

9 September 2024

Reg. No.: GS24-213

FTC Solar
C/- Sams Solar Pty Ltd
Unit D/4, No. 1 Salmon Close,
Cranebrook, NSW 2749

Attention: Mr. Sam Makis

Dear Sam,

**GEOTECHNICAL INVESTIGATION – PROPOSED SOLAR FARM DEVELOPMENT,
BAIADA PROCESSING PLANT, No. 125 MURPHY ROAD, HANWOOD, NSW**

Further to your request in response to our quotation, Q24-429 dated 30 July 2024 to undertake the geotechnical investigation for the proposed solar farm development at the above site, we drilled twelve (12) boreholes (BH1 to BH12) the depths of 4.5m across the site at the locations as shown in the attached borehole and DCP test location plan using our trailer-mounted drill rig with disturbed samples recovered from the boreholes for relevant laboratory testing between 6 and 12 August 2024.

Dynamic Cone Penetrometer testing (DCP) was also carried out at each borehole location (BH1 to BH12) from the existing surface level and at the starting depths of 1.5m and 3.0m below the existing surface level to assess the strength of the underlying material.

The purpose of the investigation is to assess the type and condition of the underlying soil material and make recommendation for the proposed solar farm development. It should be noted details of the proposed solar farm development had not been supplied at the time of the investigation and reporting. It should be noted site classification details are outside the scope of this investigation and report and therefore not provided as requested by the client.

1.0 Site Description

The site for the proposed solar farm development is located at the existing Hanwood Baiada Processing Plant, Murphy Road, Hanwood, NSW, which is approximately 6km south of the Griffith

central business district. The proposed solar farm development is to be located across the north-west section of the site which currently consists of an old water storage dam that has reportedly remained dry for approximately 15 years and across the north-east section of the site which currently consists of a citrus farm as noted at the time of the investigation.

The subject site at the existing dam was noted as a turkey nest design measuring approximately 80m by 150m with 5m to 8m wide crests at the top of the embankments with embankment height of approximately 1.5 to 2.4m above the existing surface level. The dam was noted as dry at the time of the investigation with all trees recently removed from the base of the dam site. However, trees were noted across the embankment as noted at the time of the investigation. The base of the existing dam site has a general downward slope from east to west at approximately 1V (vertical): 30H (horizontal) and covered with sparse topsoil and vegetation as noted at the time of the investigation.

The subject site at the existing citrus farm is generally flat with a ground cover of grass/weeds and covered by existing vineyard trees as noted at the time of the investigation. It should also be noted that an existing drainage channel traverses through the existing citrus firm from east to west as witnessed at the time of the investigation.

2.0 Site Geology

The general topography of the area is flat, gently undulating low tablelands. The subject site in the Hanwood area is underlain by the Quaternary alluvium sediments (floodplain sediments) comprising unconsolidated clay, silt, sand and gravel in accordance with 1:250,000 Scale "Metallogenic Series Sheet SI/55-10 for Narrandera".

3.0 Subsurface Condition

The borehole investigation revealed that the site for the proposed solar farm development is underlain by topsoil to 0.1m to 0.15m overlying natural alluvial material comprising low plasticity sandy clayey silt and clayey silt, low to medium and medium plasticity sandy silty clay, low to medium, medium, medium to high and high plasticity silty clay, medium plasticity sandy clay, medium to high and high plasticity clay, extending to the borehole termination depth at 4.0m in BH1 to BH12.

The moisture content of the underlying natural alluvial material was noted to be generally greater than plastic limit throughout the tested clay-based and silt-based profile within the investigation depth in BH1 to BH12 at the time of the investigation. No groundwater or seepage was encountered during the drilling in the boreholes drilled and the boreholes were found dry on completion of the drilling at the time of the investigation. It should however be noted that variations to the water table level could fluctuate with changes to the season, temperature and rainfall.

As per the DCP test results and visual observation of the resistance by auger TC bit, the underlying natural alluvial material is assessed to be generally firm and firm to stiff consistency in the upper clay-based profile to 0.2m to 0.9m (refer to attached borehole logs) then generally increasing to stiff, stiff

to very stiff and very stiff consistency with depth throughout the underlying clay-based and silt-based profile within investigation depth in BH1 to BH12 at the time of the investigation (refer to attached borehole logs).

The borehole logs with explanatory note and DCP test reports are herewith attached.

4.0 Laboratory Testing

To confirm and evaluate the results of the fieldwork, some laboratory tests were carried out on the recovered soil samples from the boreholes. The laboratory tests included field moisture content (FMC) determination test, particle size distribution test, Atterberg Limit test and linear shrinkage (LS) test and they were carried out at our NATA accredited testing laboratory in Griffith, NSW. The laboratory test report is herewith attached. It should be noted the FMC and LS test results are also incorporated in the respective borehole logs.

External testing including pH, Electrical Conductivity (EC), chloride and sulphate content and resistivity tests were carried out on two (2) recovered samples from the boreholes drilled at the NATA accredited Sydney Environmental and Soil Laboratory (SESL) in Sydney, NSW. The test reports as received from SESL are herewith attached.

5.0 Discussion & Comment

5.1 Site Preparation and Earthworks

In general, the following site preparation is recommended as required once the any fill, topsoil and unsuitable materials, if any, are removed;

- Remove topsoil and fill, if any, and stockpile for later use for landscaping as appropriate. An average stripping depth of 0.1m to 0.15m is anticipated for the topsoil across the subject site. **It should be noted that tile drainage is likely to be encountered at the subject site of the existing citrus farm and all fill material within the drainage lines should be removed and backfilled with structural fill. Note stabilised sand may be used as structural fill provided it is placed and compacted in layers for the full depth of the drainage line trench.**
- Remove any unsuitable material if encountered at the time of the construction as required.
- Proof roll the exposed natural subgrade using a minimum of 10 passes of 12 tonne dead weight roller to detect any soft, loose or heaving areas. **It should be noted the natural alluvial material was noted to be generally firm and firm to stiff consistency in the upper natural clay-based profile to a depth of approximately 0.2m to 0.9m at the location of BH1 to BH12 at the time of the investigation (refer to attached borehole logs). It should be noted that surface movement on the firm and firm to stiff consistency subgrade may be experienced during the construction. This material may be required to be removed and or treated as appropriate prior to the placement of any fill material.**

- Any soft, loose or heave areas, if detected, should be excavated down and backfilled with appropriate approved materials, compacted in 150mm thick layers to the equivalent density of minimum 98% of Standard Maximum Dry Density (SMDD). **It should be noted that the depth and location of the affected subgrade may be varied across the site depending on the climatic condition at the time of the construction.**
- Any area of exposed subgrade, which exhibits shrinkage cracking and does not require re-compaction, should be watered and rolled until the shrinkage cracks do not reappear. During this undertaking, care should be exercised to ensure the surface does not become soft.

Subsequent to the above subgrade preparation, clean approved fill preferably granular material can be placed as required and compacted to the compaction requirements as given above. Any excavated fill material, if undertaken, may be used provided any organic matter and unsuitable materials are completely removed. The degree of compaction of any fill placement should be verified by a NATA accredited testing authority to ensure that it achieves specified density as specified above. The boundaries of the fill areas should be sloped to a maximum batter of 1.0 Vertical to 2.0 Horizontal or retained with the retaining wall as appropriate.

The structural fill supporting any structural element of the structures shall be prepared in such a way that it achieves a minimum of 98% of Standard Maximum Dry Density (SMDD) in every 150mm thick compacted layers and certified by a relevant NATA accredited testing laboratory for which a safe allowable bearing pressure of 100kPa may be adopted, provided proper drainage measures are incorporated in the design, during and after the construction.

It is highly recommended to undertake the construction of fill pads under Level 1 supervision in accordance with “AS3798 – 2007 – Guidelines on earthworks for commercial and residential developments” if fill pads are to be used for the foundation of any structure.

It would be essential to maintain drainage of the site area during any earthworks to prevent rainfall from adversely affecting the materials such that they become unsuitable for direct re-use.

5.2 Foundation of the Structures

The shallow footing system such as deep edge beam or pad and strip footings may be adopted and they may be proportioned for a maximum allowable bearing pressure of 100kPa and a subgrade reaction modulus (k) of 20kPa/mm founded on natural stiff consistency or better clay-based material at or below a depth of 0.2m to 0.9m measured from the existing surface (refer to attached borehole logs) or on a “controlled fill” building pad, prepared as specified in Section 5.1 provided proper drainage measures are incorporated during and after the construction.

The design parameters given in Table 1 below may be adopted for the footing system founded on the underlying materials. The geotechnical design parameters given in Table 1 were estimated from the DCP test results and visual assessment of the underlying natural alluvial materials.

Table 1 Geotechnical Design Parameters

Location	Depth (m)	Material Description	ABP (kPa)	ASA (C) (kPa)	AOF (°)	USS (kPa)	Density (kN/m ³)	Modulus of subgrade reaction (kN/m ³)**
BH1	0.2-1.2	Clay/Silty Clay	100	10*	24	30	16.0	10,000.00
	1.2-1.6	Silty Clay	150	15*	24	45	16.5	15,000.00
	1.6-3.0	Silty Clay	250	25	24	75	17.5	25,000.00
	3.0-4.5#	Silty Clay	350	35	24	100	18.5	35,000.00
BH2	0.3-0.9	Silty Clay	75	7.5*	24	20	15.5	7,500.00
	0.9-1.6	Silty Clay	100	10*	24	30	16.0	10,000.00
	1.6-3.2	Silty Clay	250	25	24	75	17.5	25,000.00
	3.2-4.0	Silty Clay	350	35	24	100	18.5	35,000.00
	4.0-4.5#	Clayey Sand	350	35	36	-	19.0	35,000.00
BH3	0.3-1.1	Silty Clay	100	10*	24	30	16.0	10,000.00
	1.1-1.5	Silty Clay	200	20*	24	60	17.0	20,000.00
	1.5-2.5	Silty Clay	350	35	24	100	18.5	35,000.00
	2.5-3.0	Clayey Sand	350	35	36	-	19.0	35,000.00
	3.0-4.5#	Clay	350	35	24	100	18.5	35,000.00
BH4	0.2-0.6	Sandy/Silty Clay	75	7.5*	24	20	15.5	7,500.00
	0.6-1.5	Silty Clay	100	10*	24	30	16.0	10,000.00
	1.5-1.9	Sandy Clay	250	25*	24	75	17.5	25,000.00
	1.9-3.5	Sandy Clay	350	35	24	100	18.5	35,000.00
	3.5-4.5#	Clayey Sand	300	30	34	-	18.5	30,000.00
BH5	0.2-0.8	Clay / Silty Clay	75	7.5*	24	20	15.5	7,500.00
	0.8-2.0	Silty Clay	150	15*	24	45	16.5	15,000.00
	2.0-3.0	Silty Clay	250	25	24	75	17.5	25,000.00
	3.0-3.5	Clayey Sand	350	35	36	-	19.0	35,000.00
	3.5-4.5#	Clay	350	35	-	100	18.5	35,000.00
BH6	0.2-0.8	Clay/Silty Clay	75	7.5*	24	20	15.5	7,500.00
	0.8-1.1	Silty Clay	150	15*	24	45	16.5	15,000.00
	1.1-1.5	Silty Clay	250	25*	24	75	17.5	25,000.00
	1.5-4.5#	Silty Clay/Sandy Silty Clay	350	35	24	100	18.5	35,000.00
BH7	0.2-0.8	Clay	75	7.5*	24	20	15.5	7,500.00
	0.8-1.4	Silty Clay	100	10*	24	30	16.0	10,000.00
	1.4-3.0	Silty Clay	250	25*	24	75	17.5	25,000.00
	3.0-3.5	Silty Clay	350	35	24	100	18.5	35,000.00
	3.5-4.5	Clayey Sand	350	35	36	-	19.0	35,000.00

Table 1 Geotechnical Design Parameters - Continued

Location	Depth (m)	Material Description	ABP (kPa)	ASA (C) (kPa)	AOF (°)	USS (kPa)	Density (kN/m ³)	Modulus of subgrade reaction (kN/m ³)**
BH8	0.4-1.1	Clay/Silty Clay	100	10*	24	30	16.0	10,000.00
	1.1-3.0	Silty Clay/Clayey Silt	250	25*	24	75	17.5	25,000.00
	3.0-4.5#	Sandy Caly	400	40	24	110	19.0	40,000.00
BH9	0.1-0.5	Clay	75	7.5*	24	20	15.5	7,500.00
	0.5-1.0	Clay	100	10*	24	30	16.0	10,000.00
	1.0-1.5	Silty Clay	250	25*	24	75	17.5	25,000.00
	1.5-4.5#	Silty Clay/Clay	400	40	24	110	19.0	40,000.00
BH10	0.2-0.8	Silty Clay	100	10*	24	30	16.0	10,000.00
	0.8-1.5	Silty Clay	350	35*	24	100	18.5	35,000.00
	1.5-4.5#	Silty Clay/Sandy Silty Clay	400	40	24	110	19.0	40,000.00
BH11	0.2-0.8	Silty Clay	100	10*	24	30	16.0	10,000.00
	0.8-1.5	Silty Clay	350	35*	24	100	18.5	35,000.00
	1.5-4.5#	Silty Clay/Sandy Silty Clay	400	40*	24	110	19.0	40,000.00
BH12	0.2-0.8	Silty Clay	100	10*	24	30	16.0	10,000.00
	0.8-1.5	Silty Clay	350	35*	24	100	18.5	35,000.00
	1.5-4.5#	Silty Clay	400	40*	24	110	19.0	40,000.00

Note:

- ABP - Allowable (End) Bearing Pressure
- ASA(C) - Allowable Side Adhesion (Compression)
- AOF - Angle of Friction
- USS - Undrained Shear Strength
- Density - Density (at in-situ moisture)
- # - The borehole termination depth.
- + - The borehole refusal depth.
- * - The side adhesion within the top 2.0m depth of natural soil shall be ignored (cracked zone taken as 0.5H_s).
- ** - **Factor of safety of 2.5 is adopted in estimating the Modulus of Subgrade Reaction.**

If uplift forces are to be assessed, the allowable side resistance on the footing system may be taken as equivalent to 50% of the allowable side adhesion values given above. It should be noted that a factor of safety (FOS) 2.5 was adopted for the bearing pressure and skin friction values given in Table 1 for the above natural alluvial material. It should also be noted that the soil swelling pressure should be considered moderate to high due to the moderately to highly reactive clay-based material throughout profile within the investigation depth.

If Pad/Column footing system is to be adopted, then footing size and depth shall be designed in such a way that it withstands lateral forces and overturning moments. Care shall be exercised in adopting the recommended design parameters given above in respect to the influenced zone of footing system.

The footing excavations in the silt-based and clay-based material should not be left exposed for prolonged period as deterioration of footing bases may occur when subjected to wetting and drying processes. Care should be exercised during construction to ensure water ponding does not occur since this may lead to subsequent softening of the founding materials.

Groundwater seepage may be encountered during the footing excavation if the footing excavation is undertaken after prolonged period of extreme rainfall and any such seepage should be readily controllable by conventional sump and pump dewatering systems installed at the base of the excavation. In a situation of groundwater inflows during the foundation construction, correct underwater concrete placement technique should be adopted to ensure achievement of the specified concrete quality.

The footing excavations shall be cleared off the debris and ponding water prior to the placement of the concrete in order to adopt the recommended design parameters. The bases of the pile shafts and footings must be clean and free of soft and loose material and the sides of bored pile holes where side adhesion is adopted must be free of smear prior to concreting. To achieve this, bases of bored pile holes should be cleaned using a cleaning bucket and the sides of the pile holes should be roughed to remove the smear zone associated with drilling, or the side adhesion values given above Table 1 should be reduced by 50%.

If water ponds in the base of footings or the base founding materials are affected by moisture ingress, then this material should be excavated to expose the subgrade, which has not been exposed to moisture, and pour the concrete immediately. If a delay in pouring concrete is anticipated, then a blinding layer should be placed over the base of the footing, particularly in the silt-based and clay-based foundation to prevent softening of the footing base. Care would be required to ensure footing bases are cleaned of loosened and remoulded debris. Some localized seepage or pile wall instability requiring temporary liners may be encountered within natural silt materials if footing excavations are exposed for longer period of time.

The slab panel, internal beams and load support thickening may be founded on the prepared subgrade as specified in Section 5.1 as required or natural ground as required. The ground slab may either be suspended on the footing system or by ground bearing slab if required. For the latter, we recommend that the structure be supported on a stiffened raft placed on the prepared natural subgrade, comprising a grid of reinforced beam cast integrally with the floor slab, with load bearing beams thickened to extend to the clay-based stratum as required in order to minimise the risk of significant damage from the reactive clay-based foundation. The maximum edge beam pressure of the stiffened raft slab should not exceed the allowable bearing capacity of the underlying natural clay-based foundation or “controlled fill” foundation of 100kPa.

A minimum of 100 mm thick of selected granular fill materials should be placed on the prepared subgrade particularly on the exposed clay-based subgrade before the construction of the slab to cater surface movements, such as shrink/swell movements due to the medium to highly reactive clay-based material.

It is highly recommended to incorporate proper drainage measures around the perimeter of the structure to ensure surface run-off does not ingress into the founding material.

It is also highly recommended to undertake inspections of the footing construction by an experienced geotechnical engineer to ensure that the specified allowable bearing capacity is achieved for the footing system during the construction.

5.3 Settlement

We envisage that the total settlements should be minimal provided the design is made within the allowable design parameters recommended and the maintenance of the structures and proper drainage measures are adopted around the structures.

Shallow footings proportioned in accordance with design parameters recommended above are estimated to have load induced settlements of no greater than 0.75% of the width of the footing.

Pile foundations designed in accordance with design parameters recommended above are estimated to have load induced settlements of no greater than 0.75% of the diameter of the piles. It is anticipated that differential settlement is likely to be less than 50% of the total settlement provided the footings are designed in accordance with the design parameters given above.

It should be noted that although the aforementioned design parameters given above are in terms of allowable limit, their use should be checked against settlement, using deformation characteristics values of the underlying alluvial material given in Table 2. It should be noted that differential settlement should not exceed 50% of the total settlement.

Table 2 Deformation Characteristics Values¹

Parameters	Stiff Clay-Based or Silt-Based	Stiff to Very Stiff Clay-Based or Silt-Based	Very Stiff Clay-Based
Bulk Density (kN/m³)	16.0	16.5	17.0
Elastic Modulus (Undrained) (MPa) -E_u	8.0	15.0	18.0
Coefficient of Volume Compressibility - (m²/MN) - m_v	0.07	0.07	0.07

Note: 1 - These values are estimated from the field DCP test results and visual assessment of the recovered samples.

5.4 Site Sub-Soil Class – Earthquake Design

The site sub-soil class in accordance with Section 4.2 of AS1170.4-2007 “Part 4: Earthquake actions in Australia”, is assessed to be “Class C_e- Shallow soil site”.

5.5 Soil Aggression

The two (2) pH tests indicated pH values of 8.9 and 9.0 on the natural clay-based material recovered from the boreholes and therefore the underlying soil is considered “strong alkalinity”. The EC values of 0.13 and 0.23mS/cm were recorded on the same samples tested, which are assessed to be “low salinity” and “slight salinity” respectively. The pH values are considered “non-aggressive” towards concrete due to the impermeable nature of the clay-based material and “non-corrosive” towards steel.

The sulphate content values of 10 and 40 g/kg were recorded on the same samples tested and are considered generally “low” and chloride content values of 13.6 and 16.2mg/kg recorded on the same samples tested and are also considered generally “low”. The low sulphate levels are considered “non-aggressive” towards concrete due to the impermeable nature of the clay-based material and the low chloride levels are considered “non-corrosive” towards steel.

The resistivity values of 14Ω.m and 17Ω.m were recorded on the same clay-based samples tested which are assessed to be “mild resistivity”. The “mild resistivity” is considered to provide a “mildly aggressive” environment towards unprotected steel due to the impermeable nature of the clay-based material.

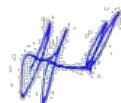
The designer is therefore referred to Section 4 of AS3600-2018 (Tables 4.3, 4.4, 4.8.1, 4.8.2, 4.8.3) and Section 6 of AS2159-2009 (Tables 6.4.2C, 6.4.3, 6.5.2C, 6.5.3) for any special precautionary measures required for buried concrete and steel elements into these materials.

6.0 General Comment

Occasionally, the subsurface soil conditions in the completed boreholes may be found to be different (or may be interpreted to be different) from those expected. This can also occur with groundwater conditions, especially after climatic changes. If such differences appear to exist, we recommend that you immediately contact us.

Should you have any queries, please do contact us.

Yours truly,



Jarrod Gornall
Senior Geotechnical Engineer



Tin Maung
Principal Geotechnical Engineer (Director)

Attachments:

- Addendum
- Plan showing site locality
- Plans showing borehole & DCP test locations
- Borehole logs with explanatory note
- Dynamic Cone Penetrometer test reports
- Laboratory test report by Aitken Rowe Testing Laboratories Pty Ltd
- Laboratory test reports by Sydney Environmental & Soil Laboratory

ADDENDUM

LIMITS OF INVESTIGATION

The recommendations made in this report are based on the assumption that the test results are representative of the overall subsurface conditions. However, it should be noted that even under optimum circumstances, actual conditions in some parts of the building site may differ from those said to exist, because no geotechnical engineer, no matter how qualified, and no subsurface exploration program, no matter how comprehensive, can reveal all that is hidden by earth, rock and time.

The client should also be aware that our recommendations refer only to our test site locations and the ground level at the time of testing.

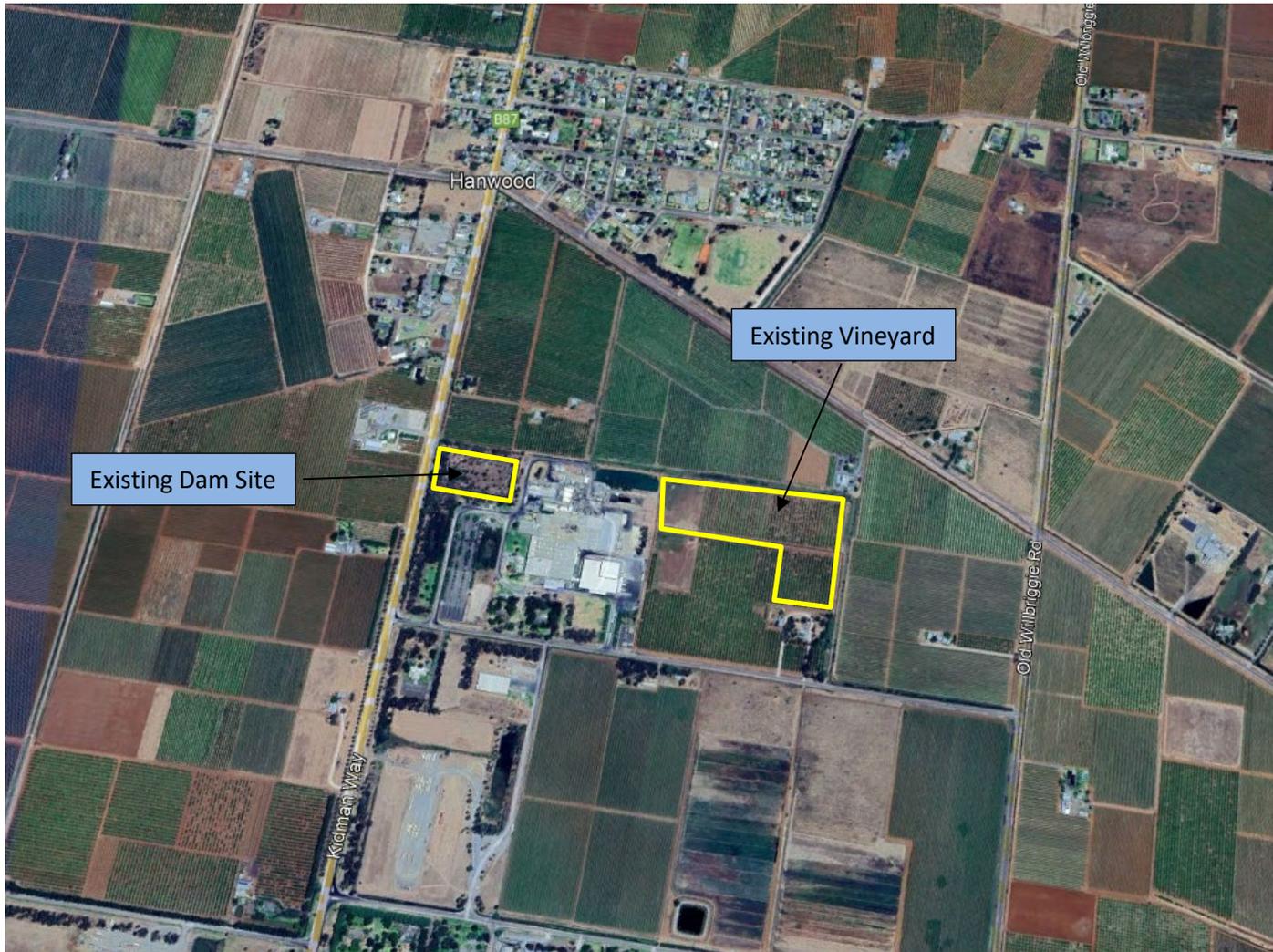
The recommendations in this report are based on the following: -

- a) The information gained from our investigation.
- b) The present "state of the art" in testing and design.
- c) The building type and site treatment conveyed to us by the client.
- d) Historical information.

Should the client or their agent have omitted to supply us with the correct relevant information, or make significant changes to the building type and/or building envelope, our report may not take responsibility for any consequences and we reserve the right to make an additional charge if more testing is necessary.

Notwithstanding the recommendations made in this report, we also recommend that whenever footings are close to any excavations or easements, that consideration should be given to deepening the footings.

Unless otherwise stated in our commission, any dimensions or slope direction and magnitude should not be used for any building costing calculations and/or positioning. Any sketch supplied should be considered as only an approximate pictorial evidence of our work.



