A.S.JAMES

PTY. LTD.

BALLARAT OFFICE: **Box 1319** **BAKERY HILL Vic 3354** **Tel:03 5333 5911** **ballarat@asjames. com.au**

P.O **1/12 Theen Avenue** **WILLASTON SA 51** **Tel: 08 8504 7467** **simonb@asjamessa.com.au**

VIC HEAD OFFICE: **15 Libbett Avenue** **Clayton South Vic 3169** **Office Tel: 95474811** **melb@asjames.com.au** **Laboratory Tel: 95624709** **lab@asjames.com.au**

A.C.N.004 584 534 A.B.N. 40 004 584 534

Geotechnical Engineers

SINCE 1963

Pipecon Pty Ltd
48 Icon Drive
Delacombe, VIC, 3356

Date: 19/2/20

Ref : 120208 B006

Marked attention to. Scott Mann

Purchase Order No :

Dear Sirs,

RE: Shortridge Drive
Lucas

We enclose Reports 120208 B002, B004 and B006 being results of field and laboratory testing, along with level one supervision, carried out on the above project between 3/2/20 and 5/2/20

Our Invoice is also enclosed.

Yours faithfully,

T.J.Holt MIEAust
A.S. JAMES PTY. LTD.

A.S. JAMES PTY.LTD **Geotechnical Engineers** **Ballarat Facility** **P.O. Box 1319 Bakery Hill Vic.**	**JOB:** Shortridge Drive Lucas	**Job No.** 120208 **Report No.** B002 **Date** 10-Feb-20

Section Tested: House Lot Fill

FOR
Pipecon Pty Ltd
48 Icon Drive
DELACOMBE VIC 3356

Test Number		8	9	10			
Date of Test		3/02/20	3/02/20	3/02/20			
Time of Test		13:50	13:54	13:59			
Location	Chainage:	See	See	See			
	Offset:	Sketch	Sketch	Sketch			
Depth of Test		600	600	600			
Probe Depth (mm)		275	275	275			
Material Type		CLAY, Silty, Gravelly	CLAY, Silty, Gravelly	CLAY, Silty, Gravelly			
Maximum Converted Wet Density (t/m3)		2.09	2.06	2.08			
Optimum Moisture Content (%)		19.0	20.5	18.0			
Field Wet Density (t/m3)		2.02	2.04	2.07			
Field Dry Density (t/m3)		1.70	1.68	1.75			
Field Moisture Content (%)		18.5	21.0	18.0			
Oversize Material (%)		3	6	7			
Compaction Type		Standard	Standard	Standard			
Oversize Retained on :		19mm	19mm	19mm			
Moisture Ratio (%)		99.5	102.5	99.5			
Moisture Variation (%)		0.0	0.5	0.0			
Wet/Dry of Optimum		Dry	Wet	Dry			
Hilf Density Ratio		**96.5**	**99.0**	**99.5**			

Notes: DEPTH OF TESTS TAKEN FROM BELOW FINISHED FILL LEVEL

NATA

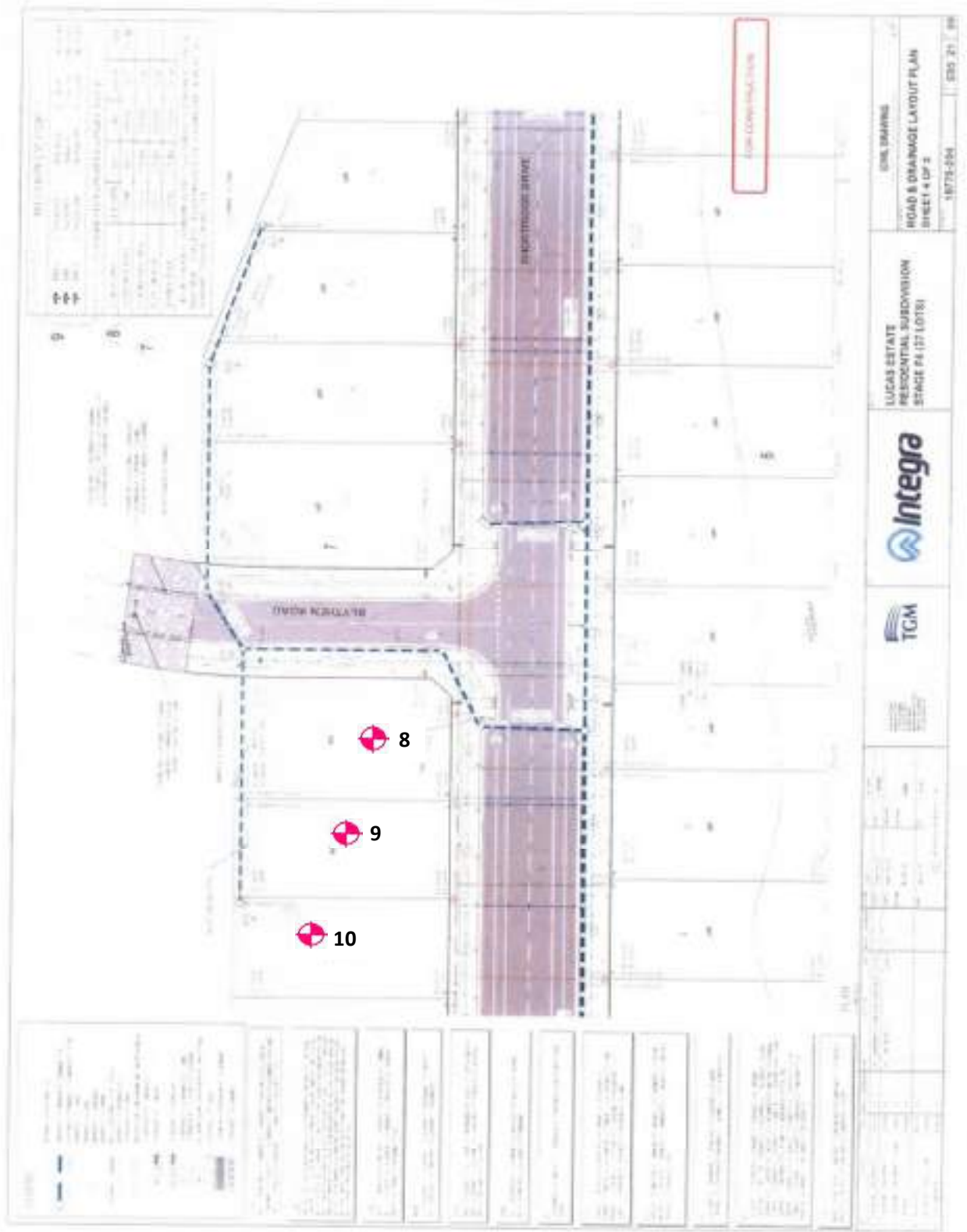
Accredited for compliance with ISO/IEC 17025 - Testing
Accreditation No 9855

Approved Signatory
H.Pyke

10-Feb-20

HILF DENSITY/MOISTURE RATIO, NUCLEAR GAUGE METHOD AS PER AS1289 - 1.1, 1.2.1(6.4),2.1.1,5.7.1,5.8.1 A.S.JAMES FORM No: LR005 FIG 1 / REV 9 / 10/01/17	TESTED BY : CHECKED BY:	T.Reece A.White	FIGURE 1 of 2

A.S. JAMES PTY.LTD Geotechnical Engineers Ballarat Facility P.O. Box 1319 Bakery Hill Vic. Accreditation No 9855	JOB: Shortridge Drive Lucas	Job No. 120208 Report No. B002 Date 10-Feb-20



TEST LOCATIONS
DISTANCES GIVEN IN METRES

N.T.S

HILF DENSITY/MOISTURE RATIO, NUCLEAR GAUGE METHOD AS PER AS1289 - 1.1, 1.2.1(6.4),2.1.1,5.7.1,5.8.1 A.S.JAMES FORM No: LR005 FIG 3 / REV 3 / 30/01/03	TESTED BY : CHECKED BY:	T.Reece A.White	FIGURE 2 of 2

A.S. JAMES PTY. LTD. **Geotechnical Engineers** **Ballarat Laboratory Reg No.-9855**	**JOB:** Shortridge Drive Lucas	JOB No: 120208 REPORT No: B002/1 DATE: 10/02/2020

DAILY GEOTECHNICAL ACTIVITY REPORT | On Site :- 13:00 Off Site : 14:00

Developer :	Constructor: Pipecon	Superintendent: Shaun
Testing Authority: A.S.James Pty Ltd	Level of GTA brief:	Level one Supervision by Testing Authority
Weather Conditions: Sunny, windy		

Equipment on Site	In Use	Not in Use		In Use	Not in Use
Excavator	√		Water cart (small)	√	
Pad Foot vibrating roller			D6 Dozer	√	
815 Compactor	√		Dump Truck (On Site)	√	
Grader			Loader	√	

Works in progress

	Location
Stripping	
Excavating	House Lots
Filling	House Lots
Rolling	House Lots

Comments, Details & Observations:

The constructor has prepared the first layer of material placed on house lots 1524, 1525 and 1526. One density test was completed on each lot. The material tested appears to be well compacted. The material appears to be well moisture conditioned, however may be slightly dry of optimum moisture content. The material contains some small oversize rock. The constructor began placing the next layer of material immediately after testing was completed. This layer will be ready for testing tomorrow morning.

Inspections

Inspection Type & Location:

House lots 1524, 1525 and 1526

Comments & Details:

The constructor has excavated some test pits spread evenly across lots 1524-1526. The constructor has exposed the natural clay subgrade on each test pit. From the test pits excavated, it appears as though the constructor has removed the majority of the silt/topsoil and exposed the underlying natural clay, however the exposed base was not inspected prior to commencement of fill placement.

Material Type / Quality / Source / Approval:

Site won material - Brown silty, gravelly CLAY
The material contains some small oversize.
Some loads of material appear to be very silty.

Compaction Testing:

Numbers performed	3	Test No.s	8-10	Location	House Lots
Numbers performed		Test No.s		Location	
Numbers performed		Test No.s		Location	

Specification Requirements	Standard / Modified	Density Ratio (%)	95
	STD	Moisture Ratio (%)	85-115

Compliance to Specification

	Conforming Tests	Non Conforming Tests
Density	8, 9, 10	
Moisture	8, 9, 10	

Site Instructions Given (Tick box)

Approval to Place Fill [√]	Filling Methods Approved [√]	Rework / Re-roll required [ ]
Stripped surface ~~Not~~ / Approved [√]	Filled Area Under Review [ ]	Moisture Conditioning required [ ]

Comments & Details

Level 1 supervision daily geotechnical report summary A.S.JAMES LW053 (Fig 2) / REV 1 / 21/5/14	Operator: T.Reece/W.Cousens Date: 3/2/20

A.S. JAMES PTY.LTD **Geotechnical Engineers** **Ballarat Laboratory** **73-77 Humffray Street North** **Accreditation No. 9855**	**JOB:** Shortridge Drive Lucas	**Job No.** 120208 **Report No.** B002/1 **Date** 10-Feb-20

House lots

Test pits

N.T.S

Site Location Plan	TESTED BY : TR/WC CHECKED BY: A.White	FIGURE 2

A.S. JAMES PTY.LTD **Geotechnical Engineers** **Ballarat Facility** **P.O. Box 1319 Bakery Hill Vic.**	**JOB:** Shortridge Drive Lucas	**Job No.** 120208 **Report No.** B004 **Date** 10-Feb-20

Section Tested: House Lot Fill

FOR
Pipecon Pty Ltd
48 Icon Drive
DELACOMBE VIC 3356

Test Number		20	21	22			
Date of Test		4/02/20	4/02/20	4/02/20			
Time of Test		8:26	8:32	8:39			
Location	Chainage:	See	See	See			
	Offset:	Sketch	Sketch	Sketch			
Depth of Test		300	300	300			
Probe Depth (mm)		300	300	300			
Material Type		CLAY, Silty, Gravelly	CLAY, Silty, Gravelly	CLAY, Silty, Gravelly			
Maximum Converted Wet Density (t/m3)		2.06	2.03	2.04			
Optimum Moisture Content (%)		24.0	23.5	24.0			
Field Wet Density (t/m3)		2.05	2.05	2.12			
Field Dry Density (t/m3)		1.69	1.69	1.71			
Field Moisture Content (%)		21.5	21.5	24.0			
Oversize Material (%)		11	7	10			
Compaction Type		Standard	Standard	Standard			
Oversize Retained on :		19mm	19mm	19mm			
Moisture Ratio (%)		90.0	90.0	99.0			
Moisture Variation (%)		2.0	2.0	0.0			
Wet/Dry of Optimum		Dry	Dry	Dry			
Hilf Density Ratio		**99.5**	**101.0**	**104.0**			

Notes: DEPTH OF TESTS TAKEN FROM BELOW FINISHED FILL LEVEL

NATA

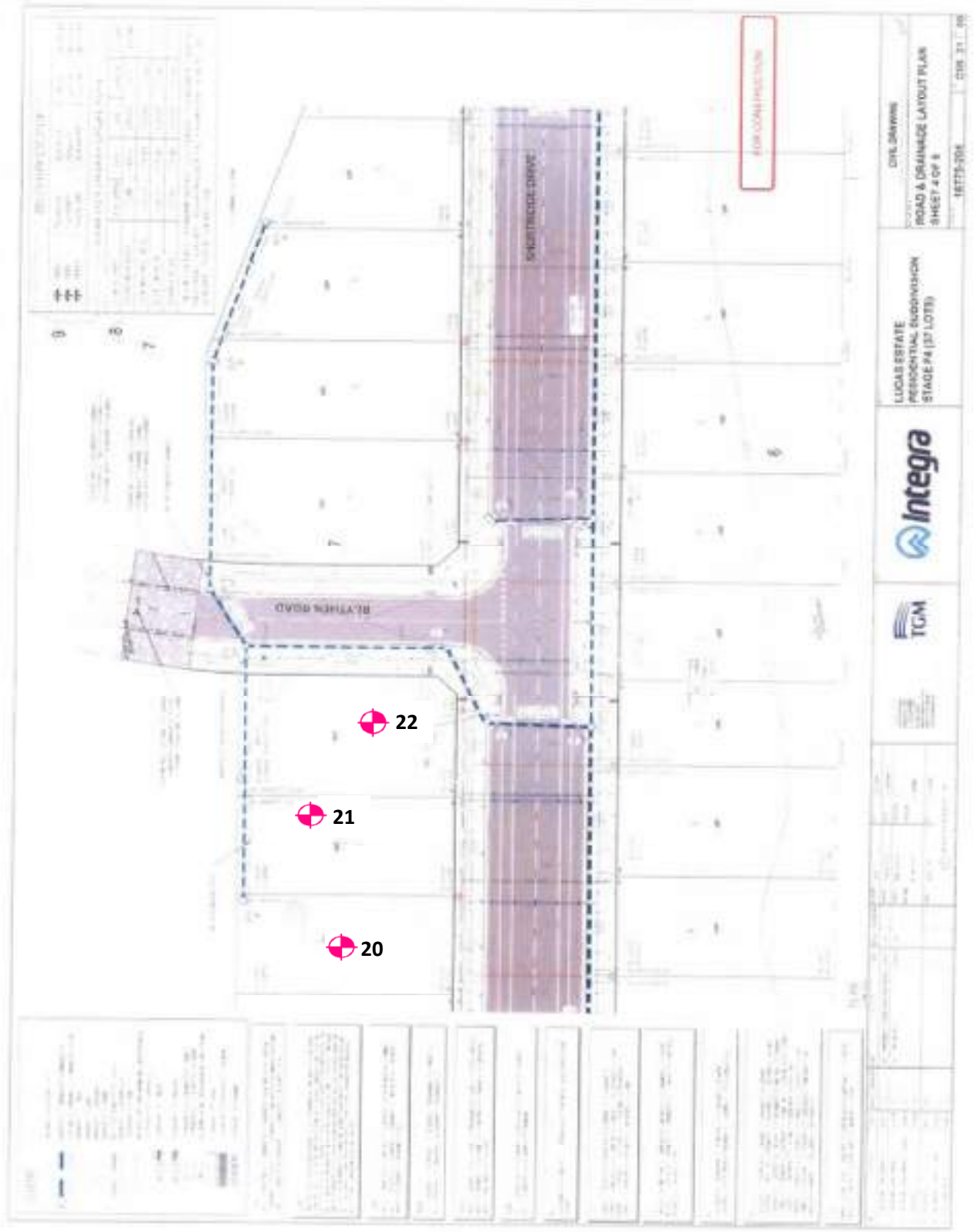
Accredited for compliance with ISO/IEC 17025 - Testing
Accreditation No 9855

Approved Signatory
H.Pyke

10-Feb-20

HILF DENSITY/MOISTURE RATIO, NUCLEAR GAUGE METHOD AS PER AS1289 - 1.1, 1.2.1(6.4),2.1.1,5.7.1,5.8.1 A.S.JAMES FORM No: LR005 FIG 1 / REV 9 / 10/01/17	TESTED BY : CHECKED BY:	J.Murphy A.White	FIGURE 1 of 2

A.S. JAMES PTY.LTD Geotechnical Engineers Ballarat Facility P.O. Box 1319 Bakery Hill Vic. Accreditation No 9855	JOB: Shortridge Drive Lucas	Job No. 120208 Report No. B004 Date 10-Feb-20



TEST LOCATIONS
DISTANCES GIVEN IN METRES

N.T.S

HILF DENSITY/MOISTURE RATIO, NUCLEAR GAUGE METHOD AS PER AS1289 - 1.1, 1.2.1(6.4),2.1.1,5.7.1,5.8.1 A.S.JAMES FORM No: LR005 FIG 3 / REV 3 / 30/01/03	TESTED BY : J.Murphy CHECKED BY: A.White	FIGURE 2 of 2

A.S. JAMES PTY. LTD. **Geotechnical Engineers** **Ballarat Laboratory Reg No.-9855**	**JOB:** Shortridge Drive Lucas	JOB No: 120208 REPORT No: B004/1 DATE: 10/02/2020

DAILY GEOTECHNICAL ACTIVITY REPORT

On Site :- 8:00 Off Site : 9:00

Developer :	Constructor: Pipecon	Superintendent: Shaun
Testing Authority: A.S.James Pty Ltd	Level of GTA brief:	Level one Supervision by Testing Authority
Weather Conditions: Sunny, fine		

Equipment on Site	In Use	Not in Use		In Use	Not in Use
Excavator	√		Water cart (small)	√	
Pad Foot vibrating roller			D6 Dozer	√	
815 Compactor	√		Dump Truck (On Site)	√	
Grader			Scraper		

Works in progress

	Location
Stripping	
Excavating	
Filling	House Lots
Rolling	House Lots

Comments, Details & Observations:

The constructor has placed approximately a 300mm layer across house lots 1524-1526. The constructor is using site won material that contains some oversize rock. One test was taken on each house lot with material appearing well compacted but possibly slightly dry of optimum moisture content. Constructor has been given approval to place the next layer.

