

INFORMATION REGARDING ENVIRONMENTAL AUDIT REPORTS

August 2007

VICTORIA'S AUDIT SYSTEM

An environmental audit system has operated in Victoria since 1989. The *Environment Protection Act 1970* (the Act) provides for the appointment by the Environment Protection Authority (EPA Victoria) of environmental auditors and the conduct of independent, high quality and rigorous environmental audits.

An environmental audit is an assessment of the condition of the environment, or the nature and extent of harm (or risk of harm) posed by an industrial process or activity, waste, substance or noise. Environmental audit reports are prepared by EPA-appointed environmental auditors who are highly qualified and skilled individuals.

Under the Act, the function of an environmental auditor is to conduct environmental audits and prepare environmental audit reports. Where an environmental audit is conducted to determine the condition of a site or its suitability for certain uses, an environmental auditor may issue either a certificate or statement of environmental audit.

A certificate indicates that the auditor is of the opinion that the site is suitable for any beneficial use defined in the Act, whilst a statement indicates that there is some restriction on the use of the site.

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Web: www.epa.vic.gov.au/envaudit

Email: environmental.audit@epa.vic.gov.au

Executive Summary

Mr Timothy Kent Russell of Maple Auditing Pty Ltd (Maple), an Environmental Auditor (Contaminated Land) appointed pursuant to the Environment Protection Act 1970 (Section 53S, Part IXD), was requested by Mr Andrew Bromley of Steller 140 Pty Ltd on 21 September 2017 to undertake an Environmental Audit of the parcel of land located at 36-40 Graham Road, Highett, Victoria (the site). Steller 140 Pty Ltd (Steller) was the owner of the site at the time of audit commencement, however at the time of audit completion the site ownership had been transferred to Ryman Healthcare (Australia) No. 8 Pty Ltd (Ryman Healthcare).

Atma Environmental Pty Ltd (Atma) was engaged by Steller (and later by Ryman Healthcare) to conduct the environmental site assessment works in support of the Audit.

This report has been prepared in accordance with Section 53X of the Environment Protection Act and other Victorian Environment Protection Authority (EPA) guidelines and should be read in conjunction with the existing environmental assessment report(s). Further details pertaining to the site are provided in Executive Table 1 below.

Executive Table 1 Summary of Audit Information

Auditor	Timothy Kent Russell
Auditor account number	75649
Auditor appointment end date	28 March 2019 to 27 March 2024
Auditor's appointment category	Contaminated Land
Audit Type	53X
Date EPA notified of audit	22 / 12 / 2017
Audit service order number	8005639 (CARMS 75573-1)
Name of person requesting audit	Mr Andrew Bromley of Steller 140 Pty Ltd initially requested the Audit. Over the course of the audit, the site transferred ownership to Ryman Healthcare (Australia) No. 8 Pty Ltd. Mr Matt Deledio of Ryman Healthcare (Australia) No. 8 Pty Ltd requested the Audit following the transfer of ownership.
Relationship of person requesting audit to site	Mr Andrew Bromley of Steller 140 Pty Ltd was the representative of the former site owner. Mr Matt Deledio (Development Manager) is the representative of Ryman Healthcare (Australia) No. 8 Pty Ltd for the site.
Name of premises owner	Ryman Healthcare (Australia) No. 8 Pty Ltd
Date of auditor engagement	21 / 12 / 2017
Completion date of the audit	25/ 02 / 2020
Reason for Audit	Environmental Audit Overlay
Audit Categorisation	Risk
Environmental Segments	Air, Land, Groundwater, Surface water
If the audit was required by an EPA notice, licence or other,	N/A

please provide EPA reference number	
Current land use zoning	General Residential Zone (GRZ1)
EPA Region	Southern Metro
Municipality	Bayside City Council
Dominant Lot on title plan	Lot 2 on Plan of Subdivision 046820 (Volume 11155, Folio 441)
Additional Lot on title plan(s)	N/A
Site/Premises name	N/A
Building/complex sub-unit/lot No.	N/A
Street/Lot – Lower No.	36
Street/Lot – Upper No.	40
Street Name	Graham
Street type (road, court, etc.)	Road
Street suffix (North, South etc.)	N/A
Suburb	Highett
Postcode	3190
GIS Coordinate of Site centroid	GDA94 – Latitude/Longitude in decimal degrees
Latitude (GDA94)	-37.951642
Longitude (GDA94)	145.042330
Site area (in square metres)	10,735 m^2
Plan of site/premises showing the audit site boundary attached	Yes
Plan of site/premises showing the audit site boundary attached in a spatial data format	No
Members and categories of support team utilised	Jackie Wright (Human Toxicology, Human Health and Ecological Risk Assessment)
Further works or requirements	The site is considered to be conditionally suitable for the proposed mixed use (commercial, high-density residential and aged-care facility) land use subject to the conditions as detailed in the Statement of Environmental Audit. Groundwater must not be used for any beneficial use without prior testing and review of results by an environmental auditor (appointed under part IXD of the Environment Protection Act 1970) to confirm its suitability for that use. It may be extracted for the purpose of environmental monitoring or remediation. Groundwater monitoring must be undertaken in accordance with the Groundwater Quality Management Plan (GQMP) attached to

	the Statement of Environmental Audit in Appendix A of this report. An Asbestos Management Plan (AMP) has been developed for the site which includes a requirement to maintain a physical barrier along the northern and north-western boundaries, to prevent further pieces of asbestos containing materials contaminating the site from off-site sources. Further, the AMP also provides management procedures for construction and maintenance workers who may encounter incidental pieces of asbestos across the site during works. The AMP is attached to the Statement of Environmental Audit in Appendix A of this report.
Nature and extent of continuing risk	The site in its current condition does not preclude any beneficial uses of land in the context of unrestricted land use. Asbestos is noted to remain immediately off-site on the northern and north-western site boundary as a result of a former shared asbestos fence. Atma installed a barrier along the northern and north-western portion of the site to prevent re-contamination of the site by ACM from this former shared fence-line. Groundwater sampling and analysis conducted at the site identified the following: • elevated concentrations of copper, nickel, zinc, sodium, chloride and sulphate considered to be naturally occurring and therefore not pollution; and • elevated concentrations of beryllium, cobalt, lead, nitrate, nitrite, total nitrogen and 1,4 dichlorobenzene considered to be regionally occurring and not site sourced; and • elevated concentrations of nitrate, total nitrogen and vinyl chloride were considered to be site sourced pollution. Groundwater may not be extracted at the site without prior testing and review of results by an Environmental Auditor (appointed under part IXD of the Environment Protection Act 1970) to confirm its suitability for that use. It may be extracted for the purpose of environmental monitoring or remediation. Post completion date of the audit, the groundwater quality management plan (GQMP) formulated for the site and accepted by the environmental auditor must be implemented and maintained until such time as an environmental auditor confirms in writing that the monitoring and management requirements are no longer required, and this confirmation is advised in writing to EPA and the planning authority The site has been declared to be within a Groundwater Quality Restricted Use Zone (GQRUZ) (as per the EPA GQRUZ Map

<table>
<tr><td></td><td>attached to the Statement of Environmental Audit in Appendix A of this report).</td></tr>
<tr><td>Outcome of the audit</td><td>Statement of Environmental Audit</td></tr>
<tr><td>Has EPA determined CUTEP at this site?</td><td>No</td></tr>
<tr><td>Has the Auditor determined CUTEP at this site?</td><td>Yes – The Auditor has determined CUTEP at the site following written communication from EPA that an Auditor determined CUTEP (with EPA review of the proposed GQMP, GQRUZ and GQRUZ communications) was the appropriate mechanism for completion of the Audit.</td></tr>
<tr><td>Has a GQRUZ been identified at the site/beyond the site by EPA?</td><td>The EPA has declared that the site is within a GQRUZ.</td></tr>
<tr><td>Does NAPL remain at the site?</td><td>No</td></tr>
<tr><td>Please indicate which of the Protected Beneficial Uses of groundwater are precluded due to pollution</td><td>e.g. including site-sourced and regional pollution.
<table>
<tr><th>Protected Use</th><th>Precluded?</th></tr>
<tr><td>Water dependent ecosystems and species</td><td>Yes</td></tr>
<tr><td>Potable water supply (desirable)</td><td>Yes</td></tr>
<tr><td>Potable water supply (acceptable)</td><td>N/A</td></tr>
<tr><td>Potable mineral water supply</td><td>N/A</td></tr>
<tr><td>Agriculture and irrigation (irrigation)</td><td>Yes</td></tr>
<tr><td>Agriculture and irrigation (stock watering)</td><td>Yes</td></tr>
<tr><td>Industrial and commercial</td><td>Yes</td></tr>
<tr><td>Water-based recreation (primary contact recreation)</td><td>Yes</td></tr>
<tr><td>Traditional Owner cultural values</td><td>Yes</td></tr>
<tr><td>Cultural and spiritual values</td><td>Yes</td></tr>
<tr><td>Buildings and structures</td><td>No</td></tr>
<tr><td>Geothermal properties</td><td>N/A</td></tr>
</table></td></tr>
<tr><td>Historical land use</td><td>The site history review identified that the site originally formed part of a larger pastoral estate extending from Highett Street to Bay Street. Aerial photography from 1931 and 1945 indicates that the site comprised vacant land. The Sands and McDougall directory for 1951 indicates that a factory was being built at the site by Small J & Co (Engineers). From 1951 to 1969 the site was owned by James Small & Co and used for tool making/engineering purposes.</td></tr>
</table>

	P&S Textiles owned the site from 1969 to 2009 and the site appears to have been used for fabric manufacturing and processing similar in nature to the current use. In 2009 the site was purchased by Clear Edge Filtration (Australia) Pty Ltd and was used up until 2018 to manufacture industrial filtration products and filter media.
Current land use	At the commencement of the Audit the site comprised adjoining industrial buildings which were occupied by Clear Edge Filtration, a manufacturer of industrial filtration products. At the completion of the Audit, the site was vacant with all above and below ground infrastructure removed from the site.
Proposed future land use	Mixed Use (commercial, high density residential, aged care facility)
Surrounding land use – north	Residential
Surrounding land use – south	Residential
Surrounding land use – east	Lyle Anderson Reserve – public park and recreation reserve.
Surrounding land use – west	Graham Road, beyond which is crown land formerly occupied by the CSIRO and currently being demolished/redeveloped.
Proposed land use zoning	General Residential Zone (GRZ1) (no known proposed change to current zoning)
Nearest surface water receptor – name	Port Phillip Bay
Nearest surface water receptor – distance (m)	Approximately 3.0 km at its closest point.
Nearest surface water receptor – direction	Southwest of the site at its closest point
Likely point of groundwater discharge	Port Phillip Bay
Site aquifer formation	Brighton Group
Groundwater flow direction	West to southwest
Groundwater TDS range (mg/L)	350 - 4,200
Groundwater Segment	A1
Are there multiple aquifers impacted by pollution at the site	No
Perched groundwater depth – upper (metres below ground level (mbgl))	N/A
Perched groundwater depth – lower (mbgl)	N/A

Regional groundwater depth – upper (mbgl)	3.09
Regional groundwater depth – lower (mbgl)	7.00
Number of bores within 2 km	327
Closest extractive use (distance in m)	328 m northwest (domestic & stock)
Zone of groundwater plume influence (m from site boundary)	N/A
Year groundwater last monitored	2019
Have you attached electronic copies of Current Groundwater Analytical Results presented as a summary table?	Yes

Appendix A
Statement of Environmental Audit

36-40 Graham Road, Highett, Victoria

ENVIRONMENT PROTECTION ACT 1970

STATEMENT OF ENVIRONMENTAL AUDIT

I, Timothy Kent Russell of Maple Auditing Pty Ltd, a person appointed by the Environment Protection Authority ('the Authority') under the *Environment Protection Act* 1970 ('the Act') as an Environmental Auditor for the purposes of the Act, having

1. been requested by Mr Matt Deledio (representative of the site owner) of Ryman Healthcare (Australia) No. 8 Pty Ltd to issue a certificate of environmental audit in relation to the site located at 36-40 Graham Road, Highett, Victoria 3190; defined as Lot 2 on Plan of Subdivision 046820 (Volume 11155, Folio 441), ('the site') owned/occupied by Ryman Healthcare (Australia) No. 8 Pty Ltd;

2. had regard to, among other things,

(i) guidelines issued by the Authority for the purposes of Part IXD of the Act,

(ii) the beneficial uses that may be made of the site

(iii) relevant State environment protection policies/industrial waste management policies, namely

SEPP *(Waters)*

SEPP *(Ambient Air Quality & Air Quality Management)*

SEPP *(Prevention and Management of Contamination of Land*)

EPA Environment Protection (Industrial Waste Resource) Regulations 2009

in making a total assessment of the nature and extent of any harm or detriment caused to, or the risk of any possible harm or detriment which may be caused to, any beneficial use made of the site by any industrial processes or activity, waste or substance (including any chemical substance), and

3. completed an environmental audit report in accordance with section 53X of the Act, a copy of which has been sent to the Authority and the relevant planning and responsible authority.

HEREBY STATE that I am of the opinion that

The site is suitable for the beneficial uses associated with sensitive use (high and medium density residential including aged care facility) and commercial and industrial land uses subject to the following conditions attached thereto:

A. Groundwater at the site is polluted and is not suitable for the use of Water Dependent Ecosystems and Species, Potable Water Supply (desirable), Agriculture and Irrigation (irrigation), Agriculture and Irrigation (stock watering), Industrial and Commercial, Water Based Recreation (Primary Contact Recreation), Traditional Owner Cultural Values and Cultural and Spiritual Values. Groundwater must not be used for any precluded beneficial use without prior testing and review of results by a suitably qualified professional to confirm its suitability for the proposed use. It may be extracted for the purpose of environmental monitoring or remediation.

B. Post completion date of this audit, the groundwater quality management plan (GQMP) formulated for the site attached to this Statement of Environmental Audit (Attachment A) (and verified by the environmental auditor) must be implemented and maintained by the site owner and/or body corporate.

C. The GQMP must remain in force until such time as an environmental auditor (appointed under Part IXD of the Environmental Protection Act 1970) verifies in writing that the monitoring and management requirements of the GQMP are no longer required, and this verification is accepted by EPA and advised in writing to the planning authority.

D. At the commencement of construction and ongoing from that date until completion of construction, the responsible site owner and builder must implement and maintain the *ATMA Environmental Pty Ltd, Asbestos Management Plan, 36-40 Graham Road, Highett, 21 February 2020* attached to this Statement of Environmental Audit as Attachment B.

E. Once construction is complete and prior to occupation and ongoing from that time, the site owner/body corporate must implement and maintain the *ATMA Environmental Pty Ltd, Asbestos Management Plan, 36-40 Graham Road, Highett, 21 February 2020* attached to this Statement of Environmental Audit as Attachment B.

F. All physical barriers (as prescribed in condition(s) D and E above), must be maintained on the site and if subsequently damaged or removed during development or occupation of the site, must be reinstated as soon as possible and to the same condition or better as they were prior to any disturbance.

G. If removal of the physical barriers (as prescribed in condition(s) D and E above) is proposed, an environmental auditor appointed under Part IXD of the Environment Protection Act 1970 ("the Act") must be engaged to verify that the barrier is no longer required.

The condition of the site is detrimental or potentially detrimental to any (one or more) beneficial uses of the site. Accordingly, I have not issued a certificate of environmental audit for the site in its current condition, the reasons for which are presented in the environmental audit report. The terms and conditions that need to be complied with before a certificate of environmental audit may be issued are set out as follows:

- *Groundwater is remediated such that all beneficial uses of groundwater are restored at and in the vicinity of the site.*

Other related information

1) The Auditor has determined that

(i) groundwater had been cleaned up to the extent practicable; and

(ii) the site is within a Groundwater Quality Restricted Use Zone (GQRUZ). The extent of the GQRUZ is shown on the Authority GQRUZ Figure attached to this Statement of Environmental Audit as Attachment C.

2) In accordance with Clause 58(4) of the SEPP (Waters) the EPA may require periodic reassessment of the practicability of groundwater clean-up.

3) The extractive beneficial uses 'Potable Water Supply', 'Agriculture and Irrigation (irrigation)', Agriculture and Irrigation (stock watering)', 'Water Based Recreation (Primary Contact Recreation)' and 'Industrial and Commercial' are precluded by one or more of vinyl chloride, nitrate and/or total nitrogen and are considered to be sourced from the site.

4) The beneficial uses 'Water Dependent Ecosystems', 'Potable Water Supply', 'Agriculture and Irrigation (irrigation)', Agriculture and Irrigation (stock watering)', 'Water Based Recreation (Primary Contact Recreation)', 'Industrial and Commercial', 'Traditional Owner Cultural Values', and 'Cultural and Spiritual Values' are precluded by one or more of beryllium, cobalt, lead, nitrate, nitrite, total nitrogen and 1,4-dichlorobenzene which are not considered to be derived from the site but are regional in nature.

5) Groundwater contains naturally elevated concentrations of copper, nickel, zinc, sodium, chloride and sulphate. The levels are considered typical of the regional groundwater quality surrounding the site and do not constitute pollution in accordance with pollution in accordance with clause 17(3)(b) of the SEPP (Waters).

6) If groundwater is to be extracted as part of any basement construction or operation, it must be tested and disposed in accordance with the Authority's requirement (EPA Publication 480 or replacement publications) and statutory requirements.

7) Groundwater monitoring bores present at the site (not required as part of the GQMP) should be decommissioned in accordance with the requirements of the most up to date version of "Minimum Construction Requirements for Water Bores in Australia", published by the Land and Water Biodiversity Committee.

8) Asbestos containing materials were found on the site and have been removed as far as practicable. Small quantities of bonded asbestos cement (AC) fragments may remain within the soil and be uncovered during excavation works. These AC fragments are not anticipated to represent a health risk to occupiers of the completed development. If encountered during future development or use of the site, any fragments must be handled and disposed in accordance with the relevant regulations.

9) Soil at the site contains naturally elevated concentrations pH. The levels are considered typical of the regional soil quality surrounding the site and do not constitute pollution or represent a health or ecological risk. Local natural plants and grasses and fauna are likely to be adapted to these background levels however there may be some impact on the development of some introduced plants, grasses and fauna.

10) Any fill or soil imported to the site must be chemically tested soil or fill that classifies as "fill material" in accordance with relevant EPA guidelines.

11) Any soils proposed to be excavated from the site and disposed of off-site must be classified and managed in accordance with relevant statutory regulations and EPA guidelines (e.g. IWRG 621).

12) In accordance with section 53ZE of the Environment Protection Act 1970, the owner/occupier of the site must provide a copy of this Statement of Environmental Audit to any person who becomes or proposes to become the occupier of the site.

This statement forms part of environmental audit report *(Maple Auditing Pty Ltd, Environmental Audit Report, 36-40 Graham Road, Highett, Victoria 3190, Report Number MA124-R02, 25 February 2020*). Further details regarding the condition of the site may be found in the environmental audit report.

DATED 25 February 2020

Signed 

ENVIRONMENTAL AUDITOR

Attachment A
Groundwater Quality Management Plan

36-40 Graham Road, Highett, Victoria

GROUNDWATER QUALITY MANAGEMENT PLAN:
36 - 40 GRAHAM ROAD, HIGHETT, VICTORIA

Prepared for:

Ryman Healthcare Pty Ltd
420 St Kilda Road
Melbourne VIC 3004

Project Ref.: 1452C Highett
Date: 26 June 2019

ACLCA
MEMBER: Australian Contaminated Land Consultants Association

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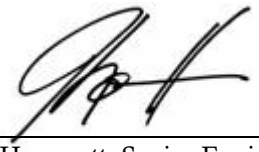
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PROJECT REFERENCE: #1452C Highett

REPORT TITLE: Groundwater Quality Management Plan:
36 – 40 Graham Road, Highett, Victoria

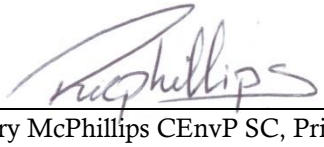
DATE: 26th June 2019

PROJECT MANAGER:



Jared Hammett, Senior Environmental Consultant

REVIEWED/APPROVED BY:



Rory McPhillips CEnvP SC, Principal Environmental Scientist

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1	Final	26/06/2019	pdf	Mr Tim Russel, Environmental Auditor (Maple Auditing)
1	Final	26/06/2019	pdf	Atma Environmental (File)

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Appendix A Monitoring Well Details

1 INTRODUCTION

1.1 Background

The site at 36 – 40 Graham Road, Highett, was originally developed for industrial uses, namely a filter media manufacturer, which continued until 2018.

The intended future use of the site is a residential multi-storey apartment building with a basement (three meters below current ground level) and a number of three and four storey townhouses with parking at grade.

Although being zoned *General Residential 1 Zone*, the site is subject to an Environmental Audit Overlay (EAO) and the Planning Permit (P2016 2017) has triggered the requirement for a Statement or Certificate of Environmental Audit (under Section 53X of the Environment Protection Act 1970) prior to development and use of the site for a sensitive land use (including residential).

Atma Environmental was engaged by Ryman Healthcare Pty Ltd, to conduct an Environmental Assessment of the site (and undertake required remedial works), with Mr. Tim Russell (Maple Auditing Pty Ltd), an EPA-appointed Environmental Auditor, engaged to conduct the Environmental Audit.

Past use of chlorinated solvents (including TCE) at the site was potentially the cause of vinyl chloride pollution identified in the groundwater at MW1 and MW8. However, no identifiable point sources have been identified, with no detectable concentrations of Volatile Organic Compounds (VOCs) recorded in the soil; all underground infrastructure (excluding the sewer easement) and the vast majority of fill material has been removed from the site. Furthermore, only trace concentrations of vinyl chloride parent products (TCE, PCE and cis-1,2-DCE) have been found in the groundwater.

It was concluded that the source of VOCs to the groundwater may have been diffuse, potentially a result of small historical spills of solvents onsite.

Concentrations of vinyl chloride detected at MW2, MW3 & MW4, were considered to be due to cross-contamination from poor quality PVC well installation material, based on the following lines of evidence:

- The immediate up-gradient replacement wells (MW2a, MW3a & MW4a) consistently reported non-detectable (<0. 00005 mg/l) results, compared with concentrations in the range of 0.005 – 0.032 mg/l at the original locations;
- The magnitude of these vinyl chloride concentrations, compared to the magnitude of concentrations of parent products reported at the site (Trichloroethylene; TCE, Tetrachloroethylene; PCE and cis-1,2-Dichloroethene; cis-1,2-DCE) is considered inconsistent;

- Vinyl chloride at MW2, MW3 and MW4, has consistently been reported 2-3 orders of magnitude higher than all other vinyl chloride concentrations across the site (where detected).

As such, the vinyl chloride results from MW2 – MW4 were discounted accordingly and removed from the dataset.

The vinyl chloride groundwater pollution was restricted to a small area, defined by the monitoring well network). The results from MW1 and MW8 fluctuate above and below the beneficial use assessment guideline, with the majority of results (including results from surrounding wells) being below the guideline; the assumption that the vinyl chloride concentrations constitute pollution was conservatively based on the highest results from MW1 and MW8.

Based on the presence of vinyl chloride pollution in wells MW1 and MW8 located adjacent to site boundaries, the plume is considered to extend marginally off-site to the south-west of MW1 (i.e. at a distance of no more than 10 m) and slightly off-site to the north-west of MW8 (i.e. at a distance of no more than 3-5 m given movement in this direction would be cross gradient).

Other contaminants identified in the groundwater are either attributable to ambient or background sources. Ambient nitrate/nitrite and 1,4-Dichlorobenzene pollution identified in the vicinity of MW2/MW14, was shown to be very localised and not extending off-site, with the source considered to be the adjacent (onsite) sewer easement. The site development plans require removal and realignment of the section of sewer easement in the location of MW2/MW14, which would remove the source and prevent ongoing pollution of the groundwater.

To ensure that remnant groundwater contamination is monitored to provide greater confidence in future plume behaviour and to provide a mechanism for periodic review of the polluted groundwater, to ensure that the groundwater remains "cleaned up to the extent practicable", implementation of a Groundwater Quality Management Plan (GQMP) will be a condition on the Statement of Environmental Audit at the completion of the audit.

In accordance with EPA Victoria '*Publication 840.2 – The Cleanup and Management of Polluted Groundwater*' (2016), a "Clean Up To the Extent Practicable" (CUTEP) submission will be presented by the Auditor to the EPA.

1.2 Purpose of GQMP

The purpose of the GQMP is to ensure that remnant groundwater contamination is monitored to provide greater confidence in future plume behaviour and to provide a mechanism for periodic review of the polluted groundwater, to ensure that the groundwater remains "cleaned up to the extent practicable".

1.3 Responsible Parties

Table A outlines the parties responsible for implementation and maintenance of this GQMP.

Table A – Responsible Parties

Party	Responsibility
Site Owner/Manager (Ryman Healthcare Pty Ltd)	• Maintenance and implementation of GQMP • Transfer of the GQMP to body corporate or similar
Environmental Consultant (Atma Environmental Pty Ltd)	• Groundwater monitoring and reporting in accordance with GQMP
Environmental Auditor (Tim Russell, Maple Auditing Pty Ltd)	• Review of monitoring reports and provision of verification to EPA seeking consent to cease monitoring • Verification of any proposed changes to the GQMP

The party responsible for maintenance and implementation of this GQMP (currently Ryman Healthcare Pty Ltd) can pass the responsibility to another party (e.g. body corporate) by agreement; any such agreement should be documented and appended to this GQMP.

2 SUMMARY OF GROUNDWATER CONTAMINATION AND CLEAN UP

Site sourced vinyl chloride impacts are considered to be associated with small historical spills of solvents/degreasers on-site (i.e. chlorinated solvents (including PCE and TCE)) and the breakdown of PCE and TCE to DCE and vinyl chloride. It was considered that all practicable steps have been taken to identify the potential VOC source area, with none identified. The site has no further potential to contaminate the groundwater with VOCs and it was expected that the plume size and concentration will continue to decrease over time.

Site sourced nitrate and total nitrogen impacts are considered to be associated with historic toilets and associated infrastructure in the northern portion of the site. All onsite sewer pipes leading to the easement have been removed and validated, and the location where the site sewer joined the easement has been sealed.

A council owned sewer main extends into the site on the southern side of the site. Leakage at the sewer has resulted in nitrate, total nitrogen, nitrite and 1,4 dichlorobenzene pollution. The Land Title shows that the six-foot-wide easement along the southern boundary of the site was in favour of the Melbourne and Metropolitan Board of Works and removal of the sewer easement (which services adjacent properties) was therefore not possible.

A toilet block to the immediate east of the site is considered to be the source of barium, beryllium, cobalt and lead pollution. Remediation of the groundwater pollution would require remediation of an off-site source, which was not considered to be a practicable expectation for the site.

Regional impacts associated with cobalt, lead, nitrate and total nitrogen are also present on and off-site. Remediation of the groundwater pollution would require remediation of a regional source, which was not considered to be a practicable expectation for the subject site.

Site sourced groundwater pollution (i.e. vinyl chloride), ambient pollution (i.e. nitrate, nitrite, nitrogen, cobalt, lead, thermotolerant coliforms and 1,4-Dichlorobenzene) and background concentrations (metals, TDS, sodium and chloride) precludes the following beneficial uses listed for Segment A2:

- *'Potable Water Supply (Acceptable)',*
- *'Potable Mineral Water Supply',*
- *'Agriculture & Irrigation (Irrigation and Stock Watering)'*
- *'Water-based Recreation'*

Groundwater does not discharge to the surface on, or in the vicinity of the site and there are no existing or likely future groundwater receptors identified within the extent of the vinyl chloride pollution.

It was concluded that cleanup has been completed to the extent practicable; the site sourced groundwater contamination was not likely to pose an unacceptable risk to receptors in any land use scenario, when the extraction & use of groundwater (considered unlikely) was precluded.

Table 2 provides a summary of all groundwater analysis results as well as applicable assessment guidelines for each relevant beneficial use of groundwater. Figure 2 show the extent of the site sourced groundwater contamination.

3 GROUNDWATER MONITORING PROGRAM

3.1 GQMP Monitoring Well Network

Figure 1 details the monitoring well network. On-site monitoring wells; MW1a, MW2a, MW4, MW4a, MW5a, MW7, MW8, MW13, MW13a, MW14, MW15, MW16 will require decommissioning to allow for the proposed site development. On-site monitoring wells; MW2, MW5 and MW9 were previously destroyed. On-site monitoring wells; MW1, MW3 and MW3a are located away from the proposed site development and could potentially remain.

Based on the known and future estimated extent of the site sourced contaminant plume, the following wells are to be monitored in accordance with this GQMP:

- MW1;
- MW8;
- MW12 (off-site; down-gradient);
- MW11 (off-site; down-gradient);
- α1 (off-site; cross-gradient).

The attached Table 1 provides the installation and survey details, as well as previously recorded field parameters for each monitoring well. Monitoring Well installation logs and survey plans are provided in Appendix A.

It is acknowledged that monitoring wells 'α1' and 'MW8' will require decommissioning due to its position within the proposed basement; these wells will therefore require replacement in a location to be agreed upon by an Auditor. Refer to Section 3.2 for further details. Where possible, α2 and α3 should also be retained in case they are needed for future sampling.

Once EPA has confirmed that ongoing monitoring can cease, all off-site wells should be appropriately decommissioned by a licenced driller.

3.2 Damage or Replacement of Monitoring Wells

The monitoring well network must be maintained in working and serviceable condition for the duration of the monitoring program. Should wells become damaged or unserviceable, replacement wells may need to be installed in consultation with the Responsible Parties.

Damaged wells should be decommissioned in accordance with the *Water Act* (1989) and replacement wells should be installed by a licensed driller and registered in accordance with the *Water Act* (1989). Reinstalled wells should be re-surveyed for location and top of casing elevation by a licensed surveyor. The well installation log and survey data should be included in the report for the next monitoring event.

It is acknowledged that monitoring wells 'α1' and 'MW8' are currently located within the proposed basement location. These wells will require decommissioning and replacement in a location to be agreed upon by an Auditor.

3.3 Monitoring Frequency and Duration

Groundwater monitoring is to be undertaken by the Environmental Consultant every year for an initial period of three years (following the issuance of a Statement of Environmental Audit).

The frequency and duration of monitoring is subject to change pending the findings of the annual review.

At the conclusion of the three-year monitoring period, a review of data and re-evaluation of the contamination plume will determine whether additional ongoing monitoring is necessary and the monitoring frequency required.

3.4 Monitoring Methodology

3.4.1 Sample Collection

Groundwater monitoring events shall be carried out in accordance with EPA Publication 669 *Groundwater Sampling Guidelines*' and Australian/New Zealand Standard ASNZS5667.1 *'Water Quality – Sampling*.

Sampling should be completed using the low flow MicroPurge™ pump technique. Although considered unlikely, prior to disturbance of the well, an interface probe shall be used to record the water level and inspect for the presence of Light Non-Aqueous Phase Liquid (LNAPL) at all locations, with individual clear disposable bailers then used to visually check for the presence of LNAPL. After sample collection, the interface probe shall be used to inspect for the presence of Dense Non-Aqueous Phase Liquid (DNAPL) at the bottom of each well, with individual clear disposable bailers then used to visually check for the presence of DNAPL

Prior to sample collection, field parameters of pH, electrical conductivity, redox, dissolved oxygen and temperature shall be measured until stabilised using a calibrated TPS 90FLMV water quality meter (or equivalent).

Groundwater samples shall be placed into appropriately preserved laboratory supplied bottles, stored on ice and delivered directly to the laboratory under Chain of Custody documentation. Water samples for metal analysis shall be field-filtered using 0.45 μm capsule filters.

Groundwater sampling details should be recorded on field sheets and retained, as should equipment calibration records. Where LNAPL or DNAPL is present in a monitoring well, it may not be possible to obtain a representative sample of dissolved phase contaminants, however the thickness of LNAPL or DNAPL should be recorded.

The MicroPurge™ pump and other sampling equipment shall be decontaminated between wells to avoid possible cross contamination.

The Environmental Consultants procedures for groundwater sampling, quality assurance and equipment decontamination should be included in the annual monitoring reports.

3.4.2 Sample Analysis

Samples are to be analysed by a laboratory accredited by the National Association of Testing Authorities (NATA). Samples from all monitoring wells (per Section 3.1) should be tested for the following analytical suite:

- Volatile Organic Compounds, including Vinyl Chloride and 1.4-Dichlorobenzene (Ultra-trace Limit of Reporting, LORs);
- Nitrogen Compounds, including total nitrogen and nitrate;

If the first GQMP GME results for 1.4-Dichlorobenzene (α1 only) are non-detect then this well can be excluded from the GQMP going forwards.

The LORs must be low enough to allow assessment of the results against the guidelines shown on Table 2. The VOC screen should include all compounds shown on Table 2.

3.4.3 QC Procedures

Each groundwater monitoring event should be undertaken in accordance with appropriate quality control / quality assurance procedures, including chain of custody procedures, sampling equipment decontamination and the collection of quality control samples as follows (each to be analysed for VOCs):

- One duplicate sample;
- One split duplicate sample;
- One equipment decontamination sample;
- One trip blank sample.

4 DATA REVIEW & REPORTING

Within one month following each monitoring event, the Environmental Consultant shall prepare a report to document the findings. The report shall include:

- The scope of monitoring works undertaken;
- The sampling procedure adopted;
- A record of the field data collected on field sheets including gauging levels and field parameters;
- Chain of custody documentation;
- NATA accredited certificates of laboratory analysis;
- Summaries of the field parameters;
- Groundwater water levels converted to Australian Height Datum (AHD) and used to calculate groundwater flow direction;
- A table of laboratory results;
- An assessment of trends of contaminants in comparison to existing post-remediation monitoring data;
- An assessment of the results against the trigger levels set out in this GQMP;
- An assessment of data quality using the data quality objectives set out in AS4482.1-2005. All non-compliances (including blanks) will be assessed and their impact on the integrity of the data evaluated;
- Identified issues within the final analytical data will be documented and corrective actions taken and;
- Recommendations for additional action and implementation of contingency actions in accordance with this GQMP.

The report should conclude as to whether there is any change in the pollution status of the groundwater or the interpretations and arguments presented in the CUTEP submission and assess whether trigger levels have been reached.

The environmental consultant shall also provide any recommendations for change to the monitoring program or for further actions deemed necessary based on the available information. The report should be provided to the Site Owner/Manager and Environmental Auditor. Any proposed changes to the GQMP will be verified by an Auditor prior to taking effect.

5 TRIGGERS AND CONTINGENCY PLAN

Triggers for initiating the Contingency Plan include:

- A distinct change in groundwater flow direction either naturally or artificially (e.g. as a result of dewatering on an adjoining property).
- Any statistically significant trend of increase in contamination of the groundwater (the assessment of what constitutes a statistically significant trend is based on a comparison to all pre and post remediation data via the use of Mann Kendal statistics).
- The appearance of LNAPL or DNAPL at any location.
- Indication that the plume is increasing or migrating beyond the current extent.

Should any of the trigger levels be exceeded, the contingency plan detailed on Table B should be implemented by the Site Owner/Environmental Consultant.

Table B – Contingency Plan

Contingency Measure	Description
Step 1: Review the site conceptual understanding.	The conceptual understanding of potential contamination at the site should be reviewed to determine if additional investigation is required. For instance, if an increasing concentration of an analyte is observed in a well, however the increase was consistent with an off-site source, no further investigation may be required. Should the change in the groundwater flow direction/conceptual site model be associated with the commencement of dewatering on an adjoining property, consideration (in conjunction with an Auditor) should be given to the need to install additional groundwater monitoring wells to ensure delineation of the groundwater plume.
Step 2: Notify relevant stakeholders.	At a minimum, the Environmental Auditor and EPA should be notified that a trigger level has been met. Other notifications should be completed as required.
Step 3: Review monitoring frequency.	If the groundwater monitoring frequency has not already been increased to confirm an observed trend, then this should be considered. Appropriate increases may include quarterly intervals and then reviewed for an ongoing adjustment to monitoring, if required.

Step 4: Identify potentially unacceptable risk.	Where the observed trend could be expected to alter the risk profile on or off site, a risk assessment may be required. This may include undertaking a vapour intrusion assessment or developing risk based assessment criteria specific for the sites use.
Step 5: Initiate contingency remediation action.	In the event groundwater concentrations are increasing and are deemed unacceptable due to risk, remediation to facilitate a reduction in contaminant concentrations needs to be undertaken. In the instance that the contamination is sourced off-site, remediation would be managed at the source. In the instance that the contamination is sourced onsite, remediation would include removal of the source (where practicable).

6 REVIEW OF GQMP

6.1 Review by the Environmental Consultant

The annual groundwater monitoring reports shall include a review of the data by the environmental consultant and provide and opinion as the whether any significant changes has occurred in the status of the groundwater pollution at the site and assess whether trigger levels have been reached. The environmental consultant shall also provide any recommendations for change to the monitoring program or for further actions deemed necessary.

