

**PERHITUNGAN SITUASI**

LOKASI :  
 PEKERJAAN : 0.0000000  
 PROYEK :

STA	TARG.	Tinggi Alat/ Patok		Sudut Horizontal				Azimuth	Bacaan benang			Sudut			Sudut Vertikal	Jarak Optis (meter)	Jarak Datar (meter)	d sin Δx	d cos Δx	Selisih Tinggi/(Δ H) (meter)	KOORDINATE		ELEVASI Z	ELEVASI Tanah (M)	Nomor Patok
												Vertikal									X	Y			
				°	'	"	°		Tengah	Atas	Bawah	°	'	"											
	UM			0	0	0	0.00	3.23862	0.000	0.000	0.000	0	0	0	0.00	0.000	0.000	0.000	0.000	1.455	0.000	0.000	0.000		UM
0+000		1.455	0.000																	531,846.000	9,399,096.000	50.000	50.000	0+000	
	0+050			110	28	4	110.47	290.468	1.000	1.250	0.750	91	32	39	91.54	50.000	49.964	-46.809	17.471	-0.891	531,799.191	9,399,113.471	49.109		0+050
	1						0.00	0.000			0.000				0.00	0.000	0.000	0.000	0.000	1.455	531,846.000	9,399,096.000	51.455	51.455	1
	2			201	27	33	201.46	201.459	1.000	1.025	0.975	93	36	26	93.61	5.000	4.980	-1.822	-4.635	0.142	531,844.178	9,399,091.365	50.142	50.142	2
	3			201	27	33	201.46	201.459	1.000	1.041	0.959	93	15	47	93.26	8.200	8.173	-2.990	-7.607	-0.009	531,843.010	9,399,088.393	49.991	49.991	3
	4			201	27	33	201.46	201.459	1.000	1.072	0.928	91	31	36	91.53	14.400	14.390	-5.264	-13.392	0.072	531,840.736	9,399,082.608	50.072	50.072	4
	5			201	27	33	201.46	201.459	1.200	1.262	1.138	90	53	54	90.90	12.400	12.397	-4.535	-11.538	0.061	531,841.465	9,399,084.462	50.061	50.061	5
	6			201	27	33	201.46	201.459	0.800	0.867	0.733	92	34	23	92.57	13.400	13.373	-4.892	-12.446	0.055	531,841.108	9,399,083.554	50.055	50.055	6
	7			201	27	33	201.46	201.459	1.500	1.640	1.360	89	24	57	89.42	28.000	27.997	-10.242	-26.056	0.240	531,835.758	9,399,069.944	50.240	50.240	7
	a			22	32	28	22.54	22.541	1.300	1.319	1.281	91	29	31	91.49	3.800	3.797	1.456	3.507	0.056	531,847.456	9,399,099.507	50.056	50.056	a
	0+000			0	0	0	0.00	107.02053	1.000	1.250	0.750	89	30	35	89.51	50.000	49.996	47.806	-14.635	0.908	531,846.000	9,399,096.000	50.000		0+000
0+050		1.480	0.000																	531,893.810	9,399,081.364	49.109	49.109	0+050	
	0+100			179	30	46	179.51	106.533	0.500	0.750	0.250	92	12	4	92.20	50.000	49.926	47.862	-14.208	-0.936	531,941.672	9,399,067.157	48.173		0+100
	1						0.00	-72.979			0.000				0.00	0.000	0.000	0.000	1.480	531,893.810	9,399,081.364	50.589	50.589	1	
	2			272	8	47	272.15	199.167	1.200	1.225	1.175	92	20	32	92.34	5.000	4.992	-1.639	-4.715	0.076	531,892.171	9,399,076.649	49.185	49.185	2
	3			272	8	47	272.15	199.167	1.000	1.042	0.958	93	18	32	93.31	8.400	8.372	-2.749	-7.908	-0.002	531,891.061	9,399,073.456	49.107	49.107	3
	4			272	8	47	272.15	559.167	0.500	0.562	0.438	93	59	5	93.98	12.400	12.340	-4.052	-11.656	0.125	531,889.758	9,399,069.708	49.234	49.234	4
	5			272	8	47	272.15	559.167	1.500	1.569	1.431	93	39	59	93.67	13.800	13.744	-4.512	-12.982	-0.897	531,889.298	9,399,068.383	48.212	48.212	5