Inspections

Inspection Type & Location:

Comments & Details:

Material Type / Quality / Source / Approval:

Compaction Testing:

Numbers performed	3	Test No.s	20-22	Location	House Lots
Numbers performed		Test No.s		Location	
Numbers performed		Test No.s		Location	

Specification Requirements	Standard / Modified	Density Ratio (%)	95
	STD	Moisture Ratio (%)	85-115

Compliance to Specification

	Conforming Tests	Non Conforming Tests
Density	20, 21, 22	
Moisture	20, 21, 22	

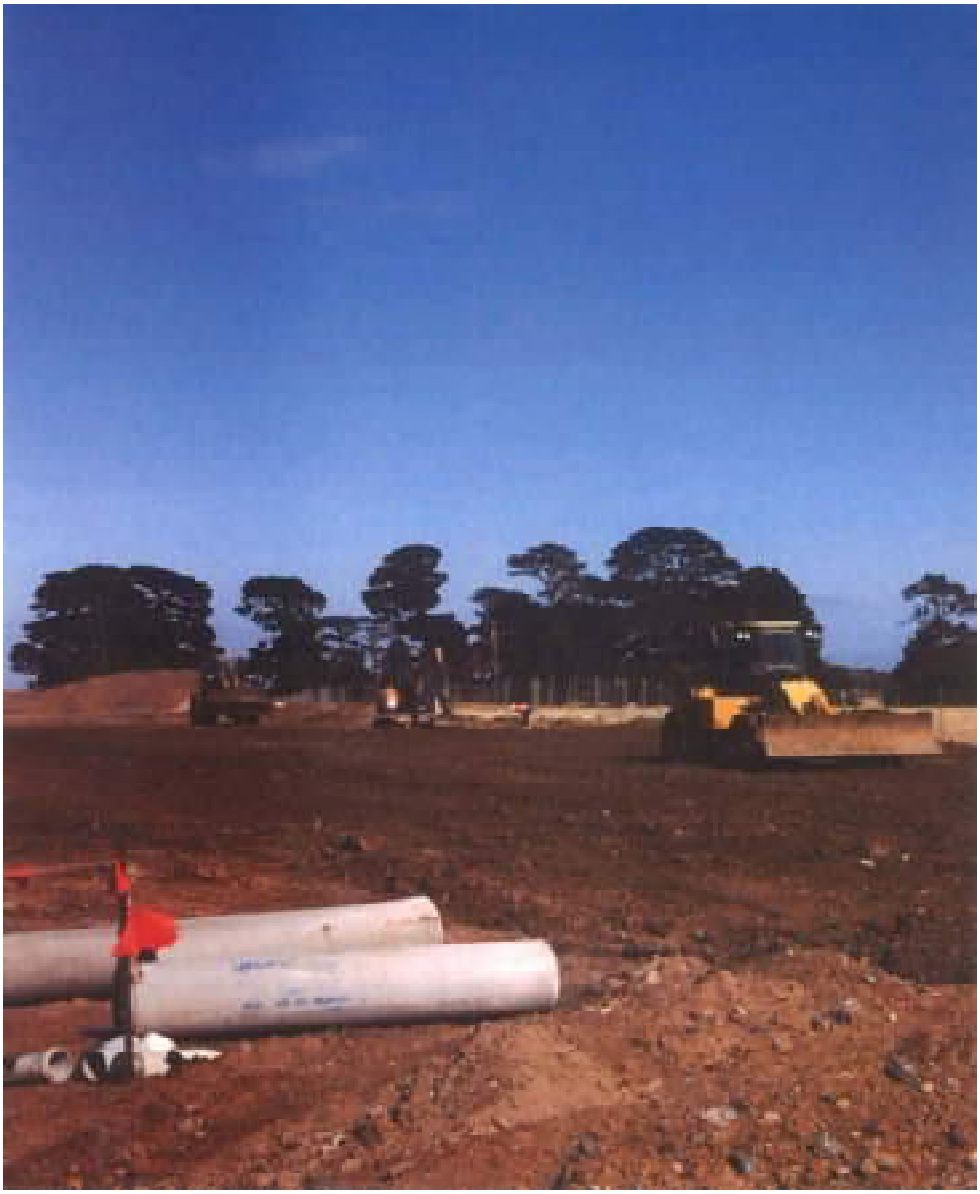
Site Instructions Given (Tick box)

Approval to Place Fill [√]	Filling Methods Approved [√]	Rework / Re-roll required [ ]
Stripped surface ~~Not~~ / Approved [√]	Filled Area Under Review [ ]	Moisture Conditioning required [ ]

Comments & Details

Level 1 supervision daily geotechnical report summary A.S.JAMES LW053 (Fig 2) / REV 1 / 21/5/14	Operator: J.Murphy Date: 4/2/20

A.S. JAMES PTY.LTD Geotechnical Engineers Ballarat Laboratory 73-77 Humffray Street North Accreditation No. 9855	JOB: Shortridge Drive Lucas	Job No. 120208 Report No. B004/1 Date 10-Feb-20



N.T.S

Site Location Plan	TESTED BY : J.Murphy CHECKED BY: A.White	FIGURE 2

A.S. JAMES PTY.LTD **Geotechnical Engineers** **Ballarat Facility** **P.O. Box 1319 Bakery Hill Vic.**	**JOB:** Shortridge Drive Lucas	**Job No.** 120208 **Report No.** B006 **Date** 11-Feb-20

Section Tested: House Lots

FOR
Pipecon Pty Ltd
48 Icon Drive
DELACOMBE VIC 3356

Test Number		32	33	34			
Date of Test		5/02/20	5/02/20	5/02/20			
Time of Test		14:14	14:16	14:18			
Location	Chainage:	See	See	See			
	Offset:	Sketch	Sketch	Sketch			
Depth of Test		FFL	FFL	FFL			
Probe Depth (mm)		300	300	300			
Material Type		CLAY, Silty, Gravelly	CLAY, Silty, Gravelly	CLAY, Silty, Gravelly			
Maximum Converted Wet Density (t/m3)		2.02	2.02	2.11			
Optimum Moisture Content (%)		25.0	22.0	22.0			
Field Wet Density (t/m3)		2.05	2.09	2.16			
Field Dry Density (t/m3)		1.67	1.72	1.78			
Field Moisture Content (%)		22.5	21.5	21.5			
Oversize Material (%)		1	4	2			
Compaction Type		Standard	Standard	Standard			
Oversize Retained on :		19mm	19mm	19mm			
Moisture Ratio (%)		89.0	96.5	98.0			
Moisture Variation (%)		2.5	0.5	0.5			
Wet/Dry of Optimum		Dry	Dry	Dry			
Hilf Density Ratio		**101.0**	**103.5**	**102.5**			

Notes: DEPTH OF TESTS TAKEN FROM FINISHED FILL LEVEL

NATA

Accredited for compliance with ISO/IEC 17025 - Testing
Accreditation No 9855

Approved Signatory
H.Pyke

11-Feb-20

HILF DENSITY/MOISTURE RATIO, NUCLEAR GAUGE METHOD AS PER AS1289 - 1.1, 1.2.1(6.4),2.1.1,5.7.1,5.8.1 A.S.JAMES FORM No: LR005 FIG 1 / REV 9 / 10/01/17	TESTED BY : CHECKED BY:	J.Murphy A.White	FIGURE 1 of 2

A.S. JAMES PTY. LTD. **Geotechnical Engineers** **Ballarat Laboratory Reg No.-9855**	**JOB:** Shortridge Drive Lucas	JOB No: 120208 REPORT No: B006/1 DATE: 11/02/2020

DAILY GEOTECHNICAL ACTIVITY REPORT On Site :- 13:40 Off Site : 14:40

Developer :	Constructor: Pipecon	Superintendent: Shaun
Testing Authority: A.S.James Pty Ltd	Level of GTA brief:	Level one Supervision by Testing Authority
Weather Conditions: Sunny, hot		

Equipment on Site	In Use	Not in Use		In Use	Not in Use
Excavator	√		Water cart (small)	√	
Pad Foot vibrating roller			D6 Dozer	√	
815 Compactor	√		Dump Truck (On Site)	√	
Grader			Scraper		

Works in progress

	Location
Stripping	
Excavating	
Filling	House Lots
Rolling	House Lots

Comments, Details & Observations:

The constructor has placed the final layer on house lots 1524-1526. The constructor is using site won material that contains some oversize rock. One test was taken on each house lot, with material appearing well compacted and dry of optimum moisture content. Tests will likely still fall within allowable moisture tolerances.

Inspections

Inspection Type & Location:

Comments & Details:

Material Type / Quality / Source / Approval:

Compaction Testing:

Numbers performed	3	Test No.s	32-34	Location	House Lots
Numbers performed		Test No.s		Location	
Numbers performed		Test No.s		Location	

Specification Requirements Standard / Modified: STD; Density Ratio (%): 95; Moisture Ratio (%): 85-115

Compliance to Specification

	Conforming Tests	Non Conforming Tests
Density	32, 33, 34	
Moisture	32, 33, 34	

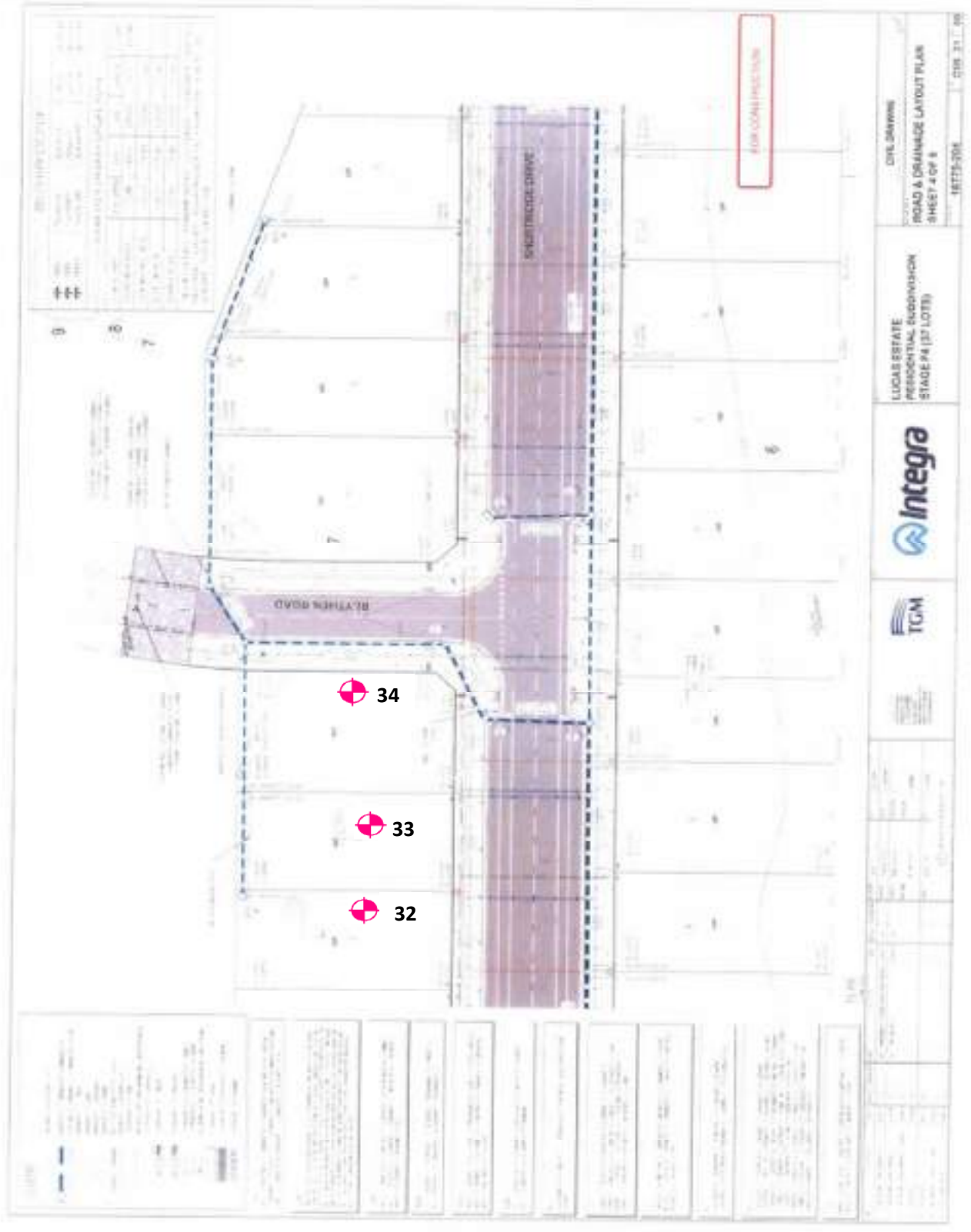
Site Instructions Given (Tick box)

Approval to Place Fill [√] Filling Methods Approved [√] Rework / Re-roll required [ ]
Stripped surface ~~Not~~ / Approved [√] Filled Area Under Review [ ] Moisture Conditioning required [ ]

Comments & Details

Level 1 supervision daily geotechnical report summary A.S.JAMES LW053 (Fig 2) / REV 1 / 21/5/14	Operator: J.Murphy Date: 5/2/20

A.S. JAMES PTY.LTD Geotechnical Engineers Ballarat Facility P.O. Box 1319 Bakery Hill Vic. Accreditation No 9855	JOB: Shortridge Drive Lucas	Job No. 120208 Report No. B006 Date 11-Feb-20



TEST LOCATIONS
DISTANCES GIVEN IN METRES

N.T.S

HILF DENSITY/MOISTURE RATIO, NUCLEAR GAUGE METHOD AS PER AS1289 - 1.1, 1.2.1(6.4),2.1.1,5.7.1,5.8.1 A.S.JAMES FORM No: LR005 FIG 3 / REV 3 / 30/01/03	TESTED BY : J.Murphy CHECKED BY: A.White	FIGURE 2 of 2

A.S.JAMES PTY LTD
A.C.N. 004 584 534 A.B.N. 40 004 584 534
Geotechnical Engineers
SINCE 1963

73-77 Humffray Street
Ballarat Vic 3350
Tel: (613) 5333 5911
Email: ballarat@asjames.com.au

19th February 2020

Pipecon,
48 Icon Drive,
DELACOMBE, VIC, 3356

Ref: 120208
B006

Marked Attention to: Shaun Mahar

RE: Level one supervision & Testing – Shortridge Drive, Lucas.

We were commissioned by Shaun Mahar of Pipecon to provide Level one supervision and density testing on excavated areas within the footprints of the proposed house lots contained within Shortridge Drive, Lucas.

We can confirm that our involvement was limited to 'Level 1' as specified in AS 3798 – 2007.

The Standard describes 'Level 1' as follows-

"The primary objective of Level 1 Inspection and Testing is for the geotechnical inspection and testing authority (GITA) to be able to express an opinion on the compliance of the work. The GITA is responsible for ensuring that the inspection and testing is sufficient for this purpose".

All density testing exceeded the requirement of 95% standard density ratio as specified in Table 5.1 of AS 3798 – 2007.

