Ministry of Forests, Lands and Natural Resource Operations
Omineca Region
Nadina Resource District

Kager Lake Rec. Site
@ Boer Mtn, Burns Lake BC
Loop Road and Camp Site Layout

Stations: 0+000.00 to 0+505.99

ROAD DESIGN SPECIFICATIONS
Design Speed: 30 km/h Avg. Finished Road Width: 5.0m Avg. Subgrade width 5.6m Fav. Grade Max. 10% Adv. Grade Max 10%

Plan Scale 1:500

Profile Vert Scale 1:100
Profile Horz Scale 1:1000

Project Location Coordinates
Latitude: 54-14-33
Longitude: -125-42-10
Elevation: 840m
Datum: NAD83
UTM Combined Scale Factor:
n/a

Notes:
- Ground model data obtained by Lidar Survey method by McElhanney Survey Consulting Ltd. June 2014
- Stripping assumed to be 0.2m

Survey Control Stations

Point Name	Northing	Easting	Elevation	Description
BASE2	6013902.260	323899.0185	843.505	Steel spike with witness stake

Plan Legend (all may not be applicable)

- L-line Location
- Road Edges
- Clearing Limits
- Culverts
- GPS Base Station
- Old Iron Bar found (tied)
- Old Pipe Post found (tie
- Survey Control Points tie
- Benchmark
- Edge of Wetland
- Existing Road Edges
- Breakline
- Powerline
- Draw
- Test Pit
- Stream
- Tension Crack
- Timberline
- Cut / Fill limits
- Powerpole

Profile Legend

- Finished Road Surface
- Profile Subgrade
- Cut / Fill limits
- Original Ground
- 1st Stratum
- 2nd Stratum (Rock)
- Ditch Invert Right
- Ditch Invert Left

	Cut	Fill
Parking_Lot	75	8
Site 1	44	6
Site 2	361	26
Site 3	9	92
Site 4	76	19
Site 5-6	40	276
Site 7	144	149
Site 8	226	25
Site 9	26	62
Site 10	397	136
Site 11-12	25	148
Volume of sites	1423	947
Loop Road	808	828
Total (bm)	2231	1775

	Cut	Fill
Tent 1	16	6
Tent 2	11	10
Tent 3	18	7
Tent 4	23	14
Total (bm)	68	37

EARTH WORK VOLUMES (Bank cubic meters)

L-Stn m.	Strip V. Cu. m.	Lyr1 V. Cu. m.	Lyr2 V. Cu. m.	SG Fill V. Cu. m.	B/W Vol. Cu. m.	Srf1 Fill V. Cu. m.
0+000.00	147.7	49.9	0.0	79.4		106.2
0+100.00	172.4	233.3	0.0	245.9		106.2
0+200.00	167.1	195.8	0.0	212.6		106.2
0+300.00	150.6	97.9	0.0	74.4		106.2
0+400.00	176.5	230.1	0.0	202.0		106.2
0+500.00	9.5	1.7	0.0	12.7		6.4
0+505.99						
Pg. Tot.	823.8	808.7	0.0	827.0	0.0	537.4
Cum. Tot.	823.8	808.7	0.0	827.0	0.0	537.4

CULVERT TABLE

L-Stn m.	Cul DIA mm.	Cul Len m.	Cul Len L m.	Cul Len R m.	Cul Skew deg.	Cul Cmt
0+112.84	500	10.00	5.00	5.00	91	
0+262.00	500	11.00	5.50	5.50	92	
0+421.67	500	14.00	8.00	6.00	98	

SOIL TYPES

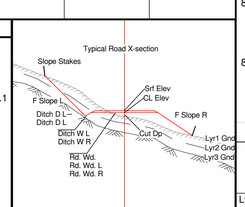
OB - Overburden
OR - Organics
OM - Parent material
SL - Silt
FS - Fine Sand & Silt
SA - Sand
SG - Sand & Gravel
CG - Sand & Course Gravel
SC - Sand/Cobbles/Gravel
GR - Gravel
BO - Boulders
FR - Fractured Rock (Talus)
RR - Rippable Rock
SR - Solid Rock

ROAD TEMPLATES

TP = Taper template
5m = 5.0m wide finished running surface
4m = 4.0m wide finished running surface

