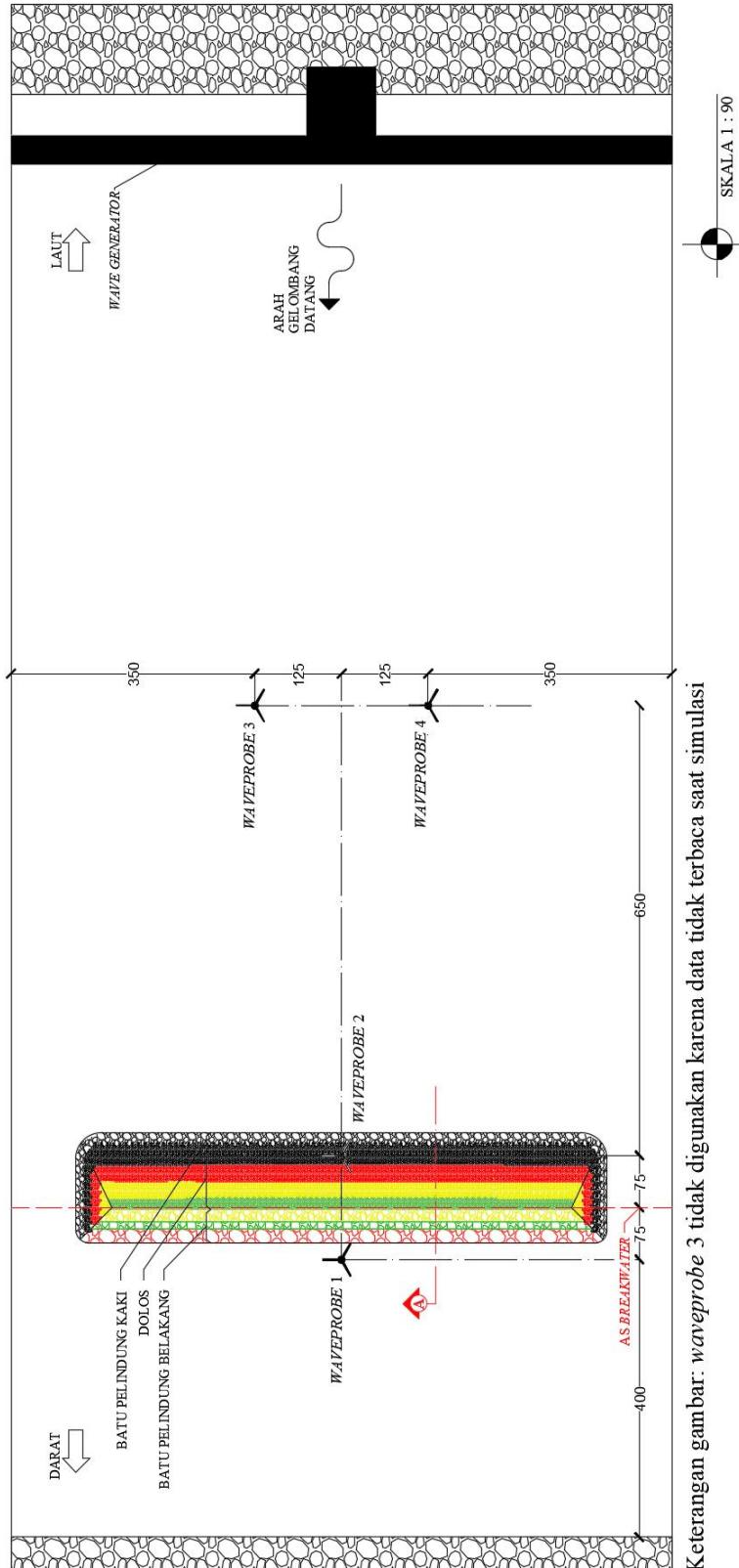


LAMPIRAN L.1

POSISI BREAKWATER DOLOS DAN WAVEPROBE

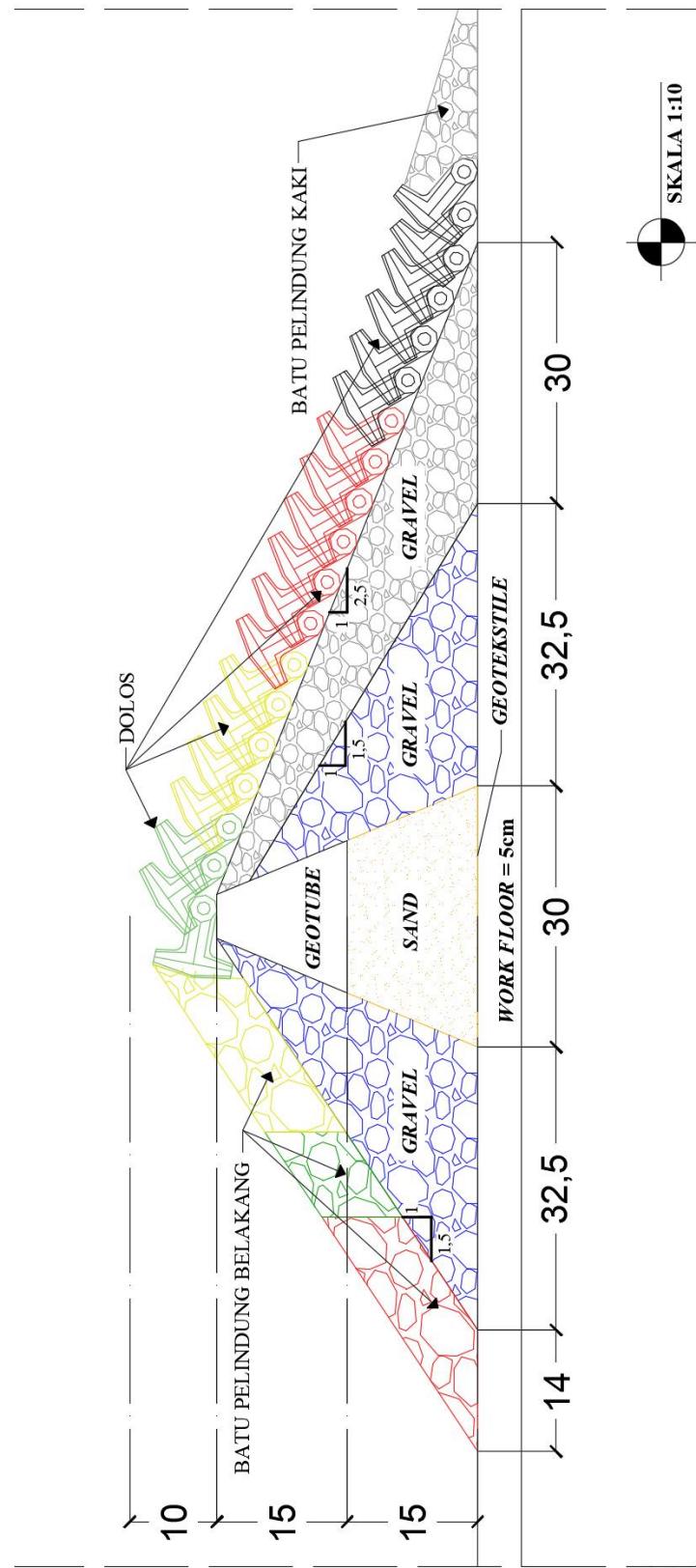


Gambar L.1.1 Posisi Breakwater Dolos dan Waveprobe

Keterangan gambar: waveprobe 3 tidak digunakan karena data tidak terbaca saat simulasi

LAMPIRAN L.2

POTONGAN MELINTANG *BREAKWATER DOLOS*



Gambar L.2.1 Potongan Melintang *Breakwater Dolos* (Potongan A)

