Ranhill SAJ

RSAJ P-B102.Rev.4

PIPE LOG

Location : REHAB 2020 - PAKEJ 2 (SP 10)
PN12/13 - JLN PT KASAN

Sheet No. : 1
Date : 31/12/2022

CHAINAGE	EXC. DEPTH

SITE CLEARANCE	sq.m	
BULK EXCAVATION		
All material	cu.m	
Rock	cu.m	
Compact material	cu.m	
FILLING		
Approved Material	cu.m	
Sand	cu.m	
Laterite (150mm)	sq.m	
Sand Bedding	sq.m	
Concrete	cu.m	
TURFING		
Top Soil (50mm)	sq.m	
Turfing	sq.m	

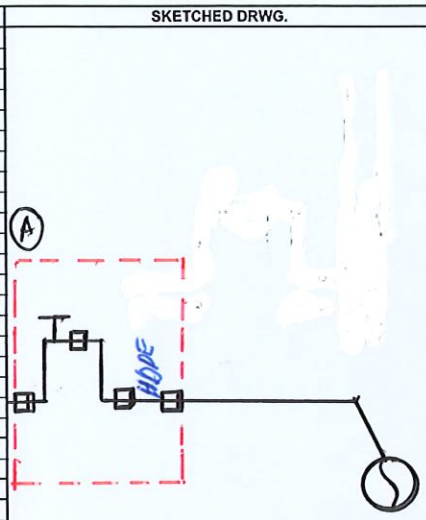
CHAMBER		
Type	Set	Middle
CHIPPING	sq.m	

PILING		
Kayu Bakau	m	
Type of Pile	UPVC	
Size	mm	80
Length (Initial)	m	
Length (Extention)	m	
Join Welding	nos	
Cut Pile (1m)	nos	
Linatex Rubber	sq.m	
MS Strap / Bracing	nos	

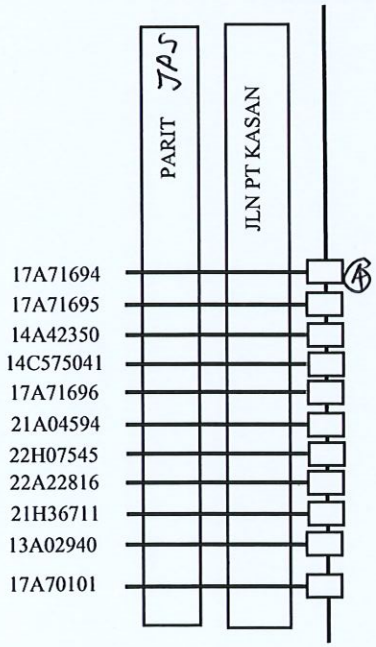
Prepared By :
ZAIDI BIN ABDULLAH SATARI
Engineer

Checked and Approved By :
MUHAMAD AZRI BIN ABDUL AZIZ
INSPEKTOR KONTRAK PONTIAN
JABATAN PROJEK
RANHILL SAJ SDN. BHD.
Date : 24/1/2023

SKETCHED DRWG.



Saddle (Type B) 150mm



TRECH EXCAVATION		
a) Depth < 1.8 m	m	
b) Depth > 1.8 m < 3.0 m	m	
c) Road Cutting	m	
d) Track/Gravel/Earth Road	sq.m	
e) Concrete Surface	sq.m	
f) Cross Hedges/Fences/Wall	sq.m	
g) Road Kerb	m	
h) Under water earth drain	sq.m	
i) Under concrete drain/culvert	sq.m	
j) In rock	cu.m	
k) Unsuitable Material	cu.m	
REINSTATEMENT ROAD		
a) Sand Filling	cu.m	
b) Crusher Run	sq.m	
c) Binder Course	sq.m	
d) Wearing Course	sq.m	
e) Milling/Resurfacing	sq.m	
f)Thermoplastic Line Marking	m	

PIPE	DIA.(mm)	NOS	L (m)
HDPE	25	-	66.20
S/STEEL	20	-	0.00

EXPOSE PIPE & SPECIAL		
	m	
	m	
	nos	
	nos	
	nos	
	sq.m	

SPECIAL / FITTINGS		
150MM SADDLE (TYPE B)	nos	
20MM METER STAND	nos	11.00
ELECTRO FUSION (22)	nos	
	nos	
	nos	
	nos	
	nos	
	nos	
	nos	
	nos	
	nos	
	nos	
	nos	
	nos	
	nos	
	nos	
	nos	

Comments / Reports

NORSILAWATI BINTI ALI
EKSEKUTIF
JABATAN PROJEK
RANHILL SAJ SDN. BHD.

RSAJ P-B107.Rev.4

Ranhill SAJ

DATA TAPPING DAN PAIP PERHUBUNGAN

PROGRAM PENGGANTIAN PAIP LAMA TAHUN 2020

Nama Projek : PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020

Nama Kontraktor : JALUR CAHAYA SDN BHD

Bil	Pipe	Size (mm)	No. Meter	No Rumah	Comm Pipe (m)		Lintas Parit		Bawah Jalan			Korekan (m2)			Catatan
					PA Pipe (m)	Poly Pipe (m)	GI Sleeve (m)	Stanless Steel (m)	Open Trench (m)	GI Sleeve (m)	Impact Moiling	Jubin	Konkrit	Longkang	
1	UPVC	150	13A02940			6.30									
2	UPVC	150	17A70101			3.30									
3	UPVC	150	21H36711			5.30									
4	UPVC	150	22A22816			4.50									
5	UPVC	150	21A04594			6.20									
6	UPVC	150	22H07545			6.40									
7	UPVC	150	17A71696			7.10									
8	UPVC	150	14C575041			8.30									
9	UPVC	150	14A42350			6.10									
10	UPVC	150	17A71695			6.00									
11	UPVC	150	17A71694			6.70									
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															
25															
26															
27															
28															
29															
30															
					0.00	66.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Disediakan Oleh :

Kontraktor
Cop : Engineer
DI BIN ABDULLAH SATARI
JALUR CAHAYA SDN BHD 599034-X

Disemak Oleh :

Inspektor Kontrak (D)
Cop :
MUHAMAD AZRI BIN ABDUL AZIZ
INSPEKTOR KONTRAK PONTIAN
JABATAN PROJEK
RANHILL SAJ SDN. BHD.

Disahkan Oleh :

Eksekutif
Cop :
NORSILAWATI BINTI ALI
EKSEKUTIF
JABATAN PROJEK
RANHILL SAJ SDN. BHD.

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

ELECTRO-FUSION MACHINE REPORT (COMM PIPE)

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 - API API
DATE	31/12/2022 (SABTU)
LOCATION	13 - JALAN PT KASAN

138	31.12.22	11:16	29.3°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.706 Ohm	5.5 kJ	OK
139	31.12.22	11:25	30.1°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.734 Ohm	5.4 kJ	OK
140	31.12.22	11:35	30.7°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.710 Ohm	5.5 kJ	OK
141	31.12.22	11:42	30.5°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.732 Ohm	5.4 kJ	OK
142	31.12.22	11:50	30.7°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.732 Ohm	5.4 kJ	OK
143	31.12.22	11:58	30.9°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.722 Ohm	5.4 kJ	OK
144	31.12.22	12:06	31.1°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.736 Ohm	5.4 kJ	OK
145	31.12.22	12:15	31.8°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.714 Ohm	5.5 kJ	OK
146	31.12.22	12:23	32.1°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.696 Ohm	5.5 kJ	OK
147	31.12.22	12:33	32.3°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.754 Ohm	5.4 kJ	OK
148	31.12.22	12:41	31.8°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.737 Ohm	5.4 kJ	OK
149	31.12.22	12:52	30.9°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.722 Ohm	5.4 kJ	OK
150	31.12.22	14:56	34.5°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.751 Ohm	5.4 kJ	OK
151	31.12.22	15:04	34.4°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.741 Ohm	5.4 kJ	OK

aliaxis

04.01.2023, 15:55

No.	Date	Time	T	MFG	Type	Diameter	V	Time Fus	R	E	Result
152	31.12.22	15:11	34.6°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.737 Ohm	5.4 kJ	OK
153	31.12.22	15:18	33.7°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.709 Ohm	5.5 kJ	OK
154	31.12.22	15:25	33.4°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.712 Ohm	5.5 kJ	OK
155	31.12.22	15:32	32.7°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.727 Ohm	5.5 kJ	OK
156	31.12.22	15:52	32.3°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.722 Ohm	5.4 kJ	OK
157	31.12.22	16:01	34.4°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.747 Ohm	5.4 kJ	OK
158	31.12.22	16:07	34.5°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.737 Ohm	5.4 kJ	OK
159	31.12.22	16:13	34.1°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.727 Ohm	5.4 kJ	OK

Disediakan Oleh:	Disemak Oleh:	Disahkan Oleh:
Kontraktor	Inspektor Kontrak (D)	Eksekutif
ZAIDI BIN ABDULLAH SATARI Engineer	MUHAMAD AZRI BIN ABDUL AZIZ INSPEKTOR KONTRAK PONTIAN JABATAN PROJEK RANHILL SAJ SDN. BHD.	NORSILAWATI BINTI ALI EKSEKUTIF JABATAN PROJEK RANHILL SAJ SDN. BHD.

JALUR CAHAYA SDN BHD 599034-X

Ranhill SAJ

Form No: JK/PT – 05
Rev Date: 23/06/2022

BORANG PEMERIKSAAN VISUAL (*ELECTRO-FUSION*)

Projek:	PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 - PAKEJ 2
Nama :	SHARUDIN BIN HASSAN
No sijil:	199
Nama syarikat:	JALUR CAHAYA SDN BHD
Tarikh dan Masa:	31/12/2022

KRITERIA	✓	X
KEADAAN TAPAK		
Kawasan tapak berada dalam keadaan yang bersih dan kering.	/	
KEADAAN BAHAN DAN PERALATAN		
Peralatan berada dalam keadaan baik dan bersih.	/	
Fittings berada dalam bungkusan? Jika ya, periksa *fittings* jika terdapat kerosakan. Jika tidak, reject *fittings*.	/	
Peralatan adalah mencukupi sebelum kerja penyambungan dilakukan.		
- *Fusion machine*	/	
- *Universal pipe cutter*	/	
- *Rotational pipe scrapper*	/	
- *Marker*	/	
- *Isopropyl Alcohol (IPA)*	/	
- Kain bersih	/	
- *Generator*	/	
Kawasan penyambungan paip berada dalam keadaan yang bersih dan kering.	/	

PEMERIKSAAN SELEPAS PROSES PENYAMBUNGAN *ELECTRO-FUSION*

1) *Melt indicator* pada *fittings* timbul.

Nama Jalan: PN 12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 138	/		Joint No. = 148	/	
Joint No. = 139	/		Joint No. = 149	/	
Joint No. = 140	/		Joint No. = 150	/	
Joint No. = 141	/		Joint No. = 151	/	
Joint No. = 142	/		Joint No. = 152	/	
Joint No. = 143	/		Joint No. = 153	/	
Joint No. = 144	/		Joint No. = 154	/	
Joint No. = 145	/		Joint No. = 155	/	
Joint No. = 146	/		Joint No. = 156	/	
Joint No. = 147	/		Joint No. = 157	/	

2) Hujung paip dipotong dengan tegak dan lurus.

Nama Jalan: PN 12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 138	/		Joint No. = 148	/	
Joint No. = 139	/		Joint No. = 149	/	
Joint No. = 140	/		Joint No. = 150	/	
Joint No. = 141	/		Joint No. = 151	/	
Joint No. = 142	/		Joint No. = 152	/	
Joint No. = 143	/		Joint No. = 153	/	
Joint No. = 144	/		Joint No. = 154	/	
Joint No. = 145	/		Joint No. = 155	/	
Joint No. = 146	/		Joint No. = 156	/	
Joint No. = 147	/		Joint No. = 157	/	

3) Penyambungan paip yang dilakukan berada dalam keadaan selari.

Nama Jalan: PN 12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 138	/		Joint No. = 148	/	
Joint No. = 139	/		Joint No. = 149	/	
Joint No. = 140	/		Joint No. = 150	/	
Joint No. = 141	/		Joint No. = 151	/	
Joint No. = 142	/		Joint No. = 152	/	
Joint No. = 143	/		Joint No. = 153	/	
Joint No. = 144	/		Joint No. = 154	/	
Joint No. = 145	/		Joint No. = 155	/	
Joint No. = 146	/		Joint No. = 156	/	
Joint No. = 147	/		Joint No. = 157	/	

4) Kawasan yang telah dikikis (*scrapped*) boleh dilihat.

Nama Jalan: PN 12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 138	/		Joint No. = 148	/	
Joint No. = 139	/		Joint No. = 149	/	
Joint No. = 140	/		Joint No. = 150	/	
Joint No. = 141	/		Joint No. = 151	/	
Joint No. = 142	/		Joint No. = 152	/	
Joint No. = 143	/		Joint No. = 153	/	
Joint No. = 144	/		Joint No. = 154	/	
Joint No. = 145	/		Joint No. = 155	/	
Joint No. = 146	/		Joint No. = 156	/	
Joint No. = 147	/		Joint No. =	/	

5) Tanda pada paip (*penetration depth*) tepat dan boleh dilihat.

Nama Jalan: PN12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 138	/		Joint No. = 148	/	
Joint No. = 139	/		Joint No. = 149	/	
Joint No. = 140	/		Joint No. = 150	/	
Joint No. = 141	/		Joint No. = 151	/	
Joint No. = 142	/		Joint No. = 152	/	
Joint No. = 143	/		Joint No. = 153	/	
Joint No. = 144	/		Joint No. = 154	/	
Joint No. = 145	/		Joint No. = 155	/	
Joint No. = 146	/		Joint No. = 156	/	
Joint No. = 147	/		Joint No. = 157	/	

6) Tiada kesan percikan paip yang telah cair atau apa-apa kerosakan pada permukaan luar paip yang telah disambung.

Nama Jalan: PN12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 138	/		Joint No. = 148	/	
Joint No. = 139	/		Joint No. = 149	/	
Joint No. = 140	/		Joint No. = 150	/	
Joint No. = 141	/		Joint No. = 151	/	
Joint No. = 142	/		Joint No. = 152	/	
Joint No. = 143	/		Joint No. = 153	/	
Joint No. = 144	/		Joint No. = 154	/	
Joint No. = 145	/		Joint No. = 155	/	
Joint No. = 146	/		Joint No. = 156	/	
Joint No. = 147	/		Joint No. = 157	/	

7) Paip dan *fittings* yang disambung dibiarkan untuk sejuk mengikut tempoh masa yang ditetapkan.					
Nama Jalan: PN 12/13 - JLN PT KASAN					
	✓	X		✓	X
Joint No. = 138	/		Joint No. = 148	/	
Joint No. = 139	/		Joint No. = 149	/	
Joint No. = 140	/		Joint No. = 150	/	
Joint No. = 141	/		Joint No. = 151	/	
Joint No. = 142	/		Joint No. = 152	/	
Joint No. = 143	/		Joint No. = 153	/	
Joint No. = 144	/		Joint No. = 154	/	
Joint No. = 145	/		Joint No. = 155	/	
Joint No. = 146	/		Joint No. = 156	/	
Joint No. = 147	/		Joint No. = 157	/	
ADAKAH PENYAMBUNGAN *ELECTRO-FUSION* INI DITERIMA? (Jika TIDAK, sila nyatakan ulasan di ruangan yang disediakan)					
	✓	X		✓	X
Joint No. = 138	/		Joint No. = 148	/	
Joint No. = 139	/		Joint No. = 149	/	
Joint No. = 140	/		Joint No. = 150	/	
Joint No. = 141	/		Joint No. = 151	/	
Joint No. = 142	/		Joint No. = 152	/	
Joint No. = 143	/		Joint No. = 153	/	
Joint No. = 144	/		Joint No. = 154	/	
Joint No. = 145	/		Joint No. = 155	/	
Joint No. = 146	/		Joint No. = 156	/	
Joint No. = 147	/		Joint No. = 157	/	

Ulasan:

.....

.....

.....

Dikendalikan oleh:	Diperiksa dan disahkan oleh:
Tandatangan:	Tandatangan:
Nama Kontraktor: SHAHRUDIN B. HASSAN	Nama Kontrak Inspektor: MUHAMAD AZRI BIN ABDUL AZIZ INSPEKTOR KONTRAK PONTIAN JABATAN PROJEK RANHILL SAJ SDN. BHD.
No. Anggota: 199	No. Anggota:
Tarikh: 31/12/2022	Tarikh: 31/12/2022

**Dokumen yang perlu diserahkan kepada *Contract Inspector*: Gambar penyambungan dan laporan daripada *Data Logger*.

JALUR CAHAYA SDN BHD 599034-X

ZAIDI BIN ABDULLAH SATARI
Engineer

Ranhill SAJ

Form No: JK/PT – 05
Rev Date: 23/06/2022

BORANG PEMERIKSAAN VISUAL (*ELECTRO-FUSION*)

Projek:	PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 - PAKEJ 2
Nama :	SHARUDIN BIN HASSAN
No sijil:	199
Nama syarikat:	JALUR CAHAYA SDN BHD
Tarikh dan Masa:	31/12/2022

KRITERIA	✓	X
KEADAAN TAPAK		
Kawasan tapak berada dalam keadaan yang bersih dan kering.	/	
KEADAAN BAHAN DAN PERALATAN		
Peralatan berada dalam keadaan baik dan bersih.	/	
Fittings berada dalam bungkusan? Jika ya, periksa *fittings* jika terdapat kerosakan. Jika tidak, reject *fittings*.	/	
Peralatan adalah mencukupi sebelum kerja penyambungan dilakukan.		
- *Fusion machine*	/	
- *Universal pipe cutter*	/	
- *Rotational pipe scrapper*	/	
- *Marker*	/	
- *Isopropyl Alcohol (IPA)*	/	
- Kain bersih	/	
- *Generator*	/	
Kawasan penyambungan paip berada dalam keadaan yang bersih dan kering.	/	

PEMERIKSAAN SELEPAS PROSES PENYAMBUNGAN *ELECTRO-FUSION*

1) *Melt indicator* pada *fittings* timbul.

Nama Jalan: PN 12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 158	/		Joint No. =		
Joint No. = 159	/		Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		

2) Hujung paip dipotong dengan tegak dan lurus.

Nama Jalan: PN 12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 158	/		Joint No. =		
Joint No. = 159	/		Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		

3) Penyambungan paip yang dilakukan berada dalam keadaan selari.

Nama Jalan: PN12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 158	/		Joint No. =		
Joint No. = 159	/		Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		

4) Kawasan yang telah dikikis (*scrapped*) boleh dilihat.

Nama Jalan: PN12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 158	/		Joint No. =		
Joint No. = 159	/		Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		

5) Tanda pada paip (*penetration depth*) tepat dan boleh dilihat.

Nama Jalan: PN12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 158	/		Joint No. =		
Joint No. = 159	/		Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		

6) Tiada kesan percikan paip yang telah cair atau apa-apa kerosakan pada permukaan luar paip yang telah disambung.

Nama Jalan: PN12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 158	/		Joint No. =		
Joint No. = 159	/		Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		

7) Paip dan *fittings* yang disambung dibiarkan untuk sejuk mengikut tempoh masa yang ditetapkan.					
Nama Jalan: PN 12/13 - JLN PT KASAN					
	✓	X		✓	X
Joint No. = 158	/		Joint No. =		
Joint No. = 159	/		Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
ADAKAH PENYAMBUNGAN *ELECTRO-FUSION* INI DITERIMA? (Jika TIDAK, sila nyatakan ulasan di ruangan yang disediakan)					
	✓	X		✓	X
Joint No. = 158	/		Joint No. =		
Joint No. = 159	/		Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		

Ulasan:

.....

.....

.....

