



# LAMPIRAN 1

## DATA BATHYMETRI IPP PANCER KABUPATEN BANYUWANGI

(Sumber : Dinas Perikanan dan Pangan Kabupaten banyuwangi)



### HASIL PENGUKURAN BATHIMETRY BREAKWATER PANCER 2016

Tanggal Pengkrm : 27 September 2016

Keterangan : Sisi luar sibet ( sisi kiri )

NO.	Koordinat as	KOORDINAT X & Y	KEDALAMAN KOTOR (Meter)	FAKTOR KOREKSI (+) (Meter)	PASANG/SURUT (-) (Meter)	KEDALAMAN RIIL (3+4+5) Meter
1		2	3	4	5	6
1	as 41 ( H )	X = Y =	-1.30	-0.50	1.5190	-0.281
2	42	X = Y =	-0.70	-0.50	1.5190	0.319
3	43	X = Y =	-1.10	-0.50	1.5190	-0.081
4	44	X = Y =	-1.20	-0.50	1.5190	-0.181
5	45	X = Y =	-2.00	-0.50	1.5190	-0.981
6	as 46 ( G )	X = Y =	-2.10	-0.50	1.5190	-1.081
7	47	X = Y =	-2.30	-0.50	1.5190	-1.281
8	48	X = Y =	-2.40	-0.50	1.5190	-1.381
9	49	X = Y =	-2.40	-0.50	1.5190	-1.381
10	50	X = Y =	-2.50	-0.50	1.5190	-1.481
11	as 51 ( F )	X = Y =	-2.60	-0.50	1.5190	-1.581
12	52	X = Y =	-2.70	-0.50	1.5190	-1.681
13	53	X = Y =	-2.80	-0.50	1.5190	-1.781
14	54	X = Y =	-2.70	-0.50	1.5190	-1.681
15	55	X = Y =	-3.00	-0.50	1.5190	-1.981

**Keterangan :**

Pengukuran Kondisi Pasang/Surut :

1. Jam : 14.42 Kondisi muka air Pasang/surut = 1.441 meter

2. Jam : 15.28 Kondisi muka air Pasang/surut = 1.596 Meter

Rata-rata kondisi Pasang/surut = 1.519 Meter

### HASIL PENGUKURAN BATHIMETRY BREAKWATER PANCER 2016

Tanggal Pengkrm : 27 September 2016

Keterangan : Sisi dalam silet ( sisi kanan )

NO.	Koordinat as	KOORDINAT X & Y	KEDALAMAN KOTOR (Meter)	FAKTOR KOREKSI (+) (Meter)	PASANG/SURUT (-) (Meter)	KEDALAMAN RIIL (3+4+5) Meter
1		2	3	4	5	6
1	as 41 ( H )	X = Y =	-2.10	-0.50	1.5190	-1.081
2	42	X = Y =	-2.20	-0.50	1.5190	-1.181
3	43	X = Y =	-2.10	-0.50	1.5190	-1.081
4	44	X = Y =	-2.00	-0.50	1.5190	-0.981
5	45	X = Y =	-2.30	-0.50	1.5190	-1.281
6	as 46 ( G )	X = Y =	-2.10	-0.50	1.5190	-1.081
7	47	X = Y =	-2.40	-0.50	1.5190	-1.381
8	48	X = Y =	-2.50	-0.50	1.5190	-1.481
9	49	X = Y =	-2.90	-0.50	1.5190	-1.881
10	50	X = Y =	-3.00	-0.50	1.5190	-1.981
11	as 51 ( F )	X = Y =	-3.10	-0.50	1.5190	-2.081
12	52	X = Y =	-3.40	-0.50	1.5190	-2.381
13	53	X = Y =	-3.40	-0.50	1.5190	-2.381
14	54	X = Y =	-3.60	-0.50	1.5190	-2.581
15	55	X = Y =	-3.60	-0.50	1.5190	-2.581

**Keterangan :**

Pengukuran Kondisi Pasang/Surut :

1. Jam : 14.42 Kondisi muka air Pasang/surut = 1.441 meter

2. Jam : 15.28 Kondisi muka air Pasang/surut = 1.596 Meter

Rata-rata kondisi Pasang/surut = 1.519 Meter

### HASIL PENGUKURAN BATHIMETRY BREAKWATER PANCER 2016

Tanggal Pengkrrn : 27 September 2016

Keterangan : Sibet 56 - 60

NO.	Koordinat as	KOORDINAT X & Y	KEDALAMAN KOTOR (Meter)	FAKTOR KOREKSI (+) (Meter)	PASANG/SURUT (-) (Meter)	KEDALAMAN RIIL (3+4+5) Meter
1		2	3	4	5	6
1	as 56	X = Y =	-3.50	-0.50	1.5190	-2.481
2		X = Y =	-3.50	-0.50	1.5190	-2.481
3		X = Y =	-3.60	-0.50	1.5190	-2.581
4		X = Y =	-3.20	-0.50	1.5190	-2.181
5		X = Y =	-3.00	-0.50	1.5190	-1.981
6	as 57	X = Y =	-2.60	-0.50	1.5190	-1.581
7		X = Y =	-3.10	-0.50	1.5190	-2.081
8		X = Y =	-3.00	-0.50	1.5190	-1.981
9		X = Y =	-3.80	-0.50	1.5190	-2.781
10		X = Y =	-4.00	-0.50	1.5190	-2.981
11	as 58	X = Y =	-4.40	-0.50	1.5190	-3.381
12		X = Y =	-3.50	-0.50	1.5190	-2.481
13		X = Y =	-3.7	-0.50	1.5190	-2.681
14		X = Y =	-3.80	-0.50	1.5190	-2.781
15		X = Y =	-3.60	-0.50	1.5190	-2.581
16	as 59	X = Y =	-2.7	-0.50	1.5190	-1.681
17		X = Y =	-2.6	-0.50	1.5190	-1.581
18		X = Y =	-2.8	-0.50	1.5190	-1.781
19		X = Y =	-3.8	-0.50	1.5190	-2.781
20		X = Y =	-4.2	-0.50	1.5190	-3.181
21	as 60	X = Y =	-4.4	-0.50	1.5190	-3.381
22		X = Y =	-4.5	-0.50	1.5190	-3.481
23		X = Y =	-4.7	-0.50	1.5190	-3.681
24		X = Y =	-4.3	-0.50	1.5190	-3.281
25		X = Y =	-4.3	-0.50	1.5190	-3.281

**Keterangan :**

Pengukuran Kondisi Pasang/Surut :

