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## **Report on Site and Soil Evaluation**

**Proposed Industrial Park**

**Lot 2010 Giorgi Road, Picton East, WA**

**Prepared for Development WA**

**Project 236293.01**

**17 December 2025**

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The undersigned, on behalf of Douglas Partners Pty Ltd, confirm that this document and all attached drawings, logs and test results have been checked and reviewed for errors, omissions and inaccuracies.

### Signature

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# Report on Site and Soil Evaluation

## Proposed Industrial Park

### Lot 2010 Giorgi Road, Picton East, WA

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## 1. Introduction

This general site and soil evaluation report (SSE), prepared by Douglas Partners Pty Ltd (Douglas) presents the results of an SSE undertaken for a proposed industrial park at Lot 2010 Giorgi Road, Picton East, WA (the site). The investigation was commissioned by email from Kelli Howell of Development WA, dated 14 August 2025 and was undertaken in accordance with Douglas' proposal P236293.01 dated 24 July 2025.

It is understood that the site will be developed into an industrial subdivision, with large industrial lots and internal pavements. The exact number and size of lots, as well as their anticipated wastewater volume is not known at this stage.

The aim of the investigation was to assess the subsurface soil and groundwater conditions across the site in order to provide comments on:

- Pertinent ground conditions including the presence of fill, gravel/coarse particle content, rock or impervious layers such as clay;
- Suitable soil categories (in accordance with the Australian Standard (AS 1547, 2012)) for the encountered materials;
- Site conditions and surrounding features and the respective constraints for on-site effluent disposal systems;
- Suitable effluent treatment systems for the site; and
- Comments on land application area sizing.

The investigation included the excavation of 32 test pits and laboratory testing of selected samples. The details of the field work are presented in this report, together with comments and recommendations on the items listed above.

This report must be read in conjunction with all appendices including the notes provided in Appendix A.

## 2. Site Description

**Table 1: Site Details**

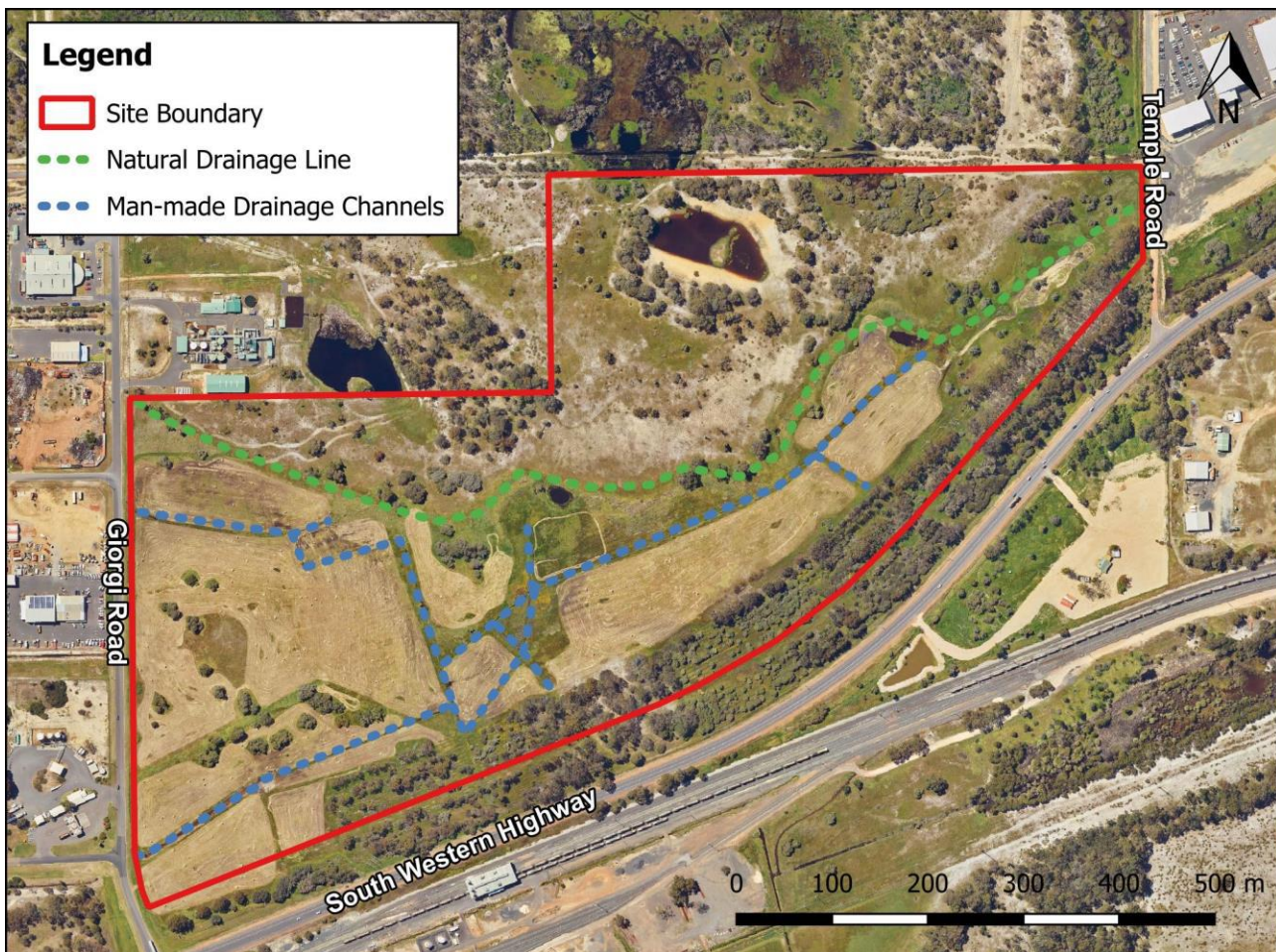
| Item                  | Details                               |
|-----------------------|---------------------------------------|
| Street Address        | Lot 2010 Giorgi Road, Picton East, WA |
| Site Area             | 44.6 ha                               |
| Local Government Area | Shire of Dardanup                     |



| Item                                             | Details                |
|--------------------------------------------------|------------------------|
| TPS3 Zone                                        | Industrial development |
| Current Landuse                                  | Pasture/Grazing        |
| Reticulated water available                      | Yes                    |
| Reticulated sewer available                      | No                     |
| Located within public drinking water source area | No                     |
| Located within sewerage sensitive area           | Yes                    |

The site comprises an irregularly shaped parcel of land, situated north of the South Western Highway (state route 20). It is contained within an area approximately 1 km east-west and 760 m north-south and covers a total area of approximately 44.6 ha.

Site surface levels were predominantly flat with some slight undulations, with surface elevations across the site at the test locations varying from a minimum RL 8.5 (TP2) to maximum RL 14.0 (TP13). with some gradual undulations.



**Figure 1: Aerial Photograph showing natural drainage line and-man-made swale drains**



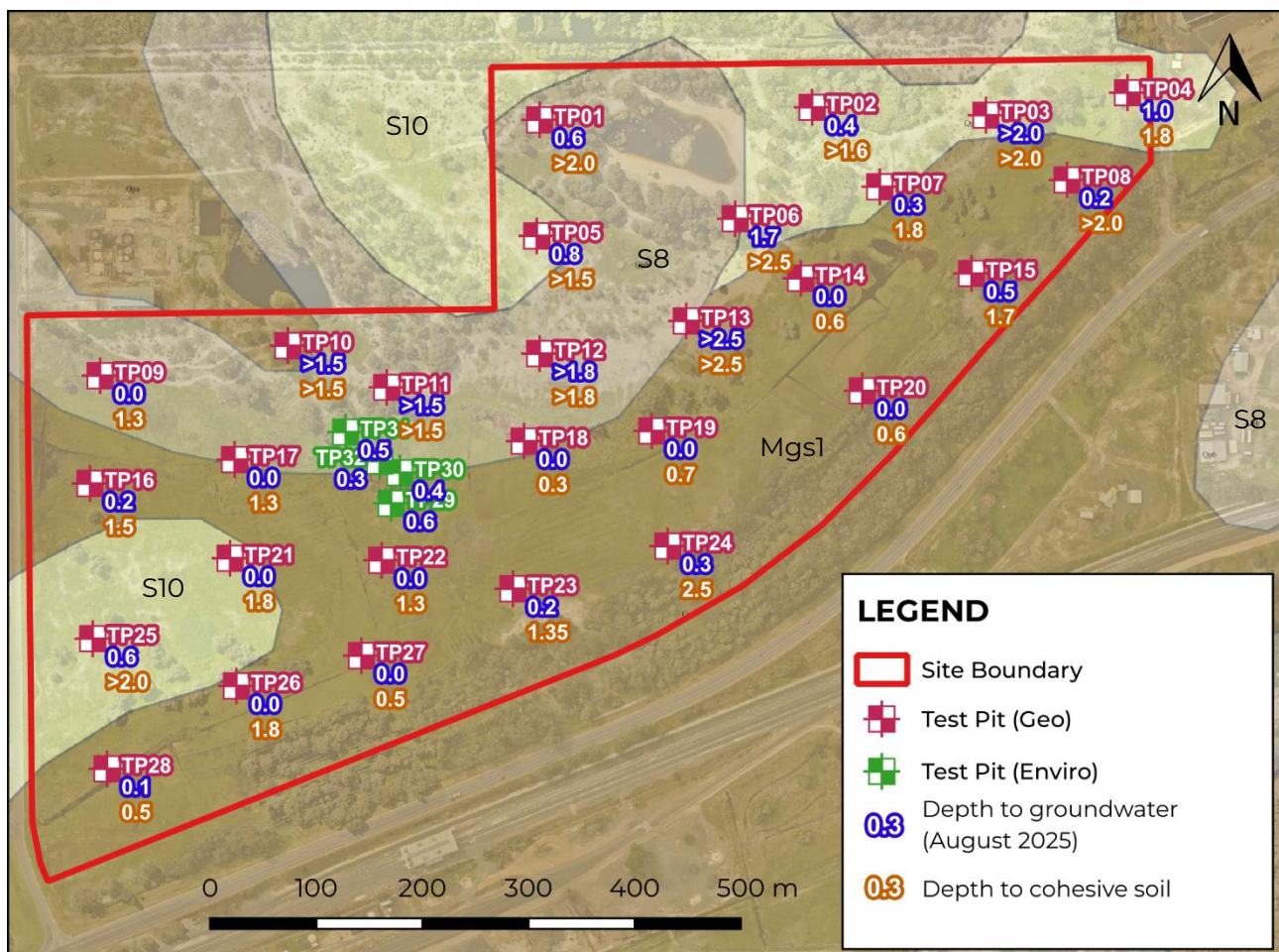
During the field work on 26 and 27 August 2025, the site was generally covered with short grass with some surface water also observed. Large to medium sized trees were present across most of the periphery of the site, especially along South Western Highway and around two farm dams towards the northern boundary.

Aerial photographs available from Landgate show that the site is crossed by a natural minor drainage line that meanders across the site between its north-eastern and north-western corners. Several man-made open drains, oriented both east-west and north-south, are also visible. These features are highlighted on one selected photo, dated 16 August 2018, above.

The 1:50,000 Bunbury-Burekup Environmental Geology sheet indicated subsurface conditions across the site comprising of three soil units:

- Thin Bassendean Sand over Guildford Formation (S10);
- Guildford Formation (Mgs1); and
- Bassendean Sand (S8).

The waterlogged ground observed in low lying parts of the site during the field work approximately correlates with the mapped Guildford Formation (Mgs1) on the geological map, below.



**Figure 2: Geological Mapping and Site and Test Locations**



Publically available information from one groundwater bore, mapped within the site, indicates groundwater was encountered at 1.1 m below surface. During fieldwork, however, undertaken on 26 and 27 August 2025 Douglas encountered groundwater at and near surface.



**Figure 3: Site Photographs – general conditions on 26 and 27 August 2025**

### 3. Climate

The past 30 years of data from Bunbury, approximately 6km west, indicate a mean annual rainfall total of approximately 735 mm and the annual average evaporation from Donnybrook, approximately 28 km south-east is 1,180 mm. See Table 2, below. Using these information sources, rainfall exceeds evaporation for 5 months of the year.

**Table 2: Local Climate Statistics**

| Statistic                                       | Jan  | Feb | Mar  | Apr  | May  | Jun   | Jul   | Aug   | Sep  | Oct  | Nov  | Dec  |
|-------------------------------------------------|------|-----|------|------|------|-------|-------|-------|------|------|------|------|
| Average monthly rainfall (mm) <sup>[1]</sup>    | 10.1 | 7.9 | 19.0 | 39.7 | 97.7 | 138.7 | 149.2 | 122.9 | 78.2 | 35.8 | 20.7 | 14.9 |
| Average monthly evaporation (mm) <sup>[2]</sup> | 187  | 158 | 127  | 71   | 53   | 39    | 42    | 53    | 62   | 92   | 126  | 172  |

Note [1]: Bunbury Data (Beureau of Meteorology, 2025)

[2]: Donnybrook Class A evaporation pan data (Luke, 1987)

|                              |                              |
|------------------------------|------------------------------|
| Rainfall exceeds evaporation | Evaporation exceeds rainfall |
|------------------------------|------------------------------|

### 4. Field Work

#### 4.1 Field work methods

The field work was carried out on 26 and 27 August 2025 and comprised:

- The excavation of 32 test pits; and
- Perth sand penetrometer (PSP) and dynamic cone penetrometer (DCP) testing.

Test pits (TP1 to TP28) were excavated to between 1.5 m and 2.5 m depth using an 8-tonne backhoe equipped with a 450 mm wide toothed bucket, with shallower termination depths caused by collapsing conditions. The ground conditions were logged in accordance with the Australian Standard (AS 1726, 2017) by a geotechnical engineer, and samples were collected from selected locations for laboratory analysis.

Test pits (TP29 to TP32) targeted the footprints of former buildings identified as part of Preliminary Site Investigation (PSI) completed by Douglas (ref: 236293.00.R.001.Rev0 dated 20 August 2025) to assess presence of subsurface fragments of potential asbestos containing materials (PACM).

Perth sand penetrometer (PSP) or dynamic cone penetrometer (DCP) testing, as most appropriate to the conditions was undertaken, adjacent to the test pits, in accordance with Australian Standard (AS 1289.6.3.3, 1997) and (AS 1289.6.3.2, 1997), respectively.

Standpipes, including slotted and solid PVC pipe with a lockable well cap, were installed in three test pit locations (TP03, TP13 and TP26). Groundwater levels in the standpipes were recorded on 16 October 2025 and the measurements are presented in Table 6.

Test locations and surface elevations were recorded using a dGPS with a variable accuracy, typically accurate to  $\pm 0.1$  m, and are shown on Drawing 1 in Appendix B. Surface elevations at each location are quoted relative to the Australian height datum (AHD) and are indicated on the logs in Appendix B.

## 4.2 Field Work Results

### 4.2.1 Soil Categories

Detailed logs of the ground conditions and results of the field testing are presented in Appendix B, together with notes defining descriptive terms and classification methods, in Appendix A.

The encountered ground conditions generally comprised a thin layer of topsoil overlying Bassendean Sand, sometimes containing a cemented layer (weakly cemented silty sand, colloquially known as 'coffee rock'), underlain by soils of the Guildford Formation, generally comprising clayey materials.

Cohesive materials of the Guildford formation were encountered at varied depths as shallow as 0.3 m.

Medium and high plasticity clays were encountered in Pits 7, 8, 14 and 20, deeper than 1.8 m.

Some sand and gravel were variably present within the Guildford alluvial formation.

Clayey soils within the Guildford Formation were encountered at less than 1.0 m depth in Pits 4, 14, 18 to 20, 22 to 24 and 26 to 28, in the approximate area mapped as Guildford Formation (Mgs1) thereby, allowing the site to be generally categorised into two zones (Zone B: as above) and Zone A (Pits 1 to 3, 5, 6, 16, 17, 21, 25 and 26), further detailed in Table 3, below, including corresponding soil categories in accordance with Australian Standard (AS 1547, 2012).



**Table 3: Summary of Observed Ground Conditions and Soil Categories**

| Zone/Location                                                                                                                                                                         | Details                                                                                                                                                                                                                                 | Assigned Soil Category <sup>[1]</sup> | Typical Observed Depth Range (m) |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|----------------------------------|
| <b>1</b><br>Approximately the areas mapped as Bassendean Sand (S8) in <b>Error! Reference source not found.</b> (Pits 1, 3, 7, 10 to 13 and 26)                                       | <b>Sand (SP), Sand (SP-SM)</b><br>Fine to medium grained, pale grey to pale brown sand, trace to with silt (SP-SM), underlying a thin layer of topsoil.                                                                                 | 1                                     | 0 – >1.5                         |
|                                                                                                                                                                                       | <b>Cemented Sand /Silty SAND (SP-SM / SM)</b><br>A layer of cemented sandy soil, brown to dark brown, generally underlying the sand – locally referred to as ‘coffee rock’ and typically formed close to historical groundwater levels. | ‘limiting layer’                      | 1.7 – >2.5                       |
|                                                                                                                                                                                       | <b>Clayey Sand (SC), Sand (SP/SP-SC) and Gravel (GP-GC)</b><br>Sand or gravel dominant soils, either clayey or with clay (<35 %).                                                                                                       | 4                                     | >1.5 - >2.5                      |
|                                                                                                                                                                                       | <b>Clay (CI)</b><br>Medium plasticity clay soils underlying the clayey sand or cemented silty sand                                                                                                                                      | 6                                     | 1.8 – >2.5                       |
| <b>3</b><br>Approximately the areas mapped as Thin Bassendean Sand over Guildford Formation (S10) in <b>Error! Reference source not found.</b> (Pits 2, 4 to 6, 8, 15, 16, 21 and 25) | <b>Sand (SP), Sand (SP-SM)</b><br>Fine to medium grained, pale grey to pale brown sand, trace to with silt (SP-SM), underlying a thin layer of topsoil.                                                                                 | 1                                     | 0 – <1.5                         |
|                                                                                                                                                                                       | <b>Silty Sand (SM)</b><br>Sand dominant soils with >12% silt                                                                                                                                                                            | 3                                     | >1.1                             |
|                                                                                                                                                                                       | <b>Cemented Sand /Silty SAND (SP-SM / SM)</b><br>A layer of cemented sandy soil, brown to dark brown, generally underlying the sand – locally referred to as ‘coffee rock’ and typically formed close to historical groundwater levels. | ‘limiting layer’                      | ~1.0 – >2.5                      |
|                                                                                                                                                                                       | <b>Clayey Sand (SC), Sand (SP/SP-SC) and Gravel (GP-GC)</b><br>Sand or gravel dominant soils, either clayey or with clay (<35 %).                                                                                                       | 4                                     | >1.5 - >2.5                      |
|                                                                                                                                                                                       | <b>Clay (CI)</b><br>Medium plasticity clay soils underlying the clayey sand or cemented silty sand                                                                                                                                      | 6                                     | 2.2 – >2.5                       |

| Zone/Location                                                                                                                                                 | Details                                                                                                                                                                                                                                 | Assigned Soil Category <sup>III</sup> | Typical Observed Depth Range (m) |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|----------------------------------|
| <b>5</b><br>Approximately the areas mapped as Guildford Formation (Mgs1) in <b>Error! Reference source not found.</b> (Pits 9, 17 to 20, 22 to 24, 27 and 28) | <b>Sand (SP), Sand (SP-SM)</b><br>Fine to medium grained, pale grey to pale brown sand, trace to with silt (SP-SM), underlying a thin layer of topsoil.                                                                                 | 1                                     | 0 – <1.0                         |
|                                                                                                                                                               | <b>Silty Sand (SM)</b><br>Sand dominant soils with >12% silt                                                                                                                                                                            | 3                                     | 0.3 – 1.8                        |
|                                                                                                                                                               | <b>Cemented Sand /Silty SAND (SP-SM / SM)</b><br>A layer of cemented sandy soil, brown to dark brown, generally underlying the sand – locally referred to as ‘coffee rock’ and typically formed close to historical groundwater levels. | ‘limiting layer’                      | ~0.9 – 1.4                       |
|                                                                                                                                                               | <b>Clayey Sand (SC), Sandy Clay (CL), Sand (SP-SC) and Gravel (GP-GC)</b><br>Sand or gravel dominant soils, either clayey or with clay (<35 %).                                                                                         | 4                                     | 0.3 – >2.5                       |
|                                                                                                                                                               | <b>Clay (CI)</b><br>Medium plasticity clay soils underlying the clayey sand or cemented silty sand                                                                                                                                      | 6                                     | 1.8 – >2.5                       |

If natural soils conditions to a depth of 1.5 m are considered to govern the selection of a suitable soil category for land application area (LAA) design, owing to variation in the depth of the sandy, silty and cemented soils, soil categories are considered to likely vary between 1 and 3 and 5. However the Category 5 areas are seasonally inundated.

Drawing 1 in Appendix B outlines the proposed soil category for LAA sizing at each test pit and the interpolated zones elsewhere on site.

#### 4.2.1 Groundwater

Groundwater, was encountered in most of the test locations during fieldwork on 26 and 27 August 2025. Owing to collapsing conditions from the shallow groundwater level and the near-surface cohesionless sandy soils, accurate measurement of the groundwater level within the test pits during the field work was difficult. As such, the groundwater observations summarised in Table 4, below, should be used with caution.

**Table 4: Summary of Encountered Groundwater**

| Location | Surface Level<br>(AHD) | Depth to Groundwater<br>(m)     | Groundwater Level<br>(AHD) |
|----------|------------------------|---------------------------------|----------------------------|
| TP1      | 11.8                   | 0.6                             | 11.2                       |
| TP2      | 8.5                    | 0.4                             | 8.1                        |
| TP3      | 12.8                   | Not observed within 2 m depth   |                            |
| TP4      | 11.9                   | 1.0                             | 10.9                       |
| TP5      | 11.9                   | 0.8                             | 11.1                       |
| TP6      | 12.9                   | 1.7                             | 11.2                       |
| TP7      | 11.7                   | 0.3                             | 11.4                       |
| TP8      | 11.7                   | 0.2                             | 11.5                       |
| TP9      | 10.5                   | 0.0                             | 10.5                       |
| TP10     | 12.4                   | Not observed within 1.5 m depth |                            |
| TP11     | 12.7                   | Not observed within 1.5 m depth |                            |
| TP12     | 13.8                   | Not observed within 1.8 m depth |                            |
| TP13     | 14.0                   | Not observed within 2.5 m depth |                            |
| TP14     | 11.3                   | 0.0                             | 11.3                       |
| TP15     | 11.7                   | 0.5                             | 11.2                       |
| TP16     | 10.6                   | 0.2                             | 10.4                       |
| TP17     | 10.6                   | 0.0                             | 10.6                       |
| TP18     | 10.5                   | 0.0                             | 10.5                       |
| TP19     | 11.1                   | 0.0                             | 11.1                       |
| TP20     | 11.2                   | 0.0                             | 11.2                       |
| TP21     | 10.8                   | 0.0                             | 10.8                       |
| TP22     | 10.5                   | 0.0                             | 10.5                       |
| TP23     | 10.6                   | 0.2                             | 10.4                       |
| TP24     | 11.0                   | 0.3                             | 10.7                       |
| TP25     | 11.0                   | 0.6                             | 10.4                       |
| TP26     | 10.2                   | 0.0                             | 10.2                       |
| TP27     | 10.1                   | 0.0                             | 10.1                       |
| TP28     | 10.1                   | 0.1                             | 10.0                       |
| TP29     | 11.2                   | 0.6                             | 10.6                       |
| TP30     | 11.3                   | 0.4                             | 10.9                       |



| Location | Surface Level (AHD) | Depth to Groundwater (m) | Groundwater Level (AHD) |
|----------|---------------------|--------------------------|-------------------------|
| TP31     | 11.0                | 0.5                      | 10.5                    |
| TP32     | 11.3                | 0.3                      | 11.0                    |

Two surface water measurements, taken during field work on 26 and 27 August are also summarised in Table 5, below.

**Table 5: Surface water level measurements (26-27 August)**

|                                                |        |         |      |   |   |   |
|------------------------------------------------|--------|---------|------|---|---|---|
| Surface water level in Drain (near TP28)       | 379961 | 6309749 | 9.6  | - | - | - |
| Surface water level in lake (near TP2 and TP6) | 380548 | 6310311 | 11.4 | - | - | - |

50 mm diameter slotted PVC standpipes were installed during the August 2025 field work and were later measured at the end of winter, on 16 October 2025. The results of the October observations are summarised in Table 6, below.

**Table 6: Summary of Groundwater Measurements (16 October)**

| Name       | Easting | Northing | Surface level (m AHD) | Top of casing (m AHD) | Groundwater depth (BTOC) | Groundwater height (m AHD) |
|------------|---------|----------|-----------------------|-----------------------|--------------------------|----------------------------|
| SP1 (TP26) | 380078  | 6309832  | 10.2                  | 11.0                  | 1.2                      | 9.7                        |
| SP2 (TP13) | 380503  | 6310176  | 14.0                  | 14.8                  | dry                      | <11.5                      |
| SP3 (TP03) | 380785  | 6310369  | 12.8                  | 14.1                  | 2.5                      | 11.6                       |

#### 4.2.2 Permeability

Surface and shallow groundwater across most of the site impacted the performance of in situ infiltration testing. However, in-situ infiltration testing was undertaken at three locations, with one location invalid due to insufficient clearance from shallow groundwater. Permeability was estimated using a calculation based on Hvorslev (Hvorslev, 1951). The permeability results are summarised in Table 7, below.

**Table 7: Summary of Permeability Analysis**

| Test Location | Depth (m) | Measured Permeability (m/day) | Ground Conditions                                                                                                             |
|---------------|-----------|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| TP6           | 1.0       | 5.2                           | Soil Category 3: SAND (SP) trace silt, over SAND (SP-SM) with silt from 1.1 m, over Silty SAND (SM) from 1.4 m. Medium dense. |

| Test Location | Depth (m) | Measured Permeability (m/day) | Ground Conditions                                             |
|---------------|-----------|-------------------------------|---------------------------------------------------------------|
| TP12          | 1.0       | 9.0                           | Soil Category 1: SAND (SP) trace silt. Loose to medium dense. |

Notes: Assigned Soil Categories defined in above, in accordance with Australian Standard (AS 1547, 2012).

## 5. Laboratory Testing

A laboratory testing programme was carried out by a NATA registered laboratory on selected soil samples and comprised the following tests:

- The particle size distribution of eleven samples;
- The Atterberg limits of seven samples;
- The shrink-swell index of three samples;
- The Emerson Classification testing of five samples; and
- The organic content of three samples.

The test certificates are included in Appendix C and summarised in Table 8, Table 9 and Table 10, below.

**Table 8: Summary of Soil Identification Testing**

| Location | Depth (m) | Fines (%) | Sand (%) | Gravel (%) | LL (%) | PL (%) | PI (%) | LS (%) | I <sub>ss</sub> | Material                                                 |
|----------|-----------|-----------|----------|------------|--------|--------|--------|--------|-----------------|----------------------------------------------------------|
| TP1      | 0.0-0.1   | 5         | 95       | 0          | -      | -      | -      | -      | -               | Organic SAND (SP-SM) with silt                           |
| TP3      | 0.5       | 1         | 99       | 0          | -      | -      | -      | -      | -               | SAND (SP) trace silt                                     |
| TP4      | 1.5       | 4         | 96       | 0          | -      | -      | -      | -      | -               | SAND (SP) trace silt                                     |
| TP6      | 1.0       | 1         | 99       | 0          | -      | -      | -      | -      | -               | SAND (SP) trace silt                                     |
| TP10     | 1.0       | 1         | 99       | 0          | -      | -      | -      | -      | -               | SAND (SP) trace silt                                     |
| TP14     | 0.8       | 20        | 72       | 8          | 34     | 18     | 16     | 5.0    | -               | Clayey SAND (SC), low to medium plasticity, trace gravel |
| TP14     | 2.5       | -         | -        | -          | 72     | 33     | 39     | 16.5   | -               | CLAY (CH), high plasticity                               |
| TP18     | 0.7-1.15  | 11        | 71       | 18         | 28     | 23     | 5      | 1.5    | 1.0             | SAND (SP-SC) with clay, with gravel                      |
| TP19     | 0.7-1.15  | 15        | 67       | 18         | 36     | 17     | 19     | 5.0    | 1.2             | Clayey SAND (SC), low to medium plasticity, with gravel  |

| Location | Depth (m) | Fines (%) | Sand (%) | Gravel (%) | LL (%) | PL (%) | PI (%) | LS (%) | I <sub>ss</sub> | Material                                                 |
|----------|-----------|-----------|----------|------------|--------|--------|--------|--------|-----------------|----------------------------------------------------------|
| TP20     | 0.8       | 8         | 71       | 21         | NO     | NP     | NP     | 0.5    | -               | SAND (SP-SM) with silt, with gravel                      |
| TP24     | 0.8-1.1   | 12        | 74       | 14         | 29     | 19     | 10     | 4.0    | -               | SAND (SP-SC) with clay, with gravel                      |
| TP28     | 0.6-1.05  | 15        | 84       | 1          | 33     | 17     | 16     | 5.0    | 0.5             | Clayey SAND (SC), low to medium plasticity, trace gravel |

Notes:

- The fines content is the percentage by dry weight of particles smaller than 75 µm diameter.
- The sand content is the percentage by dry weight of particles between 75 µm and 2.36 mm diameter.
- The gravel content is the percentage by dry weight of particles between 2.36 mm and 75 mm diameter.
- LL = liquid limit                      - PL = plastic limit                      - PI = plasticity index                      - LS = linear shrinkage
- "-" = not tested                      - I<sub>ss</sub> = shrink / swell index                      - NO/NP = not obtainable/non-plastic soil

**Table 9: Summary of Organic Testing**

| Location | Depth (m) | Organic Content (%) | Material                                           |
|----------|-----------|---------------------|----------------------------------------------------|
| TP1      | 0.0-0.1   | 9.0                 | Dark grey Organic SAND (SP-SM) with silt           |
| TP4      | 0.1       | 12.1                | Dark grey-brown Organic SAND (SP-SM) with silt     |
| TP6      | 1.5       | 0.5                 | Dark brown Cemented Silty SAND (SM), 'coffee rock' |

**Table 10: Summary of Emerson Classification Testing**

| Location | Depth (m) | Emerson Class (1-6) | Material                                                   |
|----------|-----------|---------------------|------------------------------------------------------------|
| TP2      | 1.5       | 5 <sup>[1]</sup>    | Silty SAND (SM) – dark grey                                |
| TP4      | 1.5       | 5 <sup>[1]</sup>    | SAND (SP) trace silt – blue-grey and brown                 |
| TP8      | 0.5       | 5 <sup>[1]</sup>    | SAND (SP) trace silt – pale grey                           |
| TP14     | 0.8       | 5 <sup>[1]</sup>    | Clayey SAND (SC), trace gravel – grey-brown                |
| TP28     | 0.6       | 5 <sup>[1]</sup>    | Clayey SAND (SC), trace gravel – grey mottled yellow-brown |

[1] - Emerson Class 5 soil crumbles slake with the addition of water but are only dispersive in a water solution. No calcite or gypsum is present in these soils.

## 6. Site suitability

### 6.1 Site assessment

Pertinent site characteristics to assess the suitability of the site for an on-site effluent disposal system are listed in the table below, with high constraints characteristics shaded in red, along with the proposed level of constraint and comments on risk mitigation, if required.

