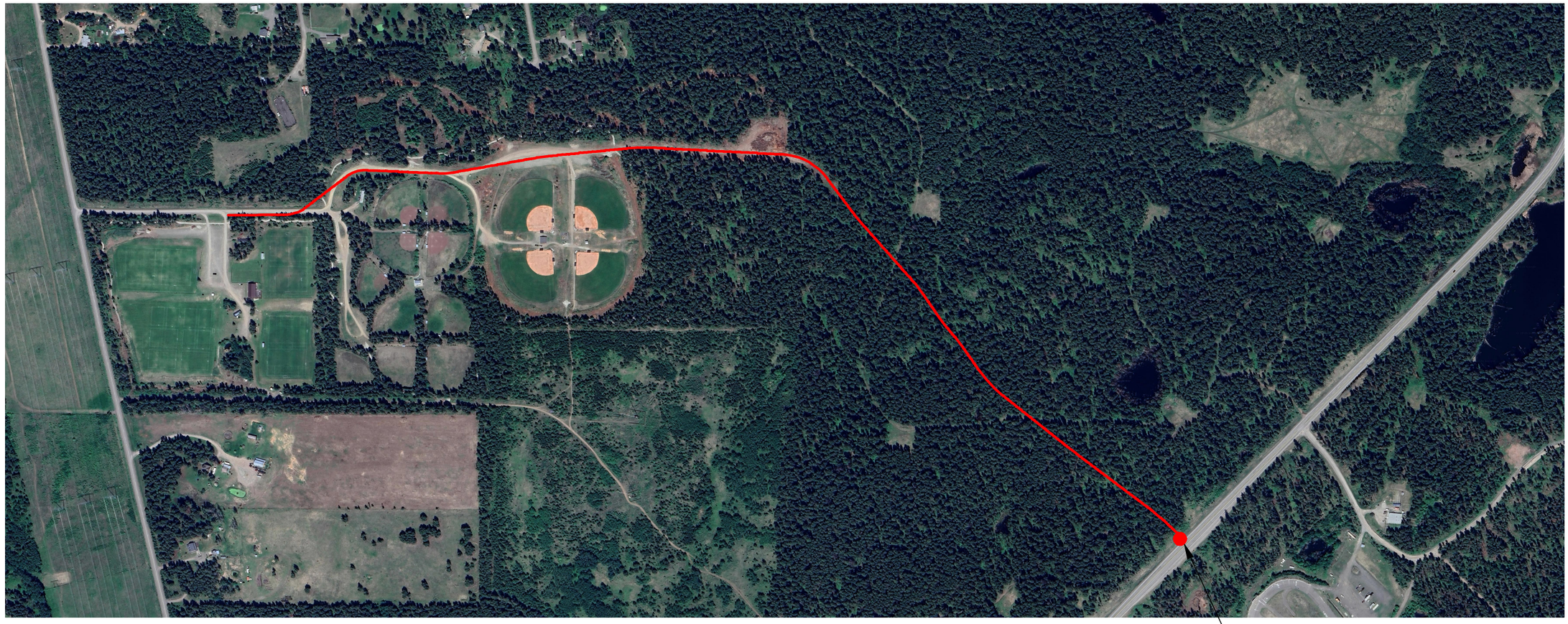
EslerSports Complex Access Project
Geometric Design
0+000.000m TO 1+173.000m



Design Revisions				
Rev. #	Date	Designer	Approved By	Description
1	04/21/26	EF	DT	ADDITIONAL NOTES AS PER MOTT REVIEW

Plot Date: 26/05/06 | Page 1 of 30

PERMIT TO PRACTICE # 1003087

EslerSports Complex Access Project
Geometric Design
0+000.000m TO 1+173.000m

CRP: Darron Campbell, Manager of Community Services	DWG#: 134-007-001
Design By: Edward Folk, P.Eng., RFT	Design Date:
Reviewed By: Daryl Taylor, P.Eng, RPF	Geotechnical Specialist: SoilTech Consulting Ltd.

Cariboo Regional District

Prepared By:

CELTIC ENGINEERING LTD

EslerSports Complex Access Project
Geometric Design
0+000.000m TO 1+173.000m

Prepared By: CELTIC ENGINEERING LTD

Plot Date: 26/05/06 | Page 2 of 30 | Design File Name: D:\Projects 2025\134-007 Esler Access Road 2025\134-007-002 Esler Gravel Road Upgrade\134-007-001 Esler Road Design NH Aug 1-EF6.dsnx

ROAD DESIGN STANDARDS

MOTT Area:	Road Name:	Design Life:	Paving Class:	Road Class:
Cariboo Chilcotin - Williams Lake	WILKIE ROAD	20 Years	C	RURAL LOCAL UNDIVIDED (RLU)

[1]DESIGN CRITERIA

Road Classification

Lane Configuration:	Double
Standard Lane Width (m):	3.6
Design Speed (km/hr):	50

Driver Limit

Reaction Time (s):	2.5
Eye Height (r	1.08
Object Heigl	0.6

Design Vehicle

Loading:	BCL-625
Side Tracking:	WB-20/I-BUS

Curve Widening for Curves

Widening to Inside (m):	Variable
Transition Length (m):	20.0
Transition Factor:	1.0

Geometric Criteria

Sight Stopping Distance (SSD)-no passing allowed (m)	65.0	Sustained Adverse Grade (%):	-7
Minimum Horizontal Curve Radius (m):	100.0	Sustained Favourable Grade (%):	7
Maximum Offset from P-Line to L-Line (m):	N/A	Short Pitch Adverse Grade < 100m (%):	-11
Mimimum Tangent length for Bridge Approaches (m):	5.0	[3]Short Pitch Favourable Grade < 100m (%):	11
Minimum Vertical Sag Curve K:	13.0	Maximum Adverse Switchback Gradient (%):	N/A
Minimum Vertical Crest Curve K:	7.0	Maximum Favourable Switchback Gradient (%):	N/A

Clear Zone not applicable due to 2:1 fill slopes; however, utility pole offset is applied to right-of-way clearing.

Ground Types

Subsurface Layers	[4]Shrink/Swell Factors	Cut (H:V)	Fill (H:V)
GR, Gravel	1.0	1 1/2:1	1 1/2:1
SA, Sand	1.05	1 1/2:1	2:1
SS, Silty Sandy Till	0.9	1:1	1 1/4:1
FR, Fractured Rock	0.85	1/2:1	1 1/2:1
SR, Solid Rock	0.75	1/4:1	1 1/4:1
Cl, Clay	1.12	2:1	2:1
Si, Silt	1.15	2:1	2:1
SG, Sandy Gravels	1.0	1 1/2:1	1 1/2:1
OB, Overburden	2.0	1:1	1:1
SGSB	1.0		2:1
WGB	1.0		2:1

Road Prism, Clearing, and Drainage Details

[5]Clearing (m)

Left		Right	
Min. C/L Offset (m)	Min. Slope Stake (m)	Min. C/L Offset (m)	Min. Slope Stake (m)
12.5	3	12.5	3

Stripping

Depth (m)	Stripping Depth to Match Depth of Overburden varies from 0.1m to 0.3m
Offset from Slope Stake (m)	Left 0.3
	Right 0.3

Finished Running Surface

Seasonality:	All Weather
Surfacing Depth (m):	0.1
Road Crown Gradient (%):	-2
Surfacing Material:	ACP=75mm
Surfacing Fill Angle (H:V):	1.5:1

Ditching

Depth Below Subgrade (m):	0.9
Width (m):	1
Inside Slope (H:V):	2:1

Debris Disposal

Method	From Station (m)	To Station (m)
End Haul	**0+000 TO 0+095**	**1+1173**
End Haul	**0+360 TO 0+420**	**1+173**
End Haul	**0+840 TO 0+860**	**1+173**

Daylighting

Left (m):	3.0
Right (m):	3.0

Turnouts

Length (m):	N/A
Taper (m):	N/A
Total Surface Width (m)	N/A

Cross Drains

Minimum Diamter (mm):	600
Minimum Gradient (%):	2
Rip Rap inlet/outlet:	As Required

Material Movement Parameters

Free Haul (m):	75.0
Over Haul (m):	100.0
End Haul (m):	>150

1-Design criteria references the most recent versions of the MoTT BC Sepplement to the TAC Geometric Design Guide (2019) and the TAC Geometric Design Guide for Canadian Roads (2017). Geometric criteria is based on road class. Where the designer wishes to extend beyond the design criteria, the BCTS representative associated with the road must be consulted.
2-Tracking assessment is required on complex S-curves, where the design vehicle does not have an opportunity to approach the curve in a straight line direction, and at intersections.
3-Shrink/Swell factors apply to fill for roads designed with bank volume.
4-Clearing limits are based on road class and slope limits.
5-Sub-base and base material

Cariboo Regional District

Prepared By:

CELTIC ENGINEERING LTD

Plan Legend

- L-line Location
- P-line Location
- Cut/Fill Limits
- Plan Road Edges
- Clearing Limits
- Reference Tree
- Culverts
- Bridge Abutment

Profile Legend

- Finished Grade
- Subgrade
- Topography
- OB Overburden-Stripping
- Soil Layer 1
- Soil Layer 2
- Ditch Bottom Right
- Ditch Bottom Left
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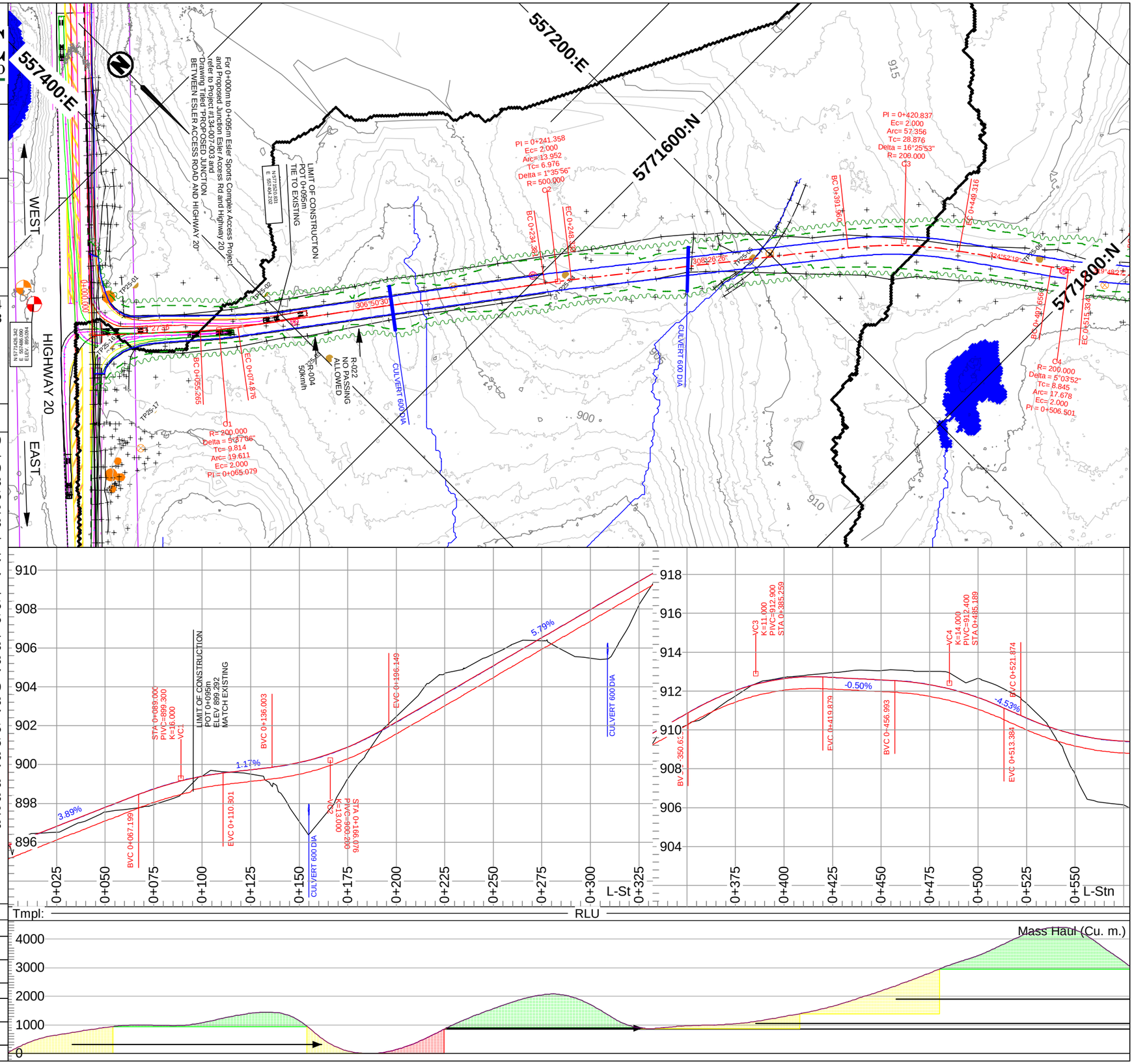
- Bridge Abutment

L-Stn m.	Cul DIA mm.	Cul Len m.	Cul Skew deg.	Inlet Z m.	Outlet Z m.
0+154.966	600	23.000	90.00	897.862	896.714
0+308.853	600	23.000	98.00	906.137	904.988

L-Stn m.	Strip V. Cu. m.	SG Cut V. Cu. m.	SG Fill V. Cu. m.	ACP Vol. Cu. m.	WGB Vol. Cu. m.	SGSB Vol Cu. m.	Strip A. Sq. m.
0+000.000	91.55	591.75	9.74	228.99	221.08	69.90	7.49
0+020.000	50.44	225.38	0.00	104.74	96.90	28.53	2.74
0+040.000	45.18	172.86	0.11	94.86	87.17	25.32	2.39
0+060.000	38.23	33.57	36.32	86.14	78.51	22.44	1.98
0+080.000	38.48	122.58	27.78	76.00	64.06	17.96	1.85
0+100.000	42.57	282.26	0.00	71.96	48.71	13.80	2.12
0+120.000	36.08	99.63	40.62	71.98	48.72	13.80	2.13
0+140.000	42.65	0.00	798.34	71.98	48.72	13.80	1.64
0+160.000	40.70	0.00	594.02	71.98	48.72	13.80	2.41
0+180.000	36.71	148.62	33.38	71.98	48.72	13.80	1.57
0+200.000	47.28	555.56	0.00	71.88	48.69	13.80	2.17
0+220.000	48.90	626.05	0.00	71.67	48.63	13.80	2.44
0+240.000	45.77	481.76	0.00	71.65	48.63	13.80	2.35
0+260.000	41.27	283.37	2.61	71.85	48.68	13.80	2.25
0+280.000	37.52	8.82	372.49	71.98	48.72	13.80	1.81
0+300.000	42.63	0.00	734.13	71.98	48.72	13.80	2.13
0+320.000	36.01	65.75	130.27	71.98	48.72	13.80	1.83
0+340.000	37.71	81.42	7.39	71.98	48.72	13.80	1.77
0+360.000	35.72	90.16	8.40	71.85	48.68	13.80	1.69
0+380.000	40.34	219.56	0.00	71.65	48.63	13.80	1.93
0+400.000	43.15	274.72	0.00	71.56	48.60	13.80	2.07
0+420.000	47.65	413.47	0.00	71.56	48.60	13.80	2.25
0+440.000	46.54	453.80	0.00	71.64	48.62	13.80	2.36
0+460.000	47.59	524.43	0.00	71.86	48.69	13.80	2.38
0+480.000	43.32	477.79	0.00	71.71	48.64	13.80	2.37
0+500.000	46.67	617.53	0.00	71.56	48.60	13.80	2.23
0+520.000	42.19	363.64	0.30	71.55	48.60	13.80	2.33
0+540.000	38.25	7.10	488.54	71.57	48.61	13.80	1.82
0+560.000	45.68	0.00	981.86	71.74	48.65	13.80	2.33
0+580.000							
Pg. Tot.	1276.78	7221.58	4266.30	2313.83	1715.74	495.35	
Cum. Tot.	1276.78	7221.58	4266.30	2313.83	1715.74	495.35	



PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — E. D. FOLK # 35587

26/05/2006

PERMIT TO PRACTICE # 1003087

EslerSports Complex Access Road

Station: 0+000.000 to 0+578.000

Plan Scale 1:2000

Profile Vert Scale 1:200

Profile Horz Scale 1:2000

Plot Date: 26/05/06

Cariboo Regional District

Prepared By:

CELTIC ENGINEERING LTD

Plan Legend

- L-line Location
- P-line Location
- Cut/Fill Limits
- Plan Road Edges
- Clearing Limits
- Reference Tree
- Culverts
- Bridge Abutment

Profile Legend

- Finished Grade
- Subgrade
- Topography
- OB Overburden-Stripping
- Soil Layer 1
- Soil Layer 2
- Ditch Bottom Right
- Ditch Bottom Left
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- Bridge Abutment

L-Stn m.	Cul DIA mm.	Cul Len m.	Cul Skew deg.	Inlet Z m.	Outlet Z m.
0+582.253	800	23.000	90.00	906.535	906.075
0+729.115	600	27.000	110.00	914.194	912.846
0+825.985	600	18.000	109.09	924.487	924.384
0+944.795	600	17.000	110.00	929.724	929.554

L-Stn m.	Strip V. Cu. m.	SG Cut V. Cu. m.	SG Fill V. Cu. m.	ACP Vol. Cu. m.	WGB Vol. Cu. m.	SGSB Vol Cu. m.	Strip A. Sq. m.
0+540.000	38.25	7.10	488.54	71.57	48.61	13.80	1.82
0+560.000	45.68	0.00	981.86	71.74	48.65	13.80	2.33
0+580.000	44.02	0.00	890.23	71.85	48.68	13.80	2.30
0+600.000	39.92	1.30	495.55	71.62	48.62	13.80	2.15
0+620.000	43.08	48.48	218.15	71.60	48.61	13.80	2.18
0+640.000	40.33	123.25	80.95	71.79	48.67	13.80	2.10
0+660.000	36.38	115.35	17.37	71.96	48.71	13.80	1.92
0+680.000	35.05	36.41	92.89	71.98	48.72	13.80	1.77
0+700.000	37.93	0.00	442.80	71.98	48.72	13.80	1.62
0+720.000	49.51	0.00	1056.49	71.97	48.72	13.80	2.23
0+740.000	49.41	0.00	1085.40	71.82	48.67	13.80	2.60
0+760.000	41.06	46.86	409.62	71.62	48.62	13.80	2.33
0+780.000	50.25	741.67	0.53	71.68	48.64	13.80	2.15
0+800.000	57.78	1181.95	0.00	71.89	48.69	13.80	2.81
0+820.000	57.33	977.64	0.00	71.94	48.71	13.80	3.00
0+840.000	46.13	481.11	0.00	71.75	48.65	13.80	2.44
0+860.000	41.24	276.93	0.00	71.58	48.61	13.80	2.20
0+880.000	34.69	99.32	9.08	71.56	48.60	13.80	1.74
0+900.000	50.30	43.15	22.20	71.56	48.60	13.80	1.66
0+920.000	94.71	1.95	130.75	68.61	48.82	13.22	5.04
0+940.000	97.16	0.00	248.36	46.78	50.27	8.97	4.93
0+960.000	82.97	0.00	141.79	24.16	51.40	4.60	4.53
0+980.000	71.55	3.04	39.97	5.09	47.98	0.96	3.74
1+000.000	91.78	27.60	9.11	0.00	42.00	0.00	4.51
1+020.000	94.84	41.13	7.15	0.00	42.00	0.00	4.61
1+040.000	97.43	80.24	0.06	0.00	42.00	0.00	4.80
1+060.000	107.19	201.74	0.00	0.00	42.00	0.00	5.20
1+080.000	99.20	109.68	0.00	0.00	42.00	0.00	5.15
1+100.000							
Pg. Tot.	1675.17	4645.90	6868.85	1508.10	1332.97	289.95	
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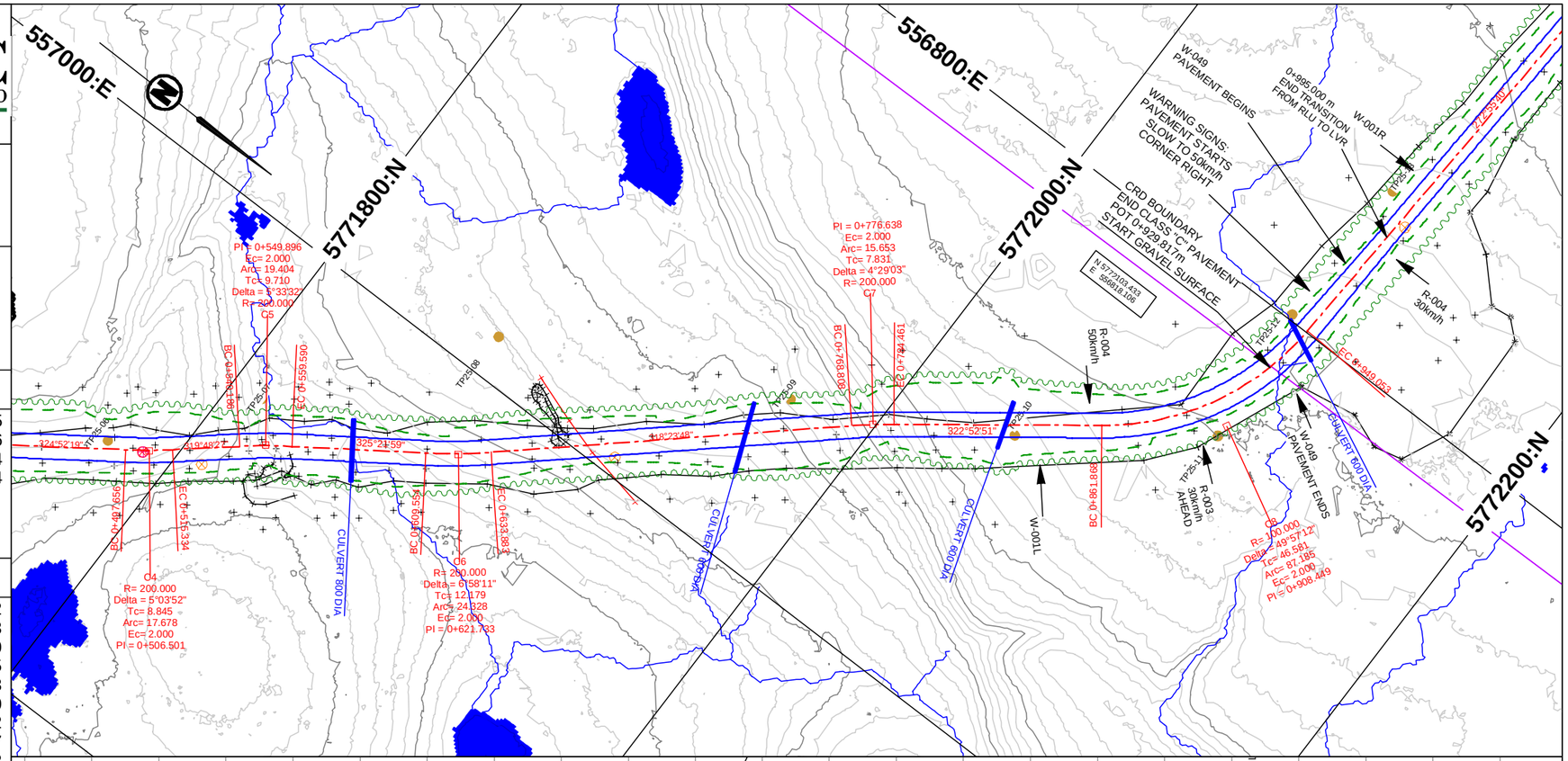

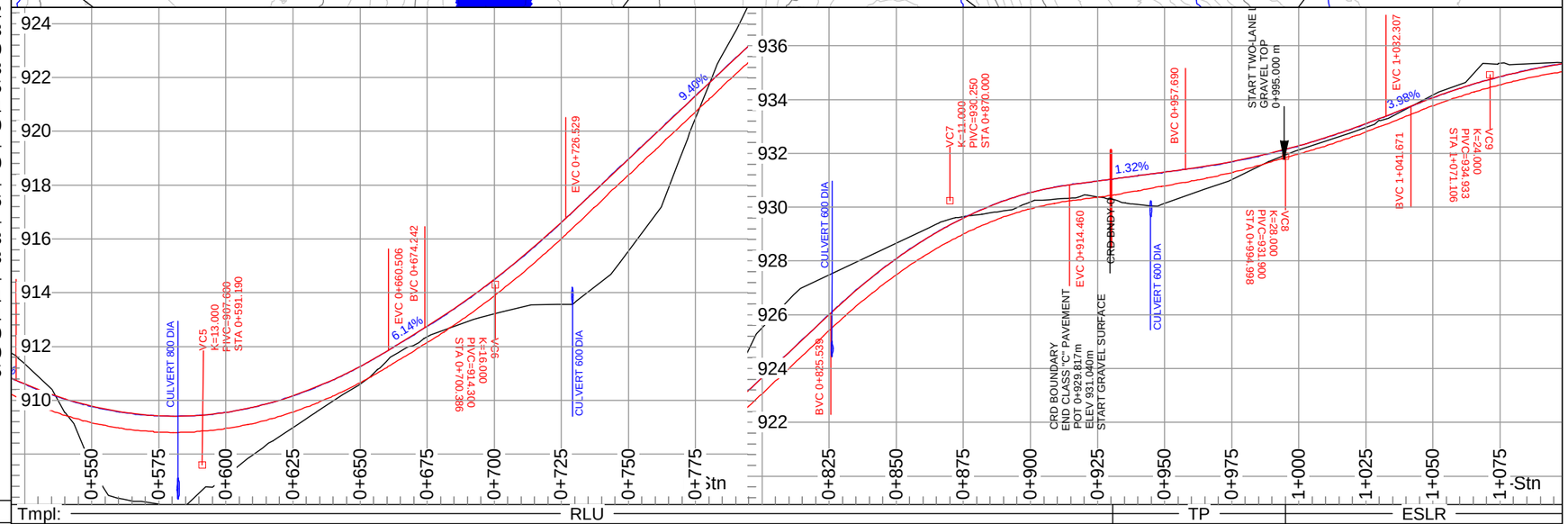

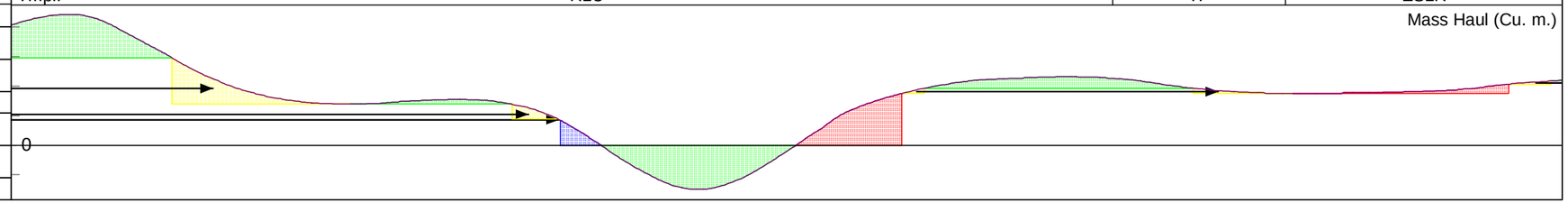

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — E. D. FOLK # 35587

26/05/2006

PERMIT TO PRACTICE # 1003087

EslerSports Complex Access Road

Station: 0+520.200 to 1+098.200

Plan Scale 1:2000

Profile Vert Scale 1:200

Profile Horz Scale 1:2000

Plot Date: 26/05/06

Cariboo Regional District

Prepared By:

CELTIC ENGINEERING LTD

Plan Legend

- L-line Location
- P-line Location
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- Plan Road Edges
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- Topography
- OB Overburden-Stripping
- Soil Layer 1
- Soil Layer 2
- Ditch Bottom Right
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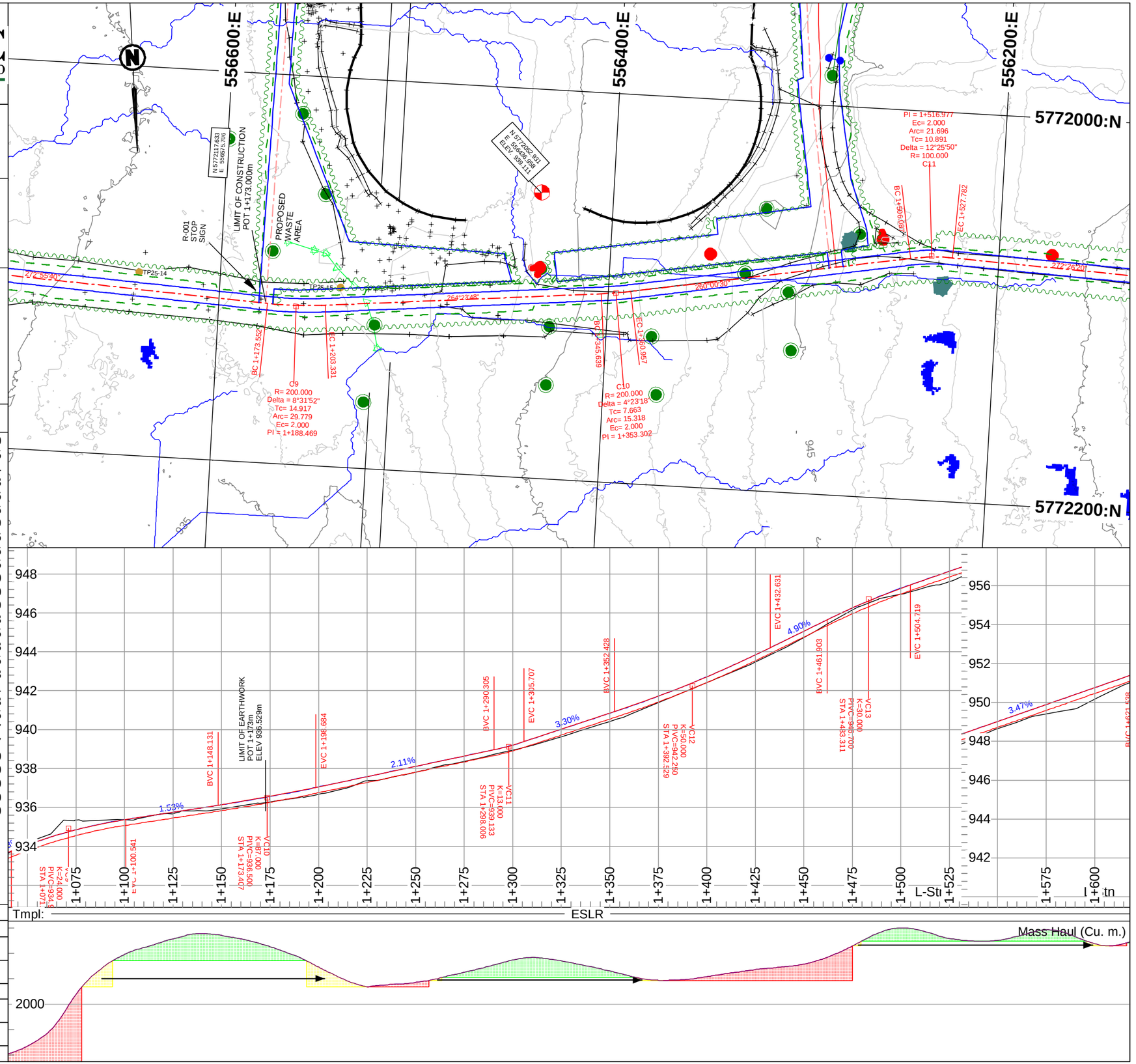
- Culverts
- Bridge Abutment

L-Stn m.	Strip V. Cu. m.	SG Cut V. Cu. m.	SG Fill V. Cu. m.	ACP Vol. Cu. m.	WGB Vol. Cu. m.	SGSB Vol Cu. m.	Strip A. Sq. m.
1+060.000	107.19	201.74	0.00	0.00	42.00	0.00	5.20
1+080.000	99.20	109.68	0.00	0.00	42.00	0.00	5.15
1+100.000	94.91	52.12	1.07	0.00	42.00	0.00	4.84
1+120.000	90.39	34.98	3.37	0.00	42.00	0.00	4.68
1+140.000	68.79	3.54	25.51	0.00	42.00	0.00	3.86
1+160.000	66.68	0.00	43.54	0.00	42.00	0.00	3.26
1+180.000	69.68	0.00	66.94	0.00	42.00	0.00	3.39
1+200.000	69.62	0.00	68.30	0.00	42.00	0.00	3.56
1+220.000	36.75	19.72	18.65	0.00	42.00	0.00	3.36
1+240.000	28.85	26.28	6.40	0.00	42.00	0.00	1.25
1+260.000	29.98	37.92	2.21	0.00	42.00	0.00	1.50
1+280.000	30.08	40.74	1.37	0.00	42.00	0.00	1.50
1+300.000	25.36	14.89	11.86	0.00	42.00	0.00	1.49
1+320.000	20.84	0.00	28.76	0.00	42.00	0.00	1.03
1+340.000	21.15	0.00	36.49	0.00	42.00	0.00	1.05
1+360.000	23.05	5.79	23.52	0.00	42.00	0.00	1.08
1+380.000	27.26	21.91	7.27	0.00	42.00	0.00	1.25
1+400.000	29.75	29.49	7.23	0.00	42.00	0.00	1.48
1+420.000	30.24	30.52	14.17	0.00	42.00	0.00	1.51
1+440.000	30.63	40.68	8.60	0.00	42.00	0.00	1.53
1+460.000	31.39	71.07	0.32	0.00	42.00	0.00	1.55
1+480.000	29.07	52.94	2.49	0.00	42.00	0.00	1.57
1+500.000	22.25	2.73	35.77	0.00	42.00	0.00	1.27
1+520.000	0.05	11.66	31.37	0.00	42.00	0.00	1.10
1+540.000	0.00	27.83	8.00	0.00	42.00	0.00	0.00
1+560.000	0.00	34.30	11.48	0.00	42.00	0.00	0.00
1+580.000	0.00	0.43	53.06	0.00	42.00	0.00	0.00
1+600.000	0.00	28.17	16.26	0.00	42.00	0.00	0.00
1+620.000							
Pg. Tot.	1083.16	899.13	534.01	0.00	1176.00	0.00	
Cum. Tot.	3744.79	12448.05	10198.78	3678.65	4043.49	757.71	



PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — E. D. FOLK # 35587

5/5/2026

PERMIT TO PRACTICE # 1003087

EslerSports Complex Access Road

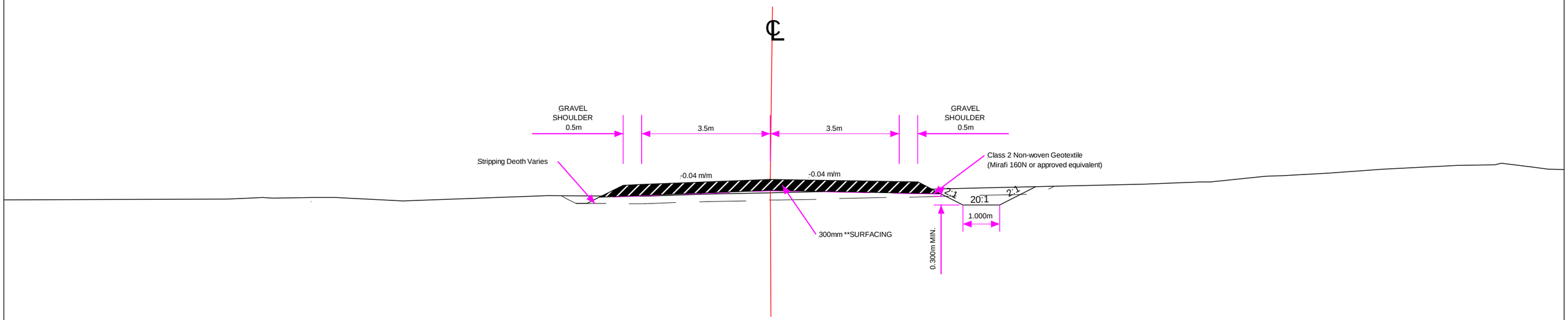
Station: 1+040.400 to 1+175.000

Plan Scale 1:2000

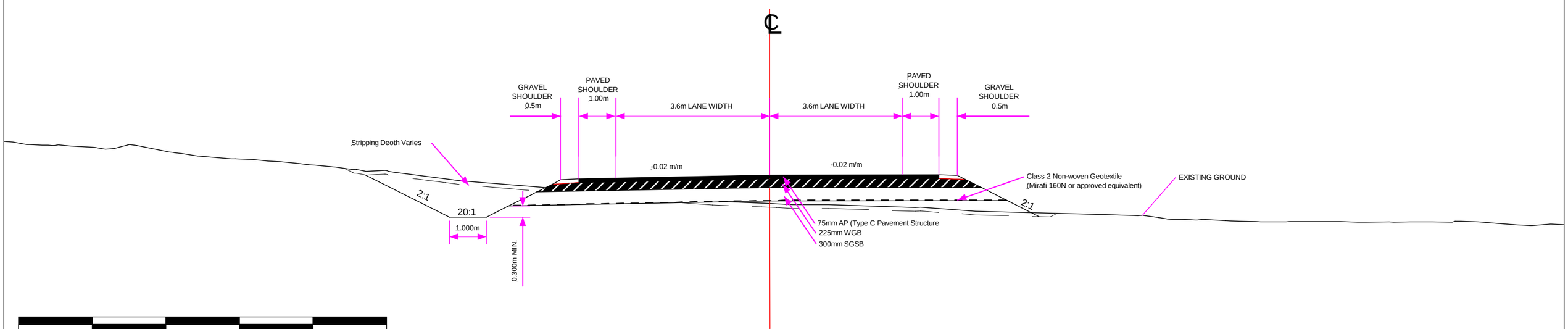
Profile Vert Scale 1:200

Profile Horz Scale 1:2000

Plot Date: 26/05/06



TWO-LANE LVR (LOW VOLUME ROAD)-GRAVEL TOP



RLU-RURAL LOCAL UNDIVIDED

0 10

Scale: 1:100

Design Revisions				
Rev. #	Date	Designer	Approved By	Description
1	04/21/26	EF	DT	ADDITIONAL NOTES AS PER MOTT REVIEW

Plot Date: 26/05/06 | Page 6 of 30

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — E. D. FOLK # 35587 — 04/15/2026

PERMIT TO PRACTICE # 1003087

EslerSports Complex Access Project
Geometric Design
0+000.000m TO 1+173.000m

TYPICAL CROSS SECTIONS

CRP: Darren Campbell, Manager of Community Services	DWG#: 134-007-001
Design By: Edward Folk, P.Eng., RFT	Design Date:
Reviewed By: Daryl Taylor, P.Eng, RPF	Geotechnical Specialist: SoilTech Consulting Ltd.

Cariboo Regional District

Prepared By: CELTIC ENGINEERING LTD

EslerSports Complex Access Project

Cariboo Regional District

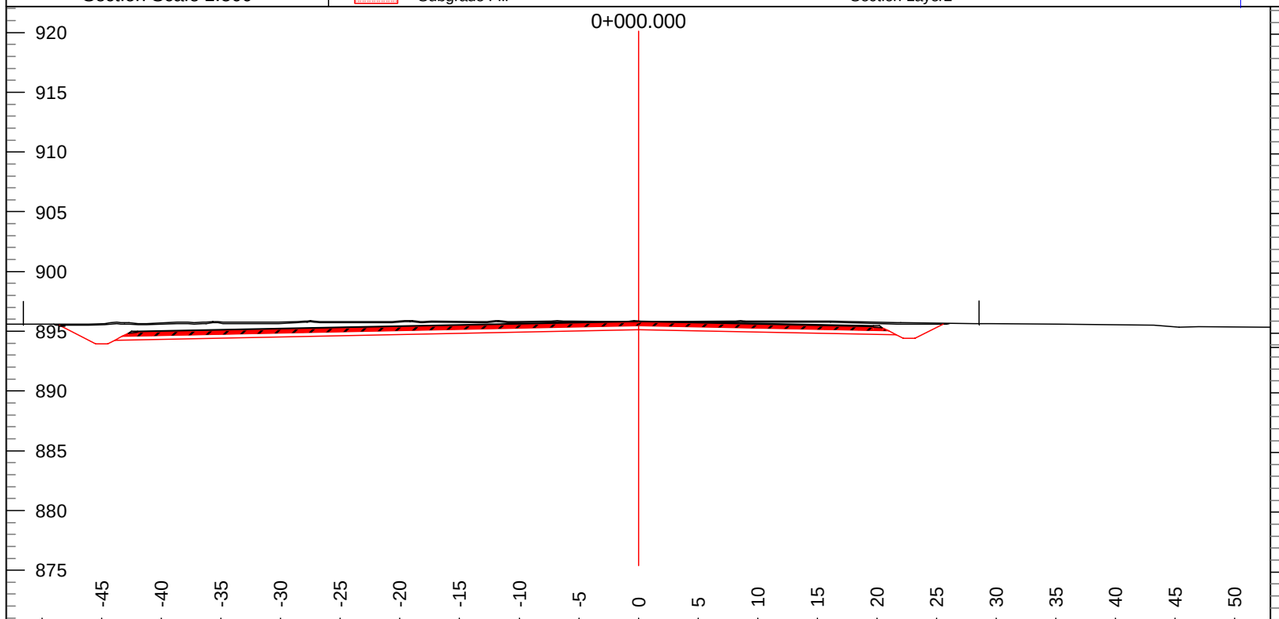
Section Scale 1:500

Section Legend

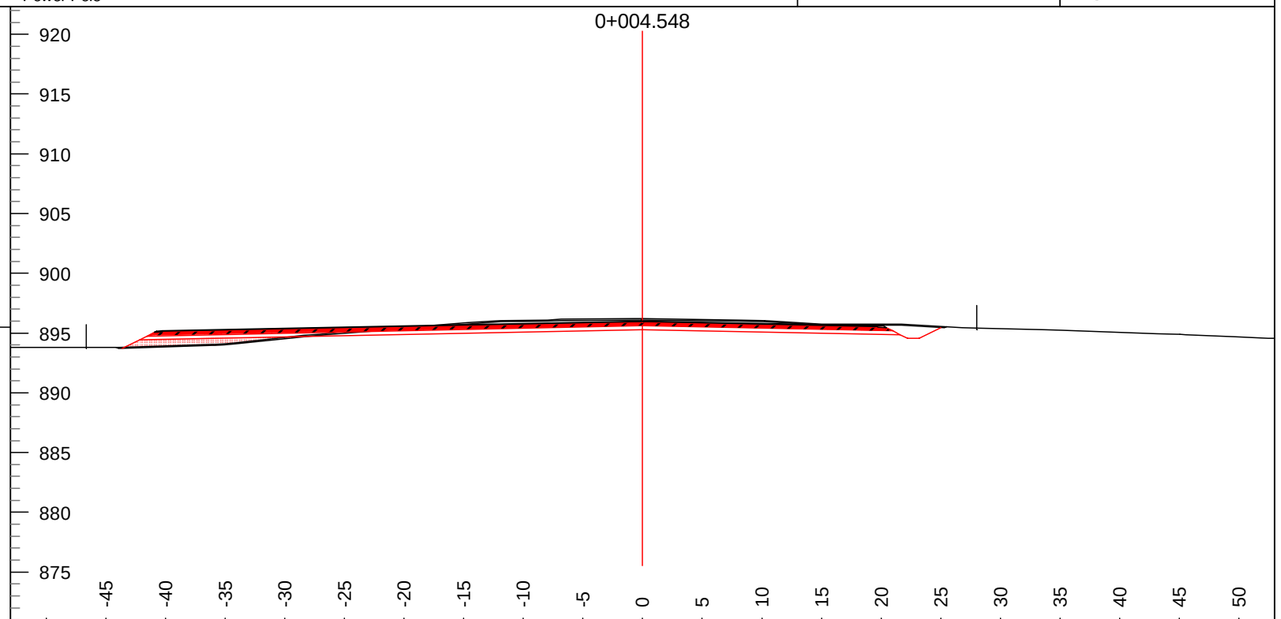
- Asphalt Surface
- WGB
- SGSB
- Subgrade Fill
- Subgrade Cut
- Section Topography
- Section Layer 1
- Section Layer2
- Stripping
- L-Centerline
- Culverts
- Power Pole
- Clearing Limit

Prepared By: CELTIC ENGINEERING LTD

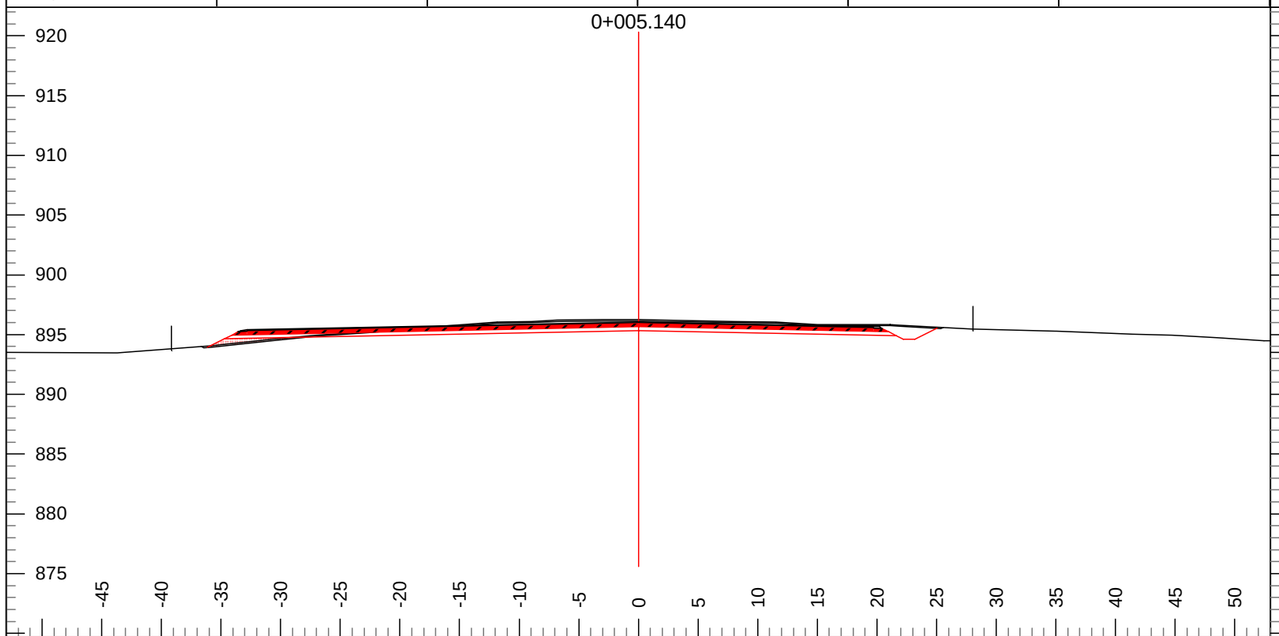
Plot Date: 26/05/06



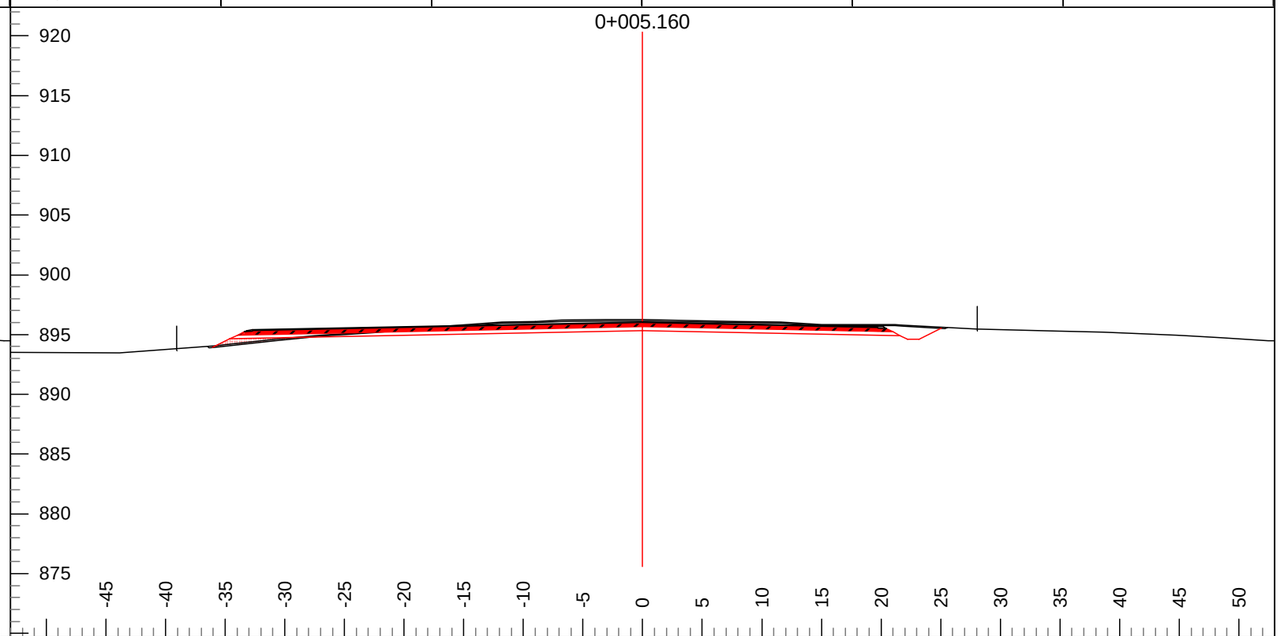
Field Ref:		L-Ssl:	-0.30%	Rd. Wd. L:	42.000	Rd. Wd. R:	19.700	L-Ssr:	0.15%	Cul DIA:	
Tmpl:	RLU	Stk L:	48.554	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	25.541	Cul Len L:	
H. Offset:	0.000	Stk L X:	-48.553	P-Stk L:	48.554	P-Stk R:	25.541	Stk R X:	25.540	Cul Fill:	
Cut Dp:	0.000	Stk L Y:	-0.361	P-Clr L:	51.554	P-Clr R:	28.540	Stk R Y:	-0.272	Cul Skew:	



Field Ref:		L-Ssl:	-1.38%	Rd. Wd. L:	40.240	Rd. Wd. R:	19.700	L-Ssr:	-1.62%	Cul DIA:	
Tmpl:	RLU	Stk L:	43.702	F Slope L:	-50.0%	F Slope R:	50.0%	Stk R:	25.021	Cul Len L:	
H. Offset:	0.000	Stk L X:	-43.631	P-Stk L:	43.690	P-Stk R:	25.016	Stk R X:	25.010	Cul Fill:	
Cut Dp:	0.207	Stk L Y:	-2.279	P-Clr L:	46.683	P-Clr R:	28.016	Stk R Y:	-0.537	Cul Skew:	



Field Ref:		L-Ssl:	-1.49%	Rd. Wd. L:	32.798	Rd. Wd. R:	19.700	L-Ssr:	-1.65%	Cul DIA:	
Tmpl:	RLU	Stk L:	36.241	F Slope L:	-50.0%	F Slope R:	50.0%	Stk R:	25.068	Cul Len L:	
H. Offset:	0.000	Stk L X:	-36.167	P-Stk L:	36.229	P-Stk R:	25.064	Stk R X:	25.059	Cul Fill:	
Cut Dp:	0.188	Stk L Y:	-2.119	P-Clr L:	39.232	P-Clr R:	28.065	Stk R Y:	-0.513	Cul Skew:	



Field Ref:		L-Ssl:	-1.49%	Rd. Wd. L:	32.675	Rd. Wd. R:	19.700	L-Ssr:	-1.65%	Cul DIA:	
Tmpl:	RLU	Stk L:	36.102	F Slope L:	-50.0%	F Slope R:	50.0%	Stk R:	25.070	Cul Len L:	
H. Offset:	0.000	Stk L X:	-36.029	P-Stk L:	36.091	P-Stk R:	25.066	Stk R X:	25.060	Cul Fill:	
Cut Dp:	0.187	Stk L Y:	-2.109	P-Clr L:	39.093	P-Clr R:	28.066	Stk R Y:	-0.512	Cul Skew:	

EslerSports Complex Access Project

Cariboo Regional District

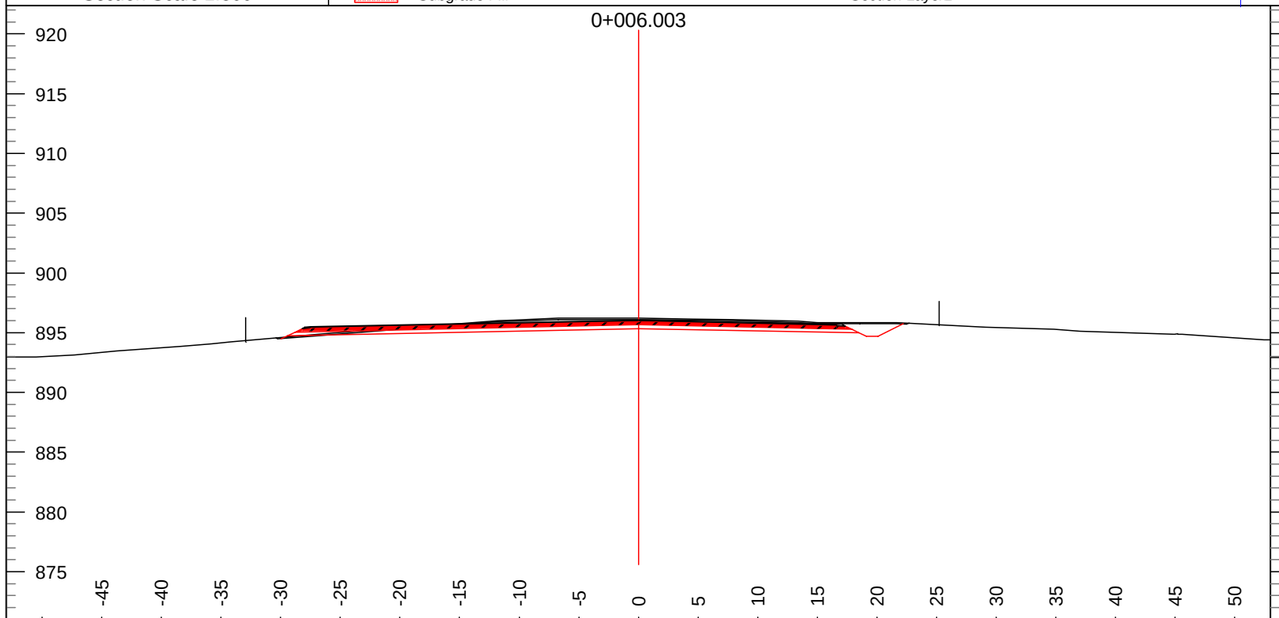
Section Scale 1:500

Section Legend

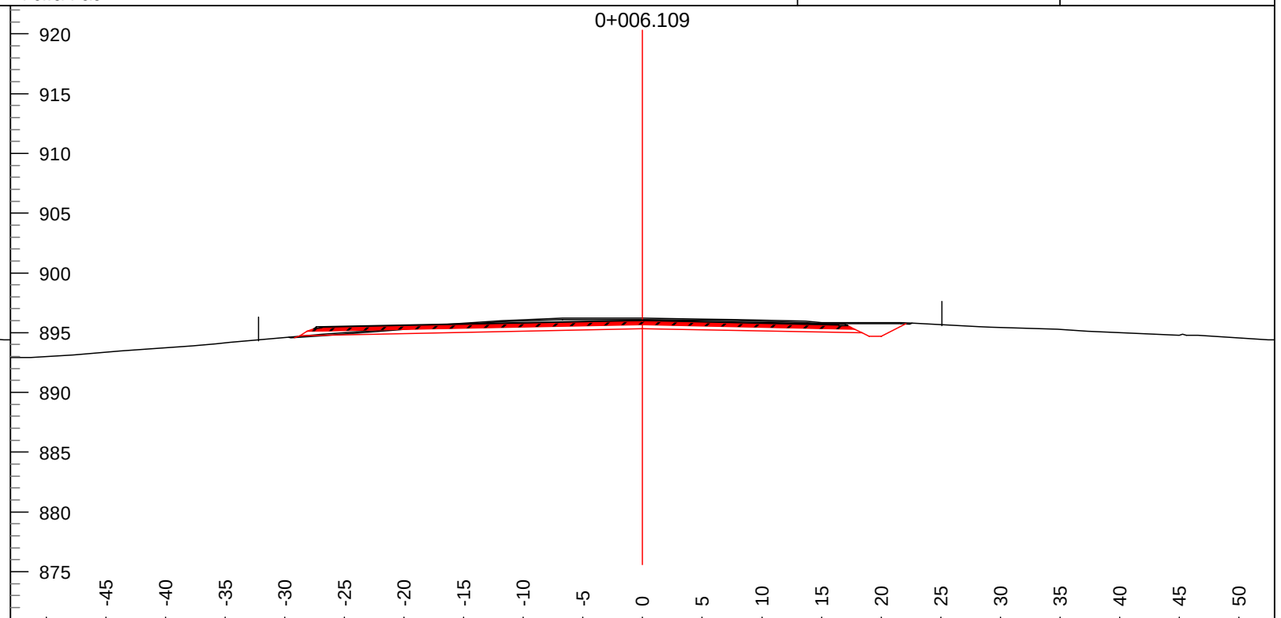
- Asphalt Surface
- WGB
- SGSB
- Subgrade Fill
- Subgrade Cut
- Section Topography
- Section Layer 1
- Section Layer2
- Stripping
- L-Centerline
- Culverts
- Power Pole
- Clearing Limit

Prepared By: CELTIC ENGINEERING LTD

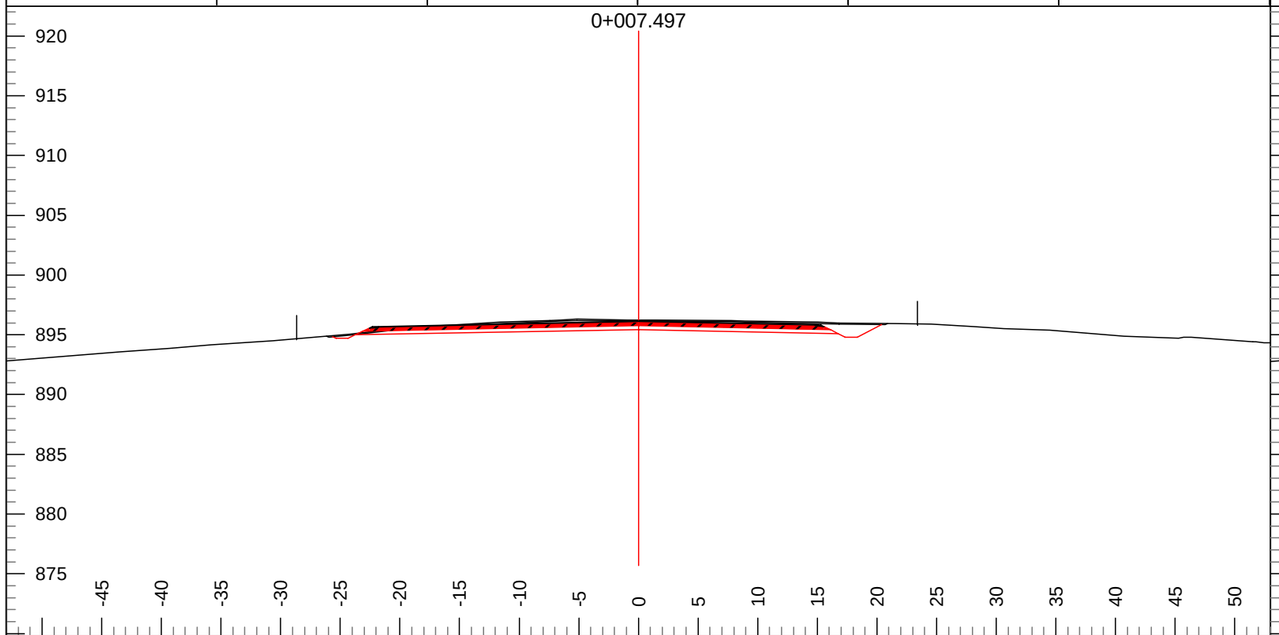
Plot Date: 26/05/06



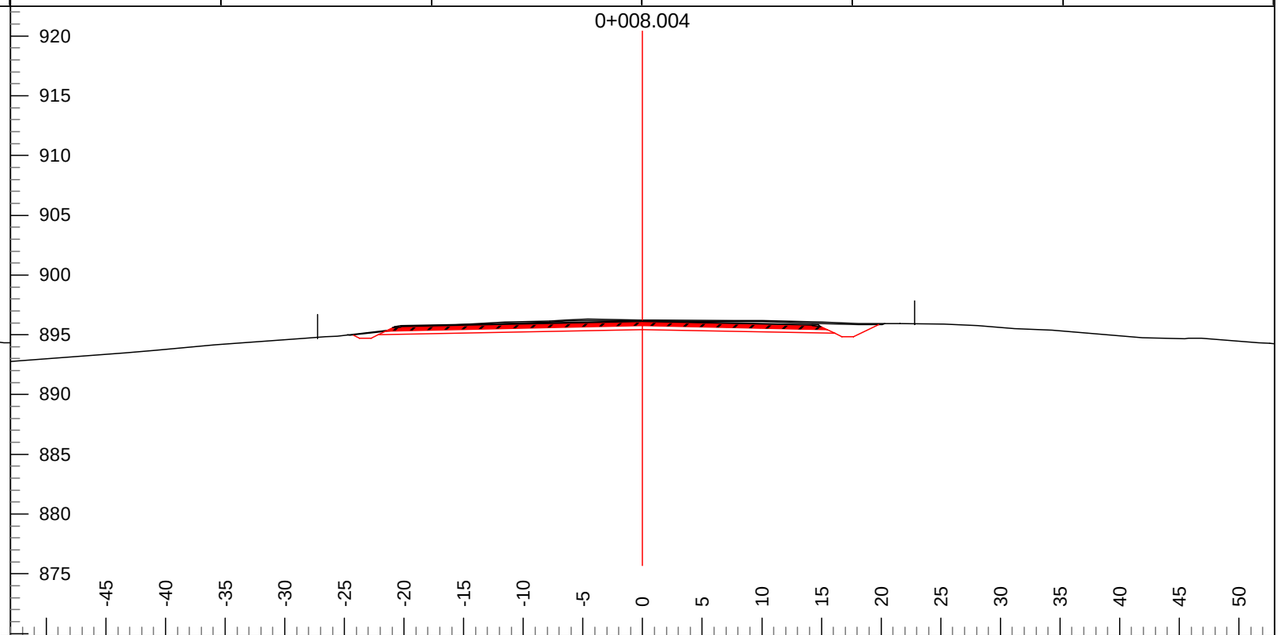
Field Ref:		L-Ssl:	-1.55%	Rd. Wd. L:	27.495	Rd. Wd. R:	16.600	L-Ssr:	-1.69%	Cul DIA:
Tmpl:	RLU	Stk L:	29.982	F Slope L:	-50.0%	F Slope R:	50.0%	Stk R:	22.219	Cul Len L:
H. Offset:	0.000	Stk L X:	-29.933	P-Stk L:	29.973	P-Stk R:	22.216	Stk R X:	22.214	Cul Fill:
Cut Dp:	0.160	Stk L Y:	-1.548	P-Clr L:	32.978	P-Clr R:	25.216	Stk R Y:	-0.323	Cul Skew:



Field Ref:		L-Ssl:	-1.53%	Rd. Wd. L:	26.845	Rd. Wd. R:	16.473	L-Ssr:	-1.69%	Cul DIA:
Tmpl:	RLU	Stk L:	29.241	F Slope L:	-50.0%	F Slope R:	50.0%	Stk R:	22.092	Cul Len L:
H. Offset:	0.000	Stk L X:	-29.195	P-Stk L:	29.233	P-Stk R:	22.089	Stk R X:	22.087	Cul Fill:
Cut Dp:	0.156	Stk L Y:	-1.491	P-Clr L:	32.237	P-Clr R:	25.090	Stk R Y:	-0.320	Cul Skew:



Field Ref:		L-Ssl:	-1.48%	Rd. Wd. L:	21.813	Rd. Wd. R:	14.808	L-Ssr:	-1.14%	Cul DIA:
Tmpl:	RLU	Stk L:	25.713	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	20.407	Cul Len L:
H. Offset:	0.000	Stk L X:	-25.675	P-Stk L:	25.708	P-Stk R:	20.406	Stk R X:	20.403	Cul Fill:
Cut Dp:	0.111	Stk L Y:	-1.304	P-Clr L:	28.712	P-Clr R:	23.405	Stk R Y:	-0.296	Cul Skew:



Field Ref:		L-Ssl:	-1.72%	Rd. Wd. L:	20.245	Rd. Wd. R:	14.200	L-Ssr:	-0.82%	Cul DIA:
Tmpl:	RLU	Stk L:	24.304	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	19.789	Cul Len L:
H. Offset:	0.000	Stk L X:	-24.269	P-Stk L:	24.298	P-Stk R:	19.787	Stk R X:	19.785	Cul Fill:
Cut Dp:	0.116	Stk L Y:	-1.191	P-Clr L:	27.303	P-Clr R:	22.786	Stk R Y:	-0.289	Cul Skew:

EslerSports Complex Access Project

Cariboo Regional District

Section Scale 1:500

Section Legend

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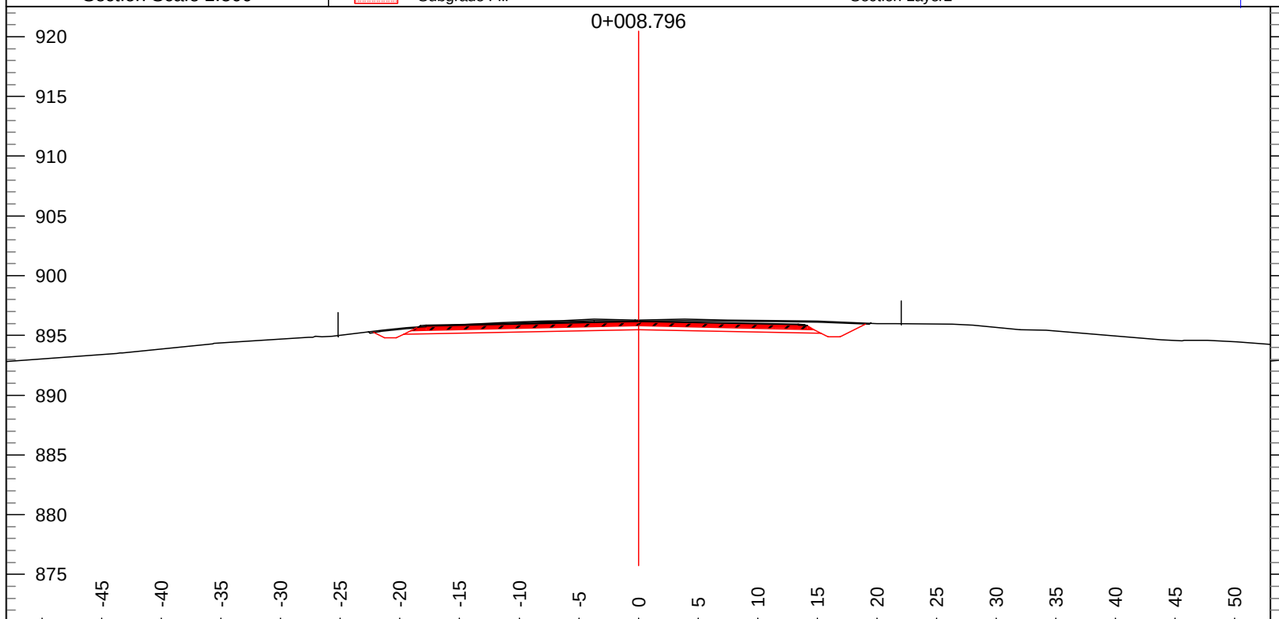
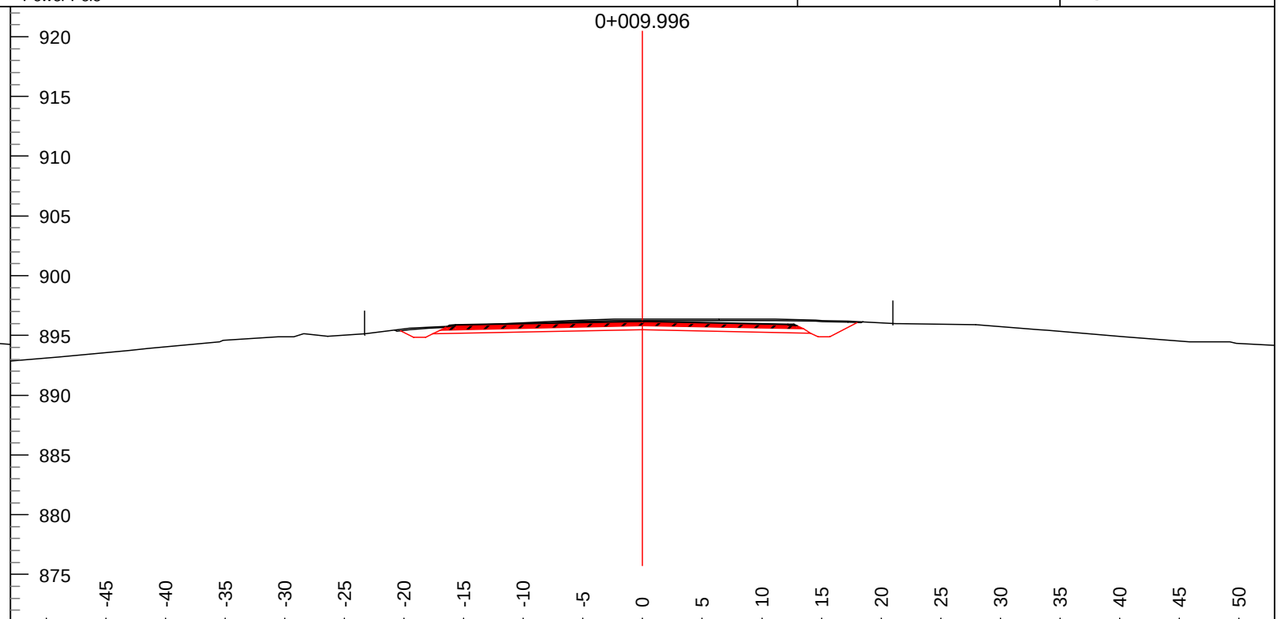
- Section Layer2
- Stripping
- L-Centerline
- Culverts
- Power Pole
- Clearing Limit

Prepared By: CELTIC ENGINEERING LTD

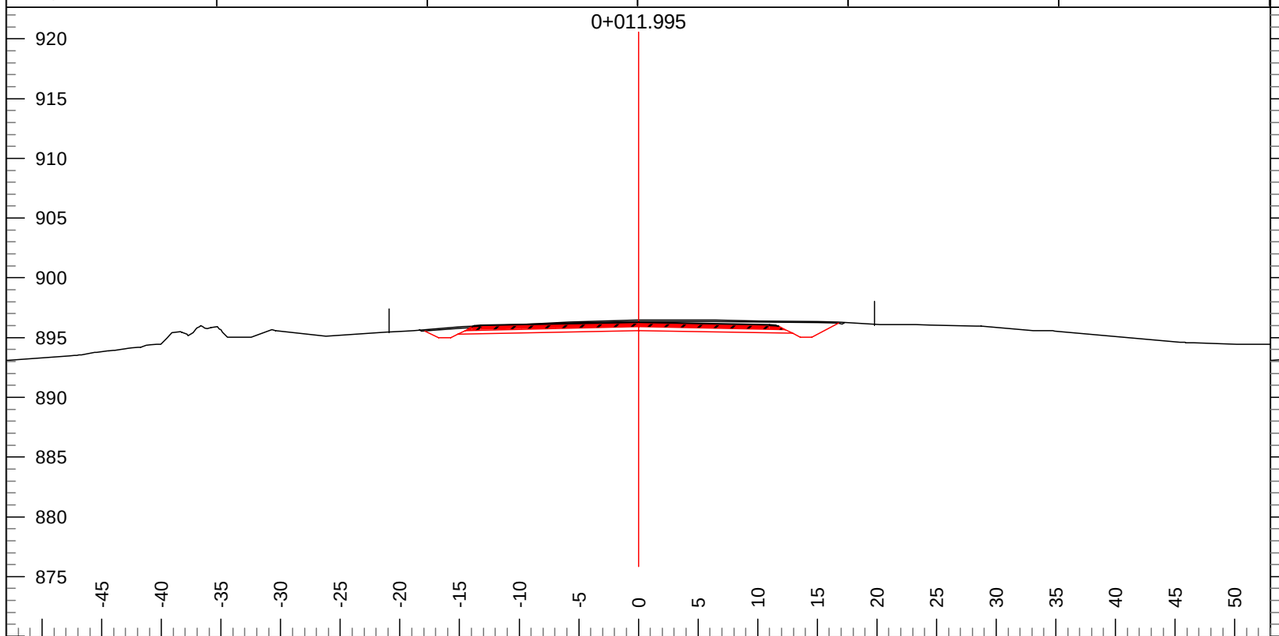
Plot Date: 26/05/06



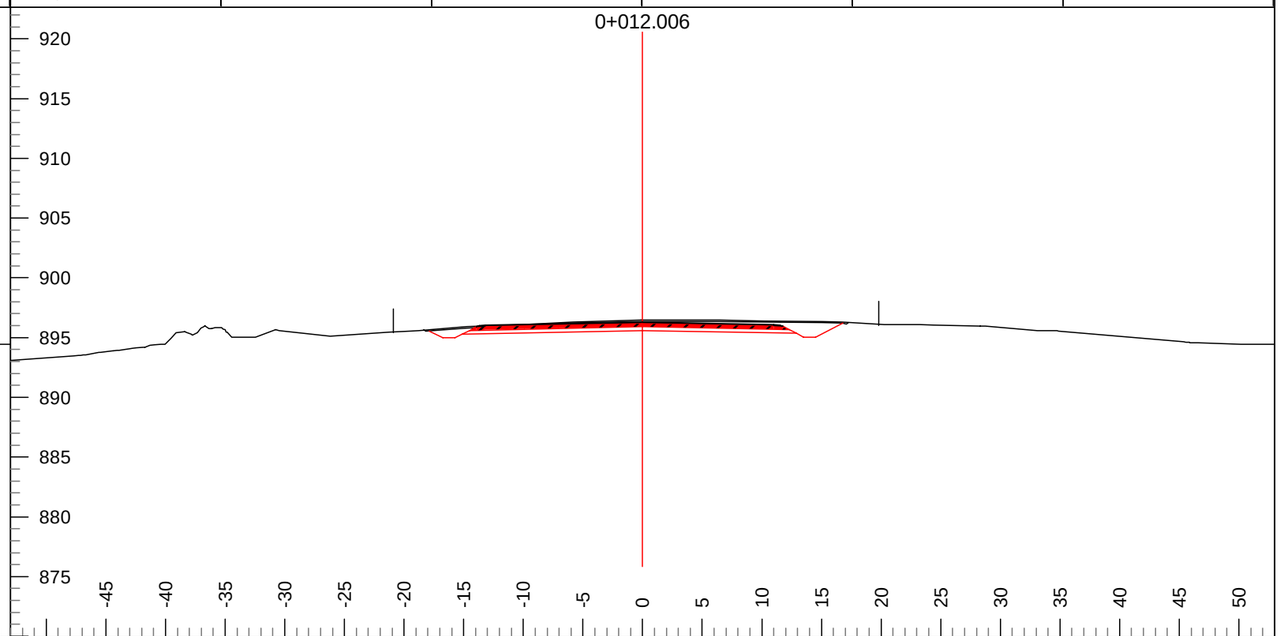
Field Ref:		L-Ssl:	-2.09%	Rd. Wd. L:	17.796	Rd. Wd. R:	13.404	L-Ssr:	-0.48%	Cul DIA:	
Tmpl:	RLU	Stk L:	22.224	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	19.035	Cul Len L:	
H. Offset:	0.000	Stk L X:	-22.198	P-Stk L:	22.219	P-Stk R:	19.033	Stk R X:	19.031	Cul Fill:	
Cut Dp:	0.124	Stk L Y:	-0.953	P-Clr L:	25.227	P-Clr R:	22.032	Stk R Y:	-0.253	Cul Skew:	



Field Ref:		L-Ssl:	-2.64%	Rd. Wd. L:	15.675	Rd. Wd. R:	12.200	L-Ssr:	-0.01%	Cul DIA:	
Tmpl:	RLU	Stk L:	20.316	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	18.010	Cul Len L:	
H. Offset:	0.000	Stk L X:	-20.294	P-Stk L:	20.310	P-Stk R:	18.009	Stk R X:	18.008	Cul Fill:	
Cut Dp:	0.134	Stk L Y:	-0.802	P-Clr L:	23.318	P-Clr R:	21.009	Stk R Y:	-0.138	Cul Skew:	



Field Ref:		L-Ssl:	-3.56%	Rd. Wd. L:	13.227	Rd. Wd. R:	11.007	L-Ssr:	-0.41%	Cul DIA:	
Tmpl:	RLU	Stk L:	17.910	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	16.799	Cul Len L:	
H. Offset:	0.000	Stk L X:	-17.889	P-Stk L:	17.904	P-Stk R:	16.797	Stk R X:	16.797	Cul Fill:	
Cut Dp:	0.152	Stk L Y:	-0.732	P-Clr L:	20.905	P-Clr R:	19.797	Stk R Y:	-0.123	Cul Skew:	



Field Ref:		L-Ssl:	-3.57%	Rd. Wd. L:	13.218	Rd. Wd. R:	11.000	L-Ssr:	-0.41%	Cul DIA:	
Tmpl:	RLU	Stk L:	17.901	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	16.792	Cul Len L:	
H. Offset:	0.000	Stk L X:	-17.879	P-Stk L:	17.894	P-Stk R:	16.790	Stk R X:	16.790	Cul Fill:	
Cut Dp:	0.152	Stk L Y:	-0.732	P-Clr L:	20.895	P-Clr R:	19.791	Stk R Y:	-0.123	Cul Skew:	

EslerSports Complex Access Project

Cariboo Regional District

Section Scale 1:500

Section Legend

- Asphalt Surface
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- Subgrade Cut
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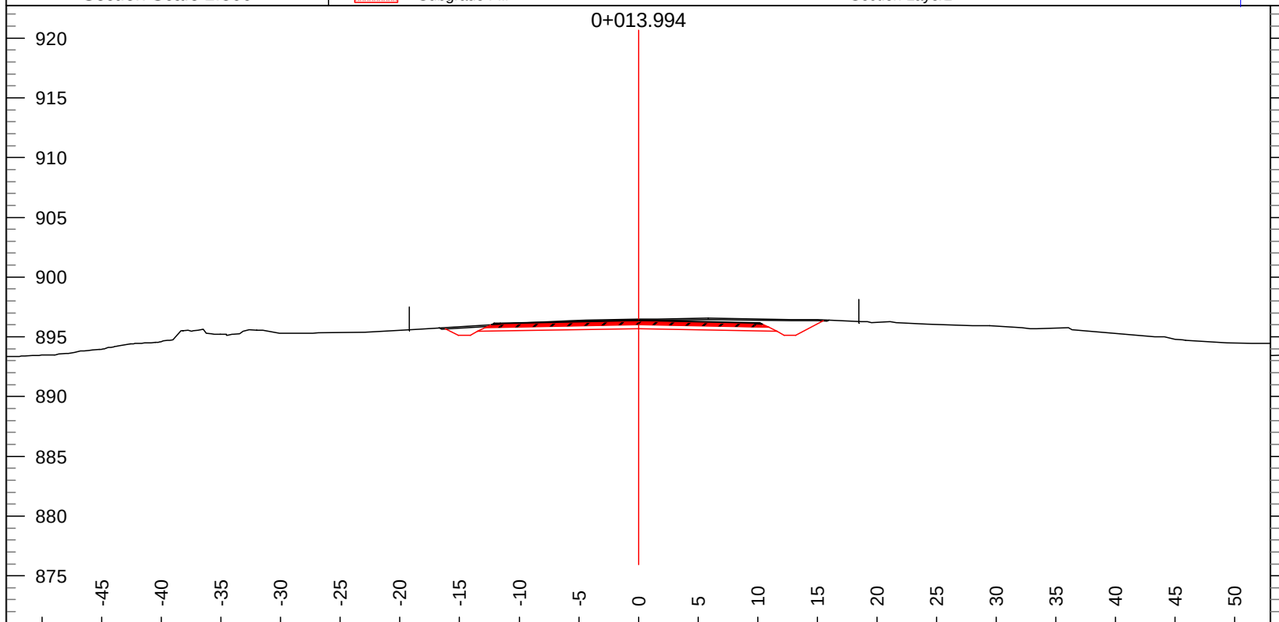
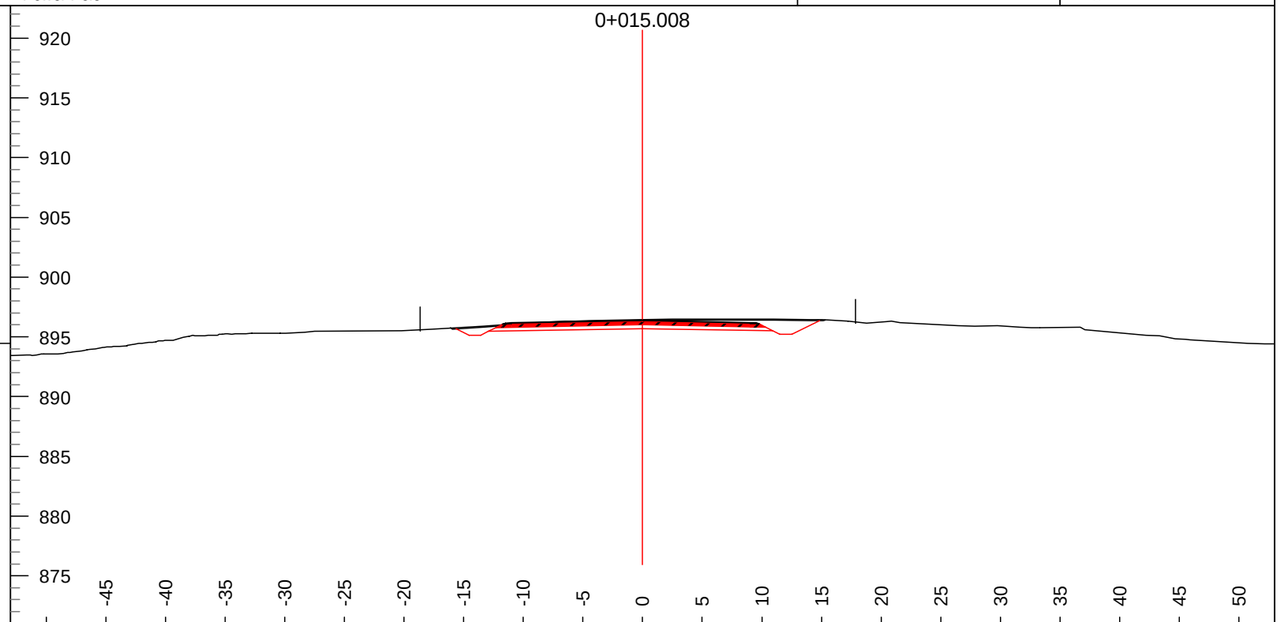
- Section Layer2
- Stripping
- L-Centerline
- Culverts
- Power Pole
- Clearing Limit

Prepared By: CELTIC ENGINEERING LTD

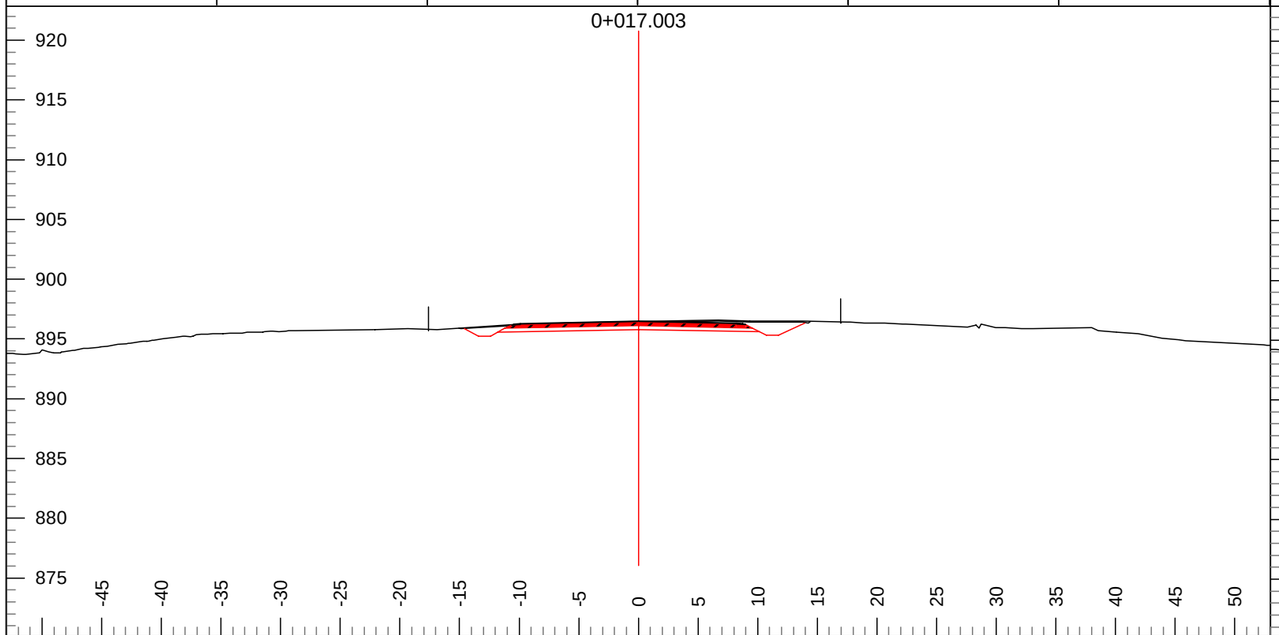
Plot Date: 26/05/06



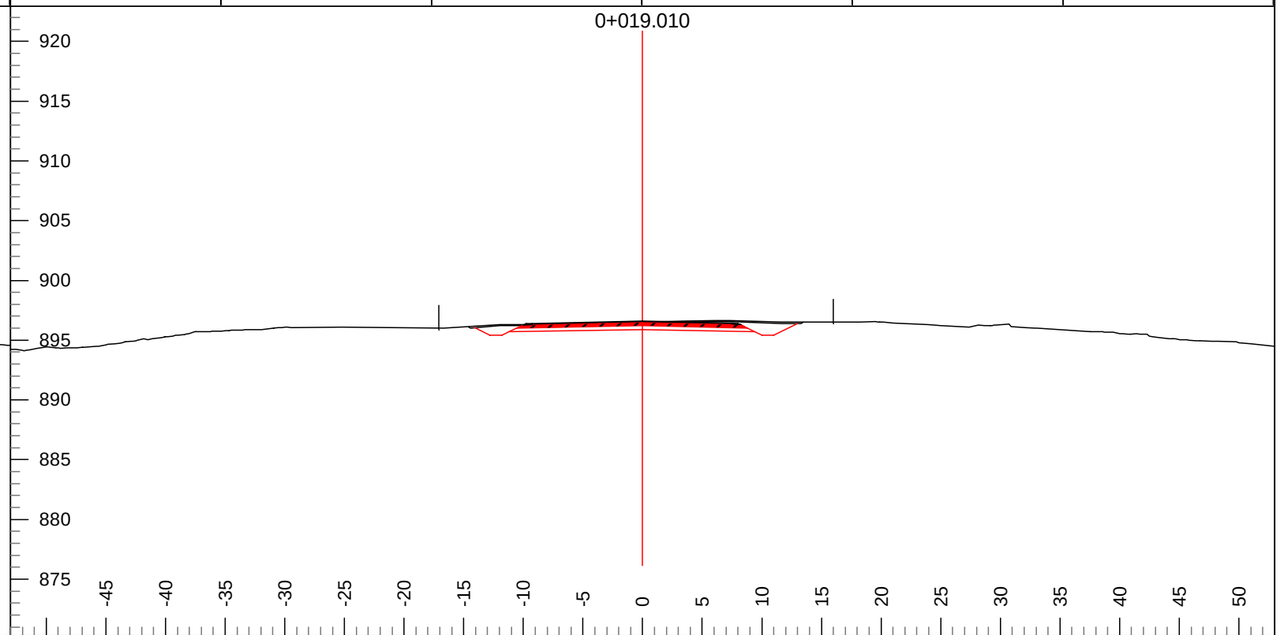
Field Ref:		L-Ssl:	-3.47%	Rd. Wd. L:	11.578	Rd. Wd. R:	9.675	L-Ssr:	0.16%	Cul DIA:	
Tmpl:	RLU	Stk L:	16.236	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	15.509	Cul Len L:	
H. Offset:	0.000	Stk L X:	-16.217	P-Stk L:	16.232	P-Stk R:	15.509	Stk R X:	15.509	Cul Fill:	
Cut Dp:	0.082	Stk L Y:	-0.710	P-Clr L:	19.233	P-Clr R:	18.509	Stk R Y:	-0.075	Cul Skew:	



Field Ref:		L-Ssl:	-3.11%	Rd. Wd. L:	11.009	Rd. Wd. R:	9.000	L-Ssr:	0.39%	Cul DIA:	
Tmpl:	RLU	Stk L:	15.644	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	14.837	Cul Len L:	
H. Offset:	0.000	Stk L X:	-15.626	P-Stk L:	15.642	P-Stk R:	14.837	Stk R X:	14.837	Cul Fill:	
Cut Dp:	0.045	Stk L Y:	-0.709	P-Clr L:	18.642	P-Clr R:	17.837	Stk R Y:	-0.060	Cul Skew:	



Field Ref:		L-Ssl:	-2.15%	Rd. Wd. L:	9.888	Rd. Wd. R:	8.252	L-Ssr:	0.19%	Cul DIA:	
Tmpl:	RLU	Stk L:	14.601	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	13.928	Cul Len L:	
H. Offset:	0.000	Stk L X:	-14.588	P-Stk L:	14.603	P-Stk R:	13.928	Stk R X:	13.928	Cul Fill:	
Cut Dp:	-0.030	Stk L Y:	-0.646	P-Clr L:	17.602	P-Clr R:	16.928	Stk R Y:	-0.125	Cul Skew:	



Field Ref:		L-Ssl:	-2.01%	Rd. Wd. L:	9.263	Rd. Wd. R:	7.500	L-Ssr:	0.48%	Cul DIA:	
Tmpl:	RLU	Stk L:	14.125	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	12.982	Cul Len L:	
H. Offset:	0.000	Stk L X:	-14.117	P-Stk L:	14.128	P-Stk R:	12.983	Stk R X:	12.981	Cul Fill:	
Cut Dp:	-0.099	Stk L Y:	-0.556	P-Clr L:	17.128	P-Clr R:	15.982	Stk R Y:	-0.207	Cul Skew:	

EslerSports Complex Access Project

Cariboo Regional District

Section Scale 1:500

Prepared By: CELTIC ENGINEERING LTD

Plot Date: 26/05/06

Section Legend

- Asphalt Surface
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- Subgrade Fill
- Subgrade Cut
- Section Topography
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- Section Layer2
- Stripping
- L-Centerline
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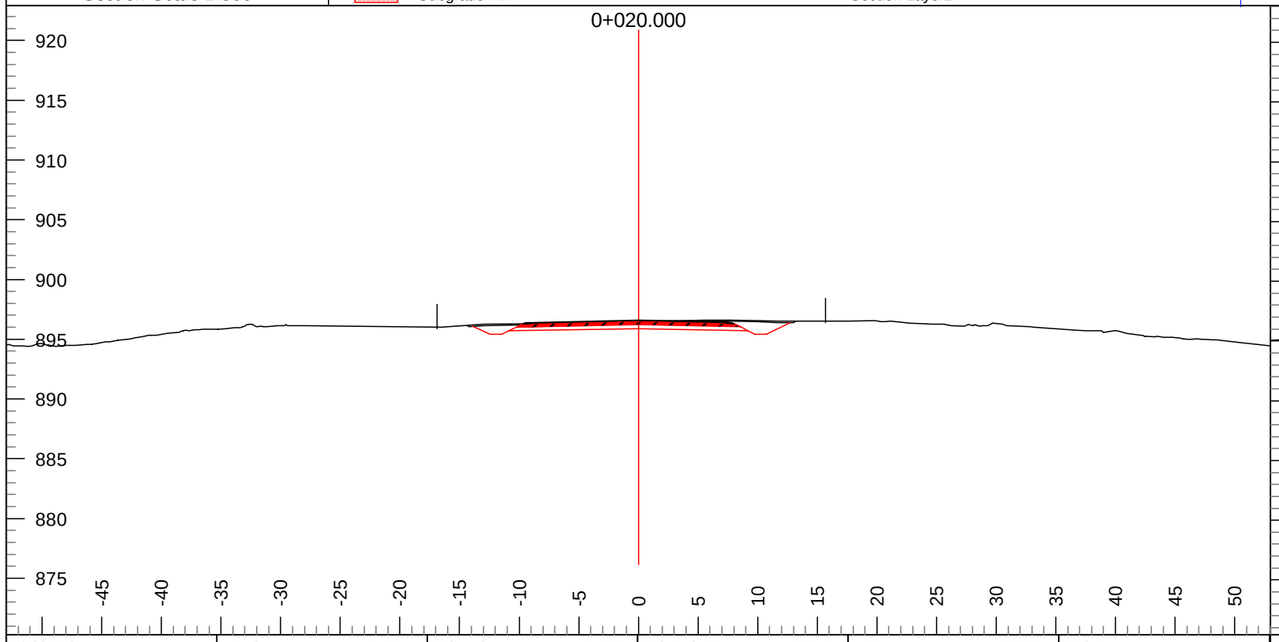
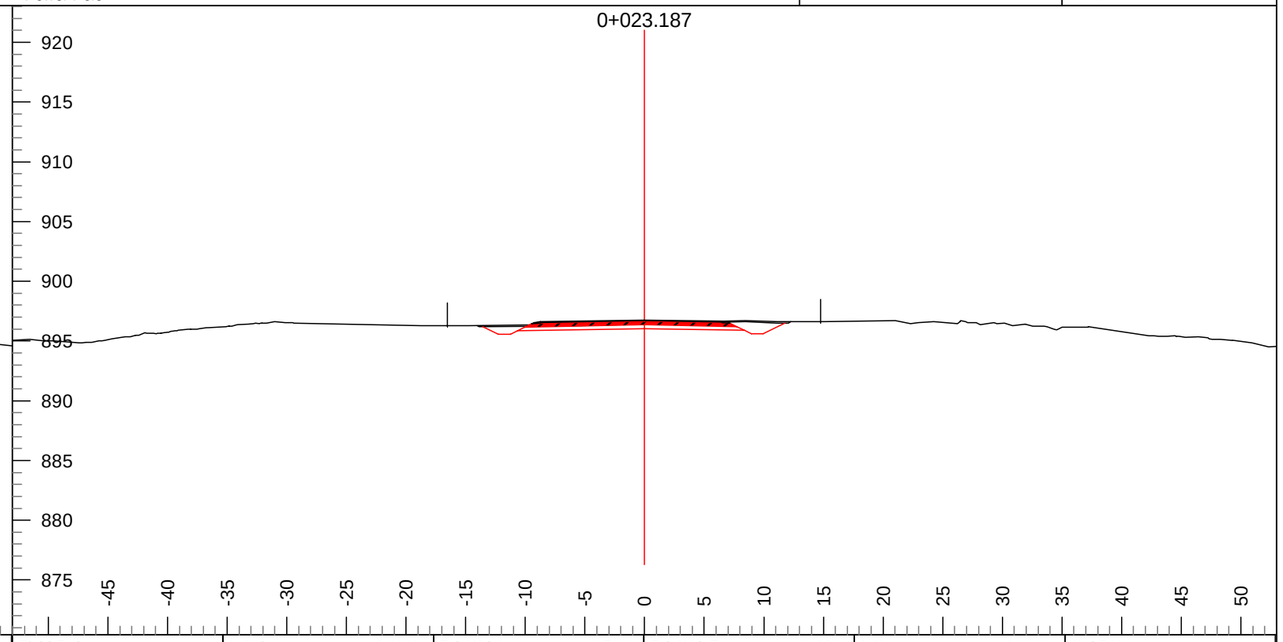
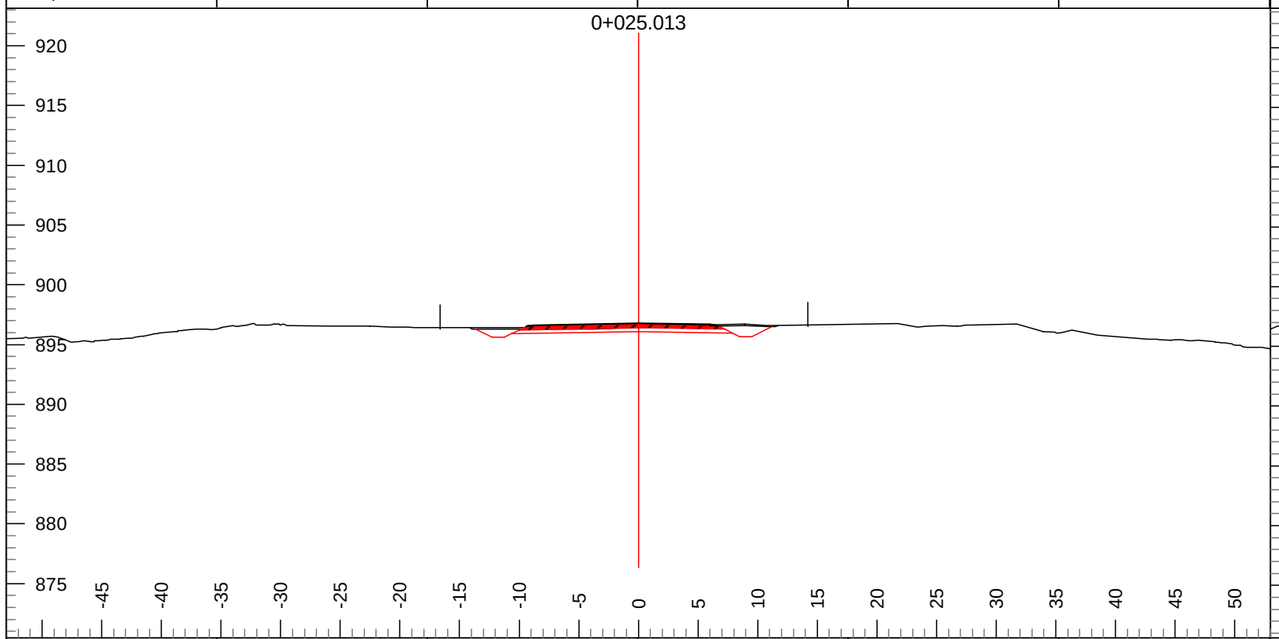


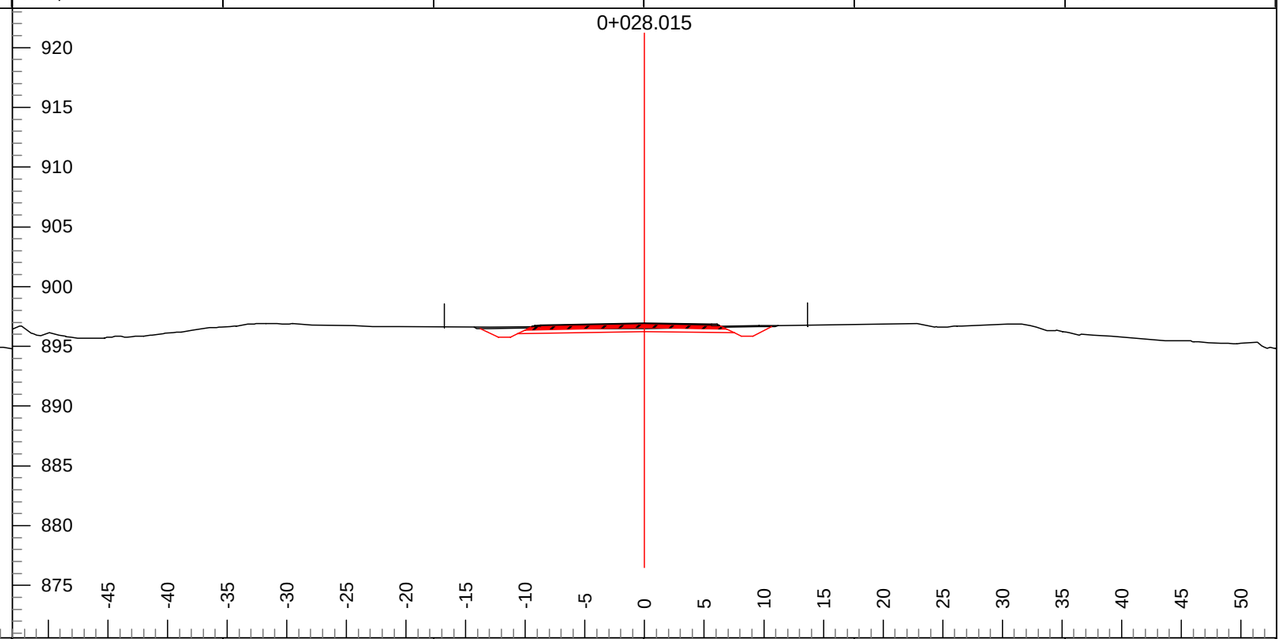
Field Ref:		L-Ssl:	-1.98%	Rd. Wd. L:	8.955	Rd. Wd. R:	7.249	L-Ssr:	0.72%	Cul DIA:	
Tmpl:	RLU	Stk L:	13.890	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	12.696	Cul Len L:	
H. Offset:	0.000	Stk L X:	-13.885	P-Stk L:	13.894	P-Stk R:	12.698	Stk R X:	12.696	Cul Fill:	
Cut Dp:	-0.132	Stk L Y:	-0.512	P-Clr L:	16.895	P-Clr R:	15.696	Stk R Y:	-0.219	Cul Skew:	



Field Ref:		L-Ssl:	-1.89%	Rd. Wd. L:	8.739	Rd. Wd. R:	6.442	L-Ssr:	1.22%	Cul DIA:	
Tmpl:	RLU	Stk L:	13.578	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	11.753	Cul Len L:	
H. Offset:	0.000	Stk L X:	-13.574	P-Stk L:	13.585	P-Stk R:	11.756	Stk R X:	11.753	Cul Fill:	
Cut Dp:	-0.240	Stk L Y:	-0.555	P-Clr L:	16.581	P-Clr R:	14.754	Stk R Y:	-0.259	Cul Skew:	



Field Ref:		L-Ssl:	-0.97%	Rd. Wd. L:	8.728	Rd. Wd. R:	5.980	L-Ssr:	1.49%	Cul DIA:	
Tmpl:	RLU	Stk L:	13.650	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	11.194	Cul Len L:	
H. Offset:	0.000	Stk L X:	-13.649	P-Stk L:	13.658	P-Stk R:	11.197	Stk R X:	11.194	Cul Fill:	
Cut Dp:	-0.300	Stk L Y:	-0.512	P-Clr L:	16.654	P-Clr R:	14.195	Stk R Y:	-0.282	Cul Skew:	



Field Ref:		L-Ssl:	0.08%	Rd. Wd. L:	8.710	Rd. Wd. R:	5.600	L-Ssr:	1.22%	Cul DIA:	
Tmpl:	RLU	Stk L:	13.797	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	10.674	Cul Len L:	
H. Offset:	0.000	Stk L X:	-13.796	P-Stk L:	13.803	P-Stk R:	10.679	Stk R X:	10.674	Cul Fill:	
Cut Dp:	-0.328	Stk L Y:	-0.429	P-Clr L:	16.799	P-Clr R:	13.676	Stk R Y:	-0.318	Cul Skew:	

EslerSports Complex Access Project

Cariboo Regional District

Section Scale 1:500

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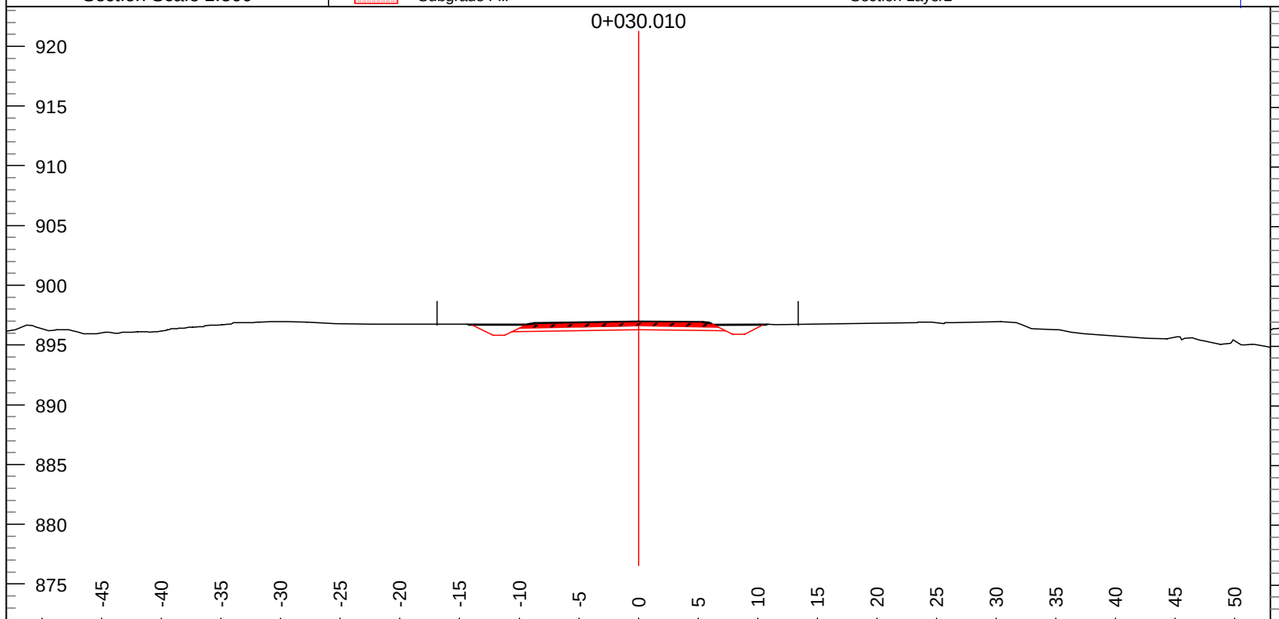
Prepared By: CELTIC ENGINEERING LTD

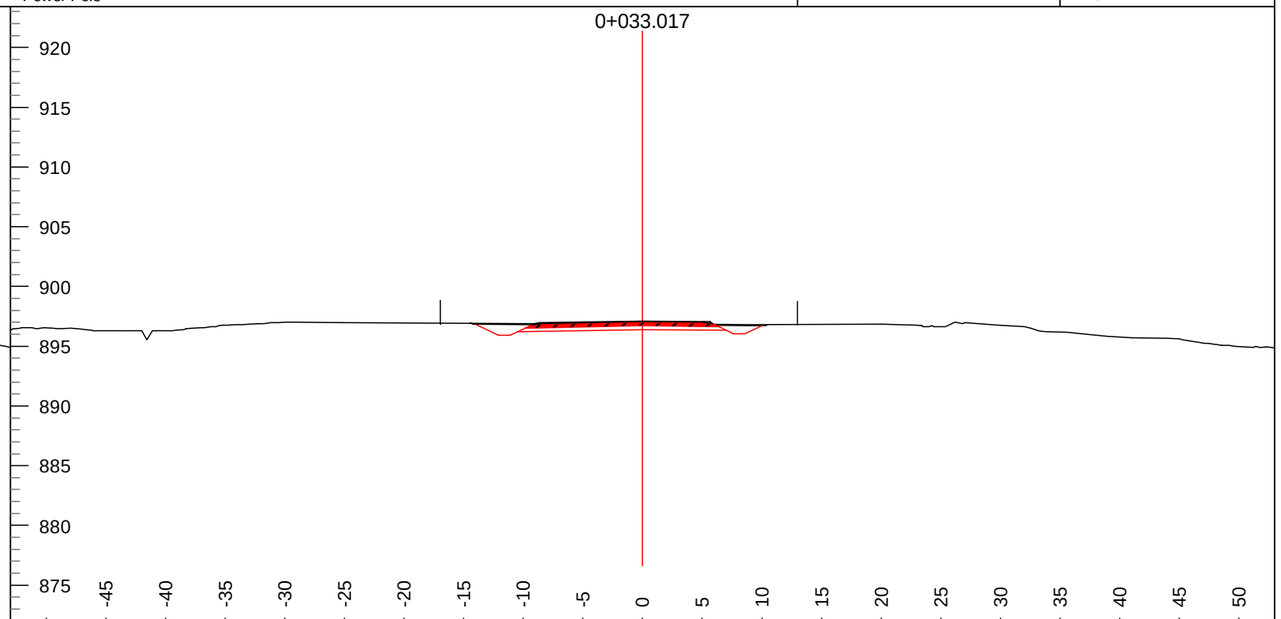
Plot Date: 26/05/06

0+030.010



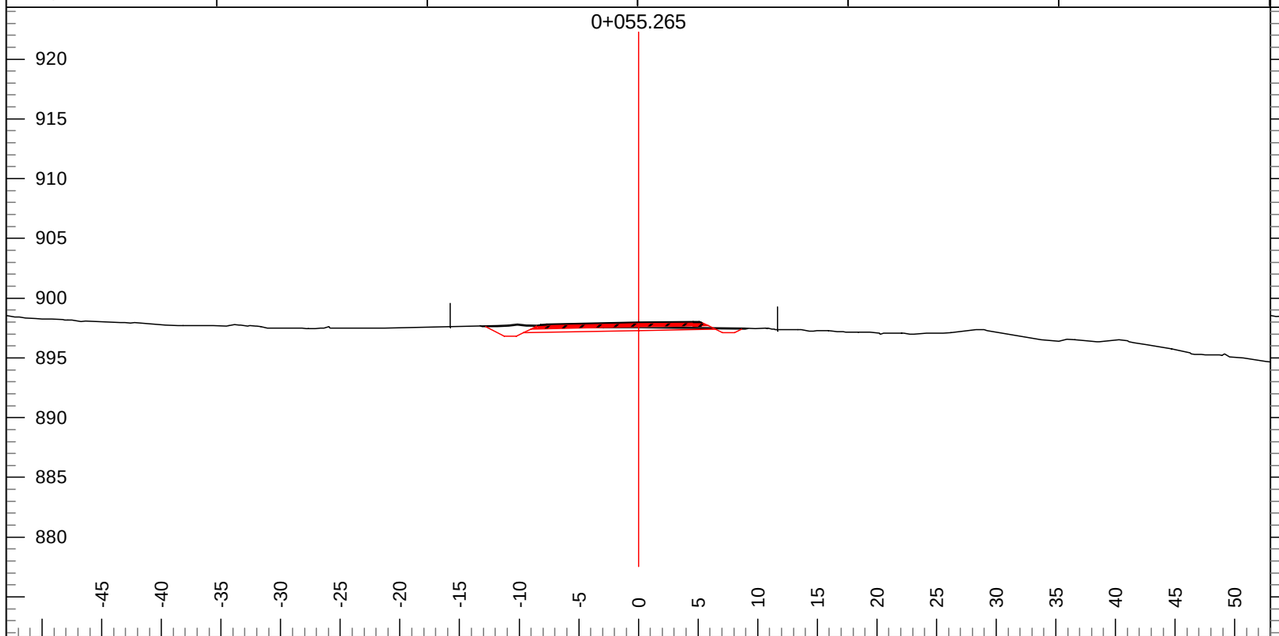
Field Ref:		L-Ssl:	0.40%	Rd. Wd. L:	8.698	Rd. Wd. R:	5.413	L-Ssr:	0.65%	Cul DIA:	
Tmpl:	RLU	Stk L:	13.906	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	10.399	Cul Len L:	
H. Offset:	0.000	Stk L X:	-13.906	P-Stk L:	13.911	P-Stk R:	10.404	Stk R X:	10.399	Cul Fill:	
Cut Dp:	-0.308	Stk L Y:	-0.368	P-Clr L:	16.908	P-Clr R:	13.401	Stk R Y:	-0.342	Cul Skew:	

0+033.017



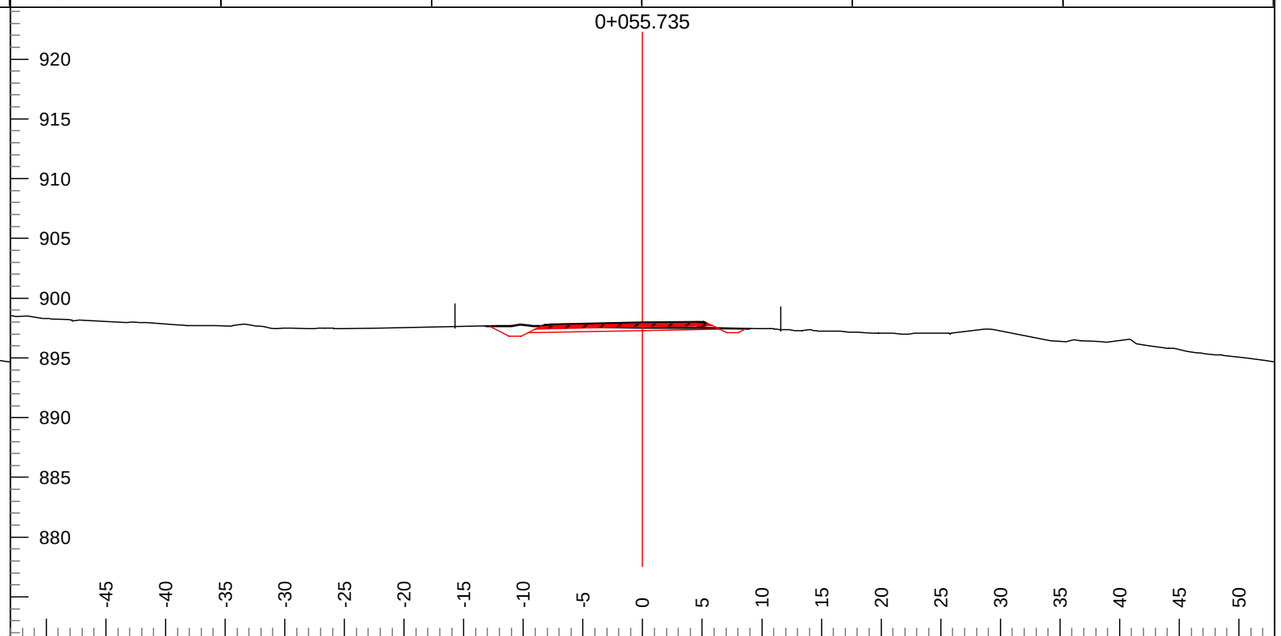
Field Ref:		L-Ssl:	0.90%	Rd. Wd. L:	8.580	Rd. Wd. R:	5.131	L-Ssr:	-0.02%	Cul DIA:	
Tmpl:	RLU	Stk L:	13.968	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	9.984	Cul Len L:	
H. Offset:	0.000	Stk L X:	-13.968	P-Stk L:	13.970	P-Stk R:	9.990	Stk R X:	9.983	Cul Fill:	
Cut Dp:	-0.278	Stk L Y:	-0.276	P-Clr L:	16.969	P-Clr R:	12.986	Stk R Y:	-0.380	Cul Skew:	

0+055.265



Field Ref:		L-Ssl:	1.87%	Rd. Wd. L:	7.708	Rd. Wd. R:	4.611	L-Ssr:	-1.86%	Cul DIA:	
Tmpl:	RLU	Stk L:	12.799	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	8.649	Cul Len L:	
H. Offset:	0.000	Stk L X:	-12.798	P-Stk L:	12.805	P-Stk R:	8.667	Stk R X:	8.645	Cul Fill:	
Cut Dp:	-0.366	Stk L Y:	-0.407	P-Clr L:	15.803	P-Clr R:	12.517	Stk R Y:	-0.610	Cul Skew:	

0+055.735



Field Ref:		L-Ssl:	1.83%	Rd. Wd. L:	7.689	Rd. Wd. R:	4.600	L-Ssr:	-1.79%	Cul DIA:	
Tmpl:	RLU	Stk L:	12.760	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	8.621	Cul Len L:	
H. Offset:	0.000	Stk L X:	-12.760	P-Stk L:	12.767	P-Stk R:	8.640	Stk R X:	8.618	Cul Fill:	
Cut Dp:	-0.379	Stk L Y:	-0.416	P-Clr L:	15.764	P-Clr R:	12.518	Stk R Y:	-0.615	Cul Skew:	

Cariboo Regional District

Section Scale 1:500

EslerSports Complex Access Project

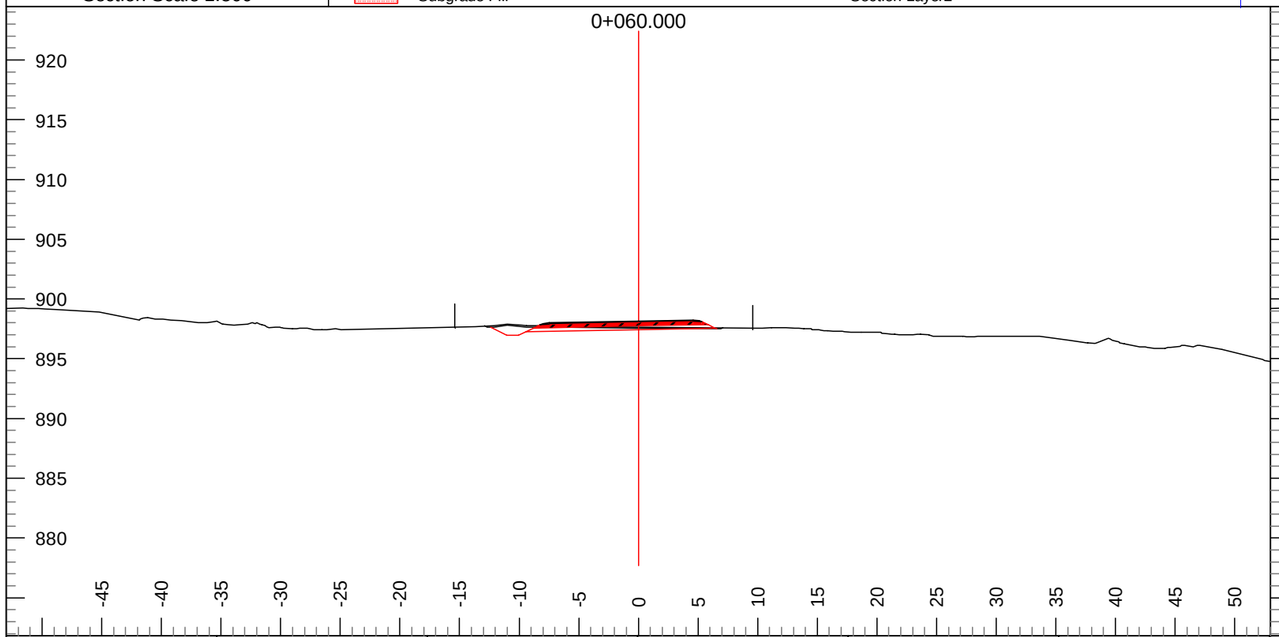
Section Legend

- Asphalt Surface
- WGB
- SGSB
- Subgrade Fill
- Subgrade Cut
- Section Topography
- Section Layer 1
- Section Layer2
- Stripping
- L-Centerline
- Culverts
- Power Pole
- Clearing Limit

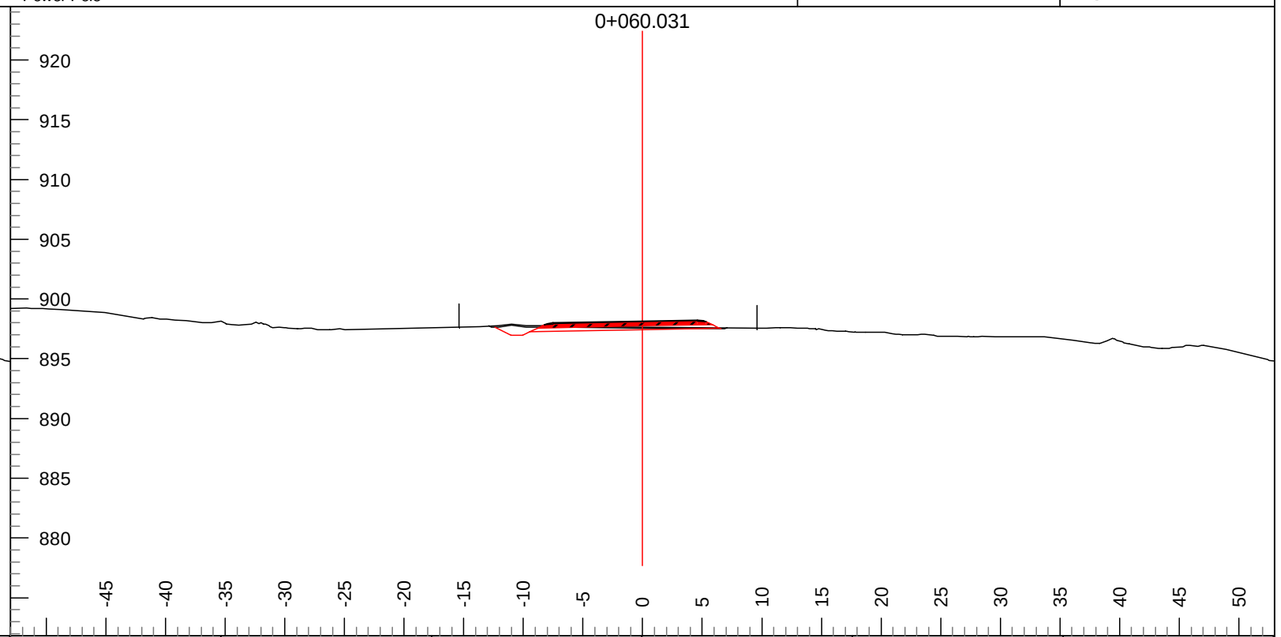
Prepared By:

CELTIC ENGINEERING LTD

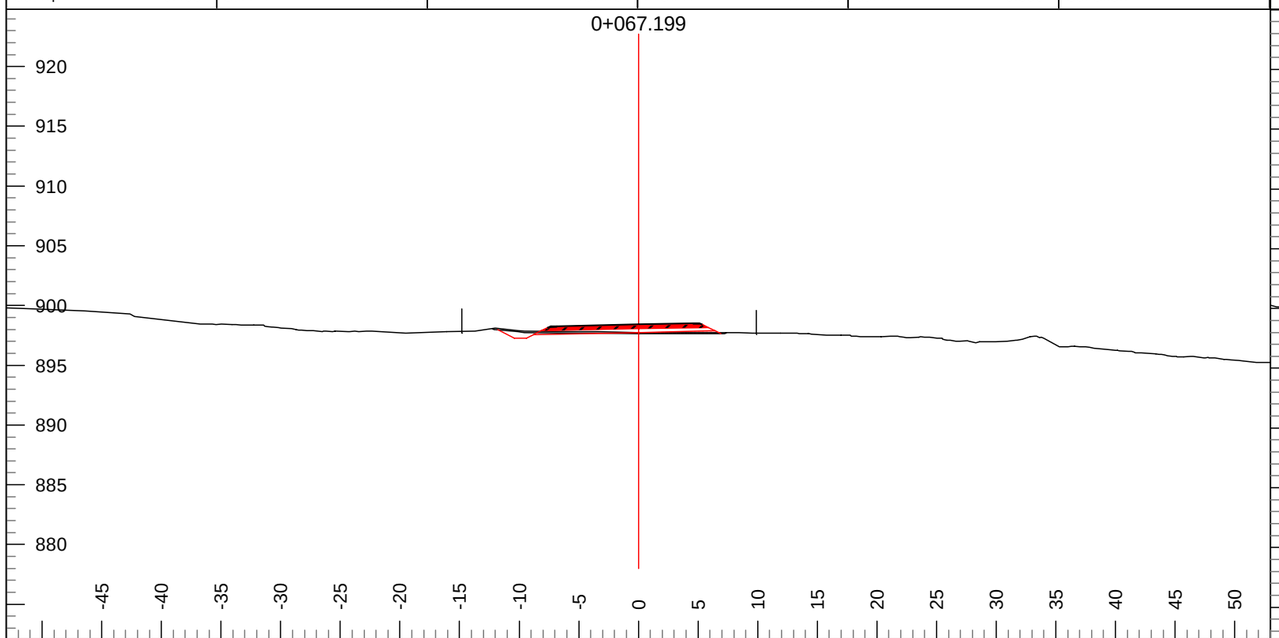
Plot Date: 26/05/06



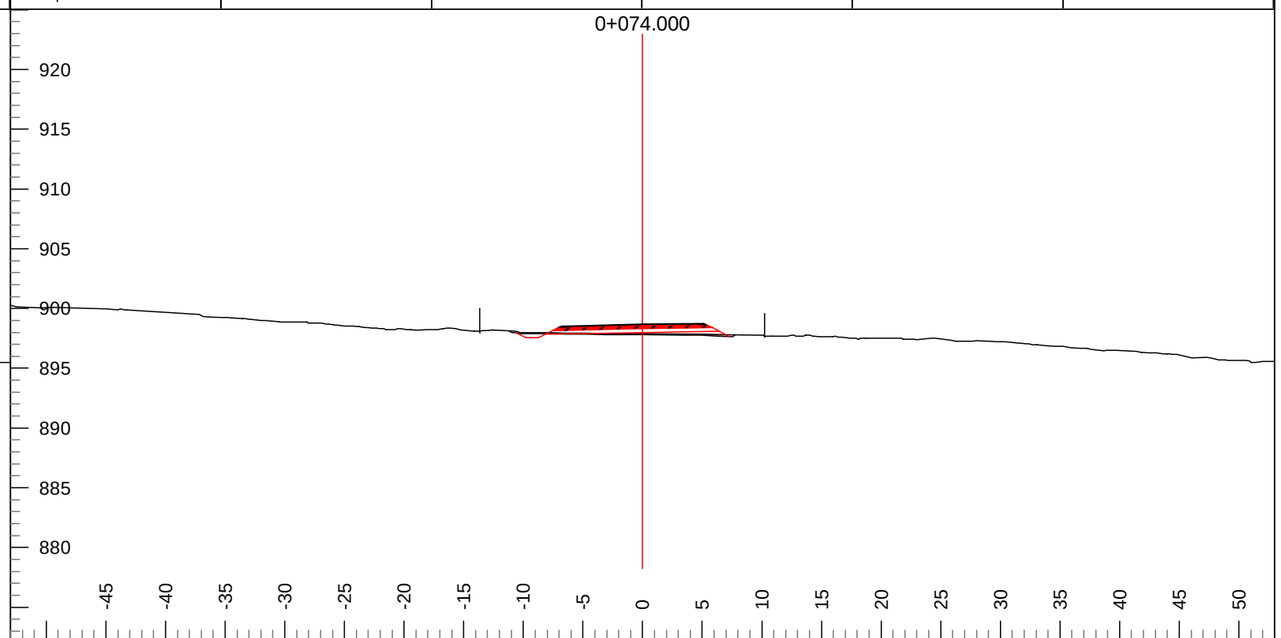
Field Ref:		L-Ssl:	1.48%	Rd. Wd. L:	7.522	Rd. Wd. R:	4.600	L-Ssr:	-1.10%	Cul DIA:	
Tmpl:	RLU	Stk L:	12.403	F Slope L:	50.0%	F Slope R:	-50.0%	Stk R:	6.582	Cul Len L:	
H. Offset:	0.000	Stk L X:	-12.403	P-Stk L:	12.413	P-Stk R:	6.613	Stk R X:	6.580	Cul Fill:	
Cut Dp:	-0.493	Stk L Y:	-0.508	P-Clr L:	15.410	P-Clr R:	12.513	Stk R Y:	-0.666	Cul Skew:	



Field Ref:		L-Ssl:	1.47%	Rd. Wd. L:	7.519	Rd. Wd. R:	4.600	L-Ssr:	-1.10%	Cul DIA:	
Tmpl:	RLU	Stk L:	12.398	F Slope L:	50.0%	F Slope R:	-50.0%	Stk R:	6.584	Cul Len L:	
H. Offset:	0.000	Stk L X:	-12.398	P-Stk L:	12.409	P-Stk R:	6.615	Stk R X:	6.582	Cul Fill:	
Cut Dp:	-0.493	Stk L Y:	-0.509	P-Clr L:	15.405	P-Clr R:	12.513	Stk R Y:	-0.667	Cul Skew:	



Field Ref:		L-Ssl:	1.14%	Rd. Wd. L:	6.868	Rd. Wd. R:	4.600	L-Ssr:	-0.54%	Cul DIA:	
Tmpl:	RLU	Stk L:	11.817	F Slope L:	50.0%	F Slope R:	-50.0%	Stk R:	6.911	Cul Len L:	
H. Offset:	0.000	Stk L X:	-11.815	P-Stk L:	11.824	P-Stk R:	6.958	Stk R X:	6.909	Cul Fill:	
Cut Dp:	-0.683	Stk L Y:	-0.462	P-Clr L:	14.828	P-Clr R:	12.522	Stk R Y:	-0.822	Cul Skew:	



Field Ref:		L-Ssl:	1.22%	Rd. Wd. L:	6.251	Rd. Wd. R:	4.600	L-Ssr:	-1.62%	Cul DIA:	
Tmpl:	RLU	Stk L:	10.651	F Slope L:	50.0%	F Slope R:	-50.0%	Stk R:	7.274	Cul Len L:	
H. Offset:	0.000	Stk L X:	-10.651	P-Stk L:	10.675	P-Stk R:	7.343	Stk R X:	7.271	Cul Fill:	
Cut Dp:	-0.810	Stk L Y:	-0.723	P-Clr L:	13.663	P-Clr R:	12.537	Stk R Y:	-1.032	Cul Skew:	

EslerSports Complex Access Project

Cariboo Regional District

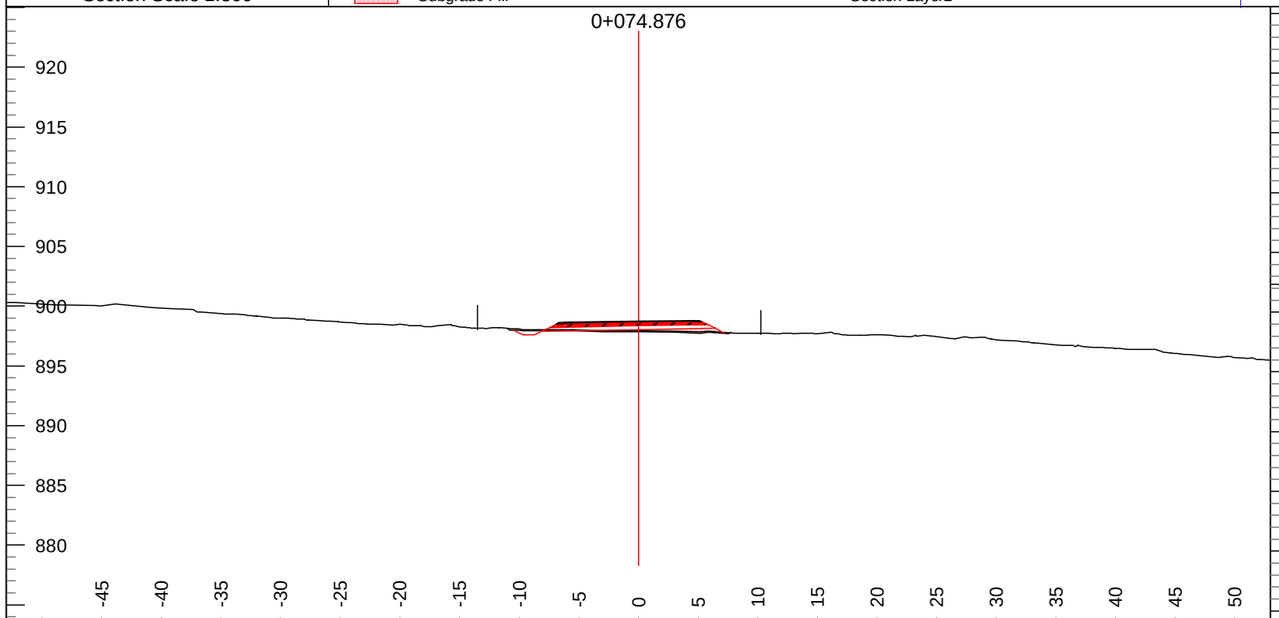
Section Scale 1:500

Section Legend

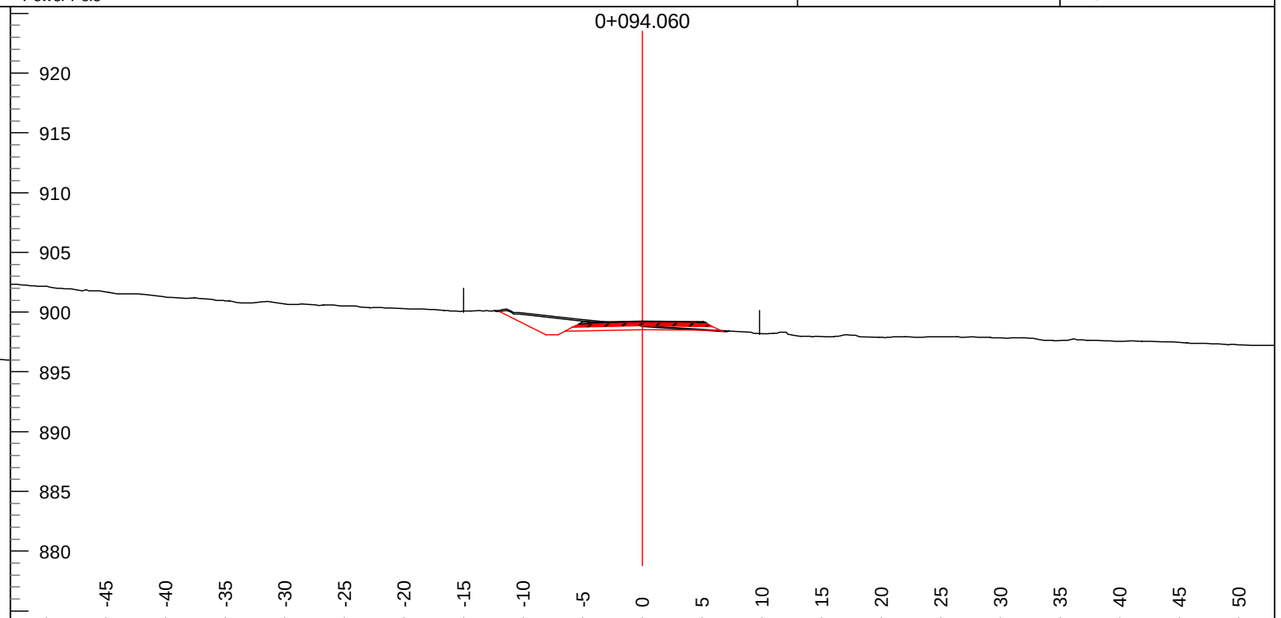
- Asphalt Surface
- WGB
- SGSB
- Subgrade Fill
- Subgrade Cut
- Section Topography
- Section Layer 1
- Section Layer2
- Stripping
- L-Centerline
- Culverts
- Power Pole
- Clearing Limit

