Tribhuwan University

Institute of Engineering

Central Campus, Pulchowk
Department of Civil Engineering
Survey Instruction Committee

HCR & Distance Observation

From	То	HCR; Set-I	H. Angle	HCR; Set-II	H. Angle	Mean H. Angle	H. Distance	Mean	H. Distance Precision	V. Distance	Pole Ht.
	M2	00°00'00''	201°27'05''	90°00'00''	201°27'06''	201°27'06''	105.981	105.974	7065	3.670	1.400
M3 -		180°00'00''		270°00'02''						3.670	1.400
IVIS	M4	201°27'03''		291°27'06''			113.554	113.545	6308	-3.529	1.285
		381°27'07''		471°27'08''						-3.329	1.203
	M3	00°00'00''		90°00'00''	158°07'15''	158°07'13''	113.536			3.746	1.400
M4	IVI3	180°00'12''	158°07'11''	270°00'04''						3.740	1.400
1014	M5	158°07'24"	138 0/ 11	248°07'18''			121.376	121.381	12138	-4.942	1.600
	IVIO	338°07'09''		428°07'16''						-4.942	1.600
	M4 -	00°00'00''	137°36'34''	90°00'00''	137°36'25''	137°36'30''	121.386			5.149	1.400
M5 -		180°00'03''		180°00'01''						3.149	1.400
	M6 -	137°36'44''		227°36'22"			78.108	78.104	8678	-7.763	1.300
		317°36'28''		317°36'28''						-7.705	1.500
	M5	00°00'00''	148°52'36''	90°00'00''	148°52'37''	148°52'36''	78.099			7.552	1.300
M6		179°59'56''		270°00'04''						7.552	1.300
IVIO	M7	148°52'40''		238°52'35"			61.790	61.790	61790	-3.870	1.300
		328°52'28"		418°52'42''						-3.670	1.300
	M6	00°00'00''	161°35'25''	90°00'00''	161°35'26''	161°35'26''	61.789			3.750	1.350
M7		179°59'56''		270°00'04''						3.730	1.550
1017	M8	161°35'26"		251°35'25"			102.340	102.342	34114	3.636	1.305
		341°35'20"		431°35'32''						3.030	1.303
	M7	00°00'00''	258°33'07''	90°00'00''	258°33'10''	258°33'09''	102.343			-3.384	1.330
M8		180°00'12''		270°00'08''						-3.364	1.550
IVIO	М9	258°33'21''	230 33 07	348°33'12" 528°33'16"			88.996	88.997	88996	1.826	1.300
		438°33'05''								1.020	1.300

Tribhuwan University

Institute of Engineering

Central Campus, Pulchowk
Department of Civil Engineering
Survey Instruction Committee

