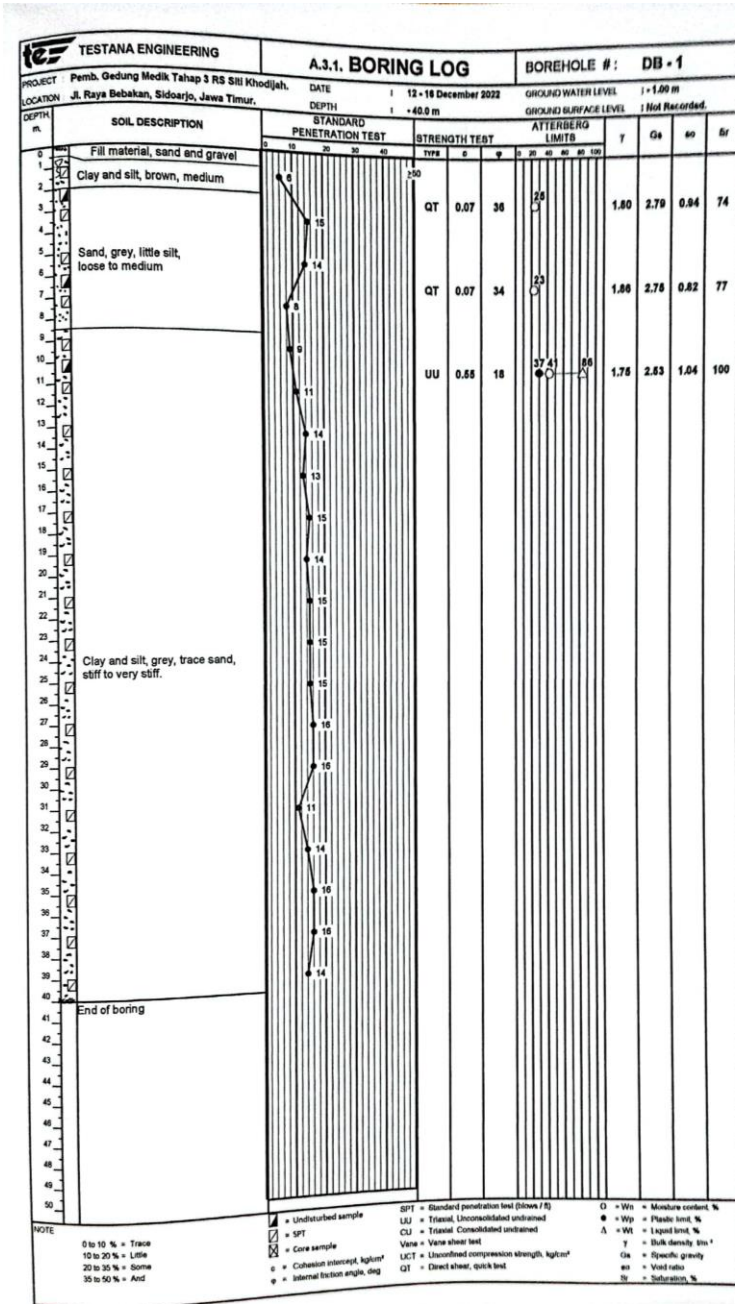


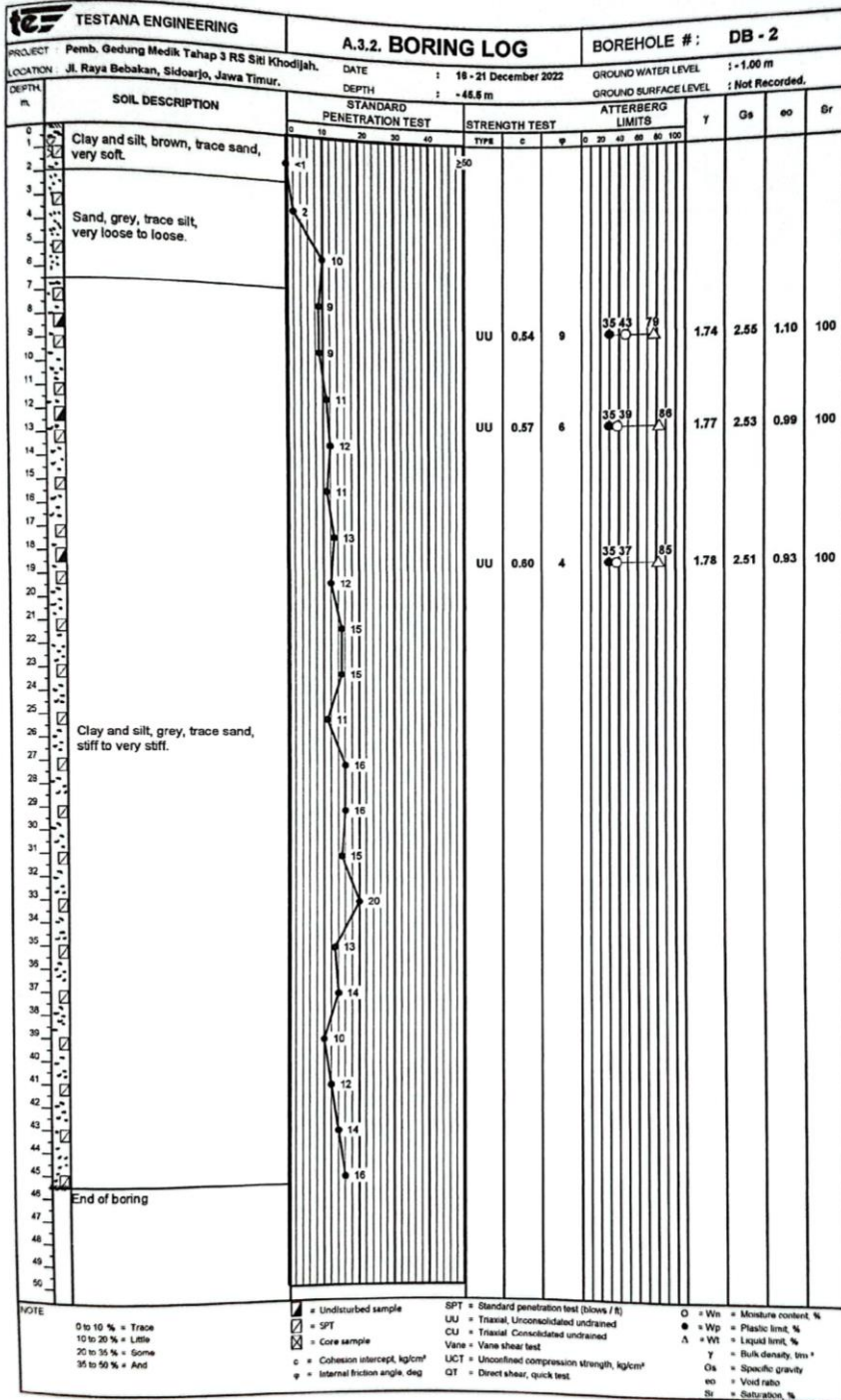
LAMPIRAN

1. Data Penyelidikan Tanah SPT (*Standard Penetration Test*)

- DB-1



• DB-2



• Data Perencanaan Pondasi Tiang Pancang DB-1



TESTANA ENGINEERING,
Soil Testings & Research Administration

A.9.1. BEARING CAPACITY OF PRECAST PILE FOUNDATION

L'Decourt Formula (1982)

Project : Pemb. Gedung Medik Tahap 3 RS Siti Khodijah Muhammadiyah, 8 Lt.
Location : Jl. Raya Bebekan, Taman Sidoarjo.

