



PROJECT NAME: TELKWA 62.20

BULKLEY RIVER CROSSING WIDENING OF 24.0m SPAN, TPG BRIDGE

CNRAIL0802

PAGE NO

OF

TASK: 7.1. PILES

DGT

CHECKED BY:

SUBTASK: 7.1.3.GEOTECHNICAL DESIGN

DATE:

DATE:

12/312008

Geotechnical Design is being prepared by BGC Engineering , and this is just to confirm or to modify required Embedment length.

GEOTECHNICAL REPORT by

GEOTECHNICAL investigation for Mile 62.2 Telkwa Subdivision ner Topley bridge by BGC Engineering Inc. dated january 07, 2008

TABLE: Element Forces - Frames

Frame	OutputCase	P	V2	V3	T	M2	M3
Text	Text	KN	KN	KN	KN-m	KN-m	KN-m
1	SERV_GROUP_I	-443.107	16.62	-0.53	-7.14E-06	-1.9376	35.844
23	SERV_GROUP_I	-443.104	16.618	0.53	7.137E-06	1.9373	35.84
45	SERV_GROUP_I	-540.643	-0.987	11.291	-7.4E-16	21.9419	-4.3177
67	SERV_GROUP_I	-523.399	-0.588	11.316	-4.41E-16	22.0406	-2.5745
89	SERV_GROUP_I	-517.053	0.0001	11.327	4.776E-15	22.0823	0.000519
111	SERV_GROUP_I	-523.402	0.589	11.317	4.413E-16	22.0414	2.5755
133	SERV_GROUP_I	-540.649	0.987	11.291	1.02E-14	21.9433	4.3188
168	SERV_GROUP_I	-87.592	15.271	0.481	6.713E-16	1.7862	34.0949
190	SERV_GROUP_I	-69.188	15.304	0.369	4.514E-15	1.3708	34.2605
222	SERV_GROUP_I	-59.919	15.319	0.137	2.633E-16	0.5078	34.3355
244	SERV_GROUP_I	-59.918	15.316	-0.136	-8.48E-15	-0.507	34.3276
270	SERV_GROUP_I	-69.185	15.301	-0.369	-7.72E-16	-1.37	34.2539
294	SERV_GROUP_I	-87.586	15.268	-0.481	-1.02E-15	-1.7855	34.0892

Frame	OutputCase	P	V2	V3	T	M2	M3
Text	Text	KN	KN	KN	KN-m	KN-m	KN-m
1	SERV_GROUP_II	-381.842	14.824	8.45	7.931E-05	19.683	33.11
23	SERV_GROUP_II	-327.126	11.767	9.298	9.073E-05	22.7829	24.2376
45	SERV_GROUP_II	-408.446	-15.07	8.366	-6.31E-15	15.9332	-43.6326
67	SERV_GROUP_II	-406.67	-14.76	8.716	-6.08E-15	16.8133	-42.2784
89	SERV_GROUP_II	-413.642	-14.29	9.062	-1.92E-15	17.6659	-40.237
111	SERV_GROUP_II	-430.771	-13.81	9.39	-5.37E-15	18.4526	-38.1584
133	SERV_GROUP_II	-456.587	-13.49	9.7	3.27E-15	19.1752	-36.7234
168	SERV_GROUP_II	-58.1	10.836	9.297	-5.11E-14	23.1927	23.1781
190	SERV_GROUP_II	-48.846	11.47	9.151	-3.03E-14	22.6511	25.1105
222	SERV_GROUP_II	-45.796	11.998	8.964	-3.08E-14	21.9542	26.7031
244	SERV_GROUP_II	-50.073	12.511	8.745	-3.92E-14	21.1423	28.2276
270	SERV_GROUP_II	-61.852	13.015	8.561	-2.87E-14	20.4584	29.7008
294	SERV_GROUP_II	-82.042	13.594	8.528	-4.54E-14	20.3353	31.3684

Frame	OutputCase	P	V2	V3	T	M2	M3
Text	Text	KN	KN	KN	KN-m	KN-m	KN-m
1	SERV_GROUP_III	-467.127	52.206	6.767	6.243E-05	15.4117	139.1454
23	SERV_GROUP_III	-390.686	50.27	7.705	7.492E-05	18.7944	133.5254
45	SERV_GROUP_III	-641.211	-12.5	32.197	-5.22E-15	72.8961	-36.0696
67	SERV_GROUP_III	-641.34	-12.15	32.393	-4.96E-15	73.4119	-34.5436
89	SERV_GROUP_III	-651.01	-11.62	32.603	1.378E-14	73.9359	-32.2786
111	SERV_GROUP_III	-671.632	-11.09	32.82	-4.17E-15	74.4468	-29.9704
133	SERV_GROUP_III	-701.719	-10.72	33.039	3.331E-14	74.9391	-28.3555
168	SERV_GROUP_III	185.543	47.652	7.595	-3.97E-14	18.8392	129.7882
190	SERV_GROUP_III	189.661	47.992	7.444	-7.2E-15	18.275	130.8737
222	SERV_GROUP_III	188.166	48.296	7.261	-2.35E-14	17.587	131.8119
244	SERV_GROUP_III	179.328	48.612	7.047	-6.16E-14	16.7829	132.7564
270	SERV_GROUP_III	162.913	48.967	6.865	-2.34E-14	16.0947	133.7826
294	SERV_GROUP_III	136.935	49.397	6.801	-3.65E-14	15.855	134.9934

189.7 kN	maximum tension
-702 kN	maximum compression