**Table 11: Site characteristics, constraints and mitigation measures**

| Characteristic                   | Comment                                                                                                                                                                                                                                                                                                                                                                                  | Constraint    | Comment/Mitigation measures                                                                                                                                                                                                                     |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Lot Size                         | Not yet known                                                                                                                                                                                                                                                                                                                                                                            | Nil (assumed) | Lot sizes of at least 2,000 m <sup>2</sup> are typically considered suitable for secondary treated effluent disposal for industrial lots, however for industrial proposals in SSAs, lot sizes are assessed on a case-by-case basis.             |
| Climate                          | Average rainfall exceeds average evaporation for five months of the year                                                                                                                                                                                                                                                                                                                 | High          | Water balance calculations recommended for sizing of irrigation area and evapotranspiration beds.                                                                                                                                               |
| Exposure                         | <p>Site has good sun and wind exposure.</p> <p>Post development lot surfaces are expected to be predominantly sealed.</p>                                                                                                                                                                                                                                                                | Nil           | Where feasible, plant trees and shrubs near to LAA to encourage evapotranspiration.                                                                                                                                                             |
| Vegetation                       | Rural pasture with open shrubland in some areas.                                                                                                                                                                                                                                                                                                                                         | Nil           | NA                                                                                                                                                                                                                                              |
| Landform and Drainage            | <p>Gentle gradient with some parts of the site inundated during winter months.</p> <p>Elevated sand dunes drain to low-lying area, containing shallow clay soils. This low-lying area bisects the site following a south-west to north-east alignment.</p> <p>With reference to Drawing 4 in Appendix B, the direction of groundwater flow in August 2025 was toward the south-west.</p> | High          | <p>Import soil to raise surface levels.</p> <p>Install system in dry conditions.</p> <p>Limit DLR</p> <p>Consider off-site groundwater flows in design, to prevent discharge of groundwater at the surface of adjacent lots and landscapes.</p> |
| Soils with very low permeability | Shallow category 5 soils in some parts of the site.                                                                                                                                                                                                                                                                                                                                      | High          | Import soil with a high permeability (category 1 or 2) to raise surface levels.                                                                                                                                                                 |
| Slope                            | Slopes across the site were generally less than 5%.                                                                                                                                                                                                                                                                                                                                      | Nil           | The effect of raising site levels on consequent slope should be considered.                                                                                                                                                                     |



| Characteristic                                                                           | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Constraint | Comment/Mitigation measures                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fill                                                                                     | Sand fill with cobbles and debris to 0.3m and >1.0m in TP31 and TP30. (restricted area)                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Low        | LAA within the restricted fill area may require additional soil investigation or specific design.                                                                                                                                                                                                                                                                                            |
| Rock Outcrops                                                                            | No outcrops or natural oversized particles observed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Nil        | NA                                                                                                                                                                                                                                                                                                                                                                                           |
| Erosion Potential                                                                        | No signs of erosion noted during investigation.<br><br>Class 5 Emerson classification. i.e. Soils are not dispersive or sodic.                                                                                                                                                                                                                                                                                                                                                                                                                                      | Nil        | NA                                                                                                                                                                                                                                                                                                                                                                                           |
| Proximity to Public Drinking Water Source Areas (PDWSA) and Sewage Sensitive Areas (SSA) | The closest PDWSA is approximately 950 m north of the site. The closest protection area for PDWSA (P1) is approximately 1.9 km west of the site.<br><br>The site is located within a Sewage Sensitive Area (SSA) (located within an estuary catchment on the Swan and Scott Coastal Plain and within 1 km of significant wetlands).                                                                                                                                                                                                                                 | High       | In accordance with the GSP, at least 1.5 m of separation from groundwater would be required from the discharge point of all on-site sewerage systems.<br><br>For industrial proposals in SSAs, lot sizes are assessed on a case-by-case basis.<br><br>A secondary treatment system with nutrient removal will generally be required.                                                         |
| Proximity to Water Bodies, Drainage, Wetlands, Watercourses, Wet Areas and Bores         | No private water bores were observed within the site.<br><br>Water bodies including dams and areas of seasonally ponding water are present within and immediately adjacent to the site.<br><br>Swale drains are located throughout the low-lying areas of the site<br><br>Public open drains (Water Corp) are present approximately 150 m northeast of the site and 50 m southwest of the site. Surface water flows would follow the 1.2 km open drain to outflow into the Ferguson River.<br><br>The Western Australia floodplain mapping tool does not indicate a | High       | The LAA should be located at least 30 m from any private water bores and 100 m from watercourses, wetlands and drainage lines (including Water Corp open drains).<br><br>Neighbouring properties should be contacted regarding private water bores if any LAA within 30 m of boundary.<br><br>Reduced set-back distances are possible for secondary treatment systems with nutrient removal. |

| Characteristic              | Comment                                                                                                                                                                                                                | Constraint | Comment/Mitigation measures                                                                                                                                                                                                                                                                                                                                                                         |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                             | likelihood of flooding at a 1% AEP. The closest flood modelling is on the Ferguson River, a major river connected to the Preston River, approximately 800 m south of the site.                                         |            |                                                                                                                                                                                                                                                                                                                                                                                                     |
| Rainfall Run-on and Seepage | Water may flow from dams within and adjacent to the site at an elevation of around 11.0 m or so to downslope areas.<br><br>The flow direction of the open (Water Corp) drain northeast of the site should be assessed. | Low        | Import soil with a high permeability (category 1 or 2) to raise surface levels.<br><br>Consider off-site groundwater flows in design, to prevent discharge of groundwater at the surface of adjacent lots and landscapes.                                                                                                                                                                           |
| Flood Potential             | Flood mapping at 1% AEP does not affect this site.<br><br>Some parts of the site inundated during winter months.                                                                                                       | High       | An onsite wastewater system should not be located in an area subject to inundation.<br><br>Import soil to raise surface levels.<br><br>Where the use of fill is proposed to achieve separation distances from groundwater, proponents may be required to provide additional information to demonstrate the solution do not impact on other lots and would not compromise the surrounding landscape. |

## 6.2 Soil/ground assessment

Pertinent soil characteristics to assess the suitability of the site for an on-site effluent disposal system are listed in Table 12, below, with high constraints characteristics shaded in red, along with the proposed level of constraint and comments on risk mitigation, if required.

**Table 12: Soil characteristics**

| Characteristic                                      | Comment                                                                      | Constraint | Mitigation Measures                                                              |
|-----------------------------------------------------|------------------------------------------------------------------------------|------------|----------------------------------------------------------------------------------|
| Profile Depth and Depth to Water table/ Groundwater | At the time of the field work was between RL 9.5 m and 11.5 m AHD. The field | High       | The site is within a sewer sensitive area (SSA), therefore a 1.5 m vertical set- |

| Characteristic                | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Constraint | Mitigation Measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                               | <p>investigation was undertaken in August 2025. This was towards the end of winter, in the one of the highest recorded rainfall years.</p> <p>Additional groundwater measurements were recorded in October with levels recorded between RL 9.7 m and 11.6 m AHD.</p> <p>Only the soil categories above the maximum groundwater table should be considered for the profile depth. These were predominantly category 1, with some limiting layers and some category 3 soils encountered at the TP06 location.</p> |            | <p>back to groundwater is required.</p> <p>Placement of fill within the proposed land application area (LAA) will be required to raise the surface level and achieve the required clearance to groundwater.</p> <p>Consider off-site groundwater flows in design, to prevent discharge of groundwater at the surface of adjacent lots and landscapes.</p> <p>A notification is to be placed on the certificate of title for the proposed lot and on the deposited plan which would state "A reticulated sewerage service is not available to the lot(s). As such, an on-site sewage system will be required. Clean fill will be required in order to achieve separation distances between sewage disposal system and groundwater."</p> |
| Coarse fragments              | Nil to very few coarse fragments within the encountered or anticipated geology.                                                                                                                                                                                                                                                                                                                                                                                                                                 | Nil        | NA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Colour, texture and structure | <p>Above the maximum groundwater table soils were generally non cohesive, with a granular texture. No mottling was present, however dark brown silty cemented soil layers were present, which are often associated with groundwater deposition.</p> <p>Details, including photographs are presented on the logs in Appendix B.</p>                                                                                                                                                                              | Low        | <p>Selection of a suitable disposal method and effluent delivery to ensure even coverage of the LAA.</p> <p>Cemented soils within 1.5 m of the proposed LAA discharge areas could be excavated and replaced with category 1 or 2 imported fill, or broken up with an excavator to decrease the limiting effect of cementation on</p>                                                                                                                                                                                                                                                                                                                                                                                                   |

| Characteristic                              | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Constraint | Mitigation Measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |            | permeability to around category 3.                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Permeability and design loading rates (DLR) | <p>Permeability of the tested shallow granular site soils, above the groundwater table exceeded 5 m/day and therefore the DLR and DIR from AS1547 (2012) for a Category 1 soil are considered likely appropriate.</p> <p>Fill will be required across most of the site within the LAA and it is recommended that the DLR should consider the soil category of the fill material.</p> <p>Higher soil categories are present at levels below maximum groundwater.</p> | Low        | <p>Owing to the high groundwater at this site, it is recommended that a relatively conservative DLR value is adopted for the LAA design and the system designer is specific on the fill characteristics for effluent infiltration and suitable quality control is employed during construction to ensure it meets design.</p> <p>If the LAA discharge is within the cemented silty sand layer at TP06. These soils would need to be broken up with an excavator and should be considered category 3.</p> |
| Dispersity                                  | Sand soils with low sodicity, structural degradation not applicable                                                                                                                                                                                                                                                                                                                                                                                                 | Low        | NA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| pH, EC, ESP and phosphorous adsorption      | Secondary treatment systems, such as ATU with nutrient removal are required to be used on this site, due to it's location within a Sewerage sensitive area (SSA).                                                                                                                                                                                                                                                                                                   | Nil        | The chemical soil characteristics are not a determining factor where secondary treatment systems are used.                                                                                                                                                                                                                                                                                                                                                                                               |

## 7. Hydraulic loading

For the purpose of this SSE, it has been assumed that an industrial development may have up to 6-8 employees working an 8 hour day, with reference to (AS 1547, 2012), a wastewater usage of up to 70 L/person/day (Department of Health) would result in a loading of 560 L/day per industrial lot.

This does not include the industrial waste hydraulic loading rates such as processing, food production, wash down and bottle rinsing (Department of Health). These considerations, as well as consideration such as triple interceptor traps to capture trade wastewater pollutants are expected to be covered at a later stage in the development process, when more details of the proposed development are known.

## 8. Sizing of disposal area

### 8.1 General Comments

An area of approximately 61 m<sup>2</sup> is expected to be suitable for on-site wastewater disposal for volumes in the order of 560 L/day. Calculations are detailed in section 8.2, below. Refinement of the LAA for each individual lot would be required when a site-specific design is undertaken, to confirm the ground conditions underlying the proposed LAA as well as the selection of a suitable design daily loading rate (DLR) or daily irrigation rate (DIR) that suits the proposed application method and ground conditions. The indicative areas above are considered to be appropriate for disposal via infiltration, such as via conventional trenches.

Generally, disposal via irrigation (such as subsurface drippers) will require a larger LAA, when compared to a conventional infiltration trench, as the process of disposal shifts from infiltration to evapotranspiration, where the effluent essentially does not infiltrate into the deeper soils. Preliminary water balance calculations indicate that areas in the order of 2,000 m<sup>2</sup> may be required for secondary treatment systems that do not include additional storage tanks (for periods of the year where rainfall exceeds evaporation). Disposal via irrigation however potentially allows for the reduction of the 1.5 m of clearance to maximum groundwater levels, so despite the larger application areas, less fill (height) may be required over the LAA.

### 8.2 Example for Conventional Trenches

Table L1 of Australian Standard (AS 1547, 2012) should be referred to for a suitable design loading rate (DLR) for the sizing of the LAA on the assumption that:

- that disposal of the treated effluent within the LAA will be via conventional trenches (refer to Figure 5); and
- fill material of Soil Category 1 or 2 (i.e. sand or sand with silt) will be used to the raise surface levels across each LAA to achieve the minimum vertical separation to groundwater.

Owing to constraints at this site including shallow groundwater, seasonal inundation set-back to drainage lines, it is recommended that the designer of the individual on-site effluent disposal system (note: secondary treatment system with nutrient removal is required) adopts a conservative DLR. It is suggested that a maximum DLR of 30 mm/day is used.

Referring to Appendix L in Australian Standard (AS 1547, 2012), the trench dimensions in Figure 5, and a DLR of 30 mm/day, a total length of trench of 155 m would be required for 1,400 L/day.

Based on the calculation: 
$$L = \frac{Q}{DLR \times W}$$

Where  $Q$  = quantity of wastewater produced in L/day

$DLR$  = design loading rate of wastewater application system; and



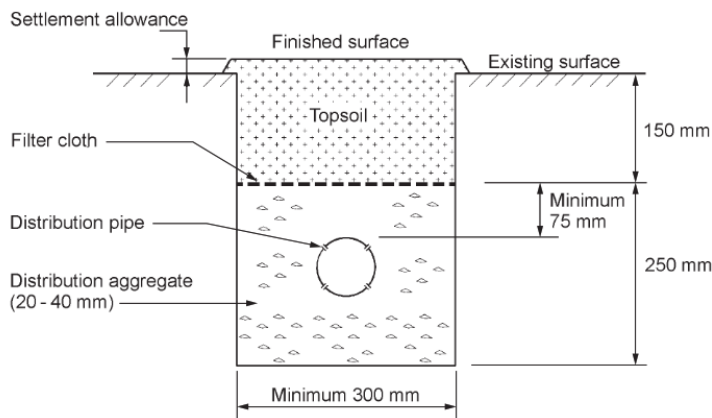
$W$  = the width of proposed trench bedding

The total trench length could be configured in three 21 m long rows with 1 m spacing between the trenches, thereby requiring a footprint of ~61 m<sup>2</sup> (21 x 2.9 m).

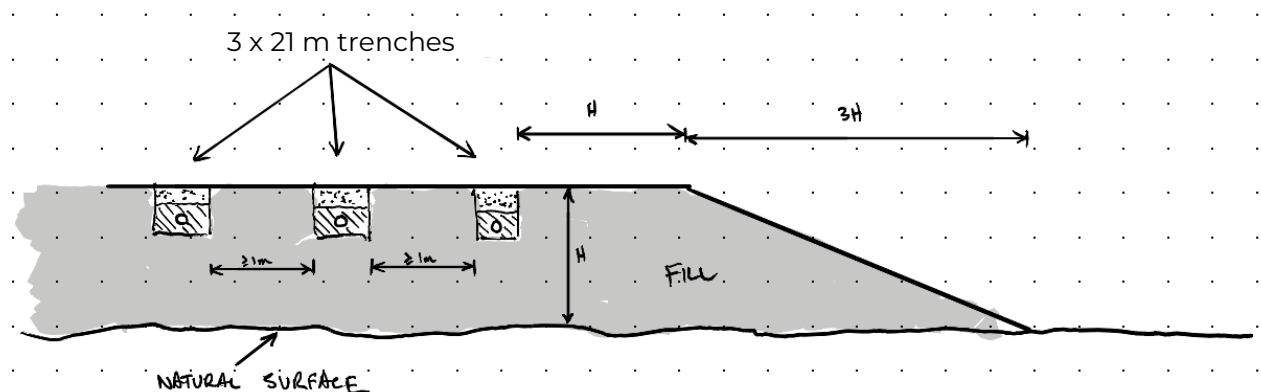
In accordance with Table R1 in (AS 1547, 2012) a horizontal setback distance of 3.0 m or 1:1 grade to the toe of the wall or a 4:1 grade to the base of any cut or fill batters should be used (whichever is greatest).

If Category 1 or 2 soils (sandy material) is used to raise the LAA and provide clearance to maximum groundwater levels, low pressure effluent distribution (LPED) lines should be considered for even distribution of effluent over the entire LAA.

For slope stability and mitigation of erosion, the batters on the edge of the LAA should be no steeper than 1V:3H and the whole area including batters should be vegetated with suitable groundcover/turf to aid evapotranspiration. The above suggested configuration is represented in the schematic in Figure 6.



**Figure 4: Schematic of Conventional Trench (Figure L1 from AS 1547:2012)**



**Figure 5: LAA Configuration Schematic - Cross Section**

## 9. Conclusions and recommendations

Based on the results of this SSE and the requirements set out in the GSP and Australian Standard (AS 1547, 2012), onsite effluent disposal at this site will require **secondary treatment systems with nutrient removal**, and land application areas will need to be raised to provide separation to maximum groundwater levels. A fill height to provide at least 1.5 m of vertical separation from the point of effluent discharge to maximum groundwater would be required for disposal methods relying on infiltration (such as trenches) and fill heights may be able to be reduced for disposal methods that rely on evapotranspiration (such as surface or sub-surface irrigation).

Secondary treatment systems would need to be inspected and maintained in accordance with the Government Sewerage Policy (State Government of Western Australia, 2019)

Observations at test locations indicate that natural soils within 1.5 m of the surface vary between Category 1, 3 and 5 at this site, however only category 1 and 3 soils are present above the maximum groundwater table.

Surface levels to the north, on the industrial lots to the west and east of the site and on the South Western highway to the south of the site are elevated above current site surface levels, and are generally RL 11.5 m AHD or greater. The area with the lowest elevation adjacent to the site is southwest of the site, near Water Corp's open drain. It is expected that wastewater dispersed using on-site systems would percolate from the proposed trenches or irrigation systems, through the proposed category 1 or 2 fill soils and eventually discharge into the open, unlined drainage systems to the west of the site, which would then follow a 1.2 km path to outflow into the Ferguson River. Use of a secondary treatment system with nutrient removal and a set-back distance of 100 m to the open, unlined drains is expected to be required for this site.

Owing to the current lack of knowledge regarding the proposed development and proposed water usage as well as the potential for environmentally hazardous materials to be included in industrial wastewater, a site-specific investigation and design is recommended for each on-site wastewater treatment and dispersal system within the proposed industrial subdivision.

## 10. References

AS 1289.6.3.2. (1997). *Methods for testing soils for engineering purposes - Soil strength and consolidation tests - Determination of the penetration resistance of a soil - 9kg dynamic cone penetrometer test*. Reconfirmed 2013: Standards Australia.

AS 1289.6.3.3. (1997). *Methods for testing soils for engineering purposes - Soil strength and consolidation tests - Determination of the penetration resistance of a soil - Perth sand penetrometer test*. Reconfirmed 2013: Standards Australia.

AS 1547. (2012). *On-site domestic wastewater management*. Standards Australia.

AS 1726. (2017). *Geotechnical Site Investigations*. Standards Australia.

AS 2870. (2011). *Residential Slabs and Footings*. Standards Australia.

Beureau of Meteorology. (2025, November). *Climate Statistics for Australian Locations*. Retrieved from [https://www.bom.gov.au/climate/averages/tables/cw\\_009965.shtml](https://www.bom.gov.au/climate/averages/tables/cw_009965.shtml)

Department of Health. (n.d.). Supplement to Regulation 29 and Schedule 9 - Wastewater system loading rates. Retrieved from [https://www.health.wa.gov.au/articles/s\\_t/supplement-to-regulation-29-and-schedule-9-wastewater-system-loading-rates](https://www.health.wa.gov.au/articles/s_t/supplement-to-regulation-29-and-schedule-9-wastewater-system-loading-rates)

Hvorslev, M. J. (1951). *Time lag and soil permeability in groundwater observations*. US Army Corps of Engineers Waterways Experiment Observation Station, Bulletin 36, Vicksburg, Mississippi.

Luke, G. J. (1987). *Evaporation data for Western Australia*. Department of Primary Industries and Regional Development.

State Government of Western Australia. (2019, September). Government Sewerage Policy.

## 11. Limitations

The scope of work for this investigation/report did not include the assessment of surface or sub-surface materials or groundwater for contaminants, within or adjacent to the site. Should evidence of fill of unknown origin be noted in the report, and in particular the presence of building demolition materials, it should be recognised that there may be some risk that such fill may contain contaminants and hazardous building materials.

Douglas Partners Pty Ltd (Douglas) has prepared this report for this project at Lot 2010 Giorgi Road, Picton East, WA in line with Douglas' proposal dated 24 July 2025 and acceptance received from Kelli Howell of Development WA dated 14 August 2025. The work was carried out under the Engineering Panel Agreement 2023/01. This report is provided for the exclusive use of Development WA for this project only and for the purposes as described in the report. It should not be used by or relied upon for other projects or purposes on the same or other site or by a third party. Any party so relying upon this report beyond its exclusive use and purpose as stated above, and without the express written consent of Douglas, does so entirely at its own risk and without recourse to Douglas for any loss or damage. In preparing this report Douglas has necessarily relied upon information provided by the client and/or their agents.

The results provided in the report are indicative of the sub-surface conditions on the site only at the specific sampling and/or testing locations, and then only to the depths investigated and at the time the work was carried out. Sub-surface conditions can change abruptly due to variable geological processes and also as a result of human influences. Such changes may occur after Douglas' field testing has been completed.

Douglas' advice is based upon the conditions encountered during this investigation. The accuracy of the advice provided by Douglas in this report may be affected by undetected variations in ground conditions across the site between and beyond the sampling and/or testing locations. The advice may also be limited by site accessibility and/or field conditions at the time of investigation.

The assessment of atypical safety hazards arising from this advice is restricted to the geotechnical components set out in this report and based on known project conditions and stated design advice and assumptions. While some recommendations for safe controls may be provided, detailed 'safety in design' assessment is outside the current scope of this report and requires additional project data and assessment.

This report must be read in conjunction with all of the attached and should be kept in its entirety without separation of individual pages or sections. Douglas cannot be held responsible for interpretations or conclusions made by others unless they are supported by an expressed statement, interpretation, outcome or conclusion stated in this report.

This report, or sections from this report, should not be used as part of a specification for a project, without review and agreement by Douglas. This is because this report has been written as advice and opinion rather than instructions for construction.

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## Appendix A

About This Report

## Introduction

These notes have been provided to amplify Douglas' report in regard to classification methods, field procedures and the comments section. Not all are necessarily relevant to all reports.

Douglas' reports are based on information gained from limited subsurface excavations and sampling, supplemented by knowledge of local geology and experience. For this reason, they must be regarded as interpretive rather than factual documents, limited to some extent by the scope of information on which they rely.

## Copyright

This report is the property of Douglas Partners Pty Ltd. The report may only be used for the purpose for which it was commissioned and in accordance with the Engagement Terms for the commission supplied at the time of proposal. Unauthorised use of this report in any form whatsoever is prohibited.

## Borehole and Test Pit Logs

The borehole and test pit logs presented in this report are an engineering and/or geological interpretation of the subsurface conditions, and their reliability will depend to some extent on frequency of sampling and the method of drilling or excavation. Ideally, continuous undisturbed sampling or core drilling will provide the most reliable assessment, but this is not always practicable or possible to justify on economic grounds. In any case the boreholes and test pits represent only a very small sample of the total subsurface profile.

Interpretation of the information and its application to design and construction should therefore take into account the spacing of boreholes or pits, the frequency of sampling, and the possibility of other than 'straight line' variations between the test locations.

## Groundwater

Where groundwater levels are measured in boreholes there are several potential problems, namely:

- In low permeability soils groundwater may enter the hole very slowly or perhaps not at all during the time the hole is left open;
- A localised, perched water table may lead to an erroneous indication of the true water table;
- Water table levels will vary from time to time with seasons or recent weather

changes. They may not be the same at the time of construction as are indicated in the report; and

- The use of water or mud as a drilling fluid will mask any groundwater inflow. Water has to be blown out of the hole and drilling mud must first be washed out of the hole if water measurements are to be made.

More reliable measurements can be made by installing standpipes which are read at intervals over several days, or perhaps weeks for low permeability soils. Piezometers, sealed in a particular stratum, may be advisable in low permeability soils or where there may be interference from a perched water table.

## Reports

The report has been prepared by qualified personnel, is based on the information obtained from field and laboratory testing, and has been undertaken to current engineering standards of interpretation and analysis. Where the report has been prepared for a specific design proposal, the information and interpretation may not be relevant if the design proposal is changed. If this happens, Douglas will be pleased to review the report and the sufficiency of the investigation work.

Every care is taken with the report as it relates to interpretation of subsurface conditions, discussion of geotechnical and environmental aspects, and recommendations or suggestions for design and construction. However, Douglas cannot always anticipate or assume responsibility for:

- Unexpected variations in ground conditions. The potential for this will depend partly on borehole or pit spacing and sampling frequency;
- Changes in policy or interpretations of policy by statutory authorities; or
- The actions of contractors responding to commercial pressures.

If these occur, Douglas will be pleased to assist with investigations or advice to resolve the matter.



## About this Report

### Site Anomalies

In the event that conditions encountered on site during construction appear to vary from those which were expected from the information contained in the report, Douglas requests that it be immediately notified. Most problems are much more readily resolved when conditions are exposed rather than at some later stage, well after the event.

### Information for Contractual Purposes

Where information obtained from this report is provided for tendering purposes, it is recommended that all information, including the written report and discussion, be made available. In circumstances where the discussion or comments section is not relevant to the contractual situation, it may be appropriate to prepare a specially edited document. Douglas would be pleased to assist in this regard and/or to make additional report copies available for contract purposes at a nominal charge.

### Site Inspection

The company will always be pleased to provide engineering inspection services for geotechnical and environmental aspects of work to which this report is related. This could range from a site visit to confirm that conditions exposed are as expected, to full time engineering presence on site.

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## Introduction to Terminology, Symbols and Abbreviations

Douglas Partners' reports, investigation logs, and other correspondence may use terminology which has quantitative or qualitative connotations. To remove ambiguity or uncertainty surrounding the use of such terms, the following sets of notes pages may be attached Douglas Partners' reports, depending on the work performed and conditions encountered:

- Soil Descriptions;
- Rock Descriptions; and
- Sampling, insitu testing, and drilling methodologies

In addition to these pages, the following notes generally apply to most documents.

### Abbreviation Codes

Site conditions may also be presented in a number of different formats, such as investigation logs, field mapping, or as a written summary. In some of these formats textual or symbolic terminology may be presented using textual abbreviation codes or graphic symbols, and, where commonly used, these are listed alongside the terminology definition. For ease of identification in these note pages, textual codes are presented in these notes in the following style **XW**. Code usage conforms with the following guidelines:

- Textual codes are case insensitive, although herein they are generally presented in upper case; and
- Textual codes are contextual (i.e. the same or similar combinations of characters may be used in different contexts with different meanings (for example `PL` is used for plastic limit in the context of soil moisture condition, as well as in `PL(A)` for point load test result in the testing results column)).

### Data Integrity Codes

Subsurface investigation data recorded by Douglas Partners is generally managed in a highly structured database environment, where records "span" between a top and bottom depth interval. Depth interval "gaps" between records are considered to introduce ambiguity, and, where appropriate, our practice guidelines may require contiguous data sets. Recording meaningful data is not always appropriate (for example assigning a "strength" to a concrete pavement) and the following codes may be used to maintain contiguity in such circumstances.

| Term           | Description                                                                                                                                                       | Abbreviation Code |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| Core loss      | No core recovery                                                                                                                                                  | KL                |
| Unknown        | Information was not available to allow classification of the property. For example, when auguring in loose, saturated sand auger cuttings may not be returned.    | UK                |
| No data        | Information required to allow classification of the property was not available. For example if drilling is commenced from the base of a hole predrilled by others | ND                |
| Not Applicable | Derivation of the properties not appropriate or beyond the scope of the investigation. For example providing a description of the strength of a concrete pavement | NA                |

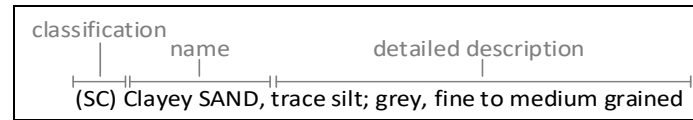
### Graphic Symbols

Douglas Partners' logs contain a "graphic" column which provides a pictorial representation of the basic composition of the material. The symbols used are directly representing the material name stated in the adjacent "Description of Strata" column, and as such no specific graphic symbology legend has been provided in these notes.

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## Introduction

All materials which are not considered to be “in-situ rock” are described in general accordance with the soil description model of AS 1726-2017 Part 6.1.3, and can be broken down into the following description structure:



The “classification” comprises a two character “group symbol” providing a general summary of dominant soil characteristics. The “name” summarises the particle sizes within the soil which most influence its behaviour. The detailed description presents more information about composition, condition, structure, and origin of the soil.

Classification, naming and description of soils require the relative proportion of particles of different sizes within the whole soil mixture to be considered.

### Particle size designation and Behaviour Model

Solid particles within a soil are differentiated on the basis of size.

The engineering behaviour properties of a soil can subsequently be modelled to be either “fine grained” (also known as “cohesive” behaviour) or “coarse grained” (“non cohesive” behaviour), depending on the relative proportion of fine or coarse fractions in the soil mixture.

| Particle Size Designation | Particle Size (mm) | Behaviour Model                                      |                      |
|---------------------------|--------------------|------------------------------------------------------|----------------------|
|                           |                    | Behaviour                                            | Approximate Dry Mass |
| Boulder                   | >200               | Excluded from particle behaviour model as “oversize” |                      |
| Cobble                    | 63 - 200           |                                                      |                      |
| Gravel <sup>1</sup>       | 2.36 - 63          | Coarse                                               | >65%                 |
| Sand <sup>1</sup>         | 0.075 - 2.36       |                                                      |                      |
| Silt                      | 0.002 - 0.075      | Fine                                                 | >35%                 |
| Clay                      | <0.002             |                                                      |                      |

<sup>1</sup> – refer grain size subdivision descriptions below

The behaviour model boundaries defined above are not precise, and the material behaviour should be assumed from the name given to the material (which considers the particle fraction which dominates the behaviour, refer “component proportions” below), rather than strict observance of the proportions of particle sizes. For example, if a material is named a “Sandy CLAY”, this is indicative that the material exhibits fine grained behaviour, even if the dry mass of coarse grained material may exceed 65%.

### Component proportions

The relative proportion of the dry mass of each particle size fraction is assessed to be a “primary”, “secondary”, or “minor” component of the soil mixture, depending on its influence over the soil behaviour.

| Component Proportion Designation | Definition <sup>1</sup>                                                                                      | Relative Proportion                                 |                                                                                           |
|----------------------------------|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|-------------------------------------------------------------------------------------------|
|                                  |                                                                                                              | In Fine Grained Soil                                | In Coarse Grained Soil                                                                    |
| Primary                          | The component (particle size designation, refer above) which dominates the engineering behaviour of the soil | The clay/silt component with the greater proportion | The sand/gravel component with the greater proportion                                     |
| Secondary                        | Any component which is not the primary, but is significant to the engineering properties of the soil         | Any component with greater than 30% proportion      | Any granular component with greater than 30%; or Any fine component with greater than 12% |
| Minor <sup>2</sup>               | Present in the soil, but not significant to its engineering properties                                       | All other components                                | All other components                                                                      |

<sup>1</sup> As defined in AS1726-2017 6.1.4.4

<sup>2</sup> In the detailed material description, minor components are split into two further sub-categories. Refer “identification of minor components” below.

### Composite Materials

In certain situations, a lithology description may describe more than one material, for example, collectively describing a layer of interbedded sand and clay. In such a scenario, the two materials would be described independently, with the names preceded or followed by a statement describing the arrangement by which the materials co-exist. For example, “INTERBEDDED Silty CLAY AND SAND”.

## Classification

The soil classification comprises a two character group symbol. The first character identifies the primary component. The second character identifies either the grading or presence of fines in a coarse grained soil, or the plasticity in a fine grained soil. Refer AS1726-2017 6.1.6 for further clarification.

## Soil Name

For most soils, the name is derived with the primary component included as the noun (in upper case), preceded by any secondary components stated in an adjective form. In this way, the soil name also describes the general composition and indicates the dominant behaviour of the material.

| Component <sup>1</sup> | Prominence in Soil Name         |
|------------------------|---------------------------------|
| Primary                | Noun (eg "CLAY")                |
| Secondary              | Adjective modifier (eg "Sandy") |
| Minor                  | No influence                    |

<sup>1</sup> – for determination of component proportions, refer component proportions on previous page

For materials which cannot be disaggregated, or which are not comprised of rock or mineral fragments, the names "ORGANIC MATTER" or "ARTIFICIAL MATERIAL" may be used, in accordance with AS1726-2017 Table 14.

Commercial or colloquial names are not used for the soil name where a component derived name is possible (for example "Gravelly SAND" rather than "CRACKER DUST").

Materials of "fill" or "topsoil" origin are generally assigned a name derived from the primary/secondary component (where appropriate). In log descriptions this is preceded by uppercase "FILL" or "TOPSOIL". Origin uncertainty is indicated in the description by the characters (?), with the degree of uncertainty described (using the terms "probably" or "possibly" in the origin column, or at the end of the description).

## Identification of minor components

Minor components are identified in the soil description immediately following the soil name. The minor component fraction is usually preceded with a term indicating the relative proportion of the component.

| Minor Component Proportion Term | Relative Proportion   |                                         |
|---------------------------------|-----------------------|-----------------------------------------|
|                                 | In Fine Grained Soil  | In Coarse Grained Soil                  |
| With                            | All fractions: 15-30% | Clay/silt: 5-12%<br>sand/gravel: 15-30% |
| Trace                           | All fractions: 0-15%  | Clay/silt: 0-5%<br>sand/gravel: 0-15%   |

The terms "with" and "trace" generally apply only to gravel or fine particle fractions. Where cobbles/boulders are encountered in minor proportions (generally less than about 12%) the term "occasional" may be used. This term describes the sporadic distribution of the material within the confines of the investigation excavation only, and there may be considerable variation in proportion over a wider area which is difficult to factually characterise due to the relative size of the particles and the investigation methods.

## Soil Composition

### Plasticity

| Descriptive Term      | Laboratory liquid limit range |                |
|-----------------------|-------------------------------|----------------|
|                       | Silt                          | Clay           |
| Non-plastic materials | Not applicable                | Not applicable |
| Low plasticity        | ≤50                           | ≤35            |
| Medium plasticity     | Not applicable                | >35 and ≤50    |
| High plasticity       | >50                           | >50            |

Note, Plasticity descriptions generally describe the plasticity behaviour of the whole of the fine grained soil, not individual fine grained fractions.

### Grain Size

| Type   | Particle size (mm) |              |
|--------|--------------------|--------------|
|        | Coarse             | Fine         |
| Gravel | 19 - 63            | 6.7 - 19     |
|        | Medium             | 2.36 - 6.7   |
|        | Fine               | 0.6 - 2.36   |
| Sand   | 0.21 - 0.6         | 0.075 - 0.21 |

### Grading

| Grading Term | Particle size (mm)                                                     |
|--------------|------------------------------------------------------------------------|
| Well         | A good representation of all particle sizes                            |
| Poorly       | An excess or deficiency of particular sizes within the specified range |
| Uniformly    | Essentially of one size                                                |
| Gap          | A deficiency of a particular size or size range within the total range |

Note, AS1726-2017 provides terminology for additional attributes not listed here.

## Soil Condition

### Moisture

The moisture condition of soils is assessed relative to the plastic limit for fine grained soils, while for coarse grained soils it is assessed based on the appearance and feel of the material. The moisture condition of a material is considered to be independent of stratigraphy (although commonly these are related), and this data is presented in its own column on logs.

| Applicability | Term                 | Tactile Assessment                                                                           | Abbreviation code |
|---------------|----------------------|----------------------------------------------------------------------------------------------|-------------------|
| Fine          | Dry of plastic limit | Hard and friable or powdery                                                                  | w<PL              |
|               | Near plastic limit   | Can be moulded                                                                               | w=PL              |
|               | Wet of plastic limit | Water residue remains on hands when handling                                                 | w>PL              |
|               | Near liquid limit    | "oozes" when agitated                                                                        | w=LL              |
|               | Wet of liquid limit  | "oozes"                                                                                      | w>LL              |
| Coarse        | Dry                  | Non-cohesive and free running                                                                | D                 |
|               | Moist                | Feels cool, darkened in colour, particles may stick together                                 | M                 |
|               | Wet                  | Feels cool, darkened in colour, particles may stick together, free water forms when handling | W                 |

The abbreviation code **NDF**, meaning "not-assessable due to drilling fluid use" may also be used.

Note, observations relating to free ground water or drilling fluids are provided independent of soil moisture condition.

