AECOM

for / pour

Parks Canada Agency

L'Agence Parcs Canada

ROAD CONSTRUCTION
HIGHWAY 93 SOUTH
PAVING AND SAFETY IMPROVEMENTS
KM 81.0 TO KM 88.1

KOOTENAY NATIONAL PARK, BRITISH COLUMBIA

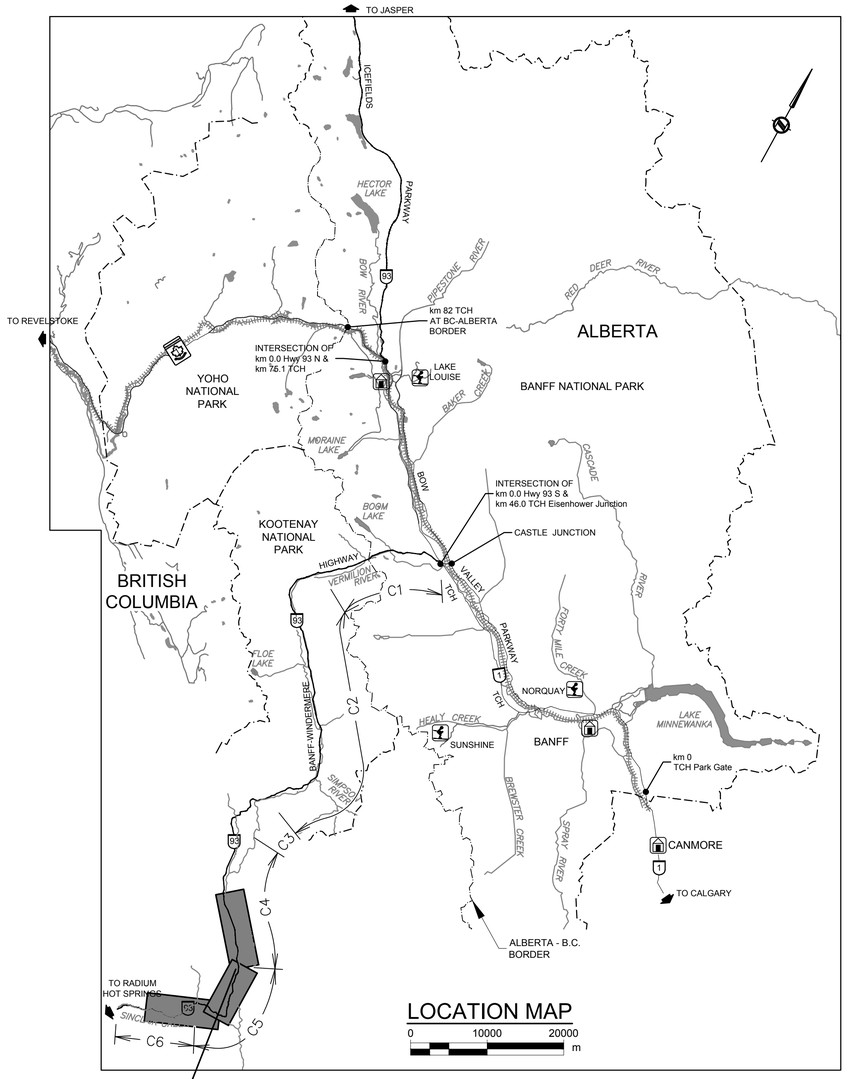
ISSUED FOR TENDER

PROJECT NO. 67309

MARCH 2019

00-G1-C01

Plotted: March 20, 2019 , 17:38:05 Filename: P:\60670877\900-CAD_GIS\910-CAD\20-SHEETS\Km 81 - Km 88\60670877-01-Cover.dwg\C01

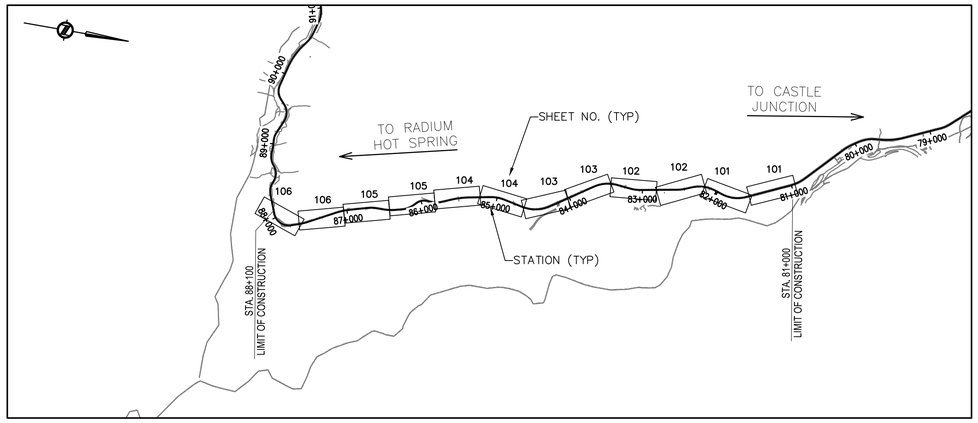


LOCATION MAP

0 10000 20000 m

Segment C4, C5, C6

km 71.0 to km 72.8 PREVENTATIVE MAINTENANCE
km 72.8 to km 75.4 PAVING
Km 75.4 to Km 81.0 PREVENTATIVE MAINTENANCE
Km 81.0 to Km 88.1 PAVING AND SAFETY IMPROVEMENTS
(SEE RIGHT SIDE FOR KEY PLAN)
Km 88.1 to Km 100.0 PREVENTATIVE MAINTENANCE



SEGMENT C5 KEY PLAN (SEE LOCATION MAP)

0 1000 2000 m

DRAWING INDEX

KM	SEGMENT	SHEET No.	SHEET TITLE
km 81.0–88.1	G1	C01	COVER SHEET
		C02	LOCATION MAP, KEY PLAN AND DRAWING INDEX
		C03	LEGEND
	C5	101	PLAN STA 81+000 TO STA 82+160
		102	PLAN STA 82+160 TO STA 83+400
		103	PLAN STA 83+400 TO STA 84+620
		104	PLAN STA 84+620 TO STA 85+820
		105	PLAN STA 85+820 TO STA 87+020
		106	PLAN STA 87+020 TO STA 88+100
		201	KOOTENAY VIEWPOINT CURB AND SIDEWALK INSTALLATION PLAN
		301	TYPICAL SECTIONS
	G1	401	DETAILS
		402	DETAILS – DRAINAGE
		403	DETAILS – BARRIER
	C5	XS01	CROSS SECTIONS ROAD STRENGTHENING STA 83+300 TO 83+400
		XS02	CROSS SECTIONS ROAD STRENGTHENING STA 83+420 TO 83+520
		XS03	CROSS SECTIONS ROAD STRENGTHENING STA 83+540 TO 83+560

CONTROL REFERENCE

POINT ID	NORTHING	EASTING	ORTH. ELEV.	CODE DESCRIPTION
182	5619267.01	577220.34	1164.06	TH (1047 Van)
184	5618974.65	577278.86	1163.97	TH RTK (1049 Van)
185	5616082.28	577942.39	1254.25	TH (1050 Van)
1414	5614310.87	578576.10	1363.97	TH RTK
1415	5614219.41	578572.65	1365.86	TH RTK
1419	5618032.64	577461.58	1182.79	TH RTK
1420	5617704.32	577688.01	1194.50	TH RTK
1421	5617427.09	577807.73	1192.88	TH RTK
1422	5621366.20	576270.02	1114.60	TH RTK
1423	5621106.35	576540.21	1112.80	TH RTK
1424	5624569.02	574205.75	1129.35	TH RTK
1425	5624329.88	574404.47	1128.21	TH RTK
1591	5614389.26	578547.52	1359.43	TH SPK NEW (1486)(Van)
1593	5613933.58	576971.40	1399.32	TH SPK NEW (1488)(Van)
1594	5613866.90	576814.61	1405.79	TH SPK NEW (1489)(Van)
1616	5627836.53	570826.12	1143.49	MON 1616J OLD 3001
1884	5628147.63	570550.87	1142.63	TH RTK MCEL
2040	5621086.79	576571.71	1113.37	BM 1612J (2888)
2041	5616955.87	577705.09	1208.71	BM 1612J (2889)
2042	5619122.43	577264.76	1164.21	BM 1612J (2890)
2541	5616102.27	577967.35	1253.40	TH RB (17951)(Van)

NOTE: COORDINATES SHOWN ARE IN UTM, ZONE 11, NAD 83 (CSRS).

This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that modifies this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from stated dimensions.

No.	Date	Description	Drawn by Dessiné par	Approved Approuvé
0	19.03.20	ISSUED FOR TENDER	DM	RL

Revision / Revision

A Detail number / B Sheet number — A Numéro de detail / B Numéro de la feuille

Linear dimensions in millimetres / Dimensions linéaires en millimètres

Consultant's Name / Nom de l'expert-conseil: AECOM

Eng. Stamp / Sceau de l'ingénieur

Parks Canada — Asset Management Western and Northern Region

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

Canada

Project title/Titre du projet

HIGHWAY 93 SOUTH BANFF–WINDERMERE HIGHWAY PAVING AND SAFETY IMPROVEMENTS
KOOTENAY NATIONAL PARK

Drawing title/Titre du dessin

LOCATION MAP, KEY PLAN AND DRAWING INDEX

Surveyed by/Arpenté par	Drawn by/Dessiné par	Date
DD	DM	2019/03/20
Designed by/Concept par	Reviewed by/Revisé par	Scale/Echelle
RL	BAS	NOTED

Client Acceptance/Acceptation du client — Date

Approved by/Approuvé par — Date

Project No./Nº du projet	Asset No./Nº du bien	Sheet No./ Nºde la feuille
67309	–	C02

Drawing Set No./Nº de série du dessin: 60570877–G1

LEGEND

ALIGNMENT ABBREVIATIONS

BC – BEGINNING OF CURVE
EC – END OF CURVE
TS – TANGENT TO SPIRAL
SC – SPIRAL TO CURVE
CS – CURVE TO SPIRAL
ST – SPIRAL TO TANGENT
PCC – POINT OF COMPOUND CURVATURE
POT – POINT ON TANGENT
POC – POINT ON CURVE
POS – POINT ON SPIRAL
BVC – BEGINNING OF VERTICAL CURVE
EVC – END OF VERTICAL CURVE
PVI – POINT OF VERTICAL INTERSECTION
ELEV – ELEVATION
PI – POINT OF INTERSECTION
STA – STATION

MISCELLANEOUS ABBREVIATIONS

AT – ALBERTA TRANSPORTATION
BH – BORE HOLE
B.O.F. – BOTTOM OF FILL
BW – BACK OF SIDEWALK
CB – CATCH BASIN
C&G – CURB AND GUTTER
CDB – CONCRETE DRAINAGE BARRIER
CI – CULVERT INLET
C.I.P.– CAST IN PLACE CONCRETE
CMB – CONCRETE MEDIAN BARRIER
CO – CULVERT OUTLET
CRB – CONCRETE ROAD BARRIER
CULV – CULVERT
DES – DESIGN
EB – EASTBOUND
EOP – EDGE OF PAVEMENT
EX – EXISTING
INV. – INVERT
LOG – LIP OF GUTTER
LS – LIGHT STANDARD
LT – LEFT TURN
MH – MANHOLE
MoTI – BC MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE
NB – NORTHBOUND
N.I.C. – NOT IN CONTRACT
PROP – PROPOSED
PP – POWER POLE
RT – RIGHT TURN
S – SANITARY
SB – SOUTHBOUND
ST – STORM
T.O.C. – TOP OF CUT
W – WATER
WB – WESTBOUND

ROAD CONSTRUCTION

EXISTING	DESCRIPTION	PROPOSED
	CONTROL POINT & ID	CTRL1455
	CONTROL MONUMENT & ID	MON2757
	CONTROL BENCHMARK & ID	BM2738
	BORE HOLE & ID	2015B–BH44
	TEST HOLE & ID	TH2756
	CONTROL LINE AND STATIONING	67+500
	ALIGNMENT GEOMETRY POINTS & STATIONING	T.S. 55+325.101
EW	EDGE OF WATER	
	TREE LINE	
	CANADIAN PACIFIC RAILWAY	
	GUARDRAIL C/W POSTS	
	EDGE OF GRAVEL ROAD	
	EDGE OF PAVEMENT	
	EDGE OF GRAVEL SHOULDER	
1012.14	SUBGRADE ELEVATION	
	CURB AND GUTTER	
	CONCRETE BARRIER	
DB DB	DRAINAGE BARRIER	DB DB
	TOP OF CUT	T.O.C.
	BOTTOM OF FILL	B.O.F.
	70 mm PAVEMENT OVERLAY	
	PAVEMENT MILLING AND INLAY	
	MILLED TIE IN	
	FULL DEPTH PAVEMENT	
	DRAINAGE SIDE DITCH	
	DRAINAGE MEDIAN DITCH	
	CULVERT	
	CONCRETE BOX CULVERT	
	DITCH BLOCK	
	CATCH BASIN AND LEAD	
	BARRIER DRAIN AND LEAD c/w SPLASH PAD	BD OR BD
	ASPHALT SPILLWAY c/w SPLASH PAD	
	RETAINING WALL	
	WILDLIFE FENCING	x x
	WILDERNESS ZONE BOUNDARY	WZB
	CLEARING LINE	
	GATE	
	POWER POLE	
UG UG	UNDERGROUND TEL & MANHOLE	
	POWER POLE WITH LIGHT	
	UTILITY POLE	
	ROAD SIGN (SINGLE POLE)	
	ROAD SIGN (MULTIPLE POLES)	
	ROAD SIGN (DOUBLESIDED)(SINGLE POLE)	
	ROAD SIGN (CANTILEVER)	
DP	GUIDE POST	DP

ENVIRONMENTAL CLASS

ARCHEOLOGICAL & CULTURAL AREA:

PROJECT RISK – HIGH
PROJECT RISK – MODERATE
PROJECT RISK – NEGLIGIBLE

AQUATIC SENSITIVITY:

FISH BEARING, GOOD HABITAT
FISH BEARING UNCERTAIN, GOOD HABITAT
NOT FISH BEARING, POTENTIAL HABITAT
NO HABITAT

VEGETATION ELEMENTS OF MANAGEMENT CONCERN:

HIGH — PROJECT RISK – HIGH
MOD — PROJECT RISK – MODERATE
LOW — PROJECT RISK – LOW
NEG — PROJECT RISK – NEGLIGIBLE

RARE PLANTS:

1: FEDERALLY PROTECTED SPECIES AT RISK
2: PROVINCIAL RARE SPECIES OR ECOLOGICAL COMMUNITY
3: PROVINCIAL RARE SPECIES OR ECOLOGICAL COMMUNITY

NOXIOUS PLANT WEEDS:

W #131 CANADA THISTLE	SPECIES CATEGORY 0 – NUMBER & NAME
W #234 KNAPWEED	SPECIES CATEGORY 1 – NUMBER & NAME
W #168 TOADFLAX	SPECIES CATEGORY 2 – NUMBER & NAME
W #343 LEAFY SPURGE	SPECIES CATEGORY 3 – NUMBER & NAME
W #268 OXEYE DAISY	SPECIES CATEGORY 4 – NUMBER & NAME
W ORANGE HAWKWEED	SPECIES CATEGORY 5 – NUMBER & NAME

ANIMALS AT RISK:

A WESTERN TOAD	SPECIES CATEGORY 1 – NAME
A LONG-TOED SALAMANDER	SPECIES CATEGORY 2 – NAME
A WOOD FROG	SPECIES CATEGORY 3 – NAME

This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that modifies this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from stated dimensions.