6.2 Review by Environmental Auditor

Following each annual monitoring event, the Environmental Auditor should review the report prepared by the Environmental Consultant and provide an opinion as to the level of compliance with the GQMP. The Environmental Auditor should also provide verification of recommended changes to the monitoring program of further actions deemed necessary.

6.3 Review by EPA

The EPA may, at any time, review the practicability of clean-up of the groundwater in accordance with clause 58 (4) of the SEPP Waters and require additional assessment, management or remediation actions to be undertaken.

6.4 Changes to the GQMP

Any suggested changes or revisions to the GQMP must be verified in writing by the Environmental Auditor and the EPA. If changes to the GQMP are approved, a revised GQMP should be prepared by the Environmental Consultant.

7 CESSATION OF MONITORING

This GQMP proposes a three-year monitoring program. Following the three years of monitoring, a review of the contamination status of the groundwater should be completed by the Environmental Consultant to determine if further monitoring is required.

The EPA considers the management process to close when all beneficial uses of the groundwater have been restored. However, it may be possible to obtain EPA agreement to cease or suspend monitoring if a further assessment of risk shows that the risks to beneficial uses of groundwater are not increasing.

The mechanism for cessation would be through Auditor Verification; EPA Publication 840.2 (*'The Clean Up and Management of Polluted Groundwater'* April 2016) states that "A GQMP cessation submission to EPA should be auditor verified (see Section 7.1 of Appendix 2), and prepared using the information listed in the GQMP cessation checklist (see Attachment B)".

The Environmental Auditor, in consultation with the Environmental Consultant and the Site Owner/Manager, should therefore make a submission to EPA to cease monitoring after the initial three years. The submission should be in accordance with the GQMP cessation checklist provided as Attachment B of '*EPA Publication 840.2 The Clean Up and Management of Polluted Groundwater'* (April 2016).

A letter will be required from the EPA regarding their decision for cessation of the monitoring program. The closure of the GQMP will not necessarily remove the site from the declared GQRUZ.

8 LIMITATIONS

The report consists of the scope of work outlined previously. This report describes the work undertaken and has been compiled for the use of Ryman Healthcare Pty Ltd, EPA Victoria and the appointed Contaminated Land Auditor only. Its conclusions are only valid for the purpose for which it was requested.

It is valid only when it is in original and complete form, and any person or company other than Ryman Healthcare Pty Ltd, EPA Victoria and the appointed Contaminated Land Auditor who rely on the report without specific reference to and permission from Atma Environmental Pty Ltd does so at their own risk. While every care has been taken in the compilation of this report, to the extent that its conclusions are based on the analysis of the data made available by your organisation or by a third party, no responsibility or liability is accepted for consequences arising from either errors or omissions in that data, or from factors or data which were not made available to Atma Environmental Pty Ltd or which Atma Environmental Pty Ltd could not ascertain by reasonable inquiry in the ordinary course of its investigation, nor for any commercial decisions taken as a result of the report.

9 REFERENCES

Atma Environmental, *'Detailed Site Investigation, 36 – 40 Graham Road, Highett*, 22nd February 2019

Australian/New Zealand Standard ASNZS5667.1 *'Water Quality – Sampling, Part 1: Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples'*

Environment Protection Authority Victoria Publication 669 *Groundwater Sampling Guidelines*'

Environment Protection Authority Victoria Publication 688 *Hydrogeological assessment (Groundwater Quality) Guidelines* 2006

Environment Protection Authority Victoria Publication 840.2 '*The Clenup and Management of Polluted Groundwater'* April 2016

Friebel, E & Nadebaum, P CRC CARE Technical Report no. 10 CRC for Contamination Assessment and Remediation of the Environment *'Health Screening Levels for Petroleum Hydrocarbons in Soil and Groundwater, Summary'* Adelaide, Australia, September 2011.

National Environment Protection Council (NEPC), *'National Environment Protection (Assessment of Site Contamination) Amendment Measure (No. 1)', 2013.*

National Institute of Water & Atmospheric Research Ltd *"Updating Nitrate Toxicity Effects on Freshwater Aquatic Species"* January 2013.

National Health and Medical Research Council (NHMRC) *"Australian Drinking Water Guidelines"* 2011 (Updated 2018)

National Health and Medical Research Council (NHMRC) *"Guidelines for Managing Risks in Recreational Water"* 2008

State Environment Protection Policy (SEPP) *"Waters"* No. S499, Gazette 23/10/2018

United States Environmental Protection Agency (USEPA), *'Regional Screening Levels for Chemical Contaminants at Superfund Sites'*, 2016.



Atma *Environmental*

Client: RYMAN HEALTHCARE

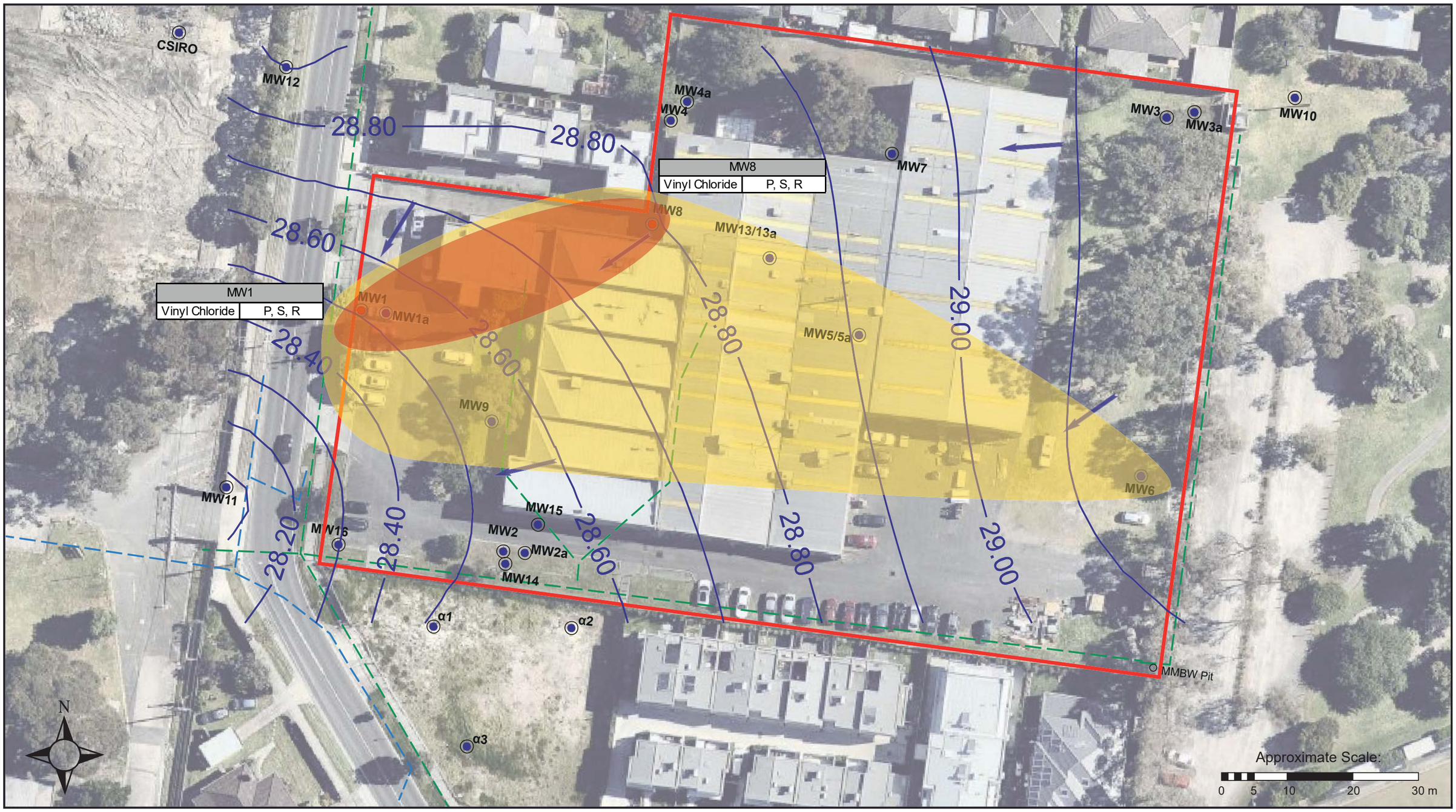
Project: 1452C Highett - GQMP

Drawn by: JH Dated: 26/02/19 Status: Final

Figure 1. Groundwater Monitoring Well Network

LEGEND:

- Investigation Area
- Groundwater Monitoring Well
- Groundwater Elevation Contour (m AHD) (January 2019)
- Ground Water Flow Direction



Atma *Environmental*

Client: RYMAN HEALTHCARE

Project: 1452C Highett - DSI

Drawn by: JH Dated: 26/02/19 Status: Final

Figure 2. Extent of Site Sourced Pollution (Vinyl Chloride)

LEGEND:

- Investigation Area
- Groundwater Monitoring Well
- Groundwater Monitoring Well - Site Sourced Pollution > BU's
- Groundwater Elevation Contour (m AHD) (January 2019)
- Ground Water Flow Direction

Refer to Fig. 6c for VOCs Contaminant Distribution

- Drainage Pipeline
- Sewer Pipeline
- Approximate Vinyl Chloride Pollution Plume Extent
- Approximate Vinyl Chloride Detectable Concetrations Plume Extent

Beneficial Uses (BU):
P = Potable Water Supply
S = Stock Watering
R = Primary Contact Recreation

Table 1. Bore Details & Groundwater Field Parameters Summary

Project: **1452C Highett**

Atma Environmental

Well No.	Total Bore Depth (mBGL)	Screened Interval (mBGL)	Screen in:	Easting	Northing	Top-of-Casing Elevation (m AHD)	Casing Stick-up	Ground Surface Elevation (m AHD)	Date	Event	GME #	Depth to Water (m bTOC)	Depth to Water (m BGL)	Water Level Elevation (m AHD)	Sampling/ Inspection Method	Time	pH	EC (mS/cm)	Redox (mV)	DO (mg/L)	Temp. (0C)	Colour	Turbidity	Odour	Field Filtered	Sheen	LNAPL Measured with IP (cm)	DNAPL Measured with IP (cm)	LNAPL Measured with Bailer (cm)	PID (ppm)
36 - 40 Graham Road, Highett																														
MW1	6.3	3.3-6.3	Clayey SAND	327935.08	5797758.40	33.30	0.50	32.80	1-May-17	Development	-	4.78	4.28	28.52	Bailer	n/a	n/a	n/a	n/a	n/a	n/a	White	Moderate	None	n/a	Nil	n/a	n/a	Nil	n/a
									10-May-17	Sampling	1	4.61	4.11	28.69	Micropurge /IP	9:35	5.36	2.59	206	2.25	17.8	Clear/grey	Low	None	Yes	Nil	Nil	Nil	Nil	0.3
									28-Jun-17	Sampling	2	4.57	4.07	28.73	Micropurge /IP	10:00	5.28	2.27	200	2.48	14.2	Clear	Low	None	Yes	Nil	Nil	Nil	Nil	0.0
									20-Mar-18	Inspection	-	4.62	4.12	28.68	Interface Probe	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
									17-Apr-18	Sampling	3	4.74	4.24	28.56	Micropurge /IP	11:10	4.39	2.40	219	1.14	19.3	Clear	Low	None	Yes	Nil	Nil	Nil	n/a	0.0
									3-Oct-18	Sampling	6	4.78	4.28	28.52	Micropurge /IP	12:05	4.72	1.98	52.7	3.19	18.0	Clear	Very Low	None	n/a	Nil	Nil	Nil	Nil	0.0
									2-Jan-19	Sampling	9	4.80	4.30	28.50	Micropurge /IP	16:30	4.56	2.16	348.1	3.11	20.7	Clear	Low	None	n/a	Nil	Nil	Nil	n/a	0.0
MW1a	6.0	3.0 - 6.0	Clayey SAND	-	-	-	-0.09	-	25-May-18	Development	-	4.21	4.30	n/a	Bailer	n/a	n/a	n/a	n/a	n/a	n/a	Yellow	High	None	n/a	Nil	n/a	n/a	Nil	n/a
									31-May-18	Sampling	4	4.19	4.28	n/a	Micropurge /IP	10:14	5.18	2.4	238	4.01	17.5	Clear/grey	Low	None	Yes	Nil	Nil	Nil	n/a	1.3
									23-Aug-18	Sampling	5	4.23	4.32	n/a	Micropurge /IP	10:02	5.00	2.46	242	2.58	16.9	Clear	Low	None	Yes	Nil	Nil	Nil	Nil	0.0
									3-Oct-18	Sampling	6	4.20	4.29	n/a	Micropurge /IP	14:50	4.33	1.76	80.1	2.65	17.7	Clear	Low	None	n/a	Nil	Nil	Nil	Nil	0.0
									30-Oct-18	Sampling	7	4.21	4.30	n/a	Micropurge /IP	16:07	4.56	1.97	138.5	3.11	21.4	Clear	Low	None	Yes	Nil	Nil	Nil	n/a	0.0
									3-Jan-19	Sampling	9	4.21	4.30	n/a	Micropurge /IP	14:50	4.71	2.05	291.7	2.96	23.2	Clear	Low	None	Yes	Nil	Nil	Nil	n/a	0.0
MW2	7.0	4.0 - 7.0	SAND	327957.97	5797721.21	34.32	0.50	33.82	1-May-17	Development	-	5.46	4.96	28.86	Bailer	n/a	n/a	n/a	n/a	n/a	n/a	White	Moderate	None	n/a	Nil	n/a	n/a	Nil	n/a
									10-May-17	Sampling	1	5.53	5.03	28.79	Micropurge /IP	11:20	4.75	4.72	301	3.82	13.6	Clear	Low	None	Yes	Nil	Nil	Nil	Nil	0.1
									28-Jun-17	Sampling	2	5.50	5.00	28.82	Micropurge /IP	11:52	4.54	4.10	254	3.11	14.0	Clear	Low	None	Yes	Nil	Nil	Nil	Nil	0.0
									20-Mar-18	Inspection	-	5.54	5.04	28.78	Interface Probe	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
									17-Apr-18	Sampling	3	5.69	5.19	28.63	Micropurge /IP	13:10	4.51	4.01	246	1.73	19.0	White/grey	Low	None	Yes	Nil	Nil	Nil	Nil	0.0
									23-Aug-18	Sampling	5	5.79	5.29	28.53	Micropurge /IP	13:18	4.25	4.99	327	3.2	13.9	Grey	Low-Mod	None	Yes	Nil	Nil	Nil	Nil	0.0
									3-Oct-18	Inspection	-	5.73	5.23	28.59	Interface Probe	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
					MW2 repaired		0.69		22-Oct-18	Re-development	-	6.15	5.46	n/a	Bailer	n/a	n/a	n/a	n/a	n/a	n/a	Brown	High	None	n/a	Nil	n/a	n/a	Nil	n/a
					Well Destroyed November 2018				29-Oct-18	Sampling	7	5.95	5.26	n/a	Micropurge /IP	15:55	4.76	3.62	182.1	5.05	18.3	Clear	Low	None	Yes	Nil	Nil	Nil	n/a	0.1
MW2a	6.8	3.8 - 6.8	SAND	-	-	-	0.62	-	25-May-18	Development	-	5.95	5.33	n/a	Bailer	n/a	n/a	n/a	n/a	n/a	n/a	Grey	High	None	n/a	Nil	n/a	n/a	Nil	n/a
									31-May-18	Sampling	4	5.97	5.35	n/a	Micropurge /IP	11:47	5.66	3.72	174	2.54	14.9	Yellow/brown	High	**Slight H2S**	Yes	Nil	Nil	Nil	n/a	0.0
									23-Aug-18	Sampling	5	6.01	5.39	n/a	Micropurge /IP	14:31	5.68	3.72	194	2.04	14.4	Light grey/brown	High	None	Yes	Nil	Nil	Nil	Nil	0.0
									3-Oct-18	Inspection	-	5.94	5.32	n/a	Interface Probe	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.0
					MW2a repaired		0.78		22-Oct-18	Re-development	-	6.06	5.28	n/a	Bailer	n/a	n/a	n/a	n/a	n/a	n/a	Light brown	High	None	n/a	Nil	n/a	n/a	Nil	n/a
									29-Oct-18	Sampling	7	6.1	5.32	n/a	Micropurge /IP	14:10	4.99	2.70	203.8	3.07	17.4	Clear/Brown	Low	None	Yes	Nil	Nil	Nil	n/a	0.0
									2-Jan-19	Sampling	9	6.06	5.37	n/a	Micropurge /IP	12:20	5.17	2.83	212.2	6.50	21.0	Clear/grey	Low	None	Yes	Nil	Nil	Nil	n/a	0.0
MW3	7.0	4.0 - 7.0	Clayey SAND	328060.97	5797789.70	35.78	0.50	35.28	1-May-17	Development	-	5.86	5.36	29.92	Bailer	n/a	n/a	n/a	n/a	n/a	n/a	Orange	Mod-High	None	n/a	Nil	n/a	n/a	Nil	n/a
									10-May-17	Sampling	1	6.43	5.93	29.35	Micropurge /IP	12:55	4.50	7.18	282	2.81	17.6	Grey	Moderate	None	Yes	Nil	Nil	Nil	Nil	0.1
									28-Jun-17	Sampling	2	6.42	5.92	29.36	Micropurge /IP	13:38	4.13	6.46	324	2.73	14.4	Cloudy	Low-Mod	None	Yes	Nil	Nil	Nil	Nil	0.0
									20-Mar-17	Inspection	-	6.52	6.02	29.26	Interface Probe	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
									17-Apr-18	Sampling	3	6.65	6.15	29.13	Micropurge /IP	16:25	3.93	6.23	327	1.35	15.9	Light brown	High	None	Yes	N	Nil	Nil	n/a	0.1
									3-Oct-18	Inspection	-	6.66	6.16	29.12	Micropurge /IP	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.0
									4-Jan-19	Sampling	9	6.62	6.12	29.16	Micropurge /IP	11:40	3.99	6.91	221.7	1.86	28.9	Orange/brown	High	None	n/a	Nil	Nil	Nil	n/a	0.0
MW3a	7.0	4.0 - 7.0	Clayey SAND	-	-	-	0.81	-	25-May-18	Development	-	7.04	6.23	n/a	Bailer	n/a	n/a	n/a	n/a	n/a	n/a	Milky Orange	High	None	n/a	Nil	Nil	Nil	Nil	n/a
									31-May-18	Sampling	4	7.09	6.28	n/a	Micropurge /IP	14:37	4.37	5.28	262	4.18	14.8	Yellow	High	None	Yes	Nil	Nil	Nil	n/a	0.0
									24-Aug-18	Sampling	5	7.14	6.33	n/a	Micropurge /IP	10:40	3.93	5.78	306	3.39	12.7	Light Brown	Moderate	None	Yes	Nil	Nil	Nil	n/a	0.0
									3-Oct-18	Inspection	-	7.06	6.25	n/a	Interface Probe	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.0
									30-Oct-18	Sampling	7	7.1	6.29	n/a	Micropurge /IP	13:40	4.04	4.70	374	3.74	19.1	Light Brown	Low	None	Yes	Nil	Nil	Nil	n/a	0.0
									4-Jan-19	Sampling	9	7.03	6.22	n/a	Micropurge /IP	11:50	3.75	5.33	409.1	2.80	23.9	Brown/yellow	High	None	Yes	Nil	Nil	Nil	n/a	0.0
MW4	7.0	4.0 - 7.0	Sandy CLAY	327984.44	5797788.29	35.32	0.50	34.82	10-May-17	Development	-	6.52	6.02	28.80	Bailer	n/a	n/a	n/a	n/a	n/a	n/a	White	Moderate	None	n/a	Nil	n/a	n/a	Nil	n/a
									10-May-17	Sampling	1	6.27	5.77	29.05	Micropurge /IP	14:40	3.66	1.79	551	3.24	13.4	Yellow/grey	Moderate	None	Yes	Nil	Nil	Nil	n/a	0.1
									28-Jun-17	Sampling	2	6.26	5.76	29.06	Micropurge /IP	15:12	5.01	1.51	268	1.54	14.5	Pale Cloudy	Moderate	None	Yes	Nil	Nil	Nil	Nil	0.0
									20-Mar-18	Inspection	-	6.34	5.84	28.98	Interface Probe	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
									17-Apr-18	Sampling	3	6.40	5.90	28.92	Micropurge /IP	9:15	4.53	1.49	215	2.56	16.2	Clear	Very Low	None	Yes	Nil	Nil	Nil	n/a	0.1
									24-Aug-18	Sampling	5	6.55	6.05	28.77	Micropurge /IP	13:54	4.79	1.86	294	4.60	14.7	Grey/brown	Moderate	None	Yes	Nil	Nil	Nil	n/a	0.0
									3-Oct-18	Inspection	-	6.50	6.00	28.82	Interface Probe	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.0
									29-Oct-18	Sampling	7	6.55	6.05	28.77	Micropurge /IP	10:25	4.74	1.24	239	4.74	16.4	Clear	Low	None	Yes	Nil	Nil	Nil	n/a	0.0
									3-Jan-19	Sampling	9	6.51	6.01	28.81	Micropurge /IP	11:50	4.69	1.42	286.7	3.88	21.2	Clear/gey	Low	None	Yes	Nil	Nil	Nil	n/a	0.0
MW4a	7.0	4.0 - 7.0	Sandy CLAY	-	-	-	0.72	-	25-May-18	Development	-	7.44	6.72	n/a	Bailer	n/a	n/a	n/a	n/a	n/a	n/a	Grey	High	None	n/a	Nil	n/a	n/a	Nil	n/a
									1-Jun-18	Sampling	4	7.47	6.75	n/a	Micropurge /IP	10:20	4.62	1.59	312	3.01	12.6	Grey/brown	Mod-Hiigh	None	Yes	Nil	Nil	Nil	n/a	0.0
									24-Aug-18	Sampling	5	7.55	6.83	n/a	Micropurge /IP	12:16	4.69	1.68	301	2.80	17.3	Grey/brown	Moderate	None	Yes	Nil	Nil	Nil	n/a	0.0
									3-Oct-18	Inspection	-	7.46	6.74	n/a	Interface Probe	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.0
									29-Oct-18	Sampling	7	7.51	6.79	n/a	Micropurge /IP	10:10	4.46	1.13	234	4.46	16.0	Grey/cloudy	Moderate	None	Yes	Nil	Nil	Nil	n/a	0.0
									3-Jan-19	Sampling	9	7.45	6.73	n/a	Micropurge /IP	13:10	4.39	1.40	316.3	2.73	24	Clear	Low	None	Yes	Nil	Nil	Nil	n/a	0.0
MW5	7.4	4.4 - 7.4	Clayey SAND	328013.39	5797754.73	34.29	-0.08	34.37	13-Apr-18	Development	-	5.22	5.30	29.07	Bailer	n/a	n/a	n/a	n/a	n/a	n/a	Grey	Moderate	None	n/a	Nil	n/a	n/a	Nil	n/a
									18-Apr-18	Sampling	3	5.33	5.41	28.96	Micropurge /IP	13:10	4.71	2.4	303	3.36	18.8	Clear/grey	Low	None	Yes	Nil	n/a	n/a	n/a	0.0
									31-May-18	Sampling	4	5.37	5.45	28.92	Micropurge /IP	8:52	5.06	2.95	318	3.39	17.3	Grey	Moderate	None	Yes	Nil	Nil	Nil	Nil	0.1
									24-Aug-18	Sampling	5	5.46	5.54	28.83	Micropurge /IP	8:52	5.01	3.16	232	4.03	13.4	Grey	Moderate	None	Yes	Nil	Nil	Nil	Nil	0.0
					MW5 replaced (MW5a)		0.67		22-Oct-18	Re-development	-	6.70	6.03	n/a	Bailer	n/a	n/a	n/a	n/a	n/a	n/a	Light brown/grey	Moderate	None	n/a	Nil	n/a	n/a	Nil	n/a
									30-Oct-18	Sampling	7	6.02	5.35	n/a	Micropurge /IP	9:30	5.70	2.79	138	5.75	18.1	Cloudy	Low	None	Yes	Nil	Nil	Nil	n/a	1.2
									3-Jan-19	Sampling	9	5.99	5.32	n/a	Micropurge /IP	12:00	4.98	3.11	175.1	1.71	20.8	Cloudy	Low	None	Yes	Nil	Nil	Nil	n/a	0.0
MW6	8.4	4.35 - 8.35	Clayey SAND	328057.16	5797732.66	35.49	0.54	34.95	13-Apr-18	Development	-	7.69	7.15	27.80	Bailer	n/a	n/a	n/a	n/a	n/a	n/a	Clear/grey	Low-Mod	None	n/a	Nil	n/a	n/a	Nil	n/a
									18-Apr-18	Sampling	3	7.31	6.77	28.18	Micropurge /IP	11:05	5.98	3.46	84	2.3	16.3	Clear/grey	Low	None	Yes	Nil	Nil	Nil	n/a	0.0
									23-May-18	Re-development	-	6.36	5.82	29.13	Bailer	n/a	n/a	n/a	n/a	n/a	n/a	Grey/Cloudy	Moderate	None	n/a	Nil	n/a	n/a	Nil	n/a
									31-May-18	Sampling	4	7.06	6.52	28.43	Micropurge /IP	13:14	5.81	3.91	118	2.8	15.9	Grey	Low	None	Yes	Nil	Nil	Nil	Nil	0.0
									24-Aug-18	Sampling	5	6.36	5.82	29.13	Micropurge /IP	8:55	5.01	3.26	192	0.86	11.1	Cloudy grey	Low	None	Yes	Nil	Nil	Nil	Nil	0.0
									3-Oct-18	Inspection	-	6.39	5.85	29.10	Interface Probe	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.0
									30-Oct-18	Sampling	7	6.38	5.84	29.11	Micropurge /IP	11:40	5.65	2.87	156	0.92	18.5	Cloudy	Low	None	Yes	Nil	Nil	Nil	n/a	0.0
									4-Jan-19	Sampling	9	6.32	5.78	29.17	Micropurge /IP	10:00	5.63	3.10	120.1	1.06	20.7	Clear	Low	None	Yes	Nil	Nil	Nil	n/a	0.0
MW7	7.5	4.5 - 7.5	Sandy CLAY	328018.25	5797783.44	35.19	0.85	34.34	13-Apr-18	Development	-	6.13	5.28	29.06	Bailer	n/a	n/a	n/a	n/a	n/a	n/a	Grey	High	None	n/a	Nil	n/a	n/a	Nil	n/a
									18-Apr-18	Sampling	3	6.23	5.38	28.96	Micropurge /IP	9:00	4.66	0.97	320	3.05	14.2	Grey	Low	None	Yes	Nil	Nil	Nil	n/a	0.0
									31-May-18	Sampling	4	6.23	5.38	28.96	Micropurge /IP	13:07	4.46	3.65	405	1.80	16.3	Clear/Grey	Low - Mod	None	Yes	Nil	Nil	Nil	Nil	0.0
									24-Aug-18	Sampling	5	6.32	5.47	28.87	Micropurge /IP	14:06	4.22	3.70	287	2.27	15.4	Cloudy	Low	None	Yes	Nil	Nil	Nil	Nil	0.0
									3-Oct-18	Inspection	-	6.26	5.41	28.93	Interface Probe	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.0
									29-Oct-18	Sampling	7	6.30	5.45	28.89	Micropurge /IP	12:20	4.34	2.93	237	3.22	19.1	Cloudy	Low	None	Yes	Nil	Nil	Nil	n/a	0.0
									3-Jan-19	Sampling	9	6.25	5.40	28.94	Micropurge /IP	10:15	4.33	2.94	186.9	1.88	19.9	Clear/cloudy	Low	None	Yes	Nil	Nil	Nil	n/a	0.0
MW8	8.0	5.0 - 8.0	Sandy CLAY	327982.13	5797772.41	34.28	-0.05	34.33	13-Apr-18	Development	-	5.30	5.35	28.98	Bailer	n/a	n/a	n/a	n/a	n/a	n/a	Cloudy Grey	Moderate	None	n/a	Nil	n/a	n/a	Nil	n/a
									19-Apr-19	Sampling	3	5.40	5.45	28.88	Micropurge /IP	8:30	4.35	2.37	291	2.18	17.2	Grey	Moderate	None	Yes	Nil	Nil	Nil	n/a	0.0
									31-May-18	Sampling	4	5.37	5.42	28.91	Micropurge /IP	14:53	4.50	2.84	311	3.89	15.2	Clear	Low	None	Yes	Nil	Nil	Nil	Nil	0.2
									24-Aug-18	Sampling	5	5.62	5.67	28.66	Micropurge /IP	10:34	4.70	3.15	290	1.38	13.5	Clear/Light grey	Low	None	Yes	Nil	Nil	Nil	Nil	0.0
									3-Oct-18	Sampling	6	5.47	5.52	28.81	Micropurge /IP	10:10	4.92	2.18	39.6	2.28	16.7	Clear	Very Low	None	n/a	Nil	Nil	Nil	Nil	0.0
									29-Oct-18	Sampling	7	5.53	5.58	28.75	Micropurge /IP	12:35	4.79	2.30	249.2	2.98	17.6	Clear/brown	Low	None	Yes	Nil	Nil	Nil	n/a	0.0
									3-Jan-19	Sampling	9	5.48	5.53	28.80	Micropurge /IP	10:15	4.50	2.41	298.6	3.01	19.4	Clear	Low	None	Yes	Nil	Nil	Nil	n/a	0.0