Prepared By: CELTIC ENGINEERING LTD

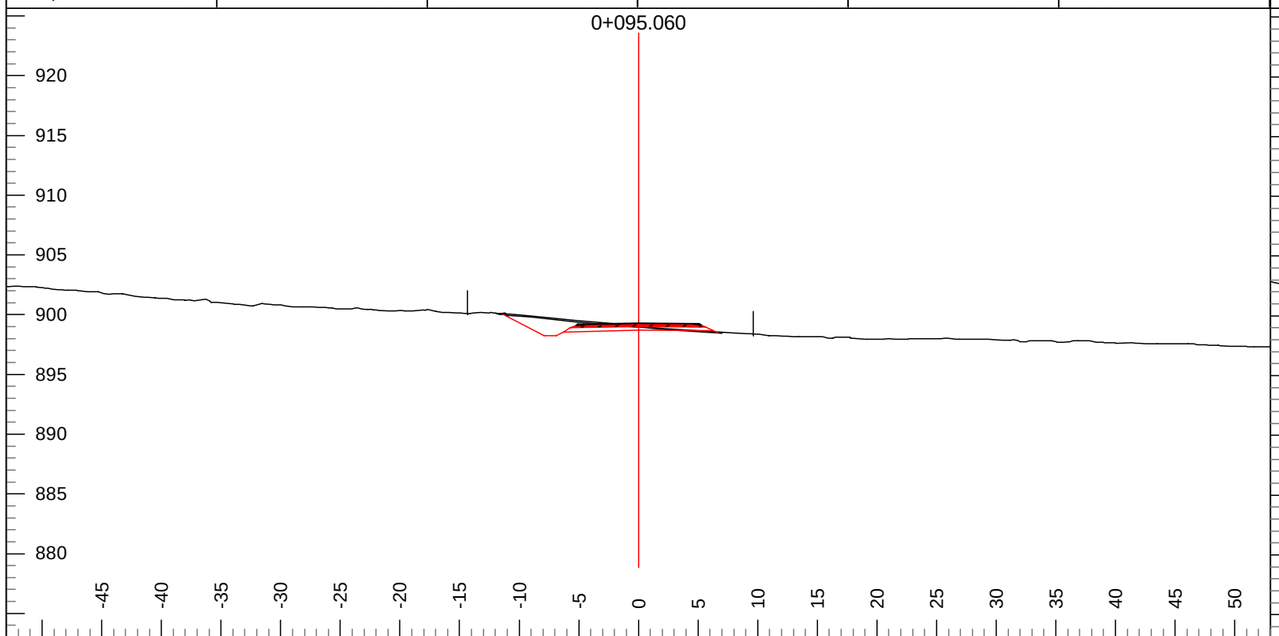
Plot Date: 26/05/06



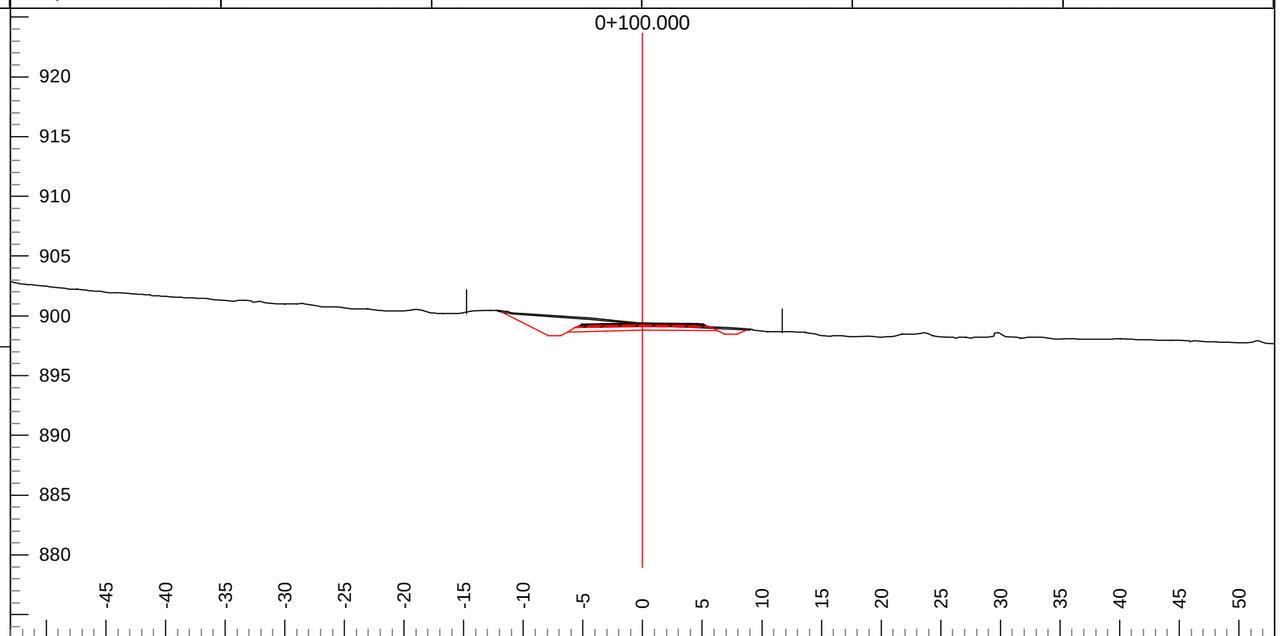
Field Ref:		L-Ssl:	1.39%	Rd. Wd. L:	6.179	Rd. Wd. R:	4.600	L-Ssr:	-1.81%	Cul DIA:	
Tmpl:	RLU	Stk L:	10.511	F Slope L:	50.0%	F Slope R:	-50.0%	Stk R:	7.272	Cul Len L:	
H. Offset:	0.000	Stk L X:	-10.511	P-Stk L:	10.538	P-Stk R:	7.342	Stk R X:	7.269	Cul Fill:	
Cut Dp:	-0.812	Stk L Y:	-0.755	P-Clr L:	13.524	P-Clr R:	12.541	Stk R Y:	-1.035	Cul Skew:	



Field Ref:		L-Ssl:	9.72%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-7.01%	Cul DIA:	
Tmpl:	RLU	Stk L:	12.062	F Slope L:	50.0%	F Slope R:	-50.0%	Stk R:	6.816	Cul Len L:	
H. Offset:	0.000	Stk L X:	-12.008	P-Stk L:	12.035	P-Stk R:	6.851	Stk R X:	6.792	Cul Fill:	
Cut Dp:	-0.328	Stk L Y:	0.814	P-Clr L:	15.031	P-Clr R:	12.552	Stk R Y:	-0.895	Cul Skew:	



Field Ref:		L-Ssl:	9.36%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-6.99%	Cul DIA:	
Tmpl:	RLU	Stk L:	11.410	F Slope L:	50.0%	F Slope R:	-50.0%	Stk R:	6.663	Cul Len L:	
H. Offset:	0.000	Stk L X:	-11.370	P-Stk L:	11.391	P-Stk R:	6.689	Stk R X:	6.638	Cul Fill:	
Cut Dp:	-0.253	Stk L Y:	0.703	P-Clr L:	14.393	P-Clr R:	12.549	Stk R Y:	-0.823	Cul Skew:	



Field Ref:		L-Ssl:	7.90%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-6.66%	Cul DIA:	
Tmpl:	RLU	Stk L:	11.805	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	8.699	Cul Len L:	
H. Offset:	0.000	Stk L X:	-11.770	P-Stk L:	11.805	P-Stk R:	8.699	Stk R X:	8.680	Cul Fill:	
Cut Dp:	-0.002	Stk L Y:	0.904	P-Clr L:	14.799	P-Clr R:	12.520	Stk R Y:	-0.579	Cul Skew:	

EslerSports Complex Access Project

Cariboo Regional District

Section Scale 1:250

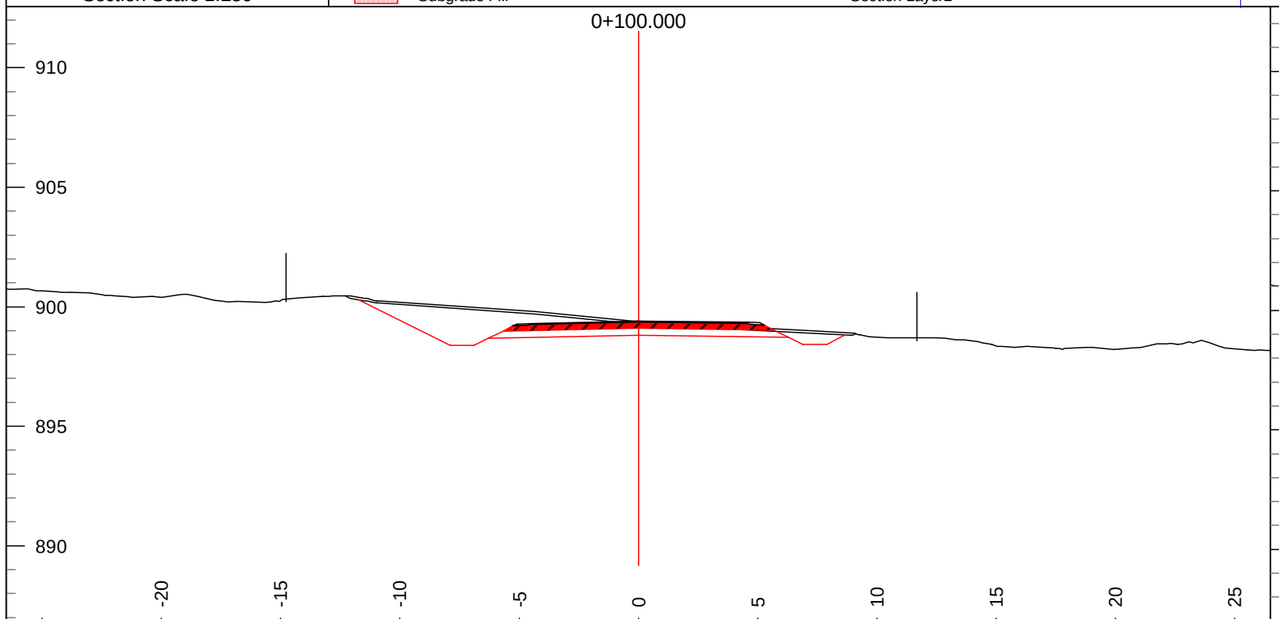
Section Legend

- Asphalt Surface
- WGB
- SGSB
- Subgrade Fill
- Subgrade Cut
- Section Topography
- Section Layer 1
- Section Layer2
- Stripping
- L-Centerline
- Culverts
- Power Pole
- Clearing Limit

Prepared By: CELTIC ENGINEERING LTD

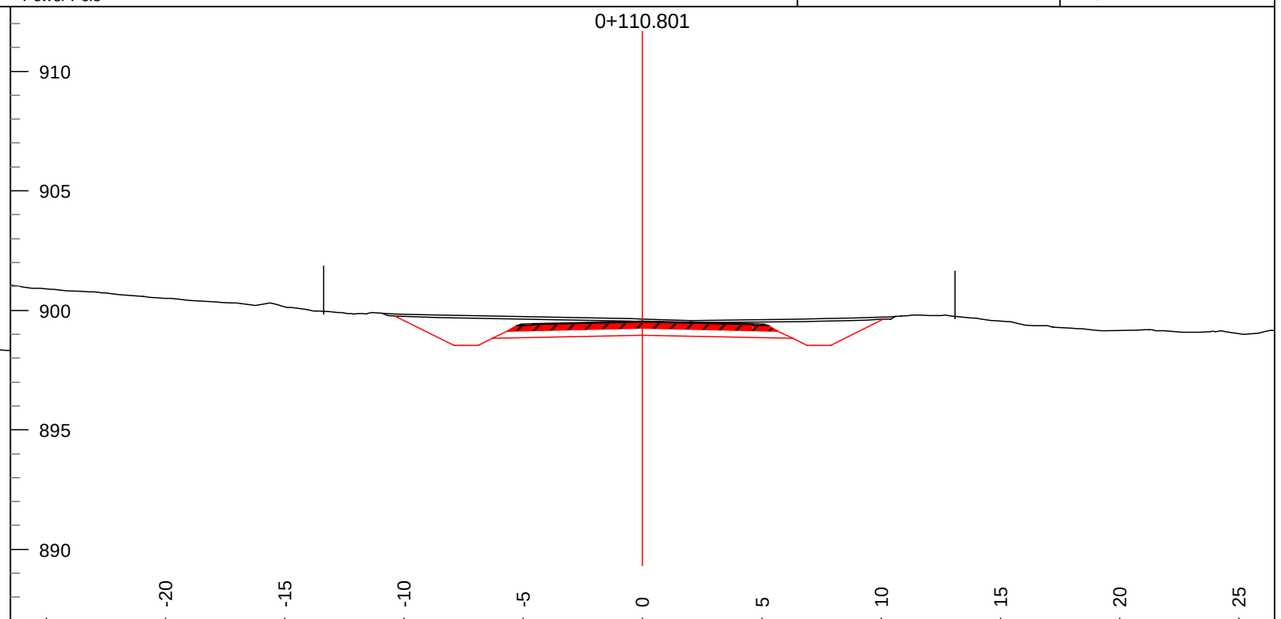
Plot Date: 26/05/06

0+100.000



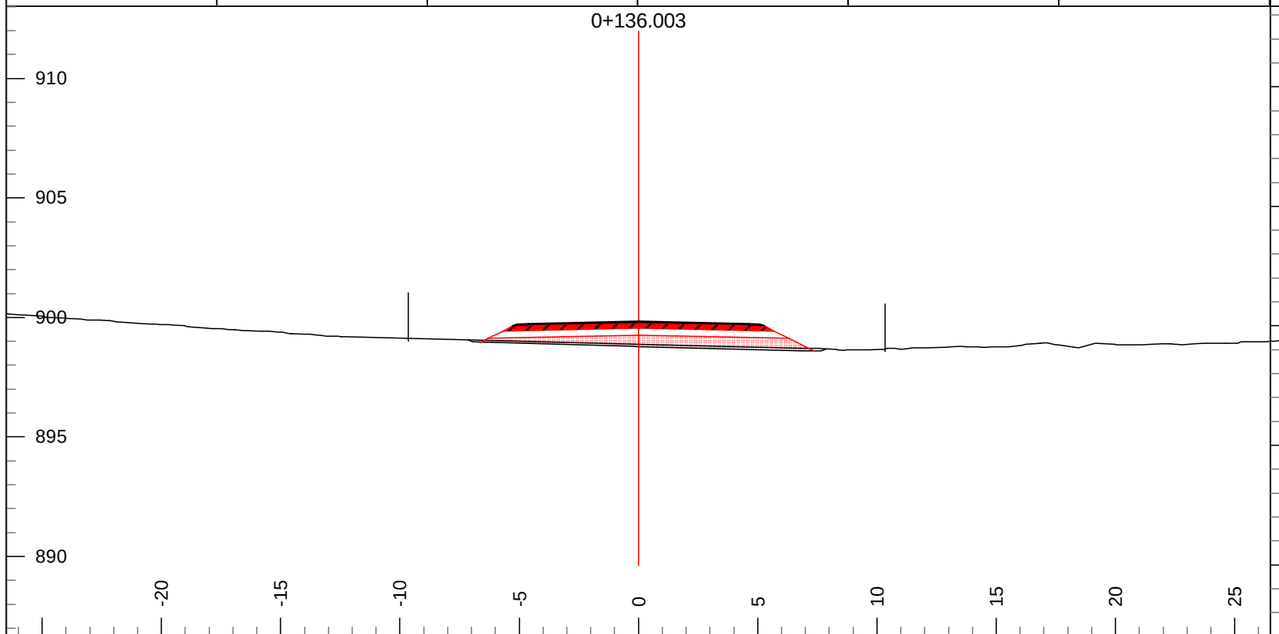
Field Ref:		L-Ssl:	7.90%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-6.66%	Cul DIA:	
Tmpl:	RLU	Stk L:	11.805	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	8.699	Cul Len L:	
H. Offset:	0.000	Stk L X:	-11.770	P-Stk L:	11.805	P-Stk R:	8.699	Stk R X:	8.680	Cul Fill:	
Cut Dp:	-0.002	Stk L Y:	0.904	P-Clr L:	14.799	P-Clr R:	12.520	Stk R Y:	-0.579	Cul Skew:	

0+110.801



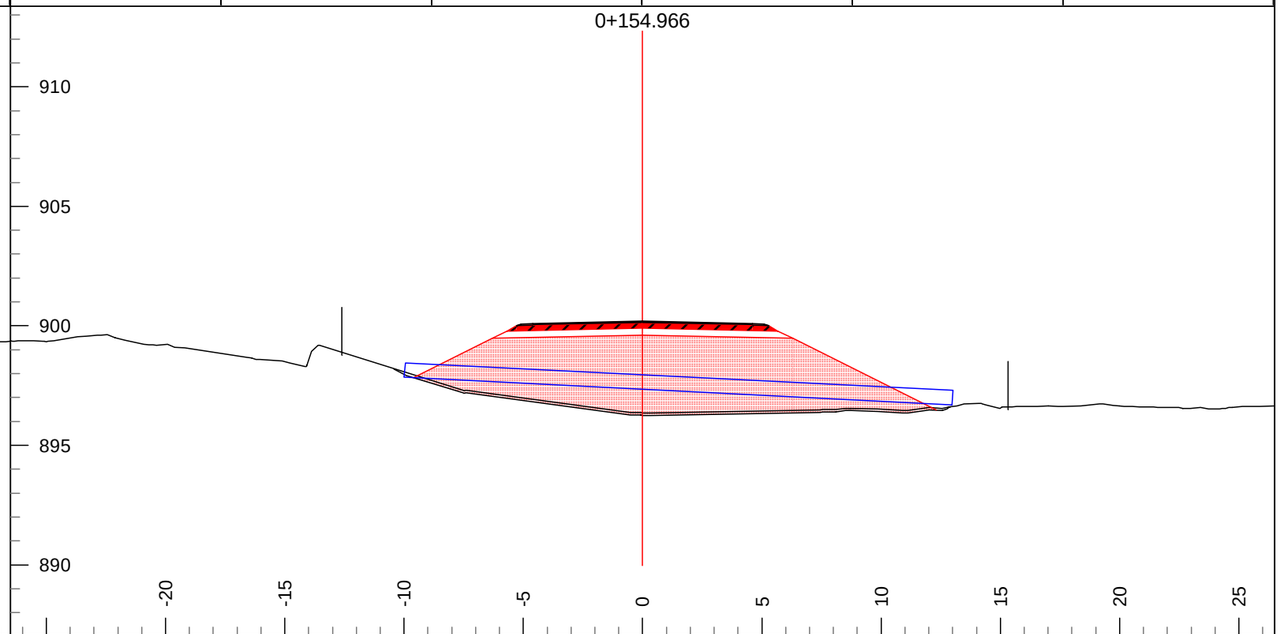
Field Ref:		L-Ssl:	2.15%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	0.97%	Cul DIA:	
Tmpl:	RLU	Stk L:	10.368	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	10.111	Cul Len L:	
H. Offset:	0.000	Stk L X:	-10.367	P-Stk L:	10.369	P-Stk R:	10.112	Stk R X:	10.111	Cul Fill:	
Cut Dp:	0.076	Stk L Y:	0.202	P-Clr L:	13.374	P-Clr R:	13.113	Stk R Y:	0.074	Cul Skew:	

0+136.003



Field Ref:		L-Ssl:	2.57%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-2.19%	Cul DIA:	
Tmpl:	RLU	Stk L:	6.647	F Slope L:	-50.0%	F Slope R:	-50.0%	Stk R:	7.366	Cul Len L:	
H. Offset:	0.000	Stk L X:	-6.646	P-Stk L:	6.706	P-Stk R:	7.466	Stk R X:	7.361	Cul Fill:	
Cut Dp:	-0.965	Stk L Y:	-0.894	P-Clr L:	12.516	P-Clr R:	12.549	Stk R Y:	-1.251	Cul Skew:	

0+154.966



Field Ref:		L-Ssl:	16.97%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	1.45%	Cul DIA:	600mm
Tmpl:	RLU	Stk L:	9.703	F Slope L:	-50.0%	F Slope R:	-50.0%	Stk R:	12.329	Cul Len L:	10.000
H. Offset:	0.000	Stk L X:	-9.590	P-Stk L:	9.878	P-Stk R:	12.882	Stk R X:	12.329	Cul Fill:	2.246
Cut Dp:	-3.841	Stk L Y:	-2.366	P-Clr L:	12.661	P-Clr R:	15.744	Stk R Y:	-3.735	Cul Skew:	90.00

Cariboo Regional District

EslerSports Complex Access Project

Prepared By:

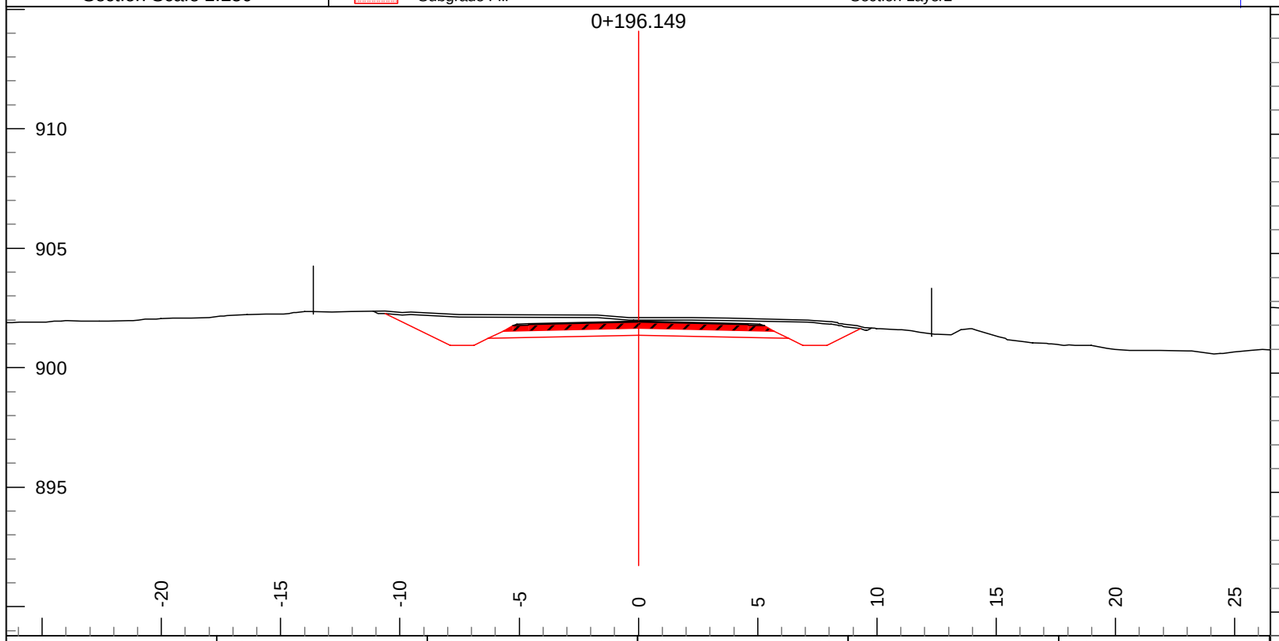
CELTIC ENGINEERING LTD

Section Scale 1:250

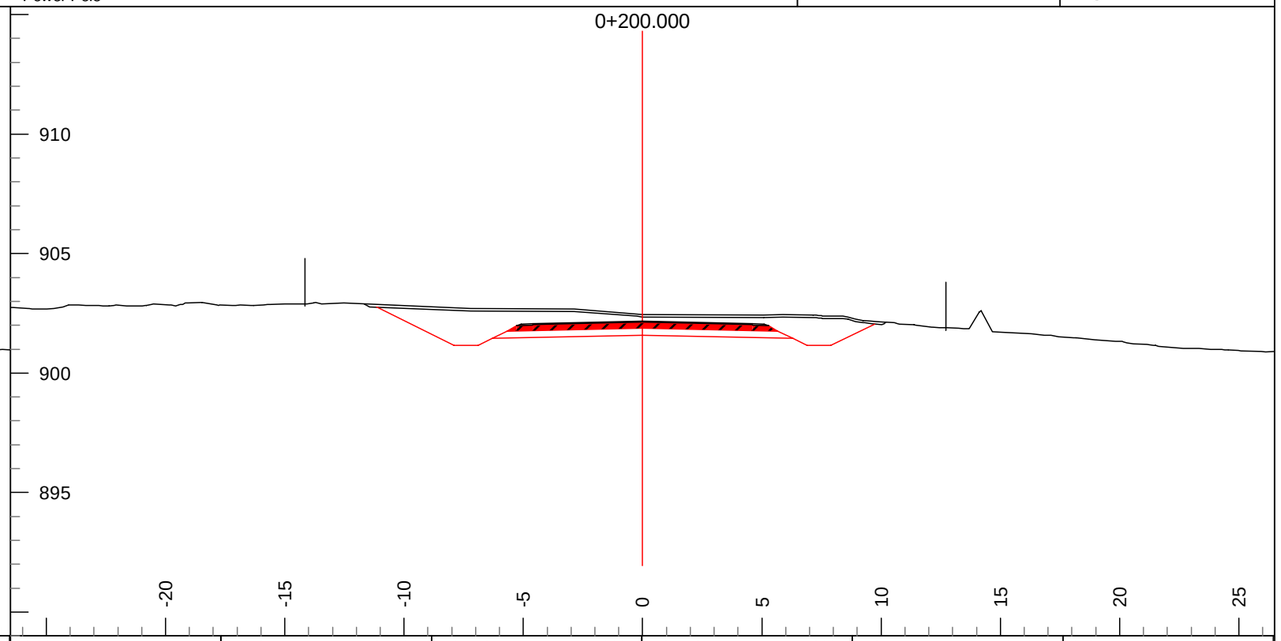
Section Legend

- Asphalt Surface
- WGB
- SGSB
- Subgrade Fill
- Subgrade Cut
- Section Topography
- Section Layer 1
- Section Layer2
- Stripping
- L-Centerline
- Culverts
- Power Pole
- Clearing Limit

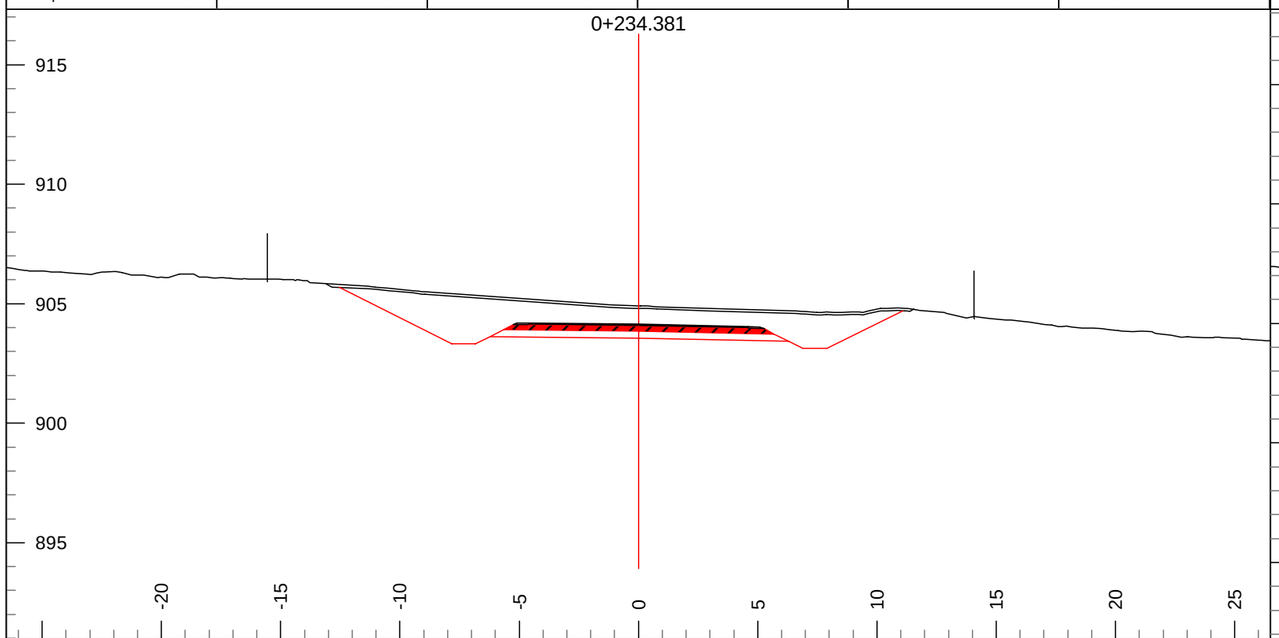
Plot Date: 26/05/06



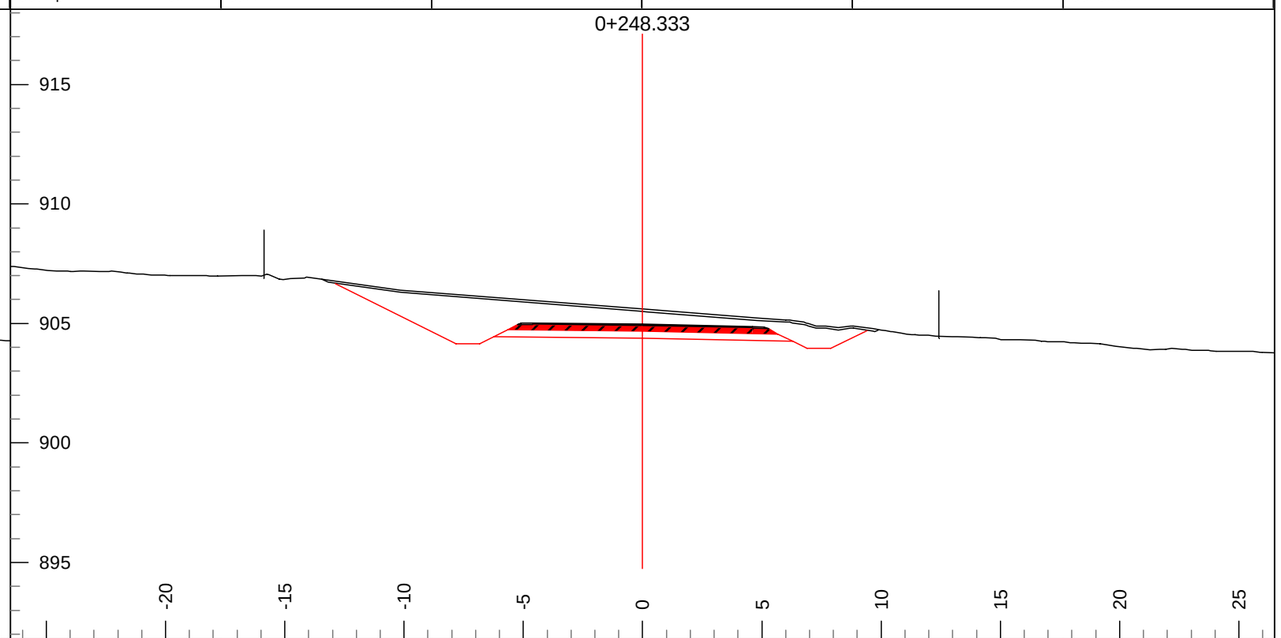
Field Ref:		L-Ssl:	2.17%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-4.74%	Cul DIA:	
Tmpl:	RLU	Stk L:	10.637	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	9.325	Cul Len L:	
H. Offset:	0.000	Stk L X:	-10.635	P-Stk L:	10.641	P-Stk R:	9.318	Stk R X:	9.312	Cul Fill:	
Cut Dp:	0.152	Stk L Y:	0.336	P-Clr L:	13.641	P-Clr R:	12.512	Stk R Y:	-0.325	Cul Skew:	



Field Ref:		L-Ssl:	3.71%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-3.13%	Cul DIA:	
Tmpl:	RLU	Stk L:	11.151	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	9.730	Cul Len L:	
H. Offset:	0.000	Stk L X:	-11.147	P-Stk L:	11.163	P-Stk R:	9.722	Stk R X:	9.722	Cul Fill:	
Cut Dp:	0.274	Stk L Y:	0.592	P-Clr L:	14.166	P-Clr R:	12.724	Stk R Y:	-0.121	Cul Skew:	



Field Ref:		L-Ssl:	7.11%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-1.19%	Cul DIA:	
Tmpl:	RLU	Stk L:	12.577	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	11.086	Cul Len L:	
H. Offset:	0.000	Stk L X:	-12.552	P-Stk L:	12.646	P-Stk R:	11.099	Stk R X:	11.085	Cul Fill:	
Cut Dp:	0.744	Stk L Y:	1.543	P-Clr L:	15.664	P-Clr R:	14.088	Stk R Y:	0.561	Cul Skew:	



Field Ref:		L-Ssl:	7.97%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-8.83%	Cul DIA:	
Tmpl:	RLU	Stk L:	12.918	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	9.470	Cul Len L:	
H. Offset:	0.000	Stk L X:	-12.873	P-Stk L:	12.985	P-Stk R:	9.432	Stk R X:	9.428	Cul Fill:	
Cut Dp:	0.622	Stk L Y:	1.704	P-Clr L:	16.003	P-Clr R:	12.510	Stk R Y:	-0.267	Cul Skew:	

EslerSports Complex Access Project

Cariboo Regional District

Section Scale 1:250

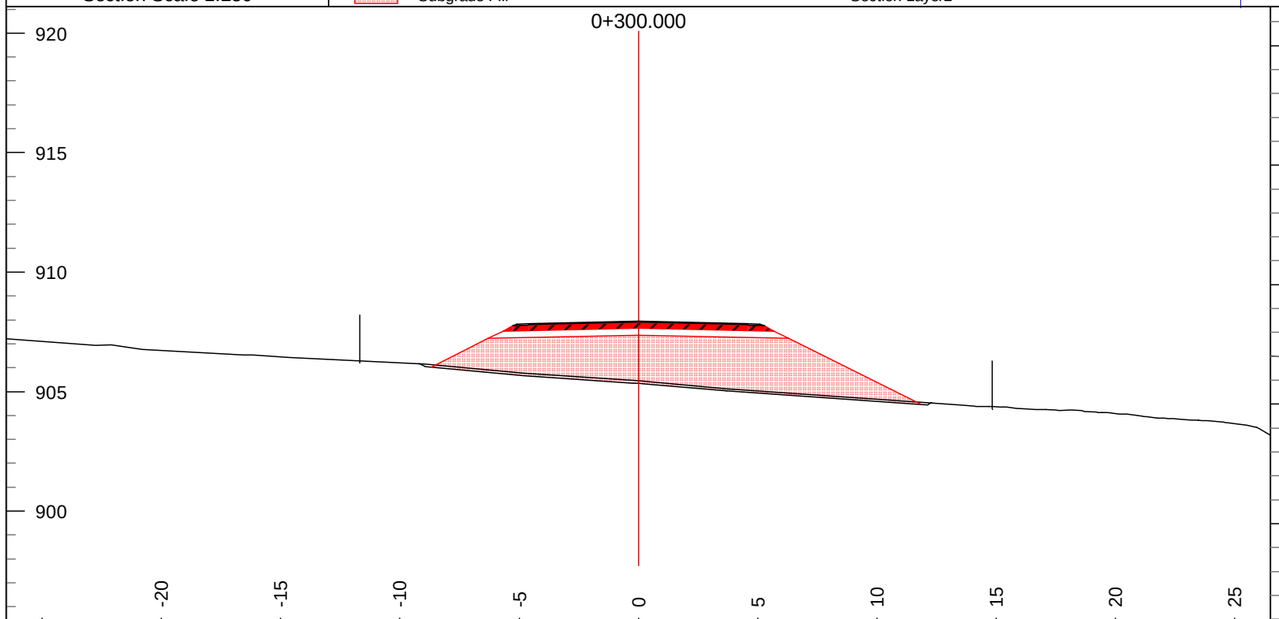
Section Legend

Asphalt Surface
WGB
SGSB
Subgrade Fill
Subgrade Cut
Section Topography
Section Layer 1
Section Layer2
Stripping
L-Centerline
Culverts
Power Pole
Clearing Limit

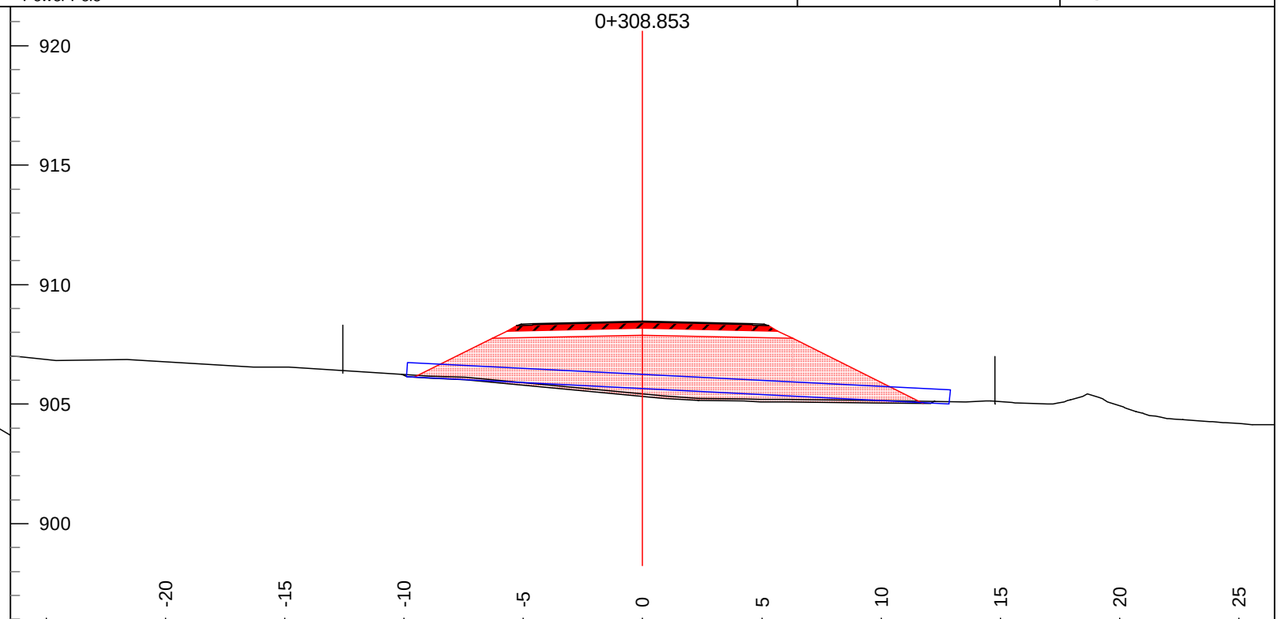
Prepared By:

CELTIC ENGINEERING LTD

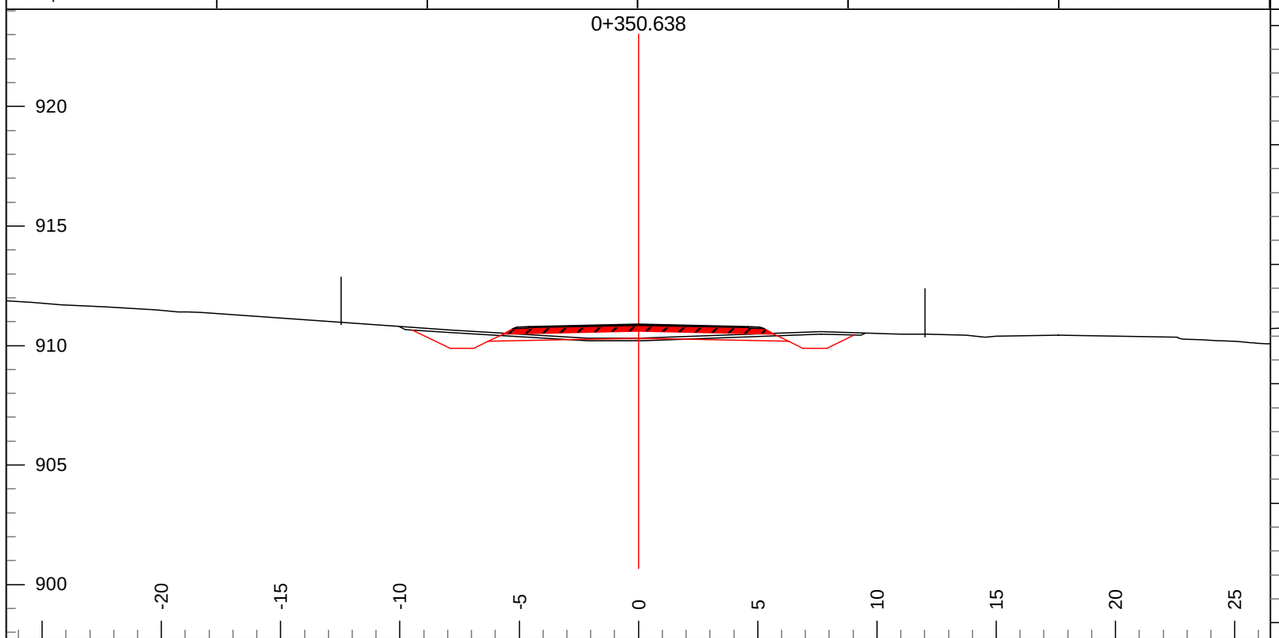
Plot Date: 26/05/06



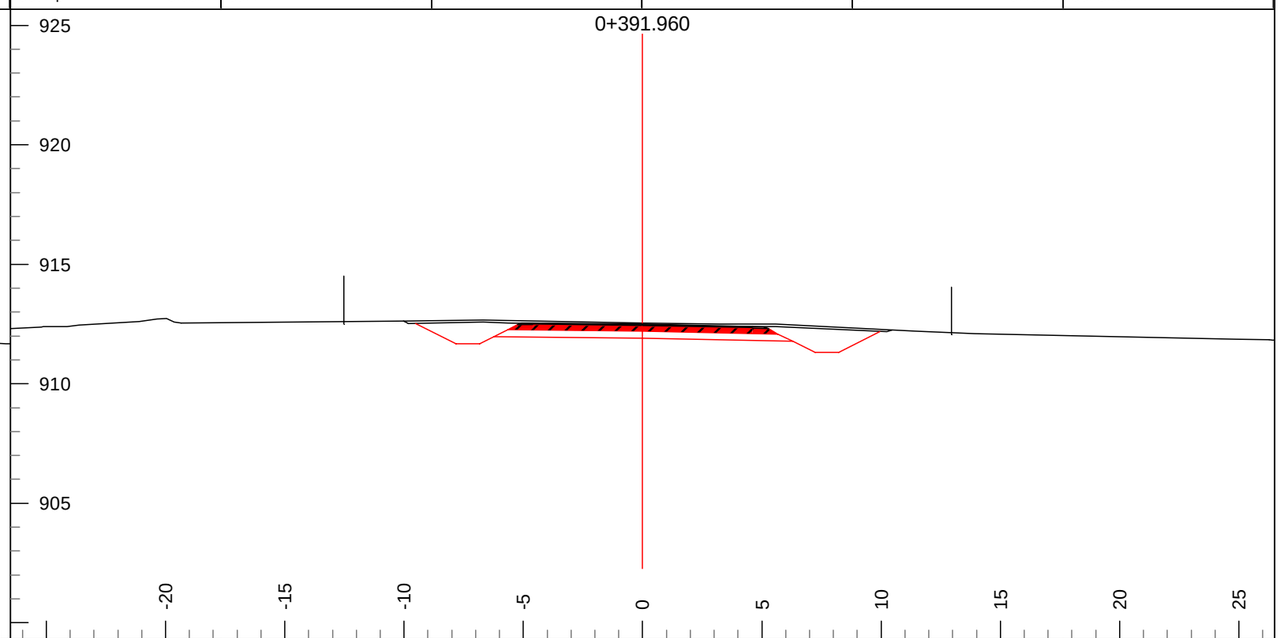
Field Ref:		L-Ssl:	7.67%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-7.48%	Cul DIA:	
Tmpl:	RLU	Stk L:	8.706	F Slope L:	-50.0%	F Slope R:	-50.0%	Stk R:	11.856	Cul Len L:	
H. Offset:	0.000	Stk L X:	-8.685	P-Stk L:	8.894	P-Stk R:	12.317	Stk R X:	11.816	Cul Fill:	
Cut Dp:	-2.506	Stk L Y:	-1.914	P-Clr L:	12.604	P-Clr R:	15.242	Stk R Y:	-3.479	Cul Skew:	



Field Ref:		L-Ssl:	8.26%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-2.76%	Cul DIA:	600mm
Tmpl:	RLU	Stk L:	9.589	F Slope L:	-50.0%	F Slope R:	-50.0%	Stk R:	11.772	Cul Len L:	10.000
H. Offset:	0.000	Stk L X:	-9.564	P-Stk L:	9.849	P-Stk R:	12.261	Stk R X:	11.765	Cul Fill:	2.236
Cut Dp:	-3.052	Stk L Y:	-2.353	P-Clr L:	12.733	P-Clr R:	15.144	Stk R Y:	-3.453	Cul Skew:	98.00



Field Ref:		L-Ssl:	4.93%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	2.01%	Cul DIA:	
Tmpl:	RLU	Stk L:	9.492	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	9.032	Cul Len L:	
H. Offset:	0.000	Stk L X:	-9.485	P-Stk L:	9.488	P-Stk R:	9.043	Stk R X:	9.031	Cul Fill:	
Cut Dp:	-0.597	Stk L Y:	-0.239	P-Clr L:	12.500	P-Clr R:	12.508	Stk R Y:	-0.466	Cul Skew:	



Field Ref:		L-Ssl:	0.71%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-2.75%	Cul DIA:	
Tmpl:	RLU	Stk L:	9.530	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	9.967	Cul Len L:	
H. Offset:	0.000	Stk L X:	-9.530	P-Stk L:	9.530	P-Stk R:	9.965	Stk R X:	9.960	Cul Fill:	
Cut Dp:	0.056	Stk L Y:	0.032	P-Clr L:	12.531	P-Clr R:	12.965	Stk R Y:	-0.318	Cul Skew:	

Cariboo Regional District

Section Scale 1:250

EslerSports Complex Access Project

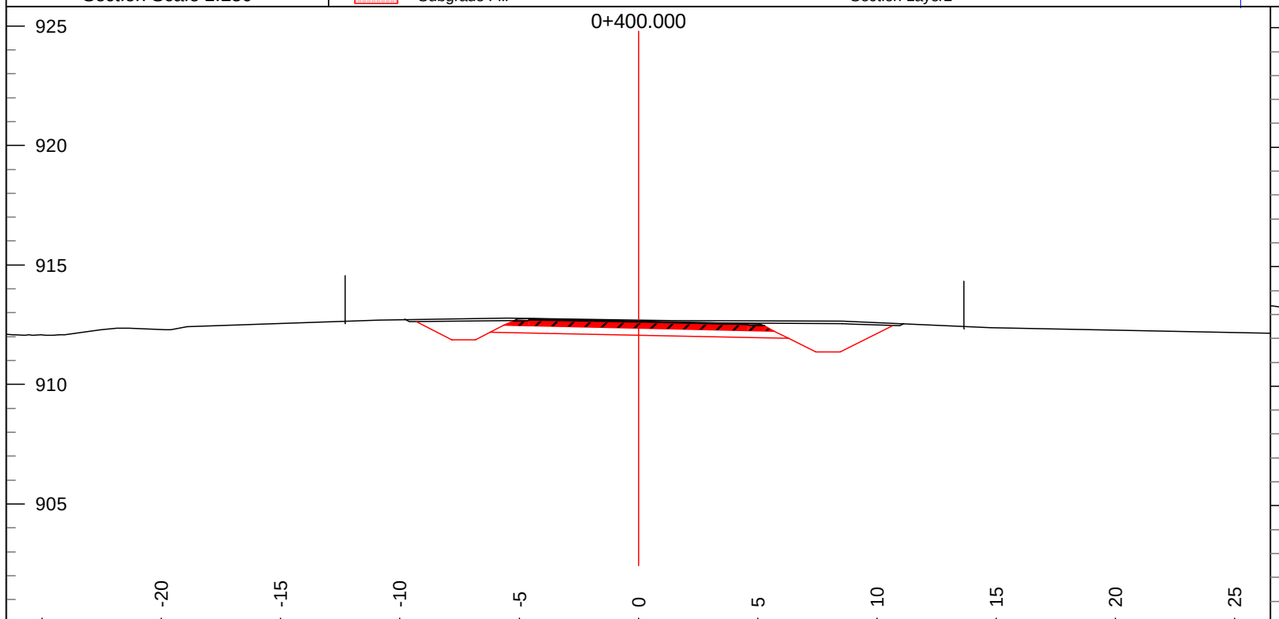
Section Legend

- Asphalt Surface
- WGB
- SGSB
- Subgrade Fill
- Subgrade Cut
- Section Topography
- Section Layer 1
- Section Layer2
- Stripping
- L-Centerline
- Culverts
- Power Pole
- Clearing Limit

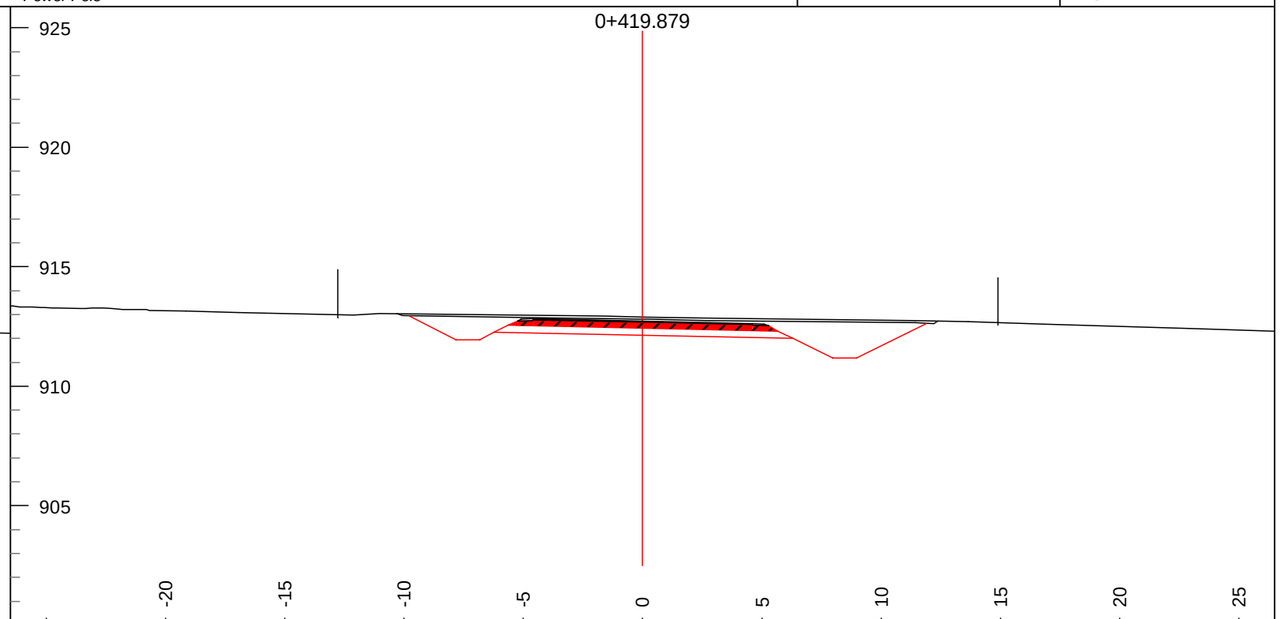
Prepared By:

CELTIC ENGINEERING LTD

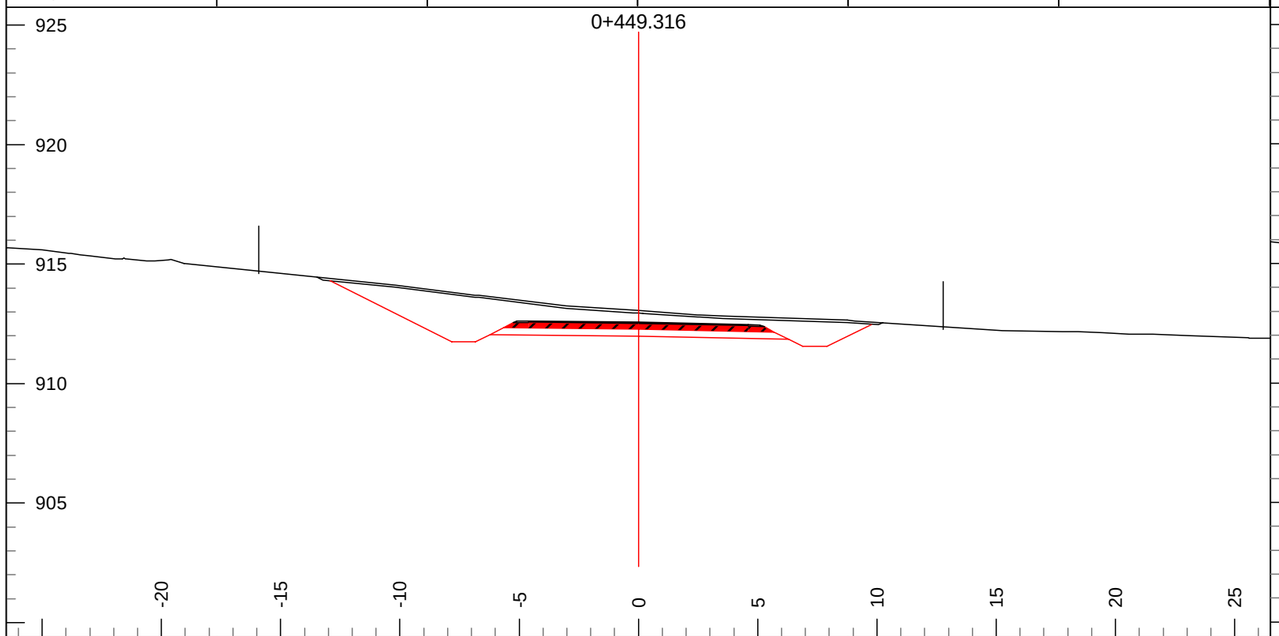
Plot Date: 26/05/06



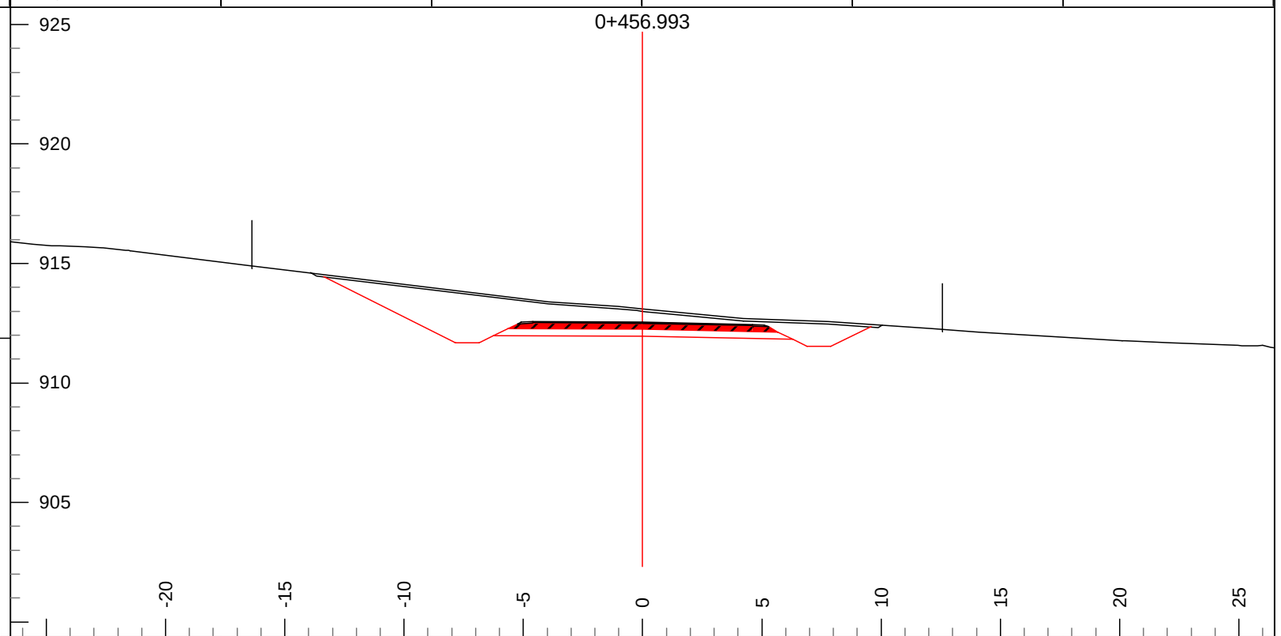
Field Ref:		L-Ssl:	0.08%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-1.16%	Cul DIA:	
Tmpl:	RLU	Stk L:	9.312	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	10.644	Cul Len L:	
H. Offset:	0.000	Stk L X:	-9.311	P-Stk L:	9.311	P-Stk R:	10.642	Stk R X:	10.641	Cul Fill:	
Cut Dp:	0.054	Stk L Y:	-0.029	P-Clr L:	12.500	P-Clr R:	13.643	Stk R Y:	-0.190	Cul Skew:	



Field Ref:		L-Ssl:	1.39%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-1.33%	Cul DIA:	
Tmpl:	RLU	Stk L:	9.787	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	11.893	Cul Len L:	
H. Offset:	0.000	Stk L X:	-9.787	P-Stk L:	9.789	P-Stk R:	11.890	Stk R X:	11.890	Cul Fill:	
Cut Dp:	0.173	Stk L Y:	0.209	P-Clr L:	12.789	P-Clr R:	14.890	Stk R Y:	-0.090	Cul Skew:	



Field Ref:		L-Ssl:	10.63%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-4.78%	Cul DIA:	
Tmpl:	RLU	Stk L:	12.990	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	9.794	Cul Len L:	
H. Offset:	0.000	Stk L X:	-12.929	P-Stk L:	13.045	P-Stk R:	9.779	Stk R X:	9.778	Cul Fill:	
Cut Dp:	0.471	Stk L Y:	1.732	P-Clr L:	16.071	P-Clr R:	12.780	Stk R Y:	-0.092	Cul Skew:	



Field Ref:		L-Ssl:	10.38%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-6.74%	Cul DIA:	
Tmpl:	RLU	Stk L:	13.436	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	9.593	Cul Len L:	
H. Offset:	0.000	Stk L X:	-13.368	P-Stk L:	13.502	P-Stk R:	9.566	Stk R X:	9.564	Cul Fill:	
Cut Dp:	0.545	Stk L Y:	1.895	P-Clr L:	16.538	P-Clr R:	12.568	Stk R Y:	-0.200	Cul Skew:	

Cariboo Regional District

EslerSports Complex Access Project

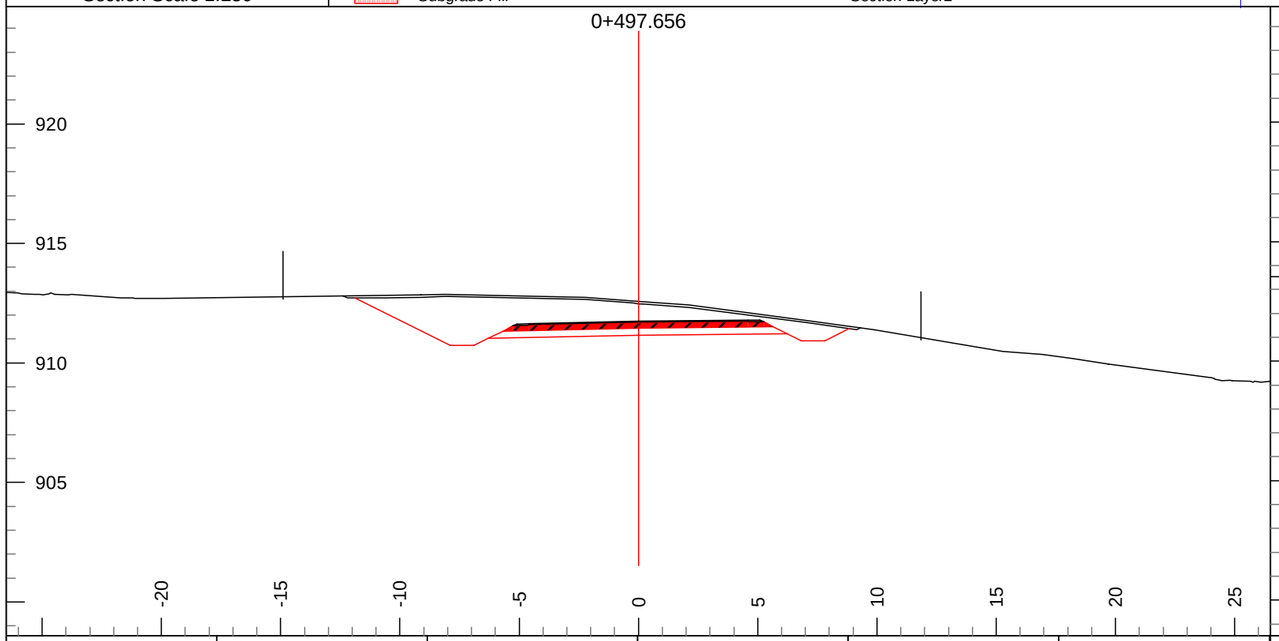
Prepared By: CELTIC ENGINEERING LTD

Section Scale 1:250

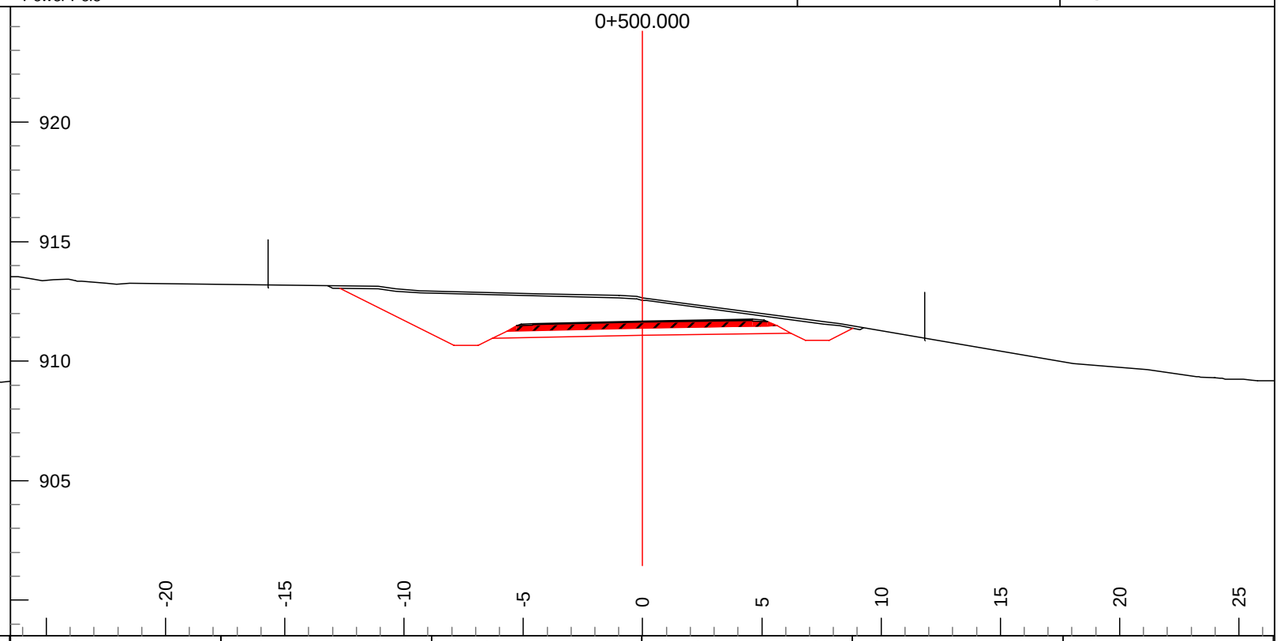
Plot Date: 26/05/06

Section Legend

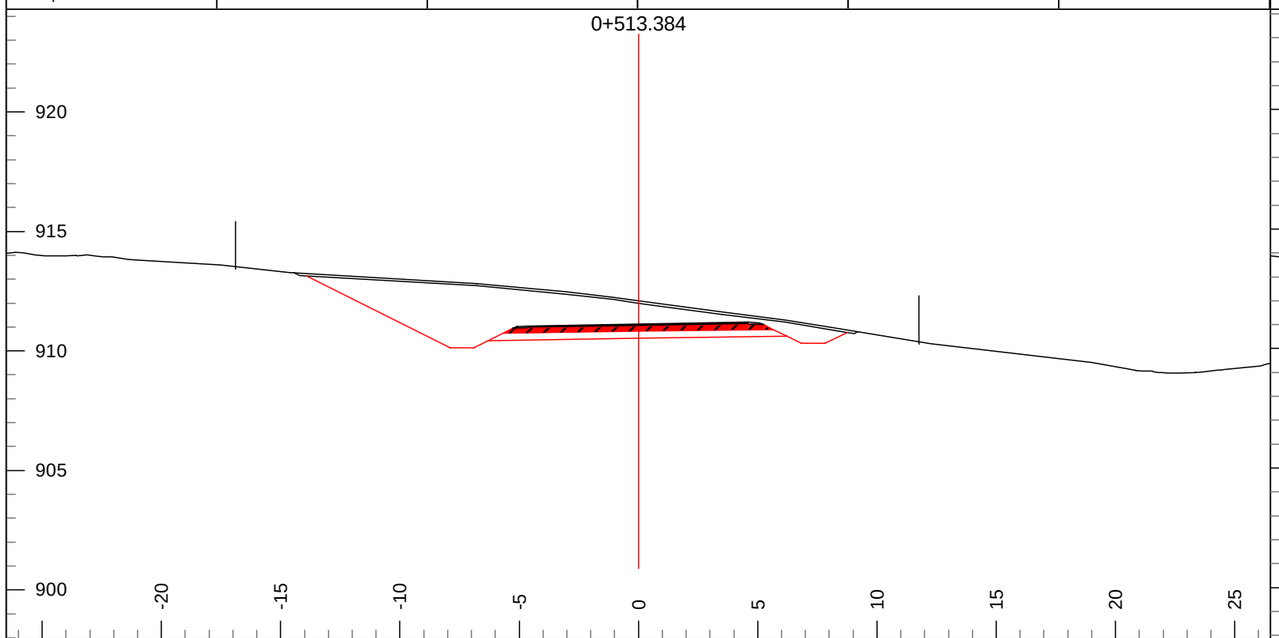
- Asphalt Surface
- WGB
- SGSB
- Subgrade Fill
- Subgrade Cut
- Section Topography
- Section Layer 1
- Section Layer2
- Stripping
- L-Centerline
- Culverts
- Power Pole
- Clearing Limit