No.	Date	Description	Drawn by Dessiné par	Approved Approuvé
0	19.03.20	ISSUED FOR TENDER	DM	RL

Revision / Revision

A/B Detail number / Sheet number — A Numéro de detail / B Numéro de la feuille

Linear dimensions in millimetres — Dimensions linéaires en millimètres

Consultant's Name / Nom de l'expert-conseil: AECOM

Eng. Stamp / Sceau de l'ingénieur

Parks Canada — Parcs Canada
Asset Management Western and Northern Region — Gestion des biens Région de l'Ouest et du Nord
Canada

Project title/Titre du projet
HIGHWAY 93 SOUTH
BANFF–WINDERMERE HIGHWAY
PAVING AND SAFETY IMPROVEMENTS
KOOTENAY NATIONAL PARK

Drawing title/Titre du dessin
LEGEND

Surveyed by/Arpenté par	Drawn by/Dessiné par	Date
DD	DM	2019/03/20
Designed by/Concept par	Reviewed by/Revisé par	Scale/Échelle
RL	BAS	NOTED

Client Acceptance/Acceptation du client — Date
Approved by/Approuvé par — Date

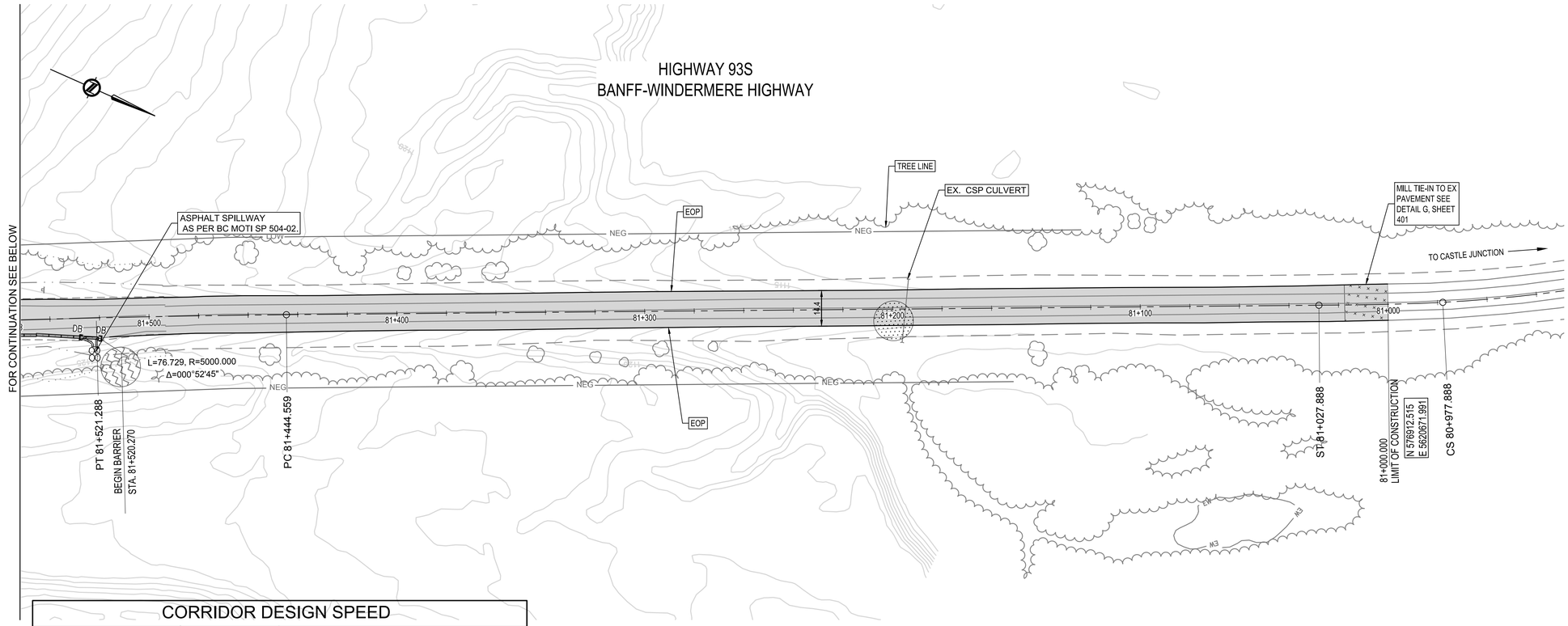
Project No./Nº du projet	Asset No./Nº du bien	Sheet No./Nº de la feuille
67309	#	C03

Drawing Set No./Nº de série du dessin: 60570877–G1

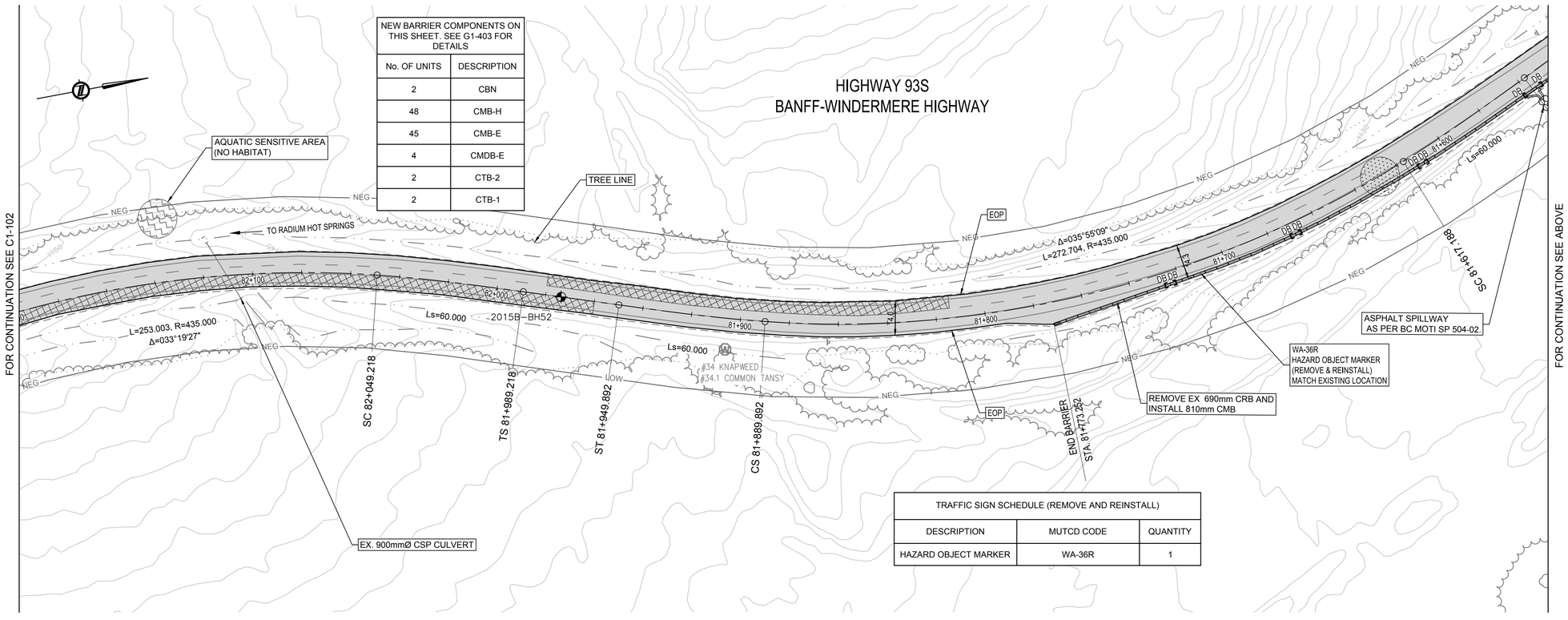
This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that modifies this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from stated dimensions.

NOTES:

1. MILLING TO BE 50mm MILL AND FILL. LOCATIONS TO BE CONFIRMED ON SITE BY DEPARTMENTAL REPRESENTATIVE.
2. SHALLOW MILL AND FILL LOCATIONS TO BE IDENTIFIED ON SITE BY DEPARTMENTAL REPRESENTATIVE.
3. COORDINATES SHOWN ARE IN UTM, ZONE 11, NAD 83 (CSRS)
4. CONTRACTOR TO REMOVE DEBRIS FROM ALL EXISTING CULVERTS WITHIN THE PROJECT LIMITS.
5. ALL SIGNS TO BE MUTCD CANADA SIGN NUMBERING EXCEPT AS NOTED.
6. CONTRACTOR TO CONFIRM EXISTING AND RELOCATED SIGNS MEET CURRENT REFLECTIVITY STANDARDS.
7. INSTALL ADDITIONAL GUIDE POSTS AS PER AT HIGHWAY PAVEMENT MARKING GUIDE SECTION C7 OR AS DIRECTED BY THE DEPARTMENTAL REPRESENTATIVE.
8. CONTRACTOR TO CONFIRM LOCATIONS OF DRAINAGE BARRIERS AND SPILLWAYS, CSP AND/OR RIPRAP OUTFALLS OR SPLASHPADS TO BE DETERMINED BY THE DEPARTMENTAL REPRESENTATIVE.



CORRIDOR DESIGN SPEED		
HIGHWAY 93S	100 km/h	STA 81+000 TO STA 82+160



NEW BARRIER COMPONENTS ON THIS SHEET. SEE G1-403 FOR DETAILS	
No. OF UNITS	DESCRIPTION
2	CBN
48	CMB-H
45	CMB-E
4	CMDB-E
2	CTB-2
2	CTB-1

TRAFFIC SIGN SCHEDULE (REMOVE AND REINSTALL)		
DESCRIPTION	MUTCD CODE	QUANTITY
HAZARD OBJECT MARKER	WA-36R	1

No.	Date	Description	Drawn by Dessiné par	Approved Approuvé
0	19.03.20	ISSUED FOR TENDER	DM	RL

Revision / Revision

A/B Detail number / Sheet number — A Numéro de detail / B Numéro de la feuille

Linear dimensions in millimetres / Dimensions linéaires en millimètres

Consultant's Name / Nom de l'expert-conseil: AECOM

Eng. Stamp / Sceau de l'ingénieur: PROFESSIONAL ENGINEER, PROVINCE OF BRITISH COLUMBIA, MAR 20-2019

Parks Canada / Parcs Canada
Asset Management Western and Northern Region / Gestion des biens Région de l'Ouest et du Nord
Canada

Project title/Titre du projet

HIGHWAY 93 SOUTH BANFF–WINDERMERE HIGHWAY PAVING AND SAFETY IMPROVEMENTS
KOOTENAY NATIONAL PARK

Drawing title/Titre du dessin

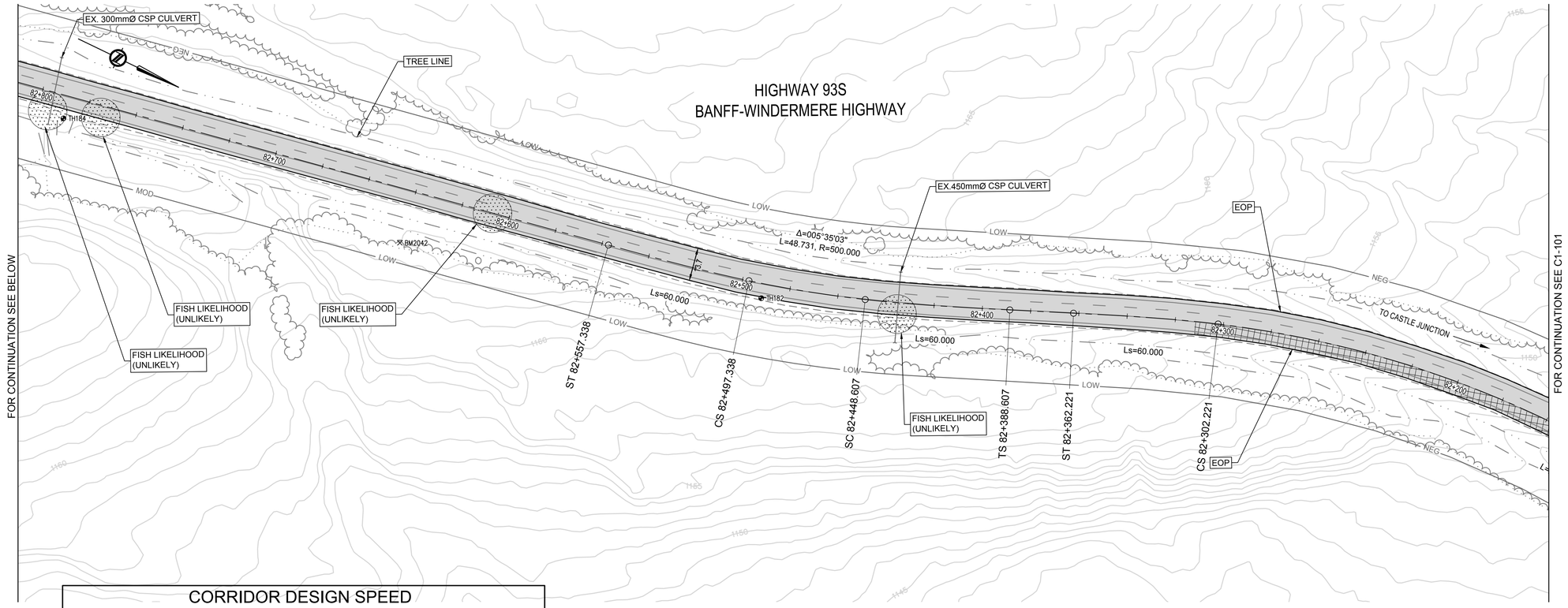
PLAN
STA 81+000 TO STA 82+160

Surveyed by/Arpenté par	Drawn by/Dessiné par	Date
DD	DM	2019/03/20
Designed by/Concept par	Reviewed by/Revisé par	Scale/Echelle
RL	BAS	0 – 25 m

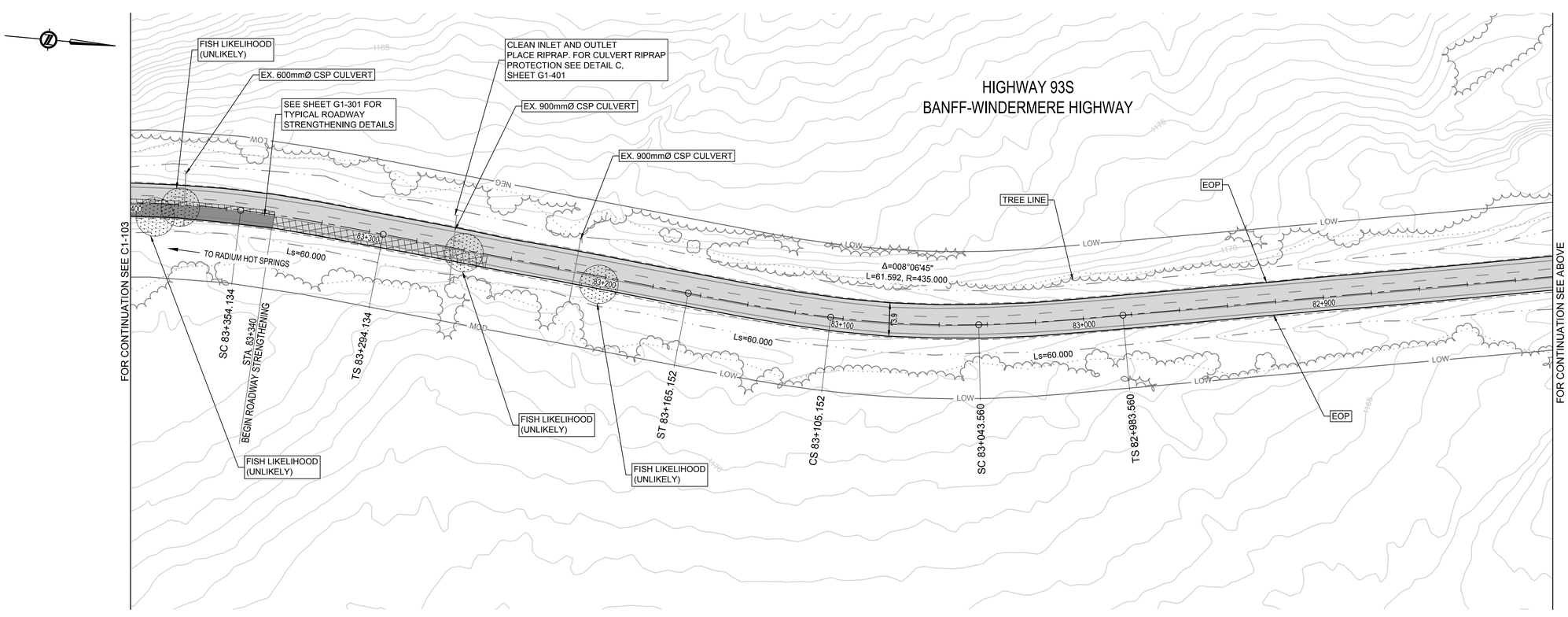
Client Acceptance/Acceptation du client — Date
Approved by/Approuvé par — Date

Project No./Nº du projet	Asset No./Nº du bien	Sheet No./Nº de la feuille
67309	#	101

Drawing Set No./Nº de série du dessin: 60570877–C5



CORRIDOR DESIGN SPEED		
HIGHWAY 93S	100 km/h	STA 82+160 TO STA 83+400



This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that modifies this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from stated dimensions.

NOTES:

1. MILLING TO BE 50mm MILL AND FILL. LOCATIONS TO BE CONFIRMED ON SITE BY DEPARTMENTAL REPRESENTATIVE.
2. SHALLOW MILL AND FILL LOCATIONS TO BE IDENTIFIED ON SITE BY DEPARTMENTAL REPRESENTATIVE.
3. COORDINATES SHOWN ARE IN UTM, ZONE 11, NAD 83 (CSRS)
4. CONTRACTOR TO REMOVE DEBRIS FROM ALL EXISTING CULVERTS WITHIN THE PROJECT LIMITS.
5. ALL SIGNS TO BE MUTCD CANADA SIGN NUMBERING EXCEPT AS NOTED.
6. CONTRACTOR TO CONFIRM EXISTING AND RELOCATED SIGNS MEET CURRENT REFLECTIVITY STANDARDS.
7. INSTALL ADDITIONAL GUIDE POSTS AS PER AT HIGHWAY PAVEMENT MARKING GUIDE SECTION C7 OR AS DIRECTED BY THE DEPARTMENTAL REPRESENTATIVE.