Google Earth Satellite Image Dated 5 September 2023



Aitken Rowe Testing Laboratories Pty Ltd

Registration Number: GS24-213

Client: FTC SOLAR C/- SAMS SOLAR PTY LTD – CRANEBROOK, NSW
Project: GEOTECHNICAL INVESTIGATION
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING
PLANT, No. 125 MURPHY ROAD, HANWOOD, NSW
SITE LOCATION PLAN



Aitken Rowe Testing Laboratories Pty Ltd

Registration Number: GS24-213

Client: FTC SOLAR C/- SAMS SOLAR PTY LTD – CRANEBROOK, NSW
Project: GEOTECHNICAL INVESTIGATION
 PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING
 PLANT, No. 125 MURPHY ROAD, HANWOOD, NSW
 BOREHOLE & DCP TEST LOCATION PLAN

AITKEN ROWE TESTING LABORATORIES PTY LTD

Borehole No.: 1

Sheet No.: 1 of 1

Ground Level: Existing

Date: 6/08/2024

Method: Auger Drilling with TC Bit

GPS N: 6199829

E: 0412248

USCS Symbol	Description	Depth (m)	Moisture Condition	Consistency/ Rel. Density	Sample		Lab. Test	Remarks & Field Records
					Type	No.		
ML	TOPSOIL: Sandy Clayey SILT; low plasticity, fine to coarse sand, dark brown		MC>PL	St.				NATURAL
CI-CH	CLAY; medium to high plasticity, with fine to coarse sand, red brown				D	1A		
CH	CLAY; high plasticity, trace sand, trace gravel, yellow brown	0.5			D	1B		FMC = 26.3%
CH	Silty CLAY; high plasticity, trace sand, trace gravel, yellow brown	1.0						
		1.5			D	1C	15.5	← Slight to Moderate Seepage @ 1.0m to 4.5m (EOBH) FMC = 22.7%
		2.0		VSt.				
		2.5						
CH	Silty CLAY; high plasticity, trace sand, yellow brown	3.0			D	1D		
		3.5						
		4.0						
		4.5						
	End of Borehole (BH1) @ 4.5m							
		5.0						
		5.5						
		6.0						

Registration No.: GS24-213

Location: Geotechnical Investigation - Proposed Solar Farm Development, Baiada Processing Plant, No. 125
Murphy Road, Hanwood, NSW

Client: FTC Solar C/- Sams Solar Pty Ltd - Cranebrook, NSW

Logged By: J.H

Scale: As shown

Seepage @ 1.0m to 4.5m (EOBH)

AITKEN ROWE TESTING LABORATORIES PTY LTD

Borehole No.: **2**
 Sheet No.: **1 of 1**

Ground Level: Existing
 Method: Auger Drilling with TC Bit

Date: **6/08/2024**
 GPS N: **6199855**
 E: **0412362**

USCS Symbol	Description	Depth (m)	Moisture Condition	Consistency/ Rel. Density	Sample		Lab. Test	Remarks & Field Records
					Type	No.		
CL-CI	TOPSOIL: Sandy Silty CLAY; low to medium plasticity, fine to coarse sand, brown		MC<PL	F				NATURAL FMC = 27.0% ← Slight to Moderate Seepage @ 1.0m to 4.5m (EOBH)
CI	Sandy CLAY; medium plasticity, fine to coarse sand, red brown		MC>PL	F	D	2A	16.0	
CH	Silty CLAY; high plasticity, with fine to coarse sand, trace gravel, yellow brown	0.5						
		1.0	St.		D	2B		
		1.5						
		2.0	VSt.		D	2C		
		2.5						
		3.0						
		3.5						
		4.0						
ML	Sandy Clayey SILT; low plasticity, fine to coarse sand, yellow brown				D	2E		
		4.5						
	End of Borehole (BH2) @ 4.5m							
		5.0						
		5.5						
		6.0						

Registration No.: GS24-213

Location: Geotechnical Investigation - Proposed Solar Farm Development, Baiada Processing Plant, No. 125
 Murphy Road, Hanwood, NSW

Client: FTC Solar C/- Sams Solar Pty Ltd - Cranebrook, NSW

Logged By: J.H

Scale: As shown

Seepage @ 1.0m to 4.5m (EOBH)

AITKEN ROWE TESTING LABORATORIES PTY LTD

Borehole No.: **3**

Sheet No.: 1 of 1

Ground Level: Existing

Date: **6/08/2024**

Method: Auger Drilling with TC Bit

GPS N: **6199810**

E: **0412452**

USCS Symbol	Description	Depth (m)	Moisture Condition	Consistency/ Rel. Density	Sample		Lab. Test	Remarks & Field Records
					Type	No.		
CL-CI	TOPSOIL: Sandy Silty CLAY; low to medium plasticity, fine to coarse sand, brown	0.5 1.0 1.5 2.0 2.5	MC>PL	S	D	3A	10.5	NATURAL FMC = 27.4% ← Slight Seepage @ 1.0m FMC=18.1% ← End of Seepage @ 3.0
CI-CH	CLAY; medium to high plasticity, with fine to coarse sand, red brown			F				
CH	Silty CLAY; high plasticity, with fine to coarse sand, trace gravel, yellow orange brown			St.				
CI	Sandy CLAY; medium plasticity, fine to coarse sand, yellow brown			VSt.				
ML	Sandy Clayey SILT; low plasticity, fine to coarse sand, yellow orange brown			D				
CH	CLAY; high plasticity, trace sand, grey yellow brown	3.0 3.5 4.0 4.5			D	3D		
				D				
	End of Borehole (BH3) @ 4.5m	5.0 5.5 6.0						

Registration No.: GS24-213

Location: Geotechnical Investigation - Proposed Solar Farm Development, Baiada Processing Plant, No. 125 Murphy Road, Hanwood, NSW

Client: FTC Solar C/- Sams Solar Pty Ltd - Cranebrook, NSW

Logged By: J.H

Scale: As shown

Seepage @ 1.0m to 3.0m

AITKEN ROWE TESTING LABORATORIES PTY LTD

Borehole No.: 4

Sheet No.: 1 of 1

Ground Level: Existing

Date: 6/08/2024

Method: Auger Drilling with TC Bit

GPS N: 6199885

E: 0412504

USCS Symbol	Description	Depth (m)	Moisture Condition	Consistency/ Rel. Density	Sample		Lab. Test	Remarks & Field Records
					Type	No.		
CL-CI	TOPSOIL: Sandy Silty CLAY; low to medium plasticity, fine to coarse sand, brown		MC>PL	F				NATURAL @OMC ← Slight to Moderate Seepage @ 1.0m to 4.5m (EOBH)
CI-CH	CLAY; medium to high plasticity, with fine to coarse sand, red brown							
CH	Silty CLAY; high plasticity, with fine to coarse sand, trace gravel, yellow brown	0.5		St.				
		1.0						
		1.5		VSt.				
CI	Sandy CLAY; medium plasticity, fine to coarse sand, yellow orange brown	2.0			D	4A		
		2.5						
		3.0						
		3.5						
ML	Sandy Clayey SILT; low plasticity, fine to coarse sand, yellow orange brown	4.0						
		4.5			D	4B	FMC = 20.9%	
	End of Borehole (BH4) @ 4.5m	5.0						
		5.5						
		6.0						

Registration No.: GS24-213

Location: Geotechnical Investigation - Proposed Solar Farm Development, Baiada Processing Plant, No. 125
Murphy Road, Hanwood, NSW

Client: FTC Solar C/- Sams Solar Pty Ltd - Cranebrook, NSW

Logged By: J.H

Scale: As shown

Seepage @ 1.0m to 4.5m (EOBH)

AITKEN ROWE TESTING LABORATORIES PTY LTD

Borehole No.: **5**
 Sheet No.: 1 of 1

Ground Level: Existing
 Method: Auger Drilling with TC Bit

Date: **9/08/2024**
 GPS N: **6199788**
 E: **0412530**

USCS Symbol	Description	Depth (m)	Moisture Condition	Consistency/ Rel. Density	Sample		Lab. Test	Remarks & Field Records	
					Type	No.			
CL-CI	TOPSOIL: Sandy Silty CLAY; low to medium plasticity, fine to coarse sand, brown		MC>PL	F		5A		NATURAL @OMC	
CI-CH	CLAY; medium to high plasticity, trace sand, red brown				D				
CH	Silty CLAY; high plasticity, with fine to coarse sand, trace gravel, yellow brown	0.5							
		1.0			St.	D			5B
		1.5							
		2.0			St.-VSt.				
CL-CI	Silty CLAY; low to medium plasticity, with fine to coarse sand, trace gravel, yellow brown	2.5	VSt.		D	5C	Slight to Moderate Seepage @ 1.0m		
		3.0							
		3.5							
ML	Sandy Clayey SILT; low plasticity, fine to coarse sand, orange brown	4.0						End of Seepage @ 3.5m	
CH	CLAY; high plasticity, trace sand, trace gravel, grey yellow brown	4.5							
	End of Borehole (BH5) @ 4.5m	5.0							
		5.5							
		6.0							

Registration No.: GS24-213

Location: Geotechnical Investigation - Proposed Solar Farm Development, Baiada Processing Plant, No. 125 Murphy Road, Hanwood, NSW

Client: FTC Solar C/- Sams Solar Pty Ltd - Cranebrook, NSW

Logged By: J.H

Scale: As shown

Seepage @ 1.0m to 3.5m

AITKEN ROWE TESTING LABORATORIES PTY LTD

Borehole No.: **6**

Sheet No.: **1 of 1**

Ground Level: Existing
Method: Auger Drilling with TC Bit

Date: **9/08/2024**

GPS N: **6199865**

E: **0412623**

USCS Symbol	Description	Depth (m)	Moisture Condition	Consistency/ Rel. Density	Sample		Lab. Test	Remarks & Field Records
					Type	No.		
CI	TOPSOIL: Sandy Silty CLAY; medium plasticity, fine to coarse sand, brown		MC>PL	F				NATURAL ← Slight to Moderate Seepage @ 1.0m to 4.5m (EOBH)
CH	CLAY; high plasticity, trace sand, red brown							
CH	Silty CLAY; high plasticity, with fine to coarse sand, trace gravel, yellow brown	0.5						
		1.0		St.				
		1.5		VSt.				
CI-CH	Silty CLAY; medium to high plasticity, with fine to coarse sand, yellow brown	2.0			D	6A		
		2.5						
		3.0						
		3.5						
CL-CI	Sandy Silty CLAY; low to medium plasticity, fine to coarse sand, yellow orange brown	4.0			D	6B		
		4.5						
	End of Borehole (BH6) @ 4.5m	5.0						
		5.5						
		6.0						

Registration No.: GS24-213

Location: Geotechnical Investigation - Proposed Solar Farm Development, Baiada Processing Plant, No. 125
Murphy Road, Hanwood, NSW

Client: FTC Solar C/- Sams Solar Pty Ltd - Cranebrook, NSW

Logged By: J.H

Scale: As shown

Seepage @ 1.0m to 4.5m (EOBH)

AITKEN ROWE TESTING LABORATORIES PTY LTD

Borehole No.: **7**
 Sheet No.: 1 of 1

Ground Level: Existing
 Method: Auger Drilling with TC Bit

Date: **9/08/2024**
 GPS N: **6199655**
 E: **0412519**

USCS Symbol	Description	Depth (m)	Moisture Condition	Consistency/ Rel. Density	Sample		Lab. Test	Remarks & Field Records	
					Type	No.			
CL-CI	TOPSOIL: Sandy Silty CLAY; low to medium plasticity, fine to coarse sand, brown		MC>PL	F		7A		NATURAL	
CH	CLAY; high plasticity, trace sand, red brown				St.				D
CH	CLAY; high plasticity, trace sand, orange yellow brown	0.5							
CH	Silty CLAY; high plasticity, with fine to coarse sand, trace gravel, yellow orange	1.0							
		1.5						Slight to Moderate Seepage @ 1.0m to 4.5m (EOBH)	
		2.0	VSt.						
		2.5							
		3.0							
ML	Sandy Clayey SILT; low plasticity, fine to coarse sand, yellow brown	3.5			D	7C			
		4.0							
		4.5							
	End of Borehole (BH7) @ 4.5m	5.0							
		5.5							
		6.0							

Registration No.: GS24-213

Location: Geotechnical Investigation - Proposed Solar Farm Development, Baiada Processing Plant, No. 125
 Murphy Road, Hanwood, NSW

Client: FTC Solar C/- Sams Solar Pty Ltd - Cranebrook, NSW

Logged By: J.H

Scale: As shown

Seepage @ 1.0m to 4.5m (EOBH)

AITKEN ROWE TESTING LABORATORIES PTY LTD

Borehole No.: **8**
 Sheet No.: 1 of 1

Ground Level: Existing
 Method: Auger Drilling with TC Bit

Date: **9/08/2024**
 GPS N: **6199739**
 E: **0412606**

USCS Symbol	Description	Depth (m)	Moisture Condition	Consistency/ Rel. Density	Sample		Lab. Test	Remarks & Field Records
					Type	No.		
CI	TOPSOIL: Sandy Silty CLAY; medium plasticity, fine to coarse sand, brown		MC>PL	F				NATURAL
CH	CLAY; high plasticity, trace sand, red brown							
CH	CLAY; high plasticity, trace sand, orange brown	0.5		St.				
CI-CH	Silty CLAY, medium to high plasticity, with fine to coarse sand, yellow brown	1.0						
		1.5		VSt.				← Slight to Moderate Seepage @ 1.0m to 4.5m (EOBH)
ML	Clayey SILT; low plasticity, with fine to coarse sand, yellow brown	2.0			D	8A	12.0	FMC = 22.0%
		2.5						
		3.0						
CI	Sandy CLAY; medium plasticity, fine to coarse sand, yellow brown	3.5			D	8B		
		4.0						
		4.5						
	End of Borehole (BH8) @ 4.5m	5.0						
		5.5						
		6.0						

Registration No.: GS24-213

Location: Geotechnical Investigation - Proposed Solar Farm Development, Baiada Processing Plant, No. 125
 Murphy Road, Hanwood, NSW

Client: FTC Solar C/- Sams Solar Pty Ltd - Cranebrook, NSW

Logged By: J.H

Scale: As shown

Seepage @ 1.0m to 4.5m (EOBH)

AITKEN ROWE TESTING LABORATORIES PTY LTD

Borehole No.: **9**Sheet No.: **1 of 1**

Ground Level: Approx. 6m below top of embankment

Date: **9/08/2024**

Method: Auger Drilling with TC Bit

GPS N: **6194915**E: **0411849**

USCS Symbol	Description	Depth (m)	Moisture Condition	Consistency/ Rel. Density	Sample		Lab. Test	Remarks & Field Records
					Type	No.		
CH	TOPSOIL: CLAY; high plasticity, trace sand, yellow brown		MC>PL	F-St.				NATURAL
CH	CLAY; high plasticity, trace sand, with fine to medium gravel, yellow brown	0.5			D	9A		FMC = 19.3%
		1.0		VSt.				
CI-CH	Silty CLAY; medium to high plasticity, trace sand, yellow brown	1.5			D	9B		
		2.0						
		2.5						
		3.0						
		3.5						
CH	CLAY; high plasticity, trace sand, yellow brown	4.0			D	9C		
		4.5						
	End of Borehole (BH9) @ 4.5m	5.0						
		5.5						
		6.0						

Registration No.: GS24-213

Location: Geotechnical Investigation - Proposed Solar Farm Development, Baiada Processing Plant, No. 125
Murphy Road, Hanwood, NSW

Client: FTC Solar C/- Sams Solar Pty Ltd - Cranebrook, NSW

Logged By: J.H

Scale: As shown

Dry on completion

AITKEN ROWE TESTING LABORATORIES PTY LTD

Borehole No.: **10**

Sheet No.: 1 of 1

Ground Level: Approx. 5m below top of embankment

Date: **12/08/2024**

Method: Auger Drilling with TC Bit

GPS N: **6199926**

E: **0411818**

USCS Symbol	Description	Depth (m)	Moisture Condition	Consistency/ Rel. Density	Sample		Lab. Test	Remarks & Field Records
					Type	No.		
CH	FILL/TOPSOIL: CLAY; high plasticity, trace sand, yellow brown		MC>PL	F				FILL: Appears poorly compacted 'Uncontrolled'
CI	Silty CLAY; medium plasticity, with fine to coarse sand, yellow brown	0.5		VSt.	D	10A		NATURAL
CI	Sandy Silty CLAY; medium plasticity, fine to coarse sand, pale yellow brown	2.0						
CI	Sandy Silty CLAY; medium plasticity, fine to coarse sand, pale yellow brown	2.5			D	10B		
CI	Sandy Silty CLAY; medium plasticity, fine to coarse sand, pale yellow brown	3.0						
CI	Sandy Silty CLAY; medium plasticity, fine to coarse sand, pale yellow brown	3.5						
CI	Sandy Silty CLAY; medium plasticity, fine to coarse sand, pale yellow brown	4.0						
CI	Sandy Silty CLAY; medium plasticity, fine to coarse sand, pale yellow brown	4.5			D	10C		
	End of Borehole (BH10) @ 4.5m							
		5.0						
		5.5						
		6.0						

Registration No.: GS24-213

Location: Geotechnical Investigation - Proposed Solar Farm Development, Baiada Processing Plant, No. 125 Murphy Road, Hanwood, NSW

Client: FTC Solar C/- Sams Solar Pty Ltd - Cranebrook, NSW

Logged By: J.H

Scale: As shown

Dry on completion

AITKEN ROWE TESTING LABORATORIES PTY LTD

Borehole No.: **11**

Sheet No.: 1 of 1

Ground Level: Approx. 3-4m below top of embankment

Date: **12/08/2024**

Method: Auger Drilling with TC Bit

GPS N: **6199949**

E: **0411761**

USCS Symbol	Description	Depth (m)	Moisture Condition	Consistency/ Rel. Density	Sample		Lab. Test	Remarks & Field Records
					Type	No.		
CI	FILL/TOPSOIL: CLAY; high plasticity, trace sand, dark brown		MC>PL	F-St.				FILL: Appears moderately compacted 'Uncontrolled'
CI	Silty CLAY; medium plasticity, with fine to coarse sand, yellow brown	0.5 1.0 1.5 2.0 2.5 3.0		VSt.				NATURAL
CI	Sandy Silty CLAY; medium plasticity, fine to coarse sand, pale yellow brown	3.5 4.0 4.5				D	11A	
	End of Borehole (BH11) @ 4.5m	5.0 5.5 6.0						

Registration No.: GS24-213

Location: Geotechnical Investigation - Proposed Solar Farm Development, Baiada Processing Plant, No. 125
Murphy Road, Hanwood, NSW

Client: FTC Solar C/- Sams Solar Pty Ltd - Cranebrook, NSW

Logged By: J.H

Scale: As shown

Dry on completion

AITKEN ROWE TESTING LABORATORIES PTY LTD

Borehole No.: **12**

Sheet No.: **1 of 1**

Ground Level: Approx. 2-3m below top of embankment

Date: **12/08/2024**

Method: Auger Drilling with TC Bit

GPS N: **6199913**

E: **0411743**

USCS Symbol	Description	Depth (m)	Moisture Condition	Consistency/ Rel. Density	Sample		Lab. Test	Remarks & Field Records
					Type	No.		
CI	FILL/TOPSOIL: CLAY; high plasticity, trace sand, dark brown		MC>PL	F				FILL: Appears moderately compacted 'Uncontrolled'
CI	Silty CLAY; medium plasticity, with fine to coarse sand, orange brown	0.5	MC>PL	St.	D	12A	9.5	NATURAL FMC = 17.0%
				VSt.				
CI	Silty CLAY; medium plasticity, with fine to coarse sand, yellow brown	1.5			D	12B		
		2.5						
		3.0						
		3.5						
		4.0						
		4.5						
	End of Borehole (BH) @ 4.5m	5.0						
		5.5						
		6.0						

Registration No.: GS24-213

Location: Geotechnical Investigation - Proposed Solar Farm Development, Baiada Processing Plant, No. 125
Murphy Road, Hanwood, NSW

Client: FTC Solar C/- Sams Solar Pty Ltd - Cranebrook, NSW

Logged By: J.H

Scale: As shown

Dry on completion



AITKEN ROWE TESTING LABORATORIES PTY LTD

LOG SYMBOLS

LOG COLUMN	SYMBOL	DEFINITION		
Groundwater Record		Standing water level. Time delay following completion of drilling may be shown.		
		Groundwater seepage into borehole or excavation noted during drilling or excavation.		
Samples	D	Disturbed bag sample taken between the depths indicated by lines.		
	U	Undisturbed 50mm diameter tube sample taken between the depths indicated by lines		
Field Tests	4, 7, 10 N=17	Standard Penetration Test (S.P.T.) performed between depths indicated by lines. Individual figures show blows per 150mm penetration driven by SPT hammer.		
	5	Dynamic Cone Penetration Test performed between depths indicated by lines.		
	7	Individual figures show blows per 100mm penetration for 60 degree solid cone driven by 9 kg hammer.		
	3			
Moisture Condition (Silt or Clay based)	MC<PL	Moisture content estimated to be less than plastic limit.		
	MC=PL	Moisture content estimated to be approx. equal to plastic limit.		
	MC>PL	Moisture content estimated to be greater than plastic limit.		
Moisture Condition (Gravel or Sand based)	D	DRY – runs freely through fingers.		
	M	MOIST – does not run freely but no free water visible on soil surface.		
	W	WET – free water visible on soil surface.		
Consistency (Silt or Clay based)	VS	VERY SOFT – unconfined compressive strength less than 25kPa.		
	S	SOFT – unconfined compressive strength 25-50 kPa.		
	F	FIRM – unconfined compressive strength 50-100kPa.		
	St.	STIFF – unconfined compressive strength 100-200kPa.		
	VSt.	VERY STIFF – unconfined compressive strength 200-400kPa.		
	H	HARD – unconfined compressive strength greater than 400kPa.		
Relative Density (Gravel or Sand based)		Description	Density Index Range %	'N' Value Range Blows/300mm
	VL	VERY LOOSE	<15	0-5
	L	LOOSE	15-35	6-10
	MD	MEDIUM DENSE	35-65	11-30
	D	DENSE	65-85	31-50
	VD	VERY DENSE	>85	>50
Hand Penetrometer Readings	300 250 280	Numbers indicate individual test results in kPa on representative undisturbed material.		
Laboratory Test	L.S. %	Linear Shrinkage (As per TfNSW Method T113)		
	M.C. %	Field Moisture Content (As per Australian Standard AS1289.2.1.1 or TfNSW Method T120)		
	Iss	Shrink-Swell Index (As per Australian Standard AS1289.7.1.1)		
Piezometer Construction	Fill		Piezometer	
		Bentonite		Solid Pipe
		Washed Fine Graded Gravel		Slotted Screen
Remarks	'V' bit	Hardened steel 'V' shaped bit.		
	'TC' bit	Tungsten Carbide wing bit.		

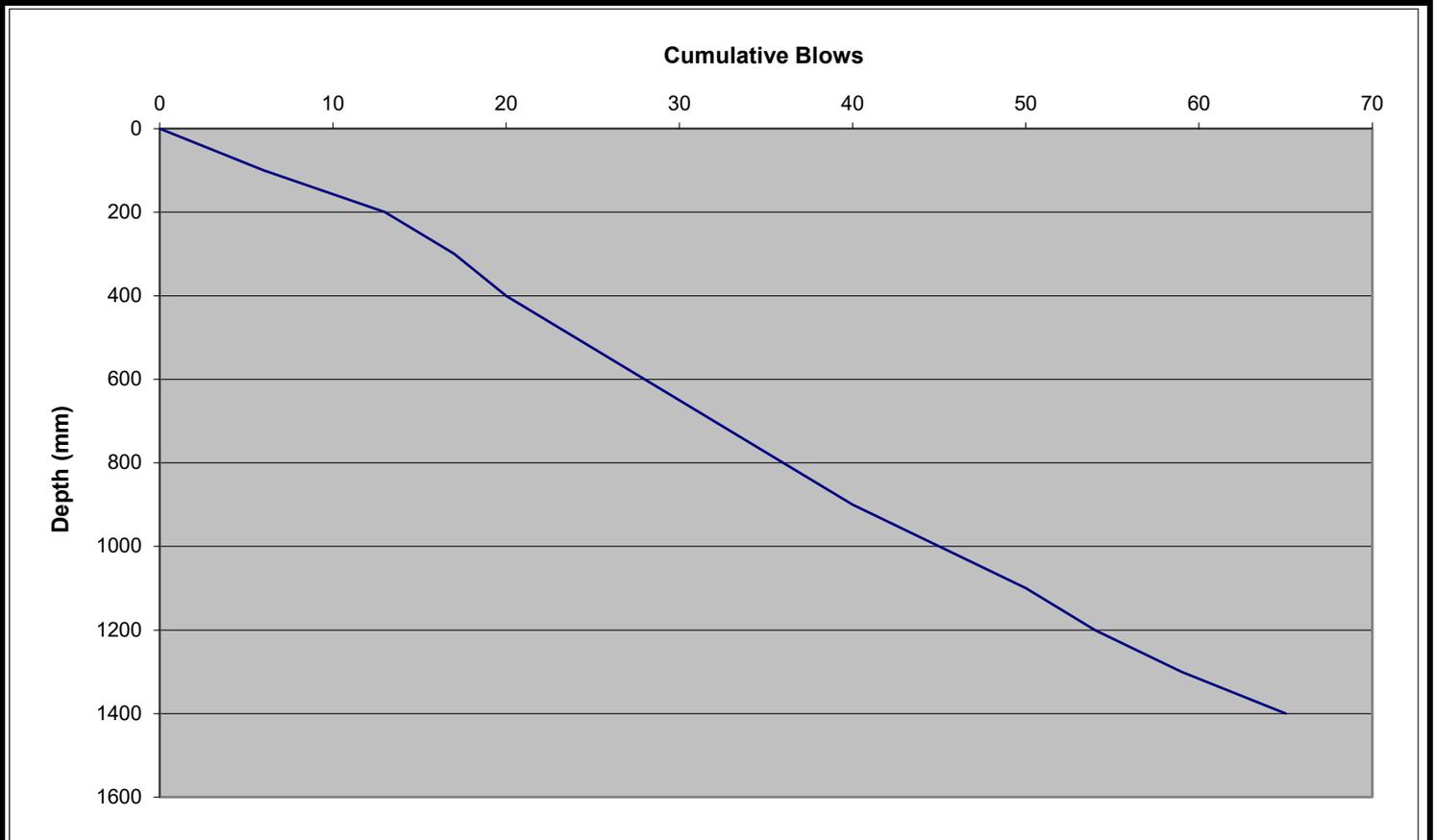
Aitken Rowe Testing Laboratories Pty Ltd

ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW	PAGE: 1 OF: 36	DCP: 1 (BH1)
PROJECT: GEOTECHNICAL INVESTIGATION	REGISTRATION NO: GS24-213	
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,	DATE OF TEST: 6/08/2024	
LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW	DEPTH BELOW ESL (mm): NIL	
SOIL DESCRIPTION: REFER TO BOREHOLE LOGS	MOISTURE CONDITION: REFER TO LOGS	
DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	TEST METHOD: AS 1289.6.3.2	

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	6	12	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	7	14	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	4	7	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	3	5	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	4	7	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	4	7	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	4	7	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	4	7	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	4	7	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	5	9	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	5	9	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	4	7	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	5	9	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	6	12	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	END	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



 <p>Accredited for compliance with ISO/IEC 17025 - Testing.</p> <p>ACCREDITATION NUMBER: 4679</p> <p>WORLD RECOGNISED ACCREDITATION</p>	REMARKS:
	<p>APPROVED SIGNATORY:  Jarrod Gornall</p> <p>DATE: 22/08/2024</p>

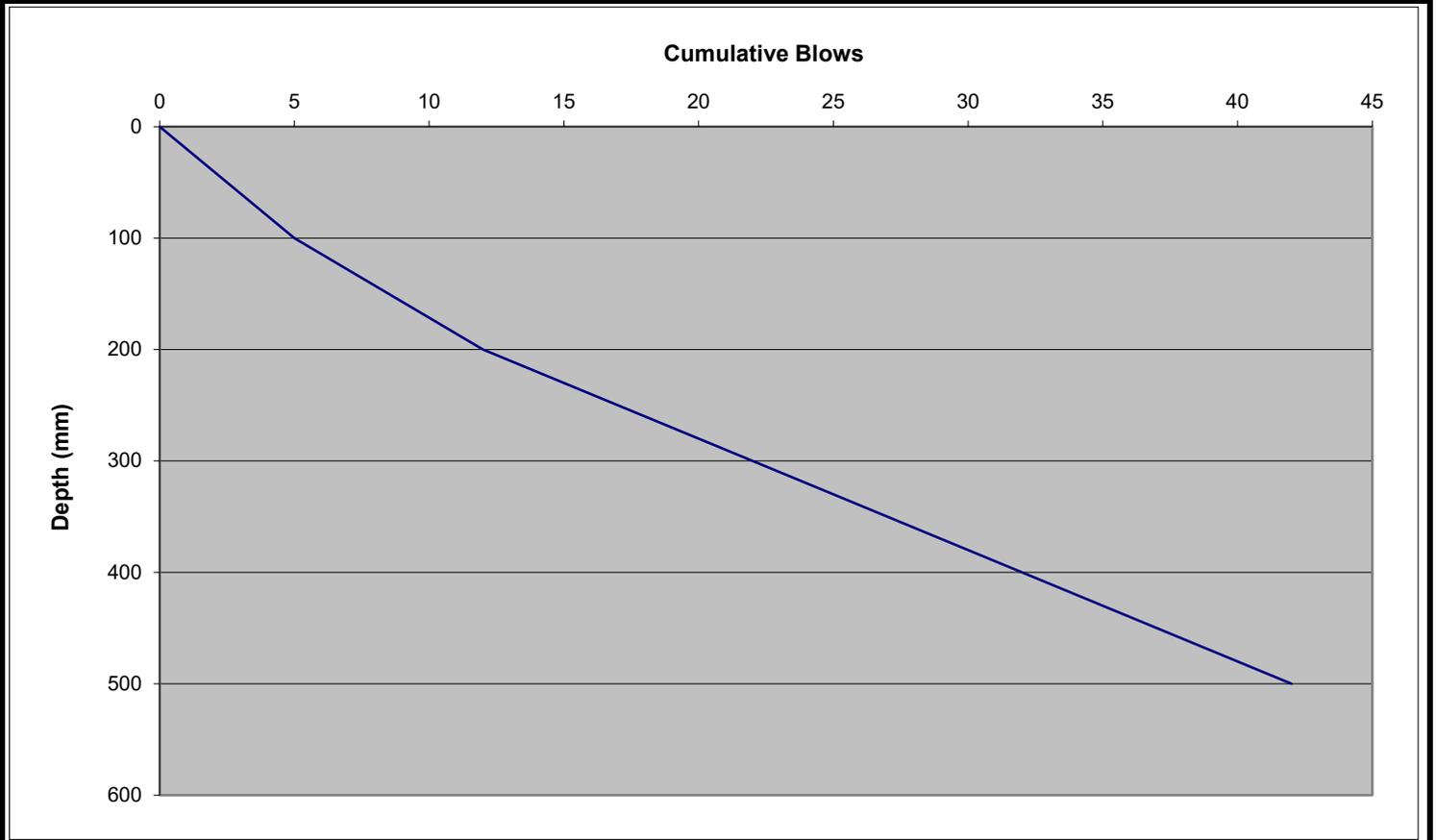
Aitken Rowe Testing Laboratories Pty Ltd

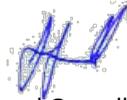
ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW	PAGE: 2 OF: 36 DCP: 2 (BH1)
PROJECT: GEOTECHNICAL INVESTIGATION	REGISTRATION NO: GS24-213
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,	DATE OF TEST: 6/08/2024
LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW	DEPTH BELOW ESL (mm): 1500
SOIL DESCRIPTION: REFER TO BOREHOLE LOGS	MOISTURE CONDITION: REFER TO LOGS
DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	TEST METHOD: AS 1289.6.3.2

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	5	9	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	7	14	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	10	23	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	10	23	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	10	23	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	END	*	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	*	*	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	*	*	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	*	*	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	*	*	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	*	*	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	*	*	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	*	*	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	*	*	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	*	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



 <p>Accredited for compliance with ISO/IEC 17025 - Testing.</p> <p>ACCREDITATION NUMBER: 4679</p> <p><small>WORLD RECOGNISED ACCREDITATION</small></p>	<p>REMARKS:</p> <div style="text-align: center; margin-top: 20px;">  APPROVED SIGNATORY: Jarrod Gornall DATE: 22/08/2024 </div>
--	---

