



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.



ISSUED FOR TENDER
FEBRUARY 2016

[illegible]

YOHO NATIONAL PARK
BRITISH COLUMBIA

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

Drawn by/Designed for
A. DEEPWELL



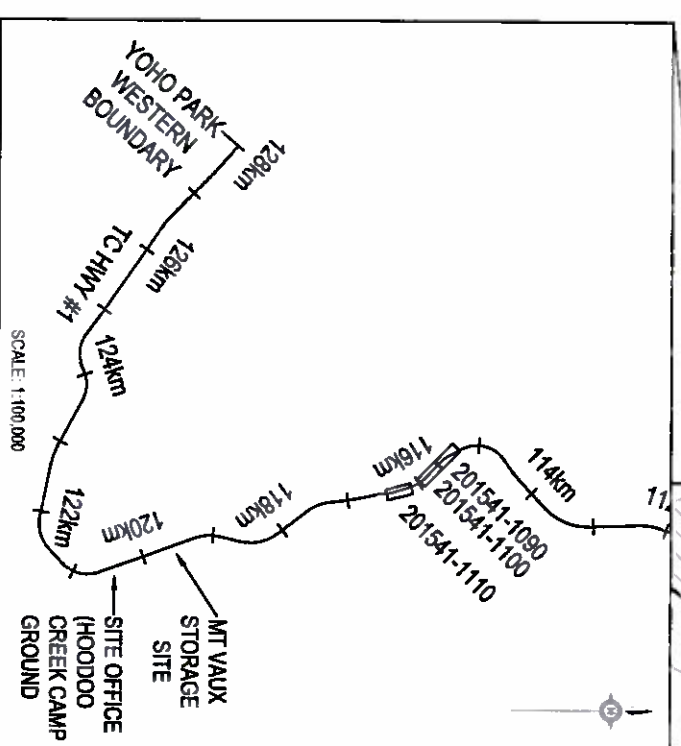
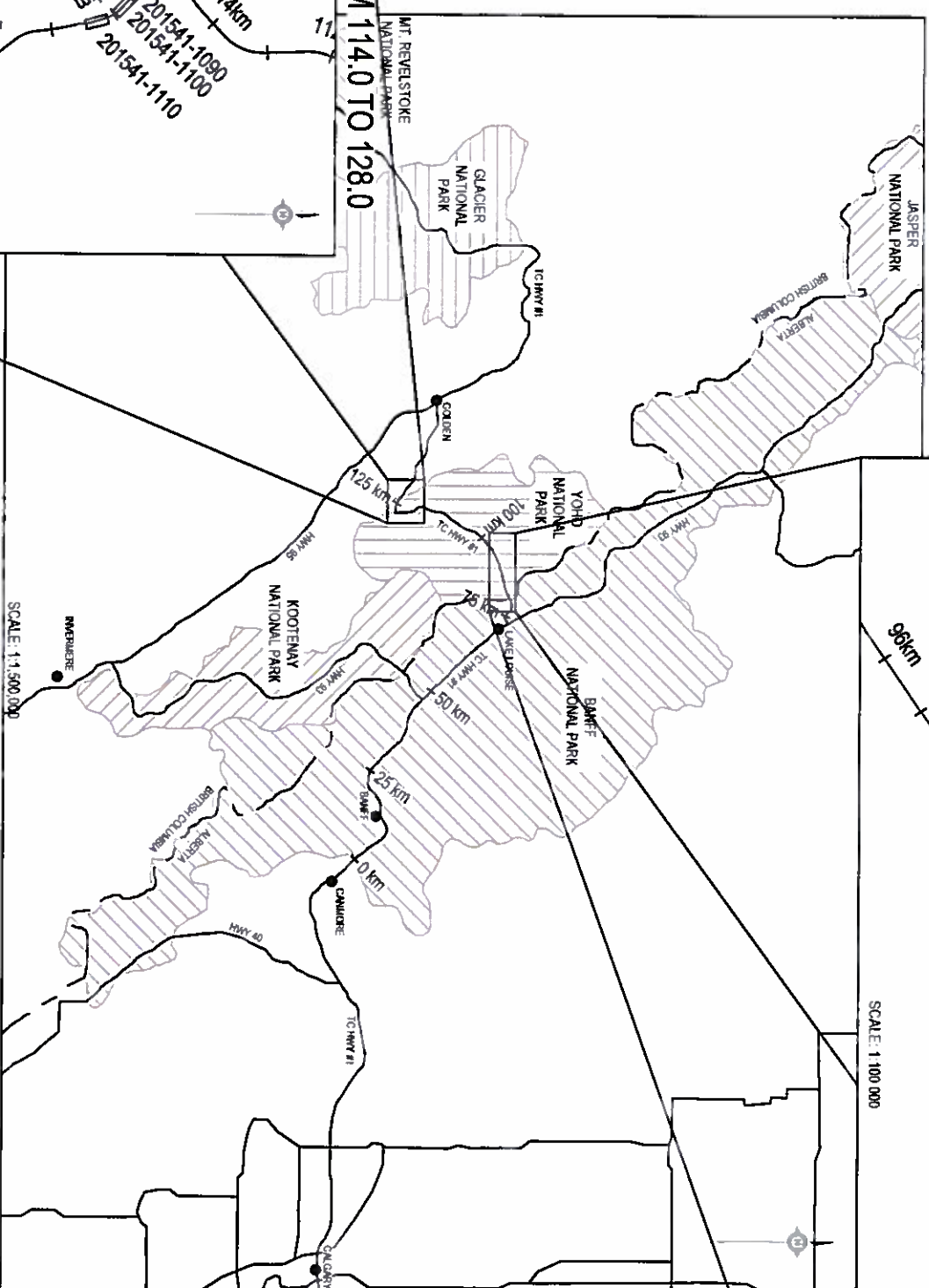
Drawing Time/Time de dessin

PROJECT LOCATION & KEY PLAN

Abstract

201641-0001

0





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/Concepted by
A. FRAPPELL

Drawn by/Dessiné par
A. DEEPMELL



Client/Client
PARKS CANADA AGENCY

Drawing time/Titre du dessin

GENERAL NOTES

Project No./no. do projeto	201641-0002	Relatório no./ do Relatório no.	0
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GENERAL

1. ALL COORDINATES ARE IN YOHIO LOCAL COORDINATES SYSTEM AND ALL ELEVATIONS ARE TO MVD 1983 SET AT 800 METRES. SEE DWG. 20154-10004 ESTABLISHMENT OF SURVEY MONUMENTS
2. ALL ELEVATIONS ARE IN METRES AND ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
3. AZIMUTH IS MEASURED AS A POSITIVE ANGLE CLOCKWISE FROM NORTH
4. 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
5. 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
6. PERSONS 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 BEGGING 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.
7. IT IS SOLELY THE CONTRACTORS RESPONSIBILITY TO DETERMINE CONSTRUCTION PROCEDURE AND SEQUENCE TO ENSURE THE SAFETY OF THE WORKS AND ITS COMPONENT PARTS DURING CONSTRUCTION UNLESS SPECIFICALLY NOTED ON DRAWINGS
8. 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.
9. 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 CONTRACTORS MEANS AND METHODS.
10. EXISTING SITE INFORMATION SHOWN ON THESE DRAWINGS IS FROM AS BUILT REFERENCE DRAWINGS AND A SURVEY PERFORMED BY MET/WHANEY CONSULTING SERVICES LTD. & ALTUS SURVEY 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.
11. THE CONTRACTOR IS REQUIRED TO UNDERTAKE A PRE MOBILIZATION SUBSURFACE UTILITY INVESTIGATION TO LOCATE EXISTING UTILITIES & STRUCTURES TO PERFORM THE WORK UNDERGROUND AND UTILITY LOCATIONS WERE IDENTIFIED THROUGH RECORDS PROVIDED BY BC ONE CALL. VERTICAL AND HORIZONTAL LOCATION AND SIZE OF UTILITIES MAY VARY FROM THE PLAN.
12. 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) AND THE OWNER.
13. PAVEMENT TO ELEVANCE SHALL BE WITHIN 25 mm FURTHER THAN THE HIGHWAY OR 0.25 m CLOSER TO THE HIGHWAY.
14. EXISTING GRADE SHOWN IN PROFILE IS APPROXIMATE. CONTRACTOR TO FIELD VERIFY AS NECESSARY TO PERFORM WORK.
15. REFER TO GEOTECHNICAL FACTUAL DATA REPORT (DECEMBER 2015) FOR ALL EXPLORATION DATA OBTAINED AS PART OF THE CONTRACT.
16. EXCAVATION LINES SHOWN ARE NOT INTENDED TO BE REPRESENTATIVE OF ANTICIPATED GROUND CONDITIONS OR AMOUNT OF OVERBURDEN THAT MAY OCCUR DURING EXCAVATION. FOR AVAILABLE GEOTECHNICAL DATA, SEE THE GEOTECHNICAL DATA REPORT (DECEMBER 2015).

- 17 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 INSTANT 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.
- 18 WHERE REFERENCE DRAWINGS ARE LISTED ON A DRAWING, THE REFERENCED DRAWINGS MUST BE READ IN CONJUNCTION WITH THAT DRAWING.
- 19 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.
- 20 UNLESS SPECIFIED DIFFERENTLY ALL FILL SHALL BE WELL GRADED WITH C-4 AND 1-C-2 FOR GRAVEL AND C-4 AND 1-C-2 FOR SANDS.
- 21 EXCAVATED MATERIAL SHALL BE STORED IN THE MOUNT VIXAS STORAGE SITE. HOWEVER, OTHER STORAGE SITES MAY BE DESIGNATED AS CONSTRUCTION DEVELOPS.

ROCK BLASTING

1. TRAFFIC HOLD TIMES AS PER SPECIFICATION 0114.00 WORK RESTRICTIONS, CLAUSE 1.5.8 F.6
2. PEAK PARTICLE VELOCITIES SHALL BE LESS THAN 50 m/s AS MEASURED AT ANY CP RAIL INFRASTRUCTURE.
3. ALL FLYROCK SHALL BE RETRIEVED FROM OUTSIDE OF THE WORK SITE AT THE EXPENSE OF THE CONTRACTOR.
4. THE CONTRACTOR SHALL UNDERTAKE A PRE-CONSTRUCTION SURVEY WITH THE DEPARTMENTAL REPRESENTATIVE PRIOR TO WORK AT ANY LOCATION.
5. HORIZONTAL BLAST HOLES SHALL ONLY BE CONSIDERED FOR PIONEERING ACCESS ROADS AT THE DEPARTMENTAL REPRESENTATIVES WRITTEN ACCEPTANCE.
6. THE CONTRACTOR SHOULD ANTICIPATE EXISTING CAMOUFLAGED ROCK BOLTS / ANCHORS MAY BE PRESENT IN ANY OF THESE ROCK FACES.

ENVIRONMENTAL NOTES:

1. 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 (EMP). AS PER THE EMP, 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.
2. 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.
3. AS PART OF ITS CONSTRUCTION ENVIRONMENTAL MANAGEMENT PROGRAM, PCA WILL RETAIN A QUALIFIED ENVIRONMENTAL MONITOR (QEM) TO MONITOR CONTRACTOR COMPLIANCE WITH RESPECT TO REGULATORY REQUIREMENTS AND WORK PRACTICES AND PROCEDURES SET OUT IN THE EMP, 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 EMP, EPP, REGULATORY REQUIREMENTS, OR RIA ENVIRONMENTAL STANDARDS.
4. PCA'S CONSTRUCTION EMP 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 SOIL 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
5. 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

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Revision	Date / Date	Description / Description	DCS	DWG	CHK				

Project title / Titre du projet

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BRITISH COLUMBIA

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Designed by / Conçepé par
A. FRAPPELL

Drawn by / Dessiné par
A. DEEPPWELL



Client / Client
PARKS CANADA AGENCY

Drawing title / Titre du dessin

DRAWING INDEX & LEGEND

Project No. / No. du projet

Sheet / Feuille

201641-0003

Revision no. /
No. Révision no.

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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/C - NOT IN CONTACT

ROAD CONSTRUCTION

EXISTING	DESCRIPTION	PROPOSED
	BORE HOLE ID	4, 1000 06 ● MH 400 @ 400
	CONTROL LINE AND STATIONING	1 S BLACK 100
	MARKER AT TIE POINTS & STATIONING	
	EDGE OF PAVEMENT GRAVEL ROAD	
	EDGE OF PAVEMENT	
	EDGE OF PAVED SHOULDER	
	SHOULDER ELEVATION	
	THROATED ROCK PAVING	
	CURB AND GUTTER	
	CONCRETE BARRIER	
	GUARD RAIL CWP POSTS	
	DRAINAGE BARRIER	
	DRAINAGE SIDE DITCH	
	DRAINAGE MEDIAN DITCH	
	DAY LIGHT LINE	
	CANADIAN PACIFIC RAILWAY	
	EXISTING PAVEMENT	
	PAVEMENT REMOVAL	
	SLOPE (GRAVEL RD)	
	TREE LINE	
	UNDER-PAVEMENT TUNNEL & MANHOLE	
	WATER LINE	
	CULVERT	
	RETAINING WALL	
	DITCH BLOCK	
	DITCH WALL	
	SMALL CSP CULVERT	
	CATCH BASIN AND STORM PIPE	
	WILDLIFE FENCING	
	WILDLIFE ZONE BOUNDARY	
	CONTROL POINT	
	GATE	
	BARBED DRAIN AND 200 mm PIPE	
	POST AND RAIL WAY	
	ROCK LINE	
	LIMIT OF CLEARING & GRUB	
	ROCK CUT FACE	
	TREES KILLED BY ON-HITS	

DRAWING INDEX

DRAWING NO.	DESCRIPTION
201541-0000	COVER PAGE
201541-0001	PROJECT LOCATION & KEY PLAN
201541-0002	GENERAL NOTES
201541-0003	DRAWING INDEX & LEGEND
201541-0004	ESTABLISHMENT OF SURVEY MONUMENTS
201541-1001	ROCK CUT CONSTRUCTION LAYOUT TYPICAL SECTIONS
201541-1002	ROCK CUT CONSTRUCTION LAYOUT TYPICAL SECTIONS
201541-1003	CONTROL LINE LAYOUT AND WORK POINT TABLES
201541-1004	CONTROL LINE LAYOUT AND WORK POINT TABLES
201541-1020	SHERBROOKE CREEK ROCK SLOPE PLAN, STA 88+580 TO 88+820
201541-1021	SHERBROOKE CREEK ROCK SLOPE PLAN, STA 88+820 TO 89+060
201541-1022	SHERBROOKE CREEK ROCK SLOPE OVERBURDEN REPROFILING
201541-1030	LOWER SHERBROOKE ROCK SLOPE PLAN, STA 89+185 TO 89+435
201541-1060	SPIRAL TUNNELS HILL ROCK SLOPE PLAN, STA 90+210 TO 90+360
201541-1061	SPIRAL TUNNELS HILL ROCK SLOPE PLAN, STA 90+360 TO 90+700
201541-1090	LITTLE TOPPLE ROCK SLOPE PLAN, STA 115+370 TO 115+600
201541-1100	LITTLE TOPPLE ROCK SLOPE PLAN, STA 115+675 TO 115+820
201541-1110	MT. VAUX ROCK SLOPE PLAN, STA 116+115 TO 116+475
201541-1111	MT. VAUX ROCK SLOPE PLAN, STA 116+475 TO 116+865
201541-2001	TYPICAL CROSS SECTIONS
201541-2002	ROCK SUPPORT TYPICAL DETAILS
201541-2003	CATCHMENT AND SLOPE DRAINAGE TYPICAL DETAILS
201541-2004	RESTORATION OR REMOVAL TYPICAL DETAILS
201541-2005	TYPICAL DETAILS SOIL SLOPE
201541-3002	MT. VAUX STORAGE SITE
201541-4020	SHERBROOKE CROSS SECTIONS
201541-4021	SHERBROOKE CROSS SECTIONS
201541-4022	SHERBROOKE CROSS SECTIONS
201541-4023	SHERBROOKE CROSS SECTIONS
201541-4024	SHERBROOKE CROSS SECTIONS
201541-4025	SHERBROOKE CROSS SECTIONS
201541-4026	SHERBROOKE CROSS SECTIONS
201541-4030	LOWER SHERBROOKE CROSS SECTIONS
201541-4031	LOWER SHERBROOKE CROSS SECTIONS
201541-4032	LOWER SHERBROOKE CROSS SECTIONS
201541-4060	SPIRAL TUNNEL HILL ROCK SLOPE CROSS SECTIONS
201541-4061	SPIRAL TUNNEL HILL ROCK SLOPE CROSS SECTIONS
201541-4062	SPIRAL TUNNEL HILL ROCK SLOPE CROSS SECTIONS
201541-4063	SPIRAL TUNNEL HILL ROCK SLOPE CROSS SECTIONS
201541-4064	SPIRAL TUNNEL HILL ROCK SLOPE CROSS SECTIONS
201541-4090	BIG TOPPLE ROCK SLOPE CROSS SECTIONS
201541-4091	BIG TOPPLE ROCK SLOPE CROSS SECTIONS
201541-4092	BIG TOPPLE ROCK SLOPE CROSS SECTIONS
201541-4093	BIG TOPPLE ROCK SLOPE CROSS SECTIONS
201541-4100	LITTLE TOPPLE ROCK SLOPE CROSS SECTIONS
201541-4101	LITTLE TOPPLE ROCK SLOPE CROSS SECTIONS
201541-4110	MT. VAUX ROCK SLOPE CROSS SECTIONS
201541-4111	MT. VAUX ROCK SLOPE CROSS SECTIONS
201541-4112	MT. VAUX ROCK SLOPE CROSS SECTIONS
201541-4113	MT. VAUX ROCK SLOPE CROSS SECTIONS
201541-4114	MT. VAUX ROCK SLOPE CROSS SECTIONS
201541-4115	MT. VAUX ROCK SLOPE CROSS SECTIONS
201541-4116	MT. VAUX ROCK SLOPE CROSS SECTIONS
201541-4117	MT. VAUX ROCK SLOPE CROSS SECTIONS



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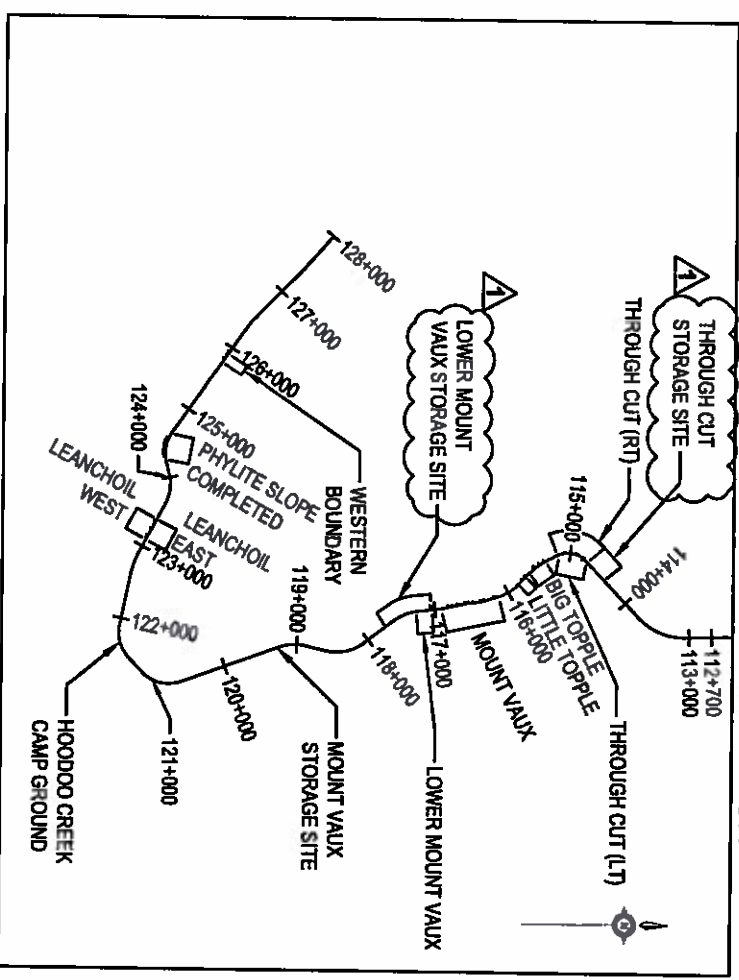


Establishment of Survey
Monuments

Project No./No. du projet	201541-0004	Revision no./ Révision no.	1
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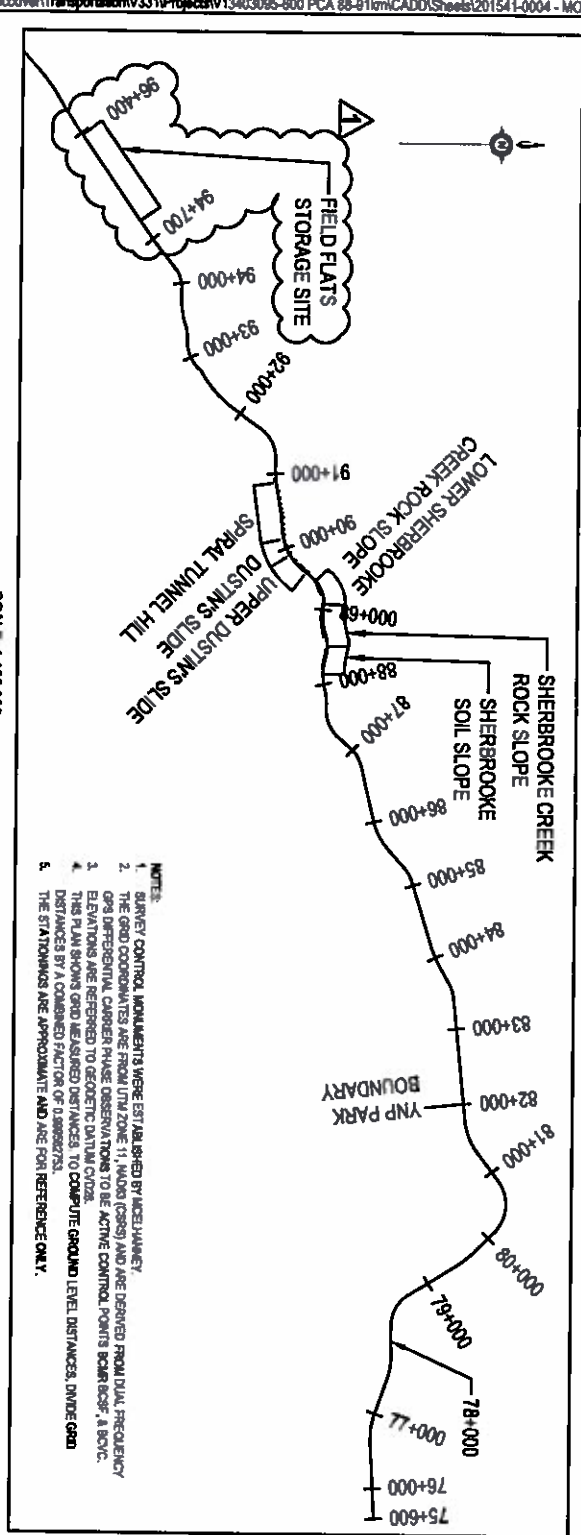
YOHO CONTROL MONUMENTS					
MONUMENT NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION	STATION
149	5680157.726	528105.238	1140.175	BM 94C19	114+829
1430	5680168.129	528082.030	1141.025	TH	114+830
1429	5680076.821	528006.569	1143.032	TH	114+931
1431	5679999.049	528018.968	1142.903	TH	115+009
1432	5679917.960	528018.927	1141.624	TH	115+088
2062	5679643.178	528139.551	1127.888	TH (3017)	115+385
1290	5679575.853	528173.935	1125.555	TH	115+459
2061	5679512.285	528211.408	1123.871	TH (3016)	115+431
1288	5679392.916	528343.000	1121.554	TH	115+706
2058	5679350.323	528388.683	1120.839	TH (3014)	115+768
1287	5679288.696	528465.629	1120.955	TH	115+860
2057	5678994.659	528616.017	1117.269	TH (3013)	116+205
1285	5678858.023	528660.999	1118.527	TH	116+349
2056	5678813.240	528673.905	1119.384	TH (3012)	116+397
2054	5678718.142	528688.519	1121.088	TH (3010)	116+495
1284	5678656.786	528695.611	1122.889	TH	116+556
2053	5678604.968	528703.269	1123.912	TH (3009)	116+608
2052	5678503.315	528724.230	1123.895	TH (3008)	116+711
2051	5678437.400	528738.989	1124.223	TH (3007)	116+779
2050	5678388.040	528749.716	1124.545	TH (3006)	116+829
1279	5678149.875	528754.327	1128.610	TH	117+068
112	5678143.846	528785.508	1129.471	BM 94C112	117+078
1445	567435.013	527854.931	1124.245	TH	123+170
1441	5674431.972	52767.221	1126.431	TH	123+269
1439	5674483.948	52767.671	1127.881	TH	123+379
1282	5674602.825	526794.678	1131.887	TH	124+313
2049	5674599.393	526760.758	1132.201	TH (3005)	124+349
2048	5674599.276	526716.053	1132.089	TH (3004)	124+396
2046	5674608.761	526655.076	1131.469	TH (3003)	124+463
1281	5674623.527	526607.224	1130.695	TH	124+511
2045	5674644.701	526561.865	1129.574	TH (3002)	124+561
1442	5673382.273	525496.588	1115.219	TH	125+857
1443	5673415.023	525449.552	1115.784	TH	125+914
1444	5673445.284	525405.404	1116.304	TH	125+988

OVERVIEW PLAN - KM 114.0 TO 128.0 - TCH



YOHO CONTROL MONUMENTS					
MONUMENT NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION	STATION
1238	5698552.932	543722.045	1510.583	TH	88+242
1239	5698562.787	543654.634	1566.206	TH	88+310
1906	5698572.137	543599.649	1563.273	TH	88+365
1240	5698587.207	543525.981	1559.986	TH	88+442
2077	5698558.380	543329.171	1550.343	TH (3011)	88+451
2076	5698546.342	543273.142	1548.381	TH (3010)	88+709
2075	569842.152	543234.137	1547.168	TH (3029)	88+747
2074	5698534.687	543183.637	1546.062	TH (3028)	88+797
2073	5698526.086	543133.986	1544.282	TH (3027)	88+846
2072	5698522.826	543086.518	1542.400	TH (3026)	88+892
2071	5698527.283	543037.585	1539.829	TH (3025)	88+939
2070	5698532.791	542986.168	1537.027	TH (3024)	88+990
2069	5698540.342	542920.379	1533.835	TH (3023)	88+057
2067	5698615.470	542757.464	1525.629	TH (3021)	88+230
1947	5698492.143	542719.031	1523.624	TH	88+277
2066	5698474.004	542670.840	1521.315	TH (3020)	88+331
2065	5698465.427	542633.252	1520.140	TH (3019)	88+388
2063	5698437.519	542597.113	1518.322	TH (3018)	88+415
1241	5698331.528	542479.083	1510.731	TH	88+572
1242	5698276.149	542436.231	1506.898	TH	88+642
2285	5698249.926	542408.009	1502.271	TH (16804)	88+681
1243	5698229.454	542385.581	1505.238	TH	88+705
1244	5698169.437	542331.826	1501.248	TH	88+795
1245	5698091.880	542234.807	1495.528	TH	88+922
2167	5698068.821	542222.860	1494.864	TH (5002)	88+935
2168	5698055.816	542160.347	1491.570	TH (5003)	90+005
2169	5698040.130	542120.459	1489.539	TH (5004)	90+049
2318	5698010.525	541988.098	1483.633	TH	90+186
91	5698007.086	541970.471	1483.151	TH	90+204
1246	5698002.963	541915.470	1479.999	TH	90+250
1427	5698001.933	541884.889	1477.155	TH	90+330
1428	5697998.777	541780.879	1473.398	TH	90+414
92	5697982.380	541701.637	1471.195	TH (3016)	90+474
93	5697973.271	541642.516	1468.412	TH (3015)	90+534
94	5697963.102	541581.516	1465.381	TH (3014)	90+586
95	5697950.472	541502.569	1461.811	TH (3013)	90+676
96	5697937.365	541413.250	1457.938	TH (3012)	90+766
434	5697892.288	541267.434	1450.511	TH	90+916

OVERVIEW PLAN - KM 88.0 TO 91.0 - TCH



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PCA PR

0	16/02/2022
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Project RITE/

KM8
T

A. FRAP

T. TAKE



PARKS CA

**CONF
WORK**

Project: Proj. / No.

PCA PROJECT NO. TETRA TECH EBA NC

YOHO NATIONAL PARK
BRITISH COLUMBIA

Designed by/Concepted by:
A. FRAPPELL/E. YANG
Drawn by/Designed by:
T. TAKEDA

CONTROL LINE LAYOUT AND WORK POINT TABLES

201541-1004

B6: PEOPLE WORK OUT CONSTRUCTION LAYOUT									
STATION	OFFSET	ELEVATION	WORK POINT #1		WORK POINT #2		WORK POINT #3		ELEVATION
			OFFSET	ELEVATION	OFFSET	ELEVATION	OFFSET	ELEVATION	
115-350.000	18.30m	1125.350m	14.80 m	1128.515m	12.70m	1128.888m	12.70m	1128.888m	1128.888m
115-360.000	19.30m	1129.375m	17.77m	1129.223m	12.70m	1129.599m	12.70m	1129.599m	1129.599m
115-370.000	28.35m	1134.636m	21.72m	1129.946m	12.71m	1128.989m	12.70m	1128.989m	1128.989m
115-380.000	28.42m	1134.726m	21.77m	1129.555m	12.70m	1127.804m	12.70m	1127.804m	1127.804m
115-400.000	34.28m	1148.507m	21.70m	1124.651m	12.70m	1126.601m	12.70m	1126.601m	1126.601m
115-410.000	38.18m	1152.747m	21.75m	1124.222m	12.75m	1126.479m	12.70m	1126.479m	1126.479m
115-420.000	37.00m	1153.049m	21.70m	1123.700m	12.70m	1126.000m	12.70m	1126.000m	1126.000m
115-440.000	37.25m	1154.222m	21.70m	1123.166m	12.70m	1125.711m	12.70m	1125.711m	1125.711m
115-450.000	38.55m	1155.677m	21.70m	1122.892m	12.67m	1125.426m	12.70m	1125.426m	1125.426m
115-460.000	38.66m	1155.825m	21.70m	1122.511m	12.70m	1124.889m	12.70m	1124.889m	1124.889m
115-470.000	40.31m	1156.777m	21.70m	1122.288m	12.87m	1124.515m	12.70m	1124.515m	1124.515m
115-480.000	41.30m	1156.977m	21.70m	1122.111m	12.70m	1124.388m	12.70m	1124.388m	1124.388m
115-490.000	41.50m	1156.931m	21.70m	1121.888m	12.67m	1124.143m	12.70m	1124.143m	1124.143m
115-500.000	41.60m	1156.144m	21.70m	1121.666m	12.70m	1123.746m	12.70m	1123.746m	1123.746m
115-510.000	42.85m	1162.111m	21.70m	1121.202m	12.70m	1123.176m	12.70m	1123.176m	1123.176m
115-530.000	42.83m	1162.188m	21.70m	1121.046m	12.87m	1123.333m	12.70m	1123.333m	1123.333m
115-540.000	42.57m	1161.616m	21.70m	1120.808m	12.70m	1123.156m	12.70m	1123.156m	1123.156m
115-560.000	38.41m	1163.351m	21.70m	1120.751m	12.70m	1123.011m	12.70m	1123.011m	1123.011m
115-580.000	38.05m	1162.666m	21.70m	1120.597m	12.70m	1122.847m	12.70m	1122.847m	1122.847m
115-600.000	34.05m	1164.611m	21.70m	1120.468m	12.87m	1122.716m	12.70m	1122.716m	1122.716m
115-620.000	31.20m	1166.677m	21.70m	1120.225m	12.70m	1122.500m	12.70m	1122.500m	1122.500m
115-640.000	30.67m	1167.455m	21.70m	1120.000m	12.70m	1122.275m	12.70m	1122.275m	1122.275m
115-660.000	31.60m	1168.677m	21.70m	1119.833m	12.70m	1122.044m	12.70m	1122.044m	1122.044m
115-680.000	38.59m	1173.877m	21.70m	1120.125m	12.70m	1122.376m	12.70m	1122.376m	1122.376m
115-700.000	35.20m	1183.455m	21.70m	1120.000m	12.70m	1122.250m	12.70m	1122.250m	1122.250m
115-720.000	32.81m	1183.841m	21.70m	1119.930m	12.70m	1122.154m	12.70m	1122.154m	1122.154m
115-740.000	31.55m	1183.726m	21.70m	1119.930m	12.70m	1122.154m	12.70m	1122.154m	1122.154m
115-760.000	28.93m	1182.514m	21.70m	1119.891m	12.70m	1122.141m	12.70m	1122.141m	1122.141m
115-780.000	26.93m	1181.251m	21.70m	1119.891m	12.70m	1122.141m	12.70m	1122.141m	1122.141m

TILE TOPPLE ROCK CUT COASTING LAYOUT					
STATION	OFFSET	ELEVATION	WORK POINT #1	WORK POINT #2	WORK POINT #3
15+600.00	-24.60m	119.51m	21.700m	119.900m	12.700m
15+600.00	24.67m	119.45m	21.720m	119.860m	-12.700m
115+600.00	27.00m	119.27m	21.700m	119.830m	-12.700m
115+600.00	-26.61m	119.35m	21.700m	119.790m	-12.700m
115+600.00	30.00m	119.00m	21.700m	119.690m	-12.700m
115+710.00	32.33m	118.61m	21.700m	119.500m	-12.700m
115+720.00	34.66m	118.62m	21.700m	119.460m	-12.700m
115+730.00	34.78m	118.60m	21.700m	119.420m	-12.700m
115+740.00	34.67m	118.57m	21.700m	119.380m	-12.700m
115+750.00	34.60m	118.53m	21.700m	119.270m	-12.700m
115+760.00	34.56m	118.42m	21.700m	119.120m	-12.700m
115+770.00	34.67m	118.40m	21.700m	118.940m	-12.700m
115+780.00	34.26m	118.37m	21.700m	118.97m	-12.700m
115+790.00	34.26m	118.34m	21.700m	118.934m	-12.700m
115+800.00	33.26m	118.31m	21.700m	118.894m	-12.700m
115+900.00	31.80m	118.67m	21.700m	119.847m	-12.700m
115+910.00	22.23m	119.67m	21.650m	119.846m	-12.700m
115+920.00	14.05m	119.97m	15.801m	119.846m	-12.700m
115+930.00	14.05m	119.97m	15.801m	119.846m	-12.700m
115+940.00	14.270m	119.960m	12.700m	119.846m	-12.700m
115+950.00	14.270m	119.960m	12.700m	119.846m	-12.700m
115+960.00	14.270m	119.960m	12.700m	119.846m	-12.700m
115+970.00	14.270m	119.960m	12.700m	119.846m	-12.700m
115+980.00	14.270m	119.960m	12.700m	119.846m	-12.700m
115+990.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+000.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+010.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+020.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+030.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+040.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+050.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+060.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+070.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+080.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+090.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+100.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+110.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+120.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+130.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+140.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+150.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+160.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+170.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+180.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+190.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+200.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+210.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+220.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+230.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+240.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+250.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+260.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+270.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+280.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+290.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+300.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+310.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+320.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+330.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+340.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+350.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+360.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+370.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+380.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+390.00	14.270m	119.960m	12.700m	119.846m	-12.700m
116+400.00	14.270m	119.960m	12.700m	119.846m	-12.700m

MOORE WALK RISE CUT CONSTRUCTION LAYOUT									
STATION		OFFSET	ELEVATION	WORK POINT #2		OFFSET	ELEVATION	WORK POINT #1	
116+130.00	-1.970m	1115.71m	-12.859m	1115.51m	-12.70m	1118.35m	-12.871m	1118.25m	-12.871m
116+140.00	-2.150m	1119.30m	-18.47m	1115.54m	-12.871m	1118.54m	-12.871m	1118.55m	-12.871m
116+160.00	-2.150m	1120.30m	-20.11m	1115.54m	-12.70m	1118.54m	-12.70m	1119.12m	-12.70m
116+180.00	-3.158m	1120.94m	-25.70m	1115.50m	-12.70m	1118.50m	-12.70m	1118.92m	-12.70m
116+195.00	-3.158m	1120.94m	-25.70m	1115.50m	-12.70m	1118.50m	-12.70m	1118.92m	-12.70m
116+200.00	-3.170m	1120.82m	-25.72m	1115.69m	-12.70m	1118.12m	-12.70m	1118.12m	-12.70m
116+210.00	-3.210m	1120.70m	-25.84m	1115.81m	-12.70m	1118.24m	-12.70m	1118.24m	-12.70m
116+220.00	-3.162m	1120.87m	-25.78m	1115.73m	-12.70m	1118.30m	-12.70m	1118.30m	-12.70m
116+230.00	-3.050m	1120.97m	-25.69m	1115.81m	-12.70m	1118.38m	-12.70m	1118.38m	-12.70m
116+240.00	-3.000m	1121.02m	-25.64m	1115.86m	-12.70m	1118.43m	-12.70m	1118.43m	-12.70m
116+250.00	-2.970m	1121.07m	-25.61m	1115.91m	-12.70m	1118.48m	-12.70m	1118.48m	-12.70m
116+260.00	-2.950m	1121.12m	-25.59m	1115.96m	-12.70m	1118.53m	-12.70m	1118.53m	-12.70m
116+270.00	-2.930m	1121.17m	-25.57m	1116.01m	-12.70m	1118.58m	-12.70m	1118.58m	-12.70m
116+280.00	-2.910m	1121.22m	-25.55m	1116.06m	-12.70m	1118.63m	-12.70m	1118.63m	-12.70m
116+290.00	-2.890m	1121.27m	-25.53m	1116.11m	-12.70m	1118.68m	-12.70m	1118.68m	-12.70m
116+300.00	-2.870m	1121.32m	-25.51m	1116.16m	-12.70m	1118.73m	-12.70m	1118.73m	-12.70m
116+310.00	-2.850m	1121.37m	-25.49m	1116.21m	-12.70m	1118.78m	-12.70m	1118.78m	-12.70m
116+320.00	-2.830m	1121.42m	-25.47m	1116.26m	-12.70m	1118.83m	-12.70m	1118.83m	-12.70m
116+330.00	-2.810m	1121.47m	-25.45m	1116.31m	-12.70m	1118.88m	-12.70m	1118.88m	-12.70m
116+340.00	-2.790m	1121.52m	-25.43m	1116.36m	-12.70m	1118.93m	-12.70m	1118.93m	-12.70m
116+350.00	-2.770m	1121.57m	-25.41m	1116.41m	-12.70m	1118.98m	-12.70m	1118.98m	-12.70m
116+360.00	-2.750m	1121.62m	-25.39m	1116.46m	-12.70m	1119.03m	-12.70m	1119.03m	-12.70m
116+370.00	-2.730m	1121.67m	-25.37m	1116.51m	-12.70m	1119.08m	-12.70m	1119.08m	-12.70m
116+380.00	-2.710m	1121.72m	-25.35m	1116.56m	-12.70m	1119.13m	-12.70m	1119.13m	-12.70m
116+390.00	-2.690m	1121.77m	-25.33m	1116.61m	-12.70m	1119.18m	-12.70m	1119.18m	-12.70m
116+400.00	-2.670m	1121.82m	-25.31m	1116.66m	-12.70m	1119.23m	-12.70m	1119.23m	-12.70m
116+410.00	-2.650m	1121.87m	-25.29m	1116.71m	-12.70m	1119.28m	-12.70m	1119.28m	-12.70m
116+420.00	-2.630m	1121.92m	-25.27m	1116.76m	-12.70m	1119.33m	-12.70m	1119.33m	-12.70m
116+430.00	-2.610m	1121.97m	-25.25m	1116.81m	-12.70m	1119.38m	-12.70m	1119.38m	-12.70m
116+440.00	-2.590m	1122.02m	-25.23m	1116.86m	-12.70m	1119.43m	-12.70m	1119.43m	-12.70m
116+450.00	-2.570m	1122.07m	-25.21m	1116.91m	-12.70m	1119.48m	-12.70m	1119.48m	-12.70m
116+460.00	-2.550m	1122.12m	-25.19m	1116.96m	-12.70m	1119.53m	-12.70m	1119.53m	-12.70m
116+470.00	-2.530m	1122.17m	-25.17m	1117.01m	-12.70m	1119.58m	-12.70m	1119.58m	-12.70m
116+480.00	-2.510m	1122.22m	-25.15m	1117.06m	-12.70m	1119.63m	-12.70m	1119.63m	-12.70m
116+490.00	-2.490m	1122.27m	-25.13m	1117.11m	-12.70m	1119.68m	-12.70m	1119.68m	-12.70m
116+500.00	-2.470m	1122.32m	-25.11m	1117.16m	-12.70m	1119.73m	-12.70m	1119.73m	-12.70m
116+510.00	-2.450m	1122.37m	-25.09m	1117.21m	-12.70m	1119.78m	-12.70m	1119.78m	-12.70m
116+520.00	-2.430m	1122.42m	-25.07m	1117.26m	-12.70m	1119.83m	-12.70m	1119.83m	-12.70m
116+530.00	-2.410m	1122.47m	-25.05m	1117.31m	-12.70m	1119.88m	-12.70m	1119.88m	-12.70m
116+540.00	-2.390m	1122.52m	-25.03m	1117.36m	-12.70m	1119.93m	-12.70m	1119.93m	-12.70m
116+550.00	-2.370m	1122.57m	-25.01m	1117.41m	-12.70m	1119.98m	-12.70m	1119.98m	-12.70m
116+560.00	-2.350m	1122.62m	-24.99m	1117.46m	-12.70m	120.03m	-12.70m	120.03m	-12.70m
116+570.00	-2.330m	1122.67m	-24.97m	1117.51m	-12.70m	120.08m	-12.70m	120.08m	-12.70m
116+580.00	-2.310m	1122.72m	-24.95m	1117.56m	-12.70m	120.13m	-12.70m	120.13m	-12.70m
116+590.00	-2.290m	1122.77m	-24.93m	1117.61m	-12.70m	120.18m	-12.70m	120.18m	-12.70m
116+600.00	-2.270m	1122.82m	-24.91m	1117.66m	-12.70m	120.23m	-12.70m	120.23m	-12.70m
116+610.00	-2.250m	1122.87m	-24.89m	1117.71m	-12.70m	120.28m	-12.70m	120.28m	-12.70m
116+620.00	-2.230m	1122.92m	-24.87m	1117.76m	-12.70m	120.33m	-12.70m	120.33m	-12.70m
116+630.00	-2.210m	1122.97m	-24.85m	1117.81m	-12.70m	120.38m	-12.70m	120.38m	-12.70m
116+640.00	-2.190m	1123.02m	-24.83m	1117.86m	-12.70m	120.43m	-12.70m	120.43m	-12.70m
116+650.00	-2.170m	1123.07m	-24.81m	1117.91m	-12.70m	120.48m	-12.70m	120.48m	-12.70m
116+660.00	-2.150m	1123.12m	-24.79m	1117.96m	-12.70m	120.53m	-12.70m	120.53m	-12.70m
116+670.00	-2.130m	1123.17m	-24.77m	1118.01m	-12.70m	120.58m	-12.70m	120.58m	-12.70m
116+680.00	-2.110m	1123.22m	-24.75m	1118.06m	-12.70m	120.63m	-12.70m	120.63m	-12.70m
116+690.00	-2.090m	1123.27m	-24.73m	1118.11m	-12.70m	120.68m	-12.70m	120.68m	-12.70m
116+700.00	-2.070m	1123.32m	-24.71m	1118.16m	-12.70m	120.73m	-12.70m	120.73m	-12.70m
116+710.00	-2.050m	1123.37m	-24.69m	1118.21m	-12.70m	120.78m	-12.70m	120.78m	-12.70m
116+720.00	-2.030m	1123.42m	-24.67m	1118.26m	-12.70m	120.83m	-12.70m	120.83m	-12.70m
116+730.00	-2.010m	1123.47m	-24.65m	1118.31m	-12.70m	120.88m	-12.70m	120.88m	-12.70m
116+740.00	-1.990m	1123.52m	-24.63m	1118.36m	-12.70m	120.93m	-12.70m	120.93m	-12.70m
116+750.00	-1.970m	1123.57m	-24.61m	1118.41m	-12.70m	120.98m	-12.70m	120.98m	-12.70m
116+760.00	-1.950m	1123.62m	-24.59m	1118.46m	-12.70m	121.03m	-12.70m	121.03m	-12.70m
116+770.00	-1.930m	1123.67m	-24.57m	1118.51m	-12.70m	121.08m	-12.70m	121.08m	-12.70m
116+780.00	-1.910m	1123.72m	-24.55m	1118.56m	-12.70m	121.13m	-12.70m	121.13m	-12.70m
116+790.00	-1.890m	1123.77m	-24.53m	1118.61m	-12.70m	121.18m	-12.70m	121.18m	-12.70m
116+800.00	-1.870m	1123.82m	-24.51m	1118.66m	-12.70m	121.23m	-12.70m	121.23m	-12.70m
116+810.00	-1.850m	1123.87m	-24.49m	1118.71m	-12.70m	121.28m	-12.70m	121.28m	-12.70m
116+820.00	-1.830m	1123.92m	-24.47m	1118.76m	-12.70m	121.33m	-12.70m	121.33m	-12.70m
116+830.00	-1.810m	1123.97m	-24.45m	1118.81m	-12.70m	121.38m	-12.70m	121.38m	-12.70m
116+840.00	-1.790m	1124.02m	-24.43m	1118.86m	-12.70m	121.43m	-12.70m	121.43m	-12.70m
116+850.00	-1.770m	1124.07m	-24.41m	1118.91m	-12.70m	121.48m	-12.70m	121.48m	-12.70m
116+860.00	-1.750m	1124.12m	-24.39m	1118.96m	-12.70m	121.53m	-12.70m	121.53m	-12.70m
116+870.00	-1.730m	1124.17m	-24.37m	1119.01m	-12.70m	121.58m	-12.70m	121.58m	-12.70m
116+880.00	-1.710m	1124.22m	-24.35m	1119.06m	-12.70m	121.63m	-12.70m	121.63m	-12.70m
116+890.00	-1.690m	1124.27m	-24.33m	1119.11m	-12.70m	121.68m	-12.70m	121.68m	-12.70m
116+900.00	-1.670m	1124.32m	-24.31m	1119.16m	-12.70m	121.73m	-12.70m	121.73m	-12.70m
116+910.00	-1.650m	1124.37m	-24.29m	1119.21m	-12.70m	121.78m	-12.70m	121.78m	-12.70m
116+920.00	-1.630m	1124.42m	-24.27m	1119.26m	-12.70m	121.83m	-12.70m	121.83m	-12.70m
116+930.00	-1.610m	1124.47m	-24.25m	1119.31m	-12.70m	121.88m	-12.70m	121.88m	-12.70m
116+940.00	-1.590m	1124.52m	-24.23m	1119.36m	-12.70m	121.93m	-12.70m	121.93m	-12.70m
116+950.00	-1.570m	1124.57m	-24.21m	1119.41m	-12.70m	121.98m	-12.70m	121.98m	-12.70m
116+960.00	-1.550m	1124.62m	-24.19m	1119.46m	-12.70m	122.03m	-12.70m	122.03m	-12.70m
116+970.00	-1.530m	1124.67m	-24.17m	1119.51m	-12.70m	122.08m	-12.70m	122.08m	-12.70m
116+980.00	-1.510m	1124.72m	-24.15m	1119.56m	-12.70m	122.13m	-12.70m	122.13m	-12.70m
116+990.00	-1.490m	1124.77m	-24.13m	1119.61m	-12.70m	122.18m	-12.70m	122.18m	-12.70m
117+000.00	-1.470m	1124.82m	-24.11m	1119.66m	-12.70m	122.23m	-12.70m	122.23m	-12.70m
117+010.00	-1.450m	1124.87m	-24.09m	1119.71m	-12.70m	122.28m	-12.70m	122.28m	-12.70m
117+020.00	-1.430m	1124.92m	-24.07m	1119.76m	-12.70m	122.33m	-12.70m	122.33m	-12.70m
117+030.00	-1.410m	1124.97m	-24.05m	1119.81m	-12.70m	122.38m	-12.70m	122.38m	-12.70m
117+040.00	-1.390m	1125.02m	-24.03m	1119.86m	-12.70m	122.43m	-12.70m	122.43m	-12.70m
117+050.00	-1.370m	1125.07m	-24.01m	1119.91m	-12.70m	122.48m	-12.70m	122.48m	-12.70m
117+060.00	-1.350m	1125.12m	-23.99m	1119.96m	-12.70m	122.53m	-12.70m	122.53m	-12.70m
117+070.00	-1.330m	1125.17m	-23.97m	1120.01m	-12.70m	122.58m	-12.70m	122.58m	-12.70m
117+080.00	-1.310m	1125.22m	-23.95m	1120.06m	-12.70m	122.63m	-12.70m	122.63m	-12.70m
117+090.00	-1.290m	1125.27m	-23.93m	1120.11m	-12.70m	122.68m	-12.70m	122.68m	-12.70m
117+100.00	-1.270m	1125.32m	-23.91m	1120.16m	-12.70m	122.73m	-12.70m	122.73m	-12.70m
117+110.00	-1.250m	1125.37m	-23.89m	1120.21m	-12.70m	122.78m	-12.70m	122.78m	-12.70m
117+120.00	-1.230m	1125.42m	-23.87m	1120.26m	-12.70m	122.83m	-12.70m	122.83m	-12.70m
117+130.00	-1.210m	1125.47m	-23.85m						



ISSUED FOR TENDER

PCA PROJECT No. TETRA TECH EBA No.