DB-1, from existing ground surface

Depth m	SPT blow/ft	Soil Type	f_c t/m ²	ΣQ_s ton	q_p t/m ²	Q_p ton	Q_{ult} ton	SPUN PILE D40 cm	
								$Q_{ult-tran}$ 0.7Q _s /SF, ton	$Q_{ult-comp}$ Q _{ult} /SF, ton
5	14	SAND	3.00	18.85	493.3	61.99	80.84	4.40	26.95
7	8	SAND	4.50	39.58	413.3	51.94	91.53	9.24	30.51
9	9	Silty CLAY	4.89	55.29	112.0	14.07	69.37	12.90	23.12
11	11	Silty CLAY	4.58	63.36	136.0	17.09	80.45	14.78	26.82
13	14	Silty CLAY	4.47	72.97	152.0	19.10	92.07	17.03	30.69
15	13	Silty CLAY	4.50	84.82	168.0	21.11	105.93	19.79	35.31
17	15	Silty CLAY	4.67	99.69	168.0	21.11	120.80	23.26	40.27
19	14	Silty CLAY	4.75	113.41	176.0	22.12	135.53	26.46	45.18
21	15	Silty CLAY	4.89	129.01	176.0	22.12	151.13	30.10	50.38
23	15	Silty CLAY	4.97	143.55	180.0	22.62	166.17	33.49	55.39
25	15	Silty CLAY	5.06	158.98	184.0	23.12	182.11	37.10	60.70
27	16	Silty CLAY	5.14	174.36	188.0	23.62	197.98	40.68	65.99
29	16	Silty CLAY	5.21	189.69	172.0	21.61	211.30	44.26	70.43
31	11	Silty CLAY	5.29	205.91	164.0	20.61	226.52	48.05	75.51
33	14	Silty CLAY	5.36	222.09	164.0	20.61	242.70	51.82	80.90
35	16	Silty CLAY	5.31	233.66	184.0	23.12	256.78	54.52	85.59
37	16	Silty CLAY	5.33	247.98	184.0	23.12	271.10	57.86	90.37
39	14	Silty CLAY	5.39	264.10	180.0	22.62	286.72	61.62	95.57

DB-1, from existing ground surface

Depth m	SPT blow/ft	Soil Type	f_c t/m ²	ΣQ_s ton	q_p t/m ²	Q_p ton	Q_{ult} ton	SPUN PILE D50 cm	
								$Q_{ult-tran}$ 0.7Q _s /SF, ton	$Q_{ult-comp}$ Q _{ult} /SF, ton
5	14	SAND	3.00	23.56	493.3	96.87	120.43	5.50	40.14
7	8	SAND	4.50	49.48	413.3	81.16	130.64	11.55	43.55
9	9	Silty CLAY	4.89	69.12	112.0	21.99	91.11	16.13	30.37
11	11	Silty CLAY	4.58	79.19	136.0	26.70	105.90	18.48	35.30
13	14	Silty CLAY	4.47	91.21	152.0	29.85	121.06	21.28	40.35
15	13	Silty CLAY	4.50	106.03	168.0	32.99	139.02	24.74	46.34
17	15	Silty CLAY	4.67	124.62	168.0	32.99	157.60	29.08	52.53
19	14	Silty CLAY	4.75	141.76	176.0	34.56	176.32	33.08	58.77
21	15	Silty CLAY	4.89	161.27	176.0	34.56	195.83	37.63	65.28
23	15	Silty CLAY	4.97	179.44	180.0	35.34	214.78	41.87	71.59
25	15	Silty CLAY	5.06	198.73	184.0	36.13	234.86	46.37	78.29
27	16	Silty CLAY	5.14	217.95	188.0	36.91	254.86	50.85	84.95
29	16	Silty CLAY	5.21	237.11	172.0	33.77	270.88	55.33	90.29
31	11	Silty CLAY	5.29	257.39	164.0	32.20	289.59	60.06	96.53
33	14	Silty CLAY	5.36	277.61	164.0	32.20	309.81	64.78	103.27
35	16	Silty CLAY	5.31	292.07	184.0	36.13	328.20	68.15	109.40
37	16	Silty CLAY	5.33	309.97	184.0	36.13	346.10	72.33	115.37
39	14	Silty CLAY	5.39	330.13	180.0	35.34	365.47	77.03	121.82

• Data Perencanaan Pondasi Tiang Pancang DB-2



TESTANA ENGINEERING,
Soil Testings & Research Administration

A.9.2. BEARING CAPACITY OF PRECAST PILE FOUNDATION

L'Decourt Formula (1982)

Project : Pemb. Gedung Medik Tahap 3 RS Siti Khodijah Muhammadiyah, 8 Lt.

Location : Jl. Raya Bebekan, Taman Sidoarjo.