The testing commenced at finished subgrade level and has extended to finished fill level within lots 1524, 1525 & 1526. The levels given in the reports are approximate levels and some small variation in levels may be expected over each individual lot.

The Level 1 Inspections and Testing covers house lots 1524, 1525 & 1526 only.

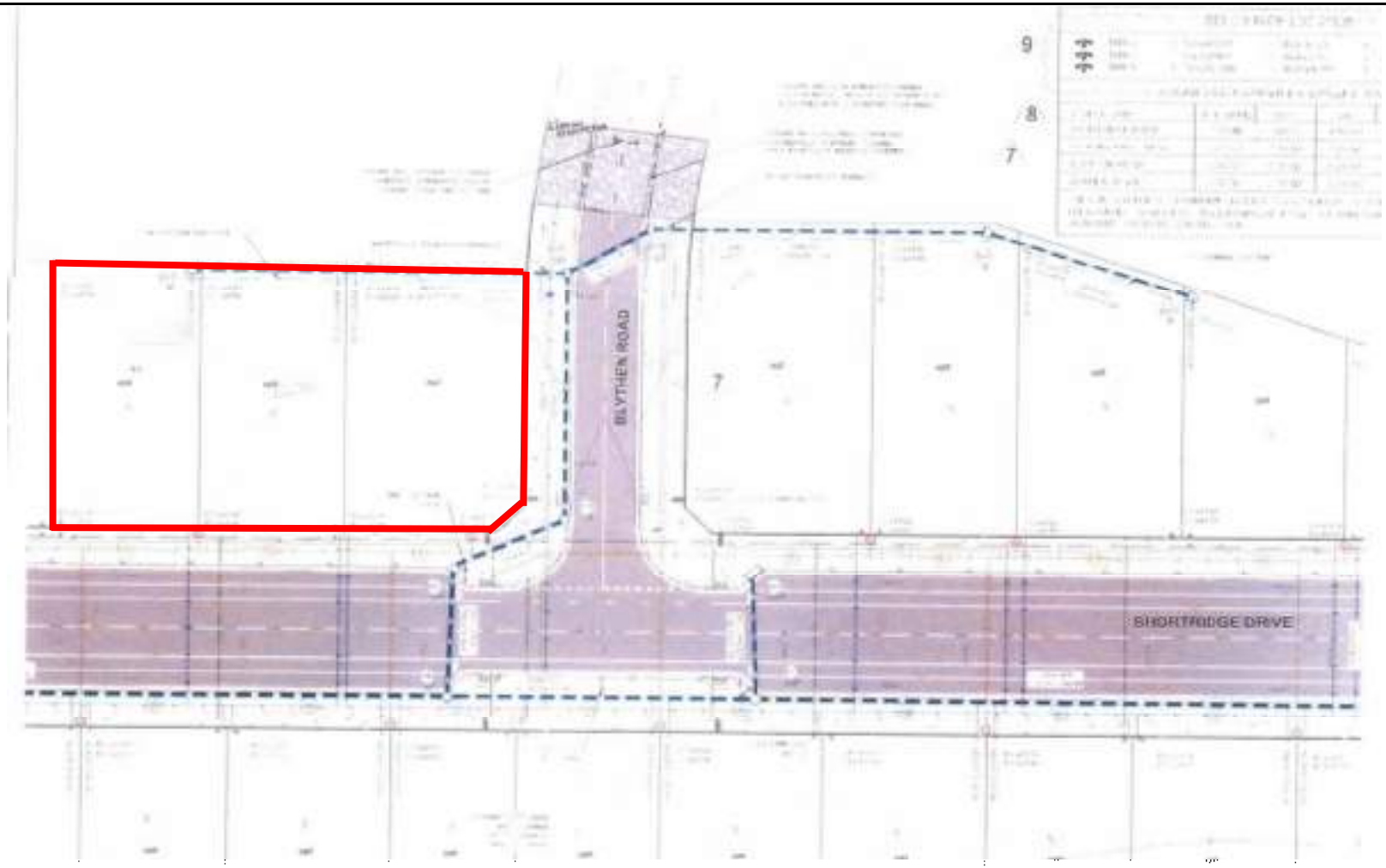
Based on the inspection and testing carried out by this office between the 3/2/20 and 5/2/20, the fill placed on the above mentioned lots satisfies the requirements of AS 3798 SECTION 8.2 and therefore can be categorised as controlled fill.

Our reports, daily reports and site plans – 120208/B002, B004 & B006 covers the above mentioned lots.

Should any point remain in doubt please do not hesitate to contact us.

Yours faithfully,

D.C.Gunn AMIEAust CEngA
REGIONAL MANAGER
A.S. JAMES PTY LTD



A.S. JAMES PTY LTD
Geotechnical Engineers

JOB: Lots 1524, 1525 & 1526 Shortridge Drive, Lucas

JOB No: 120208 **Date:** February '20

LEGEND

Denotes approximate extent of level 1 supervision and testing

A.S James does not warrant the accuracy or completeness of the information displayed within this figure and any person using it does so at thier own risk. A.S James shall bear no responsibility or liability of any errors , faults, defects or omissions in information. The above is for indicative purposes only & is not to scale.

CHECKED: D.Gunn
DRAWN: A.White

SHORTRIDGE DRIVE, LUCAS

A4

Figure 1

A.S.JAMES PTY. LTD.

A.C.N.004 584 534 A.B.N. 40 004 584 534

Geotechnical Engineers

SINCE 1963

BALLARAT OFFICE:
P.O. Box 1319
BAKERY HILL Vic 3354
03 5333 5911
ballarat@asjames.com.au

S.A. OFFICE:
1/12 Theen Avenue
WILLASTON SA 5118
08 8504 7467
asjlabsa@asjames.com.au

VIC HEAD OFFICE:
15 Libbett Avenue
Clayton South Vic 3169
Office 03 95474811
melb@asjames.com.au
Laboratory 03 95624709
lab@asjames.com.au

Pipecon
48 Icon Drive
DELACOMBE VIC 3356

Date: 30/3/20

Ref : 120208/B009

Marked attention to. Jayson Frawley

Purchase Order No :

RE: Shortridge Drive
Lucas

We enclose Report 120208 B009 being results of field and laboratory testing, along with level one supervision, carried out on the above project on 11/3/20

Our Invoice is also enclosed.

Yours faithfully,

T.J. HOLT MIEAust CPEng
NER APEC Eng IntPE (Aus) EC-1022
A.S. JAMES PTY LTD

A.S. JAMES PTY.LTD **Geotechnical Engineers** **Ballarat Facility** **P.O. Box 1319 Bakery Hill Vic.**	**JOB:** Shortridge Drive Lucas	**Job No.** 120208 **Report No.** B009 **Date** 13-Mar-20

Section Tested: House Lots

FOR
Pipecon Pty Ltd
48 Icon Drive
DELACOMBE VIC 3356

Test Number		41	42	43	44		
Date of Test		11/03/20	11/03/20	11/03/20	11/03/20		
Time of Test		11:06	11:13	11:23	11:38		
Location	Chainage:	See	See	See	See		
	Offset:	Sketch	Sketch	Sketch	Sketch		
Depth of Test		300	300	300	300		
Probe Depth (mm)		275	275	275	275		
Material Type		Silty CLAY, Gravelly	Silty CLAY, Gravelly	Silty CLAY, Gravelly	Silty CLAY, Gravelly		
Maximum Converted Wet Density (t/m3)		1.96	2.01	1.96	1.96		
Optimum Moisture Content (%)		24.0	25.0	23.5	23.5		
Field Wet Density (t/m3)		2.05	2.11	2.06	2.05		
Field Dry Density (t/m3)		1.69	1.72	1.68	1.69		
Field Moisture Content (%)		21.0	23.0	22.5	21.5		
Oversize Material (%)		0	0	0	0		
Compaction Type		Standard	Standard	Standard	Standard		
Oversize Retained on :		19mm	19mm	19mm	19mm		
Moisture Ratio (%)		88.5	92.0	95.0	90.5		
Moisture Variation (%)		2.5	2.0	1.0	2.0		
Wet/Dry of Optimum		Dry	Dry	Dry	Dry		
Hilf Density Ratio		**104.0**	**105.0**	**105.0**	**104.5**		

Notes: DEPTH OF TEST TAKEN FROM BELOW FINISHED FILL LEVEL

NATA

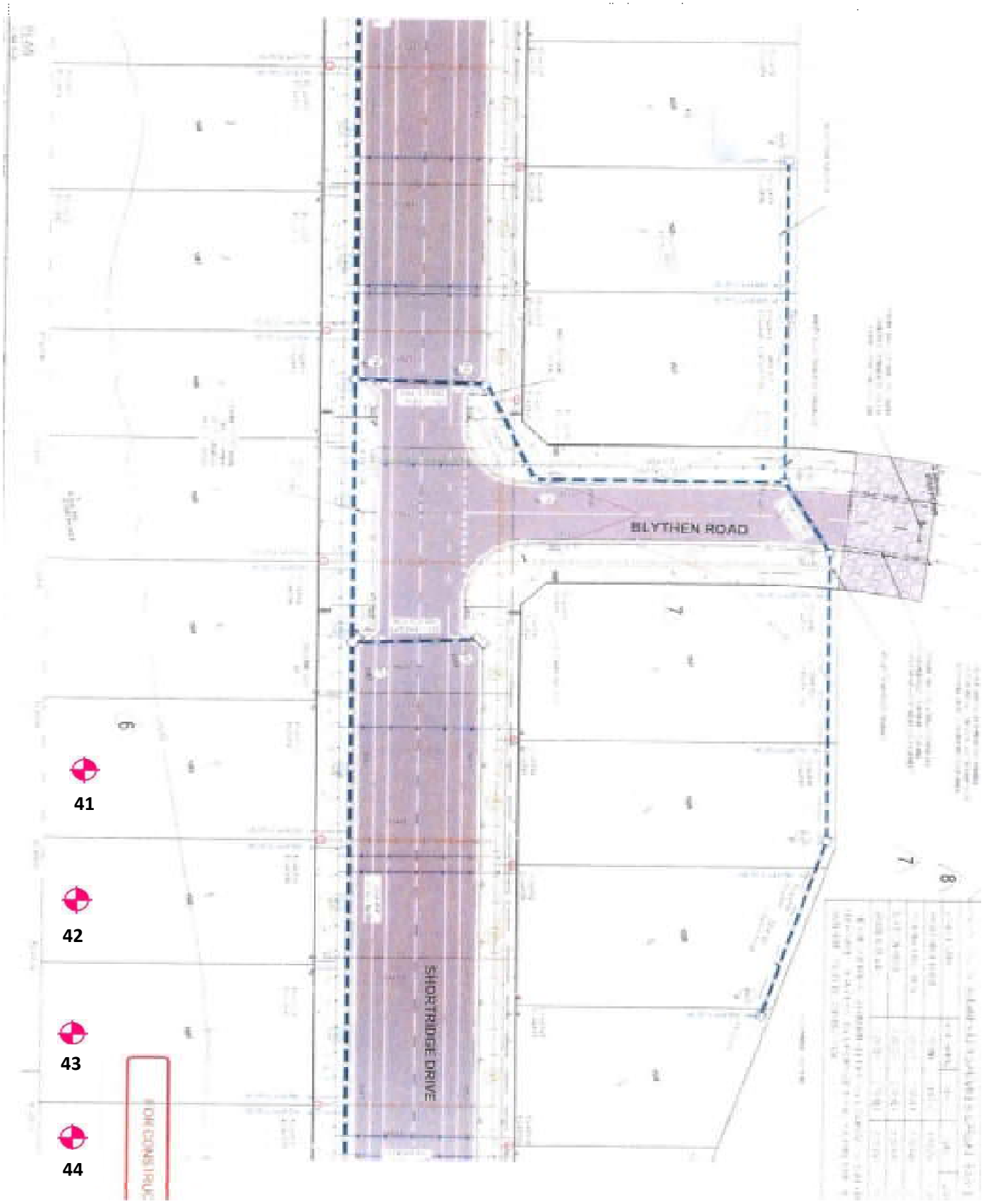
Accredited for compliance with ISO/IEC 17025 - Testing
Accreditation No 9855

Approved Signatory
D.Gunn

13-Mar-20

HILF DENSITY/MOISTURE RATIO, NUCLEAR GAUGE METHOD AS PER AS1289 - 1.1, 1.2.1(6.4),2.1.1,5.7.1,5.8.1 A.S.JAMES FORM No: LR005 FIG 1 / REV 9 / 10/01/17	TESTED BY : CHECKED BY:	J.Murphy A.White	FIGURE 1 of 2

A.S. JAMES PTY.LTD Geotechnical Engineers Ballarat Facility P.O. Box 1319 Bakery Hill Vic. Accreditation No 9855	JOB: Shortridge Drive Lucas	Job No. 120208 Report No. B009 Date 13-Mar-20



TEST LOCATIONS
DISTANCES GIVEN IN METRES

N.T.S

HILF DENSITY/MOISTURE RATIO, NUCLEAR GAUGE METHOD AS PER AS1289 - 1.1, 1.2.1(6.4),2.1.1,5.7.1,5.8.1 A.S.JAMES FORM No: LR005 FIG 3 / REV 3 / 30/01/03	TESTED BY : J.Murphy CHECKED BY: A.White	FIGURE 2 of 2

A.S. JAMES PTY. LTD. Geotechnical Engineers Ballarat Laboratory Reg No.-9855	JOB: Shortridge Drive Lucas	JOB No: 120208 REPORT No: B009/1 DATE: 13/03/2020

DAILY GEOTECHNICAL ACTIVITY REPORT

On Site :- 10:45 Off Site : 11:45

Developer :	Constructor: Pipecon	Superintendent: Shaun
Testing Authority: A.S.James Pty Ltd	Level of GTA brief:	Level one Supervision by Testing Authority
Weather Conditions: Fine, sunny		

Equipment on Site	In Use	Not in Use		In Use	Not in Use
Excavator	√		Water cart (small)	√	
Pad Foot vibrating roller			D6 Dozer		
815 Compactor	√		Dump Truck (On Site)	√	
Grader			Scraper		

Works in progress

	Location
Stripping	
Excavating	
Filling	House Lots
Rolling	House Lots

Comments, Details & Observations:

The constructor has placed an approximate 300mm layer across house lots 1500-1503. The constructor is using site won material. One test was taken on each house lot, with material appearing well compacted but slightly dry of optimum moisture content. The constructor has been advised to await laboratory results before placing the final layer across these lots.

Inspections

Inspection Type & Location:

Comments & Details:

Material Type / Quality / Source / Approval:

Compaction Testing:

Numbers performed	4	Test No.s	41-44	Location	House Lots
Numbers performed		Test No.s		Location	
Numbers performed		Test No.s		Location	

Specification Requirements Standard / Modified: STD; Density Ratio (%): 95; Moisture Ratio (%): 85-115

Compliance to Specification

	Conforming Tests	Non Conforming Tests
Density	41, 42, 43, 44	
Moisture	41, 42, 43, 44	

Site Instructions Given (Tick box)

Approval to Place Fill [√] Filling Methods Approved [√] Rework / Re-roll required [ ]
Stripped surface ~~Not~~ / Approved [√] Filled Area Under Review [ ] Moisture Conditioning required [ ]

Comments & Details

Level 1 supervision daily geotechnical report summary A.S.JAMES LW053 (Fig 2) / REV 1 / 21/5/14	Operator: J.Murphy Date: 11/3/20

A.S.JAMES PTY. LTD.

A.C.N.004 584 534 A.B.N. 40 004 584 534

Geotechnical Engineers

SINCE 1963

BALLARAT OFFICE:
P.O. Box 1319
BAKERY HILL Vic 3354
03 5333 5911
ballarat@asjames.com.au

S.A. OFFICE:
1/12 Theen Avenue
WILLASTON SA 5118
08 8504 7467

VIC HEAD OFFICE:
15 Libbett Avenue
Clayton South Vic 3169
Office 03 95474811
melb@asjames.com.au
Laboratory 03 95624709
lab@asjames.com.au

Pipecon Pty Ltd
48 Icon Drive
DELACOMBE VIC 3356

Date: 18/5/2020

Ref : 120208 B023

Marked attention to. Jayson Frawley

Purchase Order No :

RE: Shortridge Drive
Lucas

We enclose Reports 120208 B019, B021 & B023 being results of field and laboratory testing, along with level one superv carried out on the above project between 11/5/2020 and 13/5/2020

Our Invoice is also enclosed.