1. Jam : 14.42 Kondisi muka air Pasang/surut = 1.441 meter

2. Jam : 15.28 Kondisi muka air Pasang/surut = 1.596 Meter

Rata-rata kondisi Pasang/surut = 1.519 Meter

### HASIL PENGUKURAN BATHIMETRY BREAKWATER PANCER 2016

Tanggal Pengkrm : 27 September 2016

Keterangan : Sibet 61 - 65

NO.	Koordinat as	KOORDINAT X & Y	KEDALAMAN KOTOR (Meter)	FAKTOR KOREKSI (+) (Meter)	PASANG/SURUT (-) (Meter)	KEDALAMAN RIIL (3+4+5) Meter
1		2	3	4	5	6
1	as 61	X = Y =	-4.20	-0.50	1.5190	-3.181
2		X = Y =	-4.60	-0.50	1.5190	-3.581
3		X = Y =	-4.50	-0.50	1.5190	-3.481
4		X = Y =	-4.70	-0.50	1.5190	-3.681
5		X = Y =	-4.20	-0.50	1.5190	-3.181
6	as 62	X = Y =	-5.00	-0.50	1.5190	-3.981
7		X = Y =	-5.20	-0.50	1.5190	-4.181
8		X = Y =	-5.30	-0.50	1.5190	-4.281
9		X = Y =	-5.40	-0.50	1.5190	-4.381
10		X = Y =	-5.60	-0.50	1.5190	-4.581
11	as 63	X = Y =	-5.70	-0.50	1.5190	-4.681
12		X = Y =	-5.50	-0.50	1.5190	-4.481
13		X = Y =	-5.60	-0.50	1.5190	-4.581
14		X = Y =	-5.40	-0.50	1.5190	-4.381
15		X = Y =	-5.10	-0.50	1.5190	-4.081
16	as 64	X = Y =	-5.00	-0.50	1.5190	-3.981
17		X = Y =	-5.10	-0.50	1.5190	-4.081
18		X = Y =	-5.20	-0.50	1.5190	-4.181
19		X = Y =	-5.50	-0.50	1.5190	-4.481
20		X = Y =	-5.10	-0.50	1.5190	-4.081
21	as 65	X = Y =	-5.60	-0.50	1.5190	-4.581
22		X = Y =	-5.80	-0.50	1.5190	-4.781
23		X = Y =	-5.00	-0.50	1.5190	-3.981
24		X = Y =	-5.80	-0.50	1.5190	-4.781
25		X = Y =	-5.40	-0.50	1.5190	-4.381

**Keterangan :**

Pengukuran Kondisi Pasang/Surut :

1. Jam : 14.42 Kondisi muka air Pasang/surut = 1.441 meter

2. Jam : 15.28 Kondisi muka air Pasang/surut = 1.596 Meter

Rata-rata kondisi Pasang/surut = 1.519 Meter

### HASIL PENGUKURAN BATHIMETRY BREAKWATER PANCER 2016

Tanggal Pengkurn : 27 September 2016

Keterangan : Sibet 66 - 70

NO.	Koordinat as	KOORDINAT X & Y	KEDALAMAN KOTOR (Meter)	FAKTOR KOREKSI (+) (Meter)	PASANG/SURUT (-) (Meter)	KEDALAMAN RIIL (3+4+5) Meter
1		2	3	4	5	6
1	as 66	X = Y =	-5.50	-0.50	1.5190	-4.481
2		X = Y =	-5.60	-0.50	1.5190	-4.581
3		X = Y =	-5.50	-0.50	1.5190	-4.481
4		X = Y =	-5.70	-0.50	1.5190	-4.681
5		X = Y =	-5.80	-0.50	1.5190	-4.781
6	as 67	X = Y =	-5.90	-0.50	1.5190	-4.881
7		X = Y =	-6.20	-0.50	1.5190	-5.181
8		X = Y =	-5.80	-0.50	1.5190	-4.781
9		X = Y =	-6.00	-0.50	1.5190	-4.981
10		X = Y =	-6.10	-0.50	1.5190	-5.081
11	as 68	X = Y =	-6.50	-0.50	1.5190	-5.481
12		X = Y =	-6.10	-0.50	1.5190	-5.081
13		X = Y =	-6.00	-0.50	1.5190	-4.981
14		X = Y =	-6.10	-0.50	1.5190	-5.081
15		X = Y =	-6.20	-0.50	1.5190	-5.181
16	as 69	X = Y =	-6.20	-0.50	1.5190	-5.181
17		X = Y =	-6.30	-0.50	1.5190	-5.281
18		X = Y =	-6.30	-0.50	1.5190	-5.281
19		X = Y =	-6.00	-0.50	1.5190	-4.981
20		X = Y =	-6.10	-0.50	1.5190	-5.081
21	as 70	X = Y =	-6.00	-0.50	1.5190	-4.981
22		X = Y =	-6.30	-0.50	1.5190	-5.281
23		X = Y =	-6.50	-0.50	1.5190	-5.481
24		X = Y =	-6.70	-0.50	1.5190	-5.681
25		X = Y =	-6.90	-0.50	1.5190	-5.881

**Keterangan :**

Pengukuran Kondisi Pasang/Surut :

1. Jam : 14.42 Kondisi muka air Pasang/surut = 1.441 meter

2. Jam : 15.28 Kondisi muka air Pasang/surut = 1.596 Meter

Rata-rata kondisi Pasang/surut = 1.519 Meter

### HASIL PENGUKURAN BATHIMETRY BREAKWATER PANCER 2016

Tanggal Pengkrrn : 27 September 2016

Keterangan : Sibet 71 - 75

NO.	Koordinat as	KOORDINAT X & Y	KEDALAMAN KOTOR (Meter)	FAKTOR KOREKSI (+) (Meter)	PASANG/SURUT (-) (Meter)	KEDALAMAN RIIL (3+4+5) Meter
1		2	3	4	5	6
1	as 71	X = Y =	-6.90	-0.50	1.5190	-5.881
2		X = Y =	-6.70	-0.50	1.5190	-5.681
3		X = Y =	-6.60	-0.50	1.5190	-5.581
4		X = Y =	-6.90	-0.50	1.5190	-5.881
5		X = Y =	-6.40	-0.50	1.5190	-5.381
6	as 72	X = Y =	-6.80	-0.50	1.5190	-5.781
7		X = Y =	-7.10	-0.50	1.5190	-6.081
8		X = Y =	-7.20	-0.50	1.5190	-6.181
9		X = Y =	-7.00	-0.50	1.5190	-5.981
10		X = Y =	-7.10	-0.50	1.5190	-6.081
11	as 73	X = Y =	-6.80	-0.50	1.5190	-5.781
12		X = Y =	-7.00	-0.50	1.5190	-5.981
13		X = Y =	-7.10	-0.50	1.5190	-6.081
14		X = Y =	-6.90	-0.50	1.5190	-5.881
15		X = Y =	-7.20	-0.50	1.5190	-6.181
16	as 74	X = Y =	-7.10	-0.50	1.5190	-6.081
17		X = Y =	-7.00	-0.50	1.5190	-5.981
18		X = Y =	-7.20	-0.50	1.5190	-6.181
19		X = Y =	-7.10	-0.50	1.5190	-6.081
20		X = Y =	-7.00	-0.50	1.5190	-5.981
21	as 75	X = Y =	-7.20	-0.50	1.5190	-6.181
22		X = Y =	-7.20	-0.50	1.5190	-6.181
23		X = Y =	-7.00	-0.50	1.5190	-5.981
24		X = Y =	-7.30	-0.50	1.5190	-6.281
25		X = Y =	-7.00	-0.50	1.5190	-5.981

**Keterangan :**

Pengukuran Kondisi Pasang/Surut :