No.	Date	Description	Drawn by Dessiné par	Approved Approuvé
0	19.03.20	ISSUED FOR TENDER	DM	RL

Revision / Revision

A Detail number — A Numéro de detail
B Sheet number — B Numéro de la feuille

Linear dimensions in millimetres — Dimensions linéaires en millimètres

Consultant's Name / Nom de l'expert-conseil: AECOM

Eng. Stamp / Sceau de l'ingénieur: PROFESSIONAL ENGINEER, PROVINCE OF BRITISH COLUMBIA, MAR 20-2019

Parks Canada — Parcs Canada
Asset Management Western and Northern Region — Gestion des biens Région de l'Ouest et du Nord
Canada

Project title/Titre du projet

HIGHWAY 93 SOUTH BANFF–WINDERMERE HIGHWAY PAVING AND SAFETY IMPROVEMENTS
KOOTENAY NATIONAL PARK

Drawing title/Titre du dessin

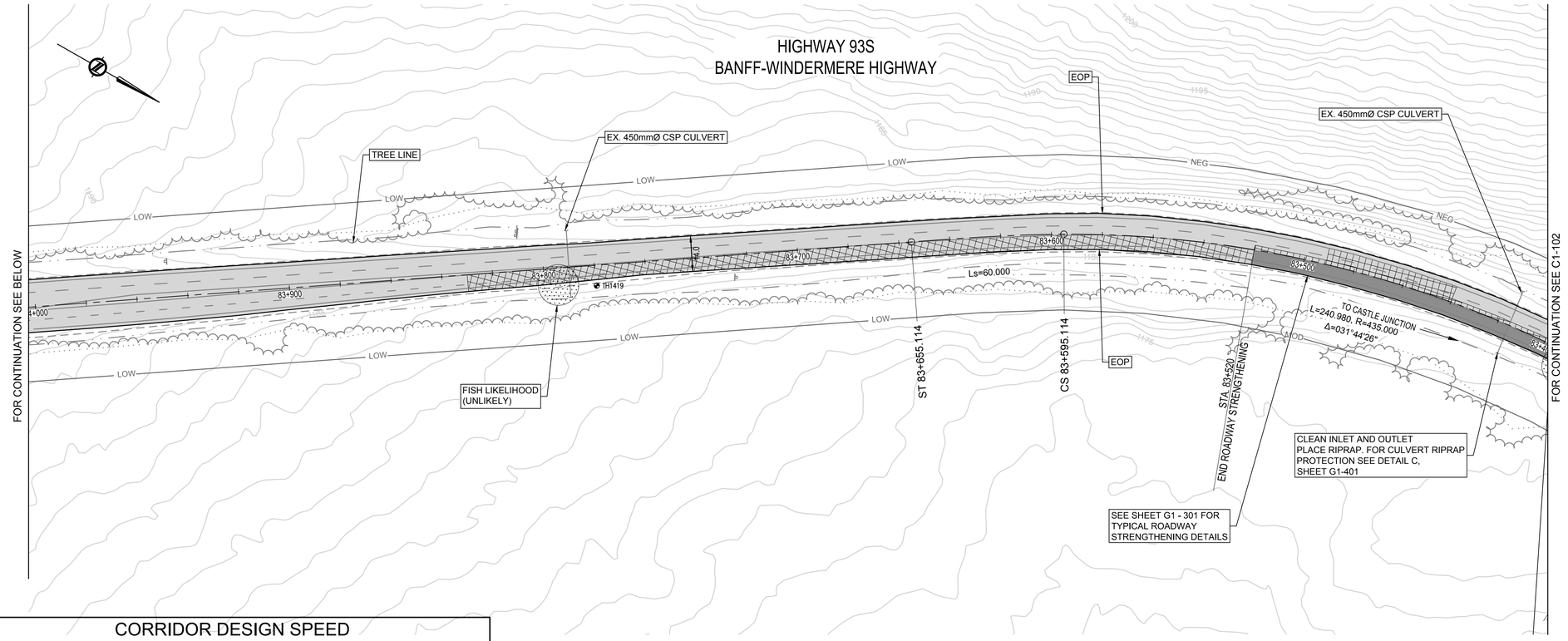
PLAN
STA 82+160 TO STA 83+400

Surveyed by/Arpenté par	Drawn by/Dessiné par	Date
DD	DM	2019/03/20
Designed by/Concept par	Reviewed by/Revisé par	Scale/Echelle
RL	BAS	0 25 m

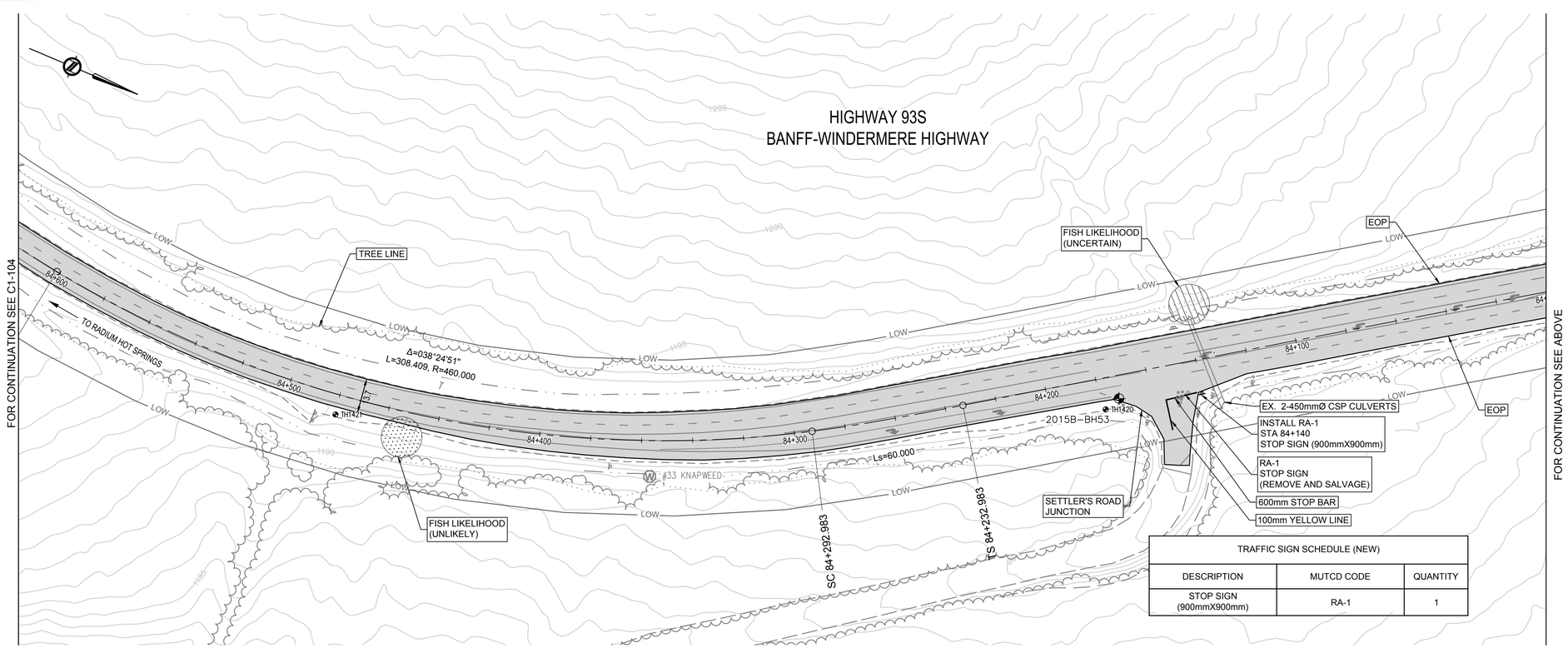
Client Acceptance/Acceptation du client — Date
Approved by/Approuvé par — Date

Project No./Nº du projet	Asset No./Nº du bien	Sheet No./ Nº de la feuille
67309	#	102

Drawing Set No./Nº de série du dessin: 60570877–C5



CORRIDOR DESIGN SPEED		
HIGHWAY 93S	100 km/h	STA 83+400 TO STA 84+620



TRAFFIC SIGN SCHEDULE (NEW)		
DESCRIPTION	MUTCD CODE	QUANTITY
STOP SIGN (900mmX900mm)	RA-1	1

This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that modifies this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from stated dimensions.

NOTES:

1. MILLING TO BE 50mm MILL AND FILL. LOCATIONS TO BE CONFIRMED ON SITE BY DEPARTMENTAL REPRESENTATIVE.
2. SHALLOW MILL AND FILL LOCATIONS TO BE IDENTIFIED ON SITE BY DEPARTMENTAL REPRESENTATIVE.
3. COORDINATES SHOWN ARE IN UTM, ZONE 11, NAD 83 (CSRS)
4. CONTRACTOR TO REMOVE DEBRIS FROM ALL EXISTING CULVERTS WITHIN THE PROJECT LIMITS.
5. ALL SIGNS TO BE MUTCD CANADA SIGN NUMBERING EXCEPT AS NOTED.
6. CONTRACTOR TO CONFIRM EXISTING AND RELOCATED SIGNS MEET CURRENT REFLECTIVITY STANDARDS.
7. INSTALL ADDITIONAL GUIDE POSTS AS PER AT HIGHWAY PAVEMENT MARKING GUIDE SECTION C7 OR AS DIRECTED BY THE DEPARTMENTAL REPRESENTATIVE.

No.	Date	Description	Drawn by Dessiné par	Approved Approuvé
0	19.03.20	ISSUED FOR TENDER	DM	RL

Revision / Revision

A/B Detail number / Sheet number — A Numéro de detail / B Numéro de la feuille

Linear dimensions in millimetres / Dimensions linéaires en millimètres

Consultant's Name / Nom de l'expert-conseil: AECOM

Eng. Stamp / Sceau de l'ingénieur: PROFESSIONAL ENGINEER, PROVINCE OF BRITISH COLUMBIA, MAR 20-2019

Parks Canada / Parcs Canada

Asset Management Western and Northern Region / Gestion des biens Région de l'Ouest et du Nord

Canada

Project title/Titre du projet

HIGHWAY 93 SOUTH BANFF–WINDERMERE HIGHWAY PAVING AND SAFETY IMPROVEMENTS
KOOTENAY NATIONAL PARK

Drawing title/Titre du dessin

PLAN
STA 83+400 TO STA 84+620

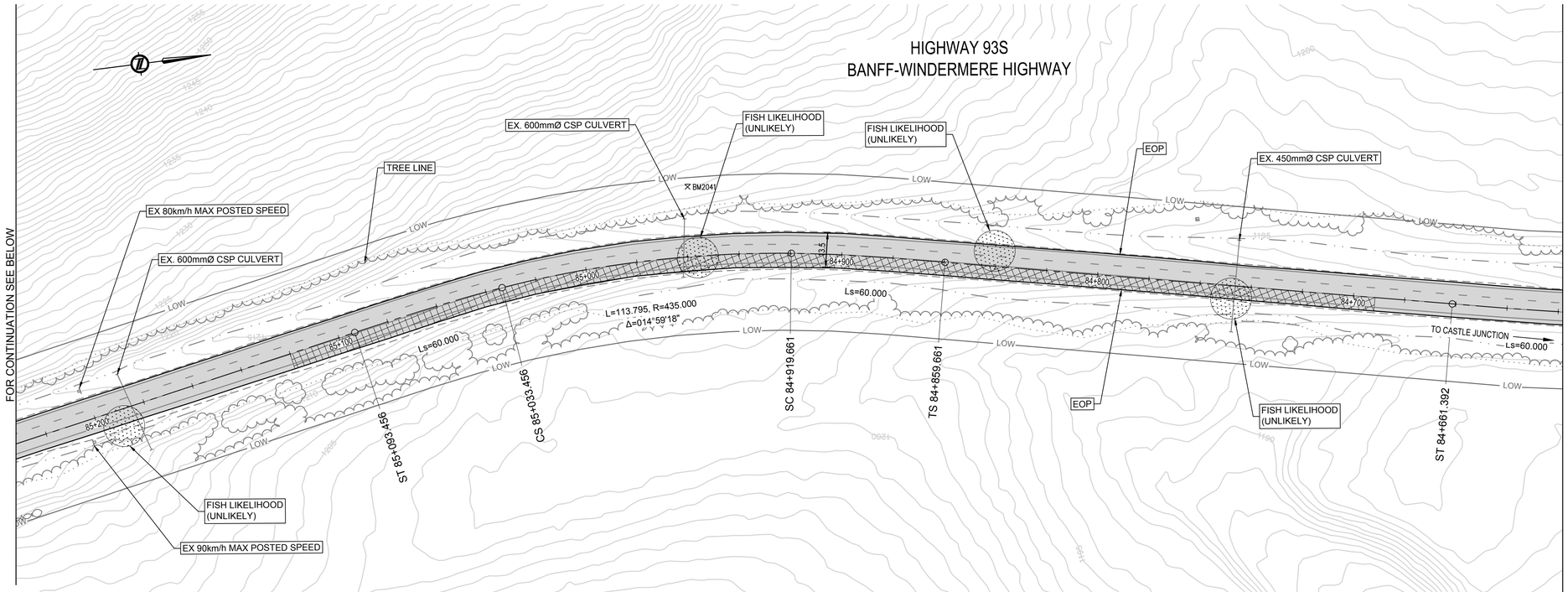
Surveyed by/Arpenté par	Drawn by/Dessiné par	Date
DD	DM	2019/03/20
Designed by/Concept par	Reviewed by/Revisé par	Scale/Échelle
RL	BAS	0–25 m

Client Acceptance/Acceptation du client — Date

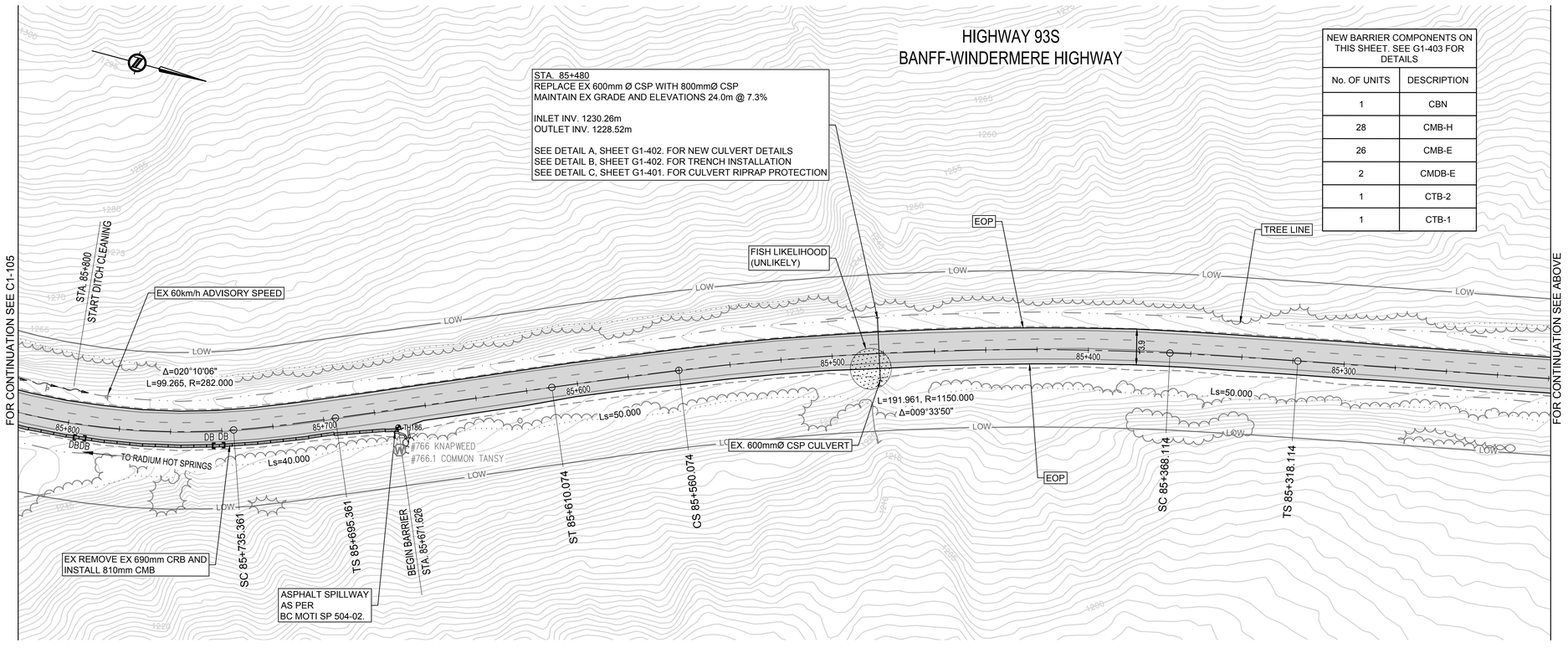
Approved by/Approuvé par — Date

Project No./Nº du projet	Asset No./Nº du bien	Sheet No./Nº de la feuille
67309	#	103

Drawing Set No./Nº de série du dessin: 60570877–C5



CORRIDOR DESIGN SPEED		
HIGHWAY 93S	100 km/h	STA 84+620 TO STA 85+200
HIGHWAY 93S	90 km/h	STA 85+200 TO STA 85+820



NEW BARRIER COMPONENTS ON THIS SHEET. SEE G1-403 FOR DETAILS	
No. OF UNITS	DESCRIPTION
1	CBN
28	CMB-H
26	CMB-E
2	CMDB-E
1	CTB-2
1	CTB-1

This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that modifies this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from stated dimensions.

NOTE:

1. DITCH CLEAN, AS DIRECTED BY DEPARTMENTAL REPRESENTATIVE, TO IMPROVE DRAINAGE BETWEEN STA. 85+800 TO STA. 85+900 IN THE SOUTHBOUND DITCH.
2. MILLING TO BE 50mm MILL AND FILL. LOCATIONS TO BE CONFIRMED ON SITE BY DEPARTMENTAL REPRESENTATIVE.
3. SHALLOW MILL AND FILL LOCATIONS TO BE IDENTIFIED ON SITE BY DEPARTMENTAL REPRESENTATIVE.
3. COORDINATES SHOWN ARE IN UTM, ZONE 11, NAD 83 (CSRS)
4. CONTRACTOR TO REMOVE DEBRIS FROM ALL EXISTING CULVERTS WITHIN THE PROJECT LIMITS.
5. ALL SIGNS TO BE MUTCD CANADA SIGN NUMBERING EXCEPT AS NOTED.
6. CONTRACTOR TO CONFIRM EXISTING AND RELOCATED SIGNS MEET CURRENT REFLECTIVITY STANDARDS.
7. INSTALL ADDITIONAL GUIDE POSTS AS PER AT HIGHWAY PAVEMENT MARKING GUIDE SECTION C7 OR AS DIRECTED BY THE DEPARTMENTAL REPRESENTATIVE.
8. CONTRACTOR TO CONFIRM LOCATIONS OF DRAINAGE BARRIERS AND SPILLWAYS. CSP AND/OR RIPRAP OUTFALLS TO BE DETERMINED BY THE DEPARTMENTAL REPRESENTATIVE.