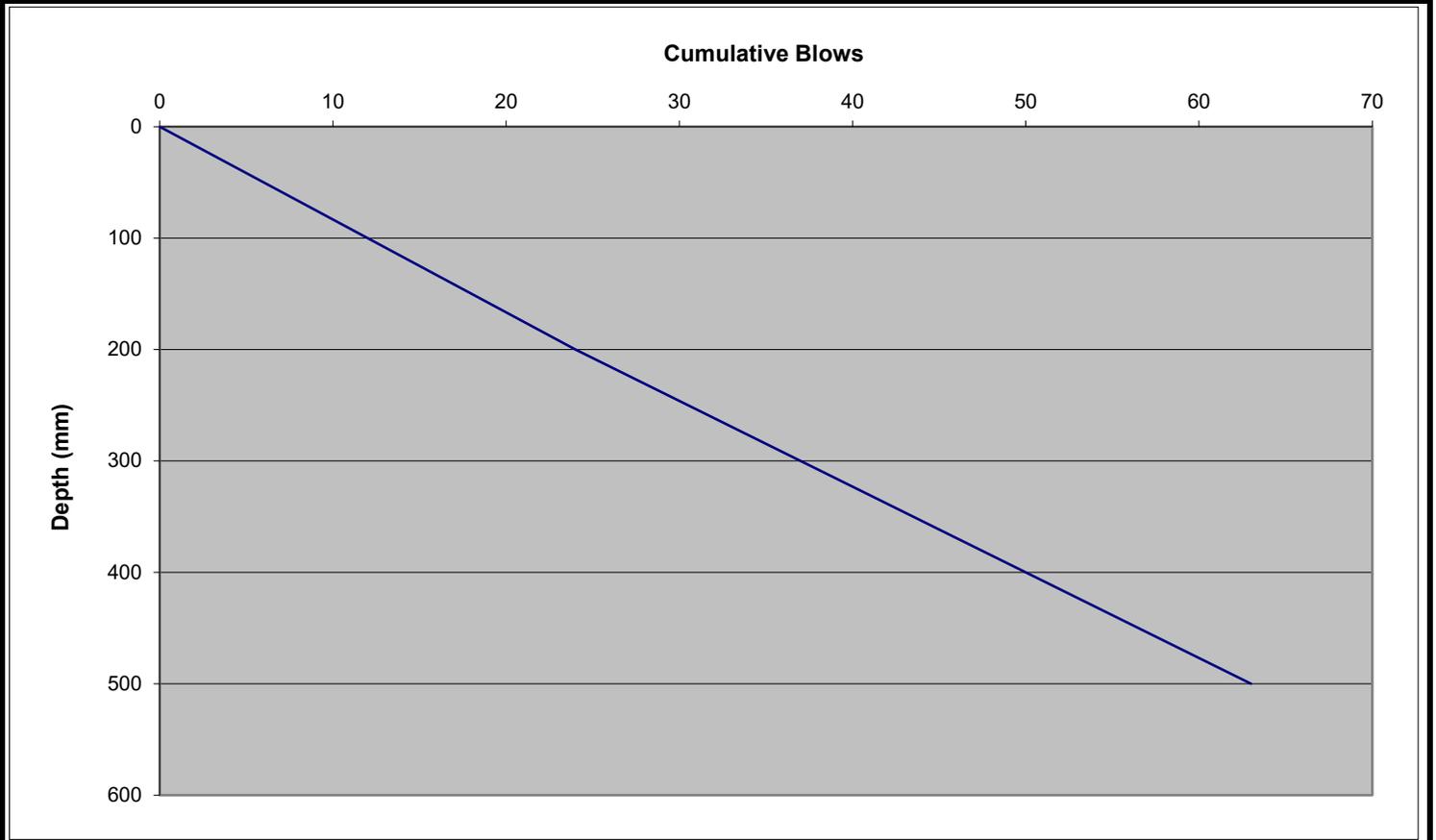
Aitken Rowe Testing Laboratories Pty Ltd

ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW	PAGE: 3 OF: 36	DCP: 3 (BH1)
PROJECT: GEOTECHNICAL INVESTIGATION	REGISTRATION NO: GS24-213	
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,	DATE OF TEST: 6/08/2024	
LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW	DEPTH BELOW ESL (mm): 3000	
SOIL DESCRIPTION: REFER TO BOREHOLE LOGS	MOISTURE CONDITION: REFER TO LOGS	
DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	TEST METHOD: AS 1289.6.3.2	

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	12	28	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	12	28	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	13	32	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	13	32	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	13	32	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	END	*	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	*	*	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	*	*	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	*	*	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	*	*	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	*	*	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	*	*	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	*	*	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	*	*	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	*	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



 <p>Accredited for compliance with ISO/IEC 17025 - Testing.</p> <p>ACCREDITATION NUMBER: 4679</p> <p>WORLD RECOGNISED ACCREDITATION</p>	REMARKS:
	<p>APPROVED SIGNATORY: Jarrod Gornall</p> <p>DATE: 22/08/2024</p>

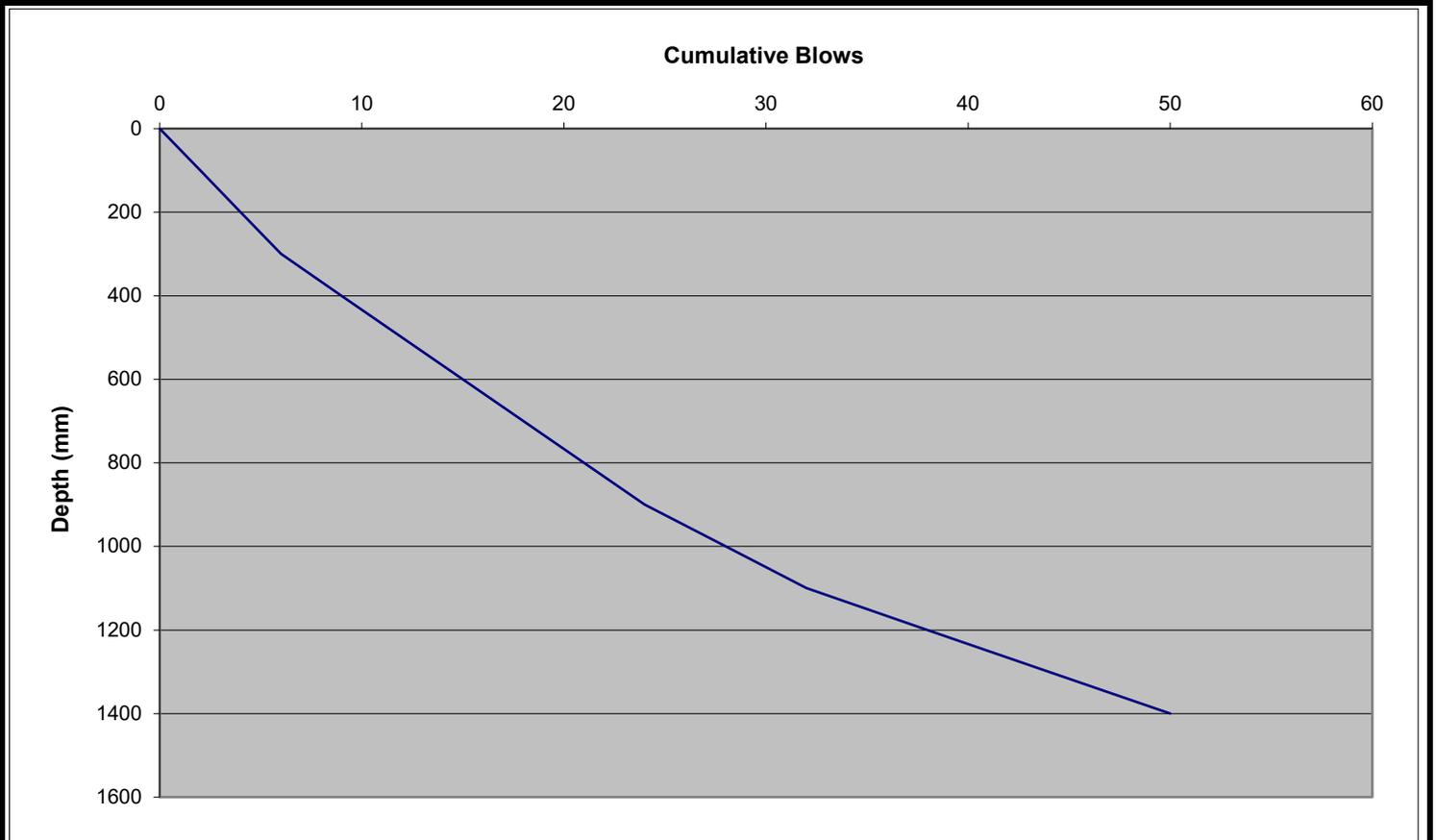
Aitken Rowe Testing Laboratories Pty Ltd

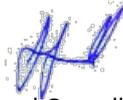
ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW	PAGE: 4 OF: 36	DCP: 4 (BH2)
PROJECT: GEOTECHNICAL INVESTIGATION	REGISTRATION NO: GS24-213	
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,	DATE OF TEST: 6/08/2024	
LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW	DEPTH BELOW ESL (mm): NIL	
SOIL DESCRIPTION: REFER TO BOREHOLE LOGS	MOISTURE CONDITION: REFER TO LOGS	
DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	TEST METHOD: AS 1289.6.3.2	

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	2	3	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	2	3	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	2	3	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	3	5	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	3	5	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	3	5	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	3	5	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	3	5	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	3	5	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	4	7	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	4	7	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	6	12	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	6	12	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	6	12	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	END	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



 <p>Accredited for compliance with ISO/IEC 17025 - Testing.</p> <p>ACCREDITATION NUMBER: 4679</p> <p>WORLD RECOGNISED ACCREDITATION</p>	REMARKS:
	<p>APPROVED SIGNATORY:  Jarrod Gornall</p> <p>DATE: 22/08/2024</p>

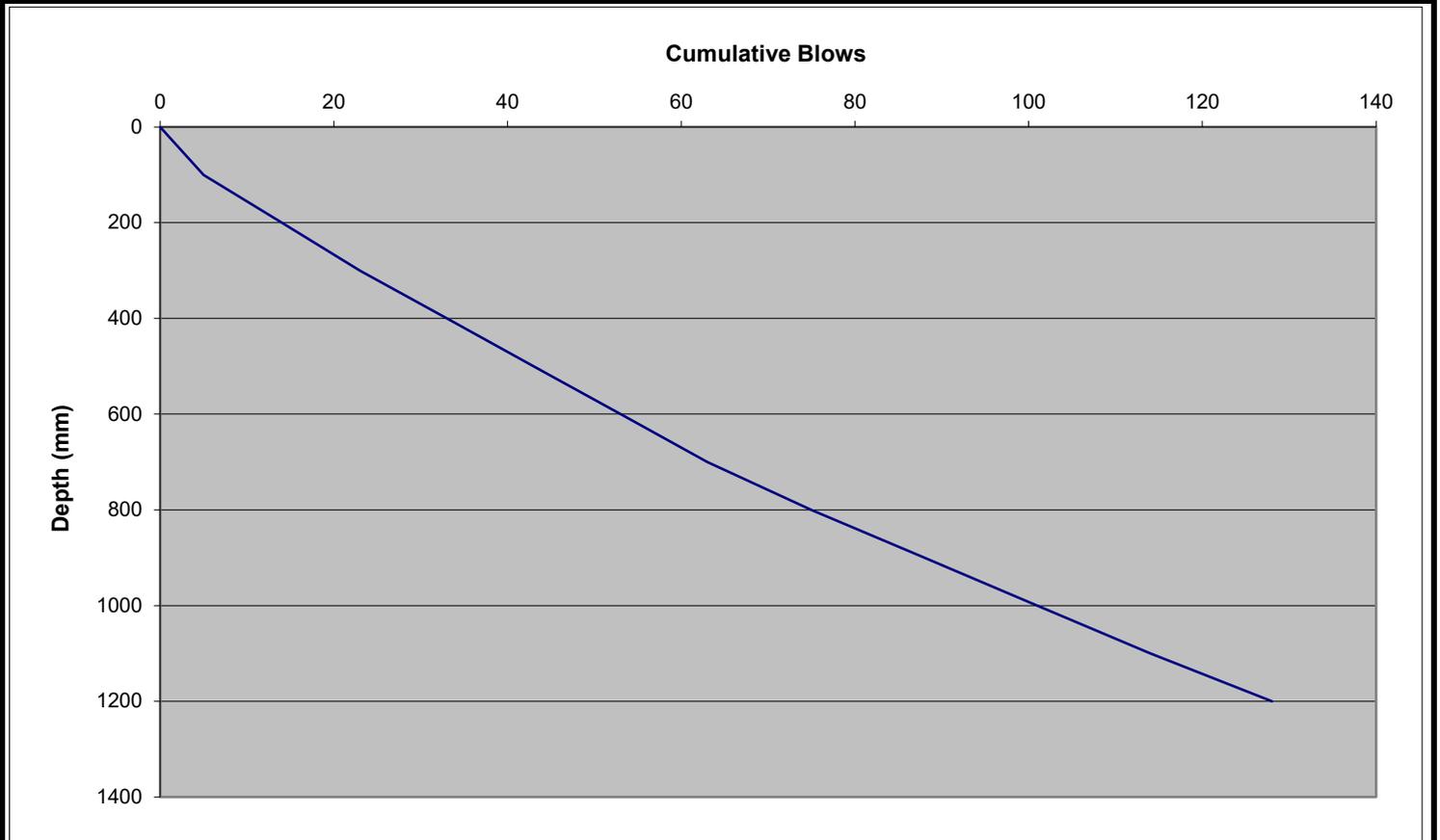
Aitken Rowe Testing Laboratories Pty Ltd

ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW PROJECT: GEOTECHNICAL INVESTIGATION PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT, LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW SOIL DESCRIPTION: REFER TO BOREHOLE LOGS DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	PAGE: 5 OF: 36 <i>DCP: 5 (BH2)</i> REGISTRATION NO: GS24-213 DATE OF TEST: 6/08/2024 DEPTH BELOW ESL (mm): 1500 MOISTURE CONDITION: REFER TO LOGS TEST METHOD: AS 1289.6.3.2
--	---

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	5	9	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	9	20	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	9	20	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	10	23	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	10	23	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	10	23	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	10	23	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	12	28	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	13	32	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	13	32	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	13	32	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	14	35	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	END	*	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	*	*	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	*	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



<p>Accredited for compliance with ISO/IEC 17025 - Testing.</p> <p>ACCREDITATION NUMBER: 4679</p> <p><small>WORLD RECOGNISED ACCREDITATION</small></p>	<p>REMARKS:</p> <div style="text-align: center; margin-top: 20px;"> <p>APPROVED SIGNATORY: Jarrod Gornall</p> <p>DATE: 22/08/2024</p> </div>
---	--

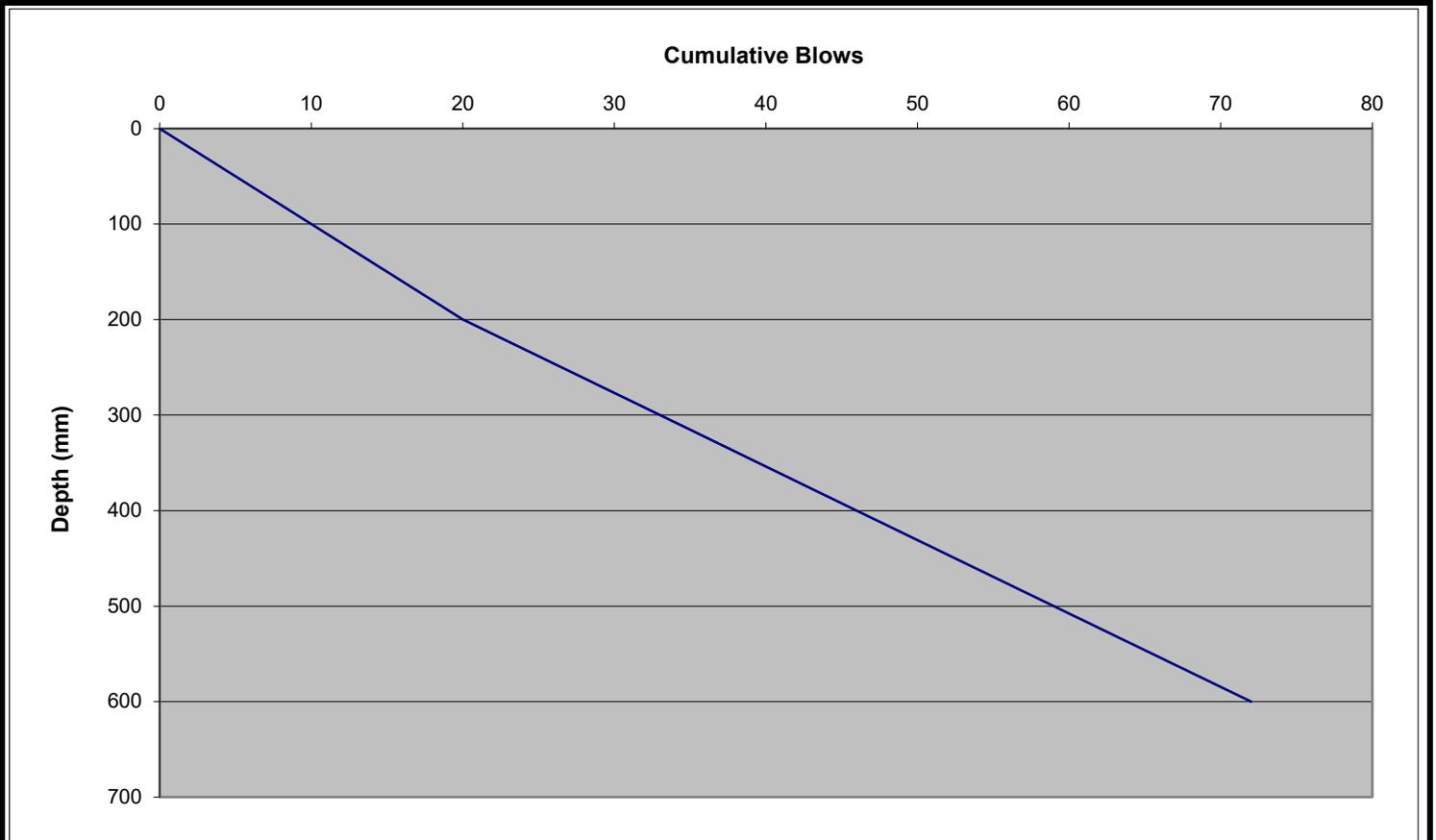
Aitken Rowe Testing Laboratories Pty Ltd

ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW	PAGE: 6 OF: 36	DCP: 6 (BH2)
PROJECT: GEOTECHNICAL INVESTIGATION	REGISTRATION NO: GS24-213	
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,	DATE OF TEST: 6/08/2024	
LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW	DEPTH BELOW ESL (mm): 3000	
SOIL DESCRIPTION: REFER TO BOREHOLE LOGS	MOISTURE CONDITION: REFER TO LOGS	
DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A		TEST METHOD: AS 1289.6.3.2

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	10	23	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	10	23	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	13	32	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	13	32	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	13	32	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	13	32	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	END	*	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	*	*	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	*	*	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	*	*	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	*	*	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	*	*	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	*	*	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	*	*	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	*	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



 <p>Accredited for compliance with ISO/IEC 17025 - Testing.</p> <p>ACCREDITATION NUMBER: 4679</p> <p>WORLD RECOGNISED ACCREDITATION</p>	REMARKS:
	<p>APPROVED SIGNATORY:  Jarrod Gornall</p> <p>DATE: 22/08/2024</p>

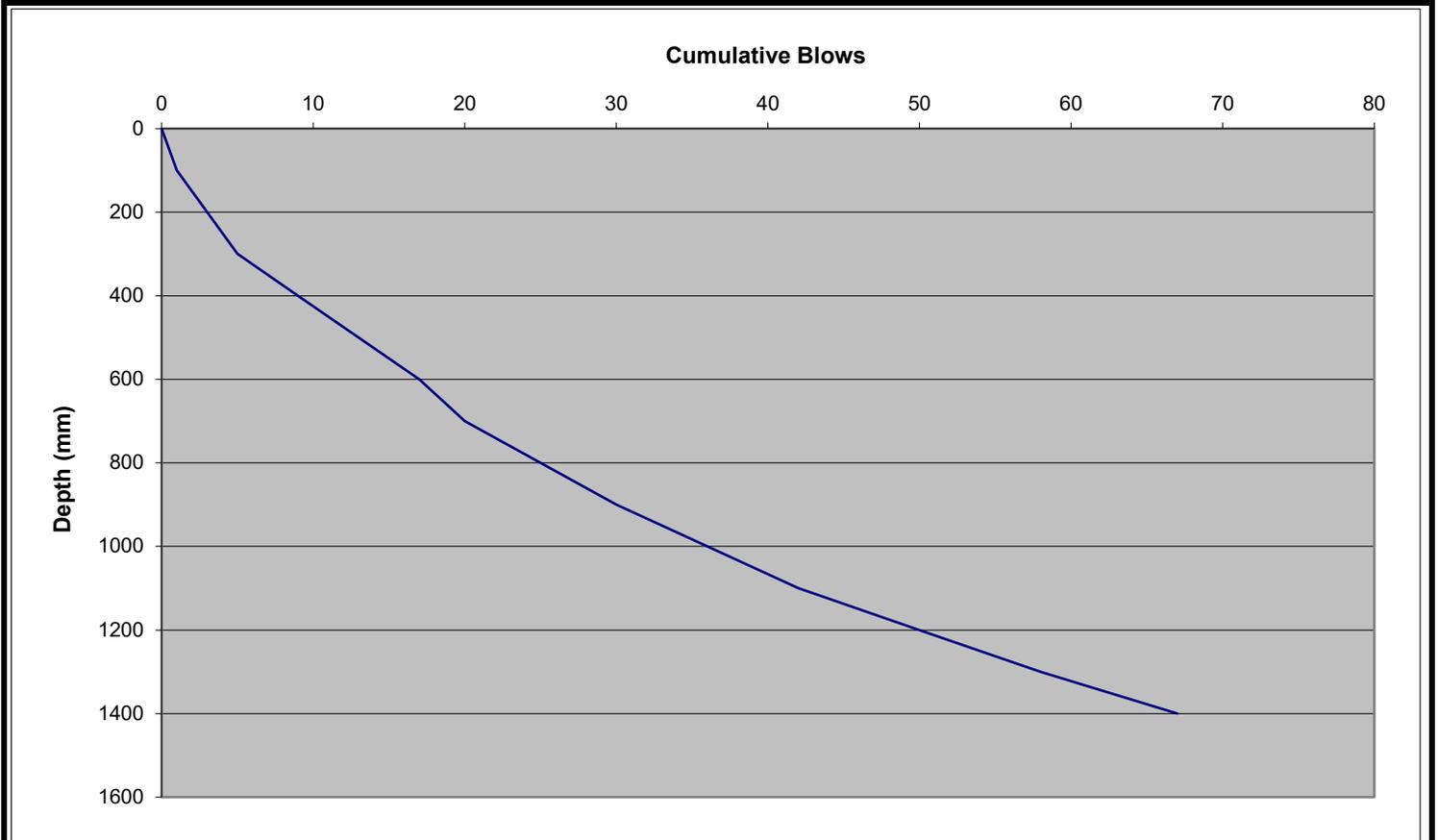
Aitken Rowe Testing Laboratories Pty Ltd

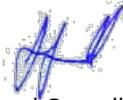
ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW	PAGE: 7 OF: 36	DCP: 7 (BH3)
PROJECT: GEOTECHNICAL INVESTIGATION	REGISTRATION NO: GS24-213	
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,	DATE OF TEST: 6/08/2024	
LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW	DEPTH BELOW ESL (mm): NIL	
SOIL DESCRIPTION: REFER TO BOREHOLE LOGS	MOISTURE CONDITION: REFER TO LOGS	
DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	TEST METHOD: AS 1289.6.3.2	

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	1	1	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	2	3	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	2	3	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	4	7	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	4	7	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	4	7	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	3	5	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	5	9	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	5	9	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	6	12	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	6	12	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	8	17	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	8	17	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	9	20	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	END	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



 <p>Accredited for compliance with ISO/IEC 17025 - Testing.</p> <p>ACCREDITATION NUMBER: 4679</p> <p>WORLD RECOGNISED ACCREDITATION</p>	REMARKS:
	<p>APPROVED SIGNATORY:  Jarrod Gornall</p> <p>DATE: 22/08/2024</p>

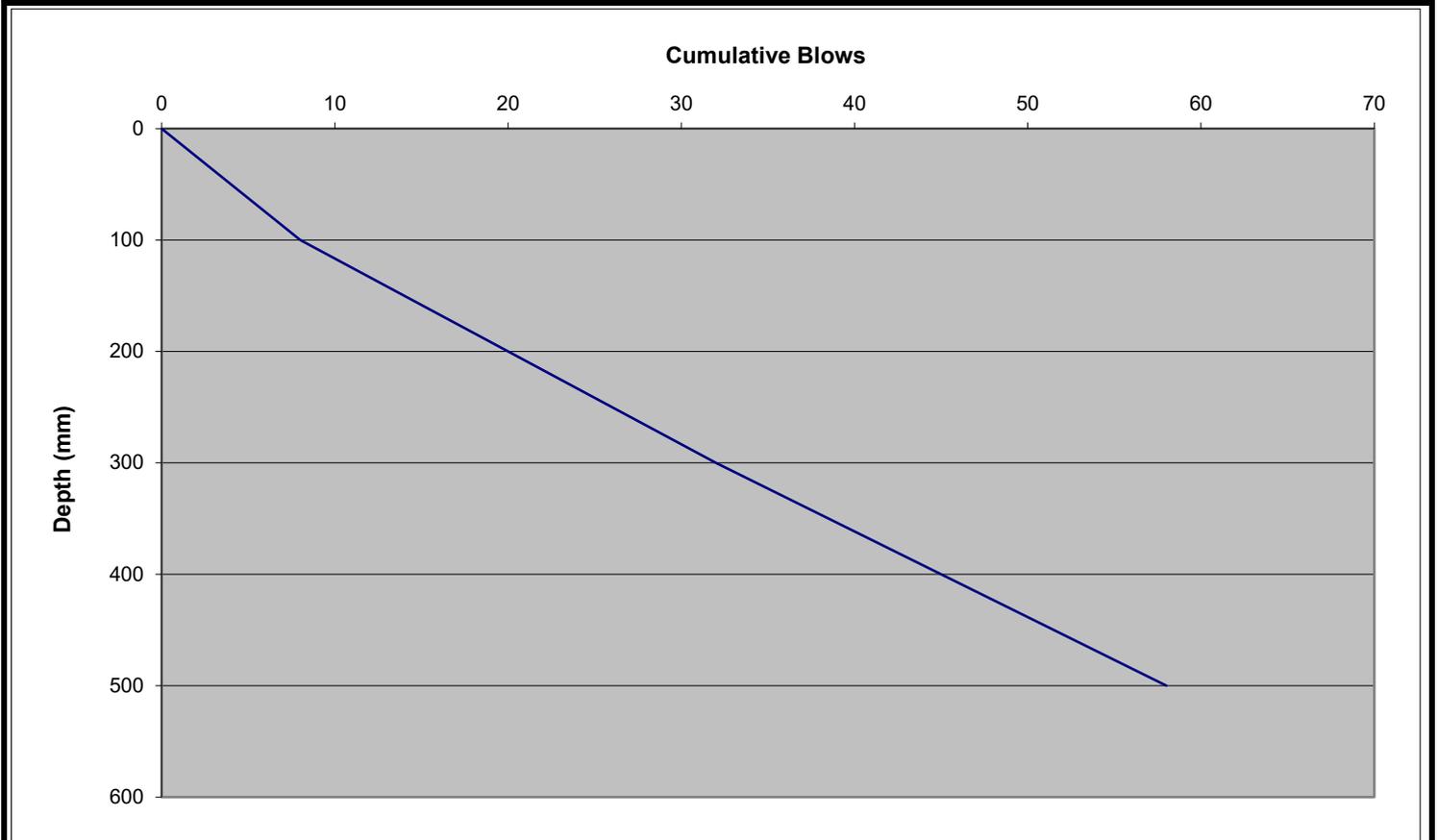
Aitken Rowe Testing Laboratories Pty Ltd

ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW	PAGE: 8 OF: 36 DCP: 8 (BH3)
PROJECT: GEOTECHNICAL INVESTIGATION	REGISTRATION NO: GS24-213
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,	DATE OF TEST: 6/08/2024
LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW	DEPTH BELOW ESL (mm): 1500
SOIL DESCRIPTION: REFER TO BOREHOLE LOGS	MOISTURE CONDITION: REFER TO LOGS
DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	TEST METHOD: AS 1289.6.3.2

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	8	17	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	12	28	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	12	28	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	13	32	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	13	32	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	END	*	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	*	*	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	*	*	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	*	*	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	*	*	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	*	*	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	*	*	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	*	*	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	*	*	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	*	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



 <p>Accredited for compliance with ISO/IEC 17025 - Testing.</p> <p>ACCREDITATION NUMBER: 4679</p> <p>WORLD RECOGNISED ACCREDITATION</p>	REMARKS:
	<p>APPROVED SIGNATORY:  Jarrod Gornall</p> <p>DATE: 22/08/2024</p>