HCR & Distance Observation

From	То	HCR; Set-I	H. Angle	HCR; Set-II	H. Angle	Mean H. Angle	H. Distance	Mean	H. Distance Precision	V. Distance	Pole Ht.
M9 -	M8	00°00'00''	143°49'34''	90°00'00''	143°49'31''	143°49'32''	88.997			-1.837	1.400
		179°59'54''		269°59'58''						2.007	21.100
	M10	143°49'31''		233°49'32''			64.726	64.722	8090	2.160	1.530
		323°49'30''		413°49'28''				I		2.100	1.550
	M9	00°00'00''		90°00'00''	127°18'32''	127°18'33''	64.718			-1.162	2.150
M ₁₀		180°00'12''	127°18'34''	270°00'01''						1.102	
""10"	M11	127°18'47''	12, 100.	217°18'35''			69.390	69.386	8673	-1.853	1.350
	IVITT	307°18'32''		397°18'30''							1.550
	M10	00°00'00''		90°00'00''	140°37'54''	140°37'54''	69.382			2.002	1.310
M11		180°00'00''	140°37'54''	270°00'07''				<u> </u>		2.002	1.510
'''11	M12	140°38'00''	140 37 34	230°37'56''			96.554	96.557	19311	10.017	2.100
	IVIIZ	320°37'48''		410°37'59''							
	M11	00°00'00''	174°15'09''	90°00'00''	- 174°15'11''	174°15'10''	96.559			-8.398	2.150
M12		180°00'14''		269°59'58''						0.000	
	M13	174°15'11''		264°15'08''			71.871	71.872	35936	0.812	2.100
	IVIIJ	354°15'21''		444°15'12''							
	M12	00°00'00''	98°31'26"	90°00'00''	98°31'13''	98°31'20"	71.873			-0.714	2.100
M13		179°59'54''		270°00'11''						0.714	2.100
14113	M14 —	98°31'24''		188°31'25''			78.024	78.021	11146	1.214	1.700
		278°31'22''		368°31'12''							
	M13	00°00'00''	- 260°37'07''	90°00'00''	· 260°36'59''	260°37'03''	78.017			-0.814	1.400
M14		179°59'59''		270°00'05''						-0.814	1.400
14114	M15	260°37'09''		350°37'06''			88.800	88.796	9866	1.127	1.300
		440°37'04''		530°36'58''							
M15 -	M14	00°00'00''	162°07'12'' -	90°00'00''	162°07'11''	162°07'11''	88.791			-1.258	1.300
		179°59'46''		269°59'57''						-1.236	1.500
	M16 -	162°07'06''		252°07'10''			112.032	112.033	112032	5.534	1.350
		342°07'04''		432°07'08''							

Tribhuwan University

Institute of Engineering

Central Campus, Pulchowk
Department of Civil Engineering
Survey Instruction Committee

HCR & Distance Observation

From	То	HCR; Set-I	H. Angle	HCR; Set-II	H. Angle	Mean H. Angle	H. Distance	Mean	H. Distance Precision	V. Distance	Pole Ht.
	M15	00°00'00''	121°26'19''	90°00'00''	121°26'22''	121°26'21''	112.033			-5.692	1.300
M16	IVIIJ	180°00'01''		270°00'03"						-3.032	1.500
INITO	M17	121°26'18''		211°26'22"			115.656	115.652	14456	2.542	1.350
		301°26'21''		391°26'25"						2.542	1.550
	M16	00°00'00''		90°00'00''	199°15'00''	199°15'03''	115.648			-2.807	1.300
M17	IVIIO	180°00'08''	199°15'05''	270°00'13''						2.007	1.500
IVII/	CP1	199°15'04''	199 13 03	289°15'08''			88.119	88.112	6294	5.220	1.800
	CFI	379°15'15''		469°15'05''						3.220	1.800
	M17	00°00'00''	114°54'53''	90°00'00''	· 114°54'57''	114°54'55''	88.105			-4.925	1.400
CP1	IVII/	180°00'10''		270°00'05"						-4.923	1.400
	CP2	114°55'02''		204°54'56''			126.755	126.747	7922	-2.743	1.550
		294°54'54''		384°55'03"						-2.743	1.550
	CP1	00°00'00''	191°31'43''	90°00'00''	4	191°31'37''	126.739			3.444	2.000
CP2		179°59'48''		269°59'55"						3.444	2.000
CF Z	M1	191°31'46''		281°31'33"			91.696	91.688	5393	-1.616	1.300
	IVII	371°31'28''		461°31'25"						-1.010	1.500
	CP2	00°00'00''	- 148°48'59''	90°00'00''	148°49'02''	148°49'00''	91.679			1.788	1.600
M1		179°59'52''		270°00'06''							
IVIT	M2	148°48'50''		238°49'03''			92.477	92.485	6166	-0.902	1.750
		328°49'00''		418°49'06''						-0.902	1.750
M2 -	M1	00°00'00''	110°33'37''	90°00'00''	- 110°33'36''	110°33'36''	92.492			1.186	1.600
		180°00'01''		270°00'02"						1.100	1.000
1412	М3 -	110°33'40''	110 33 37	200°33'36"			105.966	105.974	7065	-3.364	1.650
		290°33'34''		380°33'38''						-3,304	1.050