Table 1. Bore Details & Groundwater Field Parameters Summary

Project: **1452C Highett**

Atma Environmental

Well No.	Total Bore Depth (mBGL)	Screened Interval (mBGL)	Screen in:	Easting	Northing	Top-of-Casing Elevation (m AHD)	Casing Stick-up	Ground Surface Elevation (m AHD)	Date	Event	GME #	Depth to Water (m bTOC)	Depth to Water (m BGL)	Water Level Elevation (m AHD)	Sampling/ Inspection Method	Time	pH	EC (mS/cm)	Redox (mV)	DO (mg/L)	Temp. (0C)	Colour	Turbidity	Odour	Field Filtered	Sheen	LNAPL Measured with IP (cm)	DNAPL Measured with IP (cm)	LNAPL Measured with Bailer (cm)	PID (ppm)
MW9	7.5	4.5 - 7.5	Clayey SAND	327956.37	5797739.79	34.62	0.65	33.97	13-Apr-18	Development	-	6.11	5.46	28.51	Bailer	n/a	n/a	n/a	n/a	n/a	n/a	Clear/grey	Low-Mod	None	n/a	Nil	n/a	n/a	Nil	n/a
									19-Apr-19	Sampling	3	6.00	5.35	28.62	Micropurge /IP	10:25	4.73	3.45	253	2.09	18.3	Clear/grey	Very Low	None	Yes	Nil	Nil	Nil	Nil	0.0
									31-May-18	Sampling	4	6.03	5.38	28.59	Micropurge /IP	13:26	4.49	3.66	347	1.75	17.0	Clear/grey	Low	None	Yes	Nil	Nil	Nil	Nil	0.0
									24-Aug-18	Sampling	5	6.17	5.52	28.45	Micropurge /IP	11:40	4.57	3.73	322	2.48	15.3	:Light grey	Low-Mod	None	Yes	Nil	Nil	Nil	Nil	0.0
									3-Oct-18	Inspection	-	6.07	5.42	28.55	Interface Probe	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.0
					Well Destroyed October 2018																										
MW13	11.4	8.4 - 11.4	SAND	n/a	n/a	n/a	0.65	n/a	18-Oct-18	Development	-	6.60	5.95	n/a	Bailer	n/a	n/a	n/a	n/a	n/a	n/a	Milky/Light brown	Very High	None	n/a	Nil	n/a	n/a	Nil	n/a
Nested Well									29-Oct-18	Sampling	7	6.01	5.36	n/a	Micropurge /IP	15:45	5.33	1.68	103	4.31	19.4	Brown	High	None	n/a	Nil	Nil	Nil	n/a	0.0
									3-Jan-19	Sampling	9	5.95	5.30	n/a	Micropurge /IP	15:06	5.66	1.10	139.3	1.02	21.7	Brown	High	None	n/a	Nil	Nil	Nil	n/a	0.0
MW13a	7.0	4.0 - 7.0	SAND	n/a	n/a	n/a	0.37	n/a	18-Oct-18	Development	-	6.65	6.28	n/a	Bailer	n/a	n/a	n/a	n/a	n/a	n/a	Clear/Light Brown	Low - Mod	None	n/a	Nil	n/a	n/a	Nil	n/a
Nested Well									29-Oct-18	Sampling	7	5.72	5.35	n/a	Micropurge /IP	14:25	5.59	1.68	142	5.96	19.4	Cloudy	Low	None	n/a	Nil	Nil	Nil	n/a	0.1
									3-Jan-19	Sampling	9	5.67	5.30	n/a	Micropurge /IP	13:48	5.32	1.85	161.3	3.52	21.6	Cloudy	Low	None	n/a	Nil	Nil	Nil	n/a	0.0
MW14	7.5	4.5 - 7.5	SAND	n/a	n/a	n/a	0.55	n/a	23-Nov-18	Development	-	5.24	4.69	n/a	Bailer	n/a	n/a	n/a	n/a	n/a	n/a	Mily white/brown	High	None	n/a	Nil	n/a	n/a	Nil	n/a
									3-Dec-18	Sampling	8	5.17	4.62	n/a	Micropurge /IP	10:15	4.38	2.66	232.1	5.05	17.3	Grey/Light brown	Moderate	None	n/a	Nil	Nil	Nil	n/a	0.7
									2-Jan-19	Sampling	9	5.20	4.65	n/a	Micropurge /IP	10:40	4.81	3.39	230.1	4.00	20	Grey	Low-Mod	None	n/a	Nil	Nil	Nil	n/a	0.0
MW15	7.0	4.0 - 7.0	SAND	n/a	n/a	n/a	0.55	n/a	23-Nov-18	Development	-	5.40	4.85	n/a	Bailer	n/a	n/a	n/a	n/a	n/a	n/a	Milky light brown	High	None	n/a	Nil	n/a	n/a	Nil	n/a
									3-Dec-18	Sampling	8	5.02	4.47	n/a	Micropurge /IP	12:35	4.41	3.40	229.9	4.12	19.5	Light grey	Moderate	None	n/a	Nil	Nil	Nil	n/a	1.1
									2-Jan-19	Sampling	9	5.07	4.52	n/a	Micropurge /IP	13:50	4.88	3.50	266.3	3.71	20	Clear/grey	Low	None	n/a	Nil	Nil	Nil	n/a	0.0
MW16	6.5	3.5 - 6.5	SAND	n/a	n/a	n/a	1.0	n/a	23-Nov-18	Development	-	5.80	4.80	n/a	Bailer	n/a	n/a	n/a	n/a	n/a	n/a	Milky light brown	High	None	n/a	Nil	n/a	n/a	Nil	n/a
									3-Dec-18	Sampling	8	5.30	4.30	n/a	Micropurge /IP	12:00	5.33	2.75	187	4.39	19.5	Light grey	Moderate	None	n/a	Nil	Nil	Nil	n/a	6.4
									2-Jan-19	Sampling	9	5.34	4.34	n/a	Micropurge /IP	15:15	6.37	2.86	323	2.35	22.3	Clear/grey	Low	None	n/a	Nil	Nil	Nil	n/a	0.9
Off-Site Wells																														
MWA	9.9	4.5 - 10.5	SAND	n/a	n/a	35.46	-0.1	35.56	20-Mar-18	Inspection	-	6.22	6.32	29.24	Interface Probe	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Nil	n/a	n/a	n/a	n/a	n/a	n/a
Up-gradient									1-Nov-18	Sampling	7	6.25	6.35	29.21	Passive Defussion Bags	n/a	n/a	n/a	n/a	n/a	n/a	Clear	Low	None	n/a	Nil	n/a	n/a	Nil	n/a
MWB	11.3	5.0 - 11	SAND	328139.60	5797740.56	36.57	0.805	35.77	20-Mar-18	Inspection	-	7.22	6.42	29.35	Interface Probe	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	None	n/a	n/a	n/a	n/a	n/a	n/a
Up-gradient									19-Apr-18	Inspection	-	7.18	6.38	29.39	Interface Probe	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	None	n/a	n/a	n/a	n/a	n/a	0.0
									31-May-18	Sampling	4	7.24	6.44	29.33	Micropurge /IP	11:09	4.5	0.73	250	0.82	14	Yellow/brown	High	None	Yes	Nil	Nil	Nil	Nil	0.0
									1-Nov-18	Sampling	7	7.27	6.47	29.30	Passive Defussion Bags	n/a	n/a	n/a	n/a	n/a	n/a	Clear	Low	None	n/a	Nil	n/a	n/a	Nil	n/a
MW10	9.0	5.0 - 9.0	Clayey SAND	328081.80	5797794.03	36.70	0.63	36.07	13-Apr-18	Development	-	7.31	6.68	29.39	Bailer	n/a	n/a	n/a	n/a	n/a	n/a	Grey/white/clear	Low	None	n/a	Nil	n/a	n/a	Nil	n/a
Up-gradient									18-Apr-18	Sampling	3	7.45	6.82	29.25	Micropurge /IP	15:45	4.93	1.66	264	2.75	19.6	Grey/light brown	Moderate	None	Yes	Nil	Nil	Nil	n/a	0.0
									31-May-18	Sampling	4	7.53	6.9	29.17	Micropurge /IP	9:33	5.11	1.77	283	3.49	11.5	Grey/yellow	Moderate	None	Yes	Nil	Nil	Nil	Nil	0.0
					MW10 converted to flush				23-Aug-18	Sampling	5	6.98	7.00	29.07	Micropurge /IP	12:15	4.39	1.83	307	2.17	12.7	Light brown	Moderate	None	Yes	Nil	Nil	Nil	Nil	0.0
						36.05	-0.02	36.07	3-Oct-18	Inspection	-	6.90	6.92	29.15	Interface Probe	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Nil	0.0
									30-Oct-18	Sampling	7	6.93	6.95	29.12	Micropurge /IP	15:25	4.89	1.35	240	4.41	19.5	Light brown	Low	None	Yes	Nil	Nil	Nil	n/a	0.0
									4-Jan-19	Sampling	9	6.87	6.89	29.18	Micropurge /IP	9:49	4.82	1.43	149	3.19	22.7	Brown	Moderate	None	Yes	Nil	Nil	Nil	n/a	0.0
MW11	7.0	4.0 - 7.0	SAND	327915.00	5797729.74	32.10	-0.05	32.15	13-Apr-18	Development	-	3.66	3.71	28.44	Bailer	n/a	n/a	n/a	n/a	n/a	n/a	Grey	Mod-High	None	n/a	Nil	n/a	n/a	Nil	n/a
Down-gradient									19-Apr-19	Sampling	3	3.78	3.83	28.32	Micropurge /IP	12:10	6.50	3.11	167	0.93	22.5	Grey	Modetate	None	Yes	Nil	Nil	Nil	Nil	0.1
									31-May-18	Sampling	4	3.72	3.77	28.38	Micropurge /IP	10:23	6.49	3.27	183	1.72	19.9	Clear	Low	None	Yes	Nil	Nil	Nil	Nil	0.1
									23-Aug-18	Sampling	5	3.86	3.91	28.24	Micropurge /IP	12:10	5.35	3.40	160	0.86	16.6	Cloudy	Low	None	Yes	Nil	Nil	Nil	Nil	0.0
									3-Oct-18	Inspection	-	3.82	3.87	28.28	Interface Probe	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Nil	0.0
									30-Oct-18	Sampling	7	3.84	3.89	28.26	Micropurge /IP	10:55	6.38	2.68	96	1.83	19.7	Milky	Low	None	Yes	Nil	Nil	Nil	n/a	0.0
									2-Jan-19	Sampling	9	4.05	4.10	28.05	Micropurge /IP	12:30	4.81	1.48	179.5	2.17	21.2	Cloudy	Low	None	Yes	Nil	Nil	Nil	n/a	0.0
MW12	7.4	4.4 - 7.4	Clayey SAND	327923.72	5797797.77	32.69	-0.03	32.72	13-Apr-18	Development	-	3.76	3.79	28.93	Bailer	n/a	n/a	n/a	n/a	n/a	n/a	Grey	High	None	n/a	Nil	n/a	n/a	Nil	n/a
Down-gradient									19-Apr-19	Sampling	3	3.90	3.93	28.79	Micropurge /IP	14:10	4.92	1.86	217	4.15	20.6	Grey	High	None	Yes	Nil	Nil	Nil	n/a	0.0
									31-May-18	Sampling	4	3.89	3.92	28.80	Micropurge /IP	12:00	4.82	1.77	264	1.32	18.5	Clear/grey	Low-Mod	None	Yes	Nil	Nil	Nil	Nil	0.5
									23-Aug-18	Sampling	5	4.07	4.10	28.62	Micropurge /IP	10:02	4.96	1.79	149	1.79	16.2	Clear	Low-Mod	None	Yes	Nil	Nil	Nil	Nil	0.0
									3-Oct-18	Inspection	-	4.03	4.06	28.66	Interface Probe	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Nil	0.0
									30-Oct-18	Sampling	7	4.04	4.07	28.65	Micropurge /IP	9:20	4.67	1.37	191	5.48	17.2	Clear	Low	None	Yes	Nil	Nil	Nil	n/a	0.0
									2-Jan-19	Sampling	9	3.77	3.80	28.92	Micropurge /IP	10:40	6.46	2.74	123.6	1.98	20.6	Light grey	Low	None	Yes	Nil	Nil	Nil	n/a	0.0
α1	6.7	3.0 - 6.7	SAND	327947.57	5797708.04	32.90	0.50	32.40	21-Oct-15	Sampling	-	3.76	3.26	29.14	Micropurge /IP	9:30	6.63	0.93	121	3.00	16.5	light brown	High	None	Yes	Nil	Nil	Nil	n/a	0.8
Cross-gradient									24-Nov-15	Sampling	-	3.86	3.36	29.04	Micropurge /IP	9:50	6.02	0.83	118	2.21	19.2	cloudy	Low	None	Yes	Nil	Nil	Nil	n/a	0.4
						32.99			21-Dec-17	Sampling	-	n/a	3.15	28.77	Micropurge /IP	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
									14-Feb-18	Sampling	-	n/a	3.09	28.83	Micropurge /IP	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		New survey April 2018:		327947.57	5797708.03	32.94	1.1	31.84	19-Apr-18	Inspection	-	4.31	3.21	28.63	Interface Probe	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.0
									23-Aug-18	Sampling	5	4.53	3.43	28.41	Micropurge /IP	14:00	6.58	1.37	139	3.2	16.1	Grey/cloudy	Low	None	Yes	Nil	Nil	Nil	Nil	0.0
									30-Oct-18	Sampling	7	4.43	3.33	28.51	Micropurge /IP	12:40	6.98	1.09	-21.5	3.1	18.6	Clear	Low	None	Yes	Nil	Nil	Nil	n/a	0.0
									2-Jan-19	Sampling	9	4.41	3.31	28.53	Micropurge /IP	14:32	7.16	1.11	74.3	1.85	20.9	Cloudy	Low	None	n/a	Nil	Nil	Nil	n/a	0.0
α2	7.1	3.6 - 7.1	SAND	327968.89	5797708.03	32.98	0.5	32.48	21-Oct-15	Sampling	-	3.82	3.32	29.16	Micropurge /IP	11:40	4.92	0.83	170	1.70	15.7	Cloudy	High	None	Yes	Nil	Nil	Nil	n/a	0.7
Cross-gradient									24-Nov-15	Sampling	-	3.85	3.35	29.13	Micropurge /IP	11:20	5.25	0.87	217	0.77	19.7	Clear to cloudy	Low	None	Yes	Nil	Nil	Nil	n/a	0.5
						32.09			21-Dec-17	Sampling	-	n/a	3.16	28.90	Micropurge /IP	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
									14-Feb-18	Sampling	-	n/a	3.15	28.97	Micropurge /IP	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		New survey April 2018:		327968.95	5797707.99	33.08	1.14	31.94	19-Apr-18	Inspection	-	4.31	3.17	28.77	Interface Probe	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.0
									23-Aug-18	Sampling	5	4.36	3.22	28.72	Micropurge /IP	15:30	5.48	0.66	217	4.39	15.8	Cloudy	Low	None	Yes	Nil	Nil	Nil	Nil	0.1
									30-Oct-18	Sampling	7	4.42	3.28	28.66	Micropurge /IP	14:05	5.28	0.71	55.7	3.79	18.5	Clear	Low	None	Yes	Nil	Nil	Nil	n/a	0.0
									2-Jan-19	Sampling	9	4.40	3.26	28.54	Micropurge /IP	15:50	5.38	0.73	131.9	3.50	21.1	Cloudy	Low	None	n/a	Nil	Nil	Nil	n/a	0.0
α3	7.0	3.1 - 6.6	SAND	327952.63	5797688.52	32.89	0.35	32.54	21-Oct-15	Sampling	-	3.79	3.44	29.10	Micropurge /IP	13:45	6.82	1.50	97	2.38	18.1	clear to cloudy	Low	None	Yes	Nil	Nil	Nil	n/a	0.5
Cross-gradient									24-Nov-15	Sampling	-	3.83	3.48	29.06	Micropurge /IP	13:05	6.94	1.33	223	1.38	18.3	cloudy	High	None	Yes	Nil	Nil	Nil	n/a	0.1
						32.93			21-Dec-17	Sampling	-	n/a	3.19	28.86	Micropurge /IP	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
									14-Feb-18	Sampling	-	n/a	3.14	28.91	Micropurge /IP	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		New survey April 2018:		327952.63	5797688.54	32.88	0.93	31.95	19-Apr-18	Inspection	-	4.22	3.29	28.66	Interface Probe	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.0

Notes:
MGA94 Zone 55 Coordinates
AGL = Above Ground Level
BGL = Below Ground Level
TOC = Top Of Casing
AHD = Australian Height Datum
PPM = Parts Per Million
IP = Interface Probe
n/a = not available

Table 2. Groundwater Sample Analysis Results

PROJECT: Highett (#1452C)

Protected Beneficial Uses of Segment 'A2' Groundwater:	Assessment Guideline				Arsenic (As)	Barium (Ba)	Beryllium (Be)	Boron (B)	Cadmium (Cd)	Total Chromium (Cr)	Hexavalent Chromium	Cobalt (Co)	Copper (Cu)	Lead (Pb)	Manganese (Mn)	Mercury (Hg)	Molybdenum (Mo)	Nickel (Ni)	Selenium (Se)	Silver (Ag)	Tin (Sn)	Zinc (Zn)	Cyanide (total)	Calcium (Ca)	Magnesium (Mg)	Potassium (K)	Sodium (Na)	Chloride (Cl)	Sulfate (as S)[A]	Total Ammonia (as N)	Nitrate (as N)	Nitrite (as N)	Organic Nitrogen (as N)	Total Kjeldahl Nitrogen (TKN as N)	Total Nitrogen	E.coli (MPN/100 mL)	Thermotolerant Coliforms (MPN/100 mL)	Bicarbonate Alkalinity mg CaCO3/L	Carbonate Alkalinity mg CaCO3/L	Total Alkalinity mg CaCO3/L	Total Dissolved Solids (TDS)	TRH (C6-C9)	TRH (C10-C14)	TRH (C15-C28)	TRH (C29-C36)	TRH (C6-C10)[B]	TRH (>C10-C16)[C]	TRH (>C16-C34)	TRH (>C34-C40)
Water Dependent Ecosystems & Species	SEPP Waters (Port Phillip Bay - Hobsons Bay) *Slightly to Moderatley Modified*				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.3	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	ANZECC AWQGs 2000 - Aquatic Ecosystems 95% Protection for Marine Waters				0.0045[F]	n/a	n/a	n/a	0.0055	0.0274	0.0044	0.001	0.0013	0.0044	0.08[F]	0.0004	0.023[F]	0.070	n/a	0.0014	n/a	0.015	0.007	n/a	n/a	n/a	n/a	n/a	n/a	0.74	2.4[G]	0.06[N]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Potable Water Supply	NHMRC Australian Drinking Water Guidelines 2011 (Updated Version 3.5 2018) - Health				0.01	2.00	0.06	4.0	0.002	0.050	0.050	n/a	2.0	0.01	0.50	0.001	0.05	0.020	0.01	0.1	n/a	n/a	0.08	n/a	n/a	n/a	n/a	n/a	n/a	n/a	11.29[H]	0.912	n/a	n/a	n/a	0.0	0.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	NHMRC Australian Drinking Water Guidelines 2011 (Updated Version 3.5 2018) - Aesthetic				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1.0	n/a	0.10	n/a	n/a	n/a	n/a	n/a	n/a	3.0	n/a	n/a	n/a	n/a	180	250	250	0.50	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	600	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Agriculture & Irrigation (Irrigation)	ANZECC AWQGs 2000 - Irrigation Water Quality (LTV for Heavy Metals and Metalloids)				0.1	n/a	0.10	0.50	0.01	0.1	n/a	0.050	0.2	2.0	0.2	0.002	0.01	0.2	0.02	n/a	n/a	2.0	n/a	n/a	n/a	n/a	115	175	n/a	n/a	n/a	n/a	n/a	n/a	5.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Agriculture & Irrigation (Stock Watering)	ANZECC AWQGs 2000 - Livestock Watering				0.5	n/a	n/a	5.0	0.05	1.0	n/a	1.0	0.4	0.1	NST	0.002	0.15	1.0	0.02	n/a	n/a	20	n/a	1,000	n/a	n/a	n/a	n/a	1,000	n/a	90.29	9.12	n/a	n/a	n/a	100	100	n/a	n/a	n/a	2,000	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	NHMRC Australian Drinking Water Guidelines 2011 - Health *(adopted for pesticides & organics)*				n/a	n/a	n/a	n/a	n/a	n/a	0.050	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.08	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Water-based Recreation (Primary Contact Recreation)	NHMRC Australian Drinking Water Guidelines 2011 (Updated Version 3.5 2018) - Health *(modified x 10)*				0.100	20	0.60	40	0.020	0.5[I]	0.50	0.060[K]	20	0.10	5.0	0.010	0.50	0.2	0.10	1.000	120[K]	n/a	0.08	n/a	n/a	n/a	n/a	n/a	n/a	n/a	112.9[H]	30	n/a	n/a	n/a	0.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	NHMRC Australian Drinking Water Guidelines 2011 (Updated Version 3.5 2018) - Aesthetic				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1.0	n/a	0.10	n/a	n/a	n/a	n/a	n/a	n/a	3.0	n/a	n/a	n/a	n/a	180	250	250	0.41[H]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Buildings and Structures	AS2159-2009 - Exposure Classification For Concrete Piles— Piles In Soil				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	6,000	333	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Monitoring Well	**Samle ID**	**GME #**	**Sampling Date**	**Laboratory (Report #)**																																													
ONSITE WELLS																																																	
MW1	MW1-100517	1	10-May-17	545817	< 0.001	0.04	< 0.001	< 0.05	< 0.0002	< 0.001	-	0.006	0.021	< 0.001	0.072	< 0.0001	< 0.005	0.170	< 0.001	< 0.005	< 0.005	0.140	< 0.005	17	13	7.3	350	470	80	0.02	0.07	-	-	-	0.09[M]	-	-	38	< 10	38	1,300	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW1-280617	2	28-Jun-17	552273	< 0.001	0.03	< 0.001	< 0.05	< 0.0002	< 0.001	-	0.003	0.006	< 0.001	0.052	< 0.0001	< 0.005	0.140	< 0.001	< 0.005	< 0.005	0.035	-	10	14	< 0.5	440	460	90	0.04	0.24	-	-	-	0.28[M]	-	-	27	< 10	27	1,400	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW1-170418	3	17-Apr-18	594779	< 0.001	0.03	< 0.001	< 0.05	< 0.0002	< 0.001	< 0.001	0.002	0.011	0.002	0.024	< 0.0001	< 0.005	0.170	< 0.001	< 0.005	< 0.005	0.045	< 0.005	6.1	15	0.8	490	340	90	< 0.01	0.20	-	-	-	0.2[M]	-	-	< 20	< 10	< 20	1,300	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW1	6	03-Oct-18	620846	< 0.001	0.03	< 0.001	< 0.05	< 0.0002	< 0.001	-	0.002	0.038	0.004	0.015	< 0.0001	< 0.005	0.130	< 0.001	< 0.005	< 0.005	0.061	-	4.8	13	0.8	410	510	57	0.04	< 0.02	< 0.02	< 0.2	< 0.2	< 0.2	-	-	< 20	< 10	< 20	-	-	-	-	-	-	-	-	-
	MW1	9	02-Jan-19	634656	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW1A	MW1A-310518	4	31-May-18	601305	< 0.001	0.03	< 0.001	0.06	< 0.0002	< 0.001	< 0.001	0.003	0.011	0.002	0.039	< 0.0001	< 0.005	0.009	< 0.001	< 0.005	< 0.005	0.095	< 0.005	9.0	15	< 0.5	390	340	60	0.02	0.02	-	-	-	0.04[M]	-	-	< 20	< 10	< 20	1,100	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW1A-230818	5	23-Aug-18	614153	< 0.0002	0.023	0.0005	0.016	< 0.00005	0.0005	-	0.0018	0.011	0.001	0.015	< 0.00004	0.0002	0.120	0.0003	< 0.0001	0.0001	0.039	-	5.4	15	0.6	400	370	57	0.02	0.35	-	-	-	0.28[M]	-	-	< 20	< 10	< 20	1,200	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW1A	6	03-Oct-18	620846	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW1A-301018	7	30-Oct-18	625411	< 0.001	0.03	< 0.001	< 0.05	< 0.0002	< 0.001	-	0.002	0.038	0.004	0.015	< 0.0001	< 0.005	0.130	< 0.001	< 0.005	< 0.005	0.061	-	4.8	13	0.8	410	510	57	0.04	< 0.02	< 0.02	< 0.2	< 0.2	< 0.2	-	-	< 20	< 10	< 20	-	-	-	-	-	-	-	-	-
	MW1A	9	03-Jan-19	634755	< 0.001	< 0.02	< 0.001	< 0.05	< 0.0002	< 0.001	-	0.004	0.007	< 0.001	0.062	< 0.0001	< 0.005	0.190	< 0.001	< 0.005	< 0.005	0.024	-	7.2	13	0.8	410	640	63	0.02	0.04	< 0.02	-	-	0.06[M]	-	-	< 20	< 10	< 20	1,500	-	-	-	-	-	-	-	-
MW2	MW2-100517	1	10-May-17	545817	< 0.001	0.05	< 0.001	< 0.05	< 0.0002	< 0.001	-	0.018	0.012	< 0.001	0.063	< 0.0001	< 0.005	0.160	< 0.001	< 0.005	< 0.005	0.110	< 0.005	19	39	5.2	640	930	73	0.14	41	-	-	-	41[M]	-	-	< 20	< 10	< 20	2,300	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW2-280617	2	28-Jun-17	552273	< 0.001	0.04	< 0.001	< 0.05	< 0.0002	< 0.001	-	0.008	0.013	0.002	0.027	< 0.0001	< 0.005	0.250	< 0.001	< 0.005	< 0.005	0.038	-	18	36	< 5	750	920	73	0.08	62	-	-	-	62[M]	-	-	< 20	< 10	< 20	2,400	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW2-170418	3	17-Apr-18	594779	< 0.001	0.04	< 0.001	< 0.05	< 0.0002	< 0.001	< 0.001	0.003	0.010	0.003	0.012	< 0.0001	< 0.005	0.180	< 0.001	< 0.005	< 0.005	0.031	< 0.005	13	40	< 5	820	1,000	73	< 0.01	82	-	-	-	82[M]	-	-	< 20	< 10	< 20	2,300	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW2-230818	5	23-Aug-18	614153	< 0.0002	0.03	0.0002	0.01	< 0.00005	0.0006	-	0.002	0.016	0.005	0.008	< 0.00004	0.0001	0.210	0.0006	< 0.0001	0.0002	0.038	-	-	-	-	-	-		< 0.01	78	-	-	-	78[M]	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW2-291018	7	29-Oct-18	625218	< 0.001	0.03	< 0.001	0.08	0.0004	< 0.001	-	0.003	0.036	0.004	0.059	< 0.0001	< 0.005	0.110	< 0.001	< 0.005	< 0.005	0.095	-	-	-	-	-	-		0.02	75	< 0.02	4.80	4.80	80	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2A	MW2A-310518	4	31-May-18	601305	< 0.001	0.03	< 0.001	0.06	0.0004	< 0.001	< 0.001	0.004	0.012	0.002	0.200	< 0.0001	< 0.005	0.030	< 0.001	< 0.005	< 0.005	0.150	< 0.005	31	27	7.5	560	830	73	0.49	2.4	-	-	-	2.9[M]	-	-	63	< 10	63	1,700	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW2A-230818	5	23-Aug-18	614153	0.0004	0.016	< 0.0001	0.016	0.00043	0.0002	-	0.004	0.004	0.001	0.160	< 0.00004	0.0005	0.110	0.0003	< 0.0001	0.0001	0.074	-	13	23	< 5	550	830	67	0.37	3.5	-	-	-	3.9[M]	-	-	40	< 10	40	1,700	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW2A-291018	7	29-Oct-18	625218	< 0.001	0.02	< 0.001	< 0.05	0.0004	< 0.001	-	0.004	0.023	< 0.001	0.200	< 0.0001	< 0.005	0.088	< 0.001	< 0.005	< 0.005	0.130	-	27	30	< 5	750	780	70	0.21	5.1	0.03	1.20	1.40	6.5[M]	-	-	75	< 10	75	1,900	-	-	-	-	-	-	-	-
	MW2A	9	02-Jan-19	634656	< 0.001	< 0.02	< 0.001	< 0.05	0.0004	< 0.001	-	0.003	0.042	0.005	0.096	< 0.0001	< 0.005	0.064	< 0.001	< 0.005	< 0.005	0.100	-	12	23	< 5	590	890	70	0.21	8.5	< 0.02	-	-	8.7[M]	< 1	< 1	31	< 10	31	1,800	-	-	-	-	-	-	-	-
MW3	MW3-100517	1	10-May-17	545817	0.002	0.89	0.002	< 0.05	0.0002	0.004	-	0.047	0.029	0.008	0.170	< 0.0001	< 0.005	0.160	0.003	< 0.005	< 0.005	0.140	< 0.005	17	220	< 5	740	1,900	11	0.09	0.05	-	-	-	0.14[M]	-	-	< 20	< 10	< 20	4,200	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW3-280617	2	28-Jun-17	552273	0.004	0.82	0.002	< 0.05	< 0.0002	0.002	-	0.043	0.029	0.015	0.130	< 0.0001	< 0.005	0.150	0.005	< 0.005	< 0.005	0.039	-	15	220	< 5	880	2,000	12	0.08	0.41	-	-	-	0.49[M]	-	-	< 20	< 10	< 20	3,700	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW3-170418	3	17-Apr-18	594779	0.003	0.58	0.004	< 0.05	< 0.0002	0.003	< 0.001	0.041	0.029	0.026	0.073	< 0.0001	< 0.005	0.190	0.005	< 0.005	< 0.005	0.058	< 0.005	9.4	230	< 5	890	1,700	11	0.05	0.05	-	-	-	0.1[M]	-	-	< 20	< 10	< 20	3,200	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW3	9	04-Jan-19	634755	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW3A	MW3A-310518	4	31-May-18	601305	0.003	0.40	0.004	< 0.05	< 0.0002	0.003	< 0.001	0.039	0.053	0.017	0.160	< 0.0001	< 0.005	0.110	0.002	< 0.005	< 0.005	0.099	< 0.005	6.7	140	6.1	680	1,300	15	0.06	0.65	-	-	-	0.71[M]	-	-	< 20	< 10	< 20	2,500	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW3A-240818	5	24-Aug-18	614152	0.003	0.38	0.006	< 0.005	0.00011	0.003	-	0.039	0.082	0.031	0.077	< 0.00004	< 0.0001	0.140	0.003	< 0.0001	0.0002	0.054	-	< 5	160	< 5	730	1,500	33	< 0.01	0.42	-	-	-	0.42[M]	-	-	< 20	< 10	< 20	2,400	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW3A-301018	7	30-Oct-18	625411	0.003	0.34	0.005	< 0.05	< 0.0002	0.003	-	0.041	0.037	0.023	0.043	< 0.0001	< 0.005	0.220	0.003	< 0.005	< 0.005	0.055	-	< 5	240	< 5	1100	1800	14	< 0.01	0.54	< 0.02	< 0.2	< 0.2	0.54	-	-	< 20	< 10	< 20	-	-	-	-	-	-	-	-	-
	MW3A	9	04-Jan-19	634755	0.002	0.29	0.004	< 0.05	< 0.0002	0.002	-	0.034	0.013	0.021	0.031	< 0.0001	< 0.005	0.160	0.004	< 0.005	< 0.005	0.037	-	< 5	170	< 5	760	1700	17	< 0.01	0.64	< 0.02	-	-	0.64[M]	-	-	< 20	< 10	< 20	2,600	-	-	-	-	-	-	-	-
MW4	MW4-100517	1	10-May-17	545817	< 0.001	0.05	< 0.001	< 0.05	< 0.0002	< 0.001	-	0.007	0.005	< 0.001	0.020	< 0.0001	< 0.005	0.140	0.002	< 0.005	< 0.005	0.053	< 0.005	4.7	10	< 0.5	250	480	20	0.03	8.6	-	-	-	8.6[M]	-	-	< 20	< 10	< 20	870	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW4-281617	2	28-Jun-17	552273	< 0.001	0.04	< 0.001	< 0.05	< 0.0002	< 0.001	-	0.004	0.006	< 0.001	0.008	< 0.0001	< 0.005	0.130	0.002	< 0.005	< 0.005	0.022	-	3.7	9.7	< 0.5	270	370	12	0.05	8.8	-	-	-	8.9[M]	-	-	< 20	< 10	< 20	810	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW4-170418	3	17-Apr-18	594779	< 0.001	0.04	< 0.001	< 0.05	< 0.0002	< 0.001	-	0.003	0.017	0.001	0.006	< 0.0001	< 0.005	0.120	0.002	< 0.005	< 0.005	0.057	-	2.3	9.9	< 0.5	290	280	11	< 0.01	8.5	-	-	-	8.5[M]	-	-	< 20	< 10	< 20	760	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW4-240818	5	24-Aug-18	614152	< 0.0002	0.04	0.0008	0.013	9E-05	0.0002	-	0.003	0.020	0.003	0.003	0.00004	0.0005	0.170	0.0018	0.0002	0.0002	0.012	-	-	-	-	-	-		< 0.01	7.0	-	-	-	7.0[M]	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW4-291018	7	29-Oct-18	625218	< 0.001	0.04	< 0.001	< 0.05	0.0002	< 0.001	-	0.003	0.046	0.006	0.006	< 0.0001	< 0.005	0.120	0.001	< 0.005	< 0.005	0.078	-	-	-	-	-	-		< 0.01	9.3	< 0.02	0.70	0.70	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW4	9	03-Jan-19	634755	< 0.001	0.04	< 0.001	< 0.05	< 0.0002	< 0.001	-	0.003	0.011	0.002	< 0.005	< 0.0001	< 0.005	0.140	0.001	< 0.005	< 0.005	0.023	-	-	-	-	-	-		< 0.05	11	< 0.02	-	-	11[M]	-	< 1	-	-	-	-	-	-	-	-	-	-	-	-
MW4A	MW4A-010618	4	01-Jun-18	601305	< 0.001	0.12	< 0.001	< 0.05	< 0.0002	< 0.001	-	0.011	0.018	0.002	0.033	< 0.0001	< 0.005	0.077	< 0.001	< 0.005	< 0.005	0.100	-	10	28	0.7	200	260	2.0	0.02	13	-	-	-	13[M]	-	-	< 20	< 10	< 20	710	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW4A-240818	5	24-Aug-18	614152	< 0.0002	0.14	0.002	0.006	0.0001	0.0004	-	0.010	0.005	0.006	0.016	< 0.00004	0.0001	0.120	< 0.0002	< 0.0001	< 0.0001	0.028	-	7.0	32	< 0.5	230	410	1.8	0.04	9.7	-	-	-	9.7[M]	-	-	< 20	< 10	< 20	840	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW4A-291018	7	29-Oct-18	625218	< 0.001	0.14	0.002	< 0.05	< 0.0002	< 0.001	-	0.010	0.020	0.002	0.012	< 0.0001	< 0.005	0.100	< 0.001	< 0.005	< 0.005	0.034	-	7.0	33	< 0.5	250	380	< 1.7	0.02	12	< 0.02	0.50	0.50	13	-	-	< 20	< 10	< 20	870	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW4A	9	03-Jan-19	634755	< 0.001	0.12	0.001	< 0.05	< 0.0002	< 0.001	-	0.008	0.010	0.002	0.008	< 0.0001	< 0.005	0.200	< 0.001	< 0.005	< 0.005	0.025	-	5.5	29	< 0.5	220	360	4.0	< 0.01	12	< 0.02	-	-	12[M]	< 1	< 1	< 20	< 10	< 20	800	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
MW5	MW5-180418	3	18-Apr-18	594959	< 0.001	0.14	< 0.001	< 0.05	0.0003	< 0.001	< 0.001	0.011	0.020	0.002	0.056	< 0.0001	< 0.005	0.280	< 0.001	< 0.005	< 0.005	0.053	< 0.005	26	42	0.5	490	1,000	8.0	0.05	1.1	-	-	-	1.15[M]	-	-	< 20	< 10	< 20	1,400	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW5-300518	4	30-May-18	601100	< 0.001	0.15	< 0.001	0.08	< 0.0002	< 0.001	< 0.001	0.007	0.021	0.002	0.031	< 0.0001	< 0.005	0.073	< 0.001	< 0.005	< 0.005	0.066	< 0.005	24	40	< 0.5	400	470	7.7	< 0.01	0.46	-	-	-	0.46[M]	-	-	< 20	< 10	< 20	1,400	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW5-240818	5	24-Aug-18	614152	< 0.0002	0.14	0.0002	0.047	0.0018	0.0005	-	0.005	0.081	0.002	0.021	< 0.00004	0.0003	0.290	< 0.0002	0.0001	0.0002	0.033	-	23	40	< 0.5	400	790	7.3	< 0.01	0.33	-	-	-	0.33[M]	-	-	< 20	< 10	< 20	1,100	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
MW5A *MW5 Replacement*	MW5A-301018	7	30-Oct-18	625218	< 0.001	0.21	< 0.001	0.06	< 0.0002	< 0.001	-	0.007	0.083	0.006	0.096	< 0.0001	< 0.005	0.077	< 0.001	< 0.005	< 0.005	0.130	-	57	67	< 5	570	950	10.7	< 0.01	0.09	< 0.02	< 0.2	< 0.2	< 0.2	-	-	43	< 10	43	-	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW5A	9	03-Jan-19	634755	< 0.001	0.20	< 0.001	< 0.05	< 0.0002	< 0.001	-	0.005	0.011	0.002	0.034	< 0.0001	< 0.005	0.160	< 0.001	< 0.005	< 0.005	0.032	-	40	56	< 5	560	1100	9.7	< 0.01	0.07	< 0.02	-	-	0.07[M]	-	-	21	< 10	21	2,400	-	-	-	-	-	-	-	-
MW6	MW6-180418	3	18-Apr-18	594959	0.001	0.08	< 0.001	< 0.05	< 0.0002	< 0.001	-	0.003	0.004	< 0.001	0.140	< 0.0001	< 0.005	0.220	< 0.001	< 0.005	< 0.005	0.037	-	18	61	< 5	610	1,100	37	0.27	0.09	-	-	-	0.36[M]	-	-	92	< 10	92	1,900	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW6-310518	4	31-May-18	601305	0.001	0.07	< 0.001	0.1	< 0.0002	< 0.001	-	0.003	0.009	< 0.001	0.056	< 0.0001	< 0.005	0.068	< 0.001	< 0.005	< 0.005	0.059	-	8.4	52	< 5	540	890	33	0.17	0.74	-	-	-	0.91[M]	-	-	60	< 10	60	1,700	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW6-240818	5	24-Aug-18	614152	0.0008	0.063	< 0.0001	0.058	0.00005	0.0015	-	0.004	0.013	0.002	0.045	< 0.00004	0.0004	0.100	0.0004	< 0.0001	0.0002	0.057	-	6.9	55	< 0.5	500	840	26	0.05	0.26	-	-	-	0.31[M]	-	-	64	< 10	64	1,400	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW6-301018	7	30-Oct-18	625411	0.001	0.05	< 0.001	0.06	< 0.0002	0.001	-	0.004	0.036	0.001	0.027	< 0.0001	< 0.005	0.061	< 0.001	< 0.005	< 0.005	0.054	-	5.8	40	0.9	430	760	22	0.15	0.38	< 0.02	0.20	0.40	0.80	-	-	93	< 10	93	-	-	-	-	-	-	-	-	-
	MW6	9	04-Jan-19	634755	0.001	0.05	< 0.001	< 0.05	< 0.0002	< 0.001	-	0.002	0.007	< 0.001	0.016	< 0.0001	< 0.005	0.036	< 0.001	< 0.005	< 0.005	0.022	-	5.4	39	0.5	430	760	23	0.06	0.46	< 0.02	-	-	0.52[M]	-	-	63	< 10	63	1,500	-	-	-	-	-	-	-	-
MW7	MW7-180418	3	18-Apr-18	594959	< 0.001	0.06	0.001	< 0.05	< 0.0002	0.001	-	0.011	0.030	0.012	0.017	< 0.0001	< 0.005	0.310	0.001	< 0.005	< 0.005	0.063	-	< 5	36	< 5	630	1,100	29	< 0.01	2.0	-	-	-	2.0[M]	-	-	< 20	< 10	< 20	1,700	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW7-300518	4	30-May-18	601100	< 0.001	0.06	0.001	< 0.05	< 0.0002	< 0.001	-	0.010	0.035	0.012	0.009	< 0.0001	< 0.005	0.063	< 0.001	< 0.005	< 0.005	0.078	-	< 5	41	< 5	710	910	30	< 0.01	2.0	-	-	-	2.0[M]	-	-	< 20	< 10	< 20	1,500	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW7-240818	5	24-Aug-18	614152	0.0004	0.058	0.0015	0.015	9E-05	0.0011	-	0.010	0.014	0.010	0.005	< 0.00004	0.0001	0.120	0.001	< 0.0001	< 0.0001	0.034	-	< 5	38	< 5	610	960	30	< 0.01	1.9	-	-	-	1.9[M]	-	-	< 20	< 10	< 20	1,800	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW7-291018	7	10-Oct-96	625218	< 0.001	0.05	0.001	< 0.05	< 0.0002	0.001	-	0.009	0.039	0.008	0.007	< 0.0001	< 0.005	0.160	< 0.001	< 0.005	< 0.005	0.042	-	< 5	38	< 5	670	900	29	< 0.01	1.9	< 0.02	< 0.2	< 0.2	2.0	-	-	< 20	< 10	< 20	1,800	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW7	9	03-Jan-19	634656	< 0.001	0.05	0.001	< 0.05	0.0009	< 0.001	-	0.008	0.033	0.010	< 0.005	< 0.0001	< 0.005	0.120	< 0.001	< 0.005	< 0.005	0.066	-	< 5	34	< 5	620	1200	37	< 0.01	2.0	< 0.02	-	-	2.0[M]	-	-	< 20	< 10	< 20	2,000	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
MW8	MW8-190418	3	19-Apr-18	595144	< 0.001	0.22	0.002	< 0.05	< 0.0002	< 0.001	-	0.013	0.034	0.005	0.050	< 0.0001	< 0.005	0.130	0.001	< 0.005	< 0.005	0.068	-	14	43	1.4	490	980	13	0.06	6.1	-	-	-	6.2[M]	-	-	< 20	< 10	< 20	1,400	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW8-290518	4	29-May-18	601013	< 0.001	0.18	0.002	< 0.05	< 0.0002	< 0.001	-	0.012	0.025	0.004	0.048	< 0.0001	< 0.005	0.150	0.001	< 0.005	< 0.005	0.300	-	9.8	34	0.8	440	860	10	0.06	6.9	-	-	-	7.0[M]	-	-	< 20	< 10	< 20	1,400	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW8-240818	5	24-Aug-18	614152	< 0.0002	0.2	0.002	0.018	0.0011	0.0006	-	0.011	0.0095	0.007	0.029	< 0.00004	0.0001	0.120	0.001	< 0.0001	< 0.0001	0.026	-	10	45	< 0.5	440	820	9.0	0.05	6.1	-	-	-	6.2[M]	-	-	< 20	< 10	< 20	1,500	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW8	6	03-Oct-18	620846	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW8-291018	7	29-Oct-18	625175	< 0.001	0.18	0.001	< 0.05	< 0.0002	< 0.001	-	0.010	0.029	0.005	0.025	< 0.0001	< 0.005	0.150	< 0.001	< 0.005	< 0.005	0.066	-	14	43	0.9	440	780	8.3	0.03	7.4	0.06	15	15	23	-	-	< 20	< 10	< 20	1,500	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW8	9	03-Jan-19	634656	< 0.001	0.19	0.002	< 0.05	< 0.0002	< 0.001	-	0.009	0.004	0.003	0.020	< 0.0001	< 0.005	0.120	< 0.001	< 0.005	< 0.005	0.017	-	11	38	< 0.5	460	900	14	< 0.01	7.7	< 0.02	-	-	7.7[M]	< 1	< 1	< 20	< 10	< 20	1,700	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
MW9	MW9-190418	3	19-Apr-18	595144	< 0.001	0.04	< 0.001	< 0.05	< 0.0002	0.001	-	0.007	0.021	0.003	0.098	< 0.0001	< 0.005	0.054	< 0.001	< 0.005	< 0.005	0.070	-	16	37	< 5	630	1,100	100	0.07	0.05	-	-	-	0.12[M]	-	-	< 20	< 10	< 20	1,900	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW9-290518	4	29-May-18	601013	< 0.001	0.03	< 0.001	< 0.05	< 0.0002	0.001	-	0.005	0.019	0.003	0.056	< 0.0001	< 0.005	0.190	< 0.001	< 0.005	< 0.005	0.160	-	12	36	< 5	610	950	93	0.05	< 0.02	-	-	-	0.05[M]	-	-	< 20	< 10	< 20	1,800	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW9-230818	5	23-Aug-18	614153	0.0003	0.025	0.0007	0.016	< 0.00005	0.0011	-	0.0028	0.0084	0.003	0.020	< 0.00004	< 0.0001	0.034	0.0003	< 0.0001	0.0001	0.028	-	10	34	< 5	640	910	87	0.09	< 0.02	-	-	-	0.09[M]	-	-	< 20	< 10	< 20	2,000	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
MW13 *(Screened 8.4 - 11.4 m bgl)*	MW13-291018	7	29-Oct-18	625175	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW13	9	03-Jan-19	634755	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.3	-	-	-	-	-	-	-	-	-	-	-	580	-	-	-	-	-	-	-	-
MW13A *(Screened 4.0 - 7.0 m bgl)*	MW13A-291018	7	29-Oct-18	625175	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW13A	9	03-Jan-19	634755	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14 *MW2 Replacement*	MW14	8	03-Dec-18	631206	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		0.19	58	0.26	-	-	58[M]	< 1	< 1	-	-	-	-	-	-	-	-	-	-	-	-
	MW14	9	02-Jan-19	634656	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	36	< 5	700	850	80	0.29	120	0.07	-	-	120[M]	< 1	< 1	< 20	< 10	< 20	2,500	-	-	-	-	-	-	-	-
MW15	MW15	8	03-Dec-18	631206	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		< 0.01	0.42	< 0.02	-	-	0.42[M]	< 1	< 1	-	-	-	-	-	-	-	-	-	-	-	-
	MW15	9	02-Jan-19	634656	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23	44	< 5	700	1300	37	< 0.01	0.29	< 0.02	-	-	0.29[M]	< 10	< 10	< 20	< 10	< 20	2,000	-	-	-	-	-	-	-	-
MW16	MW16	8	03-Dec-18	631206	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		< 0.01	0.64	0.03	-	-	0.6[M]	< 1	2.0	-	-	-	-	-	-	-	-	-	-	-	-
	MW16	9	02-Jan-19	634656	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.9	16	2.5	500	880	12	0.01	0.59	< 0.02	-	-	0.6[M]	< 1	< 1	160	< 10	160	1,500	-	-	-	-	-	-	-	-
OFF-SITE WELLS																																																	
MW10 *(Off-site; Up-gradient)*	MW10-180418	3	18-Apr-18	594959	< 0.001	0.06	< 0.001	< 0.05	< 0.0002	< 0.001	-	0.006	0.046	0.002	0.048	< 0.0001	< 0.005	0.150	0.002	< 0.005	< 0.005	0.024	-	15	21	0.7	310	600	7.0	0.04	1.8	-	-	-	1.8[M]	-	-	< 20	< 10	< 20	770	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW10-300518	4	30-May-18	601100	< 0.001	0.070	< 0.001	< 0.05	< 0.0002	< 0.001	-	0.006	0.016	0.001	0.036	< 0.0001	< 0.005	0.072	0.001	< 0.005	< 0.005	0.120	-	9.2	17	0.8	240	280	8.7	< 0.01	1.8	-	-	-	1.8[M]	-	-	< 20	< 10	< 20	750	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW10-240818	5	24-Aug-18	614152	< 0.0002	0.066	0.0005	0.013	0.00006	0.001	-	0.0047	0.018	0.008	0.015	< 0.00004	< 0.0001	0.079	0.001	< 0.0001	< 0.0001	0.031	-	8.5	21	0.6	260	420	4.7	< 0.01	1.8	-	-	-	1.8[M]	-	-	< 20	< 10	< 20	790	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW10-301018	7	30-Oct-18	625411	< 0.001	0.060	< 0.001	< 0.05	< 0.0002	< 0.001	-	0.005	0.032	0.004	0.012	< 0.0001	< 0.005	0.110	< 0.001	< 0.005	< 0.005	0.059	-	8.3	18	0.8	250	470	4.0	< 0.01	1.9	0.02	< 0.2	< 0.2	1.9	-	-	< 20	< 10	< 20	-	-	-	-	-	-	-	-	-
	MW10	9		634755	< 0.001	0.060	< 0.001	< 0.05	< 0.0002	< 0.001	-	0.004	0.013	0.002	0.009	< 0.0001	< 0.005	0.046	< 0.001	< 0.005	< 0.005	0.045	-	7.9	17	0.7	250	410	4.3	< 0.01	1.8	< 0.02	-	-	1.8[M]	-	-	< 20	< 10	< 20	990	-	-	-	-	-	-	-	-
MW11 *(Off-site; Down-gradient)*	MW11-190418	3	19-Apr-18	595144	< 0.001	0.09	< 0.001	0.21	< 0.0002	0.004	-	0.002	0.002	< 0.001	< 0.005	< 0.0001	< 0.005	0.120	0.002	< 0.005	< 0.005	0.008	-	49	72	3	470	950	11	< 0.01	2.8	-	-	-	2.8[M]	-	-	120	< 10	120	1,600	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW11-290518	4	29-May-18	601013	< 0.001	0.09	< 0.001	0.18	< 0.0002	0.005	-	0.002	0.004	< 0.001	< 0.005	< 0.0001	< 0.005	0.034	0.002	< 0.005	< 0.005	0.047	-	47	66	2.7	440	910	9.0	< 0.01	2.5	-	-	-	2.5[M]	-	-	110	< 10	110	1,700	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW11-230818	5	23-Aug-18	614153	0.0004	0.08	< 0.0001	0.21	< 0.00005	0.004	-	0.0012	0.0027	0.0001	0.002	< 0.00004	0.0003	0.130	0.002	< 0.0001	0.0001	0.013	-	43	63	2.6	450	860	10	< 0.01	2.5	-	-	-	2.5[M]	-	-	120	< 10	120	1,800	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW11-301018	7	30-Oct-18	625411	< 0.001	0.09	< 0.001	0.23	< 0.0002	0.006	-	0.002	0.061	0.003	< 0.005	< 0.0001	< 0.005	0.170	0.002	< 0.005	< 0.005	0.058	-	45	62	3.0	450	600	7.7	< 0.01	2.6	< 0.02	< 0.2	< 0.2	2.6	-	-	120	< 10	120	-	-	-	-	-	-	-	-	-
	MW11	9	02-Jan-19	634656	< 0.001	0.08	< 0.001	0.19	< 0.0002	0.004	-	< 0.001	0.007	< 0.001	< 0.005	< 0.0001	< 0.005	0.009	0.002	< 0.005	< 0.005	0.034	-	44	62	2.3	480	930	9.0	< 0.01	2.4	-	-	-	2.4[M]	-	-	110	< 10	110	1,500	-	-	-	-	-	-	-	-
MW12 *(Off-site; Down-gradient)*	MW12-190418	3	19-Apr-18	595144	< 0.001	0.03	< 0.001	< 0.05	< 0.0002	< 0.001	-	0.004	0.008	< 0.001	0.010	< 0.0001	< 0.005	0.094	< 0.001	< 0.005	< 0.005	0.027	-	7.6	17	< 0.5	350	380	80	< 0.01	1.4	-	-	-	1.4[M]	-	-	< 20	< 10	< 20	1,000	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW12-290518	4	29-May-18	601013	< 0.001	0.02	< 0.001	< 0.05	< 0.0002	< 0.001	-	0.002	0.009	0.001	< 0.005	< 0.0001	< 0.005	0.200	< 0.001	< 0.005	< 0.005	0.120	-	3.9	11	< 0.5	310	280	90	< 0.01	0.11	-	-	-	0.11[M]	-	-	< 20	< 10	< 20	930	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	0.1	< 0.1
	MW12-230818	5	23-Aug-18	614153	0.0002	0.019	0.0003	0.019	< 0.00005	0.0003	-	0.0014	0.0046	0.001	0.003	< 0.00004	0.0009	0.130	0.001	0.0005	0.0004	0.052	-	5.5	12	0.5	310	220	97	< 0.01	0.28	-	-	-	0.11[M]	-	-	< 20	< 10	< 20	990	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW12-301018	7	30-Oct-18	625218	< 0.001	0.02	< 0.001	< 0.05	< 0.0002	< 0.001	-	0.002	0.040	0.004	< 0.005	< 0.0001	< 0.005	0.130	< 0.001	< 0.005	< 0.005	0.074	-	4.3	11	< 0.5	290	270	103	< 0.01	0.08	< 0.02	< 0.2	< 0.2	< 0.2	-	-	< 20	< 10	< 20	-	-	-	-	-	-	-	-	-
	MW12	9	02-Jan-19	634656	< 0.001	< 0.02	< 0.001	< 0.05	< 0.0002	< 0.001	-	0.001	0.013	0.002	< 0.005	< 0.0001	< 0.005	0.068	< 0.001	< 0.005	< 0.005	0.110	-	3.4	10	< 0.5	310	290	97	< 0.01	0.03	-	-	-	0.03[M]	-	-	< 20	< 10	< 20	860	-	-	-	-	-	-	-	-
MWA *(Off-site; Up-gradient)*	MWA	-[K]	20-Mar-18	590286	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MWA/6.5	7	01-Nov-18	625519	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MWA/7.5	7	01-Nov-18	625519	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MWA/9.5	7	01-Nov-18	625519	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWB *(Off-site; Up-gradient)*	MWB	-[K]	20-Mar-18	590286	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	0.09	-	-	-	-	-	-	-	-	-	350	-	-	-	-	-	-	-	-
	MWB-300518	4	30-May-18	601100	0.001	< 0.02	< 0.001	< 0.05	< 0.0002	< 0.001	-	< 0.001	0.013	0.001	0.006	< 0.0001	< 0.005	0.029	< 0.001	< 0.005	< 0.005	0.520	-	< 0.5	2.2	< 0.5	120	74	50	< 0.01	0.30	-	-	-	0.3[M]	-	-	< 20	< 10	< 20	350	-	-	-	-	-	-	-	-
	MWB/10.5	7	01-Nov-18	625519	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MWB/8.0	7	01-Nov-18	625519	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MWB/9.5	7	01-Nov-18	625519	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
α1 *(Off-site; Down-gradient)*	MW1-211015	-[L]	21-Oct-15	476820	0.003	-	-	-	< 0.0002	0.009	-	-	0.004	0.009	-	< 0.0001	< 0.005	0.012	< 0.001	< 0.005	< 0.005	0.063	-	5.3	4.8	< 0.5	180	41	15	0.04	0.05	-	-	-	0.09[M]	-	-	370	< 10	370	680	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW1-241115	-[L]	24-Nov-15	481008	0.002	-	-	-	< 0.0002	< 0.001	-	-	0.008	< 0.001	-	< 0.0001	< 0.005	0.058	< 0.001	< 0.005	< 0.005	0.038	-	2.8	3.7	< 0.5	180	23	8.3	0.06	< 0.1	-	-	-	0.06[M]	-	-	380	< 10	380	690	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW1	-[L]	21-Dec-17	12756	0.001	0.004	< 0.005	0.20	< 0.0001	< 0.001	<0.005	< 0.001	0.002	< 0.001	< 0.005	< 0.0005	< 0.001	0.004	< 0.001	< 0.001	0.001	0.009	<0.004	0.9	-	-	-	72		<0.005	<0.005	-	-	-	ND	-	-	-	-	-	890	< 0.01	< 0.05	0.34	0.11	< 0.01	< 0.05	0.44	< 0.1
	MW1	-[L]	14-Feb-18	584842	0.002	< 0.02	< 0.001	0.25	< 0.0002	< 0.001	< 0.001	< 0.001	0.002	< 0.001	< 0.005	< 0.0001	< 0.005	0.012	< 0.001	< 0.005	< 0.005	0.017	< 0.005	1.2	3.9	< 0.5	280	60	11	< 0.01	0.21	-	-	-	0.21[M]	-	-	410	< 10	-	770	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	α1-230818	5	23-Aug-18	614153	0.0012	0.0048	< 0.0001	0.21	< 0.00005	0.0003	-	0.0002	0.0019	< 0.0001	0.001	< 0.00004	0.0008	0.150	0.001	0.0001	0.0001	0.009	-	-	-	-	-	-		< 0.01	0.11	-	-	-	0.11[M]	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	α1-301018	7	30-Oct-18	625411	0.002	< 0.02	< 0.001	0.22	< 0.0002	< 0.001	-	< 0.001	0.073	0.007	< 0.005	< 0.0001	< 0.005	0.019	0.001	< 0.005	< 0.005	0.091	-	-	-	-	-	-		< 0.01	0.03	< 0.02	< 0.2	< 0.2	< 0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	α1	9	02-Jan-19	634656	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		< 0.01	0.05	< 0.02	-	-	0.05[M]	-	-	-	-	-	-	-	-	-	-	-	-	-	-
α2 *(Off-site; Down-gradient)*	MW2-211015	-[L]	21-Oct-15	476820	0.001	-	-	-	< 0.0002	0.002	-	-	0.008	0.007	-	< 0.0001	< 0.005	0.039	< 0.001	< 0.005	< 0.005	0.064	-	6.4	2.6	< 0.5	130	71	25	< 0.01	0.07	-	-	-	0.07[M]	-	-	70	< 10	70	520	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW2-241115	-[L]	24-Nov-15	481008	< 0.001	-	-	-	< 0.0002	< 0.001	-	-	0.004	< 0.001	-	< 0.0001	< 0.005	0.082	< 0.001	< 0.005	< 0.005	0.067	-	1.3	1.4	< 0.5	150	68	24	0.02	0.03	-	-	-	0.05[M]	-	-	49	< 10	49	480	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW2	-[L]	21-Dec-17	12756	< 0.001	0.022	< 0.005	0.03	0.0002	< 0.001	<0.005	< 0.001	0.001	< 0.001	0.008	< 0.0005	< 0.001	0.008	0.002	< 0.001	< 0.001	0.051	<0.004	11	-	-	-	78		0.35	1.50	-	-	-	1.85[M]	-	-	-	-	-	510	< 0.01	< 0.05	0.48	0.19	< 0.01	< 0.05	0.62	< 0.1
	MW2	-[L]	14-Feb-18	584842	< 0.001	< 0.02	< 0.001	< 0.05	< 0.0002	< 0.001	< 0.001	< 0.001	0.002	< 0.001	< 0.005	< 0.0001	< 0.005	0.007	< 0.001	< 0.005	< 0.005	0.095	< 0.005	3.4	2.3	0.7	170	81	25	0.12	0.48	-	-	-	0.6[M]	-	-	45	< 10	-	460	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	α2-230818	5	23-Aug-18	614153	0.0006	0.016	< 0.0001	0.04	0.00005	0.0004	-	0.0002	0.0059	0.001	0.002	< 0.00004	0.0005	0.110	0.002	< 0.0001	0.0001	0.020	-	-	-	-	-	-		< 0.01	5.8	-	-	-	5.8[M]	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	α2-301018	7	30-Oct-18	625411	< 0.001	< 0.02	< 0.001	< 0.05	< 0.0002	< 0.001	-	< 0.001	0.032	0.002	< 0.005	< 0.0001	< 0.005	0.037	< 0.001	< 0.005	< 0.005	0.050	-	-	-	-	-	-		< 0.01	0.22	< 0.02	< 0.2	< 0.2	0.22	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	α2	9	02-Jan-19	634656	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		< 0.01	0.22	< 0.02	-	-	0.22[M]	-	-	-	-	-	-	-	-	-	-	-	-	-	-
α3 *(Off-site; Down-gradient)*	MW3-211015	-[L]	21-Oct-15	476820	0.002	-	-	-	< 0.0002	< 0.001	-	-	0.004	0.003	-	< 0.0001	< 0.005	0.029	< 0.001	< 0.005	< 0.005	0.045	-	5.8	5.4	< 0.5	240	86	7.7	< 0.01	0.07	-	-	-	0.07[M]	-	-	580	< 10	580	860	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW3-241115	-[L]	24-Nov-15	481008	0.002	-	-	-	< 0.0002	< 0.001	-	-	0.004	< 0.001	-	< 0.0001	< 0.005	0.073	< 0.001	< 0.005	< 0.005	0.008	-	3.6	5.6	< 0.5	260	57	9.0	< 0.01	0.03	-	-	-	0.03[M]	-	-	630	< 10	630	860	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1
	MW3	-[L]	21-Dec-17	12756	0.002	0.011	< 0.005	0.20	< 0.0001	< 0.001	<0.005	< 0.001	0.004	< 0.001	< 0.005	< 0.0005	0.003	0.006	< 0.001	< 0.001	< 0.001	0.019	<0.004	5.2	-	-	-	67		<0.005	0.26	-	-	-	0.26[M]	-	-	-	-	-	1,000	< 0.01	< 0.05	0.12	< 0.1	< 0.01	< 0.05	0.16	< 0.1
	MW3	-[L]	14-Feb-18	584842	0.002	< 0.02	< 0.001	0.20	< 0.0002	< 0.001	< 0.001	< 0.001	0.003	< 0.001	0.008	< 0.0001	< 0.005	0.022	< 0.001	< 0.005	< 0.005	0.033	< 0.005	3.4	6.8	0.6	350	79	10	< 0.01	0.07	-	-	-	0.07[M]	-	-	560	< 10	-	810	< 0.02	< 0.05	< 0.1	< 0.1	< 0.02	< 0.05	< 0.1	< 0.1