No.	Date	Description	Drawn by Dessiné par	Approved Approuvé
0	19.03.20	ISSUED FOR TENDER	DM	RL

Revision / Revision

A Detail number / A Numéro de detail
B Sheet number / B Numéro de la feuille

Linear dimensions in millimetres / Dimensions linéaires en millimètres

Consultant's Name / Nom de l'expert-conseil: AECOM

Eng. Stamp / Sceau de l'ingénieur: PROFESSIONAL ENGINEER, PROVINCE OF BRITISH COLUMBIA, MAR 20-2019

Parks Canada / Parcs Canada
Asset Management Western and Northern Region / Gestion des biens Région de l'Ouest et du Nord
Canada

Project title/Titre du projet
HIGHWAY 93 SOUTH
BANFF–WINDERMERE HIGHWAY
PAVING AND SAFETY IMPROVEMENTS
KOOTENAY NATIONAL PARK

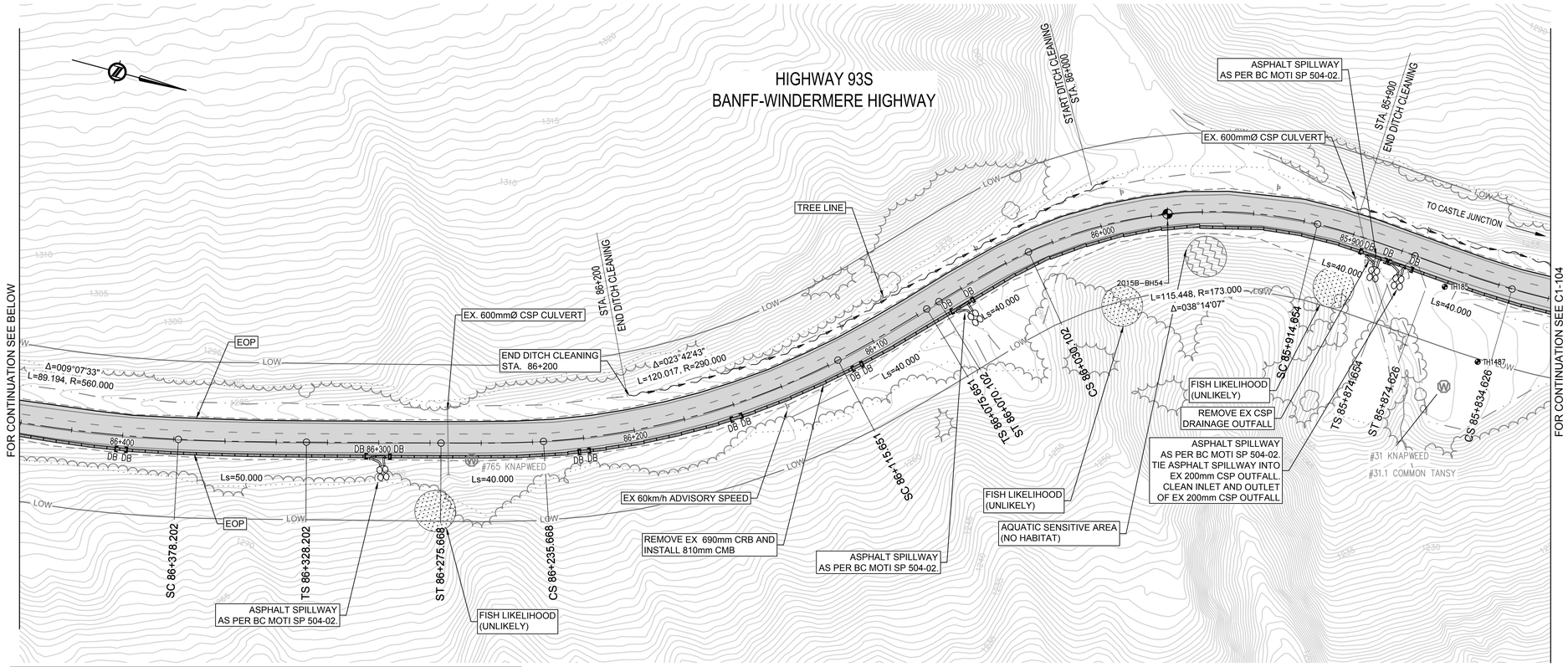
Drawing title/Titre du dessin
PLAN
STA 84+620 TO STA 85+820

Surveyed by/Arpenté par	Drawn by/Dessiné par	Date
DD	DM	2019/03/20
Designed by/Concept par	Reviewed by/Revisé par	Scale/Echelle
RL	BAS	0 – 25 m

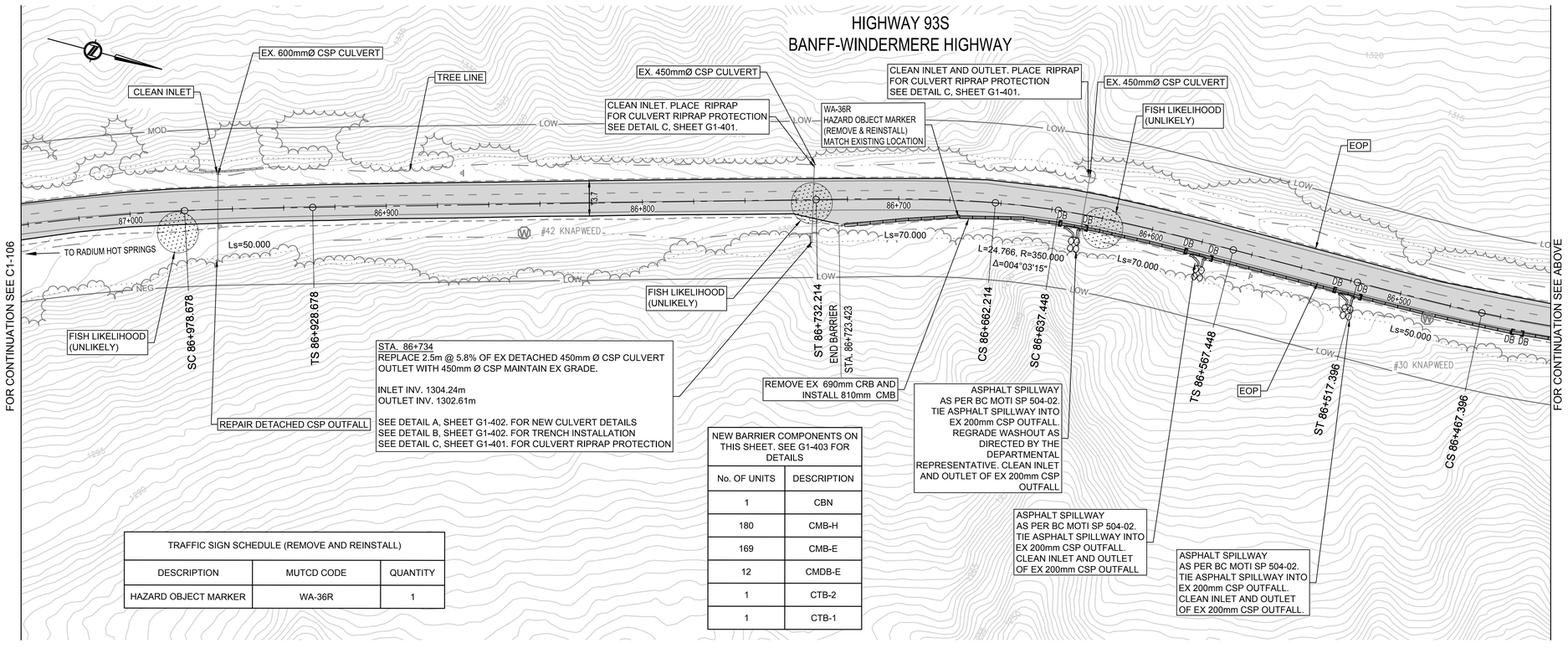
Client Acceptance/Acceptation du client — Date
Approved by/Approuvé par — Date

Project No./Nº du projet	Asset No./Nº du bien	Sheet No./Nº de la feuille
67309	#	104

Drawing Set No./Nº de série du dessin: 60570877–C5



CORRIDOR DESIGN SPEED		
HIGHWAY 93S	90 km/h	STA 85+820 TO STA 87+020



TRAFFIC SIGN SCHEDULE (REMOVE AND REINSTALL)		
DESCRIPTION	MUTCD CODE	QUANTITY
HAZARD OBJECT MARKER	WA-36R	1

NEW BARRIER COMPONENTS ON THIS SHEET. SEE G1-403 FOR DETAILS	
No. OF UNITS	DESCRIPTION
1	CBN
180	CMB-H
169	CMB-E
12	CMDB-E
1	CTB-2
1	CTB-1

This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that modifies this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from stated dimensions.

NOTES:

1. DITCH CLEAN, AS DIRECTED BY DEPARTMENTAL REPRESENTATIVE, TO IMPROVE DRAINAGE BETWEEN STA. 86+000 TO STA. 86+200 IN THE SOUTHBOUND DITCH.
2. MILLING TO BE 50mm MILL AND FILL. LOCATIONS TO BE CONFIRMED ON SITE BY DEPARTMENTAL REPRESENTATIVE.
3. SHALLOW MILL AND FILL LOCATIONS TO BE IDENTIFIED ON SITE BY DEPARTMENTAL REPRESENTATIVE.
4. COORDINATES SHOWN ARE IN UTM, ZONE 11, NAD 83 (CSRS)
5. CONTRACTOR TO REMOVE DEBRIS FROM ALL EXISTING CULVERTS WITHIN THE PROJECT LIMITS.
6. ALL SIGNS TO BE MUTCD CANADA SIGN NUMBERING EXCEPT AS NOTED.
7. INSTALL ADDITIONAL GUIDE POSTS AS PER AT HIGHWAY PAVEMENT MARKING GUIDE SECTION C7 OR AS DIRECTED BY THE DEPARTMENTAL REPRESENTATIVE.
8. CONTRACTOR TO CONFIRM EXISTING AND RELOCATED SIGNS MEET CURRENT REFLECTIVITY STANDARDS.
9. CONTRACTOR TO CONFIRM LOCATIONS OF DRAINAGE BARRIERS AND SPILLWAYS. CSP AND/OR RIPRAP OUTFALLS TO BE DETERMINED BY THE DEPARTMENTAL REPRESENTATIVE.

No.	Date	Description	Drawn by Dessiné par	Approved Approuvé
0	19.03.20	ISSUED FOR TENDER	DM	RL

Revision / Revision

A Detail number / A Numéro de detail
B Sheet number / B Numéro de la feuille

Linear dimensions in millimetres / Dimensions linéaires en millimètres

Consultant's Name / Nom de l'expert-conseil: AECOM

Eng. Stamp / Sceau de l'ingénieur: PROFESSIONAL ENGINEER, PROVINCE OF BRITISH COLUMBIA, MAR 20-2019

Parks Canada / Parcs Canada
Asset Management Western and Northern Region / Gestion des biens Région de l'Ouest et du Nord
Canada

Project title/Titre du projet
HIGHWAY 93 SOUTH
BANFF–WINDERMERE HIGHWAY
PAVING AND SAFETY IMPROVEMENTS
KOOTENAY NATIONAL PARK

Drawing title/Titre du dessin
PLAN
STA 85+820 TO STA 87+020

Surveyed by/Arpenté par	Drawn by/Dessiné par	Date
DD	DM	2019/03/20
Designed by/Concept par	Reviewed by/Revisé par	Scale/Echelle
RL	BAS	0 – 25 m

Client Acceptance/Acceptation du client — Date
Approved by/Approuvé par — Date

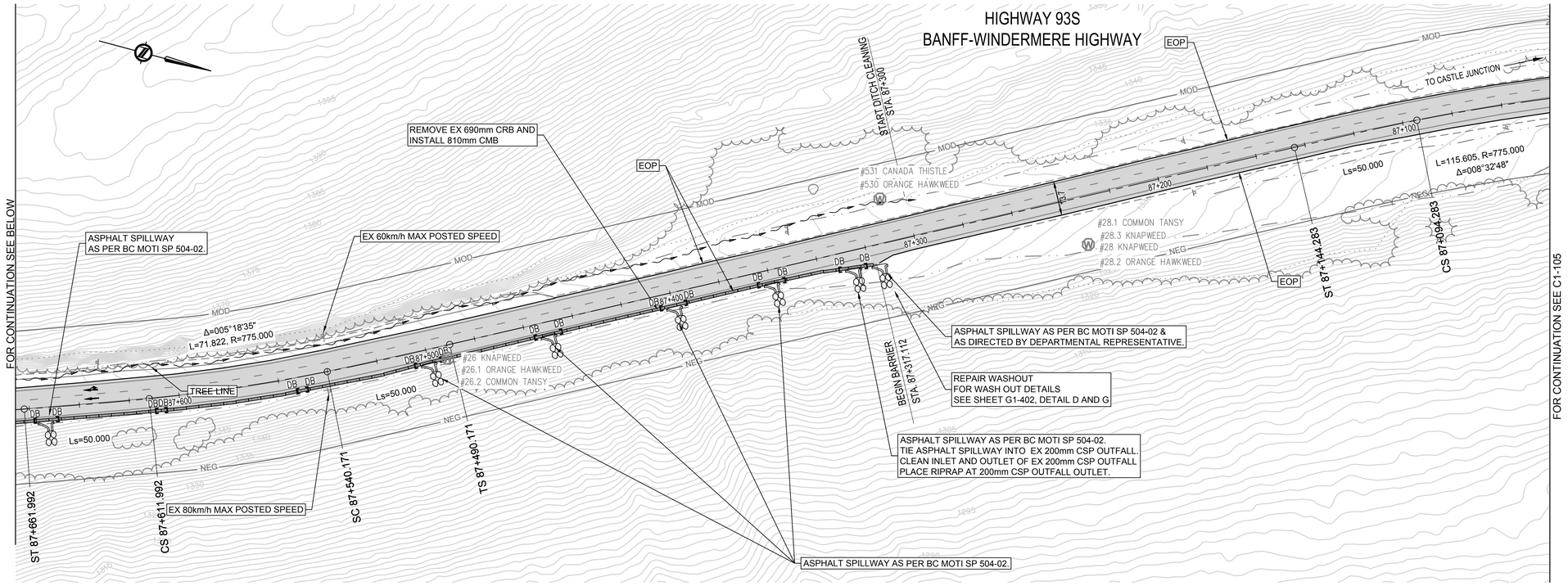
Project No./Nº du projet	Asset No./Nº du bien	Sheet No./Nº de la feuille
67309	#	105

Drawing Set No./Nº de série du dessin: 60570877–C5

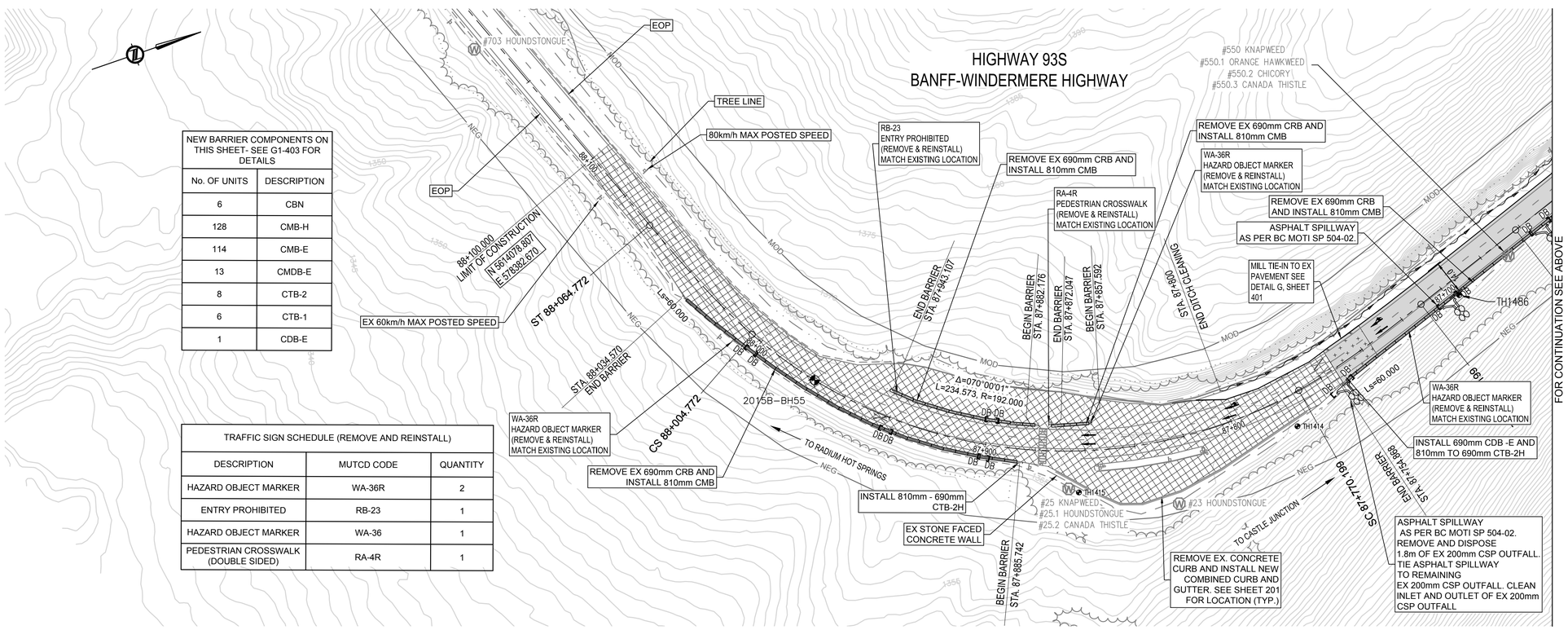
This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that modifies this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from stated dimensions.