Dikendalikan oleh:	Diperiksa dan disahkan oleh:
Tandatangan:	Tandatangan:
Nama Kontraktor: SHAHUDIN B. HASSAN	Nama Kontrak Inspektor: MUHAMAD AZRI BIN ABDUL AZIZ INSPEKTOR KONTRAK PONTIAN JABATAN PROJEK RANHILL SAJ SDN. BHD.
No. Anggota: 199	No. Anggota:
Tarikh: 31/12/2022	Tarikh: 31/12/2022

**Dokumen yang perlu diserahkan kepada *Contract Inspector*: Gambar penyambungan dan laporan daripada *Data Logger*.

CAHAYA SDN BHD JALUR 599034-X

ZAIDI BIN ABDULLAH SATARI
Engineer

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	31/12/2022 (SABTU)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 13A02940
	No. rumah :
	Semasa kerja (EF)
	Joint number: 138

REMARKS	No. meter : SAJ 13A02940
	No. rumah :
	Semasa kerja (EF)
	Joint number: 139

REMARKS	No. meter : SAJ 13A02940
	No. rumah :
	Semasa kerja

REMARKS	No. meter : SAJ 13A02940
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 13A02940
	No. rumah :
	Selepas kerja

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

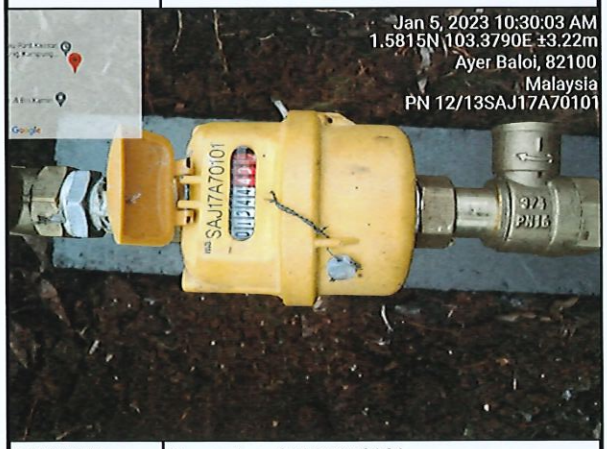
SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	31/12/2022 (SABTU)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 17A70101
	No. rumah :
	Semasa kerja (EF)
	Joint number: 140

REMARKS	No. meter : SAJ 17A70101
	No. rumah :
	Semasa kerja (EF)
	Joint number: 141

REMARKS	No. meter : SAJ 17A70101
	No. rumah :
	Semasa kerja

REMARKS	No. meter : SAJ 17A70101
	No. rumah :
	Selepas kerja



REMARKS	No. meter : SAJ 17A70101
	No. rumah :
	Selepas kerja

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	31/12/2022 (SABTU)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 21H36711
	No. rumah :
	Semasa kerja (EF)
	Joint number: 142

REMARKS	No. meter : SAJ 21H36711
	No. rumah :
	Semasa kerja (EF)
	Joint number: 143

REMARKS	No. meter : SAJ 21H36711
	No. rumah :
	Semasa kerja

REMARKS	No. meter : SAJ 21H36711
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 21H36711
	No. rumah :
	Selepas kerja

REMARKS	

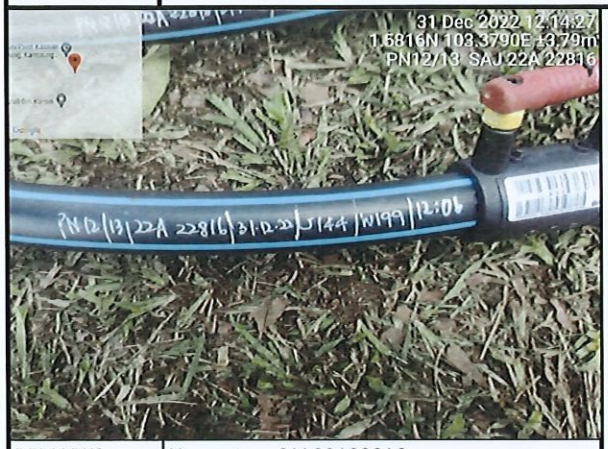
PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	31/12/2022 (SABTU)
LOCATION	13 - JALAN PARIT KASAN



REMARKS	No. meter : SAJ 22A22816
	No. rumah :
	Semasa kerja (EF)
	Joint number: 144

REMARKS	No. meter : SAJ 22A22816
	No. rumah :
	Semasa kerja (EF)
	Joint number: 145

REMARKS	No. meter : SAJ 22A22816
	No. rumah :
	Semasa kerja

REMARKS	No. meter : SAJ 22A22816
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 22A22816
	No. rumah :
	Selepas kerja

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	31/12/2022 (SABTU)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 21A04594
	No. rumah :
	Semasa kerja (EF)
	Joint number: 146

REMARKS	No. meter : SAJ 21A04594
	No. rumah :
	Semasa kerja (EF)
	Joint number: 147

REMARKS	No. meter : SAJ 21A04594
	No. rumah :
	Semasa kerja

REMARKS	No. meter : SAJ 21A04594
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 21A04594
	No. rumah :
	Selepas kerja

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

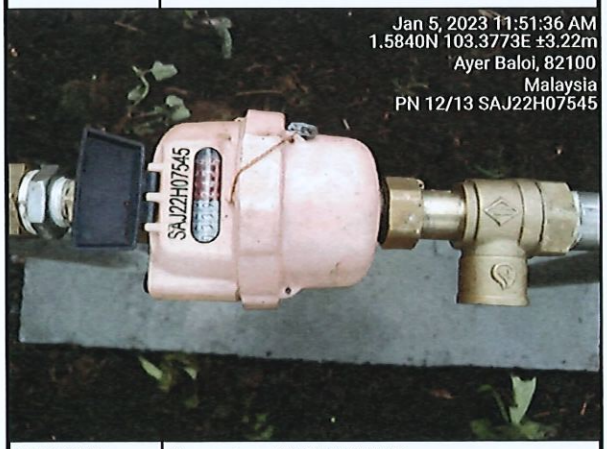
SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	31/12/2022 (SABTU)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 22H07545
	No. rumah :
	Semasa kerja (EF)
	Joint number: 148

REMARKS	No. meter : SAJ 22H07545
	No. rumah :
	Semasa kerja (EF)
	Joint number: 149

REMARKS	No. meter : SAJ 22H07545
	No. rumah :
	Semasa kerja

REMARKS	No. meter : SAJ 22H07545
	No. rumah :
	Selepas kerja



REMARKS	No. meter : SAJ 22H07545
	No. rumah :
	Selepas kerja

REMARKS	

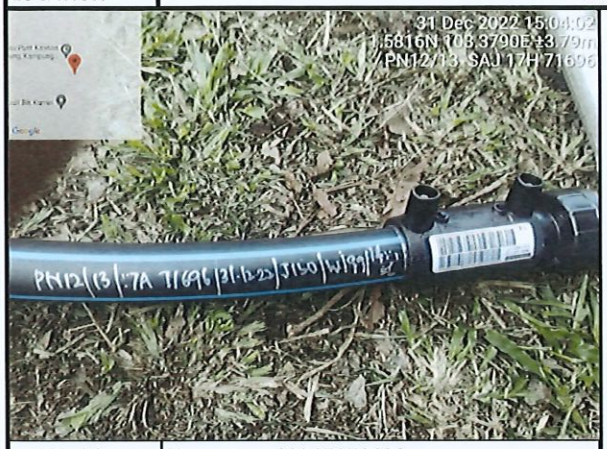
PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	31/12/2022 (SABTU)
LOCATION	13 - JALAN PARIT KASAN



REMARKS	No. meter : SAJ 17A71696
	No. rumah :
	Semasa kerja (EF)
	Joint number: 150

REMARKS	No. meter : SAJ 17A71696
	No. rumah :
	Semasa kerja (EF)
	Joint number: 151

REMARKS	No. meter : SAJ 17A71696
	No. rumah :
	Semasa kerja

REMARKS	No. meter : SAJ 17A71696
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 17A71696
	No. rumah :
	Selepas kerja

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	31/12/2022 (SABTU)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 14C575041
	No. rumah :
	Semasa kerja (EF)
	Joint number: 152

REMARKS	No. meter : SAJ 14C575041
	No. rumah :
	Semasa kerja (EF)
	Joint number: 153

REMARKS	No. meter : SAJ 14C575041
	No. rumah :
	Semasa kerja

REMARKS	No. meter : SAJ 14C575041
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 14C575041
	No. rumah :
	Selepas kerja

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	31/12/2022 (SABTU)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 14A42350
	No. rumah :
	Semasa kerja (EF)
	Joint number: 154

REMARKS	No. meter : SAJ 14A42350
	No. rumah :
	Semasa kerja (EF)
	Joint number: 155

REMARKS	No. meter : SAJ 14A42350
	No. rumah :
	Semasa kerja

REMARKS	No. meter : SAJ 14A42350
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 14A42350
	No. rumah :
	Selepas kerja

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	31/12/2022 (SABTU)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 17A71695
	No. rumah :
	Semasa kerja (EF)
	Joint number: 156

REMARKS	No. meter : SAJ 17A71695
	No. rumah :
	Semasa kerja (EF)
	Joint number: 157

REMARKS	No. meter : SAJ 17A71695
	No. rumah :
	Semasa kerja

REMARKS	No. meter : SAJ 17A71695
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 17A71695
	No. rumah :
	Selepas kerja

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

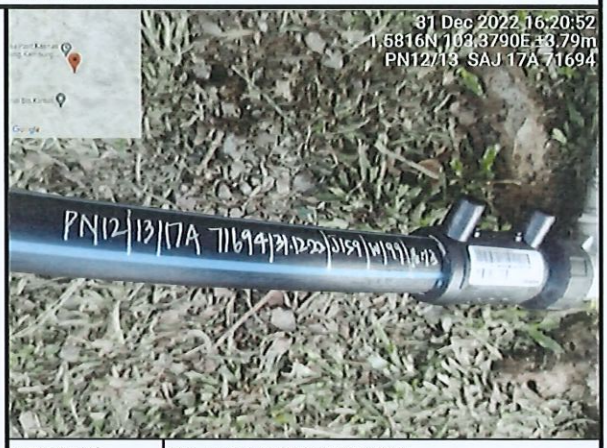
Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	31/12/2022 (SABTU)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 17A71694
	No. rumah :
	Semasa kerja (EF)
	Joint number: 158



REMARKS	No. meter : SAJ 17A71694
	No. rumah :
	Semasa kerja (EF)
	Joint number: 159

REMARKS	No. meter : SAJ 17A71694
	No. rumah :
	Semasa kerja

REMARKS	No. meter : SAJ 17A71694
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 17A71694
	No. rumah :
	Selepas kerja

REMARKS	

Ranhill SAJ

RSAJ P-B102.Rev.4

PIPE LOG

Location : REHAB 2020 - PAKEJ 2 (SP 10)
PN12/13 - JLN PT KASAN

Sheet No. : 2
Date : 1/1/2023

CHAINAGE	EXC. DEPTH

SITE CLEARANCE	sq.m	
BULK EXCAVATION		
All material	cu.m	
Rock	cu.m	
Compact material	cu.m	
FILLING		
Approved Material	cu.m	
Sand	cu.m	
Laterite (150mm)	sq.m	
Sand Bedding	sq.m	
Concrete	cu.m	
TURFING		
Top Soil (50mm)	sq.m	
Turfing	sq.m	

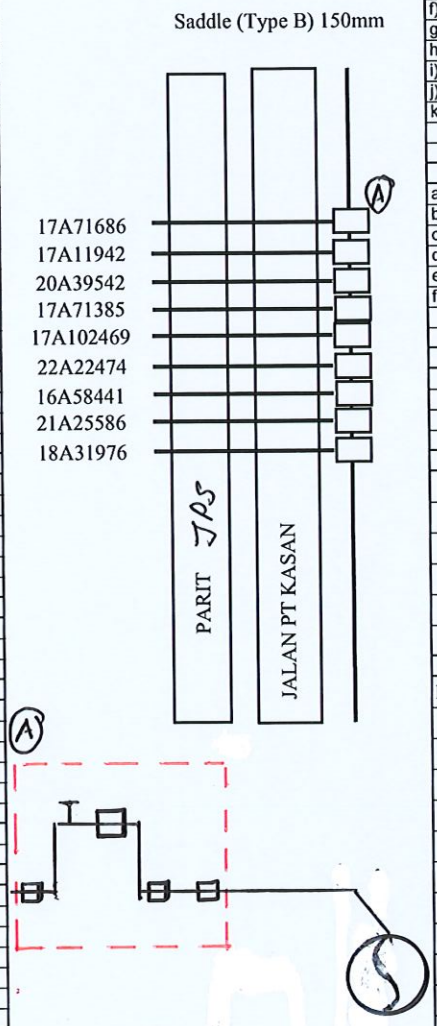
CHAMBER		
Type	Set	Middle
CHIPPING	sq.m	

PILING		
Kayu Bakau	m	
Type of Pile	UPVC	
Size	mm	80
Length (Initial)	m	
Length (Extention)	m	
Join Welding	nos	
Cut Pile (1m)	nos	
Linatex Rubber	sq.m	
MS Strap /Bracing	nos	

Prepared By :
HAIDI BIN ABDULLAH SATARI
Engineer

Checked and Approved By :
MUHAMAD AZRI BIN ABDUL AZIZ
INSPEKTOR KONTRAK PONTIAN
JABATAN PROJEK
RANHILL SAJ SDN. BHD.
Date : 24/1/2023

SKETCHED DRWG.



TRECH EXCAVATION		
a) Depth < 1.8 m	m	
b) Depth > 1.8 m < 3.0 m	m	
c) Road Cutting	m	
d) Track/Gravel/Earth Road	sq.m	
e) Concrete Surface	sq.m	
f) Cross Hedges/Fences/Wall	sq.m	
g) Road Kerb	m	
h) Under water earth drain	sq.m	
i) Under concrete drain/culvert	sq.m	
j) In rock	cu.m	
k) Unsuitable Material	cu.m	
REINSTATEMENT ROAD		
a) Sand Filling	cu.m	
b) Crusher Run	sq.m	
c) Binder Course	sq.m	
d) Wearing Course	sq.m	
e) Milling/Resurfacing	sq.m	
f)Thermoplastic Line Marking	m	

PIPE	DIA.(mm)	NOS	L (m)
HDPE	25	-	178.30
S/STEEL	20	-	0.00

EXPOSE PIPE & SPECIAL		
	m	
	m	
	nos	
	nos	
	nos	
	sq.m	

SPECIAL / FITTINGS		
150MM SADDLE (TYPE B)	nos	—
20MM METER STAND	nos	9.00
ELECTRO FUSION (20)	nos	

Comments / Reports

NORSILAWATI BINTI ALI
EKSEKUTIF
JABATAN PROJEK
RANHILL SAJ SDN. BHD.

RSAJ P-B107.Rev.4

Ranhill SAJ

DATA TAPPING DAN PAIP PERHUBUNGAN

PROGRAM PENGGANTIAN PAIP LAMA TAHUN 2020

Nama Projek : PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020

Nama Kontraktor : JALUR CAHAYA SDN BHD

Bil	Pipe	Size (mm)	No. Meter	No Rumah	Comm Pipe (m)		Lintas Parit		Bawah Jalan			Korekan (m2)			Catatan
					PA Pipe (m)	Poly Pipe (m)	GI Sleeve (m)	Stanless Steel (m)	Open Trench (m)	GI Sleeve (m)	Impact Molling	Jubin	Konkrit	Longkang	
1	UPVC	150	18A31976			28.80									
2	UPVC	150	21A25586			9.30									
3	UPVC	150	22A22474			16.70									
4	UPVC	150	17A102469			10.30									
5	UPVC	150	17A71385			24.40									
6	UPVC	150	17A11942			17.50									
7	UPVC	150	17A71686			19.30									
8	UPVC	150	16A58441			24.50									
9	UPVC	150	20A39542			27.50									
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															
25															
26															
27															
28															
29															
30															
					0.00	178.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Disediakan Oleh :

ZULI BIN ABDULLAH SATARI
Engineer

Kontraktor
Cop :

JALUR CAHAYA SDN BHD
599034-X

Disemak Oleh :

Inspektor Kontrak (D)
Cop :

MUHAMAD AZRI BIN ABDUL AZIZ
INSPEKTOR KONTRAK PONTIAN
JABATAN PROJEK
RANHILL SAJ SDN. BHD.

Disahkan Oleh :

Eksekutif
Cop :

Ranhill SAJ

Form No: JK/PT – 05
Rev Date: 23/06/2022

BORANG PEMERIKSAAN VISUAL (*ELECTRO-FUSION*)

Projek:	PROGRAM PENGGANTIAN PAIP CAMA BAGI TAHUN 2020 - PAKEJ 2
Nama :	SHARUDIN BIN HASSAN
No sijil:	199
Nama syarikat:	JALUR CAHAYA SDN BHD
Tarikh dan Masa:	1 / 1 / 2023

KRITERIA	✓	X
KEADAAN TAPAK		
Kawasan tapak berada dalam keadaan yang bersih dan kering.	/	
KEADAAN BAHAN DAN PERALATAN		
Peralatan berada dalam keadaan baik dan bersih.	/	
Fittings berada dalam bungkusan? Jika ya, periksa *fittings* jika terdapat kerosakan. Jika tidak, reject *fittings*.	/	
Peralatan adalah mencukupi sebelum kerja penyambungan dilakukan.		
- *Fusion machine*	/	
- *Universal pipe cutter*	/	
- *Rotational pipe scrapper*	/	
- *Marker*	/	
- *Isopropyl Alcohol (IPA)*	/	
- Kain bersih	/	
- *Generator*		
Kawasan penyambungan paip berada dalam keadaan yang bersih dan kering.	/	

PEMERIKSAAN SELEPAS PROSES PENYAMBUNGAN *ELECTRO-FUSION*

1) *Melt indicator* pada *fittings* timbul.

Nama Jalan: PN12/13- JLN PT KASAN

	✓	X		✓	X
Joint No. = 160	/		Joint No. = 170	/	
Joint No. = 161	/		Joint No. = 171	/	
Joint No. = 162	/		Joint No. = 172	/	
Joint No. = 163	/		Joint No. = 173	/	
Joint No. = 164	/		Joint No. = 174	/	
Joint No. = 165	/		Joint No. = 175	/	
Joint No. = 166	/		Joint No. = 176	/	
Joint No. = 167	/		Joint No. = 177	/	
Joint No. = 168	/		Joint No. = 178	/	
Joint No. = 169	/		Joint No. = 179	/	

2) Hujung paip dipotong dengan tegak dan lurus.

Nama Jalan: PN12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 160	/		Joint No. = 170	/	
Joint No. = 161	/		Joint No. = 171	/	
Joint No. = 162	/		Joint No. = 172	/	
Joint No. = 163	/		Joint No. = 173	/	
Joint No. = 164	/		Joint No. = 174	/	
Joint No. = 165	/		Joint No. = 175	/	
Joint No. = 166	/		Joint No. = 176	/	
Joint No. = 167	/		Joint No. = 177	/	
Joint No. = 168	/		Joint No. = 178	/	
Joint No. = 169	/		Joint No. = 179	/	

3) Penyambungan paip yang dilakukan berada dalam keadaan selari.

Nama Jalan: PN 12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 160	/		Joint No. = 170	/	
Joint No. = 161	/		Joint No. = 171	/	
Joint No. = 162	/		Joint No. = 172	/	
Joint No. = 163	/		Joint No. = 173	/	
Joint No. = 164	/		Joint No. = 174	/	
Joint No. = 165	/		Joint No. = 175	/	
Joint No. = 166	/		Joint No. = 176	/	
Joint No. = 167	/		Joint No. = 177	/	
Joint No. = 168	/		Joint No. = 178	/	
Joint No. = 169	/		Joint No. = 179	/	

4) Kawasan yang telah dikikis (*scrapped*) boleh dilihat.

Nama Jalan: PN 12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 160	/		Joint No. = 170	/	
Joint No. = 161	/		Joint No. = 171	/	
Joint No. = 162	/		Joint No. = 172	/	
Joint No. = 163	/		Joint No. = 173	/	
Joint No. = 164	/		Joint No. = 174	/	
Joint No. = 165	/		Joint No. = 175	/	
Joint No. = 166	/		Joint No. = 176	/	
Joint No. = 167	/		Joint No. = 177	/	
Joint No. = 168	/		Joint No. = 178	/	
Joint No. = 169	/		Joint No. = 179	/	

5) Tanda pada paip (*penetration depth*) tepat dan boleh dilihat.