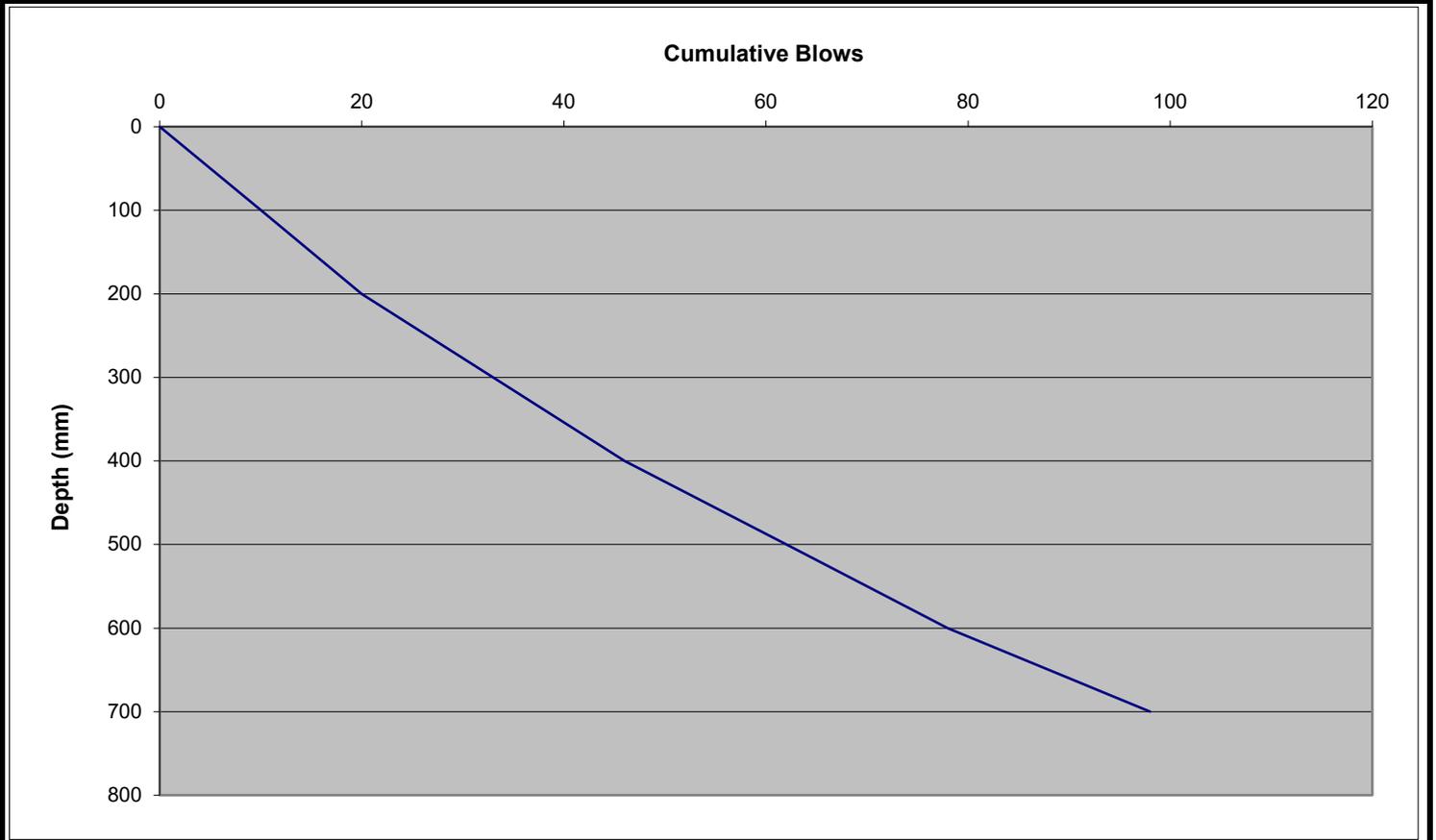
Aitken Rowe Testing Laboratories Pty Ltd

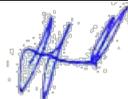
ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW	PAGE: 9 OF: 36 DCP: 9 (BH3)
PROJECT: GEOTECHNICAL INVESTIGATION	REGISTRATION NO: GS24-213
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,	DATE OF TEST: 6/08/2024
LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW	DEPTH BELOW ESL (mm): 3000
SOIL DESCRIPTION: REFER TO BOREHOLE LOGS	MOISTURE CONDITION: REFER TO LOGS
DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	TEST METHOD: AS 1289.6.3.2

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	10	23	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	10	23	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	13	32	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	13	32	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	16	41	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	16	41	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	20	55	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	END	*	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	*	*	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	*	*	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	*	*	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	*	*	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	*	*	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	*	*	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	*	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



 <p>Accredited for compliance with ISO/IEC 17025 - Testing.</p> <p>ACCREDITATION NUMBER: 4679</p> <p>WORLD RECOGNISED ACCREDITATION</p>	REMARKS:
	<p>APPROVED SIGNATORY:  Jarrod Gornall</p> <p>DATE: 22/08/2024</p>

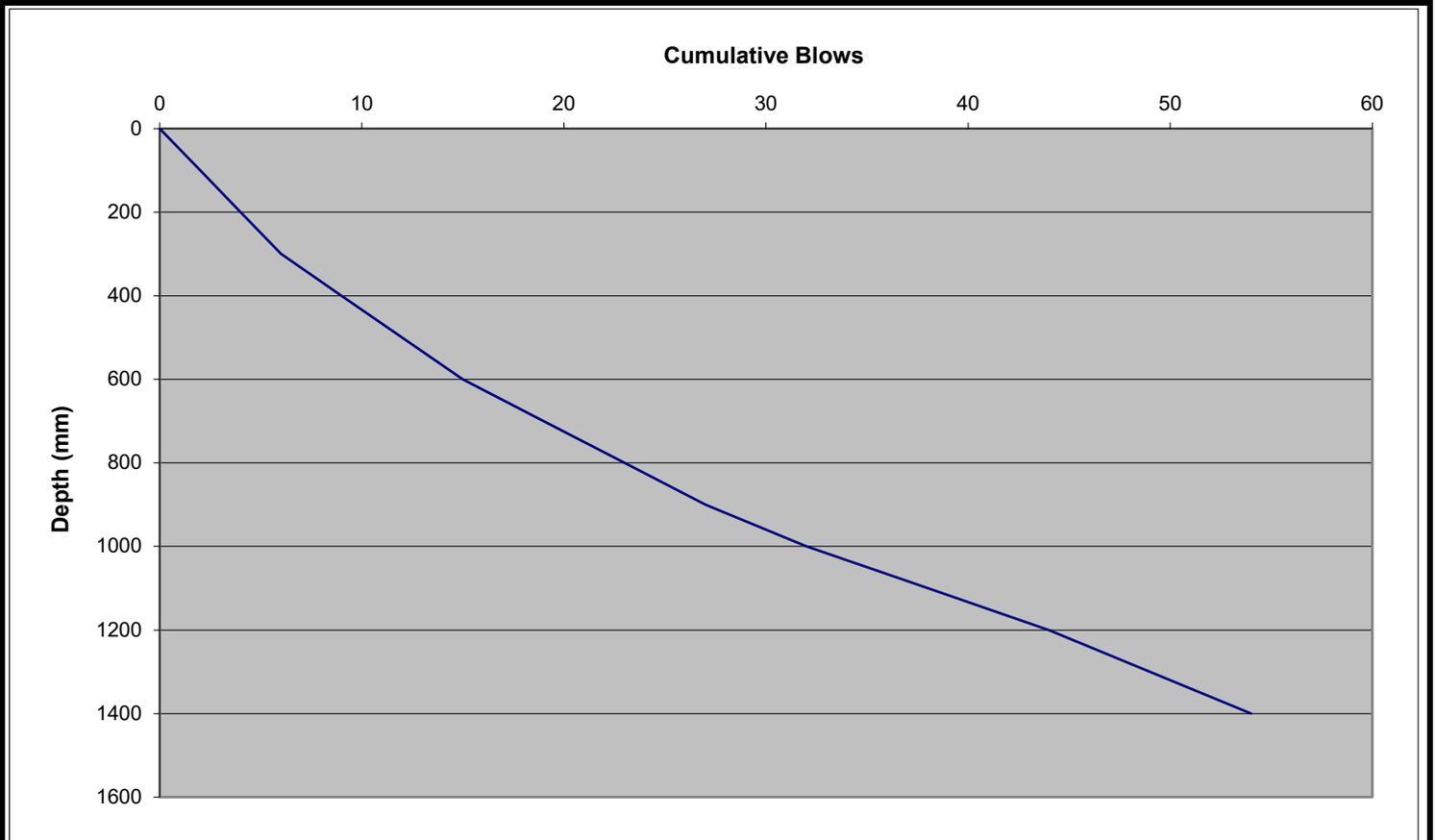
Aitken Rowe Testing Laboratories Pty Ltd

ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW	PAGE: 10 OF: 36 DCP: 10 (BH4)
PROJECT: GEOTECHNICAL INVESTIGATION	REGISTRATION NO: GS24-213
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,	DATE OF TEST: 6/08/2024
LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW	DEPTH BELOW ESL (mm): NIL
SOIL DESCRIPTION: REFER TO BOREHOLE LOGS	MOISTURE CONDITION: REFER TO LOGS
DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	TEST METHOD: AS 1289.6.3.2

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	2	3	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	2	3	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	2	3	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	3	5	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	3	5	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	3	5	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	4	7	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	4	7	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	4	7	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	5	9	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	6	12	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	6	12	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	5	9	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	5	9	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	END	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



 <p>Accredited for compliance with ISO/IEC 17025 - Testing.</p> <p>ACCREDITATION NUMBER: 4679</p> <p>WORLD RECOGNISED ACCREDITATION</p>	REMARKS:
	<p>APPROVED SIGNATORY:  Jarrod Gornall</p> <p>DATE: 22/08/2024</p>

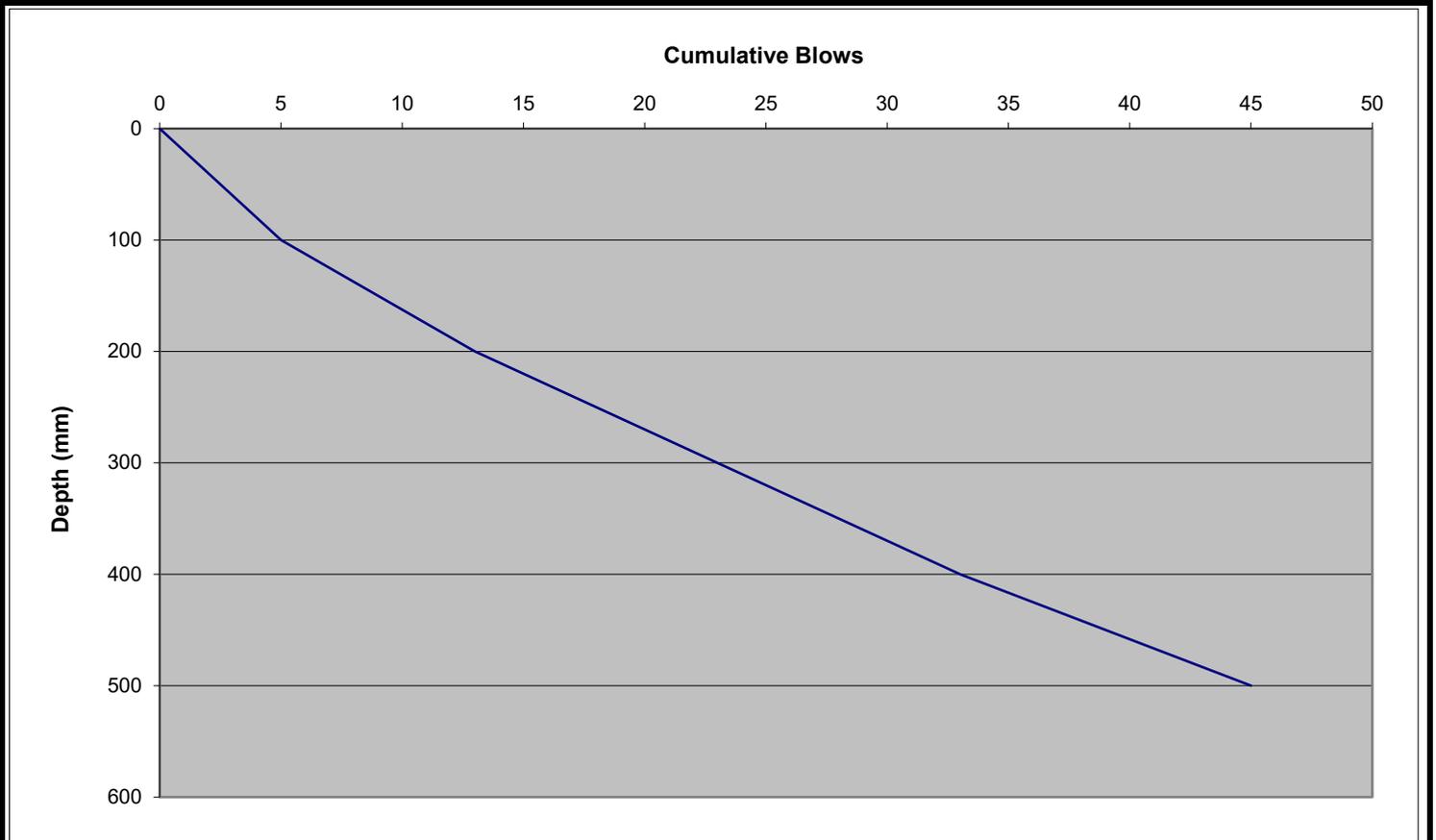
Aitken Rowe Testing Laboratories Pty Ltd

ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW	PAGE: 11 OF: 36 DCP: 11 (BH4)
PROJECT: GEOTECHNICAL INVESTIGATION	REGISTRATION NO: GS24-213
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,	DATE OF TEST: 6/08/2024
LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW	DEPTH BELOW ESL (mm): 1500
SOIL DESCRIPTION: REFER TO BOREHOLE LOGS	MOISTURE CONDITION: REFER TO LOGS
DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	TEST METHOD: AS 1289.6.3.2

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	5	9	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	8	17	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	10	23	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	10	23	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	12	28	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	END	*	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	*	*	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	*	*	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	*	*	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	*	*	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	*	*	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	*	*	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	*	*	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	*	*	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	*	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



 <p>Accredited for compliance with ISO/IEC 17025 - Testing.</p> <p>ACCREDITATION NUMBER: 4679</p> <p>WORLD RECOGNISED ACCREDITATION</p>	REMARKS:
	<p>APPROVED SIGNATORY:  Jarrod Gornall</p> <p>DATE: 22/08/2024</p>

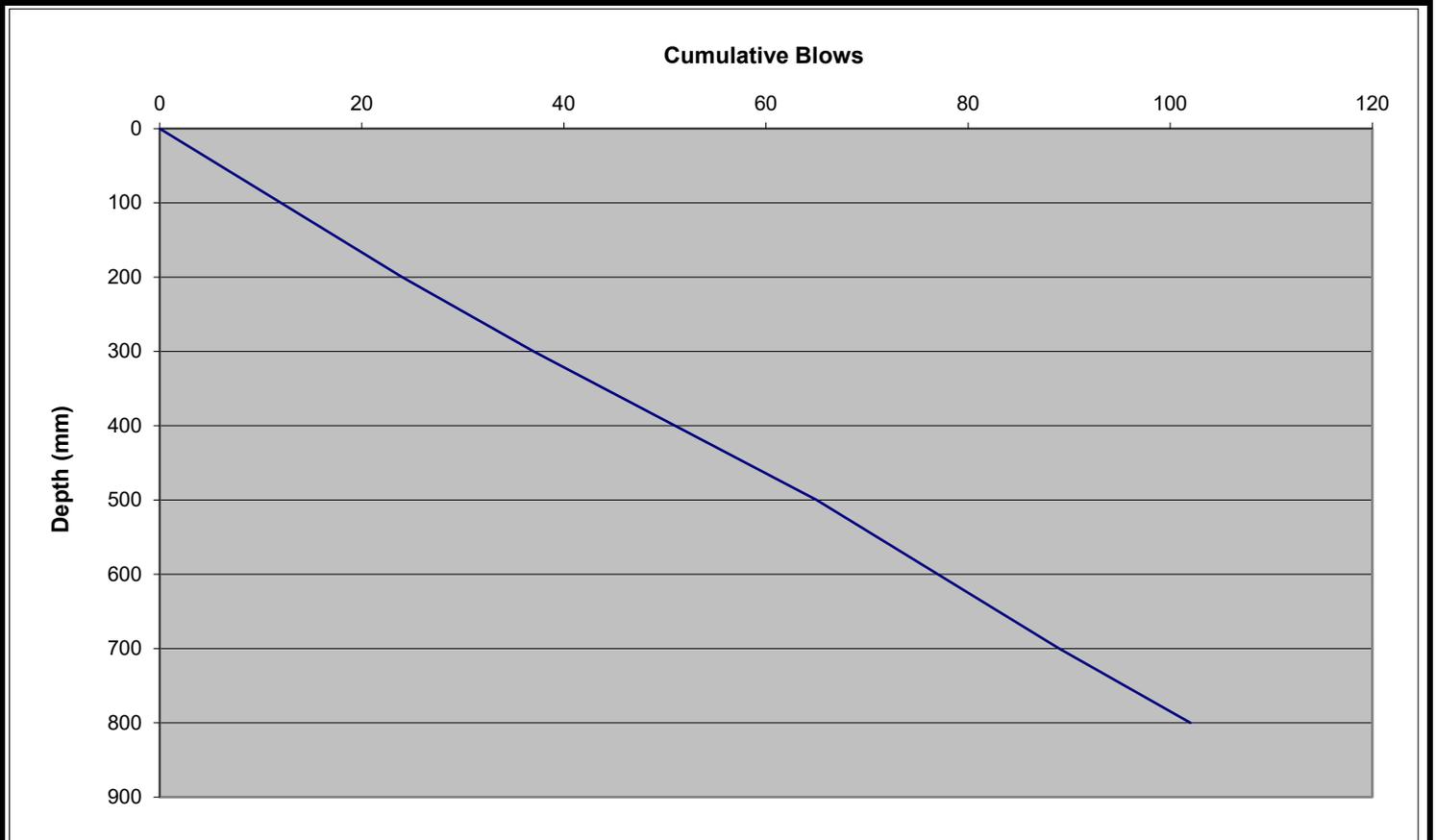
Aitken Rowe Testing Laboratories Pty Ltd

ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW	PAGE: 12 OF: 36 DCP: 12 (BH4)
PROJECT: GEOTECHNICAL INVESTIGATION	REGISTRATION NO: GS24-213
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,	DATE OF TEST: 6/08/2024
LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW	DEPTH BELOW ESL (mm): 3000
SOIL DESCRIPTION: REFER TO BOREHOLE LOGS	MOISTURE CONDITION: REFER TO LOGS
DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	TEST METHOD: AS 1289.6.3.2

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	12	28	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	12	28	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	13	32	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	14	35	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	14	35	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	12	28	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	12	28	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	13	32	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	END	*	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	*	*	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	*	*	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	*	*	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	*	*	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	*	*	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	*	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



 <p>Accredited for compliance with ISO/IEC 17025 - Testing.</p> <p>ACCREDITATION NUMBER: 4679</p> <p>WORLD RECOGNISED ACCREDITATION</p>	REMARKS:
	<p>APPROVED SIGNATORY:  Jarrod Gornall</p> <p>DATE: 22/08/2024</p>

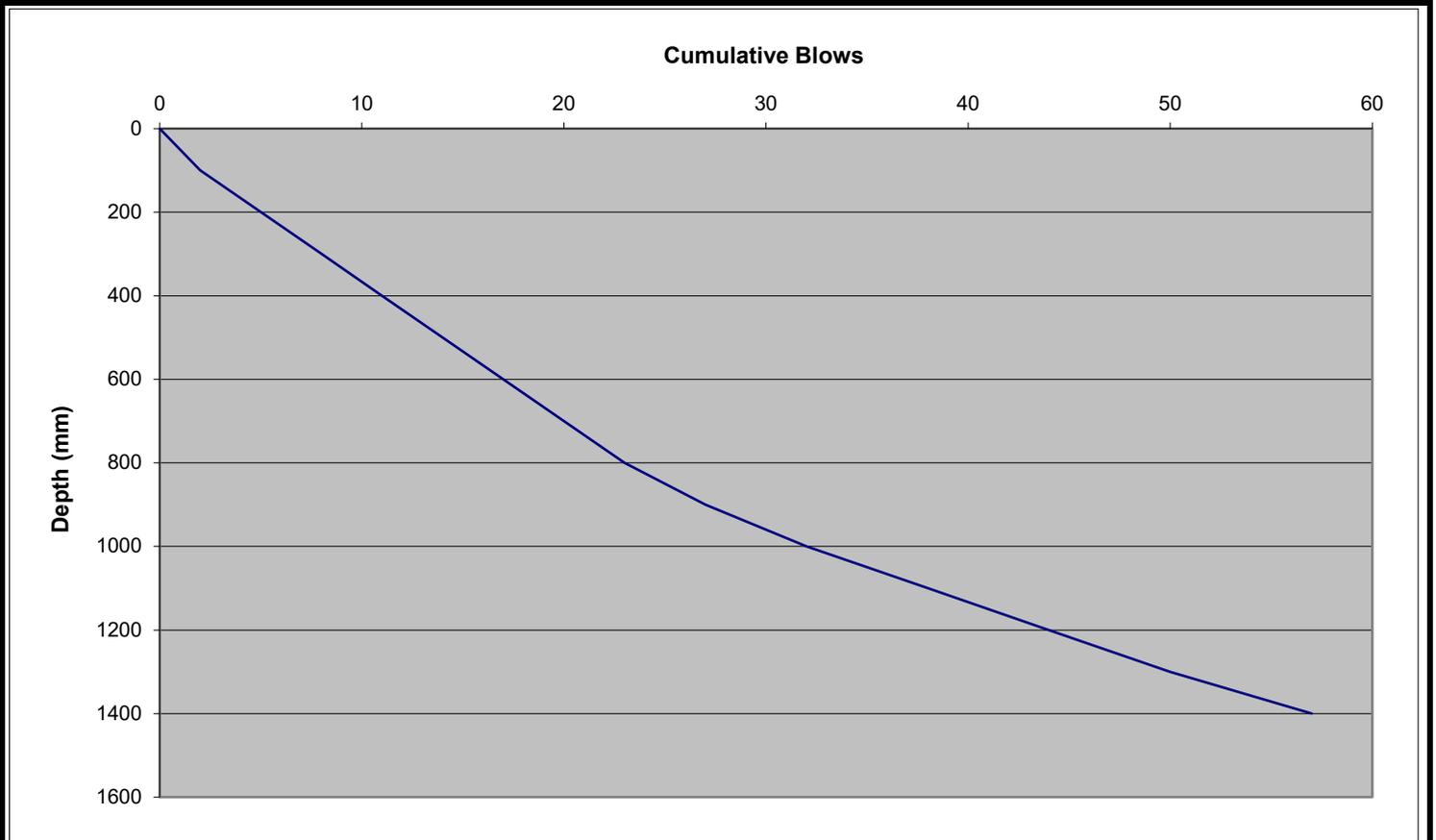
Aitken Rowe Testing Laboratories Pty Ltd

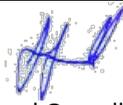
ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW	PAGE: 13 OF: 36 DCP: 13 (BH5)
PROJECT: GEOTECHNICAL INVESTIGATION	REGISTRATION NO: GS24-213
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,	DATE OF TEST: 9/08/2024
LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW	DEPTH BELOW ESL (mm): NIL
SOIL DESCRIPTION: REFER TO BOREHOLE LOGS	MOISTURE CONDITION: REFER TO LOGS
DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	TEST METHOD: AS 1289.6.3.2

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	2	3	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	3	5	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	3	5	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	3	5	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	3	5	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	3	5	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	3	5	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	3	5	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	4	7	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	5	9	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	6	12	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	6	12	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	6	12	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	7	14	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	END	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



 <p>Accredited for compliance with ISO/IEC 17025 - Testing.</p> <p>ACCREDITATION NUMBER: 4679</p> <p>WORLD RECOGNISED ACCREDITATION</p>	REMARKS:
	<p>APPROVED SIGNATORY:  Jarrod Gornall</p> <p>DATE: 22/08/2024</p>

Aitken Rowe Testing Laboratories Pty Ltd

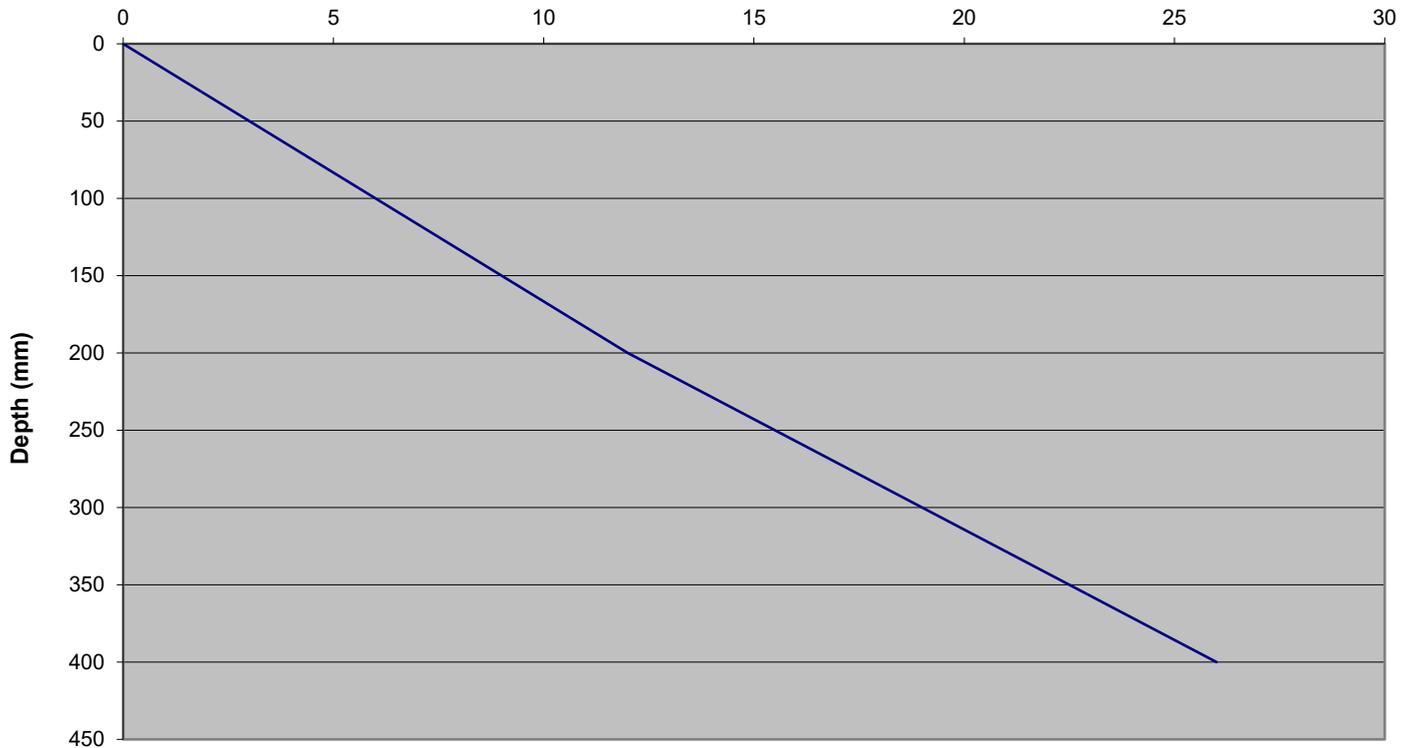
ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW	PAGE: 14 OF: 36 DCP: 14 (BH5)
PROJECT: GEOTECHNICAL INVESTIGATION	REGISTRATION NO: GS24-213
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,	DATE OF TEST: 9/08/2024
LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW	DEPTH BELOW ESL (mm): 1500
SOIL DESCRIPTION: REFER TO BOREHOLE LOGS	MOISTURE CONDITION: REFER TO LOGS
DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	TEST METHOD: AS 1289.6.3.2

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	6	12	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	6	12	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	7	14	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	7	14	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	END	*	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	*	*	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	*	*	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	*	*	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	*	*	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	*	*	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	*	*	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	*	*	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	*	*	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	*	*	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	*	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*

Cumulative Blows



Accredited for compliance with ISO/IEC 17025 - Testing.