1	ISSUED FOR TENDER	AF	TT	AF
2				
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YOHO NATIONAL PARK
BRITISH COLUMBIA

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

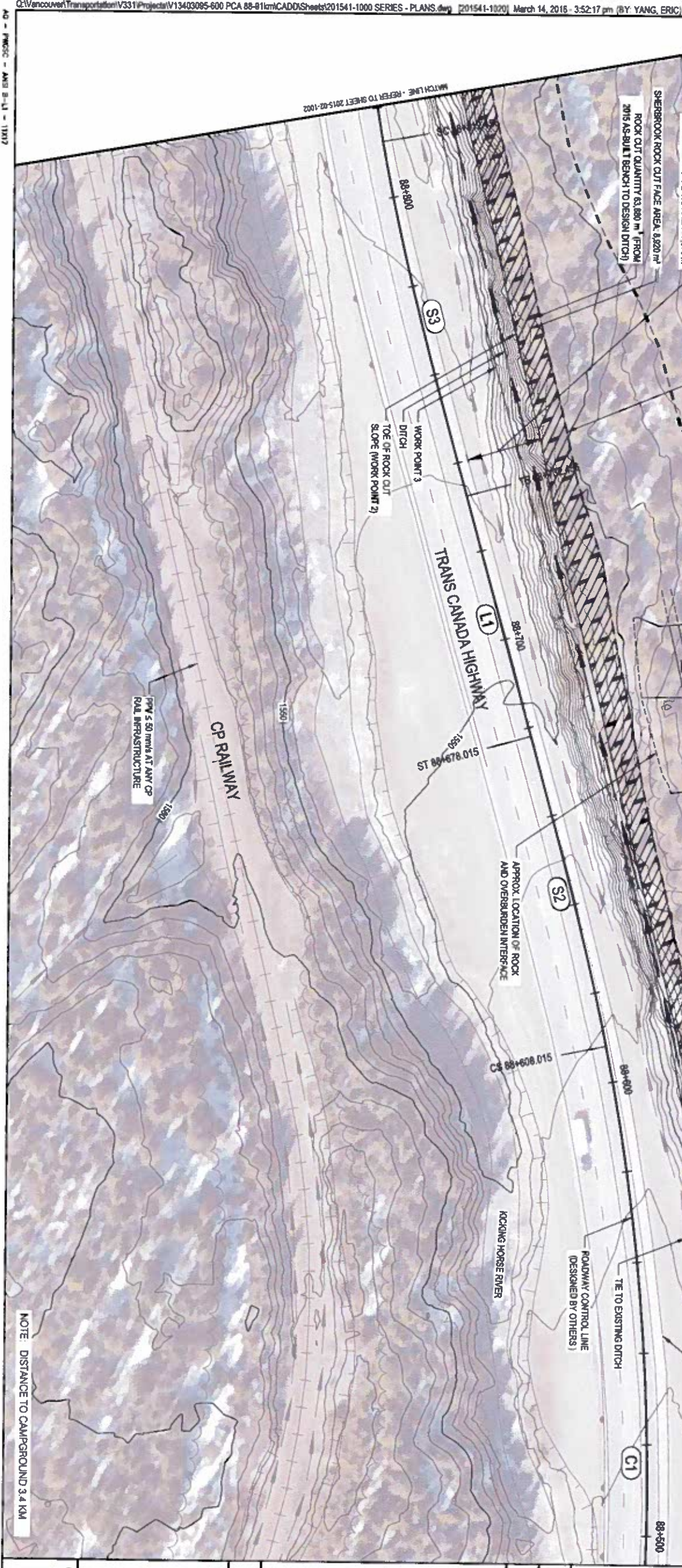
Designed by/Concepted by
A. FRAPPELL / E. YANG
Drawn by/Detailing by
T. TAKEDA



Client/Client
PARKS CANADA AGENCY

Showing /Indiquant
SHERBROOKE CREEK
ROCK SLOPE PLAN
STA 88+580 TO 88+820

Project No./No. du projet	Sheet/Feuille	Revision no./ Révision no.
201541-1020	1	





ISSUED FOR TENDER

PCA PROJECT NO. TETRA TECH EBA NO.

[illegible]

**YOHO NATIONAL PARK
BRITISH COLUMBIA**

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

A. FRAPPELL / E. YANG
 Design: by / Drawing: poor

T. TAKEDA



PARKS CANADA AGENCY
City/Prov
Drawing Title/Proj description
**SHERBROOKE CREEK
ROCK SLOPE PLAN**
STA 88+820 TO 89+060

Project no./No. du projet	Sheet/Feuille	Revision no./ La Revision no
	201541-1021	0





0 10 1:1000 50m

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**YOHO NATIONAL PARK
BRITISH COLUMBIA**

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

Designed by/Conceps por
A. FRAPPELLI/E. YANG

T. TAKEDA

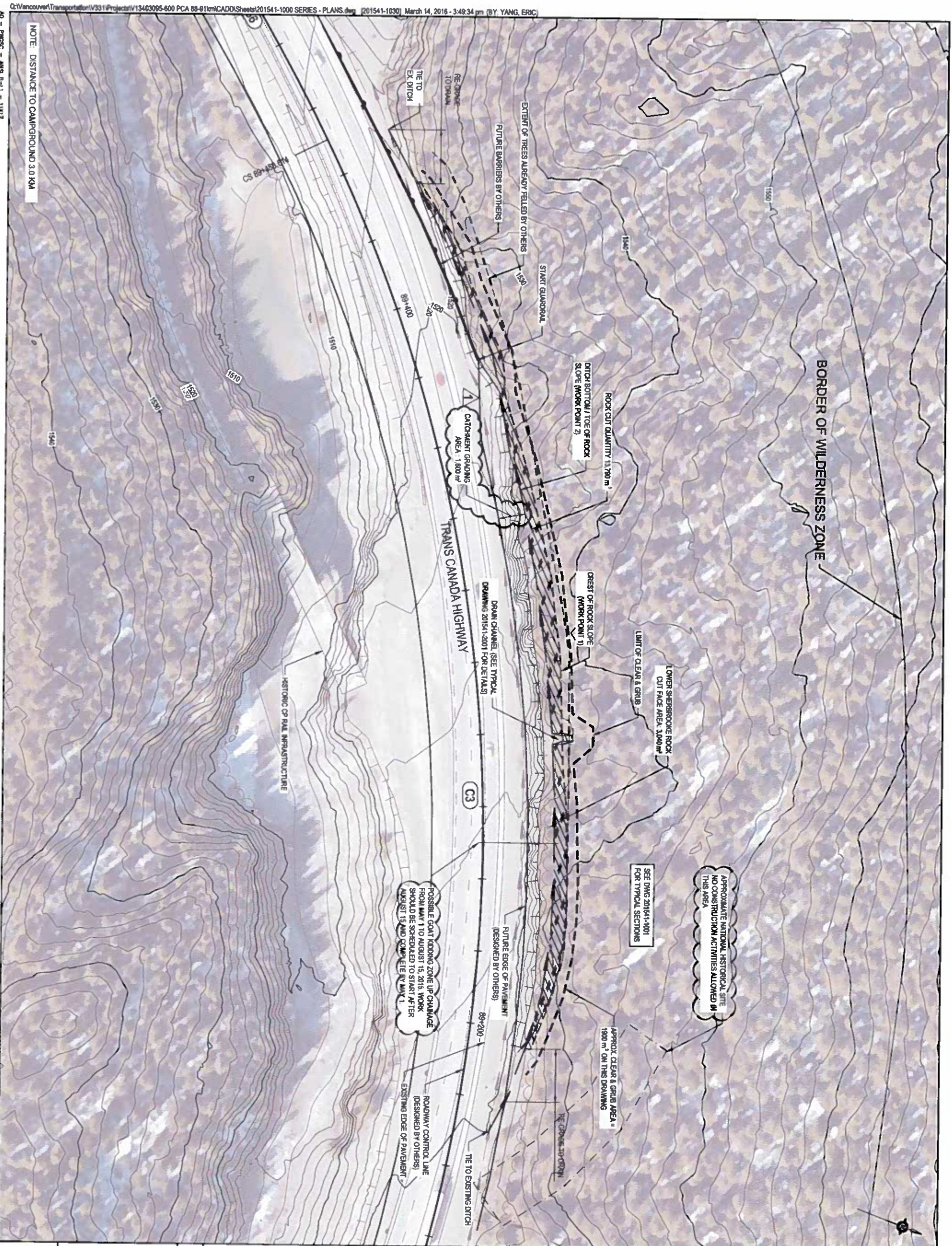


**LOWER SHERBROOKE CREEK
ROCK SLOPE PLAN
STA 89+195 TO 89+435**

Project No./Ma. du proje

201541-1030

Let \mathcal{R} be a relation on A .



ISSUED FOR TENDER

PCA PROJECT NO. TETRA TECH EBA NO.

[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 Film/Tire du dessin

**SPIRAL TUNNELS HILL
ROCK SLOPE PLAN
STA 90+210 TO 90+360**

Project No./No. du projet	Sheet/Feuille
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201541-1060

Revision no./
La Révision no.



ISSUED FOR TENDER

TETRA TECH EBA No.

[illegible]

Project title/Title du projet

**YHOHO 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

**Designed by/Designed
T. TAKEDA**

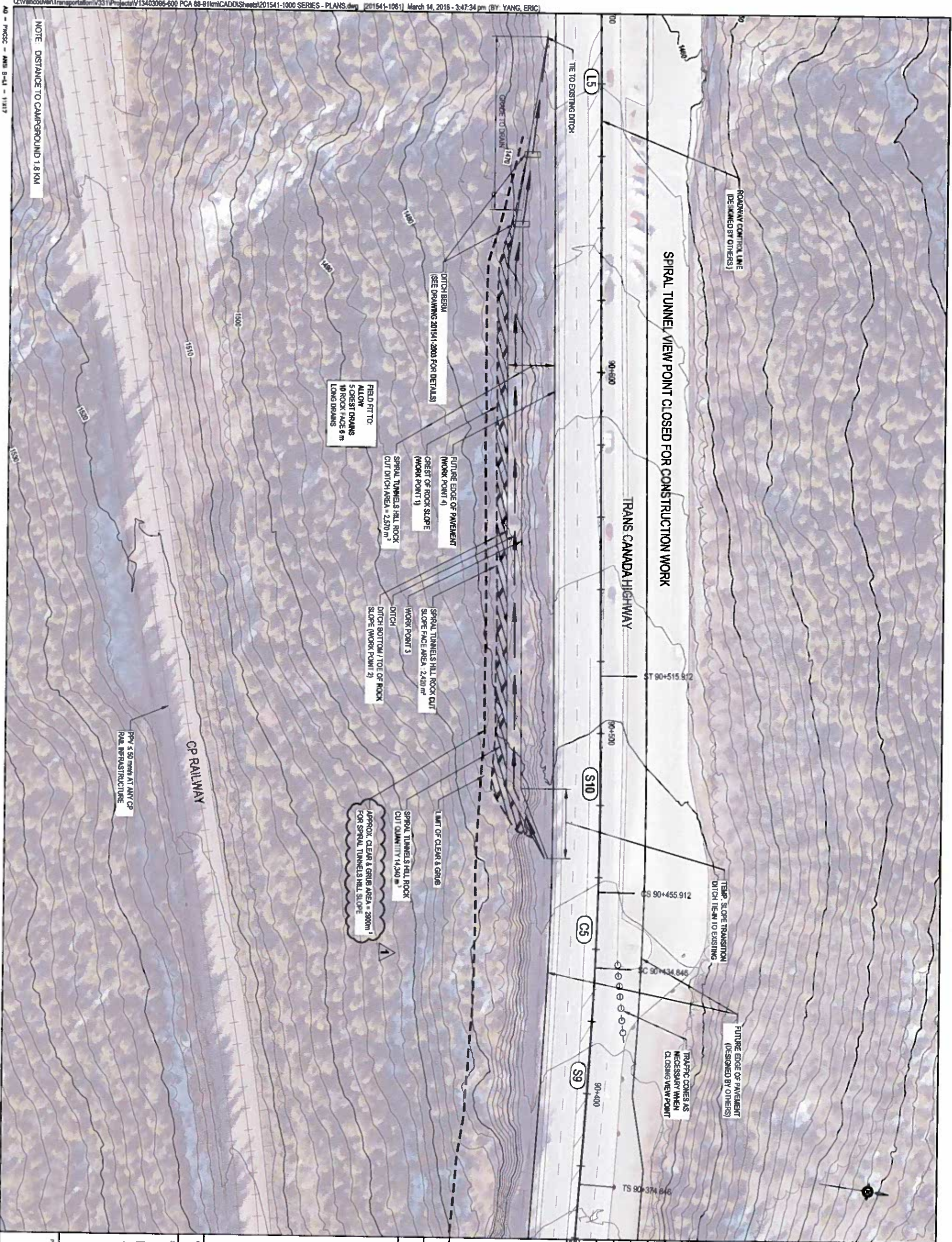
**PARKS CANADA AGENCY**

Drawing title/Title du dessin

**SPIRAL TUNNELS HILL
ROCK SLOPE PLAN
STA 90+360 TO 90+700**

[illegible]

201541-1061

Revision no. /
to Revision no.



ISSUED FOR TENDER

PCA PROJECT No. TETRA TECH EBA No.



1	1600/14	ISSUED FOR TENDER	AF	TT	AF
Project Name/Title du projet	Yoho National Park British Columbia				
Project No./N° du projet	201541-1090				
Project Date/Date de projet	2016				
Project Description/Description	Rock Slope Reprofilng				
Project Status/Statut du projet	AF				

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
BIG TOPPLE
ROCK SLOPE PLAN
STA 115+370 TO 115+600

Project No./N° du projet	201541-1090	Revision no./ Le dessin n°	1
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ISSUED FOR TENDER

TETRA TECH EBA No.

[illegible]

Project title/Title of project

**YOHO NATIONAL PARK
BRITISH COLUMBIA**

Designed by/Concept por
A. FRAPPELL / E. YANG
Drawn by/Detailing por
T. TAKEDA



Client/Client:
PARKS CANADA AGENCY

Drawing the/tra cu capin

**LITTLE TOPPLE
ROCK SLOPE PLAN
STA 115+675 TO 115+820**

[illegible]

201541-1100

[illegible]

ISSUED FOR TENDER

PCA PROJECT NO. TETRA TECH EBA NO.

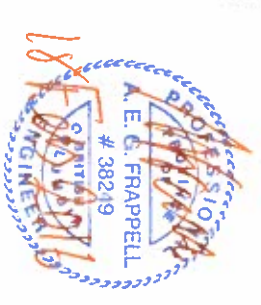
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**YOHO NATIONAL PARK
BRITISH COLUMBIA**

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

A. FRAPPELLI / E. YANG

T. TAKEDA



PARKS CANADA AGENCY

Drinking water/food du dossier

**MOUNT VAUX
ROCK SLOPE PLAN
STA 116+115 TO 116+475**

Project No./No. du projet

Share/Results

Region no.
to Region no.

201541-1110

0





ISSUED FOR TENDER

PCA PROJECT NO. TETRA TECH EBA NO.

[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/Designed
T. TAKEDA



Client/cliente
PARKS CANADA AGENCY

**MOUNT VAUX
ROCK SLOPE PLAN
STA 116+475 TO 116+865**

Project No./No. du projet	Sheet/Feuille
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201541-1111

Revision no./
to Revision no.

PCA PROJECT NO. TETRA TECH EBA NO.

Project title/description of project

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

TYPICAL CROSS SECTION

Project no./no du projet	Sheet/feuille	Revision no./ no de révision
	201541-2001	0



AO - PMSOC - ANS B-11 - 11X17



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

[illegible]

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

T. TAKEDA

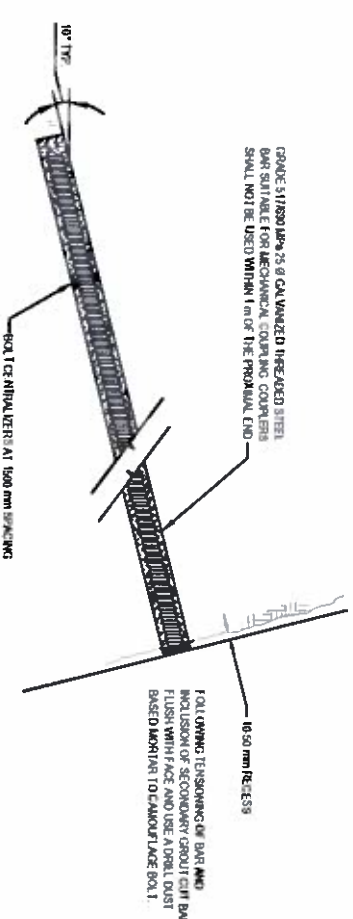
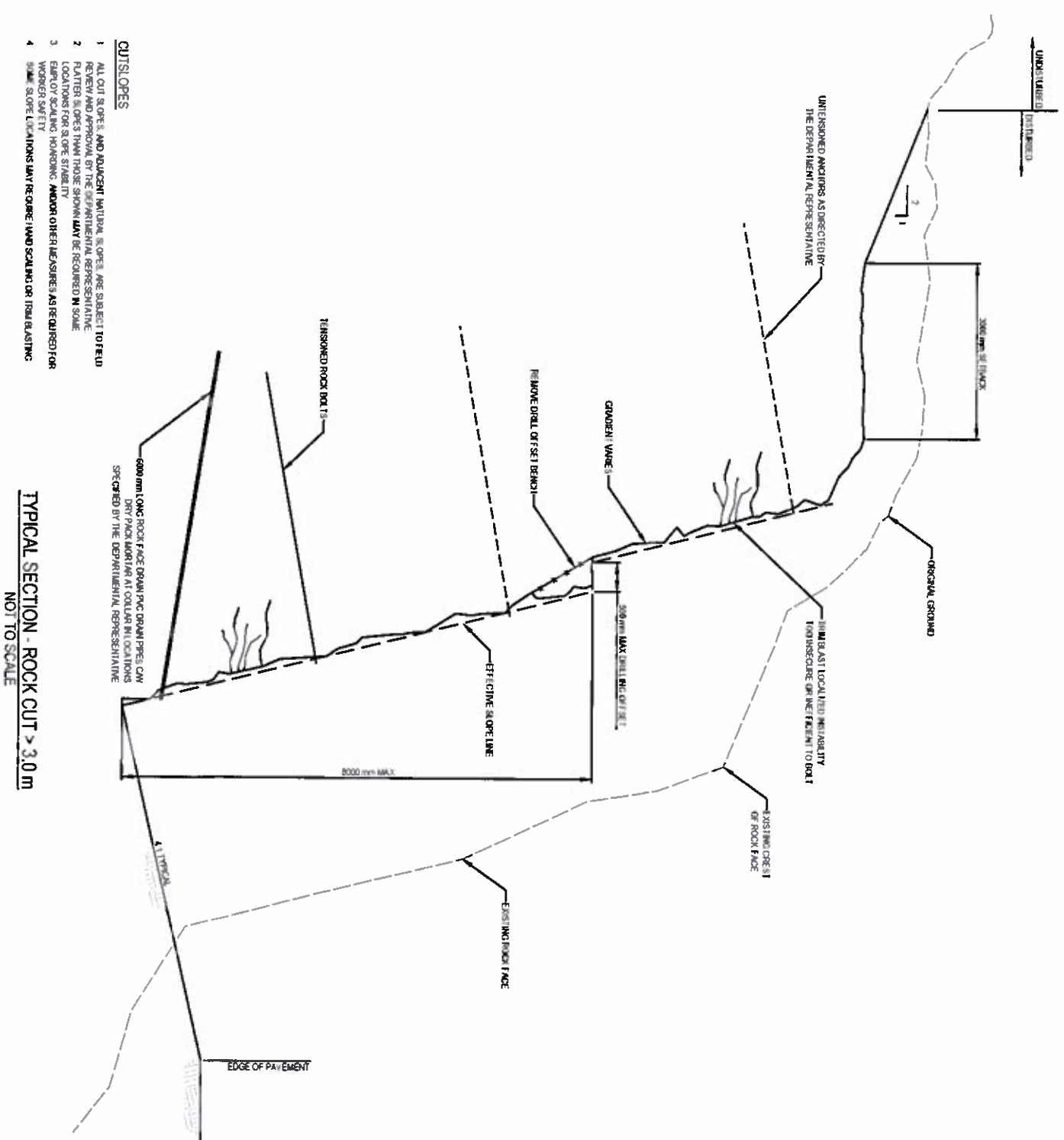


Client/client
PARKS CANADA AGENCY

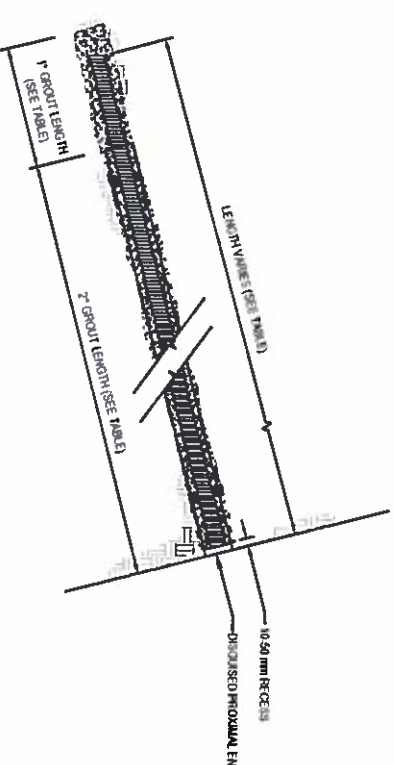
ROCK SUPPORT TYPICAL DETAILS

Project No./No. du projet	Street/Adresse	Project No./No. du projet
	201541-2002	0

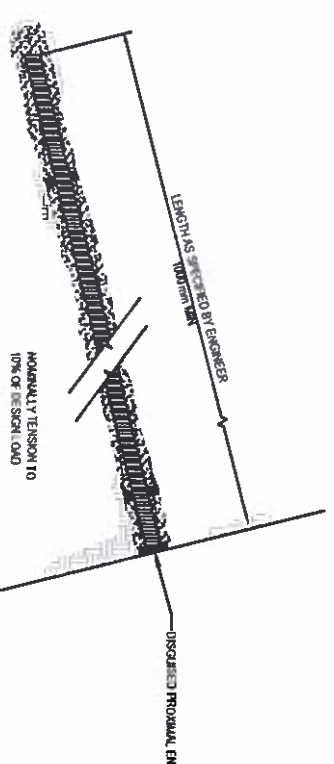
- NOTES:**
1. INSTALL ROCK SUPPORT AND MAKE SPECIFIED TREATMENTS AS DIRECTED BY THE DEPARTMENTAL REPRESENTATIVE.
 2. FIXED BOLT LENGTHS SHALL BE VERIFIED BY THE DEPARTMENTAL REPRESENTATIVE BASED ON SITE CONDITIONS AT EACH APPLICATION LOCATION.
 3. ROCK SUPPORT INSTALLATION SHALL BE SEQUENCED WITH THE EXCAVATION.
 4. ROCKFACE DRAINS SHALL BE AS PER BC MOTI STANDARD SPECIFICATION 206.



TYPICAL ANCHOR
NOT TO SCALE



TENSIONED ROCK BOLT
NOT TO SCALE



UNTENSIONED ROCK BOLT
NOT TO SCALE

ROCKSOLIT LENGTH (m)	1 st GROUT LENGTH (m)	2 nd GROUT LENGTH (m)	TENSION LOAD (kN)
3	1.5	1.5	100
4	1.8	2.2	120
5	2.2	2.6	130
6	2.5	3.5	150

ISSUED FOR TENDER

PCA PROJECT NO.	TETRA TECH EBA NO.
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[illegible]

**YOHO NATIONAL PARK
BRITISH COLUMBIA**

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

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

Drawn by/Designed by
T. TAKEDA

PROFESSIONAL
A. E. G. FRAPPELL
38249
BRITISH
ENGINE

Client/client
PARKS CANADA AGENCY

Drawing title/Title du dessin

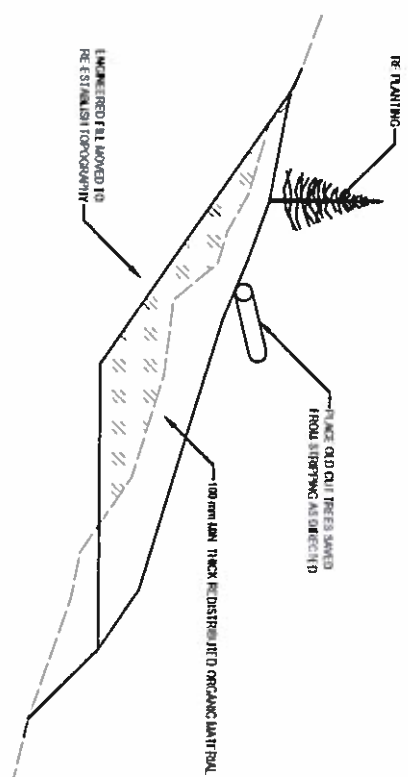
RESTORATION OR REMOVAL TYPICAL DETAILS

Project No./No. du projet	Sheet/Feuille
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201541-2004

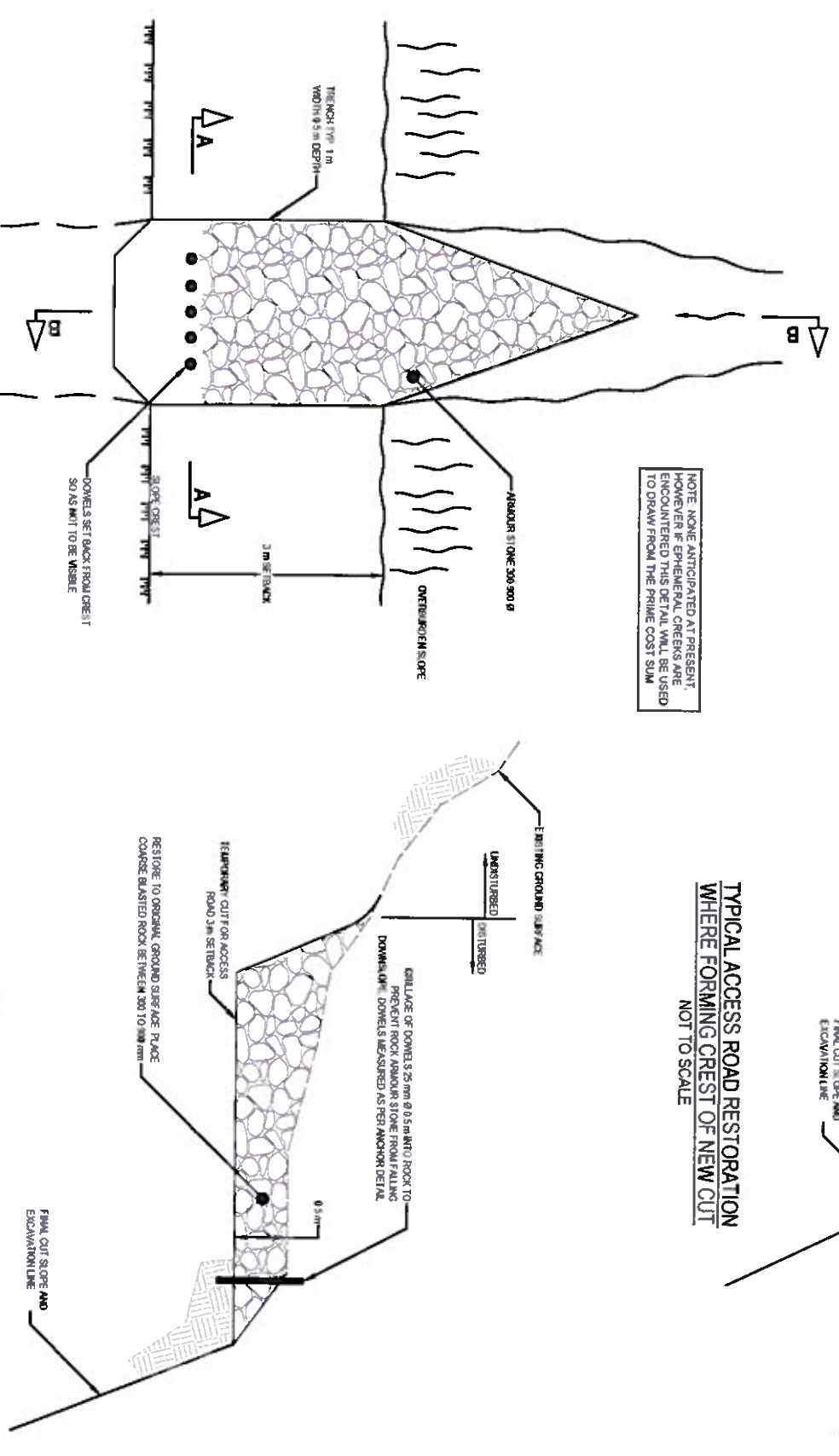
Revision no./
La Revision no..

ACCESS ROAD REMOVAL/RESTORATION
WHERE NOT FORMING CREST OF NEW CUT
NOT TO SCALE



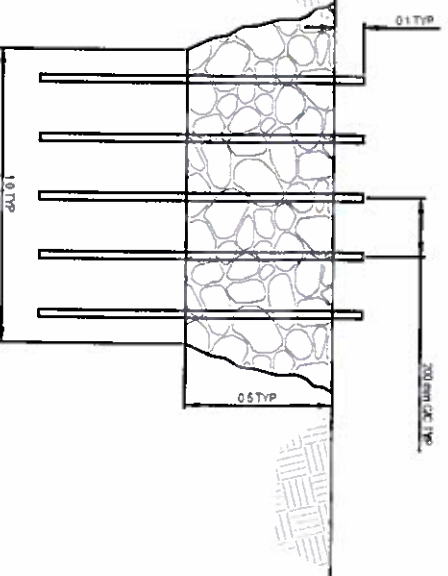
NOTE: NONE ANTICIPATED AT PRESENT, HOWEVER IF EPHEMERAL CREEKS ARE ENCOUNTERED THIS DETAIL WILL BE USED TO DRAW FROM THE PRIME COST SUM

**TYPICAL ACCESS ROAD RESTORATION
WHERE FORMING CREST OF NEW CUT
NOT TO SCALE**

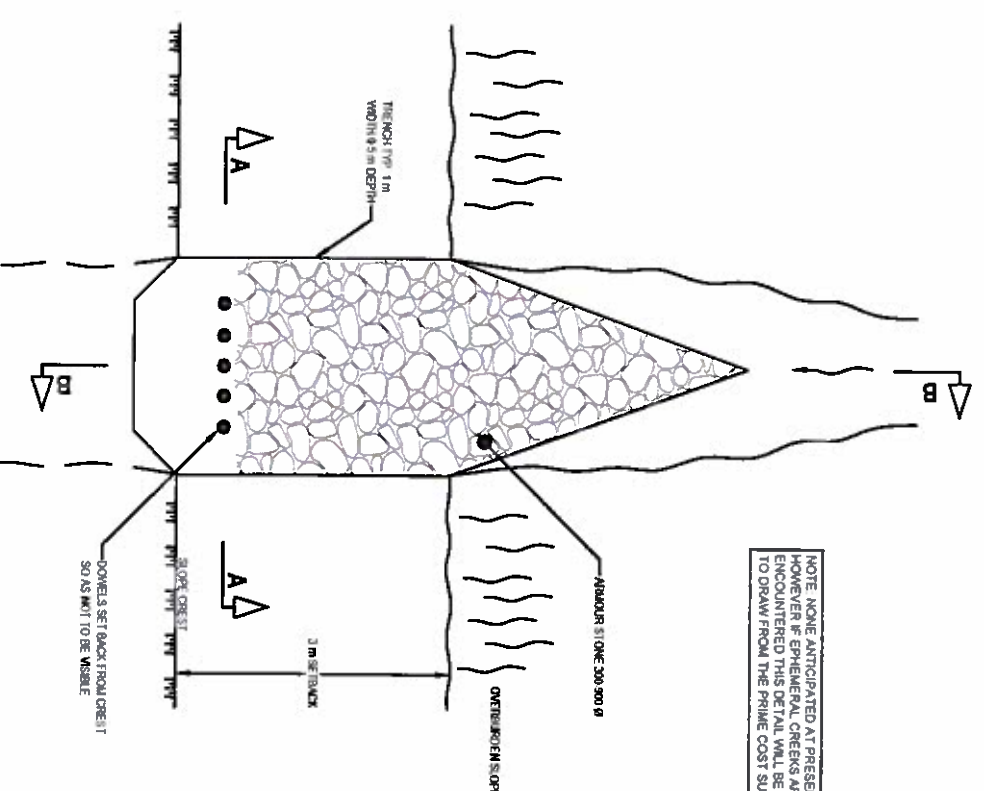


1. GENERAL NOTES:
2. 1. THE OUTSIDE EDGE OF THE ACCESS ROAD FORMS THE EDGE OF THE ROCK CUT.
3. 2. THE 3 M SET BACK AT THE CREST IS SET FOR INSPECTION AND SAFETY THE TOLERANCE ON THIS SET BACK IS ± 0.5 M.
4. 3. ACCESS ROAD REMOVAL WILL OCCUR AT LOCATION WHERE THE OLD EXISTING HIGHWAY IS USED TO GET TO SLOPES (E.G. 114+050 TO 114+850 AND 114+150 TO 114+900).
5. 4. FOR REPLANTING SPECIES OF TREES AND SPACING REFER TO SPECIFICATION.
6. 5. LARGER TREES SAVED FROM STRIPPING WILL BE REPOSITIONED FOR HABITAT PURPOSES.
7. 6. DRILL OFFSETS SHALL BE REMOVED.
8. 7. OVERBURDEN SLOPES SHALL BE SLOPED AT 4:1 UNLESS DIRECTED BY THE DEPARTMENTAL REPRESENTATIVE.
9. 8. CREST BLENDING INTO NATURAL SOIL SLOPES SHALL BE ROUNDED TO REDUCE EROSION.

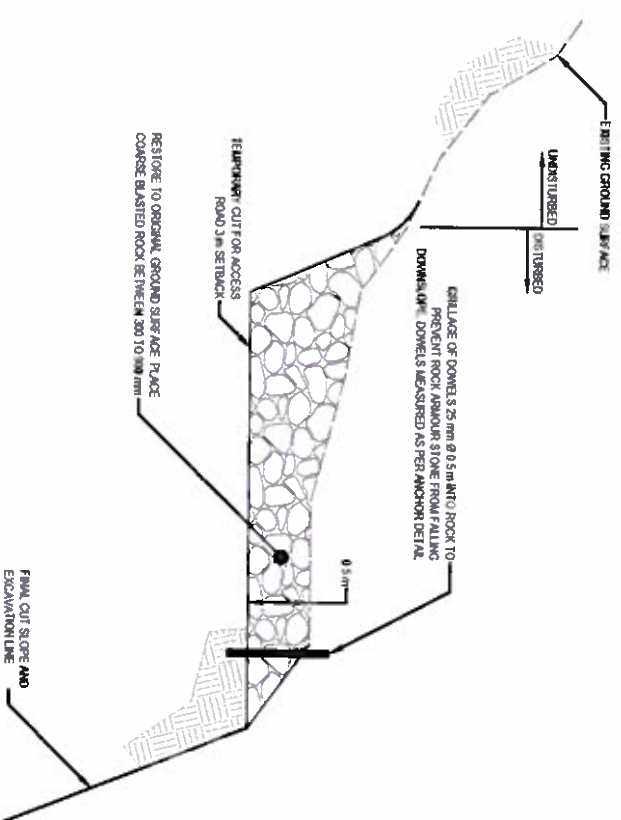
SECTION A-A
NOT TO SCALE



PLAN VIEW OF NATURAL CREEK
NOT TO SCALE



**SECTION B-B TYPICAL ACCESS ROAD
RESTORATION AT CREEK CROSSINGS**
NOT TO SCALE



ISSUED FOR TENDER

PCA PROJECT NO.	TETRA TECHEBA NO.
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[illegible]

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

T. TAKEDA

Column/Column

PARKS CANADA AGENCY

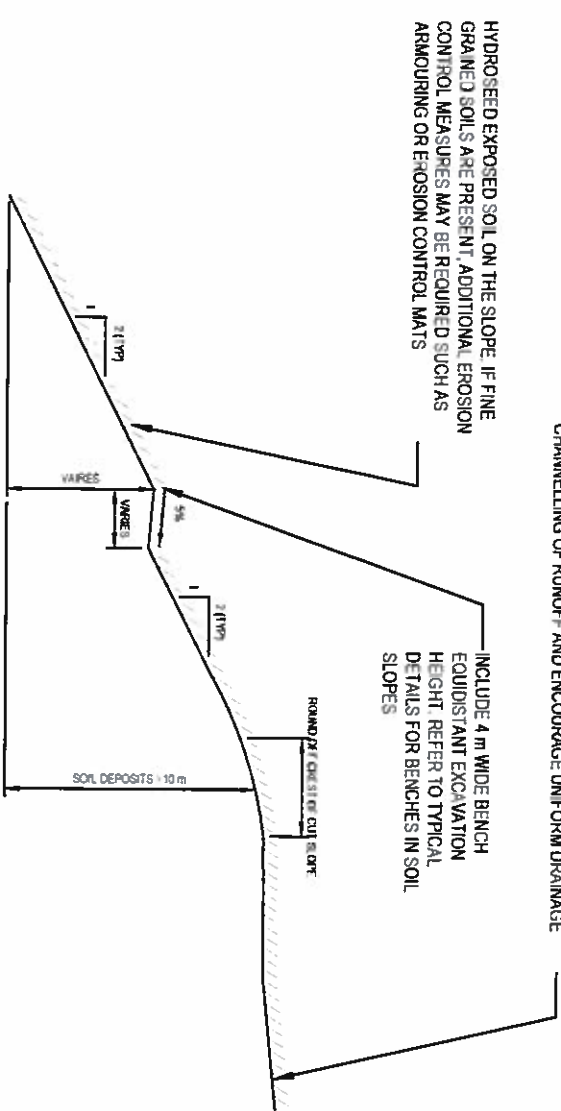
Twisting the/line du centre

TYPICAL DETAILS SOIL SLOPE

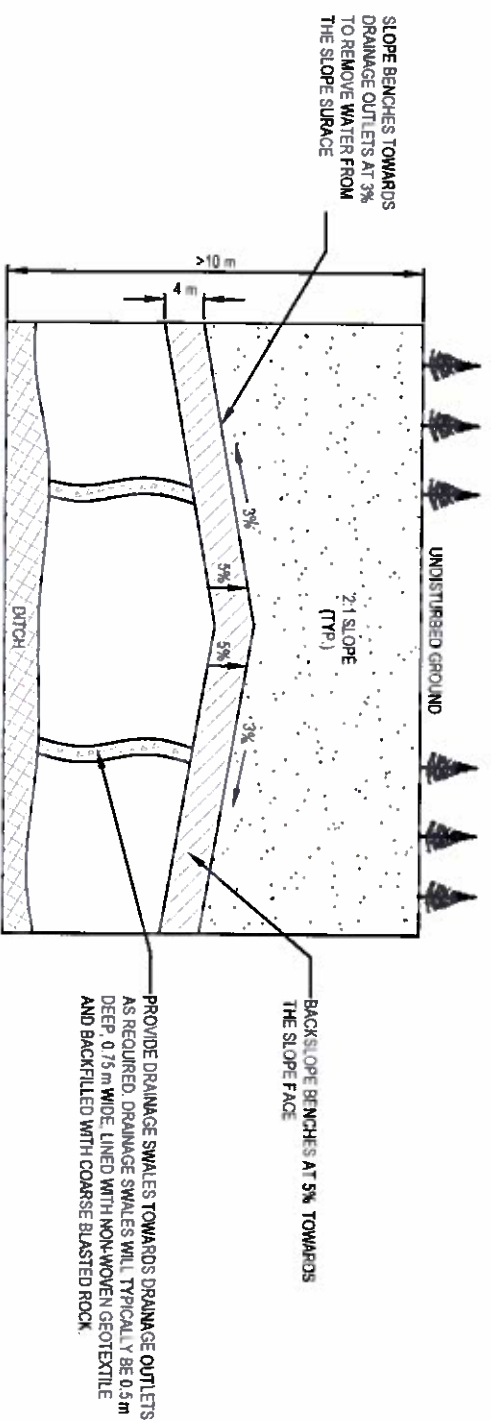
Project #4027 No. 04 Project

0.001

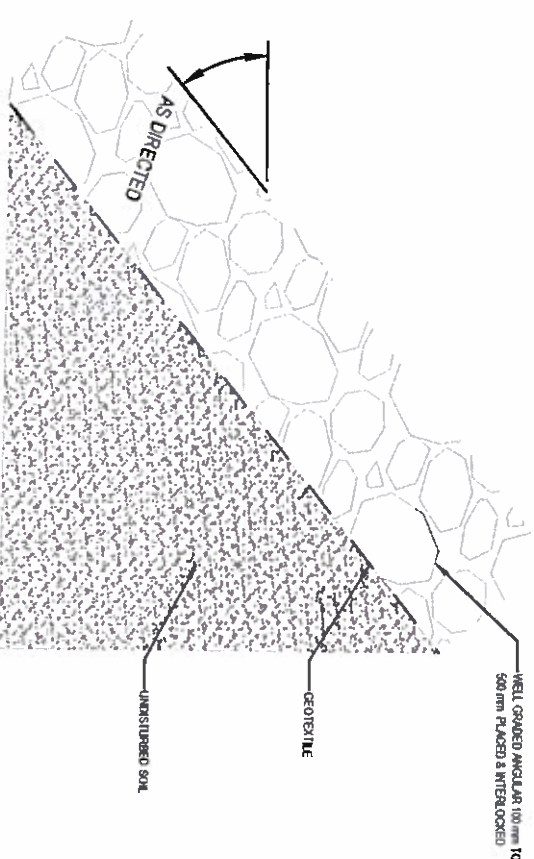
Season/Year

Revision No./
in Revision no.