NOTE:

1. DITCH CLEAN, AS DIRECTED BY DEPARTMENTAL REPRESENTATIVE, TO IMPROVE DRAINAGE BETWEEN STA. 87+300 TO STA. 87+800 IN THE SOUTHBOUND DITCH.
2. MILLING TO BE 50mm MILL AND FILL. LOCATIONS TO BE CONFIRMED ON SITE BY DEPARTMENTAL REPRESENTATIVE.
3. SHALLOW MILL AND FILL LOCATIONS TO BE IDENTIFIED ON SITE BY DEPARTMENTAL REPRESENTATIVE.
3. COORDINATES SHOWN ARE IN UTM, ZONE 11, NAD 83 (CSRS)
4. CONTRACTOR TO REMOVE DEBRIS FROM ALL EXISTING CULVERTS WITHIN THE PROJECT LIMITS.
5. ALL SIGNS TO BE MUTCD CANADA SIGN NUMBERING EXCEPT AS NOTED.
6. CONTRACTOR TO CONFIRM EXISTING AND RELOCATED SIGNS MEET CURRENT REFLECTIVITY STANDARDS.
7. INSTALL ADDITIONAL GUIDE POSTS AS PER AT HIGHWAY PAVEMENT MARKING GUIDE SECTION C7 OR AS DIRECTED BY THE DEPARTMENTAL REPRESENTATIVE.
8. CONTRACTOR TO CONFIRM LOCATIONS OF DRAINAGE BARRIERS AND SPILLWAYS. CSP AND/OR RIPRAP OUTFALLS TO BE DETERMINED BY THE DEPARTMENTAL REPRESENTATIVE.



CORRIDOR DESIGN SPEED		
HIGHWAY 93S	90 km/h	STA 87+020 TO STA 87+520
HIGHWAY 93S	70 km/h	STA 87+520 TO STA 88+080
HIGHWAY 93S	90 km/h	STA 88+080 TO STA 88+100



NEW BARRIER COMPONENTS ON THIS SHEET- SEE G1-403 FOR DETAILS	
No. OF UNITS	DESCRIPTION
6	CBN
128	CMB-H
114	CMB-E
13	CMDB-E
8	CTB-2
6	CTB-1
1	CDB-E

TRAFFIC SIGN SCHEDULE (REMOVE AND REINSTALL)		
DESCRIPTION	MUTCD CODE	QUANTITY
HAZARD OBJECT MARKER	WA-36R	2
ENTRY PROHIBITED	RB-23	1
HAZARD OBJECT MARKER	WA-36	1
PEDESTRIAN CROSSWALK (DOUBLE SIDED)	RA-4R	1

No.	Date	Description	Drawn by Dessiné par	Approved Approuvé
0	19.03.20	ISSUED FOR TENDER	DM	RL

Revision / Revision

A/B Detail number / Sheet number — A Numéro de detail / B Numéro de la feuille

Linear dimensions in millimetres / Dimensions linéaires en millimètres

Consultant's Name / Nom de l'expert-conseil: AECOM

Eng. Stamp / Sceau de l'ingénieur: PROFESSIONAL ENGINEER, PROVINCE OF BRITISH COLUMBIA, MAR 20-2019

Parks Canada / Parcs Canada
Asset Management Western and Northern Region / Gestion des biens Région de l'Ouest et du Nord
Canada

Project title/Titre du projet
HIGHWAY 93 SOUTH
BANFF–WINDERMERE HIGHWAY
PAVING AND SAFETY IMPROVEMENTS
KOOTENAY NATIONAL PARK

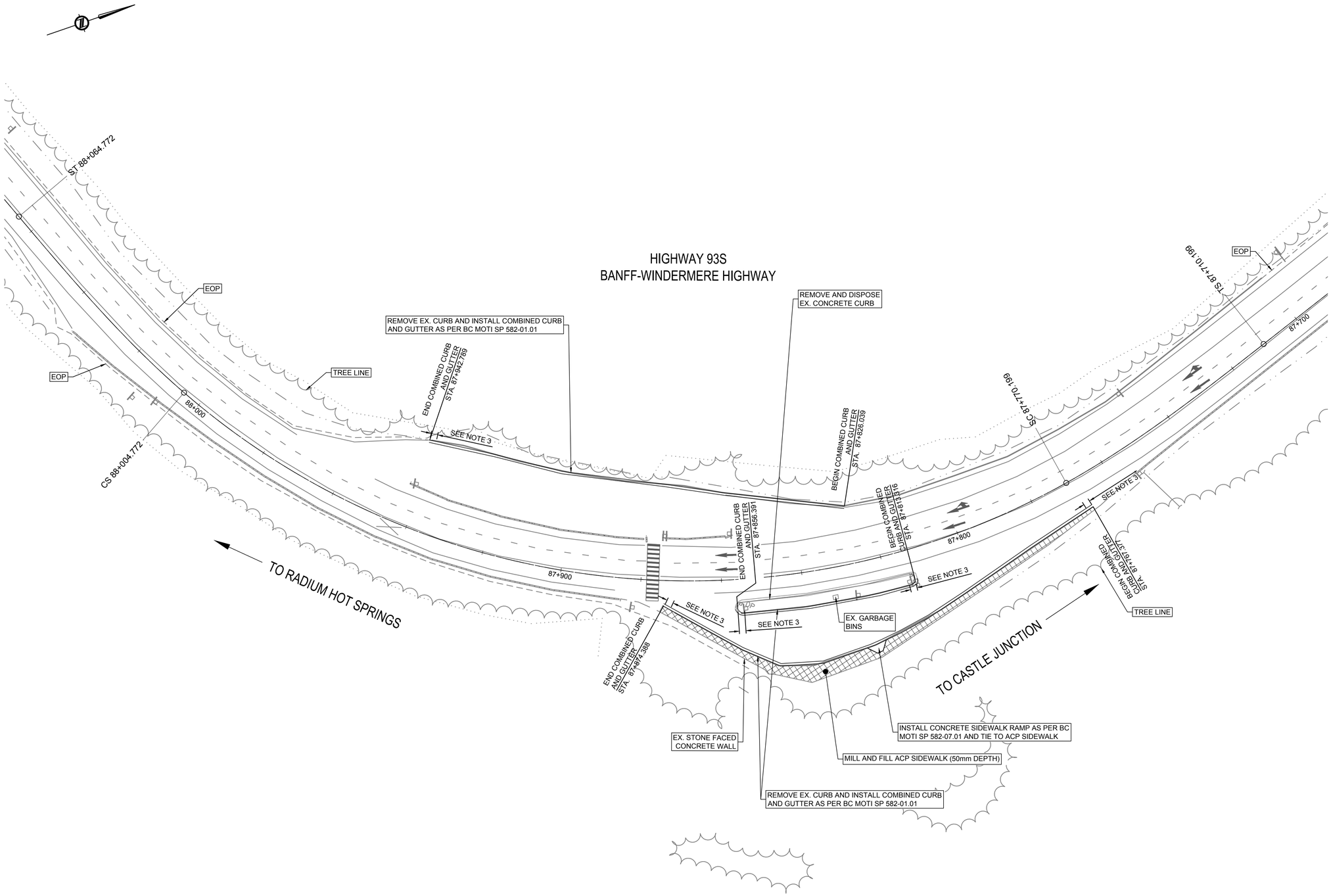
Drawing title/Titre du dessin
PLAN
STA 87+020 TO STA 88+100

Surveyed by/Arpenté par	Drawn by/Dessiné par	Date
DD	DM	2019/03/20
Designed by/Concept par	Reviewed by/Revisé par	Scale/Echelle
RL	BAS	0 – 25 m

Client Acceptance/Acceptation du client — Date
Approved by/Approuvé par — Date

Project No./Nº du projet	Asset No./Nº du bien	Sheet No./Nº de la feuille
67309	#	106

Drawing Set No./Nº de série du dessin: 60570877–C5



CORRIDOR DESIGN SPEED	
HIGHWAY 93S	100 km/h

This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that modifies this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from stated dimensions.

NOTES:

1. SIDEWALK MILLING TO BE 50mm MILL AND FILL. LOCATIONS TO BE CONFIRMED ON SITE BY DEPARTMENTAL REPRESENTATIVE.
2. COORDINATES SHOWN ARE IN UTM, ZONE 11, NAD 83 (CSRS)
3. INSTALL 1m LONG CURB TRANSITION (150mm TALL TO 0mm TALL) OR AS DIRECTED BY THE DEPARTMENTAL REPRESENTATIVE.
4. SIGNAGE AND GARBAGE BINS TO BE REINSTATED TO ORIGINAL CONDITION AT THE END OF THE WORK.

No.	Date	Description	Drawn by Dessiné par	Approved Approuvé
0	19.03.20	ISSUED FOR TENDER	DM	RL

Revision / Revision

A/B Detail number / Sheet number — A Numéro de detail / B Numéro de la feuille

Linear dimensions in millimetres — Dimensions linéaires en millimètres

Consultant's Name / Nom de l'expert-conseil: AECOM

Eng. Stamp / Sceau de l'ingénieur: PROFESSIONAL ENGINEER — MAR 20-2019

Parks Canada — Asset Management Western and Northern Region

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

Canada

Project title/Titre du projet

HIGHWAY 93 SOUTH
BANFF–WINDERMERE HIGHWAY
PAVING AND SAFETY IMPROVEMENTS
KOOTENAY NATIONAL PARK

Drawing title/Titre du dessin

KOOTNEY VIEWPOINT
CURB AND SIDEWALK IMPROVEMENTS PLAN

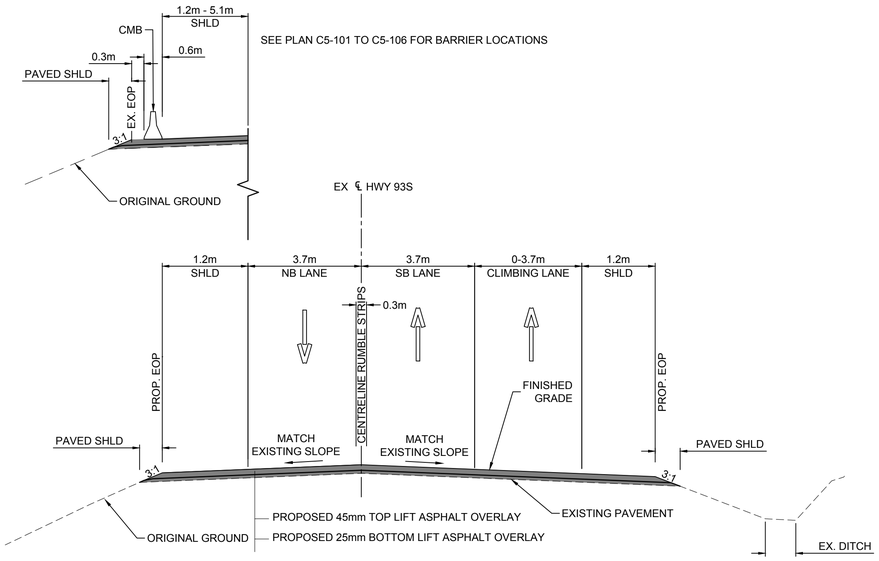
Surveyed by/Arpenté par	Drawn by/Dessiné par	Date
DD	DM	2019/03/20
Designed by/Concept par	Reviewed by/Revisé par	Scale/Échelle
RL	BAS	0 – 10 m

Client Acceptance/Acceptation du client — Date

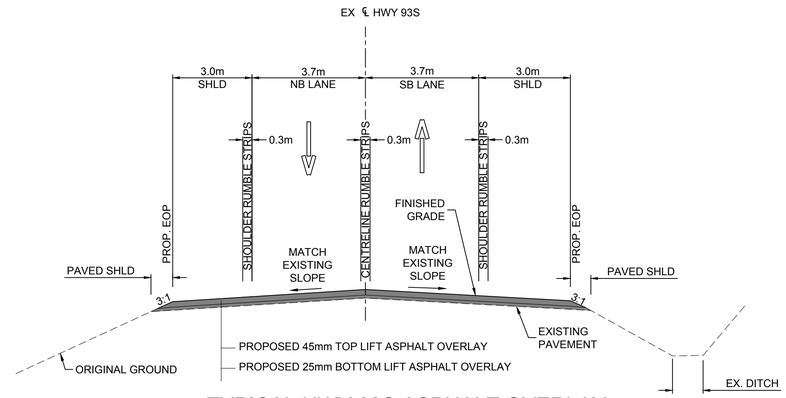
Approved by/Approuvé par — Date

Project No./Nº du projet	Asset No./Nº du bien	Sheet No./ Nº de la feuille
67309	#	201

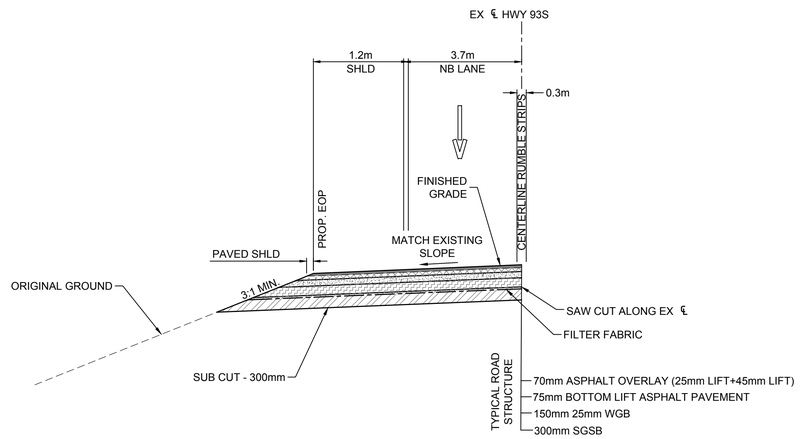
Drawing Set No./Nº de série du dessin: 60570877–C5



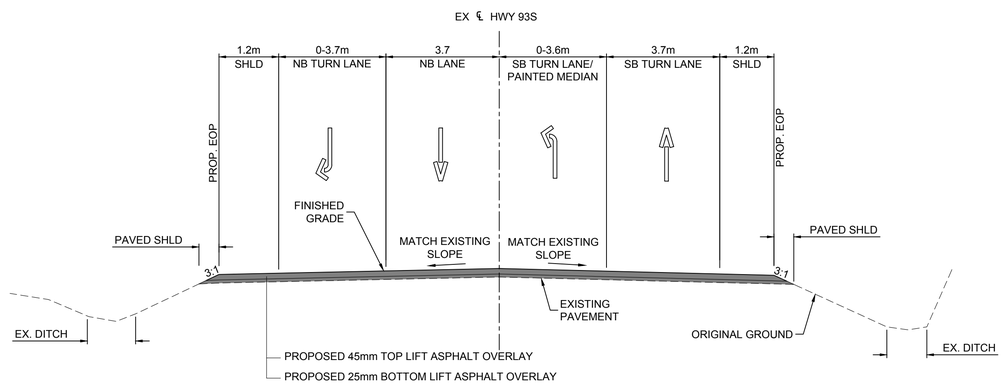
TYPICAL HWY 93S OVERLAY WITH SOUTHBOUND CLIMBING LANE
STA. 81+482 - STA. 83+764
STA. 84+482 - STA. 87+754



TYPICAL HWY 93S ASPHALT OVERLAY
STA. 72+800 - STA. 75+400
STA. 81+000 - STA. 81+482

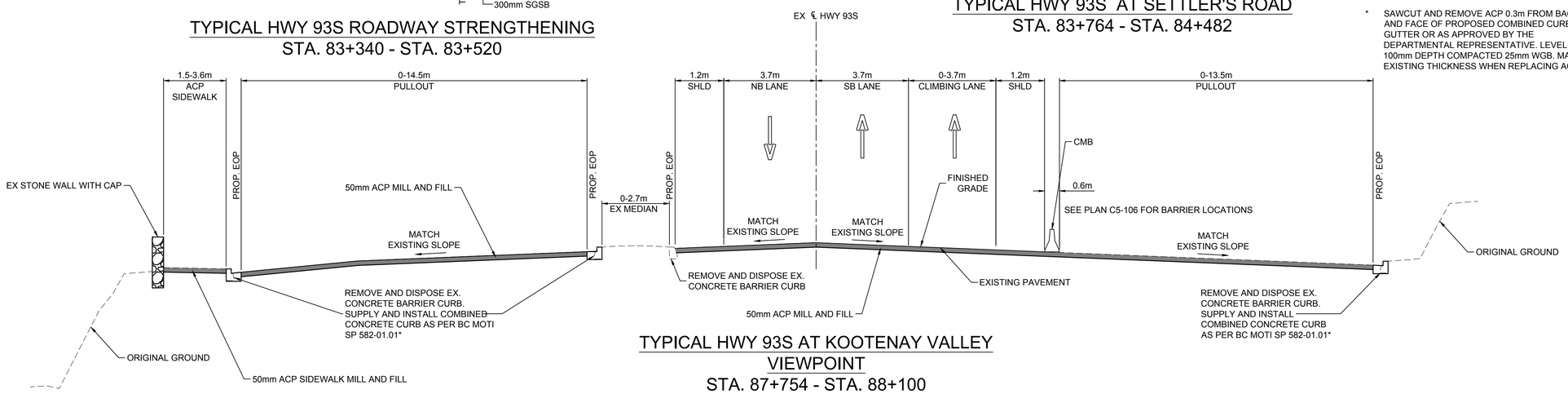


TYPICAL HWY 93S ROADWAY STRENGTHENING
STA. 83+340 - STA. 83+520



TYPICAL HWY 93S AT SETTLER'S ROAD
STA. 83+764 - STA. 84+482

* SAWCUT AND REMOVE ACP 0.3m FROM BACK AND FACE OF PROPOSED COMBINED CURB AND GUTTER OR AS APPROVED BY THE DEPARTMENTAL REPRESENTATIVE. LEVEL WITH 100mm DEPTH COMPACTED 25mm WGB. MATCH EXISTING THICKNESS WHEN REPLACING ACP



TYPICAL HWY 93S AT KOOTENAY VALLEY VIEWPOINT
STA. 87+754 - STA. 88+100

This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that modifies this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from stated dimensions.

