

#### ပို့ခိုက်ရွှေရေးရပကျဖစ်[ကျက် PEMERINTAH KABUPATEN GIANYAI ထို့နာနာပြီးရေးရည်မှုချိန်ရေးသစ်[ကုပ်

#### DINAS PEKERJAAN UMUM DAN PENATAAN RUANG

ทางคำพฤหารค-พูหัว(ฦระหวุล) (๑๓๓ หา)ผระผมผา-พระกุษารณ Jin. Raya Bona-Gianyar Tip (0361) 944997-943817 Email : dinaspugianyar@gmail.com

### **LAPORAN HASIL PERHITUNGAN EPANET**





#### ပိမ်ာ်ကို ရွားရေးလူပ႑ဖား၍ကျွက်ာ PEMERINTAH KABUPATEN GIANYAR ထိုအပါပိန်းရာအရိုင္တုမျို့ပ်နာဖာာ၍ကျပဲ

#### DINAS PEKERJAAN UMUM DAN PENATAAN RUANG

സെതിനധുന്നാതെ-തൃത്തി റ്റുണ്ടേയിൽ (ത്തേഷ്) ധാദധ്യാസ-ധാത്രാത്ത Jin. Raya Bona-Gianyar Tip (0361) 944997-943817 Email : dinaspugianyar@gmail.com

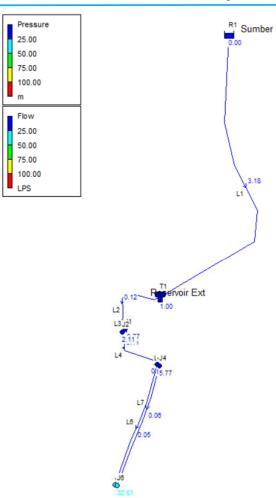
### **PERENCANAAN SPAM 2024 PAKET 1**



Jl. Batusari No. 15 Telp. : (0361) 241613, 241676 Fax. : (0361) 241676

Denpasar 80235

## HASIL PERHITUNGAN EPANET DESA KERTA (PILAN)

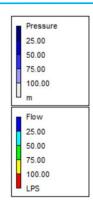


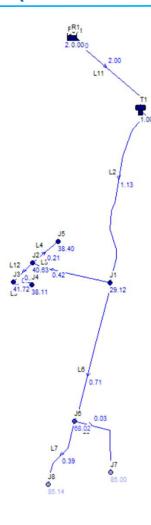
### TABEL HASIL PERHITUNGAN EPANET DESA KERTA (PILAN)

Network Table - Nodes							
	Elevation	Base Demand	Pressure				
Node ID	m	LPS	m				
Junc J1	761.21	0.00	-0.77				
Junc J2	758.33	0.01	2.11				
Junc J3	753.88	0.00	6.55				
Junc J4	754.66	0.00	5.77				
Junc J5	726.32	0.05	34.11				
Junc J6	727.61	0.06	32.81				
Resvr R1	785.41	-3.18	0.00				
Tank T1	759.46	3.06	1.00				

	Network Table - Links							
	Length	Diameter	Roughness	Flow	Velocity	Unit Headloss	<b>Friction Factor</b>	
Link ID	m	mm		LPS	m/s	m/km		
Pipe L1	1184.64	60.00	150	3.18	1.12	21,06	0,02	
Pipe L2	264.69	60.00	130.0000	0.12	0.04	0,06	0,042	
Pipe L3	12.63	60.00	130.0000	0.01	0.00	0	0	
Pipe L4	206.02	60.00	130.0000	0.11	0.04	0,05	0,042	
Pipe L5	7.51	60.00	130.0000	0.06	0.02	0,02	0,052	
Pipe L6	457.29	60.00	130.0000	0.05	0.02	0,01	0,047	
Pipe L7	456.03	60.00	130.0000	0.06	0.02	0,02	0,046	
Total Unit Headloss						0,02		

## HASIL PERHITUNGAN EPANET DESA KERTA (Kantor Perbekel Kerta)





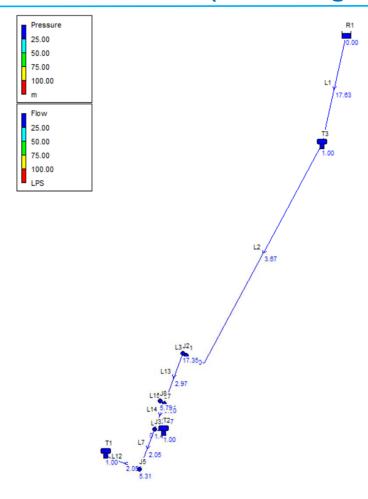
## TABEL HASIL PERHITUNGAN EPANET DESA KERTA (Kantor Perbekel Kerta)

Network Table - Nodes						
	Elevation	Base Demand	Pressure			
Node ID	m	LPS	m			
Junc J1	891.72	0.00	29.12			
Junc J2	880.02	0.00	40.63			
Junc J3	878.91	0.00	41.72			
Junc J4	880.67	0.21	38.11			
Junc J5	882.23	0.21	38.40			
Junc J6	851.93	0.29	68.02			
Junc J7	834.77	0.03	85.00			
Junc J8	834.67	0.39	85.14			
Junc J11	865.92	0.00	59.60			
Resvr R1	865.92	-2.00	0.00			
Tank T1	920.23	0.87	1.00			

Network Table - Links								
	Length	Diameter	Roughness	Flow	Velocity	Unit Headloss	Friction Factor	
Link ID	m	mm		LPS	m/s	m/km		
Pipe L2	661.00	89.00	130.0000	1.13	0.18	0,59	0,031	
Pipe L3	288.32	60.00	130.0000	0.42	0.15	0,65	0,035	
Pipe L4	119.07	60.00	130.0000	0.21	0.07	0,18	0,038	
Pipe L6	516.51	60.00	130.0000	0.71	0.25	1,71	0,032	
Pipe L7	252.44	60	130.0000	0.39	0.14	0,56	0,035	
Pipe L8	282.99	22	130.0000	0.03	0.08	0,65	0,045	
Pipe L9	78.01	22.00	130.0000	0.21	0.55	23,76	0,034	
Pipe L11	367.35	60.00	130.0000	2.00	0.71	11,69	0,027	
Pipe L12	96.25	60.00	130.0000	0.21	0.07	0,18	0,038	
Pump P1 Sumber	#N/A	#N/A	#N/A	2.00	0.00	-59,6	0	
Total U	nit Headloss	Total Unit Headloss				0,10		