	6			272	8	47	272.15	559.167	1.600	1.671	1.529	93	7	46	93.13	14.200	14.158	-4.648	-13.373	-0.892	531,889.162	9,399,067.991	48.217	48.217	6
	7			272	8	47	272.15	559.167	0.800	0.875	0.725	92	5	21	92.09	15.000	14.980	-4.918	-14.150	0.134	531,888.892	9,399,067.215	49.243	49.243	7
	a			90	6	44	90.11	377.133	1.300	1.315	1.285	93	33	8	93.55	3.000	2.988	0.880	2.856	-0.005	531,894.690	9,399,084.220	49.104	49.104	a
	0+050			0	0	0	0.00	106.53330	1.000	1.250	0.750	89	26	3	89.43	50.000	49.995	47.928	-14.227	0.954	531,893.810	9,399,081.364	49.109		0+050
0+100		1.460	0.000																	531,941.743	9,399,067.136	48.173	48.173	0+100	
	0+150			184	48	4	184.80	111.334	1.000	1.250	0.750	91	45	13	91.75	50.000	49.953	46.530	-18.174	-1.068	531,988.273	9,399,048.962	47.105		0+150
	1			271	59	45	272.00	198.529	1.000	1.023	0.977	92	39	21	92.66	4.600	4.590	-1.459	-4.352	0.248	531,940.284	9,399,062.783	48.421	48.421	1
	2			271	59	45	272.00	198.529	0.900	0.942	0.858	92	14	10	92.24	8.400	8.387	-2.665	-7.952	0.233	531,939.077	9,399,059.183	48.406	48.406	2
	3			271	59	45	272.00	198.529	0.700	0.751	0.649	93	51	15	93.85	10.200	10.154	-3.227	-9.628	0.079	531,938.516	9,399,057.508	48.252	48.252	3
	4			271	59	45	272.00	198.529	2.000	2.056	1.944	92	2	42	92.05	11.200	11.186	-3.555	-10.606	-0.939	531,938.188	9,399,056.530	47.234	47.234	4
	5			271	59	45	272.00	198.529	1.500	1.558	1.442	94	11	14	94.19	11.600	11.538	-3.667	-10.940	-0.880	531,938.076	9,399,056.196	47.293	47.293	5
	6			271	59	45	272.00	198.529	0.800	0.860	0.740	91	57	34	91.96	12.000	11.986	-3.809	-11.365	0.250	531,937.934	9,399,055.771	48.423	48.423	6
	7			271	59	45	272.00	198.529	1.200	1.280	1.120	88	14	3	88.23	16.000	15.985	-5.080	-15.156	0.752	531,936.663	9,399,051.979	48.925	48.925	7
	8			236	56	18	236.94	163.472	0.700	0.765	0.635	92	33	3	92.55	13.000	12.974	3.691	-12.438	0.183	531,945.434	9,399,054.698	48.356	48.356	8
	9			326	21	28	326.36	252.891	0.500	0.600	0.400	90	49	50	90.83	20.000	19.996	-19.111	-5.883	0.670	531,922.632	9,399,061.253	48.843	48.843	9
							0.00	-73.467			0.000				0.00	0.000	0.000	0.000	1.460	531,941.743	9,399,067.136	49.633	49.633		

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				°	'	"	°		Tengah	Atas	Bawah	°	'	"	°						X	Y			
	a			88	37	30	88.63	15.158	1.800	1.812	1.788	117	23	39	117.39	2.400	1.892	0.495	1.826	-1.113	531,942.237	9,399,068.962	47.060	47.060	a
	b			88	37	30	88.63	15.158	1.600	1.614	1.586	114	57	57	114.97	2.800	2.301	0.602	2.221	-1.021	531,942.344	9,399,069.357	47.152	47.152	b
	c			88	37	30	88.63	15.158	1.200	1.216	1.184	100	37	26	100.62	3.200	3.091	0.808	2.984	-0.300	531,942.551	9,399,070.119	47.873	47.873	c
