

TRIBHUWAN UNIVERSITY
INSTITUTE OF ENGINEERING
PULCHOWK CAMPUS
DEPARTMENT OF CIVIL ENGINEERING

SURVEY INSTRUCTION COMMITTEE
RL TRANSFER TO BRIGDE STATION A

Bridge Station to TBM2 [Forward]														
Stations Chainage	BS			Mean BS	S1	FS			Mean FS	S2	Rise	Fall	Stadia Interval	Horizontal Distance
	Top	Mid	Bottom			Top	Mid	Bottom						
BS A	1.245	1.215	1.185	1.215	0.06								0.06	6
TP1	1.195	1.156	1.118	1.15633	0.077	0.665	0.637	0.605	0.63567	0.06	0.57933		0.137	13.7
TP2	1.916	1.903	1.888	1.90233	0.028	0.982	0.947	0.912	0.947	0.07	0.20933		0.098	9.8
TP3	1.752	1.729	1.701	1.72733	0.051	0.654	0.641	0.627	0.64067	0.027	1.26167		0.078	7.8
TP4	1.865	1.835	1.805	1.835	0.06	0.743	0.721	0.695	0.71967	0.048	1.00767		0.108	10.8
TP5	1.53	1.507	1.485	1.50733	0.045	0.981	0.963	0.945	0.963	0.036	0.872		0.081	8.1
TP6	1.5	1.43	1.36	1.43	0.14	1.081	1.059	1.038	1.05933	0.043	0.448		0.183	18.3
TP7	1.397	1.328	1.26	1.32833	0.137	1.26	1.19	1.121	1.19033	0.139	0.23967		0.276	27.6
TP8	1.355	1.285	1.215	1.285	0.14	1.005	0.935	0.864	0.93467	0.141	0.39367		0.281	28.1
TP9	1.443	1.407	1.375	1.40833	0.068	1.633	1.558	1.485	1.55867	0.148		0.27367	0.216	21.6
TP10	1.389	1.233	1.279	1.30033	0.11	0.686	0.65	0.617	0.651	0.069	0.75733		0.179	17.9
TBM2						1.956	1.898	1.845	1.89967	0.111		0.59933	0.111	11.1
Σ				16.0953					11.1997		5.76867	0.873		180.8

Arithmetic Check:	
ΣBS - ΣFS	4.89567
ΣRise - ΣFall	4.89567

Bridge Station to TBM2 [Backward]														
Stations Chainage	BS			Mean BS	S1	FS			Mean FS	S2	Rise	Fall	Stadia Interval	Horizontal Distance
	Top	Mid	Bottom			Top	Mid	Bottom						
TBM 2	1.99	1.941	1.89	1.94033	0.1								0.1	10
TP1	0.714	0.678	0.643	0.67833	0.071	1.484	1.434	1.38	1.43267	0.104	0.50767		0.175	17.5
TP2	1.345	1.3	1.256	1.30033	0.089	1.447	1.408	1.368	1.40767	0.079		0.72933	0.168	16.8
TP3	1.279	1.25	1.181	1.23667	0.098	1.077	1.031	0.985	1.031	0.092	0.26933		0.19	19
TP4	0.946	0.905	0.869	0.90667	0.077	1.275	1.226	1.175	1.22533	0.1	0.01133		0.177	17.7
TP5	1.109	1.035	0.967	1.037	0.142	1.255	1.218	1.18	1.21767	0.075		0.311	0.217	21.7
TP6	0.839	0.787	0.736	0.78733	0.103	1.235	1.166	1.098	1.16633	0.137		0.12933	0.24	24
TP7	0.731	0.713	0.695	0.713	0.036	1.804	1.752	1.702	1.75267	0.102		0.96533	0.138	13.8
TP8	0.743	0.723	0.703	0.723	0.04	1.544	1.524	1.505	1.52433	0.039		0.81133	0.079	7.9
TP9	0.877	0.864	0.85	0.86367	0.027	1.825	1.802	1.787	1.80467	0.038		1.08167	0.065	6.5
TP10	1.005	0.974	0.94	0.973	0.065	1.838	1.821	1.807	1.822	0.031		0.95833	0.096	9.6
TP11	1.129	1.091	1.054	1.09133	0.075	1.572	1.538	1.505	1.53833	0.067		0.56533	0.142	14.2
TP12	0.868	0.857	0.84	0.855	0.028	0.981	0.947	0.914	0.94733	0.067	0.144		0.095	9.5
BS A						1.154	1.144	1.134	1.144	0.02		0.289	0.02	2
Σ				13.1057					18.014		0.93233	5.84067		190.2

Arithmetic Check:	
ΣBS - ΣFS	-4.90833
ΣRise - ΣFall	-4.90833

Mean Height Difference	4.902
Discrepancy	0.01267
Required Precision	0.01043

RL of TBM2	1309.768
∴ RL of station A	1304.866