1. Jam : 14.42 Kondisi muka air Pasang/surut = 1.441 meter

2. Jam : 15.28 Kondisi muka air Pasang/surut = 1.596 Meter

Rata-rata kondisi Pasang/surut = 1.519 Meter

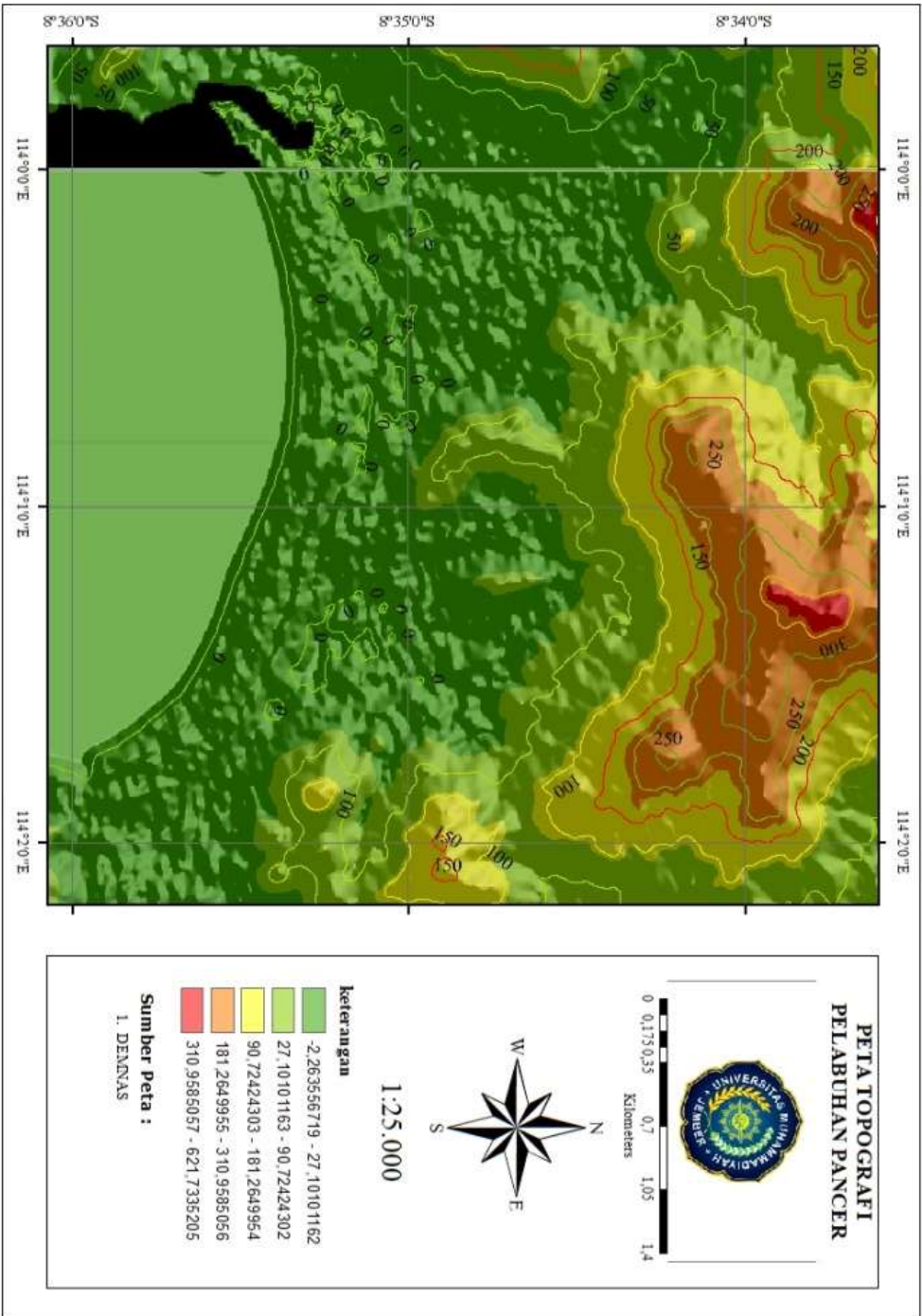


## **LAMPIRAN 2**

### **PETA TOPOGRAFI**

*(Sumber : Badan Informasi Geospasial tahun 2020)*





## **LAMPIRAN 3**

### **DATA PASANG SURUT**

*(Sumber : Badan Informasi Geospasial tahun 2020)*



Waktu	Jam	Elevasi	MSL	PASUT (M)	PASUT (CM)	JULIAN DAY	MAX	MIN
1/1/2020	0:00:00	-0,903	0	-0,90	-90,30	43831		
1/1/2020	1:00:00	-0,697	3,069	2,37	237,20	43831		
1/1/2020	2:00:00	-0,36	3,069	2,71	270,90	43831		
1/1/2020	3:00:00	0,022	3,069	3,09	309,10	43831		
1/1/2020	4:00:00	0,357	3,069	3,43	342,60	43831		
1/1/2020	5:00:00	0,565	3,069	3,63	363,40	43831		
1/1/2020	6:00:00	0,606	3,069	3,68	367,50	43831		
1/1/2020	7:00:00	0,481	3,069	3,55	355,00	43831		
1/1/2020	8:00:00	0,235	3,069	3,30	330,40	43831		
1/1/2020	9:00:00	-0,058	3,069	3,01	301,10	43831		
1/1/2020	10:00:00	-0,312	3,069	2,76	275,70	43831		
1/1/2020	11:00:00	-0,456	3,069	2,61	261,30	43831		
1/1/2020	12:00:00	-0,448	3,069	2,62	262,10	43831		
10/19/2020	13:00:00	0,739	3,069	3,81	380,80	44123		
10/19/2020	14:00:00	1,276	3,069	4,35	434,50	44124		
10/19/2020	15:00:00	1,549	3,069	4,62	461,80	44124	4,62	
10/19/2020	16:00:00	1,483	3,069	4,55	455,20	44124		
10/19/2020	17:00:00	1,088	3,069	4,16	415,70	44124		
10/19/2020	18:00:00	0,451	3,069	3,52	352,00	44124		
10/19/2020	19:00:00	-0,279	3,069	2,79	279,00	44124		
10/19/2020	20:00:00	-0,934	3,069	2,14	213,50	44124		
10/19/2020	21:00:00	-1,363	3,069	1,71	170,60	44124		
10/19/2020	22:00:00	-1,475	3,069	1,59	159,40	44124		
10/19/2020	23:00:00	-1,257	3,069	1,81	181,20	44124		
11/16/2020	0:00:00	0,133	3,069	3,20	320,20	44151		
11/16/2020	1:00:00	0,616	3,069	3,69	368,50	44151		
11/16/2020	2:00:00	0,875	3,069	3,94	394,40	44151		
11/16/2020	3:00:00	0,852	3,069	3,92	392,10	44151		
11/16/2020	4:00:00	0,565	3,069	3,63	363,40	44151		
11/16/2020	5:00:00	0,103	3,069	3,17	317,20	44151		
11/16/2020	6:00:00	-0,396	3,069	2,67	267,30	44151		
11/16/2020	7:00:00	-0,786	3,069	2,28	228,30	44151		
11/16/2020	8:00:00	-0,949	3,069	2,12	212,00	44151		
11/16/2020	9:00:00	-0,823	3,069	2,25	224,60	44151		
11/16/2020	10:00:00	-0,426	3,069	2,64	264,30	44151		
11/16/2020	11:00:00	0,154	3,069	3,22	322,30	44151		
11/16/2020	12:00:00	0,775	3,069	3,84	384,40	44151		
11/16/2020	13:00:00	1,28	3,069	4,35	434,90	44152		
11/16/2020	14:00:00	1,538	3,069	4,61	460,70	44152		
11/16/2020	15:00:00	1,472	3,069	4,54	454,10	44152		