	0+100			0	0	0	0.00	111.33441	1.000	1.250	0.750	89	19	47	89.33	50.000	49.993	46.567	-18.188	1.078	531,941.743	9,399,067.136	48.173		0+100
0+150		1.493	0.000																		531,988.316	9,399,048.945	47.105	47.105	0+150
	0+200			224	13	59	224.23	155.567	1.000	1.250	0.750	91	2	58	91.05	50.000	49.983	20.674	-45.507	-0.422	532,008.990	9,399,003.438	46.683		0+200
	1			292	18	18	292.31	223.639	1.000	1.026	0.974	95	48	19	95.81	5.200	5.147	-3.552	-3.725	-0.025	531,984.764	9,399,045.220	47.080	47.080	1
	2			292	18	18	292.31	223.639	0.900	0.950	0.850	93	53	17	93.89	10.000	9.954	-6.869	-7.204	-0.080	531,981.447	9,399,041.741	47.025	47.025	2
	3			292	18	18	292.31	223.639	0.800	0.874	0.726	92	14	48	92.25	14.800	14.777	-10.198	-10.694	0.114	531,978.118	9,399,038.251	47.219	47.219	3
	4			292	18	18	292.31	223.639	1.600	1.680	1.520	92	6	50	92.11	16.000	15.978	-11.027	-11.563	-0.696	531,977.290	9,399,037.382	46.409	46.409	4
	5			292	18	18	292.31	223.639	1.600	1.682	1.518	91	56	28	91.94	16.400	16.381	-11.305	-11.855	-0.662	531,977.011	9,399,037.090	46.444	46.444	5
	6			292	18	18	292.31	223.639	1.000	1.087	0.913	90	59	27	90.99	17.400	17.395	-12.004	-12.589	0.192	531,976.312	9,399,036.357	47.297	47.297	6
	7			289	57	9	289.95	221.287	0.500	0.578	0.422	93	18	33	93.31	15.600	15.548	-10.259	-11.683	0.097	531,978.057	9,399,037.262	47.202	47.202	7
	a			99	38	7	99.64	30.970	1.700	1.716	1.684	109	36	14	109.60	3.200	2.840	1.461	2.435	-1.105	531,989.778	9,399,051.380	46.000	46.000	a
	b			99	38	7	99.64	30.970	1.300	1.318	1.282	111	37	53	111.63	3.600	3.111	1.601	2.667	-0.873	531,989.917	9,399,051.612	46.232	46.232	b
	c			99	38	7	99.64	30.970	1.000	1.020	0.980	94	29	8	94.49	4.000	3.976	2.046	3.409	0.183	531,990.362	9,399,052.354	47.288	47.288	c
	e			195	15	37	195.26	126.595	0.800	0.835	0.765	96	17	15	96.29	7.000	6.916	5.553	-4.123	-0.060	531,993.869	9,399,044.822	47.045	47.045	e
	f			2	46	3	2.77	-65.898	0.500	0.599	0.401	92	14	8	92.24	19.800	19.770	-18.046	8.073	0.222	531,970.270	9,399,057.018	47.327	47.327	f
	g			342	17	17	342.29	273.622	0.500	0.609	0.391	91	53	44	91.90	21.800	21.776	-21.733	1.376	0.273	531,966.584	9,399,050.321	47.378	47.378	g
	h			1	5	42	1.10	-67.571	0.700	0.745	0.655	94	23	42	94.40	9.000	8.947	-8.270	3.414	0.109	531,980.046	9,399,052.359	47.214	47.214	h
	i			336	24	14	336.40	267.738	0.700	0.785	0.615	92	32	41	92.54	17.000	16.966	-16.953	-0.670	0.040	531,971.363	9,399,048.276	47.145	47.145	i
	j			211	41	2	211.68	143.018	0.700	0.762	0.638	94	20	51	94.35	12.400	12.329	7.416	-9.849	-0.139	531,995.733	9,399,039.097	46.966	46.966	j
	k			244	45	2	244.75	176.085	0.500	0.573	0.427	95	3	30	95.06	14.600	14.487	0.989	-14.453	-0.279	531,989.305	9,399,034.492	46.826	46.826	k
	l			215	47	37	215.79	147.128	0.500	0.630	0.370	92	27	19	92.46	26.000	25.952	14.086	-21.797	-0.118	532,002.402	9,399,027.148	46.987	46.987	l