Yours faithfully,

T.J. HOLT MIEAust CPEng
NER APEC Eng IntPE (Aus) EC-1022
A.S. JAMES PTY LTD

A.S. JAMES PTY.LTD **Geotechnical Engineers** **Ballarat Facility** **P.O. Box 1319 Bakery Hill Vic.**	**JOB:** Shortridge Drive Lucas	**Job No.** 120208 **Report No.** B019 **Date** 18-May-20

Section Tested: House Lot Fill

FOR
Pipecon Pty Ltd
48 Icon Drive
DELACOMBE VIC 3356

Test Number		82					
Date of Test		11/05/20					
Time of Test		14:17					
Location	Chainage:	See					
	Offset:	Sketch					
Depth of Test		600					
Probe Depth (mm)		300					
Material Type		Silty CLAY, Gravelly					
Maximum Converted Wet Density (t/m3)		2.06					
Optimum Moisture Content (%)		21.5					
Field Wet Density (t/m3)		2.13					
Field Dry Density (t/m3)		1.74					
Field Moisture Content (%)		22.5					
Oversize Material (%)		3					
Compaction Type		Standard					
Oversize Retained on :		19mm					
Moisture Ratio (%)		104.5					
Moisture Variation (%)		1.0					
Wet/Dry of Optimum		Wet					
Hilf Density Ratio		**103.0**					

Notes: DEPTH OF TESTS TAKEN FROM BELOW FINISHED FILL LEVEL

NATA

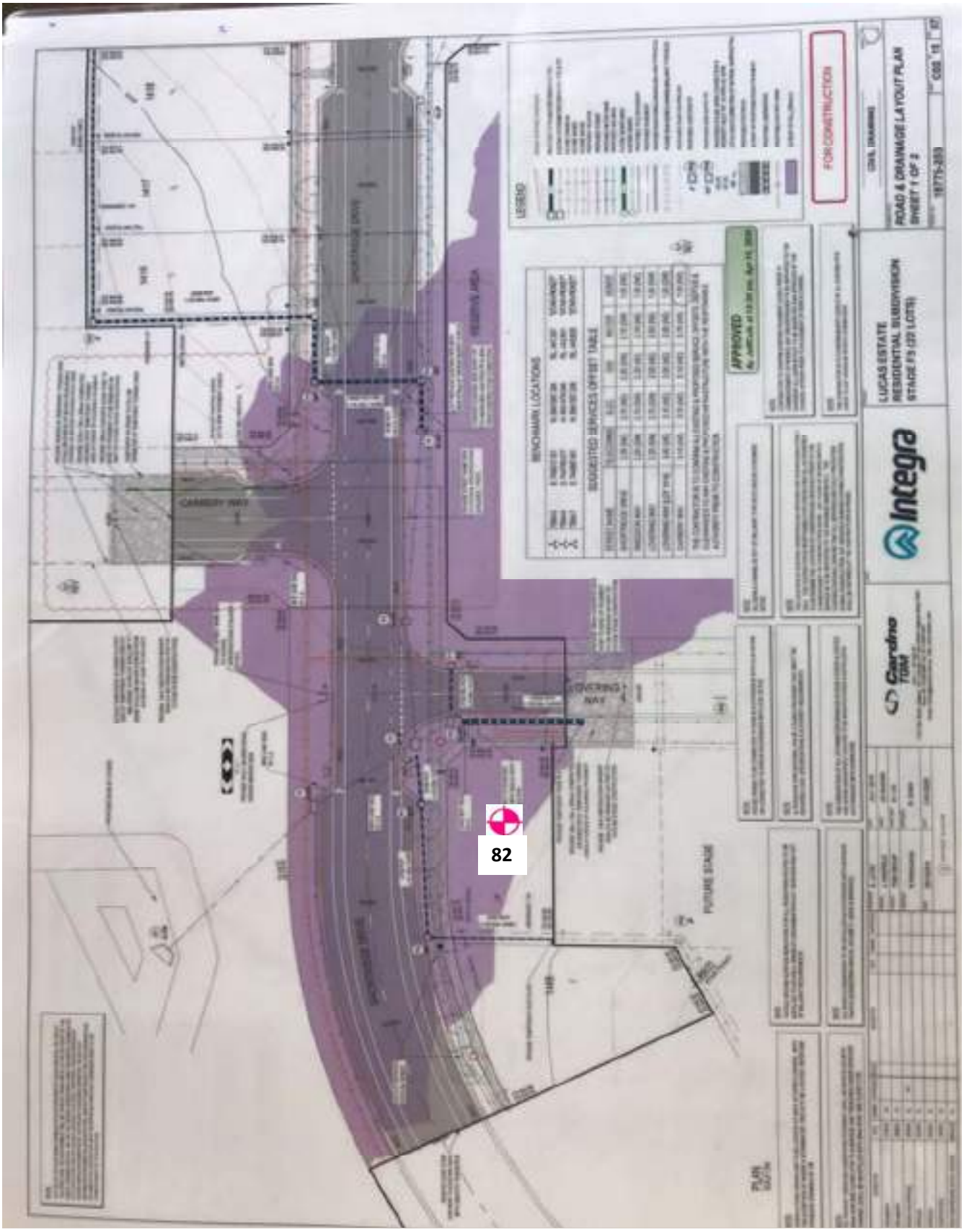
Accredited for compliance with ISO/IEC 17025 - Testing
Accreditation No 9855

Approved Signatory
H.Pyke

18-May-20

HILF DENSITY/MOISTURE RATIO, NUCLEAR GAUGE METHOD AS PER AS1289 - 1.1, 1.2.1(6.4),2.1.1,5.7.1,5.8.1 A.S.JAMES FORM No: LR005 FIG 1 / REV 9 / 10/01/17	TESTED BY : CHECKED BY:	J.Murphy A.White	FIGURE 1 of 2

A.S. JAMES PTY.LTD Geotechnical Engineers Ballarat Facility P.O. Box 1319 Bakery Hill Vic. Accreditation No 9855	JOB: Shortridge Drive Lucas	Job No. 120208 Report No. B019 Date 18-May-20



TEST LOCATIONS

DISTANCES GIVEN IN METRES

N.T.S

HILF DENSITY/MOISTURE RATIO, NUCLEAR GAUGE METHOD	TESTED BY :	J.Murphy	FIGURE
AS PER AS1289 - 1.1, 1.2.1(6.4),2.1.1,5.7.1,5.8.1			
A.S.JAMES FORM No: LR005 FIG 3 / REV 3 / 30/01/03	CHECKED BY:	A.White	2 of 2

A.S. JAMES PTY. LTD. **Geotechnical Engineers** **Ballarat Laboratory Reg No.-9855**	**JOB:** Shortridge Drive Lucas	JOB No: 120208 REPORT No: B019/1 DATE: 18/05/2020

DAILY GEOTECHNICAL ACTIVITY REPORT

On Site :- 14:00 Off Site : 14:30

Developer :	Constructor: Pipecon	Superintendent: Shaun
Testing Authority: A.S.James Pty Ltd	Level of GTA brief:	Level one Supervision by Testing Authority
Weather Conditions: Sunny, windy		

Equipment on Site	In Use	Not in Use		In Use	Not in Use
Excavator	√		Water cart (small)	√	
Pad Foot vibrating roller	√		D6 Dozer		
815 Compactor	√		Dump Truck (On Site)	√	
Grader		√	Scraper		

Works in progress

	Location
Stripping	
Excavating	
Filling	House Lot
Rolling	House Lot

Comments, Details & Observations:

The constructor has placed the first layer of material on house lot 1414. One test was carried out on this lot. Material appears well compacted and well moisture conditioned. The constructor was given approval to place the next layer.

Inspections

Inspection Type & Location:

Visual Inspection - House Lot 1414

Comments & Details:

The constructor has excavated a test pit on house lot 1414. The constructor has exposed the natural silty clay subgrade in this pit. It appears as though the constructor has removed the majority of the silt/topsoil and exposed the underlying natural clay, however the exposed base was not inspected prior to commencement of fill placement.

Material Type / Quality / Source / Approval:

Site won material - CLAY, Silty, Gravelly, contains some oversize rocks

Compaction Testing:

Numbers performed	1	Test No.s	82	Location	House Lot Fill
Numbers performed		Test No.s		Location	
Numbers performed		Test No.s		Location	

Specification Requirements

Standard / Modified		Density Ratio (%)	95
	STD	Moisture Ratio (%)	85-115

Compliance to Specification

	Conforming Tests	Non Conforming Tests
Density	82	
Moisture	82	

Site Instructions Given (Tick box)

Approval to Place Fill [√] Filling Methods Approved [√] Rework / Re-roll required [ ]

Stripped surface ~~Not~~ / Approved [√] Filled Area Under Review [ ] Moisture Conditioning required [ ]

Comments & Details

Level 1 supervision daily geotechnical report summary A.S.JAMES LW053 (Fig 2) / REV 1 / 21/5/14	Operator: J.Murphy Date: 11/5/2020

A.S. JAMES PTY.LTD **Geotechnical Engineers** **Ballarat Laboratory** **73-77 Humffray Street North** **Accreditation No. 9855**	**JOB:** Shortridge Drive Lucas	**Job No.** 120208 **Report No.** B019/1 **Date** 18-May-20

Lot 1414 test pit

N.T.S

Site Location Plan	TESTED BY : J.Murphy CHECKED BY: A.White	FIGURE 2

A.S. JAMES PTY.LTD **Geotechnical Engineers** **Ballarat Facility** **P.O. Box 1319 Bakery Hill Vic.**	**JOB:** Shortridge Drive Lucas	**Job No.** 120208 **Report No.** B021 **Date** 18-May-20

Section Tested: House Lot Fill

FOR
Pipecon Pty Ltd
48 Icon Drive
DELACOMBE VIC 3356

Test Number		87					
Date of Test		12/05/20					
Time of Test		14:12					
Location	Chainage:	See					
	Offset:	Sketch					
Depth of Test		300					
Probe Depth (mm)		300					
Material Type		Silty CLAY, Gravelly					
Maximum Converted Wet Density (t/m3)		2.07					
Optimum Moisture Content (%)		21.5					
Field Wet Density (t/m3)		1.99					
Field Dry Density (t/m3)		1.64					
Field Moisture Content (%)		21.5					
Oversize Material (%)		0					
Compaction Type		Standard					
Oversize Retained on :		19mm					
Moisture Ratio (%)		98.5					
Moisture Variation (%)		0.5					
Wet/Dry of Optimum		Dry					
Hilf Density Ratio		**96.0**					

Notes: DEPTH OF TESTS TAKEN FROM BELOW FINISHED FILL LEVEL

NATA

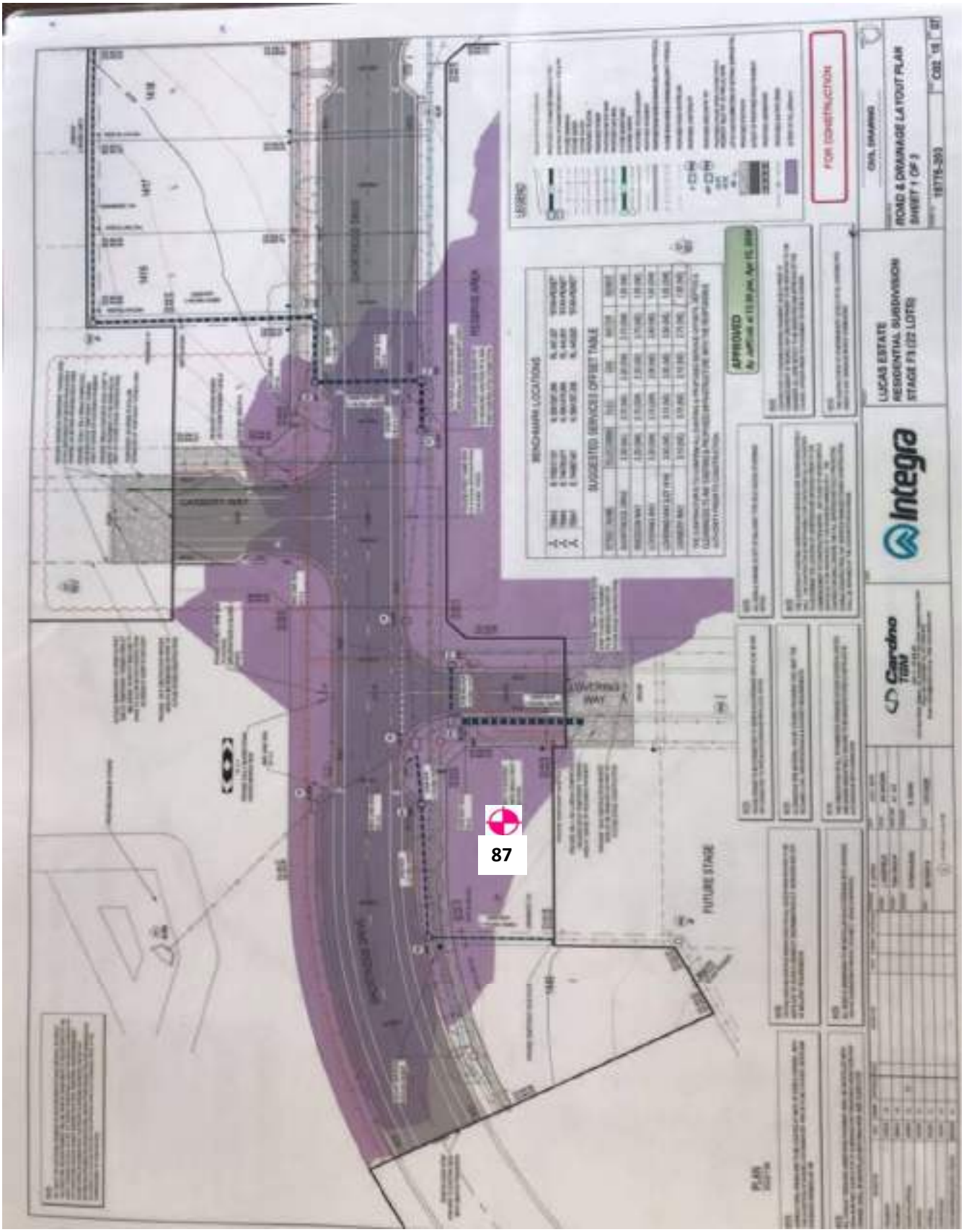
Accredited for compliance with ISO/IEC 17025 - Testing
Accreditation No 9855

Approved Signatory
H.Pyke

18-May-20

HILF DENSITY/MOISTURE RATIO, NUCLEAR GAUGE METHOD AS PER AS1289 - 1.1, 1.2.1(6.4),2.1.1,5.7.1,5.8.1 A.S.JAMES FORM No: LR005 FIG 1 / REV 9 / 10/01/17	TESTED BY : CHECKED BY:	J.Murphy A.White	FIGURE 1 of 2

A.S. JAMES PTY.LTD Geotechnical Engineers Ballarat Facility P.O. Box 1319 Bakery Hill Vic. Accreditation No 9855	JOB: Shortridge Drive Lucas	Job No. 120208 Report No. B021 Date 18-May-20



TEST LOCATIONS

DISTANCES GIVEN IN METRES

N.T.S

HILF DENSITY/MOISTURE RATIO, NUCLEAR GAUGE METHOD AS PER AS1289 - 1.1, 1.2.1(6.4),2.1.1,5.7.1,5.8.1 A.S.JAMES FORM No: LR005 FIG 3 / REV 3 / 30/01/03	TESTED BY : J.Murphy CHECKED BY: A.White	FIGURE 2 of 2

A.S. JAMES PTY. LTD. Geotechnical Engineers Ballarat Laboratory Reg No.-9855	JOB: Shortridge Drive Lucas	JOB No: 120208 REPORT No: B021/1 DATE: 18/05/2020

DAILY GEOTECHNICAL ACTIVITY REPORT

On Site :- 13:45 Off Site : 14:15

Developer :	Constructor: Pipecon	Superintendent: Shaun
Testing Authority: A.S.James Pty Ltd	Level of GTA brief:	Level one Supervision by Testing Authority
Weather Conditions: Sunny, windy		

Equipment on Site	In Use	Not in Use		In Use	Not in Use
Excavator	√		Water cart (small)	√	
Pad Foot vibrating roller	√		D6 Dozer		
815 Compactor	√		Dump Truck (On Site)	√	
Grader	√		Scraper		

Works in progress

	Location
Stripping	
Excavating	
Filling	House Lot
Rolling	House Lot

Comments, Details & Observations:

The constructor has placed the next layer of material on house lot 1414. One test was carried out on this lot. Material appears well compacted and well moisture conditioned. The constructor was given approval to place the next layer.