Hasil Perhitungan Total Head				
Total Unit Headloss	0,10			
Selisih Elevasi	55			
Total Head	55,10			

### TABEL HASIL PERHITUNGAN EPANET DESA TARO (Br. Pisang Kelod)

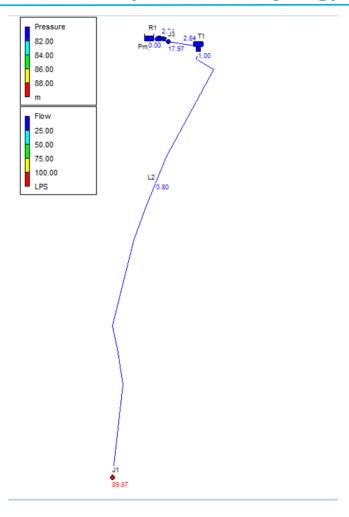


### TABEL HASIL PERHITUNGAN EPANET DESA TARO (Br. Pisang Kelod)

Network Table - Nodes						
	Elevation	Demand	Pressure			
Node ID	m	LPS	m			
Junc J7	798.88	0.00	5.60			
Junc J8	798.69	0.01	5.79			
Junc J1	806.93	0.70	20.40			
Junc J2	808.43	0.00	17.35			
Junc J3	792.34	0.00	1.42			
Junc J5	779.88	0.00	5.31			
Resvr R1	894.63	-17.63	0.00			
Tank T1	776.72	2.05	1.00			
Tank T2	792.35	0.92	1.00			
Tank T3	834.16	13.96	1.00			

	Network Table - Links							
	Length Diameter Roughness			Flow	Velocity	Unit Headloss	Friction Factor	
Link ID	m	mm		LPS	m/s	m/km		
Pipe L11	50.18	48.00	130.0000	0.92	0.51	8,17	0.030	
Pipe L12	207.20	48.00	130.0000	2.05	1.13	36,04	0.027	
Pipe L13	296.13	48.00	130.0000	2.97	1.64	71,93	0.025	
Pipe L14	149.64	48.00	130.0000	2.97	1.64	71,61	0.025	
Pipe L15	27.41	22.00	130.0000	0.01	0.02	0,04	0.055	
Pipe L1	619.10	89.00	130.0000	17.63	2.83	96,06	0.021	
Pipe L2	1488.44	89.00	130.0000	3.67	0.59	5,26	0.026	
Pipe L3	21.66	48.00	130.0000	2.97	1.64	71,93	0.025	
Pipe L7	237.86	48.00	130.0000	2.05	1.13	36,04	0.027	
	Total U	nit Headlos	is			0,40		

## TABEL HASIL PERHITUNGAN EPANET DESA TARO (Br. Alas Pujung)



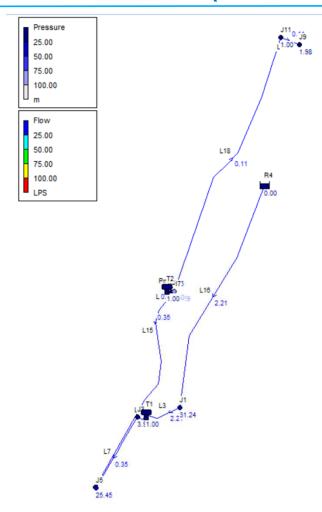
## TABEL HASIL PERHITUNGAN EPANET DESA TARO (Br. Alas Pujung)

Network Table - Nodes						
Elevation Demand Pressure						
Node ID	m	LPS	m			
Junc J1	809.00	0.80	89.87			
Junc J3	890.00	0.00	17.97			
Resvr R1	854.00	-2.84	0.00			
Tank T1	901.00	2.04	1.00			

Network Table - Links								
	Length Diameter Roughness Flow Velocity Unit Headloss Friction Factor							
Link ID	m	mm		LPS	m/s	m/km		
Pipe L2	1466.73	60	130.0000	0.80	0.28	2,13	0,031	
Pipe P2	350	60	150	2.84	1.00	17,05	0,02	
Pump Pmp1 Sumber	#N/A	#N/A	#N/A	2.84	0.00	-53,97	0	
Total Unit Headloss						0,07		

Hasil Perhitungan Total Head					
Total Unit Headloss	0,07				
Selisih Elevasi	47				
Total Head	47,07				

### TABEL HASIL PERHITUNGAN EPANET DESA TARO (Br. Tebuana)

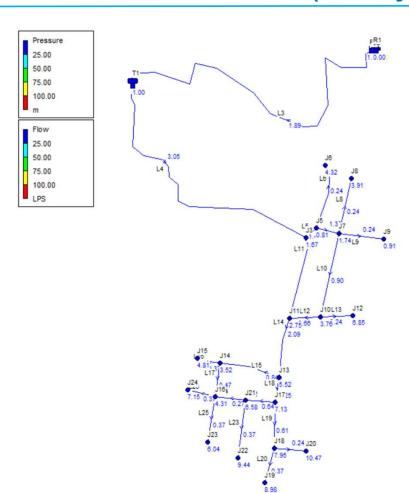


### TABEL HASIL PERHITUNGAN EPANET DESA TARO (Br. Tebuana)

Network Table - Nodes						
	Elevation	Head	Pressure			
Node ID	m	m	m			
Junc J11	920.00	921.00	1.00			
Junc J3	809.00	812.94	3.94			
Junc J4	787.00	842.93	55.93			
Junc J5	787.00	812.45	25.45			
Junc J6	842.00	843.00	1.00			
Junc J7	842.00	921.29	79.29			
Junc J9	919.00	920.98	1.98			
Junc J1	787.00	818.24	31.24			
Junc J8	842.00	921.30	79.30			
Resvr R4	851.00	851.00	0.00			
Tank T1	812.00	813.00	1.00			
Tank T2	842.00	843.00	1.00			

	Network Table - Links								
	Length	Diameter	Roughness	Flow	Velocity	Unit Headloss	Friction Factor		
Link ID	m	mm		LPS	m/s	m/km			
Pipe L18	1236.73	42.00	150.0000	0.11	0.08	0,24	0.031		
Pipe L21	87.90	42.00	150.0000	0.11	0.08	0,24	0.031		
Pipe L3	164.52	48.00	150.0000	2.21	1.22	31,82	0.020		
Pipe L4	54.63	48.00	150.0000	0.35	0.19	1,05	0.026		
Pipe L7	359.92	48.00	130.0000	0.35	0.19	1,37	0.034		
Pipe L10	32.59	42.00	150.0000	0.11	0.08	0,24	0.031		
Pipe L14	28.08	89.00	130.0000	0.35	0.06	0,07	0.038		
Pipe L15	963.88	89.00	130.0000	0.35	0.06	0,07	0.037		
Pipe L16	1029.55	48.00	150.0000	2.21	1.22	31,82	0.020		
Pump Pmp1 Distribusi	#N/A	#N/A	#N/A	0.11	0.00	-78,3	0.000		
Т	Total Unit Headloss					0,15			