	m			234	14	40	234.24	165.579	0.500	0.612	0.388	93	29	24	93.49	22.400	22.317	5.558	-21.614	-0.363	531,993.874	9,399,027.331	46.742	46.742	m
	n			220	36	19	220.61	151.940	0.500	0.693	0.307	91	51	10	91.85	38.600	38.560	18.138	-34.027	-0.253	532,006.455	9,399,014.918	46.852	46.852	n
	o			232	54	34	232.91	164.244	1.000	1.192	0.808	91	18	39	91.31	38.400	38.380	10.422	-36.938	-0.385	531,998.738	9,399,012.007	46.720	46.720	o
	0+150			0	0	0	0.00	155.56747	1.000	1.250	0.750	90	5	24	90.09	50.000	50.000	20.681	-45.522	0.421	531,988.316	9,399,048.945	47.105		0+150
0+200		1.500	0.000																		532,008.997	9,399,003.423	46.683	46.683	0+200
	0+250			210	35	41	210.59	186.162	1.000	1.250	0.750	91	8	43	91.15	50.000	49.980	-5.365	-49.691	-0.499	532,003.632	9,398,953.731	46.184		0+250
	1			300	36	41	300.61	276.179	1.100	1.127	1.073	93	48	24	93.81	5.400	5.376	-5.345	0.579	0.044	532,003.652	9,399,004.001	46.727	46.727	1
	2			300	36	41	300.61	276.179	0.600	0.645	0.555	95	45	19	95.76	9.000	8.909	-8.858	0.959	0.011	532,000.140	9,399,004.382	46.694	46.694	2
	3			300	36	41	300.61	276.179	0.500	0.570	0.430	93	44	1	93.73	14.000	13.941	-13.860	1.500	0.094	531,995.138	9,399,004.923	46.777	46.777	3
	4			300	36	41	300.61	276.179	1.200	1.272	1.128	92	43	26	92.72	14.400	14.367	-14.284	1.546	-0.382	531,994.713	9,399,004.969	46.301	46.301	4
	5			300	36	41	300.61	276.179	1.300	1.374	1.226	92	21	3	92.35	14.800	14.775	-14.689	1.590	-0.406	531,994.308	9,399,005.013	46.277	46.277	5
	6			300	36	41	300.61	276.179	1.000	1.083	0.917	90	39	24	90.66	16.600	16.598	-16.501	1.786	0.310	531,992.496	9,399,005.209	46.993	46.993	6
	a			115	29	56	115.50	91.066	1.300	1.310	1.290	101	32	3	101.53	2.000	1.920	1.920	-0.036	-0.176	532,010.917	9,399,003.387	46.507	46.507	a
	b			115	29	56	115.50	91.066	1.600	1.615	1.585	108	25	16	108.42	3.000	2.700	2.700	-0.050	-0.910	532,011.697	9,399,003.372	45.773	45.773	b
	c			115	29	56	115.50	91.066	0.700	0.728	0.672	99	49	5	99.82	5.600	5.437	5.436	-0.101	-0.114	532,014.434	9,399,003.321	46.569	46.569	c
	d			28	22	11	28.37	3.937	0.500	0.577	0.423	93	24	19	93.41	15.400	15.346	1.054	15.309	0.090	532,010.051	9,399,018.732	46.773	46.773	d
	0+200			0	0	0	0.00	186.16219	1.000	1.250	0.750	89	54	47	89.91	50.000	50.000	-5.367	-49.711	0.511	532,008.997	9,399,003.423	46.683		0+200

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												Vertikal									X	Y				
				°	'	"	°			Tengah	Atas	Bawah	°	'	"						°					
0+250			1.435	0.000																	532,003.630	9,398,953.712	46.184	46.184	0+250	
	0+300				179	53	24	179.89	186.052	1.000	1.250	0.750	90	44	37	90.74	50.000	49.992	-5.271	-49.713	-0.214	531,998.359	9,398,903.999	45.970		0+300
	1				276	29	25	276.49	282.652	0.900	0.924	0.876	93	10	32	93.18	4.800	4.785	-4.669	1.048	0.270	531,998.961	9,398,954.760	46.454	46.454	1