Inspections

Inspection Type & Location:

Comments & Details:

Material Type / Quality / Source / Approval:

Site won material - CLAY, Silty, Gravelly, contains some oversize rocks

Compaction Testing:

Numbers performed	1	Test No.s	87	Location	House Lot Fill
Numbers performed		Test No.s		Location	
Numbers performed		Test No.s		Location	

Specification Requirements	Standard / Modified	Density Ratio (%)	95
	STD	Moisture Ratio (%)	85-115

Compliance to Specification

	Conforming Tests	Non Conforming Tests
Density	87	
Moisture	87	

Site Instructions Given (Tick box)

Approval to Place Fill [√] Filling Methods Approved [√] Rework / Re-roll required [ ]

Stripped surface ~~Not~~ / Approved [√] Filled Area Under Review [ ] Moisture Conditioning required [ ]

Comments & Details

Level 1 supervision daily geotechnical report summary A.S.JAMES LW053 (Fig 2) / REV 1 / 21/5/14	Operator: J.Murphy Date: 12/5/2020

A.S. JAMES PTY.LTD Geotechnical Engineers Ballarat Laboratory 73-77 Humffray Street North Accreditation No. 9855	JOB: Shortridge Drive Lucas	Job No. 120208 Report No. B021/1 Date 18-May-20

Lot 1414 test pad

N.T.S

Site Location Plan	TESTED BY : J.Murphy CHECKED BY: A.White	FIGURE 2

A.S. JAMES PTY.LTD **Geotechnical Engineers** **Ballarat Facility** **P.O. Box 1319 Bakery Hill Vic.**	**JOB:** Shortridge Drive Lucas	**Job No.** 120208 **Report No.** B023 **Date** 18-May-20

Section Tested: House Lot Fill

FOR
Pipecon Pty Ltd
48 Icon Drive
DELACOMBE VIC 3356

Test Number		92	93	94	95	96	
Date of Test		13/05/20	13/05/20	13/05/20	13/05/20	13/05/20	
Time of Test		14:39	15:03	15:05	15:07	15:09	
Location	Chainage:	See	See	See	See	See	
	Offset:	Sketch	Sketch	Sketch	Sketch	Sketch	
Depth of Test		FFL	FFL	FFL	FFL	FFL	
Probe Depth (mm)		300	300	300	300	300	
Material Type		Silty CLAY, Gravelly	Silty CLAY, Gravelly	Silty CLAY, Gravelly	Silty CLAY, Gravelly	Silty CLAY, Gravelly	
Maximum Converted Wet Density (t/m3)		2.02	2.00	2.04	2.05	2.08	
Optimum Moisture Content (%)		25.0	25.0	27.0	23.5	21.5	
Field Wet Density (t/m3)		2.07	2.03	2.09	2.14	2.13	
Field Dry Density (t/m3)		1.64	1.60	1.65	1.73	1.74	
Field Moisture Content (%)		26.0	27.0	27.0	24.0	22.0	
Oversize Material (%)		2	0	2	0	0	
Compaction Type		Standard	Standard	Standard	Standard	Standard	
Oversize Retained on :		19mm	19mm	19mm	19mm	19mm	
Moisture Ratio (%)		104.0	109.0	100.5	101.5	101.0	
Moisture Variation (%)		1.0	2.0	0.0	0.5	0.0	
Wet/Dry of Optimum		Wet	Wet	Wet	Wet	Wet	
Hilf Density Ratio		**102.0**	**101.5**	**103.0**	**104.5**	**102.0**	

Notes: DEPTH OF TESTS TAKEN FROM FINISHED FILL LEVEL

NATA

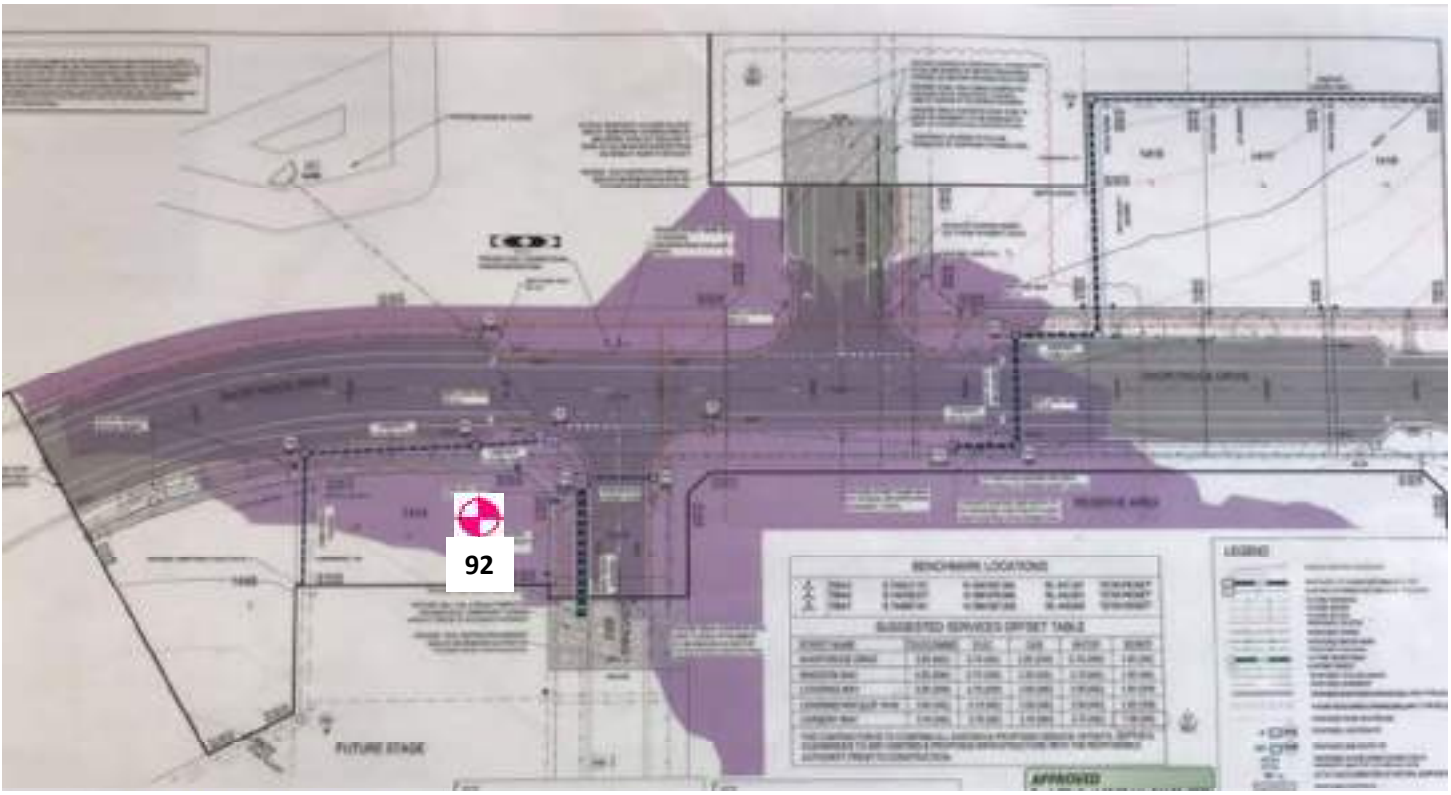
Accredited for compliance with ISO/IEC 17025 - Testing
Accreditation No 9855

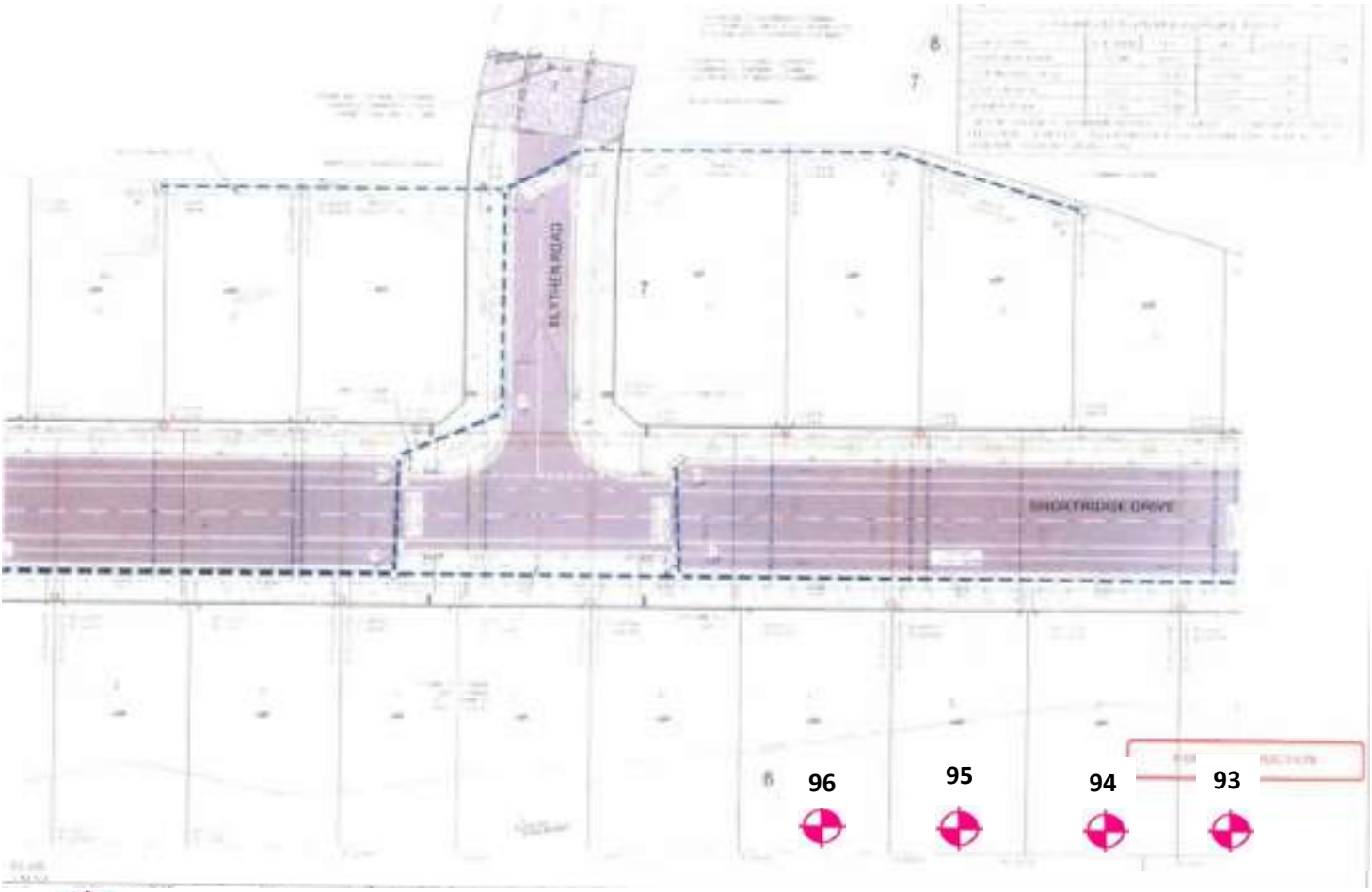
Approved Signatory
H.Pyke

18-May-20

HILF DENSITY/MOISTURE RATIO, NUCLEAR GAUGE METHOD AS PER AS1289 - 1.1, 1.2.1(6.4),2.1.1,5.7.1,5.8.1 A.S.JAMES FORM No: LR005 FIG 1 / REV 9 / 10/01/17	TESTED BY : CHECKED BY:	J.Murphy A.White	FIGURE 1 of 2

A.S. JAMES PTY.LTD Geotechnical Engineers Ballarat Facility P.O. Box 1319 Bakery Hill Vic. Accreditation No 9855	JOB: Shortridge Drive Lucas	Job No. 120208 Report No. B023 Date 18-May-20





TEST LOCATIONS
DISTANCES GIVEN IN METRES

N.T.S

HILF DENSITY/MOISTURE RATIO, NUCLEAR GAUGE METHOD AS PER AS1289 - 1.1, 1.2.1(6.4),2.1.1,5.7.1,5.8.1 A.S.JAMES FORM No: LR005 FIG 3 / REV 3 / 30/01/03	TESTED BY : J.Murphy CHECKED BY: A.White	FIGURE 2 of 2

A.S. JAMES PTY. LTD. **Geotechnical Engineers** **Ballarat Laboratory Reg No.-9855**	**JOB:** Shortridge Drive Lucas	JOB No: 120208 REPORT No: B023/1 DATE: 18/05/2020

DAILY GEOTECHNICAL ACTIVITY REPORT

On Site :- 14:00 Off Site : 15:30

Developer :	Constructor: Pipecon	Superintendent: Shaun
Testing Authority: A.S.James Pty Ltd	Level of GTA brief:	Level one Supervision by Testing Authority
Weather Conditions: Sunny, windy		

Equipment on Site	In Use	Not in Use		In Use	Not in Use
Excavator	√		Water cart (small)		√
Pad Foot vibrating roller	√		D6 Dozer		
815 Compactor	√		Dump Truck (On Site)	√	
Grader	√		Scraper		

Works in progress

	Location
Stripping	
Excavating	
Filling	House Lot
Rolling	House Lot

Comments, Details & Observations:

The constructor has placed the final layer of material on house lot 1414. One test was carried out on this lot. Material appears well compacted and well moisture conditioned.
Testing was also carried out at finished fill level on lots 1500-1503. One test was taken on each lot with material appearing well moisture conditioned and well compacted.

Inspections

Inspection Type & Location:

Visual Inspection - Subgrade on lots 1500, 1501, 1502 & 1503

Comments & Details:

The constructor has excavated some test pits spread evenly across lots 1500-1503. The constructor has exposed the natural clay subgrade on each test pit. From the test pits excavated it appears as though the constructor has removed the majority of the topsoil/silt and exposed the suitable stiff underlying natural clay, however the exposed base was not inspected prior to commencement of filling works.

Material Type / Quality / Source / Approval:

Site won material - CLAY, Silty, Gravelly, contains some oversize rocks

Compaction Testing:

Numbers performed	5	Test No.s	92-96	Location	House Lot Fill
Numbers performed		Test No.s		Location	
Numbers performed		Test No.s		Location	

Specification Requirements

Standard / Modified		Density Ratio (%)	95
STD		Moisture Ratio (%)	85-115

Compliance to Specification

	Conforming Tests	Non Conforming Tests
Density	92,93,94,95,96	
Moisture	92,93,94,95,96	

Site Instructions Given (Tick box)

Approval to Place Fill [√] Filling Methods Approved [√] Rework / Re-roll required [ ]
Stripped surface ~~Not~~ / Approved [√] Filled Area Under Review [ ] Moisture Conditioning required [ ]

Comments & Details

Level 1 supervision daily geotechnical report summary A.S.JAMES LW053 (Fig 2) / REV 1 / 21/5/14	Operator: J.Murphy/H.Pyke Date: 13/5/2020

A.S. JAMES PTY.LTD **Geotechnical Engineers** **Ballarat Laboratory** **73-77 Humffray Street North** **Accreditation No. 9855**	**JOB:** Shortridge Drive Lucas	**Job No.** 120208 **Report No.** B023/1 **Date** 18-May-20

Lot 1500 test pit

Lot 1501 test pit

Lot 1502 test pit

Lot 1503 test pit

Site Location Plan	TESTED BY : J.Murphy/H.Pyke CHECKED BY: A.White	FIGURE 2

A.S.JAMES PTY.LTD

A.C.N.004 584 534 A.B.N. 40 004 584 534

Geotechnical Engineers

SINCE 1963

15 Libbett Avenue

Clayton South Vic 3169

03 95474811

melb@asjames.com.au

TAX INVOICE

Marked attention to: Jayson Frawley

IN ACCOUNT WITH: Pipecon Pty Ltd

48 Icon Drive

DELACOMBE VIC 3356

Purchase Order No :

Email for Accounts: reception@pipecon.com.au

Invoice No : 120208 / B023

Job Site Contact: Shaun Maher

Job Contact Email: jayson@pipecon.com.au

Date : 18/5/2020

RE: Shortridge Drive

Lucas

This is a Payment claim under the Building and Construction Industry Security of Payment Act 2002

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	B019 11/5/20				
	Level one supervision, including field testing, travel time and reporting	Hr.s.	0.5	$140.00	$70.00
	Laboratory Hilf Density Test, Standard Method	No..	1	$95.00	$95.00
	Inspection undertaken by technician	No.	1	$250.00	$250.00
2	B021 12/5/20				
	Level one supervision, including field testing, travel time and reporting	Hr.s.	0.5	$140.00	$70.00
	Laboratory Hilf Density Test, Standard Method	No..	1	$95.00	$95.00
3	B023 13/5/20				
	Level one supervision, including field testing, travel time and reporting	Hr.s.	1.5	$140.00	$210.00
	Laboratory Hilf Density Test, Standard Method	No..	5	$95.00	$475.00
	Inspection undertaken by technician	No.	1	$250.00	$250.00
		SUB-TOTAL			$1,515.00
		G.S.T. (10%)			$151.50
		TOTAL			$1,666.50

Please arrange payment via EFT
to A.S.James Pty Ltd
BSB - 013 437 Account No.- 3143 17895
Please send remittances to
accounts@asjames.com.au
Thank You

STRICTLY NET-30 DAYS FROM DATE OF INVOICE

A.S.JAMES PTY LTD
A.C.N. 004 584 534 A.B.N. 40 004 584 534
Geotechnical Engineers
SINCE 1963

73-77 Humffray Street
Ballarat Vic 3350
Tel: (613) 5333 5911
Email: ballarat@asjames.com.au

19th May 2020

Pipecon,
48 Icon Drive,
DELACOMBE, VIC, 3356

Ref: 120208
B023

Marked Attention to: Jayson Frawley

RE: Level one supervision & Testing – Lot 1414 Stage F3 and lots 1500-1503 Stage F4, Shortridge Drive, Lucas.