ACCREDITATION NUMBER:
4679

REMARKS:

APPROVED SIGNATORY:  Jarrod Gornall

DATE: 22/08/2024

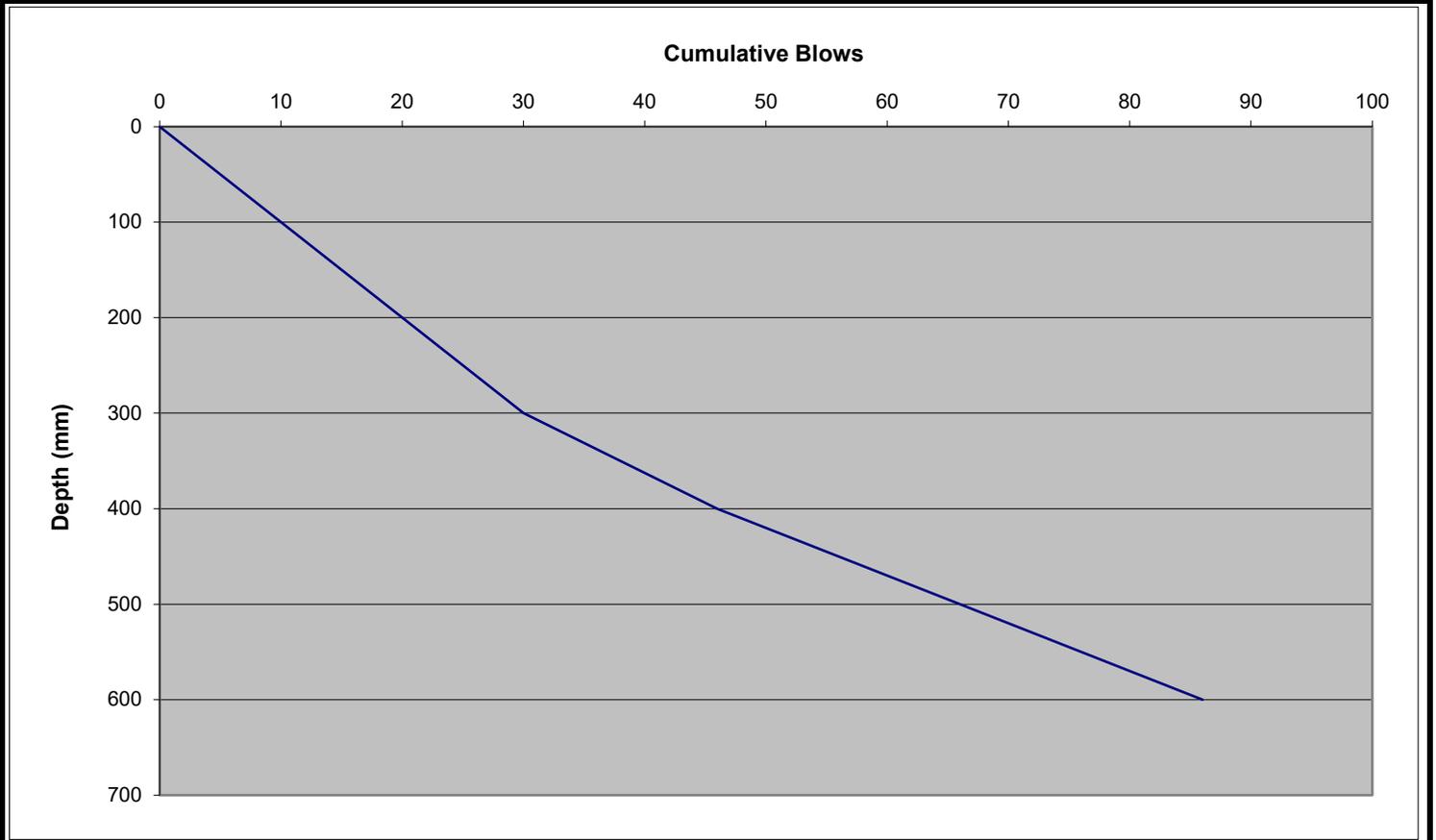
Aitken Rowe Testing Laboratories Pty Ltd

ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW PROJECT: GEOTECHNICAL INVESTIGATION PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT, LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW SOIL DESCRIPTION: REFER TO BOREHOLE LOGS DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	PAGE: 15 OF: 36 DCP: 15 (BH5) REGISTRATION NO: GS24-213 DATE OF TEST: 9/08/2024 DEPTH BELOW ESL (mm): 2900 MOISTURE CONDITION: REFER TO LOGS TEST METHOD: AS 1289.6.3.2
--	--

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	10	23	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	10	23	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	10	23	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	16	41	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	20	55	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	20	55	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	END	*	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	*	*	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	*	*	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	*	*	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	*	*	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	*	*	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	*	*	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	*	*	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	*	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



Accredited for compliance with ISO/IEC 17025 - Testing. ACCREDITATION NUMBER: 4679 WORLD RECOGNISED ACCREDITATION	REMARKS: <div style="text-align: center;"> APPROVED SIGNATORY: Jarrod Gornall DATE: 22/08/2024 </div>
--	---

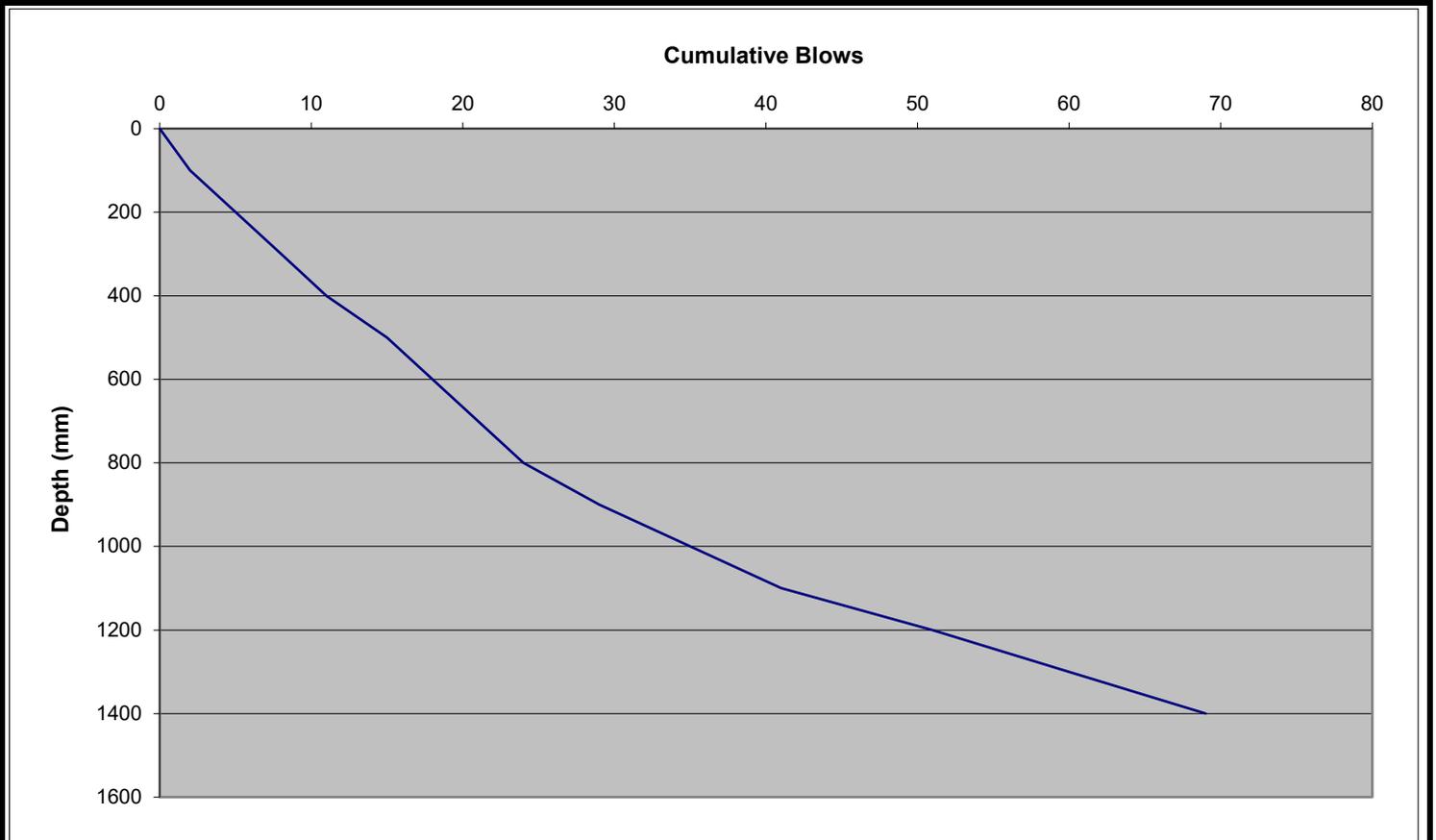
Aitken Rowe Testing Laboratories Pty Ltd

ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW	PAGE: 16 OF: 36 DCP: 16 (BH6)
PROJECT: GEOTECHNICAL INVESTIGATION	REGISTRATION NO: GS24-213
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,	DATE OF TEST: 9/08/2024
LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW	DEPTH BELOW ESL (mm): NIL
SOIL DESCRIPTION: REFER TO BOREHOLE LOGS	MOISTURE CONDITION: REFER TO LOGS
DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	TEST METHOD: AS 1289.6.3.2

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	2	3	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	3	5	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	3	5	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	3	5	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	4	7	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	3	5	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	3	5	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	3	5	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	5	9	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	6	12	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	6	12	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	10	23	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	9	20	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	9	20	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	END	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



 <p>Accredited for compliance with ISO/IEC 17025 - Testing.</p> <p>ACCREDITATION NUMBER: 4679</p> <p>WORLD RECOGNISED ACCREDITATION</p>	REMARKS:
	<p>APPROVED SIGNATORY:  Jarrod Gornall</p> <p>DATE: 22/08/2024</p>

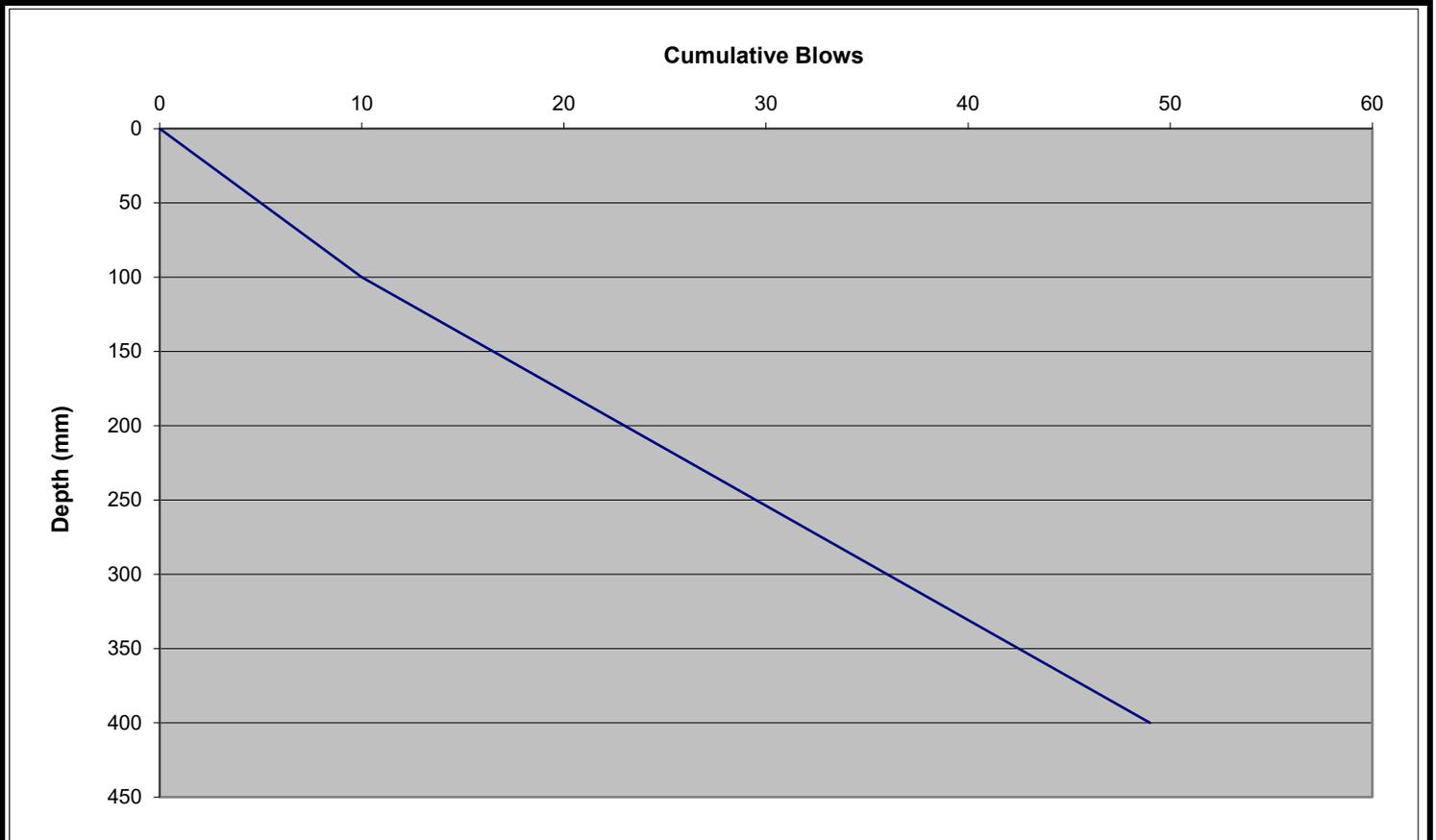
Aitken Rowe Testing Laboratories Pty Ltd

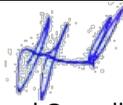
ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW	PAGE: 17 OF: 36 DCP: 17 (BH6)
PROJECT: GEOTECHNICAL INVESTIGATION	REGISTRATION NO: GS24-213
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,	DATE OF TEST: 9/08/2024
LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW	DEPTH BELOW ESL (mm): 1400
SOIL DESCRIPTION: REFER TO BOREHOLE LOGS	MOISTURE CONDITION: REFER TO LOGS
DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	TEST METHOD: AS 1289.6.3.2

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	10	23	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	13	32	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	13	32	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	13	32	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	END	*	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	*	*	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	*	*	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	*	*	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	*	*	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	*	*	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	*	*	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	*	*	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	*	*	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	*	*	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	*	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



 <p>Accredited for compliance with ISO/IEC 17025 - Testing.</p> <p>ACCREDITATION NUMBER: 4679</p> <p>WORLD RECOGNISED ACCREDITATION</p>	REMARKS:
	<p>APPROVED SIGNATORY:  Jarrod Gornall</p> <p>DATE: 22/08/2024</p>

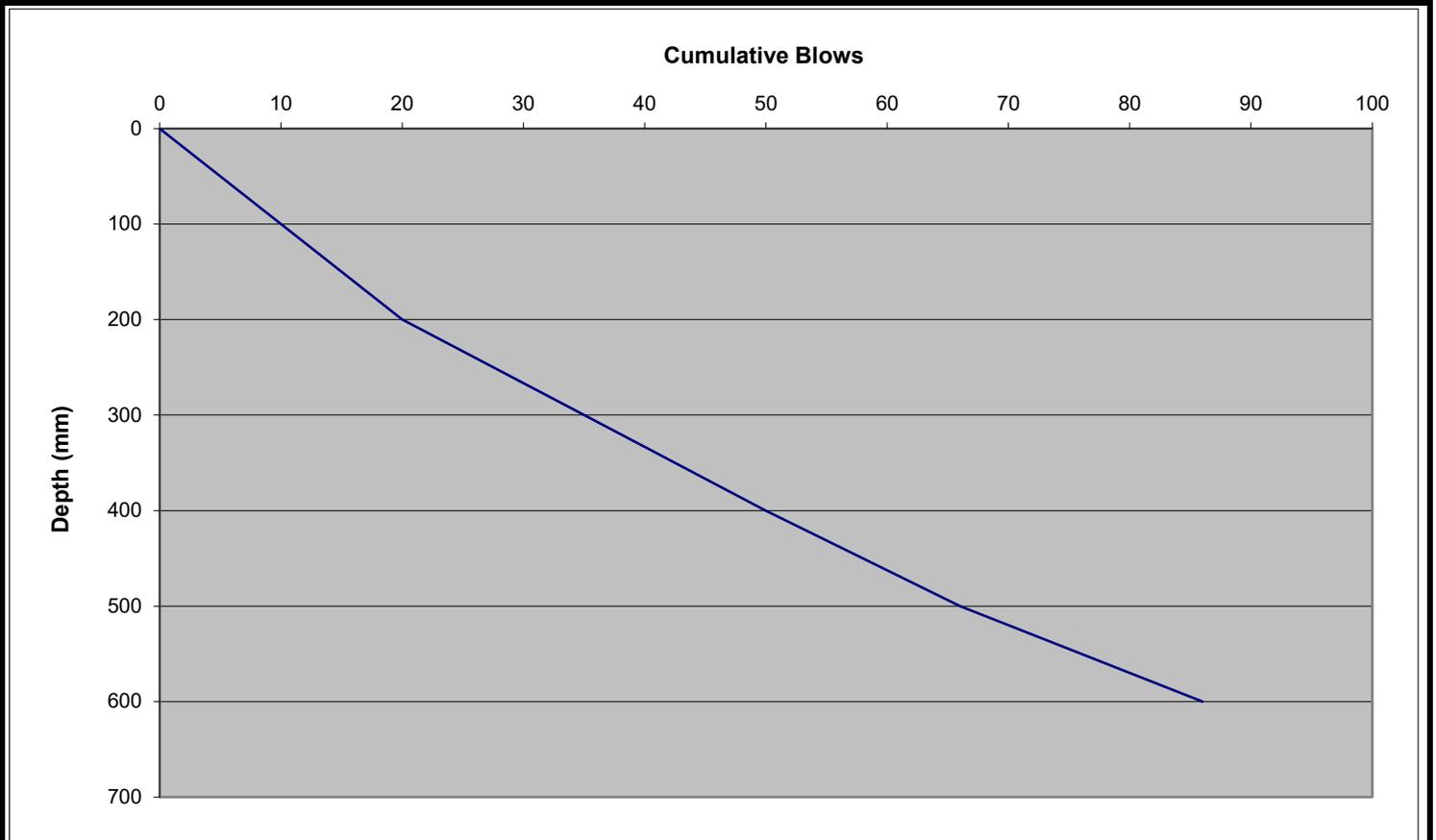
Aitken Rowe Testing Laboratories Pty Ltd

ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW PROJECT: GEOTECHNICAL INVESTIGATION PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT, LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW SOIL DESCRIPTION: REFER TO BOREHOLE LOGS DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	PAGE: 18 OF: 36 DCP: 18 (BH6) REGISTRATION NO: GS24-213 DATE OF TEST: 9/08/2024 DEPTH BELOW ESL (mm): 2900 MOISTURE CONDITION: REFER TO LOGS TEST METHOD: AS 1289.6.3.2
--	--

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	10	23	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	10	23	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	15	38	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	15	38	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	16	41	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	20	55	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	END	*	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	*	*	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	*	*	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	*	*	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	*	*	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	*	*	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	*	*	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	*	*	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	*	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



Accredited for compliance with ISO/IEC 17025 - Testing. ACCREDITATION NUMBER: 4679 WORLD RECOGNISED ACCREDITATION	REMARKS: <div style="text-align: center;"> APPROVED SIGNATORY: Jarrod Gornall DATE: 22/08/2024 </div>
---	---

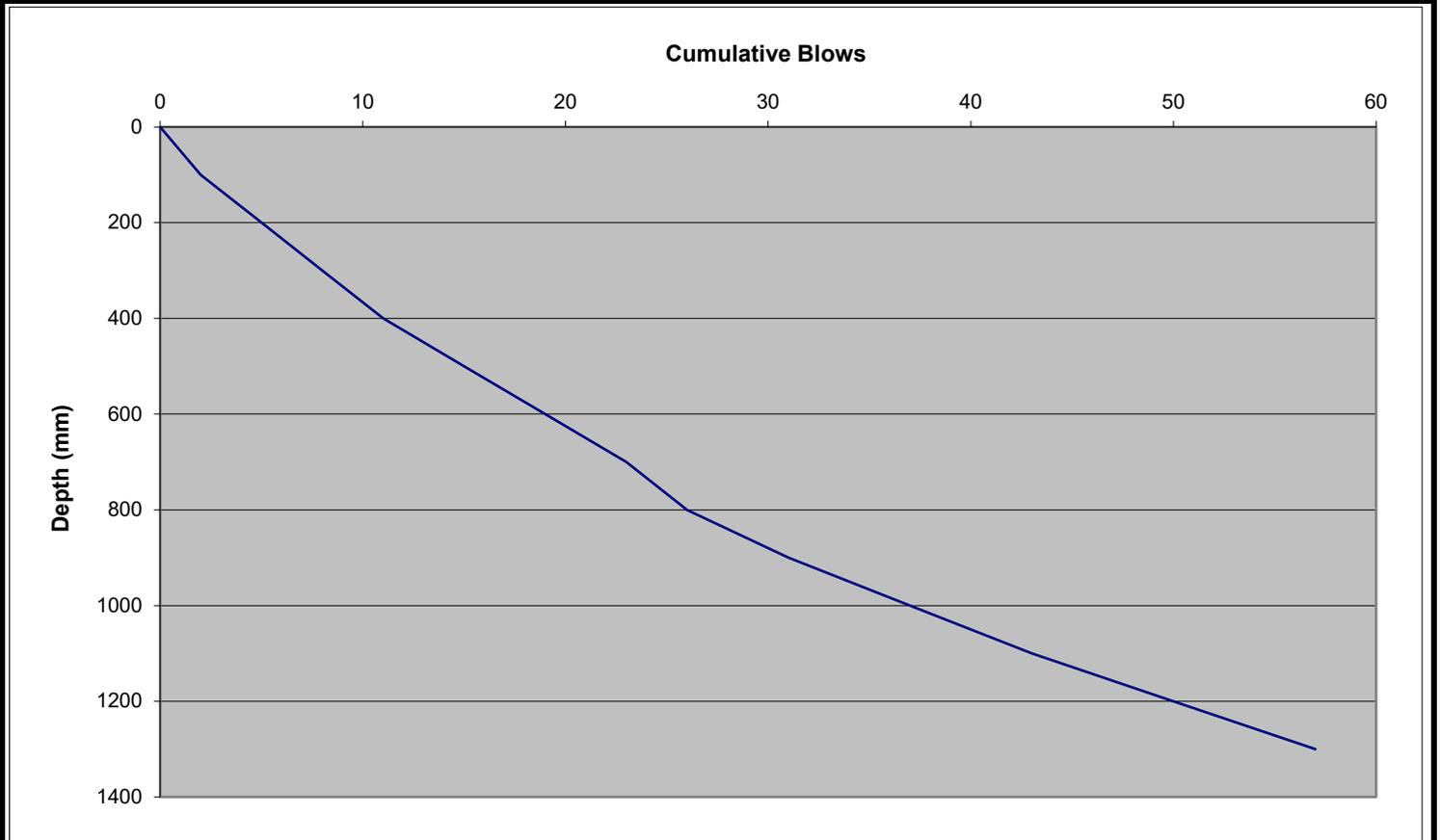
Aitken Rowe Testing Laboratories Pty Ltd

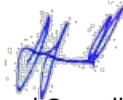
ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW	PAGE: 19 OF: 36 DCP: 19 (BH7)
PROJECT: GEOTECHNICAL INVESTIGATION	REGISTRATION NO: GS24-213
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,	DATE OF TEST: 9/08/2024
LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW	DEPTH BELOW ESL (mm): NIL
SOIL DESCRIPTION: REFER TO BOREHOLE LOGS	MOISTURE CONDITION: REFER TO LOGS
DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	TEST METHOD: AS 1289.6.3.2

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	2	3	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	3	5	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	3	5	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	3	5	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	4	7	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	4	7	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	4	7	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	3	5	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	5	9	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	6	12	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	6	12	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	7	14	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	7	14	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	END	*	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	*	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



 <p>Accredited for compliance with ISO/IEC 17025 - Testing.</p> <p>ACCREDITATION NUMBER: 4679</p> <p>WORLD RECOGNISED ACCREDITATION</p>	REMARKS:
	<p>APPROVED SIGNATORY:  Jarrod Gornall</p> <p>DATE: 22/08/2024</p>

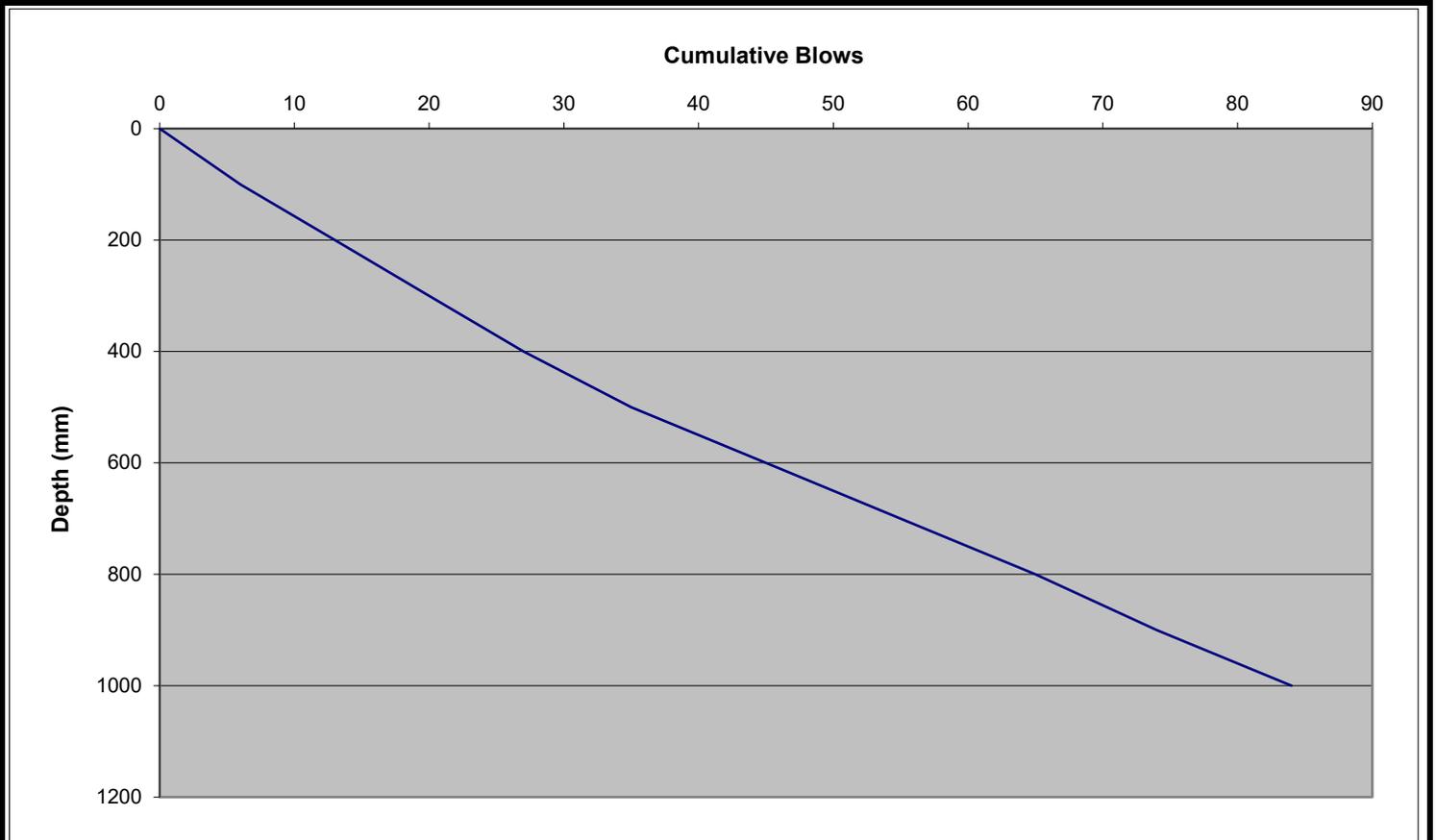
Aitken Rowe Testing Laboratories Pty Ltd

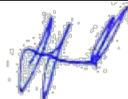
ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW	PAGE: 20 OF: 36 DCP: 20 (BH7)
PROJECT: GEOTECHNICAL INVESTIGATION	REGISTRATION NO: GS24-213
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,	DATE OF TEST: 9/08/2024
LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW	DEPTH BELOW ESL (mm): 1400
SOIL DESCRIPTION: REFER TO BOREHOLE LOGS	MOISTURE CONDITION: REFER TO LOGS
DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	TEST METHOD: AS 1289.6.3.2

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	6	12	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	7	14	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	7	14	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	7	14	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	8	17	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	10	23	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	10	23	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	10	23	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	9	20	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	10	23	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	END	*	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	*	*	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	*	*	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	*	*	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	*	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



 <p>Accredited for compliance with ISO/IEC 17025 - Testing.</p> <p>ACCREDITATION NUMBER: 4679</p> <p>WORLD RECOGNISED ACCREDITATION</p>	REMARKS:
	<p>APPROVED SIGNATORY:  Jarrod Gornall</p> <p>DATE: 22/08/2024</p>

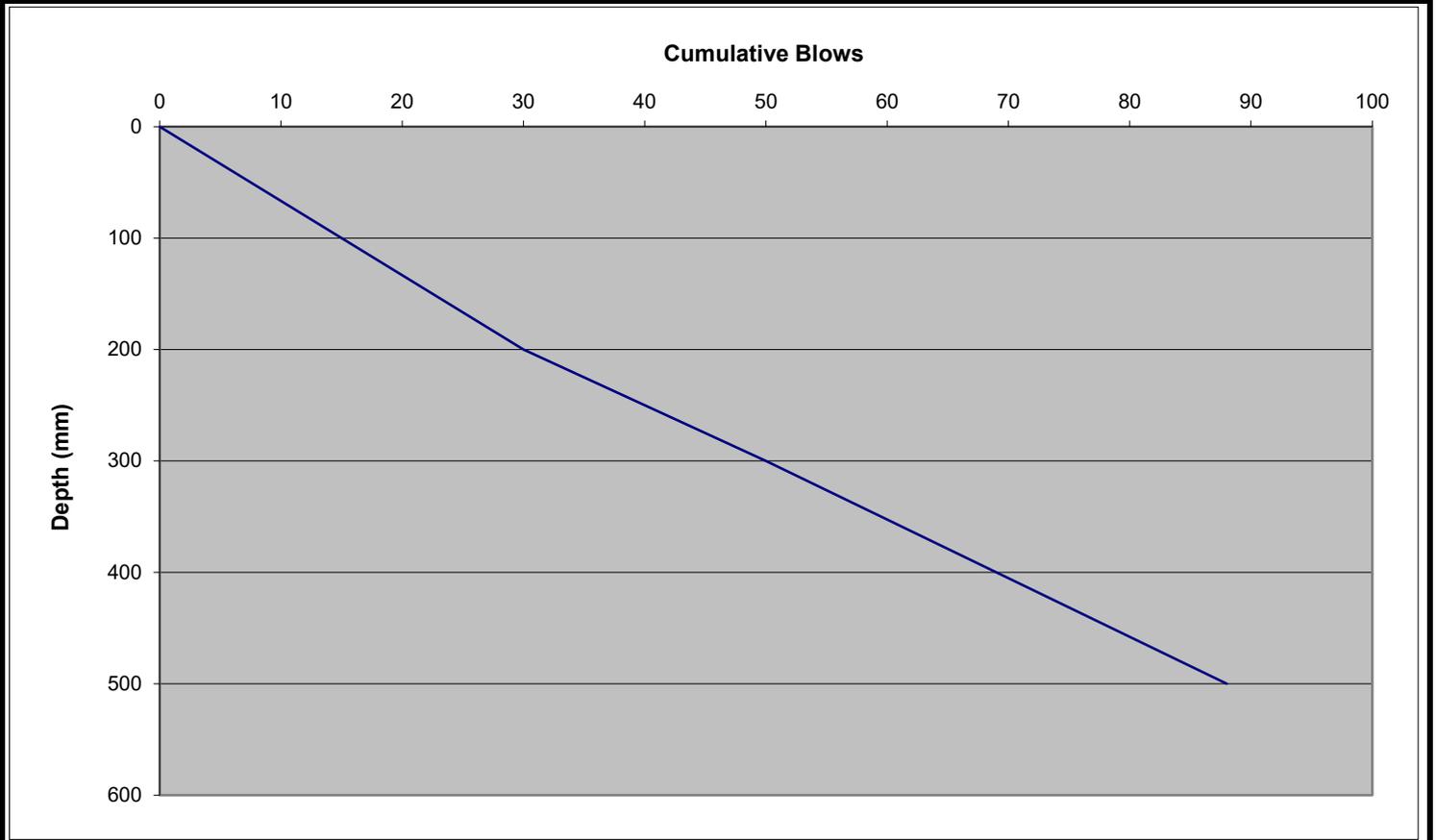
Aitken Rowe Testing Laboratories Pty Ltd