NOTES:
[A] Sulfate as SO4 converted to Sulfate as S (divided by 3)
[B] Less BTEX
[C] Less Naphthalene
[D] Volatile (P&T GCMS) method
[E] Semi-volatile (GCMS) method
[F] Low Reliability Trigger Level
[G] National Institute of Water & Atmospheric Research Ltd (January 2013) Updating Nitrate Toxicity Effects on Freshwater Aquatic Species.
[H] Criteria of nitrate as NO3 / ammonia as NH3 converted to as N
[I] USEPA RSLs (2016)
[J] From ANZECC 1992 Water Quality Guidelines for Raw Waters for Drinking Purposes
[K] US EPA (May 2018) Regional Screening Levels for Tap Water. Adjusted to be consistent with Australian cancer risk policy.
[L] Sampling completed by Atma Environmental & Alpha Environmental as part of audit of adjacent land (32 - 34 Graham Road, Highett; CARMS No. 75232-1)
[M] Not laboratory measured, indicative values based on the sum of nitrate and ammonia have been calculated
[N] CCME Freshwater guideline

Units are in mg/L.
'ND' means Not Detectable.
'n/a' means Not Available.
NST means 'Not Sufficiently Toxic'
Yellow highlighted results exceed highlighted criteria
Underlined results exceed underlined criteria
Strikethrough means results not to be relied upon

Table 2. Groundwater Sample Analysis Results

PROJECT: Highett (#1452C)

Protected Beneficial Uses of Segment 'A2' Groundwater: / Monitoring Well	Assessment Guideline / Samle ID	GME #	Sampling Date	Laboratory (Report #)	BTEX (SUM)	Benzene	Toluene	Ethyl Benzene	m&p-xylenes	o-xylene	Xylenes (Total)	Naphthalene[D]
Water Dependent Ecosystems & Species	SEPP Waters (Port Phillip Bay - Hobsons Bay) *Slightly to Moderatley Modified*				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	ANZECC AWQGs 2000 - Aquatic Ecosystems 95% Protection for Marine Waters				n/a	0.70	n/a	n/a	n/a	n/a	n/a	n/a
Potable Water Supply	NHMRC Australian Drinking Water Guidelines 2011 (Updated Version 3.5 2018) - Health				n/a	0.001	0.8	0.3	n/a	n/a	0.6	n/a
	NHMRC Australian Drinking Water Guidelines 2011 (Updated Version 3.5 2018) - Aesthetic				n/a	n/a	0.025	0.003	n/a	n/a	0.02	n/a
Agriculture & Irrigation (Irrigation)	ANZECC AWQGs 2000 - Irrigation Water Quality (LTV for Heavy Metals and Metalloids)				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Agriculture & Irrigation (Stock Watering)	ANZECC AWQGs 2000 - Livestock Watering				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	NHMRC Australian Drinking Water Guidelines 2011 - Health *(adopted for pesticides & organics)*				n/a	0.001	0.8	0.3	n/a	n/a	0.6	n/a
Water-based Recreation (Primary Contact Recreation)	NHMRC Australian Drinking Water Guidelines 2011 (Updated Version 3.5 2018) - Health *(modified x 10)*				n/a	0.001	0.8	0.3	n/a	n/a	0.6	n/a
	NHMRC Australian Drinking Water Guidelines 2011 (Updated Version 3.5 2018) - Aesthetic				n/a	n/a	0.025	0.003	n/a	n/a	0.02	n/a
Buildings and Structures	AS2159-2009 - Exposure Classification For Concrete Piles— Piles In Soil				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
ONSITE WELLS												
MW1	MW1-100517	1	10-May-17	545817	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW1-280617	2	28-Jun-17	552273	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW1-170418	3	17-Apr-18	594779	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW1	6	03-Oct-18	620846	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
	MW1	9	02-Jan-19	634656	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
MW1A	MW1A-310518	4	31-May-18	601305	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW1A-230818	5	23-Aug-18	614153	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW1A	6	03-Oct-18	620846	-	-	-	-	-	-	-	-
	MW1A-301018	7	30-Oct-18	625411	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
	MW1A	9	03-Jan-19	634755	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
MW2	MW2-100517	1	10-May-17	545817	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW2-280617	2	28-Jun-17	552273	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW2-170418	3	17-Apr-18	594779	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW2-230818	5	23-Aug-18	614153	-	-	-	-	-	-	-	-
	MW2-291018	7	29-Oct-18	625218	-	-	-	-	-	-	-	-
MW2A	MW2A-310518	4	31-May-18	601305	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW2A-230818	5	23-Aug-18	614153	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW2A-291018	7	29-Oct-18	625218	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
	MW2A	9	02-Jan-19	634656	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
MW3	MW3-100517	1	10-May-17	545817	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW3-280617	2	28-Jun-17	552273	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW3-170418	3	17-Apr-18	594779	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW3	9	04-Jan-19	634755	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
MW3A	MW3A-310518	4	31-May-18	601305	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW3A-240818	5	24-Aug-18	614152	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW3A-301018	7	30-Oct-18	625411	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
	MW3A	9	04-Jan-19	634755	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
MW4	MW4-100517	1	10-May-17	545817	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW4-281617	2	28-Jun-17	552273	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW4-170418	3	17-Apr-18	594779	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW4-240818	5	24-Aug-18	614152	-	-	-	-	-	-	-	-
	MW4-291018	7	29-Oct-18	625218	-	-	-	-	-	-	-	-
	MW4	9	03-Jan-19	634755	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
MW4A	MW4A-010618	4	01-Jun-18	601305	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW4A-240818	5	24-Aug-18	614152	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW4A-291018	7	29-Oct-18	625218	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW4A	9	03-Jan-19	634755	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
MW5	MW5-180418	3	18-Apr-18	594959	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW5-300518	4	30-May-18	601100	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW5-240818	5	24-Aug-18	614152	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
MW5A *MW5 Replacement*	MW5A-301018	7	30-Oct-18	625218	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW5A	9	03-Jan-19	634755	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
MW6	MW6-180418	3	18-Apr-18	594959	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW6-310518	4	31-May-18	601305	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW6-240818	5	24-Aug-18	614152	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW6-301018	7	30-Oct-18	625411	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
	MW6	9	04-Jan-19	634755	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
MW7	MW7-180418	3	18-Apr-18	594959	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW7-300518	4	30-May-18	601100	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW7-240818	5	24-Aug-18	614152	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW7-291018	7	10-Oct-96	625218	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW7	9	03-Jan-19	634656	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
MW8	MW8-190418	3	19-Apr-18	595144	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW8-290518	4	29-May-18	601013	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW8-240818	5	24-Aug-18	614152	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW8	6	03-Oct-18	620846	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW8-291018	7	29-Oct-18	625175	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW8	9	03-Jan-19	634656	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
MW9	MW9-190418	3	19-Apr-18	595144	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW9-290518	4	29-May-18	601013	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW9-230818	5	23-Aug-18	614153	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
MW13 *(Screened 8.4 - 11.4 mbgl)*	MW13-291018	7	29-Oct-18	625175	**0.002**	< 0.001	**0.002**	< 0.001	< 0.002	< 0.001	< 0.003	-
	MW13	9	03-Jan-19	634755	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
MW13A *(Screened 4.0 - 7.0 mbgl)*	MW13A-291018	7	29-Oct-18	625175	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
	MW13A	9	03-Jan-19	634755	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
MW14 *MW2 Replacement*	MW14	8	03-Dec-18	631206	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
	MW14	9	02-Jan-19	634656	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
MW15	MW15	8	03-Dec-18	631206	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
	MW15	9	02-Jan-19	634656	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
MW16	MW16	8	03-Dec-18	631206	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
	MW16	9	02-Jan-19	634656	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
OFF-SITE WELLS												
MW10 *(Off-site; Up-gradient)*	MW10-180418	3	18-Apr-18	594959	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW10-300518	4	30-May-18	601100	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW10-240818	5	24-Aug-18	614152	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW10-301018	7	30-Oct-18	625411	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
	MW10	9		634755	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
MW11 *(Off-site; Down-gradient)*	MW11-190418	3	19-Apr-18	595144	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW11-290518	4	29-May-18	601013	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW11-230818	5	23-Aug-18	614153	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW11-301018	7	30-Oct-18	625411	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
	MW11	9	02-Jan-19	634656	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
MW12 *(Off-site; Down-gradient)*	MW12-190418	3	19-Apr-18	595144	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW12-290518	4	29-May-18	601013	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW12-230818	5	23-Aug-18	614153	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW12-301018	7	30-Oct-18	625218	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
	MW12	9	02-Jan-19	634656	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
MWA *(Off-site; Up-gradient)*	MWA	-[K]	20-Mar-18	590286	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
	MWA/6.5	7	01-Nov-18	625519	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
	MWA/7.5	7	01-Nov-18	625519	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
	MWA/9.5	7	01-Nov-18	625519	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
MWB *(Off-site; Up-gradient)*	MWB	-[K]	20-Mar-18	590286	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
	MWB-300518	4	30-May-18	601100	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
	MWB/10.5	7	01-Nov-18	625519	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
	MWB/8.0	7	01-Nov-18	625519	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
	MWB/9.5	7	01-Nov-18	625519	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	-
α1 *(Off-site; Down-gradient)*	MW1-211015	-[L]	21-Oct-15	476820	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW1-241115	-[L]	24-Nov-15	481008	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW1	-[L]	21-Dec-17	12756	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW1	-[L]	14-Feb-18	584842	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	α1-230818	5	23-Aug-18	614153	-	-	-	-	-	-	-	-
	α1-301018	7	30-Oct-18	625411	-	-	-	-	-	-	-	-
	α1	9	02-Jan-19	634656	-	-	-	-	-	-	-	-
α2 *(Off-site; Down-gradient)*	MW2-211015	-[L]	21-Oct-15	476820	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW2-241115	-[L]	24-Nov-15	481008	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW2	-[L]	21-Dec-17	12756	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW2	-[L]	14-Feb-18	584842	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	α2-230818	5	23-Aug-18	614153	-	-	-	-	-	-	-	-
	α2-301018	7	30-Oct-18	625411	-	-	-	-	-	-	-	-
	α2	9	02-Jan-19	634656	-	-	-	-	-	-	-	-
α3 *(Off-site; Down-gradient)*	MW3-211015	-[L]	21-Oct-15	476820	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW3-241115	-[L]	24-Nov-15	481008	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW3	-[L]	21-Dec-17	12756	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01
	MW3	-[L]	14-Feb-18	584842	ND	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.003	< 0.01

Assessment Guideline / Samle ID	Total PAH	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(b&j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene[E]	Phenanthrene	Pyrene
SEPP Waters (Port Phillip Bay - Hobsons Bay) *Slightly to Moderatley Modified*	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
ANZECC AWQGs 2000 - Aquatic Ecosystems 95% Protection for Marine Waters	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.05	n/a	n/a
NHMRC Australian Drinking Water Guidelines 2011 (Updated Version 3.5 2018) - Health	n/a	n/a	n/a	n/a	n/a	0.00001	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
NHMRC Australian Drinking Water Guidelines 2011 (Updated Version 3.5 2018) - Aesthetic	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
ANZECC AWQGs 2000 - Irrigation Water Quality (LTV for Heavy Metals and Metalloids)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
ANZECC AWQGs 2000 - Livestock Watering	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
NHMRC Australian Drinking Water Guidelines 2011 - Health *(adopted for pesticides & organics)*	n/a	n/a	n/a	n/a	n/a	0.00001	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.0017[I]	n/a	n/a
NHMRC Australian Drinking Water Guidelines 2011 (Updated Version 3.5 2018) - Health *(modified x 10)*	n/a	n/a	n/a	n/a	n/a	0.00001	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
NHMRC Australian Drinking Water Guidelines 2011 (Updated Version 3.5 2018) - Aesthetic	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
AS2159-2009 - Exposure Classification For Concrete Piles— Piles In Soil	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
ONSITE WELLS																	
MW1-100517	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW1-280617	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW1-170418	< 0.01	< 0.01	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001
MW1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW1A-310518	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW1A-230818	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW1A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW1A-301018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW1A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2-100517	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW2-280617	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2-170418	< 0.01	< 0.01	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001
MW2-230818	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2-291018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2A-310518	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW2A-230818	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2A-291018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW3-100517	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW3-280617	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW3-170418	< 0.01	< 0.01	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001
MW3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW3A-310518	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW3A-240818	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW3A-301018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW3A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4-100517	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW4-281617	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4-170418	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW4-240818	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4-291018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4A-010618	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW4A-240818	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4A-291018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW5-180418	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW5-300518	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW5-240818	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW5A-301018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW5A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW6-180418	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW6-310518	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW6-240818	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW6-301018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7-180418	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW7-300518	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW7-240818	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7-291018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW8-190418	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW8-290518	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW8-240818	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW8-291018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW9-190418	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW9-290518	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW9-230818	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13-291018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13A-291018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OFF-SITE WELLS																	
MW10-180418	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW10-300518	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW10-240818	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW10-301018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-190418	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW11-290518	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW11-230818	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11-301018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW12-190418	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW12-290518	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW12-230818	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW12-301018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWA/6.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWA/7.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWA/9.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWB-300518	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWB/10.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWB/8.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWB/9.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW1-211015	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW1-241115	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW1	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00002	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00002	< 0.00001	< 0.00001
MW1	< 0.001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	**0.00003**	< 0.00001	< 0.00001
α1-230818	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
α1-301018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
α1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2-211015	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW2-241115	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW2	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00002	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00002	< 0.00001	< 0.00001
MW2	< 0.001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
α2-230818	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
α2-301018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
α2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW3-211015	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW3-241115	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW3	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00002	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00002	< 0.00001	< 0.00001
MW3	< 0.001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001

Assessment Guideline / Samle ID	VOC (Sum)	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1- Dichloroethene	1,2,3-Trichloropropane	1,2,4-Trimethylbenzene	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2- Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene
SEPP Waters (Port Phillip Bay - Hobsons Bay) *Slightly to Moderatley Modified*	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
ANZECC AWQGs 2000 - Aquatic Ecosystems 95% Protection for Marine Waters	n/a	n/a	n/a	n/a	1.9	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
NHMRC Australian Drinking Water Guidelines 2011 (Updated Version 3.5 2018) - Health	n/a	n/a	n/a	n/a	n/a	0.03[J]	0.03	n/a	n/a	0.003	1.5	0.003	n/a	n/a	n/a
NHMRC Australian Drinking Water Guidelines 2011 (Updated Version 3.5 2018) - Aesthetic	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.001	n/a	n/a	n/a	0.020
ANZECC AWQGs 2000 - Irrigation Water Quality (LTV for Heavy Metals and Metalloids)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
ANZECC AWQGs 2000 - Livestock Watering	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
NHMRC Australian Drinking Water Guidelines 2011 - Health *(adopted for pesticides & organics)*	n/a	n/a	n/a	n/a	n/a	0.03[J]	0.03	n/a	n/a	0.003	1.5	0.003	n/a	n/a	n/a
NHMRC Australian Drinking Water Guidelines 2011 (Updated Version 3.5 2018) - Health *(modified x 10)*	n/a	n/a	n/a	n/a	n/a	0.03[J]	0.03	n/a	n/a	n/a	1.5	0.003	n/a	n/a	n/a
NHMRC Australian Drinking Water Guidelines 2011 (Updated Version 3.5 2018) - Aesthetic	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.001	n/a	n/a	n/a	0.020
AS2159-2009 - Exposure Classification For Concrete Piles— Piles In Soil	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
ONSITE WELLS															
MW1-100517	**0.00300**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW1-280617	**0.00044**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
MW1-170418	**0.00029**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
MW1	**0.00022**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00001**	< 0.001	< 0.001	< 0.001
MW1	**0.00063**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
MW1A-310518	**0.00008**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00001**	< 0.001	< 0.001	< 0.001
MW1A-230818	**0.00012**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00006**	< 0.001	< 0.001	< 0.001
MW1A	**0.00006**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00006**	< 0.001	< 0.001	< 0.001
MW1A-301018	**0.00015**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00007**	< 0.001	< 0.001	< 0.001
MW1A	ND	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
MW2-100517	**0.00700**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW2-280617	**0.013110**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00002**	< 0.001	< 0.001	< 0.001
MW2-170418	**0.01318**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00003**	< 0.001	< 0.001	< 0.001
MW2-230818	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2-291018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2A-310518	**0.05105**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00001**	< 0.001	< 0.001	< 0.001
MW2A-230818	**0.00010**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00004**	< 0.001	< 0.001	< 0.001
MW2A-291018	**0.00002**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00002**	< 0.001	< 0.001	< 0.001
MW2A	**0.00004**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00004**	< 0.001	< 0.001	< 0.001
MW3-100517	**0.00500**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW3-280617	**0.011190**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00001**	< 0.001	< 0.001	< 0.001
MW3-170418	**0.00533**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00002**	< 0.001	< 0.001	< 0.001
MW3	**0.01502**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
MW3A-310518	**0.00017**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
MW3A-240818	**0.00042**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00005**	< 0.001	< 0.001	< 0.001
MW3A-301018	**0.00042**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00006**	< 0.001	< 0.001	< 0.001
MW3A	**0.00004**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
MW4-100517	**0.00800**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW4-281617	**0.014110**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
MW4-170418	**0.02709**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
MW4-240818	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4-291018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4	**0.03200**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
MW4A-010618	ND	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
MW4A-240818	**0.01818**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00003**	< 0.001	< 0.001	< 0.001
MW4A-291018	**0.00002**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00002**	< 0.001	< 0.001	< 0.001
MW4A	ND	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
MW5-180418	**0.00023**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00018**	< 0.001	< 0.001	< 0.001
MW5-300518	**0.00106**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00069**	< 0.001	< 0.001	< 0.001
MW5-240818	**0.00099**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00073**	< 0.001	< 0.001	< 0.001
MW5A-301018	**0.01200**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
MW5A	ND	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
MW6-180418	**0.00012**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00012**	< 0.001	< 0.001	< 0.001
MW6-310518	**0.00017**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00017**	< 0.001	< 0.001	< 0.001
MW6-240818	**0.00049**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00036**	< 0.001	< 0.001	< 0.001
MW6-301018	**0.00042**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00033**	< 0.001	< 0.001	< 0.001
MW6	**0.00057**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00046**	< 0.001	< 0.001	< 0.001
MW7-180418	**0.00074**	< 0.001	< 0.001	< 0.001	< 0.001	**0.00045**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00008**	< 0.001	< 0.001	< 0.001
MW7-300518	**0.00109**	< 0.001	< 0.001	< 0.001	< 0.001	**0.00046**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00024**	< 0.001	< 0.001	< 0.001
MW7-240818	**0.00105**	< 0.001	< 0.001	< 0.001	< 0.001	**0.00044**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00026**	< 0.001	< 0.001	< 0.001
MW7-291018	**0.00099**	< 0.001	< 0.001	< 0.001	< 0.001	**0.00051**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00026**	< 0.001	< 0.001	< 0.001
MW7	**0.00125**	< 0.001	< 0.001	< 0.001	< 0.001	**0.00060**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00034**	< 0.001	< 0.001	< 0.001
MW8-190418	**0.00008**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00005**	< 0.001	< 0.001	< 0.001
MW8-290518	**0.00067**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00027**	< 0.001	< 0.001	< 0.001
MW8-240818	**0.00127**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00029**	< 0.001	< 0.001	< 0.001
MW8	**0.00048**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00025**	< 0.001	< 0.001	< 0.001
MW8-291018	**0.00015**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00013**	< 0.001	< 0.001	< 0.001
MW8	**0.00113**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00032**	< 0.001	< 0.001	< 0.001
MW9-190418	**0.00004**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00004**	< 0.001	< 0.001	< 0.001
MW9-290518	**0.00019**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00012**	< 0.001	< 0.001	< 0.001
MW9-230818	**0.00044**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00013**	< 0.001	< 0.001	< 0.001
MW13-291018	**0.01002**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
MW13	ND	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
MW13A-291018	**0.00006**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00002**	< 0.001	< 0.001	< 0.001
MW13A	**0.00019**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00011**	< 0.001	< 0.001	< 0.001
MW14	**0.00173**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
MW14	**0.00054**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
MW15	ND	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
MW15	ND	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
MW16	ND	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
MW16	ND	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
OFF-SITE WELLS															
MW10-180418	**0.00004**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00004**	< 0.001	< 0.001	< 0.001
MW10-300518	**0.00030**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00017**	< 0.001	< 0.001	< 0.001
MW10-240818	**0.00025**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00014**	< 0.001	< 0.001	< 0.001
MW10-301018	**0.00024**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00016**	< 0.001	< 0.001	< 0.001
MW10	**0.00017**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00017**	< 0.001	< 0.001	< 0.001
MW11-190418	**0.00002**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00002**	< 0.001	< 0.001	< 0.001
MW11-290518	**0.00010**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00002**	< 0.001	< 0.001	< 0.001
MW11-230818	**0.00007**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00002**	< 0.001	< 0.001	< 0.001
MW11-301018	**0.00011**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00003**	< 0.001	< 0.001	< 0.001
MW11	**0.00004**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00004**	< 0.001	< 0.001	< 0.001
MW12-190418	**0.00003**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00003**	< 0.001	< 0.001	< 0.001
MW12-290518	**0.00012**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00004**	< 0.001	< 0.001	< 0.001
MW12-230818	**0.00025**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00003**	< 0.001	< 0.001	< 0.001
MW12-301018	**0.00002**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00002**	< 0.001	< 0.001	< 0.001
MW12	ND	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
MWA	ND	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
MWA/6.5	ND	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
MWA/7.5	ND	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
MWA/9.5	ND	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
MWB	ND	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
MWB-300518	**0.00015**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00002**	< 0.001	< 0.001	< 0.001
MWB/10.5	ND	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
MWB/8.0	ND	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
MWB/9.5	ND	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
MW1-211015	**0.00100**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	< 0.001	< 0.001	**0.001**	< 0.001	-	< 0.001
MW1-241115	ND	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	< 0.001	< 0.001	< 0.001	< 0.001	-	< 0.001
MW1	**0.00080**	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	**0.0008**	< 0.0001	< 0.0001	< 0.0001
MW1	**0.00155**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.0012**	< 0.001	< 0.001	< 0.001
α1-230818	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
α1-301018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
α1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2-211015	**0.00100**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	< 0.001	< 0.001	< 0.001	< 0.001	-	< 0.001
MW2-241115	ND	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	< 0.001	< 0.001	< 0.001	< 0.001	-	< 0.001
MW2	**0.00030**	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
MW2	**0.00102**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001
α2-230818	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
α2-301018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
α2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW3-211015	ND	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	< 0.001	< 0.001	< 0.001	< 0.001	-	< 0.001
MW3-241115	ND	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	< 0.001	< 0.001	< 0.001	< 0.001	-	< 0.001
MW3	ND	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
MW3	**0.00033**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001