DB-2, from existing ground surface SPUN PILE D40 cm

Depth m	SPT blow/ft	Soil Type	f_r t/m ²	ΣQ_s ton	q_p t/m ²	Q_p ton	Q_{ult} ton	$Q_{ult-10min}$ 0.7Q _s /SF, ton	$Q_{ult-comp}$ Q _{ult} /SF, ton
5	10	SAND	2.00	12.57	293.3	36.86	49.43	2.93	16.48
7	9	Silty CLAY	2.00	17.59	112.0	14.07	31.67	4.11	10.56
9	9	Silty CLAY	2.78	31.42	116.0	14.58	45.99	7.33	15.33
11	11	Silty CLAY	3.08	42.62	128.0	16.08	58.71	9.94	19.57
13	12	Silty CLAY	3.27	53.37	136.0	17.09	70.46	12.45	23.49
15	11	Silty CLAY	3.50	65.97	144.0	18.10	84.07	15.39	28.02
17	13	Silty CLAY	3.71	79.35	144.0	18.10	97.44	18.51	32.48
19	12	Silty CLAY	3.83	91.53	160.0	20.11	111.63	21.36	37.21
21	15	Silty CLAY	4.00	105.56	168.0	21.11	126.67	24.63	42.22
23	15	Silty CLAY	4.10	118.50	164.0	20.61	139.11	27.65	46.37
25	11	Silty CLAY	4.27	134.23	168.0	21.11	155.34	31.32	51.78
27	16	Silty CLAY	4.42	149.85	172.0	21.61	171.47	34.97	57.16
29	16	Silty CLAY	4.44	161.66	188.0	23.62	185.28	37.72	61.76
31	15	Silty CLAY	4.57	178.08	204.0	25.64	203.72	41.55	67.91
33	20	Silty CLAY	4.69	194.44	192.0	24.13	218.57	45.37	72.85
35	13	Silty CLAY	4.77	209.83	188.0	23.62	233.46	48.96	77.82
37	14	Silty CLAY	4.94	229.74	148.0	18.60	248.34	53.61	82.78
39	10	Silty CLAY	4.96	243.23	144.0	18.10	261.32	56.75	87.11
41	12	Silty CLAY	5.00	257.61	132.0	16.59	274.20	60.11	91.40
43	14	Silty CLAY	4.97	268.38	156.0	19.60	287.98	62.62	95.99
45	16	Silty CLAY	4.97	280.95	180.0	22.62	303.57	65.55	101.19

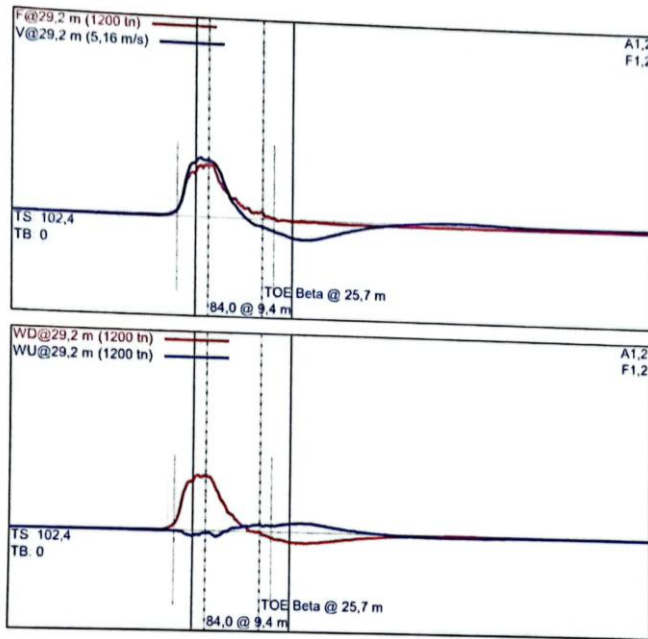
DB-2, from existing ground surface SPUN PILE D50 cm