Nama Jalan: PN 12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 160	/		Joint No. = 170	/	
Joint No. = 161	/		Joint No. = 171	/	
Joint No. = 162	/		Joint No. = 172	/	
Joint No. = 163	/		Joint No. = 173	/	
Joint No. = 164	/		Joint No. = 174	/	
Joint No. = 165	/		Joint No. = 175	/	
Joint No. = 166	/		Joint No. = 176	/	
Joint No. = 167	/		Joint No. = 177	/	
Joint No. = 168	/		Joint No. = 178	/	
Joint No. = 169	/		Joint No. = 179	/	

6) Tiada kesan percikan paip yang telah cair atau apa-apa kerosakan pada permukaan luar paip yang telah disambung.

Nama Jalan: PN 12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 160	/		Joint No. = 170	/	
Joint No. = 161	/		Joint No. = 171	/	
Joint No. = 162	/		Joint No. = 172	/	
Joint No. = 163	/		Joint No. = 173	/	
Joint No. = 164	/		Joint No. = 174	/	
Joint No. = 165	/		Joint No. = 175	/	
Joint No. = 166	/		Joint No. = 176	/	
Joint No. = 167	/		Joint No. = 177	/	
Joint No. = 168	/		Joint No. = 178	/	
Joint No. = 169	/		Joint No. = 179	/	

7) Paip dan *fittings* yang disambung dibiarkan untuk sejuk mengikut tempoh masa yang ditetapkan.					
Nama Jalan: PN 12/13 - JLN PT KASAN					
	✓	X		✓	X
Joint No. = 160	/		Joint No. = 170	/	
Joint No. = 161	/		Joint No. = 171	/	
Joint No. = 162	/		Joint No. = 172	/	
Joint No. = 163	/		Joint No. = 173	/	
Joint No. = 164	/		Joint No. = 174	/	
Joint No. = 165	/		Joint No. = 175	/	
Joint No. = 166	/		Joint No. = 176	/	
Joint No. = 167	/		Joint No. = 177	/	
Joint No. = 168	/		Joint No. = 178	/	
Joint No. = 169	/		Joint No. = 179	/	
ADAKAH PENYAMBUNGAN *ELECTRO-FUSION* INI DITERIMA? (Jika TIDAK, sila nyatakan ulasan di ruangan yang disediakan)					
	✓	X		✓	X
Joint No. = 160	/		Joint No. = 170	/	
Joint No. = 161	/		Joint No. = 171	/	
Joint No. = 162	/		Joint No. = 172	/	
Joint No. = 163	/		Joint No. = 173	/	
Joint No. = 164	/		Joint No. = 174	/	
Joint No. = 165	/		Joint No. = 175	/	
Joint No. = 166	/		Joint No. = 176	/	
Joint No. = 167	/		Joint No. = 177	/	
Joint No. = 168	/		Joint No. = 178	/	
Joint No. = 169	/		Joint No. = 179	/	

Ulasan:

.....

.....

.....

Dikendalikan oleh:	Diperiksa dan disahkan oleh:
Tandatangan:	Tandatangan:
Nama Kontraktor: SHARUDIN B. HASSAN	Nama Kontrak Inspektor: MUHAMAD AZRI BIN ABDUL AZIZ INSPEKTOR KONTRAK PONTIAN
No. Anggota: 199	No. Anggota: JABATAN PROJEK RANHILL SAJ SDN. BHD.
Tarikh: 1/11/2023	Tarikh: 1/1/2023

**Dokumen yang perlu diserahkan kepada *Contract Inspector*: Gambar penyambungan dan laporan daripada *Data Logger*.

JALUR CAHAYA SDN BHD 599034-X

ZAIDI BIN ABDULLAH SATARI
Engineer

Ranhill SAJ

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

JC

ELECTRO-FUSION MACHINE REPORT (COMM PIPE)

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 - API API
DATE	1/1/2023 (AHAD)
LOCATION	13 - JALAN PT KASAN

160	01.01.23	10:15	28.4°C	FR	CPL	25 mm	28.0 V	0028 s/0028 s	3.733 Ohm	5.6 kJ	OK
161	01.01.23	10:22	28.5°C	FR	CPL	25 mm	28.0 V	0028 s/0028 s	3.736 Ohm	5.6 kJ	OK
162	01.01.23	10:28	28.5°C	FR	CPL	25 mm	28.0 V	0028 s/0028 s	3.676 Ohm	5.7 kJ	OK
163	01.01.23	10:35	29.1°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.739 Ohm	5.4 kJ	OK
164	01.01.23	10:41	29.5°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.739 Ohm	5.4 kJ	OK
165	01.01.23	10:47	30.2°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.734 Ohm	5.4 kJ	OK
166	01.01.23	10:53	30.1°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.735 Ohm	5.4 kJ	OK
167	01.01.23	10:59	30.7°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.755 Ohm	5.4 kJ	OK
168	01.01.23	11:05	30.0°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.728 Ohm	5.4 kJ	OK
169	01.01.23	11:11	29.6°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.712 Ohm	5.5 kJ	OK
170	01.01.23	11:18	29.7°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.720 Ohm	5.4 kJ	OK
171	01.01.23	11:30	29.9°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.684 Ohm	5.5 kJ	OK
172	01.01.23	11:37	29.9°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.716 Ohm	5.4 kJ	OK
173	01.01.23	11:43	30.1°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.765 Ohm	5.4 kJ	OK
174	01.01.23	11:49	30.3°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.747 Ohm	5.4 kJ	OK
175	01.01.23	11:56	30.3°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.735 Ohm	5.4 kJ	OK
176	01.01.23	12:12	30.3°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.737 Ohm	5.5 kJ	OK
177	01.01.23	12:21	30.0°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.729 Ohm	5.4 kJ	OK
178	01.01.23	12:33	30.9°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.741 Ohm	5.4 kJ	OK
179	01.01.23	15:48	32.4°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.767 Ohm	5.4 kJ	OK

Disediakan Oleh:	Disemak Oleh:	Disahkan Oleh:
ZAID BIN ABDULLAH SATARI Engineer	MUHAMAD AZRI BIN ABDUL AZIZ INSPEKTOR KONTRAK PONTIAN JABATAN PROJEK RANHILL SAJ SDN. BHD.	
Kontraktor	Inspektor Kontrak (D)	Eksekutif

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	1/1/2023 (AHAD)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 18A31976
	No. rumah :
	Semasa kerja (EF)
	Joint number: 160

REMARKS	No. meter : SAJ 18A31976
	No. rumah :
	Semasa kerja (EF)
	Joint number: 161

REMARKS	No. meter : SAJ 18A31976
	No. rumah :
	Semasa kerja (EF)
	Joint number: 178

REMARKS	No. meter : SAJ 18A31976
	No. rumah :
	Semasa kerja

REMARKS	No. meter : SAJ 18A31976
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 18A31976
	No. rumah :
	Selepas kerja

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	1/1/2023 (AHAD)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 21A25586
	No. rumah :
	Semasa kerja (EF)
	Joint number: 162

REMARKS	No. meter : SAJ 21A25586
	No. rumah :
	Semasa kerja (EF)
	Joint number: 163

REMARKS	No. meter : SAJ 21A25586
	No. rumah :
	Semasa kerja

REMARKS	No. meter : SAJ 21A25586
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 21A25586
	No. rumah :
	Selepas kerja

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	1/1/2023 (AHAD)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 22A22474
	No. rumah :
	Semasa kerja (EF)
	Joint number: 164

REMARKS	No. meter : SAJ 22A22474
	No. rumah :
	Semasa kerja (EF)
	Joint number: 165

REMARKS	No. meter : SAJ 22A22474
	No. rumah :
	Semasa kerja

REMARKS	No. meter : SAJ 22A22474
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 22A22474
	No. rumah :
	Selepas kerja

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	1/1/2023 (AHAD)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 17A102469
	No. rumah :
	Semasa kerja (EF)
	Joint number: 166

REMARKS	No. meter : SAJ 17A102469
	No. rumah :
	Semasa kerja (EF)
	Joint number: 167

REMARKS	No. meter : SAJ 17A102469
	No. rumah :
	Semasa kerja

REMARKS	No. meter : SAJ 17A102469
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 17A102469
	No. rumah :
	Selepas kerja

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

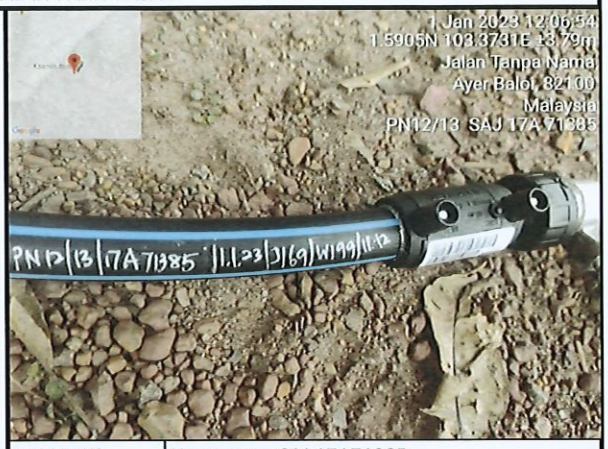
Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	1/1/2023 (AHAD)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 17A71385
	No. rumah :
	Semasa kerja (EF)
	Joint number: 168



REMARKS	No. meter : SAJ 17A71385
	No. rumah :
	Semasa kerja (EF)
	Joint number: 169

REMARKS	No. meter : SAJ 17A71385
	No. rumah :
	Semasa kerja

REMARKS	No. meter : SAJ 17A71385
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 17A71385
	No. rumah :
	Selepas kerja

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	1/1/2023 (AHAD)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 17A11942
	No. rumah :
	Semasa kerja (EF)
	Joint number: 170

REMARKS	No. meter : SAJ 17A11942
	No. rumah :
	Semasa kerja (EF)
	Joint number: 171

REMARKS	No. meter : SAJ 17A11942
	No. rumah :
	Semasa kerja

REMARKS	No. meter : SAJ 17A11942
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 17A11942
	No. rumah :
	Selepas kerja

REMARKS	

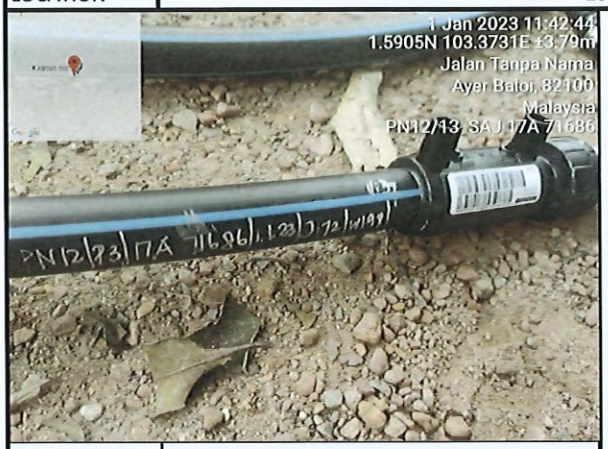
PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	1/1/2023 (AHAD)
LOCATION	13 - JALAN PARIT KASAN



REMARKS	No. meter : SAJ 17A71686
	No. rumah :
	Semasa kerja (EF)
	Joint number: 172

REMARKS	No. meter : SAJ 17A71686
	No. rumah :
	Semasa kerja (EF)
	Joint number: 173

REMARKS	No. meter : SAJ 17A71686
	No. rumah :
	Semasa kerja (EF)
	Joint number: 179

REMARKS	No. meter : SAJ 17A71686
	No. rumah :
	Semasa kerja

REMARKS	No. meter : SAJ 17A71686
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 17A71686
	No. rumah :
	Selepas kerja

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	1/1/2023 (AHAD)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 16A58441
	No. rumah :
	Semasa kerja (EF)
	Joint number: 174

REMARKS	No. meter : SAJ 16A58441
	No. rumah :
	Semasa kerja (EF)
	Joint number: 175

REMARKS	No. meter : SAJ 16A58441
	No. rumah :
	Semasa kerja

REMARKS	No. meter : SAJ 16A58441
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 16A58441
	No. rumah :
	Selepas kerja

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	1/1/2023 (AHAD)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 20A39542
	No. rumah :
	Semasa kerja (EF)
	Joint number: 176

REMARKS	No. meter : SAJ 20A39542
	No. rumah :
	Semasa kerja (EF)
	Joint number: 177

REMARKS	No. meter : SAJ 20A39542
	No. rumah :
	Semasa kerja

REMARKS	No. meter : SAJ 20A39542
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 20A39542
	No. rumah :
	Selepas kerja

REMARKS	

Ranhill SAJ

RSAJ P-B102.Rev.4

PIPE LOG

Location : REHAB 2020 - PAKEJ 2 (SP 10)
PN12/13 - JLN PT KASAN

Sheet No. : 3
Date : 2/1/2023

CHAINAGE	EXC. DEPTH

SITE CLEARANCE	sq.m	

BULK EXCAVATION		
All material	cu.m	
Rock	cu.m	
Compact material	cu.m	

FILLING		
Approved Material	cu.m	
Sand	cu.m	
Laterite (150mm)	sq.m	
Sand Bedding	sq.m	
Concrete	cu.m	

TURFING		
Top Soil (50mm)	sq.m	
Turfing	sq.m	

CHAMBER		
Type	Set	Middle

CHIPPING	sq.m	

PILING		
Kayu Bakau	m	
Type of Pile	UPVC	
Size	mm	80
Length (Initial)	m	
Length (Extention)	m	
Join Welding	nos	
Cut Pile (1m)	nos	
Linatex Rubber	sq.m	
MS Strap / Bracing	nos	

Prepared By :

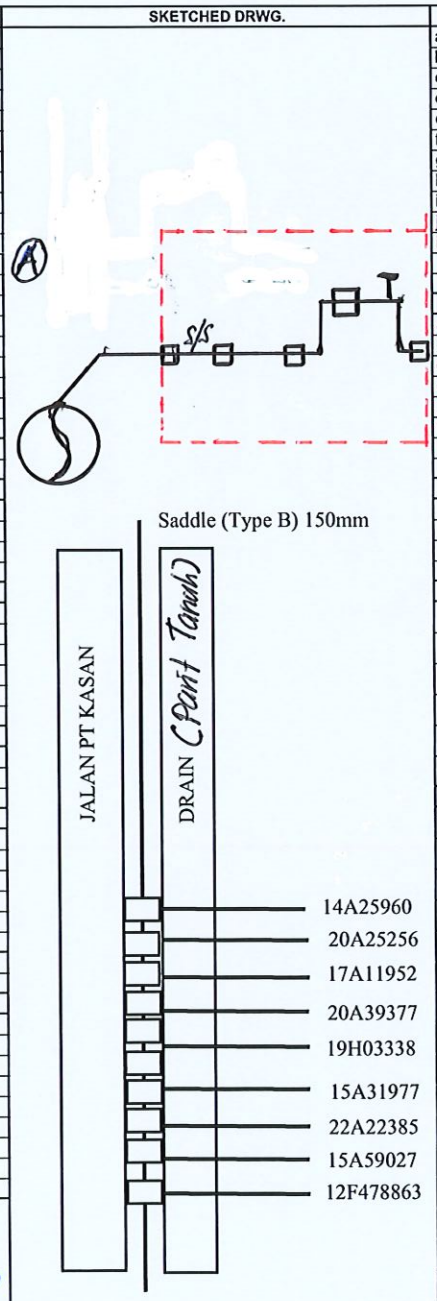
ZAKI BIN ABDULLAH SATARI
Engineer

Checked and Approved By :

MUHAMAD AZRI BIN ABDUL AZIZ
INSPEKTOR KONTRAK PONTIAN
JABATAN PROJEK
RANHILL SAJ SDN. BHD.

Date : 24/1/2023

SKETCHED DRWG.



TRECH EXCAVATION		
a) Depth < 1.8 m	m	
b) Depth > 1.8 m < 3.0 m	m	
c) Road Cutting	m	
d) Track/Gravel/Earth Road	sq.m	
e) Concrete Surface	sq.m	
f) Cross Hedges/Fences/Wall	sq.m	
g) Road Kerb	m	
h) Under water earth drain	sq.m	
i) Under concrete drain/culvert	sq.m	
j) In rock	cu.m	
k) Unsuitable Material	cu.m	

REINSTATEMENT ROAD		
a) Sand Filling	cu.m	
b) Crusher Run	sq.m	
c) Binder Course	sq.m	
d) Wearing Course	sq.m	
e) Milling/Resurfacing	sq.m	
f)Thermoplastic Line Marking	m	

PIPE	DIA.(mm)	NOS	L (m)
HDPE	25	-	140.30
S/STEEL	20	-	27.00

EXPOSE PIPE & SPECIAL		
	m	
	m	
	nos	
	nos	
	nos	
	sq.m	

SPECIAL / FITTINGS		
150MM SADDLE (TYPE B)	nos	–
20MM METER STAND	nos	9.00
ELECTRO FUSION (27)	nos	

Comments / Reports

NORSILAWATI BINTI ALI
EKSEKUTIF
JABATAN PROJEK
RANHILL SAJ SDN. BHD.

RSAJ P-B107.Rev.4

Ranhill SAJ

DATA TAPPING DAN PAIP PERHUBUNGAN

PROGRAM PENGGANTIAN PAIP LAMA TAHUN 2020

Nama Projek : PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020

Nama Kontraktor : JALUR CAHAYA SDN BHD

Bil	Pipe	Size (mm)	No. Meter	No Rumah	Comm Pipe (m)		Lintas Parit		Bawah Jalan			Korekan (m2)			Catatan
					PA Pipe (m)	Poly Pipe (m)	GI Sleeve (m)	Stanless Steel (m)	Open Trench (m)	GI Sleeve (m)	Impact Molling	Jubin	Konkrit	Longkang	
1	UPVC	150	12F478863			11.90		2.50							
2	UPVC	150	15A59027			14.90		2.70							
3	UPVC	150	22A22385			17.60		3.00							
4	UPVC	150	19H03338			15.50		3.70							
5	UPVC	150	20A25256			21.60		2.70							
6	UPVC	150	15A31977			6.00		3.70							
7	UPVC	150	20A39377			13.10		3.00							
8	UPVC	150	17A11952			21.40		3.00							
9	UPVC	150	14A25960			18.30		2.70							
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															
25															
26															
27															
28															
29															
30															
					0.00	140.30	0.00	27.00	0.00	0.00	0.00	0.00	0.00	0.00	

Disediakan Oleh :

Kontraktor
Cop :

Disemak Oleh :

Inspektor Kontrak (D)
Cop : MUHAMAD AZRI BIN ABDUL AZIZ
INSPEKTOR KONTRAK PONTIAN
JABATAN PROJEK
RANHILL SAJ SDN. BHD.

Disahkan Oleh :

Eksekutif
Cop : NORSILAWATI BINTI ALI
EKSEKUTIF
JABATAN PROJEK
RANHILL SAJ SDN. BHD.

Ranhill SAJ

Form No: JK/PT – 05
Rev Date: 23/06/2022

BORANG PEMERIKSAAN VISUAL (*ELECTRO-FUSION*)

Projek:	PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 - PAKEJ 2
Nama :	SHARUDIN BIN HASSAN
No sijil:	199
Nama syarikat:	JALUR CAHAYA SDN BHD
Tarikh dan Masa:	20/12/2022

KRITERIA	✓	X
KEADAAN TAPAK		
Kawasan tapak berada dalam keadaan yang bersih dan kering.	/	
KEADAAN BAHAN DAN PERALATAN		
Peralatan berada dalam keadaan baik dan bersih.	/	
Fittings berada dalam bungkusan? Jika ya, periksa *fittings* jika terdapat kerosakan. Jika tidak, reject *fittings*.	/	
Peralatan adalah mencukupi sebelum kerja penyambungan dilakukan.	/	
- *Fusion machine*	/	
- *Universal pipe cutter*	/	
- *Rotational pipe scrapper*	/	
- *Marker*	/	
- *Isopropyl Alcohol (IPA)*	/	
- Kain bersih	/	
- *Generator*	/	
Kawasan penyambungan paip berada dalam keadaan yang bersih dan kering.	/	

PEMERIKSAAN SELEPAS PROSES PENYAMBUNGAN *ELECTRO-FUSION*

1) *Melt indicator* pada *fittings* timbul.