### TABEL HASIL PERHITUNGAN EPANET DESA KEDISAN (Br. Bayad)



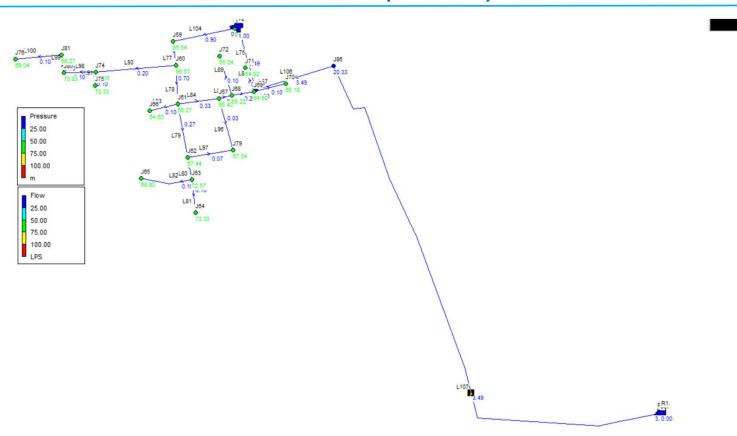
### TABEL HASIL PERHITUNGAN EPANET DESA KEDISAN (Br. Bayad)

Network Table - Nodes								
	Elevation	Demand	Pressure					
Node ID	m	LPS	m					
Junc J3	532.77	0.00	1.67					
Junc J5	533.38	0.00	0.81					
Junc J6	529.83	0.24	4.32					
Junc J7	532.11	0.00	1.74					
Junc J8	529.91	0.24	3.91					
Junc J9	532.92	0.24	0.91					
Junc J10	529.55	0.00	3.76					
Junc J11	530.45	0.00	2.75					
Junc J12	526.44	0.24	6.85					
Junc J13	525.84	0.00	5.52					
Junc J14	527.49	0.00	3.52					
Junc J15	526.17	0.37	4.81					
Junc J16	526.64	0.00	4.31					
Junc J17	523.94	0.00	7.13					
Junc J18	522.98	0.00	7.95					
Junc J19	521.90	0.37	8.98					
Junc J20	520.44	0.24	10.47					
Junc J21	524.39	0.00	6.58					
Junc J22	521.46	0.37	9.44					
Junc J23	524.85	0.37	6.04					
Junc J24	523.76	0.37	7.15					
Junc J2	491.98	0.00	81.00					
Resvr R1	491.98	-1.89	0.00					
Tank T1	550.73	-1.16	1.00					

			Netwo	rk Table - Link	cs		
	Length	Diameter	Roughness	Flow	Velocity	Unit Headloss	Friction Factor
Link ID	m	mm		LPS	m/s	m/km	
Pipe L3	891.62	48.00	150.0000	1.89	1.04	23,84	0,021
Pipe L4	679.46	60.00	130.0000	3.05	1.08	25,44	0,026
Pipe L5	31.87	60.00	130.0000	1.62	0.57	7,9	0,028
Pipe L6	157.45	60.00	130.0000	0.24	0.08	0,23	0,038
Pipe L7	57.26	60.00	130.0000	1.38	0.49	5,88	0,029
Pipe L8	135.65	60.00	130.0000	0.24	0.08	0,23	0,038
Pipe L9	108.29	60.00	130.0000	0.24	0.08	0,23	0,038
Pipe L10	205.33	60.00	130.0000	0.90	0.32	2,67	0,031
Pipe L11	199.95	60.00	130.0000	1.43	0.50	6,24	0,029
Pipe L12	73.73	60.00	130.0000	0.66	0.23	1,5	0,032
Pipe L13	78.20	60.00	130.0000	0.24	0.08	0,23	0,037
Pipe L14	145.35	60.00	130.0000	2.09	0.74	12,63	0,027
Pipe L15	146.82	60.00	130.0000	0.84	0.30	2,36	0,031
Pipe L16	66.76	60.00	130.0000	0.37	0.13	0,51	0,035
Pipe L17	80.76	60.00	130.0000	0.47	0.17	0,81	0,034
Pipe L18	60.10	60.00	130.0000	1.25	0.44	4,84	0,029
Pipe L19	110.68	60.00	130.0000	0.61	0.22	1,29	0,033
Pipe L20	85.07	60.00	130.0000	0.37	0.13	0,51	0,035
Pipe L21	76.22	60.00	130.0000	0.24	0.08	0,23	0,038
Pipe L22	72.47	60.00	130.0000	0.64	0.22	1,39	0,032
Pipe L23	141.14	60.00	130.0000	0.37	0.13	0,51	0,035
Pipe L24	72.75	60.00	130.0000	0.27	0.09	0,28	0,037
Pipe L25	110.32	60.00	130.0000	0.37	0.13	0,51	0,035
Pipe L26	67.15	60.00	130.0000	0.37	0.13	0,51	0,035
Pump P1 Sumber	#N/A	#N/A	#N/A	1.89	0.00	-81	0
Total Ui	nit Headlos	,				0,18	

	Hasil Perhitungan Total Head
Total Unit Headloss	0,18
Selisih Elevasi	59
Total Head	59,18

# TABEL HASIL PERHITUNGAN EPANET DESA BEDULU (Br. Mas)



### TABEL HASIL PERHITUNGAN EPANET DESA BEDULU (Br. Mas )

Network Table - Nodes							
	Elevation	Base Demand	Pressure				
Node ID	m	LPS	m				
Junc J85	169.43	0.00	63.64				
Junc J86	166.53	0.00	20.33				
Junc J58	166.95	0.00	14.06				
Junc J59	167.16	0.00	65.54				
Junc J60	165.99	0.00	66.57				
Junc J61	164.14	0.00	68.27				
Junc J62	164.94	0.00	67.44				
Junc J63	159.80	0.00	72.57				
Junc J64	159.04	0.10	73.33				
Junc J65	163.57	0.10	68.80				
Junc J66	167.81	0.10	64.60				
Junc J67	165.90	0.00	66.48				
Junc J68	167.15	0.00	65.22				
Junc J69	167.44	0.00	64.92				
Junc J70	167.18	0.10	65.18				
Junc J71	167.54	0.10	64.82				
Junc J72	167.32	0.10	65.04				
Junc J74	160.98	0.00	71.55				
Junc J75	162.20	0.10	70.33				
Junc J76	163.48	0.10	69.04				
Junc J79	164.84	0.10	67.54				
Junc J80	161.70	0.00	70.83				
Junc J81	164.25	0.00	68.27				
Junc J57	132.80	0.00	86.95				
Resvr R1	131.94	-3.49	0.00				
Tank T2	175.39	2.59	1.00				