NOTES:

[A] Sulfate as SO_4 converted to Sulfate as S (divided by 3)
[B] Less BTEX
[C] Less Naphthalene
[D] Volatile (P&T GCMS) method
[E] Semi-volatile (GCMS) method
[F] Low Reliability Trigger Level
[G] National Institute of Water & Atmospheric Research Ltd (January 2013) Updating Nitrate Toxicity Effects on Freshwater A
[H] Criteria of nitrate as NO_3 / ammonia as NH_3 converted to as N
[I] USEPA RSLs (2016)
[J] From ANZECC 1992 Water Quality Guidelines for Raw Waters for Drinking Purposes
[K] US EPA (May 2018) Regional Screening Levels for Tap Water. Adjusted to be consistent with Australian cancer risk policy.
[L] Sampling completed by Atma Environmental & Alpha Environmental as part of audit of adjacent land (32 - 34 Graham Roac
[M] Not laboratory measured, indicative values based on the sum of nitrate and ammonia have been calculated
[N] CCME Freshwater guideline

Units are in mg/L.
'ND' means Not Detectable.
'n/a' means Not Available.
NST means 'Not Sufficiently Toxic'
Yellow highlighted results exceed highlighted criteria
Underlined results exceed underlined criteria
Strikethrough means results not to be relied upon

Table 2. Groundwater Sample Analysis Results

PROJECT: Highett (#1452C)

Atma Environmental

Protected Beneficial Uses of Segment 'A2' Groundwater:	Assessment Guideline	1,3-Dichloropropane	1,4-Dichlorobenzene	2-Butanone (MEK)	2-Propanone (Acetone)	4-Chlorotoluene	4-Methyl-2-pentanone (MIBK)	Allyl chloride	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane (Mythl Bromide)	Carbon disulfide	Carbon Tetrachloride
Water Dependent Ecosystems & Species	SEPP Waters (Port Phillip Bay - Hobsons Bay) *Slightly to Moderatley Modified*	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	ANZECC AWQGs 2000 - Aquatic Ecosystems 95% Protection for Marine Waters	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.02[F]	n/a
Potable Water Supply	NHMRC Australian Drinking Water Guidelines 2011 (Updated Version 3.5 2018) - Health	n/a	0.04	n/a	14[I]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**0.001**	n/a	0.003
	NHMRC Australian Drinking Water Guidelines 2011 (Updated Version 3.5 2018) - Aesthetic	n/a	**0.0003**	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Agriculture & Irrigation (Irrigation)	ANZECC AWQGs 2000 - Irrigation Water Quality (LTV for Heavy Metals and Metalloids)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Agriculture & Irrigation (Stock Watering)	ANZECC AWQGs 2000 - Livestock Watering	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	NHMRC Australian Drinking Water Guidelines 2011 - Health *(adopted for pesticides & organics)*	n/a	0.04	n/a	14[I]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**0.001**	n/a	0.003
Water-based Recreation (Primary Contact Recreation)	NHMRC Australian Drinking Water Guidelines 2011 (Updated Version 3.5 2018) - Health *(modified x 10)*	n/a	0.04	n/a	14[I]	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.003
	NHMRC Australian Drinking Water Guidelines 2011 (Updated Version 3.5 2018) - Aesthetic	n/a	**0.0003**	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Buildings and Structures	AS2159-2009 - Exposure Classification For Concrete Piles— Piles In Soil	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Protected Beneficial Uses of Segment 'A2' Groundwater:	Assessment Guideline	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Iodomethane	Isopropyl benzene (Cumene)	Methylene Chloride (Dichloromethane)	Styrene	Tetrachloroethene (PCE)	trans 1,2- Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl Chloride	Phenols (sum)	Pentachlorophenol	Cresols (sum)
Water Dependent Ecosystems & Species	SEPP Waters (Port Phillip Bay - Hobsons Bay) *Slightly to Moderatley Modified*	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	ANZECC AWQGs 2000 - Aquatic Ecosystems 95% Protection for Marine Waters	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.03[F]	n/a	n/a	n/a	n/a	n/a	0.33[F]	n/a	n/a	0.40	0.022	n/a
Potable Water Supply	NHMRC Australian Drinking Water Guidelines 2011 (Updated Version 3.5 2018) - Health	0.078[I]	n/a	n/a	n/a	0.06	0.1	n/a	n/a	n/a	n/a	n/a	0.004	n/a	0.05	0.060	n/a	0.03[J]	n/a	**0.0003**	n/a	0.01	n/a
	NHMRC Australian Drinking Water Guidelines 2011 (Updated Version 3.5 2018) - Aesthetic	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Agriculture & Irrigation (Irrigation)	ANZECC AWQGs 2000 - Irrigation Water Quality (LTV for Heavy Metals and Metalloids)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Agriculture & Irrigation (Stock Watering)	ANZECC AWQGs 2000 - Livestock Watering	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	NHMRC Australian Drinking Water Guidelines 2011 - Health *(adopted for pesticides & organics)*	0.078[I]	n/a	n/a	n/a	0.06	0.1	n/a	n/a	n/a	n/a	n/a	0.004	n/a	0.05	0.060	n/a	0.03[J]	n/a	**0.0003**	n/a	0.01	n/a
Water-based Recreation (Primary Contact Recreation)	NHMRC Australian Drinking Water Guidelines 2011 (Updated Version 3.5 2018) - Health *(modified x 10)*	0.078[I]	n/a	n/a	n/a	0.06	0.1	n/a	n/a	n/a	n/a	n/a	0.004	0.030	0.05	0.060	n/a	0.03[J]	n/a	**0.0003**	n/a	0.01	n/a
	NHMRC Australian Drinking Water Guidelines 2011 (Updated Version 3.5 2018) - Aesthetic	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.004	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Buildings and Structures	AS2159-2009 - Exposure Classification For Concrete Piles— Piles In Soil	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Monitoring Well	Samle ID	GME #	Sampling Date	Laboratory (Report #)	1,3-Dichloropropane	1,4-Dichlorobenzene	2-Butanone (MEK)	2-Propanone (Acetone)	4-Chlorotoluene	4-Methyl-2-pentanone (MIBK)	Allyl chloride	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane (Mythl Bromide)	Carbon disulfide	Carbon Tetrachloride
ONSITE WELLS																		
MW1	MW1-100517	1	10-May-17	545817	< 0.001	< 0.001	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.003**	< 0.001	< 0.001
	MW1-280617	2	28-Jun-17	552273	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW1-170418	3	17-Apr-18	594779	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW1	6	03-Oct-18	620846	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW1	9	02-Jan-19	634656	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW1A	MW1A-310518	4	31-May-18	601305	< 0.001	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW1A-230818	5	23-Aug-18	614153	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW1A	6	03-Oct-18	620846	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW1A-301018	7	30-Oct-18	625411	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW1A	9	03-Jan-19	634755	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW2	MW2-100517	1	10-May-17	545817	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW2-280617	2	28-Jun-17	552273	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW2-170418	3	17-Apr-18	594779	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW2-230818	5	23-Aug-18	614153	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW2-291018	7	29-Oct-18	625218	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2A	MW2A-310518	4	31-May-18	601305	< 0.001	< 0.00001	< 0.001	**0.051**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW2A-230818	5	23-Aug-18	614153	< 0.001	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW2A-291018	7	29-Oct-18	625218	< 0.001	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW2A	9	02-Jan-19	634656	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW3	MW3-100517	1	10-May-17	545817	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW3-280617	2	28-Jun-17	552273	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW3-170418	3	17-Apr-18	594779	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW3	9	04-Jan-19	634755	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW3A	MW3A-310518	4	31-May-18	601305	< 0.001	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW3A-240818	5	24-Aug-18	614152	< 0.001	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW3A-301018	7	30-Oct-18	625411	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW3A	9	04-Jan-19	634755	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW4	MW4-100517	1	10-May-17	545817	< 0.001	< 0.001	< 0.001	< 0.003	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW4-281617	2	28-Jun-17	552273	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW4-170418	3	17-Apr-18	594779	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW4-240818	5	24-Aug-18	614152	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW4-291018	7	29-Oct-18	625218	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW4	9	03-Jan-19	634755	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW4A	MW4A-010618	4	01-Jun-18	601305	< 0.001	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW4A-240818	5	24-Aug-18	614152	< 0.001	**0.00001**	< 0.001	**0.018**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW4A-291018	7	29-Oct-18	625218	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW4A	9	03-Jan-19	634755	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW5	MW5-180418	3	18-Apr-18	594959	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW5-300518	4	30-May-18	601100	< 0.001	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW5-240818	5	24-Aug-18	614152	< 0.001	**0.00006**	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW5A *MW5 Replacement*	MW5A-301018	7	30-Oct-18	625218	< 0.001	< 0.00001	< 0.001	**0.012**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW5A	9	03-Jan-19	634755	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW6	MW6-180418	3	18-Apr-18	594959	< 0.001	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW6-310518	4	31-May-18	601305	< 0.001	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW6-240818	5	24-Aug-18	614152	< 0.001	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW6-301018	7	30-Oct-18	625411	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW6	9	04-Jan-19	634755	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW7	MW7-180418	3	18-Apr-18	594959	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW7-300518	4	30-May-18	601100	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW7-240818	5	24-Aug-18	614152	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW7-291018	7	10-Oct-96	625218	< 0.001	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW7	9	03-Jan-19	634656	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW8	MW8-190418	3	19-Apr-18	595144	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW8-290518	4	29-May-18	601013	< 0.001	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW8-240818	5	24-Aug-18	614152	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW8	6	03-Oct-18	620846	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW8-291018	7	29-Oct-18	625175	< 0.001	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW8	9	03-Jan-19	634656	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW9	MW9-190418	3	19-Apr-18	595144	< 0.001	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW9-290518	4	29-May-18	601013	< 0.001	< 0.00001	< 0.001	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW9-230818	5	23-Aug-18	614153	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW13 *(Screened 8.4 - 11.4 mbgl)*	MW13-291018	7	29-Oct-18	625175	< 0.001	< 0.00001	< 0.001	**0.01**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW13	9	03-Jan-19	634755	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW13A *(Screened 4.0 - 7.0 mbgl)*	MW13A-291018	7	29-Oct-18	625175	< 0.001	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW13A	9	03-Jan-19	634755	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW14 *MW2 Replacement*	MW14	8	03-Dec-18	631206	< 0.001	**0.001**	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW14	9	02-Jan-19	634656	< 0.001	**0.0004**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW15	MW15	8	03-Dec-18	631206	< 0.001	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW15	9	02-Jan-19	634656	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW16	MW16	8	03-Dec-18	631206	< 0.001	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW16	9	02-Jan-19	634656	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
OFF-SITE WELLS																		
MW10 *(Off-site; Up-gradient)*	MW10-180418	3	18-Apr-18	594959	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW10-300518	4	30-May-18	601100	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW10-240818	5	24-Aug-18	614152	< 0.001	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW10-301018	7	30-Oct-18	625411	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW10	9		634755	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW11 *(Off-site; Down-gradient)*	MW11-190418	3	19-Apr-18	595144	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW11-290518	4	29-May-18	601013	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW11-230818	5	23-Aug-18	614153	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW11-301018	7	30-Oct-18	625411	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW11	9	02-Jan-19	634656	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MW12 *(Off-site; Down-gradient)*	MW12-190418	3	19-Apr-18	595144	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW12-290518	4	29-May-18	601013	< 0.001	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW12-230818	5	23-Aug-18	614153	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW12-301018	7	30-Oct-18	625218	< 0.001	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MW12	9	02-Jan-19	634656	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MWA *(Off-site; Up-gradient)*	MWA	-[K]	20-Mar-18	590286	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MWA/6.5	7	01-Nov-18	625519	< 0.001	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MWA/7.5	7	01-Nov-18	625519	< 0.001	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MWA/9.5	7	01-Nov-18	625519	< 0.001	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
MWB *(Off-site; Up-gradient)*	MWB	-[K]	20-Mar-18	590286	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MWB-300518	4	30-May-18	601100	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MWB/10.5	7	01-Nov-18	625519	< 0.001	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MWB/8.0	7	01-Nov-18	625519	< 0.001	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	MWB/9.5	7	01-Nov-18	625519	< 0.001	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
α1 *(Off-site; Down-gradient)*	MW1-211015	-[L]	21-Oct-15	476820	< 0.001	< 0.001	-	-	-	-	-	-	-	< 0.001	< 0.001	< 0.001	-	< 0.001
	MW1-241115	-[L]	24-Nov-15	481008	< 0.001	< 0.001	-	-	-	-	-	-	-	< 0.001	< 0.001	< 0.001	-	< 0.001
	MW1	-[L]	21-Dec-17	12756	< 0.0001	< 0.0001	-	-	< 0.0001	-	-	< 0.0001	< 0.0005	< 0.0001	< 0.0001	< 0.002	-	< 0.0001
	MW1	-[L]	14-Feb-18	584842	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	α1-230818	5	23-Aug-18	614153	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	α1-301018	7	30-Oct-18	625411	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	α1	9	02-Jan-19	634656	-	-	-	-	-	-	-	-	-	-	-	-	-	-
α2 *(Off-site; Down-gradient)*	MW2-211015	-[L]	21-Oct-15	476820	< 0.001	< 0.001	-	-	-	-	-	-	-	< 0.001	< 0.001	< 0.001	-	< 0.001
	MW2-241115	-[L]	24-Nov-15	481008	< 0.001	< 0.001	-	-	-	-	-	-	-	< 0.001	< 0.001	< 0.001	-	< 0.001
	MW2	-[L]	21-Dec-17	12756	< 0.0001	< 0.0001	-	-	< 0.0001	-	-	< 0.0001	< 0.0005	< 0.0001	< 0.0001	< 0.002	-	< 0.0001
	MW2	-[L]	14-Feb-18	584842	< 0.001	**0.00005**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	α2-230818	5	23-Aug-18	614153	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	α2-301018	7	30-Oct-18	625411	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	α2	9	02-Jan-19	634656	-	-	-	-	-	-	-	-	-	-	-	-	-	-
α3 *(Off-site; Down-gradient)*	MW3-211015	-[L]	21-Oct-15	476820	< 0.001	< 0.001	-	-	-	-	-	-	-	< 0.001	< 0.001	< 0.001	-	< 0.001
	MW3-241115	-[L]	24-Nov-15	481008	< 0.001	< 0.001	-	-	-	-	-	-	-	< 0.001	< 0.001	< 0.001	-	< 0.001
	MW3	-[L]	21-Dec-17	12756	< 0.0001	< 0.0001	-	-	< 0.0001	-	-	< 0.0001	< 0.0005	< 0.0001	< 0.0001	< 0.002	-	< 0.0001
	MW3	-[L]	14-Feb-18	584842	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001

Monitoring Well	Samle ID	Sampling Date	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Iodomethane	Isopropyl benzene (Cumene)	Methylene Chloride (Dichloromethane)	Styrene	Tetrachloroethene (PCE)	trans 1,2- Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane	Vinyl Chloride	Phenols (sum)	Pentachlorophenol	Cresols (sum)
ONSITE WELLS																								
MW1	MW1-100517	10-May-17	< 0.001	< 0.001	< 0.005	< 0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.1	< 0.01	< 0.006
	MW1-280617	28-Jun-17	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00003**	< 0.001	**0.00008**	< 0.001	< 0.001	< 0.00001	< 0.001	**0.00033**	-	-	-
	MW1-170418	17-Apr-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00003**	< 0.001	**0.00002**	< 0.001	< 0.001	< 0.00001	< 0.001	**0.00024**	< 0.01	< 0.01	< 0.006
	MW1	03-Oct-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	**0.00021**	-	-	-
	MW1	02-Jan-19	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	**0.00063**	-	-	-
MW1A	MW1A-310518	31-May-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00007**	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	< 0.01	< 0.01	< 0.006
	MW1A-230818	23-Aug-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00006**	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW1A	03-Oct-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW1A-301018	30-Oct-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00008**	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW1A	03-Jan-19	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
MW2	MW2-100517	10-May-17	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	~~0.0070~~	< 0.1	< 0.01	< 0.006
	MW2-280617	28-Jun-17	< 0.00001	< 0.001	< 0.005	< 0.001	**0.00003**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00006**	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	~~0.0130~~	-	-	-
	MW2-170418	17-Apr-18	< 0.00001	< 0.001	< 0.005	< 0.001	**0.00003**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00012**	< 0.001	< 0.00002	**0.001**	< 0.001	< 0.00001	< 0.001	~~0.0120~~	< 0.01	< 0.01	< 0.006
	MW2-230818	23-Aug-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW2-291018	29-Oct-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2A	MW2A-310518	31-May-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00004**	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	< 0.01	< 0.01	< 0.006
	MW2A-230818	23-Aug-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00006**	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW2A-291018	29-Oct-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW2A	02-Jan-19	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
MW3	MW3-100517	10-May-17	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	~~0.0050~~	< 0.1	< 0.01	< 0.006
	MW3-280617	28-Jun-17	< 0.00001	< 0.001	< 0.005	< 0.001	**0.00002**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00009**	< 0.001	**0.00007**	< 0.001	< 0.001	< 0.00001	< 0.001	~~0.0110~~	-	-	-
	MW3-170418	17-Apr-18	< 0.00001	< 0.001	< 0.005	< 0.001	**0.00002**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00009**	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	~~0.0052~~	< 0.01	< 0.01	< 0.006
	MW3	04-Jan-19	< 0.00001	< 0.001	< 0.005	< 0.001	**0.00002**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	~~0.0150~~	-	-	-
MW3A	MW3A-310518	31-May-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00017**	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	< 0.01	< 0.01	< 0.006
	MW3A-240818	24-Aug-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00037**	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW3A-301018	30-Oct-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00036**	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW3A	04-Jan-19	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00004**	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
MW4	MW4-100517	10-May-17	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	~~0.008~~	< 0.1	< 0.01	< 0.006
	MW4-281617	28-Jun-17	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00003**	< 0.001	**0.00008**	< 0.001	< 0.001	< 0.00001	< 0.001	~~0.014~~	-	-	-
	MW4-170418	17-Apr-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00006**	< 0.001	**0.00003**	< 0.001	< 0.001	< 0.00001	< 0.001	~~0.027~~	-	-	-
	MW4-240818	24-Aug-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW4-291018	29-Oct-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW4	03-Jan-19	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	~~0.032~~	-	-	-
MW4A	MW4A-010618	01-Jun-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW4A-240818	24-Aug-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00014**	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	< 0.1	< 0.01	< 0.006
	MW4A-291018	29-Oct-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW4A	03-Jan-19	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
MW5	MW5-180418	18-Apr-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00002**	< 0.001	< 0.00002	< 0.001	< 0.001	**0.00003**	< 0.001	< 0.00005	< 0.01	< 0.01	< 0.006
	MW5-300518	30-May-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00017**	< 0.001	**0.00002**	< 0.001	< 0.001	**0.00003**	< 0.001	**0.00015**	< 0.01	< 0.01	< 0.006
	MW5-240818	24-Aug-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00005**	< 0.001	< 0.00002	< 0.001	< 0.001	**0.00001**	< 0.001	**0.00014**	< 0.1	< 0.01	< 0.006
MW5A *MW5 Replacement*	MW5A-301018	30-Oct-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW5A	03-Jan-19	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
MW6	MW6-180418	18-Apr-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW6-310518	31-May-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW6-240818	24-Aug-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00010**	< 0.001	**0.00003**	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW6-301018	30-Oct-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00009**	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW6	04-Jan-19	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	**0.00011**	-	-	-
MW7	MW7-180418	18-Apr-18	< 0.00001	< 0.001	< 0.005	< 0.001	**0.00006**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00012**	< 0.001	**0.00003**	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW7-300518	30-May-18	< 0.00001	< 0.001	< 0.005	< 0.001	**0.00006**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00028**	< 0.001	**0.00003**	< 0.001	< 0.001	**0.00002**	< 0.001	< 0.00005	-	-	-
	MW7-240818	24-Aug-18	< 0.00001	< 0.001	< 0.005	< 0.001	**0.00006**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00029**	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	< 0.1	< 0.01	< 0.006
	MW7-291018	10-Oct-96	< 0.00001	< 0.001	< 0.005	< 0.001	**0.00006**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00013**	< 0.001	**0.00002**	< 0.001	< 0.001	**0.00001**	< 0.001	< 0.00005	-	-	-
	MW7	03-Jan-19	< 0.00001	< 0.001	< 0.005	< 0.001	**0.00009**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00021**	< 0.001	< 0.00002	< 0.001	< 0.001	**0.00001**	< 0.001	< 0.00005	-	-	-
MW8	MW8-190418	19-Apr-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00003**	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW8-290518	29-May-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00013**	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	**0.00027**	-	-	-
	MW8-240818	24-Aug-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00010**	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	**0.00088**	< 0.1	< 0.01	< 0.006
	MW8	03-Oct-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00007**	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	**0.00016**	-	-	-
	MW8-291018	29-Oct-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	**0.00002**	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW8	03-Jan-19	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00008**	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	**0.00073**	-	-	-
MW9	MW9-190418	19-Apr-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW9-290518	29-May-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00007**	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW9-230818	23-Aug-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00024**	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	**0.00007**	< 0.1	< 0.01	< 0.006
MW13 *(Screened 8.4 - 11.4 mbgl)*	MW13-291018	29-Oct-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	**0.00002**	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW13	03-Jan-19	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
MW13A *(Screened 4.0 - 7.0 mbgl)*	MW13A-291018	29-Oct-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	**0.00004**	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW13A	03-Jan-19	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	**0.00008**	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
MW14 *MW2 Replacement*	MW14	03-Dec-18	**0.0002**	< 0.001	< 0.005	< 0.001	**0.00002**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	**0.00003**	< 0.001	< 0.001	**0.00004**	< 0.001	< 0.00005	-	-	-
	MW14	02-Jan-19	**0.0001**	< 0.001	< 0.005	< 0.001	**0.00001**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	**0.00003**	< 0.001	< 0.001	**0.00002**	< 0.001	< 0.00005	-	-	-
MW15	MW15	03-Dec-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW15	02-Jan-19	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
MW16	MW16	03-Dec-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW16	02-Jan-19	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
OFF-SITE WELLS																								
MW10 *(Off-site; Up-gradient)*	MW10-180418	18-Apr-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW10-300518	30-May-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00013**	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW10-240818	24-Aug-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00011**	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW10-301018	30-Oct-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00008**	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW10		< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
MW11 *(Off-site; Down-gradient)*	MW11-190418	19-Apr-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW11-290518	29-May-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00008**	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW11-230818	23-Aug-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00005**	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW11-301018	30-Oct-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00008**	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW11	02-Jan-19	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
MW12 *(Off-site; Down-gradient)*	MW12-190418	19-Apr-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW12-290518	29-May-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00008**	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW12-230818	23-Aug-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00022**	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW12-301018	30-Oct-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MW12	02-Jan-19	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
MWA *(Off-site; Up-gradient)*	MWA	20-Mar-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MWA/6.5	01-Nov-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MWA/7.5	01-Nov-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MWA/9.5	01-Nov-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
MWB *(Off-site; Up-gradient)*	MWB	20-Mar-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MWB-300518	30-May-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	**0.00013**	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MWB/10.5	01-Nov-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MWB/8.0	01-Nov-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
	MWB/9.5	01-Nov-18	< 0.00001	< 0.001	< 0.005	< 0.001	< 0.00001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	< 0.00002	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	-	-	-
α1 *(Off-site; Down-gradient)*	MW1-211015	21-Oct-15	< 0.001	-	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	< 0.001	-	< 0.001	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-
	MW1-241115	24-Nov-15	< 0.001	-	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	< 0.001	-	< 0.001	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-
	MW1	21-Dec-17	< 0.0001	< 0.002	< 0.0005	< 0.002	< 0.0001	< 0.0001	< 0.0001	< 0.0005	< 0.002	-	< 0.0001	-	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.002	< 0.0003	< 0.001	< 0.003	-
	MW1	14-Feb-18	< 0.00001	< 0.001	< 0.005	< 0.001	**0.00003**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	**0.00032**	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	< 0.1	< 0.001	< 0.001
	α1-230818	23-Aug-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	α1-301018	30-Oct-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	α1	02-Jan-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
α2 *(Off-site; Down-gradient)*	MW2-211015	21-Oct-15	< 0.001	-	< 0.005	< 0.001	**0.00100**	< 0.001	< 0.001	< 0.001	-	< 0.001	-	< 0.001	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-
	MW2-241115	24-Nov-15	< 0.001	-	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	< 0.001	-	< 0.001	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-
	MW2	21-Dec-17	< 0.0001	< 0.002	< 0.0005	< 0.002	**0.00030**	< 0.0001	< 0.0001	< 0.0005	< 0.002	-	< 0.0001	-	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.002	< 0.0003	< 0.001	< 0.003	-
	MW2	14-Feb-18	< 0.00001	< 0.001	< 0.005	< 0.001	**0.00067**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	**0.00030**	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	< 0.1	< 0.001	< 0.001
	α2-230818	23-Aug-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	α2-301018	30-Oct-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	α2	02-Jan-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
α3 *(Off-site; Down-gradient)*	MW3-211015	21-Oct-15	< 0.001	-	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	< 0.001	-	< 0.001	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-
	MW3-241115	24-Nov-15	< 0.001	-	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	< 0.001	-	< 0.001	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-
	MW3	21-Dec-17	< 0.0001	< 0.002	< 0.0005	< 0.002	< 0.0001	< 0.0001	< 0.0001	< 0.0005	< 0.002	-	< 0.0001	-	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.002	< 0.0003	< 0.001	< 0.003	-
	MW3	14-Feb-18	< 0.00001	< 0.001	< 0.005	< 0.001	**0.00002**	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.00002	< 0.001	**0.00031**	< 0.001	< 0.001	< 0.00001	< 0.001	< 0.00005	< 0.1	< 0.001	< 0.001

NOTES:
[A] Sulfate as SO4 converted to Sulfate as S (divided by 3)
[B] Less BTEX
[C] Less Naphthalene
[D] Volatile (P&T GCMS) method
[E] Semi-volatile (GCMS) method
[F] Low Reliability Trigger Level
[G] National Institute of Water & Atmospheric Research Ltd (January 2013) Updating Nitrate Toxicity Effects on Freshwater A
[H] Criteria of nitrate as NO3 / ammonia as NH3 converted to as N
[I] USEPA RSLs (2016)
[J] From ANZECC 1992 Water Quality Guidelines for Raw Waters for Drinking Purposes
[K] US EPA (May 2018) Regional Screening Levels for Tap Water. Adjusted to be consistent with Australian cancer risk policy.
[L] Sampling completed by Atma Environmental & Alpha Environmental as part of audit of adjacent land (32 - 34 Graham Roac
[M] Not laboratory measured, indicative values based on the sum of nitrate and ammonia have been calculated
[N] CCME Freshwater guideline

Units are in mg/L.
'ND' means Not Detectable.
'n/a' means Not Available.
NST means 'Not Sufficiently Toxic'
Yellow highlighted results exceed highlighted criteria
Underlined results exceed underlined criteria
Strikethrough means results not to be relied upon

Table 2. Groundwater Sample Analysis Results

PROJECT: Highett (#1452C)