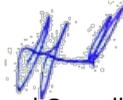
ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW	PAGE: 21 OF: 36 DCP: 21 (BH7)
PROJECT: GEOTECHNICAL INVESTIGATION	REGISTRATION NO: GS24-213
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,	DATE OF TEST: 9/08/2024
LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW	DEPTH BELOW ESL (mm): 3000
SOIL DESCRIPTION: REFER TO BOREHOLE LOGS	MOISTURE CONDITION: REFER TO LOGS
DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	TEST METHOD: AS 1289.6.3.2

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	15	38	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	15	38	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	20	55	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	19	51	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	19	51	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	END	*	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	*	*	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	*	*	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	*	*	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	*	*	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	*	*	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	*	*	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	*	*	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	*	*	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	*	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



 <p>Accredited for compliance with ISO/IEC 17025 - Testing.</p> <p>ACCREDITATION NUMBER: 4679</p> <p>WORLD RECOGNISED ACCREDITATION</p>	REMARKS:
	<p>APPROVED SIGNATORY:  Jarrod Gornall</p> <p>DATE: 22/08/2024</p>

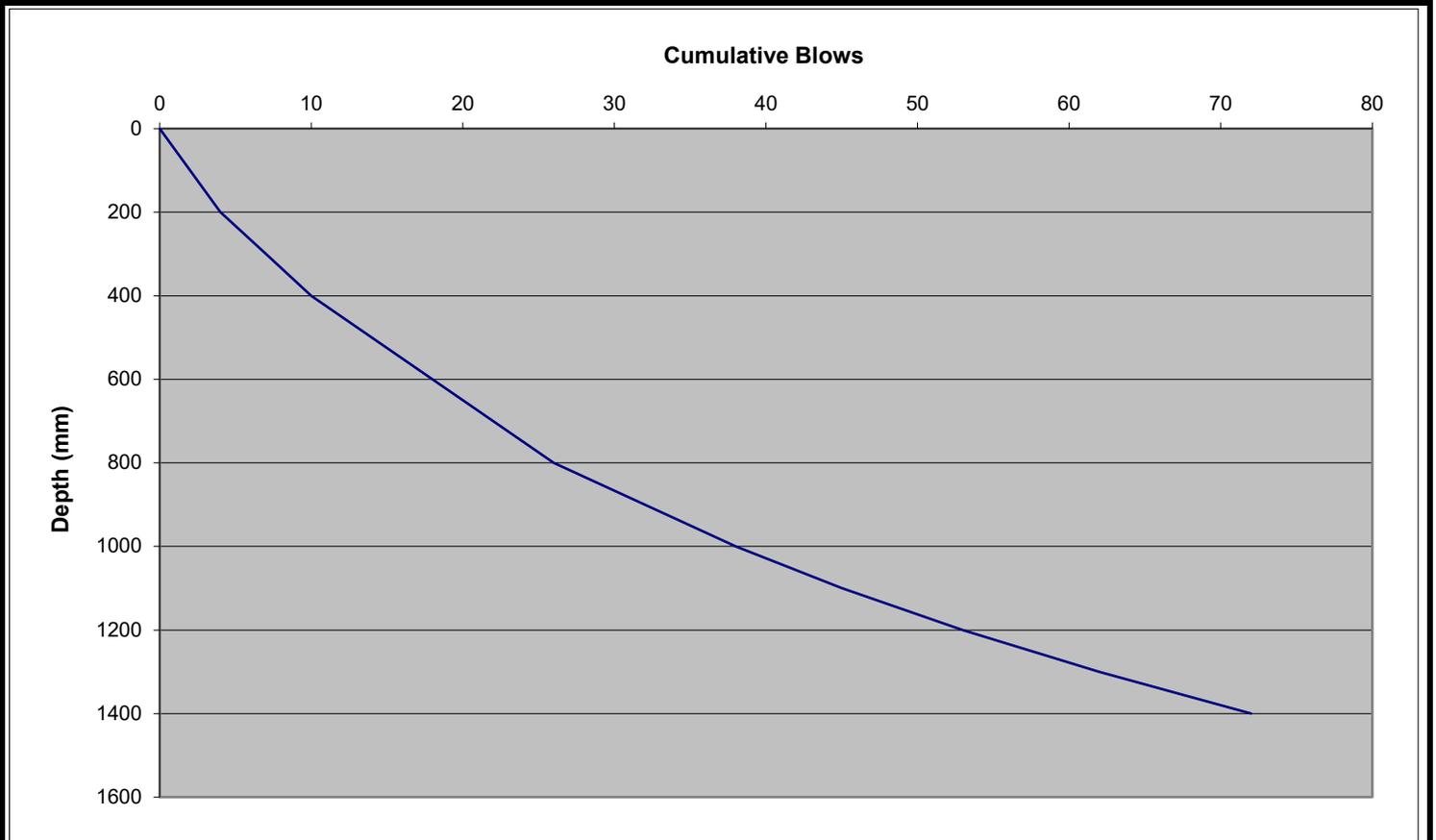
Aitken Rowe Testing Laboratories Pty Ltd

ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW	PAGE: 22 OF: 36 DCP: 22 (BH8)
PROJECT: GEOTECHNICAL INVESTIGATION	REGISTRATION NO: GS24-213
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,	DATE OF TEST: 9/08/2024
LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW	DEPTH BELOW ESL (mm): NIL
SOIL DESCRIPTION: REFER TO BOREHOLE LOGS	MOISTURE CONDITION: REFER TO LOGS
DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	TEST METHOD: AS 1289.6.3.2

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	2	3	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	2	3	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	3	5	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	3	5	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	4	7	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	4	7	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	4	7	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	4	7	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	6	12	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	6	12	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	7	14	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	8	17	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	9	20	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	10	23	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	END	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



 <p>Accredited for compliance with ISO/IEC 17025 - Testing.</p> <p>ACCREDITATION NUMBER: 4679</p> <p>WORLD RECOGNISED ACCREDITATION</p>	REMARKS:
	<p>APPROVED SIGNATORY:  Jarrod Gornall</p> <p>DATE: 22/08/2024</p>

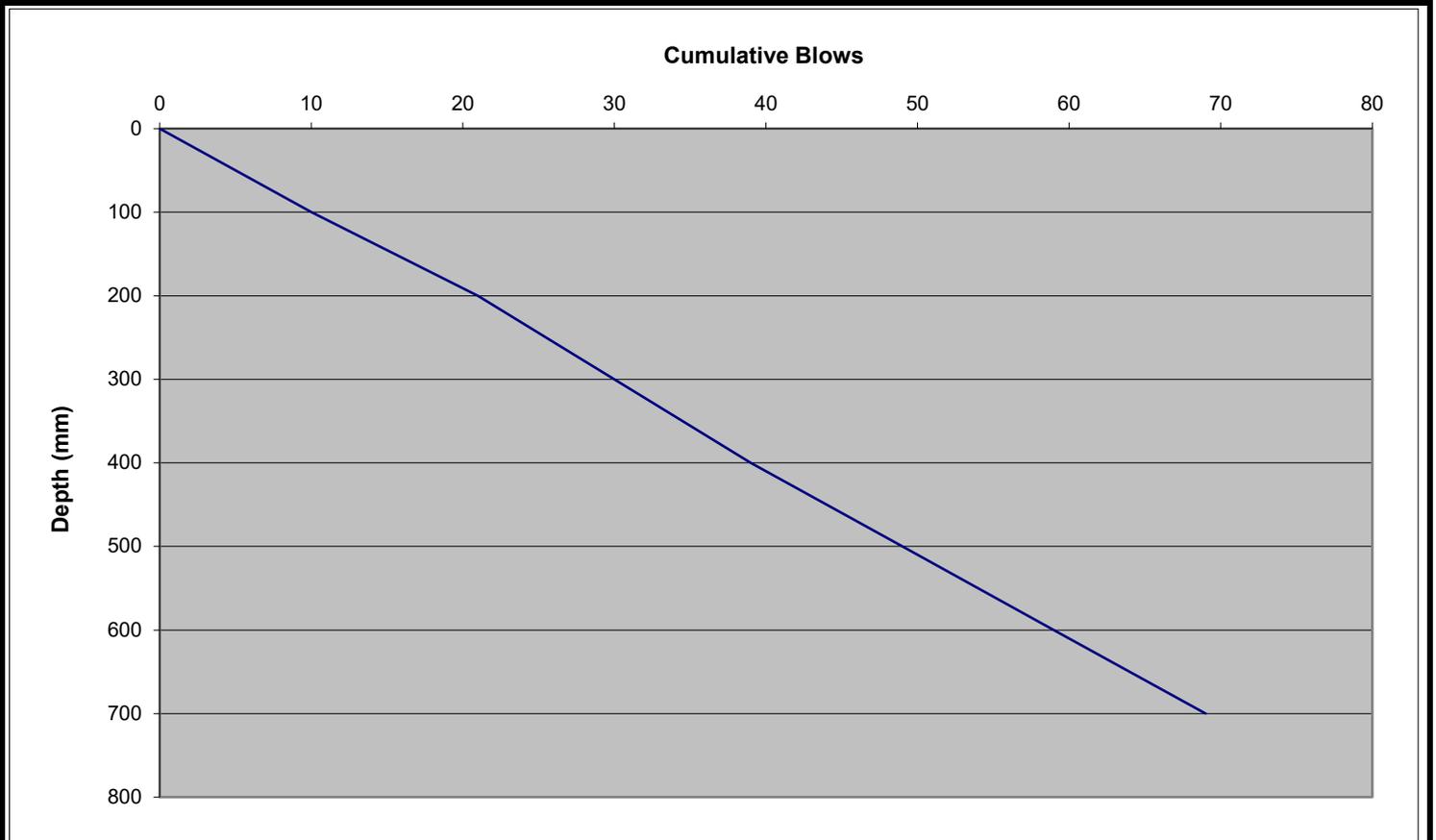
Aitken Rowe Testing Laboratories Pty Ltd

ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW	PAGE: 23 OF: 36 DCP: 23 (BH8)
PROJECT: GEOTECHNICAL INVESTIGATION	REGISTRATION NO: GS24-213
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,	DATE OF TEST: 9/08/2024
LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW	DEPTH BELOW ESL (mm): 1500
SOIL DESCRIPTION: REFER TO BOREHOLE LOGS	MOISTURE CONDITION: REFER TO LOGS
DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	TEST METHOD: AS 1289.6.3.2

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	10	23	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	11	25	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	9	20	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	9	20	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	10	23	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	10	23	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	10	23	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	END	*	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	*	*	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	*	*	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	*	*	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	*	*	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	*	*	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	*	*	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	*	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



 <p>Accredited for compliance with ISO/IEC 17025 - Testing.</p> <p>ACCREDITATION NUMBER: 4679</p> <p>WORLD RECOGNISED ACCREDITATION</p>	REMARKS:
	<p>APPROVED SIGNATORY:  Jarrod Gornall</p> <p>DATE: 22/08/2024</p>

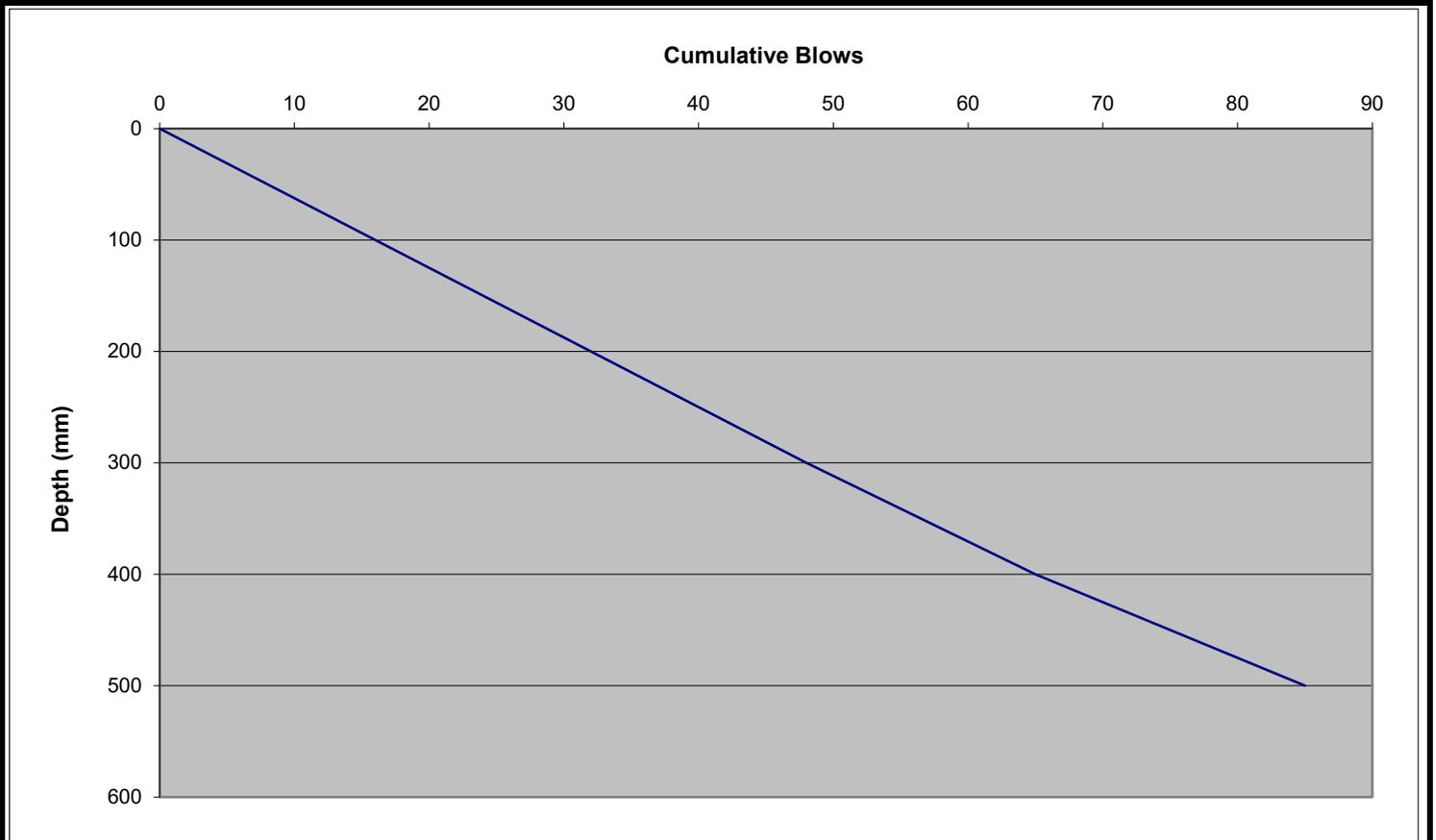
Aitken Rowe Testing Laboratories Pty Ltd

ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW	PAGE: 24 OF: 36 DCP: 24 (BH8)
PROJECT: GEOTECHNICAL INVESTIGATION	REGISTRATION NO: GS24-213
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,	DATE OF TEST: 9/08/2024
LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW	DEPTH BELOW ESL (mm): 3000
SOIL DESCRIPTION: REFER TO BOREHOLE LOGS	MOISTURE CONDITION: REFER TO LOGS
DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	TEST METHOD: AS 1289.6.3.2

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	16	41	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	16	41	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	16	41	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	17	44	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	20	55	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	END	*	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	*	*	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	*	*	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	*	*	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	*	*	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	*	*	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	*	*	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	*	*	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	*	*	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	*	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



<p>Accredited for compliance with ISO/IEC 17025 - Testing.</p> <p>ACCREDITATION NUMBER: 4679</p> <p><small>WORLD RECOGNISED ACCREDITATION</small></p>	<p>REMARKS:</p> <div style="text-align: center; margin-top: 20px;"> <p>APPROVED SIGNATORY: Jarrod Gornall</p> <p>DATE: 22/08/2024</p> </div>
---	--

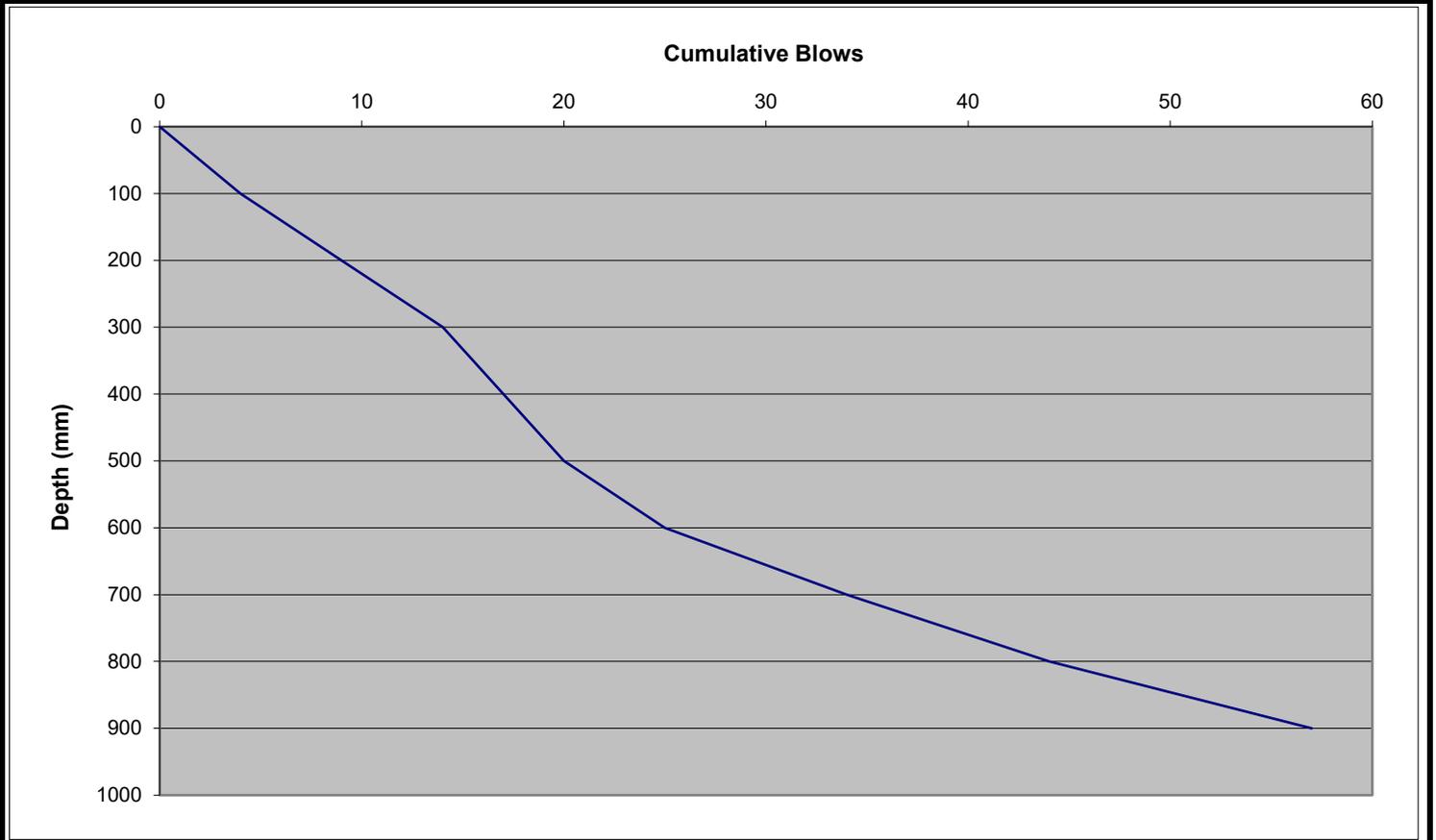
Aitken Rowe Testing Laboratories Pty Ltd

ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW	PAGE: 25 OF: 36 DCP: 25 (BH9)
PROJECT: GEOTECHNICAL INVESTIGATION	REGISTRATION NO: GS24-213
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,	DATE OF TEST: 9/08/2024
LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW	DEPTH BELOW ESL (mm): NIL
SOIL DESCRIPTION: REFER TO BOREHOLE LOGS	MOISTURE CONDITION: REFER TO LOGS
DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	TEST METHOD: AS 1289.6.3.2

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	4	7	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	5	9	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	5	9	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	3	5	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	3	5	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	5	9	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	9	20	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	10	23	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	13	32	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	END	*	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	*	*	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	*	*	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	*	*	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	*	*	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	*	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



 <p>Accredited for compliance with ISO/IEC 17025 - Testing.</p> <p>ACCREDITATION NUMBER: 4679</p> <p>WORLD RECOGNISED ACCREDITATION</p>	REMARKS:
	<p>APPROVED SIGNATORY:  Jarrod Gornall</p> <p>DATE: 22/08/2024</p>

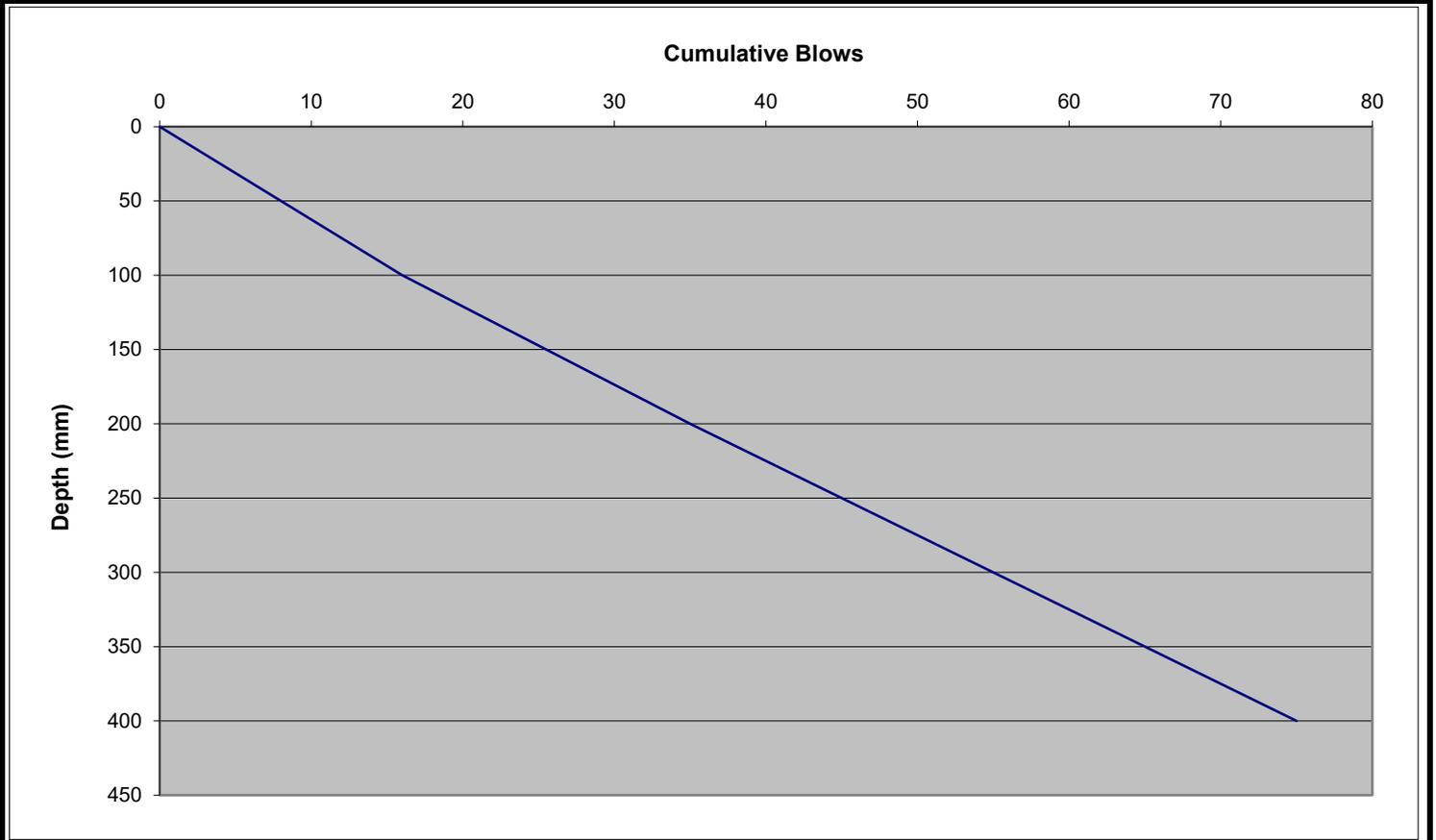
Aitken Rowe Testing Laboratories Pty Ltd

ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW	PAGE: 26 OF: 36 DCP: 26 (BH9)
PROJECT: GEOTECHNICAL INVESTIGATION	REGISTRATION NO: GS24-213
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,	DATE OF TEST: 9/08/2024
LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW	DEPTH BELOW ESL (mm): 1500
SOIL DESCRIPTION: REFER TO BOREHOLE LOGS	MOISTURE CONDITION: REFER TO LOGS
DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	TEST METHOD: AS 1289.6.3.2

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	16	41	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	19	51	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	20	55	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	20	55	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	END	*	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	*	*	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	*	*	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	*	*	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	*	*	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	*	*	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	*	*	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	*	*	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	*	*	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	*	*	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	*	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



 <p>Accredited for compliance with ISO/IEC 17025 - Testing.</p> <p>ACCREDITATION NUMBER: 4679</p> <p>WORLD RECOGNISED ACCREDITATION</p>	REMARKS:
	<p>APPROVED SIGNATORY:  Jarrod Gornall</p> <p>DATE: 22/08/2024</p>

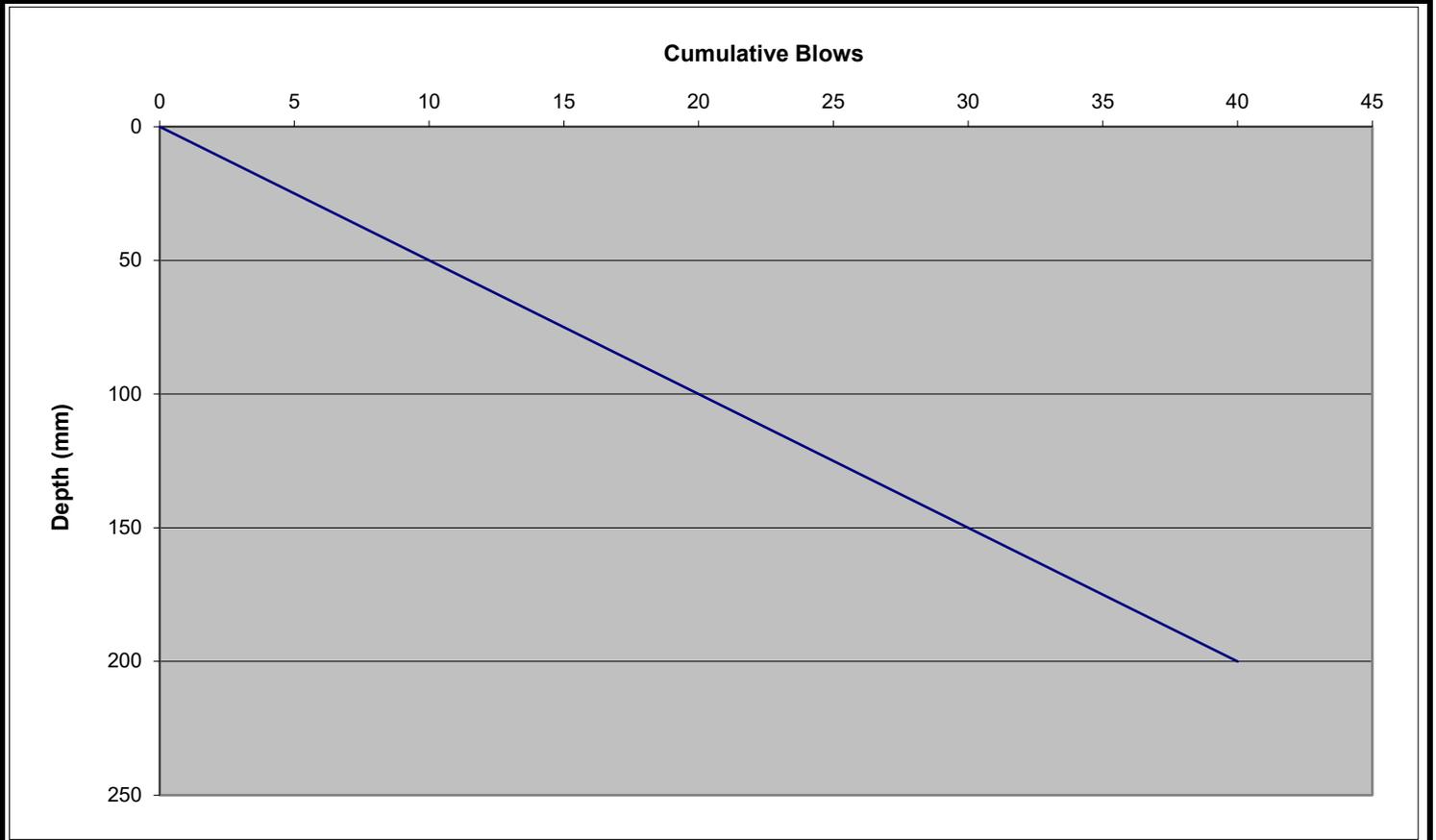
Aitken Rowe Testing Laboratories Pty Ltd

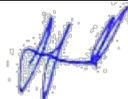
ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW	PAGE: 27 OF: 36 DCP: 27 (BH9)
PROJECT: GEOTECHNICAL INVESTIGATION	REGISTRATION NO: GS24-213
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,	DATE OF TEST: 9/08/2024
LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW	DEPTH BELOW ESL (mm): 3000
SOIL DESCRIPTION: REFER TO BOREHOLE LOGS	MOISTURE CONDITION: REFER TO LOGS
DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	TEST METHOD: AS 1289.6.3.2

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	20	55	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	20	55	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	END	*	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	*	*	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	*	*	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	*	*	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	*	*	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	*	*	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	*	*	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	*	*	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	*	*	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	*	*	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	*	*	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	*	*	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	*	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