NOTES:

1. SEE DETAIL A SHEET G1-401 FOR SUBGRADE BACKFILL AND EXCAVATION INFORMATION.
2. ALL DIMENSIONS IN METERS UNLESS NOTED OTHERWISE.
3. TYPICAL SECTIONS AND DETAILS NOT TO SCALE.
4. WIDTH VARIES AT INTERSECTION AND TAPERS.
5. SEE SHEETS C5-101 TO C5-106 FOR MILLING LOCATIONS
6. RUMBLE STRIPS AS PER BC MoTI SUPPLEMENT TO TAC FIG. 650.A TO FIG 650.H
7. SUB-GRADE EXCAVATION MAY CONTAIN SOILS UNSUITABLE FOR USE IN EMBANKMENT CONSTRUCTION.

No.	Date	Description	Drawn by Dessiné par	Approved Approuvé
0	19.03.20	ISSUED FOR TENDER	DM	RL

Revision / Revision

A Detail number — A Numéro de detail
B Sheet number — B Numéro de la feuille

Linear dimensions in millimetres — Dimensions linéaires en millimètres

Consultant's Name / Nom de l'expert-conseil: AECOM

Eng. Stamp / Sceau de l'ingénieur: PROFESSIONAL ENGINEER, PROVINCE OF BRITISH COLUMBIA, MAR 20-2019

Parks Canada — Parcs Canada
Asset Management Western and Northern Region — Gestion des biens Région de l'Ouest et du Nord
Canada

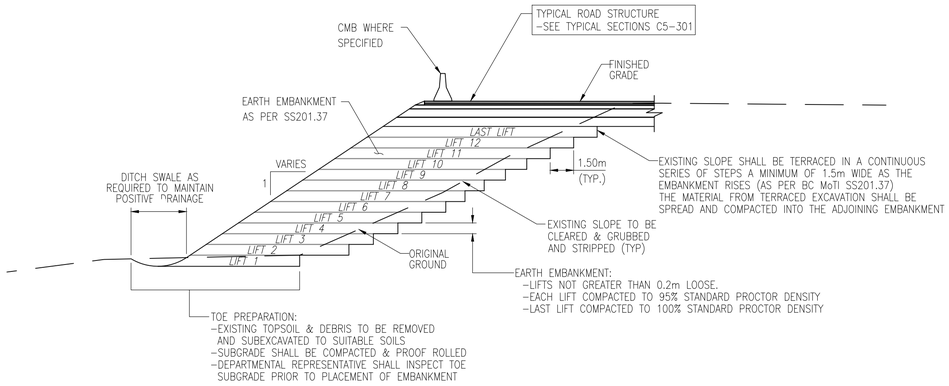
Project title/Titre du projet
HIGHWAY 93 SOUTH
BANFF–WINDERMERE HIGHWAY PAVING AND SAFETY IMPROVEMENTS
KOOTENAY NATIONAL PARK

Drawing title/Titre du dessin
TYPICAL SECTIONS

Surveyed by/Arpenté par	Drawn by/Dessiné par	Date
DD	DM	2019/03/20
Designed by/Concept par	Reviewed by/Revisé par	Scale/Echelle
RL	BAS	NTS

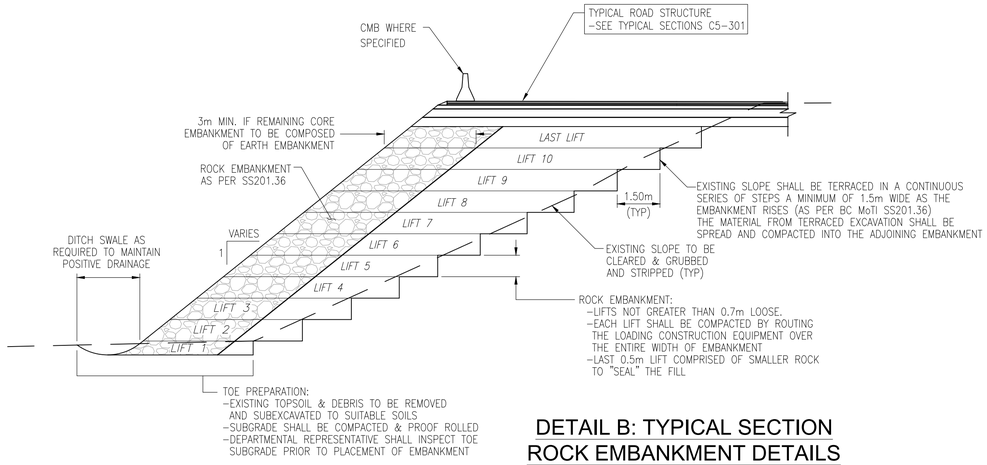
Client Acceptance/Acceptation du client — Date
Approved by/Approuvé par — Date

Project No./Nº du projet: 67309
Asset No./Nº du bien: #
Sheet No./Nº de la feuille: 301
Drawing Set No./Nº de série du dessin: 60570877–C5



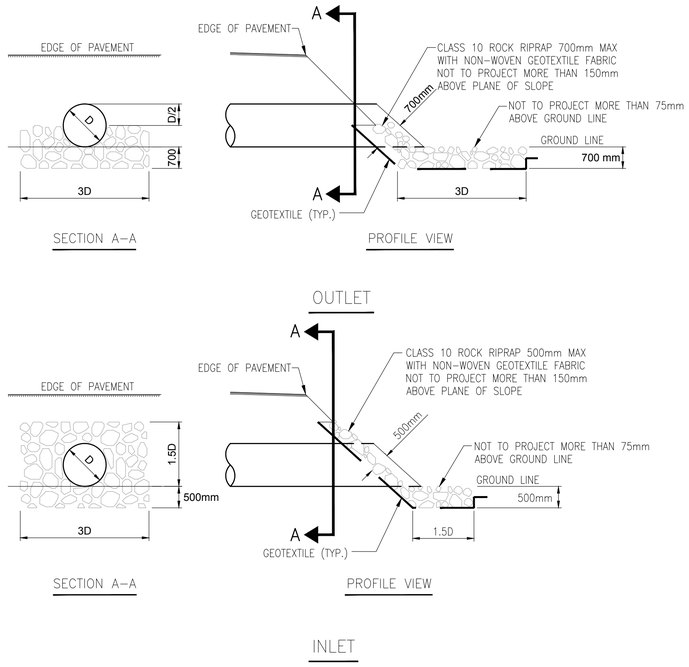
DETAIL A: TYPICAL SECTION EARTH EMBANKMENT DETAILS

N.T.S.



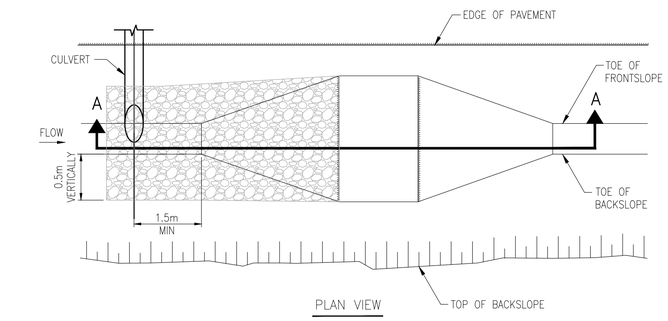
DETAIL B: TYPICAL SECTION ROCK EMBANKMENT DETAILS (IF REQUIRED)

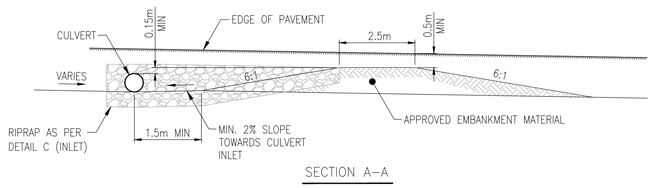
N.T.S.



DETAIL C: HAND PLACED RIPRAP FOR CSP CULVERTS

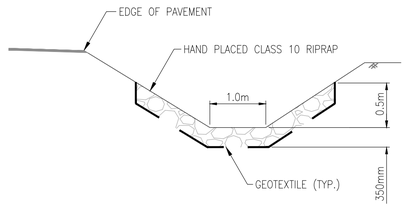
N.T.S.





DETAIL D: DITCH BLOCK DETAILS (IF REQUIRED)

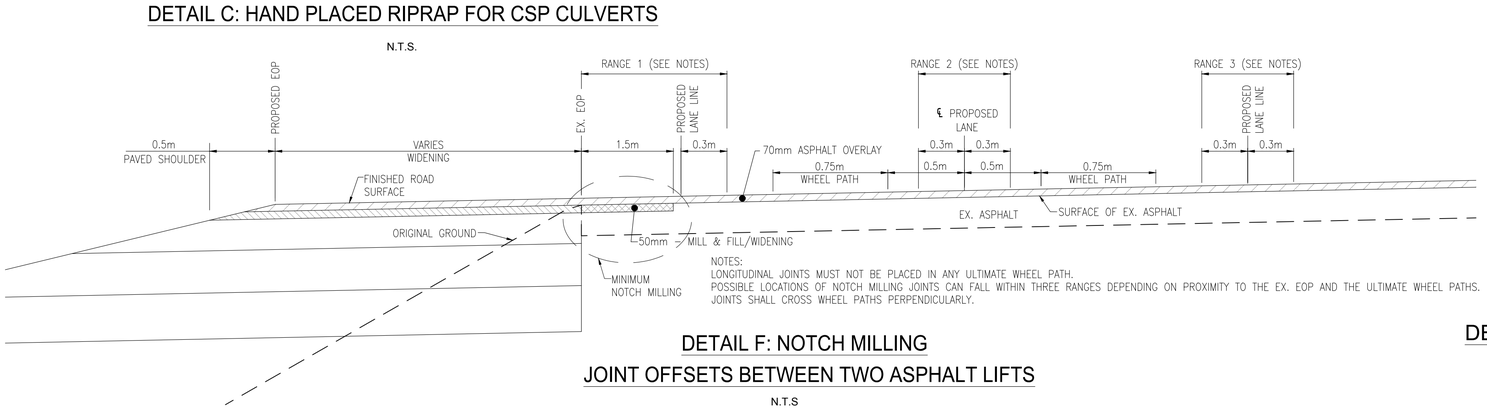
N.T.S.



NOTE: RIPRAP DITCH PROTECTION ONLY APPLIES WHERE LONGITUDINAL DITCH SLOPE GREATER THAN 5.0% AND NO ROCK CUT.

DETAIL E: RIPRAP DITCH PROTECTION DETAIL (IF REQUIRED)

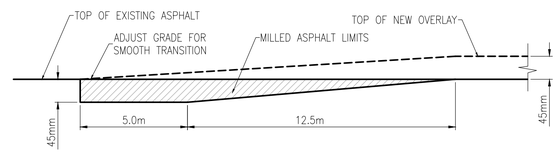
N.T.S.



NOTES:
LONGITUDINAL JOINTS MUST NOT BE PLACED IN ANY ULTIMATE WHEEL PATH.
POSSIBLE LOCATIONS OF NOTCH MILLING JOINTS CAN FALL WITHIN THREE RANGES DEPENDING ON PROXIMITY TO THE EX. EOP AND THE ULTIMATE WHEEL PATHS.
JOINTS SHALL CROSS WHEEL PATHS PERPENDICULARLY.

DETAIL F: NOTCH MILLING JOINT OFFSETS BETWEEN TWO ASPHALT LIFTS

N.T.S



DETAIL G: TYPICAL MILLED TIE-IN TO EXISTING ASPHALT (LONGITUDINAL DETAIL)

N T S

This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that modifies this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from stated dimensions.

NOTES:
1. ALL DIMENSIONS IN METRES, UNLESS OTHERWISE NOTED.

No.	Date	Description	Drawn by Dessiné par	Approved Approuvé
0	19.03.20	ISSUED FOR TENDER	DM	RL

Revision / Revision

A/B Detail number / Sheet number — A Numéro de detail / B Numéro de la feuille

Linear dimensions in millimetres — Dimensions linéaires en millimètres

Consultant's Name / Nom de l'expert-conseil: AECOM

Eng. Stamp / Sceau de l'ingénieur: PROFESSIONAL ENGINEER, PROVINCE OF BRITISH COLUMBIA, MAR 20-2019

Parks Canada — Asset Management Western and Northern Region
Parcs Canada — Gestion des biens Région de l'Ouest et du Nord
Canada

Project title/Titre du projet
HIGHWAY 93 SOUTH
BANFF–WINDERMERE HIGHWAY PAVING AND SAFETY IMPROVEMENTS
KOOTENAY NATIONAL PARK

Drawing title/Titre du dessin
DETAILS

Surveyed by/Arpenté par	Drawn by/Dessiné par	Date
DD	DM	2019/03/20
Designed by/Concept par	Reviewed by/Revisé par	Scale/Echelle
RL	BAS	NTS

Client Acceptance/Acceptation du client — Date
Approved by/Approuvé par — Date

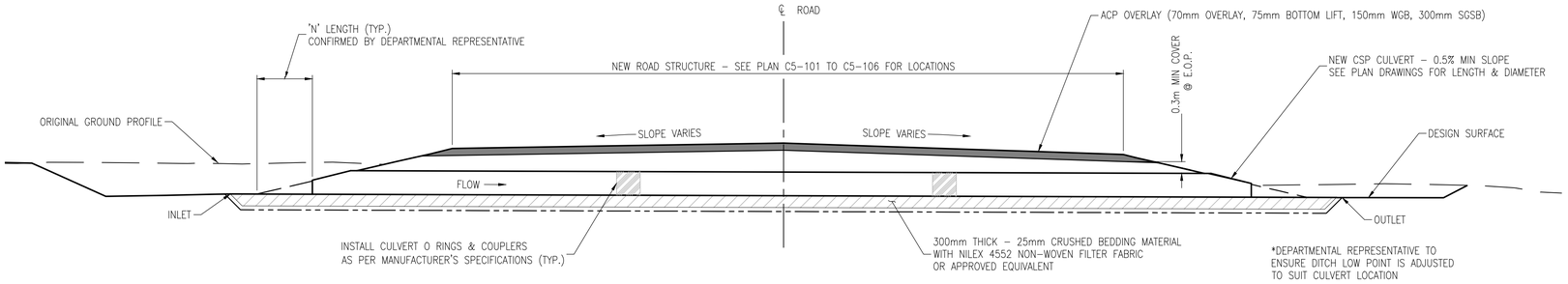
Project No./Nº du projet	Asset No./Nº du bien	Sheet No./ Nº de la feuille
67309		401

Drawing Set No./Nº de série du dessin: 60570877–G1

NOTES FOR CSP HANDLING AND ASSEMBLY:

1. CSP SECTIONS ARE TO BE LIFTED, NOT DRAGGED, FOR HANDLING. THEY SHALL NOT BE HANDLED IN A MANNER THAT MAY CAUSE DAMAGE TO THE GALVANIZED COATING OR RESULT IN OTHER PHYSICAL DAMAGE. ANY SUCH DAMAGE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE DEPARTMENTAL REPRESENTATIVE.
2. REFERENCE STANDARD INSTALLATION INSTRUCTIONS PROVIDED BY THE MANUFACTURER.
3. SHAPE CHECKS ARE TO BE CARRIED OUT DURING AND AFTER INSTALLATION TO ENSURE THAT THE INSTALLED SHAPE IS AS INTENDED.