11/16/2020	16:00:00	1,087	3,069	4,16	415,60	44152		
11/16/2020	17:00:00	0,463	3,069	3,53	353,20	44152		
11/16/2020	18:00:00	-0,262	3,069	2,81	280,70	44152		
11/16/2020	19:00:00	-0,922	3,069	2,15	214,70	44152		
11/16/2020	20:00:00	-1,372	3,069	1,70	169,70	44152		
11/16/2020	21:00:00	-1,516	3,069	1,55	155,30	44152		1,55
11/16/2020	22:00:00	-1,334	3,069	1,74	173,50	44152		
11/16/2020	23:00:00	-0,886	3,069	2,18	218,30	44152		



## **LAMPIRAN 4**

### **DATA ANGIN, WINDROSE MAWAR ANGIN**

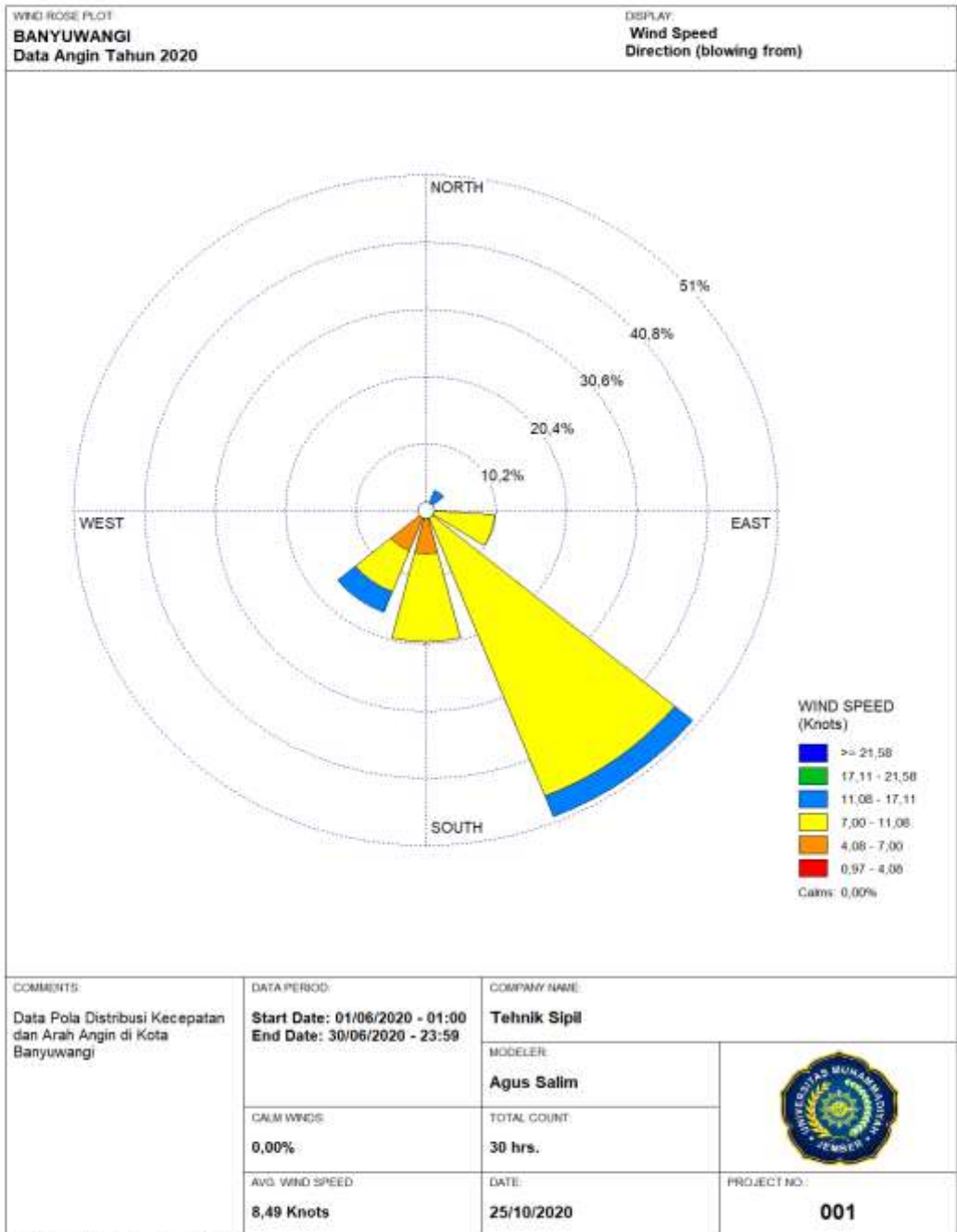
*(Sumber : BMKG Banyuwangi tahun 2020)*



### DATA ANGIN BULAN JUNI

TAHUN	BULAN	TANGGAL	JAM	ARAH	KECEPATAN	ARAH ANGIN TERBANYAK (SIMBOL)	CH
2020	6	1	1	150	5	S	0
2020	6	2	2	170	3	W	0
2020	6	3	3	30	6	W	0
2020	6	4	4	200	6	C	0
2020	6	5	5	120	5	S	0,2
2020	6	6	6	150	4	SE	1,8
2020	6	7	7	190	4	S	1,6
2020	6	8	8	150	4	SE	31,2
2020	6	9	9	170	4	C	0
2020	6	10	10	150	4	C	0
2020	6	11	11	210	3	C	0
2020	6	12	12	230	3	SW	0
2020	6	13	13	140	5	SE	0
2020	6	14	14	160	6	C	0
2020	6	15	15	150	5	SW	14,3
2020	6	16	16	150	4	C	0
2020	6	17	17	230	4	C	0
2020	6	18	18	150	4	S	0
2020	6	19	19	150	5	SE	8888
2020	6	20	20	130	4	S	2,3
2020	6	21	21	150	4	C	8888
2020	6	22	22	120	5	C	21,8
2020	6	23	23	120	4	S	0
2020	6	24	24	230	5	C	4
2020	6	25	25	180	4	S	0
2020	6	26	26	160	5	S	0,2
2020	6	27	27	170	3	C	0
2020	6	28	28	170	4	SW	0
2020	6	29	29	160	4	S	0,1
2020	6	30	30	130	5	C	8888