TYPICAL SOIL CUT SLOPE DETAILS GREATER THAN 10 m
NOT TO SCALE



ELEVATION VIEW
NOT TO SCALE



ROCK BLANKET DETAIL
NOT TO SCALE

NOTES

1. SITE-SPECIFIC DESIGN RECOMMENDATIONS MAY BE REQUIRED FOR AREAS WHERE SOIL COVER IS < 1 m IN THICKNESS AT THE TOP OF A BEDROCK SLOPE, AREAS WHERE THERE ARE PROBLEMS WITH EROSION, RAVELLING, AND/OR SHALL OW SLOPING HAS BEEN OBSERVED, WHERE THE BEDROCK SURFACE UPSLOPE OF THE CUT IS > 24 H/VR AT THE DISCRETION OF THE ON-SITE ENGINEER



PCA PROJECT NO. TETRA TECH EBA NO.

Contract Number	Item / Description	Unit	Quantity	Unit Price	Total Price
0	ISSUED FOR TENDER				

YOHO NATIONAL PARK
BRITISH COLUMBIA

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

Designed by/Concepted by
A. FRAPPELLI/E. YANG

TAKEDA



Client/client
PARKS CANADA AGENCY

Drowning time/Time on deck

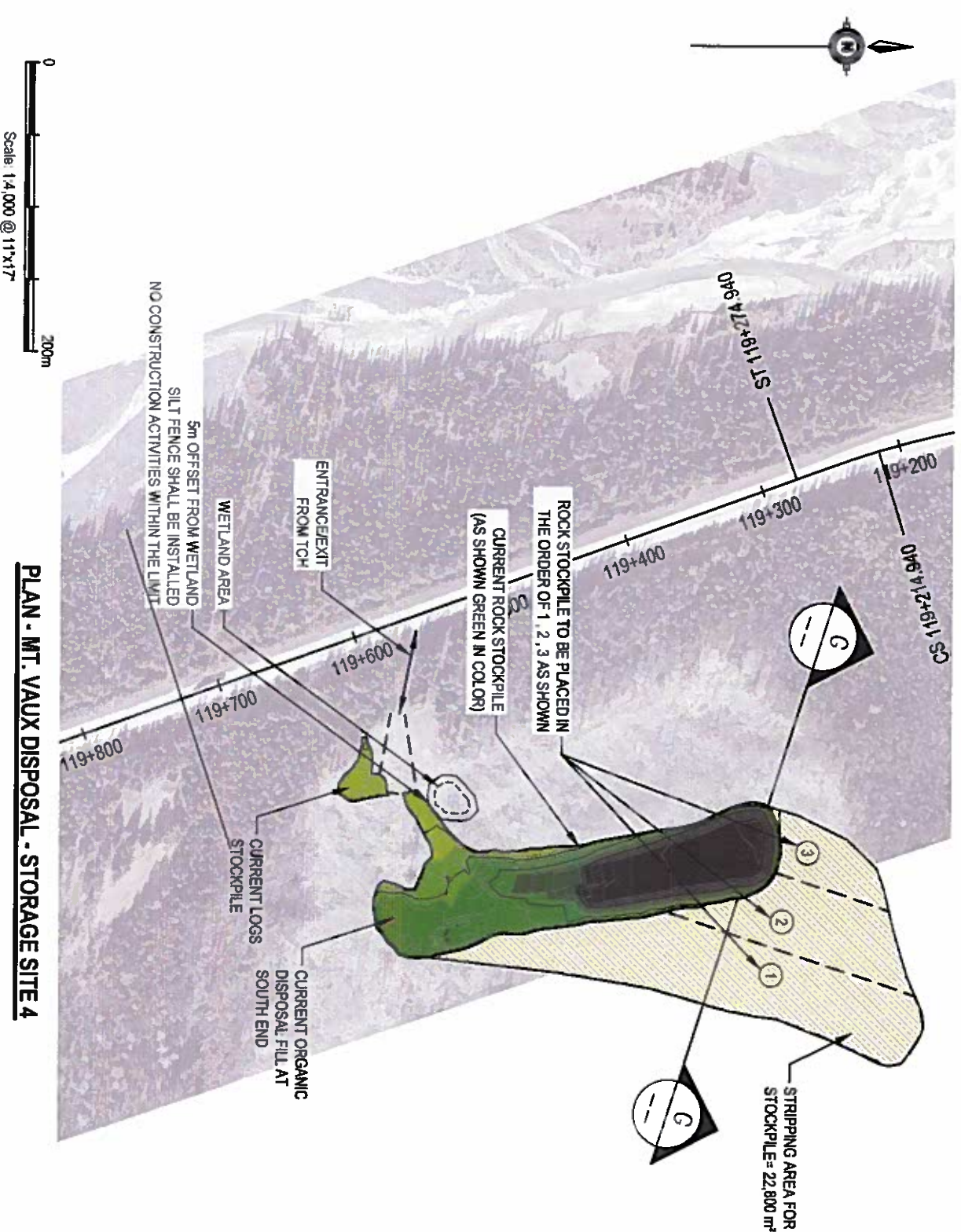
PLAN / PROFILE
MT. VAUX STORAGE SITE

Projet No./No. du projet	Statut/Faible
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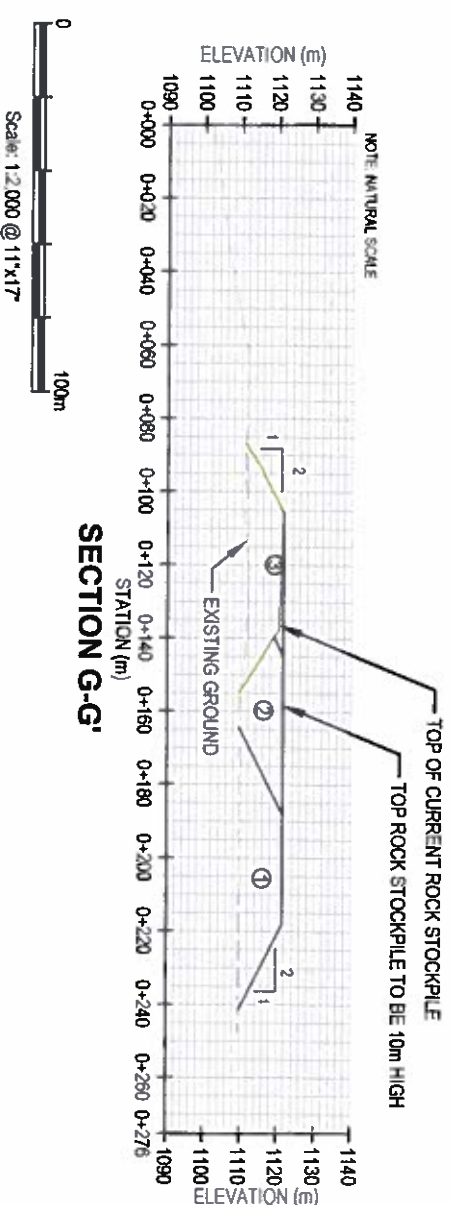
201541-3002

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- ## NOTES
1. STOCKPILE CAPACITY WITHIN FOOT PRINT: 300,000 m³
 2. EXISTING CONTOURS ARE APPROXIMATE
 3. ONLY STRIP AREA THAT WILL BE REQUIRED UNDER THIS PROJECT
 4. SIDE SLOPES ON EASTERN SIDE OF MT. VAUX STOCKPILE ARE AT 2H:1V
 5. ORGANICS AND TOPSOIL WILL BE STRIPPED AND PLACED AT MT. VAUX SOUTH DISPOSAL
 6. CREEK AND DRAINAGE WILL BE REINSTATED THROUGH OR AROUND STOCKPILE
 7. EQUIPMENT SHOULD BE CONTAINED WITHIN DISPOSAL SITE FOOTPRINT AS MUCH AS POSSIBLE
 8. 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.
 9. SILT FENCES AND OTHER PROTECTION MEASURES SHALL BE INSTALLED AROUND THE WETLAND AREA
 10. BOULDERS SHALL BE PLACED TO AVOID ACCIDENTAL ENCROACHMENT INTO THE WETLAND AREA



PLAN - MT. VAUX DISPOSAL - STORAGE SITE 4



SECTION G-G



PCA PROJECT NO. TETRA TECH EBA NO.

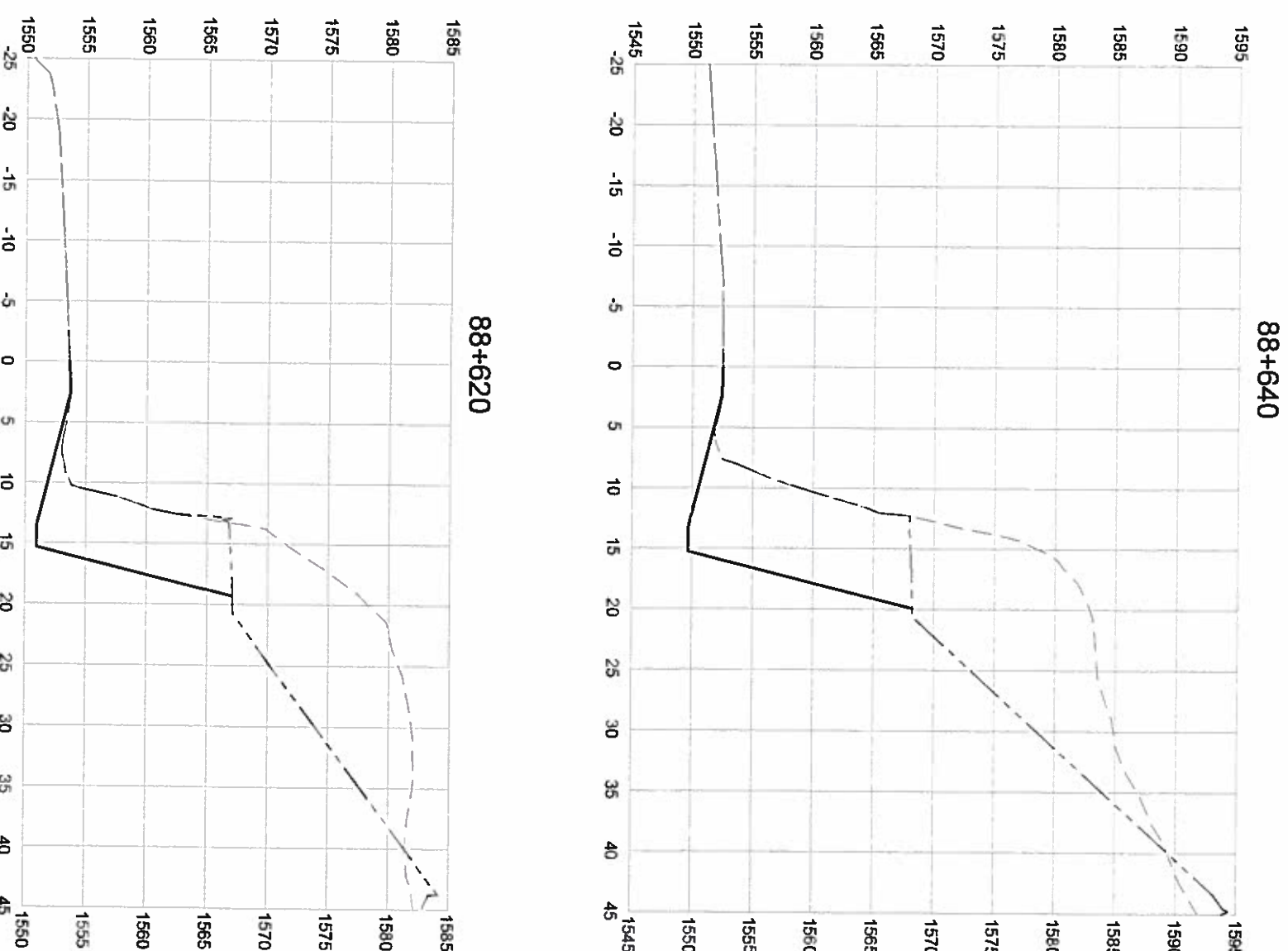
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**KM 88 TO 91 AND KM 114 TO 128
TRANS-CANADA HIGHWAY
SLOPE REPROFILING**

T. TAKEDA



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





ISSUED FOR TENDER

PCA PROJECT NO. TETRA TECH EBA NO.



0	160206	ISSUED FOR TENDER	AF	TT	AF
Revision/	Date/Date	Description/Description	DLS	OWA	CHW

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

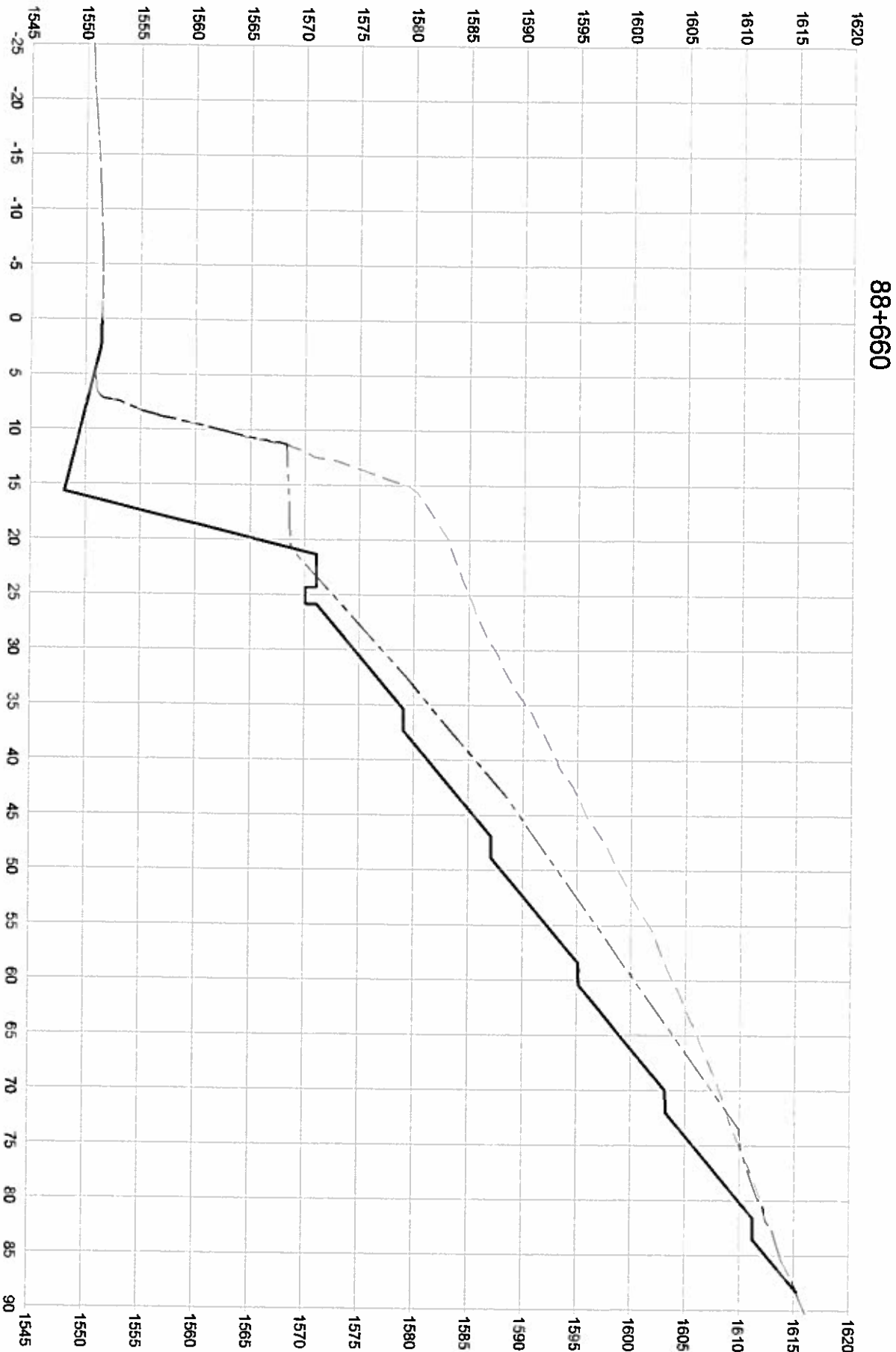
Drawn by/Dessiné par
T. TAKEDA



Client/Client
PARKS CANADA AGENCY

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

Project No./No. du projet	Sheet/Feuille	Revision No./ No. de révision (N/A)
201541-4021	0	



ISSUED FOR TENDER

PCA PROJECT NO. TETRA TECH EBA NO.

[illegible]

**YOHO NATIONAL PARK
BRITISH COLUMBIA**

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

Designed by/Concept for
A. FRAPPELLI/E. YANG

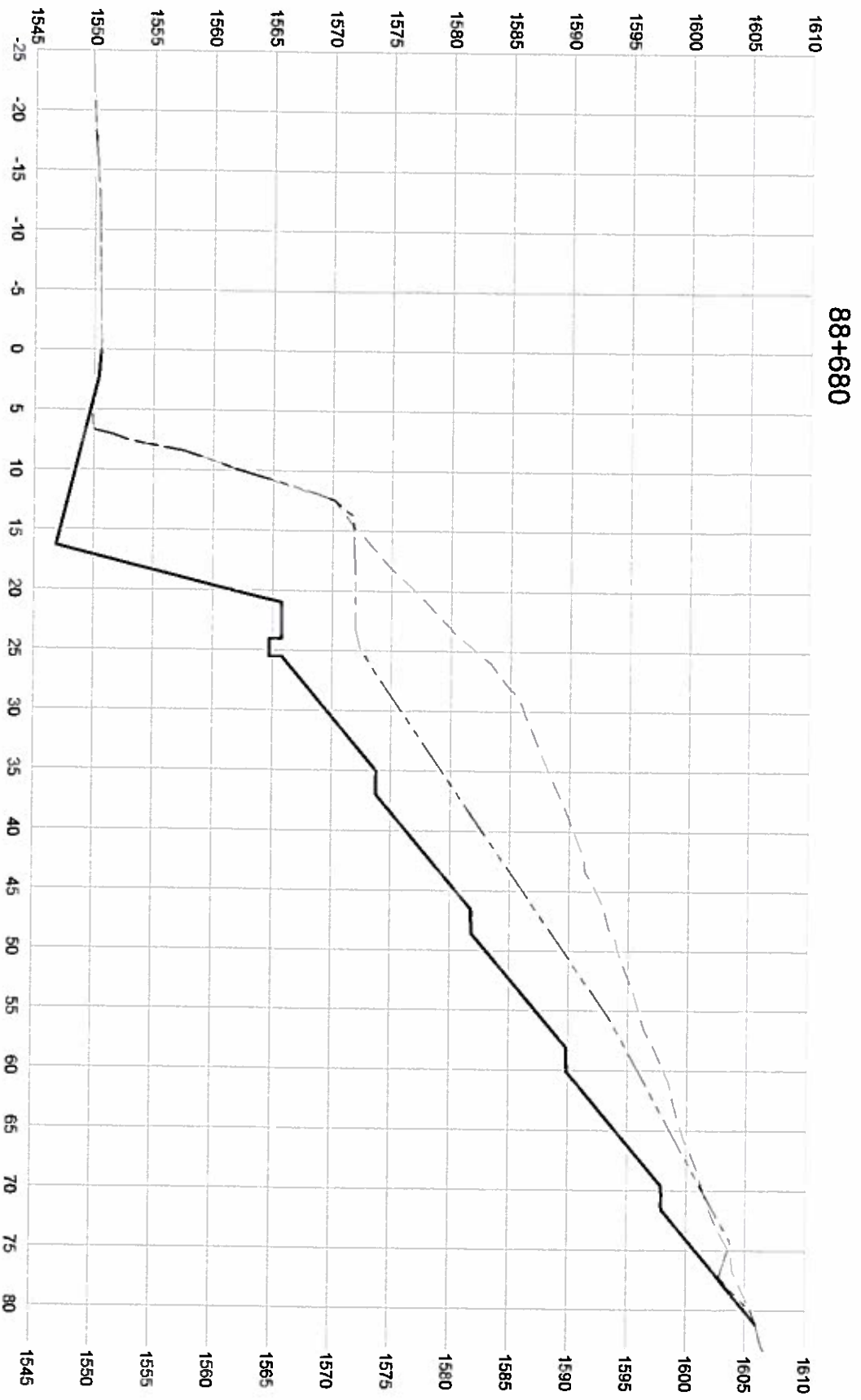
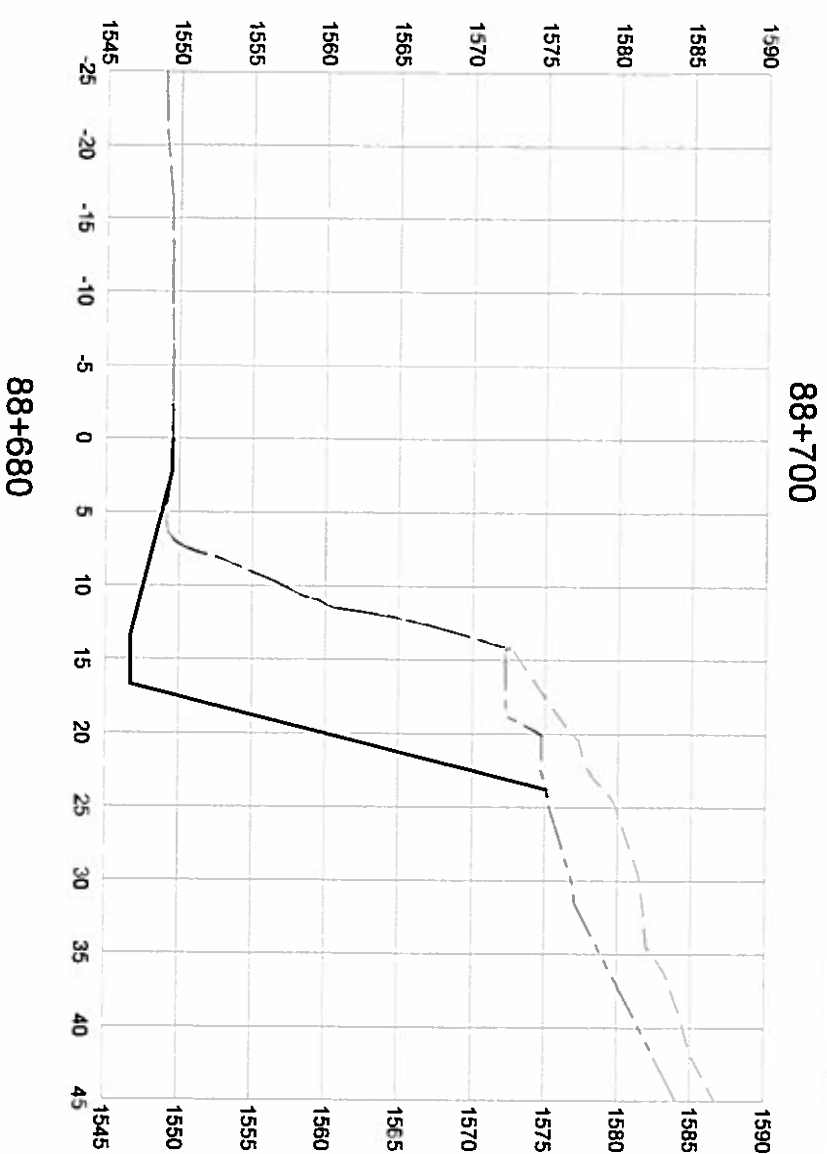
T. TAKEDA



Client/client
PARKS CANADA AGENCY

**SHERBROOKE ROCK SLOPE
CROSS SECTIONS
STA. 88+680 TO 88+700**

Project No./No. du projet	25000/25000	Revision No./ To Revision No.	0
25000/25000	201541-4022		



PCA PROJECT NO. TETRA TECH EBA NO.



T. TAKEDA



Project No./No. du projet	Sujet / topic	Revision no.



ISSUED FOR TENDER

PCA PROJECT No. TETRA TECH EBA No.



0	160209	ISSUED FOR TENDER	AF	TT	AF				
Revision	Date/Date	Description/Description	DLS	OWN	CHK				

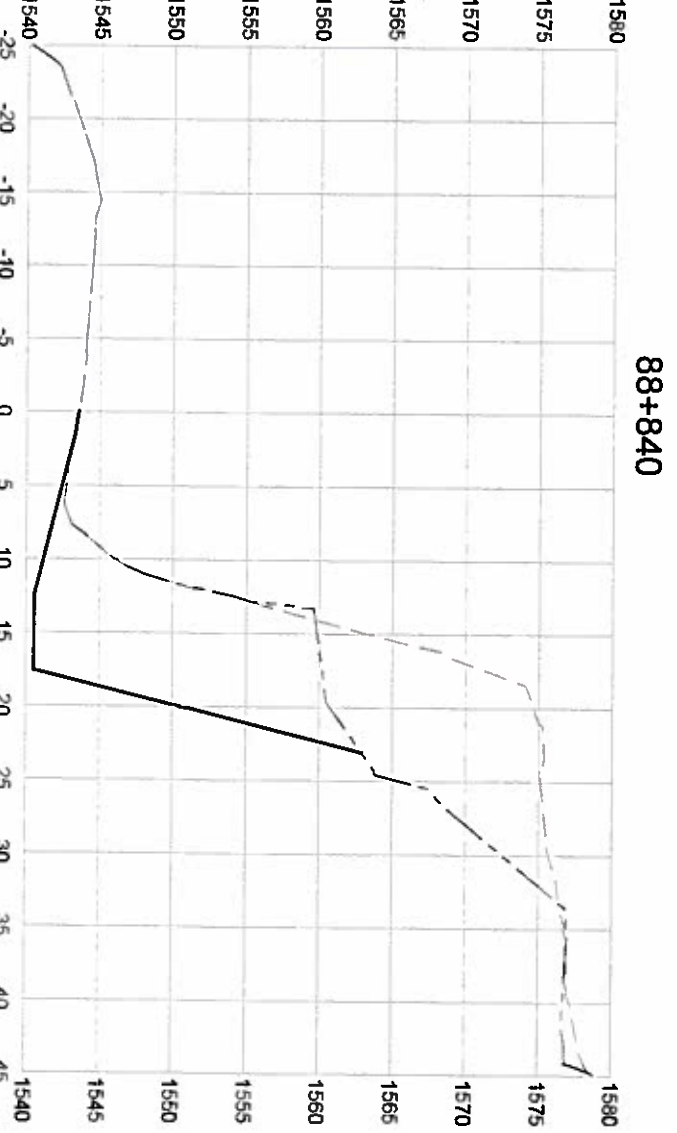
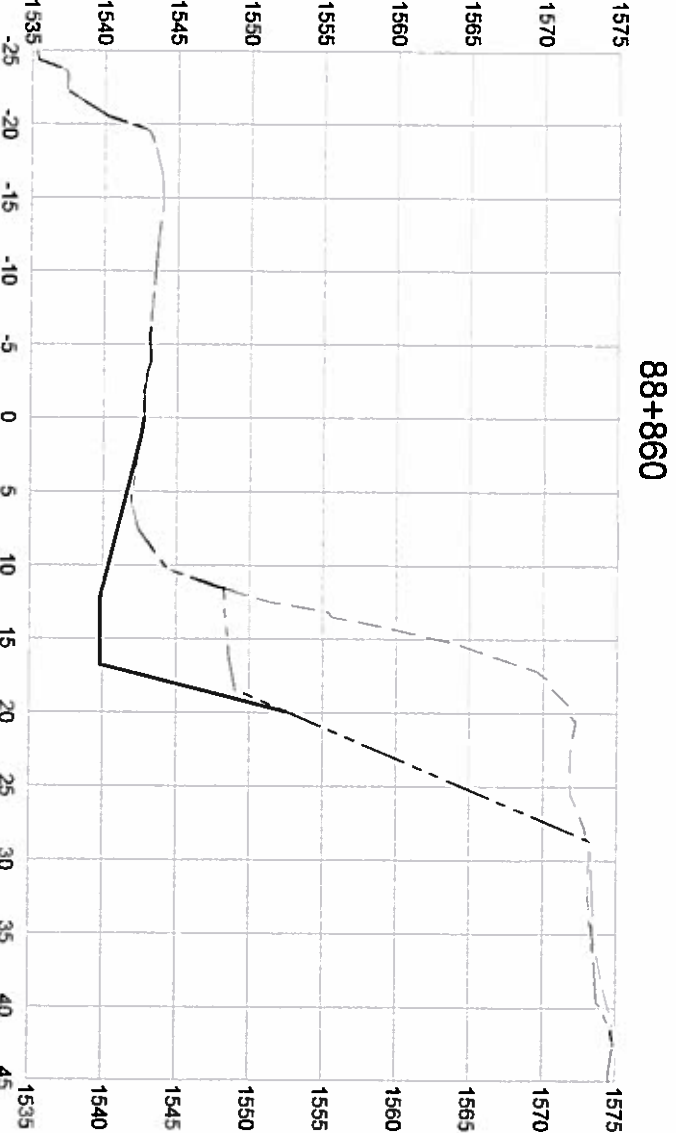
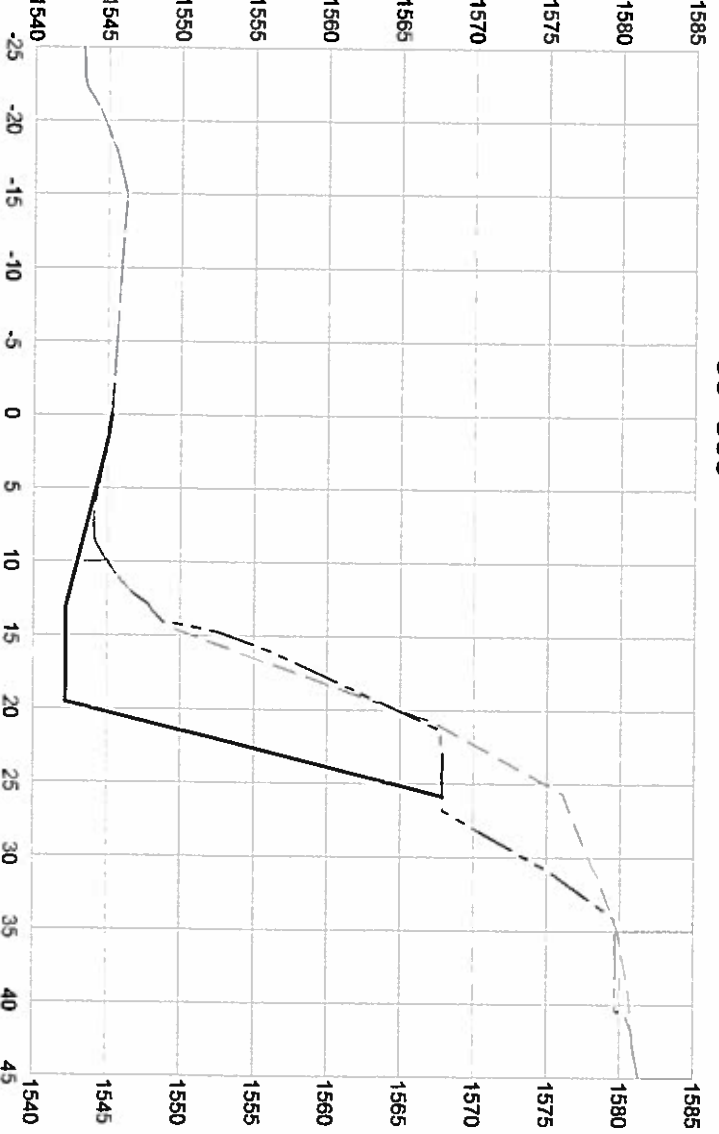
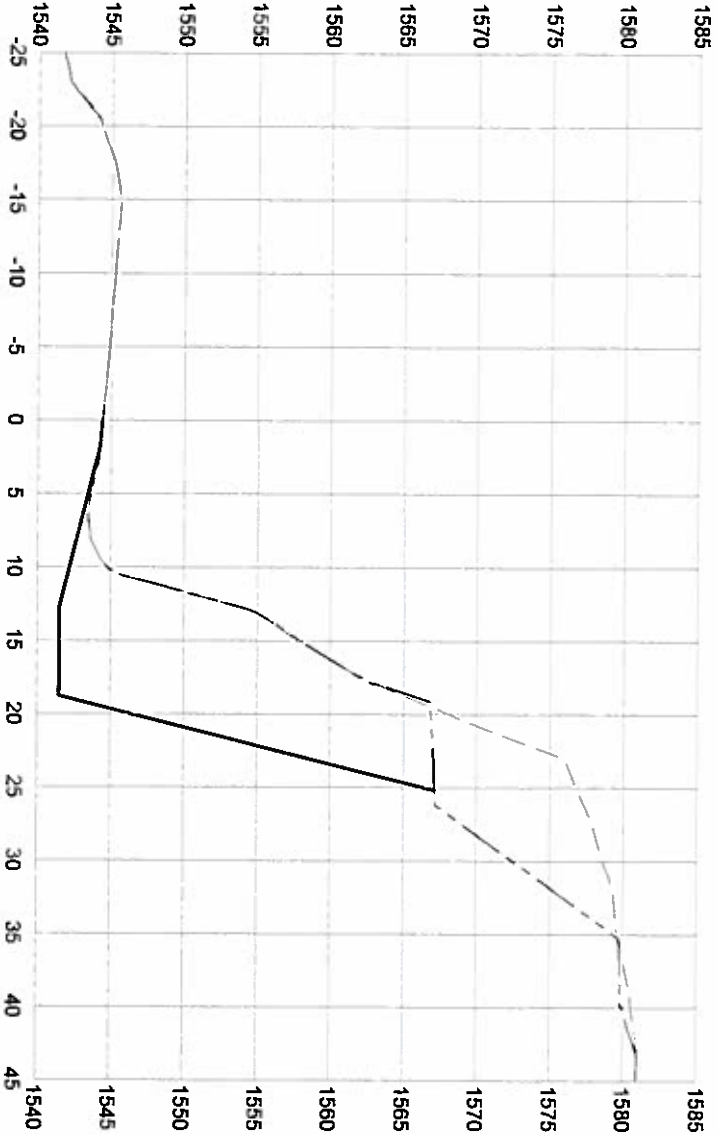
YOHO NATIONAL PARK
BRITISH COLUMBIA
KM 88 TO 91 AND KM 114 TO 128
TRANS-CANADA HIGHWAY
SLOPE REPROFILING

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+800 TO 88+860

Project No./No. du projet	Sheet/Feuille	Revision no./ No. de révision no.
201541-4024	0	



ISSUED FOR TENDER

PCA PROJECT NO. TETRA TECH EBA NO.



0	1602068	ISSUED FOR TENDER	AF	TT	AF
Revision	Date/Date	Description/Description	Dis	Drawn	Check

YOHO NATIONAL PARK
BRITISH COLUMBIA

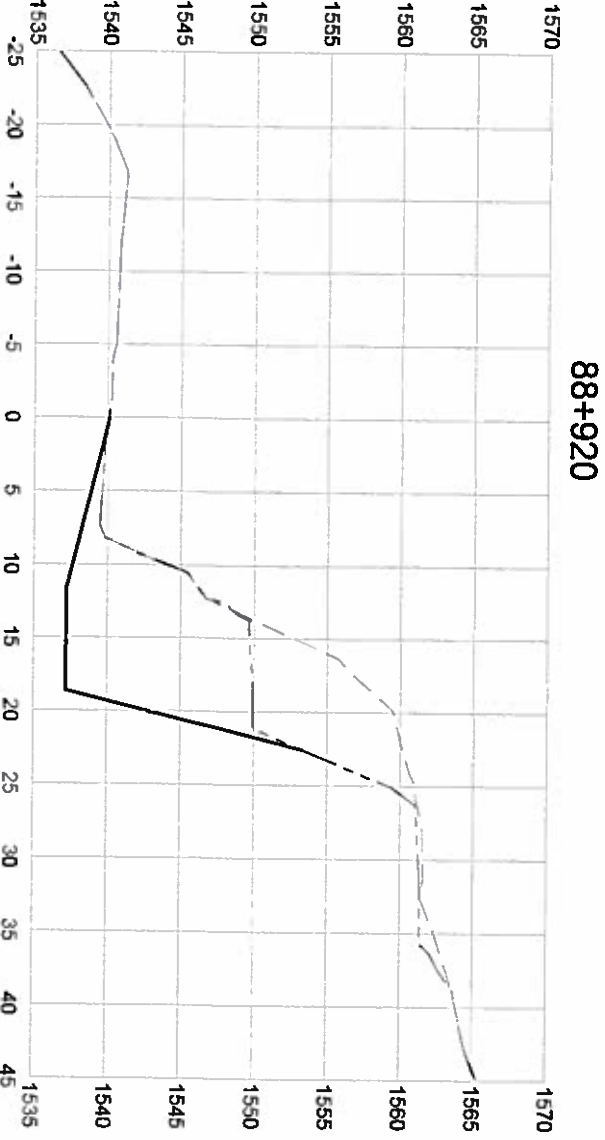
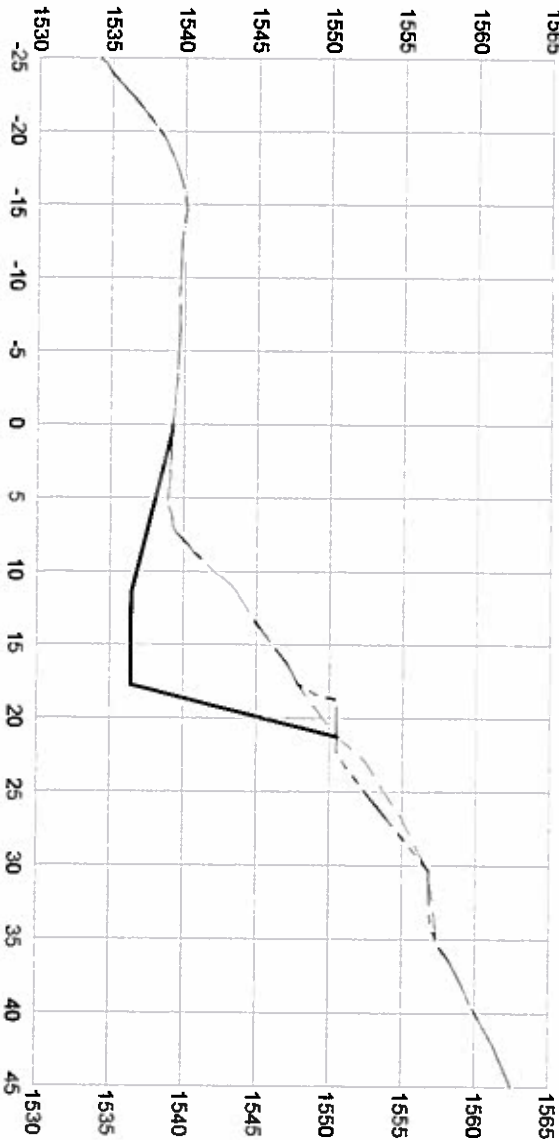
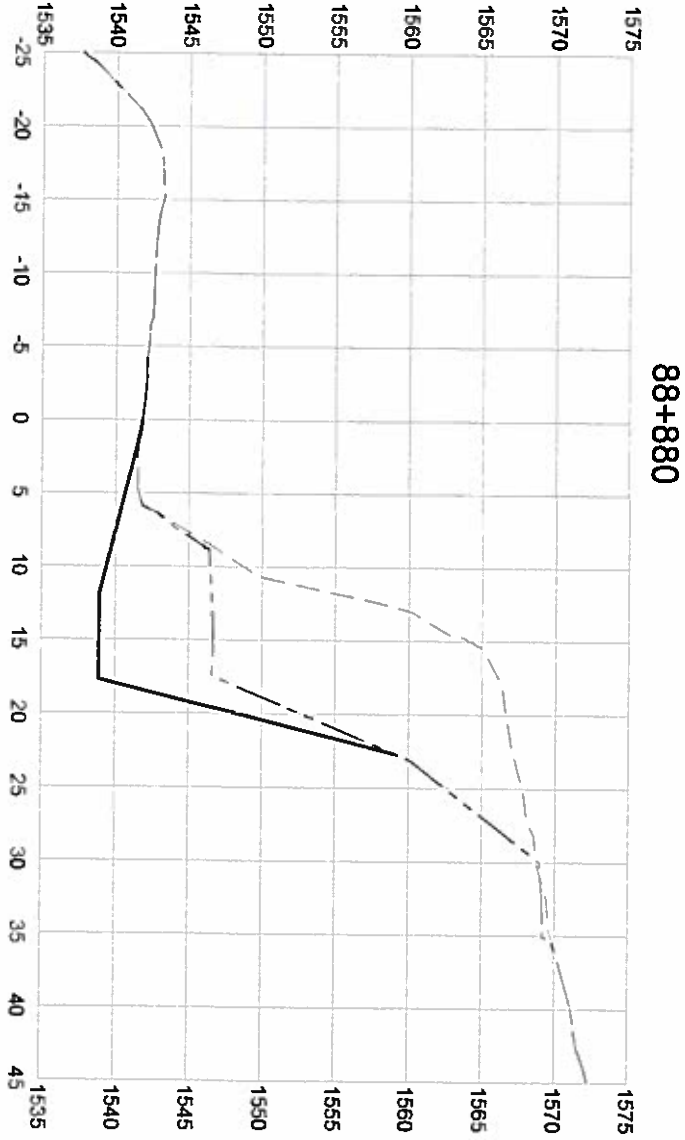
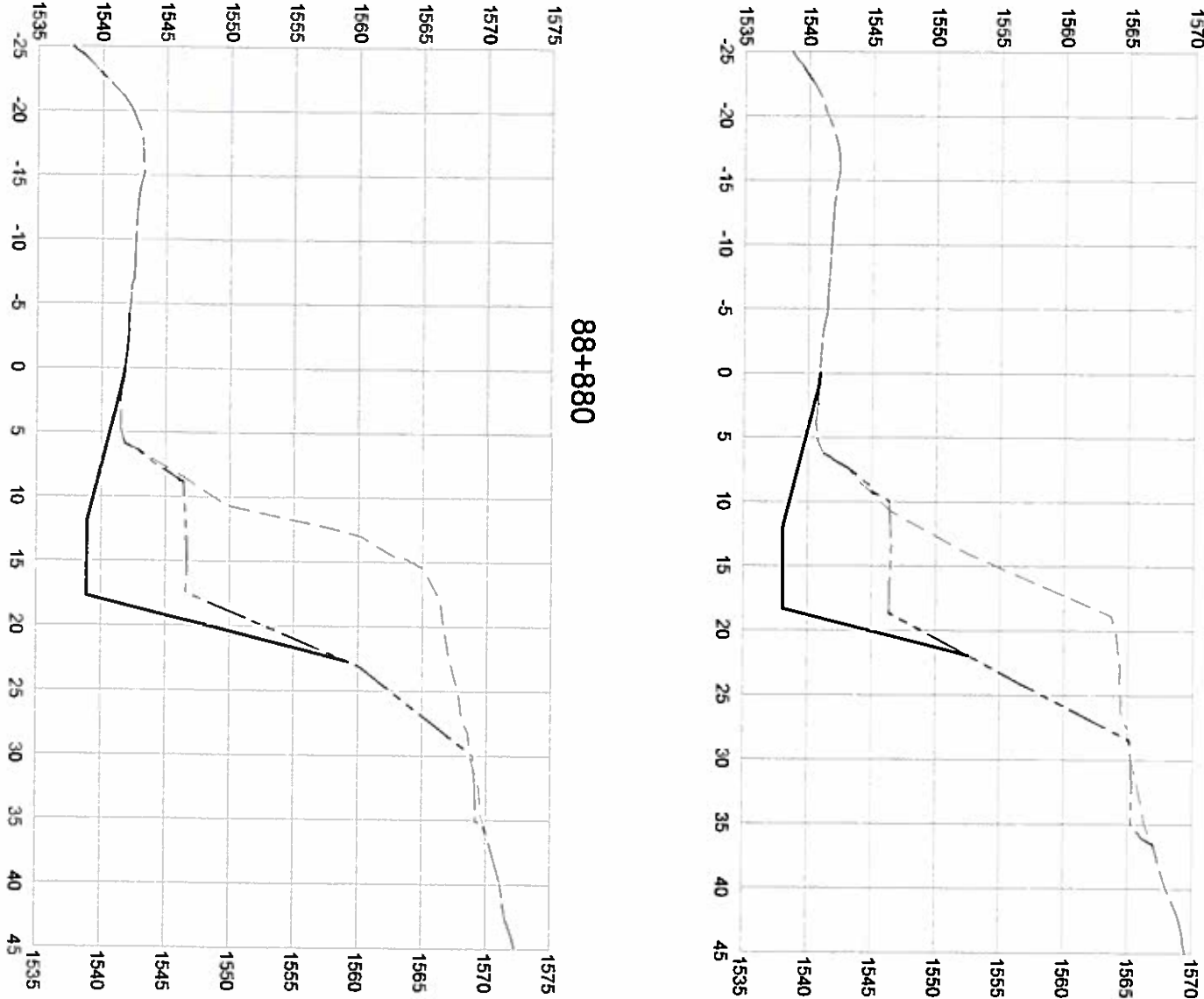
KM 88 TO 91 AND KM 114 TO 128
TRANS-CANADA HIGHWAY
SLOPE REPROFILING

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+880 TO 88+940

Project No./No. du projet	Sheet/Feuille	Revision no./ No de revision
201541-4025		0





ISSUED FOR TENDER

PCA PROJECT No. TETRA TECH EBA No.