Depth m	SPT blow/ft	Soil Type	f_r t/m ²	ΣQ_s ton	q_p t/m ²	Q_p ton	Q_{ult} ton	$Q_{ult-10min}$ 0.7Q _s /SF, ton	$Q_{ult-comp}$ Q _{ult} /SF, ton
5	10	SAND	2.00	15.71	293.3	57.60	73.30	3.67	24.43
7	9	Silty CLAY	2.00	21.99	112.0	21.99	43.98	5.13	14.66
9	9	Silty CLAY	2.78	39.27	116.0	22.78	62.05	9.16	20.68
11	11	Silty CLAY	3.08	53.28	128.0	25.13	78.41	12.43	26.14
13	12	Silty CLAY	3.27	66.71	136.0	26.70	93.41	15.56	31.14
15	11	Silty CLAY	3.50	82.47	144.0	28.27	110.74	19.24	36.91
17	13	Silty CLAY	3.71	99.18	144.0	28.27	127.46	23.14	42.49
19	12	Silty CLAY	3.83	114.41	160.0	31.42	145.82	26.69	48.61
21	15	Silty CLAY	4.00	131.95	168.0	32.99	164.93	30.79	54.98
23	15	Silty CLAY	4.10	148.13	164.0	32.20	180.33	34.56	60.11
25	11	Silty CLAY	4.27	167.79	168.0	32.99	200.78	39.15	66.93
27	16	Silty CLAY	4.42	187.32	172.0	33.77	221.09	43.71	73.70
29	16	Silty CLAY	4.44	202.07	188.0	36.91	238.98	47.15	79.66
31	15	Silty CLAY	4.57	222.60	204.0	40.06	262.66	51.94	87.55
33	20	Silty CLAY	4.69	243.05	192.0	37.70	280.75	56.71	93.58
35	13	Silty CLAY	4.77	262.29	188.0	36.91	299.20	61.20	99.73
37	14	Silty CLAY	4.94	287.18	148.0	29.06	316.24	67.01	105.41
39	10	Silty CLAY	4.96	304.04	144.0	28.27	332.31	70.94	110.77
41	12	Silty CLAY	5.00	322.01	132.0	25.92	347.93	75.14	115.98
43	14	Silty CLAY	4.97	335.47	156.0	30.63	366.10	78.28	122.03
45	16	Silty CLAY	4.97	351.19	180.0	35.34	386.53	81.94	128.84

2. Data Hasil Uji PDA

Pile Dynamics, Inc. Pile Driving Analyzer® (PDA) RS SITI KHODJAH

145



Project Information

PROJECT: RS SITI KHODJAH
PILE NAME: 145
DESC: SQUARE 50X50
PDA OWNER: Pile Dynamics, Inc.
SERIAL NUMBER: 4125L
OPERATOR: NOP
FILE: 145.pda
01Apr2023 10:36:54 AM
Blow number 8

Quantity Results

RMX 199 tn
RSU 267 tn
EBR 154 tn
EMX 2,6 tn-m
DFN 4 mm
DMX 11 mm
BTA 84,0 %
CSX 12,9 MPa
TSX 2,8 MPa

Sensors

A1 (PR): [K3560] 355 mv/6.4v/5000g (1) VF1
A2 (PR): [K3182] 338 mv/6.4v/5000g (1) VF1
F1: [I 894] 94.6 PDICAL (1) FF1
F2: [H073] 95 PDICAL (1) FF1
CLIP: OK

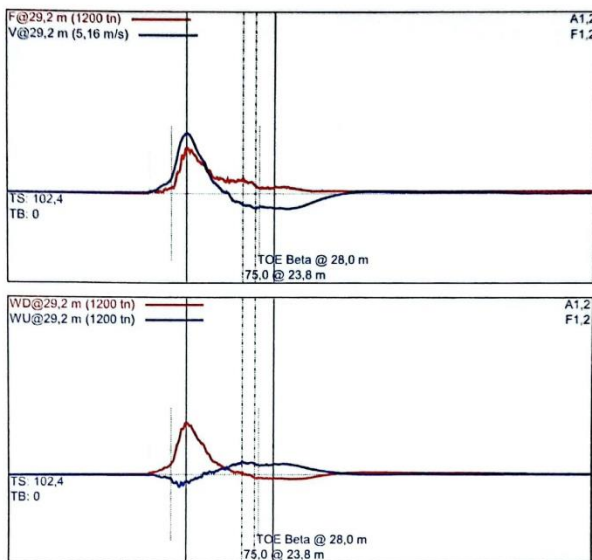
Pile Properties

LE 29,2 m
AR 2500,00 cm²
EM 354 t/cm²
SP 2,4 t/m³
WS 3800,0 m/s
WC 3795,1 m/s
EA/C 233 tn-s/m
2L/C 15,39 ms
JC 0,70
LP 28,7 m

