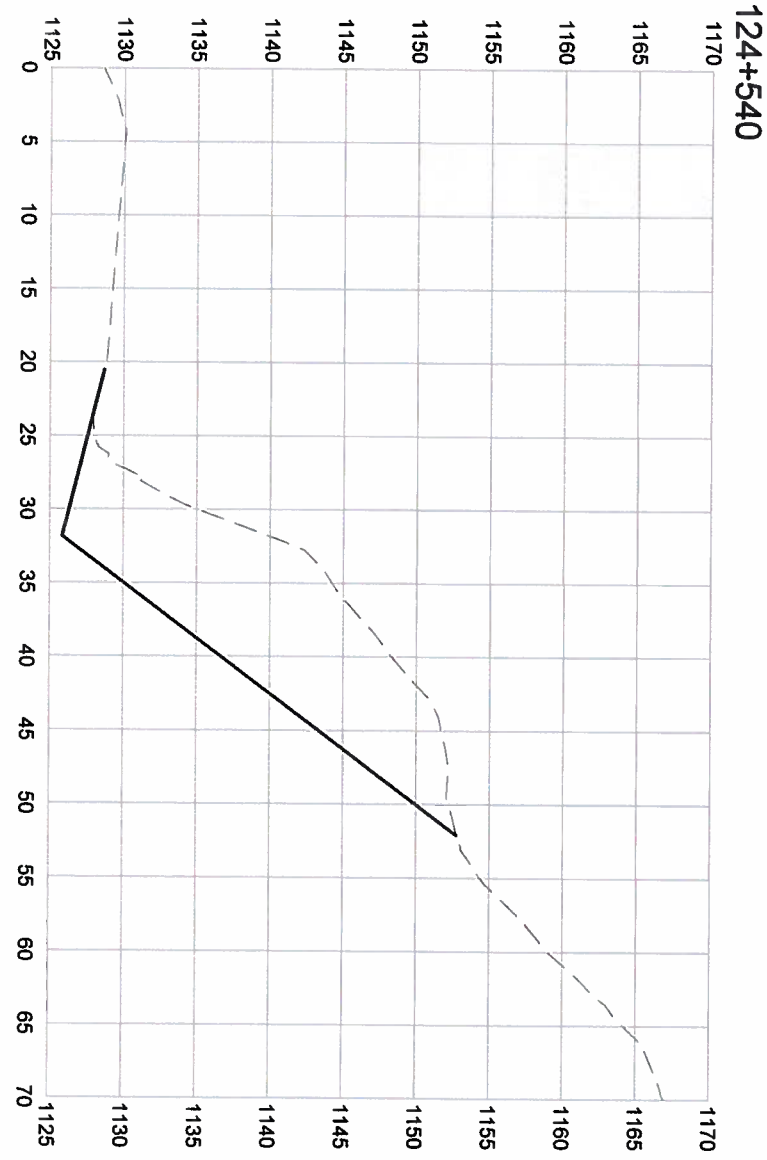


Client/Client  
PARKS CANADA AGENCY  
  
Drawing title/Titre du dessin  
PHYLLITE ROCK SLOPE  
CROSS SECTIONS  
STA. 124+460 TO 124+520

Project No./No. du projet V/13403095-01	Sheet/Feuille 2015-02-4015	Revision no./ La révision no. 00
--	-------------------------------	--







Client/Client <b>PARKS CANADA AGENCY</b>	
Drawing title/Titre du dessin <b>PHYLLITE ROCK SLOPE CROSS SECTIONS STA. 124+540 TO 124+600</b>	
Object No./No. du projet <b>V13403095-01</b>	Sheet/Fauille <b>2015-02-4016</b>
Revision no./ La Révision no. <b>00</b>	





ISSUED FOR TENDER



00	24/04/15	ISSUED FOR TENDER	AF	TT	AF
Reviser/	Date/Date	Description/Description	Rev	Drawn	Checked

Project title/Titre du projet

YOHO NATIONAL PARK  
BRITISH COLUMBIA

KM 88 TO 91 AND KM 114 TO 128  
TRANS-CANADA HIGHWAY  
SLOPE REPROFILING

Designed by/Concepté par  
A. FRAPPELL / E. YANG

Drawn by/Dessiné par  
T. TAKEDA



Client/Client  
PARKS CANADA AGENCY

Drawing title/Titre du dessin

PHYLITE ROCK SLOPE  
CROSS SECTIONS  
STA. 124+620 TO 124+651.233

Project No./No. du projet	Sheet/Feuille	Revision no./ Loi revision no.
V13403095-01	2015-02-4017	00