[illegible]

**YOHO NATIONAL PARK
BRITISH COLUMBIA**

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

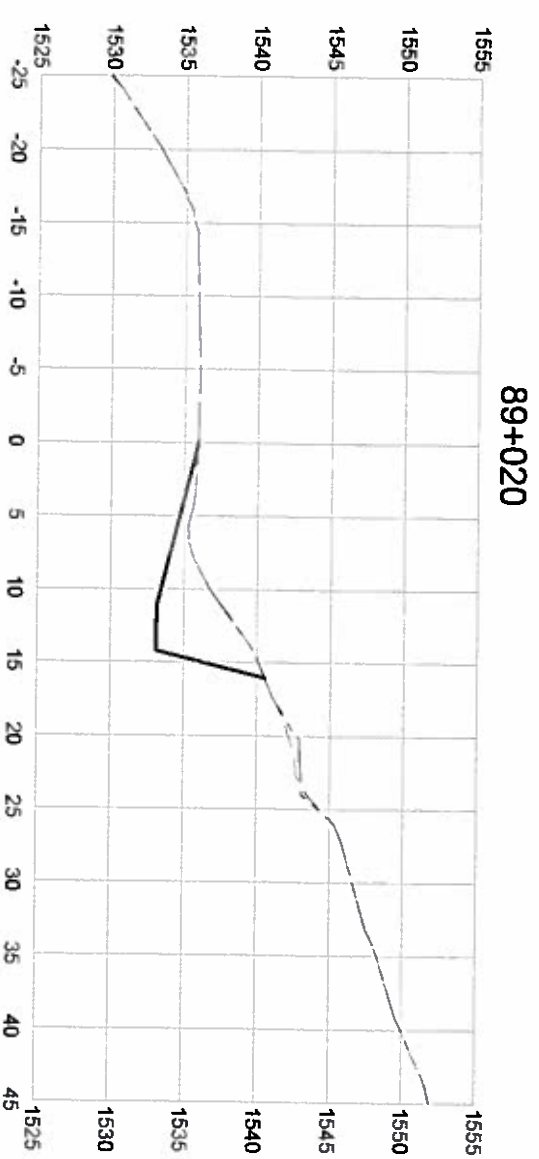
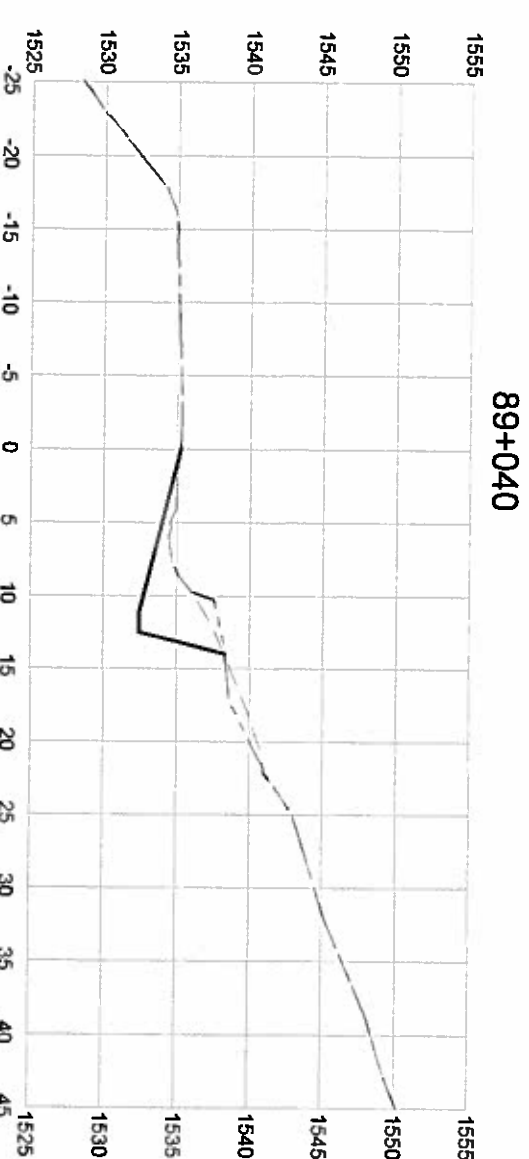
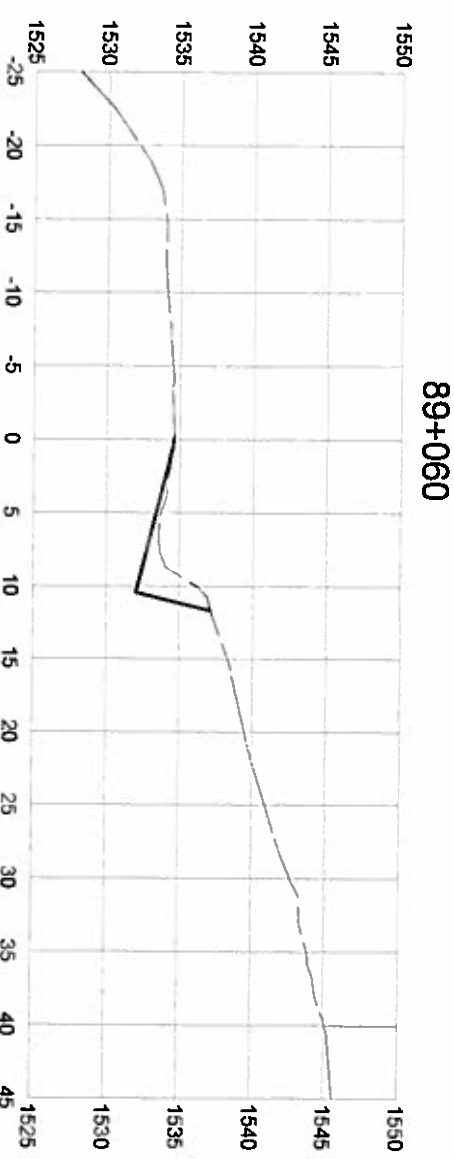
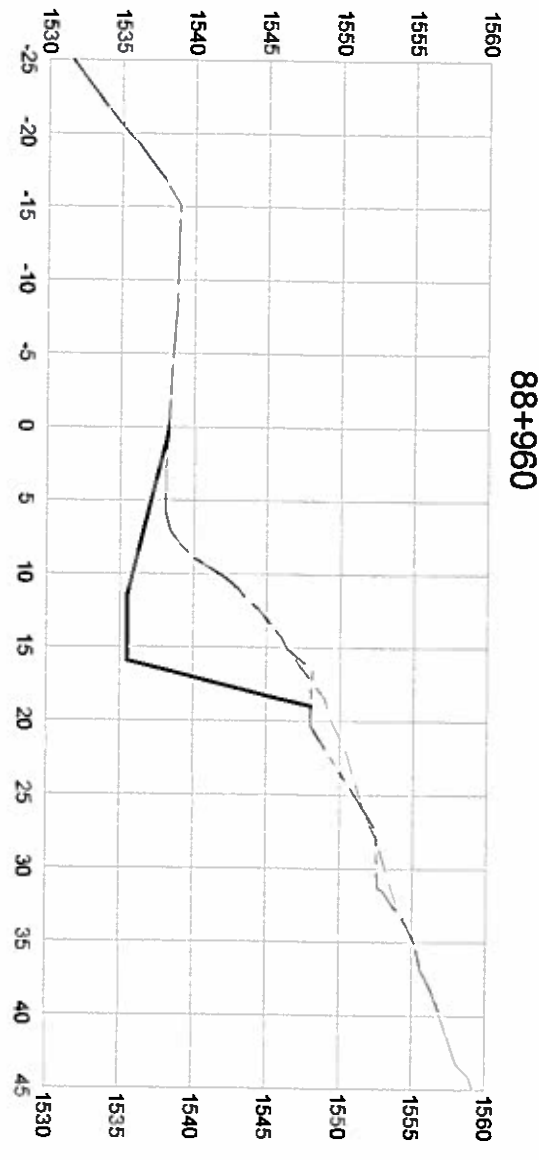
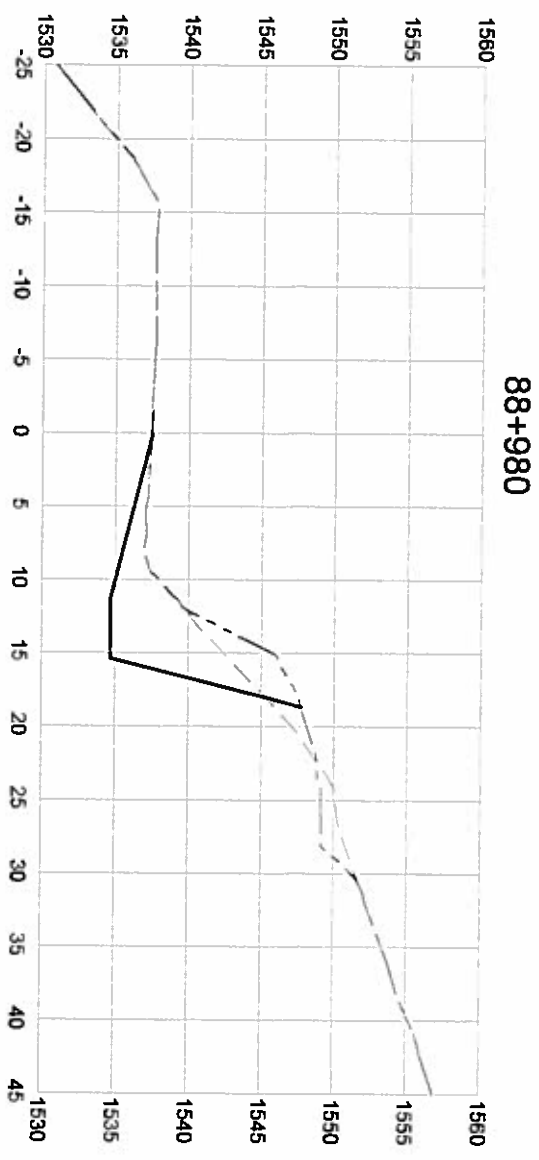
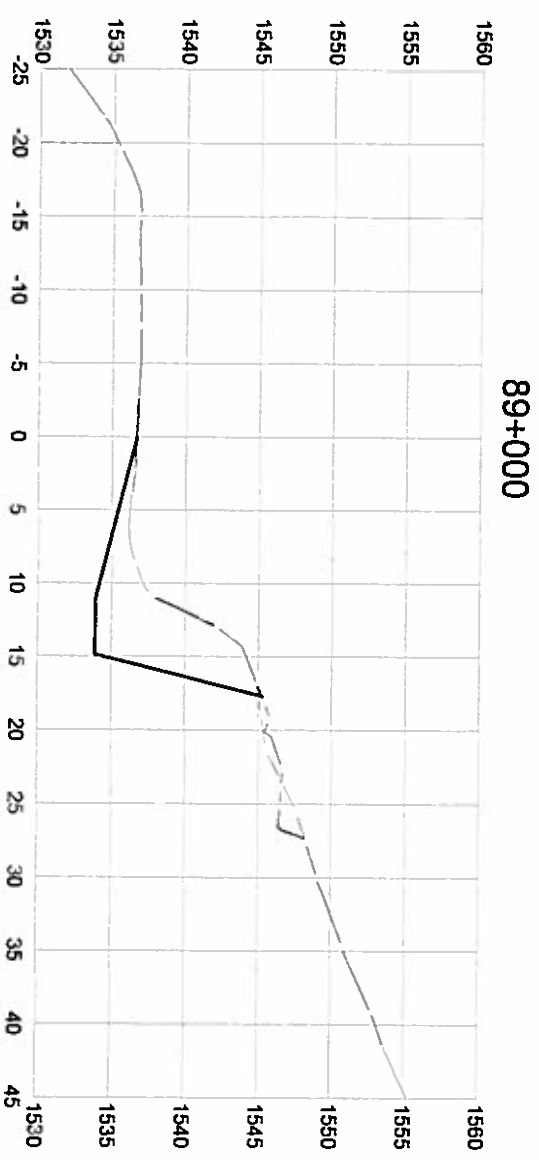
Designed by/concept por
A. FRAPELLI E YANG

Drawn by/Design por
T. TAKEDA



Client/client
PARKS CANADA AGENCY

**SHERBROOKE ROCK SLOPE
CROSS SECTIONS
STA. 88+960 TO 89+060**





ISSUED FOR TENDER

PCA PROJECT No. TETRA TECH EBA No.



0	1802069	ISSUED FOR TENDER	AF	TT	AF
REVISION	DATE/Date	DESCRIPTION/Description	QCS	QMS	CHK
Project Use/Time de projet					

YOHO NATIONAL PARK
BRITISH COLUMBIA

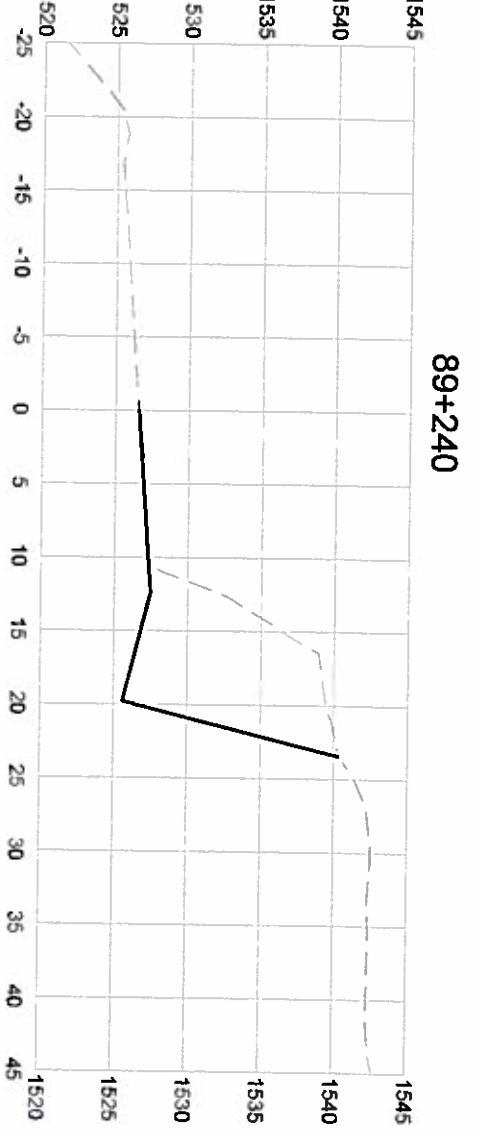
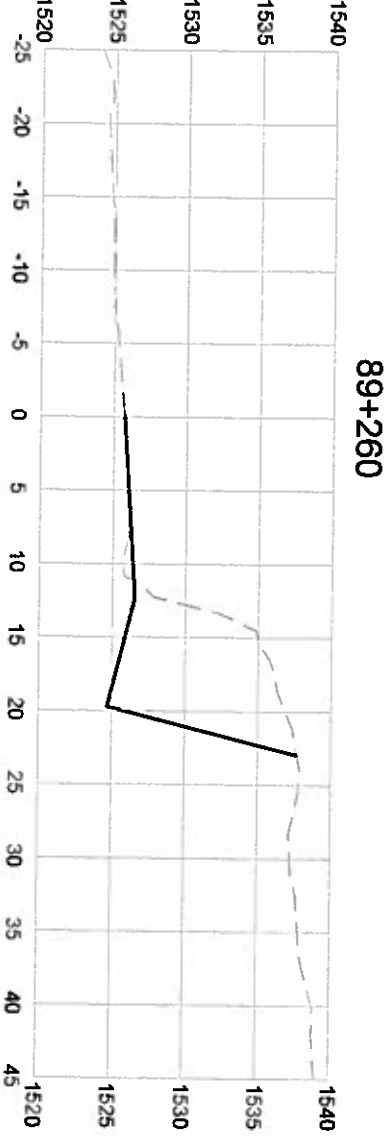
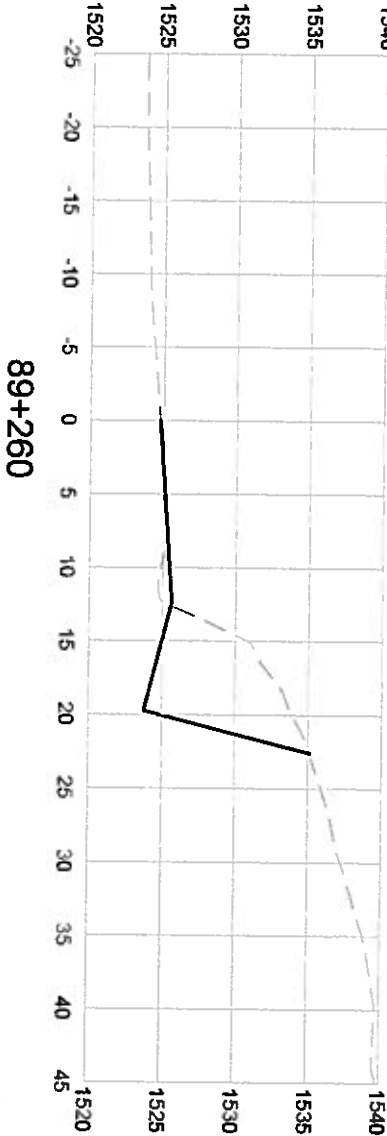
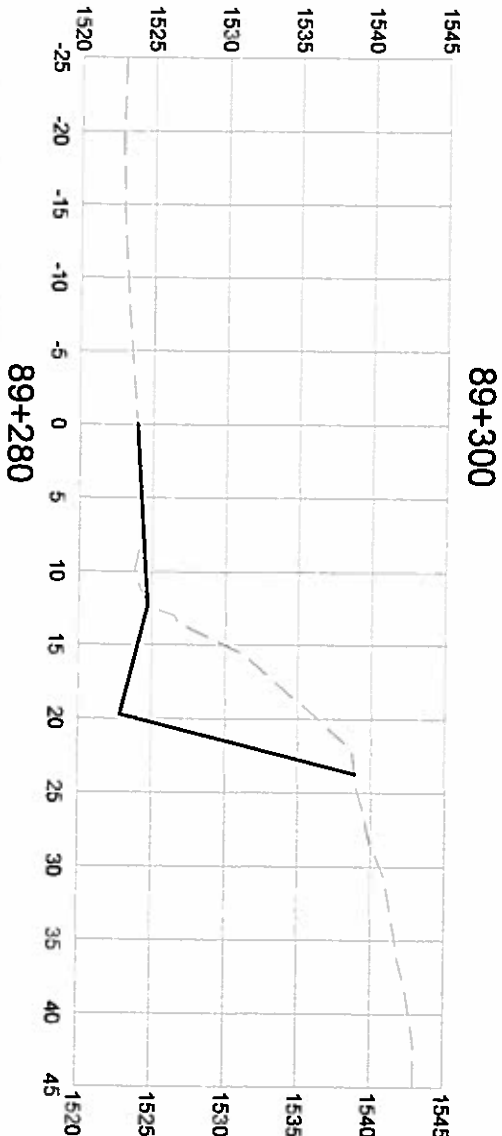
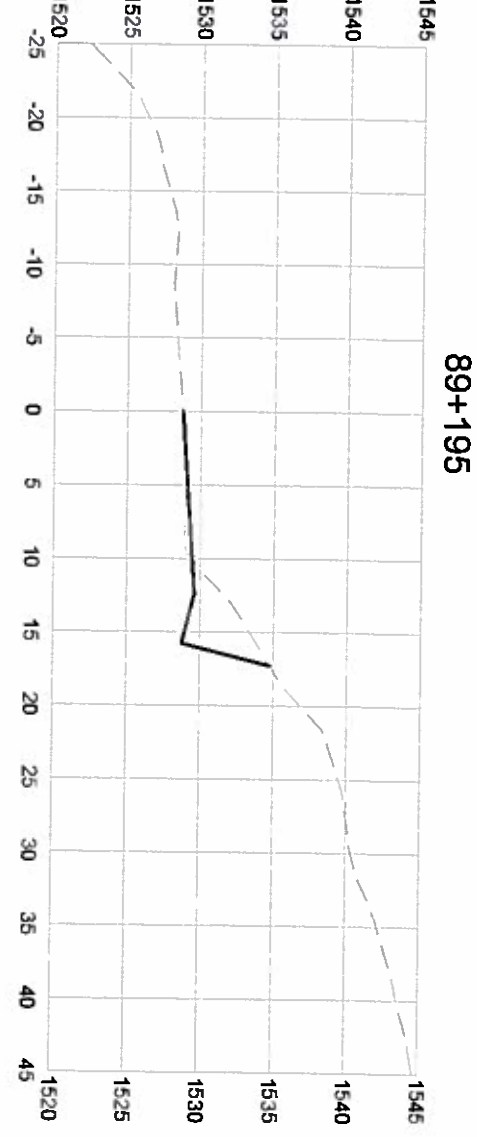
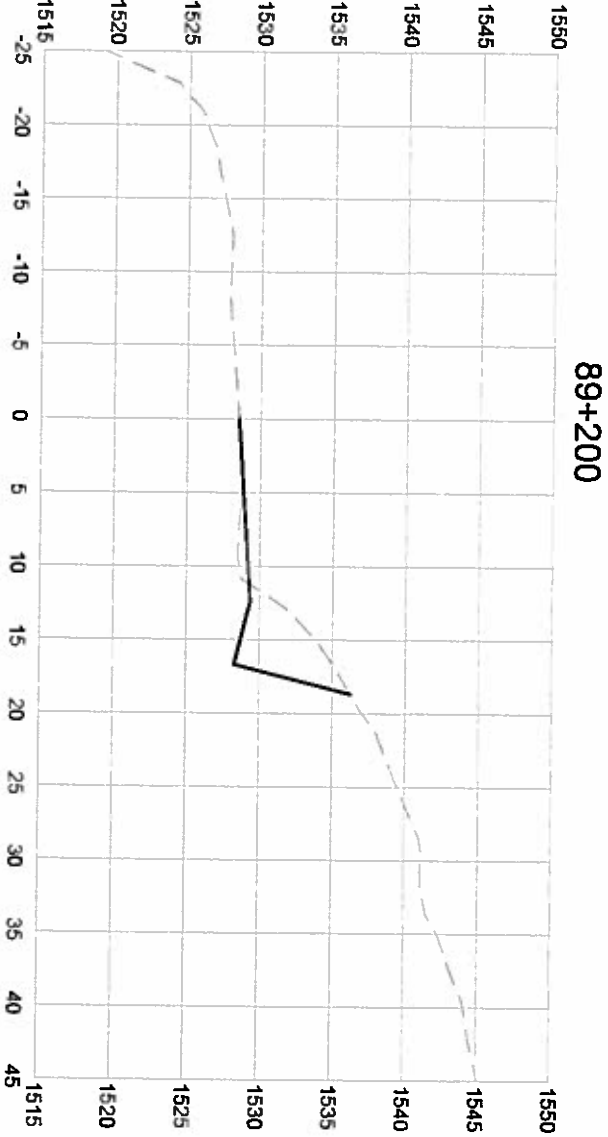
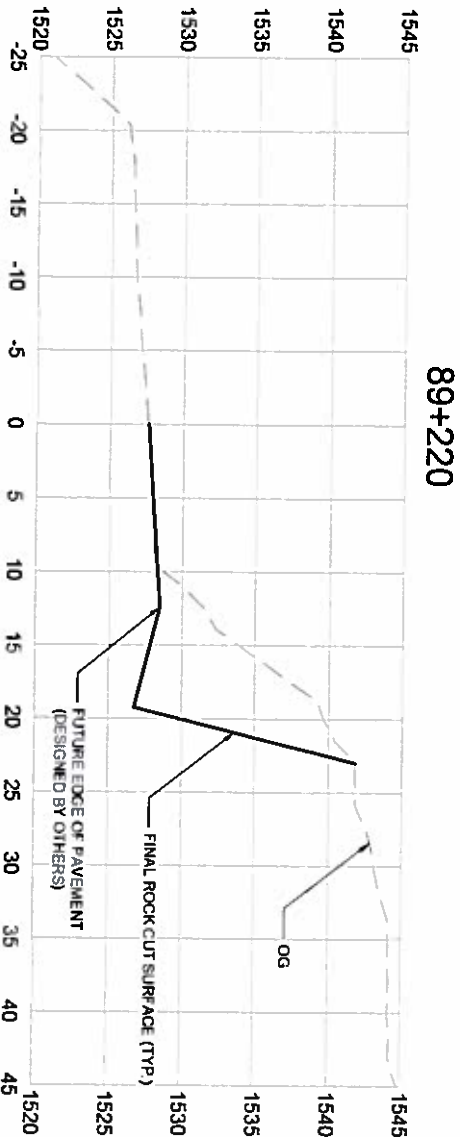
KM 88 TO 91 AND KM 114 TO 128
TRANS-CANADA HIGHWAY
SLOPE REPROFILING

Designed by/Conçu par
A. FRAPPEL / 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

Engine No./No. du projet	Sheet/Feuille	Revision no./ La révision no.
201541-4030	0	





ISSUED FOR TENDER

PCA PROJECT NO. TETRA TECH EBA NO.



0	180208	ISSUED FOR TENDER	AP	TT	AE
Revised	Issued/Date	Issued/Date/Description	By	By	By

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/Conçue par
A. FRAPPELL / E. YANG

Drawn by/Dessiné par
T. TAKEDA



Client/Client
PARKS CANADA AGENCY

Drawing Title/Title du dessin

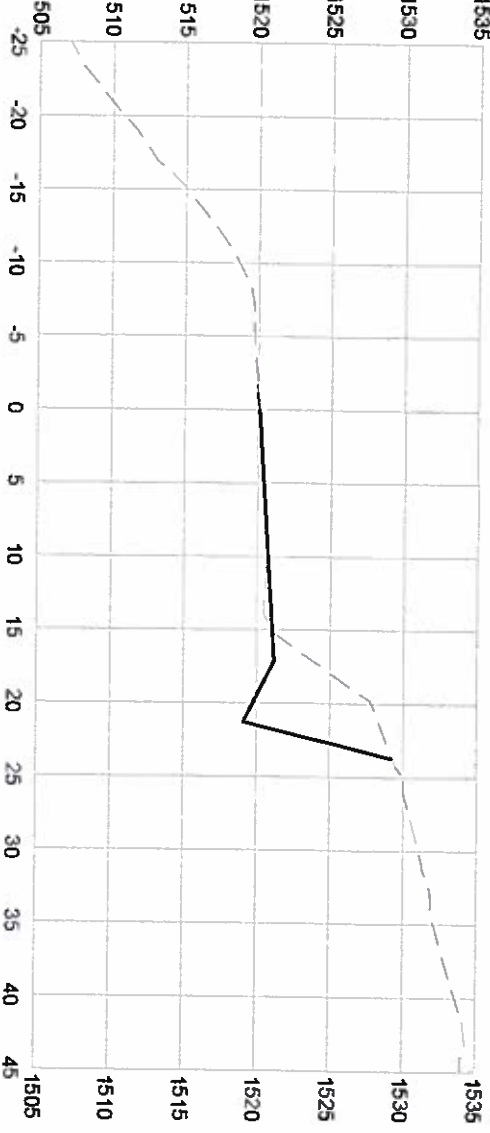
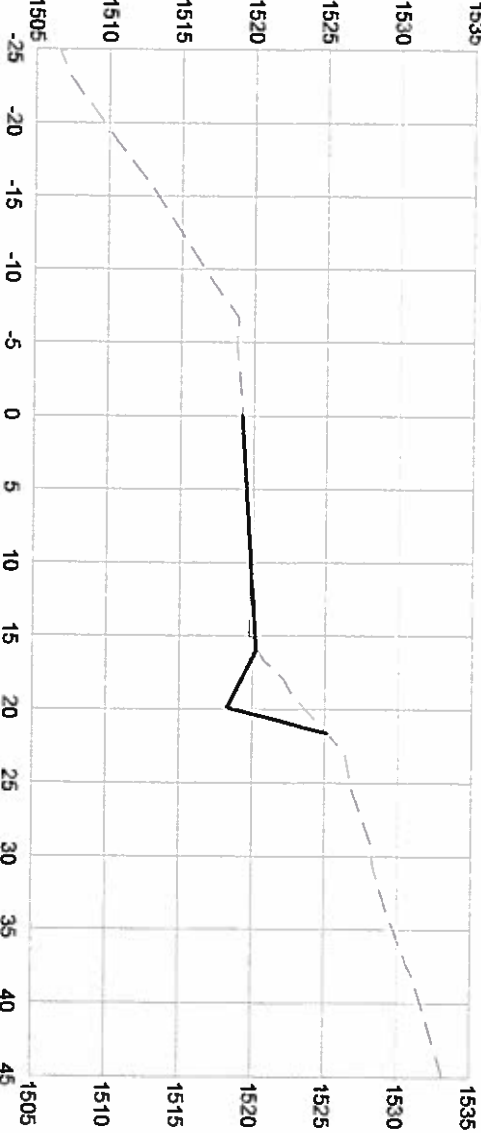
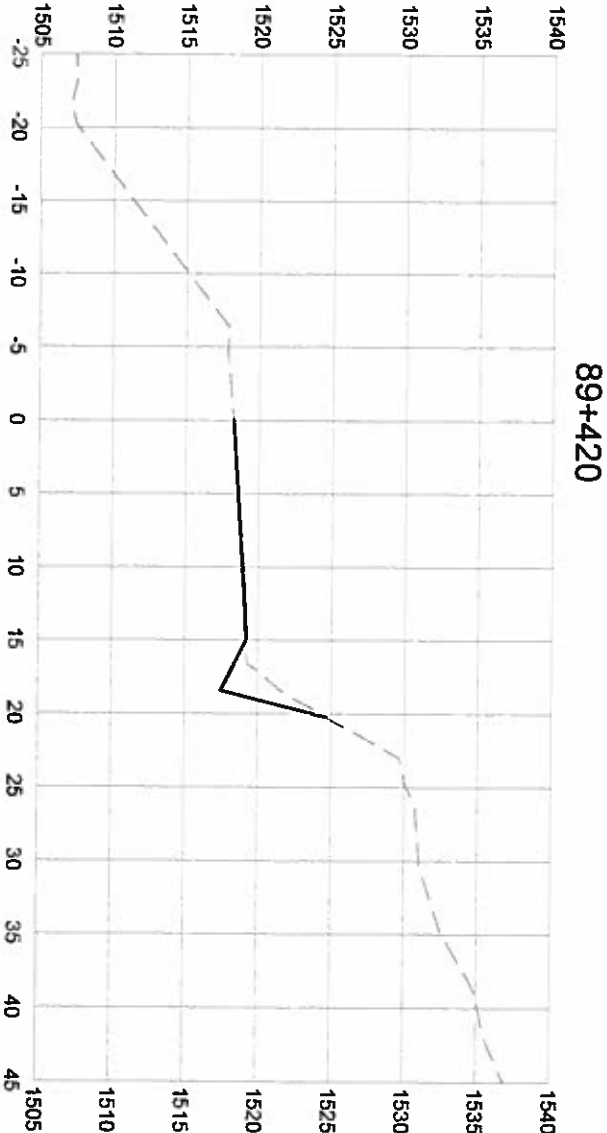
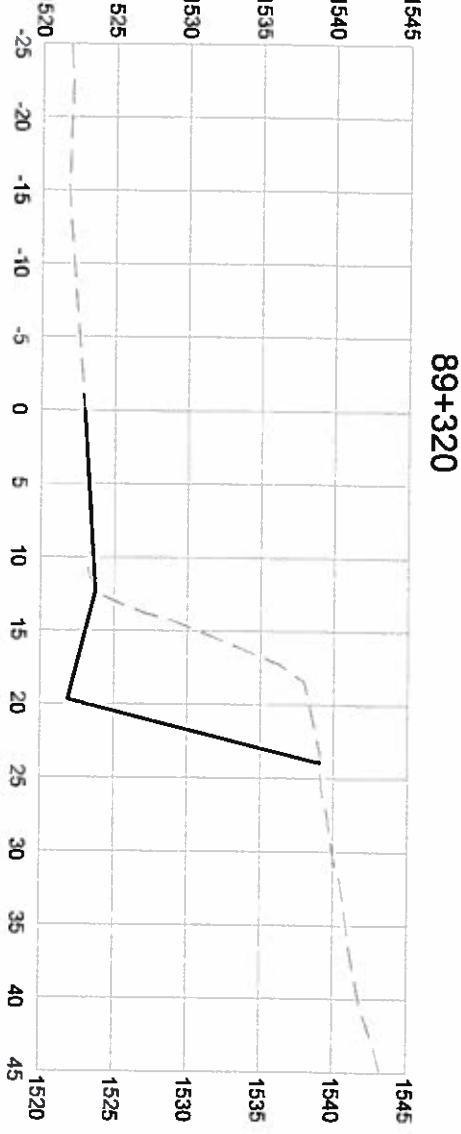
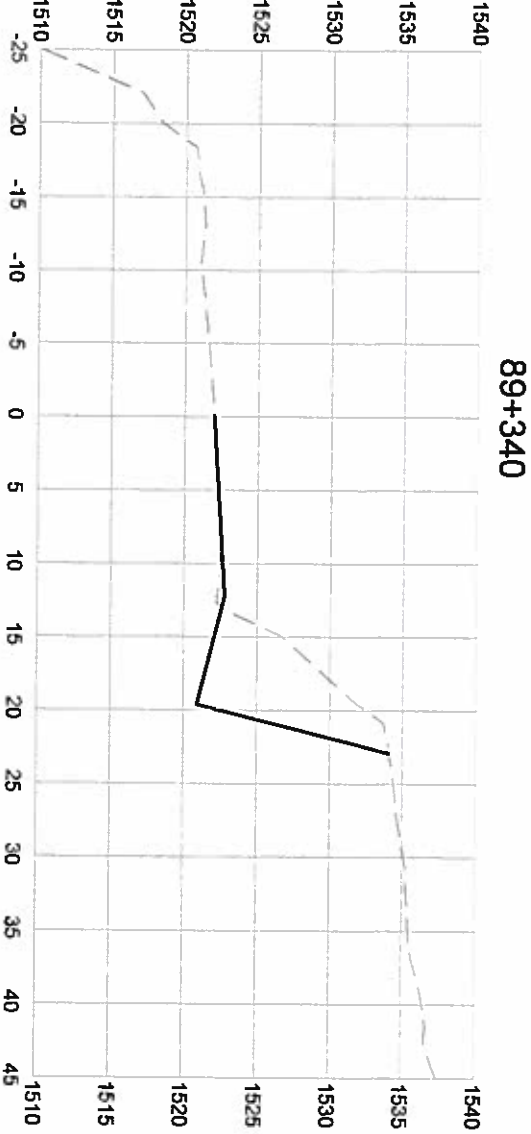
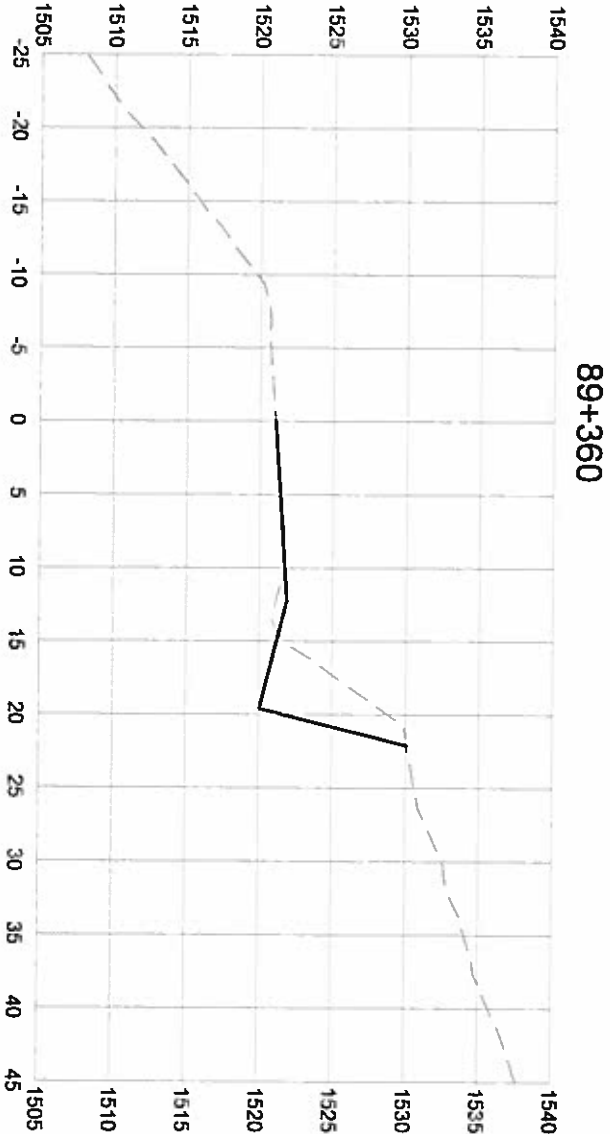
LOWER SHERBROOKE
ROCK SLOPE
CROSS SECTIONS
STA. 89+320 TO 89+420

Project No./No. du projet

Sheet No./
Feuille No.

201541-4031

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ISSUED FOR TENDER

PCA PROJECT No. TETRA TECH EBA No.

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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/Concepted por
A. FRAPPELL/E. YANG

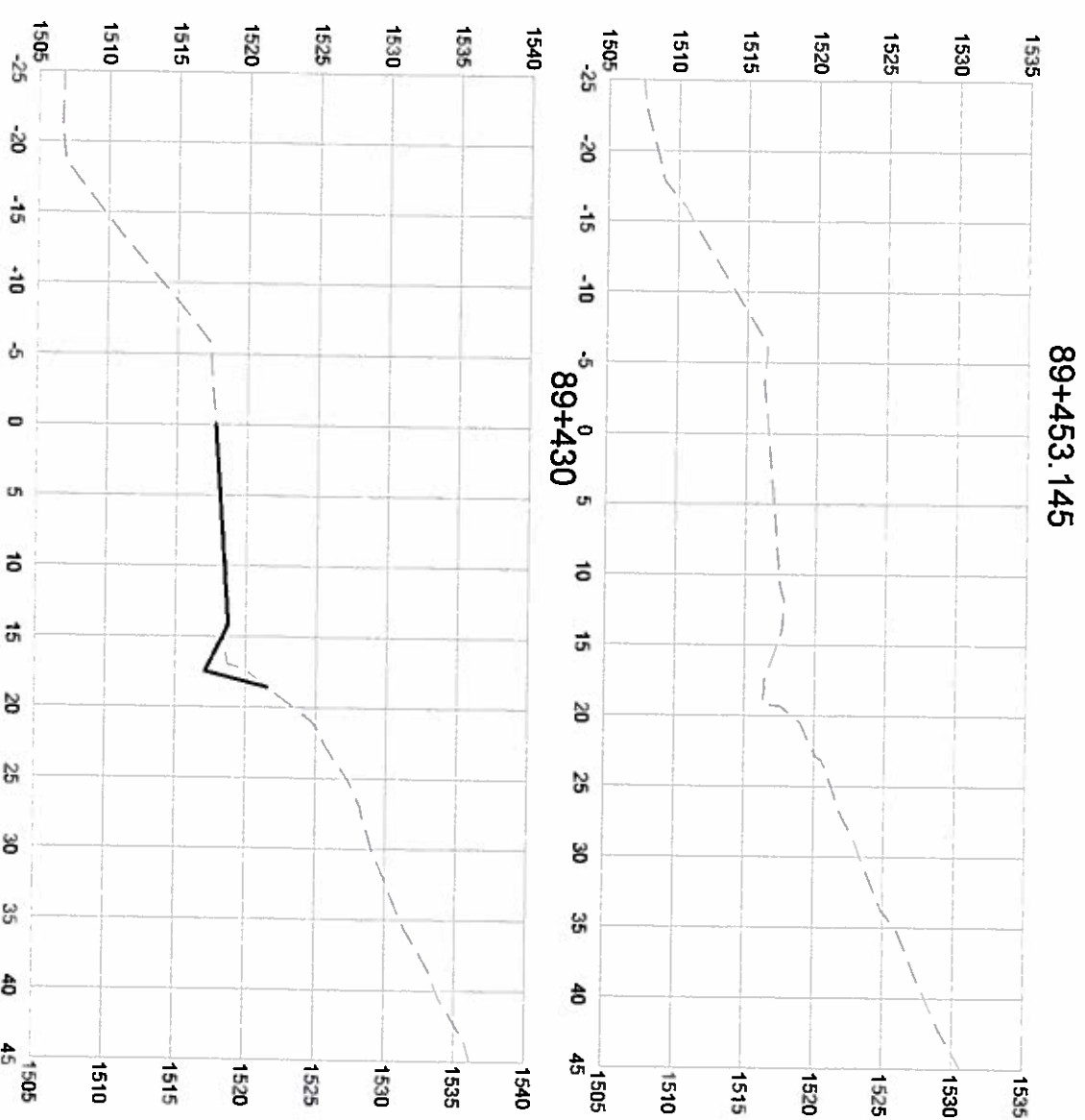
T. TAKEDA



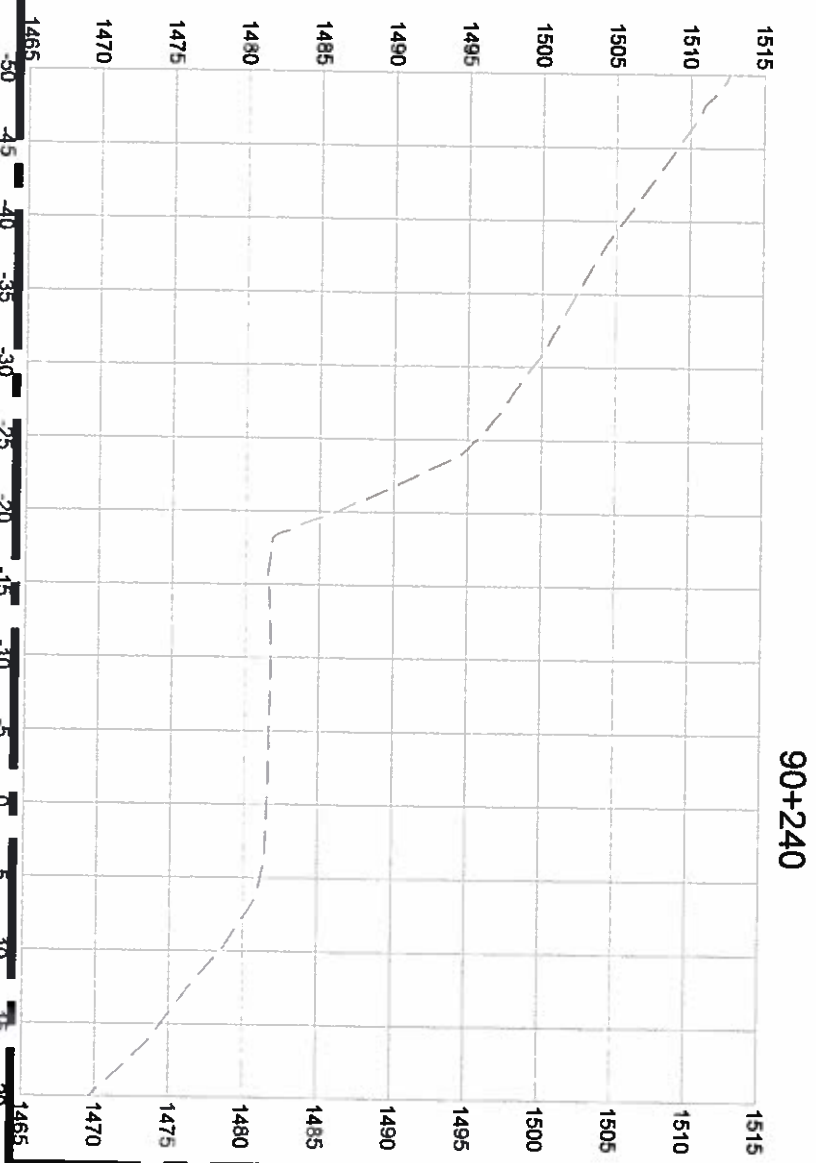
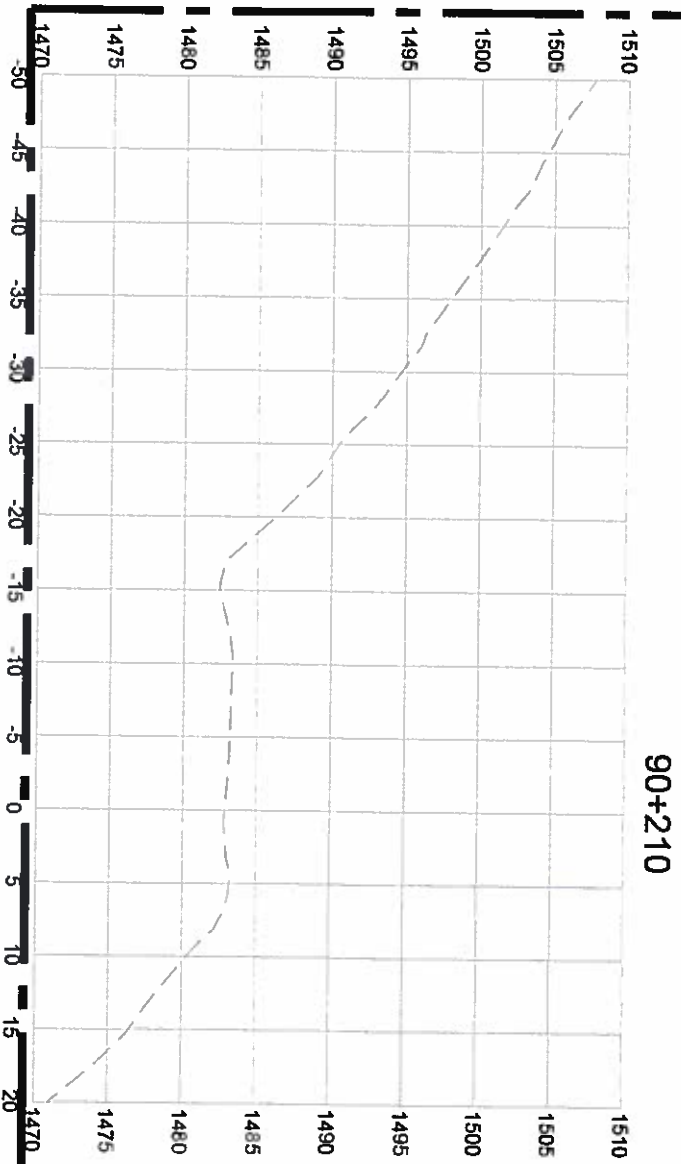
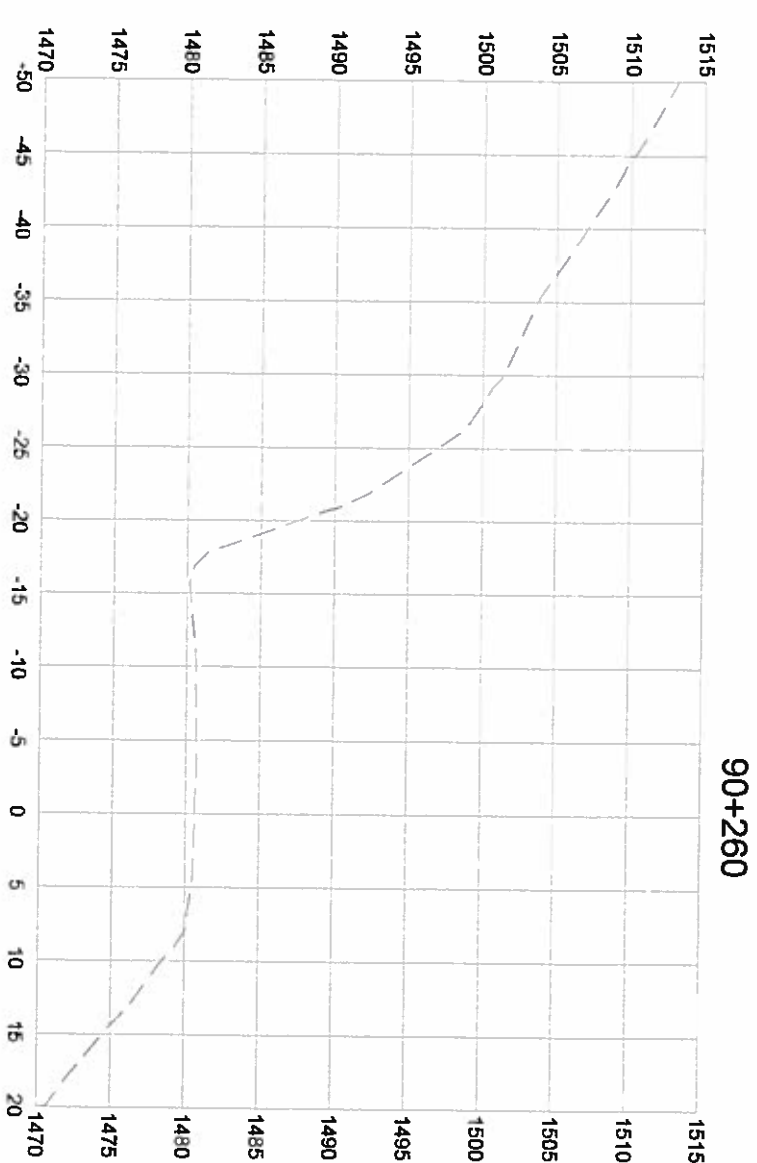
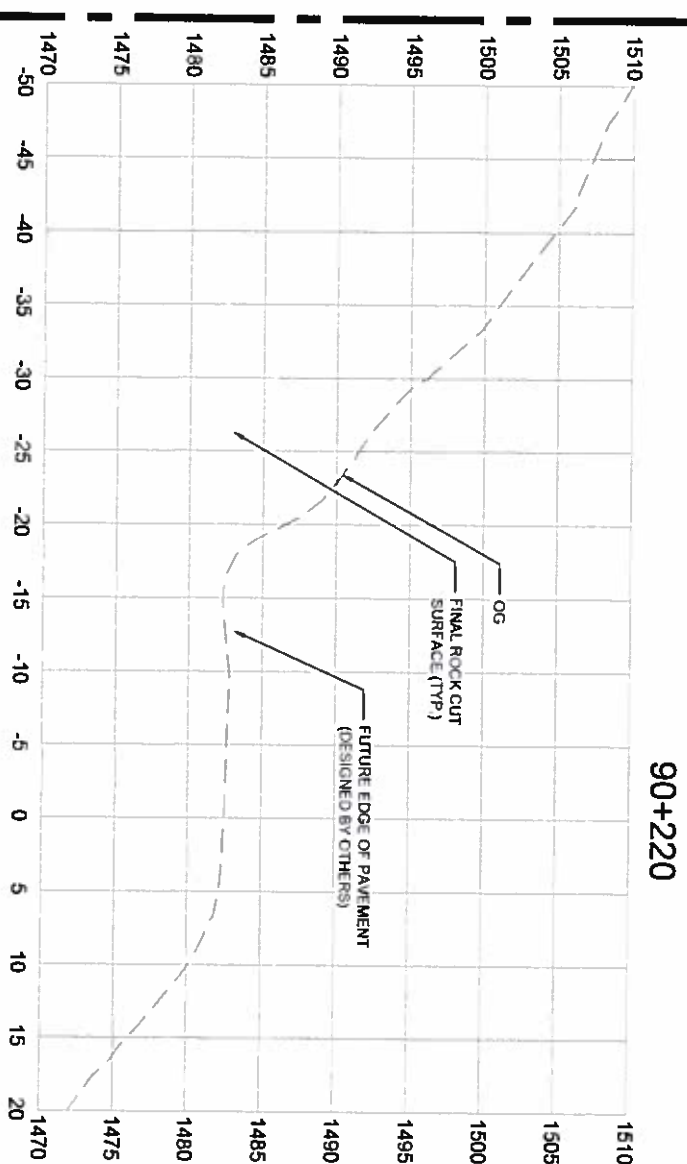
Client/client
PARKS CANADA AGENCY

Browning 119e/119r du dessin

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



FUTURE WORK
(NOT IN BILL OF QUANTITIES)



ISSUED FOR TENDER

PCA PROJECT No. TETRA TECH EBA No.