# MAWAR ANGIN



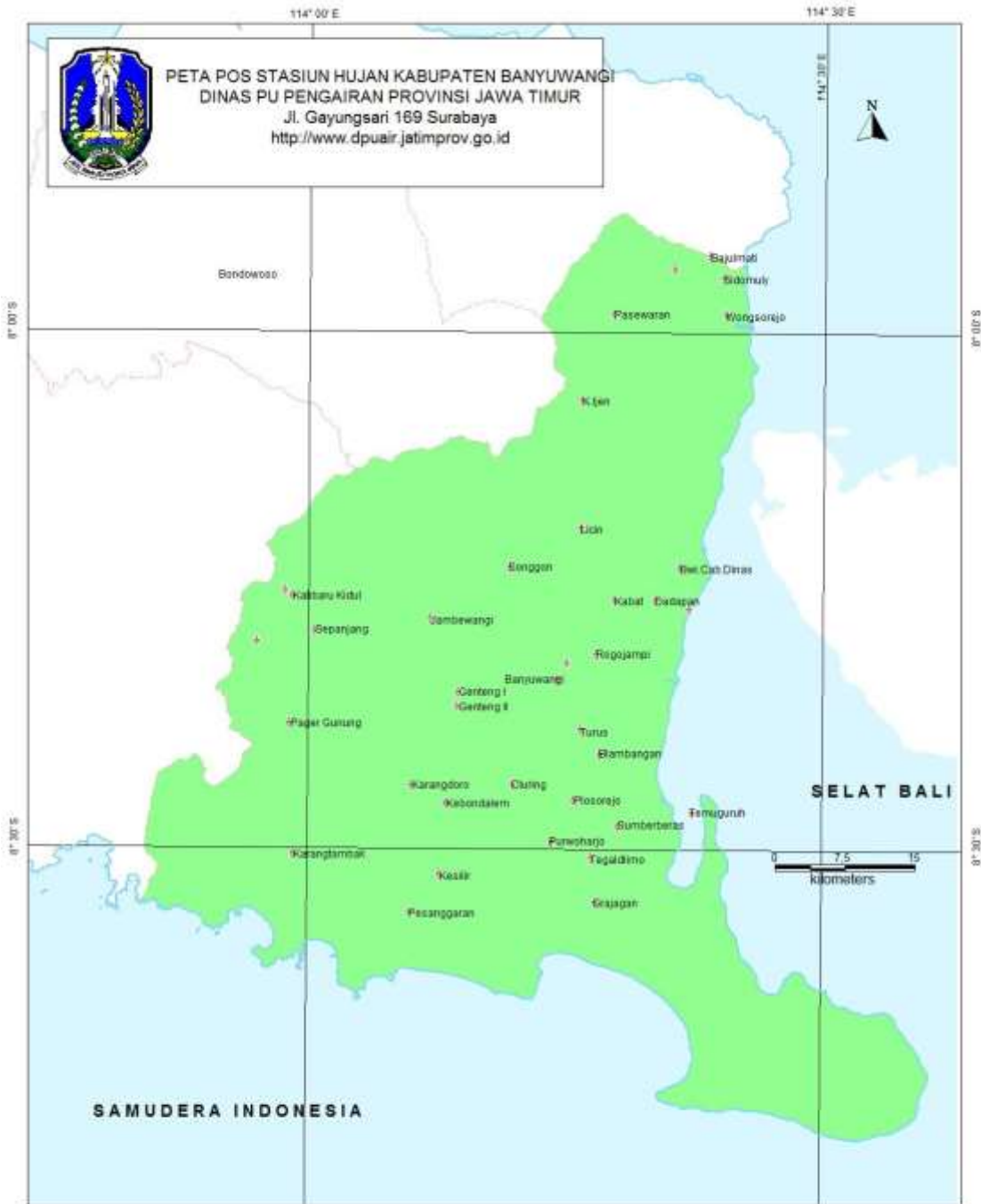


The logo of Universitas Muhammadiyah Jember is a blue shield-shaped emblem with a yellow border. It features a central sunburst with Arabic calligraphy, flanked by two green laurel branches. The text 'UNIVERSITAS MUHAMMADIYAH' is written in white along the top curve, and 'JEMBER' is written along the bottom curve, separated by two white stars.

## **LAMPIRAN 5**

### **PETA POS STASIUN HUJAN KABUPATEN BANYUWANGI**

*(Sumber : Dinas PU dan Pengairan Banyuwangi)*



**Keterangan :**

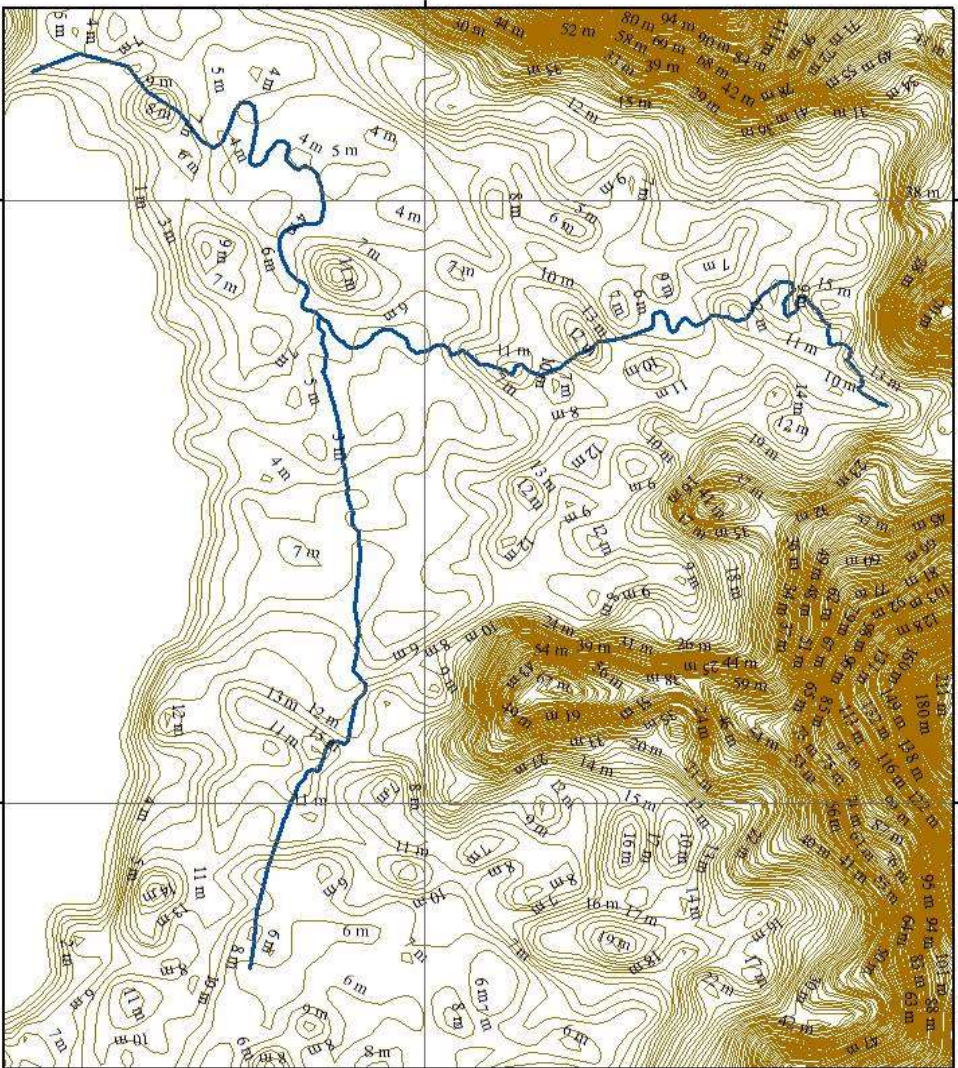
+	Pos Stasiun Hujan	—	Garis Pantai
<span style="display:inline-block; width:10px; height:10px; background-color:lightgreen; border:1px solid black;"></span>	Kabupaten Banyuwangi	<span style="display:inline-block; width:10px; height:10px; background-color:lightblue; border:1px solid black;"></span>	Laut
<span style="display:inline-block; width:10px; height:10px; border:1px dashed black;"></span>	Kab./Kota Provinsi Jawa Timur		