### Consistency/Density/Compaction/Cementation/Extremely Weathered Material

These concepts give an indication of how the material may respond to applied forces (when considered in conjunction with other attributes of the soil). This behaviour can vary independent of the composition of the material, and on logs these are described in an independent column and are generally mutually exclusive (i.e it is inappropriate to describe both consistency and compaction at the same time). The method by which the behaviour is described depends on the behaviour model and other characteristics of the soil as follows:

- In fine grained soils, the "consistency" describes the ease with which the soil can be remoulded, and is generally correlated against the materials undrained shear strength;
- In granular materials, the relative density describes how tightly packed the particles are, and is generally correlated against the density index;
- In anthropogenically modified materials, the compaction of the material is described qualitatively;
- In cemented soils (both natural and anthropogenic), the cemented "strength" is described qualitatively, relative to the difficulty with which the material is disaggregated; and
- In soils of extremely weathered material origin, the engineering behaviour may be governed by relic rock features, and expected behaviour needs to be assessed based the overall material description.

Quantitative engineering performance of these materials may be determined by laboratory testing or estimated by correlated field tests (for example penetration or shear vane testing). In some cases, performance may be assessed by tactile or other subjective methods, in which case investigation logs will show the estimated value enclosed in round brackets, for example (VS).

Consistency (fine grained soils)

| Consistency Term | Tactile Assessment                                  | Undrained Shear Strength (kPa) | Abbreviation Code |
|------------------|-----------------------------------------------------|--------------------------------|-------------------|
| Very soft        | Extrudes between fingers when squeezed              | <12                            | VS                |
| Soft             | Mouldable with light finger pressure                | >12 - ≤25                      | S                 |
| Firm             | Mouldable with strong finger pressure               | >25 - ≤50                      | F                 |
| Stiff            | Cannot be moulded by fingers                        | >50 - ≤100                     | St                |
| Very stiff       | Indented by thumbnail                               | >100 - ≤200                    | VSt               |
| Hard             | Indented by thumbnail with difficulty               | >200                           | H                 |
| Friable          | Easily crumbled or broken into small pieces by hand | -                              | Fr                |

Relative Density (coarse grained soils)

| Relative Density Term | Density Index | Abbreviation Code |
|-----------------------|---------------|-------------------|
| Very loose            | <15           | VL                |
| Loose                 | >15 - ≤35     | L                 |
| Medium dense          | >35 - ≤65     | MD                |
| Dense                 | >65 - ≤85     | D                 |
| Very dense            | >85           | VD                |

Note, tactile assessment of relative density is difficult, and generally requires penetration testing, hence a tactile assessment guide is not provided.

## Compaction (anthropogenically modified soil)

| Compaction Term      | Abbreviation Code |
|----------------------|-------------------|
| Well compacted       | WC                |
| Poorly compacted     | PC                |
| Moderately compacted | MC                |
| Variably compacted   | VC                |

## Cementation (natural and anthropogenic)

| Cementation Term    | Abbreviation Code |
|---------------------|-------------------|
| Moderately cemented | MOD               |
| Weakly cemented     | WEK               |

## Extremely Weathered Material

AS1726-2017 considers weathered material to be soil if the unconfined compressive strength is less than 0.6 MPa (i.e. less than very low strength rock). These materials may be identified as “extremely weathered material” in reports and by the abbreviation code **XWM** on log sheets. This identification is not correlated to any specific qualitative or quantitative behaviour, and the engineering properties of this material must therefore be assessed according to engineering principles with reference to any relic rock structure, fabric, or texture described in the description.

## Soil Origin

| Term                         | Description                                                                                                                                                         | Abbreviation Code |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| Residual                     | Derived from in-situ weathering of the underlying rock                                                                                                              | RS                |
| Extremely weathered material | Formed from in-situ weathering of geological formations. Has strength of less than ‘very low’ as per as1726 but retains the structure or fabric of the parent rock. | XWM               |
| Alluvial                     | Deposited by streams and rivers                                                                                                                                     | ALV               |
| Fluvial                      | Deposited by channel fill and overbank (natural levee, crevasse splay or flood basin)                                                                               | FLV               |
| Estuarine                    | Deposited in coastal estuaries                                                                                                                                      | EST               |
| Marine                       | Deposited in a marine environment                                                                                                                                   | MAR               |
| Lacustrine                   | Deposited in freshwater lakes                                                                                                                                       | LAC               |
| Aeolian                      | Carried and deposited by wind                                                                                                                                       | AEO               |
| Colluvial                    | Soil and rock debris transported down slopes by gravity                                                                                                             | COL               |
| Slopewash                    | Thin layers of soil and rock debris gradually and slowly deposited by gravity and possibly water                                                                    | SW                |
| Topsoil                      | Mantle of surface soil, often with high levels of organic material                                                                                                  | TOP               |
| Fill                         | Any material which has been moved by man                                                                                                                            | FILL              |
| Littoral                     | Deposited on the lake or seashore                                                                                                                                   | LIT               |
| Unidentifiable               | Not able to be identified                                                                                                                                           | UID               |

## Cobbles and Boulders

The presence of particles considered to be “oversize” may be described using one of the following strategies:

- Oversize encountered in a minor proportion (when considered relative to the wider area) are noted in the soil description; or
- Where a significant proportion of oversize is encountered, the cobbles/boulders are described independent of the soil description, in a similar manner to composite soils (described above) but qualified with “MIXTURE OF”.

intentionally blank





## Sampling and Testing

A record of samples retained, and field testing performed is usually shown on a Douglas Partners' log with samples appearing to the left of a depth scale, and selected field and laboratory testing (including results, where relevant) appearing to the right of the scale, as illustrated below:

| SAMPLE         |      |          | DEPTH (m)   | TESTING   |                     |
|----------------|------|----------|-------------|-----------|---------------------|
| SAMPLE REMARKS | TYPE | INTERVAL |             | TEST TYPE | RESULTS AND REMARKS |
|                | SPT  |          | 1.0<br>1.45 | SPT       | 4,9,11<br>N=20      |

### Sampling

The type or intended purpose for which a sample was taken is indicated by the following abbreviation codes.

| Sample Type                                             | Code           |
|---------------------------------------------------------|----------------|
| Auger sample                                            | A              |
| Acid Sulfate sample                                     | ASS            |
| Bulk sample                                             | B              |
| Core sample                                             | C              |
| Disturbed sample                                        | D              |
| Environmental sample                                    | ES             |
| Driven Tube sample                                      | DT             |
| Gas sample                                              | G              |
| Piston sample                                           | P              |
| Sample from SPT test                                    | SPT            |
| Undisturbed tube sample                                 | U <sup>1</sup> |
| Water sample                                            | W              |
| Material Sample                                         | MT             |
| Core sample for unconfined compressive strength testing | UCS            |

<sup>1</sup> – numeric suffixes indicate tube diameter/width in mm

The above codes only indicate that a sample was retained, and not that testing was scheduled or performed.

## Field and Laboratory Testing

A record that field and laboratory testing was performed is indicated by the following abbreviation codes.

| Test Type                                                                                                                           | Code     |
|-------------------------------------------------------------------------------------------------------------------------------------|----------|
| Pocket penetrometer (kPa)                                                                                                           | PP       |
| Photo ionisation detector (ppm)                                                                                                     | PID      |
| Standard Penetration Test<br>x/y = x blows for y mm penetration<br>HB = hammer bouncing<br>HW = fell under weight of hammer         | SPT      |
| Shear vane (kPa)                                                                                                                    | V        |
| Unconfined compressive strength, (MPa)                                                                                              | UCS      |
| Point load test, (MPa), axial (A), diametric (D), irregular (I)                                                                     | PLT(-)   |
| Dynamic cone penetrometer, followed by blow count penetration increment in mm (cone tip, generally in accordance with AS1289.6.3.2) | DCP9/150 |
| Perth sand penetrometer, followed by blow count penetration increment in mm (flat tip, generally in accordance with AS1289.6.3.3)   | PSP/150  |
| Dynamic probe super heavy, followed by blow count penetration increment in mm                                                       | DPSH/100 |

## Groundwater Observations

|       |                                          |
|-------|------------------------------------------|
|       | water seepage/inflow                     |
|       | water seepage/outflow                    |
|       | standing or observed water level         |
| NFGWO | no free groundwater observed             |
| OBS   | observations obscured by drilling fluids |

## Drilling or Excavation Methods/Tools

The drilling/excavation methods used to perform the investigation may be shown either in a dedicated column down the left-hand edge of the log, or stated in the log footer. In some circumstances abbreviation codes may be used.

| Method                                                                           | Abbreviation<br>Code |
|----------------------------------------------------------------------------------|----------------------|
| Direct Push                                                                      | DP                   |
| Solid flight auger. Suffixes:<br>/T = tungsten carbide tip,<br>/V = v-shaped tip | AD <sup>1</sup>      |
| Air Track                                                                        | AT                   |
| Diatube                                                                          | DT <sup>1</sup>      |
| Hand auger                                                                       | HA <sup>1</sup>      |
| Hand tools (unspecified)                                                         | HAND                 |
| Existing exposure                                                                | X                    |
| Hollow flight auger                                                              | HSA <sup>1</sup>     |
| HQ coring                                                                        | HQ3                  |
| HMLC series coring                                                               | HMLC                 |
| NMLC series coring                                                               | NMLC                 |
| NQ coring                                                                        | NQ3                  |
| PQ coring                                                                        | PQ3                  |
| Predrilled                                                                       | PD                   |
| Push tube                                                                        | PT <sup>1</sup>      |
| Ripping tyne/ripper                                                              | R                    |
| Rock roller                                                                      | RR <sup>1</sup>      |
| Rock breaker/hydraulic<br>hammer                                                 | EH                   |
| Sonic drilling                                                                   | SON <sup>1</sup>     |
| Mud/blade bucket                                                                 | MB <sup>1</sup>      |
| Toothed bucket                                                                   | TB <sup>1</sup>      |
| Vibrocore                                                                        | VC <sup>1</sup>      |
| Vacuum excavation                                                                | VE                   |
| Wash bore<br>(unspecified bit type)                                              | WB <sup>1</sup>      |

<sup>1</sup> – numeric suffixes indicate tool diameter/width in mm

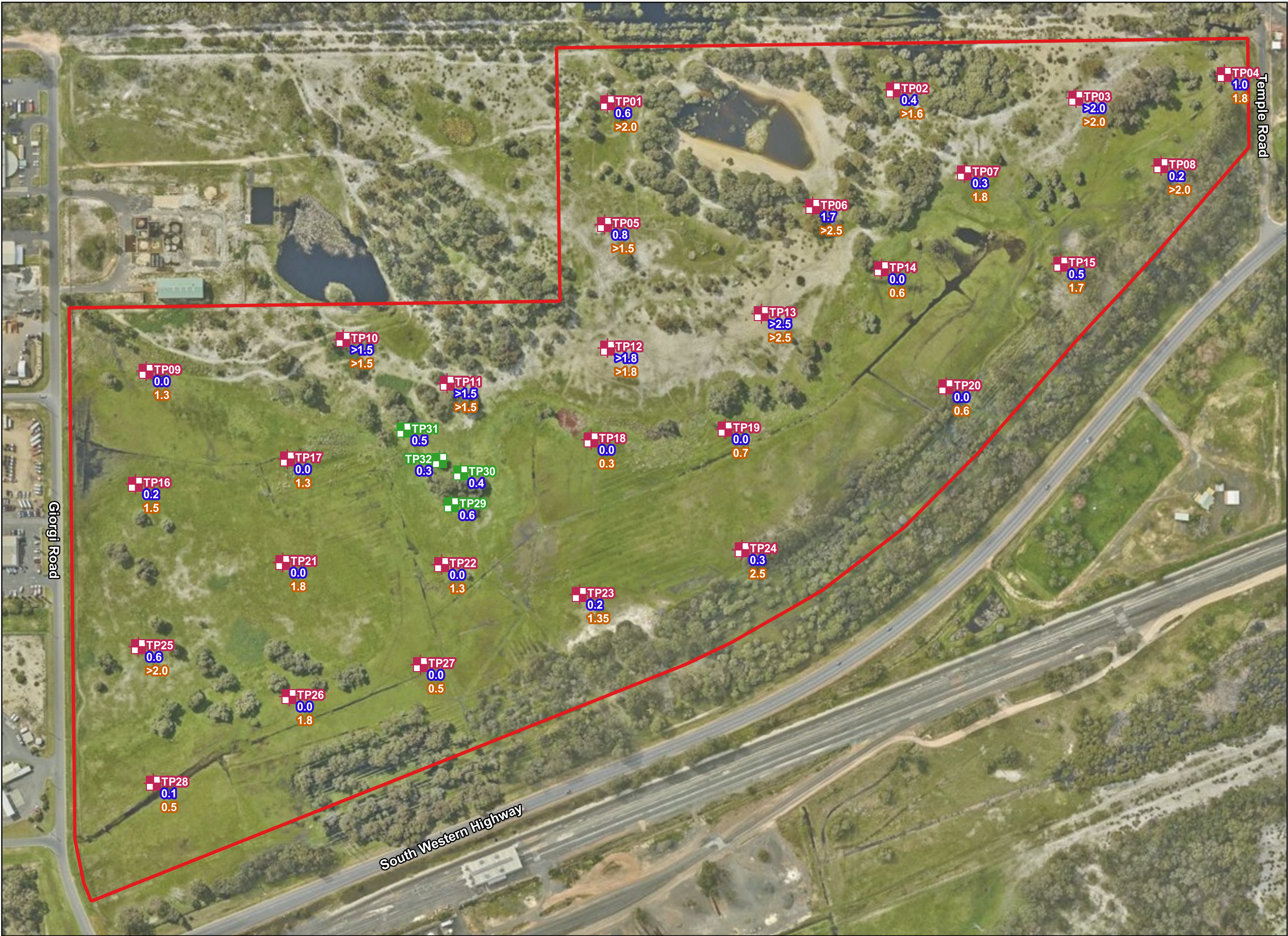
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## **Appendix B**

Drawings 1 through 4

Test Pit Logs



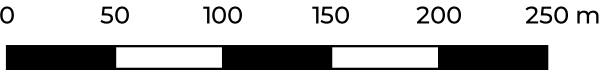


SITE LOCATION

**LEGEND**

- Site Boundary
- Test Pit (Geo)
- Test Pit (Enviro)
- Depth to groundwater (August 2025)
- Depth to cohesive soil

NOTE:  
1. Drawing projection in GDA2020 / MGA zone 50, adapted from aerial imagery from Metromap  
2. Test locations are approximate only and were located using differential GPS.



|  |                        |                        |                                                                                                                     |  |                    |
|--|------------------------|------------------------|---------------------------------------------------------------------------------------------------------------------|--|--------------------|
|  | CLIENT: Development WA |                        | TITLE: <b>Test Location Plan</b><br><b>Proposed Industrial Park</b><br><b>Lot 1010 Giorgi Road, Picton East, WA</b> |  | PROJECT: 236293.01 |
|  | OFFICE: Perth          | DRAWN BY: GG           |                                                                                                                     |  | DRAWING No: 1      |
|  | SCALE: 1:3500 @A3      | DATE: 04.November.2025 |                                                                                                                     |  | REVISION: 0        |





SITE LOCATION

LEGEND

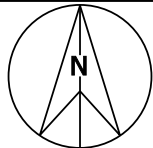
- Site Boundary
- Test Pit (Geo)
- Test Pit (Enviro)
- Water Bodies
- Inferred Soil Categories
  - 1
  - 3
  - 4
- Soil Categorisation of Test Pit
  - 1
  - 3
  - 4
- Depth to groundwater (August 2025)

NOTE:  
1. Drawing projection in GDA2020 / MGA zone 50, adapted from aerial imagery from Metromap  
2. Test locations are approximate only and were located using differential GPS.



CLIENT: Development WA  
OFFICE: Perth  
SCALE: 1:3500 @A3  
DRAWN BY: VH  
DATE: 19.November.2025

TITLE: **Test Location Plan**  
**Proposed Industrial Park**  
**Lot 1010 Giorgi Road, Picton East, WA**



PROJECT: 236293.01  
DRAWING No: 2  
REVISION: 0



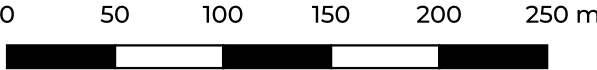


SITE LOCATION

LEGEND

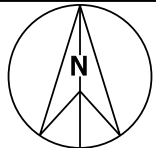
- Site Boundary
- Test Pit (Geo)
- Test Pit (Enviro)
- Water Bodies
- natural drainage
- drains (man-made)
- Surface level contours (0.5m) (ELVIS 5m DEM)
- Open Drains
- Surface level (dGPS August 2025)

NOTE:  
1. Drawing projection in GDA2020 / MGA zone 50, adapted from aerial imagery from Metromap  
2. Test locations are approximate only and were located using differential GPS.



|                        |                        |
|------------------------|------------------------|
| CLIENT: Development WA |                        |
| OFFICE: Perth          | DRAWN BY: VH           |
| SCALE: 1:3500 @A3      | DATE: 05.December.2025 |

TITLE: **Test Location Plan - Interpolated Surface Levels**  
**Proposed Industrial Park**  
**Lot 2010 Giorgi Road, Picton East, WA**



|                    |
|--------------------|
| PROJECT: 236293.01 |
| DRAWING No: 3      |
| REVISION: 0        |





SITE LOCATION

LEGEND

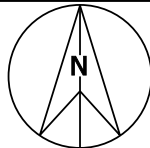
- Site Boundary
- Test Pit (Geo)
- Test Pit (Enviro)
- Water Bodies
- Open Drains
- natural drainage
- drains (man-made)
- Interpolated groundwater contour (August 2025)
- Approximate direction of groundwater flow (August 2025)
- Groundwater level (m AHD) (dGPS August 2025)

NOTE:  
1. Drawing projection in GDA2020 / MGA zone 50, adapted from aerial imagery from Metromap  
2. Test locations are approximate only and were located using differential GPS.



CLIENT: Development WA  
OFFICE: Perth  
SCALE: 1:5750 @A3  
DRAWN BY: VH  
DATE: 05.December.2025

TITLE: **Test Location Plan - Interpolated Groundwater Levels**  
**Proposed Industrial Park**  
**Lot 1010 Giorgi Road, Picton East, WA**



PROJECT: 236293.01  
DRAWING No: 4  
REVISION: 0

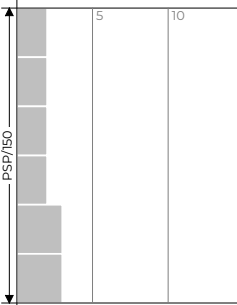


# TEST PIT LOG

**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 11.8 AHD  
**COORDINATE:** E:380365.6, N:6310364.6  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP01  
**PROJECT No:** 236293.01  
**DATE:** 26/08/25  
**SHEET:** 1 of 1

| CONDITIONS ENCOUNTERED                          |        |           |                                                                                                                                                                 |                                                                                                                         |                                                                                    |                             |             |         |      | SAMPLE   |           |                                                                                     | TESTING AND REMARKS |  |  |
|-------------------------------------------------|--------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------------------|-------------|---------|------|----------|-----------|-------------------------------------------------------------------------------------|---------------------|--|--|
| GROUNDWATER                                     | RL (m) | DEPTH (m) | DESCRIPTION OF STRATA                                                                                                                                           | GRAPHIC                                                                                                                 | ORIGIN (#)                                                                         | CONSIS. (°)<br>DENSITY: (°) | MOISTURE    | REMARKS | TYPE | INTERVAL | DEPTH (m) | TEST TYPE                                                                           | RESULTS AND REMARKS |  |  |
| Groundwater observed at 0.6 m depth<br>26/08/25 |        | 0.10      | TOPSOIL / Organic SAND (SP-SM) with silt: dark grey-brown; fine to medium; trace rootlets.<br>SAND (SP) trace silt: pale grey; fine to medium. Bassendean Sand. |                                        | TOP                                                                                |                             | M           |         | D    |          | 0.10      |  |                     |  |  |
|                                                 |        | 1         |                                                                                                                                                                 | AEO                                                                                                                     |                                                                                    | W                           |             |         |      | 1        |           |                                                                                     |                     |  |  |
|                                                 |        | 1.70      |                                                                                                                                                                 | Silty SAND (SM): dark brown and brown; fine to medium; moderately to strongly cemented, 'Coffee Rock'. Bassendean Sand. |  | AEO                         | (D) to (VD) | M       |      |          |           |                                                                                     |                     |  |  |
|                                                 |        | 2         | Test Pit discontinued at 2.00m depth. (Collapsing conditions).                                                                                                  |                                                                                                                         |                                                                                    |                             |             |         | D    |          | 2.00      |                                                                                     |                     |  |  |



NOTES: <sup>(1)</sup> Soil origin is "probable" unless otherwise stated. <sup>(2)</sup> Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location and surface elevation at each test location was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage

Refer to explanatory notes for symbol and abbreviation definitions

# TEST PIT LOG

**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 11.7 AHD  
**COORDINATE:** E:380622.4, N:6310376.4  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP02  
**PROJECT No:** 236293.01  
**DATE:** 26/08/25  
**SHEET:** 1 of 1

| CONDITIONS ENCOUNTERED                                                                      |        |           |                                                                                   |                                             |            |                        |                         |          |         |      |          |           |           | SAMPLE                                                                                                             |  |  |  | TESTING AND REMARKS |  |  |  |
|---------------------------------------------------------------------------------------------|--------|-----------|-----------------------------------------------------------------------------------|---------------------------------------------|------------|------------------------|-------------------------|----------|---------|------|----------|-----------|-----------|--------------------------------------------------------------------------------------------------------------------|--|--|--|---------------------|--|--|--|
| GROUNDWATER                                                                                 | RL (m) | DEPTH (m) | DESCRIPTION OF STRATA                                                             | GRAPHIC                                     | ORIGIN (#) | CONSIS. <sup>(*)</sup> | DENSITY. <sup>(*)</sup> | MOISTURE | REMARKS | TYPE | INTERVAL | DEPTH (m) | TEST TYPE | RESULTS AND REMARKS                                                                                                |  |  |  |                     |  |  |  |
| <div>Groundwater observed at 0.4 m depth</div> <div>26/08/25</div> <div>h<sub>1</sub></div> |        | 0.15      | TOPSOIL / SAND (SP-SM) with silt trace rootlets: dark grey-brown; fine to medium. | <div><div>TS TS</div><div>TS TS</div></div> | TOP        |                        |                         | M to W   |         |      |          |           |           | <div><div>↑</div><div>↓</div><div>PSP/150</div></div> <div><div></div><div>5</div><div>10</div><div>15</div></div> |  |  |  |                     |  |  |  |
|                                                                                             |        |           | SAND (SP) trace silt: pale grey; fine to medium. Bassendean Sand.                 |                                             |            |                        |                         |          |         | ASS  |          | 0.50      |           |                                                                                                                    |  |  |  |                     |  |  |  |
|                                                                                             |        | 1         |                                                                                   |                                             |            | AEO                    |                         |          | W       |      | ASS      |           | 1.00      |                                                                                                                    |  |  |  |                     |  |  |  |
|                                                                                             |        | 1.40      |                                                                                   |                                             |            |                        | (MD)                    |          |         | & EC | ASS/D    |           | 1.50      |                                                                                                                    |  |  |  |                     |  |  |  |
|                                                                                             | 1.6    |           | Silty SAND (SM): dark grey; fine to medium. Bassendean Sand.                      | <div><div>x x</div><div>x x</div></div>     | AEO        |                        |                         |          |         |      |          |           |           |                                                                                                                    |  |  |  |                     |  |  |  |
|                                                                                             | 1.6    |           | Test Pit discontinued at 1.60m depth. (Collapsing conditions).                    |                                             |            |                        |                         |          |         |      |          |           |           |                                                                                                                    |  |  |  |                     |  |  |  |
|                                                                                             | 2      |           |                                                                                   |                                             |            |                        |                         |          |         |      |          |           |           |                                                                                                                    |  |  |  |                     |  |  |  |
|                                                                                             | 3      |           |                                                                                   |                                             |            |                        |                         |          |         |      |          |           |           |                                                                                                                    |  |  |  |                     |  |  |  |



NOTES: #Soil origin is "probable" unless otherwise stated. °Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location of each test was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage. The surface level at this location was interpolated from the 5 m DEM.

Refer to explanatory notes for symbol and abbreviation definitions

# TEST PIT LOG

**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 12.8 AHD  
**COORDINATE:** E:380786.2, N:6310369.1  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP03  
**PROJECT No:** 236293.01  
**DATE:** 26/08/25  
**SHEET:** 1 of 1

| CONDITIONS ENCOUNTERED                |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           | SAMPLE              |  |  |  | TESTING AND REMARKS |  |  |  |
|---------------------------------------|--------|-----------|----------------------------------------------------------------------|---------|------------|-------------|--------------|----------|---------|------|----------|-----------|-----------|---------------------|--|--|--|---------------------|--|--|--|
| GROUNDWATER                           | RL (m) | DEPTH (m) | DESCRIPTION OF STRATA                                                | GRAPHIC | ORIGIN (#) | CONSIS. (%) | DENSITY. (%) | MOISTURE | REMARKS | TYPE | INTERVAL | DEPTH (m) | TEST TYPE | RESULTS AND REMARKS |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
| 26/08/25 No free groundwater observed |        | 0.10      | TOPSOIL / SAND (SP) trace rootlets trace silt: grey; fine to medium. |         | TOP        |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           | SAND (SP) trace silt: pale grey; fine to medium. Bassendean Sand.    |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        | 0.50      |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        | 1         |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        | 2         |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                      |         |            |             |              |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |



NOTES: #Soil origin is "probable" unless otherwise stated. %Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location and surface elevation at each test location was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage

Refer to explanatory notes for symbol and abbreviation definitions



# TEST PIT LOG

**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 12.0 AHD  
**COORDINATE:** E:380919.5, N:6310390.2  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP04  
**PROJECT No:** 236293.01  
**DATE:** 27/08/25  
**SHEET:** 1 of 1

| CONDITIONS ENCOUNTERED |           |                                                                                                                          |         |            |             | SAMPLE      |          |         | TESTING AND REMARKS |          |
|------------------------|-----------|--------------------------------------------------------------------------------------------------------------------------|---------|------------|-------------|-------------|----------|---------|---------------------|----------|
| GROUNDWATER            | DEPTH (m) | DESCRIPTION OF STRATA                                                                                                    | GRAPHIC | ORIGIN (#) | CONSIS. (°) | DENSITY (°) | MOISTURE | REMARKS | TYPE                | INTERVAL |
|                        | 0.15      | TOPSOIL / SAND (SP-SM) with silt trace rootlets: dark grey-brown; fine to medium.                                        | TS      | TOP        |             |             |          |         |                     |          |
|                        |           | SAND (SP) trace silt: grey; fine to medium; trace rootlets. Bassendean Sand.                                             |         |            |             |             |          |         |                     |          |
|                        |           | From 0.50m: - becoming pale grey                                                                                         |         | AEO        | MD          |             | M        |         | ASS                 | 0.50     |
|                        | 1.00      | SAND (SP) trace silt: dark brown; fine to medium; trace pockets of cemented Silty SAND ('Coffee Rock'). Bassendean Sand. |         |            |             |             |          |         | ASS                 | 1.00     |
|                        |           | From 1.30m: - becoming blue-grey and brown                                                                               |         | AEO        | (MD)        |             | W        |         | ASS/D               | 1.50     |
|                        | 1.80      | Clayey SAND (SC): blue-grey mottled brown; fine to medium; low to medium plasticity clay. Guildford Formation.           |         |            |             |             |          |         |                     |          |
|                        | 2.00      |                                                                                                                          | ALV     | F to St    |             |             | w>PL     |         | ASS                 | 2.00     |
|                        | 2.20      | CLAY (CI) with sand: dark grey; medium plasticity. Guildford Formation.                                                  |         | ALV        | St          |             | w=PL     |         |                     |          |
|                        |           | Test Pit discontinued at 2.50m depth. (Target depth).                                                                    |         |            |             |             |          |         | D                   | 2.50     |



NOTES: #Soil origin is "probable" unless otherwise stated. °Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location and surface elevation at each test location was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage

Refer to explanatory notes for symbol and abbreviation definitions



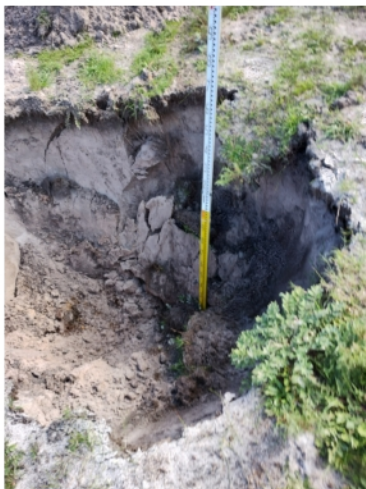
# TEST PIT LOG

**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 11.9 AHD  
**COORDINATE:** E:380363.0, N:6310255.4  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP05  
**PROJECT No:** 236293.01  
**DATE:** 26/08/25  
**SHEET:** 1 of 1

| CONDITIONS ENCOUNTERED                                                                        |        |           |                                                                                                                         |                                                    |            |                        |                         |          |         |      |          |           |           | SAMPLE              |  |  | TESTING AND REMARKS |  |  |
|-----------------------------------------------------------------------------------------------|--------|-----------|-------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|------------|------------------------|-------------------------|----------|---------|------|----------|-----------|-----------|---------------------|--|--|---------------------|--|--|
| GROUNDWATER                                                                                   | RL (m) | DEPTH (m) | DESCRIPTION OF STRATA                                                                                                   | GRAPHIC                                            | ORIGIN (#) | CONSIS. <sup>(*)</sup> | DENSITY. <sup>(*)</sup> | MOISTURE | REMARKS | TYPE | INTERVAL | DEPTH (m) | TEST TYPE | RESULTS AND REMARKS |  |  |                     |  |  |
| <div>Groundwater observed at 0.8 m depth</div> <div>26/08/25</div> <div>10</div> <div>9</div> |        | 0.10      | TOPSOIL / SAND (SP) trace rootlets trace silt: grey-brown; fine to medium.                                              | <div><div>TS</div><div>TS</div><div>TS</div></div> | TOP        |                        |                         |          |         |      |          |           |           |                     |  |  |                     |  |  |
|                                                                                               |        |           | SAND (SP) trace silt: pale grey; fine to medium. Bassendean Sand.                                                       |                                                    |            |                        |                         | M        |         | ASS  |          | 0.50      |           |                     |  |  |                     |  |  |
|                                                                                               |        | 1         |                                                                                                                         |                                                    | AEO        |                        | MD                      |          |         |      |          |           |           |                     |  |  |                     |  |  |
|                                                                                               |        | 1.30      |                                                                                                                         |                                                    |            |                        | (MD)                    |          | W       | ASS  |          | 1.00      |           |                     |  |  |                     |  |  |
|                                                                                               |        |           | Silty SAND (SM): dark brown and brown; fine to medium; moderately to strongly cemented, 'Coffee Rock'. Bassendean Sand. | <div><div>X</div><div>X</div><div>X</div></div>    | AEO        | (D) to (VD)            |                         | M        |         | ASS  |          | 1.50      |           |                     |  |  |                     |  |  |
|                                                                                               |        |           | Test Pit discontinued at 1.50m depth. (Slow digging / Collapsing conditions).                                           |                                                    |            |                        |                         |          |         |      |          |           |           |                     |  |  |                     |  |  |



NOTES: #Soil origin is "probable" unless otherwise stated. °Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location and surface elevation at each test location was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage

Refer to explanatory notes for symbol and abbreviation definitions

# TEST PIT LOG

**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 12.9 AHD  
**COORDINATE:** E:380549.9, N:6310271.5  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP06  
**PROJECT No:** 236293.01  
**DATE:** 27/08/25  
**SHEET:** 1 of 1

| CONDITIONS ENCOUNTERED                                |           |                                                                                                                                                                       |          |            |             | SAMPLE      |          |         | TESTING AND REMARKS |          |
|-------------------------------------------------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------------|-------------|-------------|----------|---------|---------------------|----------|
| GROUNDWATER                                           | DEPTH (m) | DESCRIPTION OF STRATA                                                                                                                                                 | GRAPHIC  | ORIGIN (#) | CONSIS. (°) | DENSITY (°) | MOISTURE | REMARKS | TYPE                | INTERVAL |
| RL (m)                                                |           |                                                                                                                                                                       |          |            |             |             |          |         |                     |          |
|                                                       | 0.15      | TOPSOIL / SAND (SP-SM) with rootlets with silt: dark grey-brown; fine to medium.                                                                                      | TS TS TS | TOP        |             |             |          |         | D                   | 0.10     |
|                                                       |           | SAND (SP) trace silt: grey and yellow-brown; fine to medium; trace roots to 0.9 m depth, pale grey SAND SP to 2.0 m on the northern wall of the pit. Bassendean Sand. |          | AEO        | MD          |             | M        |         | ASS                 | 0.50     |
|                                                       | 1.10      | SAND (SP-SM) with silt: dark brown; fine to medium. Bassendean Sand.                                                                                                  |          | AEO        | (MD)        |             |          |         | ASS                 | 1.00     |
|                                                       | 1.40      | Silty SAND (SM): dark brown and brown; fine to medium; moderately cemented, 'Coffee Rock'. Bassendean Sand.                                                           |          | AEO        | (MD) to (D) |             | M to W   |         | ASS                 | 1.50     |
|                                                       | 2.00      |                                                                                                                                                                       |          |            |             |             |          |         | ASS                 | 2.00     |
| Test Pit discontinued at 2.50m depth. (Target depth). |           |                                                                                                                                                                       |          |            |             |             |          |         |                     |          |



NOTES: #Soil origin is "probable" unless otherwise stated. °Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location and surface elevation at each test location was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage

Refer to explanatory notes for symbol and abbreviation definitions

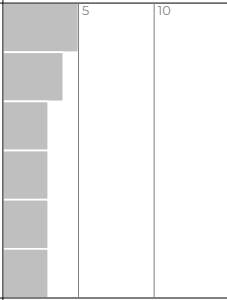


# TEST PIT LOG

**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 11.7 AHD  
**COORDINATE:** E:380686.1, N:6310301.7  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP07  
**PROJECT No:** 236293.01  
**DATE:** 27/08/25  
**SHEET:** 1 of 1

| CONDITIONS ENCOUNTERED                          |        |           |                                                                                                                                                        |                                                                                    |            |                                                                                   |                         |          |         |      |          | SAMPLE    |           |                                                                                     | TESTING AND REMARKS |  |  |
|-------------------------------------------------|--------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------|-----------------------------------------------------------------------------------|-------------------------|----------|---------|------|----------|-----------|-----------|-------------------------------------------------------------------------------------|---------------------|--|--|
| GROUNDWATER                                     | RL (m) | DEPTH (m) | DESCRIPTION OF STRATA                                                                                                                                  | GRAPHIC                                                                            | ORIGIN (#) | CONSIS. <sup>(*)</sup>                                                            | DENSITY. <sup>(*)</sup> | MOISTURE | REMARKS | TYPE | INTERVAL | DEPTH (m) | TEST TYPE | RESULTS AND REMARKS                                                                 |                     |  |  |
|                                                 |        |           |                                                                                                                                                        |                                                                                    |            |                                                                                   |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
| Groundwater observed at 0.3 m depth<br>27/08/25 |        | 0.10      | TOPSOIL / SAND (SP-SM) with silt trace rootlets: dark grey-brown; fine to medium.<br>SAND (SP) trace silt: pale grey; fine to medium. Bassendean Sand. |   | TOP        |  |                         | M to W   |         |      |          |           |           |  |                     |  |  |
|                                                 |        |           |                                                                                                                                                        |                                                                                    |            |                                                                                   |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                                 |        |           |                                                                                                                                                        |                                                                                    |            |                                                                                   |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                                 |        |           |                                                                                                                                                        |                                                                                    |            |                                                                                   |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                                 |        | 1         |                                                                                                                                                        |                                                                                    | AEO        |                                                                                   |                         | W        |         |      |          | 1.00      |           |                                                                                     |                     |  |  |
|                                                 |        | 1.50      | SAND (SP-SM) with silt: grey; fine to medium. Bassendean Sand.                                                                                         |   | AEO        |                                                                                   |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                                 |        | 1.80      | CLAY (Cl) with sand: grey; medium plasticity. Guildford Formation.                                                                                     |  | ALV        | St to VSt                                                                         |                         | w=PL     |         |      |          |           |           |                                                                                     |                     |  |  |
|                                                 |        | 2         | Test Pit discontinued at 2.00m depth. (Collapsing conditions).                                                                                         |                                                                                    |            |                                                                                   |                         |          |         | D    |          | 2.00      | PP        | 150-200kPa                                                                          |                     |  |  |



NOTES: <sup>#</sup>Soil origin is "probable" unless otherwise stated. <sup>†</sup>Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location and surface elevation at each test location was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage

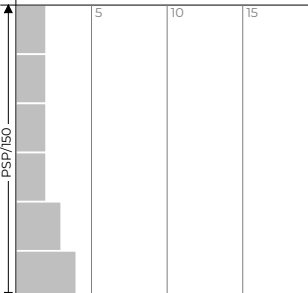
Refer to explanatory notes for symbol and abbreviation definitions

# TEST PIT LOG

**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 11.8 AHD  
**COORDINATE:** E:380862.6, N:6310308.1  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP08  
**PROJECT No:** 236293.01  
**DATE:** 27/08/25  
**SHEET:** 1 of 1

| CONDITIONS ENCOUNTERED                               |                                   |                                                                                                                                     |                                              |            |                                                   |          | SAMPLE  |       |          | TESTING AND REMARKS |           |                                                                                     |
|------------------------------------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|------------|---------------------------------------------------|----------|---------|-------|----------|---------------------|-----------|-------------------------------------------------------------------------------------|
| GROUNDWATER                                          | DEPTH (m)                         | DESCRIPTION OF STRATA                                                                                                               | GRAPHIC                                      | ORIGIN (#) | CONSIS. <sup>(*)</sup><br>DENSITY: <sup>(*)</sup> | MOISTURE | REMARKS | TYPE  | INTERVAL | DEPTH (m)           | TEST TYPE | RESULTS AND REMARKS                                                                 |
| ▼<br>Groundwater observed at 0.2 m depth<br>27/08/25 | RL (m)                            |                                                                                                                                     |                                              |            |                                                   |          |         |       |          |                     |           |                                                                                     |
|                                                      | 0.15                              | TOPSOIL / SAND (SP-SM) with silt trace rootlets: dark grey-brown; fine to medium.                                                   | T <sub>S</sub> T <sub>S</sub> T <sub>S</sub> | TOP        |                                                   | M to W   |         |       |          |                     |           |  |
|                                                      |                                   | SAND (SP) trace silt: pale grey; fine to medium. Bassendean Sand.                                                                   |                                              |            | MD                                                |          | & EC    | ASS/D | 0.50     |                     |           |                                                                                     |
|                                                      |                                   |                                                                                                                                     |                                              | AEO        |                                                   |          |         | ASS   | 1.00     |                     |           |                                                                                     |
|                                                      |                                   | 1.20m-1.30m: - becoming dark brown, trace pockets of cemented Silty SAND ('Coffee Rock')                                            |                                              |            | (MD)                                              |          |         | ASS   | 1.50     |                     |           |                                                                                     |
|                                                      | From 1.40m: - becoming pale brown |                                                                                                                                     |                                              |            |                                                   |          |         |       |          |                     |           |                                                                                     |
|                                                      | 1.70                              | SAND (SP-SM) with silt: yellow-brown; fine to medium; trace pockets of weakly cemented Silty SAND ('Coffee Rock'). Bassendean Sand. |                                              | AEO        |                                                   |          |         |       |          |                     |           |                                                                                     |
|                                                      | 2                                 | Test Pit discontinued at 2.00m depth. (Collapsing conditions).                                                                      |                                              |            |                                                   |          |         | ASS/D |          | 2.00                |           |                                                                                     |



NOTES: <sup>(#)</sup> Soil origin is "probable" unless otherwise stated. <sup>(†)</sup> Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location and surface elevation at each test location was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage

Refer to explanatory notes for symbol and abbreviation definitions

# TEST PIT LOG

**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 10.5 AHD  
**COORDINATE:** E:379951.5, N:6310123.9  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP09  
**PROJECT No:** 236293.01  
**DATE:** 26/08/25  
**SHEET:** 1 of 1

| GROUNDWATER                                     |           | CONDITIONS ENCOUNTERED                                                                    |         |            |             |              | SAMPLE   |         |      | TESTING AND REMARKS |           |           |                     |  |  |  |  |  |  |
|-------------------------------------------------|-----------|-------------------------------------------------------------------------------------------|---------|------------|-------------|--------------|----------|---------|------|---------------------|-----------|-----------|---------------------|--|--|--|--|--|--|
| RL (m)                                          | DEPTH (m) | DESCRIPTION OF STRATA                                                                     | GRAPHIC | ORIGIN (#) | CONSIS. (%) | DENSITY. (g) | MOISTURE | REMARKS | TYPE | INTERVAL            | DEPTH (m) | TEST TYPE | RESULTS AND REMARKS |  |  |  |  |  |  |
| Groundwater observed at the surface<br>25/08/25 | 0.15      | TOPSOIL / SAND (SP-SM) with silt: dark grey; fine to medium.                              |         | TOP        |             |              |          |         |      |                     |           |           |                     |  |  |  |  |  |  |
|                                                 |           |                                                                                           |         |            |             |              |          |         |      |                     |           |           |                     |  |  |  |  |  |  |
|                                                 |           |                                                                                           |         |            |             |              |          |         |      |                     |           |           |                     |  |  |  |  |  |  |
|                                                 |           |                                                                                           |         |            |             |              |          |         |      |                     |           |           |                     |  |  |  |  |  |  |
|                                                 |           |                                                                                           |         |            |             |              |          |         |      |                     |           |           |                     |  |  |  |  |  |  |
|                                                 | 1.00      | SAND (SP) trace silt: grey; fine to medium. Bassendean Sand.                              |         | AEO        |             |              |          |         | ASS  |                     | 1.00      |           |                     |  |  |  |  |  |  |
|                                                 | 1.50      | From 1.30m: - becoming blue-grey, with pockets of dark brown Clayey SAND SC, trace gravel |         |            | (MD)        |              |          |         |      |                     | 1.50      |           |                     |  |  |  |  |  |  |
|                                                 |           | Test Pit discontinued at 1.50m depth. (Collapsing conditions).                            |         |            |             |              |          |         |      |                     |           |           |                     |  |  |  |  |  |  |



NOTES: <sup>#</sup>Soil origin is "probable" unless otherwise stated. <sup>†</sup>Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location and surface elevation at each test location was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage

Refer to explanatory notes for symbol and abbreviation definitions



# TEST PIT LOG

**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 12.4 AHD  
**COORDINATE:** E:380128.4, N:6310152.1  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP10  
**PROJECT No:** 236293.01  
**DATE:** 26/08/25  
**SHEET:** 1 of 1

| CONDITIONS ENCOUNTERED                |        |           |                                                                                   |         |            |                        |                         |          |         |      |          |           |           | SAMPLE              |  |  |  | TESTING AND REMARKS |  |  |  |
|---------------------------------------|--------|-----------|-----------------------------------------------------------------------------------|---------|------------|------------------------|-------------------------|----------|---------|------|----------|-----------|-----------|---------------------|--|--|--|---------------------|--|--|--|
| GROUNDWATER                           | RL (m) | DEPTH (m) | DESCRIPTION OF STRATA                                                             | GRAPHIC | ORIGIN (#) | CONSIS. <sup>(*)</sup> | DENSITY. <sup>(*)</sup> | MOISTURE | REMARKS | TYPE | INTERVAL | DEPTH (m) | TEST TYPE | RESULTS AND REMARKS |  |  |  |                     |  |  |  |
| 26/08/25 No free groundwater observed |        | 0.10      | TOPSOIL / SAND (SP-SM) with silt trace rootlets: dark grey-brown; fine to medium. |         | TOP        |                        |                         |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                                   |         |            |                        |                         |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        |           |                                                                                   |         |            |                        |                         |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        | 1         | SAND (SP) trace silt: pale grey; fine to medium. Bassendean Sand.                 |         | AEO        |                        |                         | M        |         |      |          | 1.00      |           |                     |  |  |  |                     |  |  |  |
|                                       |        | 1.1       |                                                                                   |         |            | (MD)                   |                         |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        | 2         | Test Pit discontinued at 1.50m depth. (Collapsing conditions).                    |         |            |                        |                         |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |
|                                       |        | 10        |                                                                                   |         |            |                        |                         |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |

NOTES: <sup>(\*)</sup>Soil origin is "probable" unless otherwise stated. <sup>(\*)</sup>Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

NOTES: #Soil origin is "probable" unless otherwise stated. °Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location and surface elevation at each test location was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage

Refer to explanatory notes for symbol and abbreviation definitions

# TEST PIT LOG

**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 12.7 AHD  
**COORDINATE:** E:380221.7, N:6310112.9  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP11  
**PROJECT No:** 236293.01  
**DATE:** 26/08/25  
**SHEET:** 1 of 1

| CONDITIONS ENCOUNTERED                |        |           |                                                                            |         |            |                        |                         |          |         |      |          |           |           | SAMPLE              |  |  |  | TESTING AND REMARKS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| GROUNDWATER                           | RL (m) | DEPTH (m) | DESCRIPTION OF STRATA                                                      | GRAPHIC | ORIGIN (#) | CONSIS. <sup>(*)</sup> | DENSITY. <sup>(*)</sup> | MOISTURE | REMARKS | TYPE | INTERVAL | DEPTH (m) | TEST TYPE | RESULTS AND REMARKS |  |  |  |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 26/08/25 No free groundwater observed | RL     | 0.10      | TOPSOIL / SAND (SP) trace rootlets trace silt: grey-brown; fine to medium. |         | TOP        |                        |                         | M        |         | D    |          | 0.10      |           |                     |  |  |  |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                       |        |           |                                                                            |         |            |                        |                         |          |         |      |          |           |           |                     |  |  |  |                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



NOTES: #Soil origin is "probable" unless otherwise stated. %Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location and surface elevation at each test location was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage

Refer to explanatory notes for symbol and abbreviation definitions

# TEST PIT LOG

**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 13.8 AHD  
**COORDINATE:** E:380365.7, N:6310144.7  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP12  
**PROJECT No:** 236293.01  
**DATE:** 26/08/25  
**SHEET:** 1 of 1

| CONDITIONS ENCOUNTERED                |        |                                                                      |                                                                            |         |            |             |              |          |         | TESTING AND REMARKS |          |           |           |                     |  |
|---------------------------------------|--------|----------------------------------------------------------------------|----------------------------------------------------------------------------|---------|------------|-------------|--------------|----------|---------|---------------------|----------|-----------|-----------|---------------------|--|
| GROUNDWATER                           | RL (m) | DEPTH (m)                                                            | DESCRIPTION OF STRATA                                                      | GRAPHIC | ORIGIN (#) | CONSIS. (*) | DENSITY. (*) | MOISTURE | SAMPLE  |                     |          | DEPTH (m) | TEST TYPE | RESULTS AND REMARKS |  |
|                                       |        |                                                                      |                                                                            |         |            |             |              |          | REMARKS | TYPE                | INTERVAL |           |           |                     |  |
| 26/08/25 No free groundwater observed | RL     | 0.10                                                                 | TOPSOIL / SAND (SP) trace rootlets trace silt: grey-brown; fine to medium. |         | TOP        |             |              |          |         |                     |          |           |           |                     |  |
|                                       |        | SAND (SP) trace silt: yellow-brown; fine to medium. Bassendean Sand. |                                                                            |         |            |             |              |          |         |                     |          |           |           |                     |  |
|                                       |        | 1                                                                    |                                                                            |         | AEO        | L           |              | M        |         | D                   |          | 1.00      |           |                     |  |
|                                       |        | 2                                                                    |                                                                            |         |            | MD          |              |          |         |                     |          |           |           |                     |  |
|                                       |        | 2                                                                    | Test Pit discontinued at 1.80m depth. (Collapsing conditions).             |         |            |             |              |          |         |                     |          |           |           |                     |  |



NOTES: <sup>(#)</sup>Soil origin is "probable" unless otherwise stated. <sup>(†)</sup>Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location and surface elevation at each test location was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage

Refer to explanatory notes for symbol and abbreviation definitions



# TEST PIT LOG

**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 14.0 AHD  
**COORDINATE:** E:380503.9, N:6310175.4  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP13  
**PROJECT No:** 236293.01  
**DATE:** 27/08/25  
**SHEET:** 1 of 1

| CONDITIONS ENCOUNTERED                                |           |                                                                            |         |            |             |              |          |         |      |          |           |           |                                                              | SAMPLE |  |  | TESTING AND REMARKS |  |
|-------------------------------------------------------|-----------|----------------------------------------------------------------------------|---------|------------|-------------|--------------|----------|---------|------|----------|-----------|-----------|--------------------------------------------------------------|--------|--|--|---------------------|--|
| GROUNDWATER                                           | DEPTH (m) | DESCRIPTION OF STRATA                                                      | GRAPHIC | ORIGIN (#) | CONSIS. (%) | DENSITY. (%) | MOISTURE | REMARKS | TYPE | INTERVAL | DEPTH (m) | TEST TYPE | RESULTS AND REMARKS                                          |        |  |  |                     |  |
| 27/08/25 No free groundwater observed                 | 0.10      | TOPSOIL / SAND (SP) trace rootlets trace silt: grey-brown; fine to medium. | TS      | TOP        |             |              |          |         | D    |          | 0.10      | PSP/150   | <div><div></div><div>5</div><div>10</div><div>15</div></div> |        |  |  |                     |  |
|                                                       |           | SAND (SP) trace silt: yellow-brown; fine to medium. Bassendean Sand.       |         |            |             |              |          |         |      |          |           |           |                                                              |        |  |  |                     |  |
|                                                       |           |                                                                            |         |            | MD          |              |          |         | ASS  |          | 0.50      |           |                                                              |        |  |  |                     |  |
|                                                       | 1         |                                                                            |         |            |             |              |          |         | ASS  |          | 1.00      |           |                                                              |        |  |  |                     |  |
|                                                       |           |                                                                            |         | AEO        |             | (MD)         | M        |         | ASS  |          | 1.50      |           |                                                              |        |  |  |                     |  |
|                                                       | 2         |                                                                            |         |            |             |              |          |         | ASS  |          | 2.00      |           |                                                              |        |  |  |                     |  |
| Test Pit discontinued at 2.50m depth. (Target depth). |           |                                                                            |         |            |             |              |          |         |      |          |           |           |                                                              |        |  |  |                     |  |



NOTES: #Soil origin is "probable" unless otherwise stated. %Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location and surface elevation at each test location was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage

Refer to explanatory notes for symbol and abbreviation definitions

# TEST PIT LOG

**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 11.3 AHD  
**COORDINATE:** E:380611.7, N:6310215.5  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP14  
**PROJECT No:** 236293.01  
**DATE:** 27/08/25  
**SHEET:** 1 of 1

[illegible]

NOTES: <sup>(#)</sup>Soil origin is "probable" unless otherwise stated. <sup>(†)</sup>Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location and surface elevation at each test location was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage

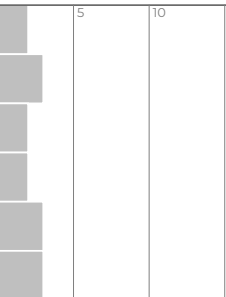
Refer to explanatory notes for symbol and abbreviation definitions

# TEST PIT LOG

**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 11.7 AHD  
**COORDINATE:** E:380772.5, N:6310220.1  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP15  
**PROJECT No:** 236293.01  
**DATE:** 27/08/25  
**SHEET:** 1 of 1

| CONDITIONS ENCOUNTERED                          |        |           |                                                                                                                                                                                 |                                                                                     |            | SAMPLE                      |                              |          | TESTING AND REMARKS |      |          |           |           |                                                                                                          |  |
|-------------------------------------------------|--------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------|-----------------------------|------------------------------|----------|---------------------|------|----------|-----------|-----------|----------------------------------------------------------------------------------------------------------|--|
| GROUNDWATER                                     | RL (m) | DEPTH (m) | DESCRIPTION OF STRATA                                                                                                                                                           | GRAPHIC                                                                             | ORIGIN (#) | CONSIS. <sup>(*)</sup><br>■ | DENSITY. <sup>(*)</sup><br>■ | MOISTURE | REMARKS             | TYPE | INTERVAL | DEPTH (m) | TEST TYPE | RESULTS AND REMARKS                                                                                      |  |
| Groundwater observed at 0.5 m depth<br>27/08/25 |        | 0.15      | TOPSOIL / SAND (SP-SM) with roots and rootlets with silt: dark grey-brown; fine to medium.<br>SAND (SP) trace silt: pale grey; fine to medium.<br>Bassendean Sand.              |    | TOP        |                             |                              | M to W   |                     |      |          |           |           | <br>PSP/150<br>100kPa |  |
|                                                 |        |           |                                                                                                                                                                                 |                                                                                     | AEO        |                             | MD                           |          |                     |      |          | 1         |           |                                                                                                          |  |
|                                                 |        | 1.20      | SAND (SP-SM) with silt: dark brown and brown; fine to medium; trace pockets of cemented Silty SAND ('Coffee Rock'). Bassendean Sand.<br><br>From 1.50m: - becoming orange-brown |    | AEO        |                             | (MD)                         | W        |                     |      |          |           |           |                                                                                                          |  |
|                                                 |        | 1.70      | Clayey SAND (SC) with gravel: orange-brown mottled dark brown; fine to medium; low to medium plasticity clay. Guildford Formation.                                              |   | ALV        |                             | F to St                      | w<PL     |                     |      |          |           |           |                                                                                                          |  |
|                                                 |        | 2.10      | SAND (SP-SM) with silt: blue-grey; fine to medium. Bassendean Sand.                                                                                                             |  | AEO        |                             | (MD)                         | W        |                     |      |          |           |           |                                                                                                          |  |
|                                                 |        |           | Test Pit discontinued at 2.50m depth.<br>(Target depth).                                                                                                                        |                                                                                     |            |                             |                              |          |                     |      |          |           | 2.50      |                                                                                                          |  |



NOTES: #Soil origin is "probable" unless otherwise stated. °Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location and surface elevation at each test location was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage

Refer to explanatory notes for symbol and abbreviation definitions



# TEST PIT LOG

**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 10.6 AHD  
**COORDINATE:** E:379942.0, N:6310022.5  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP16  
**PROJECT No:** 236293.01  
**DATE:** 26/08/25  
**SHEET:** 1 of 1

[illegible]

NOTES: <sup>(#)</sup>Soil origin is "probable" unless otherwise stated. <sup>(†)</sup>Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location and surface elevation at each test location was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage

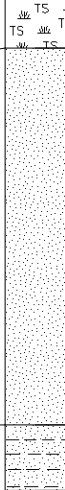
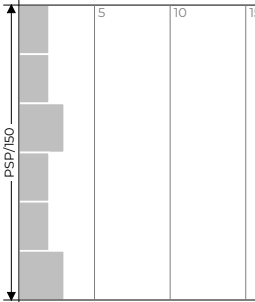
Refer to explanatory notes for symbol and abbreviation definitions

# TEST PIT LOG

**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 10.6 AHD  
**COORDINATE:** E:380078.3, N:6310044.9  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP17  
**PROJECT No:** 236293.01  
**DATE:** 26/08/25  
**SHEET:** 1 of 1

| CONDITIONS ENCOUNTERED                       |        |           |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          | SAMPLE    |           |                                                                                     | TESTING AND REMARKS |  |  |
|----------------------------------------------|--------|-----------|----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------|------------------------|---------|-------------------------|----------|---------|------|----------|-----------|-----------|-------------------------------------------------------------------------------------|---------------------|--|--|
| GROUNDWATER                                  | RL (m) | DEPTH (m) | DESCRIPTION OF STRATA                                                                                                      | GRAPHIC                                                                           | ORIGIN (#) | CONSIS. <sup>(*)</sup> |         | DENSITY. <sup>(*)</sup> | MOISTURE | REMARKS | TYPE | INTERVAL | DEPTH (m) | TEST TYPE | RESULTS AND REMARKS                                                                 |                     |  |  |
|                                              |        |           |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
| Groundwater observed at the surface 26/08/25 |        | 0.15      | TOPSOIL / SAND (SP-SM) with silt trace rootlets: dark grey-brown; fine to medium.                                          |  | TOP        |                        |         |                         |          |         |      |          |           |           |  |                     |  |  |
|                                              |        |           |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        |           |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        |           |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 1.30      | Clayey SAND (SC) with gravel: blue-grey mottled brown; fine to medium; low to medium plasticity clay. Guildford Formation. |                                                                                   | ALV        |                        | F to St |                         | w<PL     |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 1.50      | Test Pit discontinued at 1.50m depth. (Collapsing conditions).                                                             |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 2         |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 3         |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 4         |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 5         |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 6         |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 7         |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 8         |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 9         |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 10        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 11        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 12        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 13        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 14        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 15        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 16        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 17        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 18        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 19        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 20        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 21        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 22        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 23        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 24        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 25        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 26        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 27        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 28        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 29        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 30        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 31        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 32        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 33        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 34        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 35        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 36        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 37        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 38        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 39        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 40        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 41        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 42        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 43        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 44        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 45        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 46        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 47        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 48        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 49        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 50        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 51        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 52        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 53        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 54        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 55        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 56        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 57        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 58        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 59        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 60        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 61        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 62        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 63        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 64        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 65        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 66        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 67        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 68        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 69        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 70        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 71        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 72        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 73        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 74        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 75        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 76        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 77        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 78        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 79        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 80        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 81        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 82        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 83        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 84        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 85        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 86        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 87        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 88        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 89        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 90        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 91        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 92        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 93        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 94        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 95        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 96        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 97        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 98        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 99        |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |
|                                              |        | 100       |                                                                                                                            |                                                                                   |            |                        |         |                         |          |         |      |          |           |           |                                                                                     |                     |  |  |



NOTES: <sup>Ⓐ</sup> Soil origin is "probable" unless otherwise stated. <sup>Ⓛ</sup> Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.



NOTES: #Soil origin is "probable" unless otherwise stated. °Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location and surface elevation at each test location was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage

Refer to explanatory notes for symbol and abbreviation definitions

# TEST PIT LOG

**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 10.5 AHD  
**COORDINATE:** E:380351.0, N:6310062.3  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP18  
**PROJECT No:** 236293.01  
**DATE:** 27/08/25  
**SHEET:** 1 of 1

| CONDITIONS ENCOUNTERED                        |                                                       |                                                                                                                                            |         |            |                                                  |          | SAMPLE  |        |          | TESTING AND REMARKS |           |                     |  |  |  |  |
|-----------------------------------------------|-------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|---------|------------|--------------------------------------------------|----------|---------|--------|----------|---------------------|-----------|---------------------|--|--|--|--|
| GROUNDWATER<br>RL (m)                         | DEPTH (m)                                             | DESCRIPTION OF STRATA                                                                                                                      | GRAPHIC | ORIGIN (#) | CONSIS. <sup>(*)</sup><br>DENSITY <sup>(*)</sup> | MOISTURE | REMARKS | TYPE   | INTERVAL | DEPTH (m)           | TEST TYPE | RESULTS AND REMARKS |  |  |  |  |
|                                               |                                                       |                                                                                                                                            |         |            |                                                  |          |         |        |          |                     |           |                     |  |  |  |  |
| Groundwater observed at 0 m depth<br>27/08/25 | 0.20                                                  | TOPSOIL / SAND (SP-SM) with silt trace rootlets: dark grey-brown; fine to medium.                                                          |         | TOP        | L                                                | W        |         |        |          |                     |           |                     |  |  |  |  |
|                                               | 0.30                                                  | SAND (SP-SM) with silt: brown; fine to medium. Bassendean Sand.                                                                            |         | AEO        |                                                  |          |         |        |          |                     |           |                     |  |  |  |  |
|                                               | 0.70                                                  | Clayey SAND (SC): yellow-brown; fine to medium; low to medium plasticity clay; with layers of Clayey Sandy GRAVEL GC. Guildford Formation. |         | ALV        | S to F                                           | w>PL     |         |        |          |                     |           |                     |  |  |  |  |
|                                               | 1                                                     | SAND (SP-SC) with clay with gravel: grey-brown; fine to medium. Guildford Formation.                                                       |         | ALV        | St                                               | w=PL     |         | U<br>B |          |                     |           |                     |  |  |  |  |
|                                               | 1.20                                                  | Clayey SAND (SC): brown; fine to medium; low to medium plasticity clay. Guildford Formation.                                               |         |            |                                                  |          |         |        |          |                     |           |                     |  |  |  |  |
|                                               | 2                                                     | From 1.80m: - becoming dark grey                                                                                                           |         | ALV        | F to St                                          | w>PL     |         | D      |          |                     |           |                     |  |  |  |  |
| 6                                             | Test Pit discontinued at 2.50m depth. (Target depth). |                                                                                                                                            |         |            |                                                  |          |         |        |          |                     |           |                     |  |  |  |  |



NOTES: <sup>#</sup>Soil origin is "probable" unless otherwise stated. <sup>†</sup>Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location and surface elevation at each test location was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage

Refer to explanatory notes for symbol and abbreviation definitions



# TEST PIT LOG

**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 11.1 AHD  
**COORDINATE:** E:380471.3, N:6310071.9  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP19  
**PROJECT No:** 236293.01  
**DATE:** 27/08/25  
**SHEET:** 1 of 1

[illegible]

Generated with CORE-GS by Geroc - Soil Log with Photo

NOTES: <sup>(1)</sup> Soil origin is "probable" unless otherwise stated. <sup>(2)</sup> Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location and surface elevation at each test location was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage

Refer to explanatory notes for symbol and abbreviation definitions



# TEST PIT LOG

**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 11.2 AHD  
**COORDINATE:** E:380669.6, N:6310109.7  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP20  
**PROJECT No:** 236293.01  
**DATE:** 27/08/25  
**SHEET:** 1 of 1

| CONDITIONS ENCOUNTERED                                |        |           |                                                                                                                  |         |                                                                  |             |      |              |          |         |      |          |           | SAMPLE    |                     |  | TESTING AND REMARKS |  |  |
|-------------------------------------------------------|--------|-----------|------------------------------------------------------------------------------------------------------------------|---------|------------------------------------------------------------------|-------------|------|--------------|----------|---------|------|----------|-----------|-----------|---------------------|--|---------------------|--|--|
| GROUNDWATER                                           | RL (m) | DEPTH (m) | DESCRIPTION OF STRATA                                                                                            | GRAPHIC | ORIGIN (#)                                                       | CONSIS. (°) |      | DENSITY. (°) | MOISTURE | REMARKS | TYPE | INTERVAL | DEPTH (m) | TEST TYPE | RESULTS AND REMARKS |  |                     |  |  |
|                                                       |        |           |                                                                                                                  |         |                                                                  |             |      |              |          |         |      |          |           |           |                     |  |                     |  |  |
| Groundwater observed at the surface 27/08/25          | 11     | 0.15      | TOPSOIL / SAND (SP-SM) with silt trace rootlets: dark grey-brown; fine to medium.                                |         | TS                                                               | TOP         |      |              | W        |         |      |          |           |           |                     |  |                     |  |  |
|                                                       |        | TS        | AEO                                                                                                              |         |                                                                  |             |      |              |          |         |      |          |           |           |                     |  |                     |  |  |
|                                                       |        | 0.30      | SAND (SP-SM) with silt: dark grey; fine to medium. Bassendean Sand.                                              |         | AEO                                                              |             |      |              |          |         |      |          |           |           |                     |  |                     |  |  |
|                                                       |        | 0.60      | Silty SAND (SM): dark grey; fine to medium. Bassendean Sand.                                                     |         |                                                                  |             |      |              |          |         |      |          |           |           |                     |  |                     |  |  |
|                                                       |        | 0.80      | SAND (SP-SM) with silt with gravel: grey-brown; fine to medium; fine to coarse gravel. Guildford Formation.      |         | ALV                                                              | D to VD     |      |              |          |         |      |          |           |           |                     |  |                     |  |  |
|                                                       |        | 1.10      | Clayey SAND (SC) trace gravel: yellow-brown; fine to medium; low to medium plasticity clay. Guildford Formation. |         |                                                                  |             |      |              |          |         |      |          |           |           |                     |  |                     |  |  |
|                                                       |        | 1.50      |                                                                                                                  | ALV     | F to St                                                          | w<PL        |      |              |          |         |      |          |           |           |                     |  |                     |  |  |
|                                                       |        | 1.80      | CLAY (Cl) with sand: dark grey; medium plasticity. Guildford Formation.                                          |         |                                                                  |             |      |              |          |         |      |          |           |           |                     |  |                     |  |  |
|                                                       |        | 2.00      |                                                                                                                  |         | ALV                                                              | St          | w=PL |              |          |         |      |          |           |           |                     |  |                     |  |  |
|                                                       |        |           |                                                                                                                  |         | From 2.30m: - becoming dark grey mottled red-brown, trace gravel |             |      |              |          |         |      |          |           |           |                     |  |                     |  |  |
| Test Pit discontinued at 2.50m depth. (Target depth). |        |           |                                                                                                                  |         |                                                                  |             |      |              |          |         |      |          |           |           |                     |  |                     |  |  |



NOTES: #Soil origin is "probable" unless otherwise stated. °Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location and surface elevation at each test location was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage

Refer to explanatory notes for symbol and abbreviation definitions

# TEST PIT LOG

**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 10.8 AHD  
**COORDINATE:** E:380074.0, N:6309952.0  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP21  
**PROJECT No:** 236293.01  
**DATE:** 26/08/25  
**SHEET:** 1 of 1

| GROUNDWATER |           | CONDITIONS ENCOUNTERED                                                                                                  |         |            |                             |          | SAMPLE  |      |          | TESTING AND REMARKS |           |                     |
|-------------|-----------|-------------------------------------------------------------------------------------------------------------------------|---------|------------|-----------------------------|----------|---------|------|----------|---------------------|-----------|---------------------|
| RL (m)      | DEPTH (m) | DESCRIPTION OF STRATA                                                                                                   | GRAPHIC | ORIGIN (#) | CONSIS. (°)<br>DENSITY: (°) | MOISTURE | REMARKS | TYPE | INTERVAL | DEPTH (m)           | TEST TYPE | RESULTS AND REMARKS |
| 26/08/25    | 0.15      | TOPSOIL / SAND (SP-SM) with silt trace rootlets: dark grey-brown; fine to medium.                                       |         | TOP        |                             |          |         |      |          |                     | PSP/150   |                     |
|             |           |                                                                                                                         |         |            |                             |          |         |      |          |                     |           |                     |
|             |           | SAND (SP) trace silt: pale grey; fine to medium. Bassendean Sand.                                                       |         | AEO        |                             |          |         |      |          |                     |           |                     |
|             | 1.10      | Silty SAND (SM): dark brown and brown; fine to medium; moderately to strongly cemented, 'Coffee Rock'. Bassendean Sand. |         | AEO        |                             |          |         |      |          |                     |           |                     |
|             | 1.40      | SAND (SP) trace silt: pale brown; fine to medium. Bassendean Sand.                                                      |         | AEO        | (MD)                        |          |         |      |          |                     |           |                     |
|             | 1.70      | SAND (SP-SM) with silt: blue-grey; fine to medium; trace pockets of Clayey SAND SC. Bassendean Sand.                    |         | AEO        |                             |          |         |      |          |                     |           |                     |
|             | 1.80      |                                                                                                                         |         | ALV        |                             |          |         |      |          |                     |           |                     |
|             | 2         | GRAVEL (GP-GC) with clay with sand: blue-brown-grey; fine to coarse. Guildford Formation.                               |         |            |                             |          |         | D    |          | 2.00                |           |                     |
|             |           | Test Pit discontinued at 2.00m depth. (Collapsing conditions).                                                          |         |            |                             |          |         |      |          |                     |           |                     |



NOTES: <sup>(#)</sup> Soil origin is "probable" unless otherwise stated. <sup>(\*)</sup> Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location and surface elevation at each test location was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage

Refer to explanatory notes for symbol and abbreviation definitions

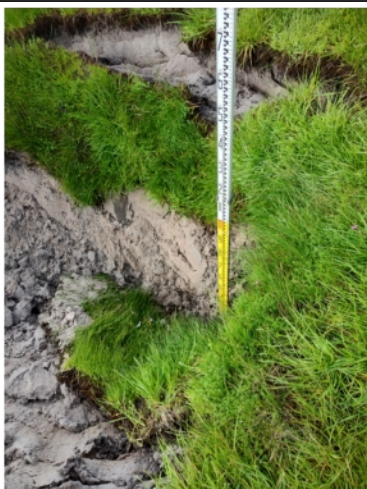


# TEST PIT LOG

**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 10.6 AHD  
**COORDINATE:** E:380216.8, N:6309950.1  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP22  
**PROJECT No:** 236293.01  
**DATE:** 26/08/25  
**SHEET:** 1 of 1

[illegible]

NOTES: <sup>(#)</sup> Soil origin is "probable" unless otherwise stated. <sup>(†)</sup> Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location and surface elevation at each test location was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage

Refer to explanatory notes for symbol and abbreviation definitions

# TEST PIT LOG

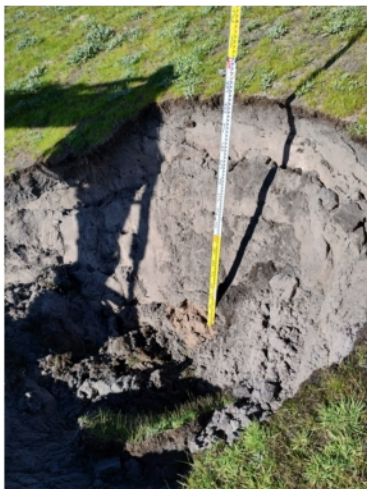
**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 10.6 AHD  
**COORDINATE:** E:380340.5, N:6309923.3  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP23  
**PROJECT No:** 236293.01  
**DATE:** 27/08/25  
**SHEET:** 1 of 1

| CONDITIONS ENCOUNTERED                                         |                                                                                                                 |                                                                                                                         |         |            |                                                   | SAMPLE   |         |      | TESTING AND REMARKS |           |           |                     |   |   |  |  |  |  |
|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|---------|------------|---------------------------------------------------|----------|---------|------|---------------------|-----------|-----------|---------------------|---|---|--|--|--|--|
| GROUNDWATER                                                    | DEPTH (m)                                                                                                       | DESCRIPTION OF STRATA                                                                                                   | GRAPHIC | ORIGIN (#) | CONSIS. <sup>(*)</sup><br>DENSITY. <sup>(*)</sup> | MOISTURE | REMARKS | TYPE | INTERVAL            | DEPTH (m) | TEST TYPE | RESULTS AND REMARKS |   |   |  |  |  |  |
| RL (m)                                                         |                                                                                                                 |                                                                                                                         |         |            |                                                   |          |         |      |                     |           |           |                     |   |   |  |  |  |  |
| ▼<br>27/08/25<br>Groundwater observed at 0.2 m depth           | 0.10                                                                                                            | TOPSOIL / SAND (SP-SM) with silt trace rootlets: dark grey-brown; fine to medium.                                       |         | TOP        |                                                   | M to W   |         |      |                     | 0.10      | PSP/150   |                     |   |   |  |  |  |  |
|                                                                |                                                                                                                 | SAND (SP) trace silt: pale grey; fine to medium. Bassendean Sand.                                                       |         |            |                                                   | AEO      |         |      |                     |           |           |                     | L | W |  |  |  |  |
|                                                                | 1.0                                                                                                             |                                                                                                                         |         |            |                                                   |          |         |      |                     |           |           |                     |   |   |  |  |  |  |
|                                                                | 1.20                                                                                                            | Silty SAND (SM): dark brown and brown; fine to medium; moderately to strongly cemented, 'Coffee Rock'. Bassendean Sand. |         | AEO        | VD                                                |          |         |      |                     |           |           |                     |   |   |  |  |  |  |
|                                                                | 1.35                                                                                                            | SAND (SP) trace silt: pale brown; fine to medium. Bassendean Sand.                                                      |         | AEO        | (MD)                                              |          |         |      |                     |           |           |                     |   |   |  |  |  |  |
| 1.50                                                           | Clayey SAND (SC): green-grey mottled brown; fine to medium; low to medium plasticity clay. Guildford Formation. |                                                                                                                         |         |            |                                                   |          |         |      |                     |           |           |                     |   |   |  |  |  |  |
| 5                                                              |                                                                                                                 |                                                                                                                         |         |            |                                                   |          |         |      |                     |           |           |                     |   |   |  |  |  |  |
| 2                                                              |                                                                                                                 |                                                                                                                         |         | ALV        | F to St                                           | w>PL     |         | D    |                     | 1.70      |           |                     |   |   |  |  |  |  |
|                                                                |                                                                                                                 |                                                                                                                         |         |            |                                                   |          |         |      |                     |           |           |                     |   |   |  |  |  |  |
|                                                                | 2                                                                                                               |                                                                                                                         |         |            |                                                   |          |         |      |                     |           | PP        | 50-100kPa           |   |   |  |  |  |  |
|                                                                |                                                                                                                 |                                                                                                                         |         |            |                                                   |          |         |      |                     |           |           |                     |   |   |  |  |  |  |
| Test Pit discontinued at 2.20m depth. (Collapsing conditions). |                                                                                                                 |                                                                                                                         |         |            |                                                   |          |         |      |                     |           |           |                     |   |   |  |  |  |  |
|                                                                | 8                                                                                                               |                                                                                                                         |         |            |                                                   |          |         |      |                     |           |           |                     |   |   |  |  |  |  |

NOTES: <sup>(\*)</sup>Soil origin is "probable" unless otherwise stated. <sup>(\*)</sup>Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.



NOTES: #Soil origin is "probable" unless otherwise stated. °Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location and surface elevation at each test location was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage

Refer to explanatory notes for symbol and abbreviation definitions

# TEST PIT LOG

**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 11.0 AHD  
**COORDINATE:** E:380486.4, N:6309963.5  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP24  
**PROJECT No:** 236293.01  
**DATE:** 27/08/25  
**SHEET:** 1 of 1

| GROUNDWATER                                       |           | CONDITIONS ENCOUNTERED                                                                                             |                                                       |            |             |              | SAMPLE   |         |      |          | TESTING AND REMARKS |           |                     |  |
|---------------------------------------------------|-----------|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|------------|-------------|--------------|----------|---------|------|----------|---------------------|-----------|---------------------|--|
| RL (m)                                            | DEPTH (m) | DESCRIPTION OF STRATA                                                                                              | GRAPHIC                                               | ORIGIN (#) | CONSIS. (°) | DENSITY: (°) | MOISTURE | REMARKS | TYPE | INTERVAL | DEPTH (m)           | TEST TYPE | RESULTS AND REMARKS |  |
| ▼ Z7/08/25<br>Groundwater observed at 0.3 m depth | 0.20      | TOPSOIL / SAND (SP-SM) with roots and rootlets with silt: dark grey-brown; fine to medium.                         |                                                       | TOP        |             |              | M to W   |         |      |          |                     |           |                     |  |
|                                                   |           | SAND (SP) trace silt: grey; fine to medium. Bassendean Sand.                                                       |                                                       | AEO        |             | L            | W        |         | ASS  |          | 0.50                |           |                     |  |
|                                                   | 0.80      | SAND (SC) with clay with gravel: yellow-brown mottled orange-brown and brown; fine to medium. Guildford Formation. |                                                       | ALV        |             | F to St      | w>PL     |         | D    |          | 0.80                |           |                     |  |
|                                                   | 1         |                                                                                                                    |                                                       |            |             |              |          |         | ASS  |          | 1.00                |           |                     |  |
|                                                   | 1.60      |                                                                                                                    |                                                       |            |             |              |          |         |      |          |                     |           |                     |  |
|                                                   |           | SAND (SP-SM) with silt: blue-grey and grey; fine to medium. Guildford Formation.                                   |                                                       | ALV        |             | (MD)         | W        |         | ASS  |          | 1.50                |           |                     |  |
|                                                   | 2         |                                                                                                                    |                                                       |            |             |              |          |         |      |          |                     |           |                     |  |
|                                                   |           | CLAY (CI-CH) with sand: dark grey; medium to high plasticity. Guildford Formation.                                 |                                                       | ALV        |             | F to St      | w=PL     |         |      |          |                     |           |                     |  |
|                                                   | 2.20      |                                                                                                                    |                                                       |            |             |              |          |         |      |          |                     |           |                     |  |
|                                                   |           |                                                                                                                    | Test Pit discontinued at 2.50m depth. (Target depth). |            |             |              |          |         |      | ASS      |                     | 2.50      |                     |  |



NOTES: <sup>(1)</sup> Soil origin is "probable" unless otherwise stated. <sup>(2)</sup> Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location and surface elevation at each test location was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage

Refer to explanatory notes for symbol and abbreviation definitions



# TEST PIT LOG

**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 11.0 AHD  
**COORDINATE:** E:379944.6, N:6309876.4  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP25  
**PROJECT No:** 236293.01  
**DATE:** 26/08/25  
**SHEET:** 1 of 1

| CONDITIONS ENCOUNTERED                          |        |           |                                                                                                                            |         |            |             |                 |          |         |      |          |           |           | SAMPLE              |  |     | TESTING AND REMARKS |  |      |  |  |
|-------------------------------------------------|--------|-----------|----------------------------------------------------------------------------------------------------------------------------|---------|------------|-------------|-----------------|----------|---------|------|----------|-----------|-----------|---------------------|--|-----|---------------------|--|------|--|--|
| GROUNDWATER                                     | RL (m) | DEPTH (m) | DESCRIPTION OF STRATA                                                                                                      | GRAPHIC | ORIGIN (#) | CONSIS. (%) | DENSITY (g/cm³) | MOISTURE | REMARKS | TYPE | INTERVAL | DEPTH (m) | TEST TYPE | RESULTS AND REMARKS |  |     |                     |  |      |  |  |
|                                                 |        |           |                                                                                                                            |         |            |             |                 |          |         |      |          |           |           |                     |  |     |                     |  |      |  |  |
| Groundwater observed at 0.6 m depth<br>26/08/25 |        | 0.15      | TOPSOIL / SAND (SP) trace silt: grey-brown; fine to medium.                                                                |         | TOP        |             | MD              | M to W   |         |      |          | ASS/B     | 0.50      | PSP/150             |  |     |                     |  |      |  |  |
|                                                 |        |           | SAND (SP) trace silt: pale grey; fine to medium. Bassendean Sand.                                                          |         |            |             |                 |          |         |      |          |           |           |                     |  | AEO |                     |  |      |  |  |
|                                                 |        | 1.00      | SAND (SP-SM) with silt: dark brown; fine to medium; trace pockets of cemented Silty SAND ('Coffee Rock'). Bassendean Sand. |         | AEO        |             |                 | W        |         |      |          |           |           |                     |  |     | ASS                 |  | 1.00 |  |  |
|                                                 |        | 1.40      | SAND (SP) trace silt: pale brown; fine to medium. Bassendean Sand.                                                         |         | AEO        |             | (MD)            |          |         |      |          |           |           |                     |  |     | ASS                 |  | 1.50 |  |  |
|                                                 |        | 2         | Test Pit discontinued at 2.00m depth. (Collapsing conditions).                                                             |         |            |             |                 |          |         | EC D |          | 2.00      |           |                     |  |     |                     |  |      |  |  |



NOTES: #Soil origin is "probable" unless otherwise stated. %Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location and surface elevation at each test location was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage

Refer to explanatory notes for symbol and abbreviation definitions

# TEST PIT LOG

**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 10.2 AHD  
**COORDINATE:** E:380080.0, N:6309831.8  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP26  
**PROJECT No:** 236293.01  
**DATE:** 26/08/25  
**SHEET:** 1 of 1

| CONDITIONS ENCOUNTERED                          |        |           |                                                                                                                |                                                                                     |            |                                                                                    |                         |          |         |      |          |           |           | SAMPLE                                                                             |                                                                                     |   |    | TESTING AND REMARKS |  |  |  |
|-------------------------------------------------|--------|-----------|----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------|------------------------------------------------------------------------------------|-------------------------|----------|---------|------|----------|-----------|-----------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---|----|---------------------|--|--|--|
| GROUNDWATER                                     | RL (m) | DEPTH (m) | DESCRIPTION OF STRATA                                                                                          | GRAPHIC                                                                             | ORIGIN (#) | CONSIS. <sup>(*)</sup>                                                             | DENSITY. <sup>(*)</sup> | MOISTURE | REMARKS | TYPE | INTERVAL | DEPTH (m) | TEST TYPE | RESULTS AND REMARKS                                                                |                                                                                     |   |    |                     |  |  |  |
|                                                 |        |           |                                                                                                                |                                                                                     |            |                                                                                    |                         |          |         |      |          |           |           |                                                                                    |                                                                                     |   |    |                     |  |  |  |
| Groundwater observed at the surface<br>26/08/25 | 10     | 0.15      | TOPSOIL / SAND (SP-SM) trace silt: grey-brown; fine to medium.                                                 |   | TOP        |  |                         |          |         |      |          |           |           |  |  | 5 | 10 | 15                  |  |  |  |
|                                                 |        |           |                                                                                                                |                                                                                     |            |                                                                                    |                         |          |         |      |          |           |           |                                                                                    |                                                                                     |   |    |                     |  |  |  |
|                                                 |        |           |                                                                                                                |                                                                                     |            |                                                                                    |                         |          |         |      |          |           |           |                                                                                    |                                                                                     |   |    |                     |  |  |  |
|                                                 |        |           |                                                                                                                |                                                                                     |            |                                                                                    |                         |          |         |      |          |           |           |                                                                                    |                                                                                     |   |    |                     |  |  |  |
|                                                 |        |           | From 0.40m: - becoming brown                                                                                   |                                                                                     | AEO        |                                                                                    |                         |          |         |      |          | 1         |           |                                                                                    |                                                                                     |   |    |                     |  |  |  |
|                                                 |        |           | From 1.50m: - becoming blue-grey                                                                               |                                                                                     |            | (MD)                                                                               |                         |          |         |      |          |           |           |                                                                                    |                                                                                     |   |    |                     |  |  |  |
|                                                 |        | 1.80      | Clayey SAND (SC): blue-grey mottled brown; fine to medium; low to medium plasticity clay. Guildford Formation. |  | ALV        | F to St                                                                            |                         | w>PL     |         |      |          |           |           |                                                                                    |                                                                                     |   |    |                     |  |  |  |
|                                                 |        | 2         | Test Pit discontinued at 2.00m depth. (Collapsing conditions).                                                 |                                                                                     |            |                                                                                    |                         |          |         |      |          |           |           |                                                                                    |                                                                                     |   |    |                     |  |  |  |



NOTES: #Soil origin is "probable" unless otherwise stated. °Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location and surface elevation at each test location was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage

Refer to explanatory notes for symbol and abbreviation definitions

# TEST PIT LOG

**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 10.1 AHD  
**COORDINATE:** E:380197.7, N:6309860.3  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP27  
**PROJECT No:** 236293.01  
**DATE:** 27/08/25  
**SHEET:** 1 of 1

| CONDITIONS ENCOUNTERED                                    |           |                                                                                                                                 |                |            |             | SAMPLE      |          |         | TESTING AND REMARKS |          |           |
|-----------------------------------------------------------|-----------|---------------------------------------------------------------------------------------------------------------------------------|----------------|------------|-------------|-------------|----------|---------|---------------------|----------|-----------|
| GROUNDWATER                                               | DEPTH (m) | DESCRIPTION OF STRATA                                                                                                           | GRAPHIC        | ORIGIN (#) | CONSIS. (°) | DENSITY (°) | MOISTURE | REMARKS | TYPE                | INTERVAL | DEPTH (m) |
| Groundwater observed at the surface<br>27/08/25<br>RL (m) | 0.15      | TOPSOIL / SAND (SP-SM) with silt trace rootlets: dark grey-brown; fine to medium.                                               | TS<br>TS<br>TS | TOP        | L           |             |          |         |                     |          |           |
|                                                           |           | SAND (SP-SM) with silt: brown; fine to medium. Bassendean Sand.                                                                 |                | AEO        | MD          |             | W        |         |                     |          |           |
|                                                           | 0.50      | Clayey SAND (SC) trace gravel: yellow-brown and grey-brown; fine to medium; low to medium plasticity clay. Guildford Formation. |                |            |             |             |          |         |                     |          |           |
|                                                           | 1         |                                                                                                                                 |                |            |             |             |          |         |                     |          |           |
|                                                           | 2         | From 1.20m: - becoming yellow-brown mottled brown                                                                               |                | ALV        | F to St     |             | w>PL     |         |                     |          |           |
|                                                           | 2         | Test Pit discontinued at 2.00m depth. (Collapsing conditions).                                                                  |                |            |             |             |          |         |                     |          |           |



NOTES: #Soil origin is "probable" unless otherwise stated. °Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location and surface elevation at each test location was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage

Refer to explanatory notes for symbol and abbreviation definitions



# TEST PIT LOG

**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 10.1 AHD  
**COORDINATE:** E:379958.1, N:6309753.9  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP28  
**PROJECT No:** 236293.01  
**DATE:** 26/08/25  
**SHEET:** 1 of 1

| CONDITIONS ENCOUNTERED                          |           |                                                                                                                               |         |            |             | SAMPLE   |         |      | TESTING AND REMARKS |           |           |
|-------------------------------------------------|-----------|-------------------------------------------------------------------------------------------------------------------------------|---------|------------|-------------|----------|---------|------|---------------------|-----------|-----------|
| GROUNDWATER                                     | DEPTH (m) | DESCRIPTION OF STRATA                                                                                                         | GRAPHIC | ORIGIN (#) | CONSIS. (%) | MOISTURE | REMARKS | TYPE | INTERVAL            | DEPTH (m) | TEST TYPE |
| 26/08/25<br>Groundwater observed at 0.1 m depth | 0         | TOPSOIL / SAND (SP-SM) with silt: dark grey-brown; fine to medium; with rootlets.                                             | TS      | TOP        | L           |          |         |      |                     |           |           |
|                                                 | 0.15      | SAND (SP) trace silt: pale grey; fine to medium. Bassendean Sand.                                                             | TS      | AEO        | MD          | W        |         |      |                     |           |           |
|                                                 | 0.50      | Clayey SAND (SC) trace gravel: grey mottled yellow-brown; fine to medium; low to medium plasticity clay. Guildford Formation. |         | ALV        | VSt         |          |         | ASS  | 0.50                |           |           |
|                                                 | 1.05      | Clayey SAND (SC): yellow-brown mottled grey-brown; fine to medium; low to medium plasticity clay. Guildford Formation.        |         | ALV        | F to St     | w=PL     |         | B/D  | 0.60                |           |           |
|                                                 | 1.40      | SAND (SP) trace silt: grey; fine to medium. Guildford Formation.                                                              |         | ALV        | (F) to (St) |          |         | U    | 1.00                |           |           |
|                                                 | 2.00      | From 1.80m: - becoming blue-grey, with pockets of Clayey SAND SC                                                              |         | ALV        | MD          | W        |         | ASS  | 1.50                |           |           |
|                                                 | 2.00      | Test Pit discontinued at 2.00m depth. (Collapsing conditions).                                                                |         |            |             |          |         | ASS  | 2.00                |           |           |



NOTES: #Soil origin is "probable" unless otherwise stated. %Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location and surface elevation at each test location was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage

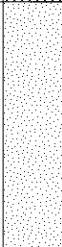
Refer to explanatory notes for symbol and abbreviation definitions

# TEST PIT LOG

**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 11.3 AHD  
**COORDINATE:** E:380225.7, N:6310003.7  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP29  
**PROJECT No:** 236293.01  
**DATE:** 26/08/25  
**SHEET:** 1 of 1

| CONDITIONS ENCOUNTERED                          |        |           |                                                                                                                              |                                                                                   |            |                                                                                   |                         |          |         |      |          |           |           | SAMPLE                                                                              |                                                   |  |  | TESTING AND REMARKS |  |  |  |
|-------------------------------------------------|--------|-----------|------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------|-----------------------------------------------------------------------------------|-------------------------|----------|---------|------|----------|-----------|-----------|-------------------------------------------------------------------------------------|---------------------------------------------------|--|--|---------------------|--|--|--|
| GROUNDWATER                                     | RL (m) | DEPTH (m) | DESCRIPTION OF STRATA                                                                                                        | GRAPHIC                                                                           | ORIGIN (#) | CONSIS. <sup>(*)</sup>                                                            | DENSITY. <sup>(*)</sup> | MOISTURE | REMARKS | TYPE | INTERVAL | DEPTH (m) | TEST TYPE | RESULTS AND REMARKS                                                                 |                                                   |  |  |                     |  |  |  |
| Groundwater observed at 0.6 m depth<br>26/08/25 | 11     | 0.25      | FILL / SAND (SP) trace silt: grey and grey-brown; fine to medium; fragments of brick, scrap metal and PACM observed in fill. |  | FILL       |  | L to MD                 | M to W   |         |      |          |           | PSP/150   |  | <div><div>5</div><div>10</div><div>15</div></div> |  |  |                     |  |  |  |
|                                                 |        |           | SAND (SP) trace silt: pale grey; fine to medium. Bassendean Sand.                                                            |  | AEO        |                                                                                   |                         | W        |         |      |          |           |           |                                                                                     |                                                   |  |  |                     |  |  |  |
|                                                 |        | 1         | Test Pit discontinued at 1.00m depth. (Target depth).                                                                        |                                                                                   |            |                                                                                   |                         |          |         |      |          |           |           |                                                                                     |                                                   |  |  |                     |  |  |  |
|                                                 |        | 10        |                                                                                                                              |                                                                                   |            |                                                                                   |                         |          |         |      |          |           |           |                                                                                     |                                                   |  |  |                     |  |  |  |
|                                                 |        | 2         |                                                                                                                              |                                                                                   |            |                                                                                   |                         |          |         |      |          |           |           |                                                                                     |                                                   |  |  |                     |  |  |  |
|                                                 |        | 9         |                                                                                                                              |                                                                                   |            |                                                                                   |                         |          |         |      |          |           |           |                                                                                     |                                                   |  |  |                     |  |  |  |



NOTES: #Soil origin is "probable" unless otherwise stated. °Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location and surface elevation at each test location was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage

Refer to explanatory notes for symbol and abbreviation definitions

# TEST PIT LOG

**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 11.3 AHD  
**COORDINATE:** E:380234.0, N:6310032.6  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP30  
**PROJECT No:** 236293.01  
**DATE:** 26/08/25  
**SHEET:** 1 of 1

| CONDITIONS ENCOUNTERED                          |        |           |                                                                                                                                                                                                      |         |            |                        |                         |          |         |      |          |           | SAMPLE    |                                                                                                                                                                                             |         | TESTING AND REMARKS |   |    |    |    |    |    |
|-------------------------------------------------|--------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|------------|------------------------|-------------------------|----------|---------|------|----------|-----------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------------------|---|----|----|----|----|----|
| GROUNDWATER                                     | RL (m) | DEPTH (m) | DESCRIPTION OF STRATA                                                                                                                                                                                | GRAPHIC | ORIGIN (#) | CONSIS. <sup>(*)</sup> | DENSITY. <sup>(*)</sup> | MOISTURE | REMARKS | TYPE | INTERVAL | DEPTH (m) | TEST TYPE | RESULTS AND REMARKS                                                                                                                                                                         |         |                     |   |    |    |    |    |    |
| Groundwater observed at 0.4 m depth<br>26/08/25 | 11     | 1         | FILL / SAND (SP-SM) with silt: grey-brown and grey; fine to medium; fragments of brick, concrete, tile, scrap metal observed in fill, fly tipped rubbish on the surface in vicinity of the test pit. |         | FILL       |                        | MD to D                 | M to W   |         |      |          |           | PSP/150   | <table border="1"><thead><tr><th>Value</th><th>Refusal</th></tr></thead><tbody><tr><td>5</td><td>30</td></tr><tr><td>10</td><td>30</td></tr><tr><td>15</td><td>30</td></tr></tbody></table> | Value   | Refusal             | 5 | 30 | 10 | 30 | 15 | 30 |
|                                                 |        |           |                                                                                                                                                                                                      |         |            |                        |                         | Value    |         |      |          |           |           |                                                                                                                                                                                             | Refusal |                     |   |    |    |    |    |    |
| 5                                               | 30     |           |                                                                                                                                                                                                      |         |            |                        |                         |          |         |      |          |           |           |                                                                                                                                                                                             |         |                     |   |    |    |    |    |    |
| 10                                              | 30     |           |                                                                                                                                                                                                      |         |            |                        |                         |          |         |      |          |           |           |                                                                                                                                                                                             |         |                     |   |    |    |    |    |    |
| 15                                              | 30     |           |                                                                                                                                                                                                      |         |            |                        |                         |          |         |      |          |           |           |                                                                                                                                                                                             |         |                     |   |    |    |    |    |    |
| W                                               |        |           |                                                                                                                                                                                                      |         |            |                        |                         |          |         |      |          |           |           |                                                                                                                                                                                             |         |                     |   |    |    |    |    |    |
| Groundwater                                     | 10     | 2         | Test Pit discontinued at 1.00m depth. (Target depth / Collapsing conditions).                                                                                                                        |         |            |                        |                         |          |         |      |          |           |           |                                                                                                                                                                                             |         |                     |   |    |    |    |    |    |
|                                                 | 9      |           |                                                                                                                                                                                                      |         |            |                        |                         |          |         |      |          |           |           |                                                                                                                                                                                             |         |                     |   |    |    |    |    |    |



NOTES: <sup>(\*)</sup>Soil origin is "probable" unless otherwise stated. <sup>(\*)</sup>Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

NOTES: #Soil origin is "probable" unless otherwise stated. °Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location and surface elevation at each test location was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage

Refer to explanatory notes for symbol and abbreviation definitions

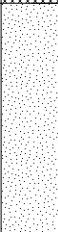


# TEST PIT LOG

**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 11.0 AHD  
**COORDINATE:** E:380182.9, N:6310070.8  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP31  
**PROJECT No:** 236293.01  
**DATE:** 26/08/25  
**SHEET:** 1 of 1

| CONDITIONS ENCOUNTERED                          |        |                                                                   |                                                                                                                            |                                                                                   |            |                                                                                   |    |              |          |         |      |          |           | SAMPLE    |                                                                                     |   | TESTING AND REMARKS |    |  |  |
|-------------------------------------------------|--------|-------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------|-----------------------------------------------------------------------------------|----|--------------|----------|---------|------|----------|-----------|-----------|-------------------------------------------------------------------------------------|---|---------------------|----|--|--|
| GROUNDWATER                                     | RL (m) | DEPTH (m)                                                         | DESCRIPTION OF STRATA                                                                                                      | GRAPHIC                                                                           | ORIGIN (#) | CONSIS. (°)                                                                       |    | DENSITY. (°) | MOISTURE | REMARKS | TYPE | INTERVAL | DEPTH (m) | TEST TYPE | RESULTS AND REMARKS                                                                 |   |                     |    |  |  |
|                                                 |        |                                                                   |                                                                                                                            |                                                                                   |            |                                                                                   |    |              |          |         |      |          |           |           |                                                                                     |   |                     |    |  |  |
| Groundwater observed at 0.5 m depth<br>26/08/25 | 1      | 0.30                                                              | FILL / SAND (SP-SM) with silt: grey and grey-brown; fine to medium; fragment of concrete, paver and PACM observed in fill. |  | FILL       |  | MD |              | M to W   |         |      |          |           | PSP/150   |  | 5 | 10                  | 15 |  |  |
|                                                 |        | SAND (SP) trace silt: pale grey; fine to medium. Bassendean Sand. |                                           | AEO                                                                               | W          |                                                                                   |    |              |          |         |      |          |           |           |                                                                                     |   |                     |    |  |  |
| Groundwater observed at 0.5 m depth<br>26/08/25 | 1      | 1                                                                 | Test Pit discontinued at 1.00m depth. (Target depth).                                                                      |                                                                                   |            |                                                                                   |    |              |          |         |      |          |           |           |                                                                                     |   |                     |    |  |  |
|                                                 | 2      | 2                                                                 |                                                                                                                            |                                                                                   |            |                                                                                   |    |              |          |         |      |          |           |           |                                                                                     |   |                     |    |  |  |



NOTES: #Soil origin is "probable" unless otherwise stated. °Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location and surface elevation at each test location was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage

Refer to explanatory notes for symbol and abbreviation definitions

# TEST PIT LOG

**CLIENT:** DevelopmentWA  
**PROJECT:** Proposed Industrial Park  
**LOCATION:** Lot 2010 Giorgi Road, Picton East, WA

**SURFACE LEVEL:** 11.3 AHD  
**COORDINATE:** E:380205.9, N:6310041.9  
**DATUM/GRID:** MGA2020 Zone 50  
**DIP/AZIMUTH:** 90°/---°

**LOCATION ID:** TP32  
**PROJECT No:** 236293.01  
**DATE:** 26/08/25  
**SHEET:** 1 of 1

| CONDITIONS ENCOUNTERED                          |        |           |                                                                                   |                                                                                   |            |             |             |          |         | SAMPLE |          |           | TESTING AND REMARKS                                                                 |                     |   |    |    |
|-------------------------------------------------|--------|-----------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------|-------------|-------------|----------|---------|--------|----------|-----------|-------------------------------------------------------------------------------------|---------------------|---|----|----|
| GROUNDWATER                                     | RL (m) | DEPTH (m) | DESCRIPTION OF STRATA                                                             | GRAPHIC                                                                           | ORIGIN(##) | CONSIS. (%) | DENSITY (%) | MOISTURE | REMARKS | TYPE   | INTERVAL | DEPTH (m) | TEST TYPE                                                                           | RESULTS AND REMARKS |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 | 11     | 0.20      | TOPSOIL / SAND (SP-SM) with silt trace rootlets: dark grey-brown; fine to medium. |  | TOP        |             |             | M to W   |         |        |          |           |  |                     | 5 | 10 | 15 |
|                                                 |        |           | SAND (SP) trace silt: pale grey; fine to medium. Bassendean Sand.                 |  | AEO        |             | MD          |          | W       |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        | 1         | Test Pit discontinued at 1.00m depth. (Target depth).                             |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 | 10     |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 | 9      |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
| Groundwater observed at 0.3 m depth<br>26/08/25 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |
|                                                 |        |           |                                                                                   |                                                                                   |            |             |             |          |         |        |          |           |                                                                                     |                     |   |    |    |



NOTES: <sup>(#)</sup> Soil origin is "probable" unless otherwise stated. <sup>(\*)</sup> Consistency/Relative density shading is for visual reference only - no correlation between cohesive and granular materials is implied.

**PLANT:** 8 t excavator, 600 mm wide toothed bucket

**OPERATOR:** BCP

**LOGGED:** GG

**METHOD:** test pit

**REMARKS:** The location and surface elevation at each test location was surveyed by Douglas using a differential global positioning system (dGPS) with variable accuracy depending on satellite coverage

Refer to explanatory notes for symbol and abbreviation definitions

---

## Appendix C

### Laboratory Test Certificates





# WESTERN GEOTECHNICAL & Laboratory Services

SOIL | AGGREGATE | CONCRETE | CRUSHING

## TEST REPORT - ASTM D2974-20 (Test Method A)

|                               |                                      |                      |                        |
|-------------------------------|--------------------------------------|----------------------|------------------------|
| <b>Client:</b>                | Development WA                       | <b>Ticket No.</b>    | S18615                 |
| <b>Client Address:</b>        | -                                    | <b>Report No.</b>    | WG25.15378-15393_1_ORG |
| <b>Project:</b>               | Proposed Industrial Park             | <b>Sample No.</b>    | WG25.15378-15393       |
| <b>Location:</b>              | Lot 2010 Giorgi Road, Picon East, WA | <b>Date Sampled:</b> | 26/08 - 27/08/2025     |
| <b>Sample Identification:</b> | Various - see below                  | <b>Date Tested:</b>  | 12/09 - 13/09/2025     |

## TEST RESULTS - Organic Content

**Sampling Method:**

**Sampled by Client, Tested as Received**

**Testing Completed By:**

**WGLS - SH**

**Furnace Temperature (°C):**

**440**

| Sample Number | Sample Identification | Ash Content (%) | Organic Content (%) |
|---------------|-----------------------|-----------------|---------------------|
| WG25.15378    | TP1 (0.0-0.1m)        | 91.0            | 9.0                 |
| WG25.15390    | TP6 (0.1m)            | 87.9            | 12.1                |
| WG25.15393    | TP4 (1.5m)            | 99.5            | 0.5                 |

**Comments:**

**Approved Signatory:**

**Name:** Cody O'Neill

**Date:** 24/September/2025



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SOIL | AGGREGATE | CONCRETE | CRUSHING

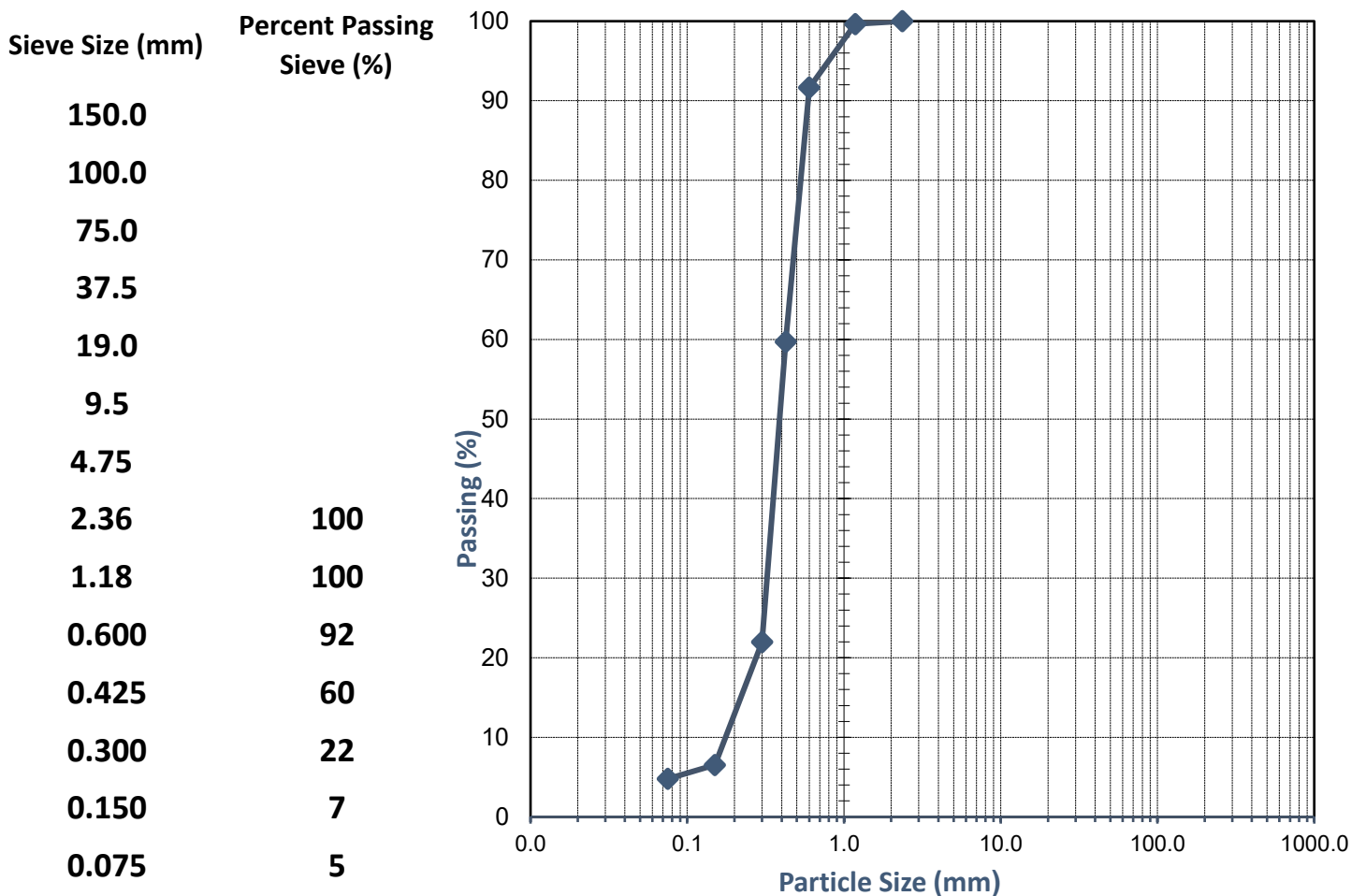
**TEST REPORT - AS 1289.3.6.1, \*AS 1289.1.1**

|                               |                                      |                      |                     |
|-------------------------------|--------------------------------------|----------------------|---------------------|
| <b>Client:</b>                | Development WA                       | <b>Ticket No.</b>    | S18615              |
| <b>Client Address:</b>        | -                                    | <b>Report No.</b>    | WG25.15378_1_PSD    |
| <b>Project:</b>               | Proposed Industrial Park             | <b>Sample No.</b>    | WG25.15378          |
| <b>Location:</b>              | Lot 2010 Giorgi Road, Picon East, WA | <b>Date Sampled:</b> | 26/08 - 27/08/2025  |
| <b>Sample Identification:</b> | TP1 (0.0-0.1m)                       | <b>Date Tested:</b>  | 16/09 - 17/09/25025 |

**TEST RESULTS - Particle Size Distribution of Soil**

**Sampling Method:**

**Sampled by Client, Tested as Received**



**Comments:** \*AS 1289.1.1- Deviation from standard: Insufficient sample according to test method requirements. NATA accreditation does not cover the performance of this service.