[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



PARKS CANADA AGENCY

**SPIRAL TUNNELS HILL ROCK SLOPE
CROSS SECTIONS
STA. 90+210 TO 90+260**

Project No./No. du projet

201541-4060

Rev'sion no./
LO Catalog no.



ISSUED FOR TENDER

PCA PROJECT No. TETRA TECH EBA No.



0	160208	ISSUED FOR TENDER	AF	TT	AF
Revision	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

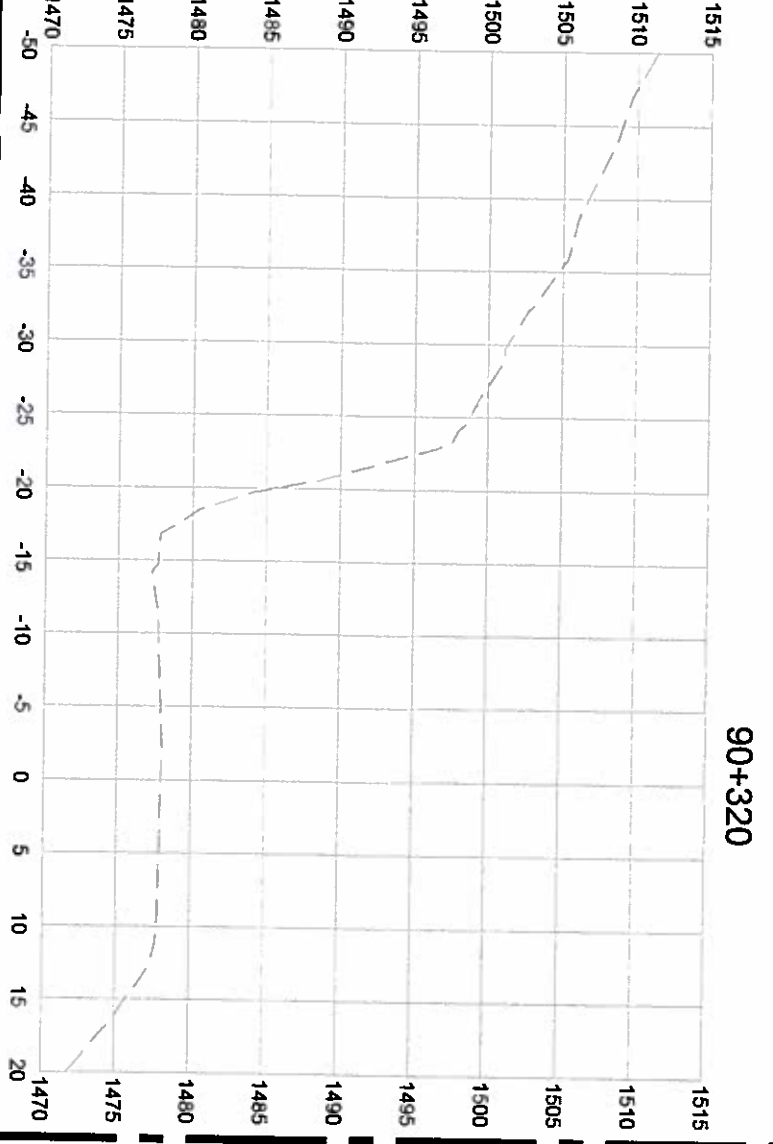
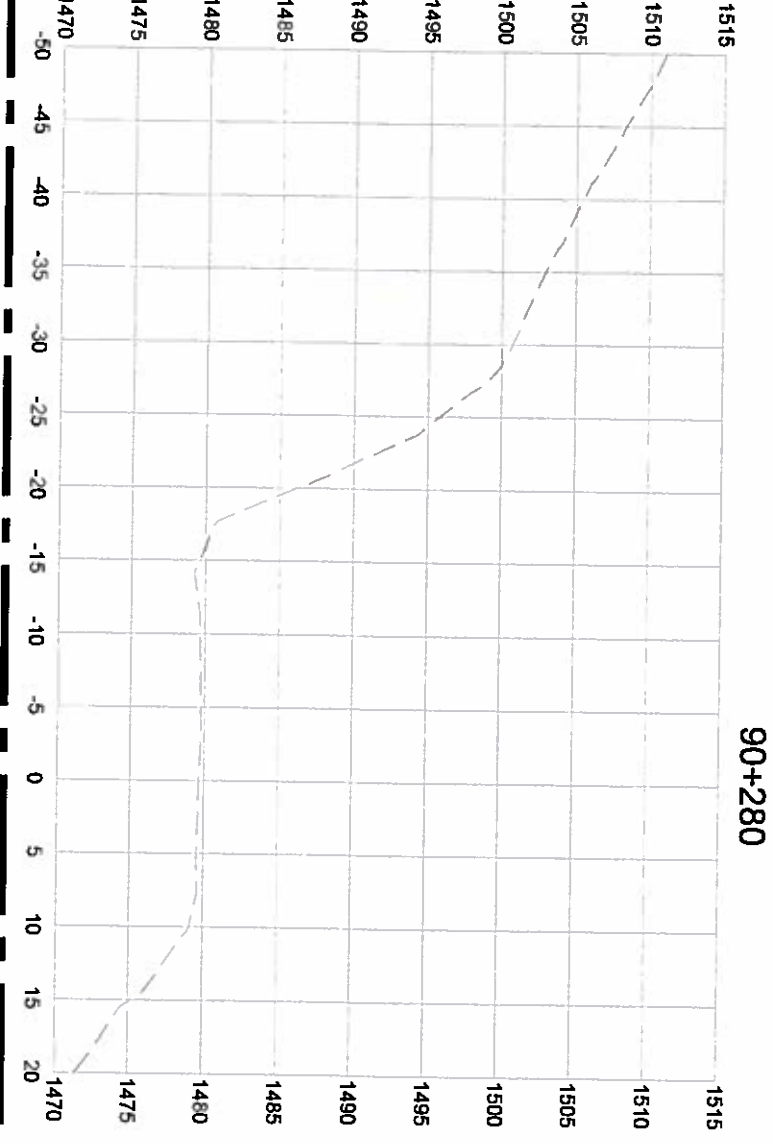
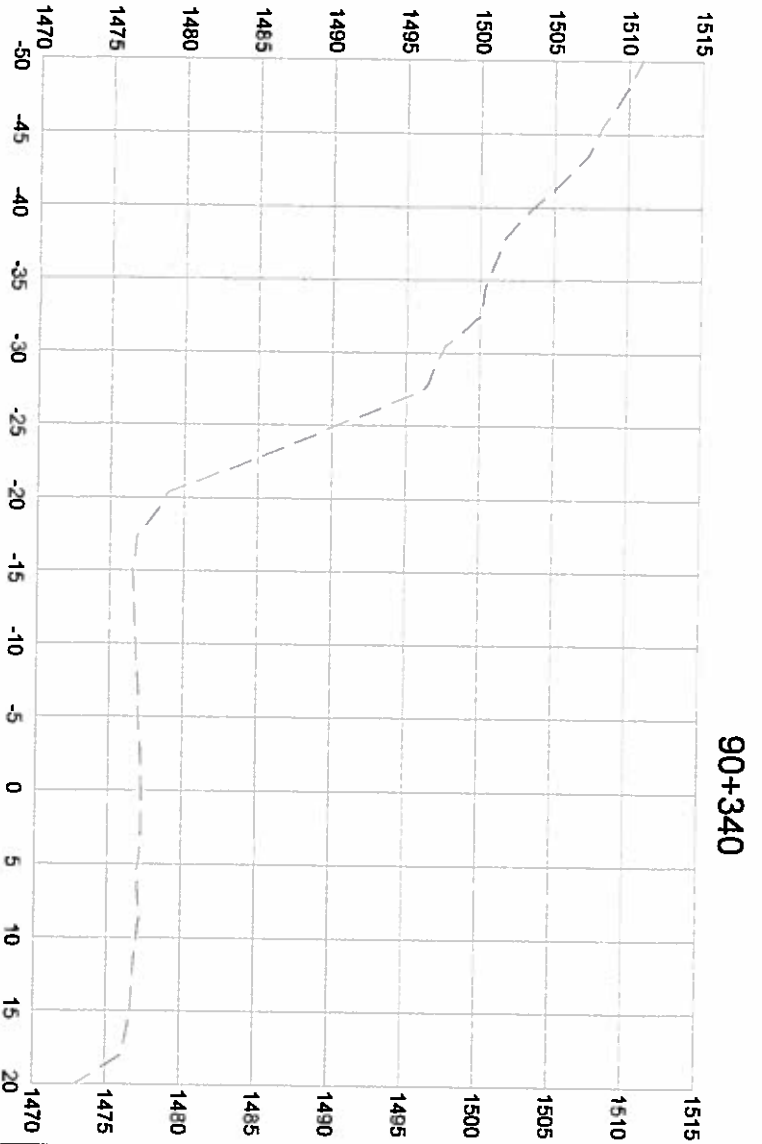
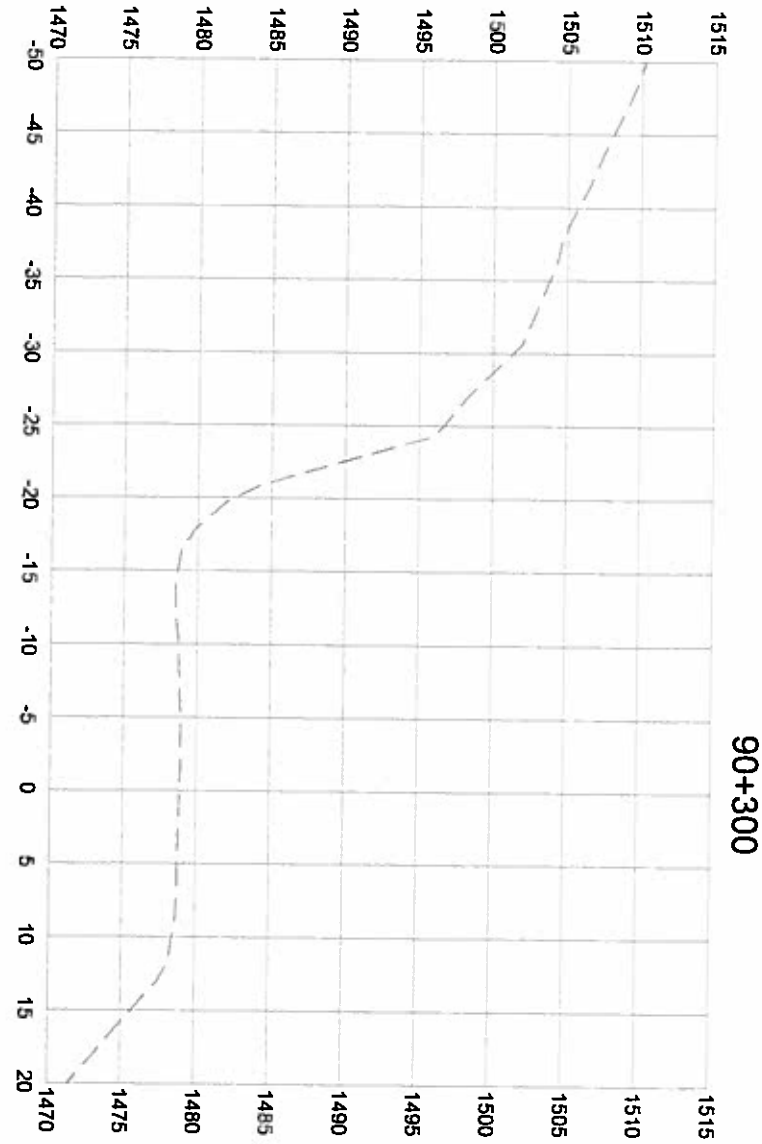
Designed by/Conçue par
A. FRAPPELL / E. YANG
Drawn by/Dessiné par
T. TAKEDA



Client/Client
PARKS CANADA AGENCY
Drawing title/Titre du dessin
SPIRAL TUNNELS HILL ROCK SLOPE
CROSS SECTIONS
STA. 90+280 TO 90+340

Project No./No. du projet	Sheet/Feuille	Revision no./ no. de révision
201641-4061		0

FUTURE WORK
(NOT IN BILL OF QUANTITIES)





ISSUED FOR TENDER

PCA PROJECT NO. TETRA TECH EBA NO.



0	1600209	ISSUED FOR TENDER	AF	TT	AF				
REVISION	DATE	DESCRIPTION/REVISION	BY	CHKD	DATE				

YOHO NATIONAL PARK
BRITISH COLUMBIA

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

Designed by/Concepted by
A. FRAPPELL / E. YANG

Drawn by/Issued for
T. TAKEDA

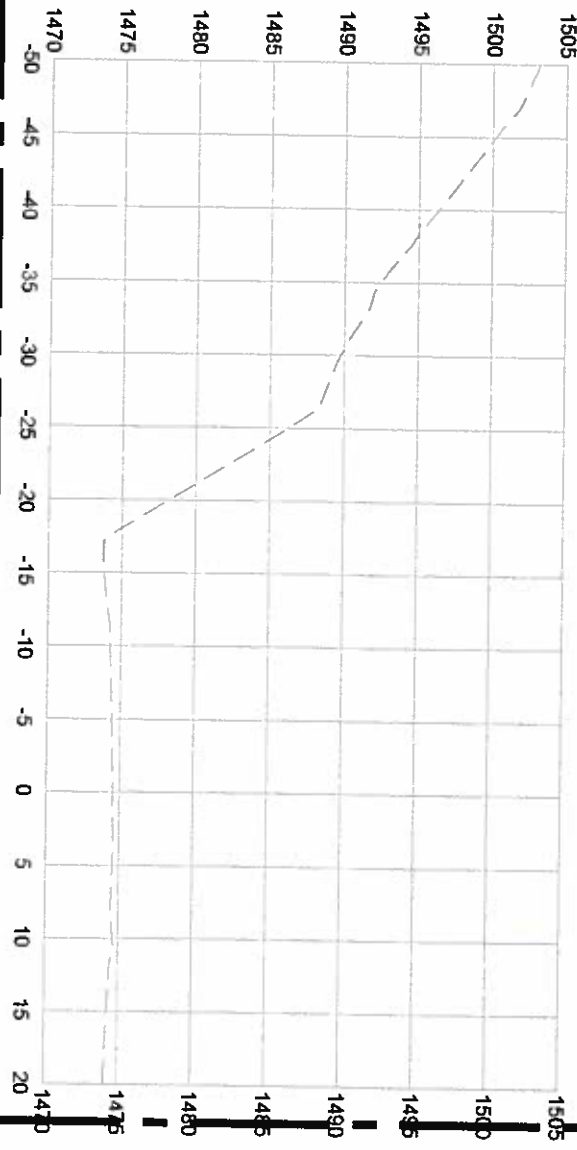
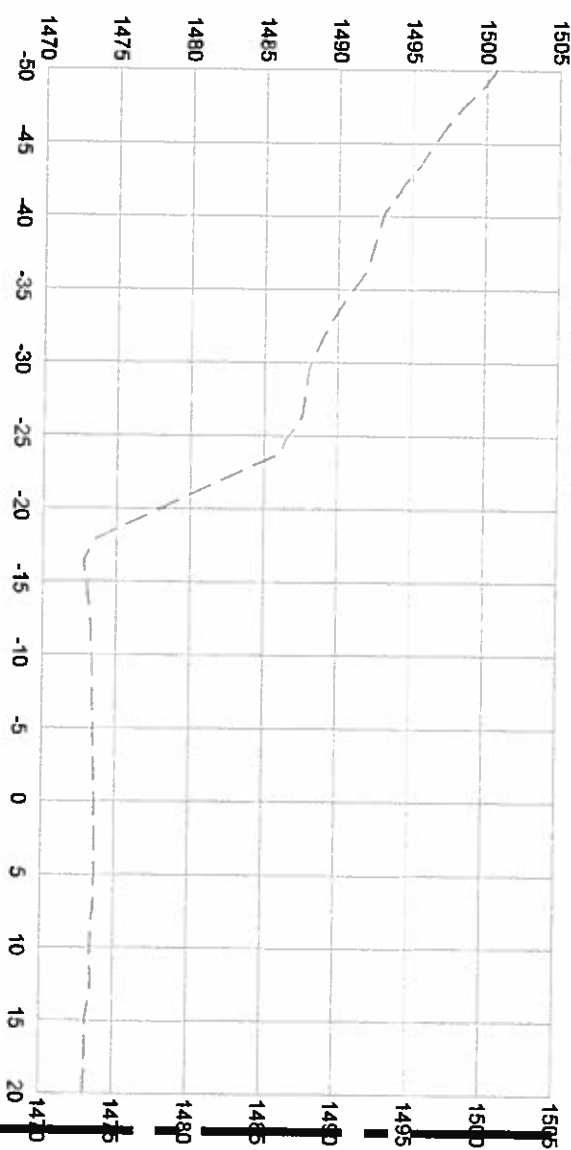
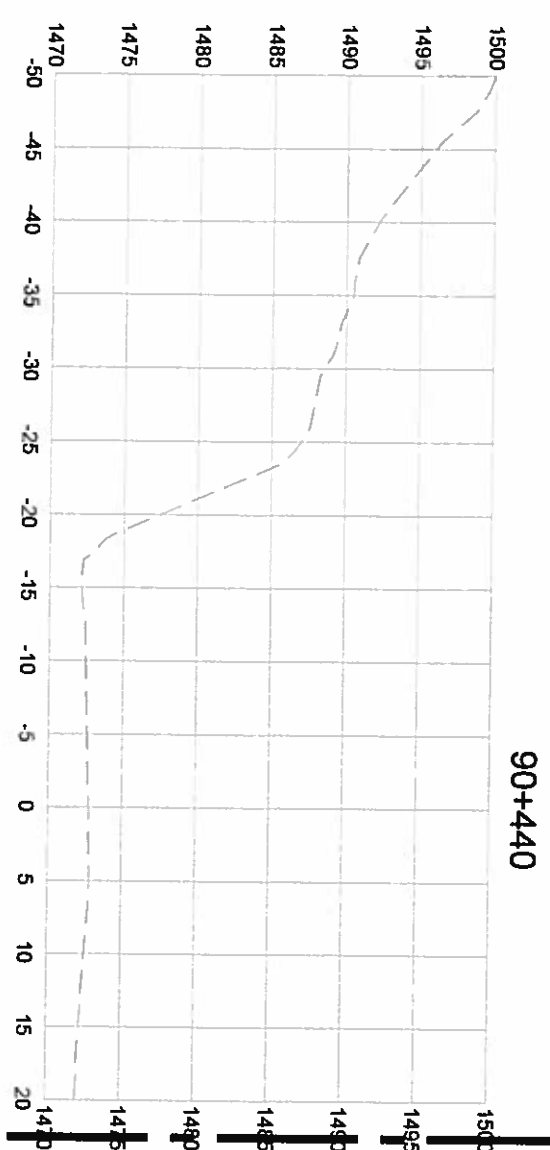
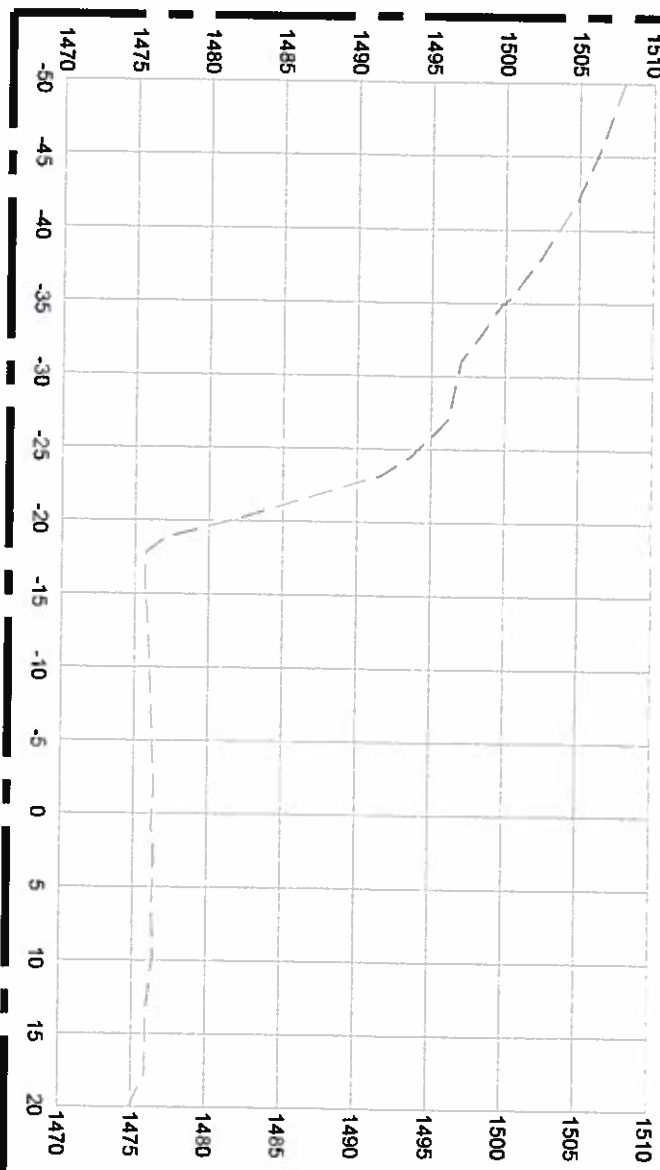
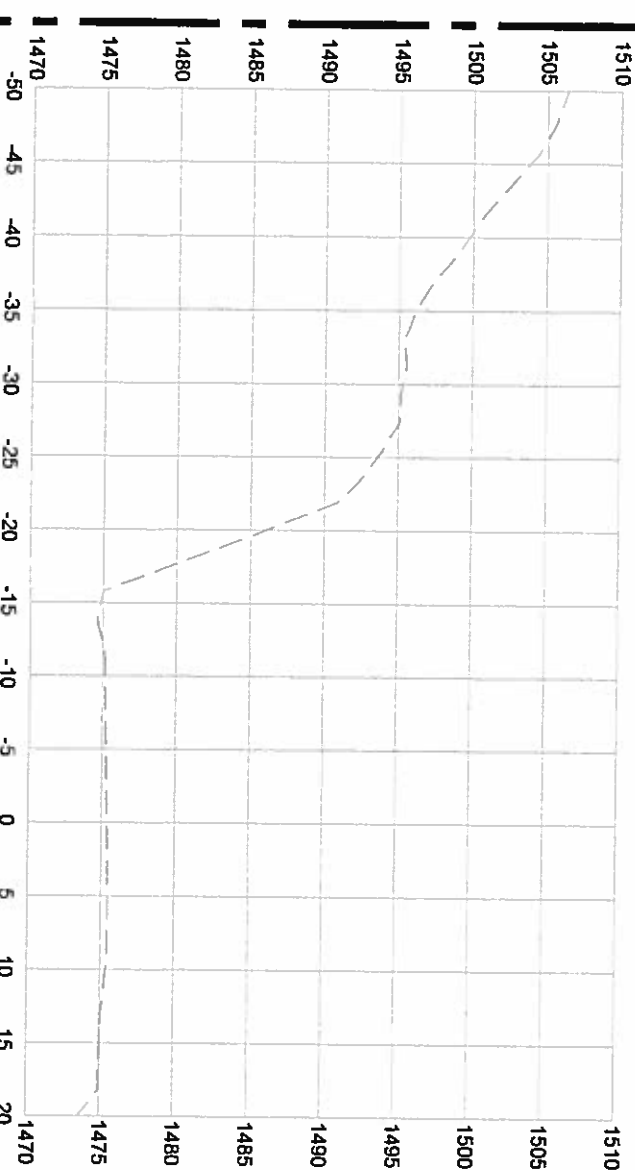


Client/Owner
PARKS CANADA AGENCY

SPIRAL TUNNELS HILL ROCK SLOPE
CROSS SECTIONS
STA. 90+360 TO 90+440

Project No./No. On project	Sheet/Total	Revision no./To Revision no.
201541-4062	0	

FUTURE WORK
(NOT IN BILL OF QUANTITIES)





ISSUED FOR TENDER

PCA PROJECT NO. TETRA TECH EBA NO.



0	160209	ISSUED FOR TENDER	AF	TT	AF				
REVISION	Draw/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

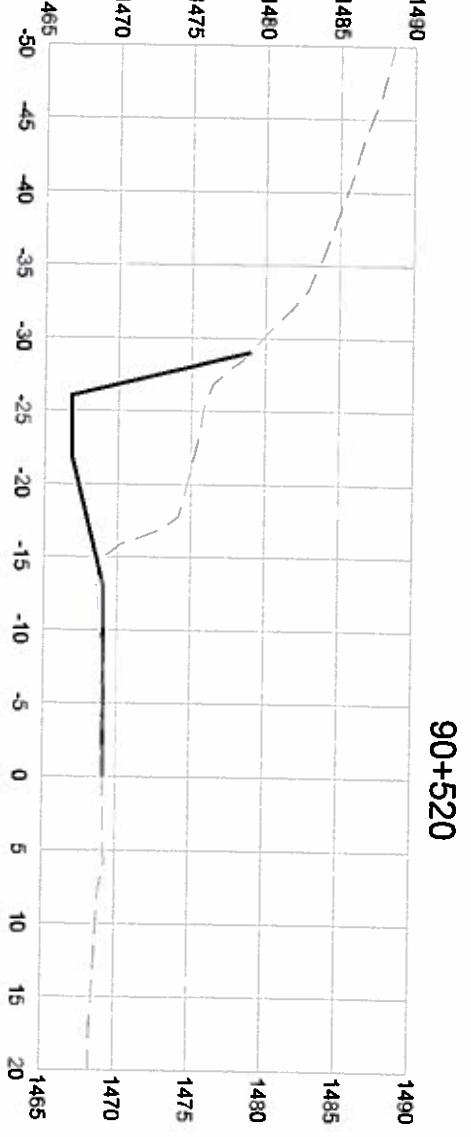
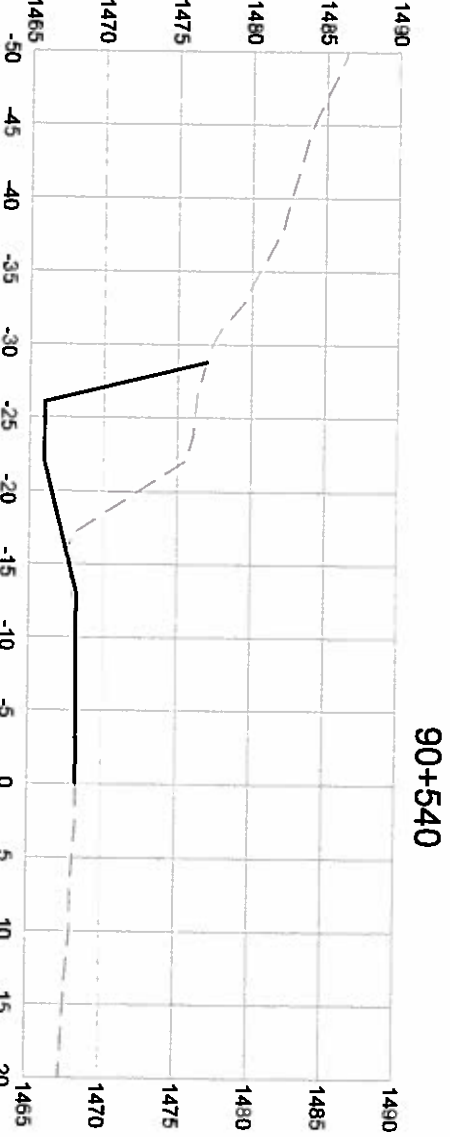
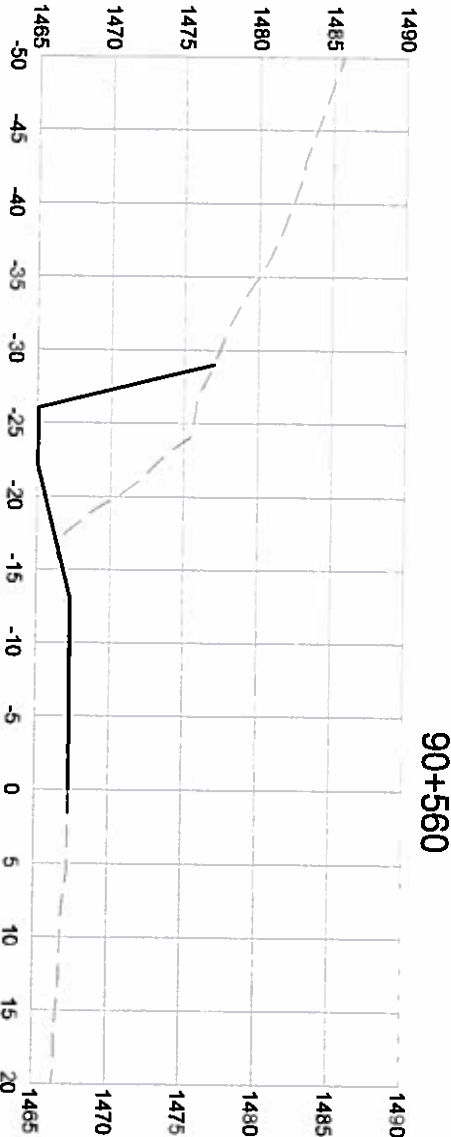
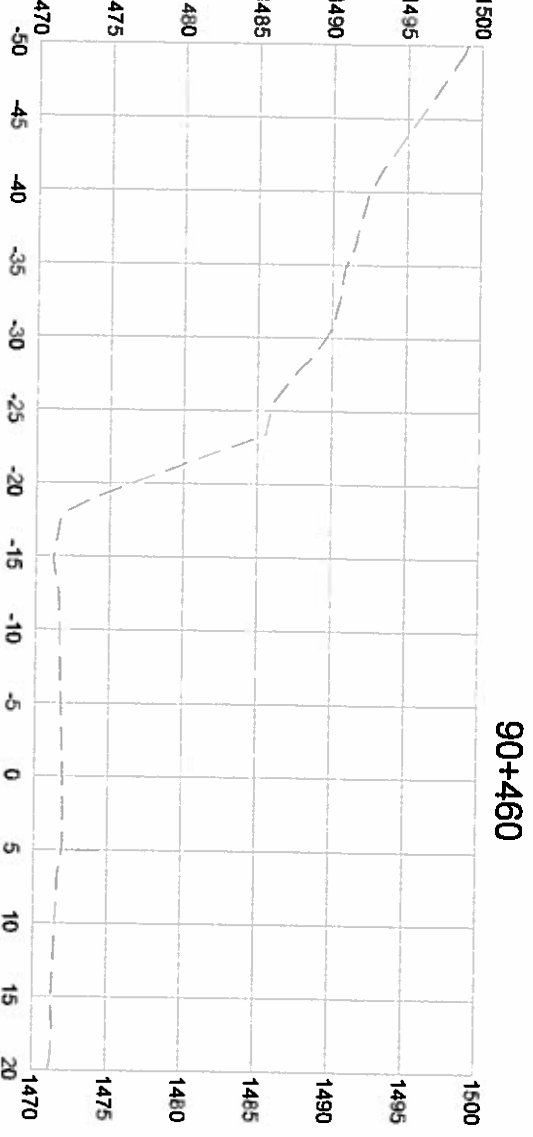
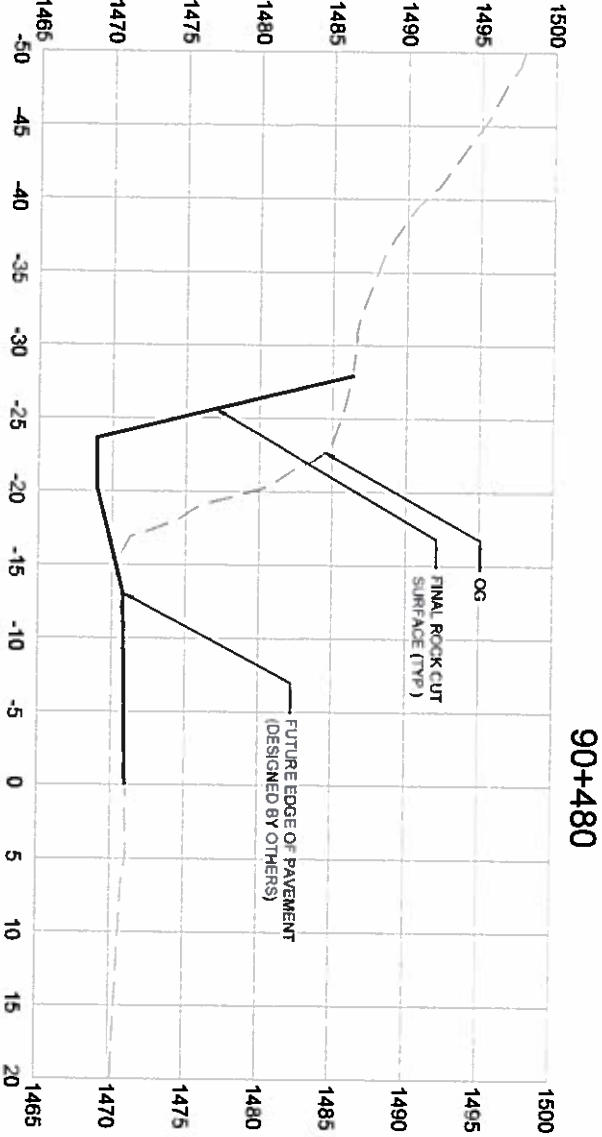
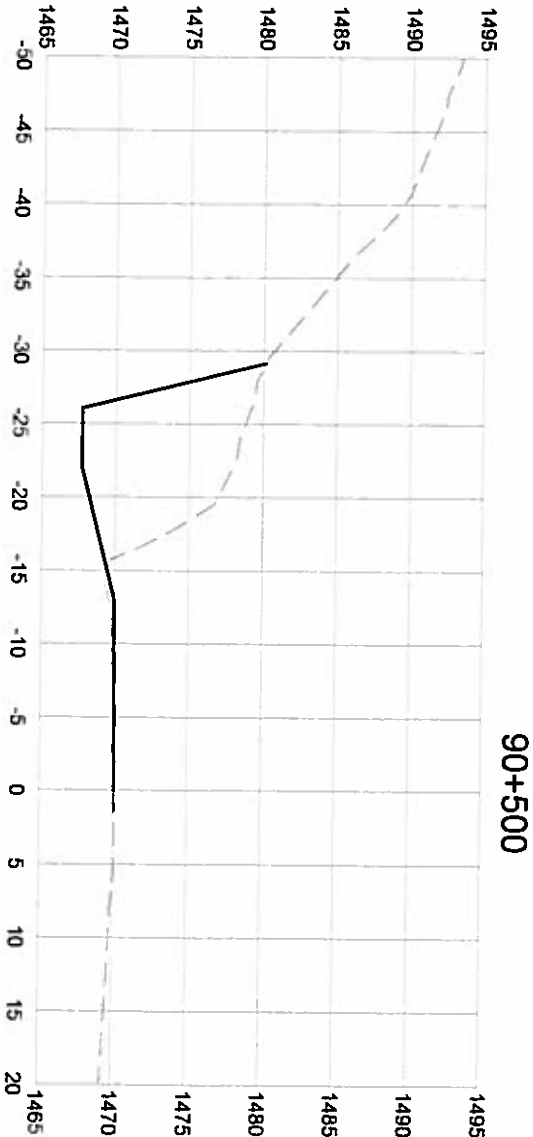
Designed by/Conçu par
A. FRAPPELL / E. YANG
Drawn by/Dessiné par
T. TAKEEDA



Client/Client
PARKS CANADA AGENCY

Drawing title/Titre du dessin
SPIRAL TUNNELS HILL ROCK SLOPE
CROSS SECTIONS
STA. 90+460 TO 90+560

Project No./No. du projet	Sheet/Feuille	Revision no./ La révision no.
201541-4063	0	





ISSUED FOR TENDER

PCA PROJECT NO. TETRA TECH EBA NO.