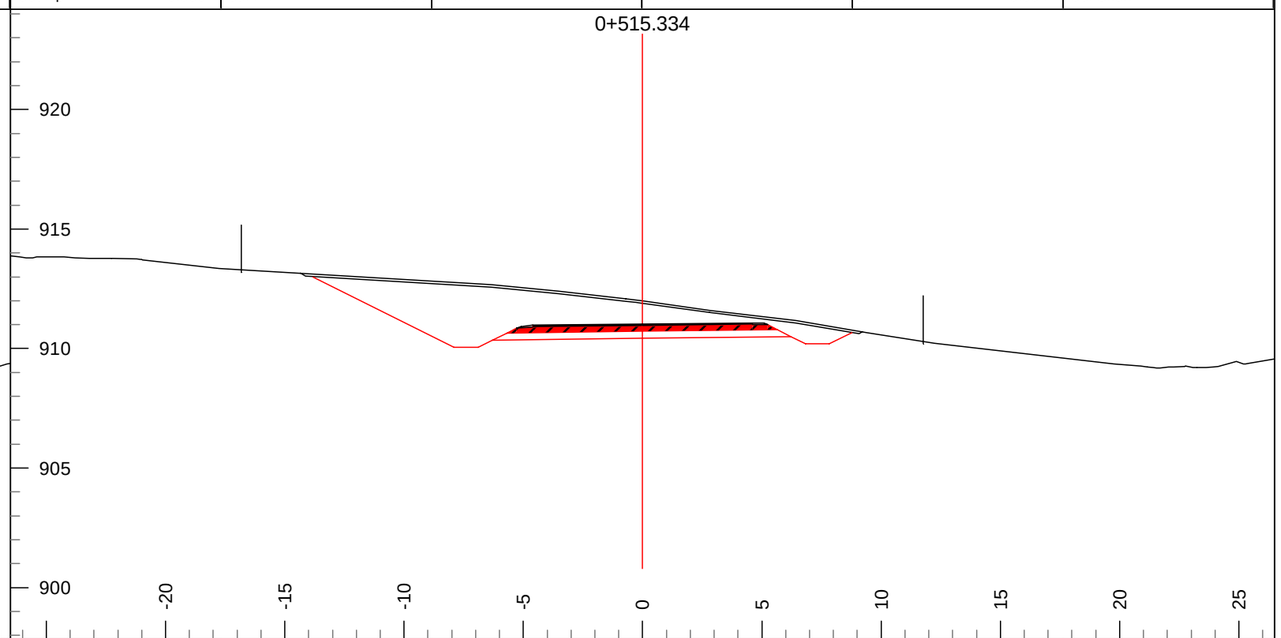
Field Ref:		L-Ssl:	2.62%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-12.07%	Cul DIA:	
Tmpl:	RLU	Stk L:	11.899	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	8.916	Cul Len L:	
H. Offset:	0.000	Stk L X:	-11.898	P-Stk L:	11.938	P-Stk R:	8.848	Stk R X:	8.842	Cul Fill:	
Cut Dp:	0.832	Stk L Y:	0.968	P-Clr L:	14.933	P-Clr R:	12.525	Stk R Y:	-0.312	Cul Skew:	



Field Ref:		L-Ssl:	3.41%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-13.88%	Cul DIA:	
Tmpl:	RLU	Stk L:	12.701	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	8.918	Cul Len L:	
H. Offset:	0.000	Stk L X:	-12.695	P-Stk L:	12.769	P-Stk R:	8.830	Stk R X:	8.825	Cul Fill:	
Cut Dp:	0.986	Stk L Y:	1.366	P-Clr L:	15.767	P-Clr R:	12.527	Stk R Y:	-0.304	Cul Skew:	



Field Ref:		L-Ssl:	9.11%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-14.23%	Cul DIA:	
Tmpl:	RLU	Stk L:	13.951	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	8.842	Cul Len L:	
H. Offset:	0.000	Stk L X:	-13.912	P-Stk L:	14.057	P-Stk R:	8.750	Stk R X:	8.743	Cul Fill:	
Cut Dp:	0.974	Stk L Y:	2.010	P-Clr L:	17.082	P-Clr R:	12.528	Stk R Y:	-0.347	Cul Skew:	



Field Ref:		L-Ssl:	9.00%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-14.06%	Cul DIA:	
Tmpl:	RLU	Stk L:	13.872	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	8.875	Cul Len L:	
H. Offset:	0.000	Stk L X:	-13.834	P-Stk L:	13.976	P-Stk R:	8.785	Stk R X:	8.778	Cul Fill:	
Cut Dp:	0.963	Stk L Y:	1.986	P-Clr L:	16.986	P-Clr R:	12.528	Stk R Y:	-0.344	Cul Skew:	

EslerSports Complex Access Project

Cariboo Regional District

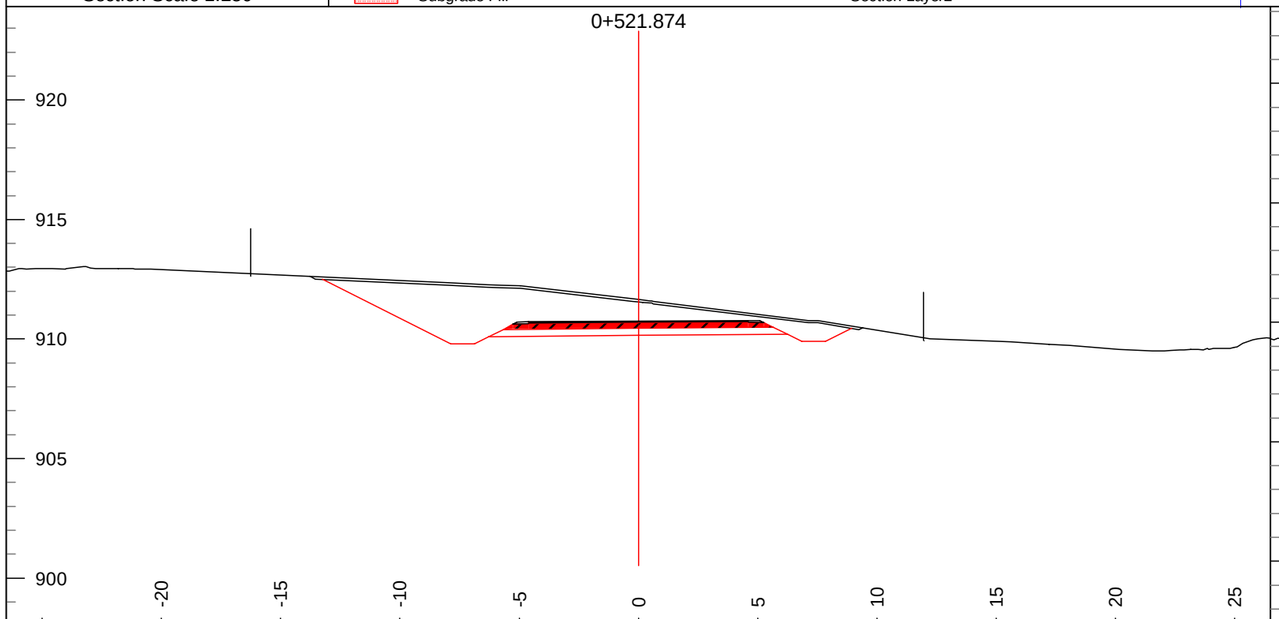
Section Scale 1:250

Section Legend

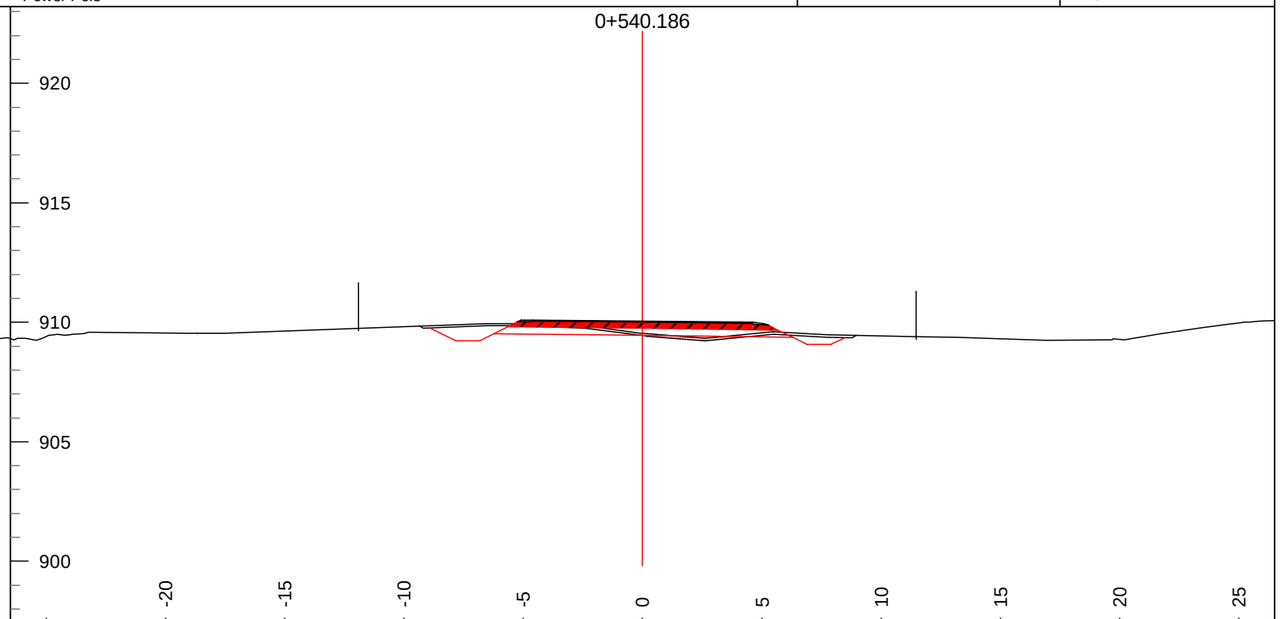
- Asphalt Surface
- WGB
- SGSB
- Subgrade Fill
- Subgrade Cut
- Section Topography
- Section Layer 1
- Section Layer2
- Stripping
- L-Centerline
- Culverts
- Power Pole
- Clearing Limit

Prepared By: CELTIC ENGINEERING LTD

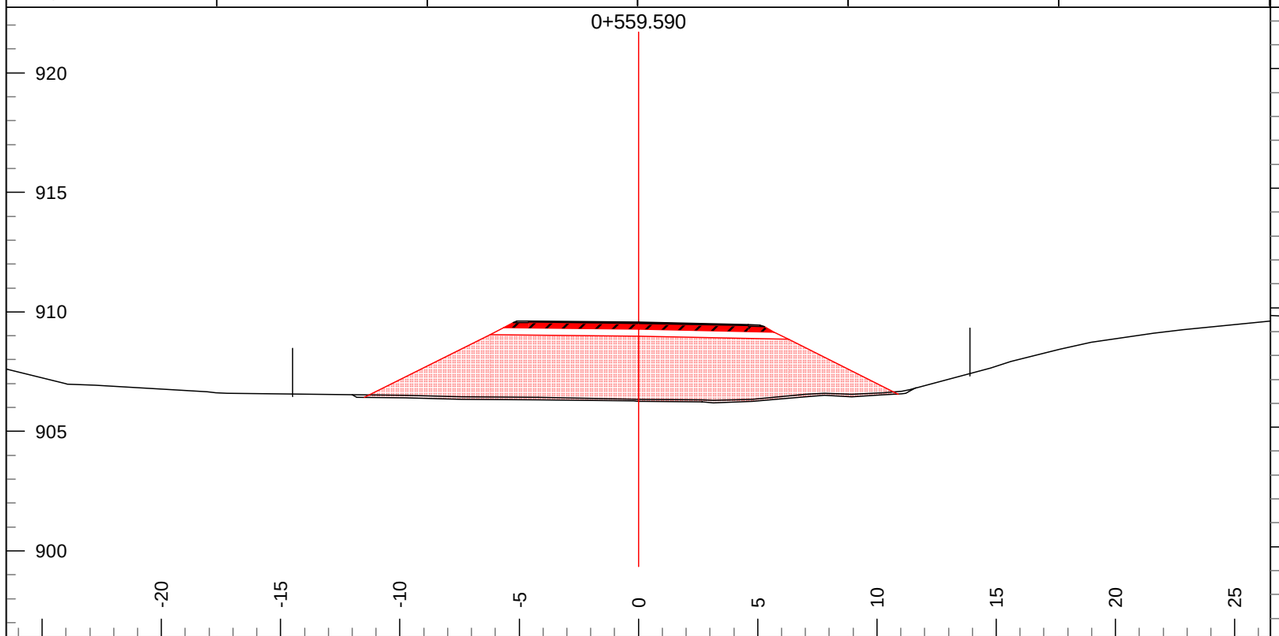
Plot Date: 26/05/06



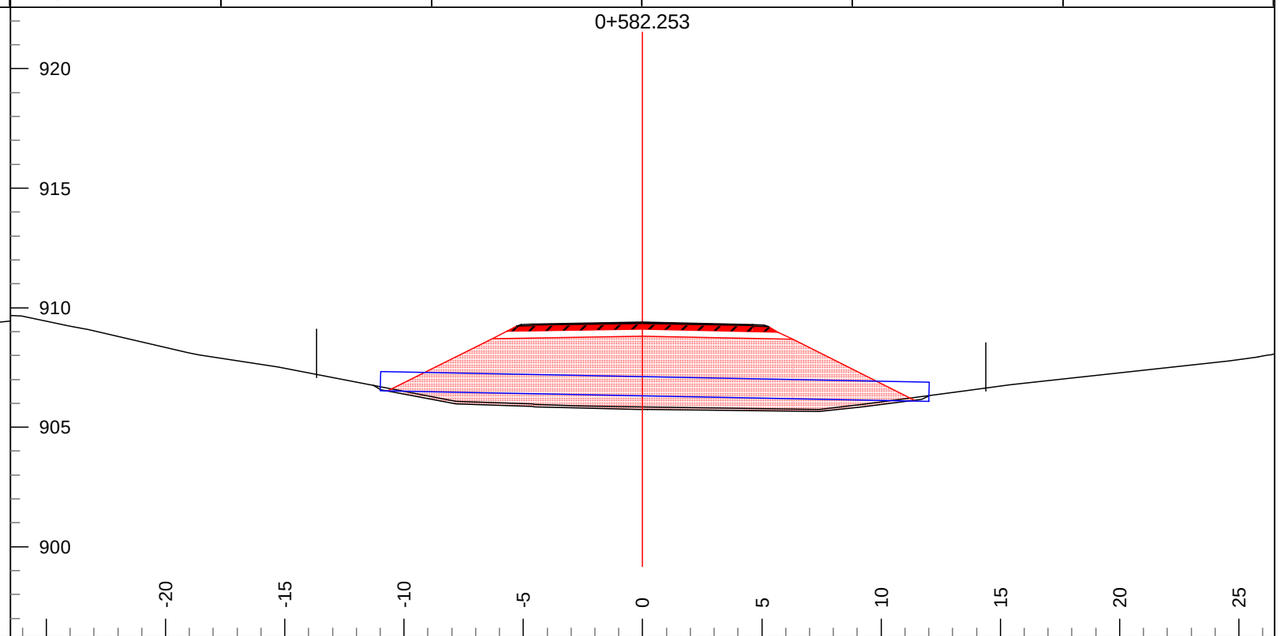
Field Ref:		L-Ssl:	7.93%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-12.82%	Cul DIA:	
Tmpl:	RLU	Stk L:	13.286	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	9.030	Cul Len L:	
H. Offset:	0.000	Stk L X:	-13.259	P-Stk L:	13.374	P-Stk R:	8.953	Stk R X:	8.948	Cul Fill:	
Cut Dp:	0.905	Stk L Y:	1.748	P-Clr L:	16.380	P-Clr R:	12.522	Stk R Y:	-0.307	Cul Skew:	



Field Ref:		L-Ssl:	2.81%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-1.07%	Cul DIA:	
Tmpl:	RLU	Stk L:	8.891	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	8.486	Cul Len L:	
H. Offset:	0.000	Stk L X:	-8.889	P-Stk L:	8.893	P-Stk R:	8.512	Stk R X:	8.484	Cul Fill:	
Cut Dp:	-0.509	Stk L Y:	-0.289	P-Clr L:	12.504	P-Clr R:	12.518	Stk R Y:	-0.689	Cul Skew:	



Field Ref:		L-Ssl:	1.42%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	2.54%	Cul DIA:	
Tmpl:	RLU	Stk L:	11.499	F Slope L:	-50.0%	F Slope R:	-50.0%	Stk R:	10.896	Cul Len L:	
H. Offset:	0.000	Stk L X:	-11.498	P-Stk L:	11.922	P-Stk R:	11.304	Stk R X:	10.894	Cul Fill:	
Cut Dp:	-3.214	Stk L Y:	-3.150	P-Clr L:	14.807	P-Clr R:	14.061	Stk R Y:	-3.018	Cul Skew:	



Field Ref:		L-Ssl:	6.35%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	1.90%	Cul DIA:	800mm
Tmpl:	RLU	Stk L:	10.684	F Slope L:	-50.0%	F Slope R:	-50.0%	Stk R:	11.395	Cul Len L:	11.000
H. Offset:	0.000	Stk L X:	-10.663	P-Stk L:	11.045	P-Stk R:	11.851	Stk R X:	11.392	Cul Fill:	2.292
Cut Dp:	-3.543	Stk L Y:	-2.879	P-Clr L:	13.838	P-Clr R:	14.656	Stk R Y:	-3.267	Cul Skew:	90.00

EslerSports Complex Access Project

Cariboo Regional District

Section Scale 1:250

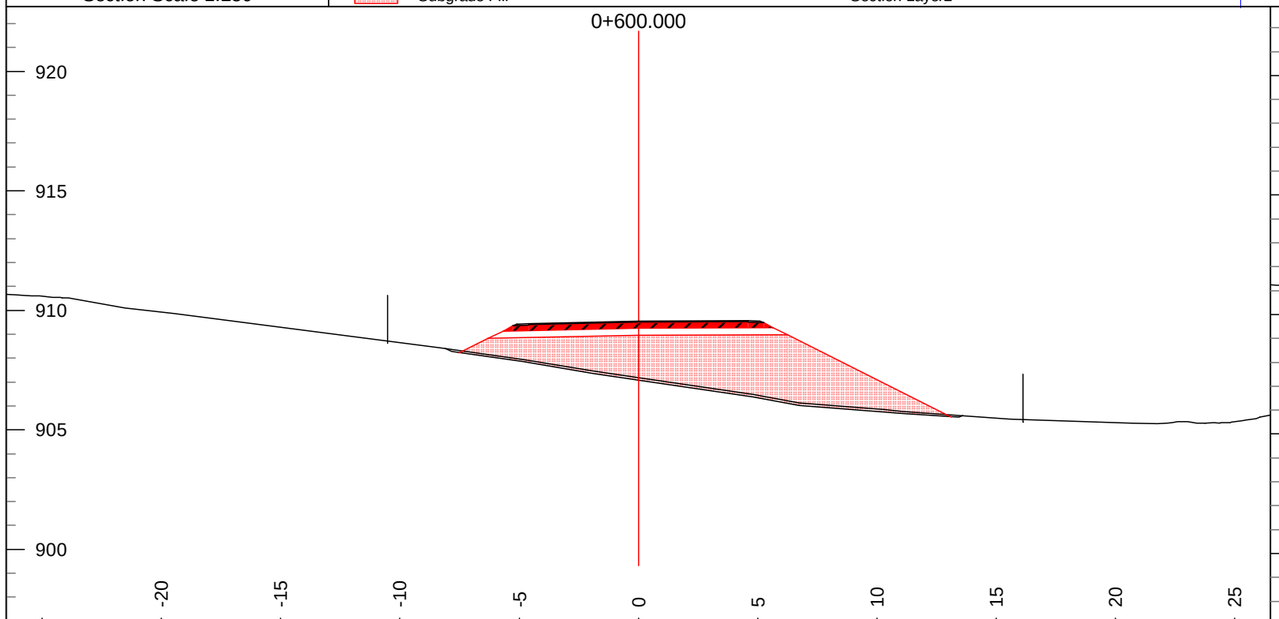
Section Legend

- Asphalt Surface
- WGB
- SGSB
- Subgrade Fill
- Subgrade Cut
- Section Topography
- Section Layer 1
- Section Layer2
- Stripping
- L-Centerline
- Culverts
- Power Pole
- Clearing Limit

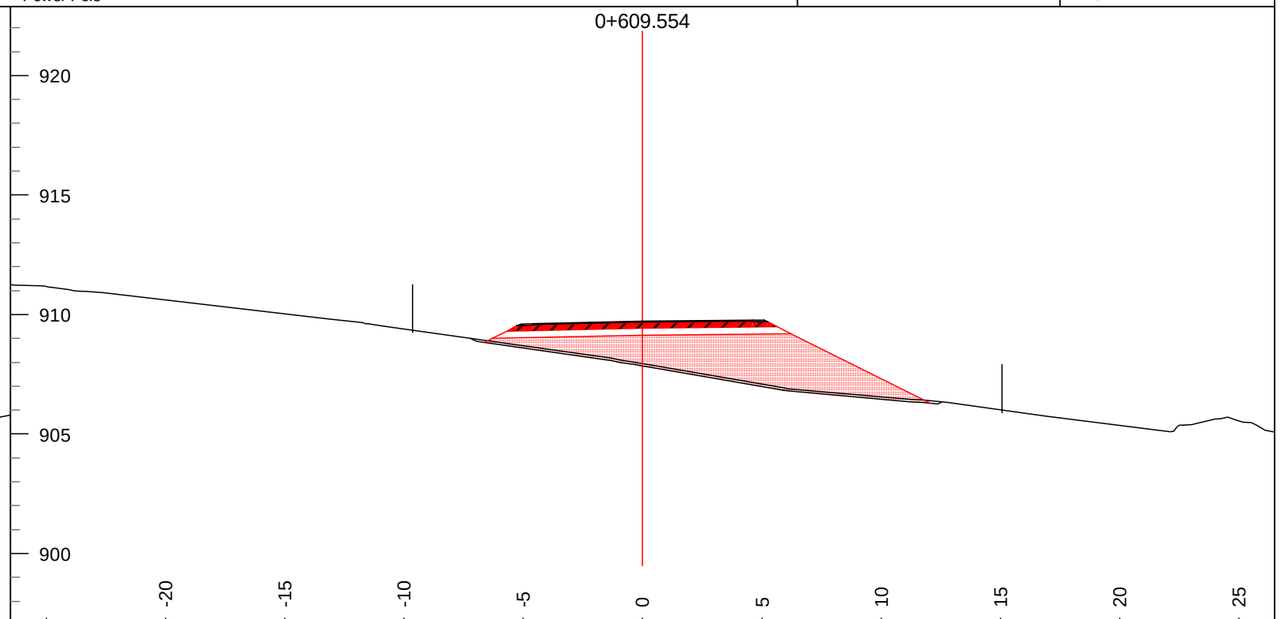
Prepared By:

CELTIC ENGINEERING LTD

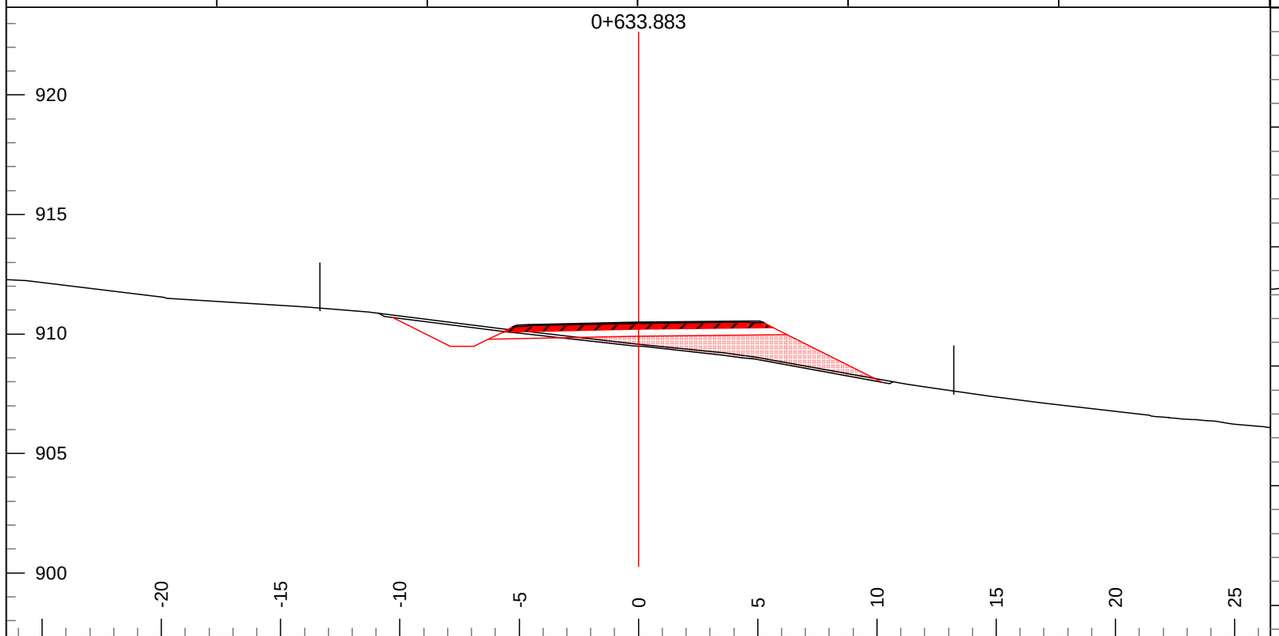
Plot Date: 26/05/06



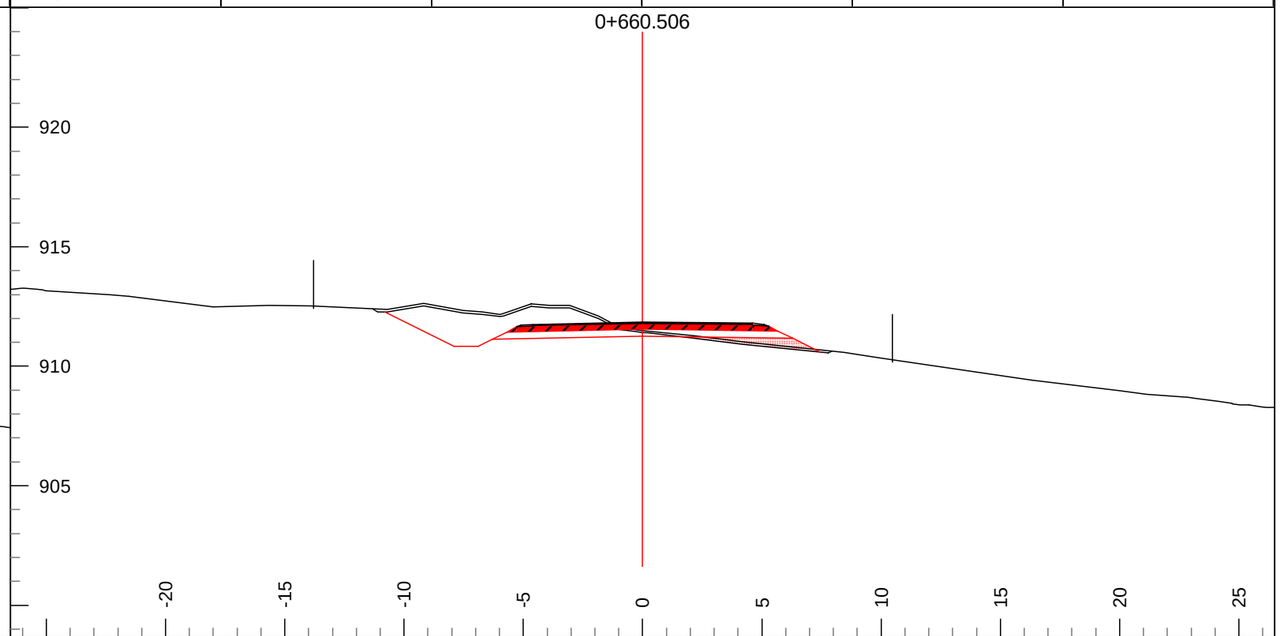
Field Ref:		L-Ssl:	14.71%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-13.03%	Cul DIA:	
Tmpl:	RLU	Stk L:	7.586	F Slope L:	-50.0%	F Slope R:	-50.0%	Stk R:	13.231	Cul Len L:	
H. Offset:	0.000	Stk L X:	-7.514	P-Stk L:	7.631	P-Stk R:	13.728	Stk R X:	13.128	Cul Fill:	
Cut Dp:	-2.368	Stk L Y:	-1.328	P-Clr L:	12.513	P-Clr R:	16.644	Stk R Y:	-4.014	Cul Skew:	



Field Ref:		L-Ssl:	14.60%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-13.82%	Cul DIA:	
Tmpl:	RLU	Stk L:	6.711	F Slope L:	-50.0%	F Slope R:	-50.0%	Stk R:	12.194	Cul Len L:	
H. Offset:	0.000	Stk L X:	-6.653	P-Stk L:	6.713	P-Stk R:	12.561	Stk R X:	12.080	Cul Fill:	
Cut Dp:	-1.780	Stk L Y:	-0.897	P-Clr L:	12.500	P-Clr R:	15.535	Stk R Y:	-3.441	Cul Skew:	



Field Ref:		L-Ssl:	11.68%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-14.59%	Cul DIA:	
Tmpl:	RLU	Stk L:	10.411	F Slope L:	50.0%	F Slope R:	-50.0%	Stk R:	10.358	Cul Len L:	
H. Offset:	0.000	Stk L X:	-10.352	P-Stk L:	10.354	P-Stk R:	10.538	Stk R X:	10.233	Cul Fill:	
Cut Dp:	-0.917	Stk L Y:	0.194	P-Clr L:	13.364	P-Clr R:	13.545	Stk R Y:	-2.517	Cul Skew:	



Field Ref:		L-Ssl:	9.78%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-11.73%	Cul DIA:	
Tmpl:	RLU	Stk L:	10.832	F Slope L:	50.0%	F Slope R:	-50.0%	Stk R:	7.524	Cul Len L:	
H. Offset:	0.000	Stk L X:	-10.805	P-Stk L:	10.813	P-Stk R:	7.574	Stk R X:	7.466	Cul Fill:	
Cut Dp:	-0.340	Stk L Y:	0.421	P-Clr L:	13.821	P-Clr R:	12.640	Stk R Y:	-1.270	Cul Skew:	

Cariboo Regional District

EslerSports Complex Access Project

Prepared By:

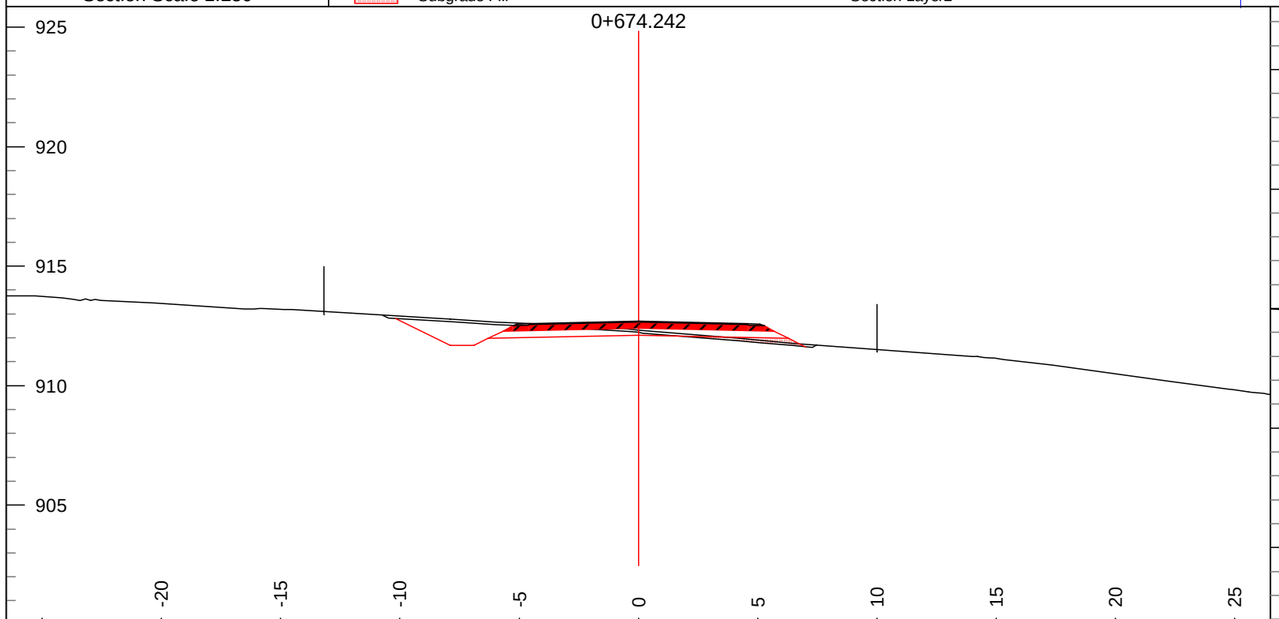
CELTIC ENGINEERING LTD

Section Scale 1:250

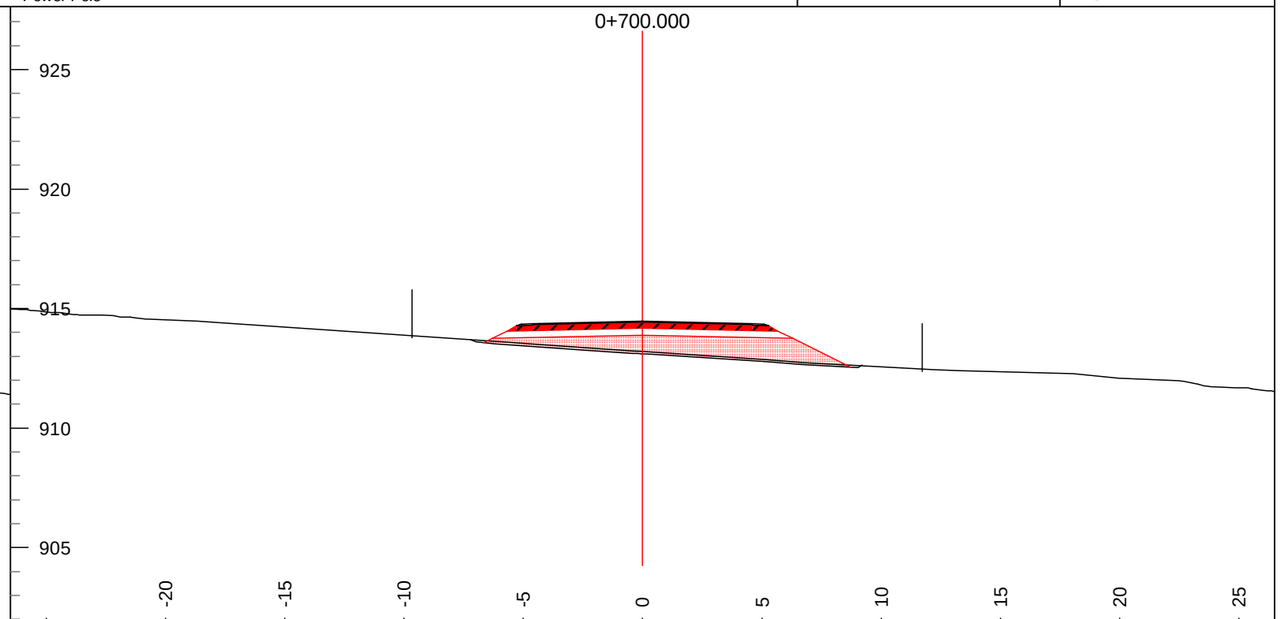
Section Legend

- Asphalt Surface
- WGB
- SGSB
- Subgrade Fill
- Subgrade Cut
- Section Topography
- Section Layer 1
- Section Layer2
- Stripping
- L-Centerline
- Culverts
- Power Pole
- Clearing Limit

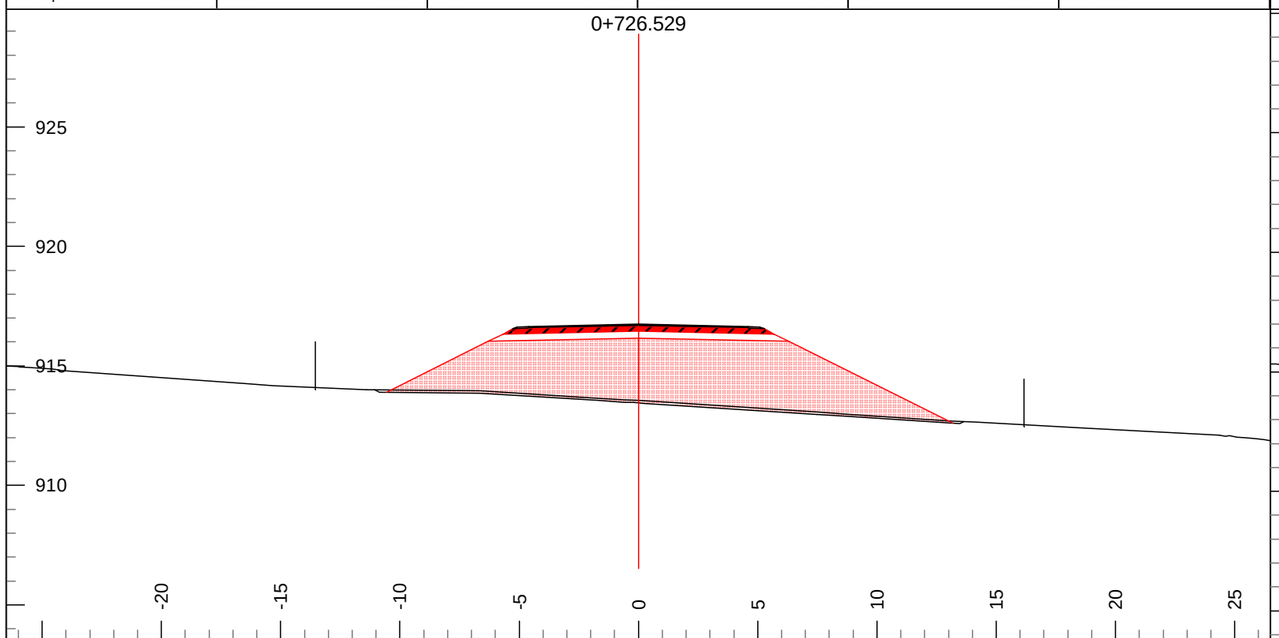
Plot Date: 26/05/06



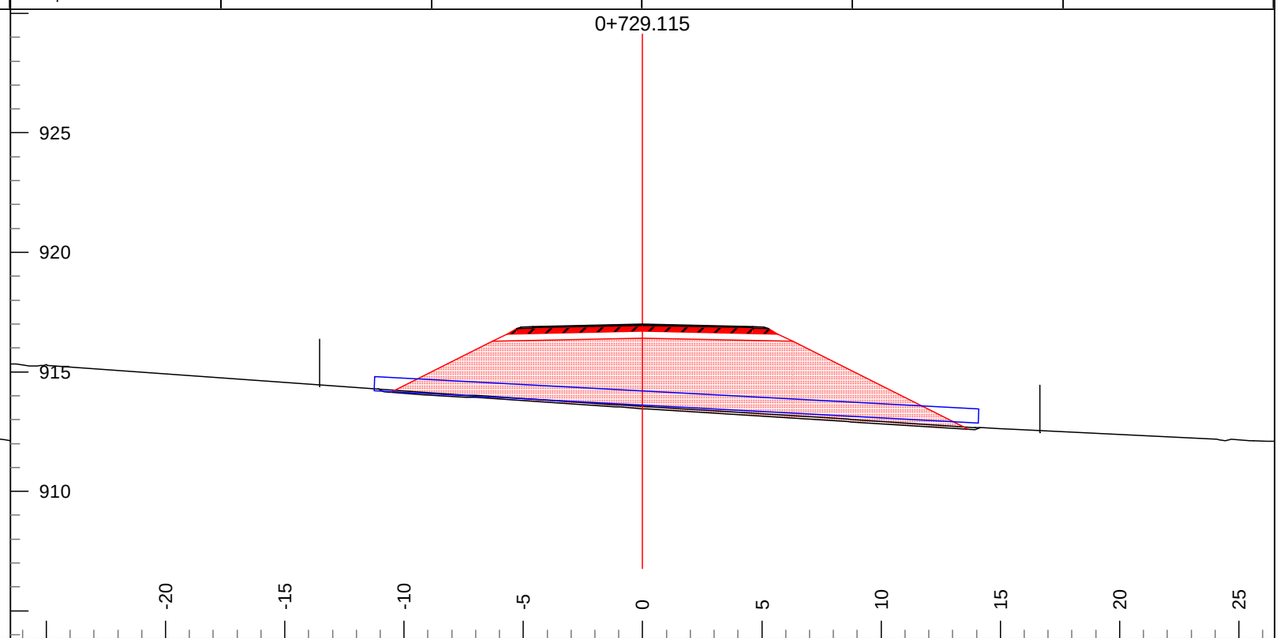
Field Ref:		L-Ssl:	5.72%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-8.12%	Cul DIA:	
Tmpl:	RLU	Stk L:	10.178	F Slope L:	50.0%	F Slope R:	-50.0%	Stk R:	7.046	Cul Len L:	
H. Offset:	0.000	Stk L X:	-10.167	P-Stk L:	10.167	P-Stk R:	7.094	Stk R X:	7.012	Cul Fill:	
Cut Dp:	-0.381	Stk L Y:	0.102	P-Clr L:	13.173	P-Clr R:	12.575	Stk R Y:	-1.077	Cul Skew:	



Field Ref:		L-Ssl:	6.87%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-6.29%	Cul DIA:	
Tmpl:	RLU	Stk L:	6.683	F Slope L:	-50.0%	F Slope R:	-50.0%	Stk R:	8.747	Cul Len L:	
H. Offset:	0.000	Stk L X:	-6.673	P-Stk L:	6.734	P-Stk R:	8.934	Stk R X:	8.722	Cul Fill:	
Cut Dp:	-1.271	Stk L Y:	-0.907	P-Clr L:	12.507	P-Clr R:	12.664	Stk R Y:	-1.932	Cul Skew:	



Field Ref:		L-Ssl:	4.43%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-6.56%	Cul DIA:	
Tmpl:	RLU	Stk L:	10.568	F Slope L:	-50.0%	F Slope R:	-50.0%	Stk R:	13.202	Cul Len L:	
H. Offset:	0.000	Stk L X:	-10.562	P-Stk L:	10.941	P-Stk R:	13.807	Stk R X:	13.167	Cul Fill:	
Cut Dp:	-3.201	Stk L Y:	-2.852	P-Clr L:	13.818	P-Clr R:	16.707	Stk R Y:	-4.154	Cul Skew:	



Field Ref:		L-Ssl:	6.56%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-6.33%	Cul DIA:	600mm
Tmpl:	RLU	Stk L:	10.566	F Slope L:	-50.0%	F Slope R:	-50.0%	Stk R:	13.695	Cul Len L:	12.000
H. Offset:	0.000	Stk L X:	-10.550	P-Stk L:	10.927	P-Stk R:	14.353	Stk R X:	13.661	Cul Fill:	2.807
Cut Dp:	-3.441	Stk L Y:	-2.846	P-Clr L:	13.784	P-Clr R:	17.247	Stk R Y:	-4.402	Cul Skew:	110.00

EslerSports Complex Access Project

Cariboo Regional District

Section Scale 1:250

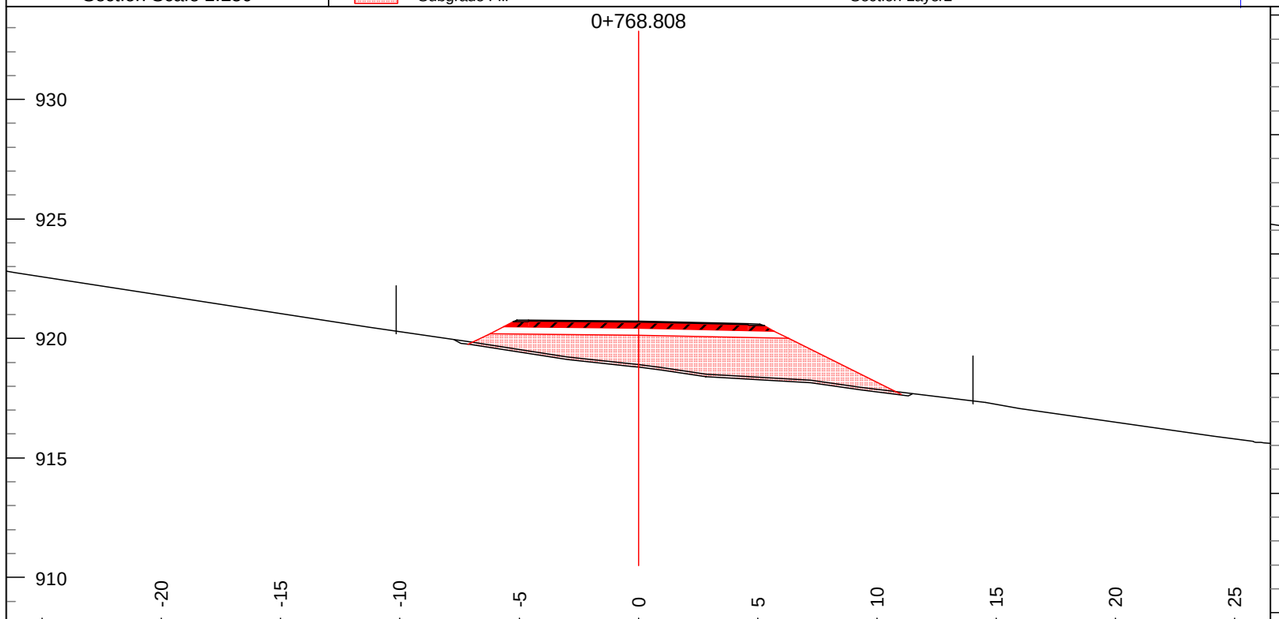
Section Legend

- Asphalt Surface
- WGB
- SGSB
- Subgrade Fill
- Subgrade Cut
- Section Topography
- Section Layer 1
- Section Layer2
- Stripping
- L-Centerline
- Culverts
- Power Pole
- Clearing Limit

Prepared By: CELTIC ENGINEERING LTD

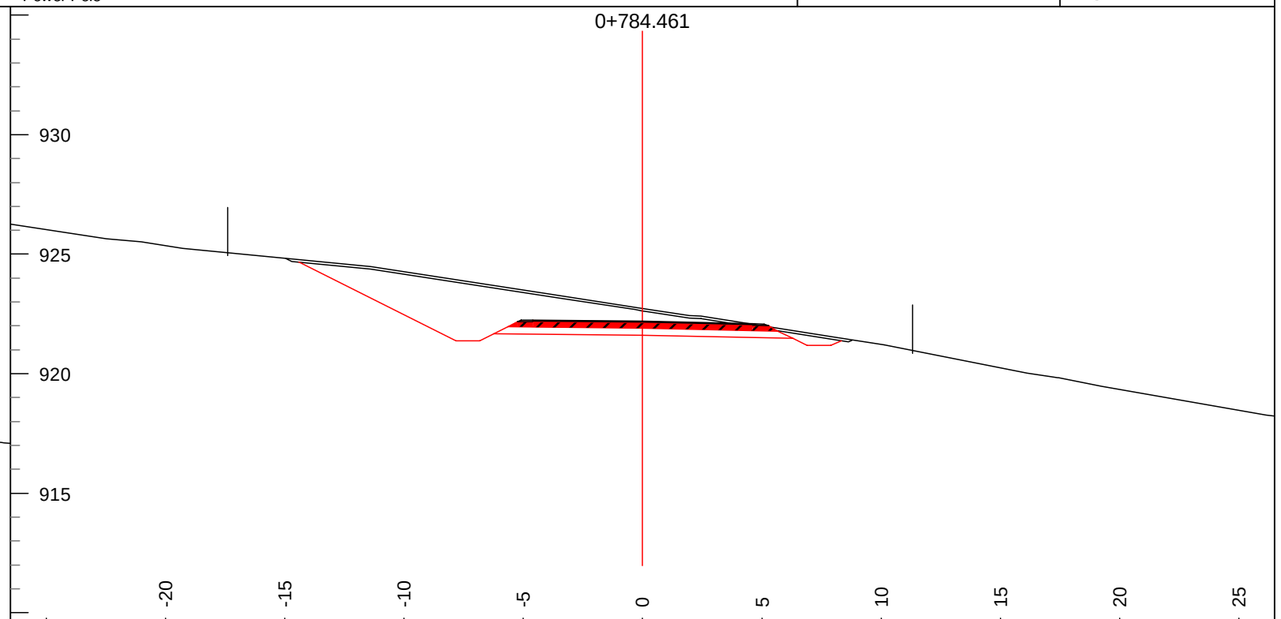
Plot Date: 26/05/06

0+768.808



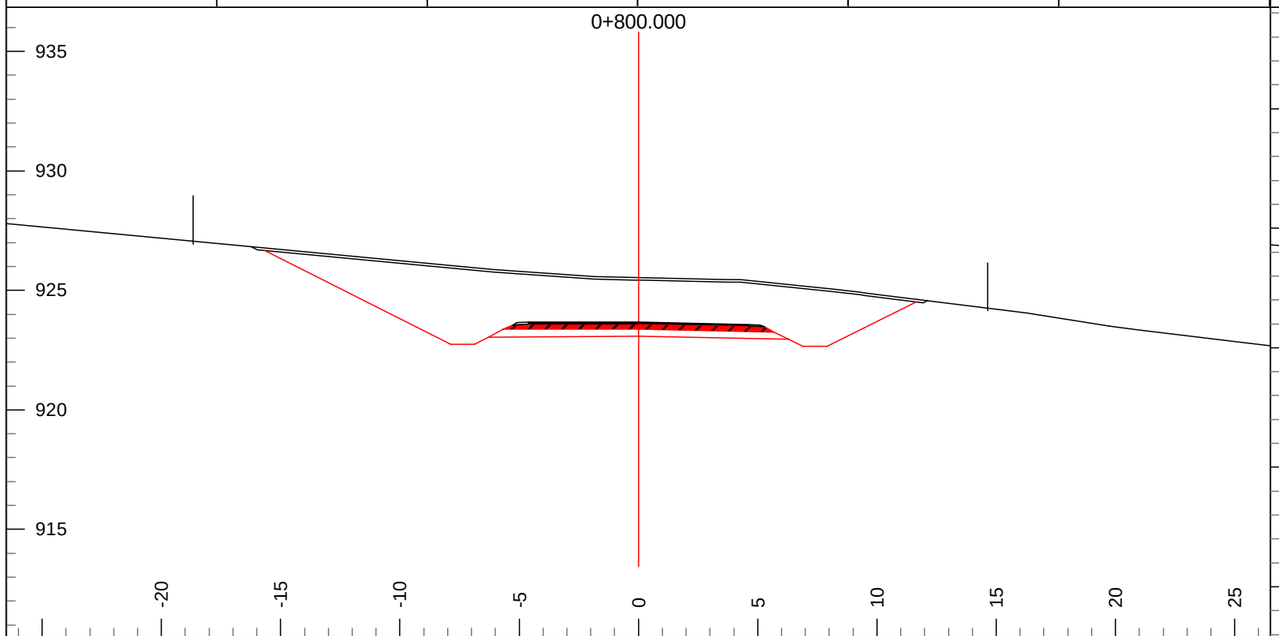
Field Ref:		L-Ssl:	13.98%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-10.23%	Cul DIA:	
Tmpl:	RLU	Stk L:	7.199	F Slope L:	-50.0%	F Slope R:	-50.0%	Stk R:	11.093	Cul Len L:	
H. Offset:	0.000	Stk L X:	-7.147	P-Stk L:	7.213	P-Stk R:	11.445	Stk R X:	11.023	Cul Fill:	
Cut Dp:	-1.836	Stk L Y:	-0.974	P-Clr L:	12.500	P-Clr R:	14.415	Stk R Y:	-3.082	Cul Skew:	

0+784.461



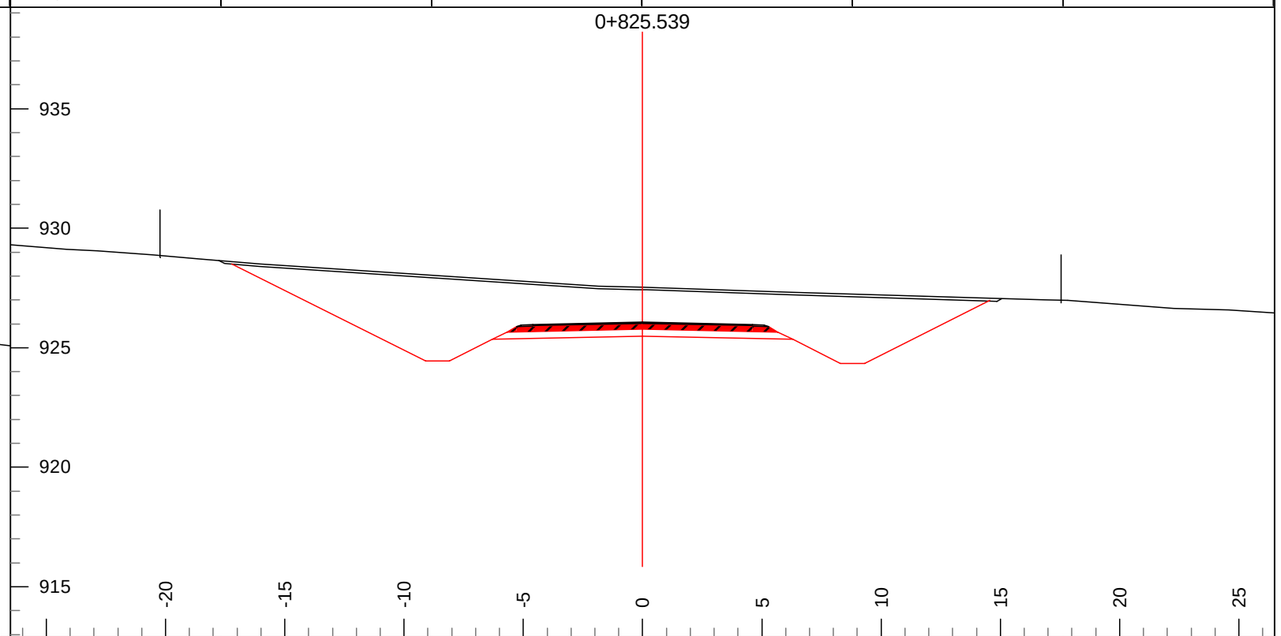
Field Ref:		L-Ssl:	15.25%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-15.17%	Cul DIA:	
Tmpl:	RLU	Stk L:	14.520	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	8.426	Cul Len L:	
H. Offset:	0.000	Stk L X:	-14.391	P-Stk L:	14.600	P-Stk R:	8.357	Stk R X:	8.317	Cul Fill:	
Cut Dp:	0.529	Stk L Y:	2.463	P-Clr L:	17.625	P-Clr R:	12.585	Stk R Y:	-0.823	Cul Skew:	

0+800.000



Field Ref:		L-Ssl:	7.02%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-7.07%	Cul DIA:	
Tmpl:	RLU	Stk L:	15.728	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	11.697	Cul Len L:	
H. Offset:	0.000	Stk L X:	-15.686	P-Stk L:	15.970	P-Stk R:	11.683	Stk R X:	11.653	Cul Fill:	
Cut Dp:	1.856	Stk L Y:	2.996	P-Clr L:	18.989	P-Clr R:	14.664	Stk R Y:	0.845	Cul Skew:	

0+825.539



Field Ref:		L-Ssl:	5.92%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-3.21%	Cul DIA:	
Tmpl:	RLU	Stk L:	17.263	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	14.565	Cul Len L:	
H. Offset:	0.000	Stk L X:	-17.235	P-Stk L:	17.406	P-Stk R:	14.582	Stk R X:	14.554	Cul Fill:	
Cut Dp:	1.449	Stk L Y:	2.436	P-Clr L:	20.426	P-Clr R:	17.577	Stk R Y:	0.895	Cul Skew:	

EslerSports Complex Access Project

Cariboo Regional District

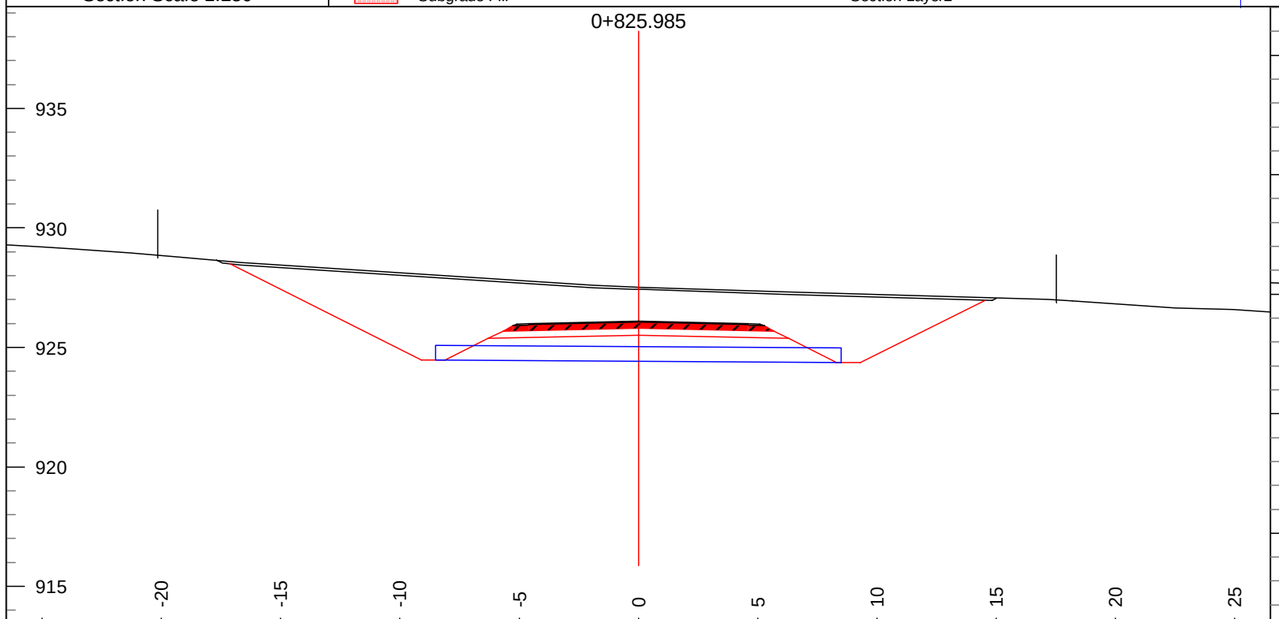
Section Scale 1:250

Section Legend

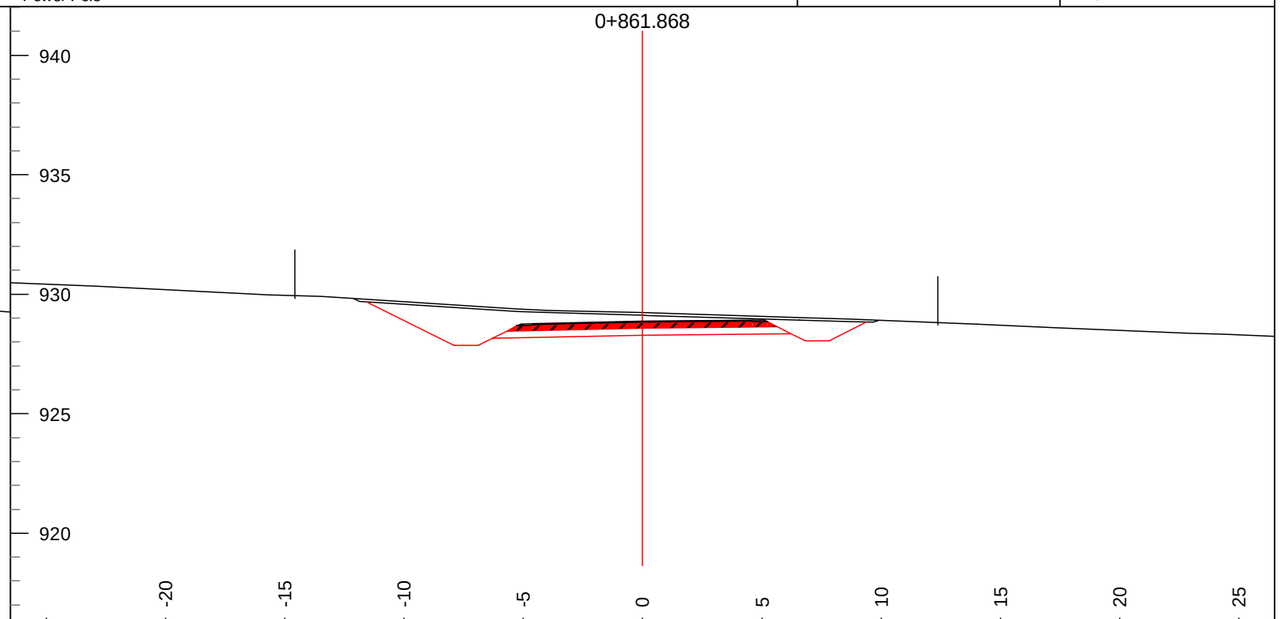
- Asphalt Surface
- WGB
- SGSB
- Subgrade Fill
- Subgrade Cut
- Section Topography
- Section Layer 1
- Section Layer2
- Stripping
- L-Centerline
- Culverts
- Power Pole
- Clearing Limit

Prepared By: CELTIC ENGINEERING LTD

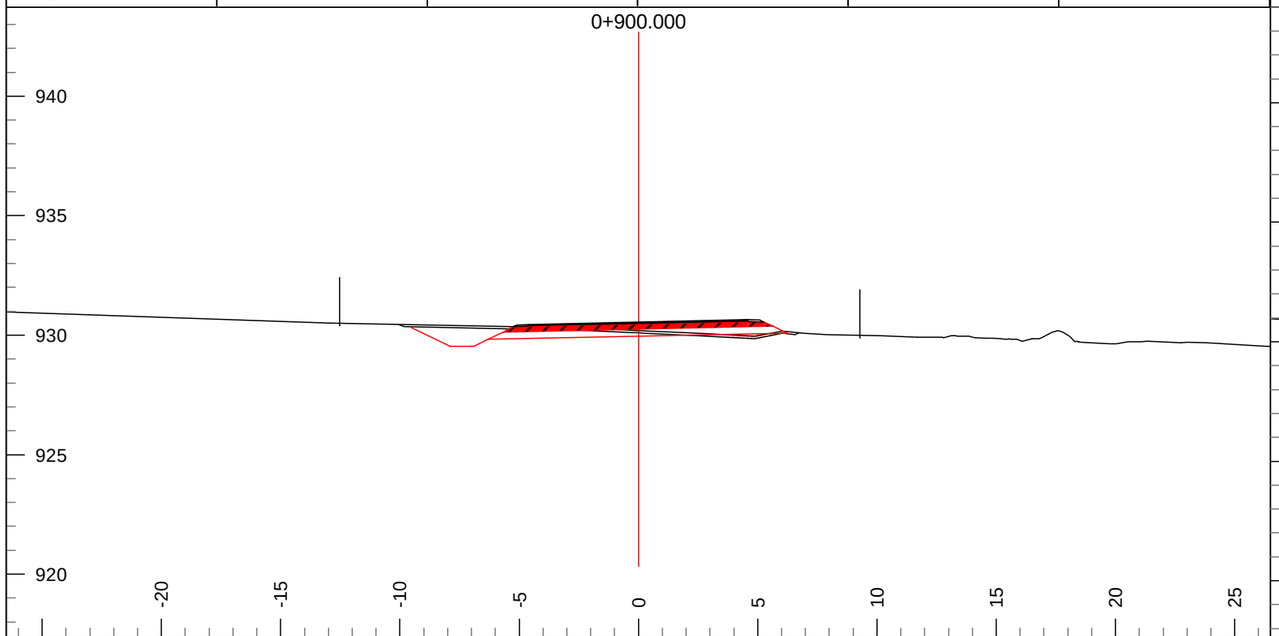
Plot Date: 26/05/06



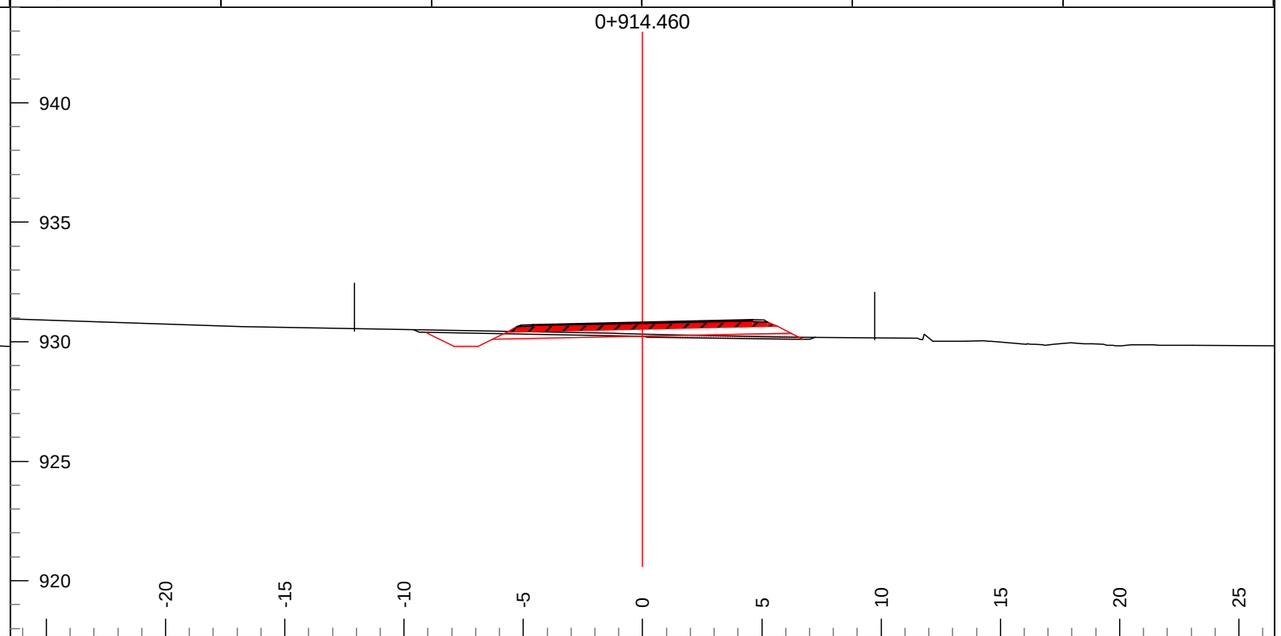
Field Ref:		L-Ssl:	5.90%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-3.20%	Cul DIA:	600mm
Tmpl:	RLU	Stk L:	17.176	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	14.526	Cul Len L:	9.000
H. Offset:	0.000	Stk L X:	-17.149	P-Stk L:	17.315	P-Stk R:	14.542	Stk R X:	14.515	Cul Fill:	1.076
Cut Dp:	1.428	Stk L Y:	2.393	P-Clr L:	20.336	P-Clr R:	17.538	Stk R Y:	0.876	Cul Skew:	109.09