**Approved Signatory:**

**Name:** Danielle Reynolds

**Date:** 17/September/2025



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SOIL | AGGREGATE | CONCRETE | CRUSHING

**TEST REPORT - AS 1289.3.8.1**

|                               |                                      |                      |                    |
|-------------------------------|--------------------------------------|----------------------|--------------------|
| <b>Client:</b>                | Development WA                       | <b>Ticket No.</b>    | S18615             |
| <b>Client Address:</b>        | -                                    | <b>Report No.</b>    | WG25.15379_1_ECN   |
| <b>Project:</b>               | Proposed Industrial Park             | <b>Sample No.</b>    | WG25.15379         |
| <b>Location:</b>              | Lot 2010 Giorgi Road, Picon East, WA | <b>Date Sampled:</b> | 26/08 - 27/08/2025 |
| <b>Sample Identification:</b> | TP2 (1.5m)                           | <b>Date Tested:</b>  | 15/09/2025         |

**TEST RESULTS - Emerson Class Number**

**Sampling Method:**

**Sampled by Client, Tested as Received**

**Source of Material:**

**Not Specified**

**Soil Description:**

**Sand**

**Water Used:**

**Distilled**

**EMERSON CLASS  
NUMBER**

**5**

**Comments:**

**Approved Signatory:**

**Name:** Madhav Basnet

**Date:** 15/September/2025



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SOIL | AGGREGATE | CONCRETE | CRUSHING

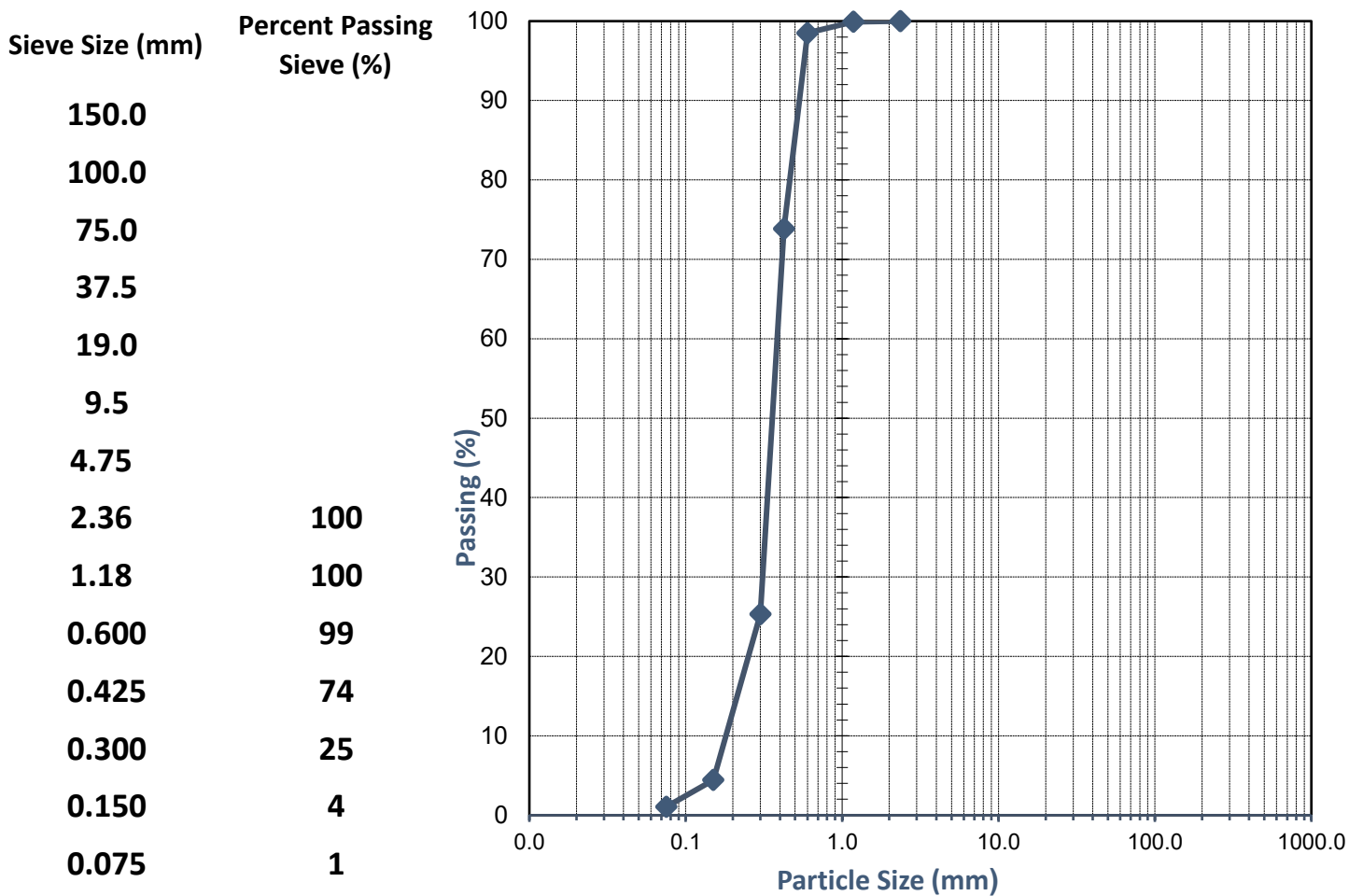
**TEST REPORT - AS 1289.3.6.1**

|                               |                                      |                      |                    |
|-------------------------------|--------------------------------------|----------------------|--------------------|
| <b>Client:</b>                | Development WA                       | <b>Ticket No.</b>    | S18615             |
| <b>Client Address:</b>        | -                                    | <b>Report No.</b>    | WG25.15380_1_PSD   |
| <b>Project:</b>               | Proposed Industrial Park             | <b>Sample No.</b>    | WG25.15380         |
| <b>Location:</b>              | Lot 2010 Giorgi Road, Picon East, WA | <b>Date Sampled:</b> | 26/08 - 27/08/2025 |
| <b>Sample Identification:</b> | TP3 (0.5m)                           | <b>Date Tested:</b>  | 15/09 - 16/09/2025 |

**TEST RESULTS - Particle Size Distribution of Soil**

**Sampling Method:**

**Sampled by Client, Tested as Received**



**Comments:**

**Approved Signatory:**

**Name:** Connor Budimir

**Date:** 16/September/2025



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SOIL | AGGREGATE | CONCRETE | CRUSHING

**TEST REPORT - AS 1289.5.2.1**

|                               |                                      |                      |                    |
|-------------------------------|--------------------------------------|----------------------|--------------------|
| <b>Client:</b>                | Development WA                       | <b>Ticket No.</b>    | S18615             |
| <b>Client Address:</b>        | -                                    | <b>Report No.</b>    | WG25.15380_1_MMDD  |
| <b>Project:</b>               | Proposed Industrial Park             | <b>Sample No.</b>    | WG25.15380         |
| <b>Location:</b>              | Lot 2010 Giorgi Road, Picon East, WA | <b>Date Sampled:</b> | 26/08 - 27/08/2025 |
| <b>Sample Identification:</b> | TP3 (0.5m)                           | <b>Date Tested:</b>  | 15/09/2025         |

**TEST RESULTS - Modified Maximum Dry Density**

**Sampling Method:**

Sampled by Client, Tested as Received

**Sample Curing Time (Hours):**

>2

**Method used to Determine Liquid Limit:**

Visual / Tactile Assessment by Competent Technician

**Material + 19.0mm (%):**

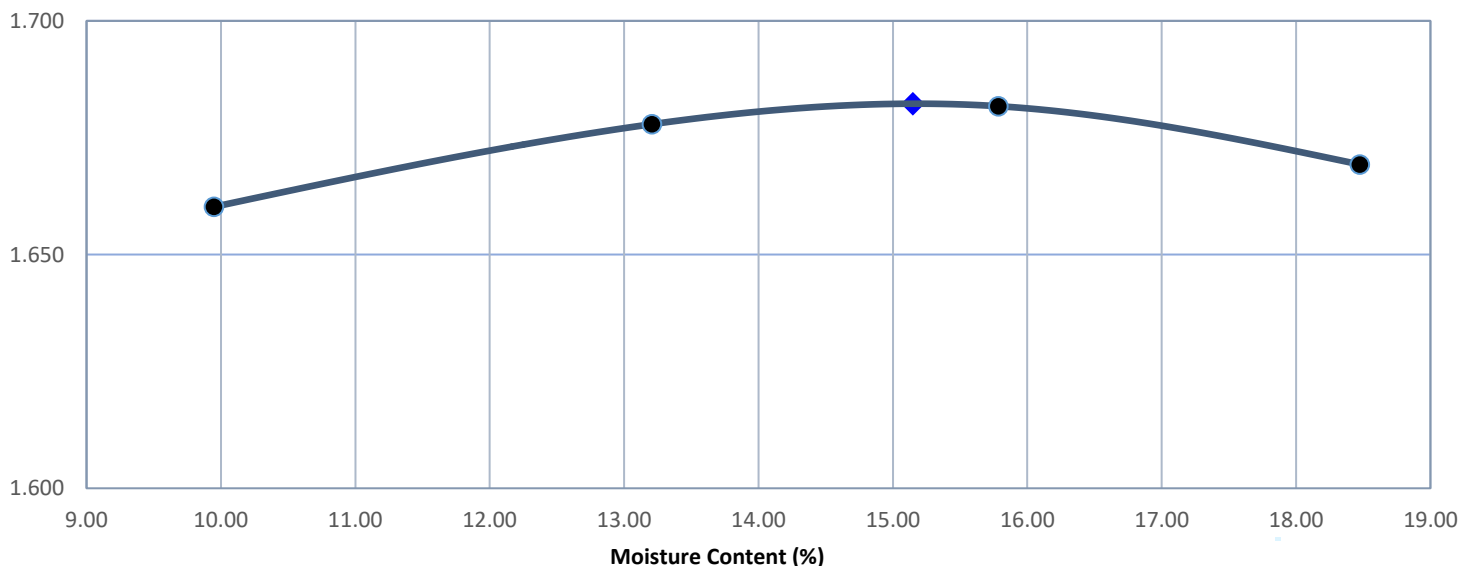
0

**Material + 37.5mm (%):**

-

|                                      |       |       |       |       |  |
|--------------------------------------|-------|-------|-------|-------|--|
| <b>Moisture Content (%)</b>          | 9.9   | 13.2  | 15.8  | 18.5  |  |
| <b>Dry Density (t/m<sup>3</sup>)</b> | 1.660 | 1.678 | 1.682 | 1.669 |  |

Dry Density (t/m<sup>3</sup>)



**Modified Maximum Dry Density (t/m<sup>3</sup>)**

**1.68**

**Optimum Moisture Content (%)**

**15.0**

**Comments:**

**Approved Signatory:**

**Name:** Danielle Reynolds

**Date:** 16/September/2025



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SOIL | AGGREGATE | CONCRETE | CRUSHING

TEST REPORT - AS 1289.6.1.1

|                        |                                      |               |                    |
|------------------------|--------------------------------------|---------------|--------------------|
| Client:                | Development WA                       | Ticket No.    | S18615             |
| Client Address:        | -                                    | Report No.    | WG25.15380_1_SCBR  |
| Project:               | Proposed Industrial Park             | Sample No.    | WG25.15380         |
| Location:              | Lot 2010 Giorgi Road, Picon East, WA | Date Sampled: | 26/08 - 27/08/2025 |
| Sample Identification: | TP3 (0.5m)                           | Date Tested:  | 15/09 - 22/09/25   |

TEST RESULTS - CALIFORNIA BEARING RATIO

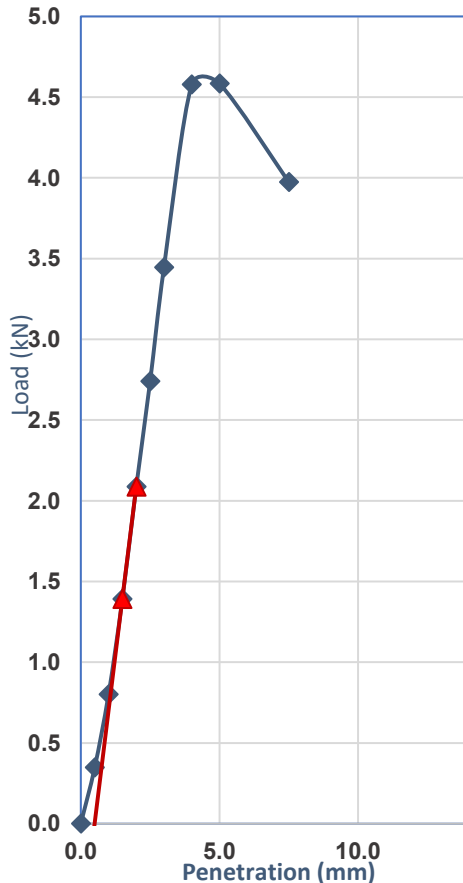
Sample Description:

Sand

Sampling Method:

Sampled by Client, Tested as Received

Load Penetration Curve



Compaction Details

|                                         |               |                           |          |
|-----------------------------------------|---------------|---------------------------|----------|
| Compaction Method                       | AS 1289.5.2.1 | Hammer Type               | Modified |
| Plasticity Determined by                | Estimated     | Curing Time (Hours)       | >48      |
| % Retained 19.0mm                       | 0             | Excluded/Replaced         | Excluded |
| Maximum Dry Density (t/m <sup>3</sup> ) | 1.68          | Optimum Moisture (%)      | 15.0     |
| Target Dry Density Ratio (%)            | 95            | Target Moisture Ratio (%) | 100      |

Specimen Conditions At Compaction

|                                 |      |                      |      |
|---------------------------------|------|----------------------|------|
| Dry Density (t/m <sup>3</sup> ) | 1.60 | Moisture Content (%) | 15.0 |
| Density Ratio (%)               | 95.0 | Moisture Ratio (%)   | 99.5 |

Specimen Conditions After Soak

|                                 |        |                       |       |
|---------------------------------|--------|-----------------------|-------|
| Soaked or Unsoaked              | Soaked | Soaking Period (days) | 4     |
| Surcharges Applied (kg)         | 4.50   | Measured Swell (%)    | 0.0   |
| Dry Density (t/m <sup>3</sup> ) | 1.60   | Dry Density Ratio (%) | 95.0  |
| Moisture Content (%)            | 18.8   | Moisture Ratio (%)    | 124.5 |

Specimen Conditions After Test

|                       |      |                     |      |
|-----------------------|------|---------------------|------|
| Top 30mm Moisture (%) | 18.5 | Remaining Depth (%) | 18.9 |
|-----------------------|------|---------------------|------|

Correction applied to Penetration: 0.5mm

Determined at a Penetration of: 2.5mm

California Bearing Ratio (CBR): 25%

Comments:

Approved Signatory:

Name: Cody O'Neill

Date: 23/September/2025



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SOIL | AGGREGATE | CONCRETE | CRUSHING

**TEST REPORT - AS 1289.3.8.1**

|                               |                                      |                      |                    |
|-------------------------------|--------------------------------------|----------------------|--------------------|
| <b>Client:</b>                | Development WA                       | <b>Ticket No.</b>    | S18615             |
| <b>Client Address:</b>        | -                                    | <b>Report No.</b>    | WG25.15393_1_ECN   |
| <b>Project:</b>               | Proposed Industrial Park             | <b>Sample No.</b>    | WG25.15393         |
| <b>Location:</b>              | Lot 2010 Giorgi Road, Picon East, WA | <b>Date Sampled:</b> | 26/08 - 27/08/2025 |
| <b>Sample Identification:</b> | TP4 (1.5m)                           | <b>Date Tested:</b>  | 15/09/2025         |

**TEST RESULTS - Emerson Class Number**

**Sampling Method:**

**Sampled by Client, Tested as Received**

**Source of Material:**

**Not Specified**

**Soil Description:**

**Sand**

**Water Used:**

**Distilled**

**EMERSON CLASS  
NUMBER**

**5**

**Comments:**

**Approved Signatory:**

**Name:** Madhav Basnet

**Date:** 15/September/2025



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SOIL | AGGREGATE | CONCRETE | CRUSHING

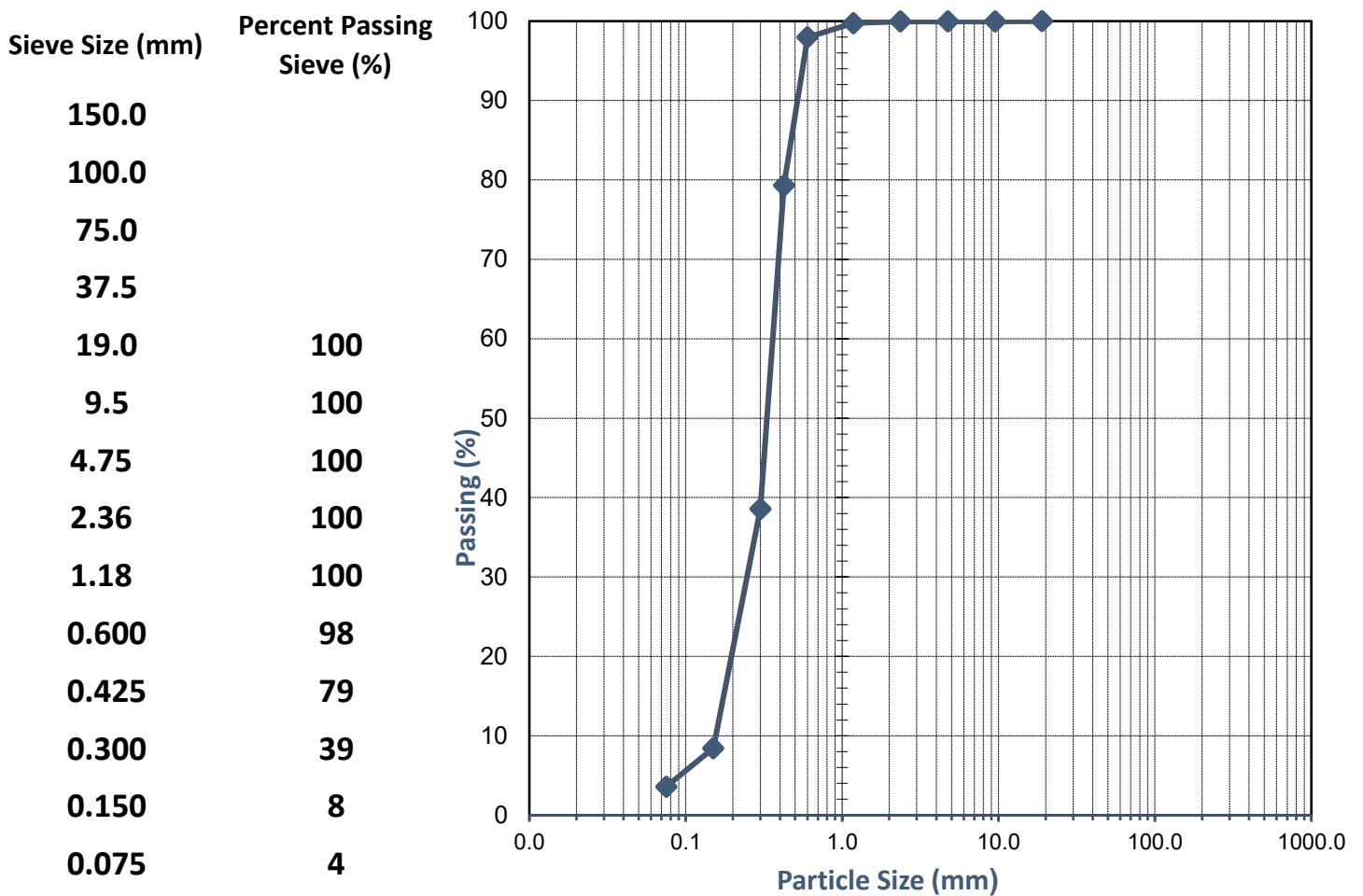
**TEST REPORT - AS 1289.3.6.1**

|                               |                                      |                      |                    |
|-------------------------------|--------------------------------------|----------------------|--------------------|
| <b>Client:</b>                | Development WA                       | <b>Ticket No.</b>    | S18615             |
| <b>Client Address:</b>        | -                                    | <b>Report No.</b>    | WG25.15393_1_PSD   |
| <b>Project:</b>               | Proposed Industrial Park             | <b>Sample No.</b>    | WG25.15393         |
| <b>Location:</b>              | Lot 2010 Giorgi Road, Picon East, WA | <b>Date Sampled:</b> | 26/08 - 27/08/2025 |
| <b>Sample Identification:</b> | TP4 (1.5m)                           | <b>Date Tested:</b>  | 15/09 - 17/09/2025 |

**TEST RESULTS - Particle Size Distribution of Soil**

**Sampling Method:**

**Sampled by Client, Tested as Received**



**Comments:**

**Approved Signatory:**

**Name:** Connor Budimir

**Date:** 17/September/2025



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SOIL | AGGREGATE | CONCRETE | CRUSHING

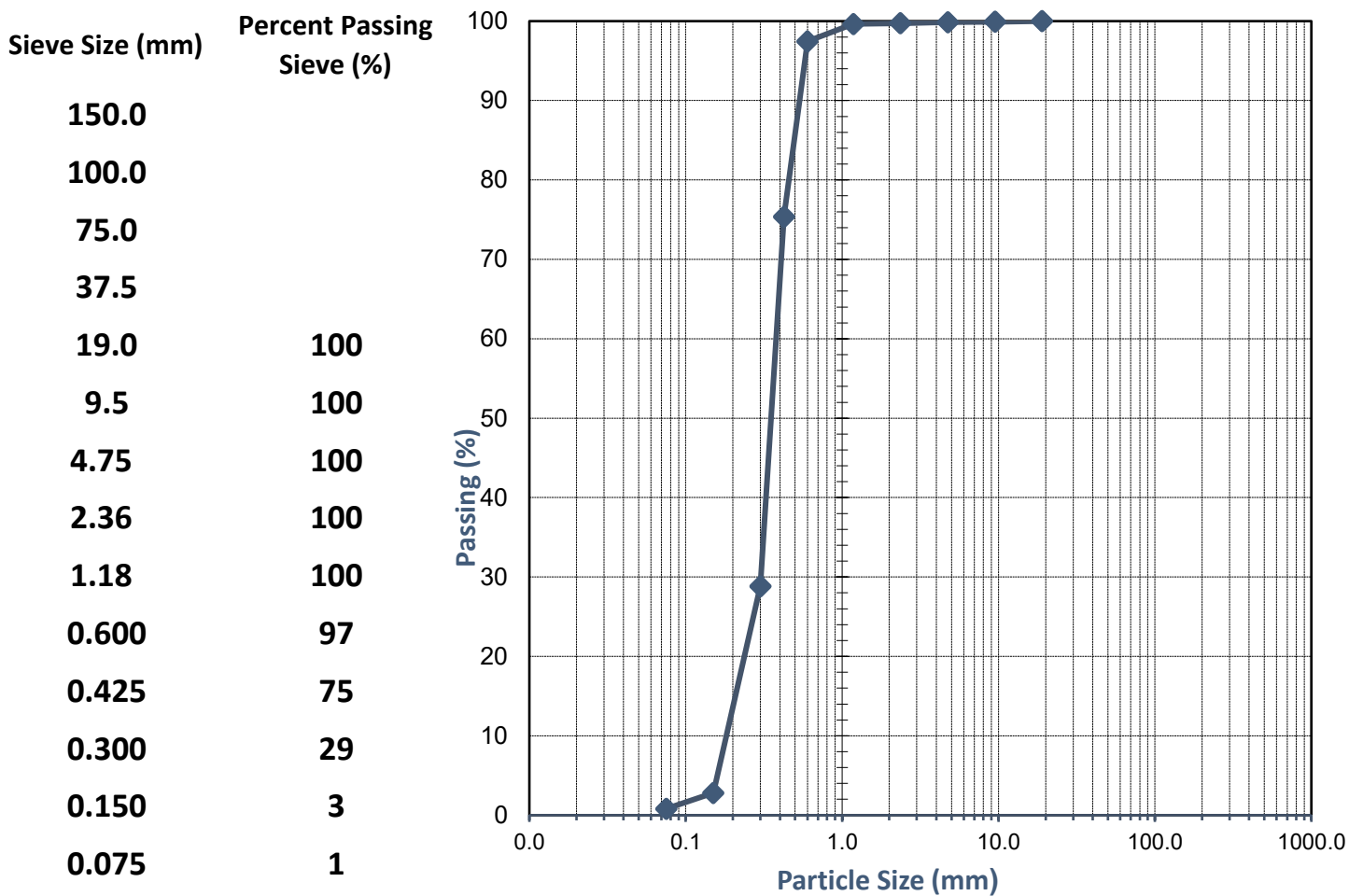
**TEST REPORT - AS 1289.3.6.1**

|                               |                                      |                      |                    |
|-------------------------------|--------------------------------------|----------------------|--------------------|
| <b>Client:</b>                | Development WA                       | <b>Ticket No.</b>    | S18615             |
| <b>Client Address:</b>        | -                                    | <b>Report No.</b>    | WG25.15392_1_PSD   |
| <b>Project:</b>               | Proposed Industrial Park             | <b>Sample No.</b>    | WG25.15392         |
| <b>Location:</b>              | Lot 2010 Giorgi Road, Picon East, WA | <b>Date Sampled:</b> | 26/08 - 27/08/2025 |
| <b>Sample Identification:</b> | TP6 (1.0m)                           | <b>Date Tested:</b>  | 15/09 - 17/09/2025 |

**TEST RESULTS - Particle Size Distribution of Soil**

**Sampling Method:**

**Sampled by Client, Tested as Received**



**Comments:**

**Approved Signatory:**

**Name:** Connor Budimir

**Date:** 17/September/2025



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SOIL | AGGREGATE | CONCRETE | CRUSHING

TEST REPORT - AS 1289.3.8.1

|                        |                                      |               |                    |
|------------------------|--------------------------------------|---------------|--------------------|
| Client:                | Development WA                       | Ticket No.    | S18615             |
| Client Address:        | -                                    | Report No.    | WG25.15381_1_ECN   |
| Project:               | Proposed Industrial Park             | Sample No.    | WG25.15381         |
| Location:              | Lot 2010 Giorgi Road, Picon East, WA | Date Sampled: | 26/08 - 27/08/2025 |
| Sample Identification: | TP8 (0.5m)                           | Date Tested:  | 15/09/2025         |

TEST RESULTS - Emerson Class Number

Sampling Method:

Sampled by Client, Tested as Received

Source of Material:

Not Specified

Soil Description:

Sand

Water Used:

Distilled

EMERSON CLASS  
NUMBER

5

Comments:

Approved Signatory:

Name: Madhav Basnet

Date: 15/September/2025



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SOIL | AGGREGATE | CONCRETE | CRUSHING

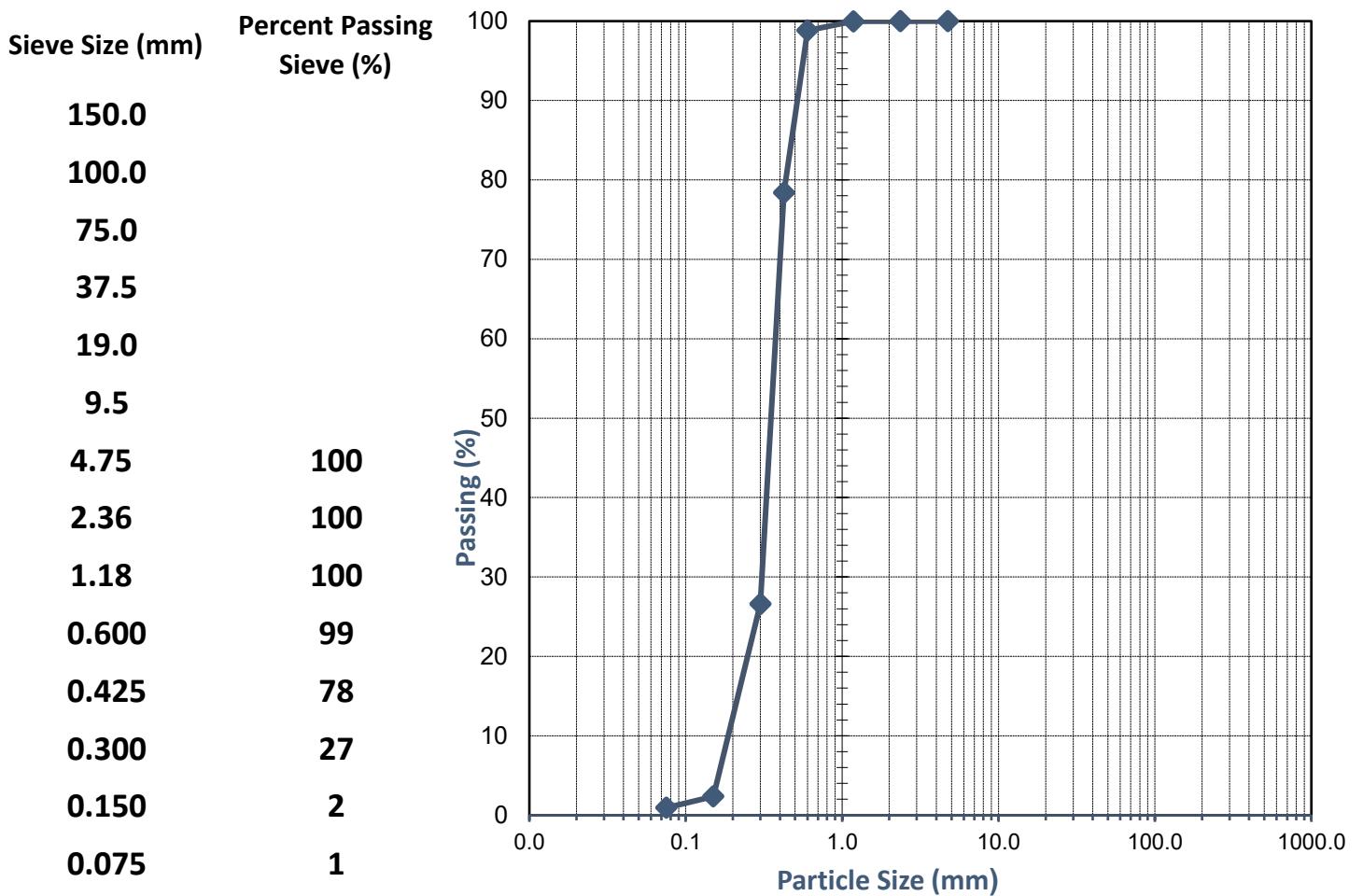
**TEST REPORT - AS 1289.3.6.1**

|                               |                                      |                      |                    |
|-------------------------------|--------------------------------------|----------------------|--------------------|
| <b>Client:</b>                | Development WA                       | <b>Ticket No.</b>    | S18615             |
| <b>Client Address:</b>        | -                                    | <b>Report No.</b>    | WG25.15391_1_PSD   |
| <b>Project:</b>               | Proposed Industrial Park             | <b>Sample No.</b>    | WG25.15391         |
| <b>Location:</b>              | Lot 2010 Giorgi Road, Picon East, WA | <b>Date Sampled:</b> | 26/08 - 27/08/2025 |
| <b>Sample Identification:</b> | TP10 (1.0m)                          | <b>Date Tested:</b>  | 15/09 - 17/09/2025 |