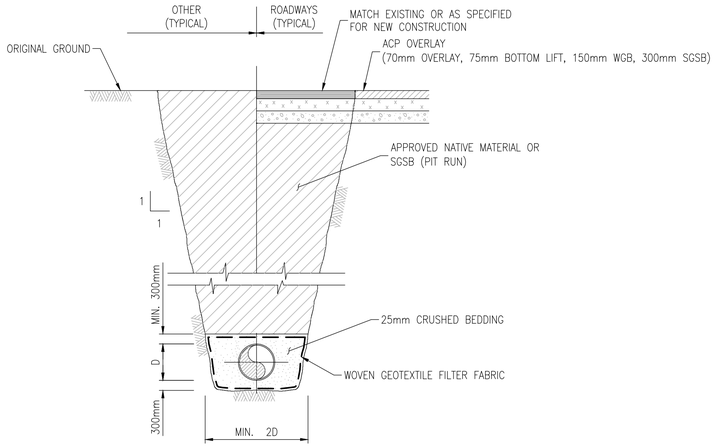
C.S.P. DIAMETER – D mm	SLOPE RATIO OF CULVERT END X:Y	"N" – m				INVERT LENGTH OF SLOPE END SEC. METRE
		WITH 3:1 SUBGRADE SLOPE RATIO	WITH 4:1 SUBGRADE SLOPE RATIO	WITH 5:1 SUBGRADE SLOPE RATIO	WITH 6:1 SUBGRADE SLOPE RATIO	
400	4 : 1	0.3	0.5	0.8	1.2	6.0
500	4 : 1	0.3	0.6	0.9	1.5	6.0
600	4 : 1	0.3	0.6	1.0	1.6	6.0
700	4 : 1	0.3	0.8	1.2	2.0	6.0
800	4 : 1	0.4	0.9	1.4	2.3	6.0
900	4 : 1	0.5	1.0	1.6	2.5	6.0
1000	4 : 1	0.5	1.2	1.8	2.8	6.0
1200	3 : 1 4 : 1	0.9 0.6	1.7 1.4	2.4 2.2	3.7 3.5	6.0
1400	3 : 1 4 : 1	1.0 0.6	1.9 1.6	2.8 2.5	4.3 3.9	6.0



PROFILE VIEW

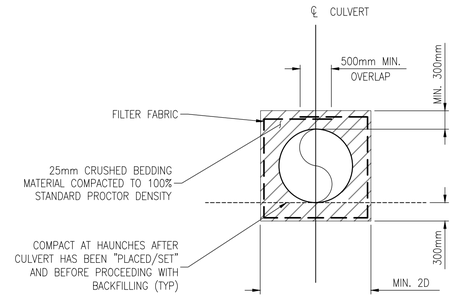
DETAIL A: TYPICAL SECTION NEW CSP CULVERT

N.T.S.



DETAIL B: TYPICAL ROAD TRENCH FOR CSP CULVERT INSTALLATION

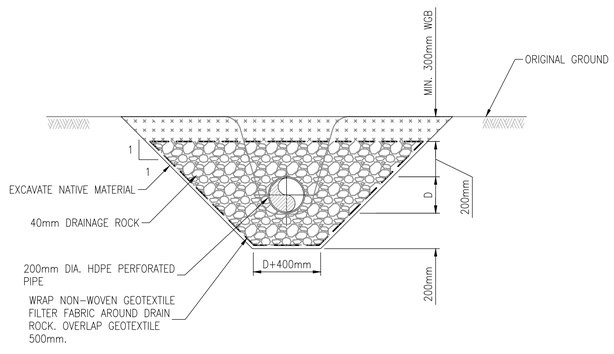
N.T.S



@ C/L OF CULVERT

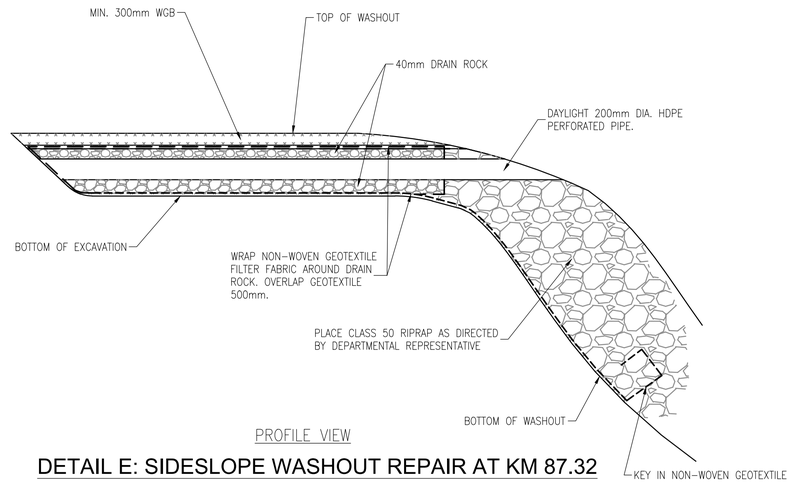
DETAIL C: TYPICAL END SECTION - CSP BACKFILL ZONE

N.T.S.



DETAIL D: TYPICAL SECTION FOR SIDESLOPE WASHOUT REPAIR AT KM 87.32

N.T.S



PROFILE VIEW

DETAIL E: SIDESLOPE WASHOUT REPAIR AT KM 87.32

N.T.S

This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that modifies this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from stated dimensions.

NOTES:
1. ALL DIMENSIONS IN METRES, UNLESS OTHERWISE NOTED.

No.	Date	Description	Drawn by Dessiné par	Approved Approuvé
0	19.03.20	ISSUED FOR TENDER	DM	RL

Revision / Revision

A/B Detail number / Sheet number — A Numéro de detail / B Numéro de la feuille

Linear dimensions in millimetres / Dimensions linéaires en millimètres

Consultant's Name / Nom de l'expert-conseil: AECOM

Eng. Stamp / Sceau de l'ingénieur: PROFESSIONAL ENGINEER, PROVINCE OF ALBERTA, BRIAN A. SMITH, MAR 20-2019

Parks Canada / Parcs Canada
Asset Management Western and Northern Region / Gestion des biens Région de l'Ouest et du Nord
Canada

Project title/Titre du projet
HIGHWAY 93 SOUTH
BANFF–WINDERMERE HIGHWAY
PAVING AND SAFETY
IMPROVEMENTS
KOOTENAY NATIONAL PARK

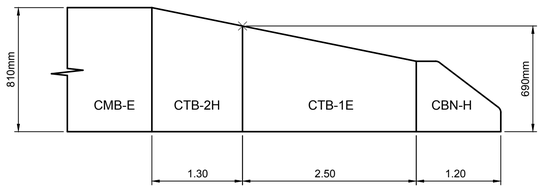
Drawing title/Titre du dessin
DETAILS
DRAINAGE

Surveyed by/Arpenté par	Drawn by/Dessiné par	Date
DD	DM	2019/03/20
Designed by/Concept par	Reviewed by/Revisé par	Scale/Echelle
RL	BAS	NTS

Client Acceptance/Acceptation du client — Date
Approved by/Approuvé par — Date

Project No./Nº du projet	Asset No./Nº du bien	Sheet No./ Nºde la feuille
67309		402

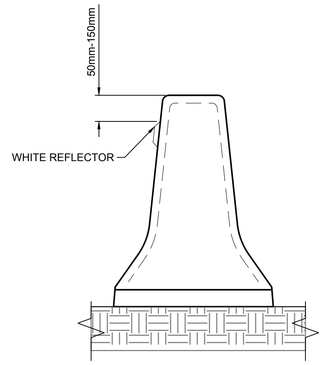
Drawing Set No./Nº de série du dessin: 60570877–G1



PROFILE VIEW

DETAIL A: TYPICAL NEW 810mm BARRIER END TREATMENT

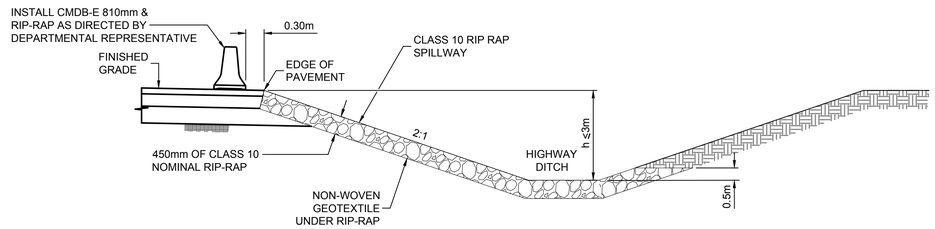
N.T.S.



NOTE:
REFLECTORS TO BE SPACED AT A MAXIMUM OF 26m ON TRAFFIC SIDE OF BARRIER.

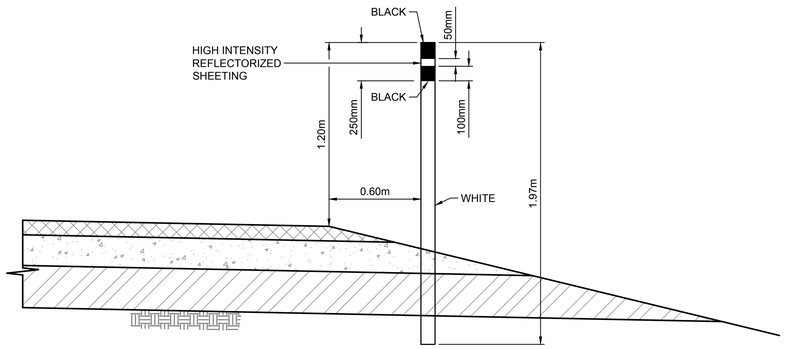
DETAIL B: TYPICAL BARRIER REFLECTOR INSTALLATION

N.T.S.



DETAIL D: BARRIER DRAIN - WITH CSP OR RIP-RAP

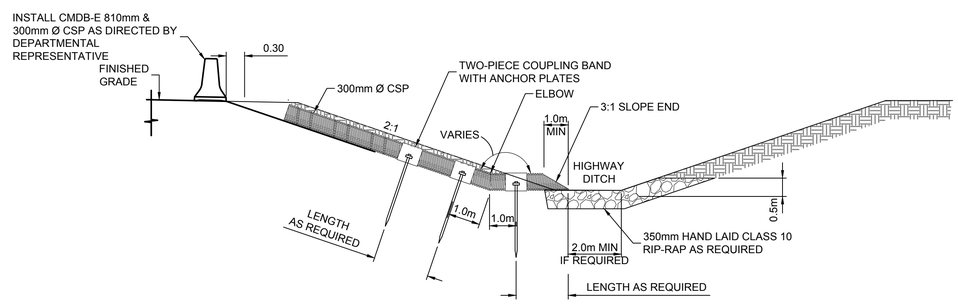
N.T.S.



DETAIL C: TYPICAL GUIDE POST INSTALLATION

N.T.S.

NOTE:
INSTALL GUIDE POST AS PER AT HIGHWAY PAVEMENT MARKING
GUIDE SECTION C7
SEE SHEETS C5-101 TO C5-106 FOR PROPOSED LOCATIONS



DETAIL E: BARRIER DRAIN - WITH SPILL WAY

N.T.S.

This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that modifies this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from stated dimensions.

NOTES:
1. ALL DIMENSIONS IN METRES, UNLESS OTHERWISE NOTED.

No.	Date	Description	Drawn by Dessiné par	Approved Approuvé
0	19.03.20	ISSUED FOR TENDER	DM	RL

Revision / Revision

A/B Detail number / Sheet number — A Numéro de detail / B Numéro de la feuille

Linear dimensions in millimetres / Dimensions linéaires en millimètres

Consultant's Name / Nom de l'expert-conseil: AECOM

Eng. Stamp / Sceau de l'ingénieur: PROFESSIONAL ENGINEER, PROVINCE OF BRITISH COLUMBIA, MAR 20-2019

Parks Canada / Parcs Canada
Asset Management Western and Northern Region / Gestion des biens Région de l'Ouest et du Nord
Canada

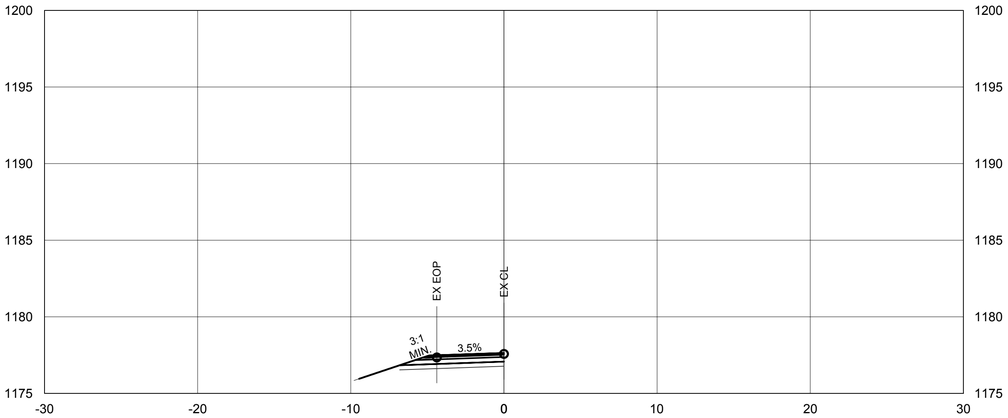
Project title/Titre du projet
HIGHWAY 93 SOUTH
BANFF–WINDERMERE HIGHWAY
PAVING AND SAFETY
IMPROVEMENTS
KOOTENAY NATIONAL PARK

Drawing title/Titre du dessin
DETAILS
BARRIER

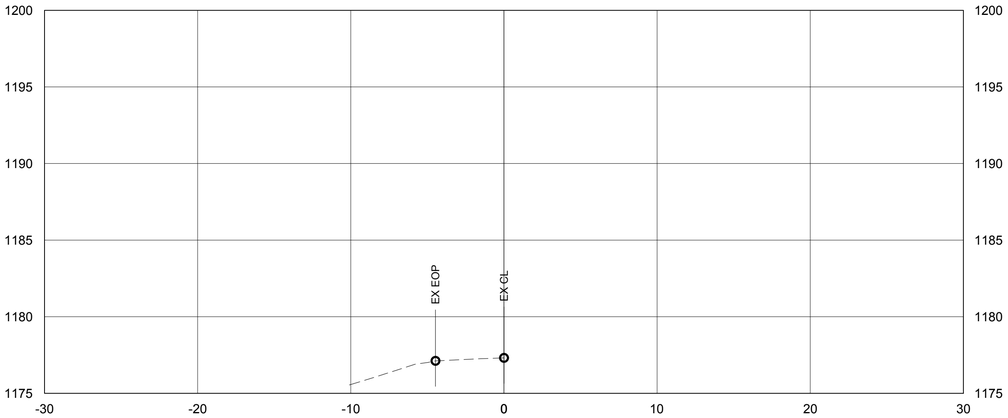
Surveyed by/Arpenté par	Drawn by/Dessiné par	Date
DD	DM	2019/03/20
Designed by/Concept par	Reviewed by/Revisé par	Scale/Echelle
RL	BAS	

Client Acceptance/Acceptation du client — Date
Approved by/Approuvé par — Date

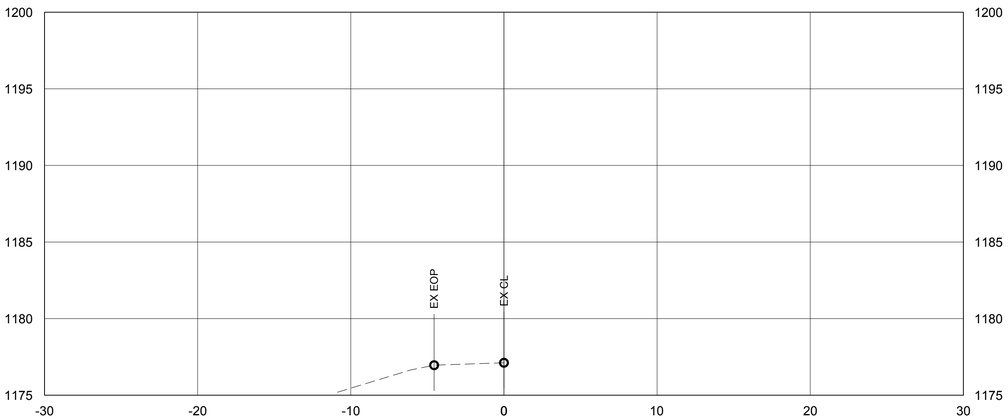
Project No./Nº du projet	Asset No./Nº du bien	Sheet No./ Nº de la feuille
67309		403
Drawing Set No./Nº de série du dessin: 60570877–G1		



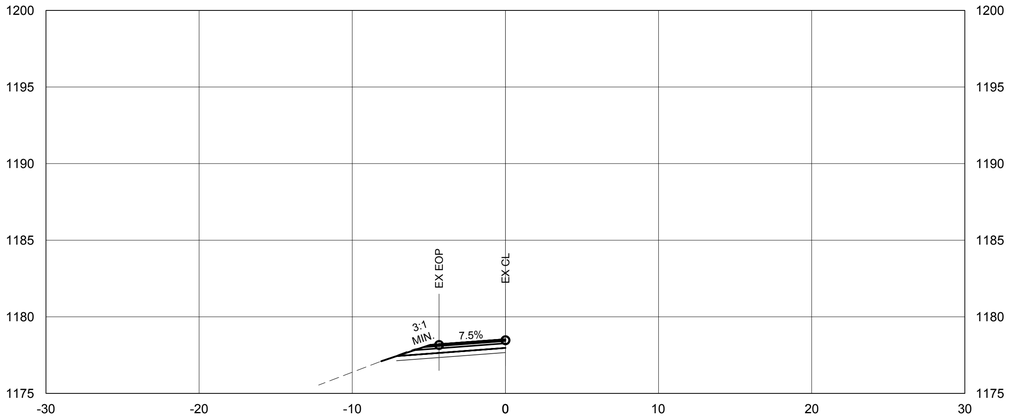
83+340



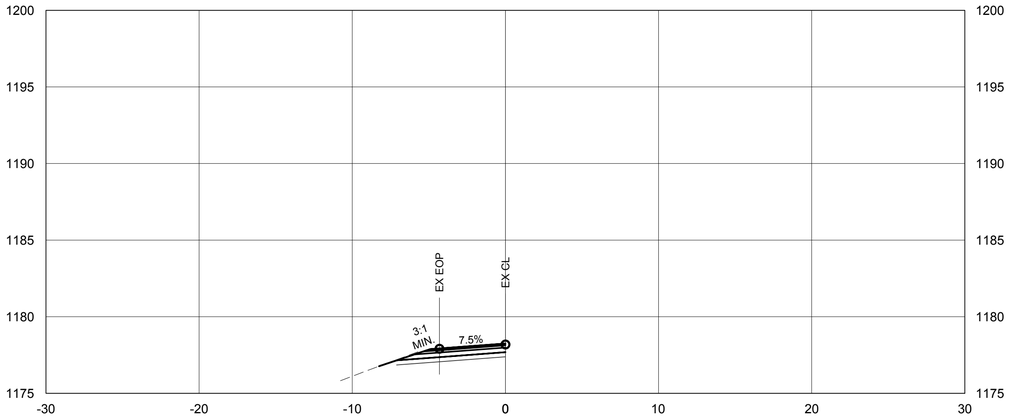
83+320



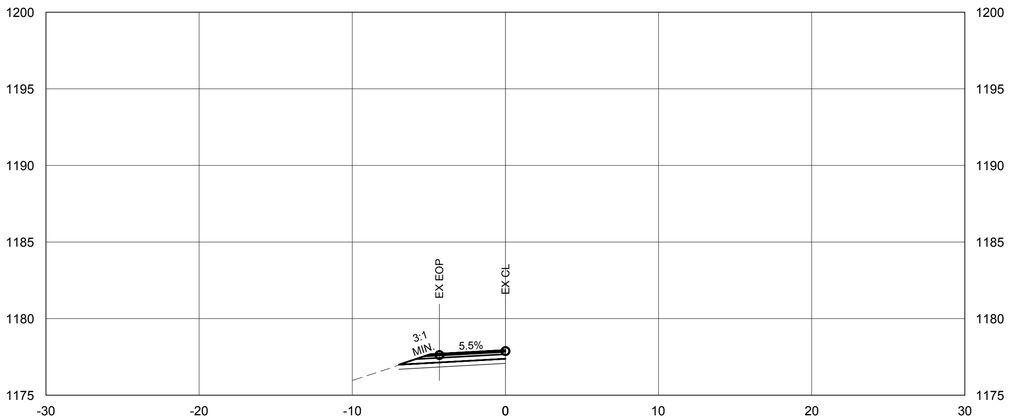
83+300



83+400



83+380



83+360

This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that modifies this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from stated dimensions.