## **LAMPIRAN 6**

### **PETA KONTUR PELABUHAN PANCER**

*(Sumber : Badan Informasi Geospasial tahun 2020)*







**PETA KONTUR  
PELABUHAN PANCER**



**1:15.000**

**Keterangan :**

-  kontur
-  das

**Sumber : DENNAS**

## **LAMPIRAN 7**

**TABEL  $(Y_n)$ ,  $(S_n)$ ,  $(Y_T)$ , Luas Daerah di Bawah Kurva Normal,  
Derajat Kepercayaan**



**Tabel 7.1 Nilai *reduced mean* ( $Y_n$ )**

<b>n</b>	0	1	2	3	4	5	6	7	8	9
10	0,4952	0,4996	0,5035	0,5070	0,5100	0,5128	0,5157	0,5181	0,5202	0,5220
20	0,5236	0,5252	0,5268	0,5283	0,5296	0,5309	0,5320	0,5332	0,5343	0,5353
30	0,5362	0,5371	0,5380	0,5388	0,5396	0,5402	0,5410	0,5418	0,5424	0,5430
40	0,5436	0,5442	0,5448	0,5453	0,5458	0,5463	0,5468	0,5473	0,5477	0,5481
50	0,5485	0,5489	0,5493	0,5497	0,5501	0,5504	0,5508	0,5511	0,5515	0,5518
60	0,5521	0,5524	0,5527	0,5530	0,5533	0,5535	0,5538	0,5540	0,5543	0,5545
70	0,5548	0,5550	0,5552	0,5555	0,5557	0,5559	0,5561	0,5563	0,5565	0,5567
80	0,5569	0,5570	0,5572	0,5574	0,5576	0,5578	0,5580	0,5581	0,5583	0,5585
90	0,5586	0,5587	0,5589	0,5591	0,5592	0,5593	0,5595	0,5596	0,5598	0,5599
100	0,5600	0,5602	0,5603	0,5604	0,5606	0,5607	0,5608	0,5609	0,5610	0,5611

Sumber : Suripin, 2004

**Tabel 7.2 Nilai *reduced standart deviation* ( $S_n$ )**

<b>n</b>	0	1	2	3	4	5	6	7	8	9
10	0,9496	0,9676	0,9833	0,9971	1,0095	1,0206	1,0316	1,0411	1,0493	1,0565
20	1,0628	1,0696	1,0754	1,0811	1,0864	1,0915	1,0961	1,1004	1,1047	1,1086
30	1,1124	1,1159	1,1193	1,1226	1,1255	1,1285	1,1313	1,1339	1,1363	1,1388
40	1,1413	1,1436	1,1458	1,1480	1,1499	1,1519	1,1538	1,1557	1,1574	1,1590
50	1,1607	1,1623	1,1638	1,1658	1,1667	1,1681	1,1696	1,1708	1,1721	1,1734
60	1,1747	1,1759	1,1770	1,1782	1,1793	1,1803	1,1814	1,1824	1,1834	1,1844
70	1,1854	1,1863	1,1873	1,1881	1,1890	1,1898	1,1906	1,1915	1,1923	1,1930
80	1,1938	1,1945	1,1953	1,1959	1,1967	1,1973	1,1980	1,1987	1,1994	1,2001
90	1,2007	1,2013	1,2020	1,2026	1,2032	1,2038	1,2044	1,2049	1,2055	1,2060
100	1,2065	1,2069	1,2073	1,2077	1,2081	1,2084	1,2087	1,2090	1,2093	1,2096

Sumber : Suripin, 2004

**Tabel 7.3 Nilai  $\Delta$  kritik uji Smirnov-Kolmogorov**

N	Derajat kepercayaan, $\alpha$			
	0,20	0,10	0,05	0,01
5	0,45	0,51	0,56	0,67
10	0,32	0,37	0,41	0,49
15	0,27	0,30	0,34	0,40
20	0,23	0,26	0,29	0,36
25	0,21	0,24	0,27	0,32
30	0,19	0,22	0,24	0,29
35	0,18	0,2	0,23	0,27
40	0,17	0,19	0,21	0,25
45	0,16	0,18	0,20	0,24
50	1,15	0,17	0,19	0,23
N > 50	$\frac{1,07}{N^{0,5}}$	$\frac{1,22}{N^{0,5}}$	$\frac{1,36}{N^{0,5}}$	$\frac{1,63}{N^{0,5}}$

Sumber : Bonnier, (1980) dalam Suripin, (2004)

**Tabel 7.4 Nilai *reduced variate* ( $Y_T$ )  
sebagai fungsi periode ulang**

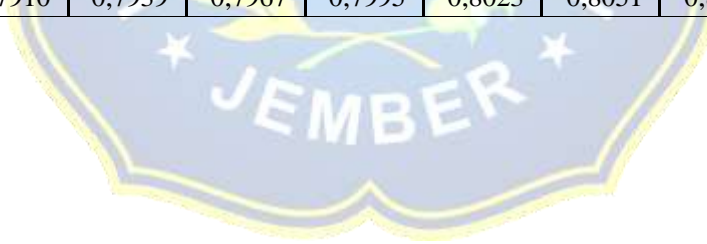
No	Periode ulang, T (tahun)	<i>Reduced variate</i> ( $Y_T$ )
1	2	0,3668
2	5	1,5004
3	10	2,251
4	20	2,9709
5	25	3,1993
6	50	3,9028
7	75	4,3117
8	100	4,6012
9	200	5,2969
10	250	5,5206
11	500	6,2149
12	1000	6,9087
13	5000	8,5188
14	10000	9,2121

Sumber : Suripin, (2004)





-0,9	0,1841	0,1814	0,1788	0,1762	0,1736	0,1711	0,1685	0,1660	0,1635	0,1611
-0,8	0,2119	0,2090	0,2061	0,2033	0,2005	0,1997	0,1949	0,1922	0,1894	0,1867
-0,7	0,2420	0,2389	0,2358	0,2327	0,2296	0,2266	0,2236	0,2206	0,2177	0,2148
-0,6	0,2743	0,2709	0,2676	0,2643	0,2611	0,2578	0,2546	0,2514	0,2483	0,2451
-0,5	0,3085	0,3050	0,3015	0,2981	0,2946	0,2912	0,2877	0,2843	0,2810	0,2776
-0,4	0,3446	0,3409	0,3372	0,3336	0,3300	0,3264	0,3228	0,3192	0,3156	0,3121
-0,3	0,3821	0,3783	0,3745	0,3707	0,3669	0,3632	0,3594	0,3557	0,3520	0,3483
-0,2	0,4207	0,4168	0,4129	0,4090	0,4052	0,4013	0,3974	0,3936	0,3897	0,3859
-0,1	0,4602	0,4562	0,4522	0,4483	0,4443	0,4404	0,4364	0,4325	0,4286	0,4247
0	0,5000	0,4960	0,4920	0,4880	0,4840	0,4801	0,4761	0,4721	0,4681	0,4641
0	0,5000	0,5040	0,5080	0,5120	0,5160	0,5199	0,5239	0,5279	0,5319	0,5359
0,1	0,5398	0,5438	0,5478	0,5517	0,5557	0,5596	0,5636	0,5675	0,5714	0,5753
0,2	0,5793	0,5832	0,5871	0,5910	0,5948	0,5987	0,6026	0,6064	0,6103	0,6141
0,3	0,6179	0,6217	0,6225	0,6293	0,6331	0,6368	0,6406	0,6443	0,6480	0,6517
0,4	0,6554	0,6591	0,6628	0,6664	0,6700	0,6736	0,6772	0,6808	0,6844	0,6879
0,5	0,6915	0,6950	0,6985	0,7019	0,7054	0,7088	0,7123	0,7157	0,7190	0,7224
0,6	0,7257	0,7291	0,7324	0,7357	0,7389	0,7422	0,7454	0,7486	0,7517	0,7549
0,7	0,7580	0,7611	0,7642	0,7673	0,7704	0,7734	0,7764	0,7794	0,7823	0,7852
0,8	0,7881	0,7910	0,7939	0,7967	0,7995	0,8023	0,8051	0,8078	0,8106	0,8133