Nama Jalan: PN12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 20	/		Joint No. =		
Joint No. = 21	/		Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		

2) Hujung paip dipotong dengan tegak dan lurus.

Nama Jalan: PN12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 20	/		Joint No. =		
Joint No. = 21	/		Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		

3) Penyambungan paip yang dilakukan berada dalam keadaan selari.

Nama Jalan: PN12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 20	/		Joint No. =		
Joint No. = 21	/		Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		

4) Kawasan yang telah dikikis (*scrapped*) boleh dilihat.

Nama Jalan: PN12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 20	/		Joint No. =		
Joint No. = 21	/		Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		

5) Tanda pada paip (*penetration depth*) tepat dan boleh dilihat.

Nama Jalan: PN12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 20	/		Joint No. =		
Joint No. = 21	/		Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		

6) Tiada kesan percikan paip yang telah cair atau apa-apa kerosakan pada permukaan luar paip yang telah disambung.

Nama Jalan: PN12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 20	/		Joint No. =		
Joint No. = 21	/		Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		

7) Paip dan *fittings* yang disambung dibiarkan untuk sejuk mengikut tempoh masa yang ditetapkan.					
Nama Jalan: PN12/13 - JLN PT KASAN					
	✓	X		✓	X
Joint No. = 20	/		Joint No. =		
Joint No. = 21	/		Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
ADAKAH PENYAMBUNGAN *ELECTRO-FUSION* INI DITERIMA? (Jika TIDAK, sila nyatakan ulasan di ruangan yang disediakan)					
	✓	X		✓	X
Joint No. = 20	/		Joint No. =		
Joint No. = 21	/		Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		

Ulasan:

.....

.....

.....

Dikendalikan oleh:	Diperiksa dan disahkan oleh:
Tandatangan:	Tandatangan:
Nama Kontraktor: SHAHRUDIN B. HASSAN	Nama Kontrak Inspektor: MUHAMAD AZRI BIN ABDUL AZIZ INSPEKTOR KONTRAK PONTIAN
No. Anggota: 199	No. Anggota: JABATAN PROJEK RANHILL SAJ SDN. BHD.
Tarikh: 20/12/2022	Tarikh: 20/12/2022

**Dokumen yang perlu diserahkan kepada *Contract Inspector*: Gambar penyambungan dan laporan daripada *Data Logger*.

JALUR CAHAYA SDN BHD 599034-X

ZAIDI BIN ABDULLAH SATARI
Engineer

Ranhill SAJ

Form No: JK/PT – 05
Rev Date: 23/06/2022

BORANG PEMERIKSAAN VISUAL (*ELECTRO-FUSION*)

Projek:	PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 - PAKEJ 2
Nama :	SHARUDIN BIN HASSAN
No sijil:	199
Nama syarikat:	JALUR CAHAYA SDN BHD
Tarikh dan Masa:	2/1/2023

KRITERIA	✓	X
KEADAAN TAPAK		
Kawasan tapak berada dalam keadaan yang bersih dan kering.	/	
KEADAAN BAHAN DAN PERALATAN		
Peralatan berada dalam keadaan baik dan bersih.	/	
Fittings berada dalam bungkusan? Jika ya, periksa *fittings* jika terdapat kerosakan. Jika tidak, reject *fittings*.	/	
Peralatan adalah mencukupi sebelum kerja penyambungan dilakukan.		
- *Fusion machine*	/	
- *Universal pipe cutter*	/	
- *Rotational pipe scrapper*	/	
- *Marker*	/	
- *Isopropyl Alcohol (IPA)*	/	
- Kain bersih	/	
- *Generator*	/	
Kawasan penyambungan paip berada dalam keadaan yang bersih dan kering.	/	

PEMERIKSAAN SELEPAS PROSES PENYAMBUNGAN *ELECTRO-FUSION*

1) *Melt indicator* pada *fittings* timbul.

Nama Jalan: PN 12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. =			Joint No. = 189	/	
Joint No. =			Joint No. = 190	/	
Joint No. = 180	/		Joint No. = 191	/	
Joint No. = 181	/		Joint No. = 192	/	
Joint No. = 182	/		Joint No. = 193	/	
Joint No. = 183	/		Joint No. = 194	/	
Joint No. = 184	/		Joint No. = 195	/	
Joint No. = 185	/		Joint No. = 196	/	
Joint No. = 186	/		Joint No. = 197	/	
Joint No. = 187	/		Joint No. = 198	/	

2) Hujung paip dipotong dengan tegak dan lurus.

Nama Jalan: PN 12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. =			Joint No. = 189	/	
Joint No. =			Joint No. = 190	/	
Joint No. = 180	/		Joint No. = 191	/	
Joint No. = 181	/		Joint No. = 192	/	
Joint No. = 182	/		Joint No. = 193	/	
Joint No. = 183	/		Joint No. = 194	/	
Joint No. = 184	/		Joint No. = 195	/	
Joint No. = 185	/		Joint No. = 196	/	
Joint No. = 186	/		Joint No. = 197	/	
Joint No. = 187	/		Joint No. = 198	/	

3) Penyambungan paip yang dilakukan berada dalam keadaan selari.

Nama Jalan: PN 12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. =			Joint No. = 189	/	
Joint No. =			Joint No. = 190	/	
Joint No. = 180	/		Joint No. = 191	/	
Joint No. = 181	/		Joint No. = 192	/	
Joint No. = 182	/		Joint No. = 193	/	
Joint No. = 183	/		Joint No. = 194	/	
Joint No. = 184	/		Joint No. = 195	/	
Joint No. = 185	/		Joint No. = 196	/	
Joint No. = 186	/		Joint No. = 197	/	
Joint No. = 187	/		Joint No. = 198	/	

4) Kawasan yang telah dikikis (*scrapped*) boleh dilihat.

Nama Jalan: PN 12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. =			Joint No. = 189	/	
Joint No. =			Joint No. = 190	/	
Joint No. = 180	/		Joint No. = 191	/	
Joint No. = 181	/		Joint No. = 192	/	
Joint No. = 182	/		Joint No. = 193	/	
Joint No. = 183	/		Joint No. = 194	/	
Joint No. = 184	/		Joint No. = 195	/	
Joint No. = 185	/		Joint No. = 196	/	
Joint No. = 186	/		Joint No. = 197	/	
Joint No. = 187	/		Joint No. = 198	/	

5) Tanda pada paip (*penetration depth*) tepat dan boleh dilihat.

Nama Jalan: PN 12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. =			Joint No. = 189	/	
Joint No. =			Joint No. = 190	/	
Joint No. = 180	/		Joint No. = 191	/	
Joint No. = 181	/		Joint No. = 192	/	
Joint No. = 182	/		Joint No. = 193	/	
Joint No. = 183	/		Joint No. = 194	/	
Joint No. = 184	/		Joint No. = 195	/	
Joint No. = 185	/		Joint No. = 196	/	
Joint No. = 186	/		Joint No. = 197	/	
Joint No. = 187	/		Joint No. = 198	/	

6) Tiada kesan percikan paip yang telah cair atau apa-apa kerosakan pada permukaan luar paip yang telah disambung.

Nama Jalan: PN 12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. =			Joint No. = 189	/	
Joint No. =			Joint No. = 190	/	
Joint No. = 180	/		Joint No. = 191	/	
Joint No. = 181	/		Joint No. = 192	/	
Joint No. = 182	/		Joint No. = 193	/	
Joint No. = 183	/		Joint No. = 194	/	
Joint No. = 184	/		Joint No. = 195	/	
Joint No. = 185	/		Joint No. = 196	/	
Joint No. = 186	/		Joint No. = 197	/	
Joint No. = 187	/		Joint No. = 198	/	

7) Paip dan *fittings* yang disambung dibiarkan untuk sejuk mengikut tempoh masa yang ditetapkan.					
Nama Jalan: PN12/13 – JLN PT KARAN					
	✓	X		✓	X
Joint No. = 180	/		Joint No. = 191	/	
Joint No. = 181	/		Joint No. = 192	/	
Joint No. = 182	/		Joint No. = 193	/	
Joint No. = 183	/		Joint No. = 194	/	
Joint No. = 184	/		Joint No. = 195	/	
Joint No. = 185	/		Joint No. = 196	/	
Joint No. = 186	/		Joint No. = 197	/	
Joint No. = 187	/		Joint No. = ~~18~~ 198	/	
Joint No. = 189	/		Joint No. =		
Joint No. = 190	/		Joint No. =		
ADAKAH PENYAMBUNGAN *ELECTRO-FUSION* INI DITERIMA? (Jika TIDAK, sila nyatakan ulasan di ruangan yang disediakan)					
	✓	X		✓	X
Joint No. = 180	/		Joint No. = 191		
Joint No. = 181	/		Joint No. = 192	/	
Joint No. = 182	/		Joint No. = 193	/	
Joint No. = 183	/		Joint No. = 194	/	
Joint No. = 184	/		Joint No. = 195	/	
Joint No. = 185	/		Joint No. = 196	/	
Joint No. = 186	/		Joint No. = 197	/	
Joint No. = 187	/		Joint No. = 198	/	
Joint No. = 189	/		Joint No. =		
Joint No. = 190	/		Joint No. =		

Ulasan:

.....

.....

.....

Dikendalikan oleh:	Diperiksa dan disahkan oleh:
Tandatangan:	Tandatangan:
Nama Kontraktor: SHAHUDIN B. HASSAN	Nama Kontrak Inspektor: MUHAMAD AZRI BIN ABDUL AZIZ INSPEKTOR KONTRAK PONTIAN JABATAN PROJEK RANHILL SAJ SDN. BHD.
No. Anggota: 199	No. Anggota:
Tarikh: 2/1/2023	Tarikh: 2/1/2023

**Dokumen yang perlu diserahkan kepada *Contract Inspector*: Gambar penyambungan dan laporan daripada *Data Logger*.

JAMUR CAHAYA SDN BHD 599034-X

ZAIDI BIN ABDULLAH SATARI
Engineer

Form No: JK/PT – 05
Rev Date: 23/06/2022

Ranhill SAJ

BORANG PEMERIKSAAN VISUAL (*ELECTRO-FUSION*)

Projek:	PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 - PAKEJ 2
Nama :	SHARUDIN BIN HASIAN
No sijil:	199
Nama syarikat:	JALUR CAHAYA SDN BHD
Tarikh dan Masa:	2/1/2023

KRITERIA	✓	X
KEADAAN TAPAK		
Kawasan tapak berada dalam keadaan yang bersih dan kering.	/	
KEADAAN BAHAN DAN PERALATAN		
Peralatan berada dalam keadaan baik dan bersih.	/	
Fittings berada dalam bungkusan? Jika ya, periksa *fittings* jika terdapat kerosakan. Jika tidak, reject *fittings*.	/	
Peralatan adalah mencukupi sebelum kerja penyambungan dilakukan.		
- *Fusion machine*	/	
- *Universal pipe cutter*	/	
- *Rotational pipe scrapper*	/	
- *Marker*	/	
- *Isopropyl Alcohol (IPA)*	/	
- Kain bersih	/	
- *Generator*	/	
Kawasan penyambungan paip berada dalam keadaan yang bersih dan kering.	/	

PEMERIKSAAN SELEPAS PROSES PENYAMBUNGAN *ELECTRO-FUSION*

1) *Melt indicator* pada *fittings* timbul.

Nama Jalan: PN 12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 199	/		Joint No. =		
Joint No. = 200	/		Joint No. =		
Joint No. = 201	/		Joint No. =		
Joint No. = 202	/		Joint No. =		
Joint No. = 203	/		Joint No. =		
Joint No. = 204	/		Joint No. =		
Joint No. = 205	/		Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		

2) Hujung paip dipotong dengan tegak dan lurus.

Nama Jalan: PN 12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 199	/		Joint No. =		
Joint No. = 200	/		Joint No. =		
Joint No. = 201	/		Joint No. =		
Joint No. = 202	/		Joint No. =		
Joint No. = 203	/		Joint No. =		
Joint No. = 204	/		Joint No. =		
Joint No. = 205	/		Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		

3) Penyambungan paip yang dilakukan berada dalam keadaan selari.

Nama Jalan: PN 12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 199	/		Joint No. =		
Joint No. = 200	/		Joint No. =		
Joint No. = 201	/		Joint No. =		
Joint No. = 202	/		Joint No. =		
Joint No. = 203	/		Joint No. =		
Joint No. = 204	/		Joint No. =		
Joint No. = 205	/		Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		

4) Kawasan yang telah dikikis (*scrapped*) boleh dilihat.

Nama Jalan: PN 12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 199	/		Joint No. =		
Joint No. = 200	/		Joint No. =		
Joint No. = 201	/		Joint No. =		
Joint No. = 202	/		Joint No. =		
Joint No. = 203	/		Joint No. =		
Joint No. = 204	/		Joint No. =		
Joint No. = 205	/		Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		

5) Tanda pada paip (*penetration depth*) tepat dan boleh dilihat.

Nama Jalan: PN 12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 199	/		Joint No. =		
Joint No. = 200	/		Joint No. =		
Joint No. = 201	/		Joint No. =		
Joint No. = 202	/		Joint No. =		
Joint No. = 203	/		Joint No. =		
Joint No. = 204	/		Joint No. =		
Joint No. = 205	/		Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		

6) Tiada kesan percikan paip yang telah cair atau apa-apa kerosakan pada permukaan luar paip yang telah disambung.

Nama Jalan: PN 12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 199	/		Joint No. =		
Joint No. = 200	/		Joint No. =		
Joint No. = 201	/		Joint No. =		
Joint No. = 202	/		Joint No. =		
Joint No. = 203	/		Joint No. =		
Joint No. = 204	/		Joint No. =		
Joint No. = 205	/		Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		

7) Paip dan *fittings* yang disambung dibiarkan untuk sejuk mengikut tempoh masa yang ditetapkan.					
Nama Jalan: PN12/13- JLN PT KASAN					
	✓	X		✓	X
Joint No. = 199	/		Joint No. =		
Joint No. = 200	/		Joint No. =		
Joint No. = 201	/		Joint No. =		
Joint No. = 202	/		Joint No. =		
Joint No. = 203	/		Joint No. =		
Joint No. = 204	/		Joint No. =		
Joint No. = 205	/		Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
ADAKAH PENYAMBUNGAN *ELECTRO-FUSION* INI DITERIMA? (Jika TIDAK, sila nyatakan ulasan di ruangan yang disediakan)					
	✓	X		✓	X
Joint No. = 199	/		Joint No. =		
Joint No. = 200	/		Joint No. =		
Joint No. = 201	/		Joint No. =		
Joint No. = 202	/		Joint No. =		
Joint No. = 203	/		Joint No. =		
Joint No. = 204	/		Joint No. =		
Joint No. = 205	/		Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		
Joint No. =			Joint No. =		

Ulasan:

.....

.....

.....

Dikendalikan oleh:	Diperiksa dan disahkan oleh:
Tandatangan:	Tandatangan:
Nama Kontraktor: SHAHRUDIN B. HASSAN	Nama Kontrak Inspektor: MUHAMAD AZRI BIN ABDUL AZIZ INSPEKTOR KONTRAK PONTIAN
No. Anggota: 199	No. Anggota: JABATAN PROJEK RANHILL SAJ SDN. BHD.
Tarikh: 05/01/2023	Tarikh: 02/01/2023

**Dokumen yang perlu diserahkan kepada *Contract Inspector*: Gambar penyambungan dan laporan daripada *Data Logger*.

JALUR CAHAYA SDN BHD 599034-X

ZAIDI BIN ABDULLAH SATARI
Engineer

Ranhill SAJ

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

JC

ELECTRO-FUSION MACHINE REPORT (COMM PIPE)

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 - API API
DATE	2/1/2023 (ISNIN)
LOCATION	13 - JALAN PT KASAN

20	20.12.22	13:05	31.3°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.679 Ohm	5.5 kJ	OK
21	20.12.22	13:12	31.5°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.715 Ohm	5.7 kJ	OK
180	02.01.23	11:31	30.5°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.755 Ohm	5.4 kJ	OK
181	02.01.23	11:40	30.8°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.743 Ohm	5.4 kJ	OK
182	02.01.23	11:50	31.6°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.728 Ohm	5.4 kJ	OK
183	02.01.23	12:00	31.9°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.745 Ohm	5.4 kJ	OK
184	02.01.23	12:12	32.4°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.683 Ohm	5.5 kJ	OK
185	02.01.23	12:20	33.0°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.732 Ohm	5.4 kJ	OK
186	02.01.23	12:26	32.8°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.737 Ohm	5.4 kJ	OK
187	02.01.23	12:33	33.0°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.721 Ohm	5.4 kJ	OK
188	02.01.23	14:07	34.5°C	FR	CPL	25 mm	28.0 V	0000 s/0027 s	0.00	0.0 kJ	FAIL
189	02.01.23	14:10	34.0°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.782 Ohm	5.4 kJ	OK
190	02.01.23	14:18	33.6°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.731 Ohm	5.4 kJ	OK
191	02.01.23	14:28	33.7°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.710 Ohm	5.5 kJ	OK
192	02.01.23	14:33	33.3°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.740 Ohm	5.4 kJ	OK
193	02.01.23	14:43	32.9°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.743 Ohm	5.4 kJ	OK
194	02.01.23	14:49	33.6°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.733 Ohm	5.4 kJ	OK
195	02.01.23	14:56	33.8°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.757 Ohm	5.4 kJ	OK
196	02.01.23	15:03	33.3°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.755 Ohm	5.4 kJ	OK
197	02.01.23	15:10	33.4°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.738 Ohm	5.4 kJ	OK
198	02.01.23	15:17	33.4°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.736 Ohm	5.4 kJ	OK
199	02.01.23	15:24	33.9°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.736 Ohm	5.4 kJ	OK
200	02.01.23	15:31	33.6°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.672 Ohm	5.5 kJ	OK
201	02.01.23	15:37	33.9°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.765 Ohm	5.4 kJ	OK
202	02.01.23	15:43	33.5°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.732 Ohm	5.4 kJ	OK
203	02.01.23	15:51	33.0°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.730 Ohm	5.4 kJ	OK
204	02.01.23	15:57	33.2°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.732 Ohm	5.4 kJ	OK
205	02.01.23	16:03	33.1°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.720 Ohm	5.4 kJ	OK

Disediakan Oleh:	Disemak Oleh:	Disahkan Oleh:
ZAIDI BIN ABDULLAH SATARI Engineer		
Kontraktor	Inspektor Kontrak (D)	Eksekutif
JALUR MEGAHAYA SDN BHD 599034-X	MUHAMAD AZRI BIN ABDUL AZIZ INSPEKTOR KONTRAK PONTIAN JABATAN PROJEK RANHILL SAJ SDN. BHD.	MARSILAWATI BINTI ALI EKSEKUTIF JABATAN PROJEK RANHILL SAJ SDN. BHD.