На	sil Perhitungan Total Head
Total Unit Headloss	0,24
Selisih Elevasi	44
Total Head	44,24

			Network Tab	ole - Links			
	Length	Diameter	Roughness	Flow	Velocity	Unit Headloss	Friction Factor
Link ID	m	mm		LPS	m/s	m/km	
Pipe L107	1316.58	60.00	150.0000	3.49	1.23	24,99	0,019
Pipe L104	138.54	60.00	130.0000	0.90	0.32	2,65	0,031
Pipe L106	179.49	60.00	130.0000	3.49	1.23	32,57	0,025
Pipe L75	141.82	60.00	130.0000	3.49	1.23	32,57	0,025
Pipe L77	53.10	60.00	130.0000	0.90	0.32	2,65	0,031
Pipe L78	86.35	60.00	130.0000	0.70	0.25	1,67	0,032
Pipe L79	118.89	60.00	130.0000	0.27	0.10	0,29	0,037
Pipe L80	49.98	60.00	130.0000	0.20	0.07	0,16	0,039
Pipe L81	73.62	60.00	130.0000	0.10	0.04	0,05	0,043
Pipe L82	114.71	60.00	130.0000	0.10	0.04	0,05	0,043
Pipe L83	63.53	60.00	130.0000	0.10	0.04	0,05	0,043
Pipe L84	91.67	60.00	130.0000	0.33	0.12	0,40	0,036
Pipe L85	28.83	60.00	130.0000	0.30	0.11	0,35	0,036
Pipe L86	48.90	60.00	130.0000	0.20	0.07	0,16	0,039
Pipe L87	73.47	60.00	130.0000	0.10	0.04	0,05	0,043
Pipe L88	56.73	60.00	130.0000	0.10	0.04	0,05	0,043
Pipe L89	90.68	60.00	130.0000	0.10	0.04	0,05	0,043
Pipe L91	29.73	60.00	130.0000	0.10	0.04	0,05	0,043
Pipe L93	177.54	60.00	130.0000	0.20	0.07	0,16	0,039
Pipe L96	118.66	60.00	130.0000	0.03	0.01	0,00	0,053
Pipe L97	100.46	60.00	130.0000	0.07	0.03	0,03	0,045
Pipe L98	69.05	60.00	130.0000	0.10	0.04	0,05	0,043
Pipe L99	39.74	60.00	130.0000	0.10	0.04	0,05	0,043
Pipe L100	101.32	60.00	130.0000	0.10	0.04	0,05	0,043
Pump P4 Distribusi	#N/A	#N/A	#N/A	0.90	0.00	-56,68	0
Pump P2 Sumber	#N/A	#N/A	#N/A	3.49	0.00	-87,81	0
Total Unit Headloss						0,24	



#### ပိမ်ာ်ကိုရွားနားလူပ႑ဇာခ်ျီကျွက်ာ PEMERINTAH KABUPATEN GIANYAR ထိုခုသျှိပ်ခြားကာချို့ငွဲမှု၏ပြနာဇာာချီကျပဲ

#### DINAS PEKERJAAN UMUM DAN PENATAAN RUANG

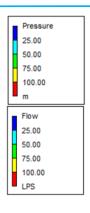
സെതിനധുന്നാതെ-തൃത്തി റ്റുണ്ടേയിൽ (ത്തേഷ്) ധാദധ്യാസ-ധാത്രാത്ത Jin. Raya Bona-Gianyar Tip (0361) 944997-943817 Email : dinaspugianyar@gmail.com

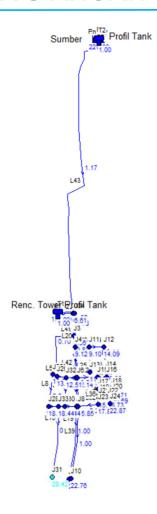
### **PERENCANAAN SPAM 2024 PAKET 2**



No. 15 Telp. : (0361) 241613, 241676 Fax. : (0361) 241 Denpasar 80235

### HASIL PERHITUNGAN EPANET DESA SIANGAN





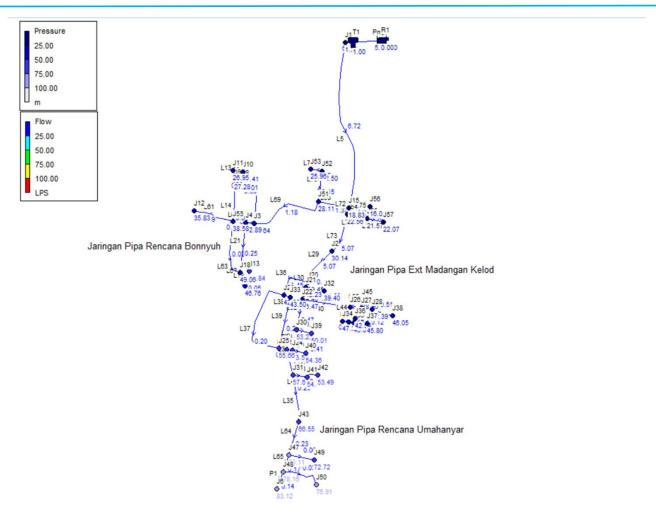
### TABEL HASIL PERHITUNGAN EPANET DESA SIANGAN