Version 2021.34

Pile Dynamics, Inc.
Pile Driving Analyzer® (PDA)
 RS SITI KHODJAH

163_3



Project Information
 PROJECT: RS SITI KHODJAH
 PILE NAME: 163_3
 DESC: SQUARE 50X50
 PDA OWNER: Pile Dynamics, Inc.
 SERIAL NUMBER: 4125L
 OPERATOR: ROY
 FILE: 163_3.pda
 03Apr2023 01:09:59 PM
 Blow number 3

Quantity Results
 RMX 228 tn
 RSU 414 tn
 EBR 131 tn
 EMX 1.9 tn-m
 DFN 5 mm
 DMX 10 mm
 BTA 75.0 %
 CSX 11.9 MPa
 TSX 1.2 MPa

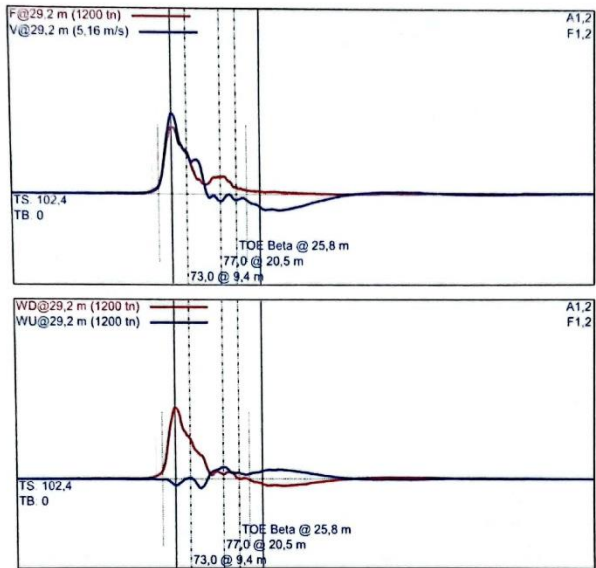
Sensors
 A1 (PR): [K3560] 355 mv/6.4v/5000g (1) VF1
 A2 (PR): [K3182] 338 mv/6.4v/5000g (1) VF1
 F1 : [I 894] 94.6 PDICAL (1) FF1
 F2 : [H073] 95 PDICAL (1) FF1
 CLIP: OK

Pile Properties
 LE 29.2 m
 AR 2500.00 cm²
 EM 354 U/cm²
 SP 2.4 U/m³
 WS 3800.0 m/s
 WC 3792.2 m/s
 EA/C 233 tn-s/m
 2L/C 15.40 ms
 JC 0.70
 LP 30.0 m