We were commissioned by Shaun Mahar of Pipecon to provide Level one supervision and density testing on excavated areas within the footprints of the proposed house lots contained within Shortridge Drive, Lucas.

We can confirm that our involvement was limited to 'Level 1' as specified in AS 3798 – 2007.

The Standard describes 'Level 1' as follows-

"The primary objective of Level 1 Inspection and Testing is for the geotechnical inspection and testing authority (GITA) to be able to express an opinion on the compliance of the work. The GITA is responsible for ensuring that the inspection and testing is sufficient for this purpose".

All density testing exceeded the requirement of 95% standard density ratio as specified in Table 5.1 of AS 3798 – 2007.

The testing commenced at finished subgrade level and has extended to finished fill level within lots 1414, 1500, 1501, 1502 and 1503. The levels given in the reports are approximate levels and some small variation in levels may be expected over each individual lot.

The Level 1 Inspections and Testing covers house lots 1414 and 1500-1503 only.

Based on the inspection and testing carried out by this office between the 11/3/2020 and 13/5/2020, the fill placed on the above mentioned lots satisfies the requirements of AS 3798 SECTION 8.2 and therefore can be categorised as controlled fill.

Our reports, daily reports and site plans – 120208/B009, B019, B021 & B023 covers the above mentioned lots.

Should any point remain in doubt please do not hesitate to contact us.

Yours faithfully,

D.C.Gunn AMIEAust CEngA
REGIONAL MANAGER
A.S. JAMES PTY LTD

A.S.JAMES PTY LTD
A.C.N. 004 584 534 A.B.N. 40 004 584 534
Geotechnical Engineers
SINCE 1963

73-77 Humffray Street
Ballarat Vic 3350
Tel: (613) 5333 5911
Email: ballarat@asjames.com.au

19th February 2020

Pipecon,
48 Icon Drive,
DELACOMBE, VIC, 3356

Ref: 120208
B006

Marked Attention to: Shaun Mahar

RE: Level one supervision & Testing – Shortridge Drive, Lucas.

We were commissioned by Shaun Mahar of Pipecon to provide Level one supervision and density testing on excavated areas within the footprints of the proposed house lots contained within Shortridge Drive, Lucas.

We can confirm that our involvement was limited to 'Level 1' as specified in AS 3798 – 2007.

The Standard describes 'Level 1' as follows-

"The primary objective of Level 1 Inspection and Testing is for the geotechnical inspection and testing authority (GITA) to be able to express an opinion on the compliance of the work. The GITA is responsible for ensuring that the inspection and testing is sufficient for this purpose".

All density testing exceeded the requirement of 95% standard density ratio as specified in Table 5.1 of AS 3798 – 2007.

The testing commenced at finished subgrade level and has extended to finished fill level within lots 1524, 1525 & 1526. The levels given in the reports are approximate levels and some small variation in levels may be expected over each individual lot.

The Level 1 Inspections and Testing covers house lots 1524, 1525 & 1526 only.

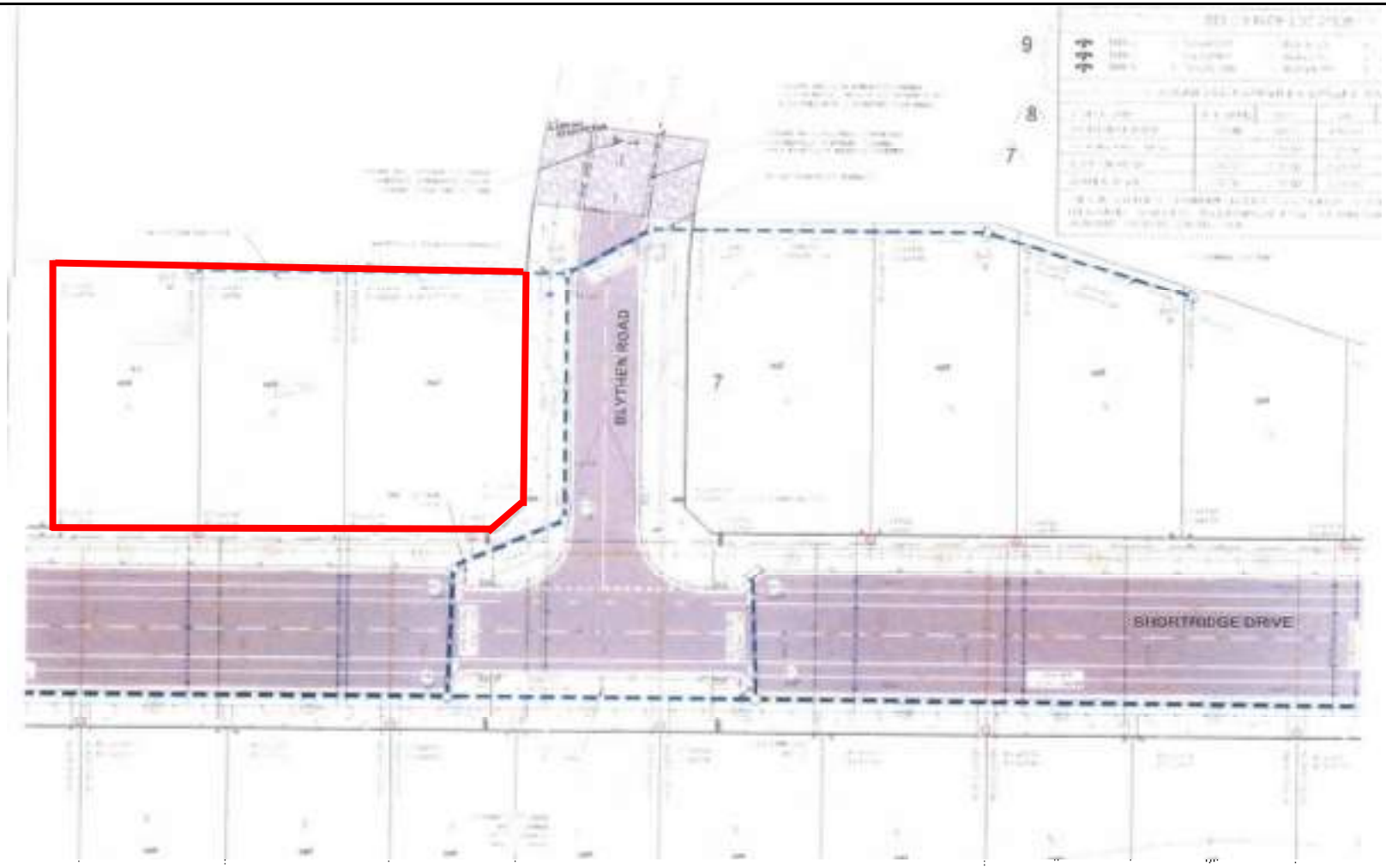
Based on the inspection and testing carried out by this office between the 3/2/20 and 5/2/20, the fill placed on the above mentioned lots satisfies the requirements of AS 3798 SECTION 8.2 and therefore can be categorised as controlled fill.

Our reports, daily reports and site plans – 120208/B002, B004 & B006 covers the above mentioned lots.

Should any point remain in doubt please do not hesitate to contact us.

Yours faithfully,

D.C.Gunn AMIEAust CEngA
REGIONAL MANAGER
A.S. JAMES PTY LTD



A.S. JAMES PTY LTD
Geotechnical Engineers

JOB: Lots 1524, 1525 & 1526 Shortridge Drive, Lucas

JOB No: 120208 **Date:** February '20

LEGEND

Denotes approximate extent of level 1 supervision and testing

A.S James does not warrant the accuracy or completeness of the information displayed within this figure and any person using it does so at thier own risk. A.S James shall bear no responsibility or liability of any errors , faults, defects or omissions in information. The above is for indicative purposes only & is not to scale.

CHECKED: D.Gunn
DRAWN: A.White

SHORTRIDGE DRIVE, LUCAS

A4

Figure 1

A.S.JAMES PTY. LTD.

A.C.N.004 584 534 A.B.N. 40 004 584 534

Geotechnical Engineers

SINCE 1963

BALLARAT OFFICE:
P.O. Box 1319
BAKERY HILL Vic 3354
03 5333 5911
ballarat@asjames.com.au

S.A. OFFICE:
1/12 Theen Avenue
WILLASTON SA 5118
08 8504 7467
asjlabsa@asjames.com.au

VIC HEAD OFFICE:
15 Libbett Avenue
Clayton South Vic 3169
Office 03 95474811
melb@asjames.com.au
Laboratory 03 95624709
lab@asjames.com.au

Pipecon
48 Icon Drive
DELACOMBE VIC 3356

Date: 30/3/20

Ref : 120208/B009

Marked attention to. Jayson Frawley

Purchase Order No :

RE: Shortridge Drive
Lucas

We enclose Report 120208 B009 being results of field and laboratory testing, along with level one supervision, carried out on the above project on 11/3/20

Our Invoice is also enclosed.

Yours faithfully,

T.J. HOLT MIEAust CPEng
NER APEC Eng IntPE (Aus) EC-1022
A.S. JAMES PTY LTD

A.S. JAMES PTY.LTD **Geotechnical Engineers** **Ballarat Facility** **P.O. Box 1319 Bakery Hill Vic.**	**JOB:** Shortridge Drive Lucas	**Job No.** 120208 **Report No.** B009 **Date** 13-Mar-20

Section Tested: House Lots

FOR
Pipecon Pty Ltd
48 Icon Drive
DELACOMBE VIC 3356

Test Number		41	42	43	44		
Date of Test		11/03/20	11/03/20	11/03/20	11/03/20		
Time of Test		11:06	11:13	11:23	11:38		
Location	Chainage:	See	See	See	See		
	Offset:	Sketch	Sketch	Sketch	Sketch		
Depth of Test		300	300	300	300		
Probe Depth (mm)		275	275	275	275		
Material Type		Silty CLAY, Gravelly	Silty CLAY, Gravelly	Silty CLAY, Gravelly	Silty CLAY, Gravelly		
Maximum Converted Wet Density (t/m3)		1.96	2.01	1.96	1.96		
Optimum Moisture Content (%)		24.0	25.0	23.5	23.5		
Field Wet Density (t/m3)		2.05	2.11	2.06	2.05		
Field Dry Density (t/m3)		1.69	1.72	1.68	1.69		
Field Moisture Content (%)		21.0	23.0	22.5	21.5		
Oversize Material (%)		0	0	0	0		
Compaction Type		Standard	Standard	Standard	Standard		
Oversize Retained on :		19mm	19mm	19mm	19mm		
Moisture Ratio (%)		88.5	92.0	95.0	90.5		
Moisture Variation (%)		2.5	2.0	1.0	2.0		
Wet/Dry of Optimum		Dry	Dry	Dry	Dry		
Hilf Density Ratio		**104.0**	**105.0**	**105.0**	**104.5**		

Notes: DEPTH OF TEST TAKEN FROM BELOW FINISHED FILL LEVEL

NATA

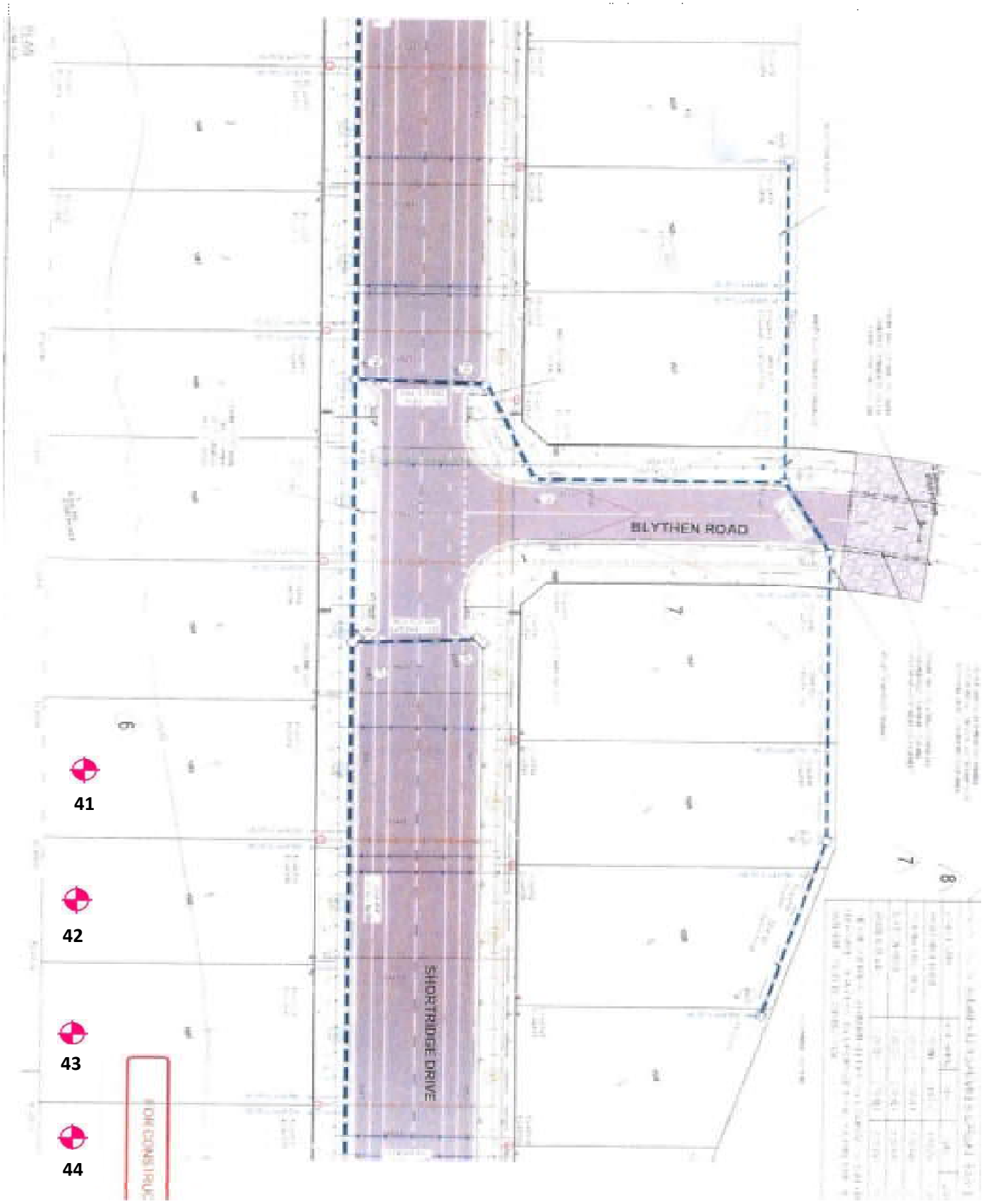
Accredited for compliance with ISO/IEC 17025 - Testing
Accreditation No 9855

Approved Signatory
D.Gunn

13-Mar-20

HILF DENSITY/MOISTURE RATIO, NUCLEAR GAUGE METHOD AS PER AS1289 - 1.1, 1.2.1(6.4),2.1.1,5.7.1,5.8.1 A.S.JAMES FORM No: LR005 FIG 1 / REV 9 / 10/01/17	TESTED BY : CHECKED BY:	J.Murphy A.White	FIGURE 1 of 2

A.S. JAMES PTY.LTD Geotechnical Engineers Ballarat Facility P.O. Box 1319 Bakery Hill Vic. Accreditation No 9855	JOB: Shortridge Drive Lucas	Job No. 120208 Report No. B009 Date 13-Mar-20



TEST LOCATIONS
DISTANCES GIVEN IN METRES

N.T.S

HILF DENSITY/MOISTURE RATIO, NUCLEAR GAUGE METHOD AS PER AS1289 - 1.1, 1.2.1(6.4),2.1.1,5.7.1,5.8.1 A.S.JAMES FORM No: LR005 FIG 3 / REV 3 / 30/01/03	TESTED BY : J.Murphy CHECKED BY: A.White	FIGURE 2 of 2

A.S. JAMES PTY. LTD. Geotechnical Engineers Ballarat Laboratory Reg No.-9855	JOB: Shortridge Drive Lucas	JOB No: 120208 REPORT No: B009/1 DATE: 13/03/2020

DAILY GEOTECHNICAL ACTIVITY REPORT

On Site :- 10:45 Off Site : 11:45

Developer :	Constructor: Pipecon	Superintendent: Shaun
Testing Authority: A.S.James Pty Ltd	Level of GTA brief:	Level one Supervision by Testing Authority
Weather Conditions: Fine, sunny		

Equipment on Site	In Use	Not in Use		In Use	Not in Use
Excavator	√		Water cart (small)	√	
Pad Foot vibrating roller			D6 Dozer		
815 Compactor	√		Dump Truck (On Site)	√	
Grader			Scraper		

Works in progress

	Location
Stripping	
Excavating	
Filling	House Lots
Rolling	House Lots

Comments, Details & Observations:

The constructor has placed an approximate 300mm layer across house lots 1500-1503. The constructor is using site won material. One test was taken on each house lot, with material appearing well compacted but slightly dry of optimum moisture content. The constructor has been advised to await laboratory results before placing the final layer across these lots.