0	160206	ISSUED FOR TENDER	AF	TT	AF
Project title/Title du projet					

YOHO NATIONAL PARK
BRITISH COLUMBIA

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

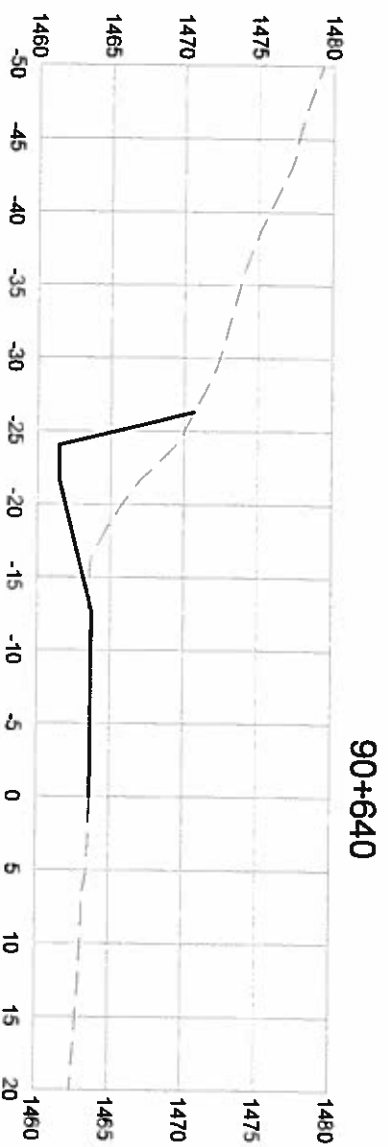
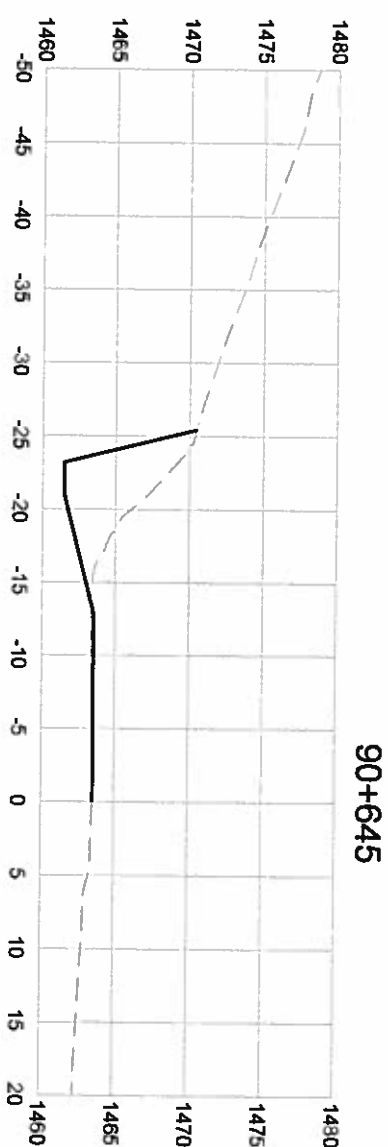
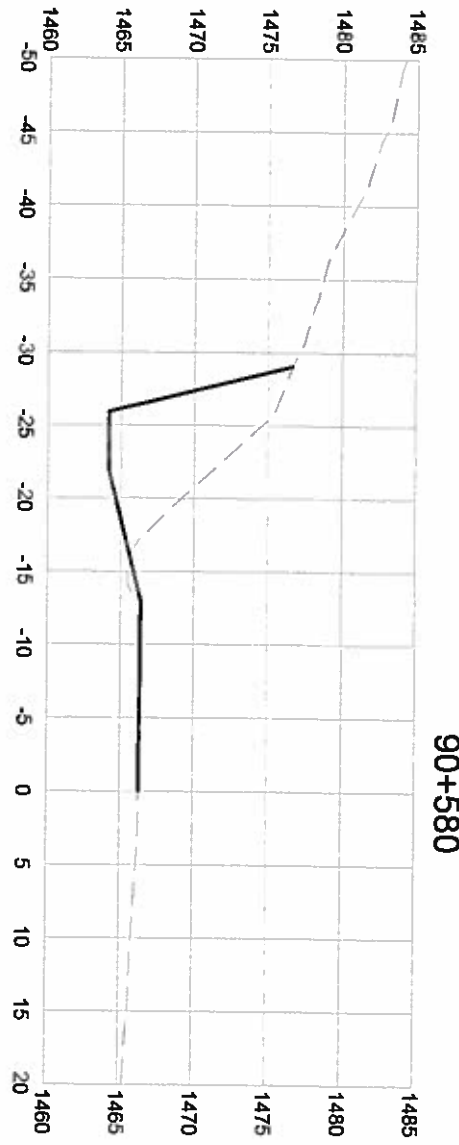
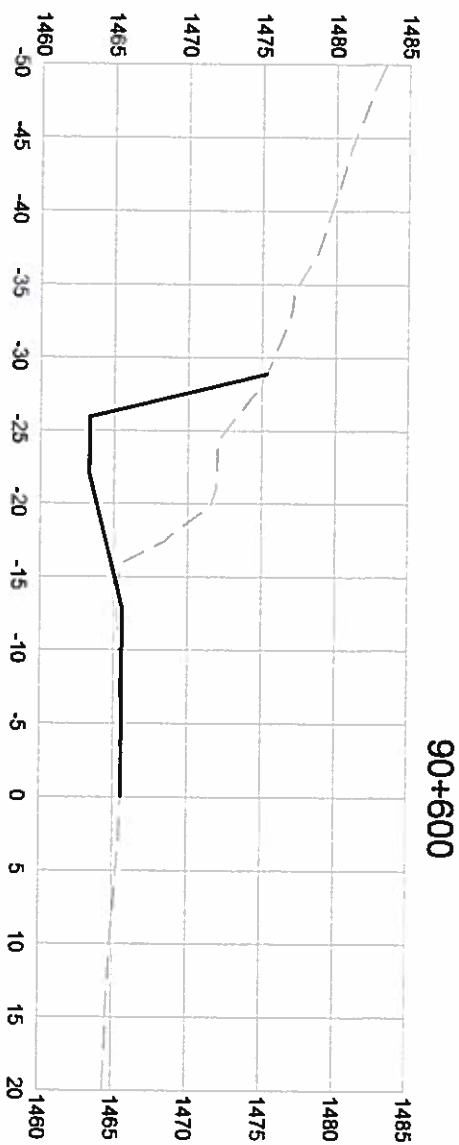
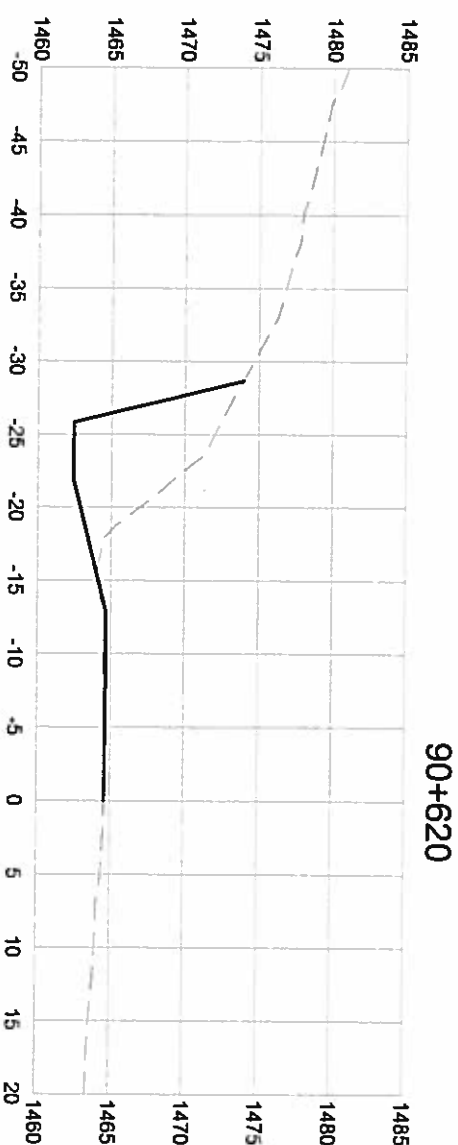
Designed/Conçu par	A. FRAPPELL / E. YANG
Checked/Contrôlé par	T. TAKEDA



Client/Client	PARKS CANADA AGENCY
---------------	---------------------

SPIRAL TUNNELS HILL ROCK SLOPE
CROSS SECTIONS
STA. 90+580 TO 90+645

Project No./No. du projet	201541-4064	Revision no./ LE Revision no.	0
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ISSUED FOR TENDER

PCA PROJECT NO. TETRA TECH EBA No



0	160208	ISSUED FOR TENDER	AP	TT	AF
Revision	Rev/Date	Description/Description	CCS	OWN	INT

Project No./Titre du projet

YOHU 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

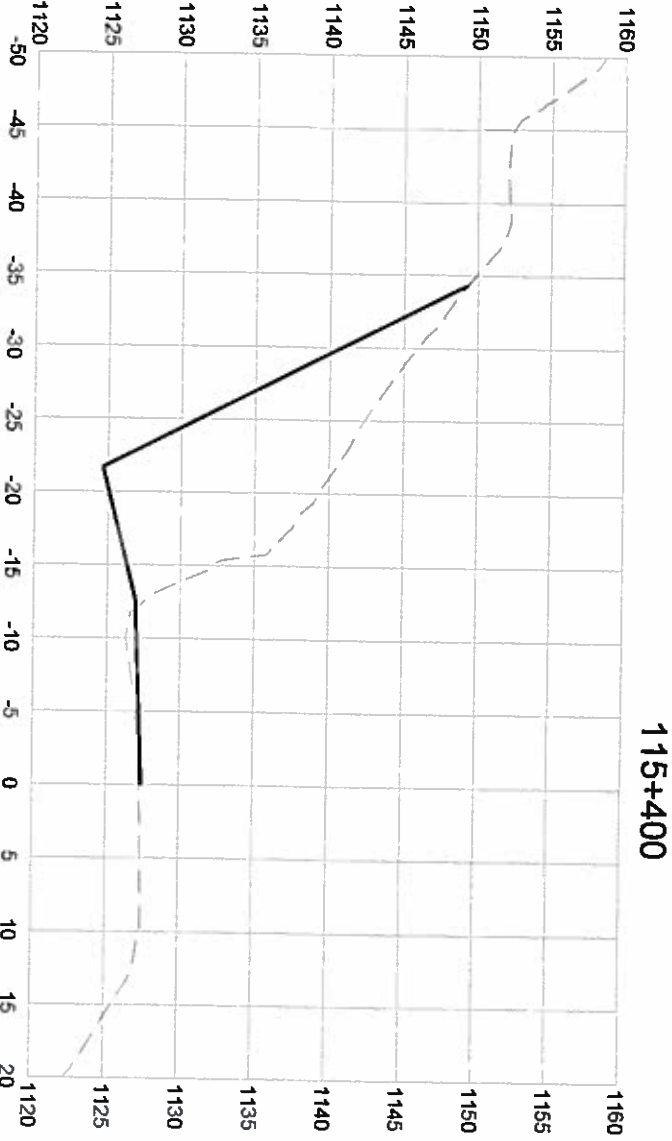
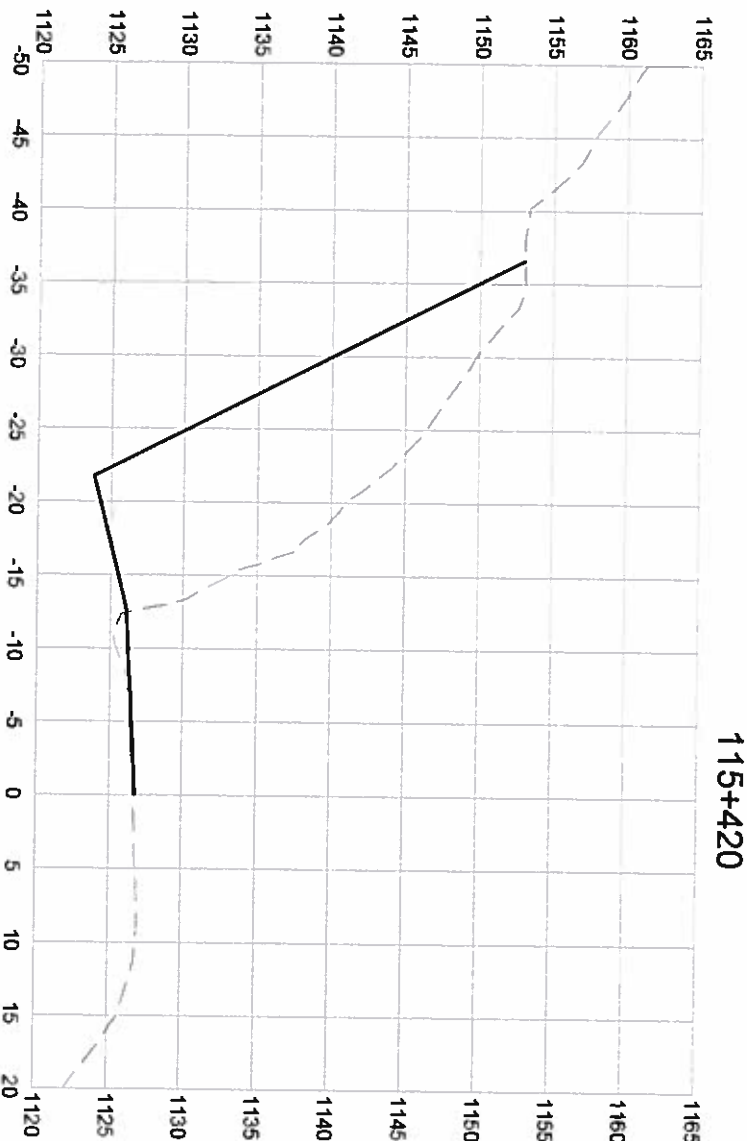
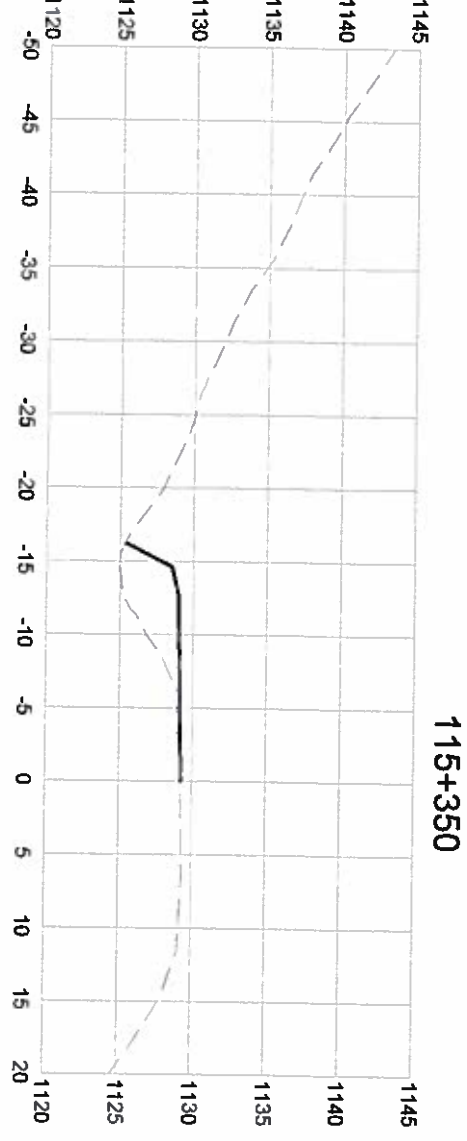
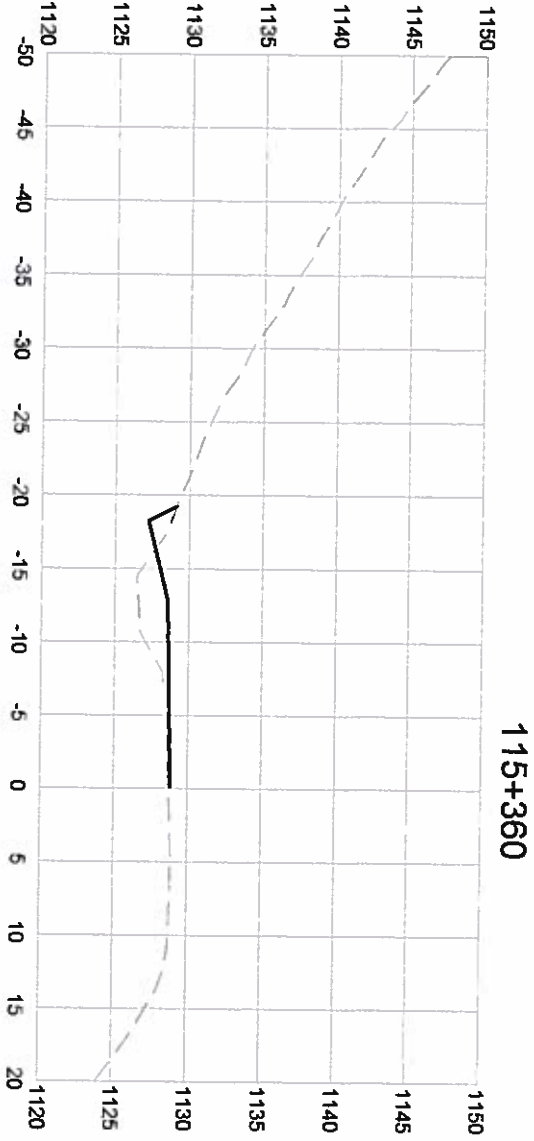
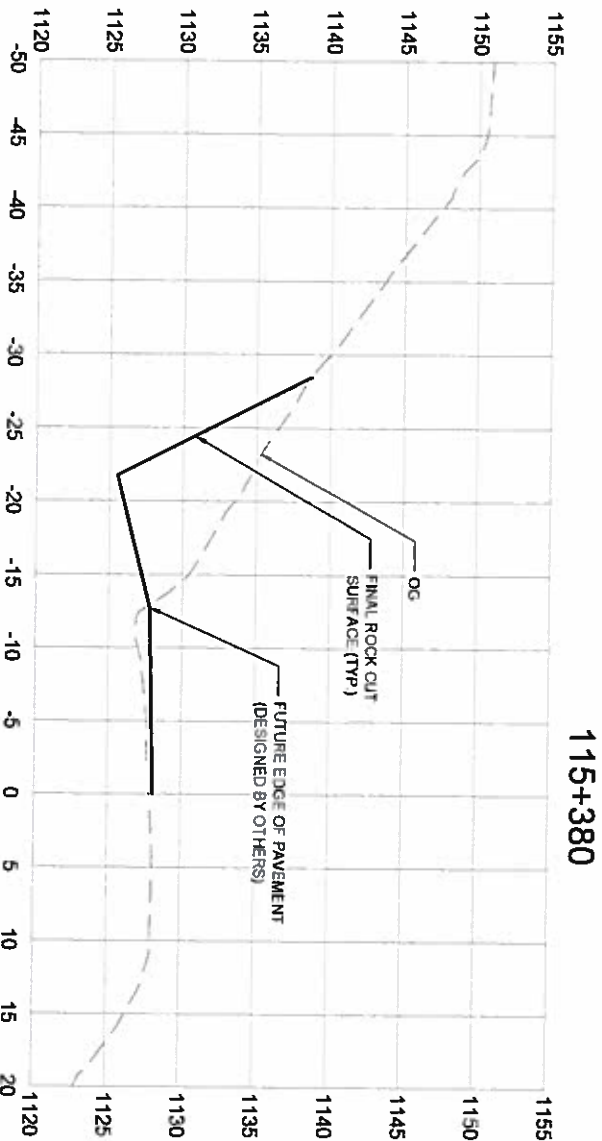
Drawing No./Titre du dessin

BIG TOPPLE ROCK SLOPE
CROSS SECTIONS
STA. 115+360 TO 115+420

Project No./No. du projet

201541-4090

Sheet/Feuille
0





ISSUED FOR TENDER

PCA PROJECT No. TETRA TECH EBA No



0	160209	ISSUED FOR TENDER	AF	TT	AF
160209	Issued/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/Conception par

A. FRAPPELL / E YANG

Drawn by/Dessiné par

T. TAKEDA



Client/Client
PARKS CANADA AGENCY

Drawing title/Titre du dessin

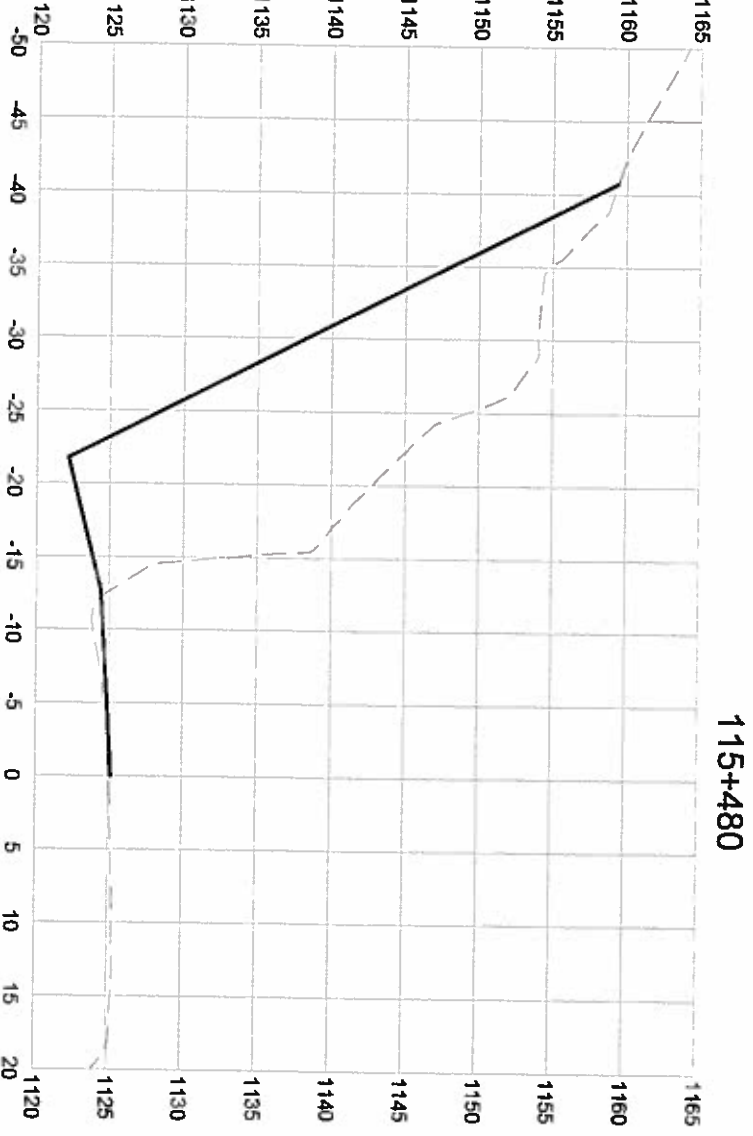
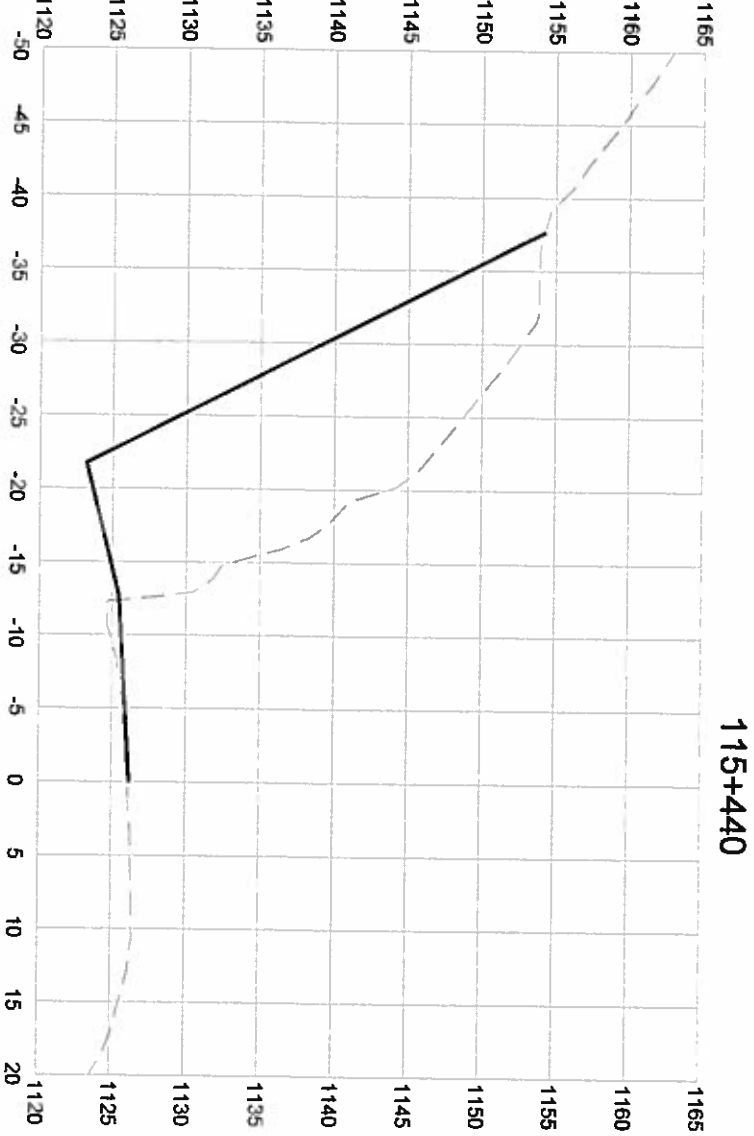
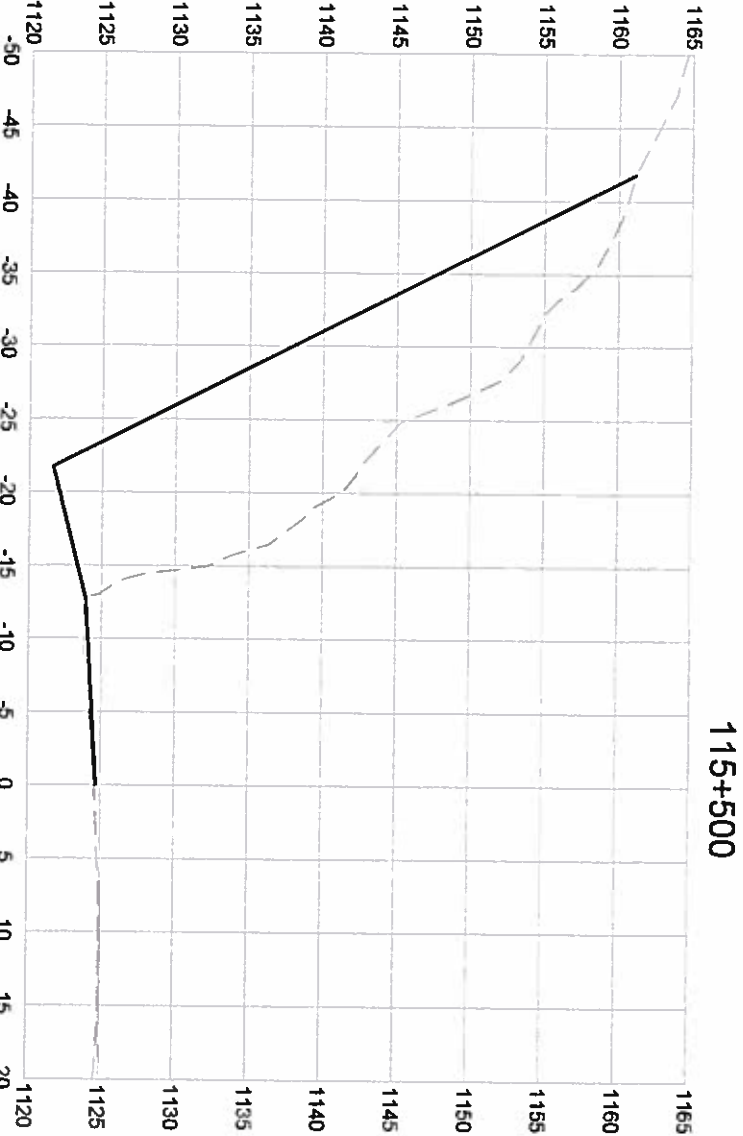
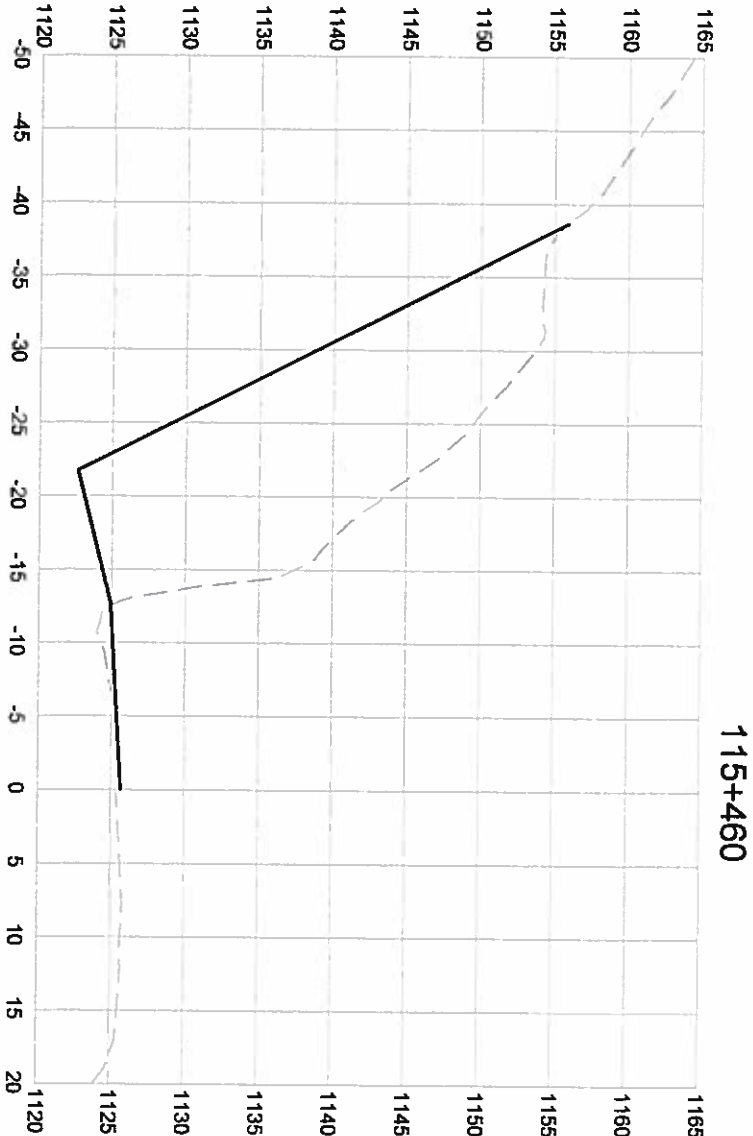
BIG TOPPLE ROCK SLOPE
CROSS SECTIONS
STA. 115+440 TO 115+500

Drawing No./No. du dessin

201541-4091

Revision No./
10 Revision No.

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ISSUED FOR TENDER

PCA PROJECT NO. TETRA TECH EBA NO.

[illegible]

Project title/Title du projet

**YOHO NATIONAL PARK
BRITISH COLUMBIA**

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

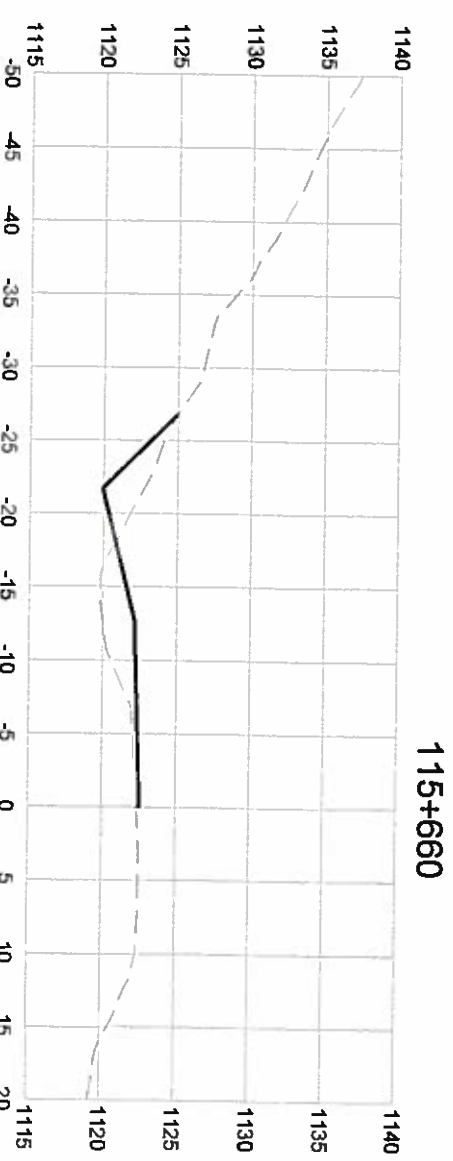
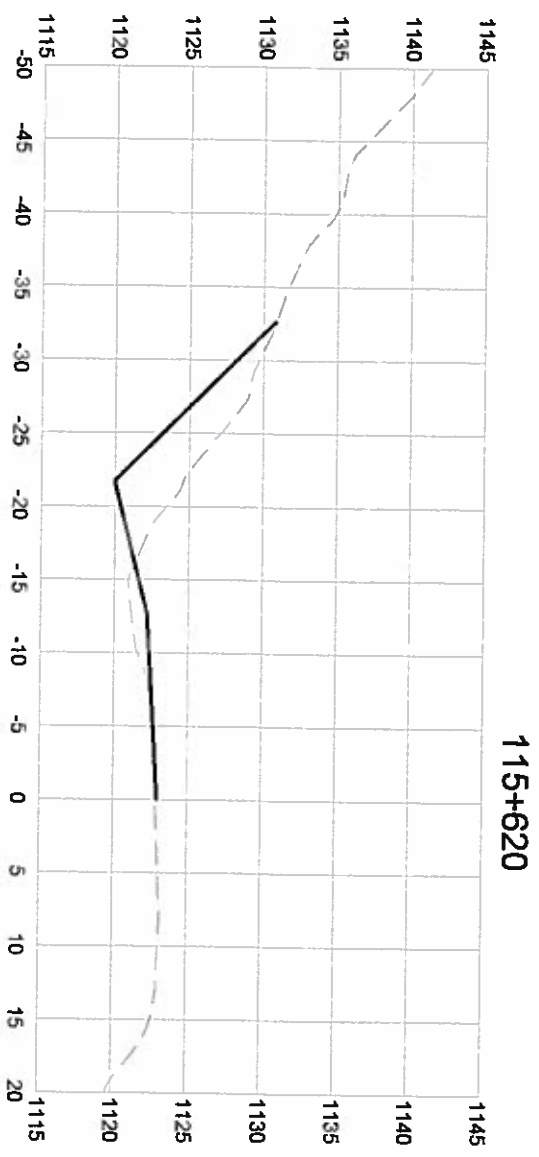
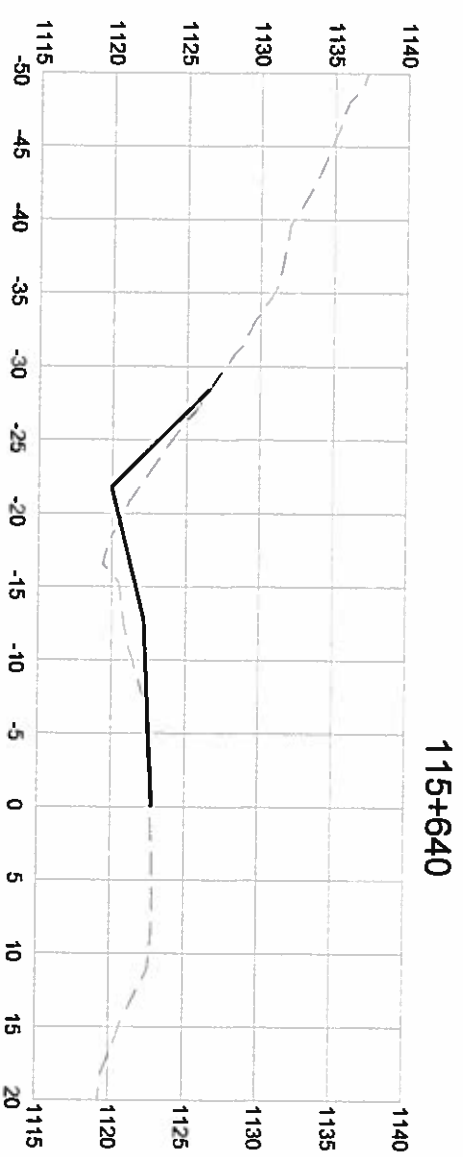
Designed by/Concept for
A. FRAPPELLI E. YANG

T. TAKEDA



Client/client
PARKS CANADA AGENCY

**BIG TOPPLE ROCK SLOPE
CROSS SECTIONS
STA. 115+620 TO 115+660**





PCA PROJECT NO. TETRA TECHEBA NO.

[illegible]

**YOHO NATIONAL PARK
BRITISH COLUMBIA**

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

Designed by: concept por
A. FRAPPELLI / E. YANG
Drawn by: Cassine per
T. TAKEDA



PARKS CANADA AGENCY

**LITTLE TOPPLE ROCK SLOPE
CROSS SECTIONS
STA. 115+660 TO 115+740**

201541-4100	201541-4100	0
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ISSUED FOR TENDER

PCA PROJECT NO. TETRA TECH EBA NO.



0	160209	ISSUED FOR TENDER	AF	TT	AF				
160209	160209	Issued for Tender	AF	TT	AF				
Project title/Title du projet									

YOHO NATIONAL PARK
BRITISH COLUMBIA

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

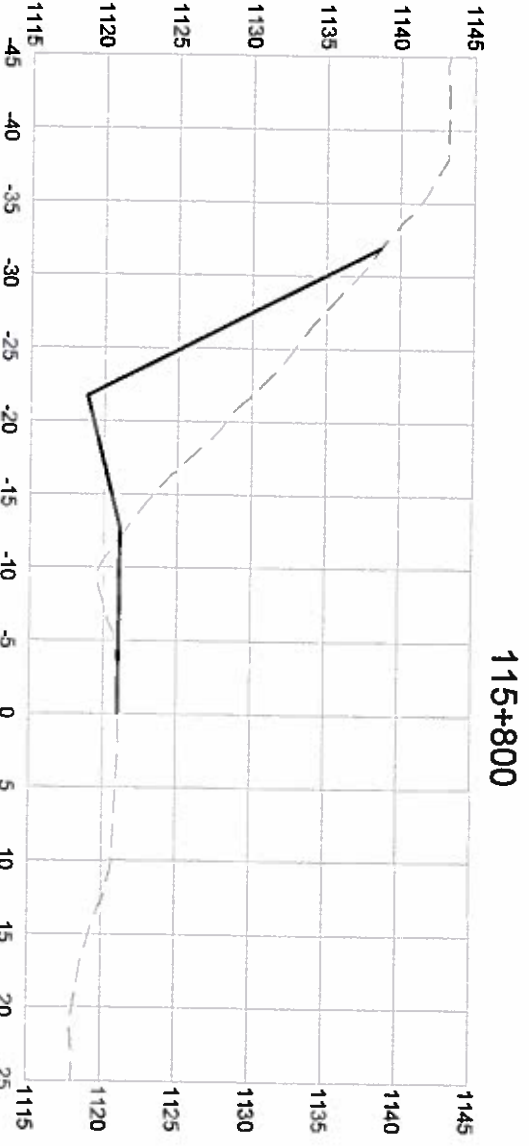
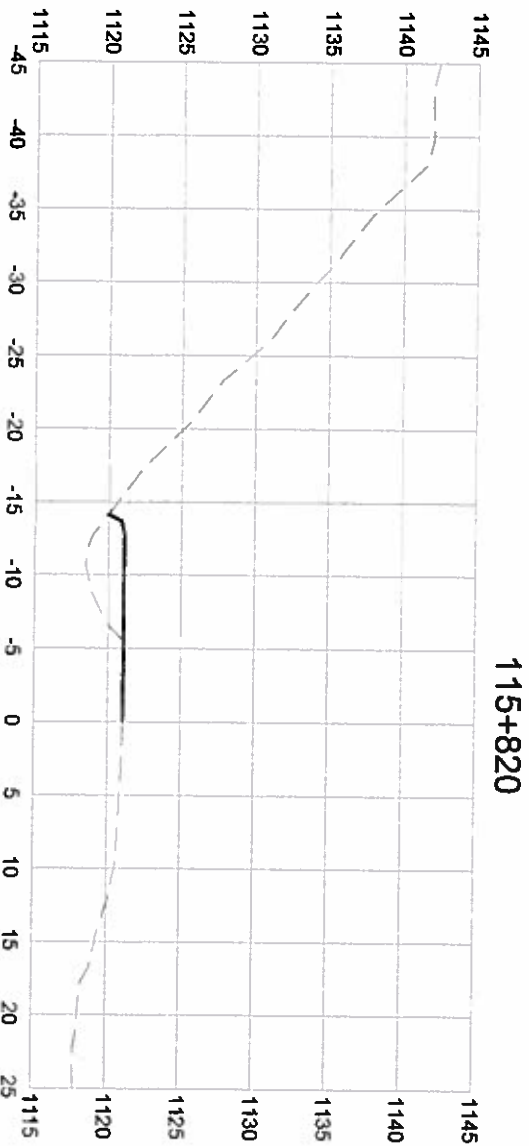
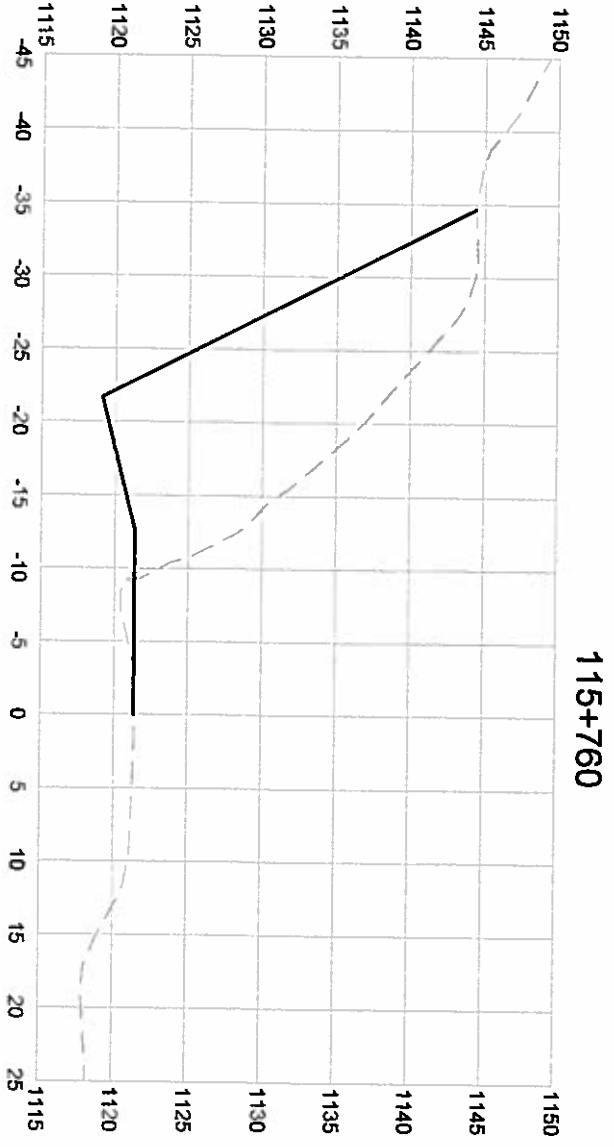
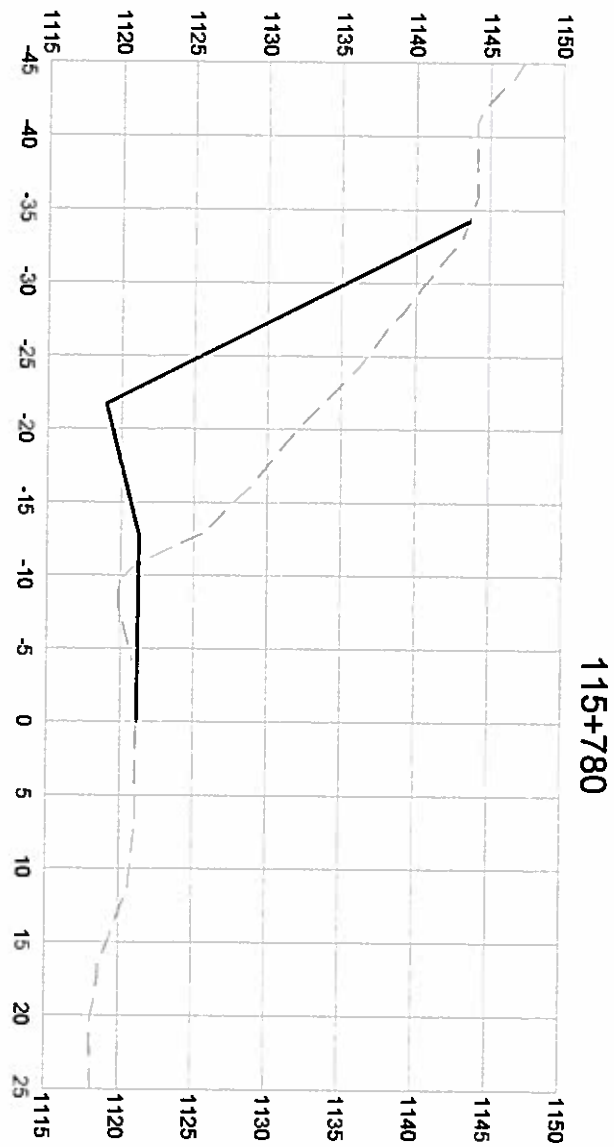
Designed by/Conçue par
A. FRAPPELL / E. YANG
Drawn by/Dessiné par
T. TAKEDA



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	Sheet/Feuille	Drawing No./No. du dessin
201541-4101	0	