	Netwo	rk Table - Node	es			
	Elevation	Demand	Pressure			
Node ID	m	LPS	m			
Junc J1	255.00	0.00	6.70	Junc J21	243.00	0.0
Junc J3	256.00	0.00	4.96	Junc J22	240.00	0.1
lunc J4	251.00	0.00	9.12	Junc J23	241.00	0.0
unc J5	249.00	0.00	11.52	Junc J24	236.00	0.10
unc J6	247.00	0.00	12.14	Junc J25	245.00	0.14
lunc J7	243.00	0.00	17.39	Junc J26	247.00	0.15
Junc J8	243.00	0.00	15.85	Junc J28	242.00	0.13
Junc J9	235.00	1.00	24.30	Junc J30	244.00	0.00
Junc J10	235.00	1.00	22.76	Junc J31	232.00	0.10
Junc J11	251.00	0.00	9.10	Junc J32	248.00	0.00
lunc J12	246.00	0.00	14.09	Junc J33	242.00	0.00
unc J13	249.00	0.14	11.09	Junc J34	255.00	0.00
lunc J14	244.00	0.14	16.08	Junc J2	257	0.00
Junc J15	247.00	0.00	11.98	Junc J27	297	0.00
Junc J16	244.00	0.10	14.98	Resvr R2	297.00	-22.09
Junc J17	245.00	0.00	13.91	Tank T1	263	2.13
Junc J18	241.00	0.10	17.71	Tank T2	299	20.92
Junc J19	244.00	0.00	14.89		•	•
unc J20	238.00	0.10	20.69			

Hasil Perhitungan Total Head						
Total Unit Headloss	0,04					
Selisih Elevasi	2					
Head Pompa	2,04					

			Network	Table - Links			
	Length	Diameter	Roughness	Flow	Velocity	Unit Headloss	Friction Factor
Link ID	m	mm		LPS	m/s	m/km	
Pipe L3	105.70	60	130.0000	1.52	0.54	7.00	0.029
Pipe L4	270.62	60	130.0000	0.70	0.25	1.67	0.032
Pipe L5	20.72	60	130.0000	0.45	0.16	0.73	0.034
Pipe L8	148.02	60	130.0000	0.31	0.11	0.37	0.036
Pipe L11	54.86	60	130.0000	0.47	0.17	0.79	0.034
Pipe L12	131.97	60	130.0000	0.39	0.14	0.56	0.035
Pipe L14	44.41	60	130.0000	0.29	0.10	0.32	0.037
Pipe L15	131.05	60	130.0000	0.53	0.19	1.00	0.033
Pipe L16	331.04	60	130.0000	0.10	0.04	0.05	0.043
Pipe L18	30.49	60	130.0000	0.08	0.03	0.03	0.044
Pipe L19	339.56	60	130.0000	1.00	0.35	3.23	0.030
Pipe L20	159.26	60	130.0000	1.78	0.63	9.38	0.028
Pipe L21	10	60	130.0000	1.78	0.63	9.38	0.028
Pipe L23	62.09	60	130.0000	0.28	0.10	0.31	0.037
Pipe L24	69.02	60	130.0000	0.14	0.05	0.08	0.041
Pipe L25	115.83	60	130.0000	0.14	0.05	0.08	0.041
Pipe L26	115.03	60	130.0000	0.14	0.05	0.08	0.041
Pipe L27	143.03	60	130.0000	1.50	0.53	6.84	0.029
Pipe L28	95.93	60	130.0000	0.70	0.25	1.65	0.032
Pipe L29	40.80	60	130.0000	0.10	0.04	0.05	0.043
Pipe L30	55.00	60	130.0000	0.60	0.21	1.24	0.033
Pipe L31	61.14	25	130.0000	0.10	0.20	3.23	0.038
Pipe L32	24.86	60	130.0000	0.50	0.18	0.88	0.034
Pipe L33	61.54	25	130.0000	0.10	0.20	3.23	0.038
Pipe L34	17.45	60	130.0000	0.40	0.14	0.58	0.035
Pipe L35	45.11	25	130.0000	0.10	0.20	3.23	0.038
Pipe L36	28.63	60	130.0000	0.30	0.10	0.34	0.036
Pipe L37	94.33	60	130.0000	0.20	0.07	0.16	0.039
Pipe L38	53.69	60	130.0000	0.10	0.04	0.05	0.043
Pipe L39	338.98	60	130.0000	1.00	0.35	3.23	0.030
Pipe L40	131.95	60	130.0000	0.80	0.28	2.15	0.031
Pipe L42	196.91	60	130.0000	0.82	0.29	2.23	0.031
Pipe L43	1462.75	42	130.0000	1.17	0.85	24.55	0.028
Pipe P1	20	60	130	1.17	0.41	4.32	0.030
Pipe P2	78	60	130	3.30	1.17	29.44	0.025
Pipe P3	5	63	130	22.09	7.09	785.24	0.019
Pipe P4	40	60	130	0.10	0.04	0.05	0.043
Pipe P5	43	60	130	0.18	0.06	0.13	0.039
Pump Pmp1 Sumber	#N/A	#N/A	#N/A	22.09	0.00	-6.93	0.000
Total Uni	t Headloss					0,04	

### HASIL PERHITUNGAN EPANET DESA MADANGAN KELOD, BONNYUH & UMAHANYAR



### TABEL HASIL PERHITUNGAN EPANET DESA MADANGAN KELOD, BONNYUH & UMAHANYAR

		ble - Nodes at 0					
	Elevation	Demand	Pressure				
Node ID	m	LPS	m		1	1	1
Junc J47	294.75	0.00	75.11	Junc J26	323.74	0.00	45.90
Junc J48	291.70	0.00	78.16	Junc J27	328.20	0.00	41.43
Junc J49	297.14	0.06	72.72	Junc J28	327.23	0.00	42.39
Junc J50	292.95	0.03	76.91	Junc J29	320.76	0.00	48.50
Junc J51	343.48	0.00	28.11	Junc J30	316.72	0.00	53.23
Junc J52	349.09	0.00	22.50	Junc J31	312.25	0.00	57.61
Junc J53	345.50	0.15	25.96	Junc J32	330.81	0.16	39.40
Junc J54	348.96	0.00	22.56	June J33	326.77	0.00	43.50
Junc J55	349.95	0.00	21.57	June J33	321.87	0.12	47.34
Junc J56	355.32	0.16	16.04			1.00	46.04
Junc J57	349.24	0.16	22.07	Junc J35	321.10		
Junc J58	316.61	0.45	52.97	Junc J36	324.56	0.12	42.54
Junc J45	330.61	0.12	38.96	Junc J37	323.71	0.12	45.80
Junc J46	332.76	0.00	38.58	Junc J38	323.55	0.51	46.05
Junc J3	337.87	0.00	33.64	Junc J39	319.86	0.12	50.01
Junc J4	338.52	0.00	32.89	Junc J40	315.44	1.00	54.36
Junc J5	332.76	0.00	38.58	Junc J41	315.03	1.00	54.52
Junc J8	340.33	0.00	31.01	Junc J42	315.97	0.12	53.49
Junc J9	344.06	0.00	27.28	Junc J43	303.31	0.00	66.55
Junc J10	341.93	0.21	29.41	June J1	374.62	0.00	1.31
Junc J11	344.38	0.21	26.95	June J2	340.77	0.00	30.14
Junc J12	335.32	0.49	35.83		286.74		83.12
Junc J13	319.50	0.05	51.84	Junc J6		0.14	
Junc J15	352.80	0.00	18.83	Junc J7	351.06	0.00	26.90
Junc J17	324.58	0.00	46.76	Resvr R1	351.06	-5.69	0.00
Junc J18	322.28	0.22	49.06	Tank T1	375.10	-1.03	1.00
Junc J20	330.84	0.00	39.45	_			
Junc J21	327.99	0.00	42.23				
Junc J22	323.60	0.00	46.47				