LEGEND:

ORIGINAL GROUND

FINISHED GROUND

SUBCUT

FOR INFORMATION ONLY

No.	Date	Description	Drawn by Dessiné par	Approved Approuvé
0	19.03.20	ISSUED FOR TENDER	DM	RL

Revision / Revision

A Detail number / A Numéro de detail

B Sheet number / B Numéro de la feuille

Linear dimensions in millimetres / Dimensions linéaires en millimètres

Consultant's Name / Nom de l'expert-conseil

AECOM

Eng. Stamp / Sceau de l'ingénieur

Parks Canada / Parcs Canada

Asset Management Western and Northern Region / Gestion des biens Région de l'Ouest et du Nord

Canada

Project title/Titre du projet

HIGHWAY 93 SOUTH
BANFF–WINDERMERE HIGHWAY
PAVING AND SAFETY
IMPROVEMENTS
KOOTENAY NATIONAL PARK

Drawing title/Titre du dessin

CROSS SECTIONS
ROAD STRENGTHENING
STA 83+300 TO 83+400

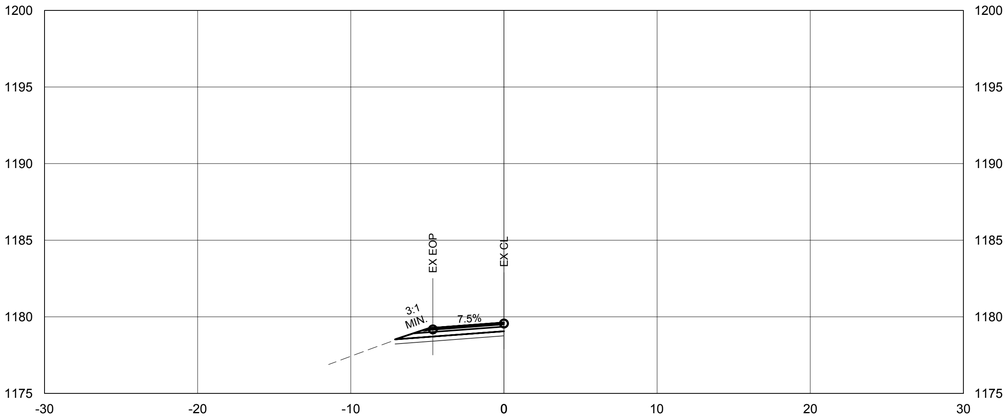
Surveyed by/Arpenté par	Drawn by/Dessiné par	Date
DD	DM	2019/03/20
Designed by/Concept par	Reviewed by/Revisé par	Scale/Échelle
RL	BAS	0 5m

Client Acceptance/Acceptation du client — Date

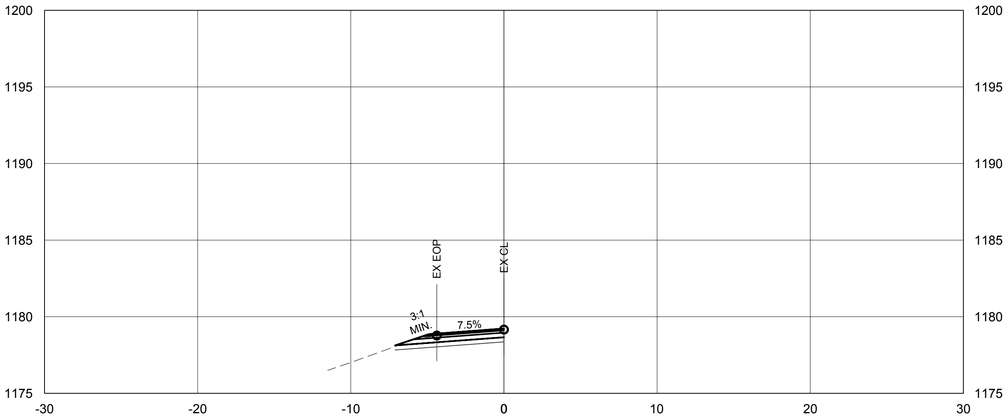
Approved by/Approuvé par — Date

Project No./Nº du projet	Asset No./Nº du bien	Sheet No./ Nº de la feuille
67309	#	XS01

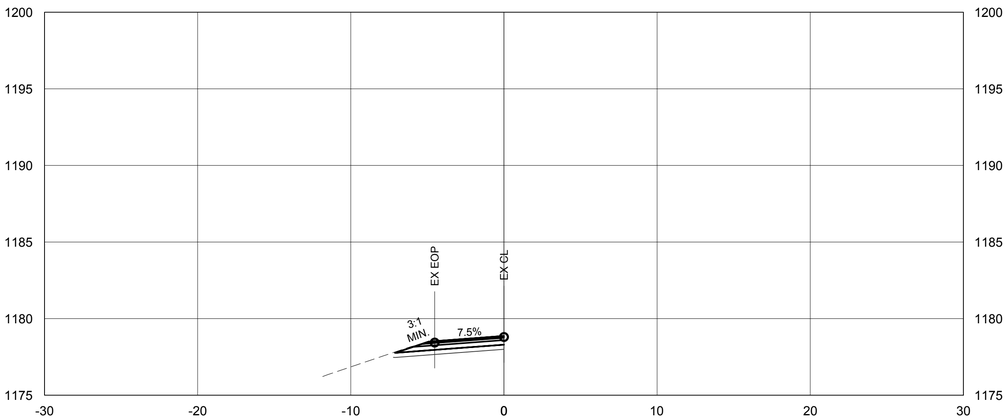
Drawing Set No./Nº de série du dessin: 60570877–C5



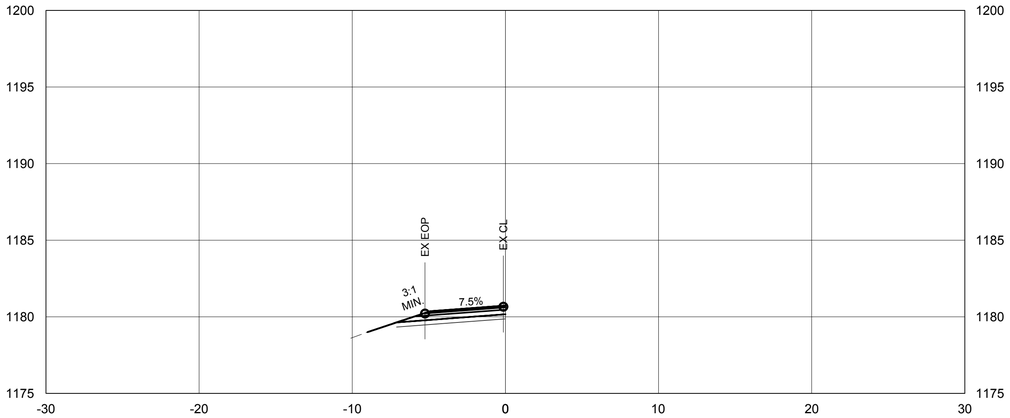
83+460



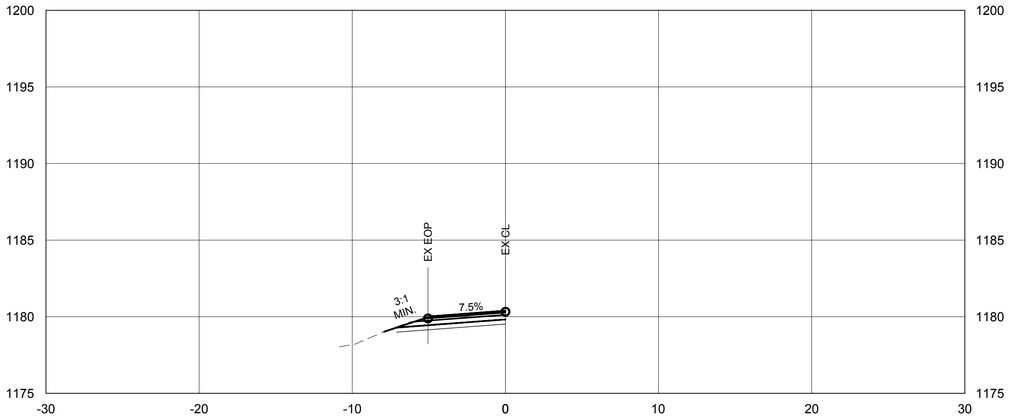
83+440



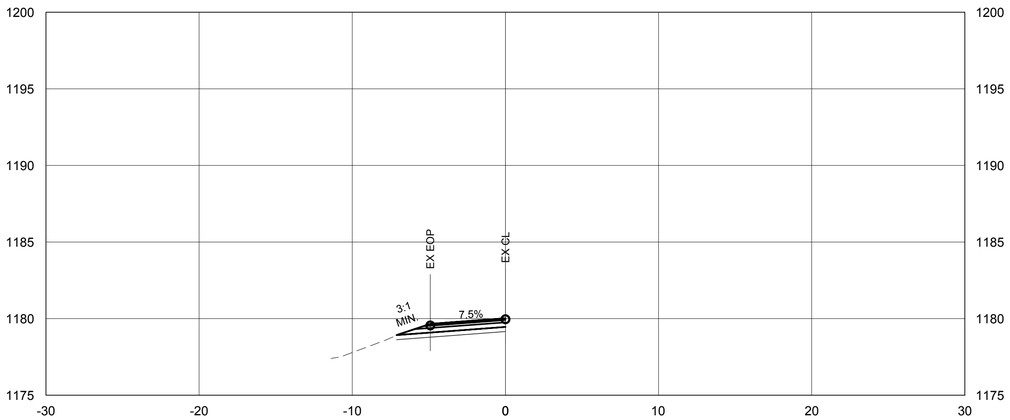
83+420



83+520



83+500



83+480

This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that modifies this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from stated dimensions.

LEGEND:

ORIGINAL GROUND

FINISHED GROUND

SUBCUT

FOR INFORMATION ONLY

No.	Date	Description	Drawn by Dessiné par	Approved Approuvé
0	19.03.20	ISSUED FOR TENDER	DM	RL

Revision / Revision

Detail number / A Numéro de detail

Sheet number / B Numéro de la feuille

Linear dimensions in millimetres / Dimensions linéaires en millimètres

Consultant's Name / Nom de l'expert-conseil

AECOM

Eng. Stamp / Sceau de l'ingénieur

Parks Canada / Parcs Canada

Asset Management Western and Northern Region / Gestion des biens Région de l'Ouest et du Nord

Canada

Project title/Titre du projet

HIGHWAY 93 SOUTH
BANFF–WINDERMERE HIGHWAY
PAVING AND SAFETY
IMPROVEMENTS
KOOTENAY NATIONAL PARK

Drawing title/Titre du dessin

CROSS SECTIONS
ROAD STRENGTHENING
STA 83+420 TO STA 83+520

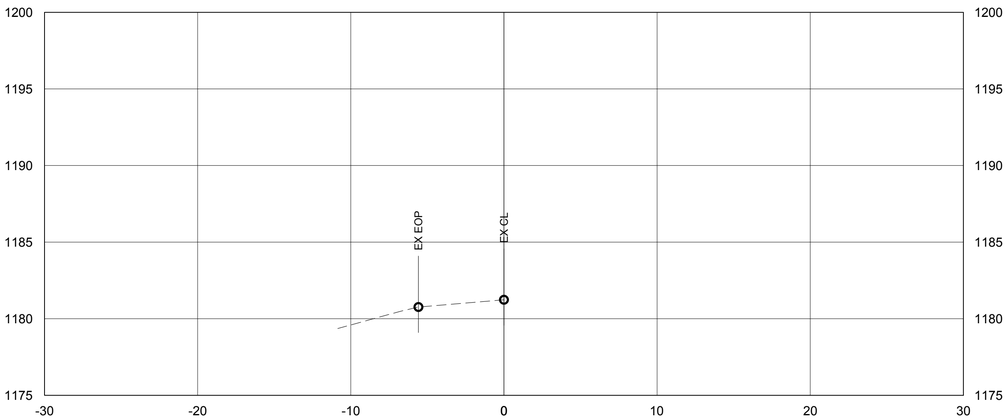
Surveyed by/Arpenté par	Drawn by/Dessiné par	Date
DD	DM	2019/03/20
Designed by/Concept par	Reviewed by/Revisé par	Scale/Échelle
RL	BAS	0 5m

Client Acceptance/Acceptation du client — Date

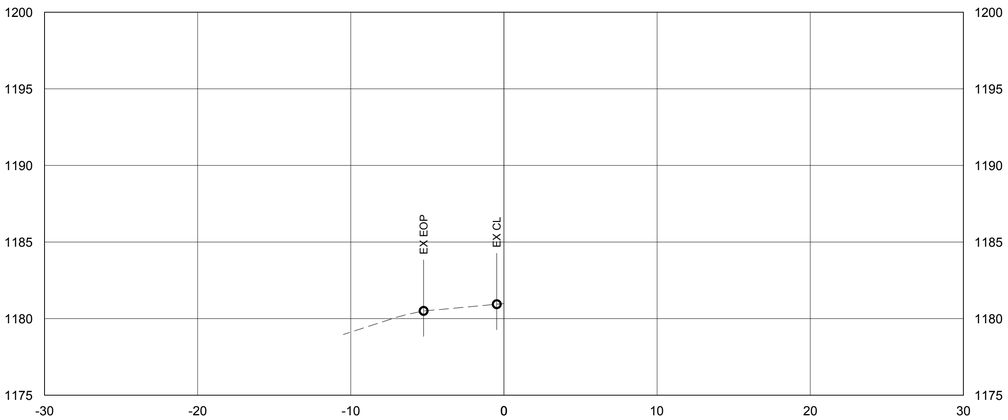
Approved by/Approuvé par — Date

Project No./Nº du projet	Asset No./Nº du bien	Sheet No./ Nº de la feuille
67309	#	XS02

Drawing Set No./Nº de série du dessin: 60570877–C1



83+560



83+540

This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that modifies this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from stated dimensions.

LEGEND:

ORIGINAL GROUND – – – – – –

FINISHED GROUND ————

SUBCUT ————

FOR INFORMATION ONLY

No.	Date	Description	Drawn by Dessiné par	Approved Approuvé
0	19.03.20	ISSUED FOR TENDER	DM	RL

Revision / Revision

A/B Detail number / Sheet number — A Numéro de detail / B Numéro de la feuille

Linear dimensions in millimetres — Dimensions linéaires en millimètres

Consultant's Name / Nom de l'expert-conseil: AECOM

Eng. Stamp / Sceau de l'ingénieur

Parks Canada — Asset Management Western and Northern Region

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

Canada

Project title/Titre du projet

HIGHWAY 93 SOUTH
BANFF–WINDERMERE HIGHWAY
PAVING AND SAFETY
IMPROVEMENTS
KOOTENAY NATIONAL PARK

Drawing title/Titre du dessin

CROSS SECTIONS
ROAD STRENGTHENING
STA 83+540 TO STA 83+560

Surveyed by/Arpenté par	Drawn by/Dessiné par	Date
DD	DM	2019/03/20
Designed by/Concept par	Reviewed by/Revisé par	Scale/Echelle
RL	BAS	0 5m

Client Acceptance/Acceptation du client — Date

Approved by/Approuvé par — Date

Project No./Nº du projet	Asset No./Nº du bien	Sheet No./ Nºde la feuille
67309	#	XS03

Drawing Set No./Nº de série du dessin: 60570877–C1