ISSUED FOR TENDER

PCA PROJECT NO. TETRA TECH EBA No



0	160209	ISSUED FOR TENDER	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

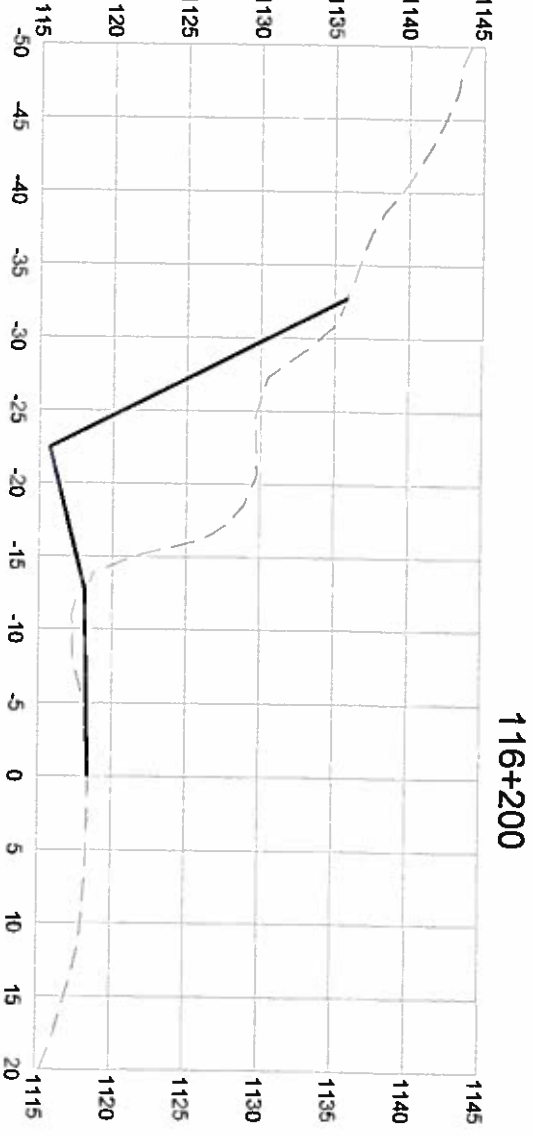
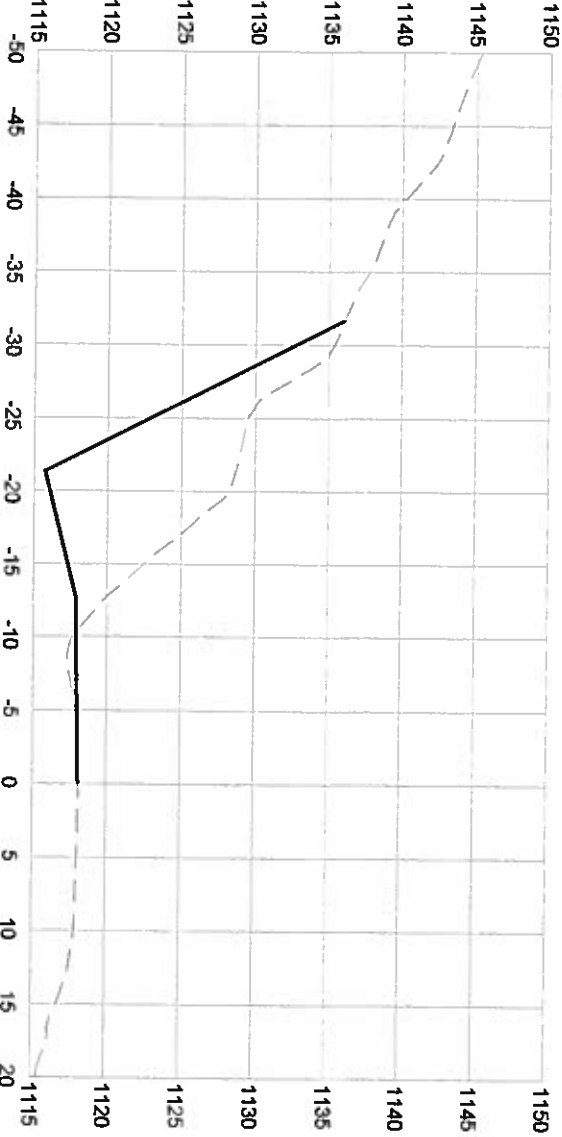
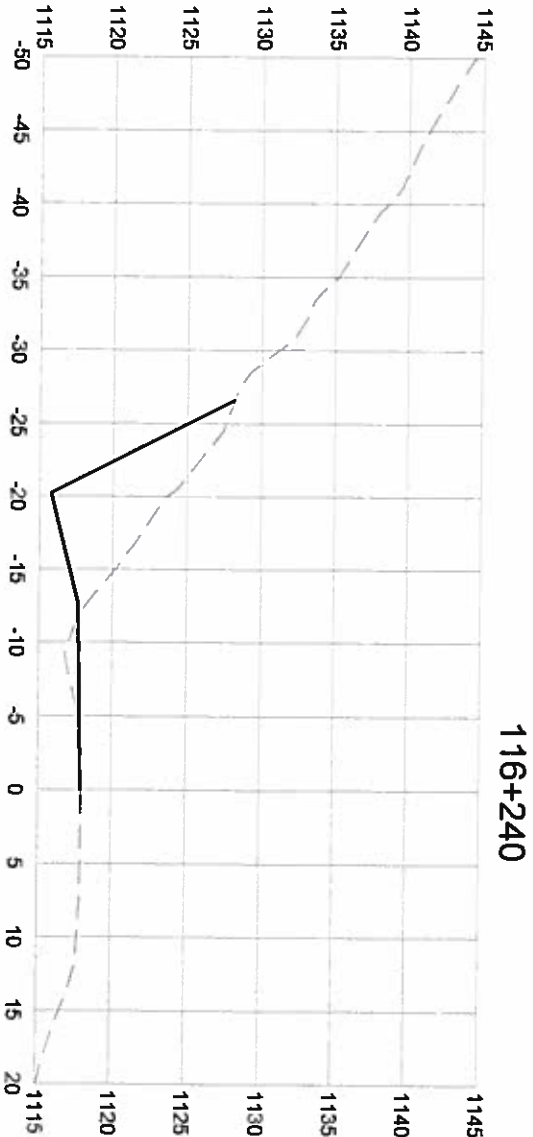
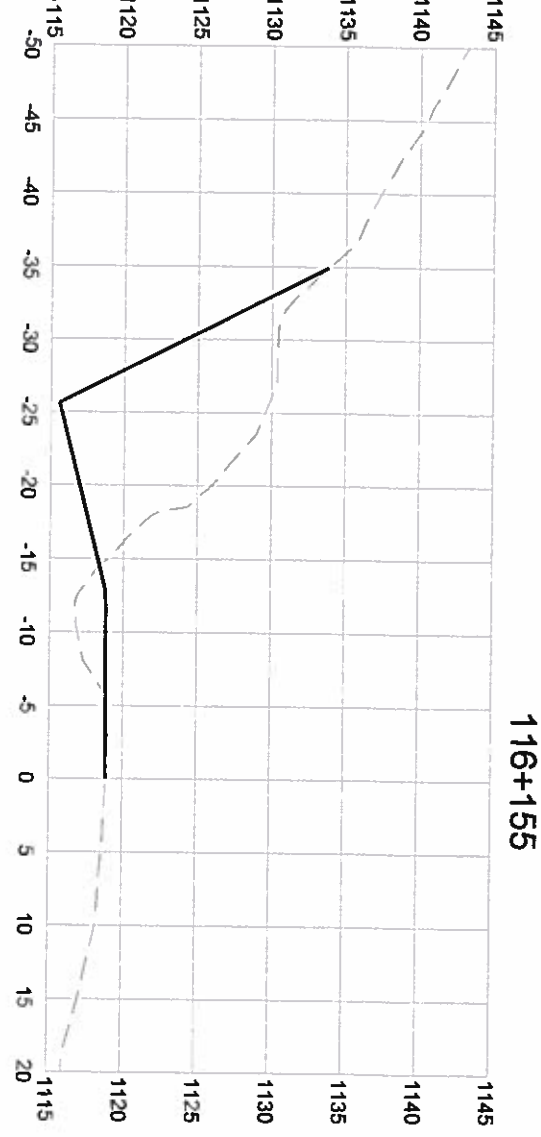
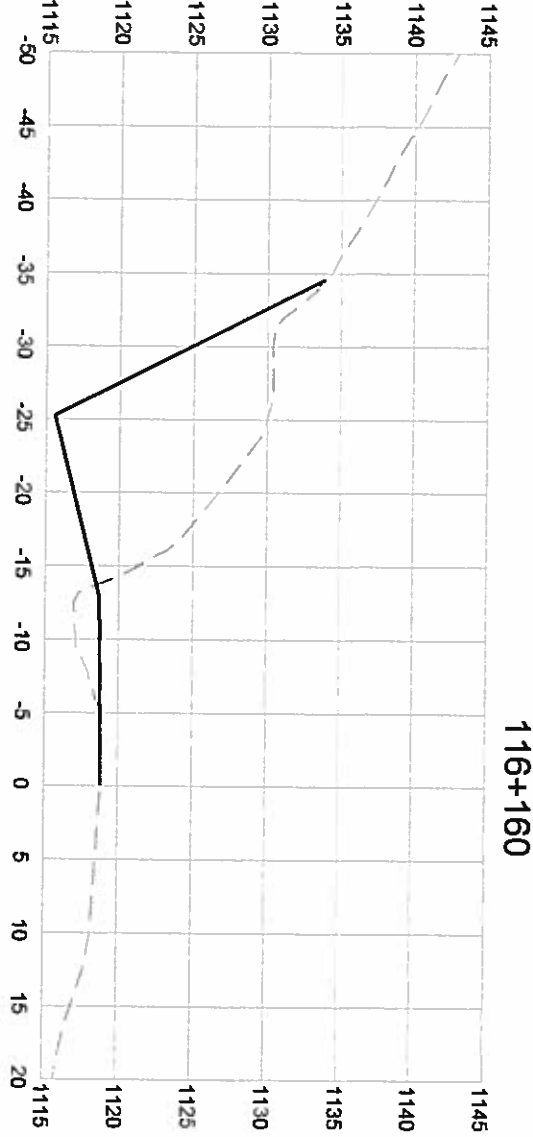
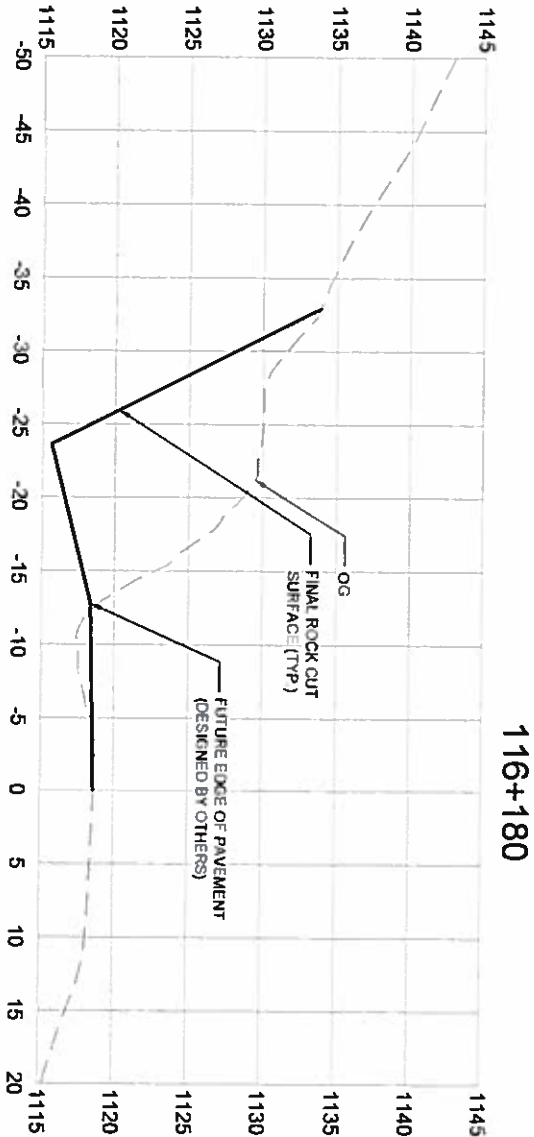
Designed by/Concepé par
A. FRAPPEL / E. YANG
Checked by/Revisé par
T. TAKEDA



Client/Client
PARKS CANADA AGENCY

Mount Vaux Rock Slope
CROSS SECTIONS
STA. 116+155 TO 116+240

Project No./No. du projet	Sheet/Feuille	Station No./ No. Station
	201541-4110	0





ISSUED FOR TENDER

PCA PROJECT NO. TETRA TECH EBA NO.



0	180208	ISSUED FOR TENDER	AF	TT	AF
DATE /	DATE /	DESCRIPTION / DESCRIPTION	DES	CHG	CHK

YOHO NATIONAL PARK
BRITISH COLUMBIA

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

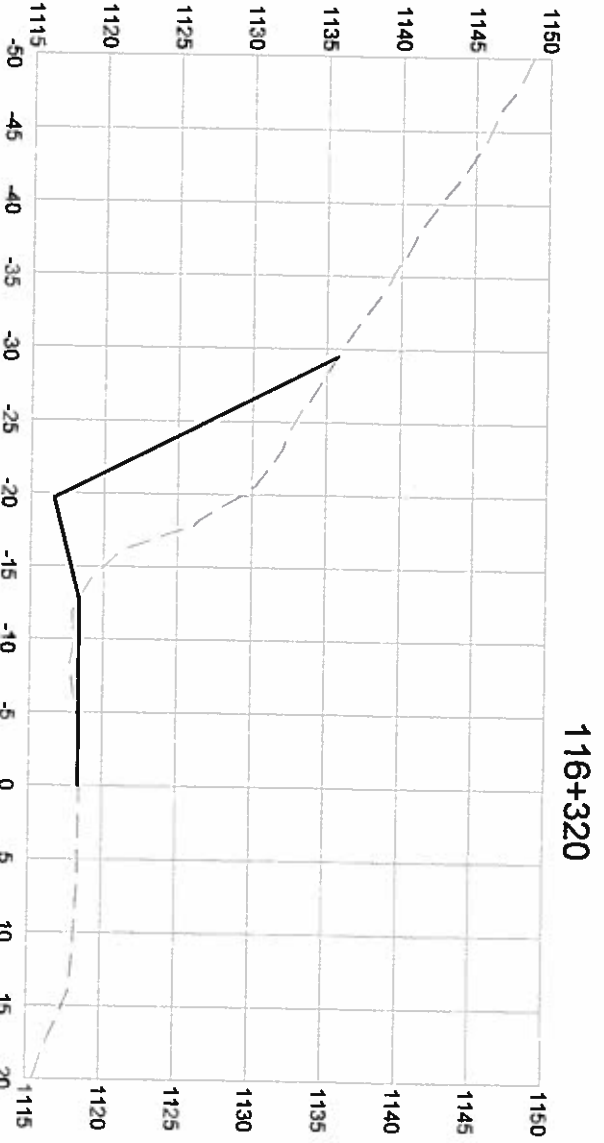
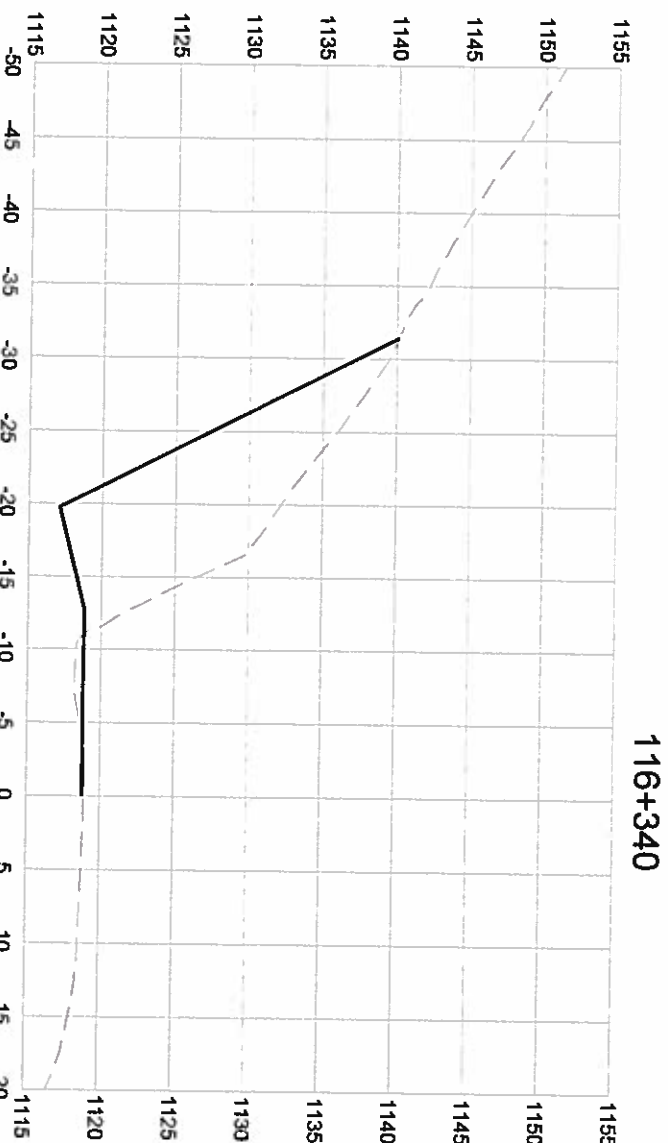
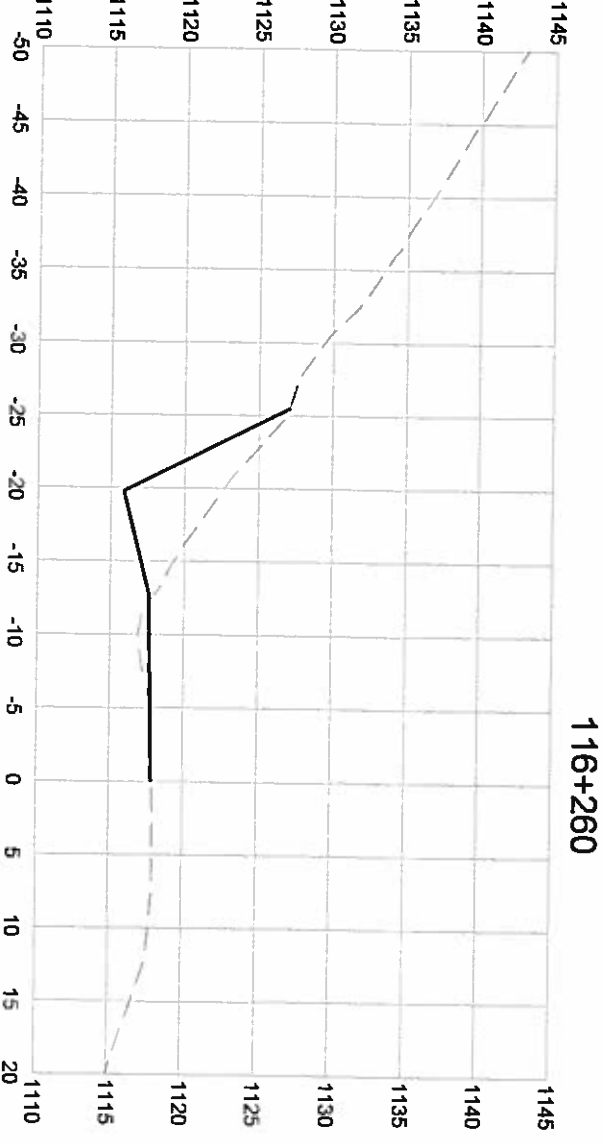
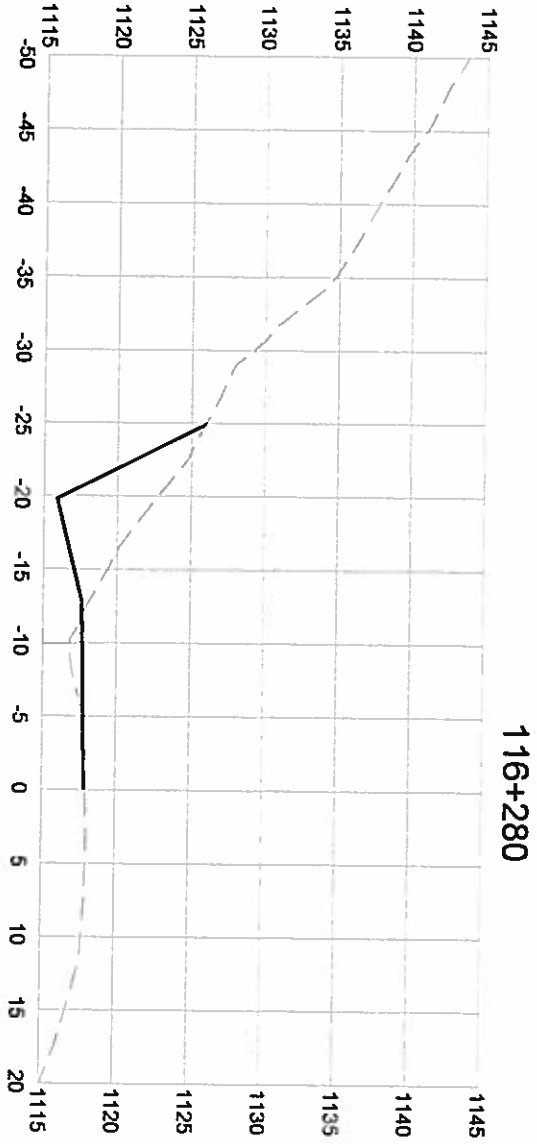
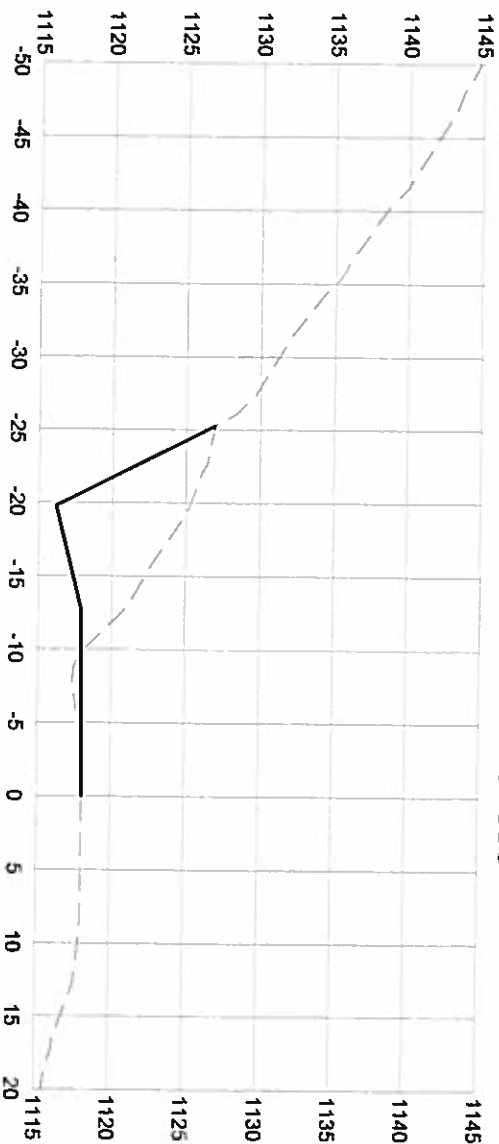
Designed by/Conçeu par
A. FRAPPELL / E. YANG
Drawn by/Dessiné par
T. TAKEDA



Client/Client
PARKS CANADA AGENCY

Drawing title/Titre de dessin
MOUNT VAUX ROCK SLOPE
CROSS SECTIONS
STA. 116+260 TO 116+340

Project No./No. du projet	Sheet/Feuille	Revision No./ L'Édition No.
201541-4111	0	



ISSUED FOR TENDER

PCA PROJECT No. TETRA TECH EBA No.

[illegible]

Project Name/Title du projet

**YOHO NATIONAL PARK
BRITISH COLUMBIA**

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

Designed by/Concepted por

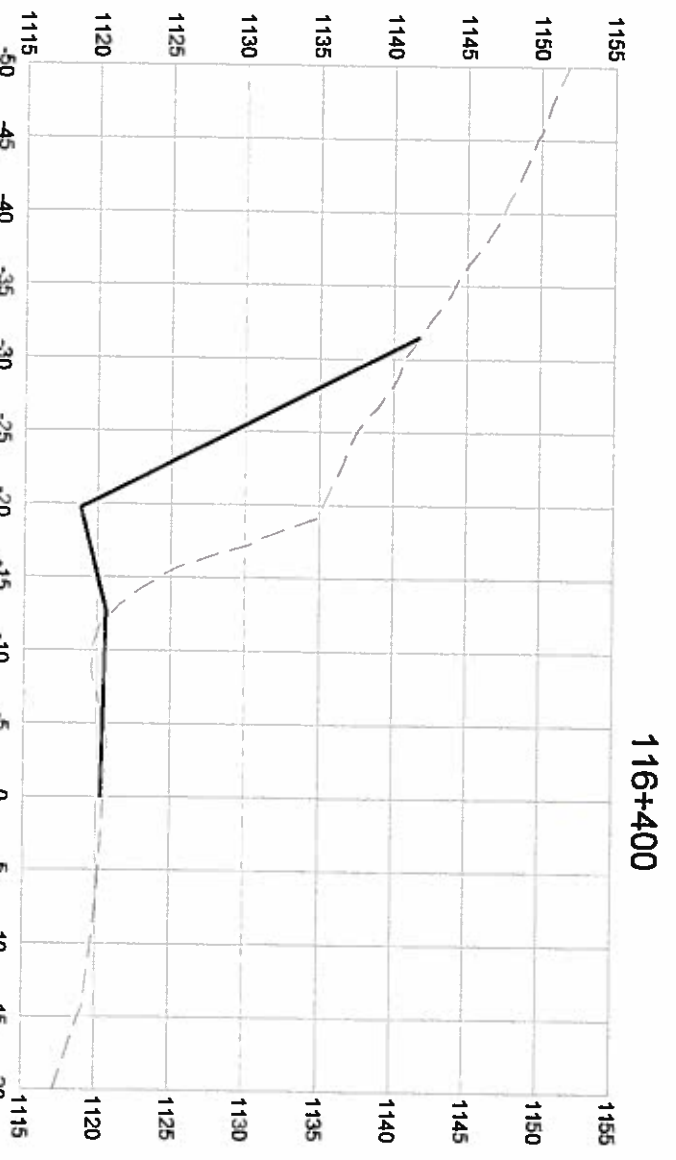
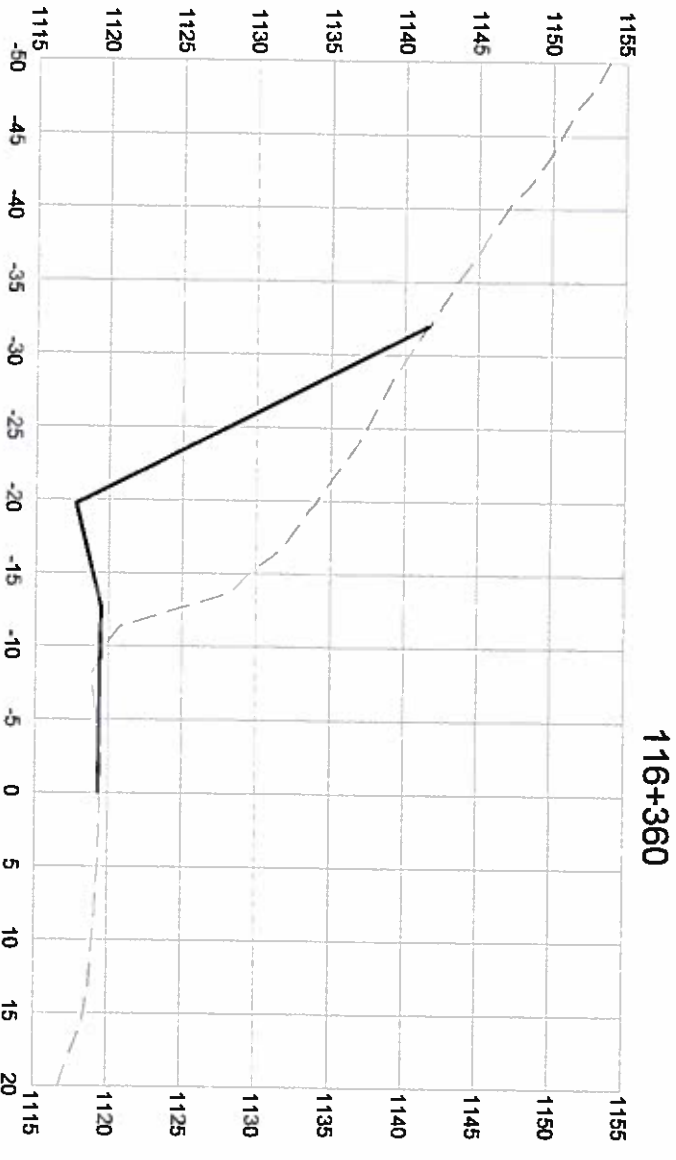
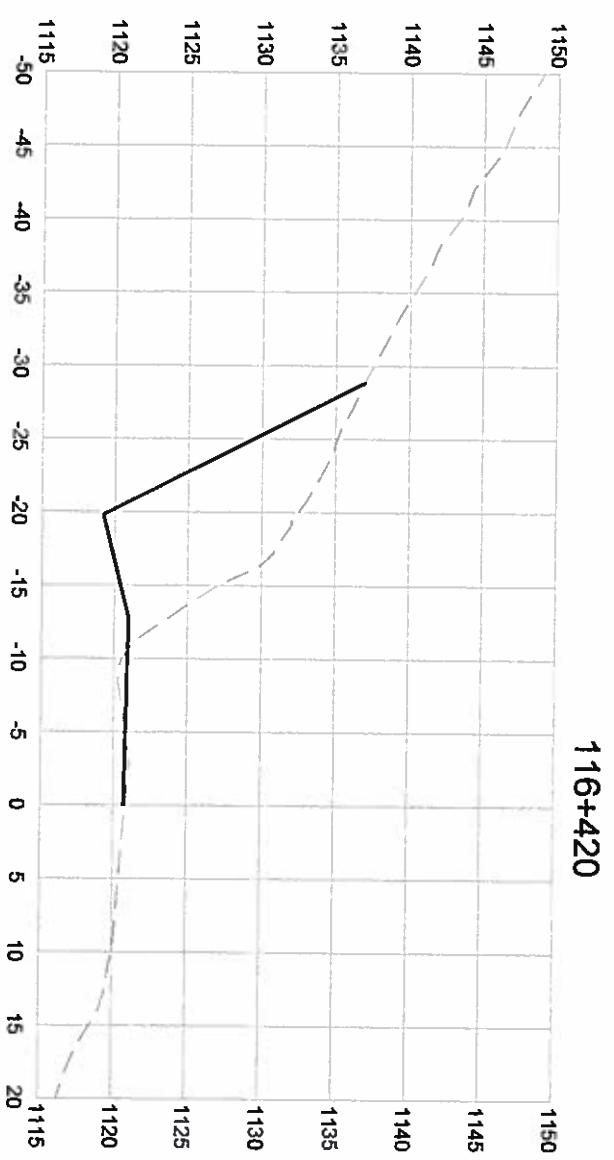
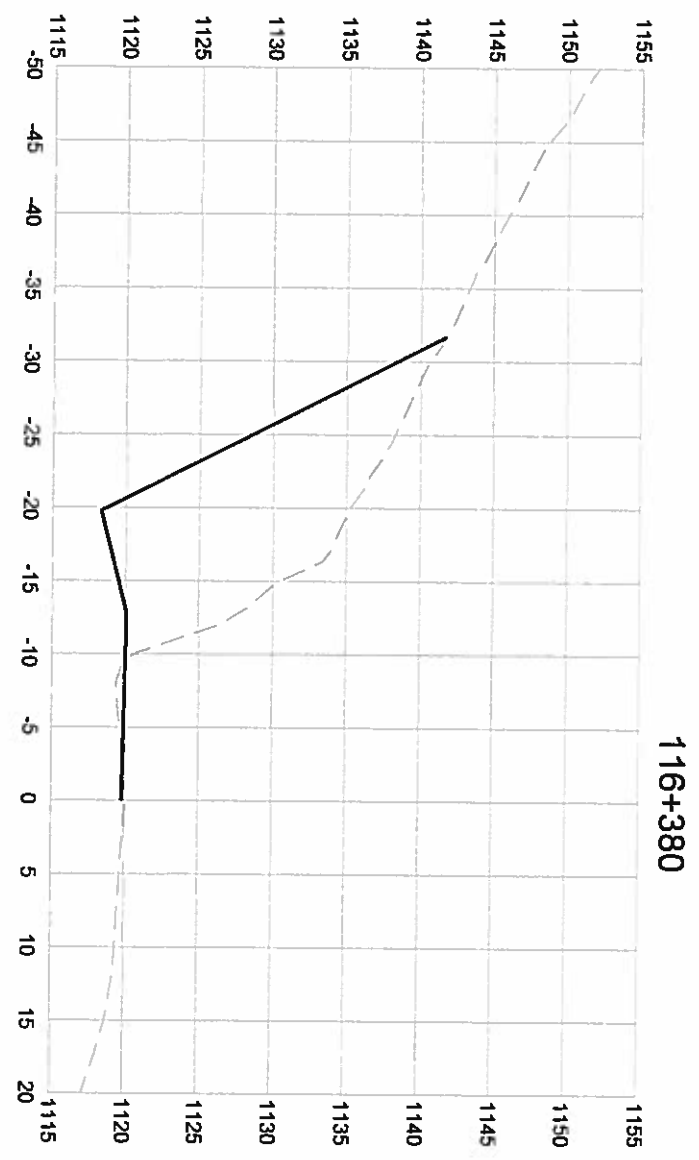
A. FRAPPELL / E. YANG

T. TAKEDA



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**MOUNT VAUX ROCK SLOPE
CROSS SECTIONS
STA. 116+360 TO 116+420**





ISSUED FOR TENDER

PCA PROJECT No. TETRA TECH EBA No.



0	160209	ISSUED FOR TENDER	AE	TT	AE
Revision Description/Description					
015	0001				

Project title/ titre du projet

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

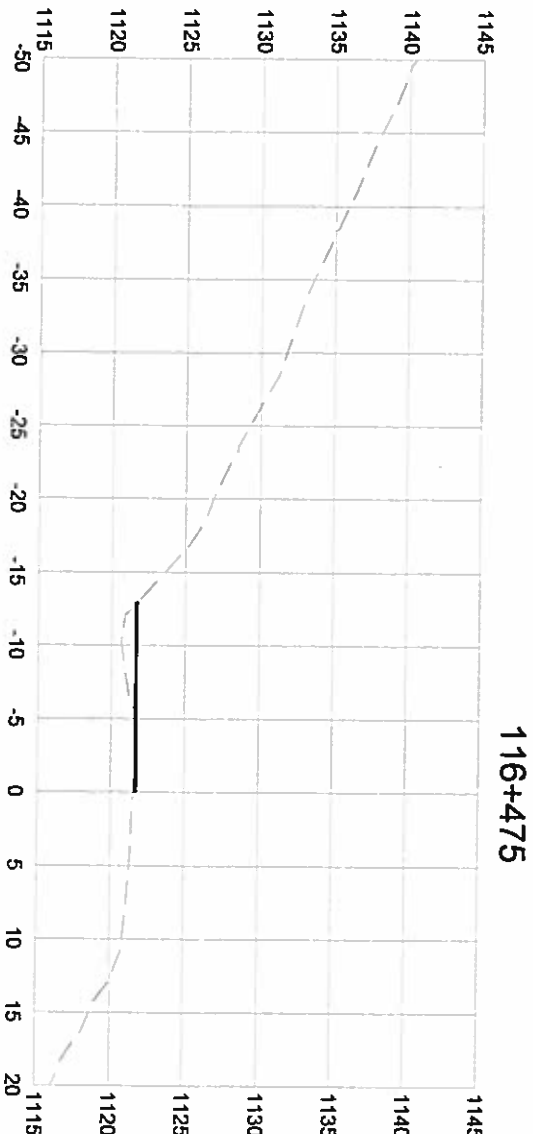
Drawn/Tracé par	A. FRAPPELL / E. YANG
Checked/Contrôlé par	T. TAKEDA



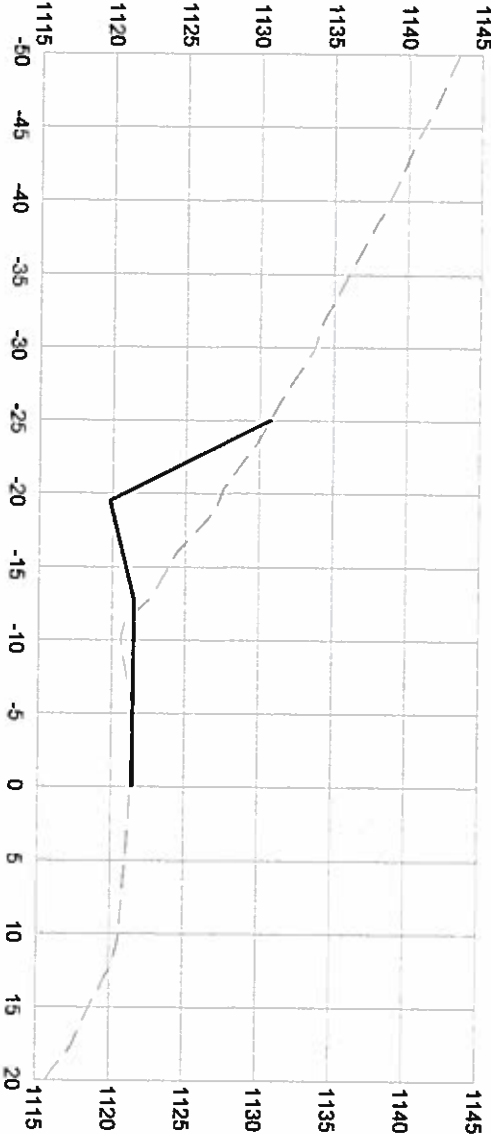
Client/Client	PARKS CANADA AGENCY
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MOUNT VAUX ROCK SLOPE
CROSS SECTIONS
STA. 116+440 TO 116+540

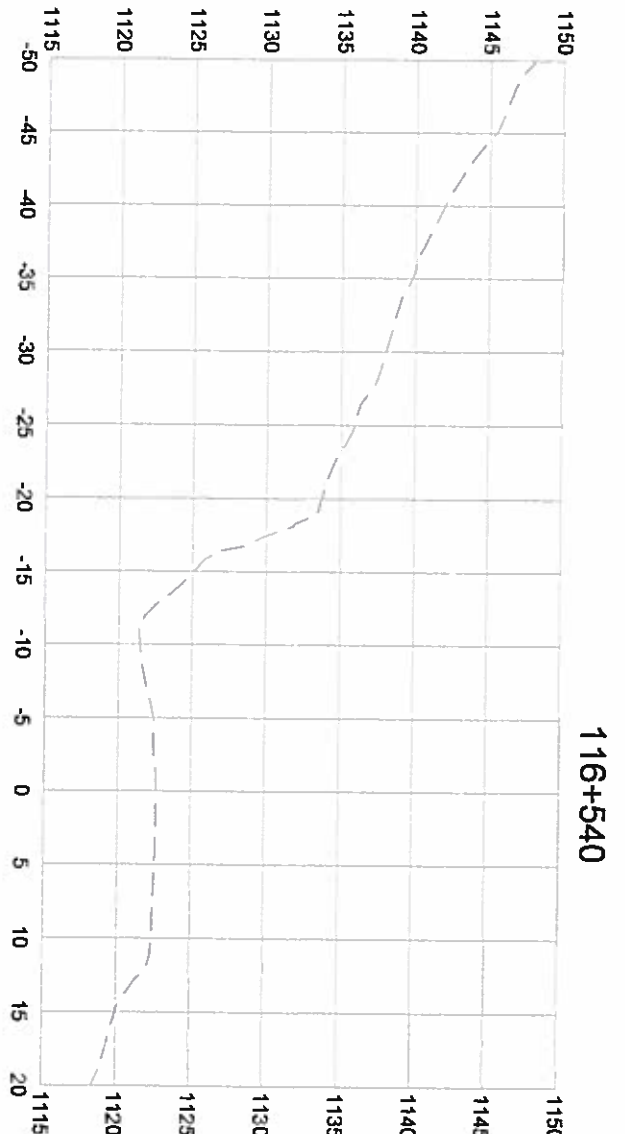
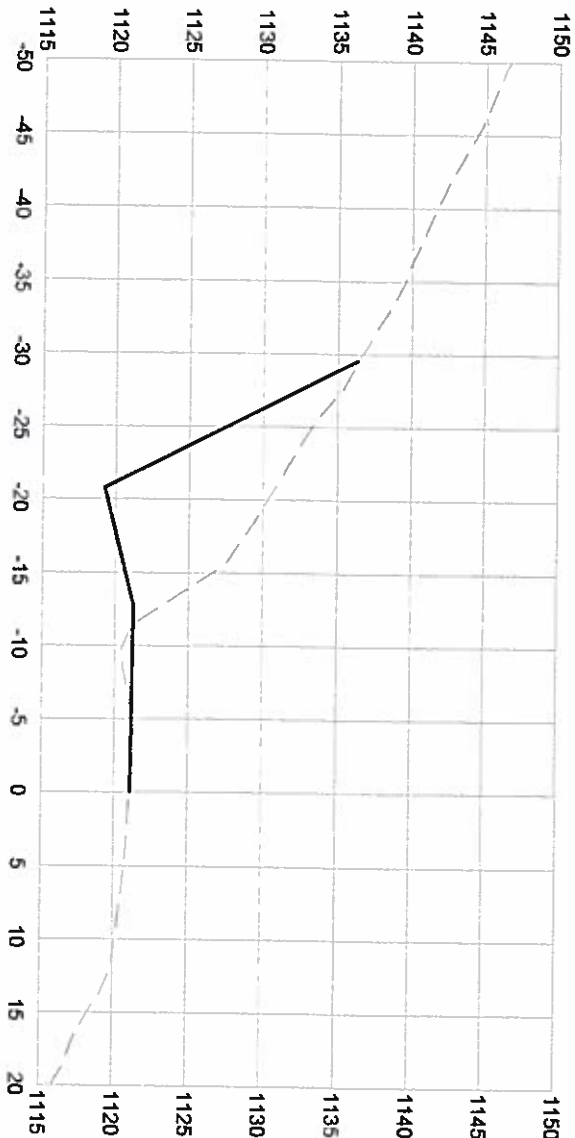
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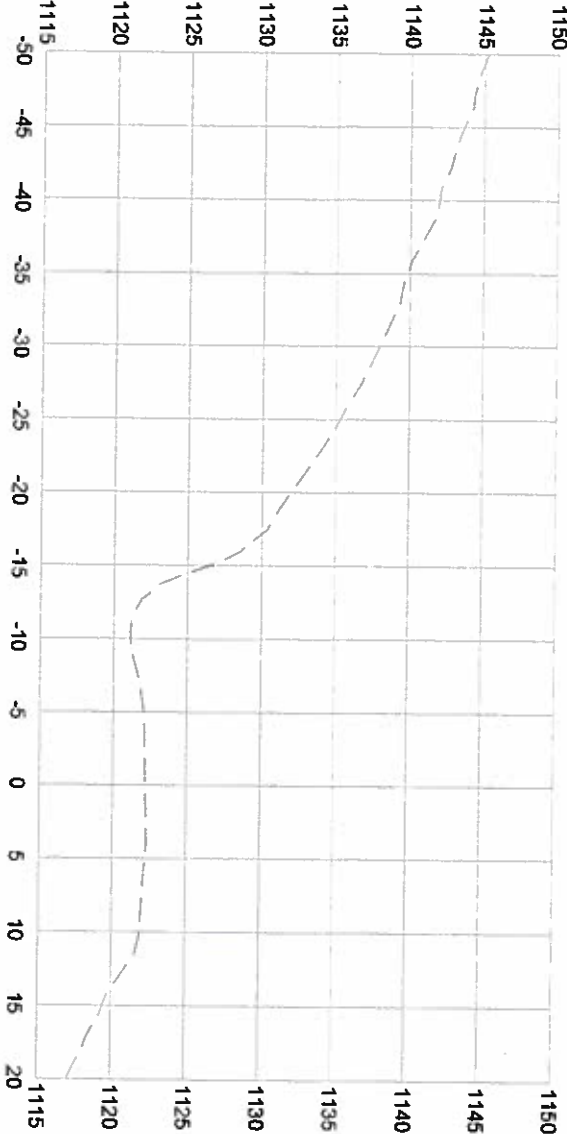
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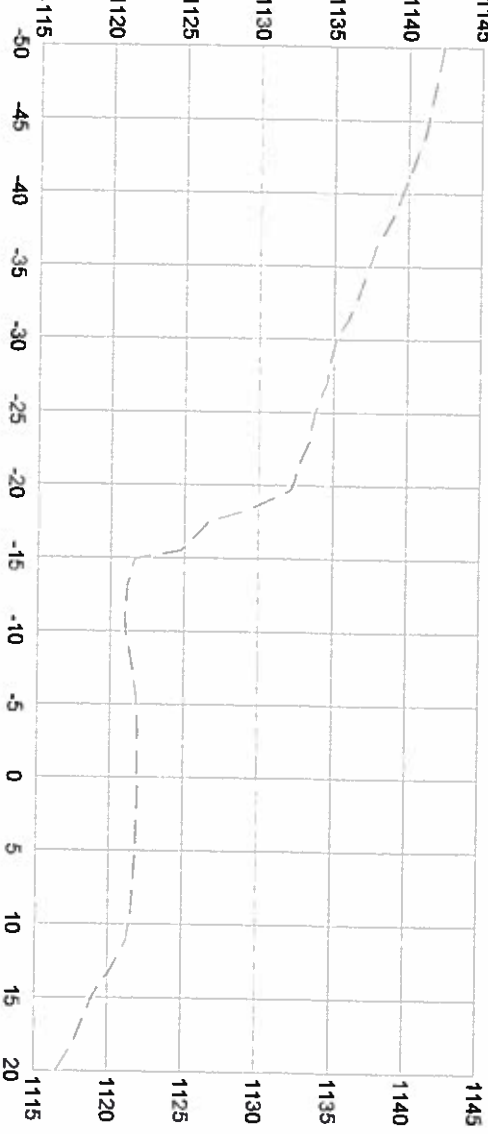
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116+520



116+500





ISSUED FOR TENDER

PCA PROJECT NO. TETRA TECH EBA NO.