LAMPIRAN L.3

FUNGSI d/L UNTUK PERTAMBAHAN NILAI d/L₀

Tabel L.3.1 Fungsi d/L untuk Pertambahan Nilai d/L₀

$\frac{d}{L_0}$	$\frac{d}{L}$	$\frac{2\pi d}{L}$	tanh $2\pi d/L$	sinh $2\pi d/L$	cosh $2\pi d/L$	K _s	K	$\frac{4\pi d}{L}$	sinh $4\pi d/L$	cosh $4\pi d/L$	n
0.0600	0.10430	0.6554	0.5753	0.7033	1.2225	0.993	0.8180	1.3107	1.7196	1.989	0.8811
0.0610	0.10529	0.6615	0.5794	0.7109	1.2269	0.991	0.8151	1.3231	1.7443	2.011	0.8793
0.0620	0.10627	0.6677	0.5835	0.7184	1.2313	0.988	0.8121	1.3354	1.7692	2.032	0.8774
0.0630	0.10724	0.6738	0.5875	0.7260	1.2357	0.986	0.8092	1.3476	1.7942	2.054	0.8755
0.0640	0.10821	0.6799	0.5915	0.7335	1.2402	0.984	0.8063	1.3598	1.8194	2.076	0.8737
0.0650	0.10918	0.6860	0.5954	0.7410	1.2446	0.981	0.8034	1.3719	1.8447	2.098	0.8719
0.0660	0.11014	0.6920	0.5993	0.7486	1.2491	0.979	0.8005	1.3840	1.8702	2.121	0.8700
0.0670	0.11109	0.6980	0.6031	0.7561	1.2537	0.977	0.7977	1.3960	1.8958	2.143	0.8682
0.0680	0.11205	0.7040	0.6069	0.7636	1.2582	0.975	0.7948	1.4080	1.9216	2.166	0.8664
0.0690	0.11300	0.7100	0.6107	0.7711	1.2628	0.973	0.7919	1.4199	1.9476	2.189	0.8645
0.0700	0.11394	0.7159	0.6144	0.7787	1.2674	0.971	0.7890	1.4318	1.9737	2.213	0.8627
0.0710	0.11488	0.7218	0.6180	0.7862	1.2720	0.969	0.7861	1.4437	2.0000	2.236	0.8609
0.0720	0.11582	0.7277	0.6217	0.7937	1.2767	0.968	0.7833	1.4554	2.0265	2.260	0.8591
0.0730	0.11675	0.7336	0.6253	0.8012	1.2814	0.966	0.7804	1.4672	2.0532	2.284	0.8573
0.0740	0.11769	0.7394	0.6288	0.8087	1.2861	0.964	0.7776	1.4789	2.0801	2.308	0.8555
0.0750	0.11861	0.7453	0.6323	0.8162	1.2908	0.962	0.7747	1.4905	2.1071	2.332	0.8537
0.0760	0.11954	0.7511	0.6358	0.8237	1.2956	0.961	0.7719	1.5022	2.1344	2.357	0.8519
0.0770	0.12046	0.7569	0.6392	0.8312	1.3004	0.959	0.7690	1.5138	2.1618	2.382	0.8501
0.0780	0.12138	0.7626	0.6426	0.8388	1.3052	0.958	0.7662	1.5253	2.1895	2.407	0.8483
0.0790	0.12229	0.7684	0.6460	0.8463	1.3100	0.956	0.7633	1.5368	2.2173	2.432	0.8465
0.0800	0.12321	0.7741	0.6493	0.8538	1.3149	0.955	0.7605	1.5483	2.2454	2.458	0.8448
0.0810	0.12412	0.7799	0.6526	0.8613	1.3198	0.953	0.7577	1.5597	2.2736	2.484	0.8430
0.0820	0.12503	0.7856	0.6559	0.8689	1.3247	0.952	0.7549	1.5711	2.3021	2.510	0.8412
0.0830	0.12593	0.7912	0.6591	0.8764	1.3297	0.951	0.7520	1.5825	2.3308	2.536	0.8395
0.0840	0.12683	0.7969	0.6623	0.8840	1.3347	0.949	0.7492	1.5938	2.3597	2.563	0.8377
0.0850	0.12773	0.8026	0.6655	0.8915	1.3397	0.948	0.7464	1.6051	2.3889	2.590	0.8360
0.0860	0.12863	0.8082	0.6686	0.8991	1.3448	0.947	0.7436	1.6164	2.4182	2.617	0.8342
0.0870	0.12953	0.8138	0.6717	0.9067	1.3499	0.946	0.7408	1.6277	2.4478	2.644	0.8325
0.0880	0.13042	0.8194	0.6748	0.9143	1.3550	0.944	0.7380	1.6389	2.4777	2.672	0.8307
0.0890	0.13131	0.8250	0.6778	0.9219	1.3601	0.943	0.7352	1.6501	2.5077	2.700	0.8290

Tabel L.3.1 Fungsi d/L untuk Pertambahan Nilai d/L₀ (Lanjutan)