Protected Beneficial Uses of Segment 'A2' Groundwater:	Assessment Guideline				Organo-Chlorine Pesticides (OCPs) (sum)	4.4'-DDD	4.4'-DDE	4.4'-DDT	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordanes - Total	d-BHC	Dieldrin	Endosulfan	Endrin	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Methoxychlor	Mirex	Toxaphene	Herbicides	2.4-D	2.4.5-T	MCPA	MCPB	Mecoprop	Picloram	Other Pesticides	Bifenthrin	Chlorpyrifos	Atrazine	Carbamate Pesticides (sum)	Aldicarb	Bendiocarb	Carbaryl	Carbofuran	Methomyl	Oxamyl	Thiobencarb	Total PCB	Aroclor-1016	Aroclor-1221	Aroclor-1232	Aroclor-1242	Aroclor-1248	Aroclor-1254	Aroclor-1260	Phthalate Esters (sum)	Bis(2-ethylhexyl)phthalate	Butyl benzyl phthalate	Diethyl phthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate
Water Dependent Ecosystems & Species	SEPP Waters (Port Phillip Bay - Hobsons Bay) *Slightly to Moderatley Modified*				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	ANZECC AWQGs 2000 - Aquatic Ecosystems 95% Protection for Marine Waters				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.00001	0.000008	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.0000009	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Potable Water Supply	NHMRC Australian Drinking Water Guidelines 2011 (Updated Version 3.5 2018) - Health				n/a	n/a	n/a	0.009	n/a	n/a	0.0003	n/a	0.002	n/a	n/a	0.02	n/a	n/a	0.0003	n/a	n/a	0.3	n/a	n/a	n/a	0.03	0.1	n/a	n/a	n/a	0.3	n/a	n/a	0.01	0.02	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.010	n/a	n/a	n/a	n/a	n/a
	NHMRC Australian Drinking Water Guidelines 2011 (Updated Version 3.5 2018) - Aesthetic				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Agriculture & Irrigation (Irrigation)	ANZECC AWQGs 2000 - Irrigation Water Quality (LTV for Heavy Metals and Metalloids)				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Agriculture & Irrigation (Stock Watering)	ANZECC AWQGs 2000 - Livestock Watering				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	NHMRC Australian Drinking Water Guidelines 2011 - Health *(adopted for pesticides & organics)*				n/a	n/a	n/a	0.009	n/a	n/a	0.0003	n/a	0.002	n/a	n/a	0.02	n/a	n/a	0.0003	0.0003	n/a	0.3	n/a	n/a	n/a	0.03	0.1	n/a	n/a	n/a	0.3	n/a	n/a	0.01	0.02	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Water-based Recreation (Primary Contact Recreation)	NHMRC Australian Drinking Water Guidelines 2011 (Updated Version 3.5 2018) - Health *(modified x 10)*				n/a	n/a	n/a	0.009	n/a	n/a	0.0003	n/a	0.002	n/a	n/a	0.02	n/a	n/a	0.0003	0.0003	n/a	0.3	n/a	n/a	n/a	0.03	0.1	n/a	n/a	n/a	0.3	n/a	n/a	0.01	0.040	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	0.010	n/a	n/a	n/a	n/a	n/a
	NHMRC Australian Drinking Water Guidelines 2011 (Updated Version 3.5 2018) - Aesthetic				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Buildings and Structures	AS2159-2009 - Exposure Classification For Concrete Piles— Piles In Soil				n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Monitoring Well	**Samle ID**	**GME #**	**Sampling Date**	**Laboratory (Report #)**																																																						
ONSITE WELLS																																																										
MW1	MW1-100517	1	10-May-17	545817	ND	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	-	< 0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05
	MW1-280617	2	28-Jun-17	552273	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW1-170418	3	17-Apr-18	594779	ND	< 0.0001	< 0.0001	< 0.0001	-	< 0.0001	< 0.0001	-	< 0.001	-	< 0.0001	< 0.0001	< 0.0001	-	< 0.0001	-	< 0.0001	< 0.0001	< 0.01	< 0.01	ND	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	ND	< 0.0005	< 0.02	< 0.002	-	-	-	-	-	-	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	ND	< 0.005	< 0.005	< 0.01	< 0.01	< 0.005	< 0.005
	MW1	6	03-Oct-18	620846	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW1	9	02-Jan-19	634656	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW1A	MW1A-310518	4	31-May-18	601305	ND	< 0.0001	< 0.0001	< 0.0001	-	< 0.0001	< 0.0001	-	< 0.001	-	< 0.0001	< 0.0001	< 0.0001	-	< 0.0001	-	< 0.0001	< 0.0001	< 0.01	< 0.01	ND	< 0.001	< 0.002	< 0.001	< 0.001	< 0.001	< 0.02	ND	< 0.0005	< 0.02	< 0.002	-	-	-	-	-	-	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	ND	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	MW1A-230818	5	23-Aug-18	614153	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW1A	6	03-Oct-18	620846	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW1A-301018	7	30-Oct-18	625411	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW1A	9	03-Jan-19	634755	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2	MW2-100517	1	10-May-17	545817	ND	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	-	< 0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05
	MW2-280617	2	28-Jun-17	552273	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW2-170418	3	17-Apr-18	594779	ND	< 0.0001	< 0.0001	< 0.0001	-	< 0.0001	< 0.0001	-	< 0.001	-	< 0.0001	< 0.0001	< 0.0001	-	< 0.0001	-	< 0.0001	< 0.0001	< 0.01	< 0.01	ND	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	ND	< 0.0005	< 0.02	< 0.002	-	-	-	-	-	-	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	ND	< 0.005	< 0.005	< 0.01	< 0.01	< 0.005	< 0.005
	MW2-230818	5	23-Aug-18	614153	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW2-291018	7	29-Oct-18	625218	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW2A	MW2A-310518	4	31-May-18	601305	ND	< 0.0001	< 0.0001	< 0.0001	-	< 0.0001	< 0.0001	-	< 0.001	-	< 0.0001	< 0.0001	< 0.0001	-	< 0.0001	-	< 0.0001	< 0.0001	< 0.01	< 0.01	ND	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.01	ND	< 0.0005	< 0.02	< 0.002	-	-	-	-	-	-	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	ND	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	MW2A-230818	5	23-Aug-18	614153	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW2A-291018	7	29-Oct-18	625218	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW2A	9	02-Jan-19	634656	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW3	MW3-100517	1	10-May-17	545817	ND	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	-	< 0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05
	MW3-280617	2	28-Jun-17	552273	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW3-170418	3	17-Apr-18	594779	ND	< 0.0001	< 0.0001	< 0.0001	-	< 0.0001	< 0.0001	-	< 0.001	-	< 0.0001	< 0.0001	< 0.0001	-	< 0.0001	-	< 0.0001	< 0.0001	< 0.01	< 0.01	ND	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	ND	< 0.0005	< 0.02	< 0.002	-	-	-	-	-	-	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	ND	< 0.005	< 0.005	< 0.01	< 0.01	< 0.005	< 0.005
	MW3	9	04-Jan-19	634755	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW3A	MW3A-310518	4	31-May-18	601305	ND	< 0.0001	< 0.0001	< 0.0001	-	< 0.0001	< 0.0001	-	< 0.001	-	< 0.0001	< 0.0001	< 0.0001	-	< 0.0001	-	< 0.0001	< 0.0001	< 0.01	< 0.01	ND	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.01	ND	< 0.0005	< 0.02	< 0.002	-	-	-	-	-	-	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	ND	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	MW3A-240818	5	24-Aug-18	614152	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW3A-301018	7	30-Oct-18	625411	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW3A	9	04-Jan-19	634755	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4	MW4-100517	1	10-May-17	545817	ND	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	-	< 0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05
	MW4-281617	2	28-Jun-17	552273	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW4-170418	3	17-Apr-18	594779	ND	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	-	< 0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW4-240818	5	24-Aug-18	614152	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW4-291018	7	29-Oct-18	625218	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW4	9	03-Jan-19	634755	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4A	MW4A-010618	4	01-Jun-18	601305	ND	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	-	< 0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW4A-240818	5	24-Aug-18	614152	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	ND	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	MW4A-291018	7	29-Oct-18	625218	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW4A	9	03-Jan-19	634755	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW5	MW5-180418	3	18-Apr-18	594959	ND	< 0.0001	< 0.0001	< 0.0001	-	< 0.0001	< 0.0001	-	< 0.001	-	< 0.0001	< 0.0001	< 0.0001	-	< 0.0001	-	< 0.0001	< 0.0001	< 0.01	< 0.01	ND	< 0.001	< 0.005	< 0.001	< 0.002	< 0.001	< 0.01	ND	< 0.0005	< 0.02	< 0.002	-	-	-	-	-	-	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	ND	< 0.005	< 0.005	< 0.01	< 0.01	< 0.005	< 0.005
	MW5-300518	4	30-May-18	601100	ND	< 0.0001	< 0.0001	< 0.0001	-	< 0.0001	< 0.0001	-	< 0.001	-	< 0.0001	< 0.0001	< 0.0001	-	< 0.0001	-	< 0.0001	< 0.0001	< 0.01	< 0.01	ND	< 0.005	< 0.01	< 0.005	< 0.005	< 0.005	< 0.05	ND	< 0.0005	< 0.02	< 0.002	-	-	-	-	-	-	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	ND	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	MW5-240818	5	24-Aug-18	614152	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	ND	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MW5A *MW5 Replacement*	MW5A-301018	7	30-Oct-18	625218	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW5A	9	03-Jan-19	634755	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW6	MW6-180418	3	18-Apr-18	594959	ND	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	-	< 0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW6-310518	4	31-May-18	601305	ND	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	-	< 0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW6-240818	5	24-Aug-18	614152	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW6-301018	7	30-Oct-18	625411	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW6	9	04-Jan-19	634755	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7	MW7-180418	3	18-Apr-18	594959	ND	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	-	< 0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW7-300518	4	30-May-18	601100	ND	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	-	< 0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW7-240818	5	24-Aug-18	614152	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	ND	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	MW7-291018	7	10-Oct-96	625218	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW7	9	03-Jan-19	634656	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW8	MW8-190418	3	19-Apr-18	595144	ND	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	-	< 0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW8-290518	4	29-May-18	601013	ND	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	-	< 0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW8-240818	5	24-Aug-18	614152	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	ND	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
	MW8	6	03-Oct-18	620846	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW8-291018	7	29-Oct-18	625175	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW8	9	03-Jan-19	634656	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW9	MW9-190418	3	19-Apr-18	595144	ND	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	-	< 0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW9-290518	4	29-May-18	601013	ND	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	-	< 0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW9-230818	5	23-Aug-18	614153	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	ND	< 0.2	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	ND	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MW13 *(Screened 8.4 - 11.4 mbgl)*	MW13-291018	7	29-Oct-18	625175	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW13	9	03-Jan-19	634755	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13A *(Screened 4.0 - 7.0 mbgl)*	MW13A-291018	7	29-Oct-18	625175	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW13A	9	03-Jan-19	634755	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14 *MW2 Replacement*	MW14	8	03-Dec-18	631206	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW14	9	02-Jan-19	634656	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW15	MW15	8	03-Dec-18	631206	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW15	9	02-Jan-19	634656	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16	MW16	8	03-Dec-18	631206	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW16	9	02-Jan-19	634656	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OFF-SITE WELLS																																																										
MW10 *(Off-site; Up-gradient)*	MW10-180418	3	18-Apr-18	594959	ND	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	-	< 0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW10-300518	4	30-May-18	601100	ND	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	-	< 0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW10-240818	5	24-Aug-18	614152	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW10-301018	7	30-Oct-18	625411	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW10	9		634755	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11 *(Off-site; Down-gradient)*	MW11-190418	3	19-Apr-18	595144	ND	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	-	< 0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW11-290518	4	29-May-18	601013	ND	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	-	< 0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW11-230818	5	23-Aug-18	614153	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW11-301018	7	30-Oct-18	625411	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW11	9	02-Jan-19	634656	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW12 *(Off-site; Down-gradient)*	MW12-190418	3	19-Apr-18	595144	ND	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	-	< 0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW12-290518	4	29-May-18	601013	ND	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	-	< 0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW12-230818	5	23-Aug-18	614153	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW12-301018	7	30-Oct-18	625218	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW12	9	02-Jan-19	634656	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWA *(Off-site; Up-gradient)*	MWA	-[K]	20-Mar-18	590286	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MWA/6.5	7	01-Nov-18	625519	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MWA/7.5	7	01-Nov-18	625519	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MWA/9.5	7	01-Nov-18	625519	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MWB *(Off-site; Up-gradient)*	MWB	-[K]	20-Mar-18	590286	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MWB-300518	4	30-May-18	601100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MWB/10.5	7	01-Nov-18	625519	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MWB/8.0	7	01-Nov-18	625519	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MWB/9.5	7	01-Nov-18	625519	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
α1 *(Off-site; Down-gradient)*	MW1-211015	-[L]	21-Oct-15	476820	ND	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	-	< 0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW1-241115	-[L]	24-Nov-15	481008	ND	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	-	< 0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW1	-[L]	21-Dec-17	12756	ND	< 0.00001	< 0.00001	< 0.000006	< 0.00005	< 0.00001	< 0.00001	< 0.00005	< 0.00001	< 0.00005	< 0.00001	< 0.00002	< 0.00001	< 0.00005	< 0.00001	< 0.00001	< 0.00002	-	-	-	-	-	-	-	-	-	-	-	-	< 0.00001	-	-	-	-	-	-	-	-	-	ND	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	ND	< 0.05	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01
	MW1	-[L]	14-Feb-18	584842	ND	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	-	< 0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.0001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	ND	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	α1-230818	5	23-Aug-18	614153	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	α1-301018	7	30-Oct-18	625411	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	α1	9	02-Jan-19	634656	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
α2 *(Off-site; Down-gradient)*	MW2-211015	-[L]	21-Oct-15	476820	ND	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	-	< 0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW2-241115	-[L]	24-Nov-15	481008	ND	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	-	< 0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW2	-[L]	21-Dec-17	12756	ND	< 0.00001	< 0.00001	< 0.000006	< 0.00005	< 0.00001	< 0.00001	< 0.00005	< 0.00001	< 0.00005	< 0.00001	< 0.00002	< 0.00001	< 0.00005	< 0.00001	< 0.00001	< 0.00002	-	-	-	-	-	-	-	-	-	-	-	-	< 0.00001	-	-	-	-	-	-	-	-	-	ND	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	ND	< 0.05	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01
	MW2	-[L]	14-Feb-18	584842	ND	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	-	< 0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.0001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	ND	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
	α2-230818	5	23-Aug-18	614153	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	α2-301018	7	30-Oct-18	625411	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	α2	9	02-Jan-19	634656	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
α3 *(Off-site; Down-gradient)*	MW3-211015	-[L]	21-Oct-15	476820	ND	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	-	< 0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW3-241115	-[L]	24-Nov-15	481008	ND	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	-	< 0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MW3	-[L]	21-Dec-17	12756	ND	< 0.00001	< 0.00001	< 0.000006	< 0.00005	< 0.00001	< 0.00001	< 0.00005	< 0.00001	< 0.00005	< 0.00001	< 0.00002	< 0.00001	< 0.00005	< 0.00001	< 0.00001	< 0.00002	-	-	-	-	-	-	-	-	-	-	-	-	< 0.00001	-	-	-	-	-	-	-	-	-	ND	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	ND	< 0.05	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01
	MW3	-[L]	14-Feb-18	584842	ND	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	-	< 0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.0001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	ND	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002

NOTES:
[A] Sulfate as SO4 converted to Sulfate as S (divided by 3)
[B] Less BTEX
[C] Less Naphthalene
[D] Volatile (P&T GCMS) method
[E] Semi-volatile (GCMS) method
[F] Low Reliability Trigger Level
[G] National Institute of Water & Atmospheric Research Ltd (January 2013) Updating Nitrate Toxicity Effects on Freshwater A
[H] Criteria of nitrate as NO3 / ammonia as NH3 converted to as N
[I] USEPA RSLs (2016)
[J] From ANZECC 1992 Water Quality Guidelines for Raw Waters for Drinking Purposes
[K] US EPA (May 2018) Regional Screening Levels for Tap Water. Adjusted to be consistent with Australian cancer risk policy.
[L] Sampling completed by Atma Environmental & Alpha Environmental as part of audit of adjacent land (32 - 34 Graham Roac
[M] Not laboratory measured, indicative values based on the sum of nitrate and ammonia have been calculated
[N] CCME Freshwater guideline

Units are in mg/L.
'ND' means Not Detectable.
'n/a' means Not Available.
NST means 'Not Sufficiently Toxic'
Yellow highlighted results exceed highlighted criteria
Underlined results exceed underlined criteria
Strikethrough means results not to be relied upon

APPENDIX A

Monitoring Well Details

Monitoring Well: MW1

Project Ref. No: 1452B
Project Name: Highett
Completion Date: 1st May 2017
BCL No: WLE068178
Drilling Contractor: Statewide
Page Number: 1 of 1
Drilling Method: Solid Stem
Drillers Licence No: 0838
Logged By: JH
Bore Diameter (mm): 100
Well Depth (m): 6.3
OVA Type: n/a
Well Diameter (mm): 50
Well Material: Class 18 PVC
Easting: 327935.08
Casing Stickup (m): +0.5
TOC Elevation (AHD): 33.30
Northing: 5797758.40
Location Description: See Figure
Datum: n/a

Depth (m bgl)	Geological Description	Depth	Additional Observations
	Ground Surface	0.0	Vegetation at surface
0.3	FILL Silty SAND, fine to coarse grain, dark brown, medium dense, moist		
1.1	NATURAL SAND, fine to coarse grain, grey, medium dense, moist	1.0	
1.3	Clayey SAND, fine to coarse grain, orange/grey, dense, damp		
	Sandy CLAY, medium plasticity, orange/grey, stiff, damp	2.0	
2.2	Clayey SAND, fine to coarse grain, orange/grey, medium dense to dense, moist		
3.1	Sandy CLAY, medium plasticity, orange/grey, stiff, damp	3.0	
4.1	Clayey SAND, mediun to coarse grain, grey, wet	4.0	
		5.0	
		6.0	
	End of Log	7.0	

Groundwater Observations -

Depth Water Encountered During Drilling (mbNS): 4.1

Post Install Water Level (mbNS): 4.28

Sample Type -

- **Hand Auger**
- **Solid Stem Auger**
- **Push Tube**
- **Split Spoon**
- **R.A.B**

Monitoring Well Construction Key -

- **Screen**
- **Bentonite**
- **Filter Pack**
- **Grout**
- **Backfill**

Monitoring Well: MW1a

Project Ref. No: 1452C
Project Name: Highett
Completion Date: 23 May 2018
BCL No: WLE070741
Drilling Contractor: Statewide
Page Number: 1 of 1
Drilling Method: Solid Stem
Drillers Licence No: 0838
Logged By: JH
Bore Diameter (mm): 100
Well Depth (m): 6.0
OVA Type: n/a
Well Diameter (mm): 50
Well Material: Class 18 PVC
Easting: n/a
Casing Stickup (m): -0.09
TOC Elevation (AHD): n/a
Northing: n/a
Location Description: See Figure
Datum: n/a

Depth (m bgl)	Geological Description	Graphic Symbol	Depth	Sample Type	Sample ID	OVA (ppm)	Well Construction Details	Additional Observations
	Ground Surface		0.0					Asphalt 40 mm thick
0.15 0.3	FILL GRAVEL, fine to coarse grains, dark grey, dense, damp							
	FILL SAND, fine to coarse grains, dark grey/brown, medium dense, damp		1.0					Hand auger to 1.0 m.
1.1 1.3	NATURAL SAND, fine to coarse grain, yellow/grey, medium dense, moist							
	Clayey SAND, fine to coarse grain, orange/grey, dense, damp		2.0					
2.2	Sandy CLAY, medium plasticity, orange/grey, stiff, damp							
	Clayey SAND, fine to coarse grain, orange/grey, medium dense to dense, moist		3.0					
3.1	Sandy CLAY, medium plasticity, orange/grey, stiff, damp							
4.1	Clayey SAND, mediun to coarse grain, grey, wet		4.0					
			5.0					
	End of Log		6.0					
			7.0					

Groundwater Observations -

Depth Water Encountered During Drilling (mbNS): 4.0

Post Install Water Level (mbNS): 4.21

Sample Type -

- **Hand Auger**
- **Solid Stem Auger**
- **Push Tube**
- **Split Spoon**
- **R.A.B**

Monitoring Well Construction Key -

- **Screen**
- **Bentonite**
- **Filter Pack**
- **Grout**
- **Backfill**

Monitoring Well: MW2

Project Ref. No: 1452B
Project Name: Highett
Completion Date: 1st May 2017
BCL No: WLE068178
Drilling Contractor: Statewide
Page Number: 1 of 1
Drilling Method: Solid Stem
Drillers Licence No: 0838
Logged By: JH
Bore Diameter (mm): 100
Well Depth (m): 7.0
OVA Type: n/a
Well Diameter (mm): 50
Well Material: Class 18 PVC
Easting: 327957.97
Casing Stickup (m): +0.5
TOC Elevation (AHD): 34.32
Northing: 5797721.21
Location Description: See Figure
Datum: n/a

Depth (m bgl)	Geological Description	Graphic Symbol	Depth	Sample Type	Sample ID	OVA (ppm)	Well Construction Details	Additional Observations
	Ground Surface		0.0					Vegetation at surface
0.2	FILL SAND, fine to coarse grain, dark grey, medium dense, moist							
0.8	NATURAL SAND, fine to coarse grain, grey/brown, medium dense, damp to moist		1.0					
	Grey							
2.0			2.0					Perched water
2.1	Wet Sandy CLAY, medium plasticity, grey/orange, very stiff, damp							
3.1	Clayey SAND, fine to coarse grain, grey/orange, very stiff, damp		3.0					
3.65	Sandy CLAY, medium plasticity, orange/grey, very stiff, damp		4.0					
4.5	SAND, medium to coarse grain, orange/grey, medium dense, moist to wet		5.0					
			6.0					
6.3	Fine to coarse grain, grey							
	End of Log		7.0					

Groundwater Observations -

Depth Water Encountered During Drilling (mbNS): 4.5
Post Install Water Level (mbNS): 4.96

Sample Type -

- **Hand Auger**
- **Solid Stem Auger**
- **Push Tube**
- **Split Spoon**
- **R.A.B**

Monitoring Well Construction Key -

- **Screen**
- **Backfill**
- **Bentonite**
- **Filter Pack**
- **Grout**

Monitoring Well: MW2a

Project Ref. No: 1452C
Project Name: Highett
Completion Date: 23 May 2018
BCL No: WLE070741
Drilling Contractor: Statewide
Page Number: 1 of 1
Drilling Method: Solid Stem
Drillers Licence No: 0838
Logged By: JH
Bore Diameter (mm): 100
Well Depth (m): 6.8
OVA Type: n/a
Well Diameter (mm): 50
Well Material: Class 18 PVC
Easting: n/a
Casing Stickup (m): +0.62
TOC Elevation (AHD): n/a
Northing: n/a
Location Description: See Figure
Datum: n/a

Depth (m bgl)	Geological Description	Graphic Symbol	Depth	Sample Type	Sample ID	OVA (ppm)	Well Construction Details	Additional Observations
	Ground Surface		0.0					Vegetation at surface
0.2	FILL SAND, fine to coarse grain, dark grey, medium dense, moist							
0.8	NATURAL SAND, fine to coarse grain, grey/brown, medium dense, damp to moist		1.0					Hand auger to 0.8 m
	Grey							
2.0			2.0					
2.1	Moist Sandy CLAY, medium plasticity, grey/orange, very stiff, damp							
3.1	Clayey SAND, fine to coarse grain, grey/orange, very stiff, damp		3.0					
3.65	Sandy CLAY, medium plasticity, orange/grey, very stiff, damp		4.0					
4.5	SAND, medium to coarse grain, orange/grey, medium dense, moist to wet		5.0					
			6.0					
6.3	Fine to coarse grain, grey							Borehole collapse 6.8 - 7.0 m
	End of Log		7.0					

Groundwater Observations -

Depth Water Encountered During Drilling (mbNS): 5.1

Post Install Water Level (mbNS): 5.3

Sample Type -

- **Hand Auger**
- **Solid Stem Auger**
- **Push Tube**
- **Split Spoon**
- **R.A.B**

Monitoring Well Construction Key -

- **Screen**
- **Bentonite**
- **Filter Pack**
- **Grout**
- **Backfill**

Monitoring Well: MW3

Project Ref. No: 1452B
Project Name: Highett
Completion Date: 1st May 2017
BCL No: WLE068178
Drilling Contractor: Statewide
Page Number: 1 of 1
Drilling Method: Solid Stem
Drillers Licence No: 0838
Logged By: JH
Bore Diameter (mm): 100
Well Depth (m): 7.0
OVA Type: n/a
Well Diameter (mm): 50
Well Material: Class 18 PVC
Easting: 328060.97
Casing Stickup (m): +0.5
TOC Elevation (AHD): 35.78
Northing: 5797789.70
Location Description: See Figure
Datum: n/a

Depth (m bgl)	Geological Description	Graphic Symbol	Depth	Sample Type	Sample ID	OVA (ppm)	Well Construction Details	Additional Observations
	Ground Surface		0.0					Vegetation at surface
0.5	FILL SAND, fine to coarse grain, dark brown/grey, medium dense, damp							
1.0	NATURAL SAND, fine to coarse grain, yellow/grey, medium dense, damp		1.0					
1.4	Moist							
	Sandy CLAY, medium plasticity, orange/grey, very stiff, damp to moist							
2.0	Damp		2.0					
2.7	Clayey SAND, moderate to coarse grain, grey, very dense, damp		3.0					
3.5	Sandy CLAY, medium plasticity, orange/grey, very stiff, damp		4.0					
4.4	Clayey SAND, moderate to coarse, light orange/grey/red, very dense, damp to moist		5.0					
			6.0					
	End of Log		7.0					

Groundwater Observations -

Depth Water Encountered During Drilling (mbNS): 4.4

Post Install Water Level (mbNS): 5.36

Sample Type -

- **Hand Auger**
- **Solid Stem Auger**
- **Push Tube**
- **Split Spoon**
- **R.A.B**

Monitoring Well Construction Key -

- **Screen**
- **Bentonite**
- **Filter Pack**
- **Grout**
- **Backfill**

Monitoring Well: MW3a

Project Ref. No: 1452C
Project Name: Highett
Completion Date: 23 May 2018
BCL No: WLE070741
Drilling Contractor: Statewide
Page Number: 1 of 1
Drilling Method: Solid Stem
Drillers Licence No: 0838
Logged By: JH
Bore Diameter (mm): 100
Well Depth (m): 8.2
OVA Type: n/a
Well Diameter (mm): 50
Well Material: Class 18 PVC
Easting: n/a
Casing Stickup (m): +0.81
TOC Elevation (AHD): n/a
Northing: n/a
Location Description: See Figure
Datum: n/a

Depth (m bgl)	Geological Description	Graphic Symbol	Depth	Sample Type	Sample ID	OVA (ppm)	Well Construction Details	Additional Observations
	Ground Surface		0.0					Vegetation at surface
0.5	FILL SAND, fine to coarse grain, dark brown/grey, medium dense, damp							Hand auger to 0.6 m
1.0	NATURAL SAND, fine to coarse grain, yellow/grey, medium dense, damp		1.0					
1.4	Moist							
	Sandy CLAY, medium plasticity, orange/grey, very stiff, damp to moist							
2.0	Damp		2.0					
2.7	Clayey SAND, moderate to coarse grain, grey, very dense, damp		3.0					
3.5	Sandy CLAY, medium plasticity, orange/grey, very stiff, damp		4.0					
4.4	Clayey SAND, moderate to coarse, light orange/grey/red, very dense, damp to moist		5.0					
			6.0					
			7.0					
			8.0					
	End of Log							

Groundwater Observations -

Depth Water Encountered During Drilling (mbNS): 6.2

Post Install Water Level (mbNS): 7.1

Sample Type -

- **Hand Auger**
- **Solid Stem Auger**
- **Push Tube**
- **Split Spoon**
- **R.A.B**

Monitoring Well Construction Key -

- **Screen**
- **Backfill**
- **Bentonite**
- **Filter Pack**
- **Grout**

Monitoring Well: MW4

Project Ref. No: 1452B
Project Name: Highett
Completion Date: 2nd May 2017
BCL No: WLE068178
Drilling Contractor: Statewide
Page Number: 1 of 1
Drilling Method: Solid Stem
Drillers Licence No: 0838
Logged By: JH
Bore Diameter (mm): 100
Well Depth (m): 7.0
OVA Type: n/a
Well Diameter (mm): 50
Well Material: Class 18 PVC
Easting: 327984.44
Casing Stickup (m): +0.5
TOC Elevation (AHD): 35.32
Northing: 5797788.29
Location Description: See Figure
Datum: n/a

Depth (m bgl)	Geological Description	Graphic Symbol	Depth	Sample Type	Sample ID	OVA (ppm)	Well Construction Details	Additional Observations
	Ground Surface		0.0					Vegetation at surface
0.25	FILL SAND, fine to coarse grain, grey, loose to medium dense, damp. Trace glass fragments							
0.9	NATURAL SAND, fine to coarse grain, orange, medium dense, damp		1.0					
	Grey							
2.1			2.0					
2.3	Sandy CLAY, low to medium plasticity, grey/orange, very stiff, damp							
	Dark orange							
3.2			3.0					
	Clayey SAND, fine to coarse grain, grey/orange, very dense, damp to moist							
			4.0					
4.5	Moist							
			5.0					
6.0			6.0					
	Sandy CLAY, medium plasticity, grey/orange/brown, very stiff, moist							
			7.0					
	End of Log							

Groundwater Observations -

Depth Water Encountered During Drilling (mbNS): 4.5

Post Install Water Level (mbNS): 6.02

Sample Type -

- **Hand Auger**
- **Solid Stem Auger**
- **Push Tube**
- **Split Spoon**
- **R.A.B**

Monitoring Well Construction Key -

- **Screen**
- **Bentonite**
- **Filter Pack**
- **Grout**
- **Backfill**

Monitoring Well: MW4a

Project Ref. No: 1452C
Project Name: Highett
Completion Date: 23 May 2018
BCL No: WLE070741
Drilling Contractor: Statewide
Page Number: 1 of 1
Drilling Method: Solid Stem
Drillers Licence No: 0838
Logged By: JH
Bore Diameter (mm): 100
Well Depth (m): 8.0
OVA Type: n/a
Well Diameter (mm): 50
Well Material: Class 18 PVC
Easting: n/a
Casing Stickup (m): +0.5
TOC Elevation (AHD): 72
Northing: n/a
Location Description: See Figure
Datum: n/a

Depth (m bgl)	Geological Description	Graphic Symbol	Depth	Sample Type	Sample ID	OVA (ppm)	Well Construction Details	Additional Observations
	Ground Surface		0.0					Vegetation at surface
	FILL SAND, fine to coarse grain, light grey/brown,medium dense, damp.		1.0					
1.2	NATURAL SAND, fine to coarse grain, light brown, medium dense, dry		2.0					
2.1								
2.3	Light brown/yellow Dark orange		3.0					
3.2	Clayey SAND, fine to coarse grain, grey/orange, very dense, damp to moist		4.0					
4.5	Moist		5.0					
6.0	Sandy CLAY, medium plasticity, grey/orange/brown, very stiff, moist		6.0					
			7.0					
	End of Log		8.0					

Groundwater Observations -

Depth Water Encountered During Drilling (mbNS): 6.0
Post Install Water Level (mbNS): 6.8

Sample Type -

- **Hand Auger**
- **Solid Stem Auger**
- **Push Tube**
- **Split Spoon**
- **R.A.B**

Monitoring Well Construction Key -

- **Screen**
- **Backfill**
- **Bentonite**
- **Filter Pack**
- **Grout**

Monitoring Well: MW5

Project Ref. No: 1452C
Project Name: Highett
Completion Date: 10/4/18
BCL No: WLE068178
Drilling Contractor: Statewide
Page Number: 1 of 1
Drilling Method: SS
Drillers Licence No: 0838
Logged By: J.H.
Bore Diameter (mm): 100
Well Depth (m): 7.5
OVA Type: PID
Well Diameter (mm): 50
Well Material: PVC
Easting: 328013.39
Casing Stickup (m): -0.01
TOC Elevation (AHD): 34.29
Northing: 5797754.73
Location Description: Refer to Figure.
Datum: MGA94 Zone 55

Depth (m bgl)	Geological Description	Depth	Sample ID	OVA (ppm)	Additional Observations
	Ground Surface	0.0			Concrete 140 mm thick
0.3	SAND		MW5/0.1	1.3	
0.45	Fine to coarse grained, dark grey/brown, medium dense, damp		MW5/0.5	0.7	
	Very dense	1.0	MW5/1.0	0.3	
1.1	Light orange				
	Clayey SAND Fine to coarse grained,orange/grey, medium dense to dense, damp				Solid Stem drilling commences
1.85	Light grey	2.0	MW5/2.0	0.2	
2.6	Moderate to coarse grained, dark orange	3.0	MW5/3.0	0.4	
3.4	Fine to coarse grained, grey with minor pink hues, damp to moist	4.0	MW5/4.0	0.6	
4.8	Grey, moist	5.0			
5.9	Moderate to coarse grained, grey/brown, wet	6.0			
		7.0			
	End of Log	8.0			
		9.0			

Groundwater Observations -

Depth Water Encountered During Drilling (mbNS): 5.9

Post Install Water Level (mbNS): 5.3

Sample Type -

- **Hand Auger**
- **Solid Stem Auger**
- **Push Tube**
- **Split Spoon**
- **R.A.B**

Monitoring Well Construction Key -

- **Screen**
- **Bentonite**
- **Filter Pack**
- **Grout**
- **Backfill**

Monitoring Well: MW5A

Project Ref. No: 1452C
Project Name: Highett
Completion Date: 22/10/18
BCL No: WLE068178
Drilling Contractor: Rockwell
Page Number: 1 of 1
Drilling Method: SS
Drillers Licence No: 804
Logged By: J.H.
Bore Diameter (mm): 100
Well Depth (m): 7.4
OVA Type: n/a
Well Diameter (mm): 100
Well Material: PVC
Easting: n/a
Casing Stickup (m): 0.67
TOC Elevation (AHD): n/a
Northing: n/a
Location Description: Immediatley adjacent to MW5
Datum: n/a

Depth (m bgl)	Geological Description	Graphic Symbol	Depth	Sample Type	Sample ID	OVA (ppm)	Well Construction Details	Additional Observations
	Ground Surface		0.0					
0.2	DISTURBED NATURAL Fine to coarse grained, dark grey/brown, medium dense, damp							
0.45	NATURAL SAND, fine to coarse grained, dark grey/brown, medium dense, damp		1.0					
1.0	Light orange/grey							
1.1	Dark oragene, trace clay							
1.8	Clayey SAND, fine to coarse grained, dark orange/grey, medium dense, damp		2.0					
2.6	Light grey Dark orange, medium to coarse grained		3.0					
3.4	Fine to coarse, grey/pink, damp to moist		4.0					
4.8	Grey, moist		5.0					
5.8	Wet		6.0					
5.9	Medium to coarse grained, grey/brown		7.0					
	End of Log		8.0					
			9.0					

Groundwater Observations -

Depth Water Encountered During Drilling (mbNS): 5.8

Post Install Water Level (mbNS): 6.03

Sample Type -

- **Hand Auger**
- **Solid Stem Auger**
- **Push Tube**
- **Split Spoon**
- **R.A.B**

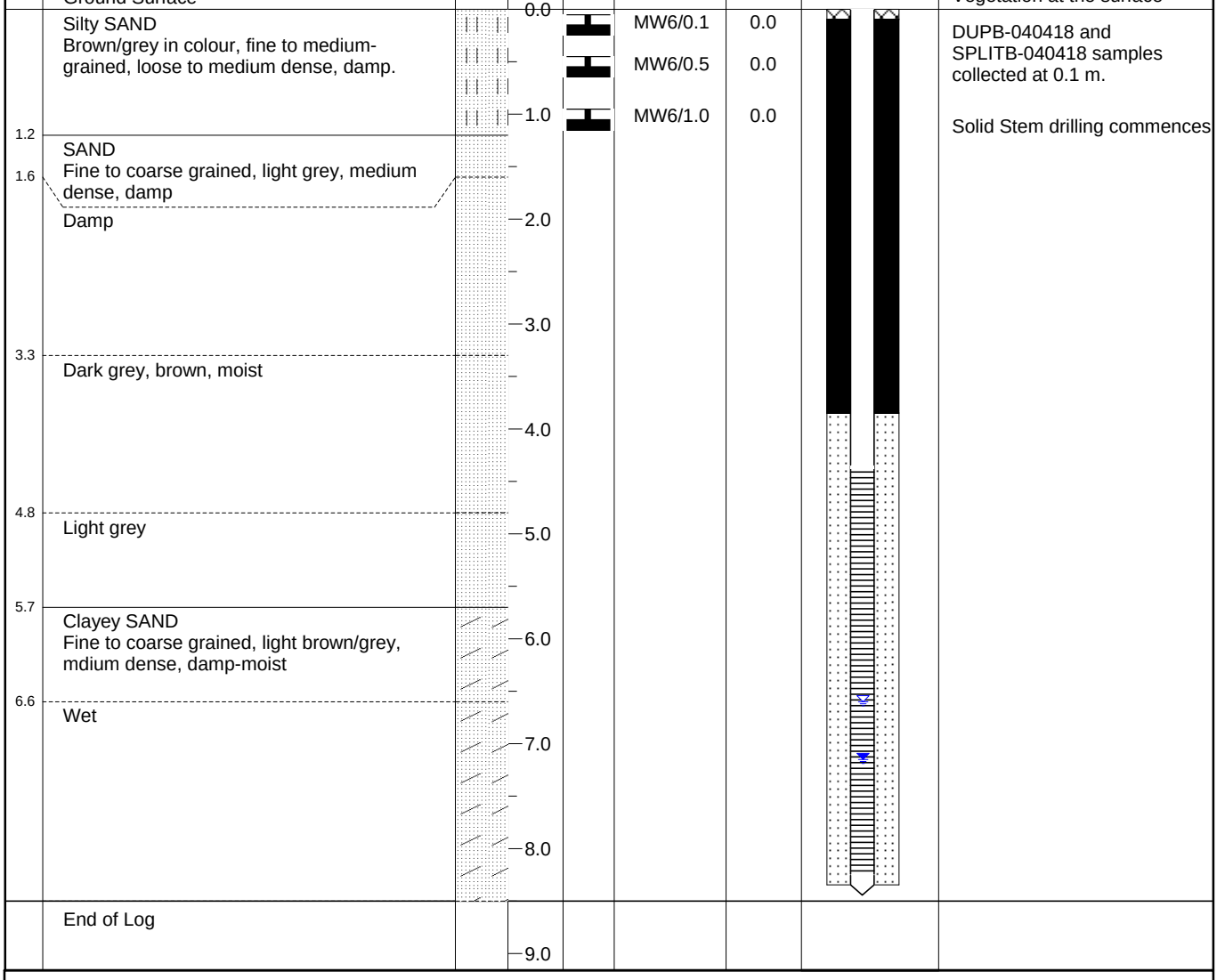
Monitoring Well Construction Key -

- **Screen**
- **Bentonite**
- **Filter Pack**
- **Grout**
- **Backfill**

Monitoring Well: MW6

Project Ref. No: 1452C
Project Name: Highett
Completion Date: 11/4/18
BCL No: WLE068178
Drilling Contractor: Statewide
Page Number: 1 of 1
Drilling Method: SS
Drillers Licence No: 0838
Logged By: K.C.
Bore Diameter (mm): 100
Well Depth (m): 8.35
OVA Type: PID
Well Diameter (mm): 50
Well Material: PVC
Easting: 328057.16
Casing Stickup (m): 0.57
TOC Elevation (AHD): 35.49
Northing: 5797732.66
Location Description: Refer to Figure.
Datum: MGA94 Zone 55

Depth (m bgl)	Geological Description	Depth	Sample ID	OVA (ppm)	Additional Observations
	Ground Surface	0.0			Vegetation at the surface
	Silty SAND Brown/grey in colour, fine to medium-grained, loose to medium dense, damp.		MW6/0.1	0.0	DUPB-040418 and SPLITB-040418 samples collected at 0.1 m.
			MW6/0.5	0.0	
		1.0	MW6/1.0	0.0	Solid Stem drilling commences
1.2					
1.6	SAND Fine to coarse grained, light grey, medium dense, damp				
	Damp	2.0			
		3.0			
3.3	Dark grey, brown, moist				
		4.0			
4.8	Light grey				
		5.0			
5.7	Clayey SAND Fine to coarse grained, light brown/grey, mdium dense, damp-moist				
		6.0			
6.6	Wet				
		7.0			
		8.0			
	End of Log	9.0			



Groundwater Observations -

Depth Water Encountered During Drilling (mbNS): 6.6
Post Install Water Level (mbNS): 7.15

Sample Type -

- **Hand Auger**
- **Solid Stem Auger**
- **Push Tube**
- **Split Spoon**
- **R.A.B**

Monitoring Well Construction Key -

- **Screen**
- **Bentonite**
- **Filter Pack**
- **Grout**
- **Backfill**

Monitoring Well: MW7

Project Ref. No: 1452C
Project Name: Highett
Completion Date: 9/4/18
BCL No: WLE068178
Drilling Contractor: Statewide
Page Number: 1 of 1
Drilling Method: SS
Drillers Licence No: 0838
Logged By: J.H.
Bore Diameter (mm): 120
Well Depth (m): 7.5
OVA Type: PID
Well Diameter (mm): 50
Well Material: PVC
Easting: 328018.25
Casing Stickup (m): +0.87
TOC Elevation (AHD): 35.19
Northing: 5797783.44
Location Description: Refer to Figure.
Datum: MGA94 Zone 55

Depth (m bgl)	Geological Description	Graphic Symbol	Depth	Sample Type	Sample ID	OVA (ppm)	Well Construction Details	Additional Observations
	Ground Surface		0.0					
0.2	FILL Silty SAND, Fine to medium grained, grey/brown, loose to medium dense, damp							Concrete 140 mm thick Wet at 0.3 m.
0.35								
0.55								
0.65								
0.75	Intermixed gravels, brick/concrete fragments		1.0					
1.2	SAND Fine to medium grained, light brown, loose to medium dense, damp							Solid Stem drilling commences
1.85	Clayey SAND Fine to medium grained, brown with orange mottles, dense, damp		2.0					
2.6	Fine to coarse grained							
	Sandy CLAY Low plasticity, grey with orange mottles, stiff, damp		3.0					
3.8	Clayey SAND Fine to coarse grained, orange/grey, medium dense, damp		4.0					
	SAND Moderate to coarse grained, dark orange, medium dense, damp							
4.8	Fine to coarse grained, light brown/grey		5.0					
	Orange/grey, trace clay							
5.5	Clayey SAND Fine to coarse grained, grey/brown, medium dense, damp		6.0					
6.3	Sandy CLAY Low plasticity, orange/grey, very stiff, damp		7.0					
	End of Log		8.0					
			9.0					

Groundwater Observations -

Depth Water Encountered During Drilling (mbNS): 6.3

Post Install Water Level (mbNS): 5.28

Sample Type -

- **Hand Auger**
- **Solid Stem Auger**
- **Push Tube**
- **Split Spoon**
- **R.A.B**