Inspections

Inspection Type & Location:

Comments & Details:

Material Type / Quality / Source / Approval:

Compaction Testing:

Numbers performed	4	Test No.s	41-44	Location	House Lots
Numbers performed		Test No.s		Location	
Numbers performed		Test No.s		Location	

Specification Requirements Standard / Modified: STD; Density Ratio (%): 95; Moisture Ratio (%): 85-115

Compliance to Specification

	Conforming Tests	Non Conforming Tests
Density	41, 42, 43, 44	
Moisture	41, 42, 43, 44	

Site Instructions Given (Tick box)

Approval to Place Fill [√] Filling Methods Approved [√] Rework / Re-roll required [ ]
Stripped surface ~~Not~~ / Approved [√] Filled Area Under Review [ ] Moisture Conditioning required [ ]

Comments & Details

Level 1 supervision daily geotechnical report summary A.S.JAMES LW053 (Fig 2) / REV 1 / 21/5/14	Operator: J.Murphy Date: 11/3/20

A.S.JAMES

PTY. LTD.

BALLARAT OFFICE: **Box 1319** **BAKERY HILL Vic 3354** **Tel:03 5333 5911** **ballarat@asjames. com.au**

P.O **1/12 Theen Avenue** **WILLASTON SA 51** **Tel: 08 8504 7467** **simonb@asjamessa.com.au**

VIC HEAD OFFICE: **15 Libbett Avenue** **Clayton South Vic 3169** **Office Tel: 95474811** **melb@asjames.com.au** **Laboratory Tel: 95624709** **lab@asjames.com.au**

A.C.N.004 584 534 A.B.N. 40 004 584 534

Geotechnical Engineers

SINCE 1963

Pipecon Pty Ltd
48 Icon Drive
Delacombe, VIC, 3356

Date: 19/2/20

Ref : 120208 B006

Marked attention to. Scott Mann

Purchase Order No :

Dear Sirs,

RE: Shortridge Drive
Lucas

We enclose Reports 120208 B002, B004 and B006 being results of field and laboratory testing, along with level one supervision, carried out on the above project between 3/2/20 and 5/2/20

Our Invoice is also enclosed.

Yours faithfully,

T.J.Holt MIEAust
A.S. JAMES PTY. LTD.

A.S. JAMES PTY.LTD **Geotechnical Engineers** **Ballarat Facility** **P.O. Box 1319 Bakery Hill Vic.**	**JOB:** Shortridge Drive Lucas	**Job No.** 120208 **Report No.** B002 **Date** 10-Feb-20

Section Tested: House Lot Fill

FOR
Pipecon Pty Ltd
48 Icon Drive
DELACOMBE VIC 3356

Test Number		8	9	10			
Date of Test		3/02/20	3/02/20	3/02/20			
Time of Test		13:50	13:54	13:59			
Location	Chainage:	See	See	See			
	Offset:	Sketch	Sketch	Sketch			
Depth of Test		600	600	600			
Probe Depth (mm)		275	275	275			
Material Type		CLAY, Silty, Gravelly	CLAY, Silty, Gravelly	CLAY, Silty, Gravelly			
Maximum Converted Wet Density (t/m3)		2.09	2.06	2.08			
Optimum Moisture Content (%)		19.0	20.5	18.0			
Field Wet Density (t/m3)		2.02	2.04	2.07			
Field Dry Density (t/m3)		1.70	1.68	1.75			
Field Moisture Content (%)		18.5	21.0	18.0			
Oversize Material (%)		3	6	7			
Compaction Type		Standard	Standard	Standard			
Oversize Retained on :		19mm	19mm	19mm			
Moisture Ratio (%)		99.5	102.5	99.5			
Moisture Variation (%)		0.0	0.5	0.0			
Wet/Dry of Optimum		Dry	Wet	Dry			
Hilf Density Ratio		**96.5**	**99.0**	**99.5**			

Notes: DEPTH OF TESTS TAKEN FROM BELOW FINISHED FILL LEVEL

NATA

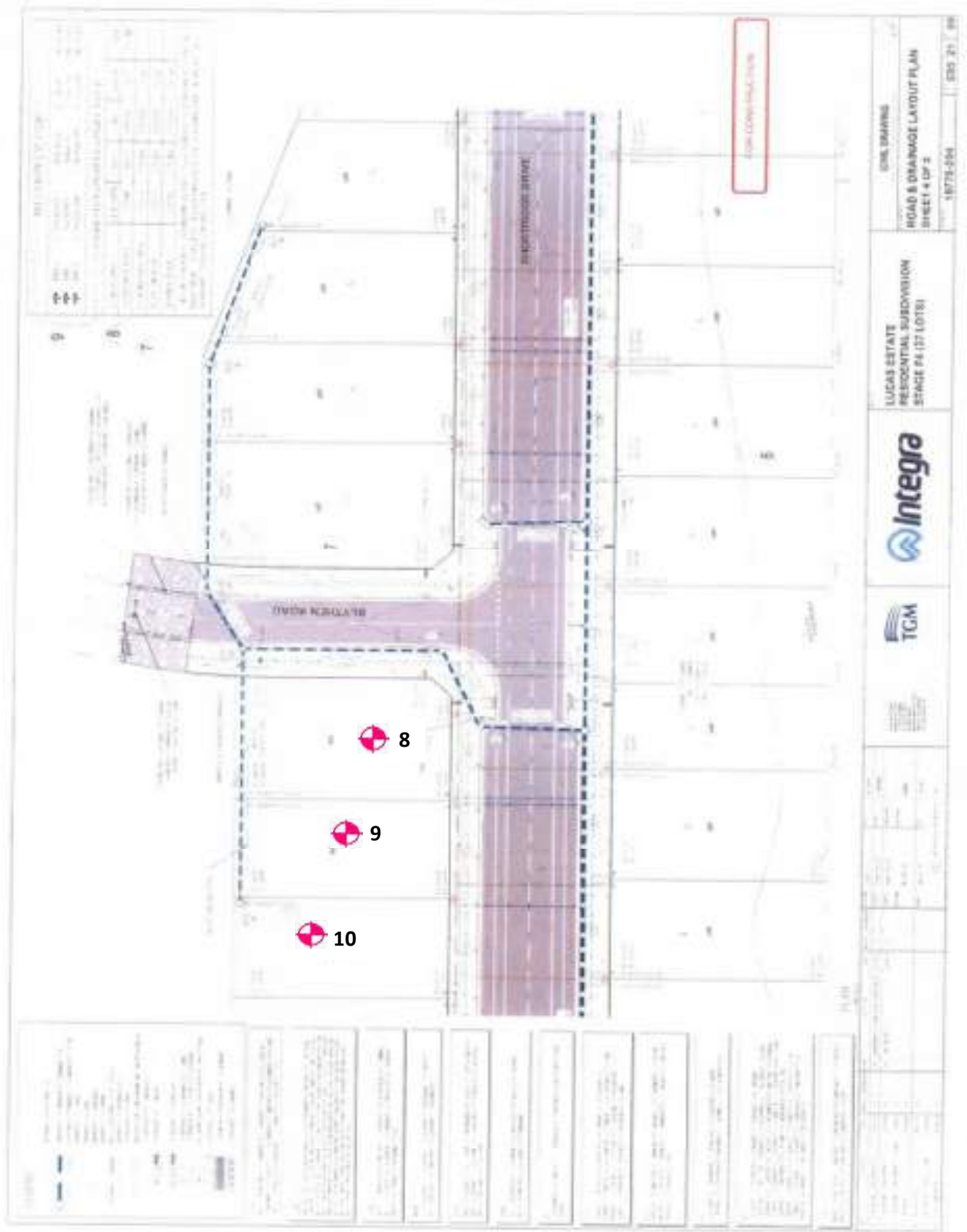
Accredited for compliance with ISO/IEC 17025 - Testing
Accreditation No 9855

Approved Signatory
H.Pyke

10-Feb-20

HILF DENSITY/MOISTURE RATIO, NUCLEAR GAUGE METHOD AS PER AS1289 - 1.1, 1.2.1(6.4),2.1.1,5.7.1,5.8.1 A.S.JAMES FORM No: LR005 FIG 1 / REV 9 / 10/01/17	TESTED BY : CHECKED BY:	T.Reece A.White	FIGURE 1 of 2

A.S. JAMES PTY.LTD Geotechnical Engineers Ballarat Facility P.O. Box 1319 Bakery Hill Vic. Accreditation No 9855	JOB: Shortridge Drive Lucas	Job No. 120208 Report No. B002 Date 10-Feb-20



TEST LOCATIONS
DISTANCES GIVEN IN METRES

N.T.S

HILF DENSITY/MOISTURE RATIO, NUCLEAR GAUGE METHOD AS PER AS1289 - 1.1, 1.2.1(6.4),2.1.1,5.7.1,5.8.1 A.S.JAMES FORM No: LR005 FIG 3 / REV 3 / 30/01/03	TESTED BY : CHECKED BY:	T.Reece A.White	FIGURE 2 of 2

A.S. JAMES PTY. LTD. **Geotechnical Engineers** **Ballarat Laboratory Reg No.-9855**	**JOB:** Shortridge Drive Lucas	JOB No: 120208 REPORT No: B002/1 DATE: 10/02/2020

DAILY GEOTECHNICAL ACTIVITY REPORT | On Site :- 13:00 Off Site : 14:00

Developer :	Constructor: Pipecon	Superintendent: Shaun
Testing Authority: A.S.James Pty Ltd	Level of GTA brief:	Level one Supervision by Testing Authority
Weather Conditions: Sunny, windy		

Equipment on Site	In Use	Not in Use		In Use	Not in Use
Excavator	√		Water cart (small)	√	
Pad Foot vibrating roller			D6 Dozer	√	
815 Compactor	√		Dump Truck (On Site)	√	
Grader			Loader	√	

Works in progress

	Location
Stripping	
Excavating	House Lots
Filling	House Lots
Rolling	House Lots

Comments, Details & Observations:

The constructor has prepared the first layer of material placed on house lots 1524, 1525 and 1526. One density test was completed on each lot. The material tested appears to be well compacted. The material appears to be well moisture conditioned, however may be slightly dry of optimum moisture content. The material contains some small oversize rock. The constructor began placing the next layer of material immediately after testing was completed. This layer will be ready for testing tomorrow morning.

Inspections

Inspection Type & Location:

House lots 1524, 1525 and 1526

Comments & Details:

The constructor has excavated some test pits spread evenly across lots 1524-1526. The constructor has exposed the natural clay subgrade on each test pit. From the test pits excavated, it appears as though the constructor has removed the majority of the silt/topsoil and exposed the underlying natural clay, however the exposed base was not inspected prior to commencement of fill placement.

Material Type / Quality / Source / Approval:

Site won material - Brown silty, gravelly CLAY
The material contains some small oversize.
Some loads of material appear to be very silty.

Compaction Testing:

Numbers performed	3	Test No.s	8-10	Location	House Lots
Numbers performed		Test No.s		Location	
Numbers performed		Test No.s		Location	

Specification Requirements	Standard / Modified	Density Ratio (%)	95
	STD	Moisture Ratio (%)	85-115

Compliance to Specification

	Conforming Tests	Non Conforming Tests
Density	8, 9, 10	
Moisture	8, 9, 10	

Site Instructions Given (Tick box)

Approval to Place Fill [√]	Filling Methods Approved [√]	Rework / Re-roll required [ ]
Stripped surface ~~Not~~ / Approved [√]	Filled Area Under Review [ ]	Moisture Conditioning required [ ]

Comments & Details

Level 1 supervision daily geotechnical report summary A.S.JAMES LW053 (Fig 2) / REV 1 / 21/5/14	Operator: T.Reece/W.Cousens Date: 3/2/20

A.S. JAMES PTY.LTD **Geotechnical Engineers** **Ballarat Laboratory** **73-77 Humffray Street North** **Accreditation No. 9855**	**JOB:** Shortridge Drive Lucas	**Job No.** 120208 **Report No.** B002/1 **Date** 10-Feb-20

House lots

Test pits

N.T.S

Site Location Plan	TESTED BY : TR/WC CHECKED BY: A.White	FIGURE 2

A.S. JAMES PTY.LTD **Geotechnical Engineers** **Ballarat Facility** **P.O. Box 1319 Bakery Hill Vic.**	**JOB:** Shortridge Drive Lucas	**Job No.** 120208 **Report No.** B004 **Date** 10-Feb-20

Section Tested: House Lot Fill

FOR
Pipecon Pty Ltd
48 Icon Drive
DELACOMBE VIC 3356

Test Number		20	21	22			
Date of Test		4/02/20	4/02/20	4/02/20			
Time of Test		8:26	8:32	8:39			
Location	Chainage:	See	See	See			
	Offset:	Sketch	Sketch	Sketch			
Depth of Test		300	300	300			
Probe Depth (mm)		300	300	300			
Material Type		CLAY, Silty, Gravelly	CLAY, Silty, Gravelly	CLAY, Silty, Gravelly			
Maximum Converted Wet Density (t/m3)		2.06	2.03	2.04			
Optimum Moisture Content (%)		24.0	23.5	24.0			
Field Wet Density (t/m3)		2.05	2.05	2.12			
Field Dry Density (t/m3)		1.69	1.69	1.71			
Field Moisture Content (%)		21.5	21.5	24.0			
Oversize Material (%)		11	7	10			
Compaction Type		Standard	Standard	Standard			
Oversize Retained on :		19mm	19mm	19mm			
Moisture Ratio (%)		90.0	90.0	99.0			
Moisture Variation (%)		2.0	2.0	0.0			
Wet/Dry of Optimum		Dry	Dry	Dry			
Hilf Density Ratio		**99.5**	**101.0**	**104.0**			

Notes: DEPTH OF TESTS TAKEN FROM BELOW FINISHED FILL LEVEL

NATA

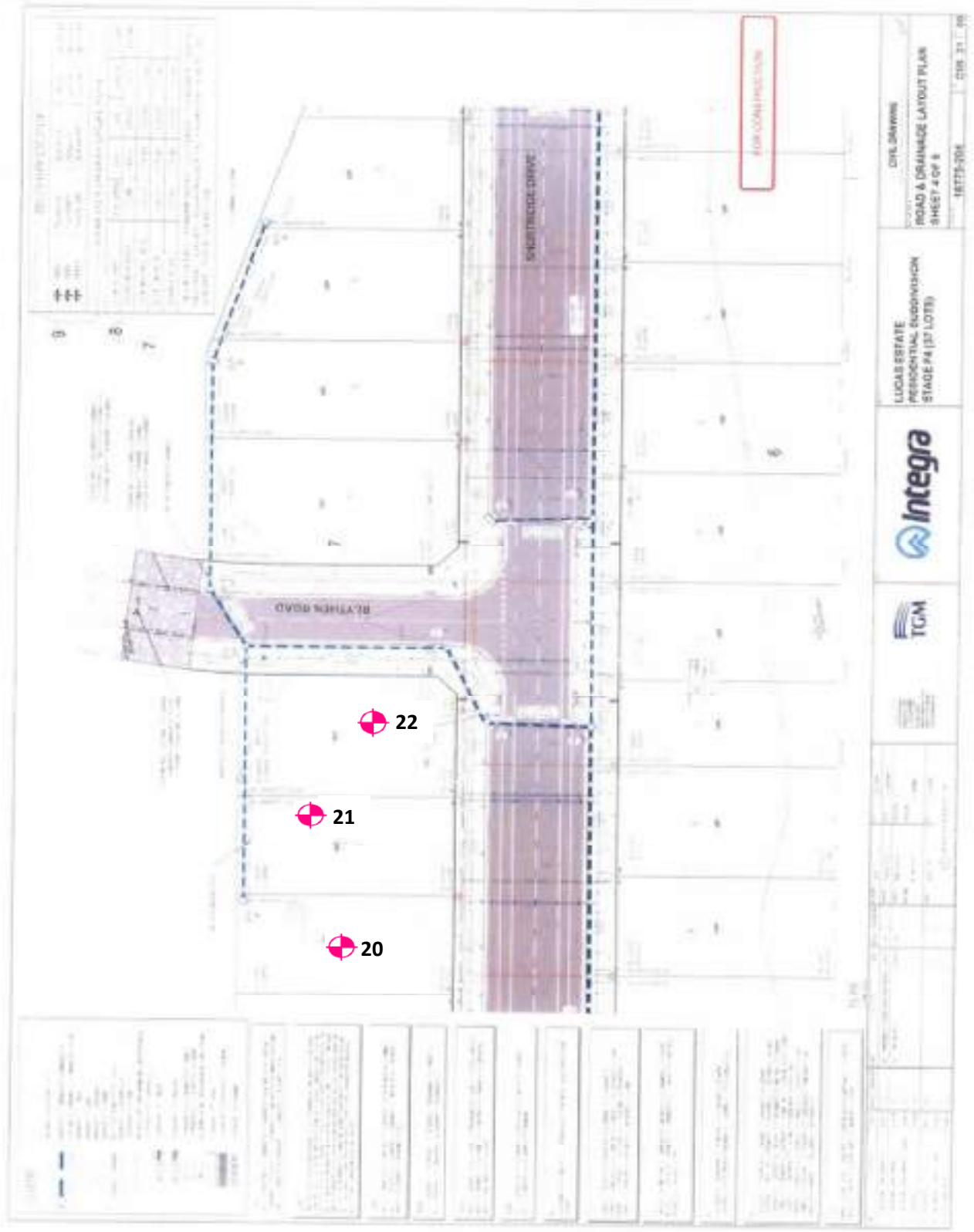
Accredited for compliance with ISO/IEC 17025 - Testing
Accreditation No 9855