$\frac{d}{L_0}$	$\frac{d}{L}$	$\frac{2\pi d}{L}$	tanh $2\pi d/L$	sinh $2\pi d/L$	cosh $2\pi d/L$	K _s	K	$\frac{4\pi d}{L}$	sinh $4\pi d/L$	cosh $4\pi d/L$	n
0.0900	0.13220	0.8306	0.6808	0.9295	1.3653	0.942	0.7325	1.6613	2.5380	2.728	0.8273
0.0910	0.13309	0.8362	0.6838	0.9371	1.3705	0.941	0.7297	1.6724	2.5686	2.756	0.8255
0.0920	0.13397	0.8418	0.6867	0.9448	1.3757	0.940	0.7269	1.6835	2.5994	2.785	0.8238
0.0930	0.13485	0.8473	0.6897	0.9524	1.3810	0.939	0.7241	1.6946	2.6305	2.814	0.8221
0.0940	0.13573	0.8528	0.6926	0.9601	1.3863	0.938	0.7214	1.7057	2.6618	2.843	0.8204
0.0950	0.13661	0.8584	0.6954	0.9677	1.3916	0.937	0.7186	1.7167	2.6934	2.873	0.8187
0.0960	0.13749	0.8639	0.6983	0.9754	1.3969	0.936	0.7159	1.7278	2.7252	2.903	0.8170
0.0970	0.13837	0.8694	0.7011	0.9831	1.4023	0.935	0.7131	1.7388	2.7573	2.933	0.8153
0.0980	0.13924	0.8749	0.7038	0.9908	1.4077	0.934	0.7104	1.7498	2.7897	2.964	0.8136
0.0990	0.14011	0.8804	0.7066	0.9986	1.4132	0.934	0.7076	1.7607	2.8223	2.994	0.8119
0.1000	0.14098	0.8858	0.7093	1.0063	1.4187	0.933	0.7049	1.7717	2.8553	3.025	0.8102
0.1010	0.14185	0.8913	0.7120	1.0141	1.4242	0.932	0.7021	1.7826	2.8885	3.057	0.8086
0.1020	0.14272	0.8967	0.7147	1.0219	1.4298	0.931	0.6994	1.7935	2.9220	3.088	0.8069
0.1030	0.14358	0.9022	0.7174	1.0296	1.4353	0.930	0.6967	1.8043	2.9557	3.120	0.8052
0.1040	0.14445	0.9076	0.7200	1.0374	1.4409	0.930	0.6940	1.8152	2.9898	3.153	0.8036
0.1050	0.14531	0.9130	0.7226	1.0453	1.4466	0.929	0.6913	1.8261	3.0242	3.185	0.8019
0.1060	0.14618	0.9184	0.7252	1.0531	1.4523	0.928	0.6886	1.8369	3.0589	3.218	0.8003
0.1070	0.14704	0.9239	0.7277	1.0610	1.4580	0.928	0.6859	1.8477	3.0939	3.251	0.7986
0.1080	0.14790	0.9293	0.7302	1.0689	1.4637	0.927	0.6832	1.8585	3.1292	3.285	0.7970
0.1090	0.14875	0.9347	0.7328	1.0768	1.4695	0.926	0.6805	1.8693	3.1648	3.319	0.7953
0.1100	0.14961	0.9400	0.7352	1.0847	1.4753	0.926	0.6778	1.8801	3.2007	3.353	0.7937
0.1110	0.15047	0.9454	0.7377	1.0927	1.4812	0.925	0.6751	1.8908	3.2370	3.388	0.7921
0.1120	0.15132	0.9508	0.7401	1.1007	1.4871	0.924	0.6724	1.9016	3.2736	3.423	0.7904
0.1130	0.15218	0.9562	0.7426	1.1087	1.4930	0.924	0.6698	1.9123	3.3105	3.458	0.7888
0.1140	0.15303	0.9615	0.7450	1.1167	1.4990	0.923	0.6671	1.9230	3.3478	3.494	0.7872
0.1150	0.15388	0.9669	0.7473	1.1247	1.5050	0.923	0.6645	1.9338	3.3854	3.530	0.7856
0.1160	0.15473	0.9722	0.7497	1.1328	1.5110	0.922	0.6618	1.9444	3.4234	3.566	0.7840
0.1170	0.15558	0.9776	0.7520	1.1409	1.5171	0.922	0.6592	1.9551	3.4617	3.603	0.7824
0.1180	0.15643	0.9829	0.7543	1.1490	1.5232	0.921	0.6565	1.9658	3.5003	3.640	0.7808
0.1190	0.15728	0.9882	0.7566	1.1571	1.5294	0.921	0.6539	1.9765	3.5393	3.678	0.7792

Sumber: Triatmodjo, 1999