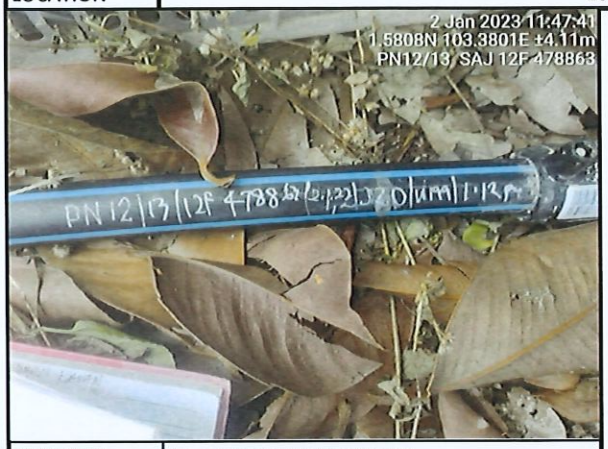
PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	2/1/2023 (ISNIN)
LOCATION	13 - JALAN PARIT KASAN



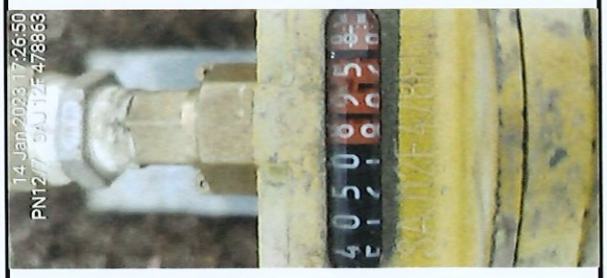
REMARKS	No. meter : SAJ 12F478863
	No. rumah :
	Semasa kerja (EF)
	Joint number: 20

REMARKS	No. meter : SAJ 12F478863
	No. rumah :
	Semasa kerja (EF)
	Joint number: 21

REMARKS	No. meter : SAJ 12F478863
	No. rumah :
	Semasa kerja (EF)
	Joint number: 180

REMARKS	No. meter : SAJ 12F478863
	No. rumah :
	Semasa kerja

REMARKS	No. meter : SAJ 12F478863
	No. rumah :
	Selepas kerja



REMARKS	No. meter : SAJ 12F478863
	No. rumah :
	Selepas kerja

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	2/1/2023 (ISNIN)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 12F478863
	No. rumah :
	Selepas kerja (s/s crossing)

REMARKS	

REMARKS	

REMARKS	

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	2/2/2023 (ISNIN)
LOCATION	13 - JALAN PARIT KASAN

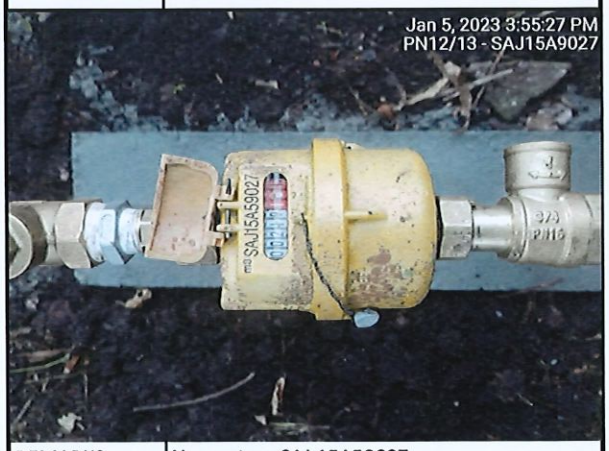
REMARKS	No. meter : SAJ 15A59027
	No. rumah :
	Semasa kerja (EF)
	Joint number: 181

REMARKS	No. meter : SAJ 15A59027
	No. rumah :
	Semasa kerja (EF)
	Joint number: 182

REMARKS	No. meter : SAJ 15A59027
	No. rumah :
	Semasa kerja (EF)
	Joint number: 183

REMARKS	No. meter : SAJ 15A59027
	No. rumah :
	Semasa kerja

REMARKS	No. meter : SAJ 15A59027
	No. rumah :
	Selepas kerja



REMARKS	No. meter : SAJ 15A59027
	No. rumah :
	Selepas kerja

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	2/1/2023 (ISNIN)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 15A59027
	No. rumah :
	Selepas kerja (s/s crossing)

REMARKS	

REMARKS	

REMARKS	

REMARKS	

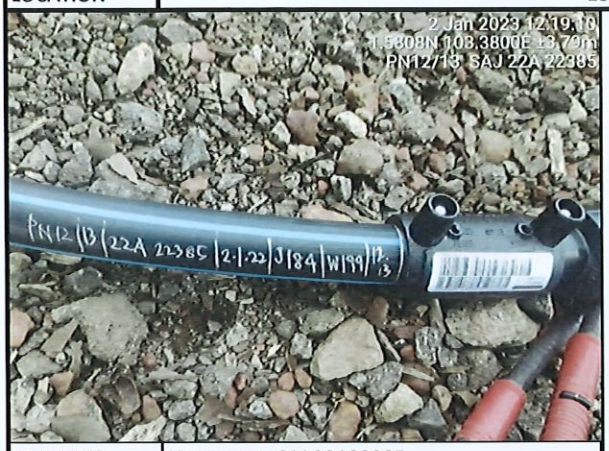
PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	2/1/2023 (ISNIN)
LOCATION	13 - JALAN PARIT KASAN



REMARKS	No. meter : SAJ 22A22385
	No. rumah :
	Semasa kerja (EF)
	Joint number: 184

REMARKS	No. meter : SAJ 22A22385
	No. rumah :
	Semasa kerja (EF)
	Joint number: 185

REMARKS	No. meter : SAJ 22A22385
	No. rumah :
	Semasa kerja (EF)
	Joint number: 186

REMARKS	No. meter : SAJ 22A22385
	No. rumah :
	Semasa kerja

REMARKS	No. meter : SAJ 22A22385
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 22A22385
	No. rumah :
	Selepas kerja

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	2/1/2023 (ISNIN)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 22A22385
	No. rumah :
	Selepas kerja (s/s crossing)

REMARKS	

REMARKS	

REMARKS	

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	2/1/2023 (ISNIN)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 19H03338
	No. rumah :
	Semasa kerja (EF)
	Joint number: 187

REMARKS	No. meter : SAJ 19H03338
	No. rumah :
	Semasa kerja (EF)
	Joint number: 189

REMARKS	No. meter : SAJ 19H03338
	No. rumah :
	Semasa kerja (EF)
	Joint number: 190

REMARKS	No. meter : SAJ 19H03338
	No. rumah :
	Semasa kerja

REMARKS	No. meter : SAJ 19H03338
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 19H03338
	No. rumah :
	Selepas kerja

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	2/1/2023 (ISNIN)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 19H03338
	No. rumah :
	Selepas kerja (s/s crossing)

REMARKS	

REMARKS	

REMARKS	

REMARKS	

REMARKS	

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

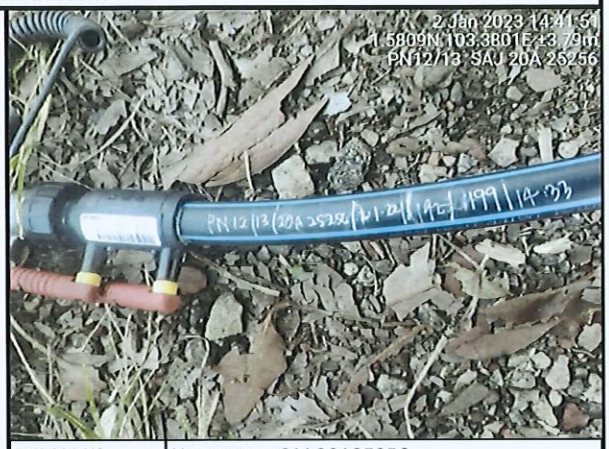
Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	2/1/2023 (ISNIN)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 20A25256
	No. rumah :
	Semasa kerja (EF)
	Joint number: 191



REMARKS	No. meter : SAJ 20A25256
	No. rumah :
	Semasa kerja (EF)
	Joint number: 192

REMARKS	No. meter : SAJ 20A25256
	No. rumah :
	Semasa kerja (EF)
	Joint number: 193

REMARKS	No. meter : SAJ 20A25256
	No. rumah :
	Semasa kerja

REMARKS	No. meter : SAJ 20A25256
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 20A25256
	No. rumah :
	Selepas kerja

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	2/1/2023 (ISNIN)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 20A25256
	No. rumah :
	Selepas kerja (s/s crossing)

REMARKS	

REMARKS	

REMARKS	

REMARKS	

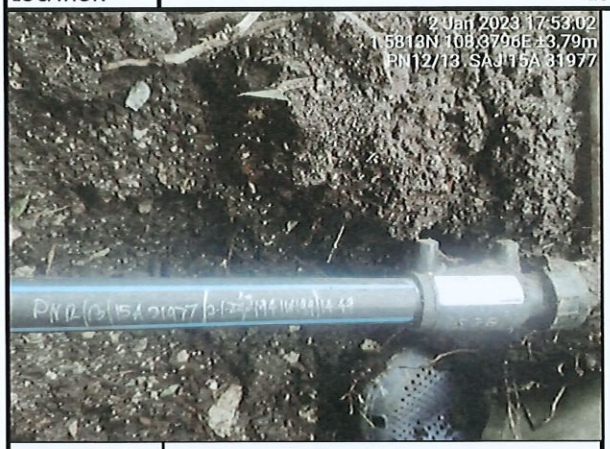
PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	2/1/2023 (ISNIN)
LOCATION	13 - JALAN PARIT KASAN



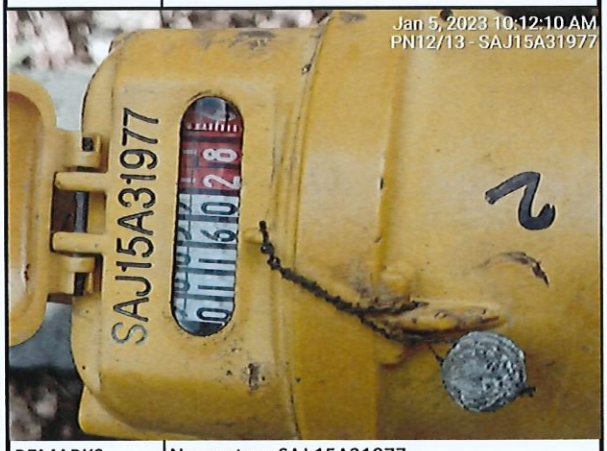
REMARKS	No. meter : SAJ 15A31977
	No. rumah :
	Semasa kerja (EF)
	Joint number: 194

REMARKS	No. meter : SAJ 15A31977
	No. rumah :
	Semasa kerja (EF)
	Joint number: 195

REMARKS	No. meter : SAJ 15A31977
	No. rumah :
	Semasa kerja (EF)
	Joint number: 196

REMARKS	No. meter : SAJ 15A31977
	No. rumah :
	Semasa kerja

REMARKS	No. meter : SAJ 15A31977
	No. rumah :
	Selepas kerja



REMARKS	No. meter : SAJ 15A31977
	No. rumah :
	Selepas kerja

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	2/1/2023 (ISNIN)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 15A31977
	No. rumah :
	Selepas kerja (s/s crossing)

REMARKS	

REMARKS	

REMARKS	

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

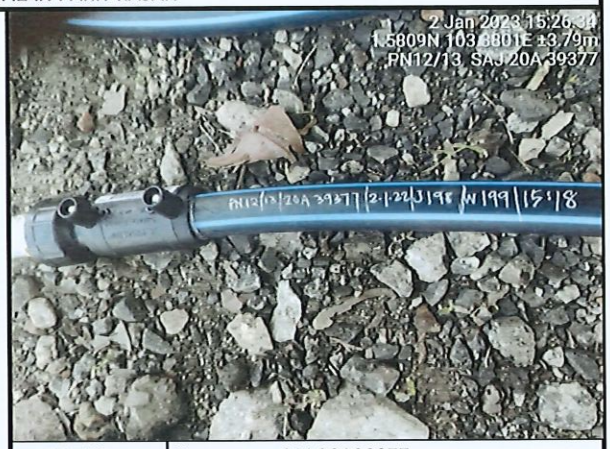
Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	2/1/2023 (ISNIN)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 20A39377
	No. rumah :
	Semasa kerja (EF)
	Joint number: 197



REMARKS	No. meter : SAJ 20A39377
	No. rumah :
	Semasa kerja (EF)
	Joint number: 198

REMARKS	No. meter : SAJ 20A39377
	No. rumah :
	Semasa kerja (EF)
	Joint number: 199

REMARKS	No. meter : SAJ 20A39377
	No. rumah :
	Semasa kerja

REMARKS	No. meter : SAJ 20A39377
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 20A39377
	No. rumah :
	Selepas kerja

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	2/1/2023 (ISNIN)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 20A39377
	No. rumah :
	Selepas kerja (s/s crossing)

REMARKS	

REMARKS	

REMARKS	

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

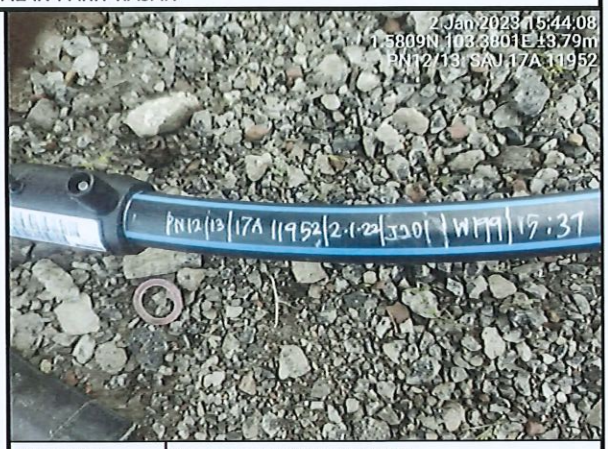
Ranhill SAJ

JC

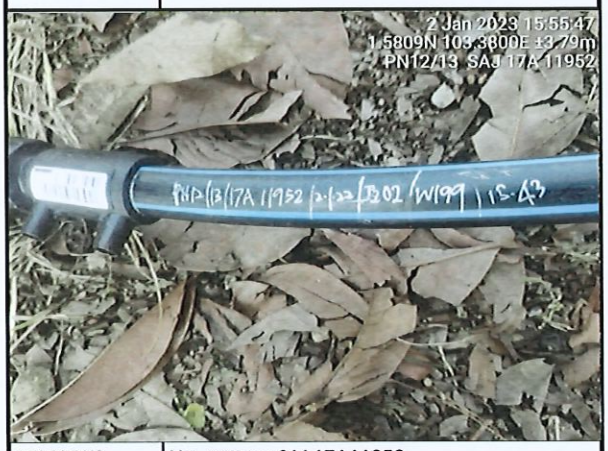
COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	2/1/2023 (ISNIN)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 17A11952
	No. rumah :
	Semasa kerja (EF)
	Joint number: 200



REMARKS	No. meter : SAJ 17A11952
	No. rumah :
	Semasa kerja (EF)
	Joint number: 201



REMARKS	No. meter : SAJ 17A11952
	No. rumah :
	Semasa kerja (EF)
	Joint number: 202

REMARKS	No. meter : SAJ 17A11952
	No. rumah :
	Semasa kerja

REMARKS	No. meter : SAJ 17A11952
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 17A11952
	No. rumah :
	Selepas kerja

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	2/1/2023 (ISNIN)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 17A11952
	No. rumah :
	Selepas kerja (s/s crossing)

REMARKS	

REMARKS	

REMARKS	

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	2/1/2023 (ISNIN)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 14A25960
	No. rumah :
	Semasa kerja (EF)
	Joint number: 203

REMARKS	No. meter : SAJ 14A25960
	No. rumah :
	Semasa kerja (EF)
	Joint number: 204

REMARKS	No. meter : SAJ 14A25960
	No. rumah :
	Semasa kerja (EF)
	Joint number: 205

REMARKS	No. meter : SAJ 14A25960
	No. rumah :
	Semasa kerja

REMARKS	No. meter : SAJ 14A25960
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 14A25960
	No. rumah :
	Selepas kerja

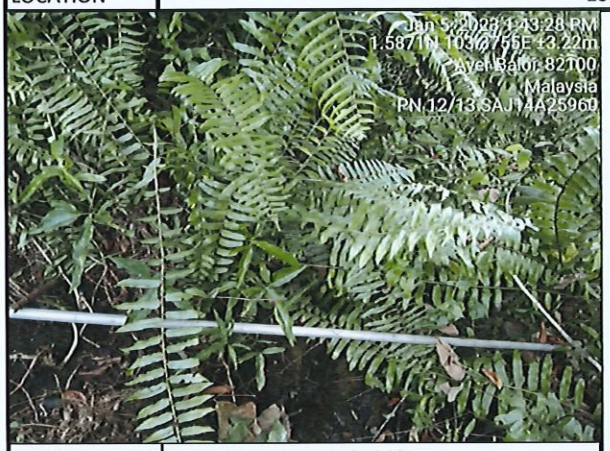
PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	2/1/2023 (ISNIN)
LOCATION	13 - JALAN PARIT KASAN



REMARKS	No. meter : SAJ 14A25960
	No. rumah :
	Selepas kerja (s/s crossing)

REMARKS	

REMARKS	

REMARKS	

REMARKS	

Ranhill SAJ

RSAJ P-B102.Rev.4

PIPE LOG

Location : REHAB 2020 - PAKEJ 2 (SP 10)
PN12/13 - JLN PT KASAN

Sheet No. : 4
Date : 3/1/2023

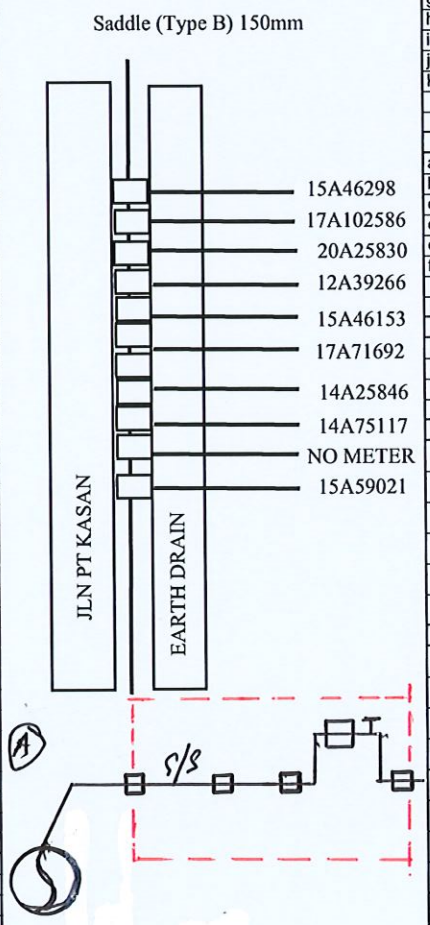
CHAINAGE	EXC. DEPTH

SITE CLEARANCE	sq.m	
BULK EXCAVATION		
All material	cu.m	
Rock	cu.m	
Compact material	cu.m	
FILLING		
Approved Material	cu.m	
Sand	cu.m	
Laterite (150mm)	sq.m	
Sand Bedding	sq.m	
Concrete	cu.m	
TURFING		
Top Soil (50mm)	sq.m	
Turfing	sq.m	

CHAMBER		
Type	Set	Middle
CHIPPING	sq.m	

PILING		
Kayu Bakau	m	
Type of Pile	UPVC	
Size	mm	80
Length (Initial)	m	
Length (Extention)	m	
Join Welding	nos	
Cut Pile (1m)	nos	
Linatex Rubber	sq.m	
MS Strap /Bracing	nos	

SKETCHED DRWG.



TRECH EXCAVATION		
a) Depth < 1.8 m	m	
b) Depth > 1.8 m < 3.0 m	m	
c) Road Cutting	m	
d) Track/Gravel/Earth Road	sq.m	
e) Concrete Surface	sq.m	
f) Cross Hedges/Fences/Wall	sq.m	
g) Road Kerb	m	
h) Under water earth drain	sq.m	
i) Under concrete drain/culvert	sq.m	
j) In rock	cu.m	
k) Unsuitable Material	cu.m	
REINSTATEMENT ROAD		
a) Sand Filling	cu.m	
b) Crusher Run	sq.m	
c) Binder Course	sq.m	
d) Wearing Course	sq.m	
e) Milling/Resurfacing	sq.m	
f)Thermoplastic Line Marking	m	

PIPE	DIA.(mm)	NOS	L (m)
HDPE	25	-	105.90
S/STEEL	20	-	21.90

EXPOSE PIPE & SPECIAL		
	m	
	m	
	nos	
	nos	
	nos	
	sq.m	

SPECIAL / FITTINGS		
150MM SADDLE (TYPE B)	nos	—
20MM METER STAND	nos	10.00
ELECTRO FUSION (30)	nos	

Comments / Reports

Prepared By :
ZAMBRI BIN ABDULLAH SATARI
Engineer

Checked and Approved By :
MUHAMAD AZRI BIN ABDUL AZIZ
INSPEKTOR KONTRAK PONTIAN
JABATAN PROJEK
RANHILL SAJ SDN. BHD.

Date: 24/1/2023

NORSILAWATI BINTI ALI
EKSEKUTIF
JABATAN PROJEK
RANHILL SAJ SDN. BHD.