 <p>Accredited for compliance with ISO/IEC 17025 - Testing.</p> <p>ACCREDITATION NUMBER: 4679</p> <p>WORLD RECOGNISED ACCREDITATION</p>	REMARKS:
	<p>APPROVED SIGNATORY:  Jarrod Gornall</p> <p>DATE: 22/08/2024</p>

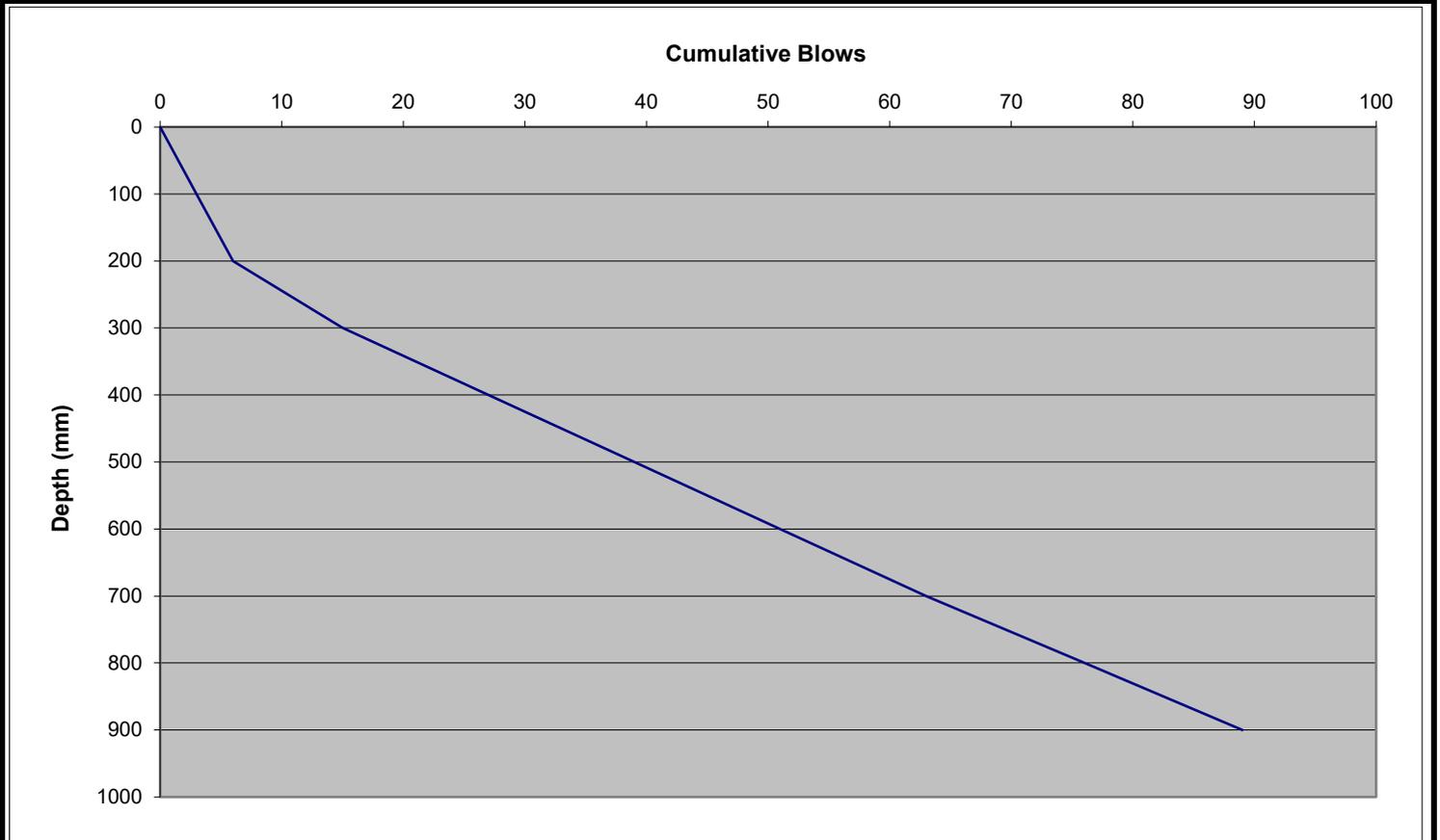
Aitken Rowe Testing Laboratories Pty Ltd

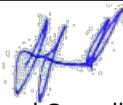
ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW	PAGE: 28 OF: 36 DCP: 28 (BH10)
PROJECT: GEOTECHNICAL INVESTIGATION	REGISTRATION NO: GS24-213
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,	DATE OF TEST: 12/08/2024
LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW	DEPTH BELOW ESL (mm): NIL
SOIL DESCRIPTION: REFER TO BOREHOLE LOGS	MOISTURE CONDITION: REFER TO LOGS
DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	TEST METHOD: AS 1289.6.3.2

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	3	5	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	3	5	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	9	20	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	12	28	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	12	28	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	12	28	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	12	28	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	13	32	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	13	32	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	END	*	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	*	*	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	*	*	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	*	*	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	*	*	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	*	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



 <p>Accredited for compliance with ISO/IEC 17025 - Testing.</p> <p>ACCREDITATION NUMBER: 4679</p> <p>WORLD RECOGNISED ACCREDITATION</p>	REMARKS:
	<p>APPROVED SIGNATORY:  Jarrod Gornall</p> <p>DATE: 22/08/2024</p>

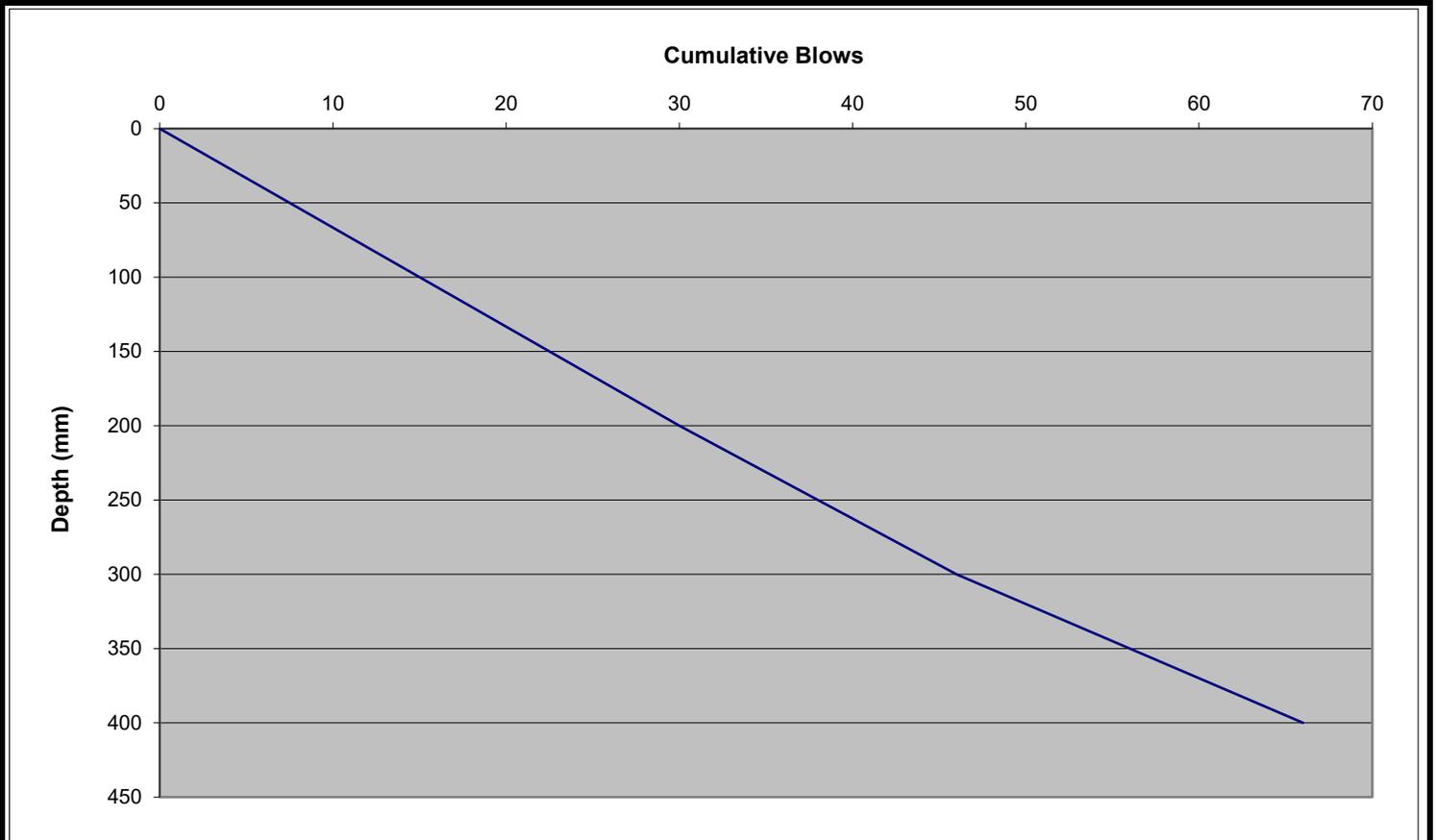
Aitken Rowe Testing Laboratories Pty Ltd

ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW	PAGE: 29 OF: 36 DCP: 29 (BH10)
PROJECT: GEOTECHNICAL INVESTIGATION	REGISTRATION NO: GS24-213
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,	DATE OF TEST: 12/08/2024
LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW	DEPTH BELOW ESL (mm): 1500
SOIL DESCRIPTION: REFER TO BOREHOLE LOGS	MOISTURE CONDITION: REFER TO LOGS
DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	TEST METHOD: AS 1289.6.3.2

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	15	38	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	15	38	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	16	41	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	20	55	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	END	*	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	*	*	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	*	*	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	*	*	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	*	*	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	*	*	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	*	*	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	*	*	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	*	*	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	*	*	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	*	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



 <p>Accredited for compliance with ISO/IEC 17025 - Testing.</p> <p>ACCREDITATION NUMBER: 4679</p> <p>WORLD RECOGNISED ACCREDITATION</p>	REMARKS:
	<p>APPROVED SIGNATORY:  Jarrod Gornall</p> <p>DATE: 22/08/2024</p>

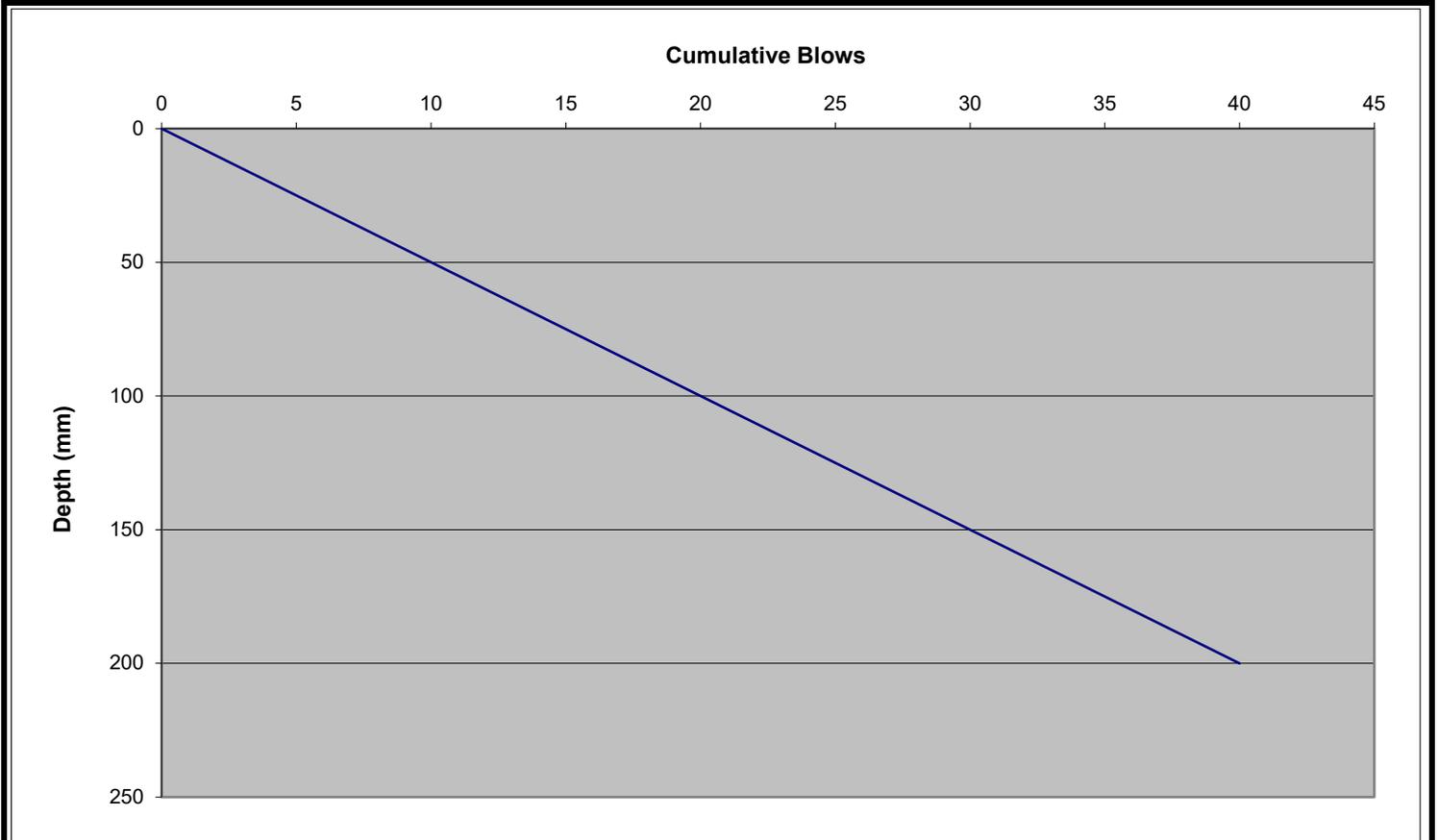
Aitken Rowe Testing Laboratories Pty Ltd

ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW PROJECT: GEOTECHNICAL INVESTIGATION PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT, LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW SOIL DESCRIPTION: REFER TO BOREHOLE LOGS DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	PAGE: 30 OF: 36 DCP: 30 (BH10) REGISTRATION NO: GS24-213 DATE OF TEST: 12/08/2024 DEPTH BELOW ESL (mm): 3000 MOISTURE CONDITION: REFER TO LOGS TEST METHOD: AS 1289.6.3.2
--	--

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	20	55	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	20	55	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	END	*	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	*	*	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	*	*	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	*	*	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	*	*	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	*	*	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	*	*	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	*	*	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	*	*	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	*	*	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	*	*	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	*	*	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	*	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



Accredited for compliance with ISO/IEC 17025 - Testing. ACCREDITATION NUMBER: 4679 WORLD RECOGNISED ACCREDITATION	REMARKS: <div style="text-align: center;"> APPROVED SIGNATORY: Jarrod Gornall DATE: 22/08/2024 </div>
---	---

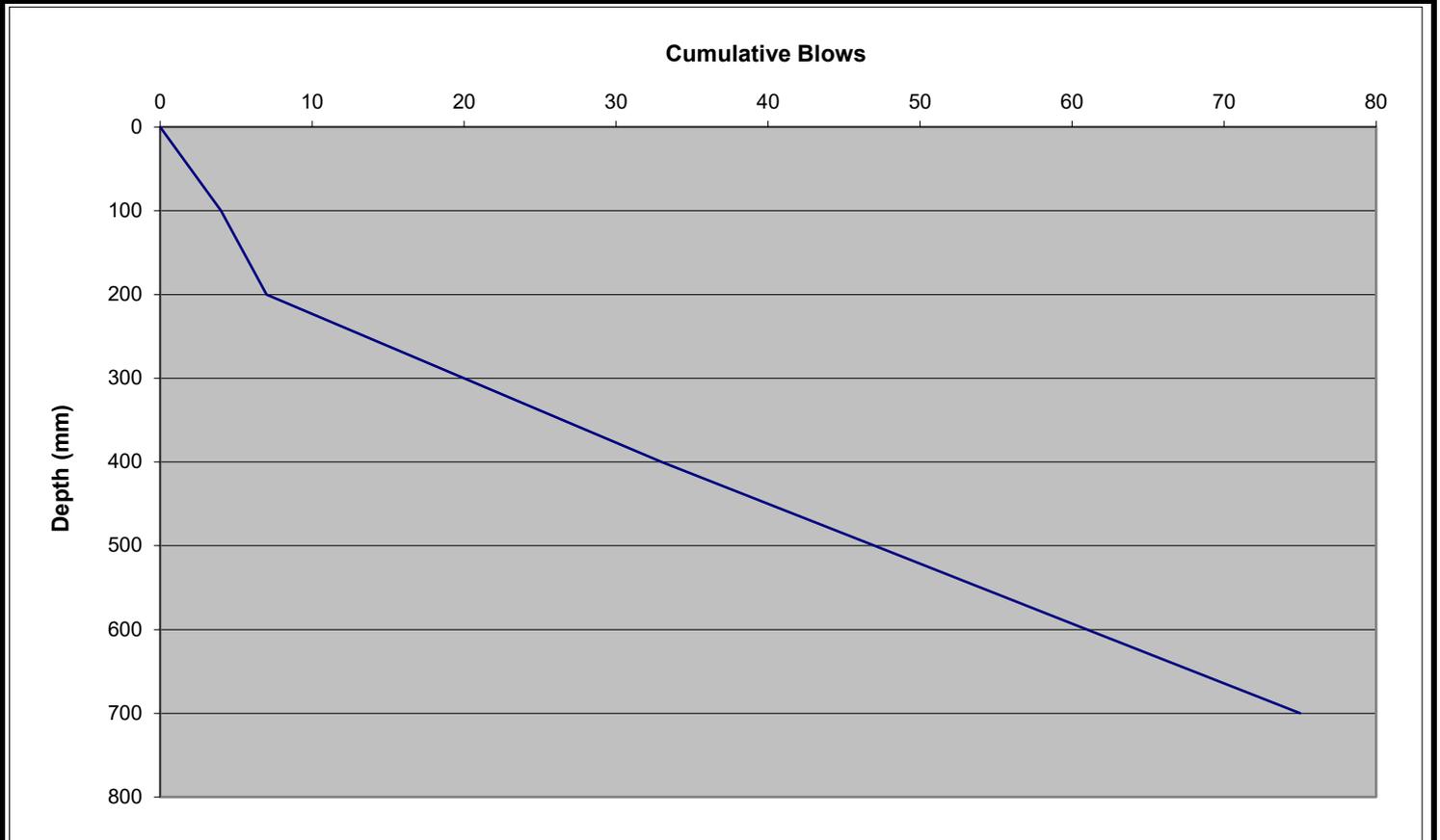
Aitken Rowe Testing Laboratories Pty Ltd

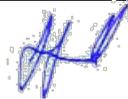
ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW	PAGE: 31 OF: 36 DCP: 31 (BH11)
PROJECT: GEOTECHNICAL INVESTIGATION	REGISTRATION NO: GS24-213
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,	DATE OF TEST: 12/08/2024
LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW	DEPTH BELOW ESL (mm): NIL
SOIL DESCRIPTION: REFER TO BOREHOLE LOGS	MOISTURE CONDITION: REFER TO LOGS
DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	TEST METHOD: AS 1289.6.3.2

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	4	7	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	3	5	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	13	32	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	13	32	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	14	35	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	14	35	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	14	35	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	END	*	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	*	*	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	*	*	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	*	*	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	*	*	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	*	*	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	*	*	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	*	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



 <p>Accredited for compliance with ISO/IEC 17025 - Testing.</p> <p>ACCREDITATION NUMBER: 4679</p> <p>WORLD RECOGNISED ACCREDITATION</p>	REMARKS:
	<p>APPROVED SIGNATORY:  Jarrod Gornall</p> <p>DATE: 22/08/2024</p>

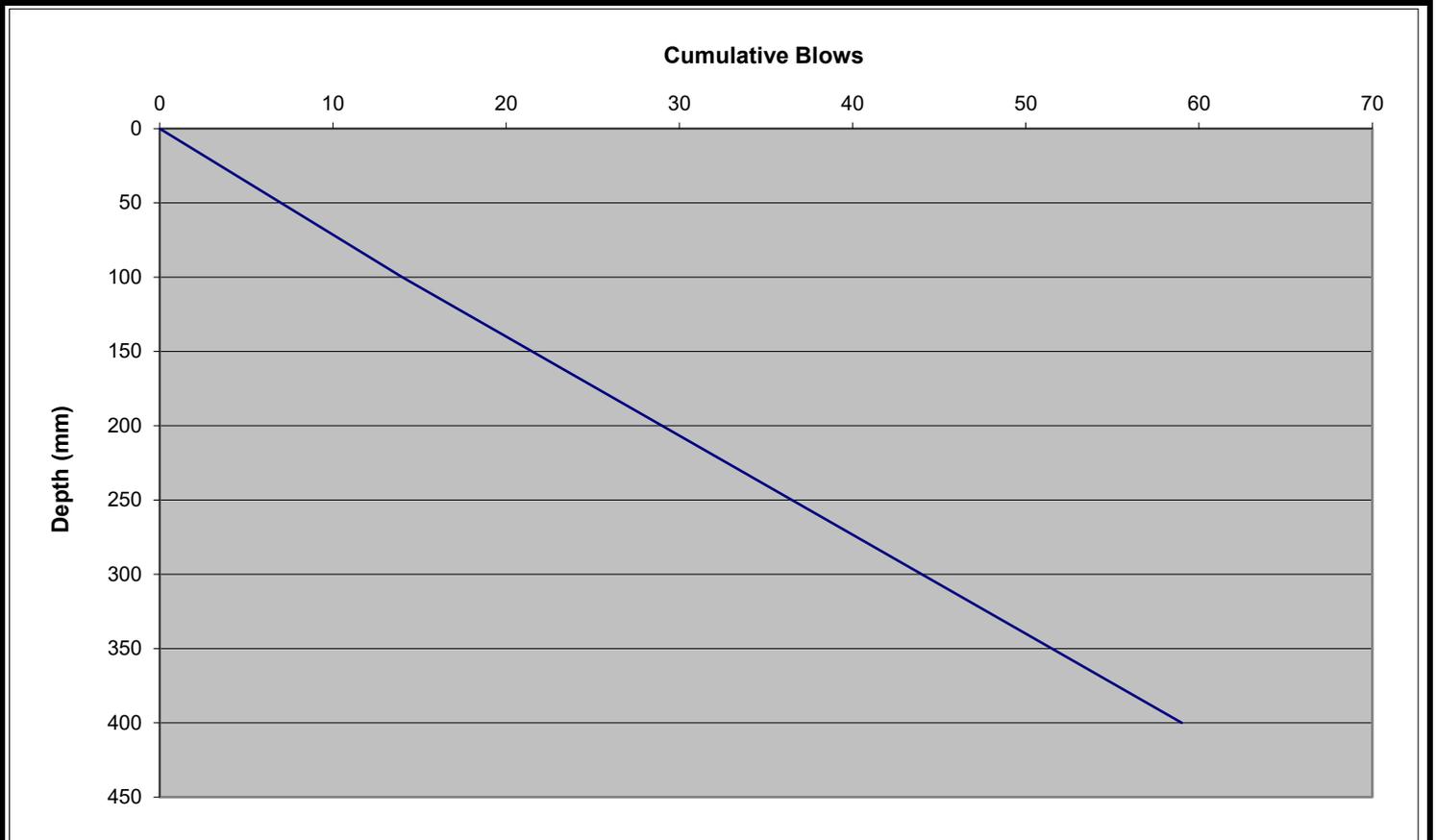
Aitken Rowe Testing Laboratories Pty Ltd

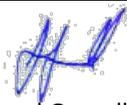
ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW	PAGE: 32 OF: 36 DCP: 32 (BH11)
PROJECT: GEOTECHNICAL INVESTIGATION	REGISTRATION NO: GS24-213
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,	DATE OF TEST: 12/08/2024
LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW	DEPTH BELOW ESL (mm): 1400
SOIL DESCRIPTION: REFER TO BOREHOLE LOGS	MOISTURE CONDITION: REFER TO LOGS
DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	TEST METHOD: AS 1289.6.3.2

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	14	35	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	15	38	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	15	38	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	15	38	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	END	*	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	*	*	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	*	*	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	*	*	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	*	*	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	*	*	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	*	*	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	*	*	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	*	*	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	*	*	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	*	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



 <p>Accredited for compliance with ISO/IEC 17025 - Testing.</p> <p>ACCREDITATION NUMBER: 4679</p> <p>WORLD RECOGNISED ACCREDITATION</p>	REMARKS:
	<p>APPROVED SIGNATORY:  Jarrod Gornall</p> <p>DATE: 22/08/2024</p>

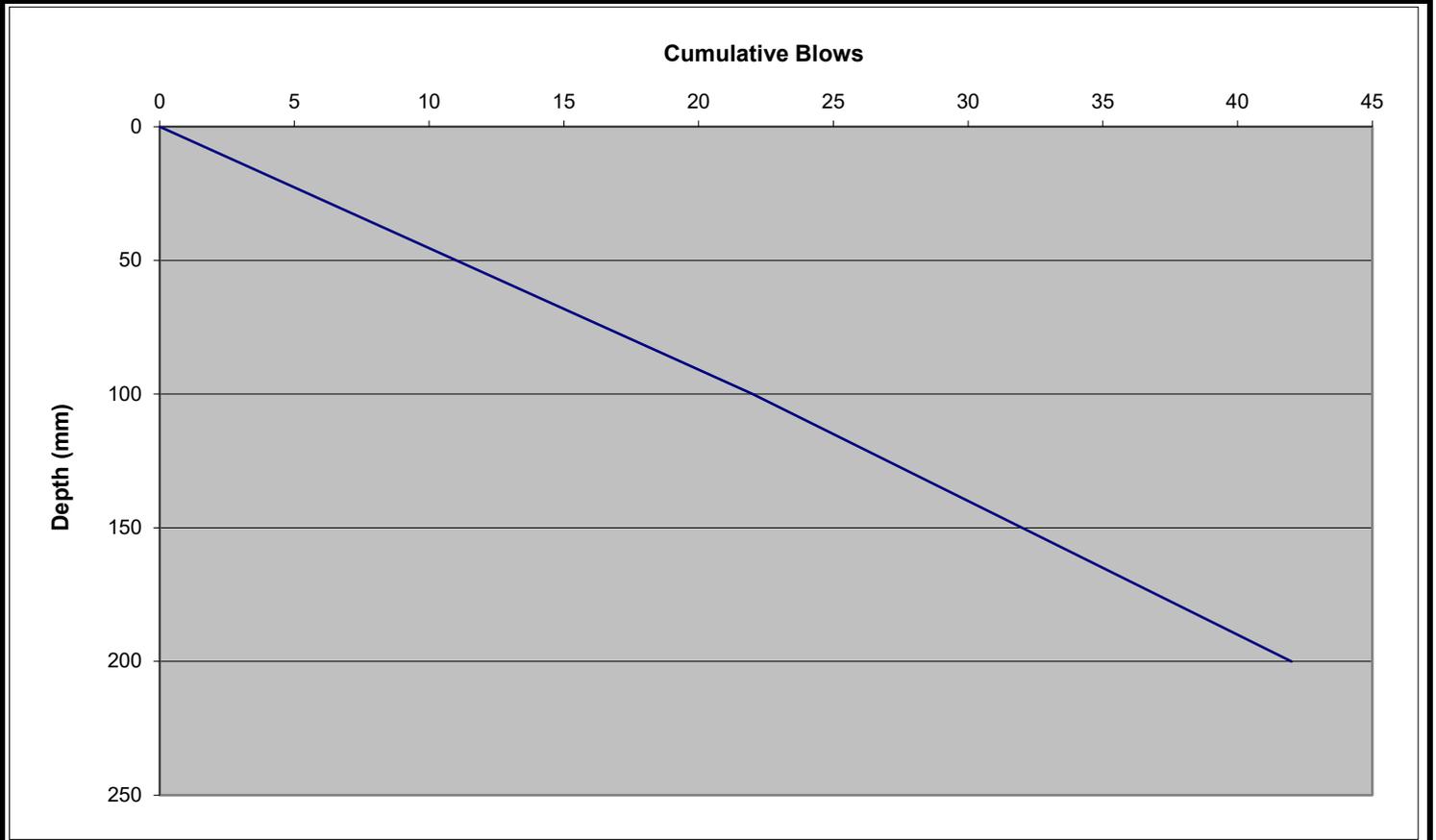
Aitken Rowe Testing Laboratories Pty Ltd

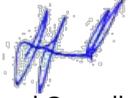
ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW	PAGE: 33 OF: 36 DCP: 33 (BH11)
PROJECT: GEOTECHNICAL INVESTIGATION	REGISTRATION NO: GS24-213
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,	DATE OF TEST: 12/08/2024
LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW	DEPTH BELOW ESL (mm): 3000
SOIL DESCRIPTION: REFER TO BOREHOLE LOGS	MOISTURE CONDITION: REFER TO LOGS
DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	TEST METHOD: AS 1289.6.3.2

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	22	62	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	20	55	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	END	*	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	*	*	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	*	*	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	*	*	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	*	*	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	*	*	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	*	*	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	*	*	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	*	*	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	*	*	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	*	*	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	*	*	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	*	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



 <p>Accredited for compliance with ISO/IEC 17025 - Testing.</p> <p>ACCREDITATION NUMBER: 4679</p> <p>WORLD RECOGNISED ACCREDITATION</p>	REMARKS:
	<p>APPROVED SIGNATORY:  Jarrod Gornall</p> <p>DATE: 22/08/2024</p>