Version 2021.34

Pile Dynamics, Inc.
Pile Driving Analyzer® (PDA)
 RS SITI KHODJAH

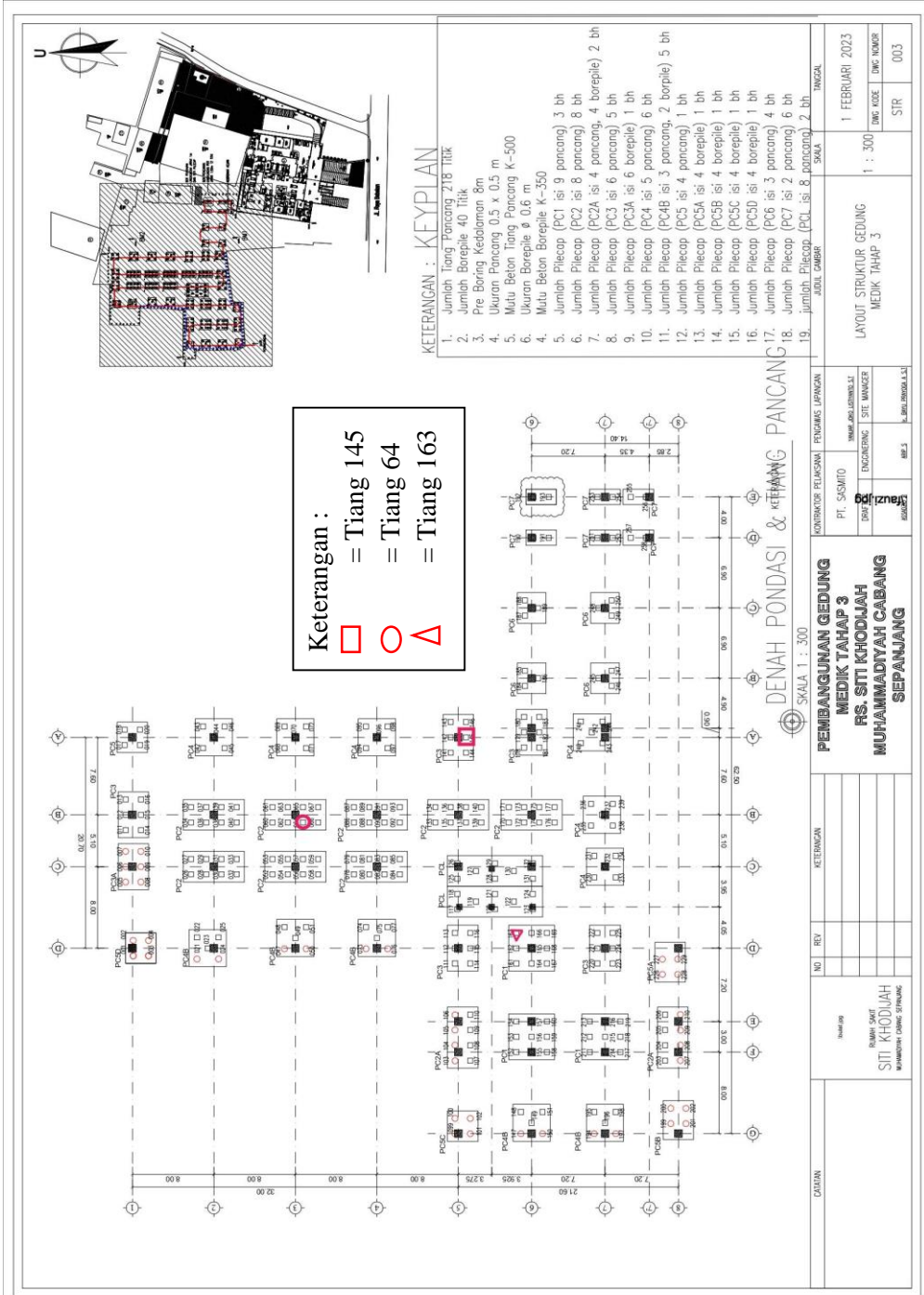
64



Project Information	Quantity Results	Sensors
PROJECT: RS SITI KHODJAH	RMX 238 tn	A1 (PR): [K3560] 355 mv/6.4v/5000g (1) VF1
PILE NAME: 64	RSU 418 tn	A2 (PR): [K3182] 338 mv/6.4v/5000g (1) VF1
DESC: SQUARE 50X50	EMX 2.9 tn-m	F1: [I 894] 94.6 PDICAL (1) FF1
PDA OWNER: Pile Dynamics, Inc.	ETR 39.1 %	F2: [H073] 95 PDICAL (1) FF1
SERIAL NUMBER: 4125L	BTA 73.0 %	CLIP: OK
OPERATOR: NOP	TSX 2.0 MPa	
FILE: 64.pda	CSI 19.7 MPa	
01Apr2023 11:56:39 AM	CSX 17.1 MPa	
Blow number 100	DMX 10 mm	
	DFN 5 mm	
	EBR 167 tn	
	SFT 159 tn	
Pile Properties		
LE 29.2 m		
AR 2500.00 cm ²		
EM 354 1/cm ²		
SP 2.4 1/m ³		
WS 3800.0 m/s		
WC 3792.2 m/s		
EA/C 233 tn-s/m		
2L/C 15.40 ms		
JC 0.70		
LP 28.7 m		

Version 2021.34

3. Data Denah Pondasi



ANALISIS PERBANDINGAN KAPASITAS DUKUNG DAN PENURUNAN PONDASI TIANG PANCANG BERDASARKAN DATA UJI SPT (Standard Penetration Test) DAN PDA (Pile Driving Analyzer)

ORIGINALITY REPORT

14%	13%	4%	5%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	123dok.com Internet Source	1%
2	xa.yimg.com Internet Source	1%
3	dspace.uii.ac.id Internet Source	1%
4	eprints.umm.ac.id Internet Source	1%
5	Submitted to Universitas 17 Agustus 1945 Surabaya Student Paper	1%
6	repository.ubb.ac.id Internet Source	1%
7	journal.untar.ac.id Internet Source	<1%
8	journal.ubb.ac.id Internet Source	<1%