Ranhill SAJ

DATA TAPPING DAN PAIP PERHUBUNGAN

PROGRAM PENGGANTIAN PAIP LAMA TAHUN 2020

Nama Projek : PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020

Nama Kontraktor : JALUR CAHAYA SDN BHD

Bil	Pipe	Size (mm)	No. Meter	No Rumah	Comm Pipe (m)		Lintas Parit		Bawah Jalan			Korekan (m2)			Catatan
					PA Pipe (m)	Poly Pipe (m)	GI Sleeve (m)	Stanless Steel (m)	Open Trench (m)	GI Sleeve (m)	Impact Molling	Jubin	Konkrit	Longkang	
1	UPVC	150	15A59021			13.50		2.50							
2	UPVC	150	No Meter			10.20		2.50							
3	UPVC	150	14A75117			7.30		2.70							
4	UPVC	150	14A25846			23.00		2.00							
5	UPVC	150	17A71692			6.90		2.50							
6	UPVC	150	15A46153			5.20		2.50							
7	UPVC	150	12A39266			13.80		1.50							
8	UPVC	150	20A25830			8.80		1.50							
9	UPVC	150	17A102586			9.00		2.00							
10	UPVC	150	15A46298			8.20		2.20							
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															
25															
26															
27															
28															
29															
30															
					0.00	105.90	0.00	21.90	0.00	0.00	0.00	0.00	0.00	0.00	

Disediakan Oleh :

ZAMRI BIN ABDULLAH SATARI
Engineer

Kontraktor
Cop :

JALUR CAHAYA SDN BHD 599034-X

Disemak Oleh :

Inspektor Kontrak (D)
Cop :

MUHAMAD AZRI BIN ABDUL AZIZ
INSPEKTOR KONTRAK PONTIAN
JABATAN PROJEK
RANHILL SAJ SDN. BHD.

Disahkan Oleh :

Eksekutif
Cop :

NORSILAWATI BINTI ALI
EKSEKUTIF
JABATAN PROJEK
RANHILL SAJ SDN. BHD.

Form No: JK/PT – 05
Rev Date: 23/06/2022

Ranhill SAJ

BORANG PEMERIKSAAN VISUAL (*ELECTRO-FUSION*)

Projek:	PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 - PAKEJ 2
Nama :	SHARUDIN BIN HASSAN
No sijil:	199
Nama syarikat:	JALUR CAHAYA SDN BHD
Tarikh dan Masa:	3 / 1 / 2023

KRITERIA	✓	X
KEADAAN TAPAK		
Kawasan tapak berada dalam keadaan yang bersih dan kering.	/	
KEADAAN BAHAN DAN PERALATAN		
Peralatan berada dalam keadaan baik dan bersih.	/	
Fittings berada dalam bungkusan? Jika ya, periksa *fittings* jika terdapat kerosakan. Jika tidak, reject *fittings*.	/	
Peralatan adalah mencukupi sebelum kerja penyambungan dilakukan.		
- *Fusion machine*	/	
- *Universal pipe cutter*	/	
- *Rotational pipe scrapper*	/	
- *Marker*	/	
- *Isopropyl Alcohol (IPA)*	/	
- Kain bersih	/	
- *Generator*	/	
Kawasan penyambungan paip berada dalam keadaan yang bersih dan kering.	/	

PEMERIKSAAN SELEPAS PROSES PENYAMBUNGAN *ELECTRO-FUSION*

1) *Melt indicator* pada *fittings* timbul.

Nama Jalan: PN12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 206	/		Joint No. = 216	/	
Joint No. = 207	/		Joint No. = 217	/	
Joint No. = 208	/		Joint No. = 218	/	
Joint No. = 209	/		Joint No. = 219	/	
Joint No. = 210	/		Joint No. = 220	/	
Joint No. = 211	/		Joint No. = 221	/	
Joint No. = 212	/		Joint No. = 222	/	
Joint No. = 213	/		Joint No. = 223	/	
Joint No. = 214	/		Joint No. = 224	/	
Joint No. = 215	/		Joint No. = 225	/	

2) Hujung paip dipotong dengan tegak dan lurus.

Nama Jalan: PN 12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 206	/		Joint No. = 216	/	
Joint No. = 207	/		Joint No. = 217	/	
Joint No. = 208	/		Joint No. = 218	/	
Joint No. = 209	/		Joint No. = 219	/	
Joint No. = 210	/		Joint No. = 220	/	
Joint No. = 211	/		Joint No. = 221	/	
Joint No. = 212	/		Joint No. = 222	/	
Joint No. = 213	/		Joint No. = 223	/	
Joint No. = 214	/		Joint No. = 224	/	
Joint No. = 215	/		Joint No. = 225	/	

3) Penyambungan paip yang dilakukan berada dalam keadaan selari.

Nama Jalan: PN12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 206	/		Joint No. = 206	/	
Joint No. = 207	/		Joint No. = 217	/	
Joint No. = 208	/		Joint No. = 218	/	
Joint No. = 209	/		Joint No. = 219	/	
Joint No. = 210	/		Joint No. = 220	/	
Joint No. = 211	/		Joint No. = 221	/	
Joint No. = 212	/		Joint No. = 222	/	
Joint No. = 213	/		Joint No. = 223	/	
Joint No. = 214	/		Joint No. = 224	/	
Joint No. = 215	/		Joint No. = 225	/	

4) Kawasan yang telah dikikis (*scrapped*) boleh dilihat.

Nama Jalan: PN 12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 206	/		Joint No. = 216	/	
Joint No. = 207	/		Joint No. = 217	/	
Joint No. = 208	/		Joint No. = 218	/	
Joint No. = 209	/		Joint No. = 219	/	
Joint No. = 210	/		Joint No. = 220	/	
Joint No. = 211	/		Joint No. = 221	/	
Joint No. = 212	/		Joint No. = 222	/	
Joint No. = 213	/		Joint No. = 223	/	
Joint No. = 214	/		Joint No. = 224	/	
Joint No. = 215	/		Joint No. = 225	/	

5) Tanda pada paip (*penetration depth*) tepat dan boleh dilihat.

Nama Jalan: PN.12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 206	/		Joint No. = 216	/	
Joint No. = 207	/		Joint No. = 217	/	
Joint No. = 208	/		Joint No. = 218	/	
Joint No. = 209	/		Joint No. = 219	/	
Joint No. = 210	/		Joint No. = 220	/	
Joint No. = 211	/		Joint No. = 221	/	
Joint No. = 212	/		Joint No. = 222	/	
Joint No. = 213	/		Joint No. = 223	/	
Joint No. = 214	/		Joint No. = 224	/	
Joint No. = 215	/		Joint No. = 225	/	

6) Tiada kesan percikan paip yang telah cair atau apa-apa kerosakan pada permukaan luar paip yang telah disambung.

Nama Jalan: PN12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 206	/		Joint No. = 216	/	
Joint No. = 207	/		Joint No. = 217	/	
Joint No. = 208	/		Joint No. = 218	/	
Joint No. = 209	/		Joint No. = 219	/	
Joint No. = 210	/		Joint No. = 220	/	
Joint No. = 211	/		Joint No. = 221	/	
Joint No. = 212	/		Joint No. = 222	/	
Joint No. = 213	/		Joint No. = 223	/	
Joint No. = 214	/		Joint No. = 224	/	
Joint No. = 215	/		Joint No. = 225	/	

7) Paip dan *fittings* yang disambung dibiarkan untuk sejuk mengikut tempoh masa yang ditetapkan.					
Nama Jalan: PN12/13 - JLN PT KASAN					
	✓	X		✓	X
Joint No. = 206	/		Joint No. = 216	/	
Joint No. = 207	/		Joint No. = 217	/	
Joint No. = 208	/		Joint No. = 218	/	
Joint No. = 209	/		Joint No. = 219	/	
Joint No. = 210	/		Joint No. = 220	/	
Joint No. = 211	/		Joint No. = 221	/	
Joint No. = 212	/		Joint No. = 222	/	
Joint No. = 213	/		Joint No. = 223	/	
Joint No. = 214	/		Joint No. = 224	/	
Joint No. = 215	/		Joint No. = 225	/	
ADAKAH PENYAMBUNGAN *ELECTRO-FUSION* INI DITERIMA? (Jika TIDAK, sila nyatakan ulasan di ruangan yang disediakan)					
	✓	X		✓	X
Joint No. = 206	/		Joint No. = 216	/	
Joint No. = 207	/		Joint No. = 217	/	
Joint No. = 208	/		Joint No. = 218	/	
Joint No. = 209	/		Joint No. = 219	/	
Joint No. = 210	/		Joint No. = 220	/	
Joint No. = 211	/		Joint No. = 221	/	
Joint No. = 212	/		Joint No. = 222	/	
Joint No. = 213	/		Joint No. = 223	/	
Joint No. = 214	/		Joint No. = 224	/	
Joint No. = 215	/		Joint No. = 225	/	

Ulasan:

.....

.....

.....

Dikendalikan oleh:	Diperiksa dan disahkan oleh:
Tandatangan:	Tandatangan:
Nama Kontraktor: SHAREUDIN B. HASSAN	Nama Kontrak Inspektor: MUHAMAD AZRI BIN ABDUL AZIZ INSPEKTOR KONTRAK PONTIAN JABATAN PROJEK RANHILL SAJ SDN. BHD.
No. Anggota: 199	No. Anggota:
Tarikh: 03/01/2023	Tarikh: 3/1/2023

**Dokumen yang perlu diserahkan kepada *Contract Inspector*: Gambar penyambungan dan laporan daripada *Data Logger*.

JALUR CAHAYA SDN BHD 599034-X

ZAIDI BIN ABDULLAH SATARI
Engineer

Form No: JK/PT – 05
Rev Date: 23/06/2022

Ranhill SAJ

BORANG PEMERIKSAAN VISUAL (*ELECTRO-FUSION*)

Projek:	PROGRAM PENGGANTIAN PAIP LAMA RAGI TAHUN 2020- PAKEJ 2
Nama :	SHARUDIN BIN HASSAN
No sijil:	199
Nama syarikat:	JALUR CAHAYA SDN BHD
Tarikh dan Masa:	31 / /2023

KRITERIA	✓	X
KEADAAN TAPAK		
Kawasan tapak berada dalam keadaan yang bersih dan kering.	/	
KEADAAN BAHAN DAN PERALATAN		
Peralatan berada dalam keadaan baik dan bersih.	/	
Fittings berada dalam bungkusan? Jika ya, periksa *fittings* jika terdapat kerosakan. Jika tidak, reject *fittings*.	/	
Peralatan adalah mencukupi sebelum kerja penyambungan dilakukan.		
- *Fusion machine*	/	
- *Universal pipe cutter*	/	
- *Rotational pipe scrapper*	/	
- *Marker*	/	
- *Isopropyl Alcohol (IPA)*	/	
- Kain bersih	/	
- *Generator*	/	
Kawasan penyambungan paip berada dalam keadaan yang bersih dan kering.	/	

PEMERIKSAAN SELEPAS PROSES PENYAMBUNGAN *ELECTRO-FUSION*

1) *Melt indicator* pada *fittings* timbul.

Nama Jalan: PN12/13- JLN PT KASAN

	✓	X		✓	X
Joint No. = 226	/		Joint No. =		
Joint No. = 227	/		Joint No. =		
Joint No. = 228	/		Joint No. =		
Joint No. = 229	/		Joint No. =		
Joint No. = 230	/		Joint No. =		
Joint No. = 231	/		Joint No. =		
Joint No. = 232	/		Joint No. =		
Joint No. = 233	/		Joint No. =		
Joint No. = 234	/		Joint No. =		
Joint No. = 235	/		Joint No. =		

2) Hujung paip dipotong dengan tegak dan lurus.

Nama Jalan: PN 12/13- JLN PT KASAN

	✓	X		✓	X
Joint No. = 226	/		Joint No. =		
Joint No. = 227	/		Joint No. =		
Joint No. = 228	/		Joint No. =		
Joint No. = 229	/		Joint No. =		
Joint No. = 230	/		Joint No. =		
Joint No. = 231	/		Joint No. =		
Joint No. = 232	/		Joint No. =		
Joint No. = 233	/		Joint No. =		
Joint No. = 234	/		Joint No. =		
Joint No. = 235	/		Joint No. =		

3) Penyambungan paip yang dilakukan berada dalam keadaan selari.

Nama Jalan: PN12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 226	/		Joint No. =		
Joint No. = 227	/		Joint No. =		
Joint No. = 228	/		Joint No. =		
Joint No. = 229	/		Joint No. =		
Joint No. = 230	/		Joint No. =		
Joint No. = 231	/		Joint No. =		
Joint No. = 232	/		Joint No. =		
Joint No. = 233	/		Joint No. =		
Joint No. = 234	/		Joint No. =		
Joint No. = 235	/		Joint No. =		

4) Kawasan yang telah dikikis (*scrapped*) boleh dilihat.

Nama Jalan: PN 12 / 13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 226	/		Joint No. =		
Joint No. = 227	/		Joint No. =		
Joint No. = 228	/		Joint No. =		
Joint No. = 229	/		Joint No. =		
Joint No. = 230	/		Joint No. =		
Joint No. = 231	/		Joint No. =		
Joint No. = 232	/		Joint No. =		
Joint No. = 233	/		Joint No. =		
Joint No. = 234	/		Joint No. =		
Joint No. = 235	/		Joint No. =		

5) Tanda pada paip (*penetration depth*) tepat dan boleh dilihat.

Nama Jalan: PN 12 / 13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 226	/		Joint No. =		
Joint No. = 227	/		Joint No. =		
Joint No. = 228	/		Joint No. =		
Joint No. = 229	/		Joint No. =		
Joint No. = 230	/		Joint No. =		
Joint No. = 231	/		Joint No. =		
Joint No. = 232	/		Joint No. =		
Joint No. = 233	/		Joint No. =		
Joint No. = 234	/		Joint No. =		
Joint No. = 235	/		Joint No. =		

6) Tiada kesan percikan paip yang telah cair atau apa-apa kerosakan pada permukaan luar paip yang telah disambung.

Nama Jalan: PN 12 / 13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 226	/		Joint No. =		
Joint No. = 227	/		Joint No. =		
Joint No. = 228	/		Joint No. =		
Joint No. = 229	/		Joint No. =		
Joint No. = 230	/		Joint No. =		
Joint No. = 231	/		Joint No. =		
Joint No. = 232	/		Joint No. =		
Joint No. = 233	/		Joint No. =		
Joint No. = 234	/		Joint No. =		
Joint No. = 235	/		Joint No. =		

7) Paip dan *fittings* yang disambung dibiarkan untuk sejuk mengikut tempoh masa yang ditetapkan.					
Nama Jalan: PN12/13 - JLN PT ICASAN					
	✓	X		✓	X
Joint No. = 226	/		Joint No. =		
Joint No. = 227	/		Joint No. =		
Joint No. = 228	/		Joint No. =		
Joint No. = 229	/		Joint No. =		
Joint No. = 230	/		Joint No. =		
Joint No. = 231	/		Joint No. =		
Joint No. = 232	/		Joint No. =		
Joint No. = 233	/		Joint No. =		
Joint No. = 234	/		Joint No. =		
Joint No. = 235	/		Joint No. =		
ADAKAH PENYAMBUNGAN *ELECTRO-FUSION* INI DITERIMA? (Jika TIDAK, sila nyatakan ulasan di ruangan yang disediakan)					
	✓	X		✓	X
Joint No. = 226	/		Joint No. =		
Joint No. = 227	/		Joint No. =		
Joint No. = 228	/		Joint No. =		
Joint No. = 229	/		Joint No. =		
Joint No. = 230	/		Joint No. =		
Joint No. = 231	/		Joint No. =		
Joint No. = 232	/		Joint No. =		
Joint No. = 233	/		Joint No. =		
Joint No. = 234	/		Joint No. =		
Joint No. = 235	/		Joint No. =		

Ulasan:

.....

.....

.....

Dikendalikan oleh:	Diperiksa dan disahkan oleh:
Tandatangan:	Tandatangan:
Nama Kontraktor: SHAHRUDIN B. HASSAN	Nama Kontrak Inspektor: MUHAMAD AZRI BIN ABDUL AZIZ INSPEKTOR KONTRAK PONTIAN
No. Anggota: 199	No. Anggota: JABATAN PROJEK RANHILL SAJ SDN. BHD.
Tarikh: 03/01/2023	Tarikh: 3/01/2023

**Dokumen yang perlu diserahkan kepada *Contract Inspector*: Gambar penyambungan dan laporan daripada *Data Logger*.

JALUR CAHAYA SDN BHD 590034-X

ZAIDI BIN ABDULLAH SATARI
Engineer

Ranhill SAJ

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

JC

ELECTRO-FUSION MACHINE REPORT (COMM PIPE)

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 - API API
DATE	3/1/2023 (SELASA)
LOCATION	13 - JALAN PT KASAN

206	03.01.23	11:56	31.6°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.692 Ohm	5.5 kJ	OK
207	03.01.23	12:07	32.9°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.730 Ohm	5.4 kJ	OK
208	03.01.23	12:14	32.4°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.688 Ohm	5.5 kJ	OK
209	03.01.23	12:23	32.1°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.714 Ohm	5.5 kJ	OK
210	03.01.23	12:32	31.7°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.745 Ohm	5.4 kJ	OK
211	03.01.23	12:41	32.1°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.730 Ohm	5.4 kJ	OK
212	03.01.23	12:49	32.4°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.724 Ohm	5.4 kJ	OK
213	03.01.23	12:56	32.7°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.685 Ohm	5.5 kJ	OK
214	03.01.23	13:05	32.9°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.754 Ohm	5.4 kJ	OK
215	03.01.23	13:16	33.2°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.746 Ohm	5.4 kJ	OK
216	03.01.23	13:22	33.9°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.776 Ohm	5.4 kJ	OK
217	03.01.23	13:29	34.2°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.736 Ohm	5.4 kJ	OK
218	03.01.23	13:39	34.2°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.718 Ohm	5.5 kJ	OK
219	03.01.23	13:49	35.4°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.754 Ohm	5.4 kJ	OK
220	03.01.23	13:55	33.9°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.703 Ohm	5.5 kJ	OK
221	03.01.23	14:06	33.4°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.735 Ohm	5.5 kJ	OK
222	03.01.23	14:13	34.0°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.770 Ohm	5.4 kJ	OK
223	03.01.23	14:23	34.2°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.713 Ohm	5.5 kJ	OK
224	03.01.23	14:31	34.5°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.745 Ohm	5.4 kJ	OK
225	03.01.23	14:37	34.6°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.722 Ohm	5.4 kJ	OK
226	03.01.23	14:43	36.0°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.730 Ohm	5.4 kJ	OK
227	03.01.23	14:53	35.1°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.718 Ohm	5.5 kJ	OK
228	03.01.23	15:00	34.5°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.745 Ohm	5.5 kJ	OK
229	03.01.23	15:09	35.4°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.694 Ohm	5.5 kJ	OK
230	03.01.23	15:16	36.4°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.738 Ohm	5.4 kJ	OK
231	03.01.23	15:22	37.8°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.765 Ohm	5.4 kJ	OK
232	03.01.23	15:30	37.7°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.696 Ohm	5.5 kJ	OK
233	03.01.23	15:38	35.9°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.770 Ohm	5.4 kJ	OK
234	03.01.23	15:45	35.1°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.743 Ohm	5.4 kJ	OK
235	03.01.23	15:51	35.1°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.725 Ohm	5.4 kJ	OK

Disediakan Oleh:	Disemak Oleh:	Disahkan Oleh:
Kontraktor	Inspektor Kontrak (D)	Eksekutif
	MUHAMAD AZRI BIN ABDUL AZIZ INSPEKTOR KONTRAK PONTIAN JABATAN PROJEK RANHILL SAJ SDN. BHD.	NORHIDAWATI BINTI ALI EKSEKUTIF JABATAN PROJEK RANHILL SAJ SDN. BHD.