**Tabel 7.6 Nilai kritis untuk distribusi Chi-Kuadrat (uji satu sisi).**

Dk	$\alpha$ derajat kepercayaan							
	0,995	0,99	0,975	0,95	0,05	0,025	0,01	0,005
1	0,0000393	0,000157	0,000982	0,00393	3,841	5,024	6,635	7,879
2	0,0100	0,0201	0,0506	0,103	5,991	7,378	9,210	10,597
3	0,0717	0,115	0,216	0,352	7,815	9,348	11,345	12,838
4	0,207	0,297	0,484	0,711	9,488	11,143	13,277	14,860
5	0,412	0,554	0,831	1,145	11,07	12,832	15,086	16,750
6	0,676	0,872	1,237	1,635	12,592	14,449	16,812	18,548
7	0,989	1,239	1,690	2,167	14,067	16,013	18,475	20,278
8	1,344	1,646	2,180	2,733	15,507	17,535	20,090	21,955
9	1,735	2,088	2,700	3,325	16,919	19,023	21,666	23,589
10	2,156	2,558	3,247	3,94	18,307	20,483	23,209	25,188
11	2,603	3,053	3,816	4,575	19,675	21,920	24,725	26,757
12	3,074	3,571	4,404	5,226	21,026	23,337	26,217	28,300
13	3,565	4,107	5,009	5,892	22,362	24,736	27,688	29,819
14	4,075	4,66	5,629	6,571	23,685	26,119	29,141	31,319
15	4,601	5,229	6,262	7,261	24,996	27,488	30,578	32,801
16	5,142	5,812	6,908	7,962	26,296	28,845	32,000	34,267
17	5,697	6,408	7,564	8,672	27,587	30,191	33,409	35,718
18	6,265	7,015	8,231	9,39	28,869	31,526	34,805	37,156
19	6,844	7,633	8,907	10,117	30,144	32,852	36,191	38,582
20	7,434	8,26	9,591	10,851	31,41	34,170	37,566	39,997
21	8,034	8,897	10,283	11,591	32,671	35,479	38,932	41,401
22	8,643	9,542	10,982	12,338	33,924	36,781	40,289	42,796
23	9,26	10,196	11,689	13,091	36,172	38,076	41,638	44,181
24	9,886	10,856	12,401	13,848	36,415	39,364	42,980	45,558
25	1,052	11,524	13,12	14,611	37,652	40,646	44,314	46,928
26	11,16	12,198	13,844	15,379	38,885	41,923	45,642	48,290

27	11,808	12,879	14,573	16,151	40,113	43,194	46,963	49,645
28	12,461	13,565	15,308	16,928	41,337	44,461	48,278	50,993
29	13,121	14,256	16,047	17,708	42,557	45,722	49,588	52,336
30	13,787	14,953	16,791	18,493	43,773	46,979	50,892	53,672

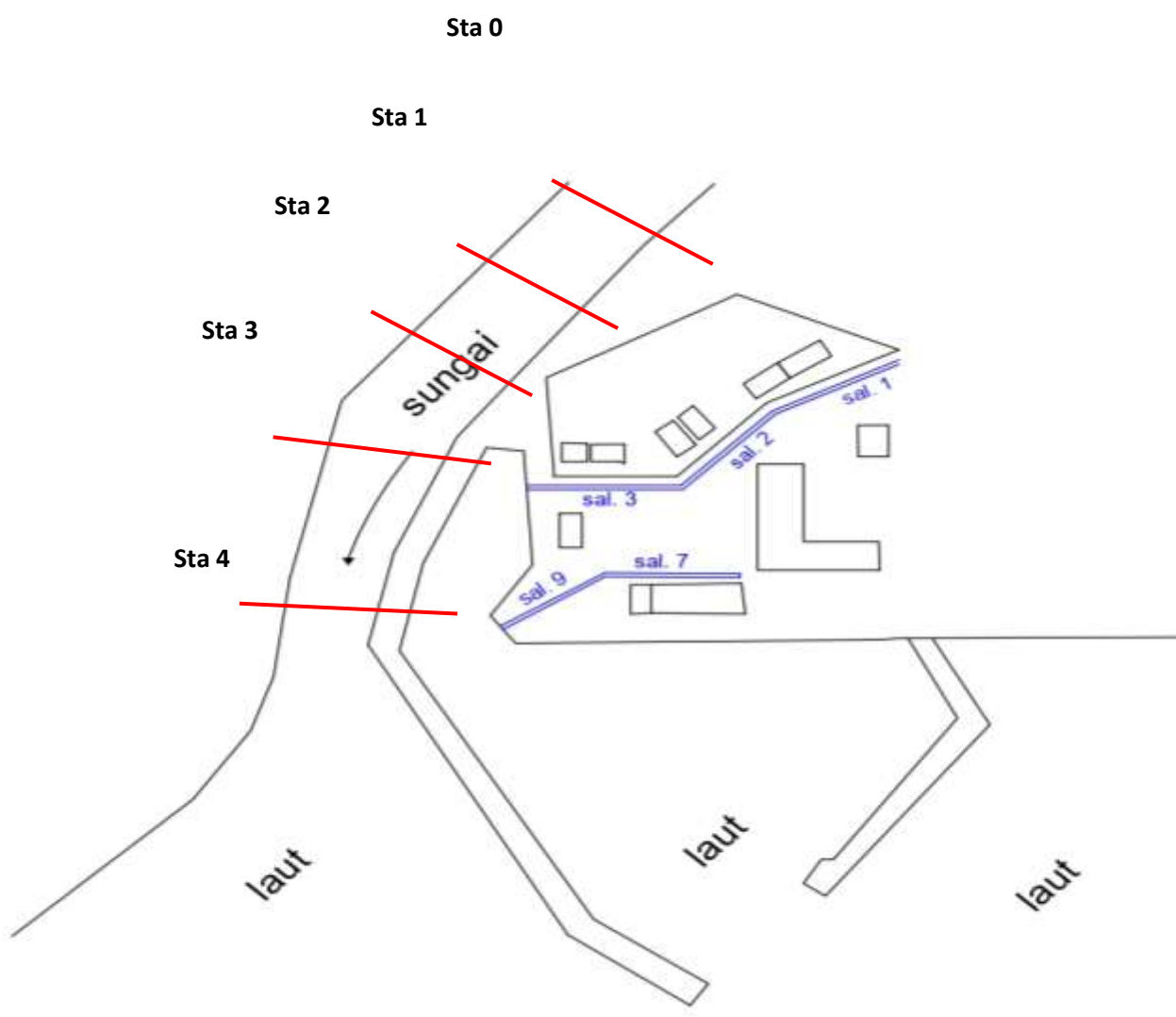
Sumber :Suripin, (2004)