Monitoring Well Construction Key -

- **Screen**
- **Bentonite**
- **Filter Pack**
- **Grout**
- **Backfill**

Monitoring Well: MW8

Project Ref. No: 1452C
Project Name: Highett
Completion Date:
BCL No: WLE068178
Drilling Contractor: Statewide
Page Number: 1 of 1
Drilling Method: SS
Drillers Licence No: 0838
Logged By: J.H.
Bore Diameter (mm): 100
Well Depth (m): 8.0
OVA Type: PID
Well Diameter (mm): 50
Well Material: PVC
Easting: 327982.13
Casing Stickup (m): -0.05
TOC Elevation (AHD): 34.28
Northing: 5797772.41
Location Description: Refer to Figure.
Datum: MGA94 Zone 55

Depth (m bgl)	Geological Description	Graphic Symbol	Depth	Sample Type	Sample ID	OVA (ppm)	Well Construction Details	Additional Observations
	Ground Surface		0.0					
0.3	SAND Grey in colour, fine to coarse-grained, medium dense, dry becoming damp with depth.				MW8/0.1	0.0		Concrete thickness of 120 mm.
					MW8/0.5	0.0		
0.8	Change in colour at 0.3 m- brown/grey.		1.0		MW8/1.0	0.0		
1.5	Change in colour and moisture content at 0.8 m- light brown/yellow, damp.							
1.65	Clayey SAND Orange/grey in colour, fine to coarse-grained, very dense, damp.		2.0		MW8/2.0	0.0		Hand augering as sampling method until 2 m.
2.6	SAND Orange in colour, medium to coarse-grained, very dense, damp.		3.0		MW8/3.0	0.2		
3.4	Sandy CLAY Medium plasticity, dark grey/orange, very stiff, damp							
4.3	Clayey SAND Fine to coarse grained, dark grey/orange, very dense, damp		4.0		MW8/4.0	0.1		
	Sandy CLAY Medium plasticity, drk grey/brown, very stiff, damp		5.0					
			6.0					
6.3	SAND Medium to coarse grained, pink/grey, medium dense, wet		7.0					
	End of Log		8.0					
			9.0					

Groundwater Observations -

Depth Water Encountered During Drilling (mbNS): 6.3

Post Install Water Level (mbNS): 5.3

Sample Type -

- **Hand Auger**
- **Solid Stem Auger**
- **Push Tube**
- **Split Spoon**
- **R.A.B**

Monitoring Well Construction Key -

- **Screen**
- **Bentonite**
- **Filter Pack**
- **Grout**
- **Backfill**

Monitoring Well: MW9

Project Ref. No: 1452C
Project Name: Highett
Completion Date: 10/4/18
BCL No: WLE068178
Drilling Contractor: Statewide
Page Number: 1 of 1
Drilling Method: SS
Drillers Licence No: 0838
Logged By: J.H.
Bore Diameter (mm): 120
Well Depth (m): 7.5
OVA Type: PID
Well Diameter (mm): 50
Well Material: PVC
Easting: 327956.37
Casing Stickup (m): +0.67
TOC Elevation (AHD): 34.62
Northing: 5797739.79
Location Description: Refer to Figure.
Datum: MGA94 Zone 55

Depth (m bgl)	Geological Description	Depth	Sample ID	OVA (ppm)	Additional Observations
	Ground Surface	0.0			
0.2	DISTURBED NATURAL SAND, grey/brown in colour, fine to coarse-grained, medium dense, dry.		MW9/0.1	0.0	Vegetation at the surface (grass).
			MW9/0.5	1.2	
0.85	SAND Grey in colour, fine to coarse-grained, medium dense, dry.	1.0	MW9/1.0	0.4	Hand augering as sampling method until 1 m.
1.1	Some clay (orange/grey) inclusions at 0.85 m.				
1.5	SAND Fine to coarse grains, dark grey, medium dense, damp	2.0	MW9/2.0	0.0	
	Sandy CLAY Medium plasticity, orange/brown/grey, very stiff, damp				
2.7	SAND Fine to coarse, light grey, medium dense, damp	3.0			
		4.0			
4.9	Sandy CLAY Medium plasticity, dark grey, very stiff, damp	5.0			
5.3					
5.6	Clayey SAND Fine to corse grains, dark grey, very dense, damp				
5.7	Moist	6.0			
	Wet	7.0			
	End of Log	8.0			

Groundwater Observations -

Depth Water Encountered During Drilling (mbNS): 5.7

Post Install Water Level (mbNS): 5.44

Sample Type -

- **Hand Auger**
- **Solid Stem Auger**
- **Push Tube**
- **Split Spoon**
- **R.A.B**

Monitoring Well Construction Key -

- **Screen**
- **Bentonite**
- **Filter Pack**
- **Grout**
- **Backfill**

Monitoring Well: MW10

Project Ref. No: 1452C
Project Name: Highett
Completion Date: 10/4/18
BCL No: WLE068178
Drilling Contractor: Statewide
Page Number: 1 of 1
Drilling Method: SS
Drillers Licence No: 0838
Logged By: J.H.
Bore Diameter (mm): 120
Well Depth (m): 9.0
OVA Type: PID
Well Diameter (mm): 50
Well Material: PVC
Easting: 328081.8
Casing Stickup (m): +0.65
TOC Elevation (AHD): 39.70
Northing: 5797794.03
Location Description: Off-site and upgradient. Refer to Figure.
Datum: MGA94 Zone 55

Depth (m bgl)	Geological Description	Graphic Symbol	Depth	Sample Type	Sample ID	OVA (ppm)	Well Construction Details	Additional Observations
	Ground Surface		0.0					
	NATURAL: SAND Fine to coarse grains, grey/brown, loose to medium dense, dry		1.0					Vegetation at the surface (grass). Hand augering as sampling method until 0.6 m.
1.3								
1.5	Light brown/orange Sandy CLAY Low plasticity, orange/grey, very stiff, damp		2.0					
			3.0					
4.0	Clayey SAND Moderate to coarse grains, light orange/brown, medium dense, damp		4.0					
4.8	Red		5.0					
5.2	Dark orange/brown							
			6.0					
6.5	Grey, moist							
			7.0					
7.5	Light brown/yellow, wet							
			8.0					
	End of Log		9.0					

Groundwater Observations -

Depth Water Encountered During Drilling (mbNS): 7.5

Post Install Water Level (mbNS): 6.68

Sample Type -

- **Hand Auger**
- **Solid Stem Auger**
- **Push Tube**
- **Split Spoon**
- **R.A.B**

Monitoring Well Construction Key -

- **Screen**
- **Bentonite**
- **Filter Pack**
- **Grout**
- **Backfill**

Atma Environmental

Monitoring Well: MW11

Project Ref. No: 1452C
Project Name: Highett
Completion Date: 9/4/18
BCL No: WLE068178
Drilling Contractor: Statewide
Page Number: 1 of 1
Drilling Method: SS
Drillers Licence No: 0838
Logged By: J.H.
Bore Diameter (mm): 100
Well Depth (m): 7.5
OVA Type: PID
Well Diameter (mm): 50
Well Material: PVC
Easting: 327915.00
Casing Stickup (m): -0.08
TOC Elevation (AHD): 32.10
Northing: 5797729.74
Location Description: Off-site and down-gradient. Refer to Figure.
Datum: MGA94 Zone 55

Depth (m bgl)	Geological Description	Graphic Symbol	Depth	Sample Type	Sample ID	OVA (ppm)	Well Construction Details	Additional Observations
	Ground Surface		0.0					
0.2	FILL Clayey SAND, fine to coarse grains, grey/brown, medium dense, dry							Concrete 100 mm thick Tree root at 0.15 m.
0.65	NATURAL Sandy CLAY, medium plasticity, dark brown/orange/grey, very stiff, dry to damp		1.0					Hand augering to 0.85 m bgl
1.05	Clayey SAND Fine to coarse grains, grey/orange/brown, very dense, damp							
1.4	SAND Fine to coarse grains, grey, medium dense, damp		2.0					
2.0	Sandy CLAY Medium plasticity, dark grey, hard, dry to damp							
	Clayey SAND Fine to coarse grains, light brown/grey, very dense, damp		3.0					
3.8	Light grey							
4.0	SAND Medium to coarse grains, light grey, vrey dense, damp, some clay		4.0					
4.9	Moist							
5.1	Wet		5.0					
6.0	Fine to coarse grains		6.0					
6.5	Saturated		7.0					
	End of Log		8.0					

Groundwater Observations -

Depth Water Encountered During Drilling (mbNS): 5.1

Post Install Water Level (mbNS): 3.71

Sample Type -

- **Hand Auger**
- **Solid Stem Auger**
- **Push Tube**
- **Split Spoon**
- **R.A.B**

Monitoring Well Construction Key -

- **Screen**
- **Backfill**
- **Bentonite**
- **Filter Pack**
- **Grout**

Monitoring Well: MW12

Project Ref. No: 1452C
Project Name: Highett
Completion Date: 9/4/18
BCL No: WLE068178
Drilling Contractor: Statewide
Page Number: 1 of 1
Drilling Method: SS
Drillers Licence No: 0838
Logged By: J.H.
Bore Diameter (mm): 100
Well Depth (m): 7.5
OVA Type: PID
Well Diameter (mm): 50
Well Material: PVC
Easting: 327923.72
Casing Stickup (m): -0.04
TOC Elevation (AHD): 32.69
Northing: 5797797.77
Location Description: Off-site and down-gradient. Refer to Figure.
Datum: MGA94 Zone 55

Depth (m bgl)	Geological Description	Graphic Symbol	Depth	Sample Type	Sample ID	OVA (ppm)	Well Construction Details	Additional Observations
	Ground Surface		0.0					
	NATURAL SAND, fine to coarse grains, dark grey/brown, medium dense, damp							Concrete 100 mm thick
0.6	Light grey/brown, moist							
0.9	Clayey SAND Fine to coarse grains, grey/brown, very dense, damp to moist		1.0					Hand augering to 1.0 m
1.2	SAND Fine to coarse grains, orange/grey, medium dense, damp							
1.8	SAND Moderate to coarse grains, dark orange, medium dense, damp to moist		2.0					
2.7	Sandy CLAY Low plasticity, light grey, very stiff, damp		3.0					
3.1	Orange/grey							
			4.0					
4.2	Stiff, moist							
			5.0					
5.8	Clayey SAND Moderate to coarse grains, orange/grey, very dense, damp to moist		6.0					
6.0	Wet							
			7.0					
	End of Log		8.0					

Groundwater Observations -

Depth Water Encountered During Drilling (mbNS): 6.0

Post Install Water Level (mbNS): 3.78

Sample Type -

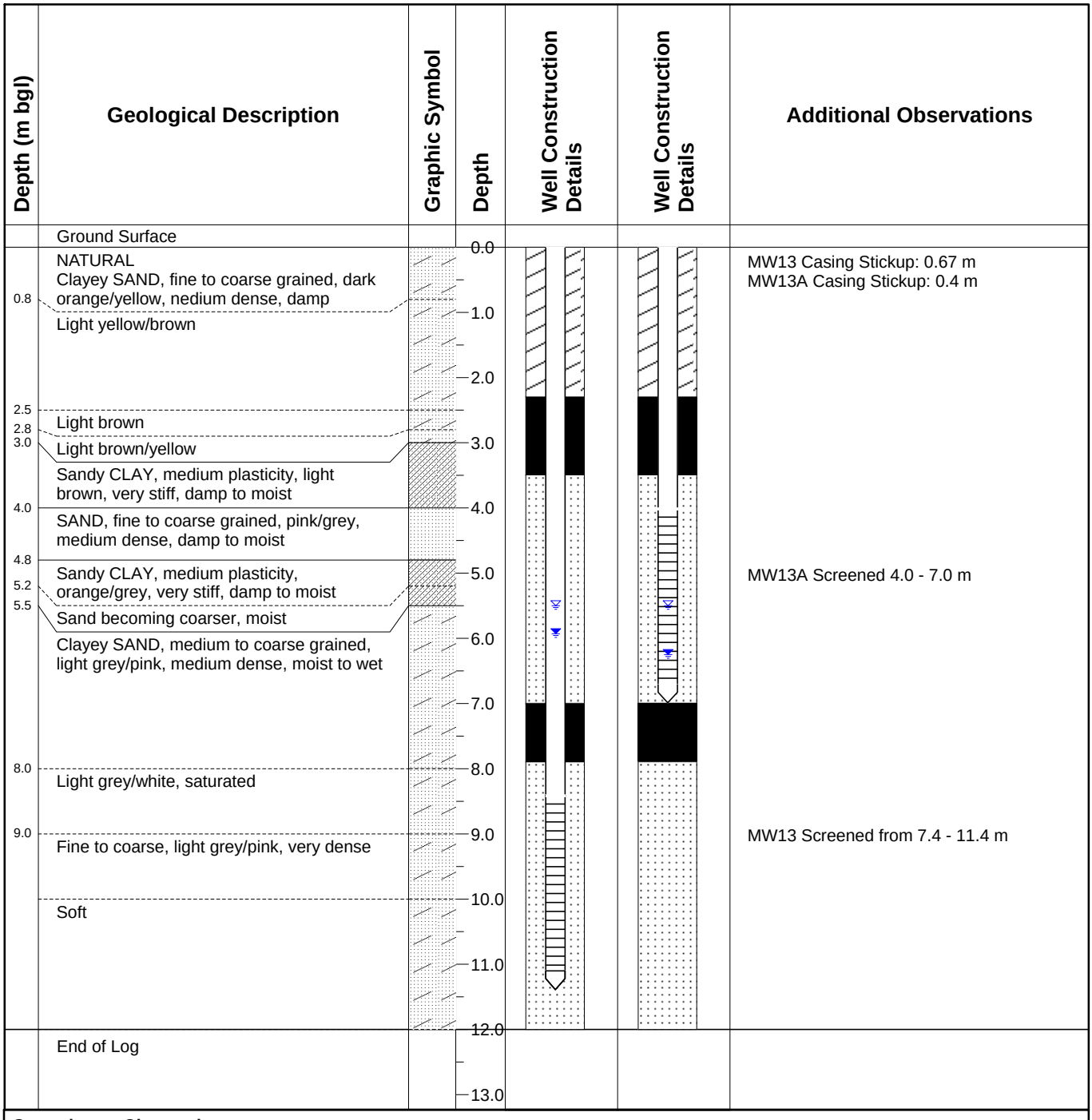
- **Hand Auger**
- **Solid Stem Auger**
- **Push Tube**
- **Split Spoon**
- **R.A.B**

Monitoring Well Construction Key -

- **Screen**
- **Backfill**
- **Bentonite**
- **Filter Pack**
- **Grout**

Monitoring Well: MW13/A

Project Ref. No: 1452C
Project Name: Highett
Completion Date: 18/10/18
BCL No: WLE070741
Drilling Contractor: Rockwell
Page Number: 1 of 1
Drilling Method: S/S
Drillers Licence No: 804
Logged By: JH
Bore Diameter (mm): 100
Well Depth (m): 11.4
OVA Type: n/a
Well Diameter (mm): 50
Well Material: PVC
Easting: -37.951396
Casing Stickup (m): 0.67/0.4
TOC Elevation (AHD): n/a
Northing: 145.042366
Location Description: Refer to Figure
Datum: MGA 55



Groundwater Observations -

Depth Water Encountered During Drilling (mbNS): 5.5

Post Install Water Level (mbNS): 5.93

Sample Type -

- **Hand Auger**
- **Solid Stem Auger**
- **Push Tube**
- **Split Spoon**
- **R.A.B**

Monitoring Well Construction Key -

- **Screen**
- **Bentonite**
- **Filter Pack**
- **Grout**
- **Backfill**

Monitoring Well: MW14

Project Ref. No: 1452C
Project Name: Highett
Completion Date: 23/11/18
BCL No: WLE068178
Drilling Contractor: Rockwell
Page Number: 1 of 1
Drilling Method: SS
Drillers Licence No: 804
Logged By: J.H.
Bore Diameter (mm): 100
Well Depth (m): 7.5
OVA Type: n/a
Well Diameter (mm): 50
Well Material: PVC
Easting: n/a
Casing Stickup (m): 0.55
TOC Elevation (AHD): n/a
Northing: n/a
Location Description: (MW2 Replacement) Refer to Figure
Datum: n/a

Depth (m bgl)	Geological Description	Graphic Symbol	Depth	Sample Type	Sample ID	OVA (ppm)	Well Construction Details	Additional Observations
	Ground Surface		0.0					
	FILL SAND, fine to coarse grains, grey/brown, medium dense, damp		1.0 2.0					MW2 remediation backfill
2.5	NATURAL SAND, fine to coarse grains, yellow, very dense, damp		3.0 4.0					
4.5	Clayey SAND, moderate to coarse grains, grey/orange/yellow, very dense, damp to moist		5.0					
6.0	Wet		6.0 7.0		MW14/6.0			
	End of Log		8.0 9.0					

Groundwater Observations -

Depth Water Encountered During Drilling (mbNS): 6.0

Post Install Water Level (mbNS): 4.69

Sample Type -

- **Hand Auger**
- **Solid Stem Auger**
- **Push Tube**
- **Split Spoon**
- **R.A.B**

Monitoring Well Construction Key -

- **Screen**
- **Bentonite**
- **Filter Pack**
- **Grout**
- **Backfill**

Monitoring Well: MW15

Project Ref. No: 1452C
Project Name: Highett
Completion Date: 23/11/18
BCL No: WLE068178
Drilling Contractor: Rockwell
Page Number: 1 of 1
Drilling Method: SS
Drillers Licence No: 804
Logged By: J.H.
Bore Diameter (mm): 100
Well Depth (m): 7.0
OVA Type: n/a
Well Diameter (mm): 50
Well Material: PVC
Easting: n/a
Casing Stickup (m): 0.55
TOC Elevation (AHD): n/a
Northing: n/a
Location Description: Refer to Figure
Datum: n/a

Depth (m bgl)	Geological Description	Graphic Symbol	Depth	Sample Type	Sample ID	OVA (ppm)	Well Construction Details	Additional Observations
	Ground Surface		0.0					
	FILL SAND, fine to coarse grains, grey/brown, medium dense, damp							Former sewer pipe back fill
1.0	NATURAL Sandy CLAY, medium plasticity, dark grey/orange, very stiff, damp		1.0					
2.0	Dark orange/grey/brown		2.0					
2.5	Clayey SAND, medium to coarse grain, dark orange/brown, damp							
3.0	SAND, fine to coarse grains, grey, medium dense, damp		3.0					
3.5	Light orange/grey, trace clay							
			4.0					
5.0			5.0					
5.2	Sandy CLAY, low to medium plasticity, grey/orange, very dense, damp to moist							
	Clayey SAND, fine to coarse grains, brown/grey, medium dense, wet		6.0					
6.1	SAND, Fine to moderate grains, light grey, medium dense, wet							
			7.0					
	End of Log		8.0					
			9.0					

Groundwater Observations -

Depth Water Encountered During Drilling (mbNS): 5.2

Post Install Water Level (mbNS): 4.85

Sample Type -

- **Hand Auger**
- **Solid Stem Auger**
- **Push Tube**
- **Split Spoon**
- **R.A.B**

Monitoring Well Construction Key -

- **Screen**
- **Backfill**
- **Bentonite**
- **Filter Pack**
- **Grout**

Monitoring Well: MW16

Project Ref. No: 1452C
Project Name: Highett
Completion Date: 23/11/18
BCL No: WLE068178
Drilling Contractor: Rockwell
Page Number: 1 of 1
Drilling Method: SS
Drillers Licence No: 804
Logged By: J.H.
Bore Diameter (mm): 100
Well Depth (m): 6.5
OVA Type: n/a
Well Diameter (mm): 50
Well Material: PVC
Easting: n/a
Casing Stickup (m): 1.0
TOC Elevation (AHD): n/a
Northing: n/a
Location Description: Refer to Figure
Datum: n/a

Depth (m bgl)	Geological Description	Graphic Symbol	Depth	Sample Type	Sample ID	OVA (ppm)	Well Construction Details	Additional Observations
	Ground Surface		0.0					
0.25	FILL Gravelly SAND, fine to coarse grains, dark grey/brown, very dense, damp							
0.65	NATURAL SAND, fine to coarse grains, dark grey/brown, medium dense, damp		1.0					
1.5	Sandy CLAY, medium plasticity, orange/grey, very stiff, damp							
2.0	Clayey SAND, fine to coarse, dark orange/brown, medium dense, damp		2.0					
2.5	SAND, fine to coarse, light grey, medium dense, damp							
	Sandy CLAY, low to medium plasticity, dark grey, very stiff, damp to moist		3.0					
3.4	Light grey/orange							
			4.0					
4.4								
4.5	SAND, moderate to coarse grains, light grey/orange, medium dense, moist to wet							
	Wet		5.0					
6.0	SAND, firm to moderate grains, light grey, medium dense, wet		6.0					Borehole collapse to 6.5 m
			7.0					
	End of Log		8.0					
			9.0					

Groundwater Observations -

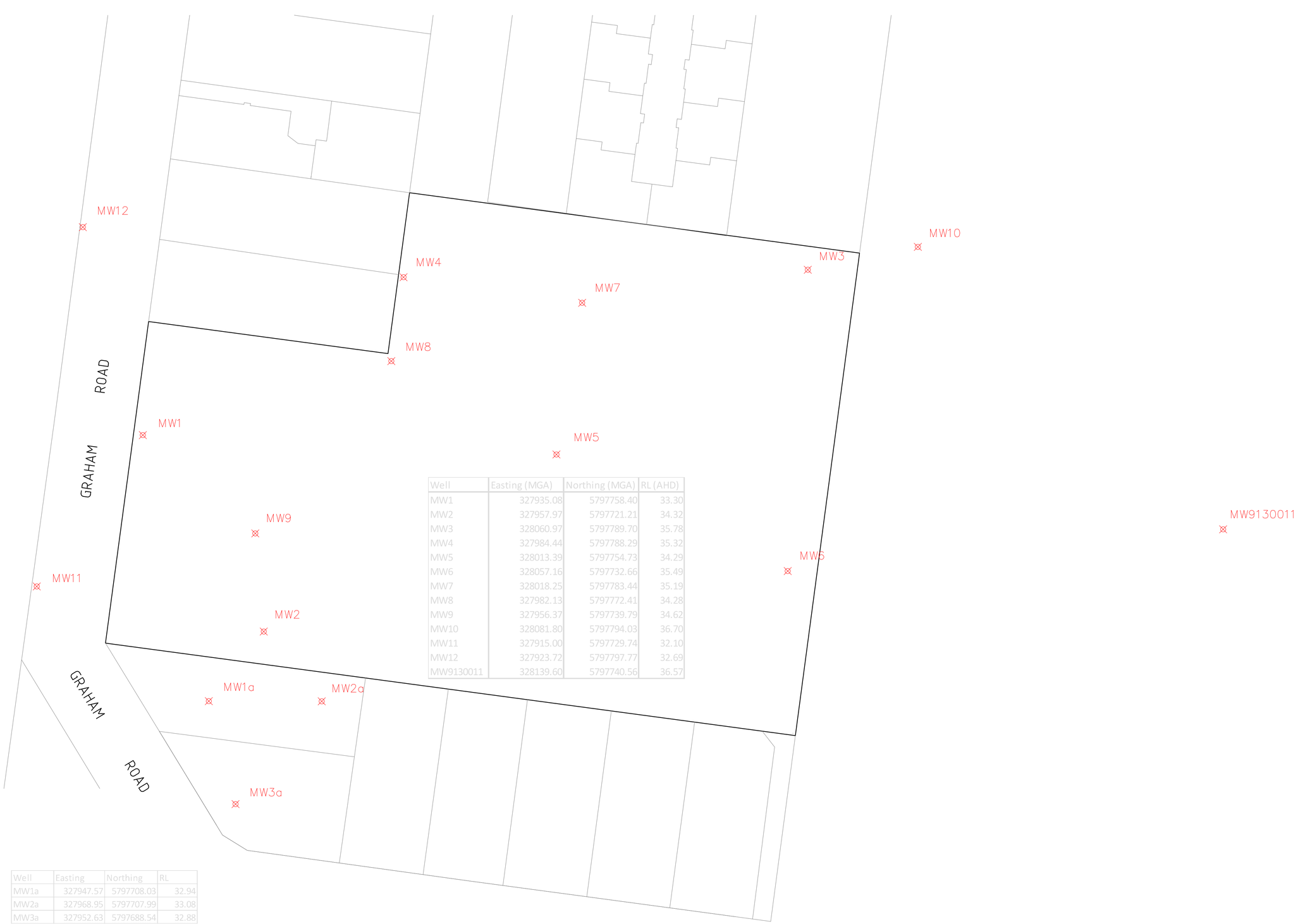
Depth Water Encountered During Drilling (mbNS): 4.5
Post Install Water Level (mbNS): 4.8

Sample Type -

- **Hand Auger**
- **Solid Stem Auger**
- **Push Tube**
- **Split Spoon**
- **R.A.B**

Monitoring Well Construction Key -

- **Screen**
- **Bentonite**
- **Filter Pack**
- **Grout**
- **Backfill**



Well	Easting (MGA)	Northing (MGA)	RL (AHD)
MW1	327935.08	5797758.40	33.30
MW2	327957.97	5797721.21	34.32
MW3	328060.97	5797789.70	35.78
MW4	327984.44	5797788.29	35.32
MW5	328013.39	5797754.73	34.29
MW6	328057.16	5797732.66	35.49
MW7	328018.25	5797783.44	35.19
MW8	327982.13	5797772.41	34.28
MW9	327956.37	5797739.79	34.62
MW10	328081.80	5797794.03	36.70
MW11	327915.00	5797729.74	32.10
MW12	327923.72	5797797.77	32.69
MW9130011	328139.60	5797740.56	36.57

Well	Easting	Northing	RL
MW1a	327947.57	5797708.03	32.94
MW2a	327968.95	5797707.99	33.08
MW3a	327952.63	5797688.54	32.88

Notation:
Date of Survey: 12/02/2015 & 19/04/2018

Scale 1:750 (0 7.5 15 22.5 30)			CLIENT Atma Environmental PROJECT 32-40 Graham Street, Highett
Sheet 1 of 1	Date 24/04/18	A3	
Drawn: PS	Drawing No. 141210AC		DETAILS Groundwater Well Asbuilt

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Attachment B
Asbestos Management Plan

36-40 Graham Road, Highett, Victoria

ASBESTOS MANAGEMENT PLAN:
36 - 40 GRAHAM ROAD, HIGHETT, VICTORIA

Prepared for:

Ryman Healthcare Pty Ltd
420 St Kilda Road
Melbourne VIC 3004

Project Ref.: 1452C Highett
Date: 21 February 2020

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Appendix A Site Development Plans

1 SUMMARY

The subject site, located at 36 – 40 Graham Road, Highett, Victoria, is to be developed as a residential (aged care) multi-storey apartment building with a basement. Although a visual asbestos clearance has been issued for the site, the soil on immediately adjoining properties to the north, was found to contain asbestos cement sheet fragments (ACM), which could re-contaminate the site (particularly when the site level is excavated lower than adjoining properties). Also, minor instances of ACM might remain unidentified (camouflaged) on the site surface.

The purpose of this Asbestos Management Plan (AMP) is to identify and explain management measures required to minimise risks to potential receptors (including construction workers and future site users). The AMP applies to the construction/management of a permanent physical barrier and incidental pieces of asbestos fragments that may be encountered during construction as well as for future occupation.

A Statement of Environmental Audit will be issued for the site and implementation of this AMP is anticipated to be one of the conditions on the Statement of Environmental Audit.

The strategy adopted for the site is to manage potential asbestos contamination by constructing a permanent physical barrier along the northern boundary to prevent asbestos fragments entering the site from adjacent land and to make site users aware of the potential to encounter asbestos on-site.

Potential risks to onsite workers during construction and to future site users who may breach the physical barrier (e.g. maintenance workers) are considered to be low and manageable when basic risk management measures (required as a minimum for construction works) are implemented, hence the requirement for this AMP to provide practical measures that should be followed to limit the potential for direct contact with soil and to minimise dust generation during site works.

To reduce potential health risks, all contractors working on the site must be made aware of the potential hazards identified and the control procedures that must be put into effect prior to beginning work. During construction works, it is the Site Managers responsibility to understand this AMP and to implement its requirements for preventing and/or minimising worker exposure to potential ACM in soil.

Post-construction, the presence of a suitable permanent physical barrier along the northern boundary of the site will prevent ACM from entering the site and will be the primary risk mitigation measure for future site users.

It will be the responsibility of the Owners Corporation to ensure ongoing maintenance of the physical barrier along the northern section of the site and if subsequently damaged or removed during occupation, it must be reinstated as soon as possible and to the same condition or better

as it was prior to any disturbance.

The AMP only applies to the management of the northern boundary fence and incidental pieces of asbestos fragments that may be encountered during construction. Soils are otherwise not contaminated and therefore do not require management. This plan does not and is not intended to cover general safety aspects relating to future site works, or to any other risks or hazards not directly related to environmental site contamination; contractors performing site works must specifically deal with these separately, as appropriate. This AMP does not replace nor supersede any general or industry-specific workplace occupational health and safety requirements, which must be adhered to at all times. This document is provided for advice only and users must appreciate that it is the strict obligation of each employer to provide a safe workplace and to manage the health and safety of workers.

2 SITE DETAILS & REGIONAL SETTING

The site is situated in Highett as shown on Figure 1. Details relating to the site's formal identification and regional setting are outlined in Table A.

Table A. Site Identification & Setting

Site Address	36 – 40 Graham Road, Highett, Victoria
Approximate Area	10,735 m^2
Certificate of Title	v.11155 f. 441
Lot Numbers	Lot 2 on Plan of Subdivision 046820
Local Government	Bayside
AMG Zone 55 Coordinates	- 37.951566 Latitude, 145.042403 Longitude
Melway Reference	77-E10
Zoning	General Residential Zone, Environmental Audit Overlay applies
Current Site Use/Features	Demolished & Vacant (under assessment)
Adjacent Land Uses	North - Residential Zone; standard residential dwellings. East - Public Park & Recreation (Lyle Anderson Reserve). South - Residential Zone; vacant site (with EAO). Certificate of Environmental Audit issued (CARMS 75232) West – Commonwealth Land Zone (CSIRO occupies). Currently being demolished/redeveloped
Elevation & Topography	36 m above sea level (asl) in the NE corner, to 33 m asl in the SW corner
Surface Water	900 m west – manmade flood retarding basin/sediment pond. 3.0 km west – Port Phillip Bay (closest natural water receptor).
Geology	Red Bluff Sandstone sedimentary deposits; a unit of the Brighton Group.

3 BACKGROUND INFORMATION

A Preliminary Site Investigation (PSI) was completed by Atma Environmental Pty Ltd, (*"Preliminary Site Investigation – 36 – 40 Graham Road, Highett",* 13th February 2017) which confirmed the following site history:

To 1918:	Agricultural.
1918 to 1951:	Agricultural/development land.
1951 to 1969:	Tool making/engineering (J Small & Co).
1969 to 2017:	Technical textile making/product manufacturing (filtration media) (P&S Textiles, Scapa, Clear Edge Filtration)

A subsequent Detailed Site Investigation (DSI) was completed by Atma Environmental Pty Ltd, (*"Detailed Site Investigation, 36 – 40 Graham Road, Highett, Vic",* 13th March 2019) to identify and complete works required to remediate the site to a level that was suitable for sensitive use and to restore protected beneficial uses. The remediation completed as part of the DSI is summarised below:

- Removal of asbestos impacted fill soils located in the north-west section and the south-east section;
- Removal of Total Recoverable Hydrocarbons soil contamination 'hotspot';
- Removal of the underground Fuel Tank, fuel lines/fill point and any associated soil contamination;
- Removal of the Straining Pit (including asbestos bituminous membrane) and any associated soil contamination;
- Removal of the Printing Screen Wash Bund and any associated soil contamination;
- Removal of the sewer lines (excluding easement);
- Removal of the thin and inconsistent layer of gravelly fill from across the site;
- Asbestos clearance documentation.

The chemical analysis of post remediation validation samples, indicated no contaminant concentrations exceed the adopted health-based assessment guidelines for any land use scenario, including sensitive residential land uses. Based on the analytical results reported, no requirements for further assessment of potential human health impacts were indicated.

Although a visual asbestos clearance has been issued for the site, the soil on immediately adjoining properties to the north, was found to contain ACM, which could re-contaminate the site (particularly when the site level is excavated lower than adjoining properties). Also, minor instances of ACM might remain unidentified (camouflaged) on the site.

The potential presence of incidental pieces of remaining ACM soil poses a *potential* human health risk *if* asbestos fibres are disturbed, made airborne and inhaled. In this case, where the asbestos was bonded in a cement sheet at the sites surface, it can be easily managed through implementation of this AMP to provide appropriate risk mitigation measures, personal protection equipment and practices for any incidental pieces of ACM uncovered at the site

during construction.

The AMP only applies to the management of the northern boundary fence and incidental pieces of asbestos fragments that may be encountered during construction. Soils are otherwise not contaminated and therefore do not require management.

4 PROPOSED DEVELOPMENT PLAN

In accordance with the proposed development plans, the intended future use of the site is a residential (aged care/retirement village) multi-storey apartment building with a basement (three meters below current ground level) and a number of three storey townhouses. The proposed development plans for the ground floor also include a theatre, café, library, activity rooms and offices (for the aged care residents).

Plans showing the proposed site development are appended in Appendix A. Figure 2 details the extent of the proposed basement boundary within the site.

5 HAZARD IDENTIFICATION AND ASSESSMENT

The following sections provide a summary of the main contaminant of concern at the site, how people might be exposed to the contaminant, and what health problems may be caused by exposure (information sourced from the Agency for Toxic Substances and Disease Registry).

5.1 Hazard Identification – Asbestos

Asbestos is the name given to a group of six different fibrous minerals (amosite, chrysotile, crocidolite, and the fibrous varieties of tremolite, actinolite, and anthophyllite) that occur naturally in the environment. Asbestos minerals have separable long fibres that are strong and flexible enough to be spun and woven and are heat resistant. Because of these characteristics, asbestos has been used for a wide range of manufactured goods, mostly in building materials (roofing shingles, ceiling and floor tiles, paper products, and asbestos cement products), friction products (automobile clutch, brake, and transmission parts), heat-resistant fabrics, packaging, gaskets, and coatings. Some vermiculite or talc products may contain asbestos.

Asbestos fibres can enter the air or water from the breakdown of natural deposits and manufactured asbestos products. Asbestos fibres do not evaporate into air or dissolve in water. Small diameter fibres and particles may remain suspended in the air for a long time and be carried long distances by wind or water before settling down. Larger diameter fibres and particles tend to settle more quickly. Asbestos fibres are not able to move through soil. Asbestos fibres are generally not broken down to other compounds and will remain virtually unchanged over long periods.

We are all exposed to low levels of asbestos in the air we breathe. These levels range from 0.00001 to 0.0001 fibres per millilitre of air and generally are highest in cities and industrial areas.

People working in industries that make or use asbestos products or who are involved in asbestos mining may be exposed to high levels of asbestos. People living near these industries may also be exposed to high levels of asbestos in air.

Asbestos fibres may be released into the air by the disturbance of asbestos-containing material during product use, demolition work, building or home maintenance, repair and remodelling. In general, exposure may occur only when the asbestos-containing material is disturbed in some way to release particles and fibres into the air.

Asbestos mainly affects the lungs and the membrane that surrounds the lungs. Breathing asbestos fibres may result in scar-like tissue in the lungs and in the pleural membrane (lining) that surrounds the lung. This disease is called asbestosis and is usually found in workers exposed to asbestos, but not in the general public. People with asbestosis have difficulty breathing, often a cough, and in severe cases heart enlargement. Asbestosis is a serious disease and can eventually lead to disability and death.

Breathing lower levels of asbestos may result in changes called plaques in the pleural membranes. Pleural plaques can occur in workers and sometimes in people living in areas with high environmental levels of asbestos. Effects on breathing from pleural plaques alone are not usually serious, but higher exposure can lead to a thickening of the pleural membrane that may restrict breathing. The World Health Organization (WHO) have determined that asbestos is a human carcinogen.

Friable asbestos products are generally quite loose and, when dry, can be crumbled into fine material, or dust with very light pressure, such as crushing with your hand. These products usually contain high levels of asbestos (up to 100% in some cases), which is loosely held in the product so that the asbestos fibres are easily released into the air. If disturbed, friable asbestos products are dangerous because the asbestos fibres can get into the air very easily, and may be inhaled by people living or working in the area.

Bonded asbestos products are made from a bonding compound (such as cement) mixed with a small proportion (usually less than 15%) of asbestos. Bonded asbestos products are solid, rigid and non-friable, and cannot be crumbled, pulverised or reduced to powder by hand pressure. The asbestos fibres are tightly bound in the product and are not normally released into the air. Common names for bonded asbestos products are 'fibro', 'asbestos cement' and 'AC sheeting'.

When they're in good condition, bonded asbestos products do not normally release any asbestos fibres into the air. They are considered a very low risk for people who are in contact with them - as long as appropriate safety precautions are used when they are disturbed.