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

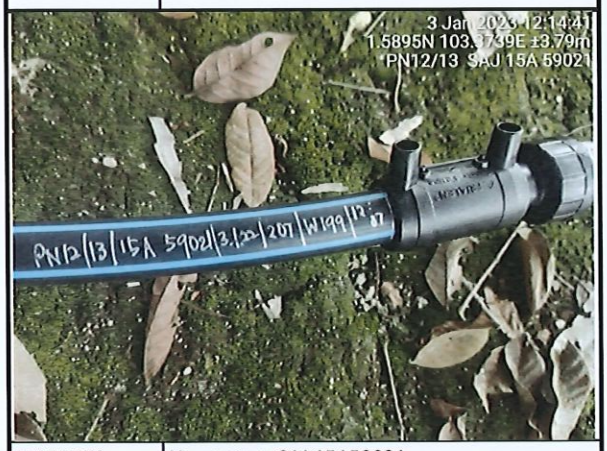
JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	3/1/2023 (SELASA)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 15A59021
	No. rumah :
	Semasa kerja (EF)
	Joint number: 206

REMARKS	No. meter : SAJ 15A59021
	No. rumah :
	Semasa kerja (EF)
	Joint number: 208



REMARKS	No. meter : SAJ 15A59021
	No. rumah :
	Semasa kerja (EF)
	Joint number: 207

REMARKS	No. meter : SAJ 15A59021
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 15A59021
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 15A59021
	No. rumah :
	Selepas kerja

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	3/1/2023 (SELASA)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 15A59021
	No. rumah :
	Selepas kerja (s/s crossing)

REMARKS	

REMARKS	

REMARKS	

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

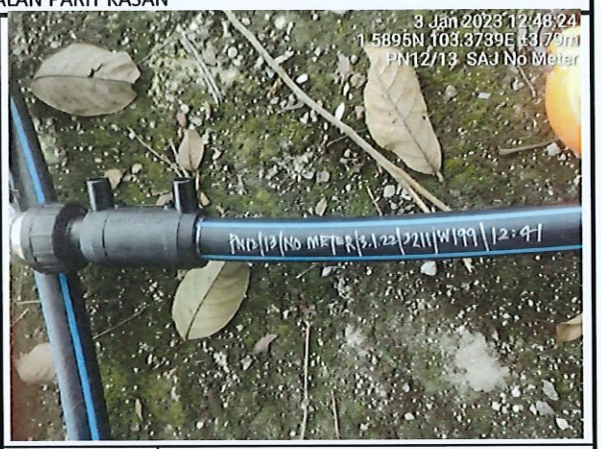
Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	3/1/2023 (SELASA)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : NO METER
	No. rumah :
	Semasa kerja (EF)
	Joint number: 210



REMARKS	No. meter : NO METER
	No. rumah :
	Semasa kerja (EF)
	Joint number: 211

REMARKS	No. meter : NO METER
	No. rumah :
	Semasa kerja (EF)
	Joint number: 209

REMARKS	No. meter : NO METER
	No. rumah :
	Selepas kerja

REMARKS	No. meter : NO METER
	No. rumah :
	Selepas kerja

REMARKS	No. meter : NO METER
	No. rumah :
	Selepas kerja

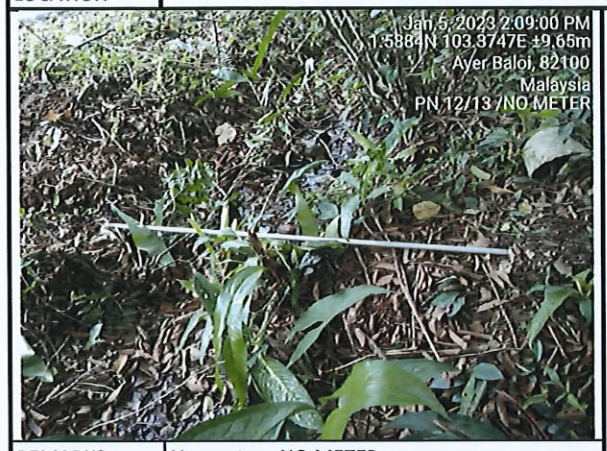
PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	3/1/2023 (SELASA)
LOCATION	13 - JALAN PARIT KASAN



REMARKS	
	No. meter : NO METER
	No. rumah :
	Selepas kerja (s/s crossing)

REMARKS	

REMARKS	

REMARKS	

REMARKS	

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

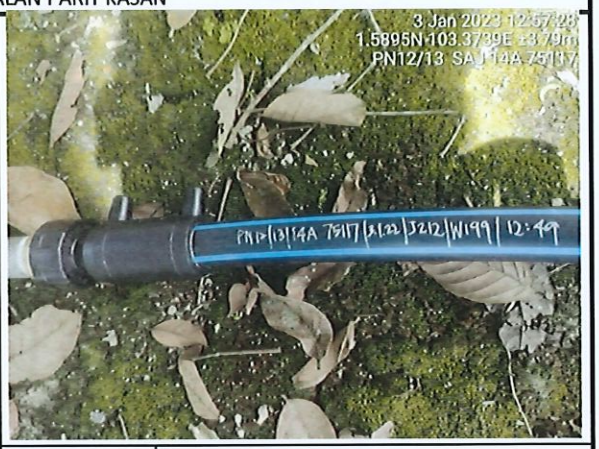
Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	3/1/2023 (SELASA)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 14A75117
	No. rumah :
	Semasa kerja (EF)
	Joint number: 213



REMARKS	No. meter : SAJ 14A75117
	No. rumah :
	Semasa kerja (EF)
	Joint number: 212

REMARKS	No. meter : SAJ 14A75117
	No. rumah :
	Semasa kerja (EF)
	Joint number: 214

REMARKS	No. meter : SAJ 14A75117
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 14A75117
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 14A75117
	No. rumah :
	Selepas kerja

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	3/1/2023 (SELASA)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	
	No. meter : SAJ 14A75117
	No. rumah :
	Selepas kerja (s/s crossing)

REMARKS	

REMARKS	

REMARKS	

REMARKS	

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	3/1/2023 (SELASA)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 14A25846
	No. rumah :
	Semasa kerja (EF)
	Joint number: 216

REMARKS	No. meter : SAJ 14A25846
	No. rumah :
	Semasa kerja (EF)
	Joint number: 217

REMARKS	No. meter : SAJ 14A25846
	No. rumah :
	Semasa kerja (EF)
	Joint number: 215

REMARKS	No. meter : SAJ 14A25846
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 14A25846
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 14A25846
	No. rumah :
	Selepas kerja

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	3/1/2023 (SELASA)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 14A25846
	No. rumah :
	Selepas kerja (s/s crossing)

REMARKS	

REMARKS	

REMARKS	

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

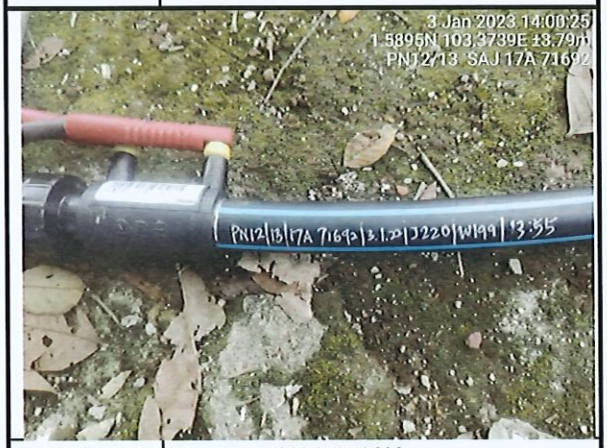
JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	3/1/2023 (SELASA)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 17A71692
	No. rumah :
	Semasa kerja (EF)
	Joint number: 218

REMARKS	No. meter : SAJ 17A71692
	No. rumah :
	Semasa kerja (EF)
	Joint number: 219



REMARKS	No. meter : SAJ 17A71692
	No. rumah :
	Semasa kerja (EF)
	Joint number: 220

REMARKS	No. meter : SAJ 17A71692
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 17A71692
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 17A71692
	No. rumah :
	Selepas kerja

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	3/1/2023 (SELASA)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	
	No. meter : SAJ 17A71692
	No. rumah :
	Selepas kerja (s/s crossing)

REMARKS	

REMARKS	

REMARKS	

REMARKS	

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

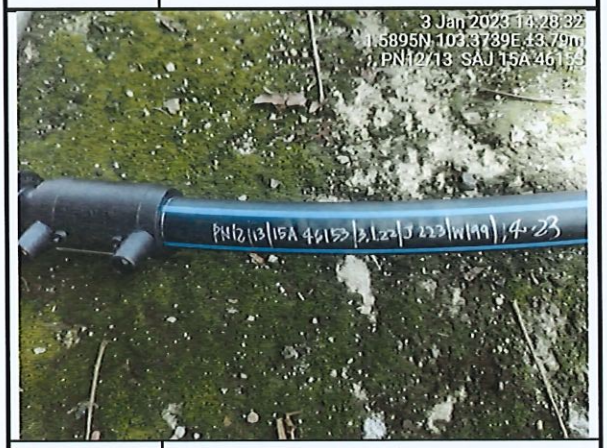
JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	3/1/2023 (SELASA)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 15A46153
	No. rumah :
	Semasa kerja (EF)
	Joint number: 221

REMARKS	No. meter : SAJ 15A46153
	No. rumah :
	Semasa kerja (EF)
	Joint number: 222



REMARKS	No. meter : SAJ 15A46153
	No. rumah :
	Semasa kerja (EF)
	Joint number: 223

REMARKS	No. meter : SAJ 15A46153
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 15A46153
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 15A46153
	No. rumah :
	Selepas kerja

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	3/1/2023 (SELASA)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 15A46153
	No. rumah :
	Selepas kerja (s/s crossing)

REMARKS	

REMARKS	

REMARKS	

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

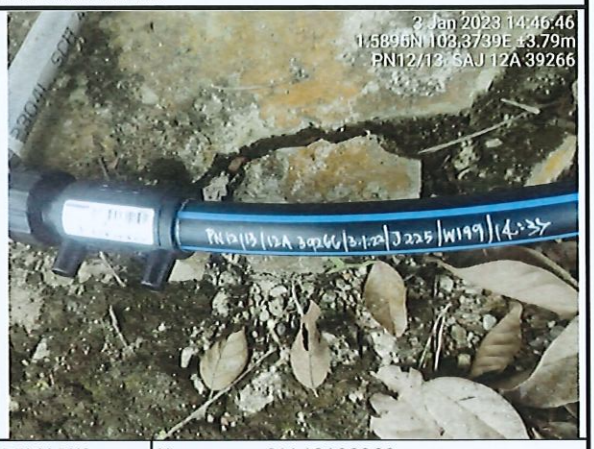
Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	3/1/2023 (SELASA)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 12A39266
	No. rumah :
	Semasa kerja (EF)
	Joint number: 224



REMARKS	No. meter : SAJ 12A39266
	No. rumah :
	Semasa kerja (EF)
	Joint number: 225

REMARKS	No. meter : SAJ 12A39266
	No. rumah :
	Semasa kerja (EF)
	Joint number: 226

REMARKS	No. meter : SAJ 12A39266
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 12A39266
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 12A39266
	No. rumah :
	Selepas kerja

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	3/1/2023 (SELASA)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	
	No. meter : SAJ 12A39266
	No. rumah :
	Selepas kerja (s/s crossing)

REMARKS	

REMARKS	

REMARKS	

REMARKS	

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

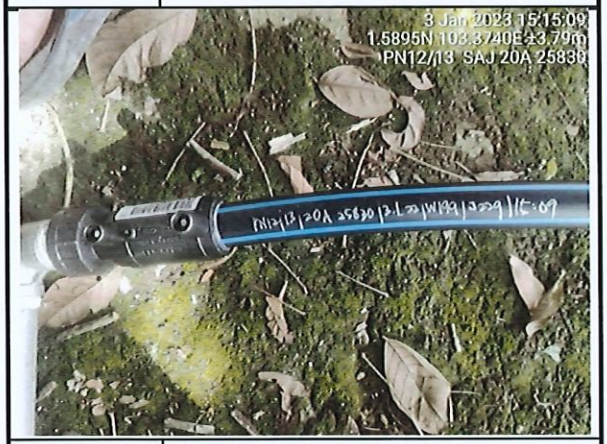
JC

COMMUNICATION PIPE WORKS

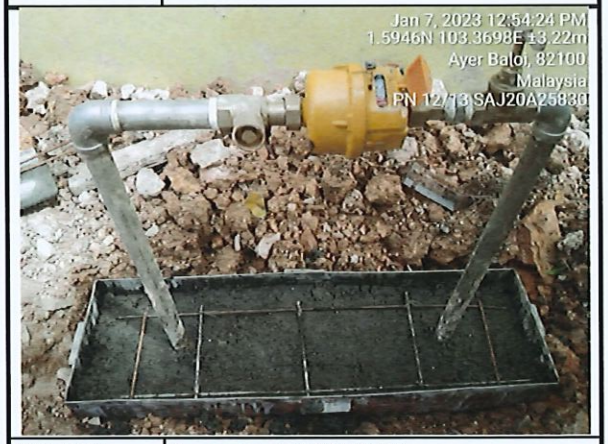
SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	3/1/2023 (SELASA)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 20A25830
	No. rumah :
	Semasa kerja (EF)
	Joint number: 227

REMARKS	No. meter : SAJ 20A25830
	No. rumah :
	Semasa kerja (EF)
	Joint number: 228



REMARKS	No. meter : SAJ 20A25830
	No. rumah :
	Semasa kerja (EF)
	Joint number: 229



REMARKS	No. meter : SAJ 20A25830
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 20A25830
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 20A25830
	No. rumah :
	Selepas kerja

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	3/1/2023 (SELASA)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	
	No. meter : SAJ 20A25830
	No. rumah :
	Selepas kerja (s/s crossing)

REMARKS	

REMARKS	

REMARKS	

REMARKS	

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	3/1/2023 (SELASA)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 17A102586
	No. rumah :
	Semasa kerja (EF)
	Joint number: 230

REMARKS	No. meter : SAJ 17A102586
	No. rumah :
	Semasa kerja (EF)
	Joint number: 231

REMARKS	No. meter : SAJ 17A102586
	No. rumah :
	Semasa kerja (EF)
	Joint number: 232

REMARKS	No. meter : SAJ 17A102586
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 17A102586
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 17A102586
	No. rumah :
	Selepas kerja

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	3/1/2023 (SELASA)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 17A102586
	No. rumah :
	Selepas kerja (s/s crossing)

REMARKS	

REMARKS	

REMARKS	

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

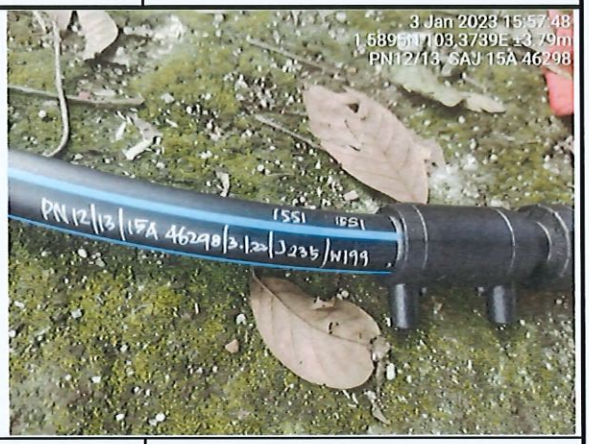
JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	3/1/2023 (SELASA)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 15A46298
	No. rumah :
	Semasa kerja (EF)
	Joint number: 233

REMARKS	No. meter : SAJ 15A46298
	No. rumah :
	Semasa kerja (EF)
	Joint number: 234



REMARKS	No. meter : SAJ 15A46298
	No. rumah :
	Semasa kerja (EF)
	Joint number: 235

REMARKS	No. meter : SAJ 15A46298
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 15A46298
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 15A46298
	No. rumah :
	Selepas kerja

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	3/1/2023 (SELASA)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	
	No. meter : SAJ 15A46298
	No. rumah :
	Selepas kerja (s/s crossing)

REMARKS	

REMARKS	

REMARKS	

REMARKS	

REMARKS	

Ranhill SAJ

RSAJ P-B102.Rev.4

PIPE LOG

Location : REHAB 2020 - PAKEJ 2 (SP 10)
PN12/13 - JLN PT KASAN

Sheet No. : 5
Date : 4/1/2023

CHAINAGE	EXC. DEPTH

SITE CLEARANCE	sq.m	
BULK EXCAVATION		
All material	cu.m	
Rock	cu.m	
Compact material	cu.m	
FILLING		
Approved Material	cu.m	
Sand	cu.m	
Laterite (150mm)	sq.m	
Sand Bedding	sq.m	
Concrete	cu.m	
TURFING		
Top Soil (50mm)	sq.m	
Turfing	sq.m	

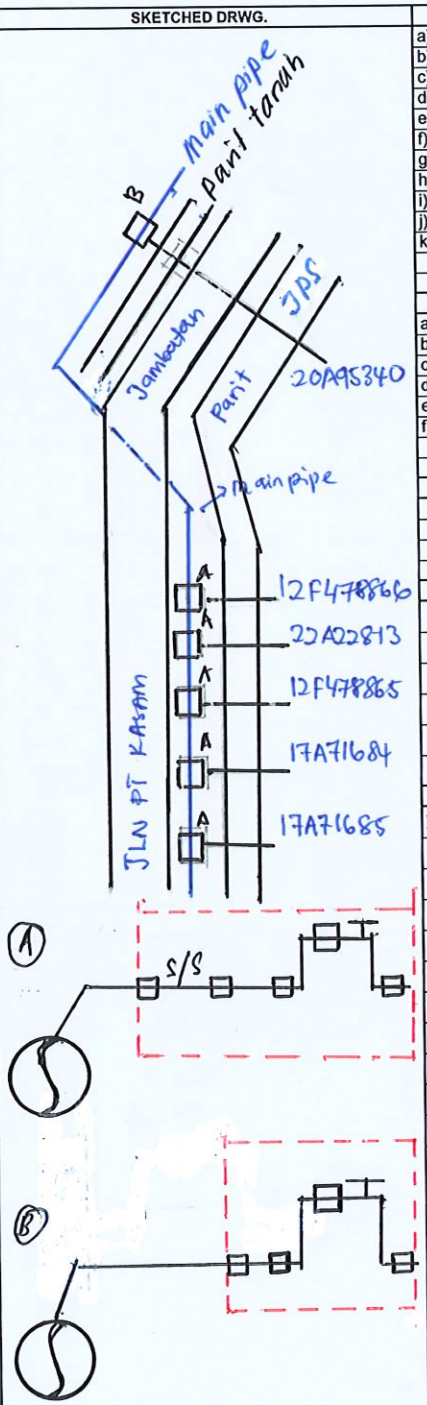
CHAMBER		
Type	Set	Middle
CHIPPING	sq.m	
PILING		
Kayu Bakau	m	
Type of Pile	UPVC	
Size	mm	80
Length (Initial)	m	
Length (Extention)	m	
Join Welding	nos	
Cut Pile (1m)	nos	
Linatex Rubber	sq.m	
MS Strap / Bracing	nos	

Prepared By :
ZAINUL ABDULLAH SATARI
Engineer

Checked and Approved By :
MUHAMAD AZRI BIN ABDUL AZIZ
INSPEKTOR KONTRAK PONTIAN
JABATAN PROJEK
RANHILL SAJ SDN. BHD.

Date : 24/1/2023

SKETCHED DRWG.



TRECH EXCAVATION		
a) Depth < 1.8 m	m	
b) Depth > 1.8 m < 3.0 m	m	
c) Road Cutting	m	
d) Track/Gravel/Earth Road	sq.m	
e) Concrete Surface	sq.m	
f) Cross Hedges/Fences/Wall	sq.m	
g) Road Kerb	m	
h) Under water earth drain	sq.m	
i) Under concrete drain/culvert	sq.m	
j) In rock	cu.m	
k) Unsuitable Material	cu.m	
REINSTATEMENT ROAD		
a) Sand Filling	cu.m	
b) Crusher Run	sq.m	
c) Binder Course	sq.m	
d) Wearing Course	sq.m	
e) Milling/Resurfacing	sq.m	
f)Thermoplastic Line Marking	m	

PIPE	DIA.(mm)	NOS	L (m)
HDPE	25	-	61.80
S/STEEL	20	-	9.00

EXPOSE PIPE & SPECIAL		
	m	
	m	
	nos	
	nos	
	nos	
	sq.m	
SPECIAL / FITTINGS		
150MM SADDLE (TYPE B)	nos	—
20MM METER STAND	nos	6.00
ELECTRO FUSION (17)	nos	

Comments / Reports

NORSILAWATI BINTI ALI
EKSEKUTIF
JABATAN PROJEK
RANHILL SAJ SDN. BHD.