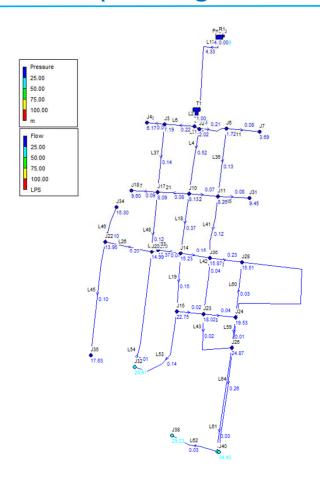
42.96 53.55

		Net	work Table - Lin	ks at 0:00 F	Irs		
	Length	Diameter	Roughness	Flow	Velocity	Unit Headloss	Friction Factor
Link ID	m	mm		LPS	m/s	m/km	
Pipe L64	179.09	114.00	130.0000	0.23	0.02	0,01	0.041
Pipe L65	94.76	114.00	130.0000	0.17	0.02	0,01	0.041
Pipe L66	135.34	60.00	130.0000	0.06	0.02	0,02	0.046
Pipe L67	211.51	60.00	130.0000	0.03	0.01	0,01	0.052
Pipe L68	162.36	114.00	130.0000	1.33	0.13	0,24	0.032
Pipe L69	419.24	114.00	130.0000	1.18	0.12	0,19	0.032
Pipe L70	159.82	89.00	130.0000	0.15	0.02	0,01	0.042
Pipe L71	61.77	32.00	130.0000	0.15	0.19	2,05	0.037
Pipe L72	32.66	114.00	130.0000	5.39	0.53	3,2	0.026
Pipe L73	214.92	114.00	130.0000	5.07	0.50	2,86	0.026
Pipe L74	107.30	89.00	130.0000	0.32	0.05	0,06	0.038
Pipe L75	65.88	32.00	130.0000	0.16	0.20	2,31	0.037
Pipe L76	87.57	32.00	130.0000	0.16	0.20	2,31	0.037
Pipe L77	43.41	32.00	130.0000	0.45	0.56	15,71	0.032
Pipe L29	215.43	114.00	130.0000	5.07	0.50	2,86	0.026
Pipe L30	30.50	114.00	130.0000	4.62	0.45	2,41	0.026
Pipe L31	63.59	114.00	130.0000	4.46	0.44	2,26	0.026
Pipe L32	165.07	114.00	130.0000	2.47	0.24	0,76	0.029
Pipe L33	109.28	114.00	130.0000	1.94	0.19	0,48	0.030
Pipe L34	131.88	114.00	130.0000	1.35	0.13	0,25	0.032
Pipe L35	250.83	114.00	130.0000	0.23	0.02	0,01	0.041
Pipe L36	196.18	89.00	130.0000	0.45	0.07	0,11	0.036
Pipe L37	509.38	89.00	130.0000	0.20	0.03	0,02	0.041
Pipe L38	37.47	89.00	130.0000	0.25	0.04	0,04	0.039
Pipe L39	272.82	89.00	130.0000	0.25	0.04	0,04	0.039
Pipe L40	254.68	89.00	130.0000	1.99	0.32	1,69	0.029
Pipe L41	60.67	89.00	130.0000	0.75	0.12	0,28	0.033
Pipe L42	54.10	89.00	130.0000	0.63	0.10	0,2	0.034
Pipe L43	114.19	89.00	130.0000	0.51	0.08	0,14	0.035
Pipe L44	79.41	60.00	130.0000	1.24	0.44	4,8	0.029
Pipe L45	78.52	60.00	130.0000	0.53	0.19	0,99	0.033

Pipe L46	109.45	60.00	130,0000	0.41	0.14	0,61	0.035
Pipe L48	77.94	60.00	130.0000	1.12	0.40	3,98	0.030
Pipe L49	94.91	60.00	130.0000	0.16	0.06	0,11	0.040
Pipe L43	66.87	32.00	130.0000	0.10	0.15	1,36	0.040
Pipe L50	35.85	32.00	130.0000	0.12	0.15	1,36	0.038
Pipe L52	25.00	32.00	130.0000	1.12	1.39		0.038
	23.23	32.00	130.0000	0.12	0.15	85,03 1.36	0.028
Pipe L54	44.50			_			0.038
Pipe L55		32.00	130.0000	0.12	0.15	1,36	
Pipe L56	78.28	32.00	130.0000	0.12	0.15	1,36	0.038
Pipe L57	74.50	60.00	130.0000	0.59	0.21	1,23	0.033
Pipe L60	0.41	60.00	130.0000	0.49	0.17	0,91	0.036
Pipe L61	217.35	60.00	130.0000	0.49	0.17	0,86	0.034
Pipe L62	89.45	60.00	130.0000	0.05	0.02	0,01	0.047
Pipe L63	302.25	60.00	130.0000	0.02	0.01	0,01	0.057
Pipe L5	893.21	114.00	130.0000	6.72	0.66	4,82	0.025
Pipe L7	47.96	60.00	130.0000	0.79	0.28	2,11	0.031
Pipe L8	64.34	60.00	130.0000	0.54	0.19	1,03	0.033
Pipe L10	297.16	60.00	130.0000	0.39	0.14	0,55	0.035
Pipe L11	42.94	60.00	130.0000	0.21	0.07	0,18	0.038
Pipe L12	40.84	60.00	130.0000	0.18	0.06	0,13	0.039
Pipe L13	47.14	60.00	130.0000	0.21	0.07	0,18	0.038
Pipe L14	221.29	60.00	130.0000	0.03	0.01	0,01	0.051
Pipe L18	79.65	60.00	130.0000	0.05	0.02	0,01	0.048
Pipe L21	263.55	60.00	130.0000	0.25	0.09	0,25	0.037
Pipe L25	156.97	89.00	130.0000	5.69	0.91	11,83	0.025
Pipe L2	34.79	114.00	130.0000	6.72	0.66	4,82	0.025
Pipe P1	70	114	130	0.14	0.01	0,01	0.044
Pump Pmp1 Sumber	#N/A	#N/A	#N/A	5.69	0.00	-26,9	0.000
Tota	Total Unit Headloss					0,20	