Approved Signatory
H.Pyke

10-Feb-20

HILF DENSITY/MOISTURE RATIO, NUCLEAR GAUGE METHOD AS PER AS1289 - 1.1, 1.2.1(6.4),2.1.1,5.7.1,5.8.1 A.S.JAMES FORM No: LR005 FIG 1 / REV 9 / 10/01/17	TESTED BY : CHECKED BY:	J.Murphy A.White	FIGURE 1 of 2

A.S. JAMES PTY.LTD Geotechnical Engineers Ballarat Facility P.O. Box 1319 Bakery Hill Vic. Accreditation No 9855	JOB: Shortridge Drive Lucas	Job No. 120208 Report No. B004 Date 10-Feb-20



TEST LOCATIONS
DISTANCES GIVEN IN METRES

N.T.S

HILF DENSITY/MOISTURE RATIO, NUCLEAR GAUGE METHOD AS PER AS1289 - 1.1, 1.2.1(6.4),2.1.1,5.7.1,5.8.1 A.S.JAMES FORM No: LR005 FIG 3 / REV 3 / 30/01/03	TESTED BY : J.Murphy CHECKED BY: A.White	FIGURE 2 of 2

A.S. JAMES PTY. LTD. **Geotechnical Engineers** **Ballarat Laboratory Reg No.-9855**	**JOB:** Shortridge Drive Lucas	JOB No: 120208 REPORT No: B004/1 DATE: 10/02/2020

DAILY GEOTECHNICAL ACTIVITY REPORT

On Site :- 8:00 Off Site : 9:00

Developer :	Constructor: Pipecon	Superintendent: Shaun
Testing Authority: A.S.James Pty Ltd	Level of GTA brief:	Level one Supervision by Testing Authority
Weather Conditions: Sunny, fine		

Equipment on Site	In Use	Not in Use		In Use	Not in Use
Excavator	√		Water cart (small)	√	
Pad Foot vibrating roller			D6 Dozer	√	
815 Compactor	√		Dump Truck (On Site)	√	
Grader			Scraper		

Works in progress

	Location
Stripping	
Excavating	
Filling	House Lots
Rolling	House Lots

Comments, Details & Observations:

The constructor has placed approximately a 300mm layer across house lots 1524-1526. The constructor is using site won material that contains some oversize rock. One test was taken on each house lot with material appearing well compacted but possibly slightly dry of optimum moisture content. Constructor has been given approval to place the next layer.

Inspections

Inspection Type & Location:

Comments & Details:

Material Type / Quality / Source / Approval:

Compaction Testing:

Numbers performed	3	Test No.s	20-22	Location	House Lots
Numbers performed		Test No.s		Location	
Numbers performed		Test No.s		Location	

Specification Requirements	Standard / Modified	Density Ratio (%)	95
	STD	Moisture Ratio (%)	85-115

Compliance to Specification

	Conforming Tests	Non Conforming Tests
Density	20, 21, 22	
Moisture	20, 21, 22	

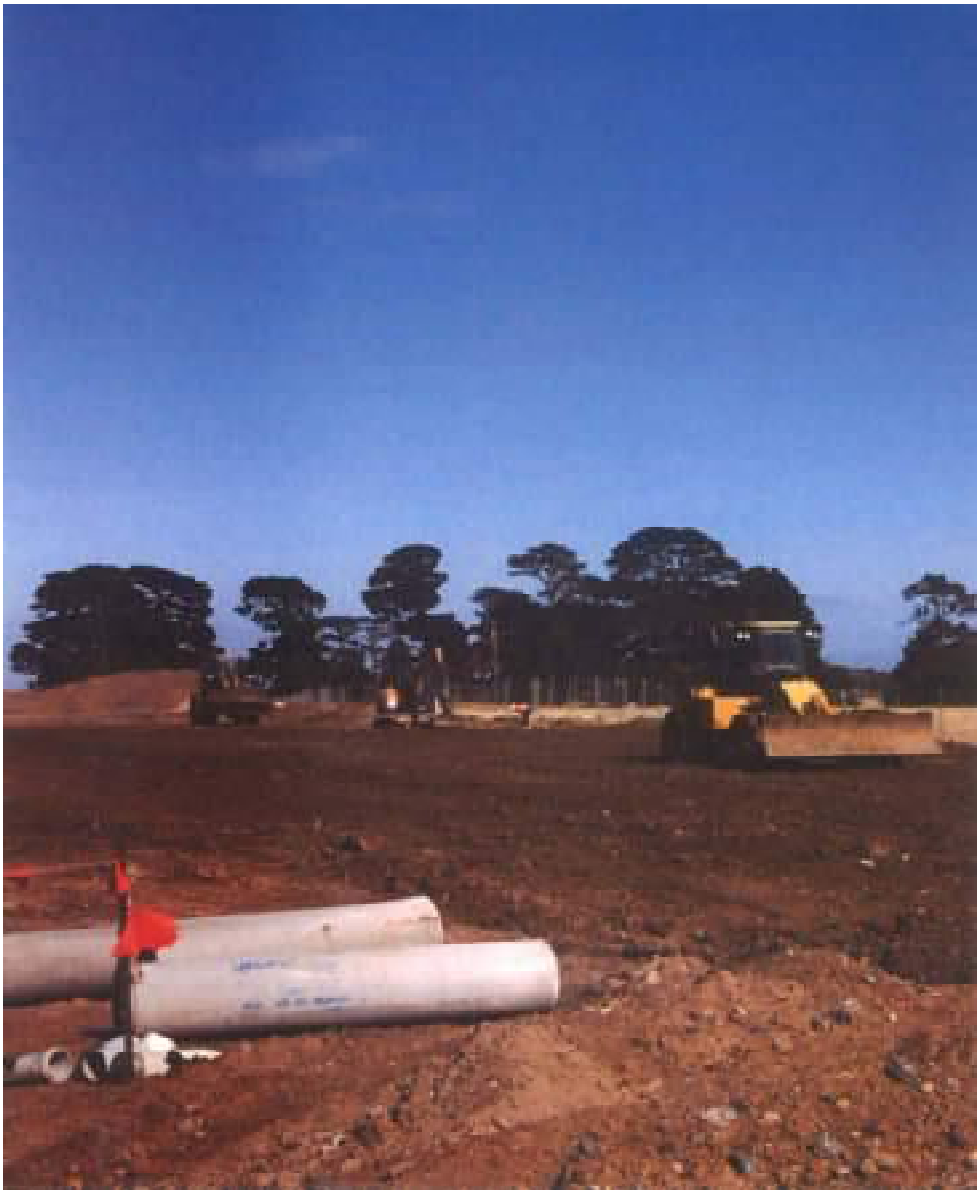
Site Instructions Given (Tick box)

Approval to Place Fill [√]	Filling Methods Approved [√]	Rework / Re-roll required [ ]
Stripped surface ~~Not~~ / Approved [√]	Filled Area Under Review [ ]	Moisture Conditioning required [ ]

Comments & Details

Level 1 supervision daily geotechnical report summary A.S.JAMES LW053 (Fig 2) / REV 1 / 21/5/14	Operator: J.Murphy Date: 4/2/20

A.S. JAMES PTY.LTD Geotechnical Engineers Ballarat Laboratory 73-77 Humffray Street North Accreditation No. 9855	JOB: Shortridge Drive Lucas	Job No. 120208 Report No. B004/1 Date 10-Feb-20



N.T.S

Site Location Plan	TESTED BY : J.Murphy CHECKED BY: A.White	FIGURE 2

A.S. JAMES PTY.LTD **Geotechnical Engineers** **Ballarat Facility** **P.O. Box 1319 Bakery Hill Vic.**	**JOB:** Shortridge Drive Lucas	**Job No.** 120208 **Report No.** B006 **Date** 11-Feb-20

Section Tested: House Lots

FOR
Pipecon Pty Ltd
48 Icon Drive
DELACOMBE VIC 3356

Test Number		32	33	34			
Date of Test		5/02/20	5/02/20	5/02/20			
Time of Test		14:14	14:16	14:18			
Location	Chainage:	See	See	See			
	Offset:	Sketch	Sketch	Sketch			
Depth of Test		FFL	FFL	FFL			
Probe Depth (mm)		300	300	300			
Material Type		CLAY, Silty, Gravelly	CLAY, Silty, Gravelly	CLAY, Silty, Gravelly			
Maximum Converted Wet Density (t/m3)		2.02	2.02	2.11			
Optimum Moisture Content (%)		25.0	22.0	22.0			
Field Wet Density (t/m3)		2.05	2.09	2.16			
Field Dry Density (t/m3)		1.67	1.72	1.78			
Field Moisture Content (%)		22.5	21.5	21.5			
Oversize Material (%)		1	4	2			
Compaction Type		Standard	Standard	Standard			
Oversize Retained on :		19mm	19mm	19mm			
Moisture Ratio (%)		89.0	96.5	98.0			
Moisture Variation (%)		2.5	0.5	0.5			
Wet/Dry of Optimum		Dry	Dry	Dry			
Hilf Density Ratio		**101.0**	**103.5**	**102.5**			

Notes: DEPTH OF TESTS TAKEN FROM FINISHED FILL LEVEL

NATA

Accredited for compliance with ISO/IEC 17025 - Testing
Accreditation No 9855

Approved Signatory
H.Pyke

11-Feb-20

HILF DENSITY/MOISTURE RATIO, NUCLEAR GAUGE METHOD AS PER AS1289 - 1.1, 1.2.1(6.4),2.1.1,5.7.1,5.8.1 A.S.JAMES FORM No: LR005 FIG 1 / REV 9 / 10/01/17	TESTED BY : CHECKED BY:	J.Murphy A.White	FIGURE 1 of 2

A.S. JAMES PTY. LTD. **Geotechnical Engineers** **Ballarat Laboratory Reg No.-9855**	**JOB:** Shortridge Drive Lucas	JOB No: 120208 REPORT No: B006/1 DATE: 11/02/2020

DAILY GEOTECHNICAL ACTIVITY REPORT On Site :- 13:40 Off Site : 14:40

Developer :	Constructor: Pipecon	Superintendent: Shaun
Testing Authority: A.S.James Pty Ltd	Level of GTA brief:	Level one Supervision by Testing Authority
Weather Conditions: Sunny, hot		

Equipment on Site	In Use	Not in Use		In Use	Not in Use
Excavator	√		Water cart (small)	√	
Pad Foot vibrating roller			D6 Dozer	√	
815 Compactor	√		Dump Truck (On Site)	√	
Grader			Scraper		

Works in progress

	Location
Stripping	
Excavating	
Filling	House Lots
Rolling	House Lots

Comments, Details & Observations:

The constructor has placed the final layer on house lots 1524-1526. The constructor is using site won material that contains some oversize rock. One test was taken on each house lot, with material appearing well compacted and dry of optimum moisture content. Tests will likely still fall within allowable moisture tolerances.

Inspections

Inspection Type & Location:

Comments & Details:

Material Type / Quality / Source / Approval:

Compaction Testing:

Numbers performed	3	Test No.s	32-34	Location	House Lots
Numbers performed		Test No.s		Location	
Numbers performed		Test No.s		Location	

Specification Requirements Standard / Modified: STD; Density Ratio (%): 95; Moisture Ratio (%): 85-115

Compliance to Specification

	Conforming Tests	Non Conforming Tests
Density	32, 33, 34	
Moisture	32, 33, 34	

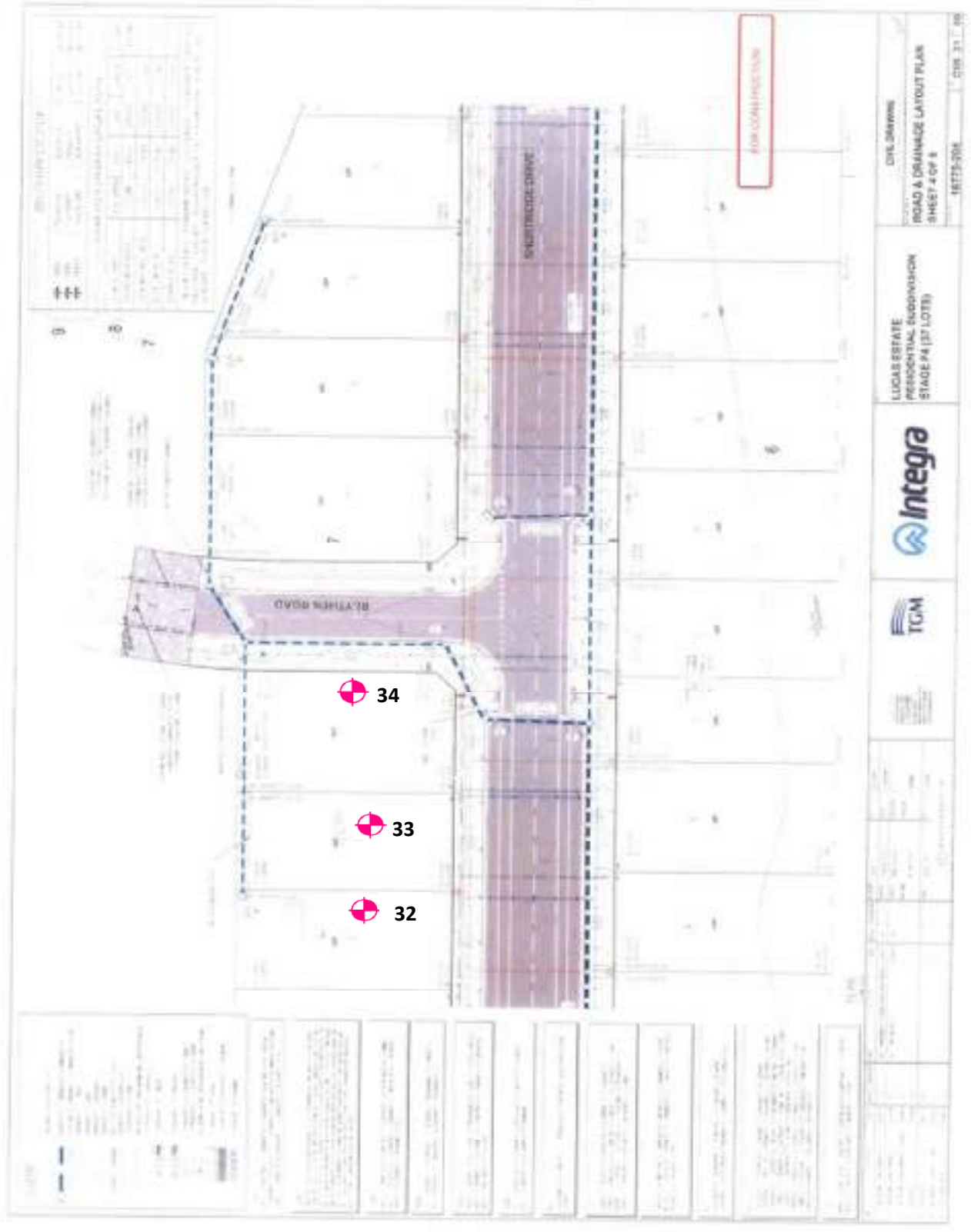
Site Instructions Given (Tick box)

Approval to Place Fill [√] Filling Methods Approved [√] Rework / Re-roll required [ ]
Stripped surface ~~Not~~ / Approved [√] Filled Area Under Review [ ] Moisture Conditioning required [ ]

Comments & Details

Level 1 supervision daily geotechnical report summary A.S.JAMES LW053 (Fig 2) / REV 1 / 21/5/14	Operator: J.Murphy Date: 5/2/20

A.S. JAMES PTY.LTD Geotechnical Engineers Ballarat Facility P.O. Box 1319 Bakery Hill Vic. Accreditation No 9855	JOB: Shortridge Drive Lucas	Job No. 120208 Report No. B006 Date 11-Feb-20



TEST LOCATIONS
DISTANCES GIVEN IN METRES

N.T.S

HILF DENSITY/MOISTURE RATIO, NUCLEAR GAUGE METHOD AS PER AS1289 - 1.1, 1.2.1(6.4),2.1.1,5.7.1,5.8.1 A.S.JAMES FORM No: LR005 FIG 3 / REV 3 / 30/01/03	TESTED BY : J.Murphy CHECKED BY: A.White	FIGURE 2 of 2