Surfacing depth = 0.2m
Ditch Slopes = 1.5:1 Ditch Depth = 0.2 Width = 0.1

F Slope = Final Slope Left or Right
Cut slopes 1.5:1
Fill slopes 2.0:1

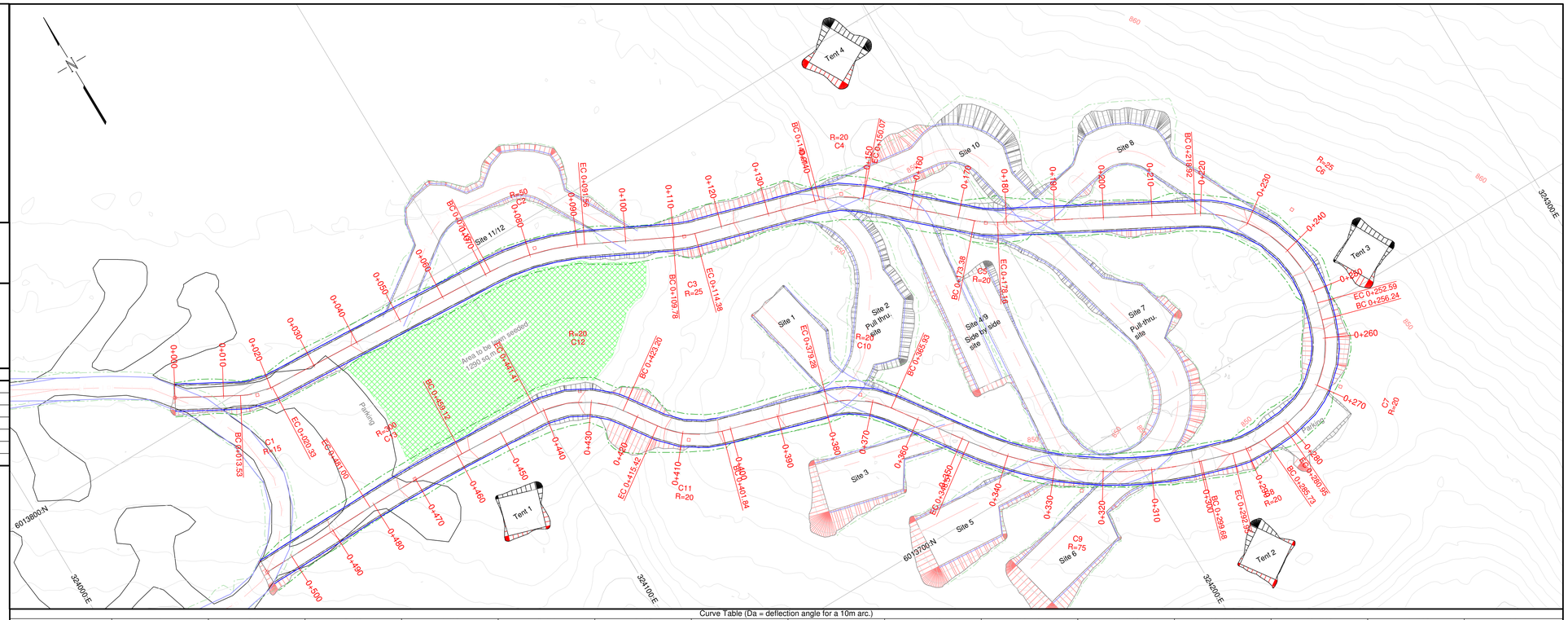


Revision	Description	Date	By	Approved	Revision

Dwg Num: 2018-741-01 Page 1 of 1

Survey By: see Notes above	---
Design By: L.N.Higgs	Sept. 2018
Approved By:	

Plot Date:18/10/03 Design File Name: C:\Data\Survey\Job741\Kager_Lake_Rec_Site.dsnx



Curve Table (Da = deflection angle for a 10m arc.)

	1	2, C1	3, C2	4, C3	5, C4	6, C5	7, C6	8, C7	9, C8	10, C9	11, C10	12, C11	13, C12	14, C13	15
IP Stn.	0+000.00	0+016.99	0+081.49	0+112.09	0+145.58	0+175.78	0+238.86	0+270.45	0+289.38	0+325.00	0+372.86	0+408.90	0+432.99	0+470.07	0+505.99
IP X	324036.82	324051.67	324116.20	324143.84	324176.05	324198.55	324254.01	324243.81	324221.21	324187.09	324158.20	324123.09	324109.00	324070.60	324034.67
IP Y	6013805.84	6013797.59	6013794.10	6013780.31	6013771.10	6013750.70	6013720.59	6013684.19	6013682.79	6013693.30	6013733.70	6013743.90	6013764.10	6013766.07	6013765.29
BC Stn.		0+013.53	0+071.13	0+109.78	0+140.91	0+173.38	0+218.92	0+256.24	0+285.73	0+299.68	0+365.93	0+401.84	0+423.20	0+459.12	
Arc. Len.(L)		6.80	20.44	4.61	9.16	4.78	33.66	24.71	7.21	48.83	13.34	13.58	18.21	21.88	
EC Stn.		0+020.33	0+091.56	0+114.38	0+150.07	0+178.16	0+252.59	0+280.95	0+292.95	0+348.51	0+379.28	0+415.42	0+441.41	0+481.00	
Radius (R)		15.00	50.00	25.00	20.00	20.00	25.00	20.00	20.00	75.00	20.00	20.00	20.00	300.00	
Angle (+/-l)		-25:57:32	23:25:04	-10:33:16	26:14:18	-13:41:52	77:09:15	70:48:05	20:40:04	37:18:20	-38:13:44	38:53:52	-52:09:42	-4:10:42	
Tangent (T)		3.46	10.36	2.31	4.66	2.40	19.94	14.21	3.65	25.32	6.93	7.06	9.79	10.94	
Da, a=10.00		38:11:50	11:27:33	22:55:06	28:38:52	28:38:52	22:55:06	28:38:52	28:38:52	7:38:22	28:38:52	28:38:52	28:38:52	1:54:35	
Design Speed		5.00	5.00	10.00	5.00	5.00	5.00	10.00	10.00	10.00	5.00	5.00	5.00	5.00