[illegible]

Project title/Title of project

YOHO NATIONAL PARK
BRITISH COLUMBIA

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

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

T. TAKEDA



PARKS CANADA AGENCY

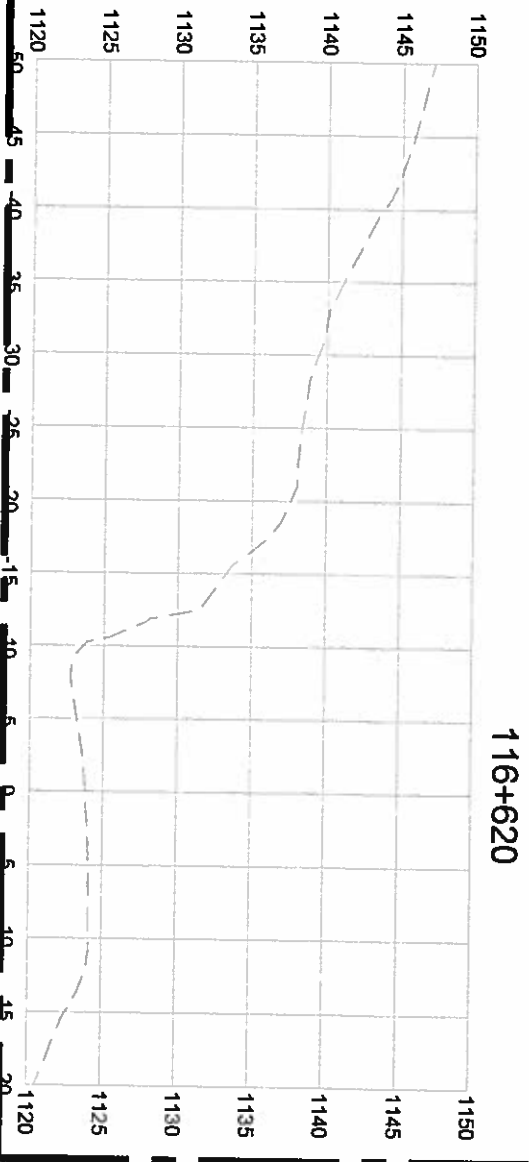
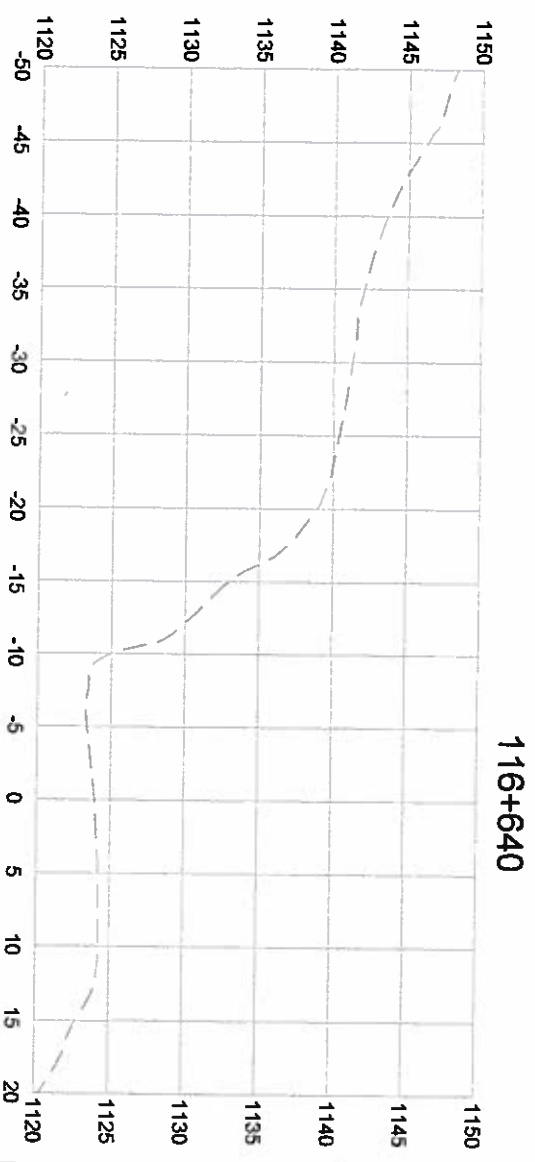
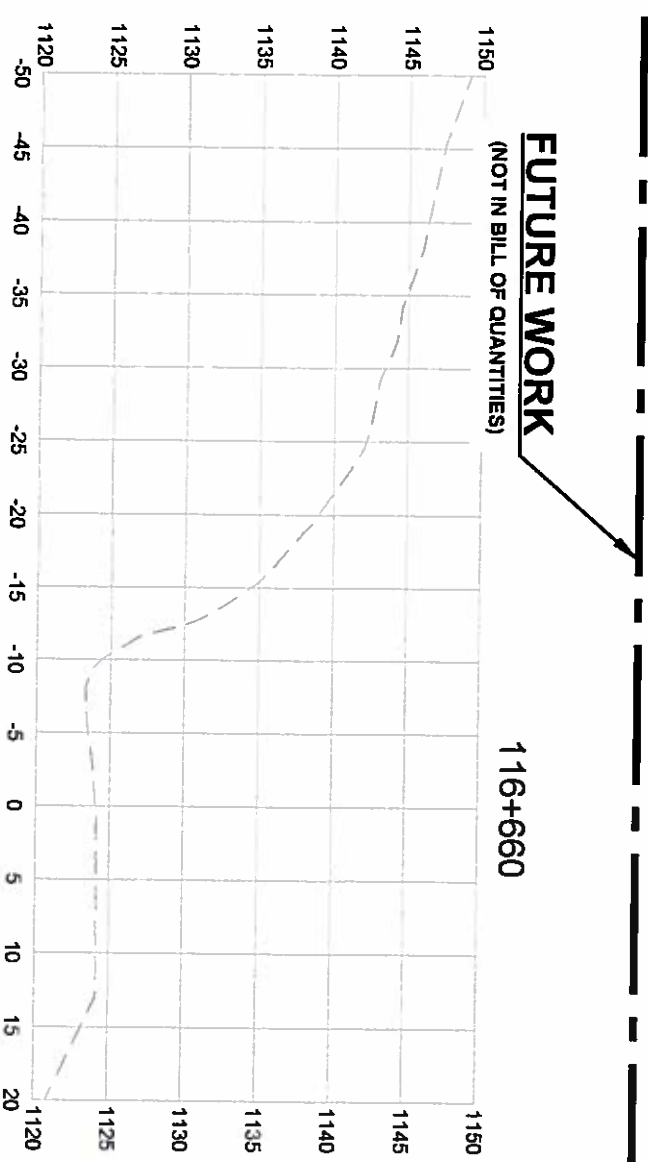
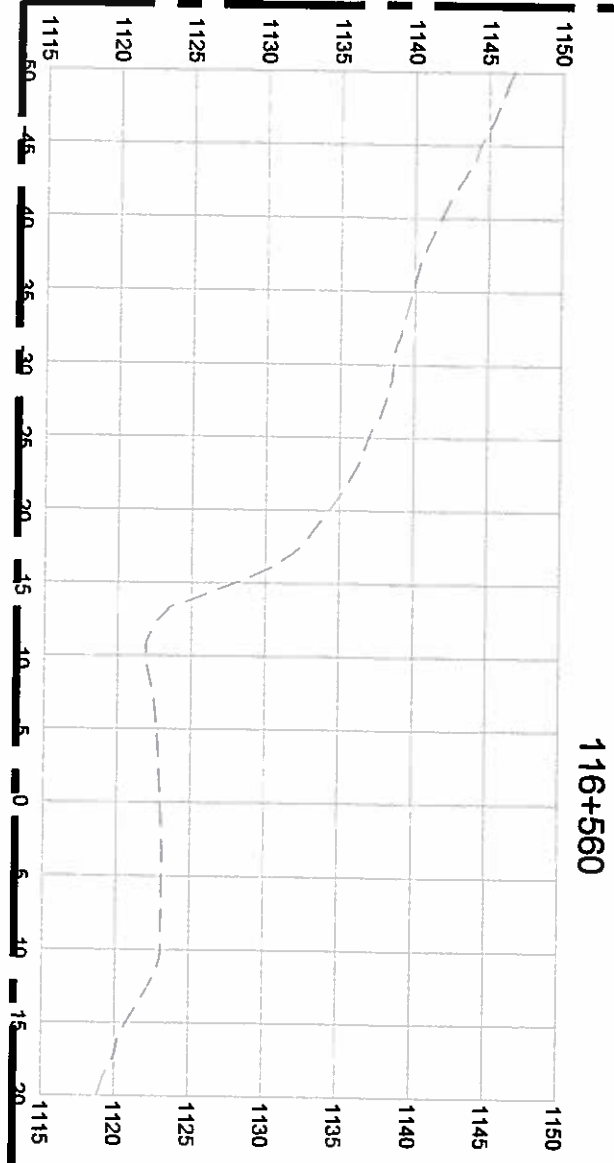
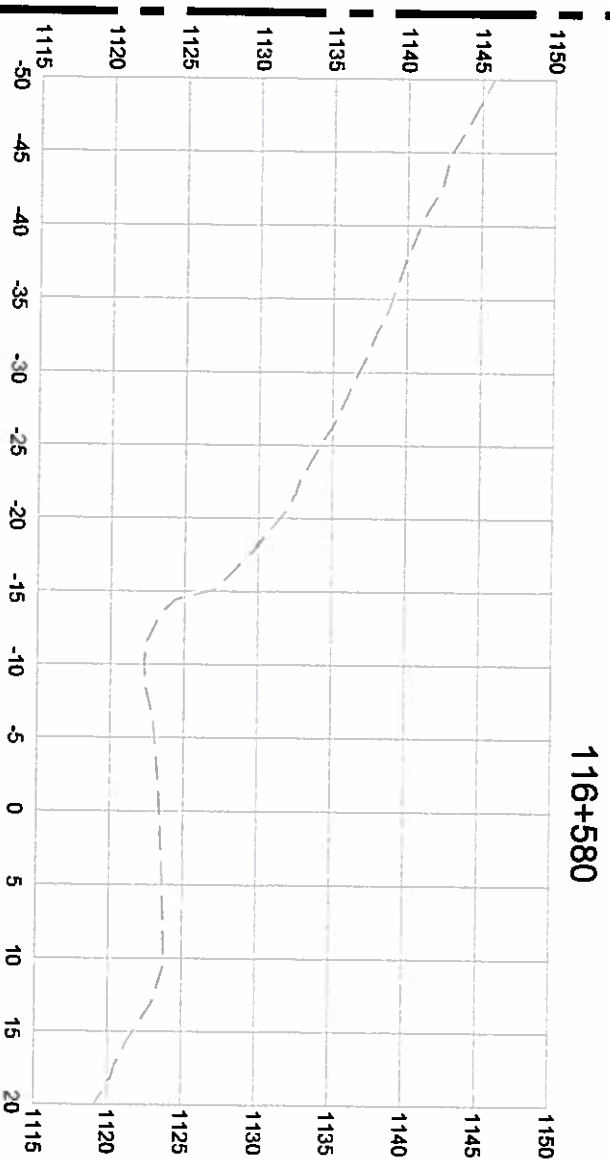
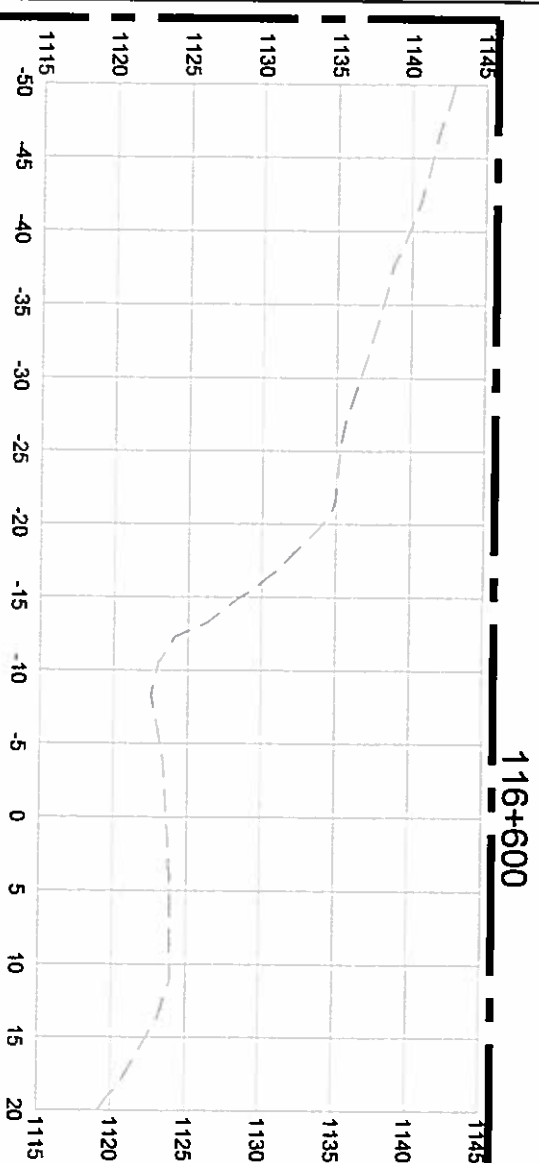
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**MOUNT VAUX ROCK SLOPE
CROSS SECTIONS
STA. 116+560 TO 116+660**

Project No./Vol. of Order

201541-4114

Revision no./
 LG Revision no.





ISSUED FOR TENDER

PCA PROJECT No. TETRA TECH EBA No.



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YOHO NATIONAL PARK
BRITISH COLUMBIA

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

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



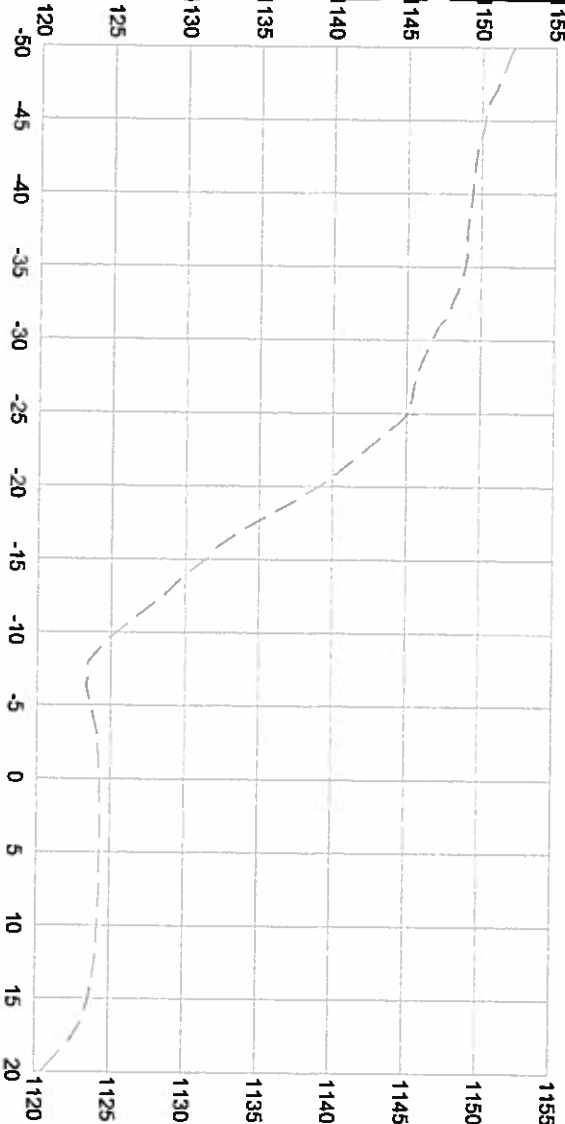
Client/Client
PARKS CANADA AGENCY

Project/Projet
MOUNT VAUX ROCK SLOPE
CROSS SECTIONS
STA. 116+680 TO 116+740

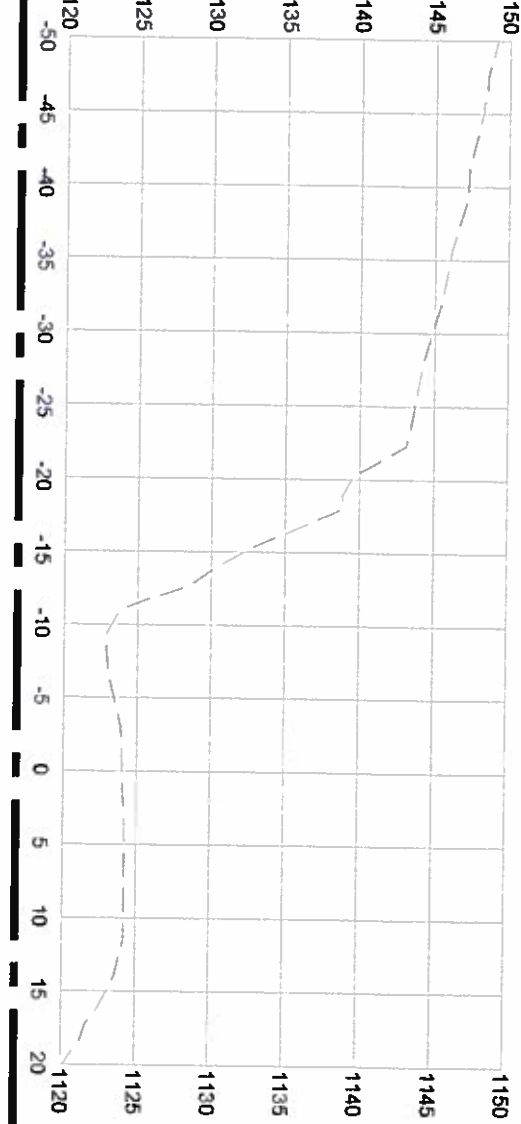
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201541-4115	0	

FUTURE WORK
(NOT IN BILL OF QUANTITIES)

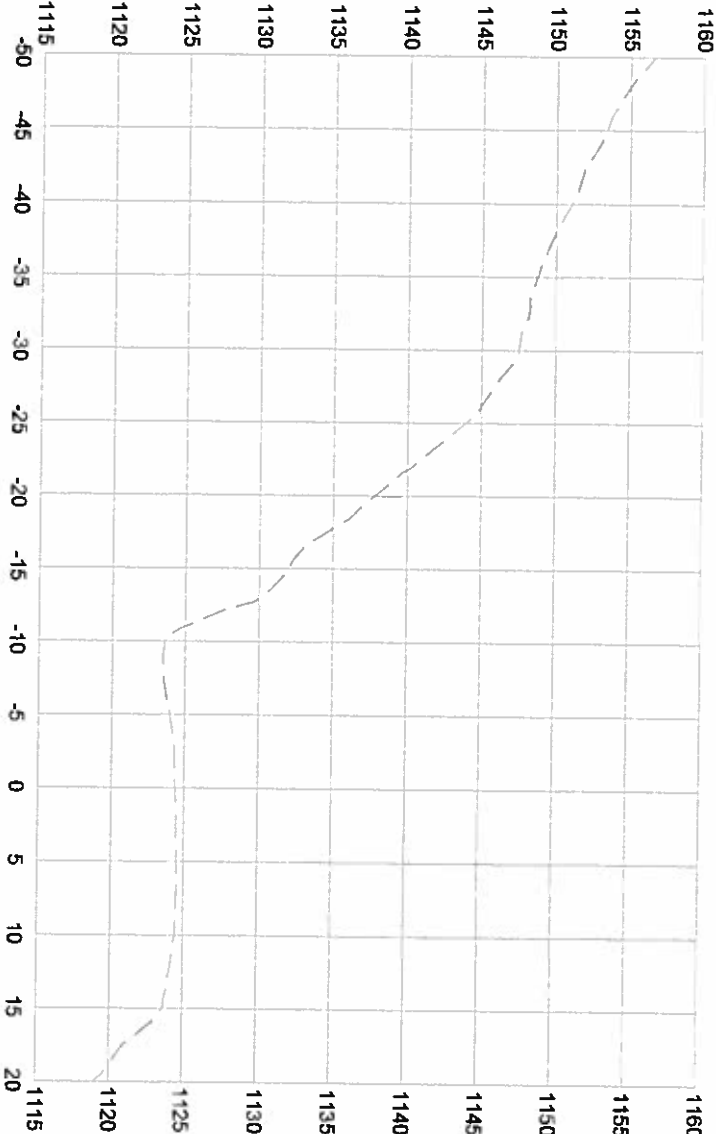
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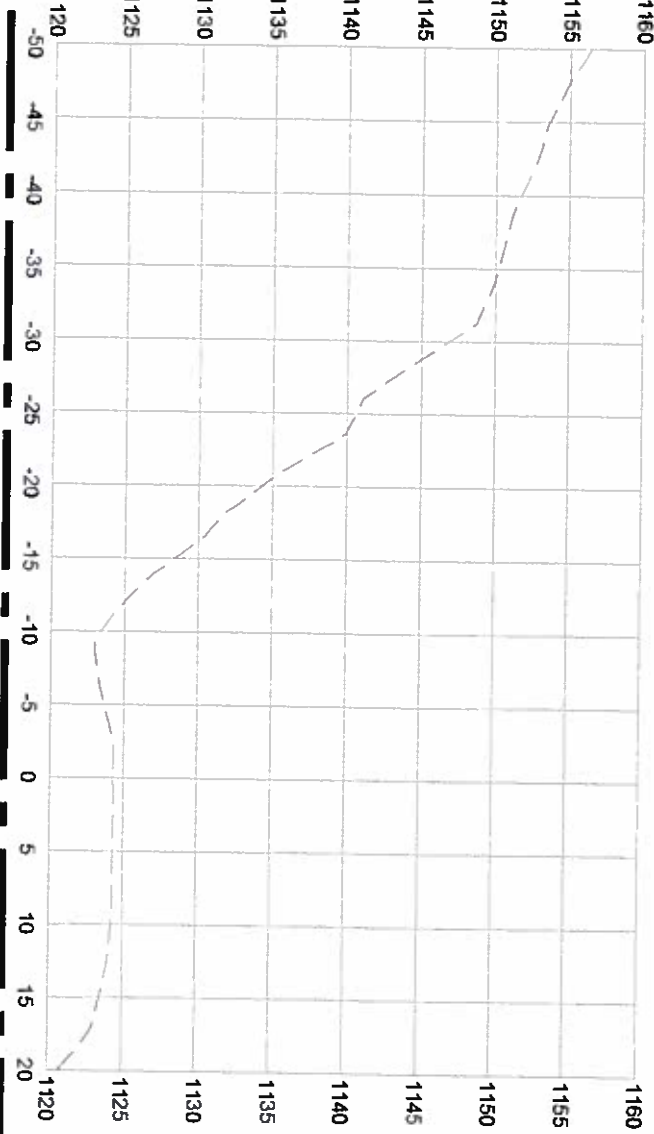
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116+740



116+720





ISSUED FOR TENDER

PCA PROJECT NO. TETRA TECH EBA NO.



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REVISION	DATE	DESCRIPTION/REVISION	DATE	BY	CHK
Project title/line de 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
Checked by/Contrôle par
T. TAKEDA



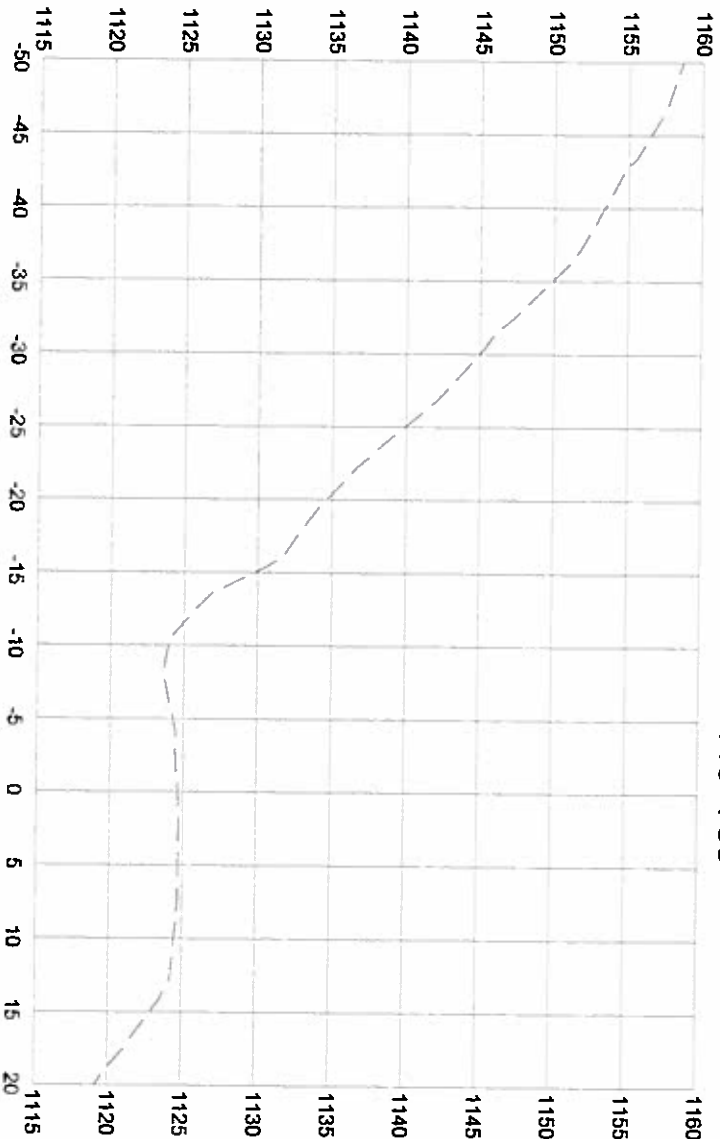
Client/Client
PARKS CANADA AGENCY

Project title/line de projet
MOUNT VAUX ROCK SLOPE
CROSS SECTIONS
STA. 116+760 TO 116+820

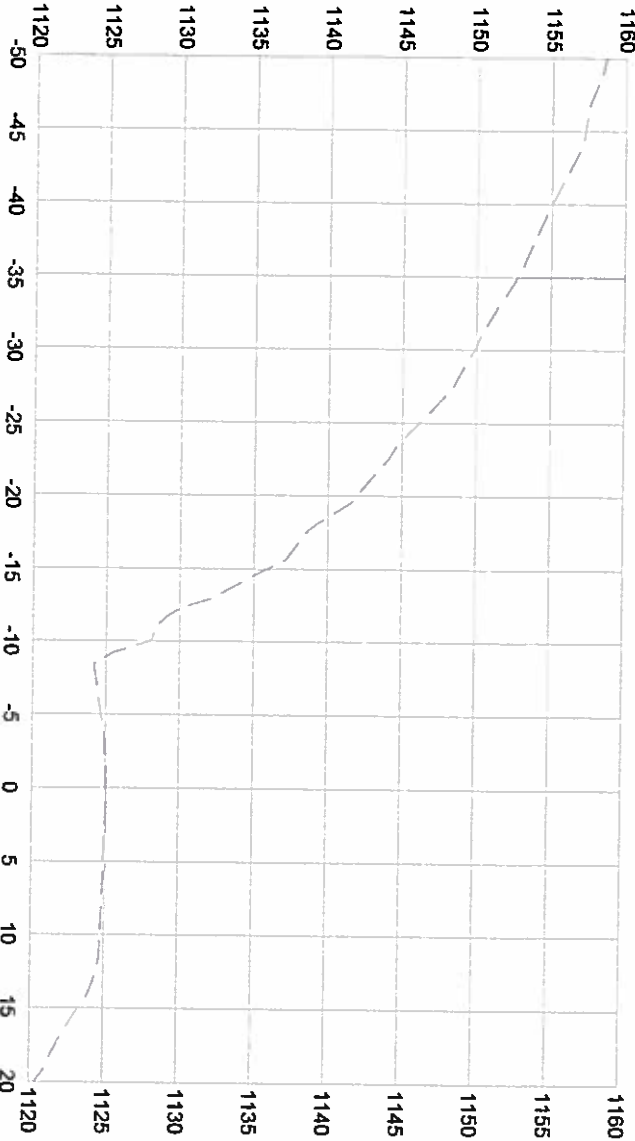
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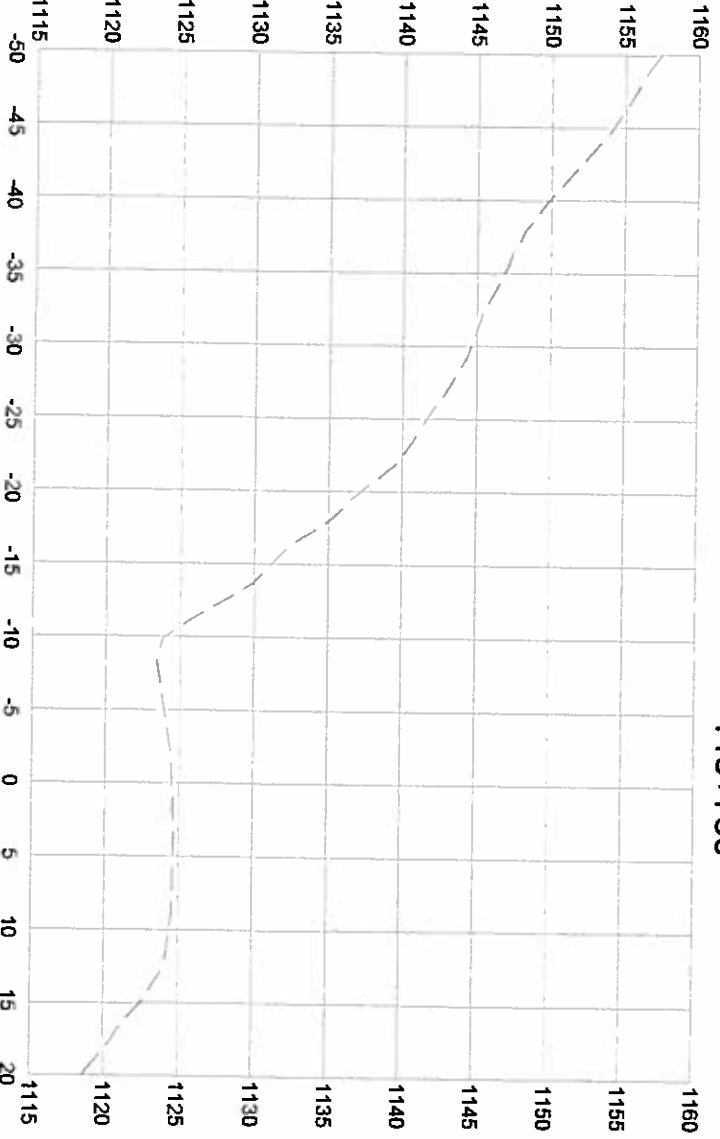
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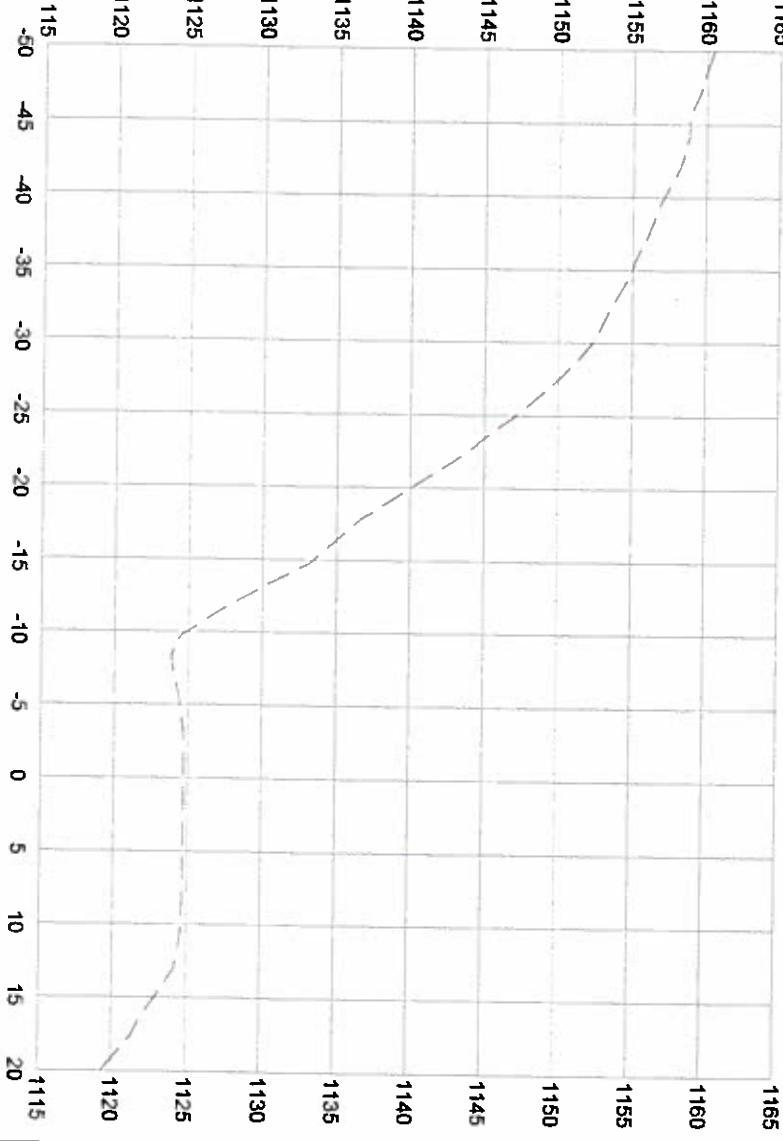
116+820



116+760



116+800



PCA PROJECT NO. TETRA TECH EBA NO.

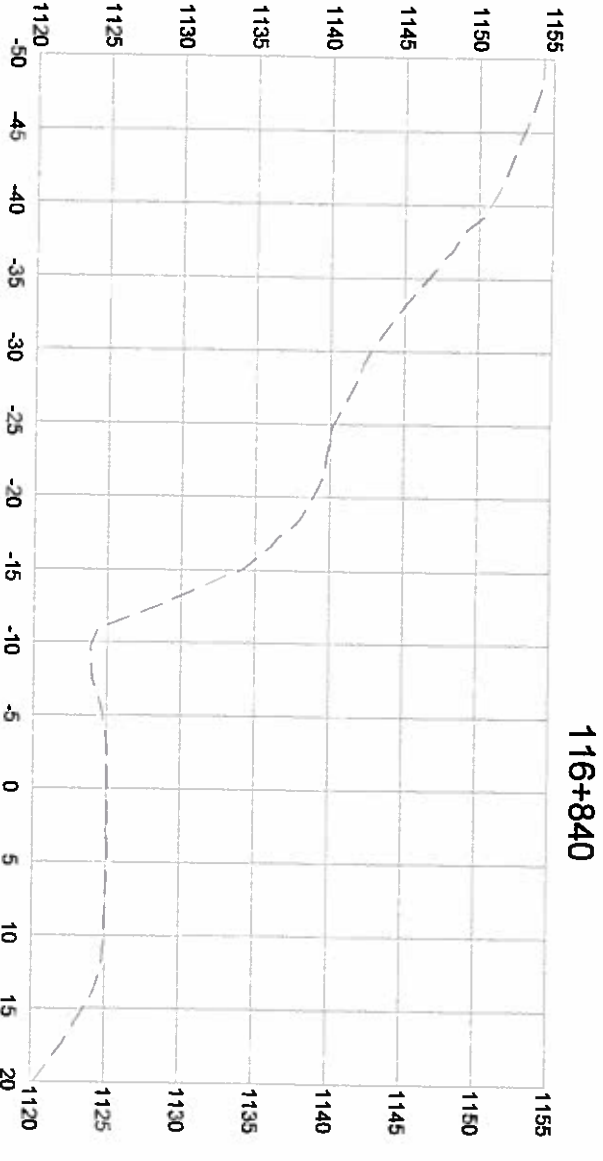
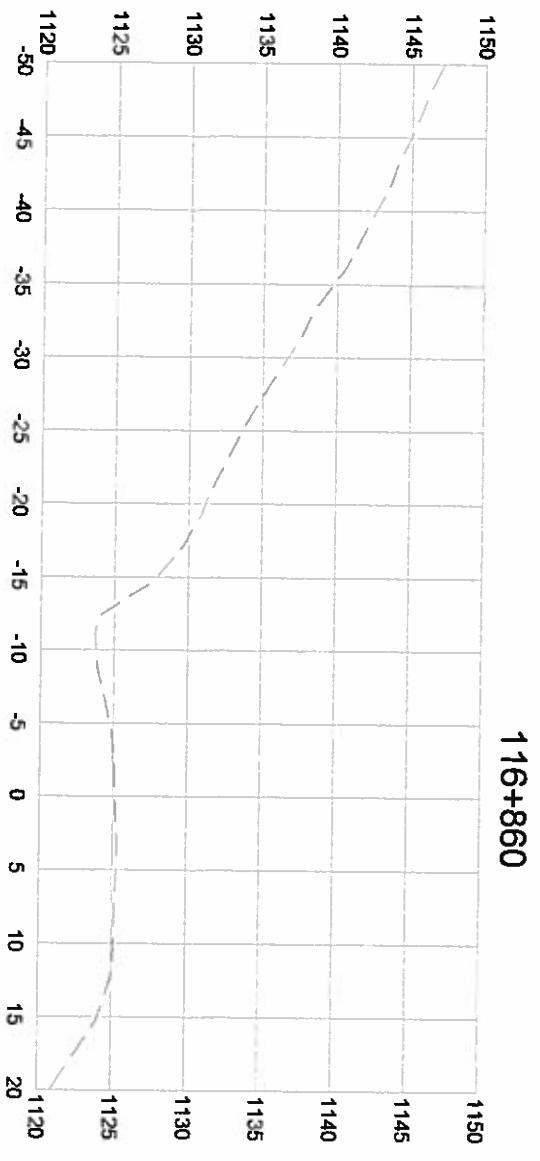
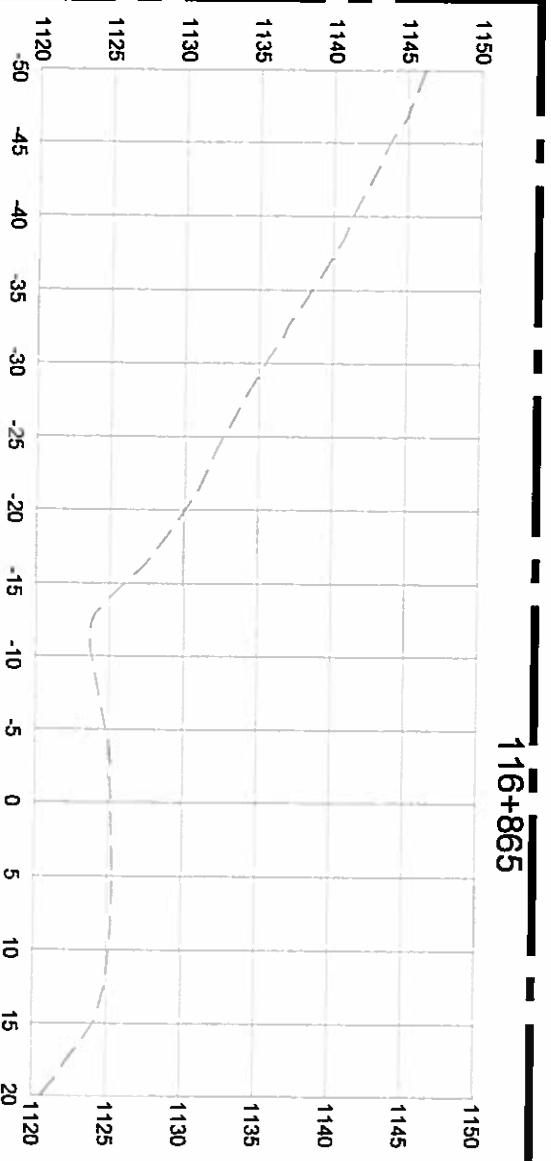
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**KM 88 TO 91 AND KM 114 TO 128
TRANS-CANADA HIGHWAY
SLOPE REPROFILING**

Message of/Concedi for
A. FRAPPELLI/E. YANG
Organ by/Oversee par
T. TAKEDA



PARKE CANADA AGENCY
Designing life/line de design
**MOUNT VAUX ROCK SLOPE
 CROSS SECTIONS**
STA. 116+840 TO 116+865



FUTURE WORK
(NOT IN BILL OF QUANTITIES)



ISSUED FOR TENDER

PCA PROJECT NO. TETRA TECH EBA NO.

[illegible]

**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



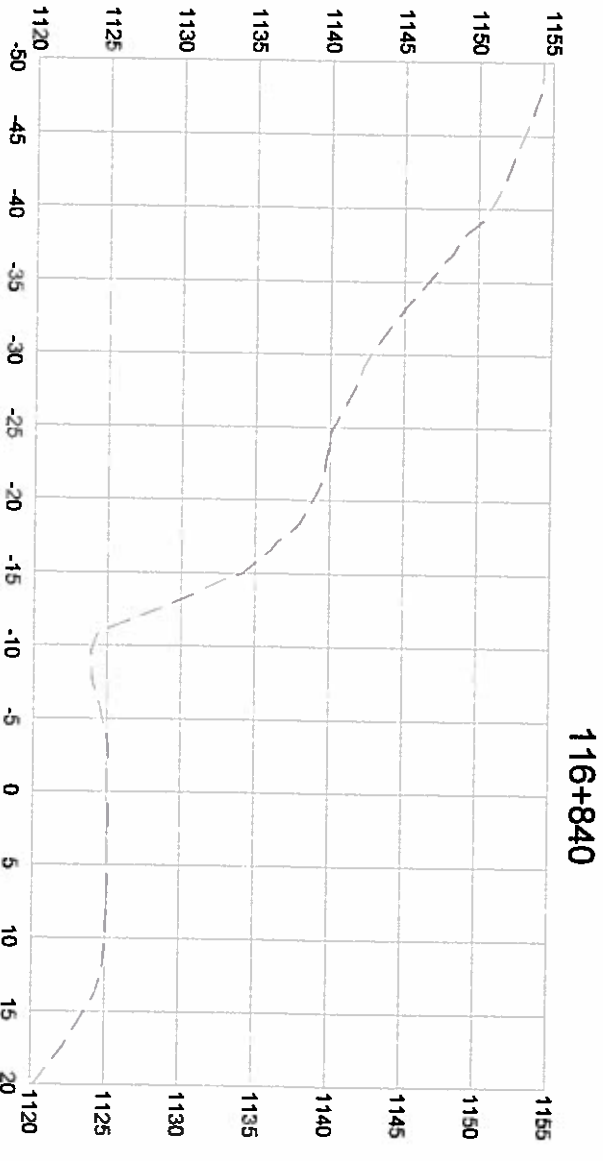
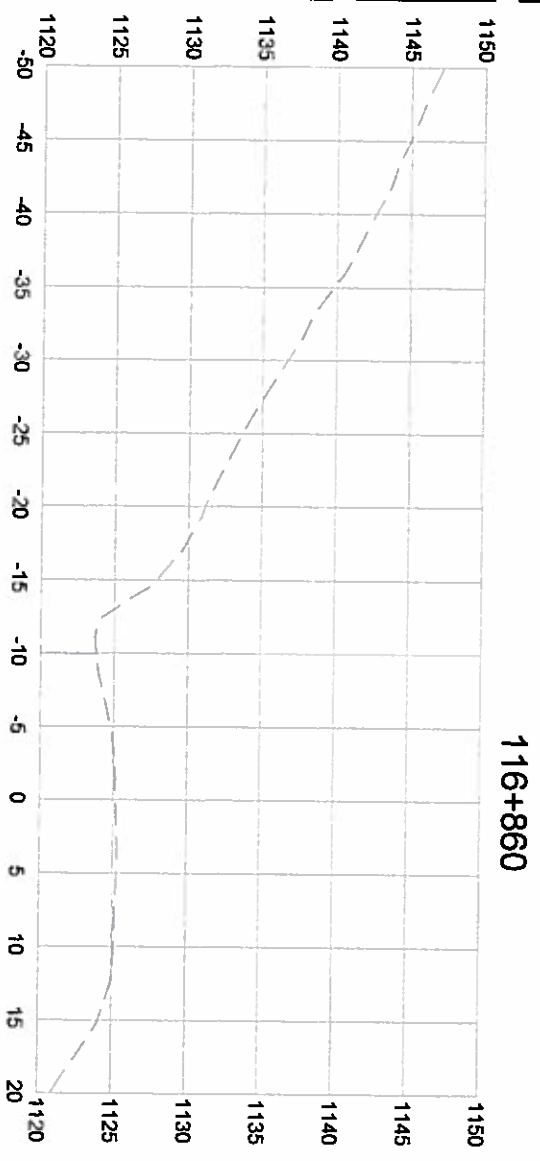
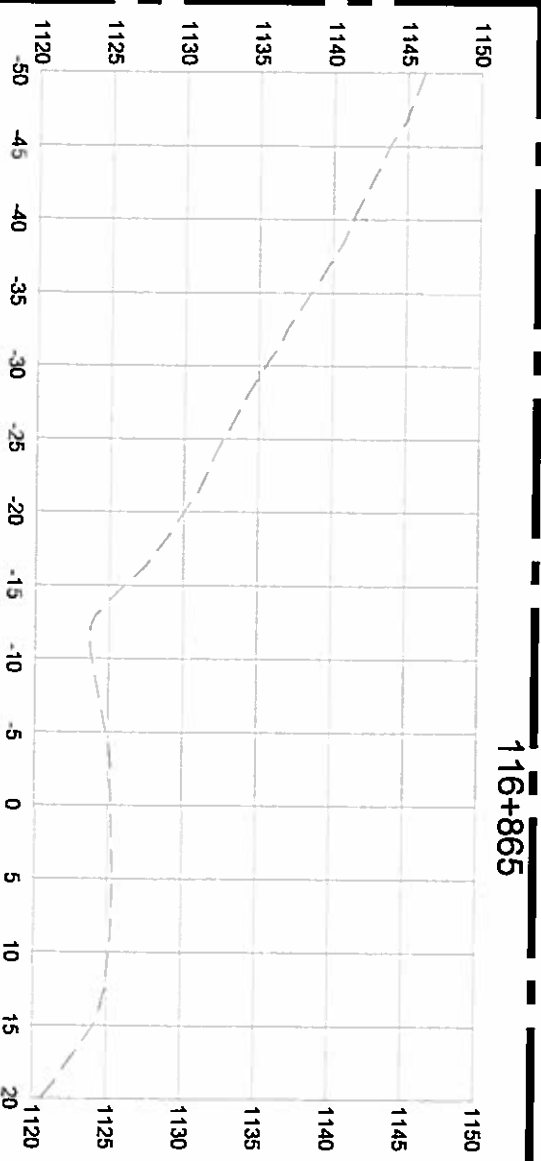
Client/client
PARKS CANADA AGENCY

**MOUNT VAUX ROCK SLOPE
CROSS SECTIONS
STA. 116+840 TO 116+865**

Project No./No. de projet	Sheet/Feuille	Revision no./ 1 ^{re} Révision no.
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201541-4117

Revision no. /
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FUTURE WORK
(NOT IN BILL OF QUANTITIES)