9	Submitted to Sultan Agung Islamic University Student Paper	<1 %
10	sitikhodijah.com Internet Source	<1 %
11	repository.its.ac.id Internet Source	<1 %
12	es.scribd.com Internet Source	<1 %
13	etd.umy.ac.id Internet Source	<1 %
14	repository.untag-sby.ac.id Internet Source	<1 %
15	jurnalnasional.ump.ac.id Internet Source	<1 %
16	idoc.pub Internet Source	<1 %
17	repositori.usu.ac.id Internet Source	<1 %
18	repository.ub.ac.id Internet Source	<1 %
19	ojs.poltekba.ac.id Internet Source	<1 %
20	repository.itk.ac.id Internet Source	<1 %
	text-id.123dok.com	

21	Internet Source	<1 %
22	www.coursehero.com Internet Source	<1 %
23	erepository.uwks.ac.id Internet Source	<1 %
24	e-journals.unmul.ac.id Internet Source	<1 %
25	jom.unpak.ac.id Internet Source	<1 %
26	jurnal.uisu.ac.id Internet Source	<1 %
27	repository.unj.ac.id Internet Source	<1 %
28	docplayer.info Internet Source	<1 %
29	Submitted to Universitas Dian Nuswantoro Student Paper	<1 %
30	pt.scribd.com Internet Source	<1 %
31	Submitted to Tarumanagara University Student Paper	<1 %
32	repositori.uma.ac.id Internet Source	<1 %
33	Submitted to Universitas Islam Indonesia Student Paper	<1 %

34	adoc.pub Internet Source	<1 %
35	binamarga.pu.go.id Internet Source	<1 %
36	repository.uhn.ac.id Internet Source	<1 %
37	dspace.umkt.ac.id Internet Source	<1 %
38	ejournal.um-sorong.ac.id Internet Source	<1 %
39	ejurnal.untag-smd.ac.id Internet Source	<1 %
40	journal.isas.or.id Internet Source	<1 %
41	jurnal.umt.ac.id Internet Source	<1 %
42	repository.usd.ac.id Internet Source	<1 %
43	Agus Mahmudi, May Tirta Hartoni Putri, Tri Wardoyo. "Analisa Perbandingan Daya Dukung Pondasi Bored Pile Berdasarkan Data Sondir Dan Pile Driving Analyzer Test Pada Proyek Pengembangan Gedung J Universitas Kristen Petra Surabaya", INTER TECH, 2023 Publication	<1 %
repository.um-surabaya.ac.id		

44	Internet Source	<1 %
45	id.scribd.com Internet Source	<1 %
46	teras.unimal.ac.id Internet Source	<1 %
47	repository.uib.ac.id Internet Source	<1 %
48	repository.stei.ac.id Internet Source	<1 %
49	repository.unej.ac.id Internet Source	<1 %
50	www.scribd.com Internet Source	<1 %
51	core.ac.uk Internet Source	<1 %
52	journal.uir.ac.id Internet Source	<1 %
53	pdfs.semanticscholar.org Internet Source	<1 %
54	repository.binadarma.ac.id Internet Source	<1 %
55	repository.unpar.ac.id Internet Source	<1 %
56	Rizaludin Rizaludin, Sigit Winarto, Ahmad Ridwan. "PERENCANAAN PONDASI TIANG	<1 %

PANCANG GEDUNG PASCA SARJANA
FAKULTAS TEKNIK UNIVERSITAS KADIRI",
Jurnal Manajemen Teknologi & Teknik Sipil,
2020

Publication

57	elibs.unigres.ac.id Internet Source	<1 %
58	eprints.uns.ac.id Internet Source	<1 %
59	jurnal.umsu.ac.id Internet Source	<1 %
60	jurnal.untan.ac.id Internet Source	<1 %
61	lib.ui.ac.id Internet Source	<1 %
62	repository.umsu.ac.id Internet Source	<1 %
63	www.slideshare.net Internet Source	<1 %
64	ojs.uniska-bjm.ac.id Internet Source	<1 %
65	www.neliti.com Internet Source	<1 %
66	jurnal.poltekba.ac.id Internet Source	<1 %

Exclude quotes On

Exclude matches Off

Exclude bibliography On