## **LAMPIRAN 8**

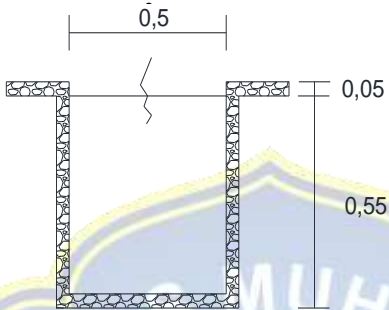
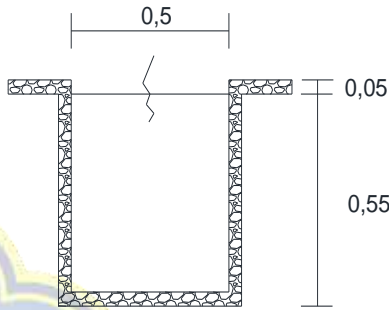
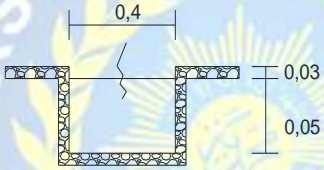
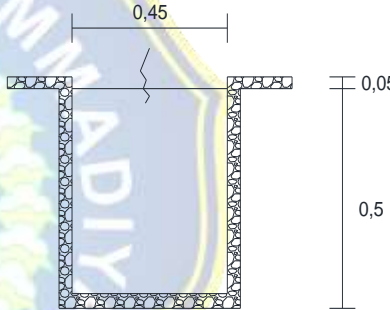
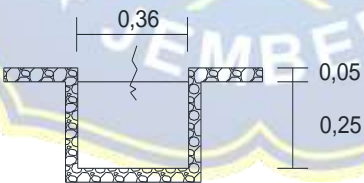
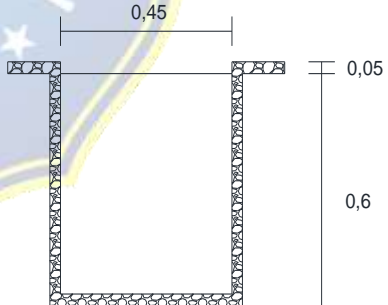
**LAYOUT PELABUHAN PANCER**





## **LAMPIRAN 9**

**DIEMENSI SALURAN**

No	Nama saluran	Dimensi Saluran existing	Dimensi Saluran baru
1	sal. 1 & 2,3		
2	sal. 7a		
3	sal. 9		



**LAMPIRAN 10**  
**PENAMPANG SUNGAI**



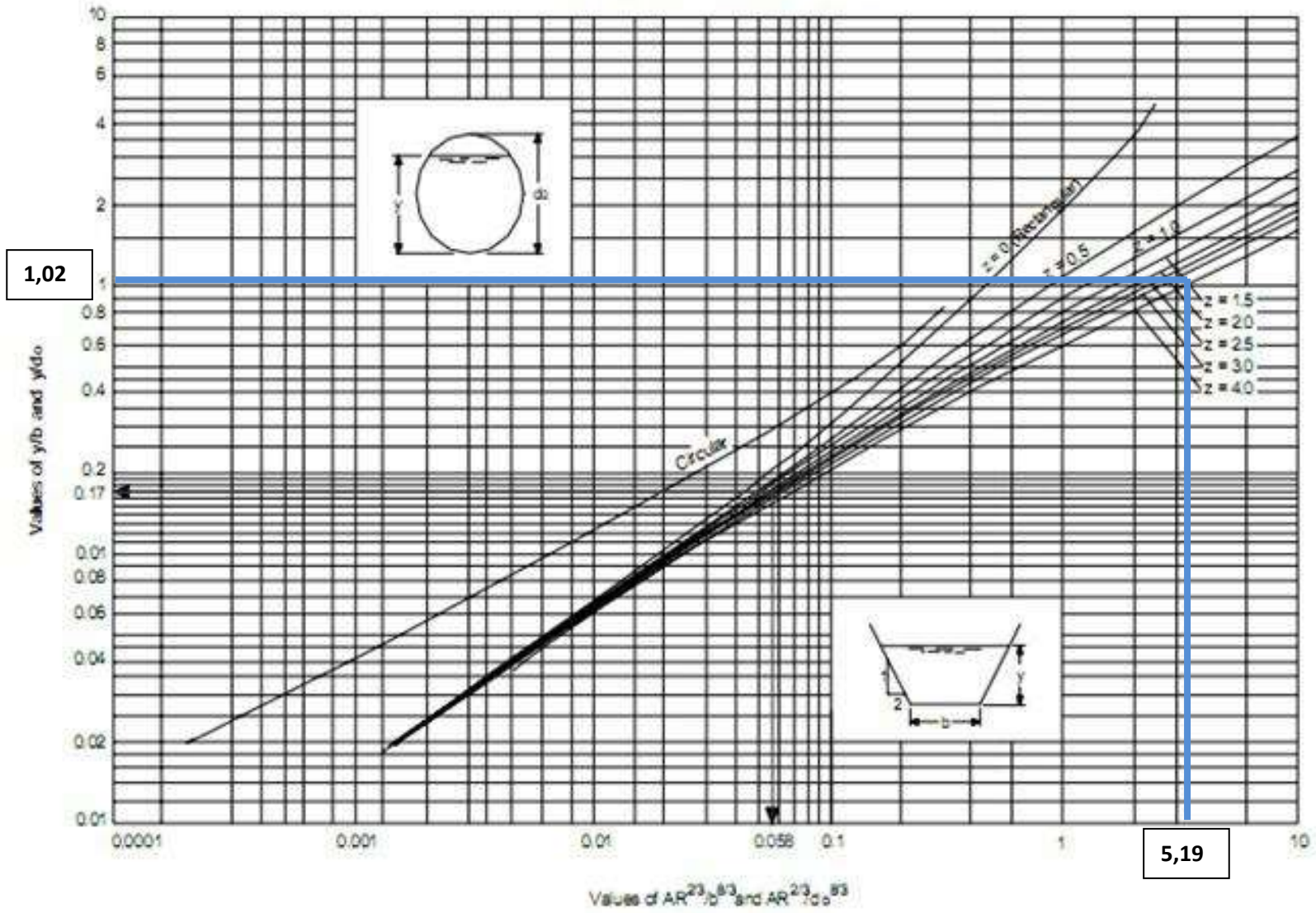
No	nama sungai	Dimensi existing	b (lebar basah )	(m) Kemiringan
1	sta 4 hilir		29,22	4,1
2	sta 3		20	4,2
3	sta 2		17	2,7
4	sta 1		14	2,5
5	sta 0 hulu		10	2,4



## **LAMPIRAN 11**

**GRAFIK PERAMALAN KEDALAMAN NORMAL**

# ALIRAN SERAGAM





## **LAMPIRAN 12**

**DOKUMENTASI SALURAN**





## DAFTAR RIWAYAT HIDUP

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### DATA PRIBADI



Nama : Agus Salim  
Tempat, Tanggal Lahir : Bondowoso, 10 Agustus 1997  
Jenis Kelamin : Laki-laki  
Tinggi Badan : 173 cm  
Agama : Islam  
Kewarganegaraan : Indonesia  
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Telephone : +6285776416811  
Email : [sagus1007@gmail.com](mailto:sagus1007@gmail.com)

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### RIWAYAT PENDIDIKAN

Sekolah Dasar : SDN 01 Grujugan Kidul Tahun 2004 - 2010  
Sekolah Menengah Pertama : Mts Nurus Salam Tahun 2010 - 2013  
Sekolah Menengah Atas : SMA Negeri 03 Tahun 2013 - 2016  
Universitas : Universitas Muhammadiyah Jember Tahun 2016 –  
2020

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### PENGALAMAN ORGANISASI

Aktif di Organisasi UKM Teater Oksigen