Ha	sil Perhitungan total Head
Total Unit Headloss	0,20
Selisih Elevasi	24
Total Head	24,20

### HASIL PERHITUNGAN EPANET DESA TAMPAKSIRING (Br. Tengah, Br. Buruan dan Br. Kelodan )



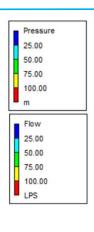
### TABEL HASIL PERHITUNGAN EPANET DESA TAMPAKSIRING (Br. Tengah, Br. Buruan dan Br. Kelodan)

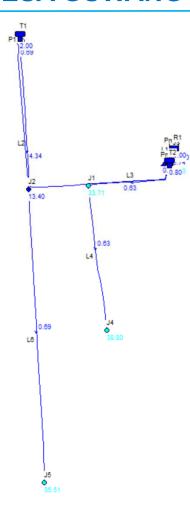
Network Table - Nodes							
	Elevation	Demand	Pressure				
Node ID	m	LPS	m				
Junc J32	492.44	0.13	26.91				
Junc J33	503.99	0.00	15.37				
Junc J34	504.02	0.10	15.30				
Junc J35	501.68	0.10	17.63				
Junc J36	503.49	0.00	15.87				
Junc J37	484.65	0.00	34.70				
Junc J38	490.12	0.03	29.23				
Junc J40	484.65	0.26	34.40				
Junc J1	518.37	0.00	1.04				
Junc J2	517.38	0.00	2.02				
Junc J3	512.20	0.00	7.19				
Junc J4	513.22	0.08	6.17				
Junc J6	517.67	0.00	1.72				
Junc J7	515.69	0.08	3.69				
Junc J10	511.24	0.00	8.13				
Junc J11	511.11	0.00	8.26				
Junc J13	522.54	0.00	29.99				
Junc J14	504.13	0.00	15.23				
Junc J15	496.61	0.00	22.75				
Junc J17	511.28	0.00	8.09				
Junc J18	509.77	0.09	9.60				
Junc J20	504.36	0.00	14.99				
Junc J22	505.38	0.00	13.95				
Junc J23	501.34	0.00	18.02				
Junc J24	499.83	0.00	19.53				
Junc J26	494.49	0.00	24.87				
Junc J28	503.84	0.00	15.51				
Junc J31	509.92	0.08	9.45				
Resvr R1	522.54	-4.33	0.00				
Tank T1	518.43	3.38	1.00				

Network Table - Links							
	Length	Diameter	Roughness	Flow	Velocity	Unit Headloss	Friction Factor
Link ID	m	mm		LPS	m/s	m/km	
Pipe L36	222.97	60.00	130.0000	0.13	0.05	0,07	0.041
Pipe L37	221.55	60.00	130.0000	0.14	0.05	0,08	0.041
Pipe L41	202.79	60.00	130.0000	0.12	0.04	0,07	0.041
Pipe L42	183.83	60.00	130.0000	0.04	0.01	0,01	0.049
Pipe L43	210.31	60.00	130.0000	0.02	0.01	0	0.055
Pipe L45	374.66	60.00	130.0000	0.10	0.04	0,05	0.043
Pipe L46	118.08	60.00	130.0000	0.10	0.04	0,05	0.043
Pipe L47	86.37	60.00	130.0000	0.09	0.03	0,04	0.044
Pipe L48	205.26	60.00	130.0000	0.12	0.04	0,07	0.041
Pipe L49	28.70	60.00	130.0000	0.19	0.07	0,15	0.039
Pipe L50	74.03	60.00	130.0000	0.07	0.02	0,02	0.045
Pipe L51	96.27	89.00	130.0000	0.15	0.02	0,01	0.042
Pipe L52	105.00	89.00	130.0000	0.23	0.04	0,03	0.040
Pipe L53	278.86	89.00	130.0000	0.14	0.02	0,01	0.043
Pipe L54	378.49	60.00	130.0000	0.01	0.00	0	0.051
Pipe L55	92.70	60.00	130.0000	0.21	0.07	0,18	0.038
Pipe L59	99.12	60.00	130.0000	0.01	0.00	0	0.125
Pipe L60	180.11	60.00	130.0000	0.03	0.01	0	0.051
Pipe L61	341.18	60.00	130.0000	0.03	0.01	0	0.050
Pipe L62	158.98	60.00	130.0000	0.03	0.01	0	0.051
Pipe L64	1136.27	60.00	130.0000	0.26	0.09	0,27	0.037
Pipe L2	50.09	89.00	130.0000	0.95	0.15	0,43	0.032
Pipe L3	16.40	89.00	130.0000	0.73	0.12	0,27	0.034
Pipe L4	213.59	89.00	130.0000	0.52	0.08	0,14	0.035
Pipe L6	98.05	60.00	130.0000	0.22	0.08	0,19	0.038
Pipe L8	57.14	60.00	130.0000	0.08	0.03	0,03	0.044
Pipe L11	109.02	60.00	130.0000	0.08	0.03	0,03	0.044
Pipe L12	92.88	60.00	130.0000	0.07	0.03	0,03	0.044
Pipe L17	298.78	48.00	150.0000	4.33	2.39	110,77	0.018
Pipe L18	195.93	89.00	130.0000	0.37	0.06	0,08	0.037
Pipe L19	189.70	89.00	130.0000	0.15	0.02	0,01	0.042
Pipe L21	103.01	60.00	130.0000	0.08	0.03	0,03	0.045
Pipe L26	153.41	60.00	130.0000	0.20	0.07	0,16	0.039
Pipe L27	88.35	60.00	130.0000	0.02	0.01	0	0.047
Pipe L28	103.96	60.00	130.0000	0.04	0.01	0,01	0.051
Pipe L35	103.22	60.00	130.0000	0.08	0.03	0,03	0.044
Pump Pmp1 Sumber	#N/A	#N/A	#N/A	4.33	0.00	-29,99	0.000
Total Unit Headloss						0,08	

Hasil Perhitungan Total Head					
Total Unit Headloss	0,08				
Selisih Elevasi	4				
Total Head	4,08				