**TEST RESULTS - Particle Size Distribution of Soil**

**Sampling Method:**

**Sampled by Client, Tested as Received**



**Comments:**

**Approved Signatory:**

**Name:** Danielle Reynolds

**Date:** 17/September/2025



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SOIL | AGGREGATE | CONCRETE | CRUSHING

**TEST REPORT - AS 1289.3.8.1**

|                               |                                      |                      |                    |
|-------------------------------|--------------------------------------|----------------------|--------------------|
| <b>Client:</b>                | Development WA                       | <b>Ticket No.</b>    | S18615             |
| <b>Client Address:</b>        | -                                    | <b>Report No.</b>    | WG25.15382_1_ECN   |
| <b>Project:</b>               | Proposed Industrial Park             | <b>Sample No.</b>    | WG25.15382         |
| <b>Location:</b>              | Lot 2010 Giorgi Road, Picon East, WA | <b>Date Sampled:</b> | 26/08 - 27/08/2025 |
| <b>Sample Identification:</b> | TP14 (0.8m)                          | <b>Date Tested:</b>  | 15/09/2025         |

**TEST RESULTS - Emerson Class Number**

**Sampling Method:**

**Sampled by Client, Tested as Received**

**Source of Material:**

**Not Specified**

**Soil Description:**

**Clayey Sand**

**Water Used:**

**Distilled**

**EMERSON CLASS  
NUMBER**

**5**

**Comments:**

**Approved Signatory:**

**Name:** Madhav Basnet

**Date:** 15/September/2025



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SOIL | AGGREGATE | CONCRETE | CRUSHING

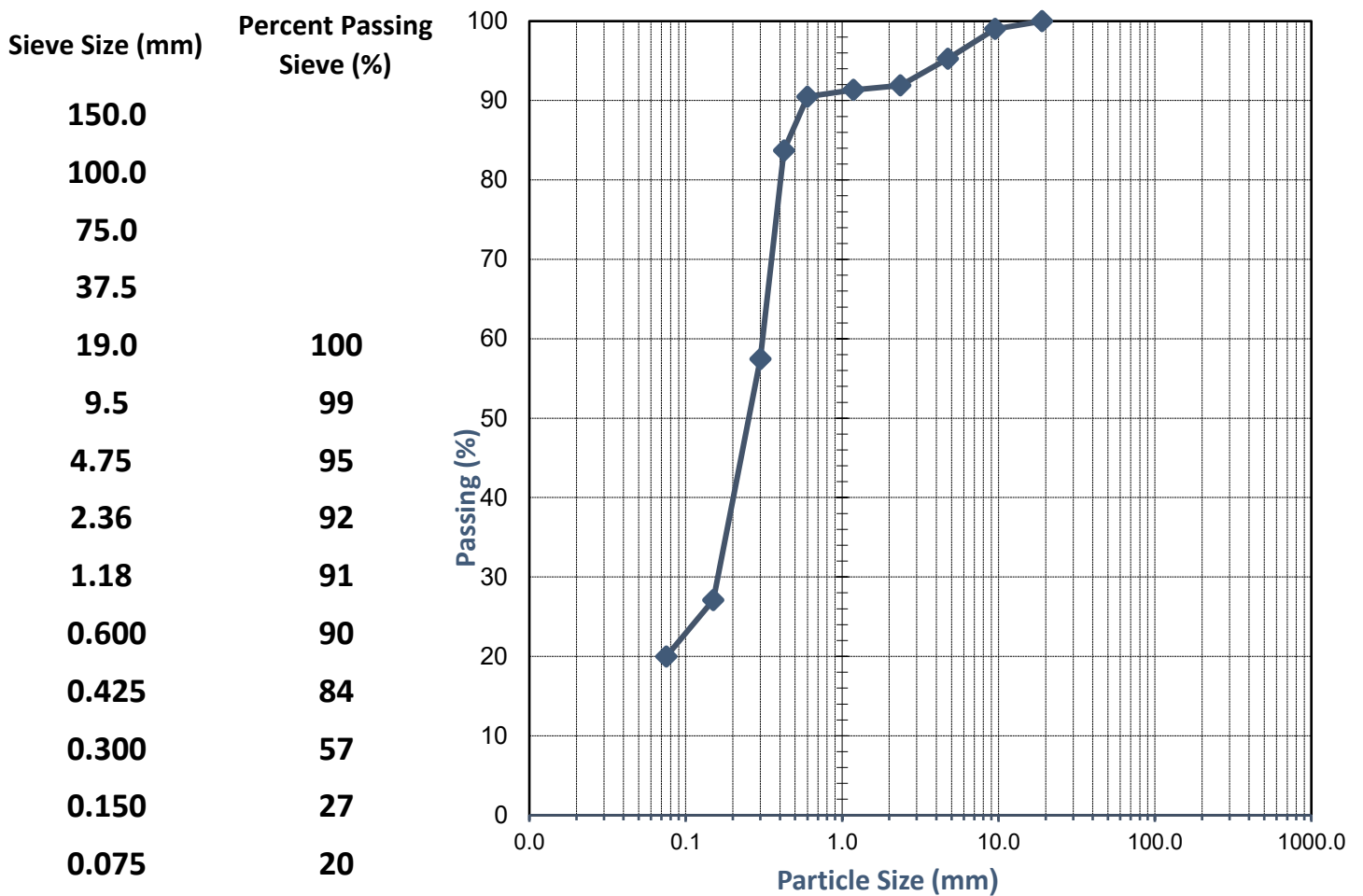
**TEST REPORT - AS 1289.3.6.1**

|                               |                                      |                      |                    |
|-------------------------------|--------------------------------------|----------------------|--------------------|
| <b>Client:</b>                | Development WA                       | <b>Ticket No.</b>    | S18615             |
| <b>Client Address:</b>        | -                                    | <b>Report No.</b>    | WG25.15382_1_PSD   |
| <b>Project:</b>               | Proposed Industrial Park             | <b>Sample No.</b>    | WG25.15382         |
| <b>Location:</b>              | Lot 2010 Giorgi Road, Picon East, WA | <b>Date Sampled:</b> | 26/08 - 27/08/2025 |
| <b>Sample Identification:</b> | TP14 (0.8m)                          | <b>Date Tested:</b>  | 15/09 - 17/09/25   |

**TEST RESULTS - Particle Size Distribution of Soil**

**Sampling Method:**

**Sampled by Client, Tested as Received**



**Comments:**

**Approved Signatory:**

**Name:** Connor Budimir

**Date:** 18/September/2025



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SOIL | AGGREGATE | CONCRETE | CRUSHING

**TEST REPORT - AS 1289.3.1.1, 3.2.1, 3.3.1 & 3.4.1**

|                               |                                      |                      |                    |
|-------------------------------|--------------------------------------|----------------------|--------------------|
| <b>Client:</b>                | Development WA                       | <b>Ticket No.</b>    | S18615             |
| <b>Client Address:</b>        | -                                    | <b>Report No.</b>    | WG25.15382_1_PI    |
| <b>Project:</b>               | Proposed Industrial Park             | <b>Sample No.</b>    | WG25.15382         |
| <b>Location:</b>              | Lot 2010 Giorgi Road, Picon East, WA | <b>Date Sampled:</b> | 26/08 - 27/08/2025 |
| <b>Sample Identification:</b> | TP14 (0.8m)                          | <b>Date Tested:</b>  | 16/09/225          |

**TEST RESULTS - Consistency Limits (Casagrande)**

**Sampling Method:**

**Sampled by Client, Tested as Received**

**History of Sample:**

**Oven Dried <50°C**

**Method of Preparation:**

**Dry Sieved**

**AS 1289.3.1.1                      Liquid Limit (%)                      34**

**AS 1289.3.2.1                      Plastic Limit (%)                      18**

**AS 1289.3.3.1                      Plasticity Index (%)                      16**

**AS 1289.3.4.1                      Linear Shrinkage (%)                      5.0**

**AS 1289.3.4.1                      Length of Mould (mm)                      250**

**AS 1289.3.4.1                      Condition of Dry Specimen:                      Cracked**

**Comments:**

**Approved Signatory:**

**Name:** Danielle Reynolds

**Date:** 17/September/2025



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# WESTERN GEOTECHNICAL

& Laboratory Services

SOIL | AGGREGATE | CONCRETE | CRUSHING

## TEST REPORT - AS 1289.3.1.2, 3.2.1, 3.3.1 & 3.4.1

|                               |                                      |                      |                    |
|-------------------------------|--------------------------------------|----------------------|--------------------|
| <b>Client:</b>                | Development WA                       | <b>Ticket No.</b>    | S18615             |
| <b>Client Address:</b>        | -                                    | <b>Report No.</b>    | WG25.15389_1_PI    |
| <b>Project:</b>               | Proposed Industrial Park             | <b>Sample No.</b>    | WG25.15389         |
| <b>Location:</b>              | Lot 2010 Giorgi Road, Picon East, WA | <b>Date Sampled:</b> | 26/08 - 27/08/2025 |
| <b>Sample Identification:</b> | TP14 (2.5m)                          | <b>Date Tested:</b>  | 18/09/2025         |

## TEST RESULTS - Consistency Limits (Casagrande)

**Sampling Method:** Sampled by Client, Tested as Received  
**History of Sample:** Oven Dried <50°C  
**Method of Preparation:** Dry Sieved

|                      |                                  |               |
|----------------------|----------------------------------|---------------|
| <b>AS 1289.3.1.2</b> | <b>Liquid Limit (%)</b>          | <b>72</b>     |
| <b>AS 1289.3.2.1</b> | <b>Plastic Limit (%)</b>         | <b>33</b>     |
| <b>AS 1289.3.3.1</b> | <b>Plasticity Index (%)</b>      | <b>39</b>     |
| <b>AS 1289.3.4.1</b> | <b>Linear Shrinkage (%)</b>      | <b>16.5</b>   |
| <b>AS 1289.3.4.1</b> | <b>Length of Mould (mm)</b>      | <b>250</b>    |
| <b>AS 1289.3.4.1</b> | <b>Condition of Dry Specimen</b> | <b>Curled</b> |

Approved Signatory:

**Name:** Danielle Reynolds

**Date:** 19/September/2025



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SOIL | AGGREGATE | CONCRETE | CRUSHING

**TEST REPORT - AS 1289.7.1.1**

|                               |                                      |                      |                    |
|-------------------------------|--------------------------------------|----------------------|--------------------|
| <b>Client:</b>                | Development WA                       | <b>Ticket No.</b>    | S18615             |
| <b>Client Address:</b>        | -                                    | <b>Report No.</b>    | WG25.15383_1_SSI   |
| <b>Project:</b>               | Proposed Industrial Park             | <b>Sample No.</b>    | WG25.15383         |
| <b>Location:</b>              | Lot 2010 Giorgi Road, Picon East, WA | <b>Date Sampled:</b> | 26/08 - 27/08/2025 |
| <b>Sample Identification:</b> | TP18 (0.7-1.15m)                     | <b>Date Tested:</b>  | 12/09 - 15/09/2025 |

**TEST RESULTS - SHRINK SWELL INDEX**

**Sampling Method:**

**Sampled by Client, Tested as Received**

**Material Description:**

**Sandy Clay with Gravel**

| SWELL SPECIMEN                     |      |
|------------------------------------|------|
| Moisture Content Initial (%):      | 24.7 |
| Dry Density - Initial ( $t/m^3$ ): | 1.50 |
| Moisture Content Final (%):        | 33.7 |
| Estimated Inert Inclusions (%):    | 16   |

| SHRINK SPECIMEN               |        |
|-------------------------------|--------|
| Moisture Content Initial (%): | 27.9   |
| Extent of Crumbling:          | Nil    |
| Length/Diameter Ratio:        | 2.1    |
| Extent of Cracking:           | Slight |

**SHRINK SWELL INDEX**

**Shrink Swell Index ( $I_{ss}$ )**

**1.0**

**Comments:**

**Approved Signatory:**

**Name:** Cody O'Neill

**Date:** 24/September/2025

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SOIL | AGGREGATE | CONCRETE | CRUSHING

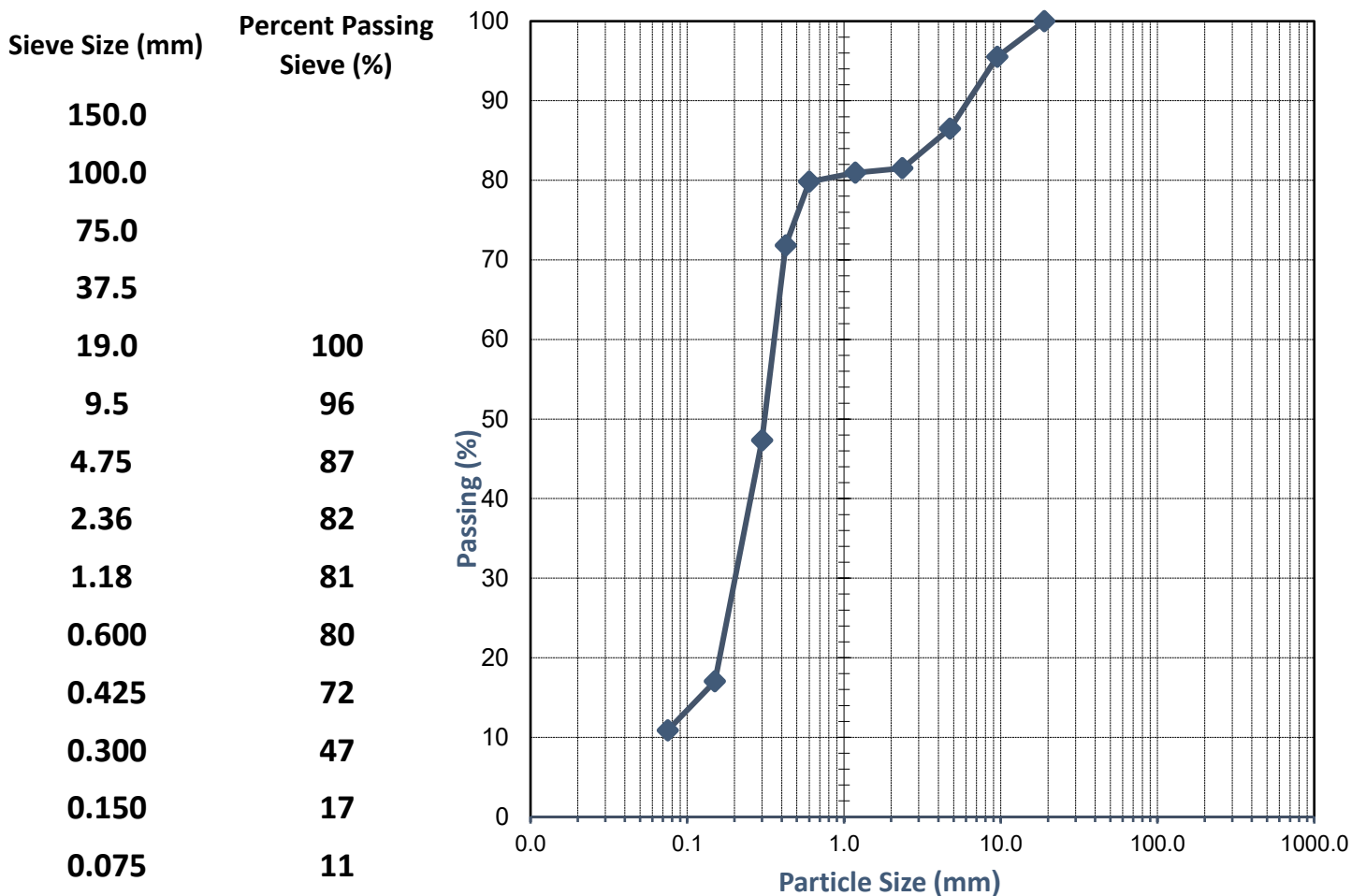
**TEST REPORT - AS 1289.3.6.1**

|                               |                                      |                      |                    |
|-------------------------------|--------------------------------------|----------------------|--------------------|
| <b>Client:</b>                | Development WA                       | <b>Ticket No.</b>    | S18615             |
| <b>Client Address:</b>        | -                                    | <b>Report No.</b>    | WG25.15384_1_PSD   |
| <b>Project:</b>               | Proposed Industrial Park             | <b>Sample No.</b>    | WG25.15384         |
| <b>Location:</b>              | Lot 2010 Giorgi Road, Picon East, WA | <b>Date Sampled:</b> | 26/08 - 27/08/2025 |
| <b>Sample Identification:</b> | TP18 (1.0m)                          | <b>Date Tested:</b>  | 15/09 - 16/09/2025 |

**TEST RESULTS - Particle Size Distribution of Soil**

**Sampling Method:**

**Sampled by Client, Tested as Received**



**Comments:**

**Approved Signatory:**

**Name:** Connor Budimir

**Date:** 16/September/2025



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SOIL | AGGREGATE | CONCRETE | CRUSHING

**TEST REPORT - AS 1289.3.1.1, 3.2.1, 3.3.1 & 3.4.1**

|                               |                                      |                      |                    |
|-------------------------------|--------------------------------------|----------------------|--------------------|
| <b>Client:</b>                | Development WA                       | <b>Ticket No.</b>    | S18615             |
| <b>Client Address:</b>        | -                                    | <b>Report No.</b>    | WG25.15384_1_PI    |
| <b>Project:</b>               | Proposed Industrial Park             | <b>Sample No.</b>    | WG25.15384         |
| <b>Location:</b>              | Lot 2010 Giorgi Road, Picon East, WA | <b>Date Sampled:</b> | 26/08 - 27/08/2025 |
| <b>Sample Identification:</b> | TP18 (1.0m)                          | <b>Date Tested:</b>  | 17/09/2025         |

**TEST RESULTS - Consistency Limits (Casagrande)**

**Sampling Method:**

**Sampled by Client, Tested as Received**

**History of Sample:**

**Oven Dried <50°C**

**Method of Preparation:**

**Dry Sieved**

|                      |                                   |            |
|----------------------|-----------------------------------|------------|
| <b>AS 1289.3.1.1</b> | <b>Liquid Limit (%)</b>           | <b>28</b>  |
| <b>AS 1289.3.2.1</b> | <b>Plastic Limit (%)</b>          | <b>23</b>  |
| <b>AS 1289.3.3.1</b> | <b>Plasticity Index (%)</b>       | <b>5</b>   |
| <b>AS 1289.3.4.1</b> | <b>Linear Shrinkage (%)</b>       | <b>1.5</b> |
| <b>AS 1289.3.4.1</b> | <b>Length of Mould (mm)</b>       | <b>250</b> |
| <b>AS 1289.3.4.1</b> | <b>Condition of Dry Specimen:</b> | <b>-</b>   |

**Comments:**

**Approved Signatory:**

**Name:** Danielle Reynolds

**Date:** 18/September/2025



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SOIL | AGGREGATE | CONCRETE | CRUSHING

**TEST REPORT - AS 1289.7.1.1**

|                               |                                      |                      |                    |
|-------------------------------|--------------------------------------|----------------------|--------------------|
| <b>Client:</b>                | Development WA                       | <b>Ticket No.</b>    | S18615             |
| <b>Client Address:</b>        | -                                    | <b>Report No.</b>    | WG25.15385_1_SSI   |
| <b>Project:</b>               | Proposed Industrial Park             | <b>Sample No.</b>    | WG25.15385         |
| <b>Location:</b>              | Lot 2010 Giorgi Road, Picon East, WA | <b>Date Sampled:</b> | 26/08 - 27/08/2025 |
| <b>Sample Identification:</b> | TP19 (0.7-1.15m)                     | <b>Date Tested:</b>  | 12/09 - 15/09/2025 |

**TEST RESULTS - SHRINK SWELL INDEX**

**Sampling Method:**

**Sampled by Client, Tested as Received**

**Material Description:**

**Sandy Clay trace Gravel**

| SWELL SPECIMEN                            |      |
|-------------------------------------------|------|
| Moisture Content Initial (%):             | 19.0 |
| Dry Density - Initial ( $\text{t/m}^3$ ): | 1.65 |
| Moisture Content Final (%):               | 24.9 |
| Estimated Inert Inclusions (%):           | 6    |

| SHRINK SPECIMEN               |      |
|-------------------------------|------|
| Moisture Content Initial (%): | 20.7 |
| Extent of Crumbling:          | Nil  |
| Length/Diameter Ratio:        | 2.2  |
| Extent of Cracking:           | Nil  |

**SHRINK SWELL INDEX**

**Shrink Swell Index ( $I_{ss}$ )**

**1.2**

**Comments:**

**Approved Signatory:**

**Name:** Cody O'Neill

**Date:** 24/September/2025

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SOIL | AGGREGATE | CONCRETE | CRUSHING

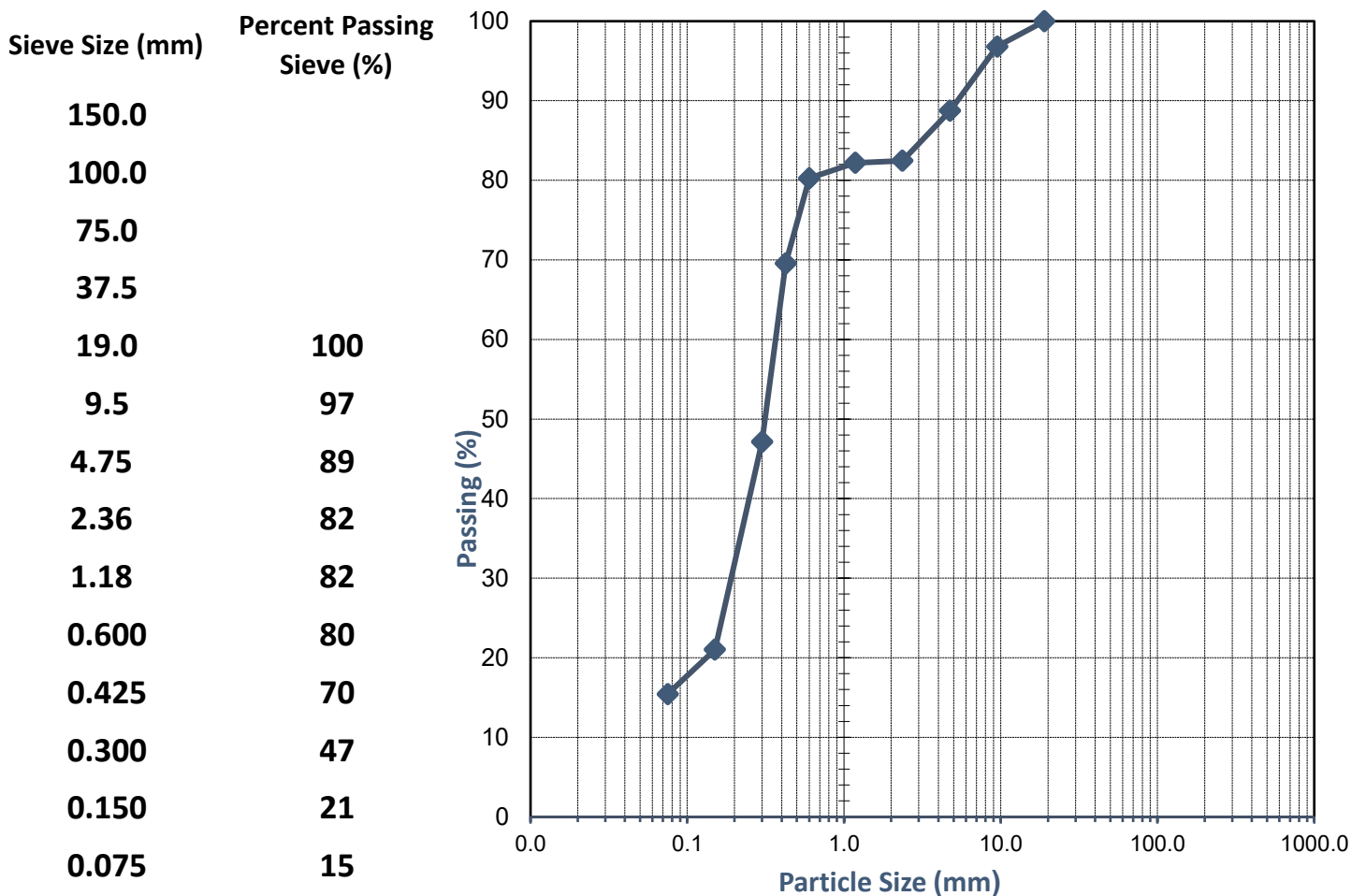
**TEST REPORT - AS 1289.3.6.1**

|                               |                                       |                      |                    |
|-------------------------------|---------------------------------------|----------------------|--------------------|
| <b>Client:</b>                | Development WA                        | <b>Ticket No.</b>    | S18818             |
| <b>Client Address:</b>        | -                                     | <b>Report No.</b>    | WG25.16472_1_PSD   |
| <b>Project:</b>               | Proposed Industrial Park              | <b>Sample No.</b>    | WG25.16472         |
| <b>Location:</b>              | Lot 2010 Giorgi Road, Picton East, WA | <b>Date Sampled:</b> | 26/08 - 27/08/2025 |
| <b>Sample Identification:</b> | TP19 (1.0m)                           | <b>Date Tested:</b>  | 02/10 - 03/10/2025 |

**TEST RESULTS - Particle Size Distribution of Soil**

**Sampling Method:**

**Sampled by Client, Tested as Received**



**Comments:**

**Approved Signatory:**

**Name:** Cody O'Neill

**Date:** 03/October/2025



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SOIL | AGGREGATE | CONCRETE | CRUSHING

**TEST REPORT - AS 1289.3.1.1, 3.2.1, 3.3.1 & 3.4.1**

|                               |                                       |                      |                    |
|-------------------------------|---------------------------------------|----------------------|--------------------|
| <b>Client:</b>                | Development WA                        | <b>Ticket No.</b>    | S18818             |
| <b>Client Address:</b>        | -                                     | <b>Report No.</b>    | WG25.16472_1_PI    |
| <b>Project:</b>               | Proposed Industrial Park              | <b>Sample No.</b>    | WG25.16472         |
| <b>Location:</b>              | Lot 2010 Giorgi Road, Picton East, WA | <b>Date Sampled:</b> | 26/08 - 27/08/2025 |
| <b>Sample Identification:</b> | TP19 (1.0m)                           | <b>Date Tested:</b>  | 6/10/2025          |

**TEST RESULTS - Consistency Limits (Casagrande)**

**Sampling Method:**

**Sampled by Client, Tested as Received**

**History of Sample:**

**Oven Dried <50°C**

**Method of Preparation:**

**Dry Sieved**

**AS 1289.3.1.1                      Liquid Limit (%)                      36**

**AS 1289.3.2.1                      Plastic Limit (%)                      17**

**AS 1289.3.3.1                      Plasticity Index (%)                      19**

**AS 1289.3.4.1                      Linear Shrinkage (%)                      5.0**

**AS 1289.3.4.1                      Length of Mould (mm)                      250**

**AS 1289.3.4.1                      Condition of Dry Specimen:                      Curled**

**Comments:**

**Approved Signatory:**

*Daniel Telo*

**Name:** Daniel Telo

**Date:** 07/October/2025



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SOIL | AGGREGATE | CONCRETE | CRUSHING

**TEST REPORT - AS 1289.5.2.1**

|                               |                                       |                      |                    |
|-------------------------------|---------------------------------------|----------------------|--------------------|
| <b>Client:</b>                | Development WA                        | <b>Ticket No.</b>    | S18818             |
| <b>Client Address:</b>        | -                                     | <b>Report No.</b>    | WG25.16472_1_MMDD  |
| <b>Project:</b>               | Proposed Industrial Park              | <b>Sample No.</b>    | WG25.16472         |
| <b>Location:</b>              | Lot 2010 Giorgi Road, Picton East, WA | <b>Date Sampled:</b> | 26/08 - 27/08/2025 |
| <b>Sample Identification:</b> | TP19 (1.0m)                           | <b>Date Tested:</b>  | 3/10/2025          |

**TEST RESULTS - Modified Maximum Dry Density**

**Sampling Method:**

Sampled by Client, Tested as Received

**Sample Curing Time (Hours):**

>48

**Method used to Determine Liquid Limit:**

Visual / Tactile Assessment by Competent Technician

**Material + 19.0mm (%):**

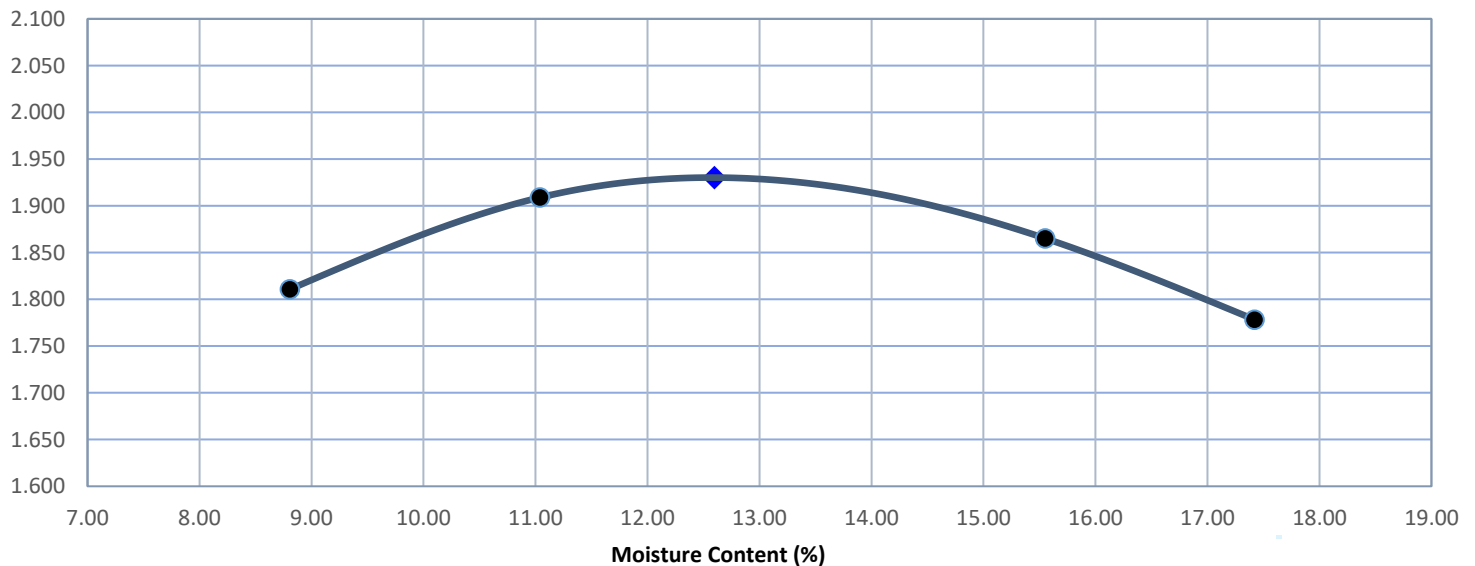
0

**Material + 37.5mm (%):**

-

|                                      |              |              |              |              |  |
|--------------------------------------|--------------|--------------|--------------|--------------|--|
| <b>Moisture Content (%)</b>          | <b>8.8</b>   | <b>11.0</b>  | <b>15.6</b>  | <b>17.4</b>  |  |
| <b>Dry Density (t/m<sup>3</sup>)</b> | <b>1.811</b> | <b>1.909</b> | <b>1.865</b> | <b>1.778</b> |  |

Dry Density (t/m<sup>3</sup>)



**Modified Maximum Dry Density (t/m<sup>3</sup>)**

**1.93**

**Optimum Moisture Content (%)**

**12.5**

**Comments:**

**Approved Signatory:**

**Name:** Danielle Reynolds

**Date:** 06/October/2025



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SOIL | AGGREGATE | CONCRETE | CRUSHING

TEST REPORT - AS 1289.6.1.1

|                        |                                       |               |                    |
|------------------------|---------------------------------------|---------------|--------------------|
| Client:                | Development WA                        | Ticket No.    | S18818             |
| Client Address:        | -                                     | Report No.    | WG25.16472_1_SCBR  |
| Project:               | Proposed Industrial Park              | Sample No.    | WG25.16472         |
| Location:              | Lot 2010 Giorgi Road, Picton East, WA | Date Sampled: | 26/08 - 27/08/2025 |
| Sample Identification: | TP19 (1.0m)                           | Date Tested:  | 03/10 - 08/10/25   |

TEST RESULTS - CALIFORNIA BEARING RATIO

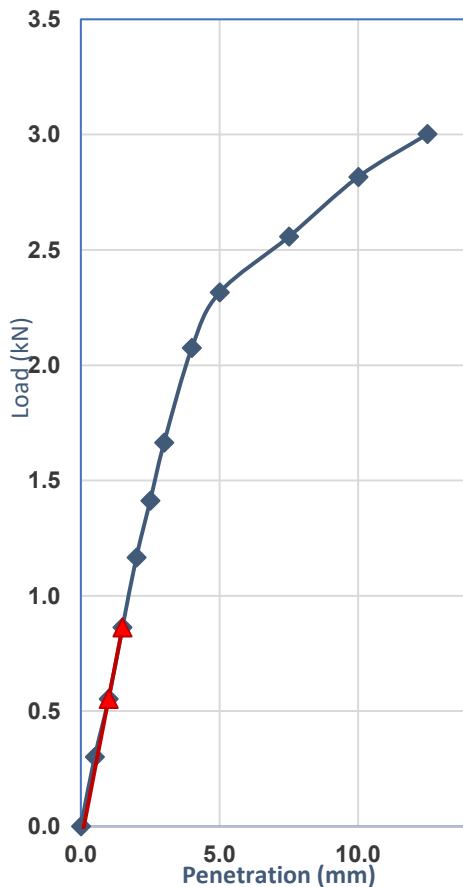
Sample Description:

Sandy Clay trace Gravel

Sampling Method:

Sampled by Client, Tested as Received

Load Penetration Curve



Compaction Details

|                                         |               |                           |          |
|-----------------------------------------|---------------|---------------------------|----------|
| Compaction Method                       | AS 1289.5.2.1 | Hammer Type               | Modified |
| Plasticity Determined by                | Estimated     | Curing Time (Hours)       | >2       |
| % Retained 19.0mm                       | 0             | Excluded/Replaced         | Excluded |
| Maximum Dry Density (t/m <sup>3</sup> ) | 1.93          | Optimum Moisture (%)      | 12.5     |
| Target Dry Density Ratio (%)            | 95            | Target Moisture Ratio (%) | 100      |

Specimen Conditions At Compaction

|                                 |      |                      |      |
|---------------------------------|------|----------------------|------|
| Dry Density (t/m <sup>3</sup> ) | 1.84 | Moisture Content (%) | 12.3 |
| Density Ratio (%)               | 95.5 | Moisture Ratio (%)   | 97.5 |

Specimen Conditions After Soak

|                                 |        |                       |       |
|---------------------------------|--------|-----------------------|-------|
| Soaked or Unsoaked              | Soaked | Soaking Period (days) | 4     |
| Surcharges Applied (kg)         | 4.50   | Measured Swell (%)    | 0.5   |
| Dry Density (t/m <sup>3</sup> ) | 1.84   | Dry Density Ratio (%) | 95.0  |
| Moisture Content (%)            | 17.9   | Moisture Ratio (%)    | 142.0 |

Specimen Conditions After Test

|                       |      |                     |      |
|-----------------------|------|---------------------|------|
| Top 30mm Moisture (%) | 18.0 | Remaining Depth (%) | 16.7 |
|-----------------------|------|---------------------|------|

Correction applied to Penetration: 0.1mm

Determined at a Penetration of: 5.0mm

California Bearing Ratio (CBR): 12%

Comments:

Approved Signatory:

Name: Cody O'Neill

Date: 10/October/2025



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SOIL | AGGREGATE | CONCRETE | CRUSHING

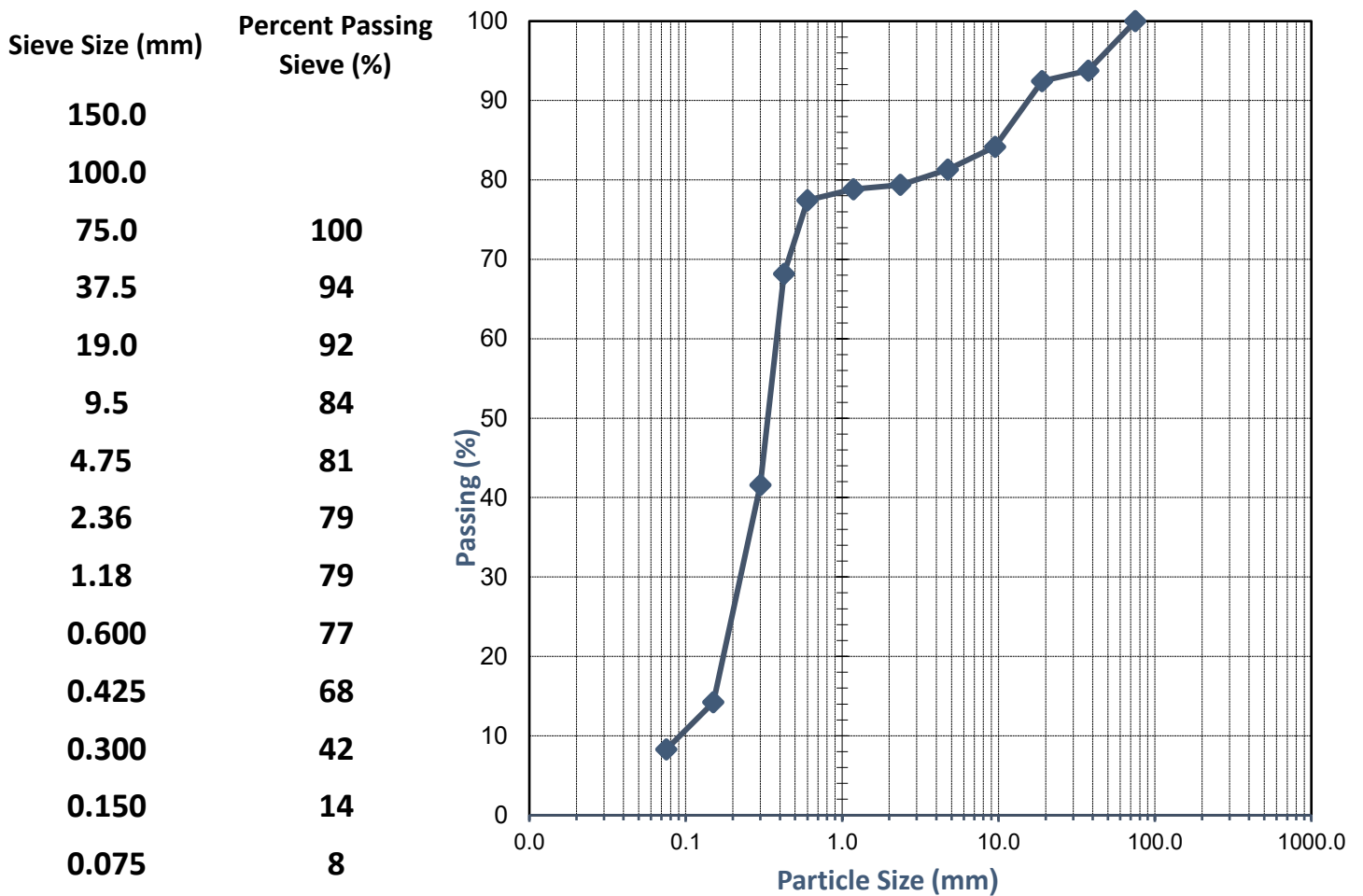
**TEST REPORT - AS 1289.3.6.1**

|                               |                                      |                      |                    |
|-------------------------------|--------------------------------------|----------------------|--------------------|
| <b>Client:</b>                | Development WA                       | <b>Ticket No.</b>    | S18615             |
| <b>Client Address:</b>        | -                                    | <b>Report No.</b>    | WG25.15386_1_PSD   |
| <b>Project:</b>               | Proposed Industrial Park             | <b>Sample No.</b>    | WG25.15386         |
| <b>Location:</b>              | Lot 2010 Giorgi Road, Picon East, WA | <b>Date Sampled:</b> | 26/08 - 27/08/2025 |
| <b>Sample Identification:</b> | TP20 (0.8m)                          | <b>Date Tested:</b>  | 15/09 - 17/09/2025 |

**TEST RESULTS - Particle Size Distribution of Soil**

**Sampling Method:**

**Sampled by Client, Tested as Received**



**Comments:**

**Approved Signatory:**

**Name:** Courtney Watt

**Date:** 18/September/2025



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SOIL | AGGREGATE | CONCRETE | CRUSHING

**TEST REPORT - AS 1289.3.1.1, 3.2.1, 3.3.1 & 3.4.1**

|                               |                                      |                      |                    |
|-------------------------------|--------------------------------------|----------------------|--------------------|
| <b>Client:</b>                | Development WA                       | <b>Ticket No.</b>    | S18615             |
| <b>Client Address:</b>        | -                                    | <b>Report No.</b>    | WG25.15386_1_PI    |
| <b>Project:</b>               | Proposed Industrial Park             | <b>Sample No.</b>    | WG25.15386         |
| <b>Location:</b>              | Lot 2010 Giorgi Road, Picon East, WA | <b>Date Sampled:</b> | 26/08 - 27/08/2025 |
| <b>Sample Identification:</b> | TP20 (0.8m)                          | <b>Date Tested:</b>  | 17/09/2025         |

**TEST RESULTS - Consistency Limits (Casagrande)**

**Sampling Method:**

**Sampled by Client, Tested as Received**

**History of Sample:**

**Oven Dried <50°C**

**Method of Preparation:**

**Dry Sieved**

|                      |                                   |                       |
|----------------------|-----------------------------------|-----------------------|
| <b>AS 1289.3.1.1</b> | <b>Liquid Limit (%)</b>           | <b>Not Obtainable</b> |
| <b>AS 1289.3.2.1</b> | <b>Plastic Limit (%)</b>          | <b>Non-Plastic</b>    |
| <b>AS 1289.3.3.1</b> | <b>Plasticity Index (%)</b>       | <b>Non-Plastic</b>    |
| <b>AS 1289.3.4.1</b> | <b>Linear Shrinkage (%)</b>       | <b>0.5</b>            |
| <b>AS 1289.3.4.1</b> | <b>Length of Mould (mm)</b>       | <b>250</b>            |
| <b>AS 1289.3.4.1</b> | <b>Condition of Dry Specimen:</b> | <b>-</b>              |

**Comments:**

**Approved Signatory:**

**Name:** Danielle Reynolds

**Date:** 18/September/2025



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SOIL | AGGREGATE | CONCRETE | CRUSHING

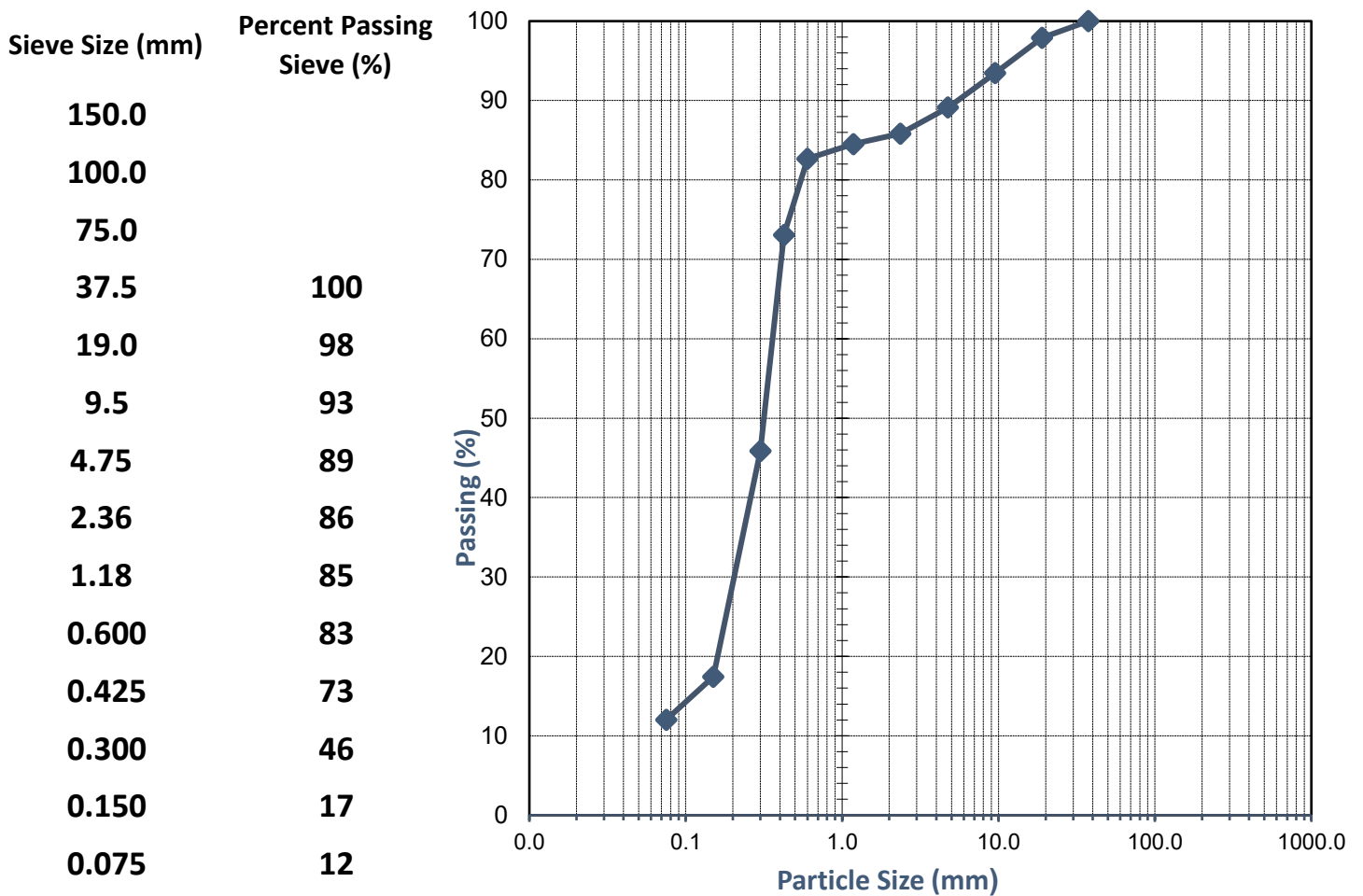
**TEST REPORT - AS 1289.3.6.1**

|                               |                                       |                      |                    |
|-------------------------------|---------------------------------------|----------------------|--------------------|
| <b>Client:</b>                | Development WA                        | <b>Ticket No.</b>    | S18818             |
| <b>Client Address:</b>        | -                                     | <b>Report No.</b>    | WG25.16473_1_PSD   |
| <b>Project:</b>               | Proposed Industrial Park              | <b>Sample No.</b>    | WG25.16473         |
| <b>Location:</b>              | Lot 2010 Giorgi Road, Picton East, WA | <b>Date Sampled:</b> | 26/08 - 27/08/2025 |
| <b>Sample Identification:</b> | TP24 (0.8-1.0m)                       | <b>Date Tested:</b>  | 02/10 - 04/10/2025 |

**TEST RESULTS - Particle Size Distribution of Soil**

**Sampling Method:**

**Sampled by Client, Tested as Received**



**Comments:**

**Approved Signatory:**

**Name:** Danielle Reynolds

**Date:** 06/October/2025



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SOIL | AGGREGATE | CONCRETE | CRUSHING

**TEST REPORT - AS 1289.3.1.1, 3.2.1, 3.3.1 & 3.4.1**

|                               |                                       |                      |                    |
|-------------------------------|---------------------------------------|----------------------|--------------------|
| <b>Client:</b>                | Development WA                        | <b>Ticket No.</b>    | S18818             |
| <b>Client Address:</b>        | -                                     | <b>Report No.</b>    | WG25.16473_1_PI    |
| <b>Project:</b>               | Proposed Industrial Park              | <b>Sample No.</b>    | WG25.16473         |
| <b>Location:</b>              | Lot 2010 Giorgi Road, Picton East, WA | <b>Date Sampled:</b> | 26/08 - 27/08/2025 |
| <b>Sample Identification:</b> | TP24 (0.8-1.0m)                       | <b>Date Tested:</b>  | 6/10/2025          |

**TEST RESULTS - Consistency Limits (Casagrande)**

**Sampling Method:**

**Sampled by Client, Tested as Received**

**History of Sample:**

**Oven Dried <50°C**

**Method of Preparation:**

**Dry Sieved**

|                      |                                   |            |
|----------------------|-----------------------------------|------------|
| <b>AS 1289.3.1.1</b> | <b>Liquid Limit (%)</b>           | <b>29</b>  |
| <b>AS 1289.3.2.1</b> | <b>Plastic Limit (%)</b>          | <b>19</b>  |
| <b>AS 1289.3.3.1</b> | <b>Plasticity Index (%)</b>       | <b>10</b>  |
| <b>AS 1289.3.4.1</b> | <b>Linear Shrinkage (%)</b>       | <b>4.0</b> |
| <b>AS 1289.3.4.1</b> | <b>Length of Mould (mm)</b>       | <b>125</b> |
| <b>AS 1289.3.4.1</b> | <b>Condition of Dry Specimen:</b> | <b>-</b>   |

**Comments:**

**Approved Signatory:**

*Daniel Telo*

**Name:** Daniel Telo

**Date:** 07/October/2025



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SOIL | AGGREGATE | CONCRETE | CRUSHING

TEST REPORT - AS 1289.5.2.1

|                        |                                       |               |                    |
|------------------------|---------------------------------------|---------------|--------------------|
| Client:                | Development WA                        | Ticket No.    | S18818             |
| Client Address:        | -                                     | Report No.    | WG25.16473_1_MMDD  |
| Project:               | Proposed Industrial Park              | Sample No.    | WG25.16473         |
| Location:              | Lot 2010 Giorgi Road, Picton East, WA | Date Sampled: | 26/08 - 27/08/2025 |
| Sample Identification: | TP24 (0.8-1.0m)                       | Date Tested:  | 2/10/2025          |

**TEST RESULTS - Modified Maximum Dry Density**

Sampling Method:

Sampled by Client, Tested as Received

Sample Curing Time (Hours):

>24

Method used to Determine Liquid Limit:

Visual / Tactile Assessment by Competent Technician

Material + 19.0mm (%):

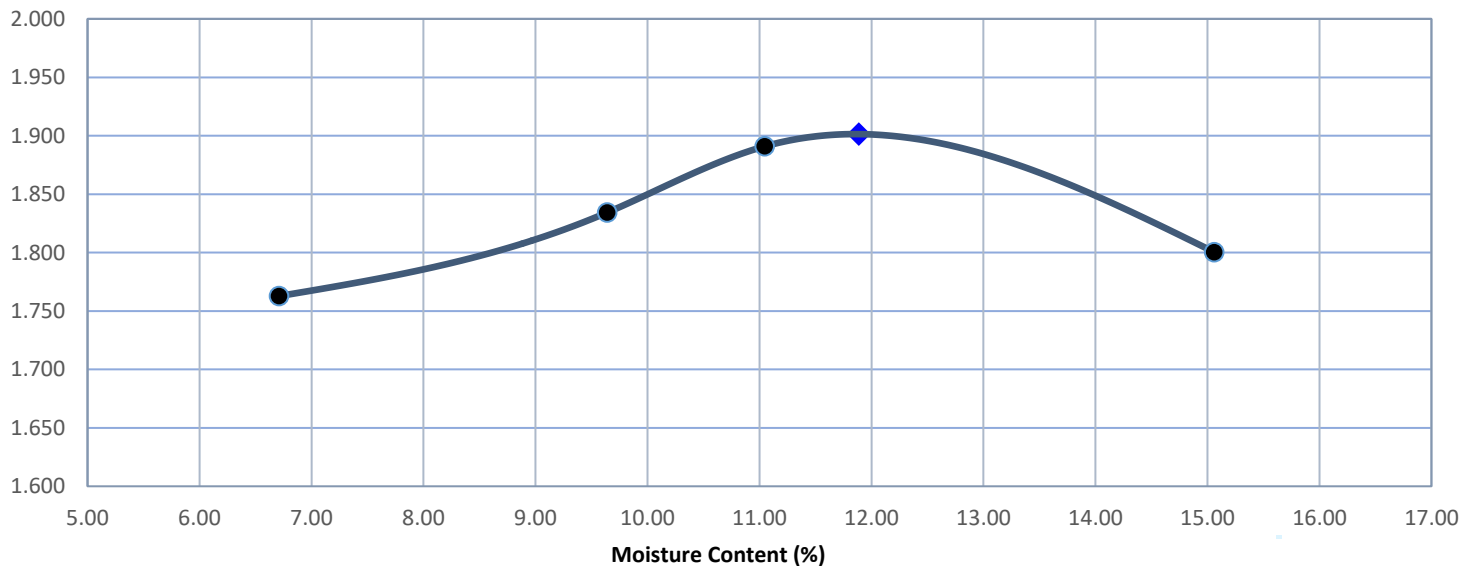
0

Material + 37.5mm (%):

-

|                                 |       |       |       |       |  |
|---------------------------------|-------|-------|-------|-------|--|
| Moisture Content (%)            | 6.7   | 9.6   | 11.0  | 15.1  |  |
| Dry Density (t/m <sup>3</sup> ) | 1.763 | 1.834 | 1.891 | 1.800 |  |

Dry Density (t/m<sup>3</sup>)



**Modified Maximum Dry Density (t/m<sup>3</sup>)**

**1.90**

**Optimum Moisture Content (%)**

**12.0**

Comments:

Approved Signatory:

Name: Danielle Reynolds

Date: 03/October/2025



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SOIL | AGGREGATE | CONCRETE | CRUSHING

TEST REPORT - AS 1289.6.1.1

|                        |                                       |               |                    |
|------------------------|---------------------------------------|---------------|--------------------|
| Client:                | Development WA                        | Ticket No.    | S18818             |
| Client Address:        | -                                     | Report No.    | WG25.16473_1_SCBR  |
| Project:               | Proposed Industrial Park              | Sample No.    | WG25.16473         |
| Location:              | Lot 2010 Giorgi Road, Picton East, WA | Date Sampled: | 26/08 - 27/08/2025 |
| Sample Identification: | TP24 (0.8-1.0m)                       | Date Tested:  | 2/10 - 8/10/25     |

TEST RESULTS - CALIFORNIA BEARING RATIO

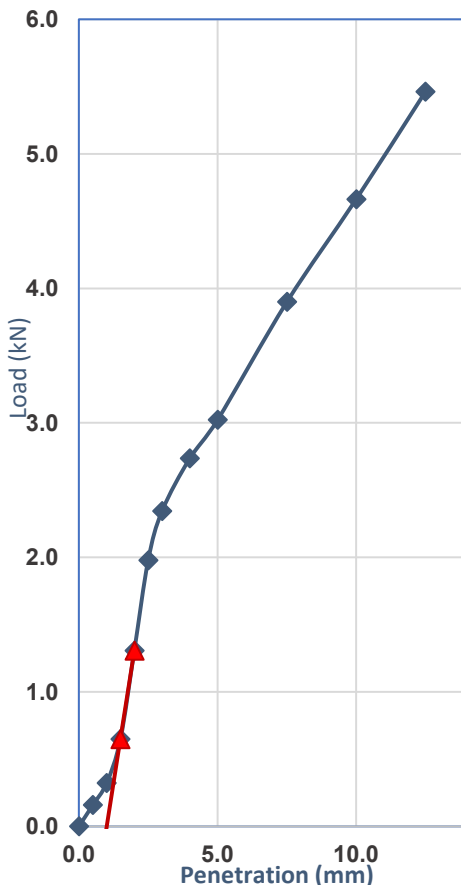
Sample Description:

Silty Sand trace Gravel

Sampling Method:

Sampled by Client, Tested as Received

Load Penetration Curve



Compaction Details

|                                         |               |                           |          |
|-----------------------------------------|---------------|---------------------------|----------|
| Compaction Method                       | AS 1289.5.2.1 | Hammer Type               | Modified |
| Plasticity Determined by                | Estimated     | Curing Time (Hours)       | >24      |
| % Retained 19.0mm                       | 0             | Excluded/Replaced         | Excluded |
| Maximum Dry Density (t/m <sup>3</sup> ) | 1.90          | Optimum Moisture (%)      | 12.0     |
| Target Dry Density Ratio (%)            | 95            | Target Moisture Ratio (%) | 100      |

Specimen Conditions At Compaction

|                                 |      |                      |      |
|---------------------------------|------|----------------------|------|
| Dry Density (t/m <sup>3</sup> ) | 1.82 | Moisture Content (%) | 11.4 |
| Density Ratio (%)               | 96.0 | Moisture Ratio (%)   | 96.0 |

Specimen Conditions After Soak

|                                 |        |                       |       |
|---------------------------------|--------|-----------------------|-------|
| Soaked or Unsoaked              | Soaked | Soaking Period (days) | 4     |
| Surcharges Applied (kg)         | 4.50   | Measured Swell (%)    | 0.0   |
| Dry Density (t/m <sup>3</sup> ) | 1.82   | Dry Density Ratio (%) | 95.5  |
| Moisture Content (%)            | 19.8   | Moisture Ratio (%)    | 166.5 |

Specimen Conditions After Test

|                       |      |                     |      |
|-----------------------|------|---------------------|------|
| Top 30mm Moisture (%) | 17.1 | Remaining Depth (%) | 18.1 |
|-----------------------|------|---------------------|------|

Correction applied to Penetration: 1mm

Determined at a Penetration of: 2.5mm

California Bearing Ratio (CBR): 19%

Comments:

Approved Signatory:

Name: Cody O'Neill

Date: 10/October/2025



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SOIL | AGGREGATE | CONCRETE | CRUSHING

**TEST REPORT - AS 1289.3.8.1**

|                               |                                      |                      |                    |
|-------------------------------|--------------------------------------|----------------------|--------------------|
| <b>Client:</b>                | Development WA                       | <b>Ticket No.</b>    | S18615             |
| <b>Client Address:</b>        | -                                    | <b>Report No.</b>    | WG25.15387_1_ECN   |
| <b>Project:</b>               | Proposed Industrial Park             | <b>Sample No.</b>    | WG25.15387         |
| <b>Location:</b>              | Lot 2010 Giorgi Road, Picon East, WA | <b>Date Sampled:</b> | 26/08 - 27/08/2025 |
| <b>Sample Identification:</b> | TP28 (0.6m)                          | <b>Date Tested:</b>  | 15/09/2025         |

**TEST RESULTS - Emerson Class Number**

**Sampling Method:**

**Sampled by Client, Tested as Received**

**Source of Material:**

**Not Specified**

**Soil Description:**

**Clayey Sand**

**Water Used:**

**Distilled**

**EMERSON CLASS  
NUMBER**

**5**

**Comments:**

**Approved Signatory:**

**Name:** Madhav Basnet

**Date:** 15/September/2025



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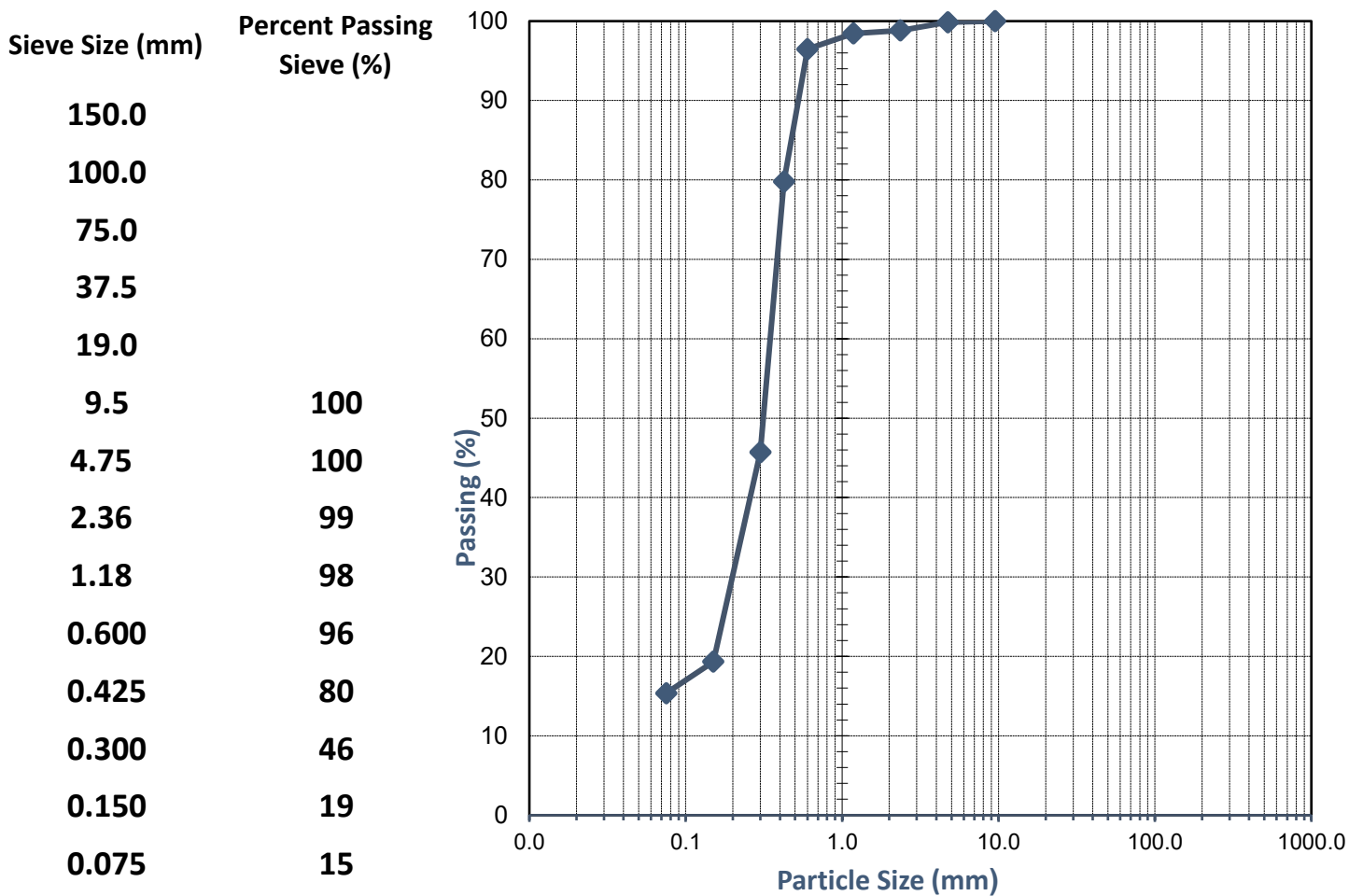
**TEST REPORT - AS 1289.3.6.1**

|                               |                                      |                      |                    |
|-------------------------------|--------------------------------------|----------------------|--------------------|
| <b>Client:</b>                | Development WA                       | <b>Ticket No.</b>    | S18615             |
| <b>Client Address:</b>        | -                                    | <b>Report No.</b>    | WG25.15387_1_PSD   |
| <b>Project:</b>               | Proposed Industrial Park             | <b>Sample No.</b>    | WG25.15387         |
| <b>Location:</b>              | Lot 2010 Giorgi Road, Picon East, WA | <b>Date Sampled:</b> | 26/08 - 27/08/2025 |
| <b>Sample Identification:</b> | TP28 (0.6m)                          | <b>Date Tested:</b>  | 15/09 - 16/09/2025 |

**TEST RESULTS - Particle Size Distribution of Soil**

**Sampling Method:**

**Sampled by Client, Tested as Received**



**Comments:**

**Approved Signatory:**

**Name:** Cody O'Neill

**Date:** 16/September/2025



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SOIL | AGGREGATE | CONCRETE | CRUSHING

**TEST REPORT - AS 1289.3.1.1, 3.2.1, 3.3.1 & 3.4.1**

|                               |                                      |                      |                    |
|-------------------------------|--------------------------------------|----------------------|--------------------|
| <b>Client:</b>                | Development WA                       | <b>Ticket No.</b>    | S18615             |
| <b>Client Address:</b>        | -                                    | <b>Report No.</b>    | WG25.15387_1_PI    |
| <b>Project:</b>               | Proposed Industrial Park             | <b>Sample No.</b>    | WG25.15387         |
| <b>Location:</b>              | Lot 2010 Giorgi Road, Picon East, WA | <b>Date Sampled:</b> | 26/08 - 27/08/2025 |
| <b>Sample Identification:</b> | TP28 (0.6m)                          | <b>Date Tested:</b>  | 17/09/2025         |

**TEST RESULTS - Consistency Limits (Casagrande)**

**Sampling Method:**

**Sampled by Client, Tested as Received**

**History of Sample:**

**Oven Dried <50°C**

**Method of Preparation:**

**Dry Sieved**

|                      |                             |            |
|----------------------|-----------------------------|------------|
| <b>AS 1289.3.1.1</b> | <b>Liquid Limit (%)</b>     | <b>33</b>  |
| <b>AS 1289.3.2.1</b> | <b>Plastic Limit (%)</b>    | <b>17</b>  |
| <b>AS 1289.3.3.1</b> | <b>Plasticity Index (%)</b> | <b>16</b>  |
| <b>AS 1289.3.4.1</b> | <b>Linear Shrinkage (%)</b> | <b>5.0</b> |

|                      |                                   |               |
|----------------------|-----------------------------------|---------------|
| <b>AS 1289.3.4.1</b> | <b>Length of Mould (mm)</b>       | <b>250</b>    |
| <b>AS 1289.3.4.1</b> | <b>Condition of Dry Specimen:</b> | <b>Curled</b> |

**Comments:**

**Approved Signatory:**

**Name:** Connor Budimir

**Date:** 18/September/2025



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SOIL | AGGREGATE | CONCRETE | CRUSHING

**TEST REPORT - AS 1289.7.1.1**

|                               |                                      |                      |                    |
|-------------------------------|--------------------------------------|----------------------|--------------------|
| <b>Client:</b>                | Development WA                       | <b>Ticket No.</b>    | S18615             |
| <b>Client Address:</b>        | -                                    | <b>Report No.</b>    | WG25.15388_1_SSI   |
| <b>Project:</b>               | Proposed Industrial Park             | <b>Sample No.</b>    | WG25.15388         |
| <b>Location:</b>              | Lot 2010 Giorgi Road, Picon East, WA | <b>Date Sampled:</b> | 26/08 - 27/08/2025 |
| <b>Sample Identification:</b> | TP28 (0.6-1.05m)                     | <b>Date Tested:</b>  | 12/09 15/09/2025   |

**TEST RESULTS - SHRINK SWELL INDEX**

**Sampling Method:**

**Sampled by Client, Tested as Received**

**Material Description:**

**Silty Sand with Gravel**

| SWELL SPECIMEN                            |      |
|-------------------------------------------|------|
| Moisture Content Initial (%):             | 20.8 |
| Dry Density - Initial ( $\text{t/m}^3$ ): | 1.59 |
| Moisture Content Final (%):               | 22.4 |
| Estimated Inert Inclusions (%):           | 9    |

| SHRINK SPECIMEN               |      |
|-------------------------------|------|
| Moisture Content Initial (%): | 22.1 |
| Extent of Crumbling:          | Nil  |
| Length/Diameter Ratio:        | 1.8  |
| Extent of Cracking:           | Nil  |

**SHRINK SWELL INDEX**

**Shrink Swell Index ( $I_{ss}$ )**

**0.5**

**Comments:**

**Approved Signatory:**

**Name:** Cody O'Neill

**Date:** 24/September/2025

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