Field Ref:		L-Ssl:	4.67%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-3.10%	Cul DIA:	
Tmpl:	RLU	Stk L:	11.595	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	9.385	Cul Len L:	
H. Offset:	0.000	Stk L X:	-11.586	P-Stk L:	11.614	P-Stk R:	9.377	Stk R X:	9.377	Cul Fill:	
Cut Dp:	0.341	Stk L Y:	0.811	P-Clr L:	14.625	P-Clr R:	12.500	Stk R Y:	-0.044	Cul Skew:	



Field Ref:		L-Ssl:	2.50%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-2.21%	Cul DIA:	
Tmpl:	RLU	Stk L:	9.531	F Slope L:	50.0%	F Slope R:	-50.0%	Stk R:	6.284	Cul Len L:	
H. Offset:	0.000	Stk L X:	-9.530	P-Stk L:	9.533	P-Stk R:	6.303	Stk R X:	6.282	Cul Fill:	
Cut Dp:	-0.357	Stk L Y:	-0.216	P-Clr L:	12.530	P-Clr R:	12.515	Stk R Y:	-0.508	Cul Skew:	



Field Ref:		L-Ssl:	1.85%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-1.53%	Cul DIA:	
Tmpl:	RLU	Stk L:	9.082	F Slope L:	50.0%	F Slope R:	-50.0%	Stk R:	6.732	Cul Len L:	
H. Offset:	0.000	Stk L X:	-9.081	P-Stk L:	9.092	P-Stk R:	6.767	Stk R X:	6.728	Cul Fill:	
Cut Dp:	-0.509	Stk L Y:	-0.441	P-Clr L:	12.503	P-Clr R:	12.525	Stk R Y:	-0.731	Cul Skew:	

Cariboo Regional District

EslerSports Complex Access Project

Prepared By:

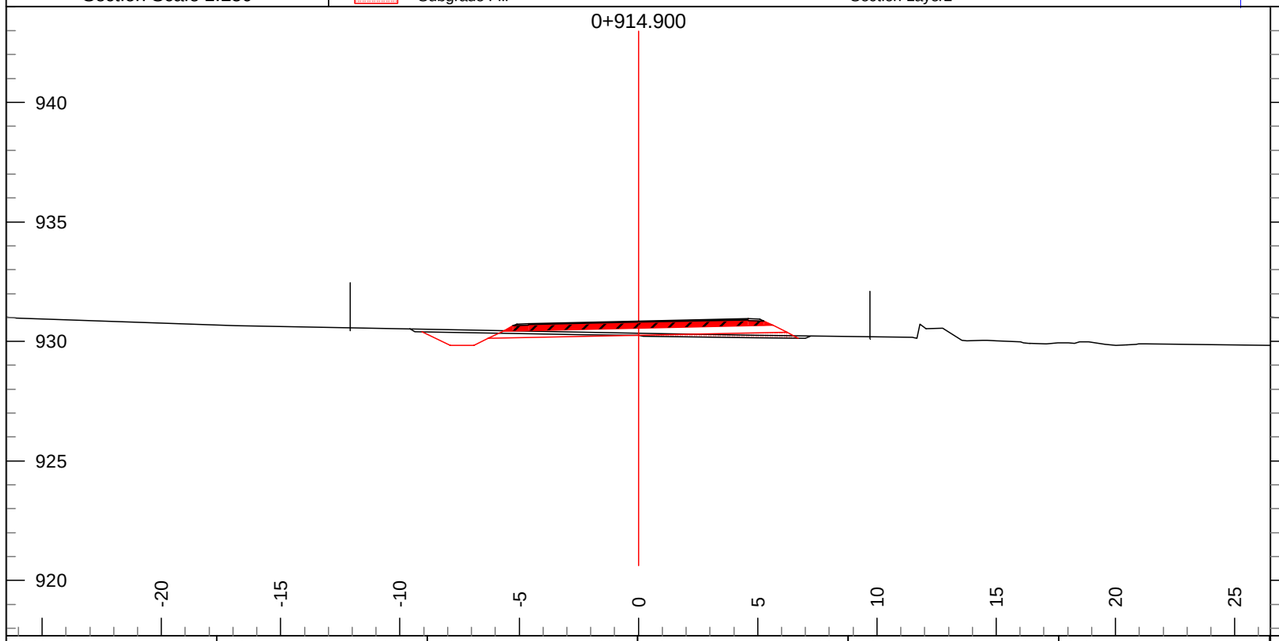
CELTIC ENGINEERING LTD

Section Scale 1:250

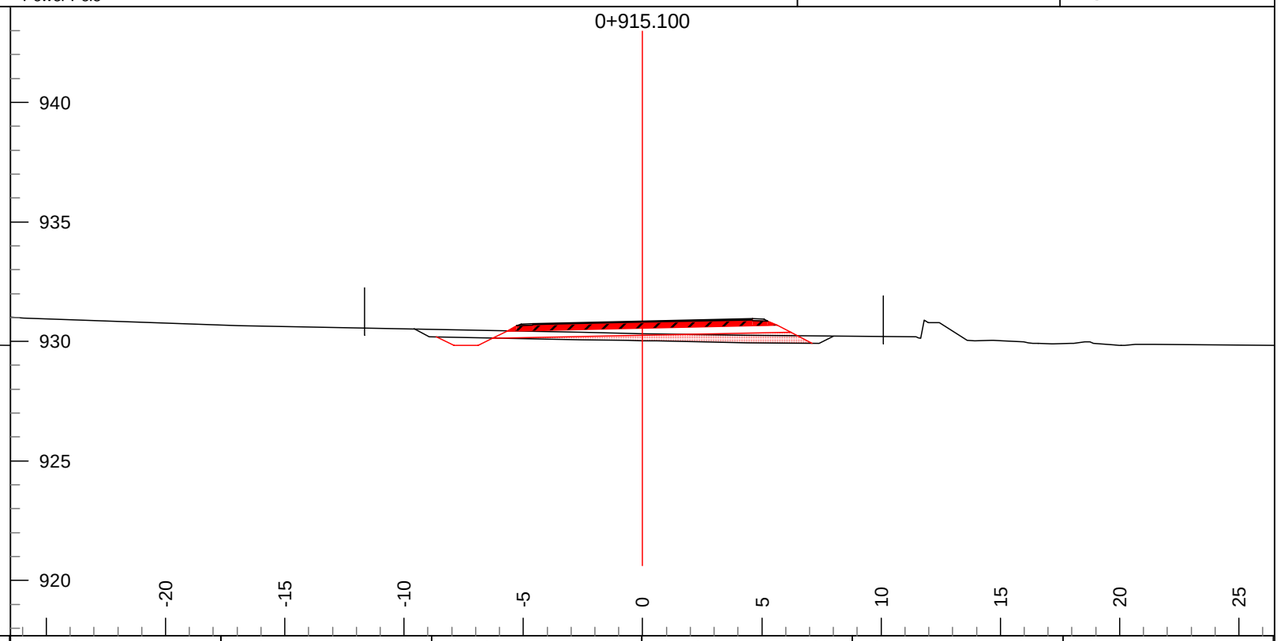
Plot Date: 26/05/06

Section Legend

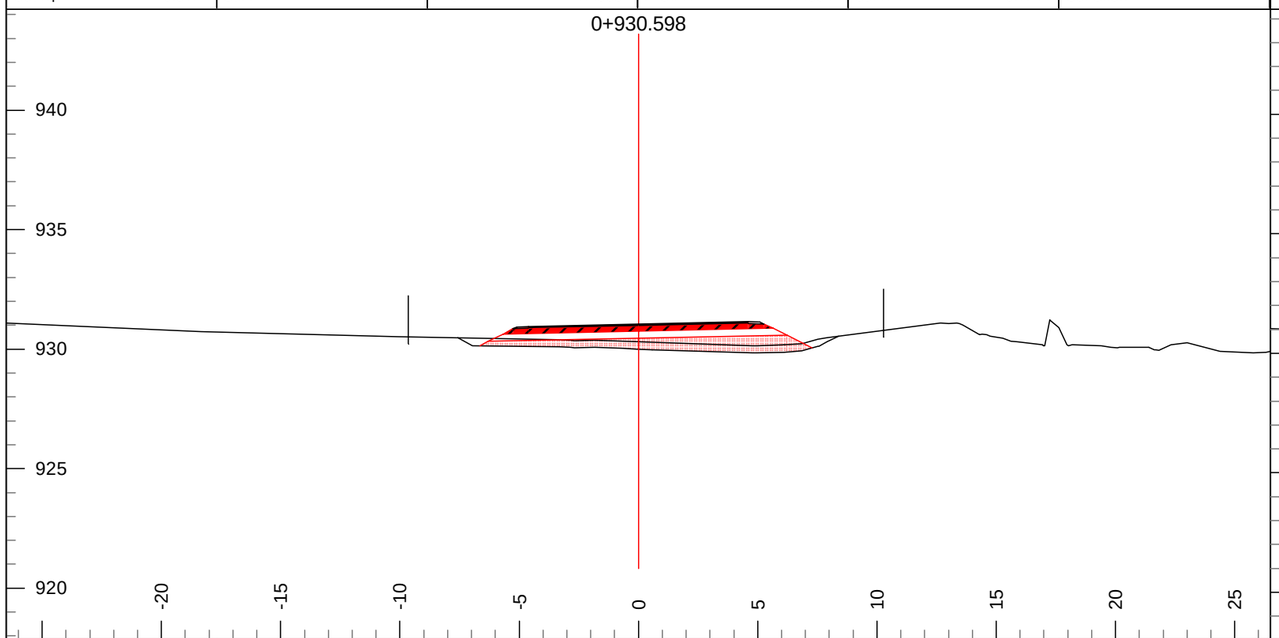
- Asphalt Surface
- WGB
- SGSB
- Subgrade Fill
- Subgrade Cut
- Section Topography
- Section Layer 1
- Section Layer2
- Stripping
- L-Centerline
- Culverts
- Power Pole
- Clearing Limit



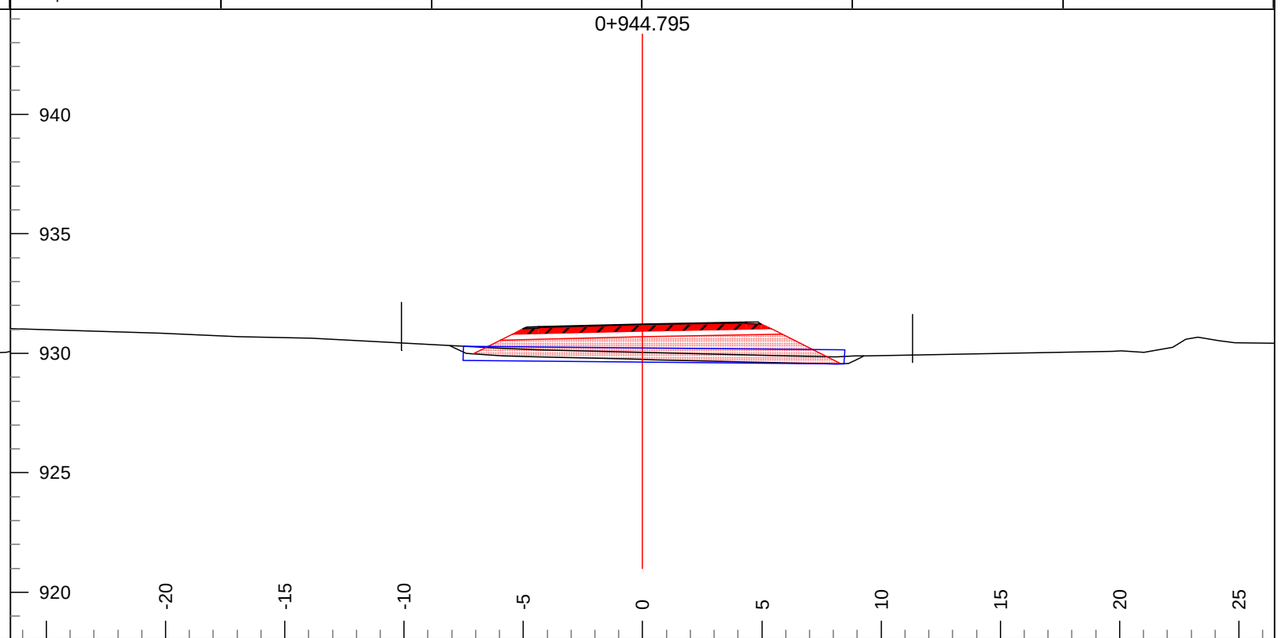
Field Ref:		L-Ssl:	1.85%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-1.40%	Cul DIA:	
Tmpl:	RLU	Stk L:	9.075	F Slope L:	50.0%	F Slope R:	-50.0%	Stk R:	6.712	Cul Len L:	
H. Offset:	0.000	Stk L X:	-9.075	P-Stk L:	9.086	P-Stk R:	6.747	Stk R X:	6.709	Cul Fill:	
Cut Dp:	-0.512	Stk L Y:	-0.444	P-Clr L:	12.503	P-Clr R:	12.504	Stk R Y:	-0.721	Cul Skew:	



Field Ref:		L-Ssl:	1.85%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	-1.34%	Cul DIA:	
Tmpl:	RLU	Stk L:	8.658	F Slope L:	50.0%	F Slope R:	-50.0%	Stk R:	7.119	Cul Len L:	
H. Offset:	0.000	Stk L X:	-8.657	P-Stk L:	8.681	P-Stk R:	7.167	Stk R X:	7.107	Cul Fill:	
Cut Dp:	-0.513	Stk L Y:	-0.653	P-Clr L:	12.503	P-Clr R:	12.500	Stk R Y:	-0.921	Cul Skew:	



Field Ref:		L-Ssl:	2.17%	Rd. Wd. L:	4.600	Rd. Wd. R:	4.600	L-Ssr:	4.53%	Cul DIA:	
Tmpl:	TP	Stk L:	6.649	F Slope L:	-50.0%	F Slope R:	-50.0%	Stk R:	7.273	Cul Len L:	
H. Offset:	0.000	Stk L X:	-6.648	P-Stk L:	6.708	P-Stk R:	7.338	Stk R X:	7.269	Cul Fill:	
Cut Dp:	-0.746	Stk L Y:	-0.895	P-Clr L:	12.509	P-Clr R:	12.500	Stk R Y:	-1.001	Cul Skew:	



Field Ref:		L-Ssl:	3.78%	Rd. Wd. L:	4.358	Rd. Wd. R:	4.358	L-Ssr:	-1.43%	Cul DIA:	600mm
Tmpl:	TP	Stk L:	7.096	F Slope L:	-50.0%	F Slope R:	-50.0%	Stk R:	8.351	Cul Len L:	8.000
H. Offset:	0.000	Stk L X:	-7.095	P-Stk L:	7.205	P-Stk R:	8.502	Stk R X:	8.336	Cul Fill:	0.994
Cut Dp:	-1.177	Stk L Y:	-1.252	P-Clr L:	12.518	P-Clr R:	12.565	Stk R Y:	-1.668	Cul Skew:	110.00

EslerSports Complex Access Project

Cariboo Regional District

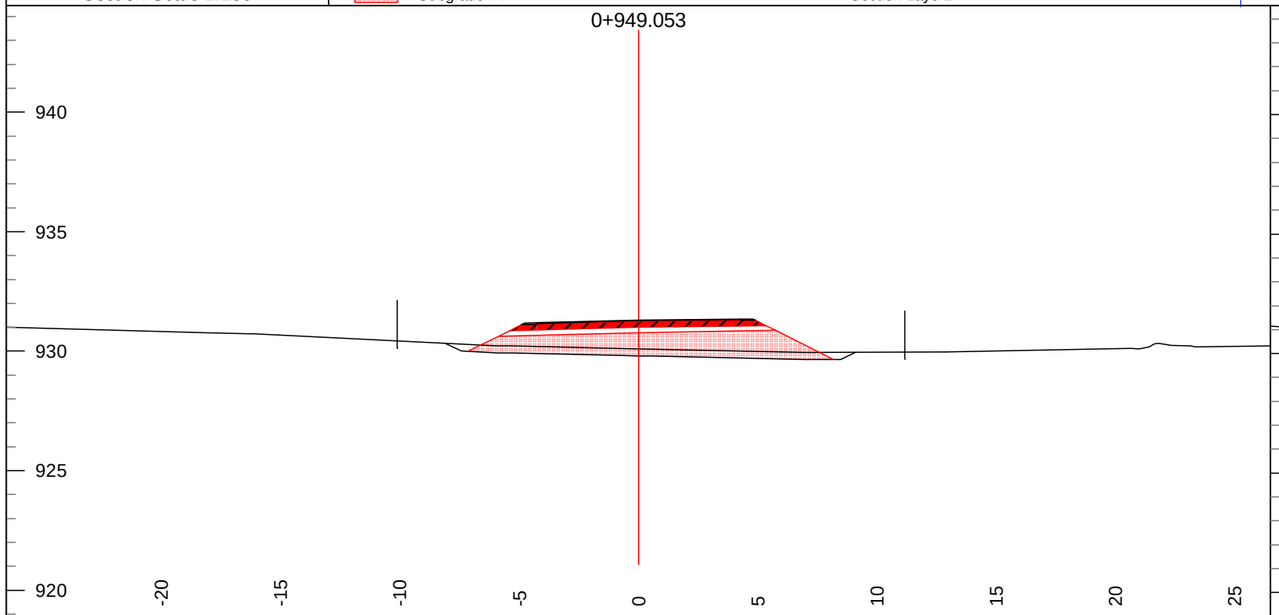
Section Scale 1:250

Section Legend

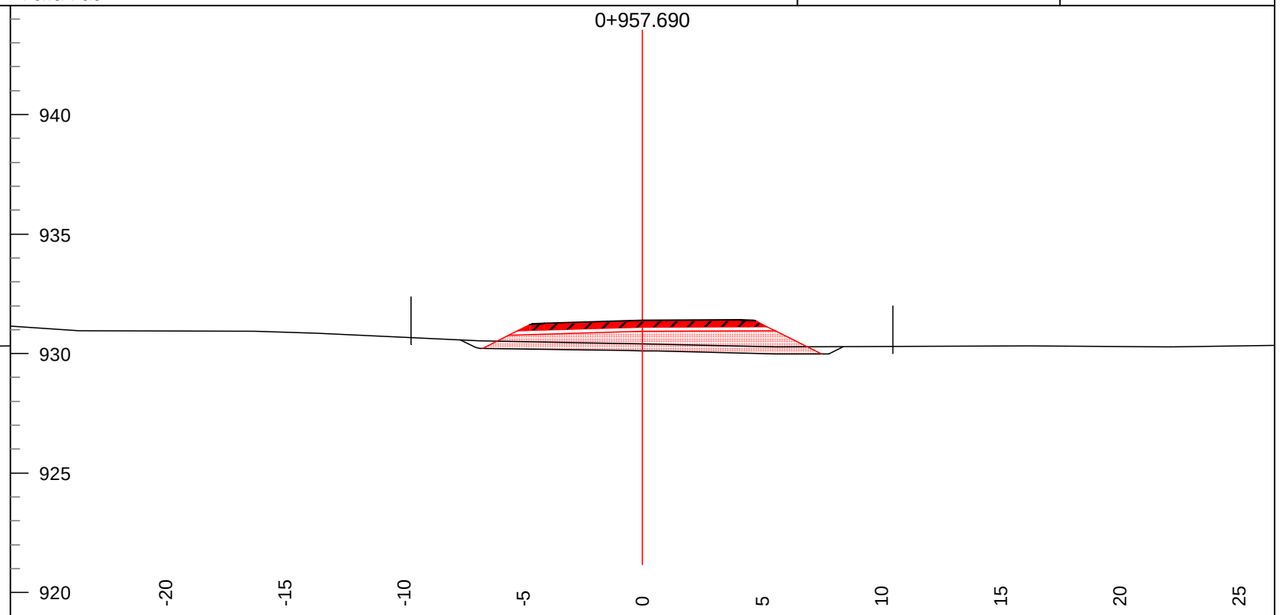
- Asphalt Surface
- WGB
- SGSB
- Subgrade Fill
- Subgrade Cut
- Section Topography
- Section Layer 1
- Section Layer2
- Stripping
- L-Centerline
- Culverts
- Power Pole
- Clearing Limit

Prepared By: CELTIC ENGINEERING LTD

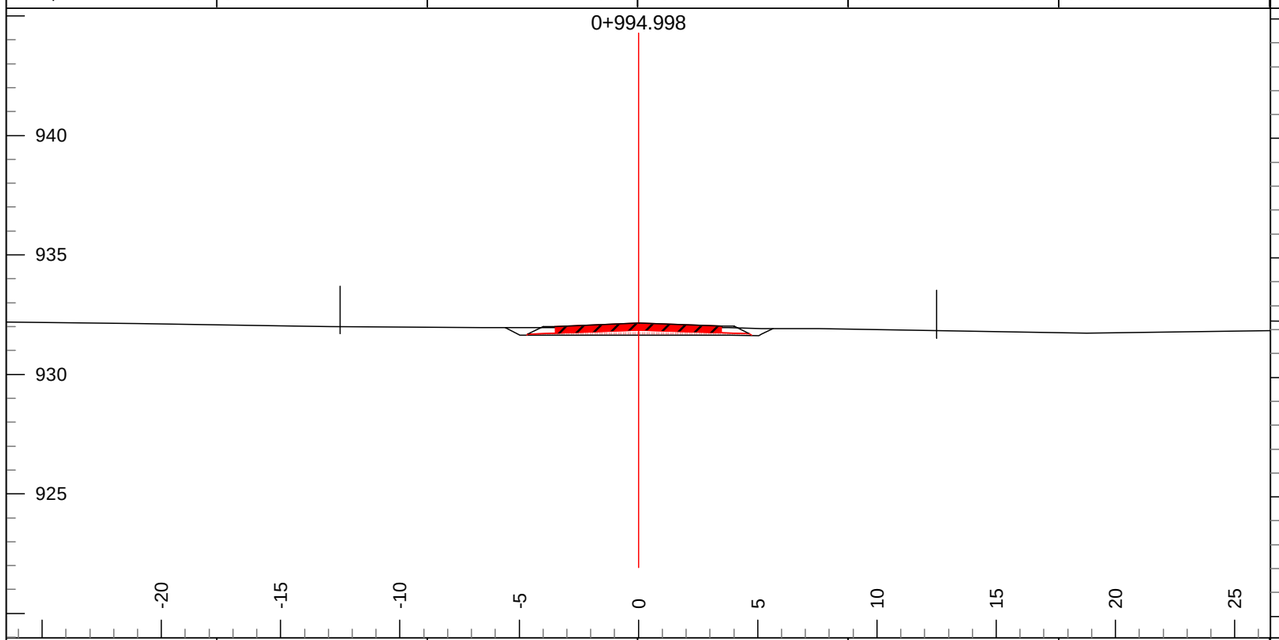
Plot Date: 26/05/06



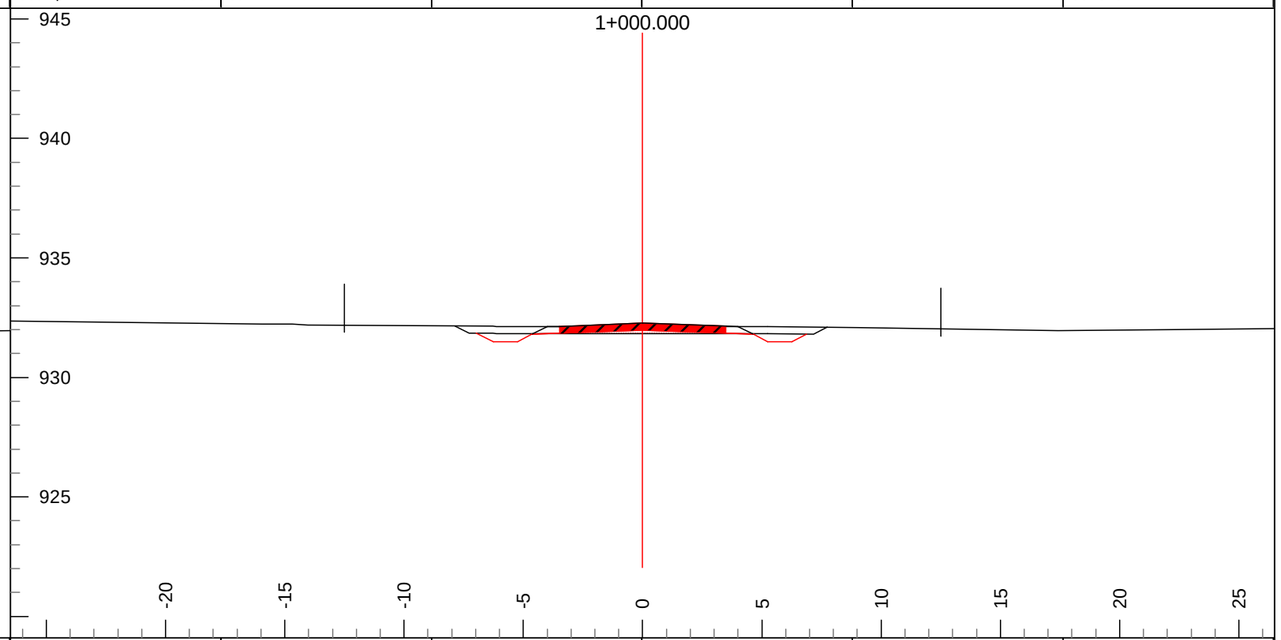
Field Ref:		L-Ssl:	3.25%	Rd. Wd. L:	4.285	Rd. Wd. R:	4.285	L-Ssr:	-1.45%	Cul DIA:	
Tmpl:	TP	Stk L:	7.131	F Slope L:	-50.0%	F Slope R:	-50.0%	Stk R:	8.197	Cul Len L:	
H. Offset:	0.000	Stk L X:	-7.130	P-Stk L:	7.249	P-Stk R:	8.349	Stk R X:	8.185	Cul Fill:	
Cut Dp:	-1.197	Stk L Y:	-1.309	P-Clr L:	12.523	P-Clr R:	12.571	Stk R Y:	-1.649	Cul Skew:	



Field Ref:		L-Ssl:	2.83%	Rd. Wd. L:	4.137	Rd. Wd. R:	4.137	L-Ssr:	-1.07%	Cul DIA:	
Tmpl:	TP	Stk L:	6.697	F Slope L:	-50.0%	F Slope R:	-50.0%	Stk R:	7.506	Cul Len L:	
H. Offset:	0.000	Stk L X:	-6.695	P-Stk L:	6.796	P-Stk R:	7.627	Stk R X:	7.494	Cul Fill:	
Cut Dp:	-1.000	Stk L Y:	-1.171	P-Clr L:	12.514	P-Clr R:	12.548	Stk R Y:	-1.417	Cul Skew:	



Field Ref:		L-Ssl:	0.22%	Rd. Wd. L:	3.500	Rd. Wd. R:	3.500	L-Ssr:	-0.78%	Cul DIA:	
Tmpl:	ESLR	Stk L:	4.693	F Slope L:	-50.0%	F Slope R:	-50.0%	Stk R:	4.770	Cul Len L:	
H. Offset:	0.000	Stk L X:	-4.683	P-Stk L:	4.710	P-Stk R:	4.787	Stk R X:	4.760	Cul Fill:	
Cut Dp:	-0.197	Stk L Y:	-0.501	P-Clr L:	12.501	P-Clr R:	12.504	Stk R Y:	-0.509	Cul Skew:	



Field Ref:		L-Ssl:	0.42%	Rd. Wd. L:	3.500	Rd. Wd. R:	3.500	L-Ssr:	-0.59%	Cul DIA:	
Tmpl:	ESLR	Stk L:	6.971	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	6.874	Cul Len L:	
H. Offset:	0.000	Stk L X:	-6.965	P-Stk L:	6.979	P-Stk R:	6.882	Stk R X:	6.866	Cul Fill:	
Cut Dp:	-0.148	Stk L Y:	-0.431	P-Clr L:	12.500	P-Clr R:	12.502	Stk R Y:	-0.467	Cul Skew:	

Cariboo Regional District

Section Scale 1:250

EslerSports Complex Access Project

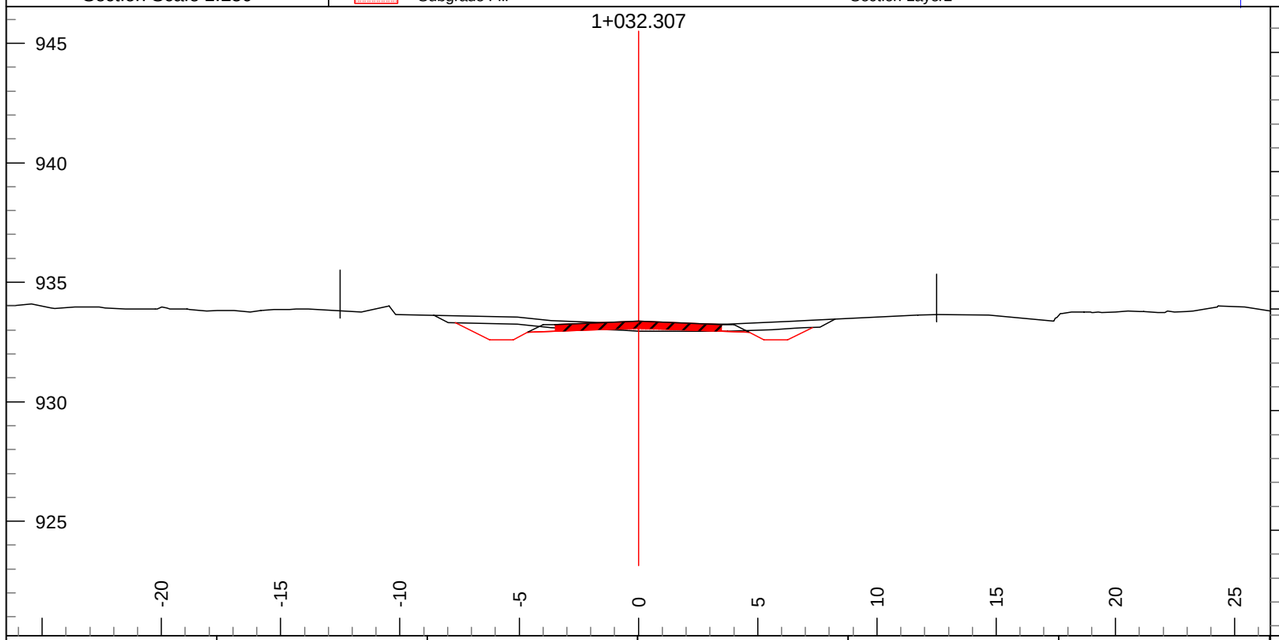
Section Legend

- Asphalt Surface
- WGB
- SGSB
- Subgrade Fill
- Subgrade Cut
- Section Topography
- Section Layer 1
- Section Layer2
- Stripping
- L-Centerline
- Culverts
- Power Pole
- Clearing Limit

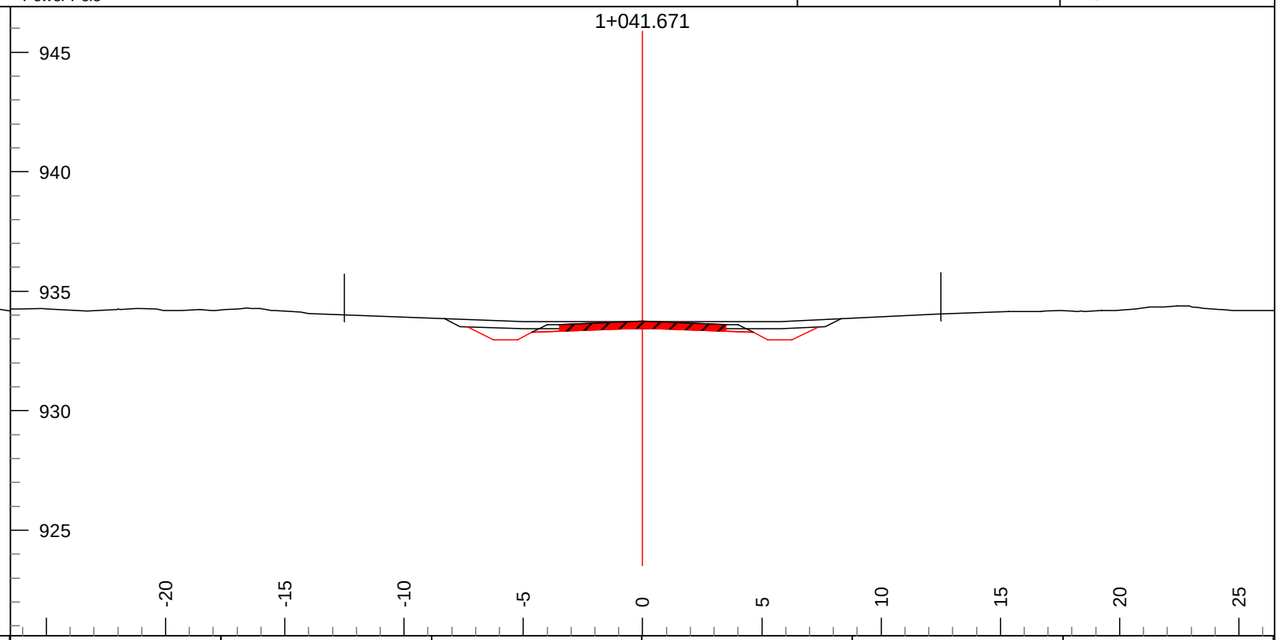
Prepared By:

CELTIC ENGINEERING LTD

Plot Date: 26/05/06



Field Ref:		L-Ssl:	3.84%	Rd. Wd. L:	3.500	Rd. Wd. R:	3.500	L-Ssr:	2.73%	Cul DIA:	
Tmpl:	ESLR	Stk L:	7.683	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	7.298	Cul Len L:	
H. Offset:	0.000	Stk L X:	-7.683	P-Stk L:	7.684	P-Stk R:	7.301	Stk R X:	7.296	Cul Fill:	
Cut Dp:	-0.113	Stk L Y:	-0.072	P-Clr L:	12.507	P-Clr R:	12.503	Stk R Y:	-0.265	Cul Skew:	



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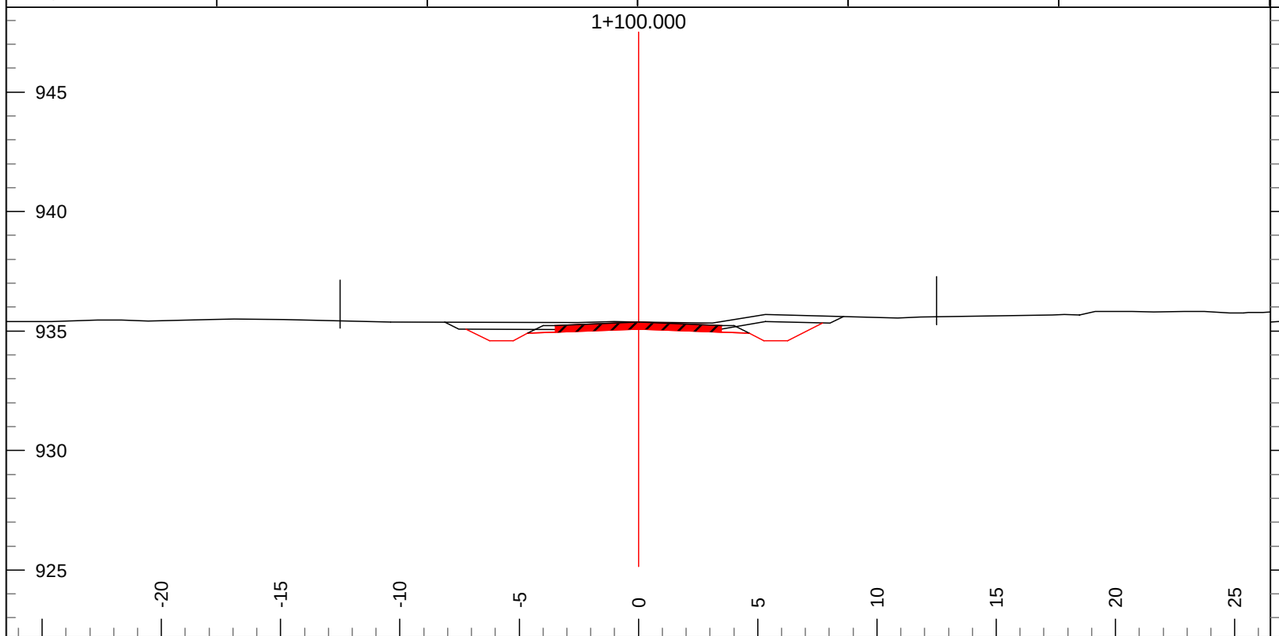

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Tmpl:	ESLR	Stk L:	7.221	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	7.737	Cul Len L:	
H. Offset:	0.000	Stk L X:	-7.215	P-Stk L:	7.221	P-Stk R:	7.737	Stk R X:	7.737	Cul Fill:	
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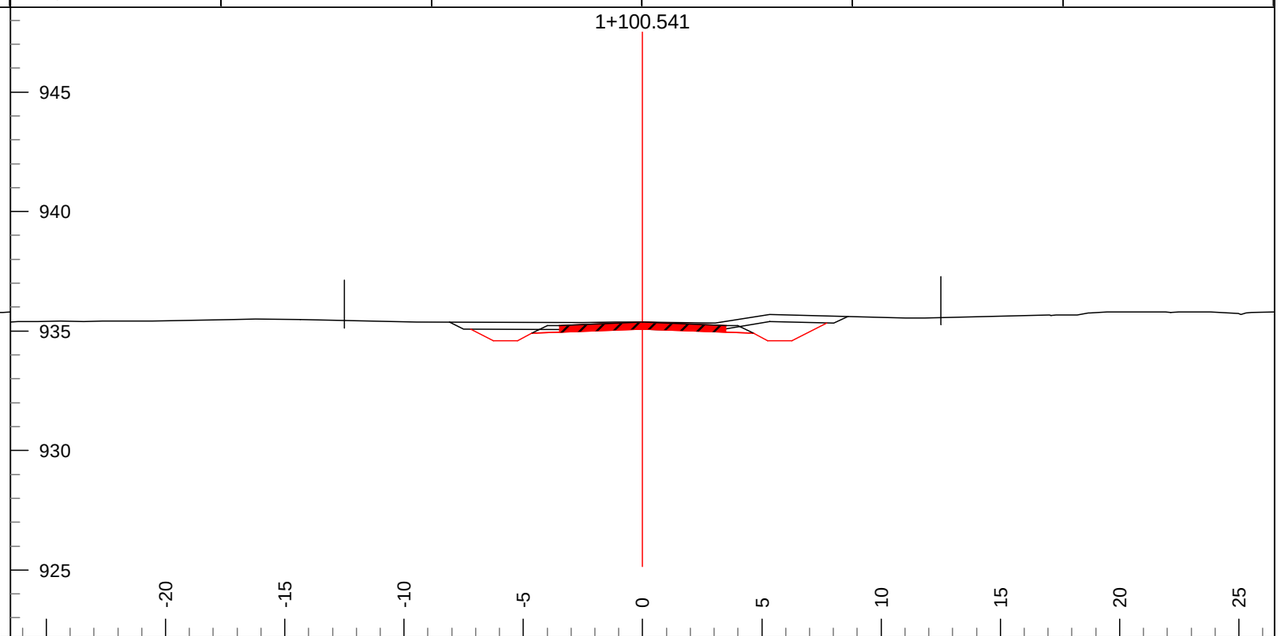

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Tmpl:	ESLR	Stk L:	7.211	F Slope L:	50.0%	F Slope R:	50.0%	Stk R:	7.736	Cul Len L:	
H. Offset:	0.000	Stk L X:	-7.205	P-Stk L:	7.212	P-Stk R:	7.736	Stk R X:	7.736	Cul Fill:	
Cut Dp:	-0.011	Stk L Y:	-0.311	P-Clr L:	12.500	P-Clr R:	12.502	Stk R Y:	-0.045	Cul Skew:	

EslerSports Complex Access Project

Cariboo Regional District

Section Scale 1:250

Section Legend

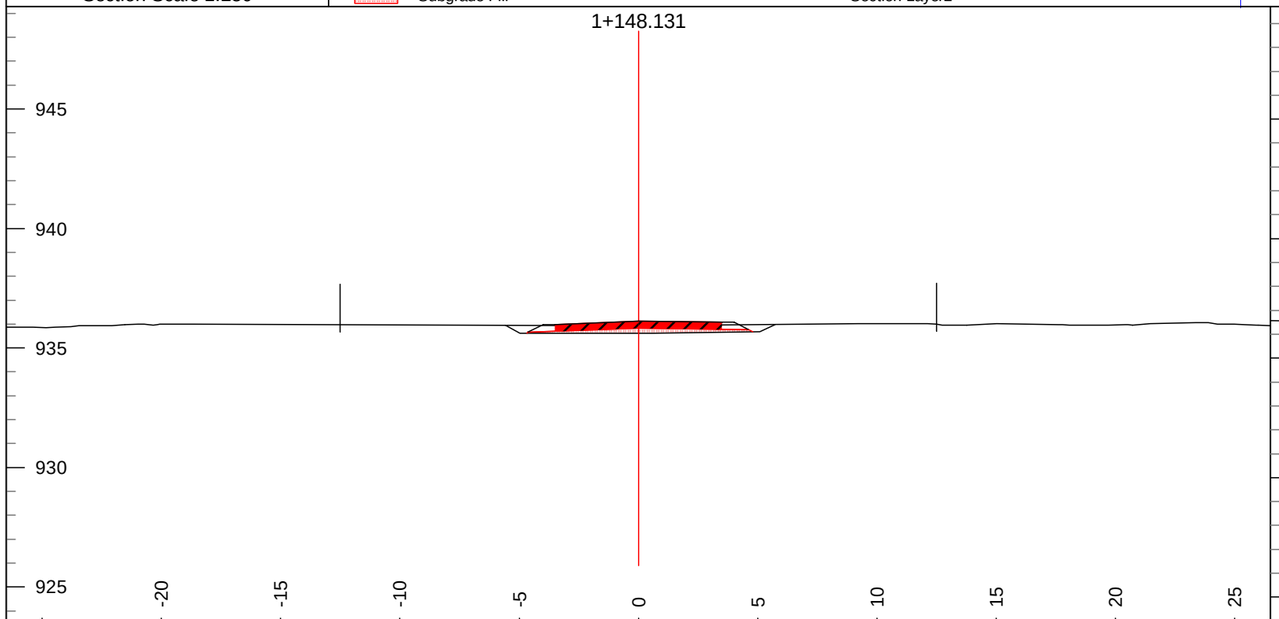
- Asphalt Surface
- WGB
- SGSB
- Subgrade Fill
- Subgrade Cut
- Section Topography
- Section Layer 1
- Section Layer2
- Stripping
- L-Centerline
- Culverts
- Power Pole
- Clearing Limit

Prepared By:

CELTIC ENGINEERING LTD

Plot Date: 26/05/06

1+148.131



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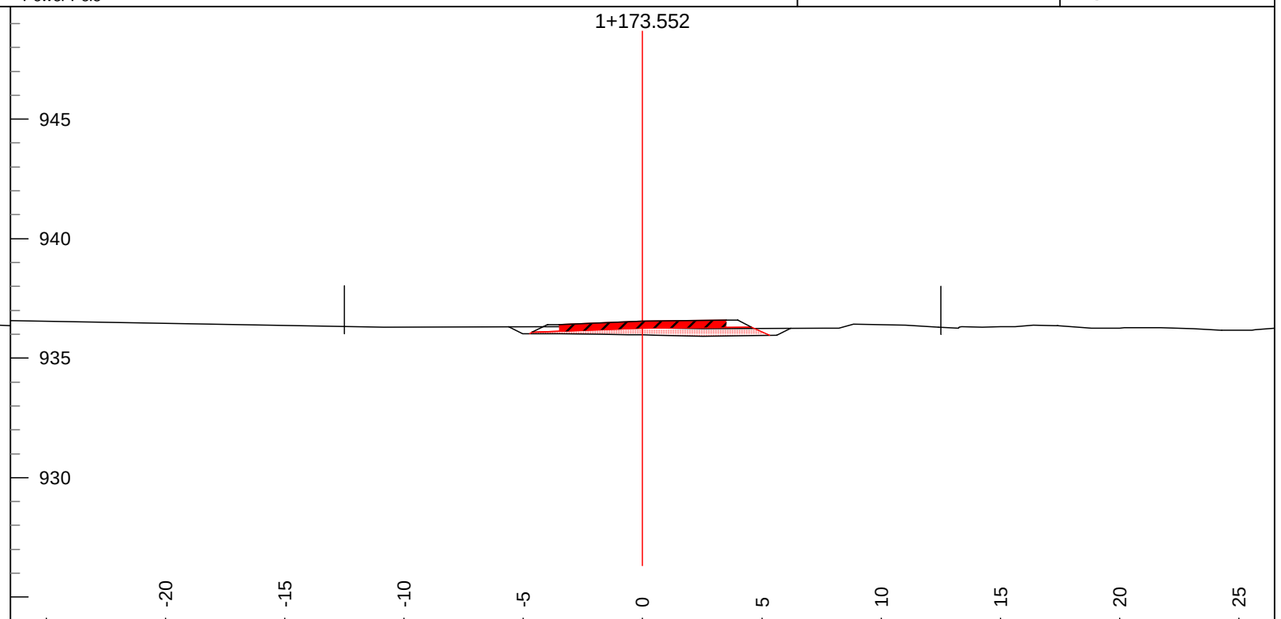
1+173.552



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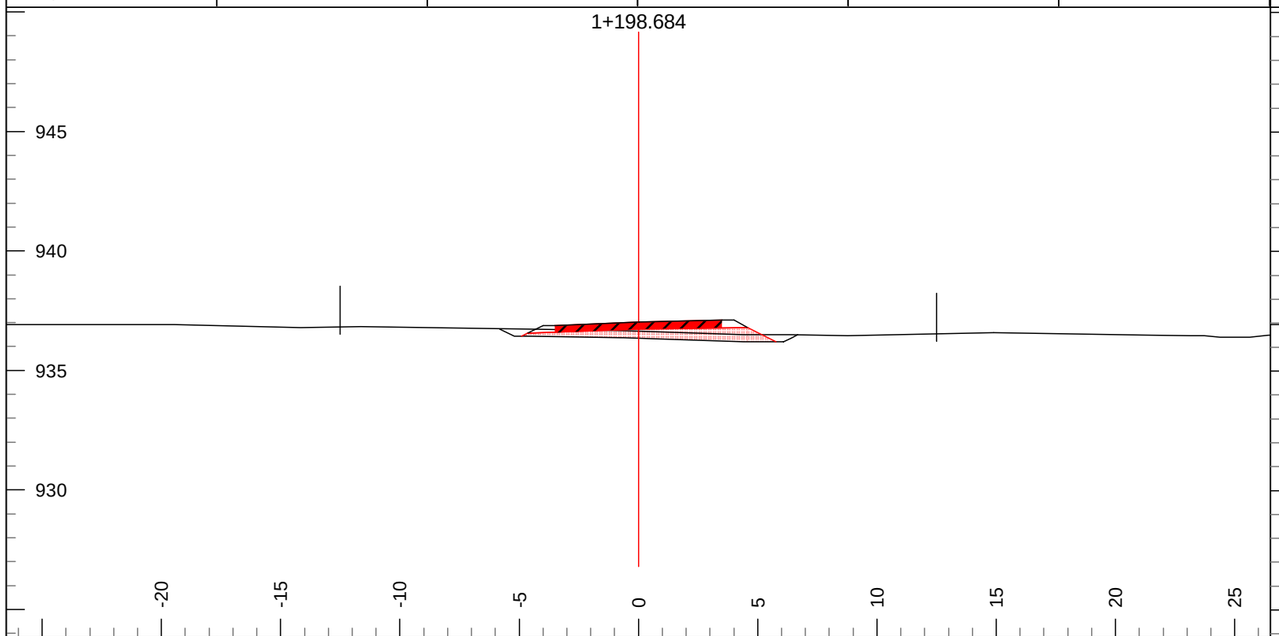
Tmpl:	ESLR	Stk L:	4.738	F Slope L:	-50.0%	F Slope R:	-50.0%	Stk R:	5.329	Cul Len L:	
H. Offset:	0.000	Stk L X:	-4.732	P-Stk L:	4.761	P-Stk R:	5.353	Stk R X:	5.319	Cul Fill:	
Cut Dp:	-0.281	Stk L Y:	-0.525	P-Clr L:	12.502	P-Clr R:	12.502	Stk R Y:	-0.605	Cul Skew:	

1+198.684



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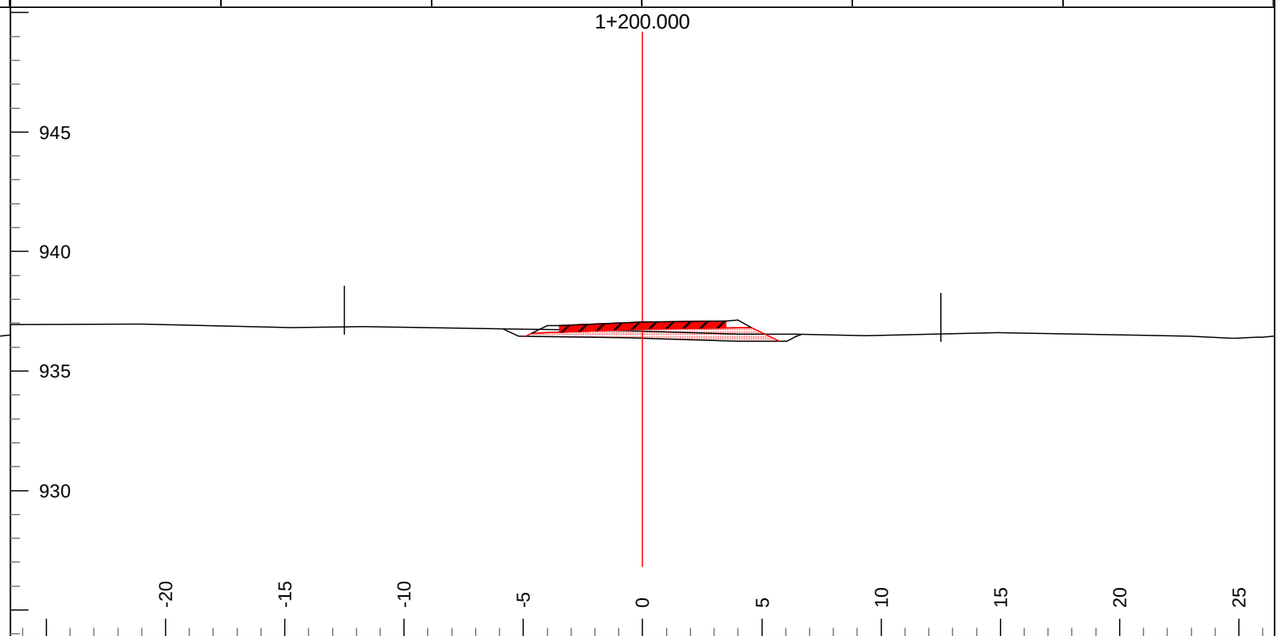
Tmpl:	ESLR	Stk L:	4.898	F Slope L:	-50.0%	F Slope R:	-50.0%	Stk R:	5.803	Cul Len L:	
H. Offset:	0.000	Stk L X:	-4.893	P-Stk L:	4.930	P-Stk R:	5.844	Stk R X:	5.786	Cul Fill:	
Cut Dp:	-0.377	Stk L Y:	-0.605	P-Clr L:	12.502	P-Clr R:	12.510	Stk R Y:	-0.820	Cul Skew:	

1+200.000



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Tmpl:	ESLR	Stk L:	4.908	F Slope L:	-50.0%	F Slope R:	-50.0%	Stk R:	5.769	Cul Len L:	
H. Offset:	0.000	Stk L X:	-4.903	P-Stk L:	4.940	P-Stk R:	5.810	Stk R X:	5.753	Cul Fill:	
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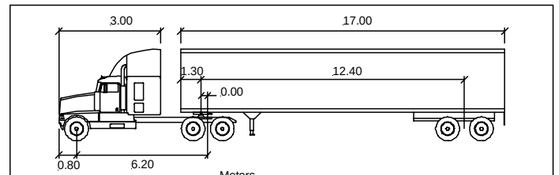

Meters

Tractor Width	; 2.60	Lock to Lock Time	; 6.00 s
Trailer Width	; 2.60	Steering Angle	; 28.15 deg
Tractor Track	; 2.60	Articulating Angle	; 70.00 deg
Overall Length	; 22.7		

TAC (2017) WB-20 SEMI-TRAILER

Legend

- TRACKING LEFT ONTO HIGHWAY 20
- TRACKING RIGHT ONTO HIGHWAY 20
- TRACKING RIGHT ONTO WILKIE RD
- TRACKING LEFT ONTO WILKIE RD

0 50

Scale: 1:750

Design Revisions

Rev. #	Date	Designer	Approved By	Description
1	04/21/26	EF	DT	ADDITIONAL NOTES AS PER MOTT REVIEW

Plot Date: 26/05/06 | Page 29 of 30

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — E. D. FOLK # 35587 — May 15/2026

PERMIT TO PRACTICE # 1003087

EslerSports Complex Access Project
Geometric Design
0+000.000m TO 1+173.000m

WILKIE ROAD-HIGHWAY 20 JUNCTION
TRACKING

CRP: Darron Campbell, Manager of Community Services	DWG#: 134-007-001
Design By: Edward Folk, P.Eng., RFT	Design Date:
Reviewed By: Daryl Taylor, P.Eng, RPF	Geotechnical Specialist: SoilTech Consulting Ltd.

Cariboo Regional District

Prepared By:

CELTIC ENGINEERING LTD

1. GENERAL

1.1. COORDINATING REGISTERED PROFESSIONAL (CRP) Daryl Taylor, P.Eng., RPF.

1.2. SURVEY CONTROL ESTABLISHED USING RTK GPS WITH COORDINATES TO NAD83(CSRS), CGVD2013, UTM ZONE 10N. SURVEY COMPLETED BY CELTIC ENGINEERING LTD.

1.3. LiDAR DATA PROVIDED BY LIDAR BC

1.4. ROAD DESIGN SPECIFICATIONS:
ESLER SPORTS COMPLEX ACCESS ROAD:
DESIGN SPEED = 50km/h
MINIMUM HORIZONTAL CURVE RADIUS = 100m
MINIMUM VERTICAL CREST CURVE = 11.0
MINIMUM VERTICAL SAG CURVE = 13.0
MINIMUM LENGTH OF VERTICAL CURVE = DESIGN SPEED (m)

2. LEGAL LOT INFORMATION

2.1. ESLER SPORTS COMPLEX:
PARCEL NUMBER 015152936
LEGAL DESCRIPTION: DISTRICT LOT 5782, CARIBOO DISTRICT.
ACCESS ROAD:
PROVINCIAL CROWN LAND

3. GEOTECHNICAL

3.1 A FORMAL GEOTECHNICAL INVESTIGATION HAS BEEN CARRIED OUT BY SOILTECH CONSULTING LTD. IN JUNE OF 2025. TO DATE, A REPORT TITLED, " GEOTECHNICAL ASSESSMENT: ESLER SPORTS FIELDS COMPLEX ROAD," DATED June 23, 2025, by Hans Jorgenson, P.Eng. WAS ISSUED FOR REFERENCE.

3.2 IF, UPON EXCAVATION, FIELD CONDITIONS VARY FROM THOSE INFERRED, THEN CHANGES TO THE FOUNDATION DESIGN OR INSTALLATION MAY BE REQUIRED AND SHOULD BE REVIEWED BY QUALIFIED REGISTERED PROFESSIONAL.

4. JUNCTION DESIGN

4.1. LOADING: BCL - 625 (63,730 KG G.V.W.).

4.2. PREVIOUS TRAFFIC STUDY INFORMATION WAS UNAVAILABLE FOR CONSIDERATION IN THE INTERSECTION DESIGN, THUS THE FOLLOWING ASSUMPTIONS HAVE BEEN MADE:
-PEAK HOUR TRAFFIC > 100 VPH.
-RIGHT TURN VOLUME>30 VPH.

4.3. THE DESIGN AND CONSTRUCTION WILL BE IN ACCORDANCE WITH THE MOST CURRENT VERSIONS OF:

- MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE, BC SUPPLEMENT TO TAC MANUAL 2019, 3RD/ EDITION.
- CANADIAN FOUNDATION ENGINEERING MANUAL.

4.4. BASED ON SITE ACCESS FROM HIGHWAY 20, THIS ROAD IS CONSIDERED AS A "CHANNELIZED, THREE-LEGGED (T) INTERSECTION", AS PER SECTION 9.2.4. OF TAC GEOMETRIC DESIGN GUIDE.

4.5. HORIZONTAL ALIGNMENT TRACKING VEHICLE: LOW-BED (SIMILAR TO 9-AXLE EXPANDO VEHICLE AS DEPICTED FIG.720.C OF SUPPLEMENT TO TAC GEOMETRIC DESIGN GUIDE) WB-20. THE WB-20 TRACKING VEHICLE MAINTAINS A MINIMUM CLEAR DISTANCE TO EDGE OF SHOULDER A MINIMUM 500mm.

5. CONSTRUCTION NOTES

5.1. THE PROFESSIONAL OF RECORD OR THEIR DESIGNATE IS REQUIRED TO INSPECT / CARRY OUT THE FOLLOWING ACTIVITIES PRIOR TO PROVIDING SUBSTANTIAL CONFORMANCE DOCUMENTATION:
-FIELD LAYOUT OF SLOPE STAKES TO ENSURE POSITIONING AND CORRECT DIMENSIONS
-COMPACTION TECHNIQUES AND TEST RESULTS
-INSPECT MATERIAL AND MATERIAL SOURCES FOR SIEVE ANALYSIS
-OTHER SITE INSPECTIONS AT THE DISCRETION OF THE PROFESSIONAL

5.2. CONTRACTORS REFER TO BC1CALL FOR UNDERGROUND UTILITIES LOCATE PRIOR TO COMMENCEMENT OF WORK AND FOR "SAFE DIGGING RULES," AND "INFORMATION FOR CONTRACTORS," AND "WORKING NEAR A RIGHT-OF-WAY," PRIOR TO COMMENCING WORK.

5.3. PLACE EMBANKMENT FILL MATERIALS IN A MANNER THAT ALLOWS ROLLER COMPACTION OR TRACK PACKING WITH AN EXCAVATOR OR CRAWLER TRACTOR IN LIFTS NOT EXCEEDING 0.5m. PLACE EMBANKMENT FILLS IN A MANNER SUCH THAT THE SOILS TEMPORARILY REPOSE AT AN ANGLE STEEPER THAN THE FILLSLOPE ANGLE GIVEN ON THE DESIGN SO THAT COMPACTION EFFORT CAN OCCUR NEAR THE FINAL OUTSIDE EDGE OF ROAD. ONCE THE EMBANKMENT FILLS ARE SUBSTANTIALLY COMPLETE, TRIM THE FILLSLOPE BACK TO NEAT LINES AT THE FILLSLOPE ANGLE GIVEN ON THE DESIGN.

5.4 CLEAR, GRUB, AND STRIP WITHIN THE LIMITS OF EXCAVATION AND FALL TREES WITHIN 3m FROM THE CLEARING LIMIT SO AS TO LEAVE A ROW OF STUMPS WITH ROOTS SUBSTANTIALLY UNDISTURBED IMMEDIATELY ABOVE THE TOP OF CUT

5.5 INSTALL CULVERTS AT THE SKEW, GRADIENT, AND DEPTH GIVEN ON THE DESIGN WITH ARMOURED INLETS, DITCH BLOCKS, AND OUTLETS UNLESS OTHERWISE SPECIFIED.

5.6 EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION IS THE RESPOSIBILITY OF THE ROAD CONSTRUCTION CONTRACTOR

Pavement Component	Type B Road	Type C Road
Class 1 Medium Hot Mix Asphalt	100mm	75mm
Well Graded Base (WGB)	300mm	225mm
Select Granular Subbase (SGSB)	300mm	300mm
Class 2 Non-woven Geotextile (Mirafi 160N or equivalent))ver the Subgrade	Yes	Yes

6. GRANULAR MATERIALS

6.1. SGSB SHALL CONSIST OF WELL GRADED, SELECT, ANGULAR TO SUB-ANGULAR, GRANULAR MATERIAL (<75MM), PLACED IN LIFTS OF 300mm MAXIMUM (MEASURED LOOSE), WATER MAY NEED TO BE ADDED (PRIOR TO COMPACTION AND DURING THE SPREADING OF LIFTS) TO THE MATERIAL TO ACHIEVE THE REQUIRED COMPACTION. MULTIPLE PASSES WITH A ROLLING VIBRATING COMPACTOR, COMPACTED TO 100% STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD).

6.2. WGB SHALL CONSIST OF A WELL DRAINED GRANULAR MATERIAL COMPACTED TO 100% SPMDD. SURFACING MATERIALS INCLUDE CRUSHED ROCK AND PIT-RUN GRAVEL AGGREGATES AND CONSIT OF TOUGH, DURABLE PARTICLES THAT WILL NOT DETERIORATE WHEN WORKED (HANDLED, SPREAD, OR COMPACTED) AND COMBINED WITH SUITABLE FINES, OR WHEN EXPOSED TO WATER AND FREEZE-THAW CYCLES. ENSURE THE AGGREGATE PARTICLES ARE UNIFORM IN QUALITY AND FREE FROM AN EXCESS OF FLAT OR ELONGATED PIECES. ENSURE THE AGGREGATE IS WELL GRADED (CONTAINS A MIX OF ALL PARTICLES SIZES) FOR COMPACTION AND FOR A DURABLE WEARING SURFACE. MULTIPLE PASSES WITH A ROLLING VIBRATING COMPACTOR, COMPACTED TO 100% STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD).

6.3. **SURFACING (3/4" ROAD CRUSH) SHALL CONSIST OF A GRANULAR MATERIAL WITH A HIGHER FINES CONTENT, COMPACTED TO 100% SPMDD. SURFACING MATERIALS INCLUDE CRUSHED ROCK AND PIT-RUN GRAVEL AGGREGATES AND CONSIT OF TOUGH, DURABLE PARTICLES THAT WILL NOT DETERIORATE WHEN WORKED (HANDLED, SPREAD, OR COMPACTED) AND COMBINED WITH SUITABLE FINES, OR WHEN EXPOSED TO WATER AND FREEZE-THAW CYCLES. ENSURE THE AGGREGATE PARTICLES ARE UNIFORM IN QUALITY AND FREE FROM AN EXCESS OF FLAT OR ELONGATED PIECES. ENSURE THE AGGREGATE IS WELL GRADED (CONTAINS A MIX OF ALL PARTICLES SIZES) FOR COMPACTION AND FOR A DURABLE WEARING SURFACE.

6.4. SUBGRADE MATERIAL, EXISTING NATURAL GLACIAL TILL IS SUITABLE FOR SUBGRADE CONSTRUCTION. PLACE THE FILL MATERIAL IN UNIFORM LAYERS OF 200mm FOR FINE-GRAINED SOIL AND 300mm FOR GRANULAR SOIL. COMPACT THE INTIAL LAYERS TO 97% SPMDD AND THE FINAL 300mm LAYER TO 100% SPMDD.

6.5. MATERIAL CHARACHTERISTICS, PLACEMENT, AND COMPACTION VALUES, FOLLOW THE RECOMMENDATIONS IN THE REPORT TITLED," GEOTECHNICAL ASSESSMENT: ESLER SPORTS FIELDS COMPLEX ROAD," DATED June 23, 2025, by Hans Jorgenson, P.Eng., ISSUED FOR REFERENCE, SPECIFICALLY SECTIONS 4 AND 5, TO GOVERN.

SIEVE SIZE (mm)	***COMPACTED FILL	**SURFACING (3/4" ROAD CRUSH)
75	100	
38		
25	50-85	100
20		
19		80-100
14		
9.500		50-85
4.750		35-70
2.360		25-50
1.180		15-35
0.300		5-20
0.150	0-15	
0.075	0-5	0-5

Particle Size (mm)	Percent Passing	
	WGB	SGSB
75	-	95-100
37.5	-	-
25	100	-
19	80-100	35-100
9.500	50-85	-
4.750	35-70	15-60
2.360	25-50	-
1.180	15-35	-
0.300	5-20	3-15
0.075	2-7	0-5

7. PAVEMENT STRUCTURES

7.1. PAVEMENT DESIGN METHODS AND GUIDELINES SHOULD FOLLOW AASHTO 1993 PAVEMENT DESIGN METHOD AND BRITISH COLUMBIA MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE (MoTT) DESIGN GUIDELINES TECHNICAL CIRCULAR T-01/15.

7.2. FOLLOW THE RECOMMENDATIONS IN THE REPORT TITLED," GEOTECHNICAL ASSESSMENT: ESLER SPORTS FIELDS COMPLEX ROAD," DATED June 23, 2025, by Hans Jorgenson, P.Eng., ISSUED FOR REFERENCE, SPECIFICALLY SECTIONS 4 AND 5, TO GOVERN.

7. SAFETY

7.1. WHERE EXCAVATION SPECIFICATIONS ON THESE DRAWINGS CONFLICT WITH WORKSAFEBC REGULATIONS, WORKSAFEBC REGULATIONS ARE TO GOVERN.

7.2. WHERE REQUIRED, TRAFFIC CONTROL SHOULD BE IN PLACE DURING CONSTRUCTION OF THE JUNCTION AND FOR INGRESS AND EGRESS OF EQUIPMENT EXITING AND ENTERING THE ESLER SPORTS COMPLEX ACCESS ROAD FOR THE DURATION OF CONSTRUCTION.