### HASIL PERHITUNGAN EPANET DESA GUWANG





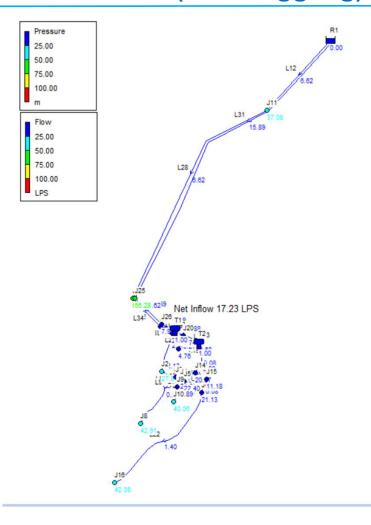
### TABEL HASIL PERHITUNGAN EPANET DESA GUWANG

Network Table - Nodes								
Elevation Base Demand Pressure								
Node ID	m	LPS	m					
Junc J1	40.28	0.00	33.71					
Junc J2	44.74	0.00	13.40					
Junc J4	34.21	0.63	38.80					
Junc J5	20.85	0.69	35.51					
Junc J3	30.68	0.00	22.70					
Junc J6	43.82	0.00	71.27					
Junc J7	43.82	0.00	30.80					
Resvr R1	30.68	-6.74	0.00					
Tank T1	57.36	3.65	2.00					
Tank T2	43.82	1.77	0.80					

	Network Table - Links						
	Length	Diameter	Roughness	Flow	Velocity	Unit Headloss	Friction Factor
Link ID	m	mm		LPS	m/s	m/km	
Pipe L1	79.33	60.00	130.0000	6.74	2.38	110,48	0,023
Pipe L2	1483.63	60.00	150	4.34	1.54	37,56	0,019
Pipe L3	461.32	60.00	130.0000	0.63	0.22	1,37	0,033
Pipe L4	712.69	60	130.0000	0.63	0.22	1,37	0,033
Pipe L6	1427.76	60.00	150	0.69	0.24	1,24	0,025
Pipe P1	754.58	60	130	0.69	0.24	1,62	0,032
Pump Pmp1 Sumber	#N/A	#N/A	#N/A	6.74	0.00	-22,7	0
Pump Pmp2 Transfer	#N/A	#N/A	#N/A	4.34	0.00	-70,47	0
Pump Pmp3 Distribusi	#N/A	#N/A	#N/A	0.63	0.00	-30	0
Total Unit				0,28			

Hasil Perhitungan Total Head					
Total Unit Headloss	0,28				
Selisih elevasi	13				
Head pompa	13,28				

## HASIL PERHITUNGAN EPANET Desa Puhu (Br. Ponggang)



## TABEL HASIL PERHITUNGAN EPANET Desa Puhu (Br. Ponggang)

Network Table - Nodes							
	Elevation	Base Demand	Pressure				
Node ID	m	LPS	m				
Junc J22	572.31	0.00	63.95				
Junc J24	614.79	0.00	11.13				
Junc J25	578.10	0.00	56.28				
Junc J26	617.45	0.00	7.92				
Junc J2	592.83	0.00	27.91				
Junc J3	598.86	0.00	21.25				
Junc J4	598.64	0.00	21.30				
Junc J5	597.43	0.00	22.40				
Junc J6	598.33	0.00	21.13				
Junc J8	577.14	0.27	42.91				
Junc J9	595.04	0.27	24.89				
Junc J10	579.75	0.27	40.06				
Junc J11	663.45	0.00	37.08				
Junc J12	620.34	0.00	1.24				
Junc J13	618.88	0.00	0.68				
Junc J14	598.60	0.00	20.87				
Junc J15	608.29	0.00	11.18				
Junc J16	553.62	1.40	42.08				
Junc J19	619.12	0.00	2.41				
Junc J20	615.78	0.00	5.74				
Junc J21	616.74	0.27	4.76				
Resvr R1	715.48	-22.51	0.00				
Tank T1	620.74	17.23	1.00				
Tank T2	618.47	2.81	1.00				

Network Table - Links								
	Length	Diameter	Roughness	Flow	Velocity	Unit Headloss	Friction Factor	
Link ID	m	mm		LPS	m/s	m/km		
Pipe L28	2476.41	76.00	150.0000	6.62	1.46	25,95	0,018	
Pipe L30	160.98	76.00	150.0000	6.62	1.46	25,95	0,018	
Pipe L31	3417.43	114.00	130.0000	15.89	1.56	23,73	0,022	
Pipe L32	379.96	114.00	130.0000	15.89	1.56	23,73	0,022	
Pipe L33	152.77	114.00	130.0000	15.89	1.56	23,73	0,022	
Pipe L34	398.72	76.00	150.0000	6.62	1.46	25,95	0,018	
Pipe L5	152.42	76.00	130.0000	2.13	0.47	4,14	0,028	
Pipe L6	53.76	76.00	130.0000	1.86	0.41	3,22	0,029	
Pipe L7	45.55	76.00	130.0000	1.59	0.35	2,41	0,029	
Pipe L8	212.23	76.00	130.0000	1.32	0.29	1,71	0,03	
Pipe L9	617.21	76.00	130.0000	0.27	0.06	0,09	0,038	
Pipe L10	87.64	76.00	130.0000	0.27	0.06	0,09	0,038	
Pipe L11	232.89	76.00	130.0000	0.27	0.06	0,09	0,038	
Pipe L12	953.80	89.00	130.0000	6.62	1.06	15,68	0,024	
Pipe L15	15.09	89.00	130.0000	5.29	0.85	10,32	0,025	
Pipe L18	12.65	76.00	130.0000	2.88	0.64	7,26	0,027	
Pipe L19	317.45	76.00	130.0000	0.08	0.02	0,01	0,045	
Pipe L20	134.90	76.00	130.0000	0.08	0.02	0,01	0,046	
Pipe L21	142.00	76.00	130.0000	0.08	0.02	0,01	0,045	
Pipe L22	1332.17	48.00	130.0000	1.40	0.77	17,84	0,028	
Pipe L23	278.72	76.00	130.0000	2.88	0.64	7,26	0,027	
Pipe L24	24.57	89.00	130.0000	2.40	0.39	2,39	0,028	
Pipe L25	408.99	89.00	130.0000	2.13	0.34	1,92	0,029	
Pipe L26	111.66	76.00	130.0000	0.27	0.06	0,09	0,038	
Pipe L27	140.69	76.00	130.0000	0.27	0.06	0,09	0,038	
Total Unit Headloss						0,22		



#### රිම් නිසු අසාගු පාලා කිලාල්න PEMERINTAH KABUPATEN GIANYAI ගික ඩ්රිකි් ෆක්ව් ඉම් ලිකක්රික ගෙක්වාර

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