RSAJ P-B107.Rev.4

Ranhill SAJ

DATA TAPPING DAN PAIP PERHUBUNGAN

PROGRAM PENGGANTIAN PAIP LAMA TAHUN 2020

Nama Projek : PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020

Nama Kontraktor : JALUR CAHAYA SDN BHD

Bil	Pipe	Size (mm)	No. Meter	No Rumah	Comm Pipe (m)		Lintas Parit		Bawah Jalan			Korekan (m2)			Catatan
					PA Pipe (m)	Poly Pipe (m)	GI Sleeve (m)	Stanless Steel (m)	Open Trench (m)	GI Sleeve (m)	Impact Molling	Jubin	Konkrit	Longkang	
1	UPVC	150	17A71685	KLINIK		13.00		1.50							
2	UPVC	150	17A71684	KLINIK		13.20		1.50							
3	UPVC	150	22A22813			8.40		2.00							
4	UPVC	150	12F478865			10.00		2.00							
5	UPVC	150	12F478866			9.40		2.00							
6	UPVC	150	20A95340			7.80		-							
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															
25															
26															
27															
28															
29															
30															
					0.00	61.80	0.00	9.00	0.00	0.00	0.00	0.00	0.00	0.00	

Disediakan Oleh :

ZAID BIN ABDULLAH SATARI
Engineer

Kontraktor
Cop :

JALUR CAHAYA SDN BHD
599034-X

Disemak Oleh :

Inspektor Kontrak (D)
Cop :

MUHAMAD AZRI BIN ABDUL AZIZ
INSPEKTOR KONTRAK PONTIAN
JABATAN PROJEK
RANHILL SAJ SDN. BHD.

Disahkan Oleh :

Eksekutif
Cop :

NORSILAWATI BINTI ALI
EKSEKUTIF
JABATAN PROJEK
RANHILL SAJ SDN. BHD.

Ranhill SAJ

Form No: JK/PT – 05
Rev Date: 23/06/2022

BORANG PEMERIKSAAN VISUAL (*ELECTRO-FUSION*)

Projek:	PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 - PAKEJ 2
Nama :	SHARUDIN BIN HASSAN
No sijil:	199
Nama syarikat:	JALUR CAHAYA SDN BHD
Tarikh dan Masa:	4/1/2023

KRITERIA	✓	X
KEADAAN TAPAK		
Kawasan tapak berada dalam keadaan yang bersih dan kering.	/	
KEADAAN BAHAN DAN PERALATAN		
Peralatan berada dalam keadaan baik dan bersih.	/	
Fittings berada dalam bungkusan? Jika ya, periksa *fittings* jika terdapat kerosakan. Jika tidak, reject *fittings*.	/	
Peralatan adalah mencukupi sebelum kerja penyambungan dilakukan.		
- *Fusion machine*	/	
- *Universal pipe cutter*	/	
- *Rotational pipe scrapper*	/	
- *Marker*	/	
- *Isopropyl Alcohol (IPA)*	/	
- Kain bersih	/	
- *Generator*		
Kawasan penyambungan paip berada dalam keadaan yang bersih dan kering.	/	

PEMERIKSAAN SELEPAS PROSES PENYAMBUNGAN *ELECTRO-FUSION*

1) *Melt indicator* pada *fittings* timbul.

Nama Jalan: PN 12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 236	/		Joint No. = 246	/	
Joint No. = 237	/		Joint No. = 247	/	
Joint No. = 238	/		Joint No. = 248	/	
Joint No. = 239	/		Joint No. = 249	/	
Joint No. = 240	/		Joint No. = 250	/	
Joint No. = 241	/		Joint No. = 251	/	
Joint No. = 242	/		Joint No. = 252	/	
Joint No. = 243	/		Joint No. =		
Joint No. = 244	/		Joint No. =		
Joint No. = 245	/		Joint No. =		

2) Hujung paip dipotong dengan tegak dan lurus.

Nama Jalan: PN 12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 236	/		Joint No. = 246	/	
Joint No. = 237	/		Joint No. = 247	/	
Joint No. = 238	/		Joint No. = 248	/	
Joint No. = 239	/		Joint No. = 249	/	
Joint No. = 240	/		Joint No. = 250	/	
Joint No. = 241	/		Joint No. = 251	/	
Joint No. = 242	/		Joint No. = 252	/	
Joint No. = 243	/		Joint No. =		
Joint No. = 244	/		Joint No. =		
Joint No. = 245	/		Joint No. =		

3) Penyambungan paip yang dilakukan berada dalam keadaan selari.

Nama Jalan: PN 12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 236	/		Joint No. = 246	/	
Joint No. = 237	/		Joint No. = 247	/	
Joint No. = 238	/		Joint No. = 248	/	
Joint No. = 239	/		Joint No. = 249	/	
Joint No. = 240	/		Joint No. = 250	/	
Joint No. = 241	/		Joint No. = 251	/	
Joint No. = 242	/		Joint No. = 252	/	
Joint No. = 243	/		Joint No. =		
Joint No. = 244	/		Joint No. =		
Joint No. = 245	/		Joint No. =		

4) Kawasan yang telah dikikis (*scrapped*) boleh dilihat.

Nama Jalan: PN 12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 236	/		Joint No. = 246	/	
Joint No. = 237	/		Joint No. = 247	/	
Joint No. = 238	/		Joint No. = 248	/	
Joint No. = 239	/		Joint No. = 249	/	
Joint No. = 240	/		Joint No. = 250	/	
Joint No. = 241	/		Joint No. = 251	/	
Joint No. = 242	/		Joint No. = 252	/	
Joint No. = 243	/		Joint No. =		
Joint No. = 244	/		Joint No. =		
Joint No. = 245	/		Joint No. =		

5) Tanda pada paip (*penetration depth*) tepat dan boleh dilihat.

Nama Jalan: PN 12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 236	/		Joint No. = 246	/	
Joint No. = 237	/		Joint No. = 247	/	
Joint No. = 238	/		Joint No. = 248	/	
Joint No. = 239	/		Joint No. = 249	/	
Joint No. = 240	/		Joint No. = 250	/	
Joint No. = 241	/		Joint No. = 251	/	
Joint No. = 242	/		Joint No. = 252	/	
Joint No. = 243	/		Joint No. =		
Joint No. = 244	/		Joint No. =		
Joint No. = 245	/		Joint No. =		

6) Tiada kesan percikan paip yang telah cair atau apa-apa kerosakan pada permukaan luar paip yang telah disambung.

Nama Jalan: PN 12/13 - JLN PT KASAN

	✓	X		✓	X
Joint No. = 236	/		Joint No. = 246	/	
Joint No. = 237	/		Joint No. = 247	/	
Joint No. = 238	/		Joint No. = 248	/	
Joint No. = 239	/		Joint No. = 249	/	
Joint No. = 240	/		Joint No. = 250	/	
Joint No. = 241	/		Joint No. = 251	/	
Joint No. = 242	/		Joint No. = 252	/	
Joint No. = 243	/		Joint No. =		
Joint No. = 244	/		Joint No. =		
Joint No. = 245	/		Joint No. =		

7) Paip dan *fittings* yang disambung dibiarkan untuk sejuk mengikut tempoh masa yang ditetapkan.					
Nama Jalan: PN12/13 – JLN PT KASAN					
	✓	X		✓	X
Joint No. = 236	/		Joint No. = 246	/	
Joint No. = 237	/		Joint No. = 247	/	
Joint No. = 238	/		Joint No. = 248	/	
Joint No. = 239	/		Joint No. = 249	/	
Joint No. = 240	/		Joint No. = 250	/	
Joint No. = 241	/		Joint No. = 251	/	
Joint No. = 242	/		Joint No. = 252	/	
Joint No. = 243	/		Joint No. =		
Joint No. = 244	/		Joint No. =		
Joint No. = 245	/		Joint No. =		
ADAKAH PENYAMBUNGAN *ELECTRO-FUSION* INI DITERIMA? (Jika TIDAK, sila nyatakan ulasan di ruangan yang disediakan)					
	✓	X		✓	X
Joint No. = 236	/		Joint No. = 246	/	
Joint No. = 237	/		Joint No. = 247	/	
Joint No. = 238	/		Joint No. = 248	/	
Joint No. = 239	/		Joint No. = 249	/	
Joint No. = 240	/		Joint No. = 250	/	
Joint No. = 241	/		Joint No. = 251	/	
Joint No. = 242	/		Joint No. = 252	/	
Joint No. = 243	/		Joint No. =		
Joint No. = 244	/		Joint No. =		
Joint No. = 245	/		Joint No. =		

Ulasan:

.....

.....

.....

Dikendalikan oleh:	Diperiksa dan disahkan oleh:
Tandatangan:	Tandatangan:
Nama Kontraktor: SHAHUDIN B. HASSAN	Nama Kontrak Inspektor: MUHAMAD AZRI BIN ABDUL AZIZ INSPEKTOR KONTRAK PONTIAN
No. Anggota: 199	No. Anggota: JABATAN PROJEK RANHILL SAJ SDN. BHD.
Tarikh: 04/01/2023	Tarikh: 4/1/2023

**Dokumen yang perlu diserahkan kepada *Contract Inspector*: Gambar penyambungan dan laporan daripada *Data Logger*.

JALUR CAHAYA SDN BHD 599034-X

ZAIDI BIN ABDULLAH SATARI
Engineer

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

ELECTRO-FUSION MACHINE REPORT (COMM PIPE)

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 - API API
DATE	4/1/2023 (RABU)
LOCATION	13 - JALAN PT KASAN

236	04.01.23	11:06	33.7°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.764 Ohm	5.4 kJ	OK	
237	04.01.23	11:14	33.3°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.737 Ohm	5.5 kJ	OK	
238	04.01.23	11:21	34.8°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.741 Ohm	5.4 kJ	OK	
239	04.01.23	11:33	36.8°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.777 Ohm	5.4 kJ	OK	
240	04.01.23	11:40	38.4°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.747 Ohm	5.4 kJ	OK	
241	04.01.23	11:47	38.3°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.749 Ohm	5.4 kJ	OK	
242	04.01.23	11:58	37.4°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.755 Ohm	5.4 kJ	OK	
243	04.01.23	12:04	38.4°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.750 Ohm	5.4 kJ	OK	
244	04.01.23	12:13	38.4°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.748 Ohm	5.4 kJ	OK	
245	04.01.23	12:22	36.4°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.725 Ohm	5.4 kJ	OK	
246	04.01.23	12:28	37.2°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.676 Ohm	5.5 kJ	OK	
247	04.01.23	12:36	36.8°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.746 Ohm	5.4 kJ	OK	
248	04.01.23	12:47	36.1°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.714 Ohm	5.5 kJ	OK	
249	04.01.23	12:54	34.7°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.686 Ohm	5.5 kJ	OK	
250	04.01.23	13:05	35.1°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.729 Ohm	5.4 kJ	OK	
251	04.01.23	13:12	37.1°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.723 Ohm	5.4 kJ	OK	
252	04.01.23	13:19	38.3°C	FR	CPL	25 mm	28.0 V	0027 s/0027 s	3.743 Ohm	5.4 kJ	OK	

Disediakan Oleh:	Disemak Oleh:	Disahkan Oleh:
Kontraktor	Inspektor Kontrak (D)	Eksekutif
ZAIDI BIN ABDULLAH SATARI Engineer	MUHAMAD AZRI BIN ABDUL AZIZ INSPEKTOR KONTRAK PONTIAN JABATAN PROJEK RANHILL SAJ SDN. BHD.	NORSILAWATI BINTI ALI EKSEKUTIF JABATAN PROJEK RANHILL SAJ SDN. BHD.

CAHYA JALUR SDN BHD 599094-X

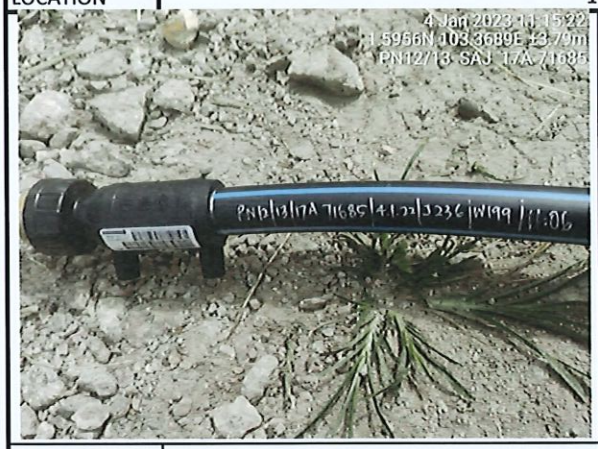
PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	4/1/2023 (RABU)
LOCATION	13 - JALAN PARIT KASAN



REMARKS	No. meter : SAJ 17A71685
	No. rumah :
	Semasa kerja (EF)
	Joint number: 236

REMARKS	No. meter : SAJ 17A71685
	No. rumah :
	Semasa kerja (EF)
	Joint number: 237

REMARKS	No. meter : SAJ 17A71685
	No. rumah :
	Semasa kerja (EF)
	Joint number: 238

REMARKS	No. meter : SAJ 17A71685
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 17A71685
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 17A71685
	No. rumah :
	Selepas kerja

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	4/1/2023 (RABU)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 17A71685
	No. rumah :
	Selepas kerja (s/s crossing)

REMARKS	

REMARKS	

REMARKS	

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	4/1/2023 (RABU)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 17A71684
	No. rumah :
	Semasa kerja (EF)
	Joint number: 239

REMARKS	No. meter : SAJ 17A71684
	No. rumah :
	Semasa kerja (EF)
	Joint number: 240

REMARKS	No. meter : SAJ 17A71684
	No. rumah :
	Semasa kerja (EF)
	Joint number: 241

REMARKS	No. meter : SAJ 17A71684
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 17A71684
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 17A71684
	No. rumah :
	Selepas kerja

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	4/1/2023 (RABU)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	
	No. meter : SAJ 17A71684
	No. rumah :
	Selepas kerja (s/s crossing)

REMARKS	

REMARKS	

REMARKS	

REMARKS	

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

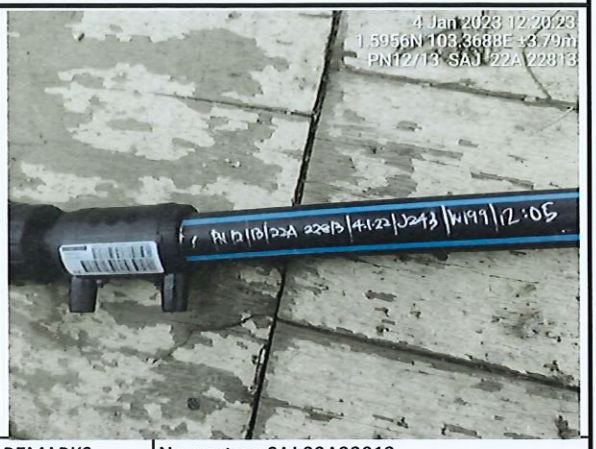
Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	4/1/2023 (RABU)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 22A22813
	No. rumah :
	Semasa kerja (EF)
	Joint number: 242



REMARKS	No. meter : SAJ 22A22813
	No. rumah :
	Semasa kerja (EF)
	Joint number: 243

REMARKS	No. meter : SAJ 22A22813
	No. rumah :
	Semasa kerja (EF)
	Joint number: 244

REMARKS	No. meter : SAJ 22A22813
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 22A22813
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 22A22813
	No. rumah :
	Selepas kerja

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	4/1/2023 (RABU)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	
	No. meter : SAJ 22A22813
	No. rumah :
	Selepas kerja (s/s crossing)

REMARKS	

REMARKS	

REMARKS	

REMARKS	

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	4/1/2023 (RABU)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 12F478865
	No. rumah :
	Semasa kerja (EF)
	Joint number: 245

REMARKS	No. meter : SAJ 12F478865
	No. rumah :
	Semasa kerja (EF)
	Joint number: 246

REMARKS	No. meter : SAJ 12F478865
	No. rumah :
	Semasa kerja (EF)
	Joint number: 247

REMARKS	No. meter : SAJ 12F478865
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 12F478865
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 12F478865
	No. rumah :
	Selepas kerja

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	4/1/2023 (RABU)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 12F478865
	No. rumah :
	Selepas kerja (s/s crossing)

REMARKS	

REMARKS	

REMARKS	

REMARKS	

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	4/1/2023 (RABU)
LOCATION	13 - JALAN PARIT KASAN

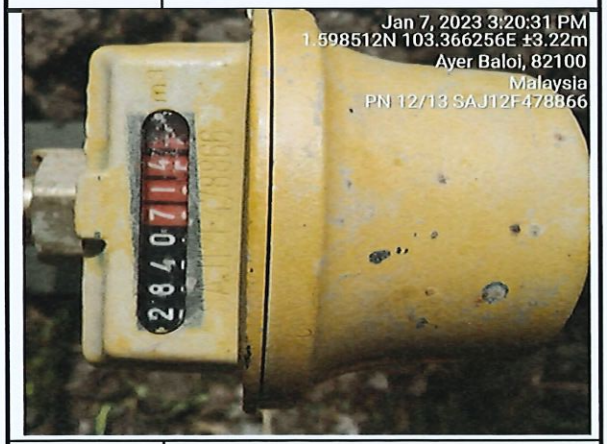
REMARKS	No. meter : SAJ 12F478866
	No. rumah :
	Semasa kerja (EF)
	Joint number: 248

REMARKS	No. meter : SAJ 12F478866
	No. rumah :
	Semasa kerja (EF)
	Joint number: 249

REMARKS	No. meter : SAJ 12F478866
	No. rumah :
	Semasa kerja (EF)
	Joint number: 250

REMARKS	No. meter : SAJ 12F478866
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 12F478866
	No. rumah :
	Selepas kerja



REMARKS	No. meter : SAJ 12F478866
	No. rumah :
	Selepas kerja

PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR
PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	4/1/2023 (RABU)
LOCATION	13 - JALAN PARIT KASAN

REMARKS	No. meter : SAJ 12F478866
	No. rumah :
	Selepas kerja (s/s crossing)

REMARKS	

REMARKS	

REMARKS	

REMARKS	

REMARKS	

REMARKS	

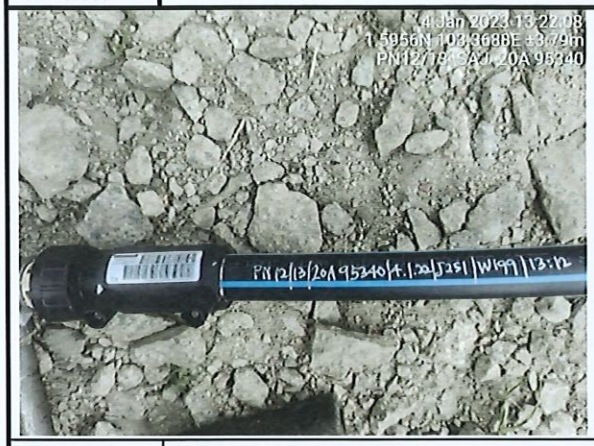
PROGRAM PENGGANTIAN PAIP LAMA BAGI TAHUN 2020 DI NEGERI JOHOR PAKEJ 2 : DAERAH JOHOR BAHRU, KULAI, PONTIAN, KOTA TINGGI DAN MERSING

Ranhill SAJ

JC

COMMUNICATION PIPE WORKS

SUB PACKAGE	PONTIAN (PTN10)
DMA	PN12 API-API
DATE	4/1/2023 (RABU)
LOCATION	13 - JALAN PARIT KASAN



REMARKS	No. meter : SAJ 20A95340
	No. rumah :
	Semasa kerja (EF)
	Joint number: 251

REMARKS	No. meter : SAJ 20A95340
	No. rumah :
	Semasa kerja (EF)
	Joint number: 252

REMARKS	No. meter : SAJ 20A95340
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 20A95340
	No. rumah :
	Selepas kerja

REMARKS	No. meter : SAJ 20A95340
	No. rumah :
	Selepas kerja

REMARKS	