	2				276	29	25	276.49	282.652	0.700	0.742	0.658	93	20	40	93.34	8.400	8.371	-8.168	1.834	0.247	531,995.462	9,398,955.545	46.431	46.431	2
	3				276	29	25	276.49	282.652	0.700	0.761	0.639	92	36	27	92.61	12.200	12.175	-11.879	2.667	0.182	531,991.751	9,398,956.378	46.366	46.366	3
	4				276	29	25	276.49	282.652	1.500	1.562	1.438	91	12	43	91.21	12.400	12.394	-12.093	2.715	-0.327	531,991.537	9,398,956.426	45.857	45.857	4
	5				276	29	25	276.49	282.652	0.500	0.568	0.432	91	41	44	91.70	13.600	13.588	-13.258	2.976	0.533	531,990.372	9,398,956.688	46.717	46.717	5
	a				92	45	21	92.76	98.918	1.600	1.609	1.591	103	3	32	103.06	1.800	1.708	1.687	-0.265	-0.541	532,005.318	9,398,953.447	45.643	45.643	a
	b				92	45	21	92.76	98.918	1.000	1.013	0.987	102	30	25	102.51	2.600	2.478	2.448	-0.384	-0.089	532,006.078	9,398,953.327	46.095	46.095	b
	c				92	45	21	92.76	98.918	1.000	1.041	0.959	92	53	11	92.89	8.200	8.179	8.080	-1.268	0.024	532,011.711	9,398,952.444	46.208	46.208	c
	d				137	45	34	137.76	143.922	0.700	0.758	0.642	93	29	43	93.50	11.600	11.557	6.806	-9.340	0.032	532,010.436	9,398,944.371	46.216	46.216	d
	0+250				0	0	0	0.00	186.05219	1.000	1.250	0.750	90	14	28	90.24	50.000	49.999	-5.272	-49.720	0.230	532,003.630	9,398,953.712	46.184		0+250
0+300		1.440	0.000																			531,998.359	9,398,903.990	45.970	45.970	0+300
	1				272	1	42	272.03	278.081	0.800	0.825	0.775	93	3	59	93.07	5.000	4.986	-4.936	0.701	0.374	531,993.422	9,398,904.691	46.344	46.344	1
	2				272	1	42	272.03	278.081	0.700	0.741	0.659	92	15	37	92.26	8.200	8.187	-8.106	1.151	0.417	531,990.253	9,398,905.141	46.388	46.388	2
	3				272	1	42	272.03	278.081	0.800	0.855	0.745	91	42	40	91.71	11.000	10.990	-10.881	1.545	0.312	531,987.477	9,398,905.535	46.282	46.282	3
	4				272	1	42	272.03	278.081	1.500	1.558	1.442	91	33	10	91.55	11.600	11.591	-11.476	1.629	-0.374	531,986.882	9,398,905.620	45.596	45.596	4
	5				272	1	42	272.03	278.081	0.500	0.566	0.434	92	10	36	92.18	13.200	13.181	-13.050	1.853	0.440	531,985.308	9,398,905.843	46.410	46.410	5
	a				91	53	9	91.89	97.938	1.000	1.012	0.988	105	32	5	105.53	2.400	2.228	2.207	-0.308	-0.135	532,000.565	9,398,903.683	45.835	45.835	a
	b				91	53	9	91.89	97.938	1.000	1.015	0.985	112	25	15	112.42	3.000	2.564	2.539	-0.354	-0.464	532,000.898	9,398,903.636	45.506	45.506	b
	c				91	53	9	91.89	97.938	0.500	0.518	0.482	111	17	12	111.29	3.600	3.126	3.096	-0.432	-0.117	532,001.454	9,398,903.559	45.853	45.853	c
	d				91	53	9	91.89	97.938	0.700	0.748	0.652	98	3	29	98.06	9.600	9.411	9.321	-1.300	-0.566	532,007.680	9,398,902.691	45.404	45.404	d
	e				182	16	53	182.28	188.334	0.500	0.571	0.429	94	9	38	94.16	14.200	14.125	-2.047	-13.976	-0.082	531,996.311	9,398,890.014	45.888	45.888	e