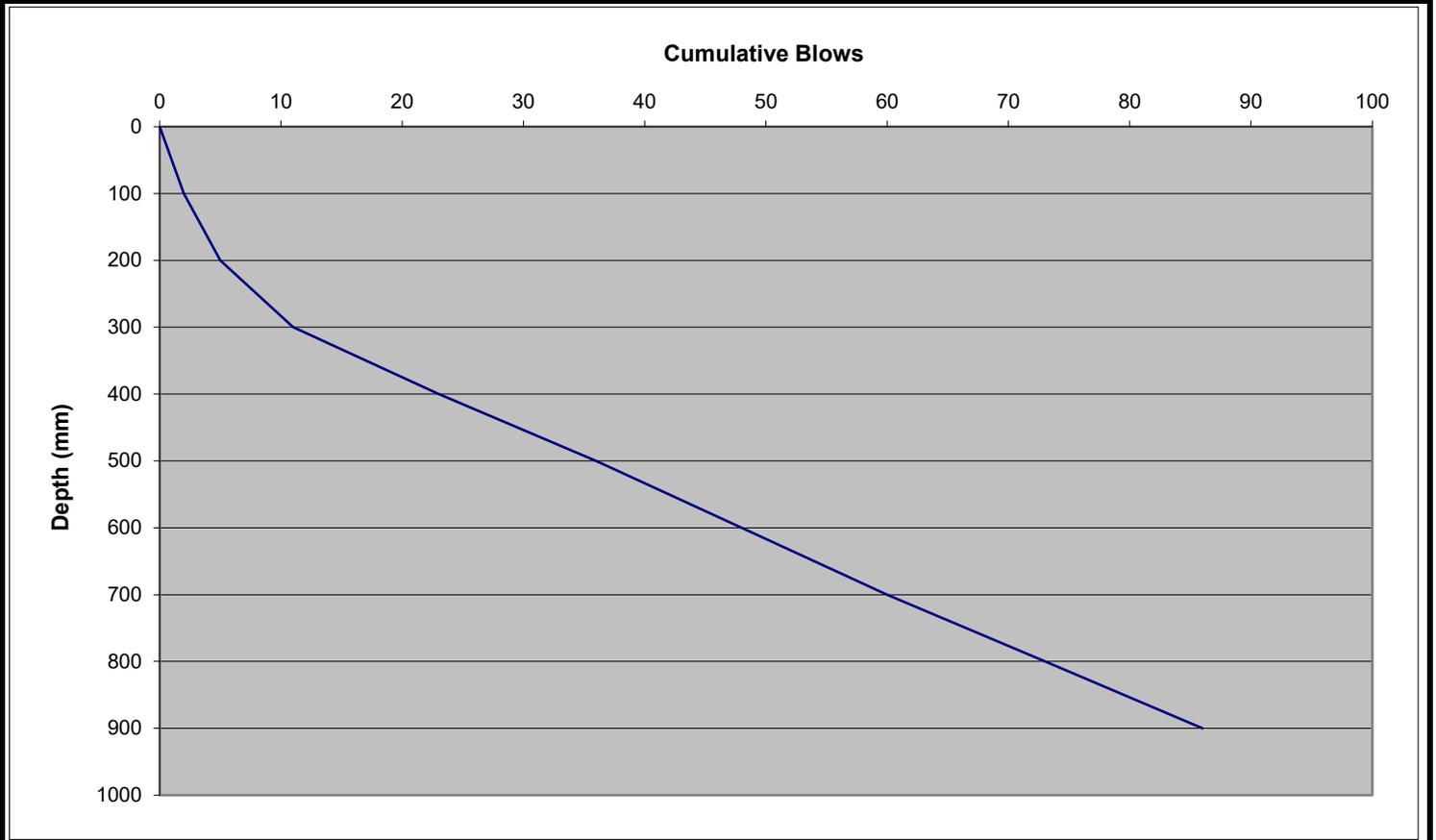
Aitken Rowe Testing Laboratories Pty Ltd

ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW PROJECT: GEOTECHNICAL INVESTIGATION PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT, LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW SOIL DESCRIPTION: REFER TO BOREHOLE LOGS DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	PAGE: 34 OF: 36 DCP: 34 (BH12) REGISTRATION NO: GS24-213 DATE OF TEST: 12/08/2024 DEPTH BELOW ESL (mm): NIL MOISTURE CONDITION: REFER TO LOGS TEST METHOD: AS 1289.6.3.2
--	---

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	2	3	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	3	5	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	6	12	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	12	28	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	13	32	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	12	28	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	12	28	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	13	32	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	13	32	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	END	*	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	*	*	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	*	*	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	*	*	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	*	*	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	*	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



 <p>Accredited for compliance with ISO/IEC 17025 - Testing.</p> <p>ACCREDITATION NUMBER: 4679</p> <p><small>WORLD RECOGNISED ACCREDITATION</small></p>	REMARKS: <div style="text-align: right;">  APPROVED SIGNATORY: Jarrod Gornall DATE: 22/08/2024 </div>
--	--

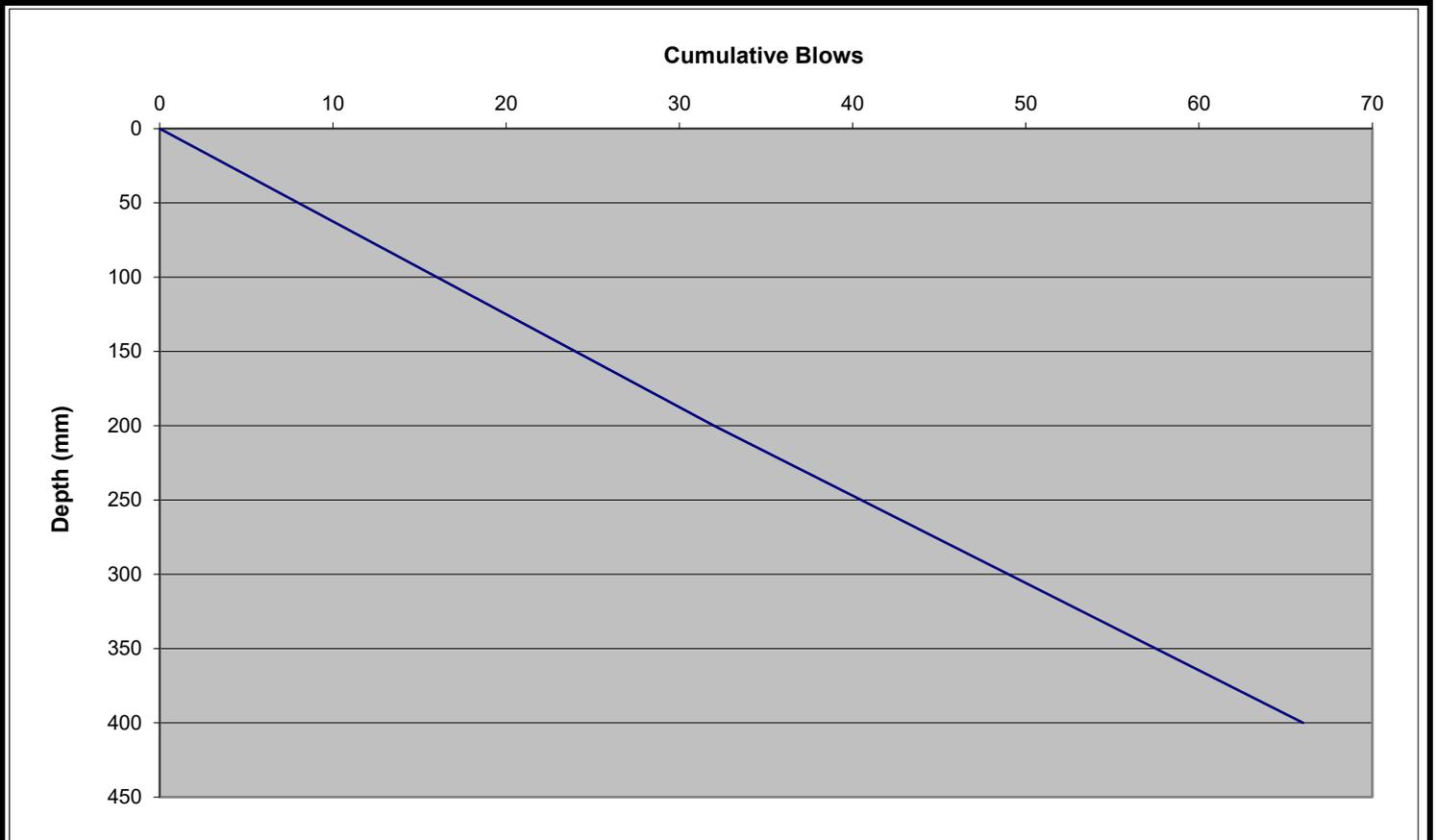
Aitken Rowe Testing Laboratories Pty Ltd

ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW	PAGE: 35 OF: 36 DCP: 35 (BH12)
PROJECT: GEOTECHNICAL INVESTIGATION	REGISTRATION NO: GS24-213
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,	DATE OF TEST: 12/08/2024
LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW	DEPTH BELOW ESL (mm): 1500
SOIL DESCRIPTION: REFER TO BOREHOLE LOGS	MOISTURE CONDITION: REFER TO LOGS
DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	TEST METHOD: AS 1289.6.3.2

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	16	41	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	16	41	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	17	44	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	17	44	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	END	*	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	*	*	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	*	*	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	*	*	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	*	*	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	*	*	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	*	*	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	*	*	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	*	*	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	*	*	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	*	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*



 <p>Accredited for compliance with ISO/IEC 17025 - Testing.</p> <p>ACCREDITATION NUMBER: 4679</p> <p>WORLD RECOGNISED ACCREDITATION</p>	REMARKS:
	<p>APPROVED SIGNATORY:  Jarrod Gornall</p> <p>DATE: 22/08/2024</p>

Aitken Rowe Testing Laboratories Pty Ltd

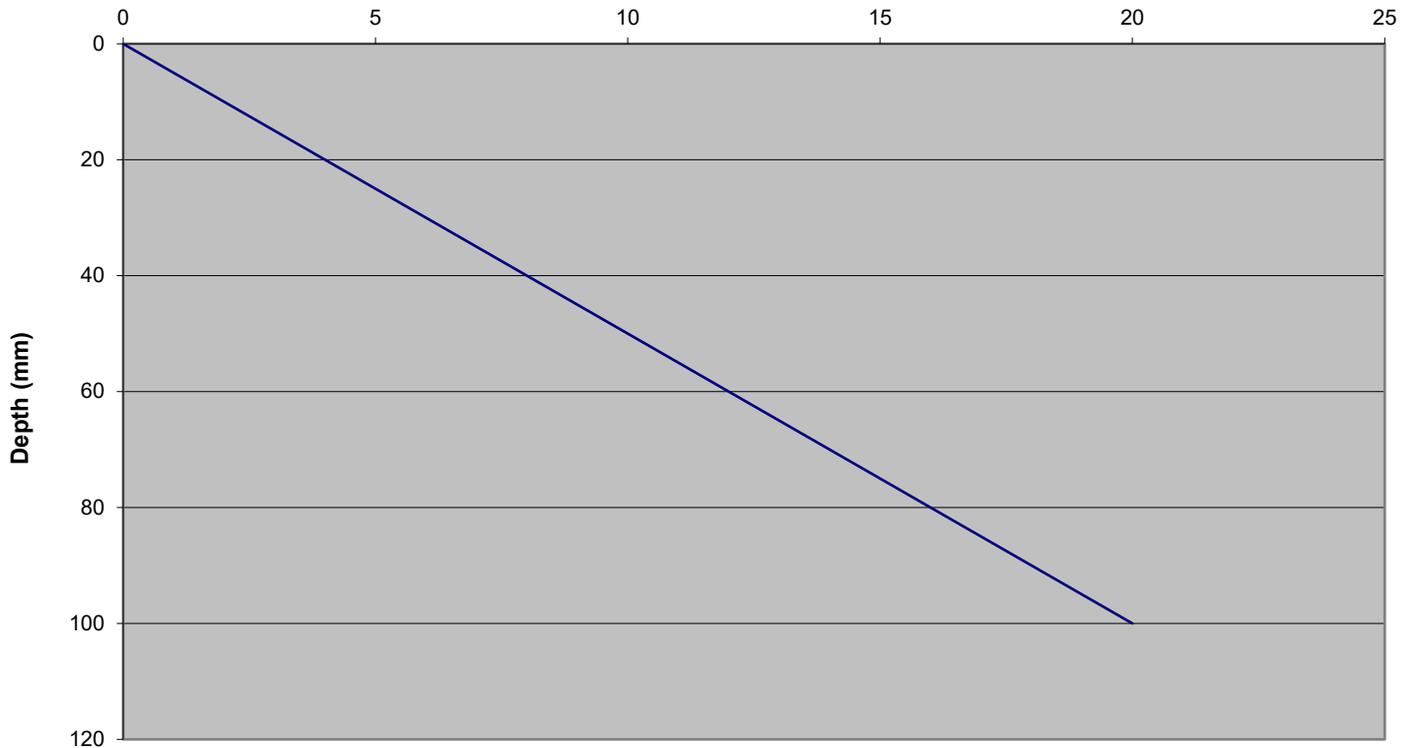
ARTL Griffith: 17b Battista Street, Griffith NSW 2680

DYNAMIC CONE PENETROMETER REPORT

CLIENT: FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW	PAGE: 36 OF: 36 DCP: 36 (BH12)
PROJECT: GEOTECHNICAL INVESTIGATION	REGISTRATION NO: GS24-213
PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,	DATE OF TEST: 12/08/2024
LOCATION: No. 125 MURPHY ROAD, HANWOOD, NSW	DEPTH BELOW ESL (mm): 3000
SOIL DESCRIPTION: REFER TO BOREHOLE LOGS	MOISTURE CONDITION: REFER TO LOGS
DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A	TEST METHOD: AS 1289.6.3.2

Depth(m)	Blows	Est. CBR									
0.0 - 0.1	20	55	1.5 - 1.6	*	*	3.0 - 3.1	*	*	4.5 - 4.6	*	*
0.1 - 0.2	END	*	1.6 - 1.7	*	*	3.1 - 3.2	*	*	4.6 - 4.7	*	*
0.2 - 0.3	*	*	1.7 - 1.8	*	*	3.2 - 3.3	*	*	4.7 - 4.8	*	*
0.3 - 0.4	*	*	1.8 - 1.9	*	*	3.3 - 3.4	*	*	4.8 - 4.9	*	*
0.4 - 0.5	*	*	1.9 - 2.0	*	*	3.4 - 3.5	*	*	4.9 - 5.0	*	*
0.5 - 0.6	*	*	2.0 - 2.1	*	*	3.5 - 3.6	*	*	5.0 - 5.1	*	*
0.6 - 0.7	*	*	2.1 - 2.2	*	*	3.6 - 3.7	*	*	5.1 - 5.2	*	*
0.7 - 0.8	*	*	2.2 - 2.3	*	*	3.7 - 3.8	*	*	5.2 - 5.3	*	*
0.8 - 0.9	*	*	2.3 - 2.4	*	*	3.8 - 3.9	*	*	5.3 - 5.4	*	*
0.9 - 1.0	*	*	2.4 - 2.5	*	*	3.9 - 4.0	*	*	5.4 - 5.5	*	*
1.0 - 1.1	*	*	2.5 - 2.6	*	*	4.0 - 4.1	*	*	5.5 - 5.6	*	*
1.1 - 1.2	*	*	2.6 - 2.7	*	*	4.1 - 4.2	*	*	5.6 - 5.7	*	*
1.2 - 1.3	*	*	2.7 - 2.8	*	*	4.2 - 4.3	*	*	5.7 - 5.8	*	*
1.3 - 1.4	*	*	2.8 - 2.9	*	*	4.3 - 4.4	*	*	5.8 - 5.9	*	*
1.4 - 1.5	*	*	2.9 - 3.0	*	*	4.4 - 4.5	*	*	5.9 - 6.0	*	*

Cumulative Blows



Accredited for compliance with ISO/IEC 17025 - Testing.

ACCREDITATION NUMBER:
4679

REMARKS:

APPROVED SIGNATORY:  Jarrod Gornall

DATE: 22/08/2024



AITKEN ROWE Testing Laboratories Pty Ltd

ARTL Griffith: 17b Battista Street, Griffith NSW 2680

*

PAGE 1 OF 2

SAMPLED BY: ARTL

DATE SAMPLED: 8-12/08/2024

DATE SUBMITTED: 12/08/2024

SAMPLING METHOD: AS1289.1.2.1

SAMPLING CLAUSE: 6.5.3

DATES TESTED: 14-23/08/2024

ORDER No.: *

TEST REPORT: GEOTECHNICAL INVESTIGATION - SOIL ANALYSIS

CLIENT : FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW

JOB DESCRIPTION : GEOTECHNICAL INVESTIGATION

PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,
No. 125 MURPHY ROAD, HANWOOD, NSW

MATERIAL SOURCE : IN-SITU BOREHOLES

PROPOSED USE : DESIGN

MATERIAL TYPE : REFER TO BOREHOLE LOGS

REGISTRATION No : R28 **GS24-213**

SAMPLE NUMBER :		1B	1C	2B	3A	3C	4B
SAMPLING LOCATION :		BH1	BH1	BH2	BH3	BH3	BH4
DEPTHS BETWEEN WHICH SAMPLES TAKEN (mm) :		300-700	1000-1500	500-1000	500-1000	1500-2000	4000-4500
TESTS	TEST ELEMENT	*	*	*	*	*	*
AS1289.3.6.1	PASS 75.0mm SIEVE %	*	*	*	*	*	*
	PASS 53.0mm SIEVE %	*	*	*	*	*	*
	PASS 37.5mm SIEVE %	*	*	*	*	*	*
	PASS 26.5mm SIEVE %	*	*	*	*	*	*
	PASS 19.0mm SIEVE %	*	*	*	*	*	*
	PASS 13.2mm SIEVE %	*	*	100	*	*	*
	PASS 9.50mm SIEVE %	*	100	99	*	*	*
	PASS 6.70mm SIEVE %	*	99	99	*	*	*
	PASS 4.75mm SIEVE %	*	99	98	*	*	*
	PASS 2.36mm SIEVE %	*	99	98	*	100	100
AS1141.19	WHOLE SAMPLE						
	PASS 425 µm SIEVE %	*	96	94	*	98	99
	PASS 75 µm SIEVE %	*	87	78	*	53	68
	LESS THAN 13.5 µm %	*	53	55	*	35	34
AS1141.19							
	-2.36mm						
	PASS 425 µm SIEVE %	*	98	96	*	98	99
	PASS 75 µm SIEVE %	*	88	79	*	53	68
	LESS THAN 13.5 µm %	*	54	57	*	35	34
	OBSERVATIONS	*	*	*	*	*	*
AS1289.3.1.2	LIQUID LIMIT %	*	47	55	*	36	39
AS1289.3.2.1	PLASTIC LIMIT %	*	14	13	*	15	16
AS1289.3.3.1	PLASTICITY INDEX	*	33	42	*	21	23
	PREPARATION METHOD	*	AS1289.1.1-5.3	AS1289.1.1-5.3	*	AS1289.1.1-5.3	AS1289.1.1-5.3
AS1289.3.4.1 (PREP-AIR DRIED)	LINEAR SHRINKAGE %	*	15.5	16.0	*	10.5	10.0
	LENGTH OF MOULD mm	*	253	253	*	253	253
	MOULDING MOISTURE CONDITIONING METHOD	*	AS1289.3.1.2	AS1289.3.1.2	*	AS1289.3.1.2	AS1289.3.1.2
	CRACKING (CA), CRUMBLING (CR) OR CURLING (CU) OCCURRED	*	CA	CA	*	CA	CA
AS1289.2.1.1	FIELD MOISTURE CONTENT %	26.3	22.7	27.0	27.4	18.1	20.9



Accredited for compliance with ISO/IEC 17025 - Testing.

ACCREDITATION NUMBER: 4679

*
*
*
All samples are oven dried and dry sieved during prep. unless otherwise stated

APPROVED SIGNATORY :

Jarrod Gornall

DATE: *



AITKEN ROWE Testing Laboratories Pty Ltd

ARTL Griffith: 17b Battista Street, Griffith NSW 2680

*

PAGE 2 OF 2

SAMPLED BY: ARTL

DATE SAMPLED: 8-12/08/2024

DATE SUBMITTED: 12/08/2024

SAMPLING METHOD: AS1289.1.2.1

SAMPLING CLAUSE: 6.5.3

DATES TESTED: 14-23/08/2024

ORDER No.: *

TEST REPORT: GEOTECHNICAL INVESTIGATION - SOIL ANALYSIS

CLIENT : FTC SOLAR C/- SAMS SOLAR PTY LTD - CRANEBROOK, NSW

JOB DESCRIPTION : GEOTECHNICAL INVESTIGATION

PROPOSED SOLAR FARM DEVELOPMENT, BAIADA PROCESSING PLANT,
No. 125 MURPHY ROAD, HANWOOD, NSW

MATERIAL SOURCE : IN-SITU BOREHOLES

PROPOSED USE : DESIGN

MATERIAL TYPE : REFER TO BOREHOLE LOGS

REGISTRATION No : R28 **GS24-213**

SAMPLE NUMBER :		7A	8A	9A	12A	*	*
SAMPLING LOCATION :		BH7	BH8	BH9	BH12	*	*
DEPTHS BETWEEN WHICH SAMPLES TAKEN (mm) :		300-600	1500-2000	100-500	200-600	*	*
TESTS	TEST ELEMENT	*	*	*	*	*	*
AS1289.3.6.1	PASS 75.0mm SIEVE %	*	*	*	*	*	*
	PASS 53.0mm SIEVE %	*	*	*	*	*	*
	PASS 37.5mm SIEVE %	*	*	*	*	*	*
	PASS 26.5mm SIEVE %	*	*	*	*	*	*
	PASS 19.0mm SIEVE %	*	*	*	*	*	*
	PASS 13.2mm SIEVE %	*	*	*	*	*	*
	PASS 9.50mm SIEVE %	*	*	*	100	*	*
	PASS 6.70mm SIEVE %	*	*	*	99	*	*
	PASS 4.75mm SIEVE %	*	*	*	99	*	*
	PASS 2.36mm SIEVE %	*	100	*	98	*	*
AS1141.19	WHOLE SAMPLE						
	PASS 425 µm SIEVE %	*	99	*	96	*	*
	PASS 75 µm SIEVE %	*	82	*	71	*	*
	LESS THAN 13.5 µm %	*	43	*	41	*	*
AS1141.19							
	-2.36mm						
	PASS 425 µm SIEVE %	*	99	*	97	*	*
	PASS 75 µm SIEVE %	*	82	*	72	*	*
	LESS THAN 13.5 µm %	*	43	*	42	*	*
	OBSERVATIONS	*	*	*	*	*	*
AS1289.3.1.2	LIQUID LIMIT %	*	39	*	36	*	*
AS1289.3.2.1	PLASTIC LIMIT %	*	16	*	15	*	*
AS1289.3.3.1	PLASTICITY INDEX	*	23	*	21	*	*
	PREPARATION METHOD	*	AS1289.1.1-5.3	*	AS1289.1.1-5.3	*	*
AS1289.3.4.1 (PREP-AIR DRIED)	LINEAR SHRINKAGE %	*	12.0	*	9.5	*	*
	LENGTH OF MOULD mm	*	253	*	253	*	*
	MOULDING MOISTURE CONDITIONING METHOD	*	AS1289.3.1.2	*	AS1289.3.1.2	*	*
	CRACKING (CA), CRUMBLING (CR) OR CURLING (CU) OCCURRED	*	CA	*	CA	*	*
AS1289.2.1.1	FIELD MOISTURE CONTENT %	26.5	22.0	19.3	17.0	*	*



Accredited for compliance with ISO/IEC 17025 - Testing.

ACCREDITATION NUMBER:
4679

*
*
*

All samples are oven dried and dry sieved during prep. unless otherwise stated

APPROVED SIGNATORY :

Jarrod Gornall

DATE: *



Corrosion & Scaling Assessment: Soil Reporting Profile

Sample Drop Off: 16 Chilvers Road
Thornleigh NSW 2120

Tel: 1300 30 40 80
Fax: 1300 64 46 89
Em: info@sesl.com.au
Web: www.sesl.com.au

Batch N°: 68335	Sample N°: 1	Date Received: 20/8/24	Report Status: Final
-----------------	--------------	------------------------	----------------------

Client Name: Aitken Rowe Testing Laboratories (ARTL) Pty Ltd	Project Name: Proposed Solar Farm - Murphy Rd, Hanwood NSW
Client Contact: Reports	SESL Quote N°:
Client Order N°:	Sample Name: GS24 - 213 / 5B
Address: PO Box 5158 WAGGA WAGGA NSW 2650	Description: Soil
	Test Type: ARTL

TEST	RESULT	COMMENTS
pH in water (1:5)	9	Strong alkalinity
EC mS/cm (1:5)	0.23	Slight
Texture Class	-	Did not test
Soil Condition Class (Permeability)	-	Did not test
SOLUBLE ANION ANALYSIS		
Sulphate (1:5) mgSO ₄ / kg	40	Low (non to mildly aggressive)
Chloride (1:5) mgCl/ kg	13.6	Low (non-aggressive)
* Resistivity Ω. m	17	Mild (mildly to moderately aggressive)
* Resistivity tested on a saturated sample/paste		(Note:- 10,000 mg/kg = 1%)

Recommendations

Analysed by SESL Australia Pty Ltd (NATA # 15633).

For the purposes of this corrosion and scaling assessment of soils towards concrete structures with steel reinforcement, concrete and steel piles, this soil shows strongly alkaline pH, slight salinity, low sulphate, low chloride and mild resistivity.

According to the *Australian Standard (AS) 2159-2009: Piling - Design and Installation*, the pH is considered non-aggressive to mildly aggressive towards concrete (dependent on soil permeability) and non-aggressive towards steel. The sulfate levels are considered to be non-aggressive to mildly aggressive towards concrete, and the chloride levels are considered to be non-aggressive towards steel. Resistivity is considered to be mildly to moderately aggressive towards steel.

Factors affecting concrete scaling are: (a) elevated sulfate, becoming mildly aggressive at >2400 mgSO₄/kg; and (b) low pH, becoming moderately aggressive at pH of <5-6.

Factors affecting steel corrosivity are: (a) elevated chloride, becoming mildly aggressive at >5,000 mgCl/kg; and (b) low pH, becoming mildly aggressive at pH of <4-5 and (d) low resistivity, becoming mildly aggressive with resistivity values less than 50Ω.m.

Overall, according AS2159:2009 the likelihood of aggressive corrosion is mild to moderate based on the mild resistivity and low based on the low sulphate and low chloride levels. SESL recommends further assessment on the physical properties of the soil (texture) to more accurately determine corrosion risk to concrete and steel structures.

pH, EC, Soluble SO₄: Bradley et al., (1983); Cl, (4500-Cl- E; APHA, 1998); Resistivity, AS1289.4.4.1:1997, Texture - PM0003 (Texture- "Northcote" (1992))

Date Report Generated
30/08/2024

Consultant:
Lachlan Eager

Authorised Signatory:
Samantha Grant-Vest



Corrosion & Scaling Assessment: Soil Reporting Profile

Sample Drop Off: 16 Chilvers Road
Thornleigh NSW 2120

Tel: 1300 30 40 80
Fax: 1300 64 46 89
Em: info@sesl.com.au
Web: www.sesl.com.au

Batch N°: 68335	Sample N°: 2	Date Received: 20/8/24	Report Status: Final
-----------------	--------------	------------------------	----------------------

Client Name: Aitken Rowe Testing Laboratories (ARTL) Pty Ltd	Project Name: Proposed Solar Farm - Murphy Rd, Hanwood NSW
Client Contact: Reports	SESL Quote N°:
Client Order N°:	Sample Name: GS24 - 213 / 10A
Address: PO Box 5158 WAGGA WAGGA NSW 2650	Description: Soil
	Test Type: ARTL

TEST	RESULT	COMMENTS
pH in water (1:5)	8.9	Strong alkalinity
EC mS/cm (1:5)	0.13	Low
Texture Class	-	Did not test
Soil Condition Class (Permeability)	-	Did not test
SOLUBLE ANION ANALYSIS		
Sulphate (1:5) mgSO ₄ / kg	10	Low (non to mildly aggressive)
Chloride (1:5) mgCl/ kg	16.2	Low (non-aggressive)
* Resistivity Ω. m	14	Mild (mildly to moderately aggressive)
* Resistivity tested on a saturated sample/paste		(Note:- 10,000 mg/kg = 1%)

Recommendations

Analysed by SESL Australia Pty Ltd (NATA # 15633).

For the purposes of this corrosion and scaling assessment of soils towards concrete structures with steel reinforcement, concrete and steel piles, this soil shows strongly alkaline pH, low salinity, low sulphate, low chloride and mild resistivity.

According to the *Australian Standard (AS) 2159-2009: Piling - Design and Installation*, the pH is considered non-aggressive to mildly aggressive towards concrete (dependent on soil permeability) and non-aggressive towards steel. The sulfate levels are considered to be non-aggressive to mildly aggressive towards concrete, and the chloride levels are considered to be non-aggressive towards steel. Resistivity is considered to be mildly to moderately aggressive towards steel.

Factors affecting concrete scaling are: (a) elevated sulfate, becoming mildly aggressive at >2400 mgSO₄/kg; and (b) low pH, becoming moderately aggressive at pH of <5-6.

Factors affecting steel corrosivity are: (a) elevated chloride, becoming mildly aggressive at >5,000 mgCl/kg; and (b) low pH, becoming mildly aggressive at pH of <4-5 and (d) low resistivity, becoming mildly aggressive with resistivity values less than 50Ω.m.

Overall, according AS2159:2009 the likelihood of aggressive corrosion is mild to moderate based on the mild resistivity and low based on the low sulphate and low chloride levels. SESL recommends further assessment on the physical properties of the soil (texture) to more accurately determine corrosion risk to concrete and steel structures.

pH, EC, Soluble SO₄: Bradley et al., (1983); Cl, (4500-Cl- E; APHA, 1998); Resistivity, AS1289.4.4.1:1997, Texture - PM0003 (Texture- "Northcote" (1992))

Date Report Generated
30/08/2024

Consultant:
Lachlan Eager

Authorised Signatory:
Samantha Grant-Vest