8. ENVIRONMENT

ENVIRONMENTAL ROAD AND RUNOFF NOTES:

8.1. DIRECT SURFACE WATER AWAY FROM WORK SITE DURING CONSTRUCTION. ENSURE DITCH WATER AND SURFACE RUNOFF FROM THE ROAD DOES NOT FLOW DIRECTLY INTO ANY STREAM. INSTALL CROSS DRAIN CULVERTS ON THE APPROACHES AND CONSTRUCT SUMPS AS REQUIRED.

8.2. IF POSSIBLE, APPROACHES TO BE CROWNED AND GRAVELED.

8.3. INSTALL SILT FENCE ALONG BASE OF EXPOSED FILL IF WARRANTED. REMOVE SILT FENCE AFTER 1 GROWING SEASON.

9. SITE CONDITIONS

DUE TO THE NATURE OF THE SITE, CONDITIONS MAY VARY FROM THE FIELD INFORMATION GATHERED. ON SITE PRESCRIPTIONS MAY HAVE TO BE MODIFIED TO ACCOMMODATE ACTUAL ROAD HORIZONTAL/VERTICAL ALIGNMENT, SLOPE ANGLES ON FILL AND CUT SLOPES, MATERIAL COMPOSITION AND WEATHER.

10. SIGNS

10.1. ALL SIGNS ARE IDENTIFIED, ARE TO BE CONSTRUCTED, AND THEIR PLACEMENT SHALL BE IN ACCORDANCE WITH THE BC MANUAL OF STANDARD TRAFFIC SIGNS & PAVEMENT MARKINGS, 2026.

Design Revisions

Rev. #	Date	Designer	Approved By	Description
1	04/21/26	EF	DT	ADDITIONAL NOTES AS PER MOTT REVIEW

Plot Date: 26/05/06 | Page 30 of 30

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — E. D. FOLK # 35587 — 04/15/2026

PERMIT TO PRACTICE # 1003087

EslerSports Complex Access Project
Geometric Design
0+000.000m TO 1+173.000m

GENERAL NOTES

CRP: BC Hydro Representative | DWG#: 256-003-001
Design By: Edward Folk, P.Eng., RFT | Design Date: April 12, 2026
Reviewed By: Daryl Taylor, P.Eng, RPF

MAPLE LEAF Forestry Ltd.

Prepared By: CELTIC ENGINEERING LTD

CARIBOO REGIONAL DISTRICT

ESLER SPORTS COMPLEX ACCESS ROAD

Station 0+095 to Station 1+173

GENERAL CONDITIONS OF CONTRACT

Document 2 of 4

May 2026

1.1 Definitions

In the Contract Documents, the following terms have the meanings set out below. Terms defined in Document 1 (Tender Package) retain those meanings. In the event of conflict between definitions, the Special Provisions govern.

CONTRACTOR	The person, firm, or corporation awarded the Contract and their permitted assigns.
CONTRACT DOCUMENTS	The documents forming the Contract, listed in Article 2.
CONTRACT PRICE	The total amount payable to the CONTRACTOR for the performance of the WORK as established by the accepted Tender, as adjusted by Change Orders.
DAY	Calendar day unless expressly stated otherwise.
DRAWINGS	The design drawings listed in Document 4 (Standard Specifications Reference Sheet) and forming part of the Contract.
EOR	Engineer of Record — the registered professional engineer responsible for the design, as identified in Document 1.
FORCE MAJEURE	An event beyond the reasonable control of a Party, including but not limited to natural disasters, acts of war, strikes not involving the CONTRACTOR's employees, and government-ordered shutdowns, but excluding weather conditions normal for the season and location.
GEOTECHNICAL SPECIALIST	SoilTech Consulting Ltd., retained by the OWNER to provide geotechnical quality control services during construction.
ENVIRONMENTAL MONITOR	Consus Management Ltd., retained by the OWNER to provide environmental monitoring and compliance support during construction.
NTP	Notice to Proceed — the written notice issued by the CONTRACT MANAGER authorizing the CONTRACTOR to commence the WORK.
OWNER	Cariboo Regional District (CRD).
SITE	The lands and areas upon or through which the WORK is performed, as identified in Document 1.
SUBCONTRACTOR	A person, firm, or corporation having a direct contract with the CONTRACTOR for a portion of the WORK.
SUBSTANTIAL COMPLETION	The stage of completion at which the WORK is sufficiently complete for the OWNER to use the WORK for its intended purpose, as certified by the CONTRACT MANAGER.
SUBSTANTIAL COMPLETION DATE	August 31, 2026, as may be adjusted by Change Order.
WARRANTY PERIOD	One (1) year from the date of Substantial Completion.
WORK	The total construction and related services required by the Contract Documents.

1.2 Order of Precedence

In the event of conflict or inconsistency between Contract Documents, the order of precedence shall be:

Document 3 — Contract Agreement

All Addenda — Addenda issued prior to Tender closing, as acknowledged in the accepted Tender Form

Document 1 — Special Provisions

Document 2 — General Conditions of Contract (this document)

Document 4 — Standard Specifications and Design Standards Reference Sheet

Drawing 134-007-001 — The design Drawings (Drawing 134-007-001 and any issued Addenda)

Document 1 (Schedule) — Schedule of Quantities and Prices (accepted Tender Form)

Where a more stringent standard or greater quantity is required by one document than another, the more stringent requirement governs unless the CONTRACT MANAGER directs otherwise in writing.

1.3 Governing Law

The Contract is governed by and construed in accordance with the laws of the Province of British Columbia and the laws of Canada applicable therein. The parties attorn to the exclusive jurisdiction of the courts of British Columbia.

1.4 Entire Agreement

The Contract Documents constitute the entire agreement between the OWNER and the CONTRACTOR with respect to the WORK and supersede all prior negotiations, representations, and agreements. No amendment to the Contract is binding unless made in writing and signed by both parties.

2.1 Contract Documents

The Contract Documents consist of:

Document 3 — Contract Agreement;

Document 2 — General Conditions of Contract;

Document 1 — Tender Package, including the Notice to Bidders, Instructions to Bidders, Schedule of Quantities and Prices, Special Provisions, and all Appendices;

Document 4 — Standard Specifications and Design Standards Reference Sheet;

All design Drawings referenced in Document 4;

All Addenda issued prior to Tender closing; and

The accepted Tender Form.

2.2 Drawings and Specifications

The CONTRACTOR shall keep one complete set of all Contract Documents, including current Drawings, on the SITE at all times and shall make them available to the CONTRACT MANAGER, EOR, GEOTECHNICAL SPECIALIST, and ENVIRONMENTAL MONITOR upon request. Drawings are not to be scaled for construction dimensions — figured dimensions govern. Where dimensions are not shown, the CONTRACTOR shall request clarification from the CONTRACT MANAGER before proceeding.

2.3 Addenda

All Addenda issued prior to Tender closing form part of the Contract. The CONTRACTOR acknowledges receipt of all Addenda identified on the accepted Tender Form. Addenda issued after Tender closing are incorporated into the Contract only by written Change Order.

3.1 Performance of the Work

The CONTRACTOR shall perform the WORK in a diligent, workmanlike manner using sufficient qualified labour, materials, and equipment to meet the SUBSTANTIAL COMPLETION DATE. The CONTRACTOR shall be solely responsible for all construction means, methods, techniques, sequences, and procedures, and for co-ordinating all portions of the WORK.

3.2 Superintendent

The CONTRACTOR shall designate a competent site superintendent who shall be present on the SITE at all times when WORK is in progress. The superintendent shall be the CONTRACTOR's authorized representative for all day-to-day decisions and communications on SITE. The superintendent shall not be changed without prior written notice to the CONTRACT MANAGER. The OWNER may require the CONTRACTOR to remove and replace a superintendent who is, in the CONTRACT MANAGER's reasonable opinion, incompetent or whose conduct is prejudicial to the WORK.

3.3 Subcontracting

The CONTRACTOR shall not subcontract any portion of the WORK without prior written approval of the CONTRACT MANAGER. Such approval shall not be unreasonably withheld. The CONTRACTOR remains fully

responsible for all WORK performed by Subcontractors and shall ensure that all Subcontractors comply with the Contract Documents. There is no contractual relationship between the OWNER and any Subcontractor.

3.4 Materials and Workmanship

All materials incorporated into the WORK shall be new, of the quality specified, and shall conform to the standards referenced in Document 4. The CONTRACTOR shall provide evidence of material quality, including supplier certificates, gradation test results, and compaction test reports, as requested by the CONTRACT MANAGER or GEOTECHNICAL SPECIALIST. All WORK shall be executed by qualified workers to the highest standard of workmanship appropriate for road construction of this type.

3.5 Site Cleanup

The CONTRACTOR shall maintain the SITE in a clean and orderly condition throughout construction and shall remove waste materials, rubbish, and temporary facilities progressively and upon completion of the WORK. At Substantial Completion, the SITE shall be left in a neat condition satisfactory to the CONTRACT MANAGER. All disposal areas shall be shaped, compacted where required, and left in a condition acceptable to the OWNER.

3.6 Protection of Work and Property

The CONTRACTOR shall be responsible for protecting all completed and partially completed WORK from damage until Substantial Completion. The CONTRACTOR shall protect all adjacent property, utilities, structures, and vegetation outside the clearing limits from damage arising from the WORK. Any damage caused by the CONTRACTOR shall be repaired at the CONTRACTOR's expense to the satisfaction of the CONTRACT MANAGER.

3.7 Access to Work

The CONTRACTOR shall provide the CONTRACT MANAGER, EOR, GEOTECHNICAL SPECIALIST, ENVIRONMENTAL MONITOR, and the OWNER's representatives with safe access to all portions of the WORK at all times. The CONTRACTOR shall not restrict access to any portion of the WORK for the purpose of concealing defects or non-conformances.

3.8 Safety

The CONTRACTOR is solely responsible for the health and safety of all workers on the SITE and for compliance with the Workers Compensation Act and WorkSafeBC regulations. The CONTRACTOR shall establish and maintain a safety program for the WORK. The CONTRACTOR shall immediately notify the CONTRACT MANAGER of any accident or incident on the SITE involving injury to persons or significant damage to property. Where excavation specifications on the Drawings conflict with WorkSafeBC regulations, WorkSafeBC regulations govern.

3.9 Environmental Protection

The CONTRACTOR shall comply with all applicable environmental legislation and with the Environmental Management Plan (EMP) referenced in Document 1. The ENVIRONMENTAL MONITOR has authority to direct the CONTRACTOR to halt WORK that is not in compliance with the EMP or applicable legislation. All spills of reportable quantities shall be reported immediately to the ENVIRONMENTAL MONITOR and to the applicable

regulatory authority. The CONTRACTOR is responsible for all costs associated with spill cleanup and remediation.

3.10 Utility Locates

The CONTRACTOR shall contact BC 1 Call (1-800-474-6886) and obtain all required underground utility locates prior to commencement of excavation or ground disturbance. The CONTRACTOR shall comply with all safe digging rules and shall protect all located utilities during the WORK. The CONTRACTOR shall be responsible for all costs arising from damage to utilities caused by failure to locate or failure to protect.

3.11 Traffic Control

The CONTRACTOR shall implement and maintain traffic control measures at the Highway 20 junction and at all equipment access and egress points for the duration of the WORK, in accordance with the BC Manual of Standard Traffic Signs and Pavement Markings, 2026 edition, and any conditions of the Ministry of Transportation and Transit access permit. All signage shall be erected prior to commencement of any WORK affecting public access.

3.12 Survey Control

The CONTRACTOR shall provide day-to-day survey control sufficient to execute the WORK in conformance with the Drawings. Pre-construction slope staking, grade control references, and all as-built surveys are performed by Celtic Engineering Ltd. and are not the CONTRACTOR's responsibility. The CONTRACTOR shall maintain and protect all survey control points established by Celtic Engineering Ltd. and shall provide 48 hours' advance notice when re-establishment is required. The CONTRACTOR shall not proceed in any area where survey control has been lost without re-establishment by Celtic Engineering Ltd.

3.13 Records

The CONTRACTOR shall maintain accurate daily records of weather conditions, equipment on SITE, crew sizes, and WORK completed. These records shall be made available to the CONTRACT MANAGER upon request and shall be provided to the CONTRACT MANAGER at Substantial Completion. The CONTRACTOR shall deliver all survey control notes and as-constructed field records to the CONTRACT MANAGER as a condition of Substantial Completion.

4.1 Administration

The CONTRACT MANAGER administers the Contract on behalf of the OWNER. The CONTRACT MANAGER is the primary point of contact for all Contract-related communications. The CONTRACT MANAGER has authority to issue instructions, interpretations, Change Orders, and certificates on behalf of the OWNER, subject to the limitations in the Contract Documents. Instructions from the CONTRACT MANAGER shall be in writing where they affect Contract Price, Contract Time, or scope of WORK.

4.2 Inspection and Testing

The CONTRACT MANAGER, EOR, and GEOTECHNICAL SPECIALIST have authority to inspect any portion of the WORK at any time. The CONTRACTOR shall provide advance notice as specified in SP-06 for activities requiring inspection or testing. The cost of all quality control testing specified in the Contract Documents is borne by the OWNER. The cost of re-testing required due to failing results or non-conformances is borne by the CONTRACTOR.

4.3 Rejection of Work

The CONTRACT MANAGER may reject WORK that does not conform to the Contract Documents. Rejected WORK shall be removed and replaced by the CONTRACTOR at no cost to the OWNER. The CONTRACT MANAGER may require uncovering of WORK for inspection. If uncovered WORK is found to be non-conforming, all costs of uncovering, correcting, and re-covering are borne by the CONTRACTOR. If uncovered WORK is found to conform, the OWNER bears the cost of uncovering and re-covering.

4.4 Instructions to Proceed

The CONTRACT MANAGER may instruct the CONTRACTOR to proceed with WORK in disputed areas under protest, without prejudice to either party's rights, to avoid delay to the overall WORK. The CONTRACTOR shall comply with such instructions promptly. Failure to comply is a default under Article 10.

4.5 Suspension of Work

The CONTRACT MANAGER may direct the CONTRACTOR to suspend WORK in any area where: (a) safety conditions are inadequate; (b) environmental violations are occurring or imminent; (c) WORK does not conform to the Contract Documents; or (d) the CONTRACT MANAGER determines suspension is necessary to protect the OWNER's interests. Suspension does not entitle the CONTRACTOR to additional compensation unless the suspension is solely due to the OWNER's fault. The CONTRACT MANAGER will direct resumption of WORK as soon as the cause of suspension is resolved.

5.1 Owner's Right to Change

The OWNER, through the CONTRACT MANAGER, may at any time order additions, deletions, or modifications to the WORK. No change is valid unless authorized by a written Change Order signed by the CONTRACT MANAGER. The CONTRACTOR shall not perform changed WORK prior to receipt of a written Change Order, except in an emergency where delay would cause injury to persons or serious damage to property, in which case the CONTRACTOR shall notify the CONTRACT MANAGER immediately and confirm in writing within 24 hours.

5.2 Change Order Valuation

Changes shall be valued by one of the following methods, in order of preference:

() Agreed lump sum based on itemized breakdown of labour, materials, and equipment;

() Unit prices established in the Schedule of Quantities and Prices or agreed unit prices for new work;

() Time and material at agreed rates with agreed markup, for changes that cannot be readily estimated in advance.

The CONTRACTOR shall submit a detailed cost breakdown for all proposed changes within five (5) Days of receipt of a change request. The parties shall negotiate in good faith to agree on the value prior to execution of the Change Order.

5.3 Disputed Changes

If the parties cannot agree on the value of a change, the CONTRACT MANAGER may direct the CONTRACTOR to proceed with the change on a time-and-material basis at the rates set out in the CONTRACTOR's accepted Tender, pending resolution. The CONTRACTOR shall keep detailed records of all labour, equipment, and materials related to the disputed change. Failure to keep such records forfeits the CONTRACTOR's right to claim for the disputed work.

5.4 Changes to Contract Time

If a change materially affects the critical path of the construction schedule, the CONTRACT MANAGER may grant an extension to the SUBSTANTIAL COMPLETION DATE by Change Order. Extensions will not be granted for changes that can be accommodated through additional resources or efficient scheduling. The CONTRACTOR shall demonstrate the impact on the critical path to the satisfaction of the CONTRACT MANAGER before any extension is granted.

6.1 Commencement

The CONTRACTOR shall commence the WORK within five (5) Days of receipt of the NTP. Early commencement requires written approval from the CONTRACT MANAGER. The CONTRACT MANAGER will issue the NTP following execution of the Contract Agreement, receipt of Performance Security, receipt of satisfactory insurance certificates, and receipt of a current WorkSafeBC Clearance Letter confirming the CONTRACTOR is in good standing with WorkSafeBC. The target NTP date is on or about June 15, 2026.

6.2 Construction Schedule

Within five (5) Days of receipt of the NTP, the CONTRACTOR shall submit a construction schedule demonstrating a credible critical path to Substantial Completion by the SUBSTANTIAL COMPLETION DATE. The schedule shall identify all major activities, their sequence and duration, planned equipment, and crew composition. The schedule shall be updated and resubmitted within five (5) Days of any event that materially affects the critical path. Submission of the schedule is a condition of the first progress payment.

6.3 Delays

The CONTRACTOR shall promptly notify the CONTRACT MANAGER in writing of any event or circumstance that may cause delay to the WORK, including but not limited to adverse weather, unforeseen site conditions, or delayed delivery of materials. Notification shall be given within five (5) Days of the CONTRACTOR becoming

aware of the potential delay. Failure to give timely notice forfeits the CONTRACTOR's right to claim a time extension for that delay.

6.4 Extensions of Time

The CONTRACTOR may apply for an extension to the SUBSTANTIAL COMPLETION DATE only for delays caused by: (a) Force Majeure; (b) Owner-directed changes that materially affect the critical path; or (c) differing site conditions as described in Article 9. Extensions will not be granted for delays caused by the CONTRACTOR's own actions or inactions, weather conditions reasonably foreseeable for the season and location, or insufficient resources. All extension requests shall be submitted in writing with full supporting documentation within ten (10) Days of the event giving rise to the delay.

6.5 Liquidated Damages

If the CONTRACTOR fails to achieve Substantial Completion by the SUBSTANTIAL COMPLETION DATE (as may be adjusted by Change Order), the CONTRACTOR shall pay Liquidated Damages as specified in the Special Provisions of Document 1. Liquidated Damages accrue for every calendar day of delay following the SUBSTANTIAL COMPLETION DATE until the date of Substantial Completion as certified by the CONTRACT MANAGER. The OWNER may deduct accrued Liquidated Damages from any amounts owed to the CONTRACTOR.

7.1 Progress Payment Applications

The CONTRACTOR shall submit progress payment applications to the CONTRACT MANAGER on a schedule agreed at the pre-construction meeting. Each application shall itemize completed WORK by pay item, include survey-confirmed quantities for survey-based items, and be accompanied by any supporting documentation requested by the CONTRACT MANAGER. The CONTRACTOR warrants that each payment application is accurate and that no amount has been previously paid.

7.2 Certification and Payment

The CONTRACT MANAGER shall review and certify or reject each payment application within ten (10) business Days of receipt. If the CONTRACT MANAGER disputes any portion of the application, the undisputed portion shall be certified within the same period. Each payment application shall be accompanied by a current WorkSafeBC Clearance Letter confirming the CONTRACTOR remains in good standing with WorkSafeBC; failure to provide the Clearance Letter entitles the CONTRACT MANAGER to withhold certification until it is received. The OWNER shall make payment within thirty (30) Days of certification. Payment of a certified amount does not constitute acceptance of the WORK or waiver of the OWNER's right to reject non-conforming WORK.

7.3 Statutory Holdback

In accordance with the Builders Lien Act, SBC 1997, Chapter 45, the OWNER shall retain ten percent (10%) of each certified progress payment as a statutory holdback. The statutory holdback shall be held in trust. Upon certification of Substantial Completion, the CONTRACT MANAGER shall issue a Certificate of Substantial Performance. The OWNER shall publish the Certificate of Substantial Performance in the manner prescribed by the Builders Lien Act. The forty-five (45) day lien period commences on the date of publication of the Certificate of Substantial Performance. The statutory holdback shall be released following the expiry of the forty-five (45)

day lien period, provided no liens have been filed, and upon receipt of the CONTRACTOR's statutory declaration confirming all Subcontractors and suppliers have been paid. The CONTRACTOR shall ensure all Subcontractors and suppliers are paid from the amounts received, less any applicable holdback.

7.4 Owner's Right to Withhold Payment

In addition to the statutory holdback, the OWNER may withhold payment from any certified amount, to the extent reasonably necessary, to protect the OWNER from loss due to: (a) defective WORK not remedied; (b) claims filed or reasonable evidence indicating claims will be filed by third parties; (c) failure of the CONTRACTOR to pay Subcontractors or suppliers; (d) reasonable evidence that the WORK cannot be completed for the unpaid balance of the Contract Price; or (e) damage to the OWNER caused by the CONTRACTOR.

7.5 Substantial Completion Payment

Upon certification of Substantial Completion, the CONTRACT MANAGER shall certify payment of the Contract Price less: (a) amounts previously paid; (b) the statutory holdback; (c) the Owner's discretionary holdback as specified in Document 1; (d) the value of any incomplete or deficient WORK; and (e) any Liquidated Damages accrued. The CONTRACTOR shall submit a statutory declaration confirming that all Subcontractors and suppliers have been paid before Final Payment is released.

7.6 Owner's Discretionary Holdback

The OWNER may withhold an amount equal to five percent (5%) of the final Contract Price from the Final Payment as security for the performance by the CONTRACTOR of its obligations during the WARRANTY PERIOD, as specified in Document 1. This holdback is separate from and in addition to the statutory holdback. It shall be released upon the OWNER's written confirmation that all warranty obligations have been satisfied at the expiry of the WARRANTY PERIOD.

7.7 Interest on Late Payments

If the OWNER fails to make payment within the time required and such failure is not due to a bona fide dispute, the OWNER shall pay interest on the overdue amount at the rate of prime plus two percent (2%) per annum, calculated daily from the due date to the date of payment.

7.8 Final Payment

Final Payment shall be made following: (a) certification of Substantial Completion; (b) delivery of the CONTRACTOR's final survey and field records; (c) submission of a statutory declaration confirming all Subcontractors and suppliers have been paid; and (d) resolution of all outstanding claims and disputes. Acceptance of Final Payment by the CONTRACTOR constitutes a full and final release of all claims against the OWNER arising from the Contract, except for warranty obligations.

7.9 Taxes

The Contract Price is exclusive of Goods and Services Tax (GST). GST shall be invoiced separately and paid by the OWNER in addition to the certified amount. All other taxes, levies, and duties applicable to the WORK, including any applicable Provincial Sales Tax (PST) on materials and equipment, are the responsibility of the

CONTRACTOR and are deemed to be included in the Contract Price. The CONTRACTOR is responsible for determining and remitting all applicable taxes to the relevant authorities.

8.1 Contractor's Insurance

The CONTRACTOR shall obtain and maintain, at its own expense, the following insurance throughout the duration of the Contract including the WARRANTY PERIOD:

() Commercial General Liability insurance with limits of not less than five million dollars ($5,000,000) per occurrence and in the aggregate, covering bodily injury, property damage, products and completed operations, and contractual liability. The Cariboo Regional District shall be named as an additional insured;

() Automobile Liability insurance covering all owned, non-owned, and hired vehicles with limits of not less than two million dollars ($2,000,000) per occurrence;

() WorkSafeBC coverage as required by the Workers Compensation Act; and

() A current WorkSafeBC Clearance Letter confirming the CONTRACTOR is in good standing with WorkSafeBC, to be provided prior to the NTP, with each progress payment application, and prior to Final Payment; and

() Such additional insurance as the CONTRACT MANAGER may reasonably require.

Evidence of all required insurance shall be delivered to the CONTRACT MANAGER prior to commencement of the WORK and shall be renewed before expiry. Insurance policies shall provide for thirty (30) Days' written notice to the OWNER before cancellation or material change.

8.2 Performance Security

Prior to execution of the Contract Agreement, the CONTRACTOR shall deliver to the OWNER one of the following forms of Performance Security:

() A Performance Bond equal to fifty percent (50%) of the Contract Price from a surety company licensed to conduct business in British Columbia; or

() A certified cheque or irrevocable standby letter of credit equal to ten percent (10%) of the Contract Price.

Performance Security shall remain in force until Final Payment and release of the Owner's discretionary holdback. The Bid Security shall be returned to the CONTRACTOR upon receipt of satisfactory Performance Security.

9.1 Notice of Differing Conditions

If the CONTRACTOR encounters subsurface or concealed physical conditions at the SITE that differ materially from those described in the Contract Documents or from conditions that a reasonable and experienced contractor would have anticipated based on the Referenced Documents (including the SoilTech Geotechnical Assessment), the CONTRACTOR shall immediately stop WORK in the affected area and notify the CONTRACT MANAGER in writing before disturbing the conditions. The CONTRACT MANAGER and GEOTECHNICAL SPECIALIST shall investigate promptly.

9.2 Adjustment for Differing Conditions

If the CONTRACT MANAGER confirms that materially differing conditions exist, the CONTRACT MANAGER shall issue a Change Order adjusting the Contract Price and Contract Time as appropriate. If the CONTRACTOR fails to give timely notice as required in 9.1, the CONTRACTOR forfeits its right to claim additional compensation for the differing condition. This provision does not limit the CONTRACTOR's responsibility to comply with the Contract Documents for conditions that fall within those described or anticipated.

10.1 Default by Contractor

The CONTRACTOR is in default if it: (a) fails to commence the WORK within the time required following NTP; (b) abandons the WORK or fails to prosecute the WORK diligently; (c) fails to comply with the Contract Documents, instructions of the CONTRACT MANAGER, or applicable law; (d) fails to pay Subcontractors or suppliers; (e) becomes insolvent or makes an assignment for the benefit of creditors; or (f) fails to remedy defective WORK within the time directed by the CONTRACT MANAGER.

10.2 Termination for Default

If the CONTRACTOR is in default, the CONTRACT MANAGER shall issue written notice identifying the default and requiring remedy within five (5) Days. If the default is not remedied within that period, or if the CONTRACTOR fails to demonstrate a credible plan for remedy within that period, the OWNER may terminate the Contract by written notice. Upon termination, the OWNER may take possession of the SITE and complete the WORK by its own forces or by engaging another contractor. The CONTRACTOR shall be responsible for all additional costs incurred by the OWNER above the unpaid Contract Price. The Performance Security shall be available to the OWNER to offset such costs.

10.3 Termination for Convenience

The OWNER may terminate the Contract for its convenience at any time by thirty (30) Days' written notice to the CONTRACTOR. Upon termination for convenience, the CONTRACTOR shall be entitled to payment for: (a) all WORK properly performed to the date of termination; (b) reasonable direct costs of demobilization; and (c) reasonable direct costs of materials ordered prior to notice that cannot be returned. The CONTRACTOR shall not be entitled to loss of profit on WORK not performed or to any consequential damages.

10.4 Default by Owner

If the OWNER fails to make payment when due and such failure is not due to a bona fide dispute, and the failure continues for fifteen (15) Days after written notice from the CONTRACTOR, the CONTRACTOR may suspend the WORK upon a further five (5) Days' written notice. If the failure to pay continues for a further thirty (30) Days, the CONTRACTOR may terminate the Contract. Upon such termination, the CONTRACTOR is entitled to payment for all WORK performed, reasonable costs of suspension and demobilization, and reasonable profit on WORK not performed due to the OWNER's default.

11.1 Notice of Dispute

A Party shall notify the other Party in writing within ten (10) Days of becoming aware of a dispute. The notice shall describe the nature of the dispute and the relief sought. Failure to give timely notice does not extinguish a claim but shall be considered in assessing any equitable relief.

11.2 Negotiation

Upon receipt of a dispute notice, the CONTRACT MANAGER and the CONTRACTOR's superintendent or principal shall meet in good faith within ten (10) Days to attempt to resolve the dispute. If the dispute is not resolved within twenty (20) Days of the notice, either Party may refer the dispute to senior representatives of each organization. If the dispute remains unresolved after a further twenty (20) Days, either Party may proceed to arbitration.

11.3 Arbitration

Any dispute not resolved by negotiation shall be finally determined by arbitration conducted in Williams Lake, British Columbia, under the Arbitration Act, SBC 2020, Chapter 2, as amended. The arbitrator shall be a single arbitrator agreed upon by the parties, or failing agreement within ten (10) Days of a written request, appointed by the British Columbia International Commercial Arbitration Centre. The arbitrator's decision shall be final and binding. Each party shall bear its own costs of arbitration unless the arbitrator determines otherwise.

11.4 Continuation of Work

Pending resolution of any dispute, the CONTRACTOR shall continue to perform the WORK as directed by the CONTRACT MANAGER, including WORK that is the subject of the dispute, unless the CONTRACTOR has validly suspended or terminated the Contract under Article 10. The OWNER shall continue to make payment of undisputed amounts during dispute resolution.

12.1 Contractor's Indemnification

The CONTRACTOR shall indemnify, defend, and hold harmless the OWNER, the CONTRACT MANAGER, and their respective officers, employees, and agents from and against all claims, losses, damages, costs, and expenses (including legal fees) arising out of or relating to: (a) the CONTRACTOR's performance of the WORK; (b) any breach of the Contract by the CONTRACTOR; (c) any negligence or wilful misconduct of the CONTRACTOR or its Subcontractors; or (d) any injury to persons or damage to property caused by the

CONTRACTOR or its Subcontractors. This indemnity does not apply to losses caused by the OWNER's own negligence or wilful misconduct.

12.2 Owner's Indemnification

The OWNER shall indemnify and hold harmless the CONTRACTOR from claims arising solely from: (a) the OWNER's negligence or wilful misconduct; or (b) the OWNER's use or occupancy of any portion of the WORK prior to Substantial Completion, to the extent such claims are not caused by the CONTRACTOR's failure to perform.

12.3 Consequential Damages

Neither party shall be liable to the other for indirect, consequential, or punitive damages arising from or related to the Contract, except: (a) Liquidated Damages as specified in the Special Provisions; (b) liability arising from a party's wilful misconduct or fraud; or (c) indemnification obligations under this Article.

13.1 Warranty Obligations

The CONTRACTOR warrants that all WORK shall be free from defects in materials and workmanship for the WARRANTY PERIOD of one (1) year from the date of Substantial Completion. During the WARRANTY PERIOD, the CONTRACTOR shall promptly remedy any defects or deficiencies identified by the CONTRACT MANAGER or OWNER at no cost to the OWNER. If the CONTRACTOR fails to remedy a defect within ten (10) Days of written notice (or such shorter period as is reasonable in an emergency), the OWNER may remedy the defect at the CONTRACTOR's expense, drawing on the Owner's discretionary holdback if necessary.

13.2 Exclusions from Warranty

The warranty does not cover: (a) damage caused by the OWNER's misuse or failure to maintain the WORK in accordance with the CONTRACT MANAGER's recommendations; (b) normal wear and tear; or (c) damage caused by third parties or events of Force Majeure occurring after Substantial Completion.

14.1 Assignment

Neither party may assign the Contract or any interest therein without the prior written consent of the other party, which consent shall not be unreasonably withheld. Any purported assignment without consent is void. The OWNER may assign the Contract to any successor entity or to the Ministry of Transportation and Transit in connection with the transfer or maintenance of the access road, without requiring the CONTRACTOR's consent.

14.2 Notices

All formal notices required or permitted under the Contract shall be in writing and delivered by hand, courier, registered mail, or email with read receipt to the addresses set out in Document 1. Notices are effective upon actual receipt. The CONTRACT MANAGER is the OWNER's designated recipient for all notices from the CONTRACTOR.

14.3 Waiver

No waiver of any provision of the Contract shall be effective unless in writing. A waiver of any breach or default shall not constitute a waiver of any other or subsequent breach or default. A party's failure to exercise any right shall not constitute a waiver of that right.

14.4 Severability

If any provision of the Contract is found to be invalid, illegal, or unenforceable, that provision shall be severed and the remaining provisions shall continue in full force and effect.

14.5 MoTT Handoff

The CONTRACTOR acknowledges that the OWNER intends to transfer the MoTT Section of the access road (Station 0+095 to Station 0+930) to the Ministry of Transportation and Transit for ongoing maintenance. The CONTRACTOR shall co-operate with the EOR and CONTRACT MANAGER in preparing all documentation required for that transfer, including as-built records, compaction test results, material certificates, and any other information required by MoTT. This obligation is included in Item H-1 (Supervision, Survey Control, and Quality Assurance) and does not entitle the CONTRACTOR to additional compensation.

14.6 Force Majeure

Neither party shall be in default for delays or failures to perform caused by Force Majeure, provided the affected party: (a) notifies the other party in writing within five (5) Days of the Force Majeure event; (b) takes all reasonable steps to mitigate the impact; and (c) resumes performance as soon as reasonably practicable. Force Majeure does not excuse the CONTRACTOR from maintaining the SITE safely during any period of suspension, nor does it entitle the CONTRACTOR to additional payment — only an extension of Contract Time is available as a remedy for Force Majeure.

END OF GENERAL CONDITIONS OF CONTRACT

Document 2 of 4 — Esler Sports Complex Access Road

CARIBOO REGIONAL DISTRICT

ESLER SPORTS COMPLEX ACCESS ROAD

Station 0+095 to Station 1+173, Williams Lake, British Columbia

CONTRACT AGREEMENT

Document 3 of 4

May 2026

PARTIES

This Contract Agreement (the "Agreement") is entered into as of the date last signed below, between:

OWNER Cariboo Regional District 180 North Third Avenue, Williams Lake, BC V2G 2A4 Attention: Darron Campbell, Manager of Community Services

— and —

CONTRACTOR [CONTRACTOR LEGAL NAME] [Address] [City, Province, Postal Code] Attention: [Contact Name and Title]

RECITALS

WHEREAS the OWNER invited tenders for the construction of the Esler Sports Complex Access Road from Station 0+095 to Station 1+173 in Williams Lake, British Columbia;

AND WHEREAS the CONTRACTOR submitted a Tender dated [TENDER DATE] in the amount of [TENDER AMOUNT] (exclusive of GST), which was accepted by the OWNER;

AND WHEREAS the parties wish to enter into this Agreement to formalize the terms and conditions of the Contract;

NOW THEREFORE, in consideration of the mutual covenants and agreements contained herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

CONTRACT PARTICULARS

Project Name	Esler Sports Complex Access Road
Drawing Reference	Drawing No. 134-007-001, Rev. 1 (April 21, 2026)
Location	Station 0+095 to Station 1+173, Williams Lake, BC
Contract Manager	Celtic Engineering Ltd. — Daryl Taylor, P.Eng., RPF
Engineer of Record	Edward Folk, P.Eng., RFT — Celtic Engineering Ltd.
Contract Price	$[AMOUNT] (exclusive of GST)

GST (5%)	$[AMOUNT]
Total Contract Price (incl. GST)	$[AMOUNT]
Target NTP Date	On or about June 15, 2026
Substantial Completion Date	August 31, 2026 (HARD DEADLINE)
Warranty Period	One (1) year from date of Substantial Completion
Liquidated Damages	$3,000 per calendar day of delay past Substantial Completion Date
Statutory Holdback	10% of each certified progress payment per Builders Lien Act
Owner's Discretionary Holdback	5% of final Contract Price — released upon expiry of Warranty Period
Performance Security	[ ] 50% Performance Bond [ ] 10% Certified Cheque / Letter of Credit
CGL Insurance Minimum	$5,000,000 per occurrence — CRD named as additional insured

AGREEMENT

1. The CONTRACTOR agrees to perform the WORK in strict accordance with the Contract Documents for the Contract Price, subject to adjustment by Change Order in accordance with the General Conditions of Contract.

2. The Contract Documents, which together form the entire agreement between the parties with respect to the WORK, are the following documents, listed in order of precedence:

Priority	Document	Title
1 (Highest)	**Document 3**	Contract Agreement (this document)
2	**All Addenda**	Addenda issued prior to Tender closing, as acknowledged in the accepted Tender Form
3	**Document 1**	Tender Package — Special Provisions
4	**Document 2**	General Conditions of Contract
5	**Document 4**	Standard Specifications and Design Standards Reference Sheet
6	**Dwg 134-007-001**	Esler Sports Complex Access Project — Geometric Design (30 sheets, Rev. 1)
7 (Lowest)	**Document 1 — Schedule**	Schedule of Quantities and Prices — accepted Tender Form

3. The CONTRACTOR acknowledges having carefully examined the Contract Documents, visited the SITE, and satisfied itself as to all conditions affecting the WORK, including all existing ground conditions, access, haul distances, material disposal locations, and environmental requirements. No claim shall be made for additional compensation based on ignorance of any condition that could have been ascertained by diligent inspection of the SITE and the Contract Documents.

4. The CONTRACTOR shall not commence the WORK prior to receipt of the written Notice to Proceed (NTP) from the CONTRACT MANAGER. The CONTRACTOR shall achieve Substantial Completion of the WORK by August 31, 2026. Time is of the essence.

5. Liquidated Damages of $3,000 per calendar day shall be payable by the CONTRACTOR to the OWNER for each calendar day that Substantial Completion extends beyond the Substantial Completion Date, as more particularly described in Article 6 of the General Conditions of Contract.

6. The OWNER shall retain a statutory holdback of ten percent (10%) of each certified progress payment in accordance with the Builders Lien Act, SBC 1997, Chapter 45. Upon certification of Substantial Completion, the CONTRACT MANAGER shall issue a Certificate of Substantial Performance, which the OWNER shall publish in accordance with the Builders Lien Act. The forty-five (45) day lien period runs from the date of that publication. In addition, the OWNER may retain a discretionary holdback of five percent (5%) of the final Contract Price until expiry of the Warranty Period, as described in Article 7 of the General Conditions of Contract.

7. The CONTRACTOR shall deliver satisfactory Performance Security, certificates of insurance, and a current WorkSafeBC Clearance Letter to the CONTRACT MANAGER prior to commencement of the WORK and prior to the NTP being issued, as specified in Article 8 of the General Conditions of Contract.

8. This Agreement shall be governed by the laws of the Province of British Columbia.

EXECUTION

IN WITNESS WHEREOF the parties have executed this Agreement as of the date last signed below.

CARIBOO REGIONAL DISTRICT (OWNER)

Authorized Signatory		*Authorized Signatory*
Print Name		*Title*
Date		*Corporate Seal (if applicable)*

CELTIC ENGINEERING LTD. (CONTRACT MANAGER — authorized on behalf of the OWNER)

Daryl Taylor, P.Eng., RPF		*Date*

[CONTRACTOR NAME] (CONTRACTOR)

Authorized Signatory		*Authorized Signatory*
Print Name		*Title*
Date		*Corporate Seal (if applicable)*

Document 3 of 4 — Esler Sports Complex Access Road

CARIBOO REGIONAL DISTRICT

ESLER SPORTS COMPLEX ACCESS ROAD

Station 0+095 to Station 1+173, Williams Lake, British Columbia

STANDARD SPECIFICATIONS AND DESIGN STANDARDS REFERENCE SHEET

Document 4 of 4

May 2026

PURPOSE OF THIS DOCUMENT This document establishes the governing design standards, construction specifications, technical circulars, and design drawings that apply to the WORK. It is to be read in conjunction with the General Conditions of Contract (Document 2) and the Special Provisions in the Tender Package (Document 1). In the event of conflict between this document and the design drawings, the design drawings govern for geometry, dimensions, and grades. In the event of conflict between this document and the Special Provisions, the Special Provisions govern. The CONTRACTOR is responsible for obtaining and maintaining current copies of all referenced standards. Where a referenced standard has been superseded and a new edition issued, the CONTRACT MANAGER shall confirm in writing which edition applies before the CONTRACTOR proceeds.

1. GOVERNING DESIGN STANDARDS

The following design standards govern the design and construction of the access road. The MoTT Section (Station 0+095 to Station 0+930) is designed and documented to MoTT standards to facilitate future acceptance and maintenance by the Ministry of Transportation and Transit. The CRD Section (Station 0+930 to Station 1+173) is designed to the Low Volume Road standard.

Ref.	Document / Standard	Edition / Date	Application on this Project
DS-01	BC Supplement to the TAC Geometric Design Guide for Canadian Roads	2019, 3rd Ed.	MoTT Section geometric design standard. Governs horizontal and vertical alignment, sight distances, cross-sections, and intersection design.
DS-02	TAC Geometric Design Guide for Canadian Roads	2017 (CA)	Referenced by DS-01. Design vehicle WB-20. Design speed 50 km/h.
DS-03	MoTT Road Classification: Rural Local Undivided (RLU)	Current	Applies to MoTT Section (Sta. 0+095 to 0+930). 2-lane undivided, 3.6m lane width, 1.0m paved shoulders, 0.5m gravel shoulders.
DS-04	MoTT Low Volume Road (LVR) Standard	Current	Applies to CRD Section (Sta. 0+930 to 1+173). 2-lane, 3.5m lane width, 0.5m gravel shoulders. Gravel surface.
DS-05	MoTT Paving Class C	Current	Applies to MoTT Section future paving program (not this Contract). 75mm ACP Type C over 225mm WGB over 300mm SGSB.
DS-06	MoTT Technical Circular T-01/15	2015	Pavement design guidelines. AASHTO 1993 method. Governs pavement structure design on MoTT Section.
DS-07	BC Manual of Standard Traffic Signs and Pavement Markings	2026	All signs and markings on this project.
DS-08	BCL-625 Loading Standard	Current	Governs structural loading for the road and junction. 63,730 kg GVW.
DS-09	MoTT Design Life	20 years	Design life for the access road.

2. GOVERNING CONSTRUCTION SPECIFICATIONS

The following construction specifications govern the execution of the WORK. Where a specification section is listed, the CONTRACTOR shall comply with that section in full unless the Special Provisions or design drawings provide a more stringent requirement, in which case the more stringent requirement governs.

Ref.	Document / Standard	Edition / Date	Application on this Project
CS-01	MoTT Standard Specifications for Highway Construction	Current edition	Governs all construction work on the MoTT Section. Sections listed below apply specifically.
CS-01a	Section 202.04 — Aggregate Quality Specifications	As above	All aggregate materials (SGSB, WGB, surfacing) must meet aggregate quality requirements in this section.
CS-01b	Section 300 — Roadway Excavation and Embankment	As above	Governs all earthworks, cut and fill operations, embankment construction, and compaction.
CS-01c	Section 304 — Granular Base and Subbase	As above	Governs placement and compaction of SGSB and WGB on the MoTT Section.
CS-01d	Section 404 — Culverts and Storm Drains	As above	Governs culvert installation, bedding, backfill, and armoured inlets/outlets.
CS-02	SoilTech Geotechnical Assessment (Ref. R-02)	June 23, 2025	Sections 4 and 5 govern material characteristics, subgrade preparation, and compaction standards for the full project. Supersedes MoTT Standard Specs where more stringent.
CS-03	AASHTO Standard Specifications	1993 Pavement Design Method	Pavement structure design basis per MoTT TC T-01/15.
CS-04	ASTM D698	Current	Standard Proctor compaction test method. All compaction expressed as % Standard Proctor Maximum Dry Density (SPMDD).
CS-05	ASTM D1883	Current	California Bearing Ratio (CBR) test method. Used for subgrade suitability confirmation per SoilTech report.
CS-06	ASTM C117 and C136	Current	Sieve analysis method for aggregate gradation verification.
CS-07	WorkSafeBC Occupational Health and Safety Regulation	Current	Governs all safety requirements on SITE. Supersedes drawing specifications where in conflict.
CS-08	Consus EMP Rev. A (Ref. R-03)	April 6, 2026	Environmental Management Plan. Governs all environmental protection, erosion control, spill response, and habitat management during construction.

3. DESIGN DRAWINGS

The following drawings form part of the Contract Documents. The CONTRACTOR shall verify that the set of drawings held on SITE matches this list and shall notify the CONTRACT MANAGER immediately of any discrepancy. Superseded revisions shall not be used for construction.

Drawing No.	Title	Rev.	Date	Sheets
134-007-001	Esler Sports Complex Access Project — Geometric Design, 0+000.000m to 1+173.000m — Cover Sheet / Location Plan	1	21 Apr 2026	Sheet 1 of 30
134-007-001	Road Design Standards and Design Criteria	1	21 Apr 2026	Sheet 2 of 30
134-007-001	Plan and Profile — Station 0+000 to 0+580 (including Earthwork Volume Table, Sheet 1 of 3)	1	21 Apr 2026	Sheet 3 of 30
134-007-001	Plan and Profile — Station 0+520 to 1+100 (including Earthwork Volume Table, Sheet 2 of 3)	1	21 Apr 2026	Sheet 4 of 30
134-007-001	Plan and Profile — Station 1+040 to 1+620 (including Earthwork Volume Table, Sheet 3 of 3)	1	21 Apr 2026	Sheet 5 of 30
134-007-001	Typical Cross Sections — RLU and LVR Standards	1	21 Apr 2026	Sheet 6 of 30
134-007-001	Cross Sections — Sta. 0+000 to 0+019 (Junction Area)	1	21 Apr 2026	Sheets 7–14 of 30
134-007-001	Cross Sections — Sta. 0+095 to 1+173 (Tender Scope)	1	21 Apr 2026	Sheets 14–28 of 30
134-007-001	Access Road / Highway 20 Junction — Tracking Diagram (WB-20)	1	21 Apr 2026	Sheet 29 of 30
134-007-001	General Notes — Granular Material Specifications, Pavement Structure, Construction Notes, Environmental Notes, Signs	1	21 Apr 2026	Sheet 30 of 30

Note: Drawing 134-007-001 was designed by Edward Folk, P.Eng., RFT; reviewed by Daryl Taylor, P.Eng., RPF; Geotechnical Specialist: SoilTech Consulting Ltd. CRP: Darron Campbell, Manager of Community Services, CRD. Permit to Practice No. 1003087.

Note: Sheets 1–6 and Sheet 30 are governing sheets applicable to the full WORK. Sheets 7–14 cover the highway junction area (0+000 to 0+095) and are provided for context only — that area is excluded from this Contract. The cross-section sheets applicable to the tender scope are Sheets 14–28.

4. MATERIAL SPECIFICATIONS SUMMARY

The following table summarizes the key material and compaction specifications applicable to the WORK. This is a summary for reference — the full specifications in the Referenced Documents govern in all cases.

Material	Quality Standard	Gradation Reference	Compaction Requirement
Subgrade Fill (Glacial Till)	Natural glacial till confirmed suitable (SoilTech 25-H-014). Remove all organics, undocumented fill, and deleterious material.	N/A — in situ material	Initial layers: 97% SPMDD in max 200mm lifts (fine-grained) or 300mm lifts (granular). Final 300mm: 100% SPMDD.
Select Granular Subbase (SGSB)	MoTT Std. Specs Section 202.04 aggregate quality. May be processed or pit run gravel.	Dwg 134-007-001 Sheet 30 and SoilTech Table 2. 75mm max; 95–100% passing 75mm.	100% SPMDD in max 300mm loose lifts. Proof-roll subgrade prior to geotextile placement.
Well Graded Base (WGB)	MoTT Std. Specs Section 202.04. Crushed material, min. 60% one-face fracture on particles >4.75mm.	Dwg 134-007-001 Sheet 30 and SoilTech Table 2. 25mm max; 100% passing 25mm.	100% SPMDD in max 300mm loose lifts. Proof-roll WGB prior to surfacing placement.
3/4" HF Surfacing (CRD Section)	Crushed granular with higher fines content for surface durability. MoTT Std. Specs Section 202.04.	Dwg 134-007-001 Sheet 30. 3/4" minus road crush.	100% SPMDD in max 300mm loose lifts.
Geotextile	Class 2 Non-Woven (Mirafi 160N or approved equivalent). Under full road footprint prior to SGSB placement.	Manufacturer's specifications. Submit product data sheet to CONTRACT MANAGER prior to installation.	Install per manufacturer's recommendations. Lap joints minimum 500mm. No tears or punctures permitted.
Embankment Fill	Natural glacial till from cut areas. No organic material, roots, or deleterious material.	N/A	Maximum 500mm lifts. Roller or track compaction. Trim fill slopes to 2H:1V on completion.
Culvert Bedding	Granular material free of organics and debris. Compactable and well graded.	As directed by GEOTECHNICAL SPECIALIST.	Compacted to satisfaction of GEOTECHNICAL SPECIALIST. Uniform support under full pipe barrel length.

ACP — Type C (Future Program)	MoTT Std. Specs for Highway Construction — asphalt provisions. 75mm depth on MoTT Section.	Not applicable to this Contract.	Not applicable to this Contract. Included for reference to future paving program.

5. QUALITY CONTROL TESTING REQUIREMENTS

The following minimum testing requirements apply during construction. SoilTech Consulting Ltd. (GEOTECHNICAL SPECIALIST) is responsible for conducting or directing all quality control testing on behalf of the OWNER. The CONTRACTOR shall provide advance notice as specified in SP-06 of Document 1 for all activities requiring testing.

Activity	Minimum Test Frequency	Test Method / Standard	Acceptance Criteria
Subgrade proof-roll	Prior to geotextile installation and after each layer of subgrade fill	Visual — loaded rubber-tired roller	No rutting or deflection. Soft areas excavated and replaced.
Subgrade compaction (fill layers)	Minimum 1 test per 500 m² per lift, or as directed by GEOTECHNICAL SPECIALIST	ASTM D698 (Standard Proctor)	Initial layers: 97% SPMDD. Final 300mm: 100% SPMDD.
SGSB compaction	Minimum 1 test per 500 m² per lift	ASTM D698	100% SPMDD
WGB compaction	Minimum 1 test per 500 m² per lift	ASTM D698	100% SPMDD
WGB proof-roll	Prior to surfacing placement	Visual — loaded rubber-tired roller	No rutting or deflection. Soft areas repaired prior to surfacing.
Surfacing compaction (CRD Section)	Minimum 1 test per 500 m² per lift	ASTM D698	100% SPMDD
Aggregate gradation	Minimum 1 per material source, and at each delivery of a new source	ASTM C117 and C136	Per Dwg 134-007-001 Sheet 30 and SoilTech Table 2
Aggregate quality	Minimum 1 per material source	MoTT Std. Specs Section 202.04	Meet all aggregate quality requirements

Culvert pipe bedding	Each culvert installation	Visual inspection by GEOTECHNICAL SPECIALIST	Uniform, compacted support. No voids. Correct grade and skew.

Note: Testing costs for specified tests are borne by the OWNER. Re-testing costs where results fail are borne by the CONTRACTOR.

Note: The GEOTECHNICAL SPECIALIST may require additional tests at any time based on field conditions. The CONTRACTOR shall accommodate all testing requests without delay to the WORK.

6. KEY DESIGN PARAMETERS — QUICK REFERENCE

Parameter	MoTT Section (Sta. 0+095–0+930)	CRD Section (Sta. 0+930–1+173)
Road Classification	Rural Local Undivided (RLU)	Low Volume Road (LVR) — Gravel
Design Speed	50 km/h	50 km/h
Design Vehicle	WB-20 (TAC-2017 CA)	WB-20
Loading	BCL-625 (63,730 kg GVW)	BCL-625
Total Running Surface Width	10.2m (2×3.6m + 2×1.0m paved shoulders + 2×0.5m gravel)	8.0m (2×3.5m + 2×0.5m gravel shoulders)
Min. Horizontal Curve Radius	100m	100m
Max. Design Grade	11%	Variable
Min. Vertical Crest Curve K	11.0	11.0
Min. Vertical Sag Curve K	13.0	13.0
Cut Slope (max)	2H:1V	2H:1V
Fill Slope (max)	2H:1V	2H:1V

Ditch Width	1.0m	1.0m
Clearing Width — Min. C/L Offset	12.5m left, 12.5m right	As per drawings
Surfacing — This Contract	300mm SGSB + 225mm WGB (no ACP this Contract)	300mm 3/4" HF road crush
Geotextile	Mirafi 160N, 3 rolls wide	Mirafi 160N, 2 rolls wide
Pavement — Future Program	75mm ACP Type C (2028 program)	N/A — gravel permanent
Min. Culvert Diameter	600mm	600mm
Min. Culvert Gradient	2%	2%
Stripping Depth	0.1m to 0.3m varies (design)	0.1m to 0.3m varies (design)

7. ENVIRONMENTAL AND REGULATORY REFERENCES

The following environmental documents and regulatory references govern construction activities on this project. All are incorporated by reference into the Contract Documents.

Ref.	Document / Standard	Edition / Date	Application on this Project
ER-01	Environmental Management Plan for the New Esler Sports Complex Road Project — Consus Management Ltd., Rory Fogarty MSc., RPBio.	Rev. A, April 6, 2026	Primary environmental management document. Governs all construction-phase environmental protection obligations.
ER-02	Environmental Assessment for the Proposed Road to the Esler Sports Complex — Davis Environmental Ltd., Larry R. Davis MSc., RPBio.	October 25, 2012	Background EA supporting the Special Use Permit application. Referenced for species at risk context.
ER-03	Licence to Cut	Issued — on file with Celtic Engineering Ltd.	Required for any tree felling within the road right-of-way. Copy to be maintained on SITE.

ER-04	Mule Deer Winter Range Exemption	Issued — on file with Celtic Engineering Ltd.	Exemption for tree clearing within designated Mule Deer Winter Range. Copy to be maintained on SITE.
ER-05	Migratory Birds Convention Act, SC 1994	Current	Clearing/grubbing during the nesting window (April 11 to August 23) requires Consus (ENVIRONMENTAL MONITOR) oversight.
ER-06	Heritage Conservation Act, RSBC 1996	Current	Chance find protocol per SP-07 of Document 1 applies. All work within 30m of any discovery to cease immediately.
ER-07	Environmental Management Act, SBC 2003	Current	Governs waste disposal, spill reporting, and contaminated materials management.
ER-08	BC 1 Call — Underground Utility Locates	Prior to any excavation	CONTRACTOR must obtain locates before any ground disturbance. 1-800-474-6886.

END OF STANDARD SPECIFICATIONS AND DESIGN STANDARDS REFERENCE SHEET

Document 4 of 4 — Esler Sports Complex Access Road

Questions regarding the applicability of any standard or specification shall be directed to the CONTRACT MANAGER (Celtic Engineering Ltd.) in writing via BCBid prior to Tender close, or by written RFI following Contract award.

ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED ROAD TO THE ESLER SPORTS COMPLEX

25 October 2012

Prepared by:

Larry R. Davis, MSc., RPBio.

Davis Environmental Ltd.

Fish & Wildlife Surveys • Research and Management • Environmental Impact Assessment

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Executive Summary

This document provides an assessment of the environmental impacts of a new 1.2 km long access road to the Esler Sports Complex proposed by the Cariboo Regional District. The road is intended to decrease the negative effects of high traffic volumes accessing the park via Hodgson Road. The new road would provide a direct route between Highway 20 and the park through a combination of crown and private land. Existing land uses in the area are dominated by forest harvesting and recreation. The Assessment Area for the project included a 100 m buffer around the road alignment. Effects of the development on surface water, vegetation, wildlife, and species at risk are examined.

The proposed road represents limited risks to the environment. There are no watercourses or wetlands present in the Assessment Area and the alignment is through vegetation communities that have previously been harvested and will continue to be harvested on a multiple entry basis. No critical habitats for species at risk (e.g. nests, hibernacula, etc) were observed during surveys in the Assessment Area. However, there are important habitats and habitat features that include the Williams Lake – Chimney Mule Deer Winter Range (MDWR) and a number of large diameter Douglas-fir trees present in the footprint of the project. Potential impacts on these important ecosystem components can be mitigated by following regulations and best management practices.

The linear corridor created through the MDWR involves a very small percentage of the winter range and mitigation measures, such as narrowing the right of way and closing the road during winter, will ameliorate the effects of this development. Narrowing the right of way will also reduce the number of large diameter Douglas-fir trees in the project footprint that will be removed. The effects of removing veteran trees can also be lessened through installing nest/den boxes in the surrounding area to provide additional reproductive habitat. Following timing widows of least risk for birds is also expected to reduce direct effects. With these mitigation measures in place, the impacts of the new road are predicted to be non-significant.

1.0 Contents

1.0 Project Background

This report is an environmental assessment of a proposed road linking Highway 20 to the Esler Sports Complex (Figure 1). The Cariboo Regional District is concerned with the amount of traffic occurring on Hodgson Road during peak periods when players are travelling to the Sports Complex. Providing a dedicated road between Highway 20 and Esler Sports Complex would address these concerns.

2.0 Assessment Scope and Methodology

The Assessment Area for this project was defined as an area approximately 100 m wide on both sides of the proposed alignment, an approximate area of 26.8 ha. The Project Footprint is identified as the area potentially disturbed by construction activities (i.e., potential limits of clear and grub boundaries) defined as the area within 20 m of either side of the road centerline. Intensive survey effort was focussed in the Project Footprint area, with the broader Assessment Area investigated for features of interest.

The following pre-field activities were undertaken as part of this project;

- Gathering and review of existing information;
- Preparing field maps and gathering coordinates for features of interest as interpreted from orthophotos, maps, and satellite imagery;
- Preparing field maps and gathering coordinates for features of interest;
- Identification of vertebrate and invertebrate fauna at risk that could occur within the project area using CDC Species and Ecosystems Explorer web tool (CDC 2012);
- Review of species lists, diagnostic features, and ecosystem or habitat indicators;
- Identification of any navigable waters, streams, fish bearing water bodies, and wetlands.

The Conservation Data Centre (CDC) BC Species and Ecosystems Explorer web tool was queried using the *Forest* habitat type, *IDF* biogeoclimatic zone, and *Central Cariboo Forest District* as search parameters (CDC, 2012). Using TRIM 1:20,000 mapping, there are no mapped navigable waters associated with this project and therefore there is no trigger under the Navigable Waters Protection Act, which is administered by Transport Canada that would require consultation. Surveys have verified that there are no defined watercourses or fish-bearing waterbodies associated with the project; and no wetlands located within the Assessment Area.

The 1.2 km long proposed road route was surveyed on July 24th 2012 by walking in a meandering pattern to maximize the likelihood of detecting rare plants and wildlife habitat features. All direct observations of plants and animals and indirect evidence of use (e.g. tracks, dens, scat, feathers, etc) were recorded (Appendix 1). Photographs of habitats and features are provided in Appendix 3.

3.0 Description of Existing Environment

The Assessment Area is largely forested habitat located between Highway 20 and the Esler Sports Complex. The road begins on the Highway 20 right of way, crosses crown land, and ends with 350 m of road and associated baseball diamonds on private land owned by the Esler Sports Complex Society. Adjacent land uses include timber harvesting and recreation. Land ownership belongs largely to the Province, but 9ha of the Assessment Area is located on private land (33%).

The Assessment Area includes 23.7 ha of forested land, 1.8 ha of urban land (ball diamonds soccer fields, and associated infrastructure), and 0.9 ha of right of way on Highway 20. The urban land includes 0.2 ha of gravel road and there is 0.4 ha of pavement in the Highway 20 right of way. Dirt roads used by all terrain vehicles and forestry operation cross the proposed alignment in three locations.

Table 1. Area of habitats within the Assessment and Footprint Areas.

Description	Area ID	Assessment Area (ha)	% Assessment Area	Footprint Area* (ha)	% Footprint Area
Average forest – partial cut Douglas-fir	1, 4, 5, 6, 7	23.7	89	4.7	98
Urban – Sports Complex and infrastructure	8	1.8	7	0.0	0
Maintained corridor (Highway 20 R/W)	3	0.9	3	0.1	2
Forest – young clear-cut (<20 years)	2, 9	0.4	1	0.0	0
Totals	All	26.8	100	4.8	100

*Based on a 40m cleared right of way

3.1 Terrestrial Habitats

The assessment area is located in the Interior Douglas-fir dry-cool variant 3 (IDFdk3) biogeoclimatic zone (Meindinger and Pojar 1990). The forest in the assessment and footprint areas is largely composed of stands that have a partial-cut harvesting history that results in a multi-storied stand with some characteristics representative of a mature forest. Areas 4 and 7 have a small component of lodgepole pine (*Pinus contorta*). Evidence of skid trails and past harvesting (stumps) were observed throughout the area surveyed. Private land in the Assessment Area contains permanently cleared land where the baseball diamonds and access roads are located, but the majority of area is composed of partial cut Douglas-fir (*Pseudotsuga menziesii*) stands. The Highway 20 right of way is dominated by grasses with some small shrubs and trees present that are regularly removed through mowing.

Forests in the area are dominated by Douglas-fir with scattered individuals or patches of lodgepole pine, trembling aspen (*Populus tremuloides*), and hybrid spruce (*Picea engelmannii x glauca*) also present. Understory vegetation cover is patchy with greater cover in shrubs, herbs, and grasses in the small openings created by harvesting. Understory areas with greater crown closure are dominated by mosses. Understory vegetation identified in the Assessment Area include: Douglas-fir, soopolallie (*Shepherdia canadensis*), prickly rose (*Rosa acicularis*), pine grass (*Calamagrostis rubescens*), kinnikinnick (*Arctostaphylos uvi-ursi*), twinflower (*Linaea borealis*), and red-stemmed feathermoss (*Pleurozium schreberi*) (see Appendix 2 for plant list).

3.2 Riparian Areas/Surface Water/Fish Habitat

A review of existing stream network and associated information on Habitat Wizard (BC Environment) found no streams connected to fish bearing waters in the Assessment Area and no defined watercourses or wetlands were found during surveys. The assessment area is generally well drained with one shallow gully present that likely conducts water only during spring melt.

3.3 Migratory Birds

The timing of the surveys for this road is outside the time typically used to assess breeding birds; however, some species have second broods and an active cavity nest of a three-toed woodpecker was observed near the road centerline. Table 2 lists the birds observed during the survey in late July 2012. Most of the species would be subject to the Migratory Birds Convention Act (1994, c.22).

Table 2. Bird species observed within the Assessment Area.

Common name	Scientific name	Migratory
American robin	*Turdus migratorius*	Yes
Black-capped chickadee	*Poecile atricapillus*	Yes
Chipping sparrow	*Spizella passerina*	Yes
Common raven	*Corvus corax*	No
Dark-eyed junco	*Junco hyemalis*	Yes
Pileated woodpecker	*Dryocopus pileatus*	Yes
Pine siskin	*Carduelis pinus*	Yes
Red-breasted nuthatch	*Sitta canadensis*	Yes
Ruby-crowned kinglet	*Regulus calendula*	Yes
Ruffed grouse	*Bonasa umbellus*	No
Three-toed woodpecker	*Picoides tridactylus*	Yes
Western tanager	*Piranga ludoviciana*	Yes
Yellow-rumped warbler	*Dendroica coronata*	Yes

3.4 Wildlife and Wildlife Habitat

Habitat types in the Assessment Area have been classified based on descriptions in Table 1 as:

- Average forest
- Urban
- Maintained corridor
- Paved area

A description of wildlife habitat value for each of these categories is provided below.

Average Forest

Partial-cut Douglas-fir forest makes up the largest habitat component in both the Assessment and Footprint Areas (89% and 98% respectively). Although logged, the forest has some characteristics of mature to old stands such as patches of multi-storied forest and the presence of large diameter veteran

trees. The dominant site series unit identified in the Assessment Area is the IDFdk/01, which is the most widespread site unit in this biogeoclimatic subzone. There is a small (0.5 ha) moist area at the end of a shallow gully that crosses the road alignment that has some characteristics of the IDFdk/07/08 site series; however, the majority of this area lies outside the footprint of the development and coniferous tree cover has been removed from the stand (See Appendix 3 – Photograph 2). Slopes in the Assessment Area are generally gentle (<10%) with the exception of small sites on the edge of a shallow gully that transects the area.

The presence of veteran trees and snags provides habitat for a range of species, such as mule deer, furbearers, woodpeckers, owls, and bark gleaning birds. The trees provide important structural diversity, forage, and increased habitat area. Large Douglas-fir trees are the most abundant wildlife habitat feature; although, some scattered dead pine and trembling aspen with signs of wildlife use are also present. For mule deer, lower elevation Douglas-fir forests represent important winter range habitat and the area contains abundant signs of winter use (fecal pellets).

Urban Areas

Urban habitats in the Assessment Area are found on private land and include the baseball fields and access roads. The diamonds are mowed on a regular basis through the spring and summer reducing habitat heterogeneity on the fields. Wildlife species may use the open areas during night and daytime hours, but would regularly be disturbed between 6pm and sundown from May through August during baseball season. Despite the regular disturbance, the edges of the cleared areas are likely regularly used by wildlife from the surrounding forest.

Maintained Corridor

The highway corridor is characterized by weedy vegetation on the shoulders and fill slopes directly adjacent to the pavement and grass dominated communities between the fill slopes and the adjacent forest. The corridor generally lacks tree and shrub cover with little coarse woody debris. No habitat features were identified in this area that are of management concern. The corridor also includes paved area that does not provide habitat of importance to wildlife.

Highway corridors create physical and behavioral barriers to wildlife movement associated with fragmentation and frequent disturbance. This can include increased risk of collisions; increased predation risk; greater risk of contamination of natural communities through invasive plants or spills of hazardous products; fragmentation of habitats; alteration of natural drainage patterns; avoidance by wildlife; and increased nest predation or parasitism. Wildlife use of the corridor is expected to be limited by the effects of highway traffic and the lack of cover. Grasses and forbs found along the edges of the corridor provide some forage value for mule deer, birds, and small mammals. However, increased mortality risk due to collisions with vehicles and greater predation risk makes this habitat a sink for many species. Despite this, generalists species, such as coyotes, foxes, and scavenging birds, may benefit from the presence of road kill associated with the highway.

Young Seral Habitats

Young forest types comprise the smallest area in the Assessment Area and are approximately 20 years old. Regenerating trees in these sites are primarily Douglas-fir, lodgepole pine, and trembling aspen. These habitats provide good foraging areas for deer, moose, ruffed grouse, and many bird species. Young seral habitats are not found in the project footprint.

3.5 Species at Risk, Ecological Communities at Risk, and Regionally Important Wildlife

3.5.1 Species at Risk

Forested habitats of the IDFdk3 in the Central Cariboo Forest District have a total of 16 wildlife species, 2 invertebrates, 2 plant species, and 5 ecological communities that have either a "Red" or "Blue" status assigned by the BC Conservation Data Centre (2012)(Appendix 2). Using ecological requirements, 8 wildlife species and both plant species, have been excluded as elements of concern due to being "unlikely" to be found within the assessment area (Appendix 4).

Specific requirements and threats to species at risk that are possible or likely to occur in the Assessment area are described below.

Fishers (*Martes pennanti*): are a blue listed species in BC that occupies forested regions of the Central Interior. Fishers are the largest obligate cavity denning species in BC requiring relatively large diameter trees with heart rot cavities for reproductive denning. Old Douglas-fir, trembling aspen, lodgepole pine, and black cottonwood are the tree species that develop appropriate sized cavities for fisher reproduction. Although no cavity trees were seen during surveys, there are a number of large-old Douglas-fir trees within the project footprint that would provide recruitment reproductive habitat for this species. Foraging habitat for fishers is supplied by stands with sufficient cover to support prey species (snowshoe hare, squirrels, rodents) in a range of forest ages.

Flammulated owl (*Otus flammeolus*): nesting and foraging habitat includes multi-age class stands with multiple canopy layers, including a veteran tree component for nesting and roosting. This species is an insectivorous, secondary cavity user, occupying cavities excavated by pileated woodpeckers and northern flickers. In BC, Douglas-fir nest trees had a mean diameter of 61 cm (SD = 14.6), and were located in multi-storied stands containing small openings (B.C. Ministry of Water, Land and Air Protection. 2004). Large Douglas-fir trees are found within the project footprint; however, none were observed with cavities

Fringed Myotis (*Myotis thysanodes*): this species are colonial bats that roost in clusters that may contain as many as 300 individuals in nursery colonies. Nursing colonies are typically found in caves and buildings; however, day roosts can sometimes be found under loose bark. Habitat in BC is typically associated with grasslands and Ponderosa pine – Douglas-fir forests (Nagorsen and Brigham, 2008). Possibly, Douglas-fir snags with loose bark could be used as day roosts in the Assessment Area however, the area is not adjacent to grasslands and snags are regularly removed as part of forest harvesting operations.

Great blue heron (*Ardea herodias Herodias*): although foraging habitats are generally in shallow water of wetlands, streams, and lakes, the species has colonial nesting sites in the

canopies of trees that can be located in upland sites. The nests are relatively large, ranging from 0.5 – 1.2 m in diameter, and constructed of sticks. Depredation and human disturbance are the primary threats to this species (B.C. Ministry of Water, Land and Air Protection. 2004). Nesting colonies are relatively conspicuous and none were observed during the wildlife survey.

Lark sparrow (Chondestes grammacus): species primarily uses open habitats containing grass and shrubs, but will also use the edges of parks. Nests may be located in various species of shrubs, saplings, and small trees (B.C. Conservation Data Centre. 2012). Breeding has been confirmed in the Williams Lake area; however, lower elevation habitats near grasslands are more likely locations than the Assessment Area.

Lewis's Woodpecker (*Melanerpes lewis*): this species has been found using large diameter Douglas-fir trees for breeding, usually in the grassland – forest interface. In many other areas, ponderosa pine, black cottonwood and trembling aspen are also used (B.C. Ministry of Water, Land and Air Protection. 2004). The assessment area is not located adjacent to grassland areas; however, suitable trees for nesting may be present in the Assessment Area.

Olive-sided Flycatcher (*Contopus cooperi*): this species is usually associated with openings in coniferous or deciduous forests, especially natural burns. They also breed in old growth forests containing natural openings and abundant snags (B.C. Conservation Data Centre. 2012). The small openings present in partial cut stands may provide habitat for this species; however, harvesting usually involves snag removal as part of safety programs.

Townsend's Big-eared Bat (*Corynorhinus townsendii*): this species feeds primarily on the edges of patches of trees and shrubs. Maternity and hibernation colonies are generally found in caves and buildings; however, day roosts are also located in cavities of trees (B.C. Conservation Data Centre. 2012). No large trees with cavities were found in the area surveyed; although suitable trees may be present in the Assessment Area.

Western Small-footed Myotis (*Myotis ciliolabrum*): this bat generally uses open habitats for foraging and mines or buildings for maternal roosts or hibernation. However, it can also use day roosts under the loose bark of trees (B.C. Conservation Data Centre. 2012). Trees with loose bark are generally snags that would be removed during harvesting in this area.

Western Toad (*Anaxyrus boreas*): breeding sites for this toad are in small ponds and pools. After metamorphosis and outside of breeding periods, toads move to upland areas where they forage on a variety of invertebrates. They hibernate in burrows below frostline, often up to 1.3 m deep. Linear features, such as roads, are a concern especially after toadlets emerge from the water and move in mass to upland areas (Hugh Griffith and Brent Matsuda, 2006).

3.5.2 Ecological Communities at Risk

Most ecological communities at risk were also ruled out using the site series and plants associated with the habitat. The Assessment Area is dominated by the IDFdk3/01 site series

which is a widespread and common habitat. A small area (0.5 ha) of moist habitat that has some characteristics of the IDFdk3/07 site series is located in the Assessment Area. The IDFdk3/07 (hybrid white spruce / prickly rose / low northern sedge) is a blue listed site series characterized by hybrid white spruce and Douglas-fir in the tree layer with an abundant herb/shrub layer containing sarsaparilla and other wet site species. This area has been previously disturbed with most coniferous forest cover removed from the site.

3.5.3 Regionally Important Wildlife

Regionally important wildlife in the Cariboo Region that possibly occur within the Assessment Area include bald eagle, rubber boa snake, moose, and mule deer (BC Ministry of Environment 2012). Of these species, mule deer winter range habitat has the greatest overlap with the project Assessment Area.

The area is part of the Chimney Lake Mule Deer Winter Range (MDWR) and contains abundant signs of winter mule deer use (e.g. pellets). This forest is dominated by Douglas-fir that is being harvested on a multiple entry system that maintains a multi-storied stand throughout the rotation. Multi-storied stands provide snow interception and thermal protection from severe winter weather for mule deer while also providing forage through litterfall and from shrubs in small openings of the forest (Waterhouse et al. 1994).

Moose will also use the Assessment Area; however, densities would be low during all seasons (few moose pellet groups were observed during surveys) likely because there are no high value wetlands or large patches of shrubs that provide winter forage in the area. Rubber boas are found at low densities in montane forests and are generally linked with moist habitats (Cameron and St. Clair, 2003). Given the lack of wetlands and the mesic forest types present in the Assessment Area, this species is unlikely to occur. Bald eagles generally nest in large trees within a kilometer of lakes and rivers where they can forage for fish. The nearest fish-bearing waters are far from the Assessment Area (Chimney Creek and Williams Lake are~3 km and 4 km away respectively) and no large stick nests were observed during surveys of the area.

4.0 Environmental Effects and Mitigation Measures

The proposed project involves the construction of a new 1.2 km long road between Highway 20 and the Esler Sports Complex. The project will result in the conversion of 4.8 ha of forested stands to 3.6 ha of managed right of way and 1.2 ha of gravel road. An Environmental Management Plan (EMP) will be prepared as part of the Construction Phase to ensure that construction activities adhere to applicable regulations (Federal and Provincial regulations, acts, and conditions) and do not significantly impact on the environment. The EMP will include a Sediment Drainage Management Plan and a Spill Contingency Plan.

The following regulations and best management practices are recommended to be met as part of the EMP:

- Migratory Birds Convention Act (1994, c.22)
- Wildlife Act

- Ministry of Transportation and Highways (MoTH) 1997. *Manual of control of erosion and shallow slope movement.*
- Minsitry of Transportation (MoT) 2006. *Standard specifications for highway construction Volume 1 of 2: Section 165 – Protection of the environment.*
- Ministry of Transportation (MoT) 2004. *Best management practices for highway maintenance activities*.
- Ministry of Environment 2012. *Develop with care: Development guidelines for urban and rural land development in British Columbia*.

Environmental effects and mitigation strategies have been summarized for components that may be impacted during this project. Where appropriate, components have been grouped to facilitate this analysis. The summary provides an estimate of the significance of effects on the ecosystem components and the residual effects where the mitigation is applied as described.

4.1 Surface water

Potential environmental effects on surface water include the transport of deleterious substances to environmentally sensitive areas due to spills of construction machinery fluids (fuels and hydraulic fluids) and erosion of exposed soils during construction and operation. The Assessment Area has no defined watercourses, wetlands, or any definable connection with fish bearing waters; however, several small wetlands exist outside the Assessment Area.

Mitigation measures concentrate on Best Management Practices that ameliorate the effects of exposing soils to erosion and preventing spills of deleterious substances. Specifically the following measures are recommended:

- Prepare a Sediment Drainage Management Plan (SDMP) to ensure that sediment does not impact on aquatic habitats.
- Prepare a Spill Contingency Plan to ensure that fuels and other hazardous wastes are handled properly and do not impact terrestrial or aquatic habitats.
- Follow the Ministry of Transportation and Highways (MoTH) 1997 *Manual of control of erosion and shallow slope movement*.
- Follow the Ministry of Transportation (MoT) 2006. *Standard specifications for highway construction Volume 1 of 2: Section 165 – Protection of the environment.*
- Follow the Ministry of Transportation (MoT) 2004. *Best management practices for highway maintenance activities*.
- Follow applicable recommendations in Ministry of Environment 2012. *Develop with care: Development guidelines for urban and rural land development in British Columbia*.

The following criteria rate the significance of residual (with mitigation) adverse environmental effects on surface water within the Assessment Area:

- **Nature: Negative**

- **Magnitude: Low** – no significant increases above baseline conditions once vegetation in R/W is established.
- **Geographic extent: Assessment Area** – no deleterious substances are expected to go beyond 100m from the footprint.
- **Duration: Moderate** – effects, if present, may be found during construction and initial years of operation.
- **Frequency: Rare** – effects are unlikely to occur
- **Reversibility: Reversible** – effects would be rare and reversible through mitigation.

Based on these criteria and the landscape context of the habitat (managed forest), adverse impacts on surface water are predicted to be non-significant.

4.2 Wildlife, Wildlife Habitat and Vegetation

Potential Environmental Effects on wildlife, wildlife habitat and vegetation include the loss of vegetation, loss of important habitat features, disturbance, and increased mortality due to vehicle – wildlife collisions. Crown land in the Assessment Area has been harvested in the past largely using a partial cutting regime to maintain winter habitat quality for mule deer and approximately 1/3 of the area is forested private land that has also been partially harvested. Specifically, potential environmental effects could result from the following:

- Conversion of up to 4.8 ha of forested vegetation to 3.6 ha of grass dominated right of way and 1.2 ha of gravel road (0.064% of the Williams Lake – Chimney MDWR).
- Loss of veteran trees and snags is estimated at 480 trees > 37.5 cm dbh using cutting guidelines for MDWR (BC Ministry of Forests 2000). Given that the area is actively managed using a partial cutting system, it is expected that most snags will have already been removed (few large diameter snags were noted during the survey).
- Sensory effects such as avoidance of habitats adjacent to the road.
- Increased risk of collisions between wildlife and vehicles.

Mitigation measures concentrate on Best Management Practices that ameliorate the effects of clearing vegetation and disturbance of wildlife. Specifically the following measures are recommended:

- Minimize the width of the right of way through crown land to decrease the area of forest vegetation and veteran trees/snags removed from the MDWR.
- Do not clear the right of way between December 15 – April 15 to minimize disturbance of wintering mule deer.
- Close the road during winter (December 15 – April 15) to minimize deer – vehicle collisions and avoidance due to sensory impacts. Sport events at the complex generally occur between April 15 and August 31st and there is another road to access the Sports Complex during other seasons.

Table 3. Summary of environmental effects and analysis of mitigation measures.

Environmental component	Potential environmental effects	Significance of effect*	Mitigation measures / Best management practices	Residual effects	Significance of residual effects*	Monitoring	Follow up
Surface water	No defined watercourses are present within the Assessment Area, but wetlands are present outside the area that could be impacted by deleterious substances.	NS	Adherence to best management practices, the project EMP, SDMP, and Spill Contingency plan.	Very low likelihood of deleterious substances impacting any watercourses.	NS	N	N
Wildlife, wildlife habitat and vegetation	Loss of vegetation due to footprint of project. Loss of veteran and snag trees are the most significant of environmental effects	ME	Most potential impacts due to removal of large diameter trees/snags and increased potential for wildlife collisions. • Minimize the width of the cleared right of way • Install den/nest boxes • Close road during winter to prevent use during winter when deer are at greatest densities.	The right of way can be reduced, but some loss of large trees and snags will occur. Potential for collisions will still be present during other seasons, but will be reduced.	NS	N	N
Migratory birds	Nesting habitat of migratory birds will be effected during clearing and grubbing phase of construction.	ME	Minimize width of right of way and Complete clearing outside of nesting period (April 1 – August 15), unless a survey indicates that nests are not active during this period.	There is a low likelihood of disturbing nesting sites.	NS	Y	N
Species at Risk/ Ecosystems at Risk	Potential effects are limited to secondary habitats of: • Fisher, flammulated owl, fringed myotis, great blue heron, lark sparrow, Lewis's woodpecker, olive-sided flycatcher, Townsends big-eared bat, western small-footed myotis, and western toad due to the uncertainty of concluding their absence from the Assessment Area. However, no roosts, dens, hibernacula or other suitable habitat was observed for these species.	ME	Most potential impacts due to removal of large diameter trees and snags. • Minimize the width of the cleared right of way • Install den/nest boxes • Adhering to the breeding bird window will reduce impacts on avian species at risk and also protect western toadlets which emerge in August.	Some loss of large trees and snags will occur, however, adhering to the breeding bird window will reduce direct mortality and installing den/nest boxes will help ameliorate the effects of habitat loss.	NS	Y	N

* Significance: ME – mitigable effects; NS – non significant effects; S – significant effects.

- Install 12 nest/den boxes in the Assessment area to ameliorate the loss of large veteran trees. Surveys in Douglas-fir stands elsewhere have found 10 large (>65 cm) diameter trees/ha with heart rot in undisturbed mature/old forests (Davis 2012).
- Follow other applicable recommendations in Ministry of Environment 2012. *Develop with care: Development guidelines for urban and rural land development in British Columbia*.

The following criteria rate the significance of residual (with mitigation) adverse environmental effects on wildlife and wildlife habitat within the Assessment Area:

- **Nature: Negative**
- **Magnitude: Moderate** – the footprint area as a percentage of the winter range is small, especially if the right of way is made narrower. Disturbance of mule deer during the critical winter period will be minimized if the road is closed during that season. The installation of nest/den boxes will help to supply critical habitats for wildlife that use large diameter cavity trees.
- **Geographic extent: Assessment Area** – effects of the opening are not expected to exceed 100m from the road and the area already has a history of harvesting.
- **Timing of effects: Construction and Operation**
- **Duration: Long** – the trees/habitat will be removed permanently
- **Frequency: Low** – maintenance activities in the corridor will be rare
- **Reversibility: Irreversible** – the area will likely not be returned to its original state.

Based on these criteria, adverse impacts on wildlife, wildlife habitat and vegetation are predicted to be non-significant.

4.3 Migratory Birds

Potential Environmental Effects on migratory birds include the destruction of nests during the clearing phase of construction, loss of vegetation, loss of important habitat features, disturbance, and increased mortality due to vehicle – bird collisions. Maintained right of way in the corridor will be grass dominated and used by species that require early seral habitats; however, increased edge is also associated with higher predation and nest parasitism. Most species of birds present in the Assessment Area would be subject to preventative measures of the Migratory Birds Convention Act (194, c.22) and the Wildlife Act. Specifically, potential environmental effects could result from the following:

- Conversion of up to 4.8 ha of forested vegetation to 3.6 ha of grass dominated right of way and 1.2 ha of gravel road.
- Loss of veteran trees and snags (estimated at 480 trees > 37.5 cm dbh).
- Sensory effects such as decreased use of habitats along the road.
- Increased risk of collisions between birds and vehicles.

Mitigation measures concentrate on Best Management Practices and regulations that ameliorate the effects of clearing vegetation and disturbance of wildlife. Specifically the following measures will be adhered to:

- Do not clear the right of way between April 1 – August 15 to minimize impacts on active nests.
- Minimize the width of the right of way through crown land to decrease the area of forest vegetation and veteran trees/snags removed.
- Install 12 nest/den boxes in the Assessment area to ameliorate the loss of large veteran trees. Surveys in Douglas-fir stands elsewhere in the IDF have found 10 large (>65 cm) diameter trees/ha with heart rot in undisturbed mature/old forests (Davis 2012).

The following criteria rate the significance of residual (with mitigation) adverse environmental effects on wildlife and wildlife habitat within the Assessment Area:

- **Nature: Negative**
- **Magnitude: Moderate** – forested areas will be replaced by grass dominated habitat and gravel road. The installation of nest/den boxes will help ameliorate the loss of large veteran trees.
- **Geographic extent: Assessment Area** – effects will not reach beyond 100m from the road.
- **Timing of effects: Construction and Operation**
- **Duration: Long** – the trees/habitat will be removed permanently
- **Frequency: Low** – maintenance of corridor will likely be rare
- **Reversibility: Irreversible** – the area will likely not be returned to its original state

Based on these criteria, adverse impacts on migratory birds are predicted to be non-significant.

4.4 Species at risk

Potential environmental effects on species at risk are focussed on fisher and western toad whose primary habitat would include forested areas (Appendix 1). Other species are also possible but the forest type does not fit with their primary habitat. Effects on fisher include loss of foraging habitat, resting habitat, and reproductive habitat. Large diameter trees with heart rot cavities are required for reproductive structures. No suitable trees were seen in the Assessment Area; however, cavity entrances in live coniferous trees are difficult to detect and recruitment trees are also required to maintain this habitat. Western toads breed in water, but use upland habitats for foraging and moist areas with woody debris or burrows for resting. Both species are blue listed in BC. Specifically, potential environmental effects could result from the following:

- Conversion of up to 4.8 ha of forested vegetation to 3.6 ha of grass dominated right of way and 1.2 ha of gravel road.

- Loss of veteran trees and snags (estimated at 12 trees > 65 cm dbh with advanced heart rot)
- Sensory effects such as decreased use of habitats along the road.
- Increased risk of collisions between wildlife and vehicles

Mitigation measures concentrate on Best Management Practices and regulations that ameliorate the effects of clearing vegetation and disturbance of species at risk. Specifically the following measures will be adhered to:

- Do not clear the right of way between July 15 – August 31 to minimize impacts on migrating toadlets.
- Minimize the width of the right of way through crown land to decrease the area of forest vegetation and veteran trees/snags removed.
- Install 12 nest/den boxes in the Assessment area to ameliorate the loss of large veteran trees. Surveys in Douglas-fir stands elsewhere have found 10 large (>65 cm) diameter trees/ha with heart rot in undisturbed mature/old forests (Davis 2012).

The following criteria rate the significance of residual (with mitigation) adverse environmental effects on wildlife and wildlife habitat within the Assessment Area:

- **Nature: Negative**
- **Magnitude: Moderate** – forested areas will be replaced by grass dominated habitat and gravel road. Narrowing the right of way and the installation of nest/den boxes will help ameliorate the loss of large veteran trees.
- **Geographic extent: Assessment Area** – effects will not reach beyond 100m from the road
- **Timing of effects: Construction and Operation**
- **Duration: Long** – the trees/habitat will be removed permanently
- **Frequency: Low** – maintenance of corridor will likely be rare
- **Reversibility: Irreversible** – the area will likely not be returned to its original state

Based on these criteria, adverse impacts on species at risk are predicted to be non-significant.

4.5 Ecological Communities at Risk

Potential Environmental Effects on ecological communities at risk are dominated by the permanent conversion of habitat within the project footprint. The total area of this habitat in the Assessment Area is small (0.5 ha) and overlap with the project footprint is restricted to a shallow gully that is approximately 20m wide. Like other crown land in the Assessment Area, the habitat has been harvested in the past removing most of the coniferous forest cover (Appendix 3 – See Photograph 2). Specifically, potential environmental effects could result from the following:

- Conversion of up to 0.08 ha of the vegetation community to 0.06 ha of grass dominated right of way and 0.02 ha of gravel road.
- Alteration of natural drainage patterns that supply moisture to the site.

Mitigation measures concentrate on Best Management Practices that ameliorate the effects of clearing vegetation and natural drainage patterns. Specifically the following measures are recommended:

- Minimize the width of the right of way through crown land to decrease the area of vegetation disturbed.
- Maintain the natural drainage pattern at this location (e.g. ensure a culvert is installed).

The following criteria rate the significance of residual (with mitigation) adverse environmental effects on the habitat within the Assessment Area:

- **Nature: Negative**
- **Magnitude: Low** – the footprint area is very small and the habitat has been previously harvested.
- **Geographic extent: Assessment Area** – effects of the opening are not expected to exceed 100m from the road and the area already has a history of harvesting.
- **Timing of effects: Construction and Operation**
- **Duration: Long** – the trees/habitat will be removed permanently
- **Frequency: Low** – maintenance activities in the corridor will be rare
- **Reversibility: Irreversible** – the area will likely not be returned to its original state.

Based on these criteria, adverse impacts on wildlife, wildlife habitat and vegetation are predicted to be non-significant.

5.0 Conclusions and Recommendations

The proposed road linking Highway 20 with the Esler Sports Complex represents limited risks to the environment. There are no watercourses or wetlands present in the Assessment Area and the alignment is through vegetation communities that have previously been harvested and will continue to be harvested on a multiple entry per rotation basis. Despite this, there are important habitats and habitat features located within the Assessment Area that include the Williams Lake – Chimney MDWR and a number of large diameter Douglas-fir trees that will be removed during the development; however, potential impacts on these attributes can be mitigated.

The linear corridor created through the MDWR involves is a very small percentage of the winter range and mitigation measures, such as narrowing the right of way and closing the road during winter, will ameliorate the effects of this development. Narrowing the right of way will also reduce the number of large diameter Douglas-fir trees in the project footprint that will be

removed and the area of IDFdk3/07 site series that will be affected. The effects of removing veteran trees can also be lessened through installing nest/den boxes in the surrounding area to provide reproductive habitat. A range of designs for the den/nest boxes to meet the needs of a variety of species (e.g. birds, furbearers, and bats) would help reduce the effects of removing cavity bearing trees. With these mitigation measures in place, the effects of the new road are predicted to be non-significant.

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Appendices

Environmental Management Plan for the New Esler Sports Complex Road Project

March 30th, 2026

Revised: April 6th, 2026

Prepared for: Celtic Engineering Ltd.

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1.0 Introduction

In March of 2026, Consus Management Ltd. (Consus) was retained by Celtic Engineering Ltd. (Celtic) and the Cariboo Regional District (CRD) to prepare an environmental management plan (EMP) for the proposed new road linking Highway 20 and the Esler Sports Complex (the Project). The Project is located ~4 km southwest of the Williams Lake City Centre and will connect the soccer and baseball fields at the complex via a more direct route to Highway 20. The CRD has been concerned for quite some time with the amount of traffic occurring on Hodgson Road during peak periods when players are travelling to the Sports Complex. Providing a dedicated road between Highway 20 and Esler Sports Complex would address these concerns, and the Project has now been expanded to include a loop road around the baseball fields along with additional parking for cars/trucks and RVs.

This plan provides relevant background information, general construction information, a Clearing and Grubbing Plan, Erosion and Sediment Control Plan, Spill Management Plan, Invasive and Noxious Weed Management Plan, and an Air Quality and Dust Control Plan. This EMP has been developed in part based on information identified during the Environmental Assessment of the proposed route (Davis Environmental 2012) – this assessment concluded the overall Project represented limited risks to the environment.

1.1 Environmental Management Plan Objectives

This EMP provides detailed mitigation measures to reduce or eliminate impacts of this Project on environmentally sensitive resources. To develop this EMP, Consus initially conducted a desktop review and field site assessment to identify any potential environmental sensitivities associated with the proposed Project activities. Additionally, we drew from recommendations for the work identified in the Environmental Assessment completed by Davis Environmental in 2012. This EMP has been developed based on all available and relevant information and covers the following aspects associated with the project:

- Clearing and grubbing works
- Erosion and sediment control measures
- Aquatic resource management
- Wildlife management
- Invasive plant and noxious weed management
- Air quality and dust control
- Spill management
- Heritage resource discovery
- Fuel handling
- Environmental Monitoring requirements

1.2 Project Scope

This Project involves the construction of the highway access road, a new gravel loop road around the existing baseball fields with additional vehicle parking, and the creation of ~15 larger spaces for RV camping/parking. The new loop road will tie into the existing gravel road used to access the fields now. The loop road will also tie into the new dedicated road to be constructed between Highway 20 and the

complex, which will have sections that are both gravel and pavement. All new roads constructed during the Project will have ditch lines and crossing structures installed as per the engineered designs provided by Celtic. Additional crossing structures will be 'field fit' as required by a Qualified Professional to match the final grades of the Project.

1.3 Project Schedule

The Project is expected to commence as soon as possible once all approvals/authorities are in place and be completed during spring and summer 2026. As of the date of this plan, the majority of tree clearing had already taken place in winter 2026 with only minimal widening of the main right of way, and select tree removal along the loop road, expected to still occur.

1.5 Project Site Description

The Project area is largely forested habitat located between Highway 20 and the Esler Sports Complex. The road begins on the Highway 20 right of way, crosses crown land, and ends with 350 m of road and associated baseball diamonds on private land owned by the CRD. The new loop road and associated parking are also located entirely on private land owned by the CRD. Adjacent land uses include timber harvesting and recreation. The majority of tree clearing along the road alignment has already occurred, with limited widening of the main right of way and some single tree clearing along the new loop road still to take place. A more detailed description of the Project site and surrounding areas can be found in the Environmental Assessment report provided under separate cover (Davis Environmental 2021).

1.6 Potential Environmental Effects

Construction activities throughout the timeline of the project with potential to result in negative environmental effects are minimal and are associated with tree clearing and grubbing activities, sediment generation/surface erosion from those same activities, and the permanent conversion of forested lands to roads and parking.

Possible impacts to the environment due to these operations associated with the project include:

- Increased sedimentation and erosion into the environment;
- the introduction/spread of invasive or non-native plant species;
- the degradation of wildlife habitat and disturbance of wildlife habitat use;
- the degradation/disruption of avian habitat;
- the loss, degradation of aquatic habitat and;
- the loss, degradation/disruption of plant species.

It is anticipated that the Clearing and Grubbing Plan, Erosion and Sediment Control Plan, Spill Management Plan, Invasive Plant and Noxious Weed Management Plan and site-specific Environmental Procedures will mitigate potential environmental effects associated with the proposed works.

1.7 Regulatory Requirements and Applicable Legislation

Consus understands that Celtic will be acting as the Site Operator/Contractor for the project, with Consus providing environmental support for implementing this EMP during Project activities. The information provided below is a (non-exhaustive) list of environmental legislation that may be relevant to the project, along with the likelihood that additional applications or permits may be required.

Potentially Applicable Federal Legislation:

1. **Migratory Birds Convention Act (SC 1994):** contains regulations to protect migratory birds, their eggs, and their nests from destruction. Vegetation clearing activities for this project are scheduled outside the breeding bird nesting window for this area (April 11 to August 23; Government of Canada 2018). Nevertheless, a pre-construction survey for year-round protected nests should be conducted by an Appropriately Qualified Professional (AQP) prior to the start of clearing.
2. **Species at Risk Act (SARA; SC 2002):** provides legal protections for preventing the harm or disturbance of threatened and endangered species and their critical habitat. It is illegal to kill, harm, harass, capture, or take any species listed on Schedule 1 of SARA. The desktop assessment completed for the project area evaluated the potential for species at risk to be affected by project activities. None of the species identified are expected to be affected by project activities therefore no additional permitting under this act should be required.
3. **Fisheries Act (RSC 1985):** legislation to manage and protect Canada's fisheries resources. Prohibits the harmful alteration, disruption, or destruction of fish and fish habitat. No fish habitat is expected to be impacted by project activities therefore no additional permitting under this act should be required.
4. **Canadian Environmental Protection Act (SC 1999):** legislation aimed at contributing to sustainable development by preventing pollution and protecting the environment and human health. Project activities should not generate, or require the use of, any toxic substances that would be covered under this Act therefore no additional permitting under this act should be required.

Potentially Applicable Provincial Legislation:

1. **Water Sustainability Act (SBC 2014):** principal law for managing the diversion and use of water resources in BC. No instream works are necessary for the proposed Project activities therefore no additional permitting under this act should be required.
2. **Forest and Range Practices Act (FRPA: SBC 2002):** governs forest and range activities on public lands in BC during forest planning, road building, timber harvesting, reforestation, and livestock grazing. Consus understands a Licence to Cut has already been issued for tree clearing works, and an exemption has been granted by the Province for tree clearing in a designated Mule Deer Winter Range area (D. Taylor pers. comm.).
3. **Wildlife Act (RSBC 1996):** protects essentially all vertebrate species from harm, except as allowed by regulation (e.g., hunting and trapping). Generally speaking, wildlife should use short-term avoidance strategies and refrain from entering the Project area during construction activities therefore no additional permitting under this act should be required.
4. **Environmental Management Act (SBC 2003):** regulates industrial and municipal waste discharge, pollution, hazardous waste, and contaminated site remediation. No waste materials that fall under this regulation are expected to be generated during Project activities therefore no additional permitting under this act should be required.

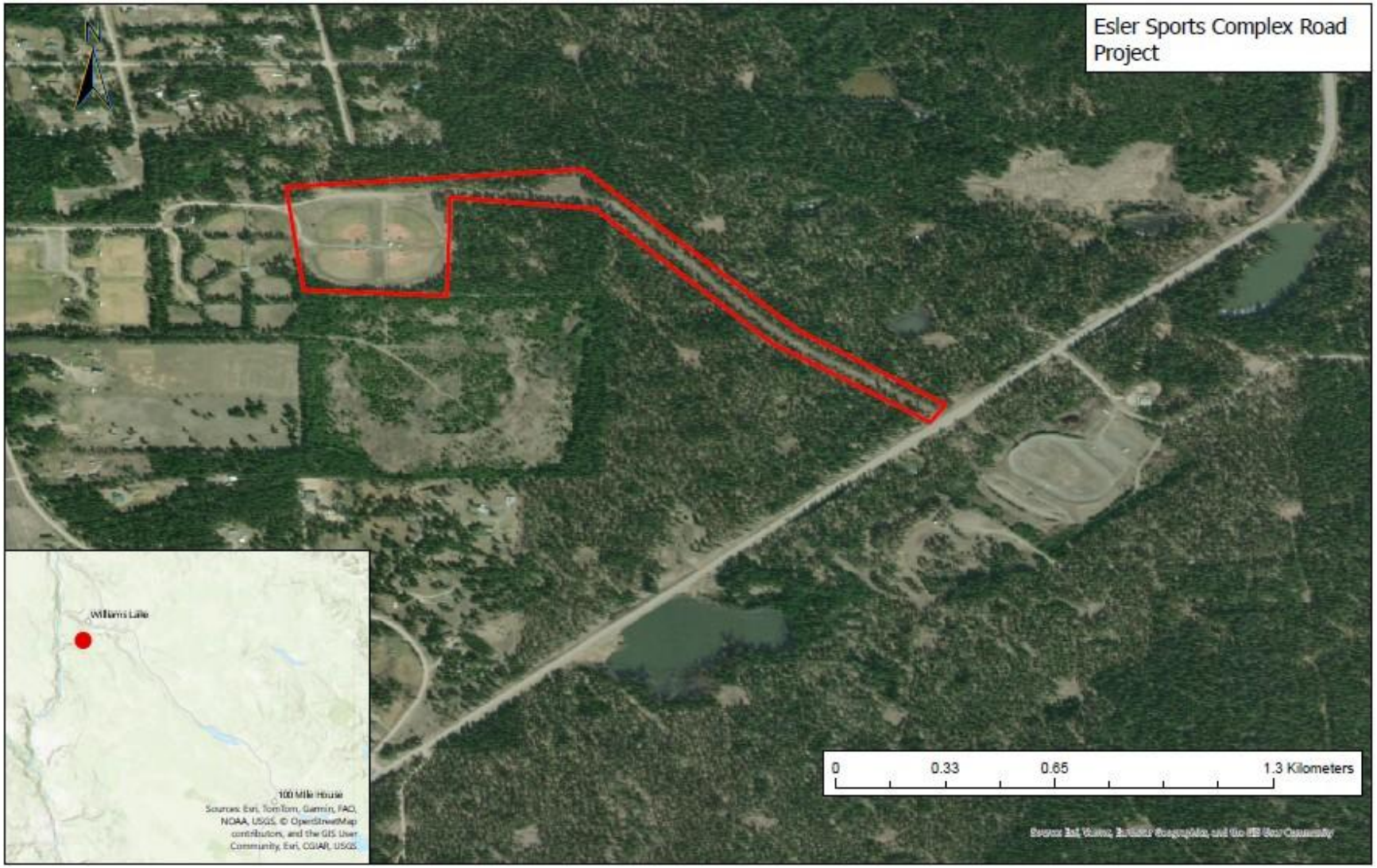

Figure 1. Location of the Project area ~4 km southwest of Williams Lake, BC (red outline).

5. **Weed Control Act (RSBC 1996):** requires that all landowners and occupiers control designated noxious plants. Invasive plants and noxious weeds were recorded within and adjacent to the site. Mitigation measures for invasive plant and noxious weed management are included in Section 3.5 Invasive Plant and Noxious Weed Management.
6. **Heritage Conservation Act (RSBC 1996):** protects potential and confirmed archaeological sites on Crown and private land. A chance find protocol has been included in Section 3.10 Heritage Resource Discovery in the unlikely event a previously identified artifact is discovered during project works.

Copies of any permits/approvals should be kept on site at all times, along with this EMP.

2.0 Environmental Resources

Consus conducted both an office-based and field site assessment of the Project area to identify any potential species at risk that may be impacted by the Project. Additionally, a detailed assessment for all environmental resources with potential to be impacted by the Project was completed by Davis Environmental in 2012. The following includes a summary of relevant information, with more details included in the 2012 Environmental Assessment report (Davis Environmental 2012).

2.1 Aquatic Resources

A review of existing stream network and associated information on Habitat Wizard (BC Environment) found no streams connected to fish bearing waters in the Project area. There is one small (~0.25 ha) wetland >125 m northeast of the proposed road alignment near Highway 20. The Project area is generally well drained with one shallow gully present that likely conducts water only during spring melt. There should be no impact to any aquatic resources by the proposed development activities.

2.2 Terrestrial Resources

The Project area is located in the Interior Douglas-fir dry-cool variant 3 (IDFdk3) biogeoclimatic zone (Hope et al. 1991). The forest in the Project footprint and surrounding areas is largely composed of stands that have a partial-cut harvesting history resulting in a multi-storied stand with some characteristics representative of a mature forest. Private land in the Project area contains permanently cleared land where the baseball diamonds and access roads are located, but the majority of area is composed of partial cut Douglas-fir (*Pseudotsuga menziesii*) stands. The Highway 20 right of way is dominated by grasses with some small shrubs and trees present that are regularly removed through mowing.

2.2.1 Species at Risk - Ecological Communities

A search for Red-and Blue- provincially listed and federally listed ecological communities with the potential to occur in the IDFdk3 BEC subzone and Cariboo-Chilcotin Natural Resource District was completed using the BC Species and Ecosystem Explorer web tool (BC CDC 2026a). No at-risk ecological communities were within the Project area, with the nearest occurrence being >600 m northwest for an awned sedge Fen – Marsh. Given the distance to the Project area, no at-risk ecological communities should not be impacted by the proposed activities.

2.2.2 Species at Risk - Vegetation

A search for Red-and Blue- provincially listed and federally listed plants with the potential to occur in the IDFdk3 BEC subzone was completed using the BC Species and Ecosystem Explorer web tool (BC CDC 2026a). One plant on the provincial Red-list and three on the Blue-list was identified in the desktop review. Given their habitat associations, none of these species are expected to be present or impacted by the proposed activities.

2.2.3 Species at Risk - Wildlife

Davis Environmental (2012) identified a total of 16 wildlife species either on the provincial Red- or Blue-list with the potential to be in forested habitats like the IDFdk3 similar to the Project area. Fishers (*Pekania pennanti*), Flammulated Owl (*Otus flammeolus*), Fringed Myotis (*Myotis thysanodes*), Great Blue Heron (*Ardea herodias Herodias*), Lark Sparrow (*Chondestes grammacus*), Lewis's Woodpecker (*Melanerpes lewis*), Olive-sided Flycatcher (*Contopus cooperi*), Townsend's Big-eared Bat (*Corynorhinus townsendii*), Western Small-footed Myotis (*Myotis ciliolabrum*), and Western Toad (*Anaxyrus boreas*) all have the potential to overlap with the Project area. However, there have been no known observations of any of these species recorded to date by the BC CDC in the vicinity of the Project.

Data from the BC CDC also showed one masked species at risk occurrence overlapping the Project area. The BC CDC was contacted for more detailed location data for this element occurrence and they confirmed that the proposed construction activities were unlikely to impact this species at risk.

Notwithstanding the above, the riparian, grassland, and forested areas adjacent to the Project may provide habitat for various invertebrate and migratory bird species at certain times of the year. Vegetation clearing activities for this Project are scheduled to take place outside of the breeding bird nesting window for this area (April 11 to August 23: Government of Canada 2018), however, a pre-construction survey for year-round protected nests should be conducted by an Appropriately Qualified Professional (AQP) prior to clearing commencing.

2.2.4 Invasive Plants

Invasive plants within a 500 m buffer of the project area were identified using the Invasive Species layer on iMap BC (BC CDC 2026b). This search identified no invasive plants within the Project area. The nearest observation of an invasive plant species was for spotted knapweed (*Centaurea biebersteinii* DC.) ~940 m northeast of the Project along the Highway 20 corridor.

2.2.5 Field Assessment

A field assessment of the Project area on March 27th, 2026, found no species of concern or significant ecological features requiring additional protections within, or immediately adjacent to, the Project footprint. In addition, a pre-construction survey for year-round protected nests was completed at this time by an Appropriately Qualified Professional to ensure no nests protected under the BC Wildlife Act or on Schedule 1 of the Migratory Birds Regulations (MBR 2022) would be impacted by the work. No year-round protected nests were identified within the Project limits during the survey. No additional habitat features of concern that could influence the Project activities were identified during the field assessment.

3.0 Best Management Practices and Mitigation Plans

The following Best Management Practices (BMPs) and mitigation plans should be followed by the Contractor during Project activities. The BMPs and mitigation plans provided are aimed at reducing or eliminating the environmental impacts of the Project on aquatic and terrestrial resources and managing erosion and sediment control issues, on-site spills, and invasive plants.

3.1 Clearing and Grubbing Plan

This Project includes limited tree clearing as the majority of the road right of way for both the access road and the loop road have already been cleared. The main access road right of way needs to be widened slightly in certain areas to adhere to Ministry of Transportation standards required as the new road approaches Highway 20. Select single stems will be removed around the loop road to create a small number of RV parking/camping spots. Care should be taken to preserve all vegetation immediately adjacent to, but outside of, the Project footprint. Stumps are being taken to existing landings to be processed by grinding at a later date and then shipped as chips to the local power facility. Topsoil and stripped materials will be stockpiled on an existing field, with some also being used to blend with the existing grades of the areas around the gravel portions of the loop and access roads. Clearing and grubbing limits should be visibly staked or flagged prior to commencing operations. Landings to be used for storing stumps and the field where excess soils are to be stockpiled are shown in Figure 2.

The clearing and grubbing work is expected to occur outside of the migratory bird nesting window for this area (April 11 to August 23: Government of Canada 2018). Regardless, a pre-construction nest survey was completed by an AQP from Consus during the field assessment of the Project site to determine whether any Schedule 1 species' nests (as defined under the Migratory Birds Regulations) or any nests protected under Section 34 of the BC Wildlife Act were present within the Project footprint. No active or inactive bird nests requiring additional protections were identified during this survey. If the planned tree clearing and grubbing activities do take place during the breeding bird nesting window, additional surveys may be required.

3.2 Erosion and Sediment Control Plan

The following Erosion and Sediment Control Plan (ESCP) relies on environmentally acceptable construction practices to minimize the introduction of sediment into watercourses and other drainages in the vicinity of the project. It will be the responsibility of the Contractor (with support from Consus) to plan, schedule, and perform Project work such that any surface water or rainfall runoff does not adversely affect any watercourses or areas surrounding the Project area. This ESCP is considered a living document and may be revised during the project should unforeseen circumstances arise. The general principles of this ESCP include:

- Planning and scheduling work to minimize the risk of erosion (i.e., during good weather or driest times of the year).
- Retaining existing vegetation wherever possible.
- Re-vegetating and/or protecting any denuded areas or exposed soils as soon as possible.
- Directing any run-off away from disturbed areas.
- Minimizing the length and steepness of slopes, wherever possible.

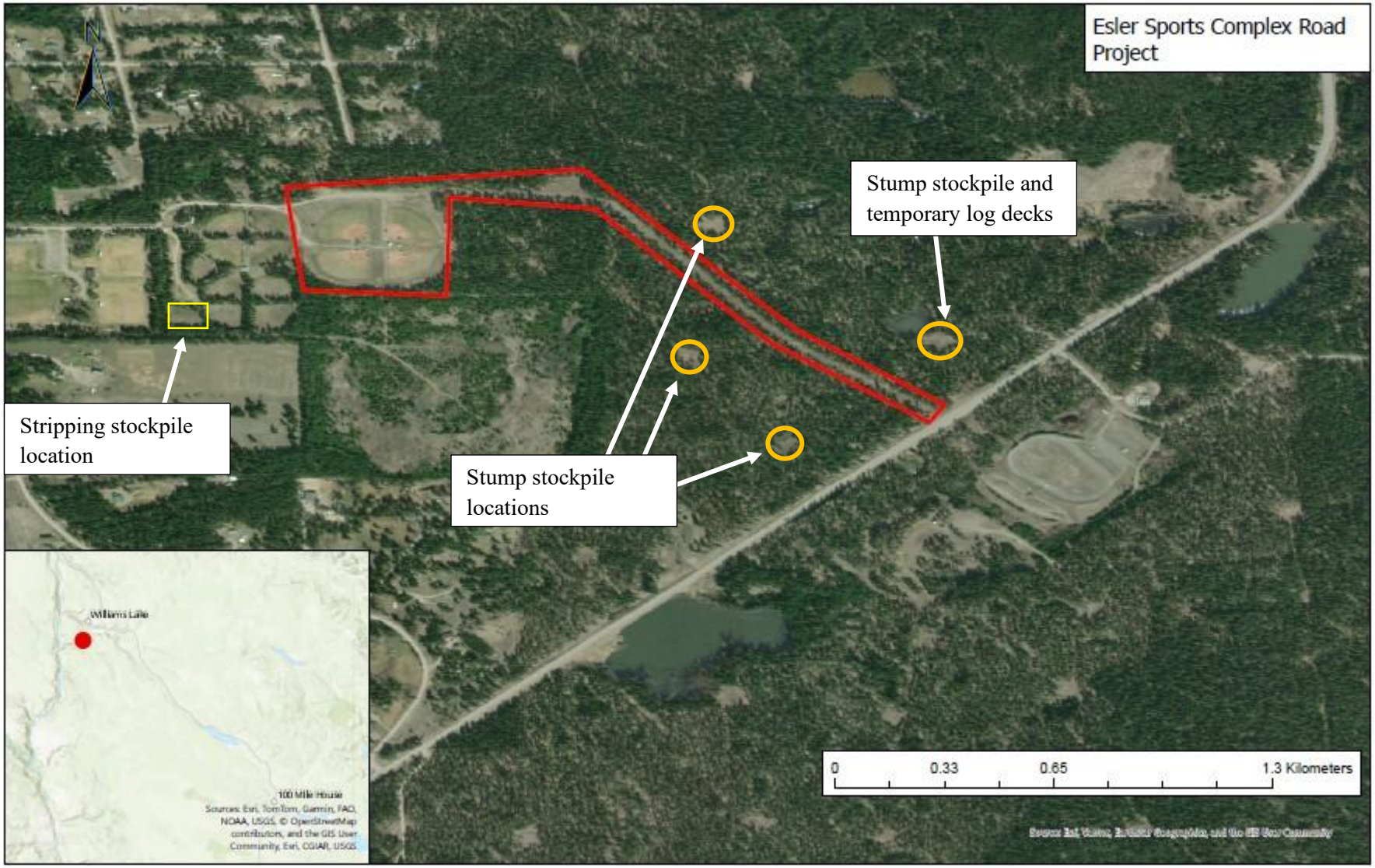

Figure 2. Map showing the location of landings to be used for stump storage and decking, and the field where excess stripped materials will be stored

- Minimizing run-off velocities and erosive energy.
- Planning, inspecting, and maintaining sediment and erosion control structures.
- Implementing any corrective measures necessary in a timely fashion.

All works will be conducted in a manner that avoids or minimizes problems arising from erosion and the discharge of silt/other deleterious substances into any watercourse/waterbody. There are no riparian features overlapping, or in close proximity to, the Project area, therefore there are minimal erosion and sediment risks associated with the proposed works. The engineered designs for the loop and main access road include locations for ditch lines and crossing structures to manage surface run off. This area is typically well drained and only receives moisture from rain and snow fall, and during the spring melt. Ditch lines will be constructed on either upslope or downslope sides of the roads to facilitate being able to direct surface water onto stable vegetated areas. Although some approximate culvert locations have been identified by Celtic, all final crossing structure locations will need to be 'field fit' by a Qualified Professional following the completion of the slope and soil recontouring works necessary for the new road construction.

Control of Surface Water

Potential Impacts: Rain and flowing water can transport exposed soil, fine sands, and clays into adjacent watercourses causing deleterious impacts on aquatic habitats.

Preventative Measures: The focus of these measures will be to stop sedimentation issues before they develop. At the discretion of the environmental monitor (EM), surface runoff will temporarily be controlled at the site, as required, using a variety of techniques. Silt fences, straw bale dikes, geotextiles, and sediment control ponds will be used to control "sheet flowing" sediment-laden runoff as required. Ditch blocks, straw bales, and sumps can be installed on an as needed basis in ditch lines of the roads within the Project site. Temporary erosion control measures will be maintained until permanent measures are functional. Specific measures to control sediments are:

- All works should be scheduled to occur during periods of dry weather.
- Concentrated water flow will be diverted around exposed work areas where possible.
- Silt fences will be erected around potential sediment sources where there is the potential for transport of sediments, including in areas disturbed by machinery if those areas to be left exposed for a length of time (e.g., >21 days). Alternatively, these areas can be revegetated with a seed mix appropriate for the region.
- Ditch blocks constructed of rocks or straw bales (temporary) may be used to intercept sediments and slow water velocity in steeper ditch lines and drainage pathways.
- Diversion/interceptor ditches will be used where required to divert storm water runoff to vegetated areas where it can filter naturally.
- Sumps may be constructed to collect turbid seepage water on an as needed basis.

Location of Sediment Control Measures

Sediment control measures will be required at all locations identified during the pre-work meeting between Celtic and Consus. There are no riparian features near the Project footprint, so currently there

are no areas requiring specific sediment control measures. Additional sediment control measures may be identified throughout the construction period (e.g. during periods of inclement weather) and will be addressed in a timely manner under the direction of Consus. Environmental staff from Consus can be present on site as needed to ensure all ESCs are functioning properly.

Descriptions of potential mitigation measures for water and sediment control are provided in Table 1.

Table 1. Potential sediment control and mitigation measures for temporary and permanent applications.

Mitigation	Description	Application	Source for typical
Channels: diversion, interceptor ditches	Channels constructed to intercept runoff water before reaching unprotected soils/sensitive habitats and causing erosion/sedimentation.	Divert sheet runoff before it can cause erosion and move it away from construction area/sensitive habitats.	MoTH 1997: 1A, 1B
Lined Channels	Permanent channel lined with cobbles and rip-rap used to reduce water velocity and prevent erosion.	Areas with erodible soils and significant water velocity.	MoTH 1997: 1C
Filtration: silt fence, straw bales.	Temporary measure used to intercept and retain sediment from disturbed areas during construction.	Unprotected cuts where sheet and rill erosion may form. In minor ditches, sediment traps where the drainage area is less than about lha and the maximum gradient behind the barrier is <2:1	MoTH 1997: 6A, 2B
Barriers: Dykes and straw bales	Berm or barrier constructed to contain water/soil before reaching sensitive areas	Use on cuts, fills, stabilization and waste spoils areas.	MoTH 1997: 2A, 2B
Ditch Blocks: rock check dams and straw bales	Mounds of rock/bales placed across drainage ditches to reduce velocity of water and minimize erosion.	Use rock in temporary or permanent ditches on erodible soils/steeper slopes. Bales used on minor ditches with little flow.	MoTH 1997: 3A, 3B
Surface protection: plastic sheeting or other materials	Temporary/permanent impermeable/permeable cover over bare soil to prevent erosion from surface water and rain drops.	Used to cover small areas of soil in sensitive areas, line temporary ditches, protect seeds (mulched materials), and stabilize vegetation (permanent matting).	MoTH 1997: 7B. 7C, 7D
Sediment Control Ponds	Provides catchment pond to remove suspended sediments before reaching streams.	Use in combination with silt fence (temporary) and rock (permanent) for watercourse protection.	DFO 1993: P. 35-40

Vegetative Covers: seeding and mulching	Provides a cover of grasses/herbs /organic mulch to mitigate surface erosion.	Applied to slopes and ditches after final grading or temporary measure where slopes will be left for extended periods.	MoTH 1997: 8C, 8D

3.3 Aquatic Resource Management

There are no riparian features within or immediately adjacent to the proposed Project footprint. There are no overlaps of the Project area with any groundwater wells or licenced waterworks, therefore no further management is required for these features. Provided the mitigation measures provided in the previous section are adhered to, there should be no impacts to any aquatic resources by the proposed construction works.

3.4 Wildlife Management

Wildlife is protected under the BC Wildlife Act (RSBC 1996) from harassment and harm. Wildlife will likely use short-term avoidance strategies and refrain from entering the Project area during construction activities. If wildlife (e.g., bears, wolves, deer, moose, sheep, bats) are observed within, or near, the active work site activities will shut down in the immediate area until the animal(s) leaves the site. If wildlife begins exhibiting aggressive behaviour the Contractor will shut down work until the wildlife leaves the area, or a Conservation Officer is employed to resolve the issue. Any harassment of wildlife will not be acceptable, and the Contractor should ensure their workers are trained on human-wildlife conflict resolution procedures.

The proposed Project activities have the potential to increase human-wildlife interactions, and the following recommendations should be followed to mitigate the negative effects of these interactions:

- Food scraps and garbage should be stored in wildlife-proof containers and removed from the site daily.
- All vehicles to follow posted speed limits.
- All wildlife observations/incidents should be documented by on-site workers, and incidents will be reported to the appropriate authorities.
- If working during dawn or dusk keep the work site well lit to reduce the chance of bats flying through the project area.
- Any wildlife vehicle collisions should be documented by on-site workers, and strategies to reduce collisions will be discussed with workers arriving to/from site.

The Contractor should retain an Appropriately Qualified Professional (AQP) if wildlife is observed in the Project area to determine if additional mitigation measures are required.

3.5 Invasive Plant and Noxious Weed Management

A handful of invasive plants were noted within the Project area, however given the time of year the site assessment was completed there are likely more species not identified at the time. Preventing the spread of these species to new areas is part of the Provincial Government's Strategic Goals for Invasive Species (MoF 2026). The following strategies should be implemented to help prevent the spread of invasive plants and noxious weeds:

- All new equipment on the worksite will have been previously pressure washed and visually inspected. All vegetation clinging to the machinery will be removed and disposed of prior to arriving at the worksite.
- The Contractor should be familiar with the identification of noxious weeds and invasive plants with potential to be present near the site.
- When moving equipment between different areas on the site, operators will visually inspect and remove any vegetation from their machinery before changing areas.
- Minimize soil disturbance and revegetate disturbed areas as soon as possible.
- Report any observation of noxious weeds or invasive plants (coordinates, flagged and reported) to the Invasive Alien Plant Program (MoF 2026).
- Any noxious weeds removed from equipment or from small areas should be placed in plastic garbage bags and disposed of using recommendations detailed on the Invasive Plant Program website (MoF 2026).
- Hay should not be used as mulch unless sourced locally and free of invasive species. Straw is preferred as mulch but should also be visually inspected prior to use to ensure no invasive plants or their seeds are present.

3.6 Waste Management

Construction and general waste materials should be managed to prevent adverse effects to aquatic and terrestrial resources, as well as human health and safety. The management, removal, and disposal of waste materials should follow guidelines set out in the BC Environmental Management Act (SBC 2003), the BC Hazardous Waste Regulation (SBC 2003), and the Transport of Dangerous Goods Act (RSBC 1996). Additionally, the following strategies to manage garbage should be applied:

- Workers should be trained on proper waste management strategies upon arrival on site.
- Reduce, reuse, and recycle materials.
- Garbage should be stored in wildlife-proof containers and removed from the site daily.
- Work areas should be kept clean and maintained at regular intervals.
- Food should be kept in designated locations or in vehicles that are inaccessible to wildlife.
- Dispose of all construction wastes at an appropriate disposal facility that complies with applicable legislation and regulations.
- Storage and labelling of hazardous materials will be in accordance with standards in the Workplace Hazardous Materials Information System, as detailed in BC's Occupational Health and Safety Regulation of the Workers Compensation Act (RSBC 2019).

The Contractor will notify an Appropriately Qualified Professional (AQP) if any suspected contaminated materials or hazardous waste are discovered or generated on site. Depending on the size of the area or volume of material operations may need to be paused so the situation can be addressed. If the hazardous material is stable and does not pose an immediate threat, the AQP may determine the appropriate course of action for removal or neutralization of the material. Any disposal of hazardous waste must be in compliance with the BC Hazardous Waste Regulation and the Environmental Management Act. Spill response procedures should be followed if the hazardous material poses an immediate threat or is unstable.

3.7 Air Quality and Dust Control

Dust dispersal from tree clearing and grubbing activities and equipment emissions have the potential to negatively affect air quality within and adjacent to the Project area. To mitigate these effects the following measures should be implemented:

- Equipment, machinery, and any vehicles operating on site will be in good working order.
- Vehicles and equipment should keep idling times to a minimum, unless otherwise required to avoid engine problems during periods of cold weather. Strategies for idle reduction include the following time limits:
    - Light trucks – 1 minute continuous idling (diesel vehicles used for site transportation will be limited to 10 minutes continuous idling time).
    - Heavy duty diesel vehicles – 5 minutes continuous idling time.
    - Construction equipment while actually being employed at the Site for work intended – allowed continuous idling.
- The Contractor may also wish to use of effective dust suppression techniques, such as on-site watering, and limiting the speed of vehicles should air quality issues arise.
- Vegetation and soil stripping activities should be planned for appropriate weather conditions and completed in a timely manner to minimize dust dispersal from wind erosion.

3.8 Spill Management

Spills of fuel due to malfunctioning equipment or refueling have the potential to negatively impact aquatic habitats, terrestrial habitats, and the atmosphere, as well as workers on site. Potential sources of spills include leaking or ruptured fuel tanks, leaks from equipment or damaged hydraulic hoses, and accidents on roadways.

Accidental spills of deleterious materials may occur during all phases of the Project, and spill management should focus on prevention and containment. Primary protection measures to be implemented and maintained throughout the project should include:

- Standard spill kits should be present at all refueling (e.g., tidy tanks), lubrication, and repair locations as well as within heavy equipment to facilitate the immediate response to spills. These spill kits should be capable of capturing 125% of potential spill volumes.
- For any work near water, a drum spill kit with absorbent boom should be readily available.
- All on site staff should be trained in hazardous material storage, handling requirements, and spill kit location and use.
- Fuel should be stored off site; if fuel is to be stored on site it should be stored in approved tidy tanks or with secondary containment. No fuel should be stored within 30 m of any watercourse.
- All waste fuel products such as filters will be secured in spill-proof containers and disposed of properly as per environmental regulations.
- Drainage water from any impacted areas will be directed into designated sumps to provide containment as needed.

All heavy equipment operating on site should be equipped with a spill kit containing the following materials:

- 15-20 absorbent universal or hydrophilic pads (for water-based substances).
- 2 disposable bags.
- 15-20 absorbent hydrophobic pads (for hydrocarbons).
- Nitrile gloves and eye protection (goggles).
- 3 containment booms.
- Laminated instruction sheets.
- Plug and dyke kit to plug punctured drums or tanks.

The following general spill or leak procedures should be implemented in the event of a spill or leak:

- Do not touch or walk through spilled material.
- Stop the flow safely and quickly (if possible).
- Shut off all machinery, pumps, valves, etc.
- Plug leaks (if possible).
- Remove containers or place them in an upright position.
- Do not smoke or use cell phones in the spill area. Prevent spilled materials from flowing away from the initial spill site of from flowing into a stream, creek, or any drainage ditches (if possible).
- Eliminate all ignition sources.
- If possible, turn leaking container so that gas escapes rather than liquid.

In the event of a spill or leak the following Spill Response Procedures will be implemented; however, procedures will vary slightly depending on the product and location of the spill.

1. Notify the Contractor site supervisor and environmental monitor verbally of any toxic or hazardous materials.
2. Consult the SDS to determine potential human health and environmental risks.
3. Ensure appropriate personal protective equipment is worn during spill clean up work.
4. **Soil:** For product spills and leaks on soil, liquid will be collected using absorbents and the soiled absorbent materials will then be transferred into a drum or other sealed container. The contaminated soil will then be excavated and also drummed or otherwise contained. Drums of waste will be labeled to identify their contents and be stored in a spill containment area prior to being hauled off site for disposal by a certified hauler to an authorized dump site for contaminated materials.
5. **Water:** For products spilled into a stream, an absorbent boom will be placed across the surface of the drainage to prevent spilled product from flowing downstream. Absorbent materials will then be used to recover floating product.
6. Complete an investigation and spill response form (example form provided in Appendix 2: Example Environmental Incident Reporting Form) and submit to the Contractor site supervisor within 24 hours of the incident.
7. Pictures will be taken of the cleanup activities for filing and reporting purposes.
8. Ensure replacement of all used spill kits and associated materials on the job site as soon as possible.

9. Contact Emergency Management and Climate Readiness BC (1-800-663-3456) if the spill is of reportable levels (Table 2).

Table 2. Reportable spill levels for BC.

Explosives	Any
Diesel Fuel	100 L *or any amount to a water body*
Gasoline	100 L *or any amount to a water body*
Grease	100 L *or any amount to a water body*
Hydraulic Oil	100 L *or any amount to a water body*
Lubricating Oils	100 L *or any amount to a water body*
Solvents	100 L *or any amount to a water body*
Flammable gases, other than natural gas as defined in section 3.11 (a) of the Federal Regulations	10 kg, if the spill results from equipment failure, error or deliberate action or inaction
Non-flammable gases of Division 2 of Class 2 as defined in section 3.11 (d) of the Federal Regulations	10 kg, where spill results from equipment failure, error or deliberate action or inaction
Flammable liquids of Class 3 as defined in section 3.12 of the Federal Regulations	100 L *or any amount to a water body*
Waste oil as defined in section 1 of the Special Waste Regulation	100 L *or any amount to a water body*
Natural Gas	10 kg, if there is a breakage in a pipeline or fitting operated above 100 psi that results in a sudden and uncontrolled release of natural gas
A substance not covered by the above listed items that can cause pollution (i.e., concrete)	200 kg

3.9 Fuel Handling

Fuel handling at the site will follow practices and procedures as outlined in *A Field Guide to Fuel Handling, Transportation, and Storage* (MWLAP 2002) and be in compliance with the relevant permits and approvals for the Project. Additional measures to be taken with respect to the handling of fuel on site include:

- Refuelling will only be allowed within designated areas and not within 30 m of any stream or watercourse.
- Storage and transportation of fuels must adhere to the Transportation of Dangerous Goods Act, and no fuel is to be stored within 30 m of a stream or watercourse.
- Drip trays will be stored at the refuelling areas and are to be utilized during refuelling activities to capture any spills.

- Small quantities of fuel, oils, and antifreeze shall be stored in separate drip trays and secured in animal-proof containers.
- Unattended equipment, pumps, fuels, and other like materials are be stored with secondary containment (e.g., drip trays) and at a distance where deleterious materials are prevented from entering any stream or watercourse (e.g., on the road surface and >30 m from the feature).

3.10 Heritage Resource Discovery

The Heritage Conservation Act (RSBC 1996) protects potential and confirmed archaeological sites on Crown and Private Land in BC. Consus has been informed that an archaeological assessment of the Project area has been completed with no outstanding concerns being identified.

In the unlikely event that a previously undiscovered artifact is found during Project activities, the Chance Find Management Guidelines adapted from protocols followed by the Ministry of Transportation and Transit should be followed. Specifically:

- The Contractor shall, on making or being advised of such a find, immediately cease operations in the affected area minimize activities which create ground disturbance in and adjacent to the affected area, and notify the Ministry Representative. The Archaeology Branch of the British Columbia Ministry of Forests will be notified as per the Heritage Conservation Act.
- Work shall not resume within 30 m of the discovery site until an appropriate directive has been received from that agency.
- To protect archaeological and paleontological sites that are situated within or adjacent to a project site, the Contractor may be required to use a variety of mitigative measures, including but not limited to drainage or erosion control, slope stabilization measures, or erecting fences or other suitable barriers to protect archaeological or paleontological sites that are situated within or adjacent to a project site.
- These measures, with any negotiated extensions of time for completion of the contract they require, will be determined and adopted at the discretion of the Ministry Representative. The costs associated with such mitigative measures will be borne by the Ministry, unless otherwise specified in the Special Provisions.
- A buffer zone, in which no land alteration or other activity is permitted, may be required to ensure adequate site protection.
- The width of this buffer zone shall be determined by the Ministry Representative in consultation with a representative of the Archaeology Branch of the British Columbia Ministry of Forests.
- The Contractor shall be responsible for the actions of employees and subcontractors with respect to site vandalism and the unlicensed collection of artifacts from Designated archaeological sites in and around the construction area.

4.0 Environmental Monitoring

The level of environmental monitoring for this Project is low since there are no instream works planned and no sensitive environmental resources are expected to be affected by the proposed activities. An environmental monitor should be present at the start of construction, and an AQP should be consulted under any of the following circumstances:

- The EMP needs to be significantly updated and redistributed.
- During the pre-work meeting prior to project works commencing to inform the Contractor, their employees, and their subcontractors, of key environmental issues.
- In the event of an environmental emergency – this may require attendance on site.
- To support the inspection, monitoring, and maintenance of erosion and sediment control measures following heavy rainfall events or other inclement weather.
- To support with any environmental incident reporting as becomes necessary.
- To liaise with agencies and regulators in the event of an environmental incident or when unforeseen site conditions may result in a potential significant impact to the environment.
- To conduct any bird or wildlife surveys and to confirm no active nests or dens are present prior to works commencing.
- To provide site-specific recommendations regarding human-wildlife conflicts if they become necessary.
- To oversee final site clean up and reclamation activities.

5.0 Conclusion

This EMP is a living document, and revisions to this plan can be made by mutual agreement between Consus, Celtic, and their subcontractors provided all changes are still in compliance with relevant permits and legislation. All changes will be recorded and must result in an improvement to the Environmental Management Plan.

Provided the strategies and recommendations outlined in this EMP are followed, it is concluded that environmental values will be protected, and sediment and other deleterious substances will be prevented from entering sensitive habitats for the duration of the project works.

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Appendix 1: Site Photographs.

Photograph 1. Part of the already cleared area for the loop road around the baseball fields.

Photograph 2. Already cleared area and typical stand type in the vicinity of the Project.

Photograph 3. Existing gravel road and cleared right of way that is part of the new access road to Highway 20.

Photograph 4. Middle portion of the new access road to Highway 20 with majority of right of way already cleared.

Photograph 5. Final portion of new access road looking at future junction with Highway 20.

Photograph 6. New access road at junction with Highway 20, looking south towards Williams Lake.

Appendix 2: Example Environmental Incident Reporting Form

Environmental Incident Reporting Form

Contact Information (person filling out the form):

First Name:_____ Last Name:_____

Telephone #:_____ Fax #:_____

General Incident Information:

Area or Region:-

_____

Location of Incident:_____

Date of Incident:_____

Time of Incident:_____ Time of Discovery:_____(24 hrs)

Describe location in site (Drawing #, station #, and other details on location:

_____
_____
_____
_____
_____
_____
_____

Product Released:

Product Type:	Estimated Qty Released	Estimated Qty Recovered
1.	1.	1.
2.	2.	2.
3.	3.	3.

Circle Source of Spill:

Storage Tank Truck Piping Pump Dispenser

Dispenser Barrel Unknown Other:_____

Circle Receiving Medium (may be more than one):

Air Land Paving Storm drain Drainage ditch Subsurface

Sanitary sewer Subsurface Lined Impoundment Other:_____

Appendix 3: Example Environmental Monitoring Form

Daily Environmental Monitoring Report	
Project:	
MoTI Project # (if applicable):	
Client:	
Client Contact:	
Environmental Monitor(s) on site:	
Date:	
Equipment Onsite	
Site Summary	
Weather - Current and for the last 24 hour period:	
Permits and Plans:	
Daily tailgate meeting attended and were environmental concerns addressed (Yes/No):	
Environmental pre-work completed (Provide details below; Yes/No):	
Construction Environmental Management Plan onsite (Yes/No):	
Environmental site-specific plans or task-specific procedures onsite, if applicable (Yes/No):	
Comments:	
Spill Response:	
Spill response material onsite/in vehicles in good working order (Yes/No):	

Refuelling locations outside Environmentally Sensitive Area, or >30 m from stream (Yes/No):	
Refuelling tanks/equipment inspected and in good working order (Yes/No):	
Equipment inspected for leaks/excessive grease and in good working order (Yes/No):	
Comments:	
Wildlife and Archaeology	
Any wildlife observations of note (Provide details below; Yes/No):	
Any chance archaelogical finds occur since last visit (Provide details below; Yes/No):	
Current Construction Activities (attach relevant photos)	
Location, Equipment, Task, and Supervisor contacted while onsite (if applicable):	
Erosion and Sediment Controls (attach relevant photos)	
Are existing erosion and sediment controls functioning and effective?	
Comments:	
Environmental Monitor (EM) Signoff:	
EM Time and Hours Onsite:	

Geotechnical Assessment:

Esler Sports Fields Complex Road

Prepared for:
Celtic Engineering Ltd.

June 23, 2025

Project Manager: Hans Jorgensen, P. Eng.
Project Number: 25-H-014

Version History		
Revision	Description	Date
1	Final Version	June 23, 2025

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1. Introduction

Celtic Engineering Ltd. (Celtic), commissioned SoilTech Consulting Ltd. (SoilTech) to conduct a geotechnical assessment for a new road connecting the Esler Sports Fields Complex to Highway 20 in Williams Lake, BC. The project area and proposed road alignment area shown in Figure 1.

To conduct this assessment, we have:

- Discussed the conceptual road design parameters and alignment with Celtic.
- Carried out a site assessment of the property and surrounding area including:
  - A desktop study of existing geotechnical information, internal project information and public data relevant to the development, geology, and water conditions at the site.
  - A field assessment, including a site investigation and site reconnaissance.
- Determined the subsurface conditions.

Based on the assessment findings, we have provided geotechnical analysis, discussion, and recommendations for:

- The anticipated subsurface conditions in the development area.
- Re-use of in situ soils.
- Pavement structures.
- Subgrade preparation.
- Temporary excavations.

2. Project Description

We understand the project will involve:

- A new section of asphalt surfaced road connecting the Esler Sports Field Complex to Highway 20.
- Improvements to Highway 20 at the intersection of the new road.
- Clearing and stripping of the proposed right-of-way.
- Surface grading and ditches for storm water management.

3. Site Assessment

To assess the site, we carried out a desktop study and a field assessment. For the desktop study we reviewed:

- Conceptual drawings for the development.
- Internal information on nearby SoilTech projects.
- Government of Canada Open Maps – Surficial Geology.
- Geological Survey of Canada Bulletin 196 and Map 1290A.
- Google Earth Imagery.
- 2019 LiDAR BC data.

The field assessment was carried on April 23, 2025 and May 13, 2025, and included a test pit investigation program. Through the site assessment we have determined the subsurface conditions in the proposed development area.

3.1 Site Description and Background

The road alignment travels through gently sloped terrain east of the field complex and then though hummocky terrain from where it turns southeast towards Highway 20. The overall grade change from the start of the road at the sports fields to Highway 20 is approximately 4%. Isolated sections through the hummocky terrain contain significant slopes (slopes at 30% grade or steeper). The steepest section reaches 40% for a height of about 4 m. Historical drainages are present through the hummocky area and there are a few some ponds in small depressions to the east of the proposed road alignment.

The subject area has been previously logged and stumped. Currently it is moderately reforested with a mix of immature and mature trees and bunchgrasses typical to the Interior Douglas Fir biogeoclimatic zone. There is evidence of historical logging roads/trails in the area and crossing the proposed alignment. Undocumented fill and disturbed soil associated with the previous logging operations and earthworks may be present along the alignment.

3.2 Geological Background

The surficial geology of the subject area can be attributed to a few major events following the Fraser Glaciation, the last period of ice sheet glaciation in BC.

- Glaciers in this area advanced from high elevations in the Coastal and Rocky Mountains, moving to lower elevations in the interior plateau.
- The advancing ice sheets grinded and bulldozed the earth beneath them which created and deposited lodgement till over top of the bedrock as they moved northward through the area.
- As the glaciers melted some erosion channels were formed.

Interpretation of the investigation data, public lidar data, and surficial geology mapping indicate the proposed road alignment travels through a till blanket deposit up to 10 m thick.

3.3 Site Investigation

We carried out a test pit investigation on the subject property on April 23, 2025 and May 13 2025. Subsurface conditions were reviewed in seventeen test pits, TP25-01 to TP25-10, at the locations shown in Figure 1. The test pits were excavated with a CAT 314E excavator (Celtic Engineering Ltd.) under the direction of our field personnel or Celtic personnel. As the test pits were advanced, the subsurface conditions encountered at each location were reviewed and recorded. At select depths field soil tests were conducted and soil samples collected from the excavated soil. The samples were submitted to our laboratory for soil index tests. Following our review and sample collection the test pits were backfilled with the excavated soil.

We classified the soil conditions in accordance with the Modified Unified Soil Classification System (MUSCS). Soil index tests were carried out on select samples to determine soil properties and to confirm our field observations. We also performed a California Bearing Ratio (CBR) test on a bulk sample from TP25-015. The observed soil and groundwater conditions, sampling depths, field measurements, and Laboratory test reports are detailed in the test pit logs in **Appendix A**. Detailed laboratory reports for the soil index tests are in **Appendix B**.

Figure 1. The proposed road alignment and test pit locations shown on Google Earth Imagery 2023.

3.4 Subsurface Conditions

One natural soil type was observed along the proposed road alignment and can be described as follows:

- Glacial Till
  - Poorly graded sand with some gravel in a matrix of low plastic silt with trace to some clay.
  - With trace boulders.
  - Very dense consistency.
  - In situ moisture content between 5% to 15%.

A surficial layer of organic soil and disturbed till, between 0.5 m and 1.0 m thick, was observed throughout the road alignment. The topographic lows are subject to increased surface water runoff and the surface soils in these areas have higher moisture contents.

4. Discussion and Recommendations

the proposed road alignment has suitable conditions to construct the road with the following considerations:

- The anticipated natural soil conditions in the development area consist of Glacial Till.
- The existing slopes are considered stable and low risk of landslide for the given subsurface conditions.
- The organic soil will have to be removed from below the proposed road and the disturbed soil will have to be remediated (compacted).
- The properties and potential re-uses of the natural soil types are detailed in Section 4.1.
- The pavement structures are detailed in Section 4.3 and should be constructed over an adequately prepared subgrade consisting of the natural soil or adequately compacted fill, as described in Section 4.3.3.
- Typical WorkSafe BC excavation slopes are suitable for the natural soil.

4.1 Anticipated Subsurface Conditions and Soil Characteristics

Along the proposed roadway alignment, the natural subsurface conditions will consist of Glacial Till which has the following properties and characteristics:

- Has low permeability
- Has moderate to high frost susceptibility.
- Can be re-used as common and subgrade fill.
- Is near the optimum moisture content for compaction.

The natural Glacial Till will provide good support for the roadway. The surficial layers of organic soil and disturbed soil will not provide good support and will have to be remediated.

4.2 Slope Stability

The steepest slope area along the proposed alignment reaches 40% grade. There is very low risk of landslide at this angle for the given subsurface conditions and the proposed road alignment is considered safe for the intended use. To maintain slope stability, we recommend:

- Do not cut slopes steeper than 2 Horizontal to 1 Vertical (2H:1V)
- Fill slopes should be constructed from adequately compacted fill (at least 95% SPD) and cut no steeper than 2H:1V for granular soil and 3H:1V for fine grained soil.

Cut or fill slopes greater than 5 m in height should be reviewed by SoilTech as a slope stability analysis may be warranted.

4.3 Pavement Structures

The site-specific traffic volumes are unknown. The proposed roadway is classified as MoTT Type C: Low Volume Roads (less than 100,000 ESAL 20-yr Design). Any widening (i.e. acceleration/deceleration lanes, turning lanes, etc.) added to Highway 20 at the new intersection location will fit the MoTT Type B: Medium to High Volume Roads classification (100,000 to 20,000,000 ESAL 20-yr Design).

The results of the laboratory CBR test indicate the Glacial Till will provide a relatively strong subgrade in its natural state or when remoulded and adequately compacted. We evaluated the structure using the design methods and guidelines from the AASHTO 1993 Pavement Design Method and Ministry of Transportation and Infrastructure (MoTT) design guidelines Technical Circular T-01/15. The recommended pavement structures for the roads are detailed in Table 1.

Table 1. Recommended Pavement Structures

Pavement Component	Type B Road	Type C Road
Class 1 Medium Hot Mix Asphalt	100 mm	75 mm
Well Graded Base (WGB)	300 mm	225 mm
Select Granular Subbase (SGSB)	300 mm	300 mm
Class 2 Non-woven Geotextile (Mirafi 160N or equivalent) Over the Subgrade	Yes	Yes

The pavement structure's design is based on it being supported by an adequately prepared subgrade as described in Section 4.3.3. Use aggregates meeting the requirements detailed in Section 0 and asphalt meeting the specifications detailed in the current MoTT Standard Specifications for Highway Construction. We recommend extending the pavement structures below any curbs and sidewalks.

4.3.1 Aggregates

Aggregates should withstand the deleterious effects of exposure to freeze-thaw, water, and general construction such as placing, grading, packing, etc. Use aggregates that meet the Aggregate Quality specifications detailed in Section 202.04 of the current MoTT Standard Specifications for Highway Construction. For WGB use a crushed material with a minimum 60% one-face fracture by mass on particles larger than 4.75 mm. The SGSB can be a processed or pit run gravel. Gradation specifications for the aggregates can be found in Table 4.

Table 2. Aggregate Gradation Specifications

Particle Size (mm)	Percent Passing	
	WGB[1]	SGSB
75	–	95 – 100
37.5	–	–
25	100	–
19	80 – 100	35 – 100
9.5	50 – 85	–
4.75	35 – 70	15 – 60
2.36	25 – 50	–
1.18	15 – 35	–
0.300	5 – 20	3 – 15
0.075	2 – 7	0 – 5

4.3.2 Pavement Structure Construction

Apply the following recommendations and specifications to the construction of the pavement structures:

- Install the non-woven geotextile over the prepared subgrade (refer to Section 4.3.3).
- Place SGSB and WGB in maximum 300 mm thick layers and compact to 100% SPD. Bring the soil to near optimum moisture content for compaction where required.
- Proof-roll the WGB layer and repair any soft areas before placing any concrete or asphalt.
- Place the asphalt surface as per the supplier's recommended procedures and compact it to a minimum average degree of compaction of 97% when comparing the in-situ density to the measured 75 Blow Marshall briquette density for the mix, with no single measured location less than 95%.

4.3.3 Subgrade Preparation

The prepared subgrade should consist of competent natural soil or adequately compacted fill of a similar consistency. The natural Glacial Till found at the site is suitable for subgrade fill. We recommend the following to prepare the subgrade:

- Remove any undocumented fill, organic soil, deleterious materials, soft wet fine-grained soil, and disturbed soil from below the proposed paved area. Extend the excavation beyond the edges of the pavement by a horizontal distance equal to the depth of the fill required below the pavement.
- Raise the grade of low areas to the design subgrade elevation with compacted soil that has similar properties and gradations to the surrounding subgrade soils.
- Place the fill material in uniform layers not exceeding 200 mm for fine-grained soil and 300 mm for granular soil.
- Compact the initial layers to 97% SPD and the final 300 mm of subgrade fill to 100% SPD. Bring the soil to near the optimum moisture content for compaction where required.

- Crown the subgrade at a minimum 2% slope away from the road centerline.
- Proof-roll the subgrade and repair any soft areas prior to installing the pavement structure.

4.4 Temporary Excavations

We recommend using slopes of 1 Horizonal to 1 Vertical (1H:1V) or shallower for excavations in the natural soil or adequately compacted fill. Measures should be taken to prevent erosion of side excavation slopes. Groundwater or surface water encountered during construction should be directed away from excavations. Prevent water from ponding in excavations. Flatter excavation slopes may be required if loose non-cohesive soil, soft soil, fill, seepage, etc. is encountered in excavations or if unfavourable weather conditions are encountered. Consult a qualified engineer if such conditions are encountered or if excavation deeper than 5 m is required.

Care should be taken when excavating near all types of existing structures and foundations. Maintain a 2H:1V slope from the base of the structure to the base of excavations. Contact SoilTech if excavations are required to be closer to an existing structure as temporary construction support may be required.

5. Review and Quality Assurance

This assessment and our recommendations are based on conceptual site plans and conversations with the Client. The final design drawings should be reviewed by SoilTech to confirm the intentions of the geotechnical design recommendations included in this report have been incorporated and are appropriate for the development. Subsurface conditions should be confirmed during construction. If the conditions (i.e., soil, groundwater, etc.) encountered during construction differ from those in our assessment they should be reviewed, as alternate or additional recommendations may be required.

During the subgrade preparation and construction of the pavement structure have SoilTech review excavations, fill materials, fill placement and compaction, proof rolls, and the installation of any geotextile or geogrid products. Depending on weather and site conditions, materials may need to be placed in smaller lift thicknesses, dried, or have water added to achieve the recommended degree of compaction. Testing should be completed on pipe bedding, subgrade fill, pavement structure layers, and the materials used to confirm the respective specifications are met.

6. Limitations

The information discussed in this report is based on SoilTech's interpretation and understanding of current site conditions and the referenced documents. This assessment was limited to the references used in our desktop study and the scope of our site investigation. The discussion and recommendations provided are based on the necessary assumption that subsurface conditions across the site are consistent with our findings. If conditions encountered at the site are inconsistent with the findings described above, they should be reviewed by SoilTech, as alternate recommendations or design parameters may be required.

7. Closure

This assessment has been completed by a qualified professional registered with the Engineers and Geoscientists of British Columbia. This report has been completed for the exclusive use of the recipient and their agents. We take no responsibility for any damages suffered from any use of or reliance on information contained within this report by third parties, or for use other than the intended purpose.

If there are any questions or if additional information is required, please contact the undersigned.

Sincerely,

Mike Warner, P. Geo.

Reviewed by,

Hans Jorgensen, P. Eng.

Appendix A:

Investigation Logs

Modified Unified Classification System for Soils

Major Division			Group		Soil Description	Classification Criteria
Coarse Grained Soils more than 50% larger than 75 µm (dual symbols used for soils with 5 to 12% fines)	**Gravels**	Clean Gravels < 5% fines	GW		Well graded gravels and sandy gravels with trace or no fines	$C_u = D_{60}/D_{10} > 4$ $C_C=(D_{30})^2/D_{10}D_{60}$= 1 to 3
			GP		Poorly graded gravels and sandy gravels with trace or no fines	Not meeting GW requirements
		Dirty Gravels > 12% fines	GM		Silty gravels and silty sandy gravels	Plasticity below A-Line or $I_p < 4$
			GC		Clayey gravels and clayey sandy gravels	Plasticity below A-Line or $I_p < 7$
	Sands	Clean Sands < 5% fines	SW		Well graded sands and gravelly sands with trace to no fines	$C_u = D_{60}/D_{10} > 4$ $C_C=(D_{30})^2/D_{10}D_{60}$= 1 to 3
			SP		Poorly graded sands and gravelly sands with trace to no fines	Not meeting SW requirements
		Dirty Sands > 12% fines	SM		Silty sands and sand/silt mixtures	Plasticity below A-Line or $I_p < 4$
			SC		Clayey sands and sand/clay mixtures	Plasticity below A-Line or $I_p < 7$
Fine Grained Soils more than 50% smaller then 75 µm	**Silts**	$W_L < 50\%$	ML		Inorganic silts and sandy silts with slight plasticity	Based on Placitity Chart (see below)
		$W_L > 50\%$	MH		Inorganic silts with high plasticity	
	Clays	$W_L < 30\%$	CL		Inorganic clay and silty clays with low plasticity	
		$30\% < W_L < 50\%$	CI		Inorganic clay and silty clays with intermediate plasticity	
		$W_L > 30\%$	CH		Inorganic clay and silty clays with high plasticity	
	Organic Silts and Clays	$W_L < 50\%$	OL		Organic silts and silty clays with low plasticity	
		$W_L > 50\%$	OH		Organic silts and silty clays with high plasticity	
	Highly Organic		PT		Peat and other highly organic soils	

Soil Components

Fraction	Size	Weight Percentage	Description
Gravel			
Coarse	75 mm to 19 mm		
Fine	19 mm to 4.75 mm	35 - 50	and
Sand			
Coarse	4.75 mm to 2 mm	20 - 35	y/ey
Medium	2 mm to 425 µm		
Fine	425 µm to 75 µm	10 - 20	some
Silt or Clay	< 75 µm		
Cobbles	200 mm to 75 mm	1 - 10	trace
Boulders	> 200 mm		

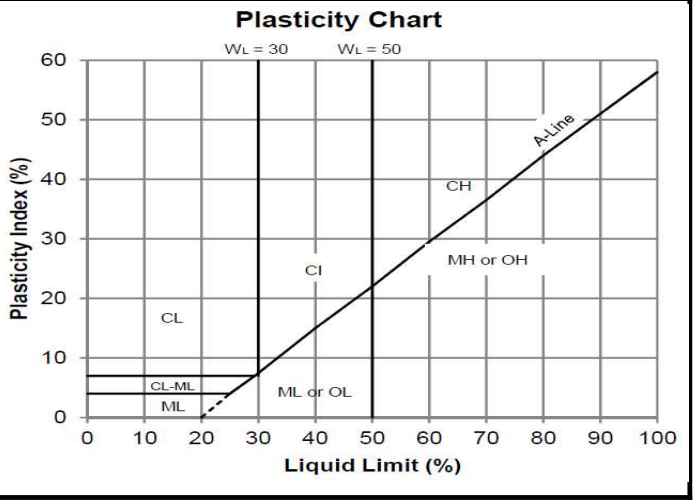
Relative Moisture

Coarse Grained	
Dry	Non-cohesive and free running
Moist	Darker colour and sticks together
Wet	Darker colour, sticks together and free water forms

Fine Grained	
Moist, dry of plastic limit	hard, friable and powdery
Moist, near plastic limit	Can be moulded
Moist, wet of plastic limit	Usually weak and free water forms
Wet, near liquid limit	
Wet of plastic limtic	

Relative Density and Consistency

Cohesionless		Cohesive	
Relative Density	**SPT Value (N)**	**Consistency**	**Undrained Shear Strength (kPa)**
Very Loose	0 - 4	Very Soft	0 - 10
Loose	4 - 10	Soft	10 - 25
Compact	10 - 30	Firm	25 - 50
Dense	30 - 50	Stiff	50 - 100
Very Dense	> 50	Very Stiff	100 - 200
		Hard	> 200



SoilTech Consulting Ltd

TP25-01

Client:	Celtic Engineering Ltd.	**Date Started:**	April 23, 2025
Project Number:	25-H-014	**Date Finished:**	April 23, 2025
Project:	Esler Field Complex Road	**Logged By:**	MW
Subcontractor:	Client	**Equip./Method:**	CAT 314E Excavator
Location:	10U 557442.35 m E, 5771455.85 m N	**Elevation:**	Existing Ground Surface

Depth (m)	Graphic Log	Stratigraphic Description	Sample Type	% Recovery	Blow Counts (N Value)	Pocket Pen (kPa)	Moisture Content (%)	Atterberg Limits		
								Plastic Limit	Liquid Limit	Plasticy Index
0		**OM:** Grass, roots, organic soil								
		SM: Sand, some gravel, some silt, trace clay, loose, brown, minor roots, disturbed								
		SM: Sand, some gravel, some silt, trace clay, very dense, low plastiicty (fines portion), damp, brown to grey (glacial till)								
1		- Gravel 15.3%, Sand 64.0%, Silt and Clay 20.7%	Bulk				15.2%			

End of test pit at 1.1 m
No groundwater encountered
Test pit backfilled with excavated material

SoilTech Consulting Ltd

TP25-02

Client:	Celtic Engineering Ltd.	**Date Started:**	April 23, 2025
Project Number:	25-H-014	**Date Finished:**	April 23, 2025
Project:	Esler Field Complex Road	**Logged By:**	MW
Subcontractor:	Client	**Equip./Method:**	CAT 314E Excavator
Location:	10U 557398.24 m E, 5771506.17 m N	**Elevation:**	Existing Ground Surface

Depth (m)	Graphic Log	Stratigraphic Description	Sample Type	% Recovery	Blow Counts (N Value)	Pocket Pen (kPa)	Moisture Content (%)	Atterberg Limits		
								Plastic Limit	Liquid Limit	Plasticy Index
0		**OM:** Grass, roots, organic soil								
		SM: Sand, some gravel, some silt, trace clay, loose, brown, minor roots, disturbed								
1		**SM:** Sand, some gravel, some silt, trace clay, very dense, low plastiicty (fines portion), damp, brown to grey (glacial till)	Bulk				13.9%			
		End of test pit at 1.0 m No groundwater encountered Test pit backfilled with excavated material								

SoilTech Consulting Ltd

TP25-03

Client:	Celtic Engineering Ltd.	**Date Started:**	April 23, 2025
Project Number:	25-H-014	**Date Finished:**	April 23, 2025
Project:	Esler Field Complex Road	**Logged By:**	MW
Subcontractor:	Client	**Equip./Method:**	CAT 314E Excavator
Location:	10U 557398.24 m E, 5771553.64 m N	**Elevation:**	Existing Ground Surface

Depth (m)	Graphic Log	Stratigraphic Description	Sample Type	% Recovery	Blow Counts (N Value)	Pocket Pen (kPa)	Moisture Content (%)	Atterberg Limits		
								Plastic Limit	Liquid Limit	Plasticy Index
0		**OM:** Grass, roots, organic soil								
		GM: Gravel and sand, some silt, trace clay, loose, brown, minor roots, disturbed - Gravel 44.6%, Sand 40.0%, Silt and Clay 15.4%	Bulk				12.2%			
1		**SM:** Sand, silty, some clay, trace gravel, very dense, low plastiicty (fines portion), damp, brown to grey (glacial till) - Gravel 6.6%, Sand 47.0%, Silt 31.6%, Clay 14.8%	Bulk				15.5%	24	34	10

End of test pit at 1.2 m
No groundwater encountered
Test pit backfilled with excavated material

SoilTech Consulting Ltd

TP25-04

Client:	Celtic Engineering Ltd.	**Date Started:**	April 23, 2025
Project Number:	25-H-014	**Date Finished:**	April 23, 2025
Project:	Esler Field Complex Road	**Logged By:**	MW
Subcontractor:	Client	**Equip./Method:**	CAT 314E Excavator
Location:	10U 557281.91 m E, 5771609.42 m N	**Elevation:**	Existing Ground Surface

Depth (m)	Graphic Log	Stratigraphic Description	Sample Type	% Recovery	Blow Counts (N Value)	Pocket Pen (kPa)	Moisture Content (%)	Atterberg Limits		
								Plastic Limit	Liquid Limit	Plasticy Index
0		**OM:** Grass, roots, organic soil								
		SM: Sand, some gravel, some silt, trace clay, loose, brown, minor roots, disturbed								
		SM: Sand, some gravel, some silt, trace clay, very dense, low plastiicty (fines portion), damp, brown to grey (glacial till)	Bulk				14.4%			

End of test pit at 0.9 m
No groundwater encountered
Test pit backfilled with excavated material

SoilTech Consulting Ltd

TP25-05

Client:	Celtic Engineering Ltd.	**Date Started:**	April 23, 2025
Project Number:	25-H-014	**Date Finished:**	April 23, 2025
Project:	Esler Field Complex Road	**Logged By:**	MW
Subcontractor:	Client	**Equip./Method:**	CAT 314E Excavator
Location:	10U 557207.53 m E, 5771671.36 m N	**Elevation:**	Existing Ground Surface

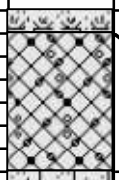
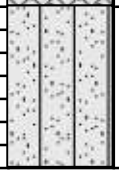
Depth (m)	Graphic Log	Stratigraphic Description	Sample Type	% Recovery	Blow Counts (N Value)	Pocket Pen (kPa)	Moisture Content (%)	Atterberg Limits		
								Plastic Limit	Liquid Limit	Plasticy Index
0		**OM:** Grass, roots, organic soil								
		SM: Sand, some gravel, some silt, trace clay, loose, brown, minor roots, disturbed								
1		**SM:** Sand, gravelly, some silt, trace clay, very dense, low plastiicty (fines portion), damp, brown to grey (glacial till) - Gravel 36.0%, Sand 44.6%, Silt and Clay 19.4%	Bulk				7.5%			

End of test pit at 1.2 m
No groundwater encountered
Test pit backfilled with excavated material

SoilTech Consulting Ltd

TP25-06

Client:	Celtic Engineering Ltd.	**Date Started:**	April 23, 2025
Project Number:	25-H-014	**Date Finished:**	April 23, 2025
Project:	Esler Field Complex Road	**Logged By:**	MW
Subcontractor:	Client	**Equip./Method:**	CAT 314E Excavator
Location:	10U 557103.30 m E, 5771776.28 m N	**Elevation:**	Existing Ground Surface

Depth (m)	Graphic Log	Stratigraphic Description	Sample Type	% Recovery	Blow Counts (N Value)	Pocket Pen (kPa)	Moisture Content (%)	Atterberg Limits		
								Plastic Limit	Liquid Limit	Plasticy Index
0		**OM:** Grass, roots, organic soil								
		SM: Sand, some gravel, some silt, trace clay, loose, brown, minor roots, disturbed								
1		**SM:** Sand, gravelly, some silt, trace clay, very dense, low plastiicty (fines portion), damp, brown to grey (glacial till) - Gravel 36.0%, Sand 44.6%, Silt and Clay 19.4%	Bulk				14.4%			

End of test pit at 1.4 m
No groundwater encountered
Test pit backfilled with excavated material

SoilTech Consulting Ltd

TP25-07

Client:	Celtic Engineering Ltd.	**Date Started:**	April 23, 2025
Project Number:	25-H-014	**Date Finished:**	April 23, 2025
Project:	Esler Field Complex Road	**Logged By:**	MW
Subcontractor:	Client	**Equip./Method:**	CAT 314E Excavator
Location:	10U 557055.92 m E, 5771812.51 m N	**Elevation:**	Existing Ground Surface

Depth (m)	Graphic Log	Stratigraphic Description	Sample Type	% Recovery	Blow Counts (N Value)	Pocket Pen (kPa)	Moisture Content (%)	Atterberg Limits		
								Plastic Limit	Liquid Limit	Plasticy Index
0		**OM:** Grass, roots, organic soil								
		SM: Sand, some gravel, some silt, trace clay, loose, brown, minor roots, disturbed								
1		**SM:** Sand, gravelly, some silt, trace clay, very dense, low plastiicty (fines portion), damp, brown to grey (glacial till) - Gravel 34.4%, Sand 46.9%, Silt and Clay 18.7%.	Bulk				14.5%			

End of test pit at 1.1 m
No groundwater encountered
Test pit backfilled with excavated material

SoilTech Consulting Ltd

TP25-08

Client:	Celtic Engineering Ltd.	**Date Started:**	April 23, 2025
Project Number:	25-H-014	**Date Finished:**	April 23, 2025
Project:	Esler Field Complex Road	**Logged By:**	MW
Subcontractor:	Client	**Equip./Method:**	CAT 314E Excavator
Location:	10U 556984.12 m E, 5771868.40 m N	**Elevation:**	Existing Ground Surface

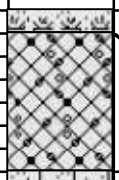
Depth (m)	Graphic Log	Stratigraphic Description	Sample Type	% Recovery	Blow Counts (N Value)	Pocket Pen (kPa)	Moisture Content (%)	Atterberg Limits		
								Plastic Limit	Liquid Limit	Plasticy Index
0		**OM:** Grass, roots, organic soil								
		SM: Sand, some gravel, some silt, trace clay, loose, brown, minor roots, disturbed								
1		**SM:** Sand, some gravel, some silt, trace clay, very dense, low plastiicty (fines portion), damp, brown to grey (glacial till)	Bulk				17.2%			

End of test pit at 1.0 m
No groundwater encountered
Test pit backfilled with excavated material

SoilTech Consulting Ltd

TP25-09

Client:	Celtic Engineering Ltd.	**Date Started:**	April 23, 2025
Project Number:	25-H-014	**Date Finished:**	April 23, 2025
Project:	Esler Field Complex Road	**Logged By:**	MW
Subcontractor:	Client	**Equip./Method:**	CAT 314E Excavator
Location:	10U 556936.46 m E, 5771968.91 m N	**Elevation:**	Existing Ground Surface

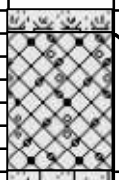
Depth (m)	Graphic Log	Stratigraphic Description	Sample Type	% Recovery	Blow Counts (N Value)	Pocket Pen (kPa)	Moisture Content (%)	Atterberg Limits		
								Plastic Limit	Liquid Limit	Plasticy Index
0		**OM:** Grass, roots, organic soil								
		SM: Sand, some gravel, some silt, trace clay, loose, brown, minor roots, disturbed								
1		**SM:** Sand, some gravel, some silt, trace clay, very dense, low plastiicty (fines portion), damp, brown to grey (glacial till) - Gravel 11.7%, Sand 60.4%, Silt and Clay 27.9%	Bulk				12.3%			

End of test pit at 1.1 m
No groundwater encountered
Test pit backfilled with excavated material

SoilTech Consulting Ltd

TP25-10

Client:	Celtic Engineering Ltd.	**Date Started:**	April 23, 2025
Project Number:	25-H-014	**Date Finished:**	April 23, 2025
Project:	Esler Field Complex Road	**Logged By:**	MW
Subcontractor:	Client	**Equip./Method:**	CAT 314E Excavator
Location:	10U 556896.39 m E, 5772043.38 m N	**Elevation:**	Existing Ground Surface

Depth (m)	Graphic Log	Stratigraphic Description	Sample Type	% Recovery	Blow Counts (N Value)	Pocket Pen (kPa)	Moisture Content (%)	Atterberg Limits		
								Plastic Limit	Liquid Limit	Plasticy Index
0		**OM:** Grass, roots, organic soil								
		SM: Sand, some gravel, some silt, trace clay, loose, brown, minor roots, disturbed								
1		**SM:** Sand, some gravel, some silt, trace clay, very dense, low plastiicty (fines portion), damp, brown to grey (glacial till)	Bulk				5.9%			

End of test pit at 1.1 m
No groundwater encountered
Test pit backfilled with excavated material

SoilTech Consulting Ltd

TP25-11

Client:	Celtic Engineering Ltd.	**Date Started:**	April 23, 2025
Project Number:	25-H-014	**Date Finished:**	April 23, 2025
Project:	Esler Field Complex Road	**Logged By:**	MW
Subcontractor:	Client	**Equip./Method:**	CAT 314E Excavator
Location:	10U 556850.50 m E, 5772103.61 m N	**Elevation:**	Existing Ground Surface

Depth (m)	Graphic Log	Stratigraphic Description	Sample Type	% Recovery	Blow Counts (N Value)	Pocket Pen (kPa)	Moisture Content (%)	Atterberg Limits		
								Plastic Limit	Liquid Limit	Plasticy Index
0		**OM:** Grass, roots, organic soil								
		SM: Sand, some gravel, some silt, trace clay, loose, brown, minor roots, disturbed - Gravel 11.5%, Sand 69.5%, Silt and Clay 19.0%	Bulk				15.3%			
1		**SM:** Sand, some gravel, some silt, trace clay, very dense, low plastiicty (fines portion), damp, brown to grey (glacial till)	Bulk				7.0%			

End of test pit at 1.2 m
No groundwater encountered
Test pit backfilled with excavated material

SoilTech Consulting Ltd

TP25-12

Client:	Celtic Engineering Ltd.	**Date Started:**	April 23, 2025
Project Number:	25-H-014	**Date Finished:**	April 23, 2025
Project:	Esler Field Complex Road	**Logged By:**	MW
Subcontractor:	Client	**Equip./Method:**	CAT 314E Excavator
Location:	10U 556797.79 m E, 5772098.15 m N	**Elevation:**	Existing Ground Surface

Depth (m)	Graphic Log	Stratigraphic Description	Sample Type	% Recovery	Blow Counts (N Value)	Pocket Pen (kPa)	Moisture Content (%)	Atterberg Limits		
								Plastic Limit	Liquid Limit	Plasticy Index
0		**OM:** Grass, roots, organic soil								
		MS: Silt, sand, gravel, and clay, loose, brown, minor roots, disturbed - Gravel 24.1%, Sand 23.7%, Silt 29.7%, Clay 22.4%	Bulk				19.4%			
1		**SM:** Sand, some gravel, some silt, trace clay, very dense, low plastiicty (fines portion), damp, brown to grey (glacial till)	Bulk				14.6%	19	40	21

End of test pit at 1.4 m
No groundwater encountered
Test pit backfilled with excavated material

SoilTech Consulting Ltd

TP25-13

Client:	Celtic Engineering Ltd.	**Date Started:**	April 23, 2025
Project Number:	25-H-014	**Date Finished:**	April 23, 2025
Project:	Esler Field Complex Road	**Logged By:**	MW
Subcontractor:	Client	**Equip./Method:**	CAT 314E Excavator
Location:	10U 556738.64 m E, 5772100.09 m N	**Elevation:**	Existing Ground Surface

Depth (m)	Graphic Log	Stratigraphic Description	Sample Type	% Recovery	Blow Counts (N Value)	Pocket Pen (kPa)	Moisture Content (%)	Atterberg Limits		
								Plastic Limit	Liquid Limit	Plasticy Index
0		**OM:** Grass, roots, organic soil								
		SM: Sand, some gravel, some silt, trace clay, loose, brown, minor roots, disturbed	Bulk				17.3%			
1		**SM:** Sand, some gravel, some silt, trace clay, very dense, low plastiicty (fines portion), damp, brown to grey (glacial till)	Bulk				14.6%			

End of test pit at 1.1 m
No groundwater encountered
Test pit backfilled with excavated material

SoilTech Consulting Ltd

TP25-14

Client:	Celtic Engineering Ltd.	**Date Started:**	April 23, 2025
Project Number:	25-H-014	**Date Finished:**	April 23, 2025
Project:	Esler Field Complex Road	**Logged By:**	MW
Subcontractor:	Client	**Equip./Method:**	CAT 314E Excavator
Location:	10U 556641.86 m E, 5772105.55 m N	**Elevation:**	Existing Ground Surface

Depth (m)	Graphic Log	Stratigraphic Description	Sample Type	% Recovery	Blow Counts (N Value)	Pocket Pen (kPa)	Moisture Content (%)	Atterberg Limits		
								Plastic Limit	Liquid Limit	Plasticy Index
0		**OM:** Grass, roots, organic soil								
		SM: Sand, some silt, traqce gravel, trace clay, loose, brown, minor roots, disturbed - Gravel 4.1%, Sand 65.5%, Silt and Clay 30.4%	Bulk				16.3%			
1		**SM:** Sand, silty, some clay, trace gravel, very dense, low plastiicty (fines portion), damp, brown to grey (glacial till)	Bulk				14.9%			

End of test pit at 1.2 m
No groundwater encountered
Test pit backfilled with excavated material

SoilTech Consulting Ltd

TP25-15

Client:	Celtic Engineering Ltd.	**Date Started:**	April 23, 2025
Project Number:	25-H-014	**Date Finished:**	April 23, 2025
Project:	Esler Field Complex Road	**Logged By:**	MW
Subcontractor:	Client	**Equip./Method:**	CAT 314E Excavator
Location:	10U 556537.76 m E, 5772107.59 m N	**Elevation:**	Existing Ground Surface

Depth (m)	Graphic Log	Stratigraphic Description	Sample Type	% Recovery	Blow Counts (N Value)	Pocket Pen (kPa)	Moisture Content (%)	Atterberg Limits		
								Plastic Limit	Liquid Limit	Plasticy Index
0		**OM:** Grass, roots, organic soil								
		SM: Frost disturbed sand, some gravel , some silt and clay, minor roots.								
1		**SM:** Sand, some gravel, some silt, trace clay, very dense, low plastiicty (fines portion), damp, brown to grey (glacial till) - Gravel 14.3%, Sand 59.0%, Silt and Clay 26.7%.	Bulk				13.5%			

End of test pit at 1.2 m
No groundwater encountered
Test pit backfilled with excavated material

SoilTech Consulting Ltd

TP25-16

Client:	Celtic Engineering Ltd.	**Date Started:**	May 13, 2025
Project Number:	25-H-014	**Date Finished:**	May 13, 2025
Project:	Esler Field Complex Road	**Logged By:**	NH (Celtic Engineering Ltd.)
Subcontractor:	Client	**Equip./Method:**	CAT 314E Excavator
Location:	10U 557473 m E, 5771469 m N	**Elevation:**	Existing Ground Surface

Depth (m)	Graphic Log	Stratigraphic Description	Sample Type	% Recovery	Blow Counts (N Value)	Pocket Pen (kPa)	Moisture Content (%)	Atterberg Limits		
								Plastic Limit	Liquid Limit	Plasticy Index
0		**OM:** Grass, roots, organic soil								
		SM: Sand, some gravel, some silt, trace clay, loose, brown, minor roots, disturbed								
1		**SM:** Sand, silty, some clay, trace gravel, very dense, low plastiicty (fines portion), damp, brown to grey (glacial till)	Bulk				9.8%			

End of test pit at 1.5 m
No groundwater encountered
Test pit backfilled with excavated material

SoilTech Consulting Ltd

TP25-17

Client:	Celtic Engineering Ltd.	**Date Started:**	May 13, 2025
Project Number:	25-H-014	**Date Finished:**	May 13, 2025
Project:	Esler Field Complex Road	**Logged By:**	NH (Celtic Engineering Ltd.)
Subcontractor:	Client	**Equip./Method:**	CAT 314E Excavator
Location:	10U 557481 m E, 5771508 m N	**Elevation:**	Existing Ground Surface

Depth (m)	Graphic Log	Stratigraphic Description	Sample Type	% Recovery	Blow Counts (N Value)	Pocket Pen (kPa)	Moisture Content (%)	Atterberg Limits		
								Plastic Limit	Liquid Limit	Plasticy Index
0		**OM:** Grass, roots, organic soil								
		SM: Sand, some gravel, some silt, trace clay, loose, brown, minor roots, disturbed								
1		**SM:** Sand, silty, some clay, trace gravel, very dense, low plastiicty (fines portion), damp, brown to grey (glacial till)	Bulk				28.5%			

End of test pit at 1.8 m
No groundwater encountered
Test pit backfilled with excavated material

Appendix B:

Soil Index Test Reports

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Sieve Analysis

Reference ASTM C117 and C136

CERTIFIED BY CCIL

Project Details

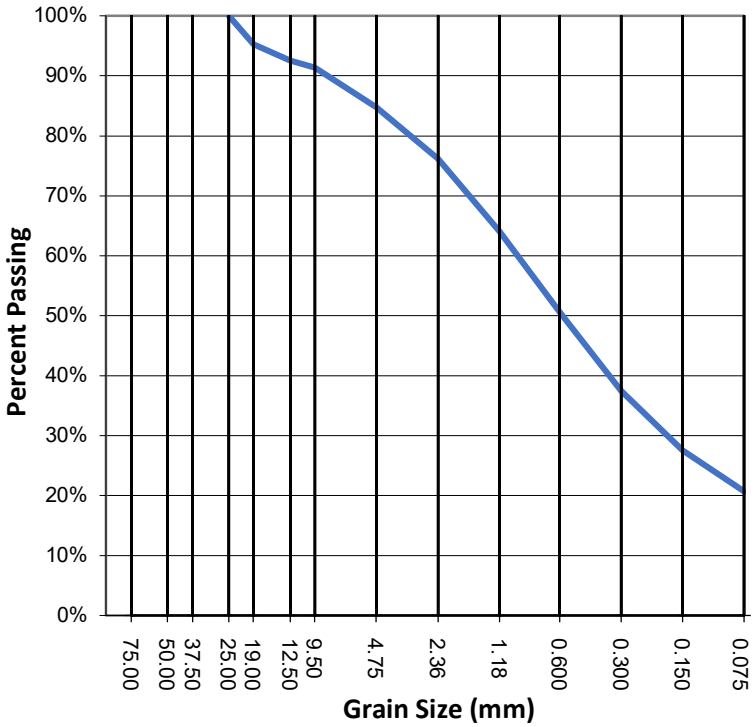
Client	Celtic Engineering Ltd.	**Project No.**	25-H-014
Project	Esler Field Complex Road	**Sieve Report No.**	SI01

Sample Details

Supplier	Existing	**Sampling Date**	April 23, 2025
Source	TP25-01	**Date Received**	April 24, 2025
Location	1.0 m	**Date Tested**	April 25, 2025
Description	Sand, some Gravel, some Fines	**Sampled By**	MW
Specification		**Tested By**	SD

Sieve Size (mm)	Percent Passing	Specifications	
		Min	Max
75.0	100.0%		
50.0	100.0%		
37.5	100.0%		
25.0	100.0%		
19.0	95.2%		
12.5	92.6%		
9.5	91.4%		
4.75	84.7%		
2.36	76.2%		
1.18	64.1%		
0.600	50.6%		
0.300	37.5%		
0.150	27.6%		
0.075	20.7%		

Moisture Content 15.2%



Comments

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Sieve Analysis

Reference ASTM C117 and C136

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Project Details

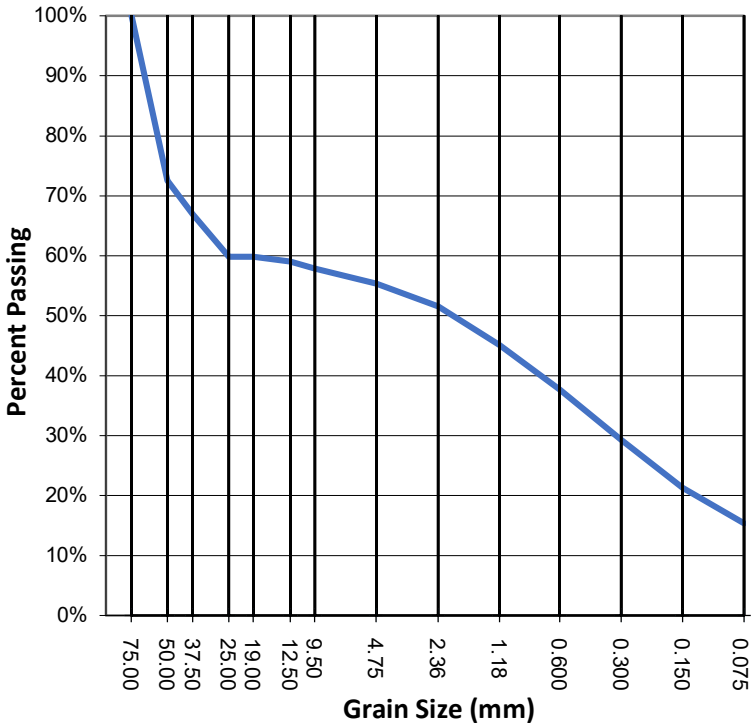
Client	Celtic Engineering Ltd.	**Project No.**	25-H-014
Project	Esler Field Complex Road	**Sieve Report No.**	SI02

Sample Details

Supplier	Existing	**Sampling Date**	April 23, 2025
Source	TP25-03	**Date Received**	April 24, 2025
Location	0.5 m	**Date Tested**	April 25, 2025
Description	Gravel and Sand, some Fines	**Sampled By**	MW
Specification		**Tested By**	SD

Sieve Size (mm)	Percent Passing	Specifications	
		Min	Max
75.0	100.0%		
50.0	72.5%		
37.5	66.9%		
25.0	59.8%		
19.0	59.8%		
12.5	59.1%		
9.5	57.8%		
4.75	55.4%		
2.36	51.6%		
1.18	45.1%		
0.600	37.7%		
0.300	29.3%		
0.150	21.3%		
0.075	15.4%		

Moisture Content 12.2%



Comments

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Sieve Analysis

Reference ASTM C117 and C136

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Project Details

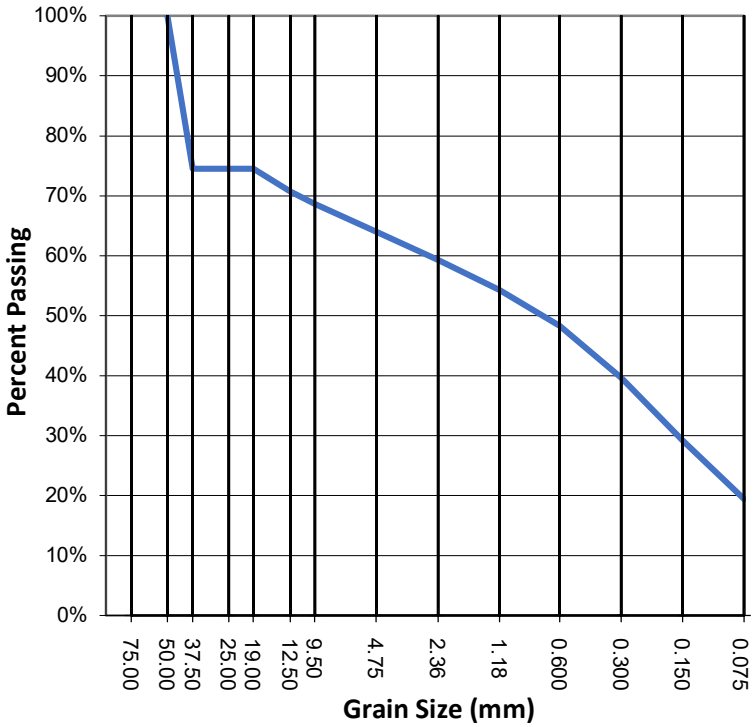
Client	Celtic Engineering Ltd.	**Project No.**	25-H-014
Project	Esler Field Complex Road	**Sieve Report No.**	SI03

Sample Details

Supplier	Existing	**Sampling Date**	April 23, 2025
Source	TP25-05	**Date Received**	April 24, 2025
Location	1.2 m	**Date Tested**	April 25, 2025
Description	Sand, Gravelly, some Fines	**Sampled By**	MW
Specification		**Tested By**	SD

Sieve Size (mm)	Percent Passing	Specifications	
		Min	Max
75.0	100.0%		
50.0	100.0%		
37.5	74.5%		
25.0	74.5%		
19.0	74.5%		
12.5	70.7%		
9.5	68.6%		
4.75	64.0%		
2.36	59.3%		
1.18	54.3%		
0.600	48.3%		
0.300	39.7%		
0.150	29.2%		
0.075	19.4%		

Moisture Content 7.5%



Comments

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Sieve Analysis

Reference ASTM C117 and C136

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Project Details

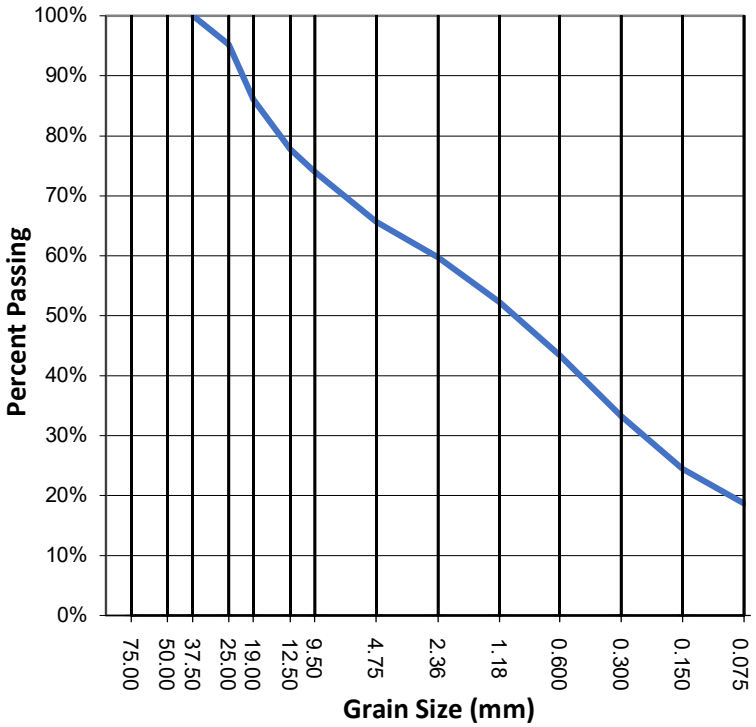
Client	Celtic Engineering Ltd.	**Project No.**	25-H-014
Project	Esler Field Complex Road	**Sieve Report No.**	SI04

Sample Details

Supplier	Existing	**Sampling Date**	April 23, 2025
Source	TP25-07	**Date Received**	April 24, 2025
Location	1.0 m	**Date Tested**	April 25, 2025
Description	Sand, Gravelly, some Fines	**Sampled By**	MW
Specification		**Tested By**	SD

Sieve Size (mm)	Percent Passing	Specifications	
		Min	Max
75.0	100.0%		
50.0	100.0%		
37.5	100.0%		
25.0	95.2%		
19.0	86.1%		
12.5	77.7%		
9.5	74.0%		
4.75	65.6%		
2.36	59.8%		
1.18	52.2%		
0.600	43.4%		
0.300	33.3%		
0.150	24.4%		
0.075	18.7%		

Moisture Content 15.2%



Comments

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Sieve Analysis

Reference ASTM C117 and C136

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Project Details

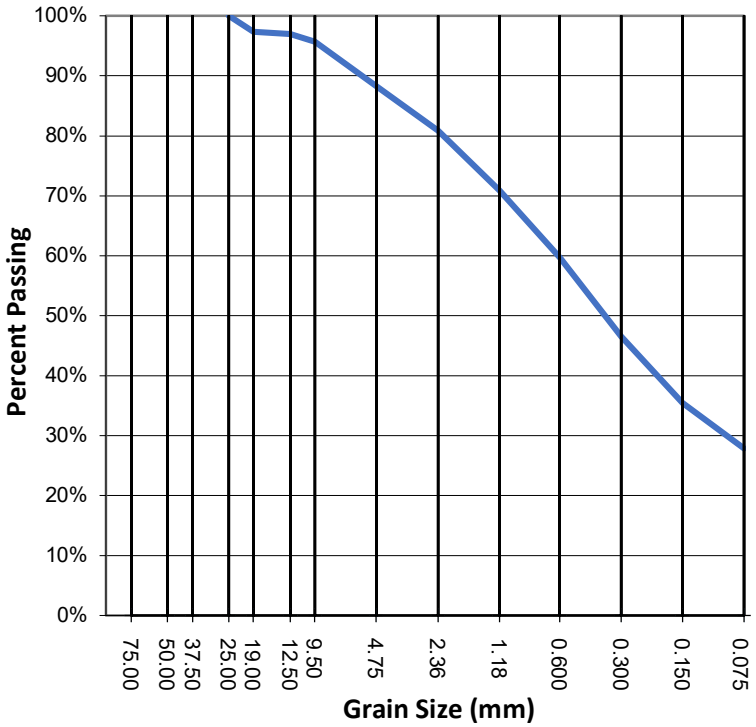
Client	Celtic Engineering Ltd.	**Project No.**	25-H-014
Project	Esler Field Complex Road	**Sieve Report No.**	SI05

Sample Details

Supplier	Existing	**Sampling Date**	April 23, 2025
Source	TP25-09	**Date Received**	April 24, 2025
Location	1.1 m	**Date Tested**	April 25, 2025
Description	Sand, some Gravel, some Silt, trace Clay	**Sampled By**	MW
Specification		**Tested By**	SD

Sieve Size (mm)	Percent Passing	Specifications	
		Min	Max
75.0	100.0%		
50.0	100.0%		
37.5	100.0%		
25.0	100.0%		
19.0	97.4%		
12.5	97.0%		
9.5	95.7%		
4.75	88.3%		
2.36	80.9%		
1.18	70.9%		
0.600	59.8%		
0.300	46.5%		
0.150	35.4%		
0.075	27.9%		

Moisture Content 12.3%



Comments

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Particle Size Distribution Analysis

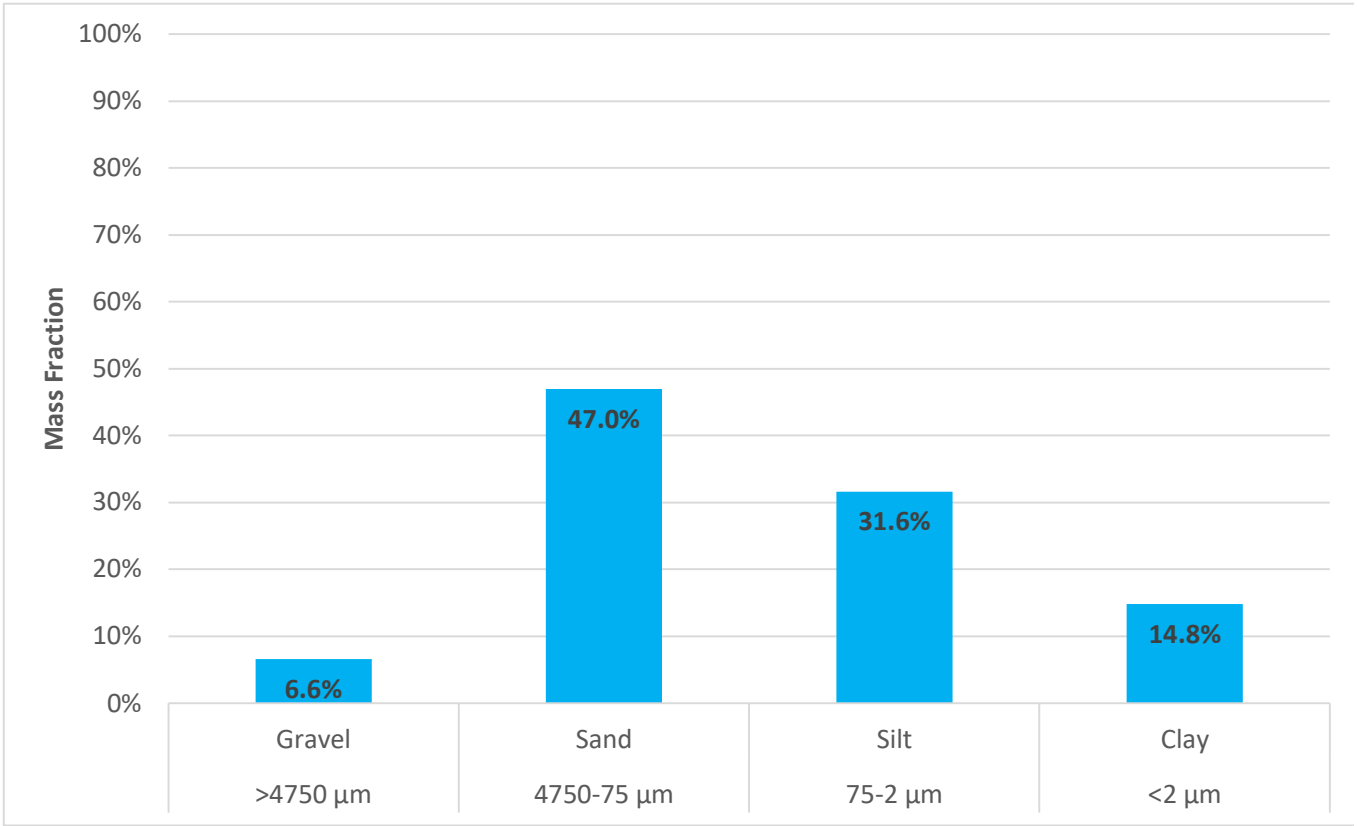
Reference ISO 13317-1 and ISO 13317-2.

Project Details

Client	Celtic Engineering Ltd.	**Project No.**	25-H-014
Project	Esler Field Complex Road	**PSD Report No.**	1

Sample Details

Source	TP25-03	**Sampling Date**	April 24, 2025
Depth	1.2 m	**Date Received**	April 25, 2025
Major Component(s)	Silty Sand some Clay trace Gravel	**Date Tested**	April 29, 2025
Tested By	SD	**Sampled By**	MW



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Particle Size Distribution Analysis

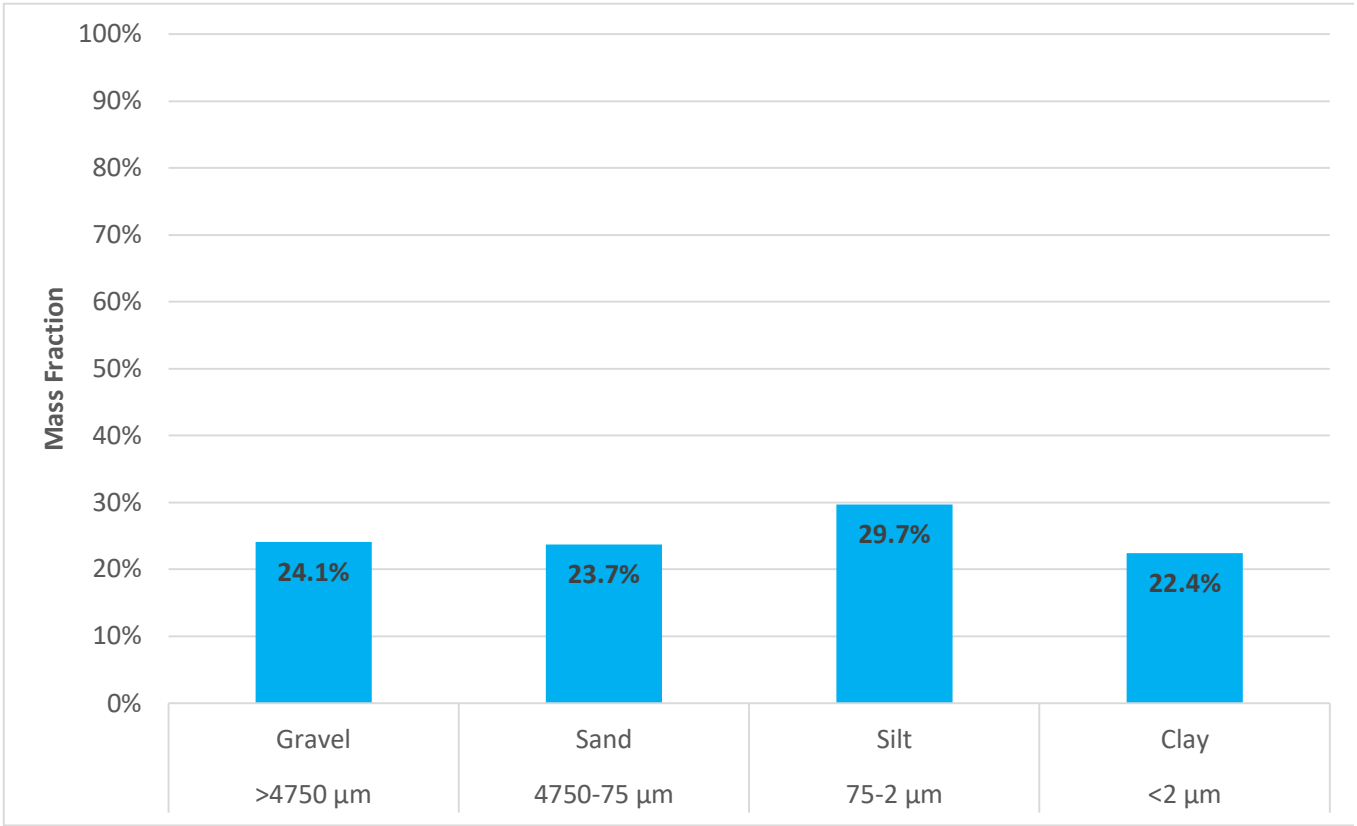
Reference ISO 13317-1 and ISO 13317-2.

Project Details

Client	Celtic Engineering Ltd.	**Project No.**	25-H-014
Project	Esler Field Complex Road	**PSD Report No.**	2

Sample Details

Source	TP25-12	**Sampling Date**	April 24, 2025
Depth	0.6 m	**Date Received**	April 25, 2025
Major Component(s)	Till	**Date Tested**	April 29, 2025
Tested By	SD	**Sampled By**	MW



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Liquid Limit, Plastic Limit and Plasticity Index of Soils

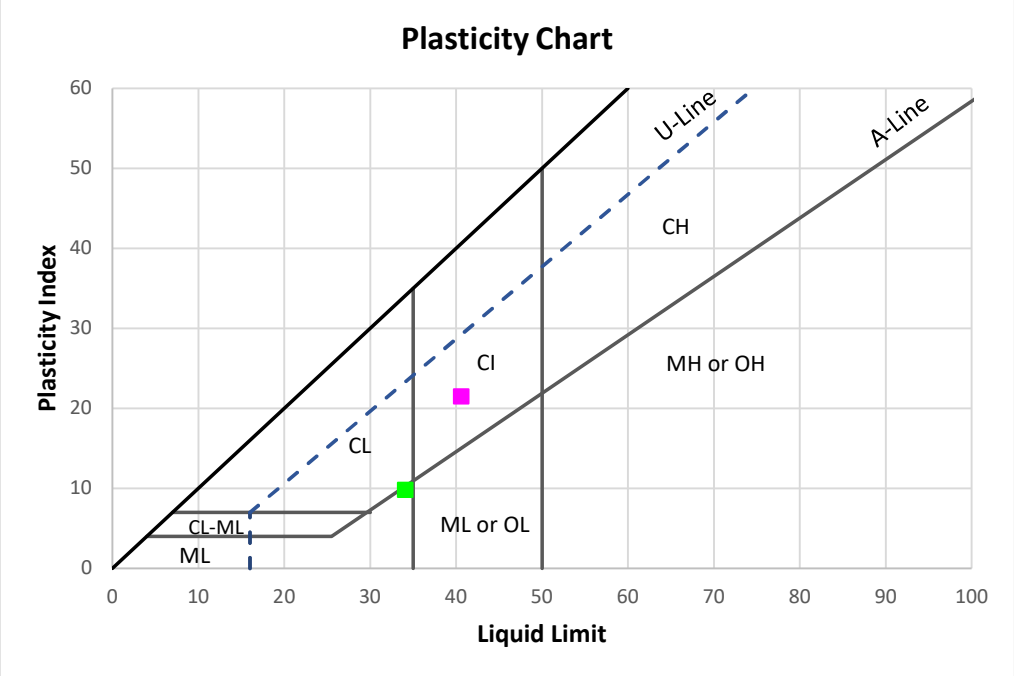
Reference ASTM D4318

Project Details

Client	Cetlic Engineering Ltd.	**Project No.**	25-H-014
Project	Esler Field Complex Road	**Location**	Williams Lake, BC

Sample Details

Sample Date	November 26 - 28, 2024	**Test Date**	December 5, 2024
Sampled By	CM	**Tested By**	SD



Symbol	Sample ID	Location	Depth (m)	Passing 425 µm (%)	Natural Moisture (%)	Liquid Limit	Plastic Limit	Plasticity Index	Soil Type
	1	TP25-03	1.2	30.9%	15.5	34.1	24.3	9.8	ML/CL
	2	TP25-12	0.6	35.7%	19.4	40.6	19.1	21.5	CI

NP - Non-Plastic result
ND - Not Determined

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Moisture Density Relationship

Reference ASTM D698 & D1557

Project Details

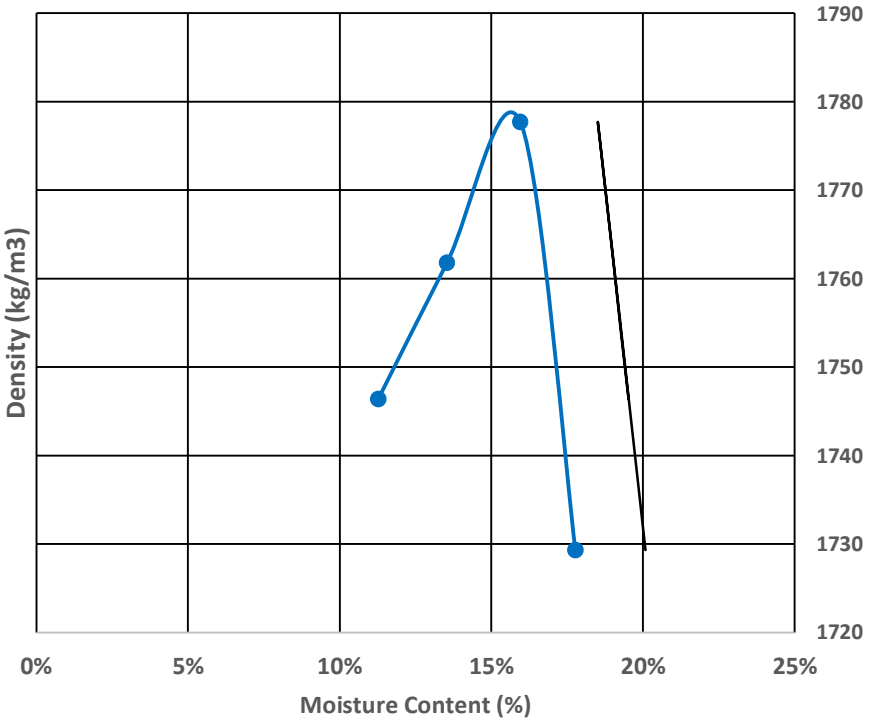
Client	Celtic Engineering Ltd.	**Proctor Report No.**	1
Project	Esler Field Complex Road	**Project No.**	25-H-014

Sample Details

Supplier	Existing	**Compaction Standard**	Standard Proctor ASTM D698
Source	TP25-15	**Rammer Type**	Manual
Sample Location	1.2 m	**Compaction Procedure**	C: 152.4 mm Mold, Passing 19mm
Sampled By	MW	**Oversize Correction Method**	ASTM 4718
Tested By	SD	**Retained on 19 mm**	7%
Date Sampled	April 23, 2025	**Oversized Specific Gravity**	2.65
Date Received	April 24, 2025	**Field Mositure Content**	11.3%
Date Tested	April 25, 2025	**Number of Trials**	4
Material ID	Till		

Trial No.	Wet Density (kg/m3)	Dry Density (kg/m3)	Moisture Content (%)
1	1943	1746	11.3%
2	2000	1762	13.5%
3	2061	1778	16.0%
4	2037	1729	17.8%
5			
6			

ZAV Curve using Specific Gravity of 2.65	Max Dry Density (kg/m3)	Optimum Moisture Content (%)
Calculated	1778	16.0
Oversize Correction	1815	15.0



Comments:

Refer to CBR Report No. 1

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California Bearing Ratio of Laboratory Compaced Soils

Reference ASTM D1883

Project Details

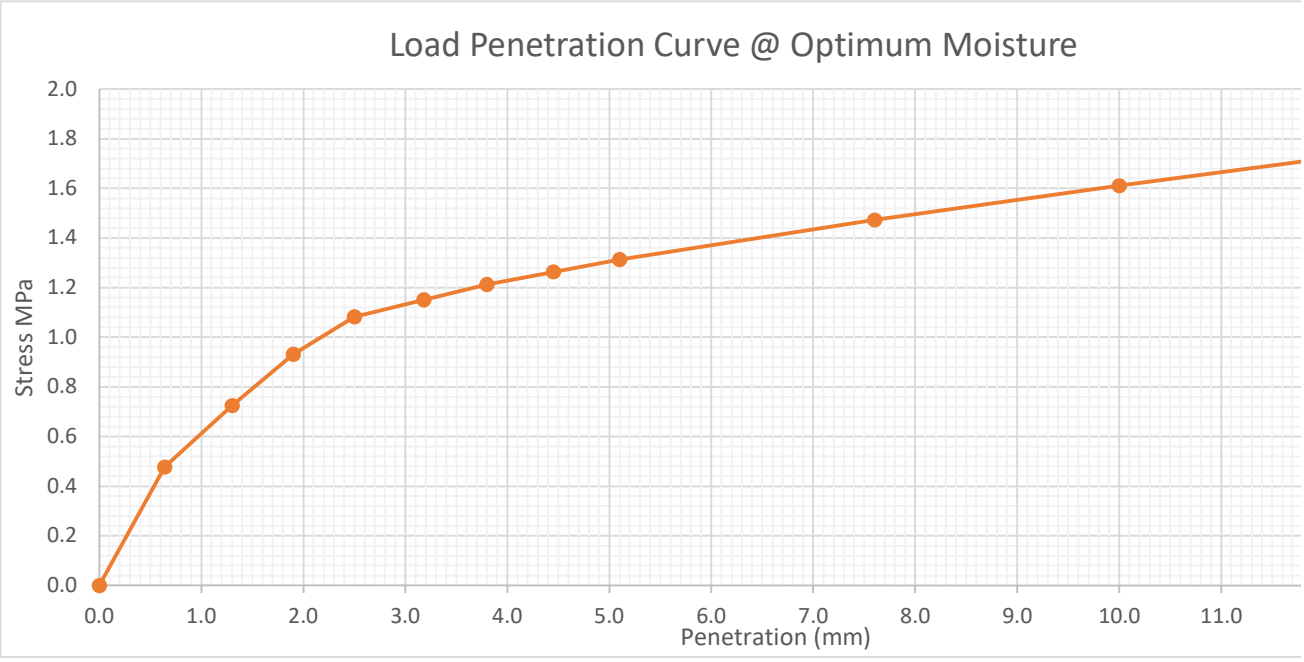
Client	Celtic Engineering Ltd.	**Project No.**	
Project	Esler Field Complex Road	**Report No.**	

Sample Details

Supplier	Existing	**Sampling Date**	
Source	TP25-15	**Date Received**	
Location	1.2 m	**Testing Date**	
Description	Till	**Sampled By**	
		Tested By	

Sample Results

CBR @ 2.5 mm	15.7	Dry Unit Weight (KN/m3)
CBR @ 5.1 mm	12.8	Max Dry Unit Weight (KN/m3)
Percent Retained on 19 mm	6.8	Optimum Moisture
Soaked Moisture	24.2%	Surcharge Load (KG)



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Comments:
Refer to Moisture Density Report No. 1

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25-H-014
1

April 23, 2025
April 24, 2025
April 29, 2025
MW
SD

1790
1790
16.1%
4.54

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