However, when bonded asbestos products are damaged or badly weathered (including hail damage), areas may become friable.

5.2 Exposure Pathways

The potential pathway through which people might be exposed to asbestos fibres is:

- **Inhalation** (breathing in) of airborne asbestos fibres.

Implementing procedures to control/eliminate these potential exposure pathways is key to mitigating risk.

5.3 Hazard Assessment

This AMP has been written as a management measure to minimise risks associated with the potential presence of bonded ACM at the site.

Other hazards that may be encountered during site works include those normally associated with the work you are engaged in, such as: personal injury due to use of tools or machinery, trenching and digging operations, etc. These must be addressed separately as appropriate by Job Safety Analysis' (JSAs) for the planned works.

Hazards associated with site contamination will vary according to the site condition and the type of activity being engaged in by workers. E.g. where workers have direct close contact with soil and/or are exposed to dust, contamination hazards will be highest.

The hazard level at any time may be assessed by considering factors that may lead to increased ingestion, inhalation or adsorption as illustrated below:

- HIGHER HAZARD CONDITIONS –

Windy	Dusty	Dry	Working in-ground (e.g. in trenches)
↑	↑	↑	↑
Calm	Not Dusty	Moist	Working isolated (e.g. in vehicles, within buildings or, above a contamination barrier)

- LOWER HAZARD CONDITIONS -

6 CONTAMINATION MANAGEMENT STRATERGY

Based on the findings of the DSI, minor instances of bonded ACM might remain unidentified (camouflaged) on the site surface, and further pieces of bonded ACM may contaminate the site from adjacent properties from the north. The potential presence of bonded ACM (which may be damaged/weathered and become friable), poses a *potential* human health risk *if* asbestos fibres are disturbed, made airborne and inhaled.

The strategy adopted for the site is to manage potential asbestos contamination by constructing a permanent physical barrier along the northern boundary to restrict ACM entering the site. Further, the AMP will outline procedures for workers who may identify incidental pieces during construction and requirements for future maintenance of the physical barrier.

7 CONTAMINATION CONTROL MEASURES

The procedures described in this AMP refer to controls associated with potential ACM in the soils at the site when undertaking the following activities only:

- Construction of the physical barrier;
- Planned & Future Construction Works (i.e. excavation or digging of soil);
- Future Uses (including general site maintenance i.e. gardening).

These contamination control measures should be adopted to minimise exposure of potential receptors to potential ACM.

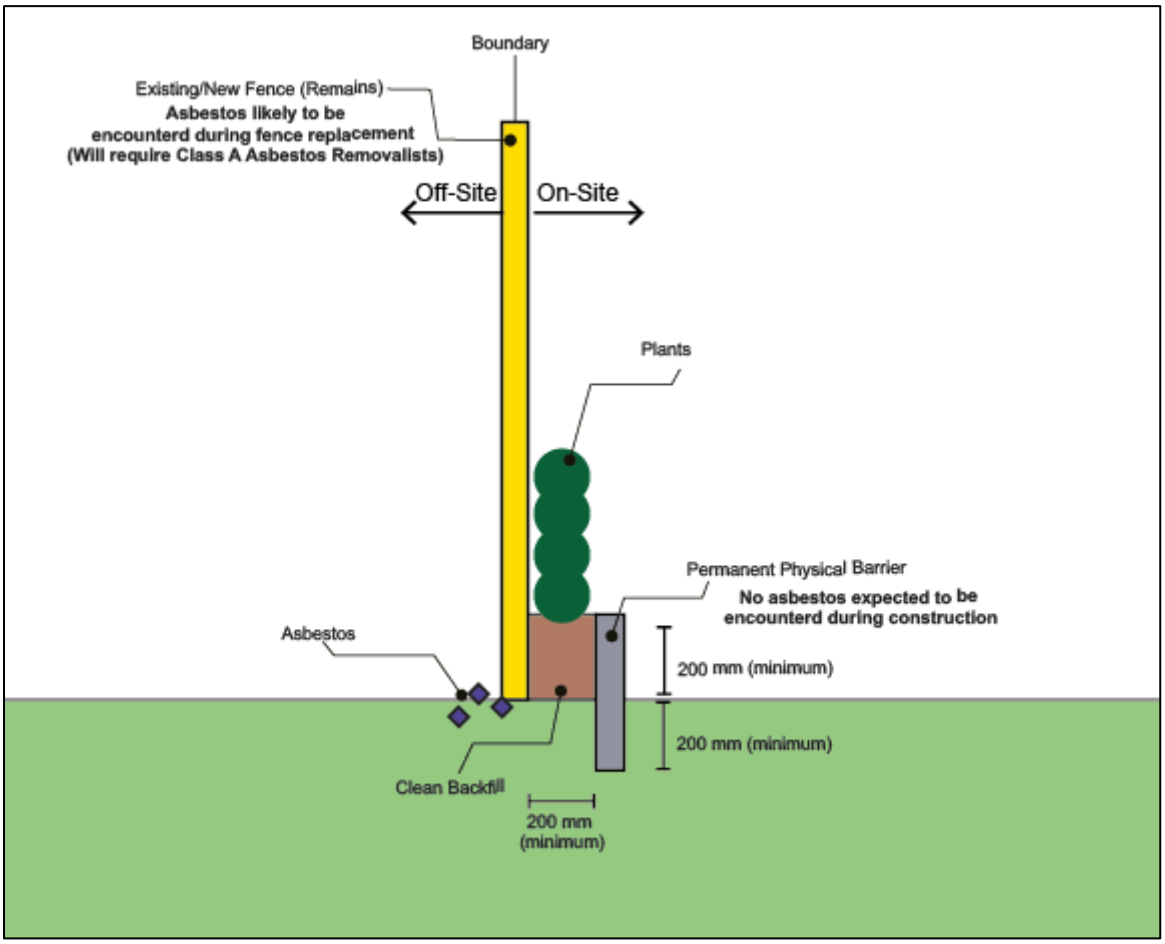
7.1 Construction of the Physical Barrier

At the commencement of construction, the responsible site owner and builder must construct a permanent physical barrier along the northern boundary (e.g. timber, concrete etc.).

The extent of the physical barrier is defined in Figure 2. The top of the physical barrier must extend a minimum of 200 mm above the surface level on adjacent properties and extend a minimum of 200 mm below the finished onsite ground level; the barrier cannot contain any openings or spaces which may allow pieces of ACM to enter the site.

The barrier must not be connected to the existing timber fence, which may be periodically replaced/repaired. A conceptual sketch of the proposed barrier is provided below in Figure A.

Figure A. Conceptual Cross-Sectional Sketch of Physical Barrier



The physical barrier must be maintained on the site and if subsequently damaged or removed during development (or future use), it must be reinstated as soon as possible and to the same condition or better as it was prior to any disturbance.

If permanent removal of the physical barrier is proposed, an environmental auditor must be engaged to verify if the barrier is no longer required.

7.2 Construction Workers

This section details the control measures which should be implemented to manage potential risks to all construction workers (and future maintenance/construction workers) whose tasks may result in exposure to incidental pieces of ACM, particularly during construction of the physical barrier in the northern section of the site.

The general environmental health and safety requirements for workers at the site include:

1. Site Inductions.	Appropriate site induction and training of all on-site personnel shall be undertaken with regard given to the presence of asbestos contaminated soils and the control measures to be put in place.
2. Site Meetings.	Tailgate meetings to review planned activities, hazard identification and specific control measures for the planned tasks shall be had frequently and before any new activity.
3. Job Safety Analysis.	Before commencement of any new work, a Job Safety Analysis relating to the task being done at the site should be undertaken. The JSA must assess the hazards associated with site contamination.
3. Monitoring.	The Site Manager must undertake regular monitoring/inspection of working conditions and evaluate potential hazards. All other personnel or subcontractors shall monitor and report any change in conditions to the Site Manager.
4. P.P.E.	Appropriate Personal Protective clothing and Equipment (PPE) shall be maintained and used, as stated in the Job Safety Analysis.
5. Incidents.	Any incidents or near misses must be reported and investigated by the Site Manager.
6. Complaints.	Any complaints, negative outcomes and management measures should be investigated and reported by the Site Manager.

In addition to the above general requirements for workers, exposure to ACM by members of the public and offsite users is to be restricted by controlling access to the site and by implementing dust mitigation measures during construction.

7.2.1 Roles & Responsibilities

The responsibility for the implementation of the AMP will initially fall with the land owner (currently Ryman Healthcare Pty Ltd). Then upon construction works, the responsibility will fall with the appointed building contractor. The land owner can ultimately pass the responsibility to another party (e.g. body corporate) by agreement; any such agreement should be documented and appended to this AMP.

Table B outlines the parties responsible for implementation and maintenance of this AMP.

Table B. Responsible Parties

Party	Responsibility
Site Owner/Manager (Ryman Healthcare Pty Ltd)	• Maintenance and implementation of AMP • Transfer of the AMP to the Building Contractor during construction • Transfer of the AMP to body corporate or similar
Building Contractor (Ryman Healthcare Pty Ltd)	• Understand this AMP and to implement its requirements for preventing and/or minimising exposure to potential ACM during construction • To ensure that any personnel, contractors or subcontractors working on the site are aware of the hazards associated with the potential presence of ACM and the control measures which must be put in place to minimise exposure.
Environmental Consultant (Atma Environmental Pty Ltd)	• General advice in relation to the implementation of this AMP
Environmental Auditor (Tim Russell, Maple Auditing Pty Ltd)	• Verification of any proposed changes to the AMP

7.2.2 Avoidance

Where practicable, personnel should plan their works to avoid direct contact with potential ACM and the inhalation/injection of dust. Only workers directly involved in the specific task should be present during soil disturbance along the boundary fence.

7.2.3 Personal Protective Equipment

Mitigation of the potential health hazards associated with a worker being exposed to incidental pieces of asbestos can be achieved through the use of Personal Protective Equipment (PPE).

Accordingly, the following PPE (over and above standard PPE required on constructions sites and/or for the specific task being undertaken) should be utilised when workers are potentially exposed to ACM:

- Long sleeves and pants,
- Gloves,
- Decontamination Facilities (hand & boot wash facilities),
- Comprehensive First Aid equipment, including eye wash station.

The following <u>additional PPE</u> should be used where workers have a high risk of exposure to ACM (e.g. when working on the excavation works along the northern boundary and/or construction of the physical barrier):

- Protective coveralls (reusable or disposable),

- Safety goggles,
- Dust mask.

Further to task-specific hazard identification and a Job Safety Analysis, the use of additional PPE (such as dust masks) may be deemed desirable, or requisite.

7.2.4 Dust Suppression

Appropriate measures should be taken to suppress dust generation during disturbance of the soils along the northern boundary fence. Dust should not be allowed to migrate from the site. The suppression of dust should at all times consider prevailing weather and soil conditions.

Typical dust suppression measures will include misting or wetting by water of soils as they are being excavated, shifted, or loaded. The accumulation of dust inside equipment (e.g. excavator cabin) should be prevented through regular cleaning.

Dust masks should be used in dusty areas of the site or where workers are in close contact with soil (e.g. when working in a narrow trench).

The collection of dust inside equipment (e.g. excavator cabin) should be prevented through regular cleaning.

7.2.5 Decontamination

In general, decontamination following work within the site will not be required except as to maintaining reasonably clean work wear and where use of personal protection equipment applies. Such general decontamination shall include:

- Removal of any obvious soil from work boots;
- Laundering of work wear;
- Washing of hands and face in soapy water at all work breaks and prior to eating drinking or smoking;
- Store and consume food and drink in a designated, dust free, clean area.

Soiled work wear should be kept out of contact with children at home.

All equipment used in the excavation of contaminated soil or which has come in contact with contaminated soil or water shall be checked for adhered soil and cleaned before leaving the site as required.

7.2.6 Asbestos

Significant quantities of asbestos cement debris are NOT expected to be encountered, nor is the frequency of material encountered expected to be routine, or high. The most likely type of asbestos containing material to be encountered is bonded asbestos cement sheet debris; this material is a *non-friable* product. The frequency and type of materials likely to be encountered is deemed to pose a negligible health risk to personnel involved.

During construction of the physical barrier along the northern boundary, disturbance and excavation of soils should proceed with caution, using sufficient dust suppression. If a significant quantity of non-friable or any friable material is identified, the site supervisor shall direct works to cease and engage an approved asbestos removalist or undertake an independent investigation (e.g. by Atma Environmental).

The following work procedure allows for the safe handling, removal and disposal of **minor quantities of non-friable** asbestos debris that may be encountered during earthworks in accordance with the Victorian *Occupational Health and Safety Regulations 2017* (*Part 4.4 Asbestos).*

Under the above regulations, an unlicensed person can conduct a limited amount of asbestos removal work if:

- the asbestos-containing material is non-friable; and
- the area of asbestos-containing material to be removed does not exceed 10 square metres in total; and
- the total time asbestos removal work is performed in any period of seven days does not exceed one hour (this period is the cumulative total time the asbestos removal work is carried out by all employees over a period of seven days).

Before you start work on removing asbestos you should read the WorkSafe Victoria *'Removing Asbestos in the Workplace Compliance Code'*, and ensure that you understand your obligations. If you believe that you are unlikely to meet your obligations, then you should consider engaging a licensed asbestos removalist to complete the work.

Associated Materials:

The following materials will be required for the removal of minor asbestos cement sheet debris in accordance with this procedure:

- Asbestos Waste Disposal Bags;
- Duct Tape;
- Ziplock Sandwich Bags;
- P2 Dust Masks;
- Barrier Tape;
- Airless Spray Bottle;
- Alcohol Wipes.

Procedure Guidelines:

This procedure shall only be implemented following authorisation by management of the lead contractor.

Relevant staff and contractors shall be inducted into this procedure at toolbox talks and shall be issued with the appropriate equipment and training to complete the task safely.

If asbestos containing materials are identified during the construction works, the following procedure should be implemented:

1. All excavation works shall cease at the earliest practicable and safe opportunity to prevent any unnecessary disturbance to the material.
2. The site supervisor shall be notified of the location of works, type and quantity of material, personnel on site and any other relevant factors.
3. If a significant quantity of non-friable or any friable material is identified, the site supervisor shall direct works to cease and engage an approved asbestos removalist or undertake an independent investigation (e.g. by Atma Environmental).
4. If minor, non-friable fragment(s) are identified, authority to commence work procedure will be given by the Site Supervisor.
5. All unauthorised or unprotected personnel shall vacate the immediate (within 10m) work area where practicable. If the site is left unattended the area shall be designated by placing barrier warning tape around the perimeter.
6. A disposable P2 dust mask is suitable for this work procedure. Masks shall be stored in a dry and clean location prior to use.
7. Cement sheet debris shall be wetted down prior to removal. Only a mist spray is necessary. Water may be used or alternatively a water / PVA solution. Application may be achieved using an airless garden spray unit (pump action) or any other means as defined and appropriate to the task.
8. Small fragments of debris may be placed inside an "asbestos" labelled ziplock sandwich bag. Larger fragments may need to be stored / placed inside an approved asbestos waste bag. Asbestos waste bags should be "goose-necked" and secured with duct tape.
9. Caution shall be exercised during removal of material to prevent unnecessary breakage.
10. Ensure no fragments, or residue are left on plant or equipment.
11. Personnel decontamination can be achieved by either washing hands with water or wiping with alcohol wipes. Remove used dust mask and place it with the used wipes (if applicable) into sandwich bag and seal. This bag is then to be treated as 'waste' with the contained asbestos debris.
12. The Site Supervisor shall be notified of job completion and to give permission for re-

commencement of works.

13. A designated storage area is to be established at the site for minor quantities of collected asbestos waste separate from the main works area.
14. The designated storage area (e.g. bin / locker) has to be labelled and secure (lockable). It is only to be used for short-term storage of materials. All waste should be disposed of at the earliest practicable opportunity at an EPA approved disposal site.
15. The Site Supervisor shall arrange collection of waste from the designated storage area for disposal at an EPA licensed tip by an approved asbestos removalist.

In accordance with the Victorian *Occupational Health and Safety Regulations 2017* (*Part 4.4 Asbestos)* a clearance certificate is not required if the asbestos removal work consisted only of the removal of non-friable asbestos-containing material not exceeding 10 square metres in total.

Checklist:

Responsible Party	Action Required	✓
Site Supervisor	Notify work crew of works procedure	
Site Supervisor	Issue equipment to personnel and contractors	
Staff	Identify asbestos sheet debris unearthed during excavation works	
Staff	Cease excavation works	
Staff	Report discovery to Site Supervisor	
Site Supervisor	Evaluate the quantity / condition of material with personnel.	
Staff	Ensure no unauthorised / unprotected personnel in immediate vicinity of debris (within 10 m) where practical	
Staff	Put on P2 dust mask	
Staff	Wet debris material down with water or PVA solution	
Staff	Pick up debris and contain debris	
Staff	Personnel and equipment decontamination.	
Staff	Notify site supervisor of completion of works	
Site Supervisor	Consolidate & remove bagged debris	
Site Supervisor	Remove bagged debris from yard to EPA licensed	

7.2.7 Complaint Register

During the construction phase, the Site Manager shall maintain a community Complaint Register which documents the following:

- The date and time of the complaint;
- The method by which the complaint was made;
- The nature of the complaint;
- The action taken by the Site Manager in relation to the complaint, including any follow-up with the complainant;
- If no action was taken by the Site Manager, the reasons why no action was taken.

Any feedback and complaint records will be logged in the Complaints Register, tracked and where relevant, responded to (within 48 hours of receiving the complaint).

7.2.8 Off-Site Disposal of Soils

As part of the proposed basement excavation, soil will require excavation and off-site disposal.

Table C provides the soil disposal hazard categorisations in accordance with EPA Industrial Waste Resource Guideline (IWRG) #621 (*'Soil Hazard Categorisation and Management'*, June 2009).

Table C. Soil Disposal Hazard Categorisations

Domain	Typical Depth Range (m bgl)	Description	Disposal Hazard Categorisation
#1	0 – 0.2	**FILL: Gravelly SAND** Typically brown, with vegetation at the surface (restricted to the north-west section under the Sales Office ~40 m^3)	**Fill Material**
#11	Underlying natural	**NATURAL: Variable SAND and clayey SAND**	**Fill Material[A]**

[A] Indicative – requires appropriate categorisation (based on current dataset)

Soils containing ACM must be packaged for disposal in accordance with EPA Publication IWRG611.1. Generally, contaminated soil must be wet before transferring to a suitable container, which is then sealed and appropriately labelled. Soils found or suspected to contain ACM must only be handled by suitably trained and competent personnel.

Dust generation should be kept to a minimum during soil excavation, loading and transport. All loads should be covered and excess soil removed from the trucks prior to leaving site.

7.2.9 Reuse of Soils

The natural soils (Domain #11) can be reused on-site without controls.

7.2.10 Import of Soils

Although not proposed, any soil imported to the site shall be material classifiable as 'Fill Material' according to EPA Victoria's Industrial Waste Resource Guidelines.

The Site Manager must make allowance for the provision of supporting documentation, such as test results, demonstrating the appropriate classification of any imported Fill material.

7.3 Future Users

Post-construction, the presence of a suitable permanent physical barrier along the northern boundary of the site will prevent asbestos from entering the site and will be the primary risk mitigation measure for future site users.

It will be the responsibility of the Owners Corporation to ensure ongoing maintenance of the physical barrier along the northern section of the site and if subsequently damaged or removed during occupation, it must be reinstated as soon as possible and to the same condition or better as it was prior to any disturbance.

It is possible (but not confirmed) that pieces of bonded ACM may remain unidentified at the site surface. The frequency and type of materials likely to be encountered is deemed to pose a negligible health risk to personnel involved. However, if encountered, the work procedure outlined for construction workers in Section 7.2.6 for the safe handling, removal and disposal of minor quantities of non-friable asbestos must be implemented.

Unless asbestos is encountered in the surface soils in close proximity to the northern boundary, minor works (i.e. gardening, weeding, cleaning and general maintenance) do not require specific controls provided the existing physical barriers are maintained.

7.4 Future Construction Workers

Future construction workers, who may be working in close proximity to or breach the physical barrier along the northern boundary and may be exposed to ACM, must be made aware of this AMP and must implement the appropriate risk management measures (as for construction workers in Section 7.2).

Reinstatement of the physical barrier along the northern boundary must be completed as possible and to the same condition or better following completion of any future maintenance/construction works.

A record shall be kept of any further maintenance/construction works that documents the works undertaken, the materials encountered, the management and disposal of any waste soil.

8 LIMITATIONS & EXCEPTIONS

This AMP relates to the requirements for management of potential risks to users of the site from residual soil contamination. This AMP should be read in full and may not be used to support any other objectives than those set out in this AMP.

This AMP does not apply to any other land use of the site (not stipulated herein).

Where data has been supplied by a third party, it is assumed that the information is correct unless otherwise stated. No responsibility is accepted by Atma Environmental for incomplete or inaccurate data supplied by others.

9 REFERENCES

Agency for Toxic Substances and Disease Registry, https://www.atsdr.cdc.gov/

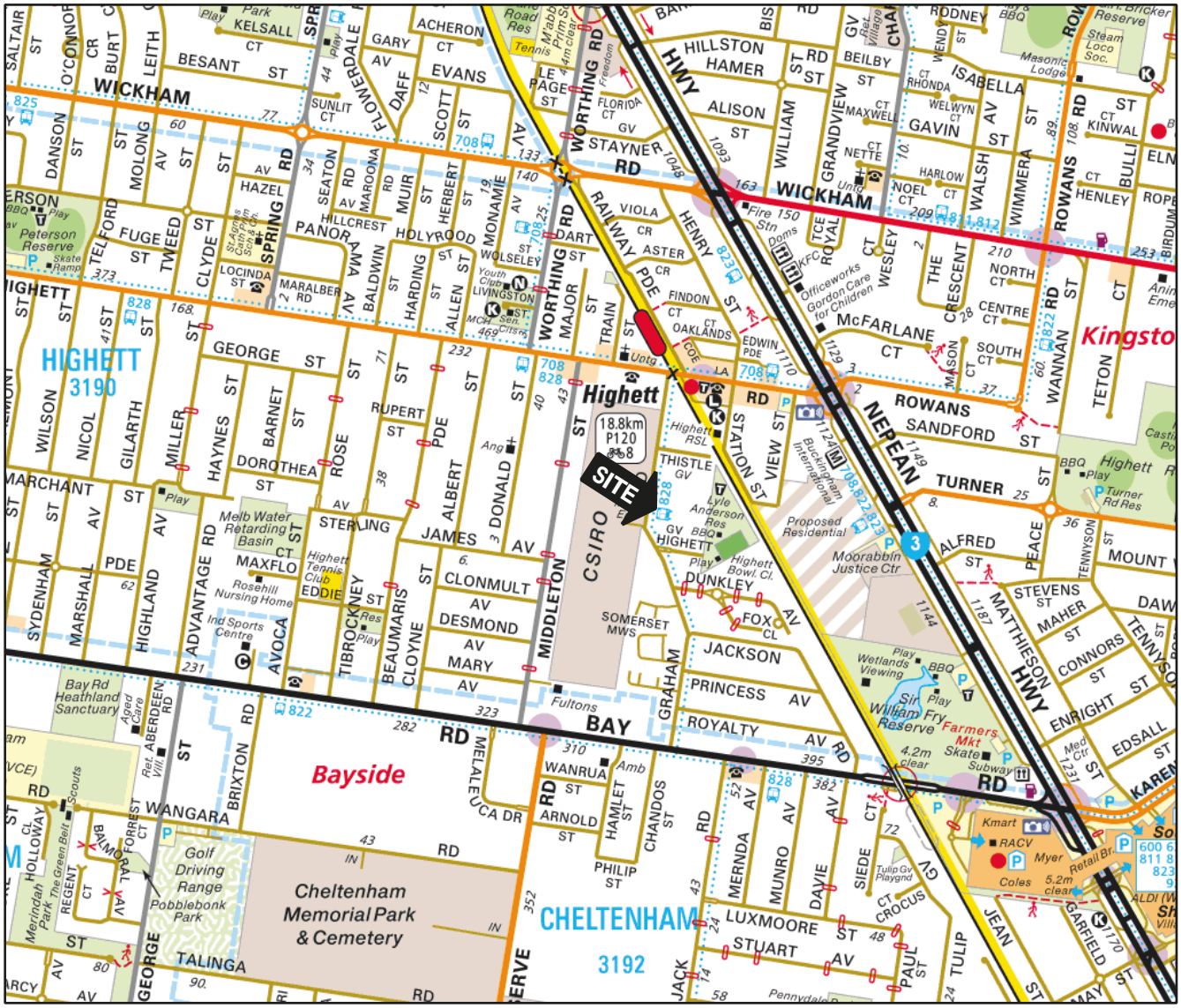
Atma Environmental Pty Ltd, *"Preliminary Site Investigation – 36 – 40 Graham Road, Highett"*, 13th February 2017

Atma Environmental Pty Ltd, "*Detailed Site Investigation, 36 – 40 Graham Road, Highett, Vic"*, 13th March 2019

Environment Protection Authority Victoria Publication 621 "*Soil Hazard Categorisation and Management"* June 2009.

Environment Protection Authority Victoria Publication 611 "*Asbestos Transport and Disposal"* June 2009.

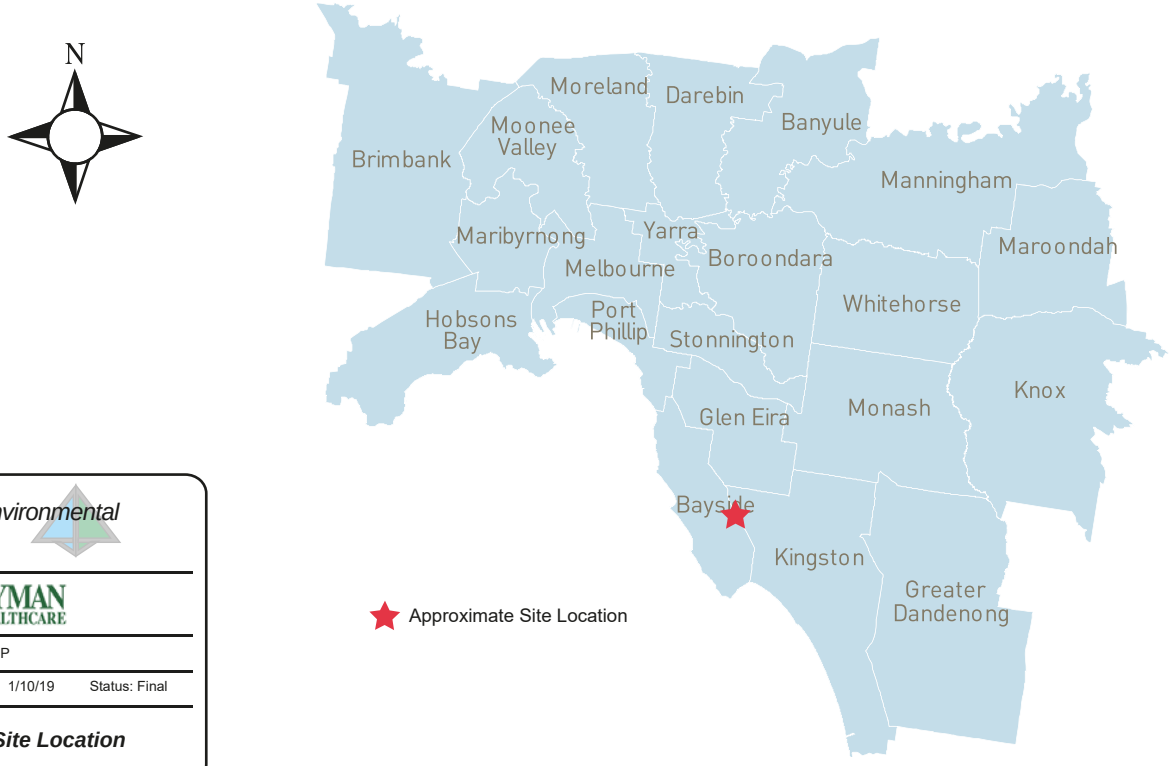
Victorian *Occupational Health and Safety Regulations* (*Part 4.4 Asbestos),* 2017



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Scale:

0 200 400 800 1200 m



Atma *Environmental*

Client:

RYMAN HEALTHCARE

Project: #1452 Highett - AMP

Drawn by: JH Dated: 1/10/19 Status: Final

Figure 1. Site Location



Atma *Environmental*

Client: RYMAN HEALTHCARE

Project: 1452C Highett - Asbestos Mangement Plan

Drawn by: JH Dated: 21/02/20 Status: Final

Figure 2. Site Details & Extent of Physical Barrier

LEGEND:

- Investigation Area
- Extent of Physical Barrier for Asbestos
- Extent of Basement Excavation (Proposed)

APPENDIX A

Site Development Plans

DEVELOPMENT SUMMARY

AGED CARE DEVELOPMENT BREAKDOWN	
LOCATION	SQM / %
TOTAL SITE AREA	4697
TOTAL BUILDING FOOTPRINT	2600
BUILDING FOOTPRINT / SITE AREA PERCENTAGE	55.0%
HARD SURFACES (PAVING/DRIVEWAYS)	645
TOTAL HARD SURFACES (INC. FOOTPRINT)	3245
PERMEABILITY PERCENTAGE	30.9%
GARDEN SPACE SQM	1658
GARDEN SPACE %	35.3%

RETIREMENT DEVELOPMENT BREAKDOWN	
LOCATION	SQM / %
TOTAL SITE AREA	7279
TOTAL BUILDING FOOTPRINT	2752
BUILDING FOOTPRINT / SITE AREA PERCENTAGE	37.8%
HARD SURFACES (PAVING/DRIVEWAYS)	1003
TOTAL HARD SURFACES (INC. FOOTPRINT)	3755
PERMEABILITY PERCENTAGE	48.4%
GARDEN SPACE SQM	3879
GARDEN SPACE %	53.3%

OVERALL DEVELOPMENT BREAKDOWN	
LOCATION	SQM / %
TOTAL SITE AREA	11976
TOTAL BUILDING FOOTPRINT	5352
BUILDING FOOTPRINT / SITE AREA PERCENTAGE	44.7%
HARD SURFACES (PAVING/DRIVEWAYS)	1648
TOTAL HARD SURFACES (INC. FOOTPRINT)	7000
PERMEABILITY PERCENTAGE	41.5%
GARDEN SPACE SQM	5537
GARDEN SPACE %	46.2%

BASEMENT

CARPARK

AGECARE BUILDING	
CAR SPACES	46
DISABLED CAR SPACES	2
TOTAL	48

RETIREMENT VILLAGE	
CAR SPACES	69
TANDEM (X 18)	36
VISITOR	27
TOTAL	132

GRAND TOTAL	180

GROUND FLOOR

AGECARE BUILDING				
LEVEL GROUND	BEDS			TOTAL m²
CARE BEDS	19			466.3
AGECARE COMMUNAL AREA				TOTAL m²
GROUND LEVEL				1050

CENTRAL APARTMENT BUILDING					
UNIT NO.	BED ROOM TYPE	BED ROOMS	INTERNAL AREA m²	TERRACE AREA m²	TOTAL m²
G51	TYPE A	2	88.6	24	112.6
G52	TYPE C	1	70	16	86.0
G53	TYPE A	2	88.6	23	111.6
G54	TYPE A	2	88.6	22	110.6
G55	TYPE A1	2	92.8	53	145.8
G56	TYPE A1	2	92.8	53	145.8
TOTAL		11	521.4	191	712.4
CENTRAL BUILDING COMMUNAL AREA					243

EAST APARTMENT BUILDING					
UNIT NO.	BED ROOM TYPE	BED ROOMS	INTERNAL AREA m²	TERRACE AREA m²	TOTAL m²
G61	TYPE A	2	88.6	23	111.6
G62	TYPE B	3	115.8	25	140.8
G63	TYPE C	1	70	16	86
G64	TYPE A	2	88.6	24	112.6
G65	TYPE A	2	88.6	24	112.6
G66	TYPE A	2	88.6	23	111.6
G67	TYPE A1	2	92.8	53	145.8
G68	TYPE A1	2	92.8	53	145.8
TOTAL		16	725.8	241	966.8

NORTH APARTMENT BUILDING					
UNIT NO.	BED ROOM TYPE	BED ROOMS	INTERNAL AREA m²	TERRACE AREA m²	TOTAL m²
G71	TYPE A	2	88.6	42	130.6
G72	TYPE A	2	88.6	36	124.6
G73	TYPE A	2	88.6	29	117.6
G74	TYPE A	2	88.6	20	108.6
G75	TYPE A	2	88.6	29	117.6
G76	TYPE A	2	88.6	20	108.6
G77	TYPE A	2	88.6	29	117.6
G78	TYPE B1	3	116.8	44	160.8
G79	TYPE B1	3	116.8	51	167.8
TOTAL		20	443	300	599

FIRST FLOOR

AGECARE BUILDING (CARE BEDS)				
LEVEL 1	BEDS			TOTAL m²
CARE BEDS	30			738
COMMUNAL AREA				352

AGECARE BUILDING (ALU)				
LEVEL 1	BEDS			105.6
ALU	13			582.3
COMMUNAL AREA				218.5

CENTRAL APARTMENT BUILDING					
UNIT NO.	BED ROOM TYPE	BED ROOMS	INTERNAL AREA m²	BALCONY AREA (POS)m²	TOTAL m²
151	TYPE A	2	88.6	25	113.6
152	TYPE B	3	115.7	37	152.7
153	TYPE C	1	70	15	85.0
154	TYPE A	2	88.6	17	105.6
155	TYPE A	2	88.6	17	105.6
156	TYPE A	2	88.6	17	105.6
157	TYPE A1	2	92.8	23	115.8
158	TYPE A1	2	92.8	26	118.8
TOTAL		16	725.7	177.0	902.7
CENTRAL BUILDING COMMUNAL AREA					NIL

EAST APARTMENT BUILDING					
UNIT NO.	BED ROOM TYPE	BED ROOMS	INTERNAL AREA m²	BALCONY AREA (POS)m²	TOTAL m²
161	TYPE A	2	88.6	25	113.6
162	TYPE B	3	115.7	37	152.7
163	TYPE C	1	70	15	85
164	TYPE A	2	88.6	17	105.6
165	TYPE A	2	88.6	17	105.6
166	TYPE A	2	88.6	17	105.6
167	TYPE A1	2	92.8	23	115.8
168	TYPE A1	2	92.8	26	118.8
TOTAL		16	725.7	177	902.7
EAST BUILDING COMMUNAL AREA					NIL

NORTH APARTMENT BUILDING					
UNIT NO.	BED ROOM TYPE	BED ROOMS	INTERNAL AREA m²	BALCONY AREA (POS)m²	TOTAL m²
171	TYPE A	2	88.6	37	125.6
172	TYPE A	2	88.6	31	119.6
173	TYPE A	2	88.6	20	108.6
174	TYPE A	2	88.6	16	104.6
175	TYPE A	2	88.6	24	112.6
176	TYPE A	2	88.6	16	104.6
177	TYPE A	2	88.6	24	112.6
178	TYPE B1	3	116.8	34	150.8
179	TYPE B1	3	116.8	35	151.8
TOTAL		20	853.8	237	1090.8
NORTH BUILDING COMMUNAL AREA					NIL

SECOND FLOOR

AGECARE BUILDING (CARE BEDS)				
LEVEL 2	BEDS			TOTAL m²
CARE BEDS	30			738
COMMUNAL AREA				202.7

AGECARE BUILDING (ALU)				
LEVEL 2	BEDS			TOTAL m²
ALU	13			582.3
COMMUNAL AREA				68.5

CENTRAL APARTMENT BUILDING					
UNIT NO.	BED ROOM TYPE	BED ROOMS	INTERNAL AREA m²	BALCONY AREA (POS)m²	TOTAL m²
251	TYPE A	2	88.6	25	113.6
252	TYPE B	2	115.7	37	152.7
253	TYPE C	2	70	15	85.0
254	TYPE A	2	88.6	17	105.6
255	TYPE A	2	88.6	17	105.6
256	TYPE A	2	88.6	17	105.6
257	TYPE A2	2	90	20	110.0
258	TYPE A2	2	90	23	113.0
TOTAL		16	720.1	171.0	891.1
CENTRAL BUILDING COMMUNAL AREA					NIL

EAST APARTMENT BUILDING					
UNIT NO.	BED ROOM TYPE	BED ROOMS	INTERNAL AREA m²	BALCONY AREA (POS)m²	TOTAL m²
261	TYPE A	2	88.6	25	113.6
262	TYPE B	2	115.7	37	152.7
263	TYPE C	2	70	15	85
264	TYPE A	2	88.6	17	105.6
265	TYPE A	2	88.6	17	105.6
266	TYPE A	2	88.6	17	105.6
267	TYPE A2	2	90	20	110
268	TYPE A2	2	90	23	113
TOTAL		16	720.1	171	891.1
EAST BUILDING COMMUNAL AREA					NIL

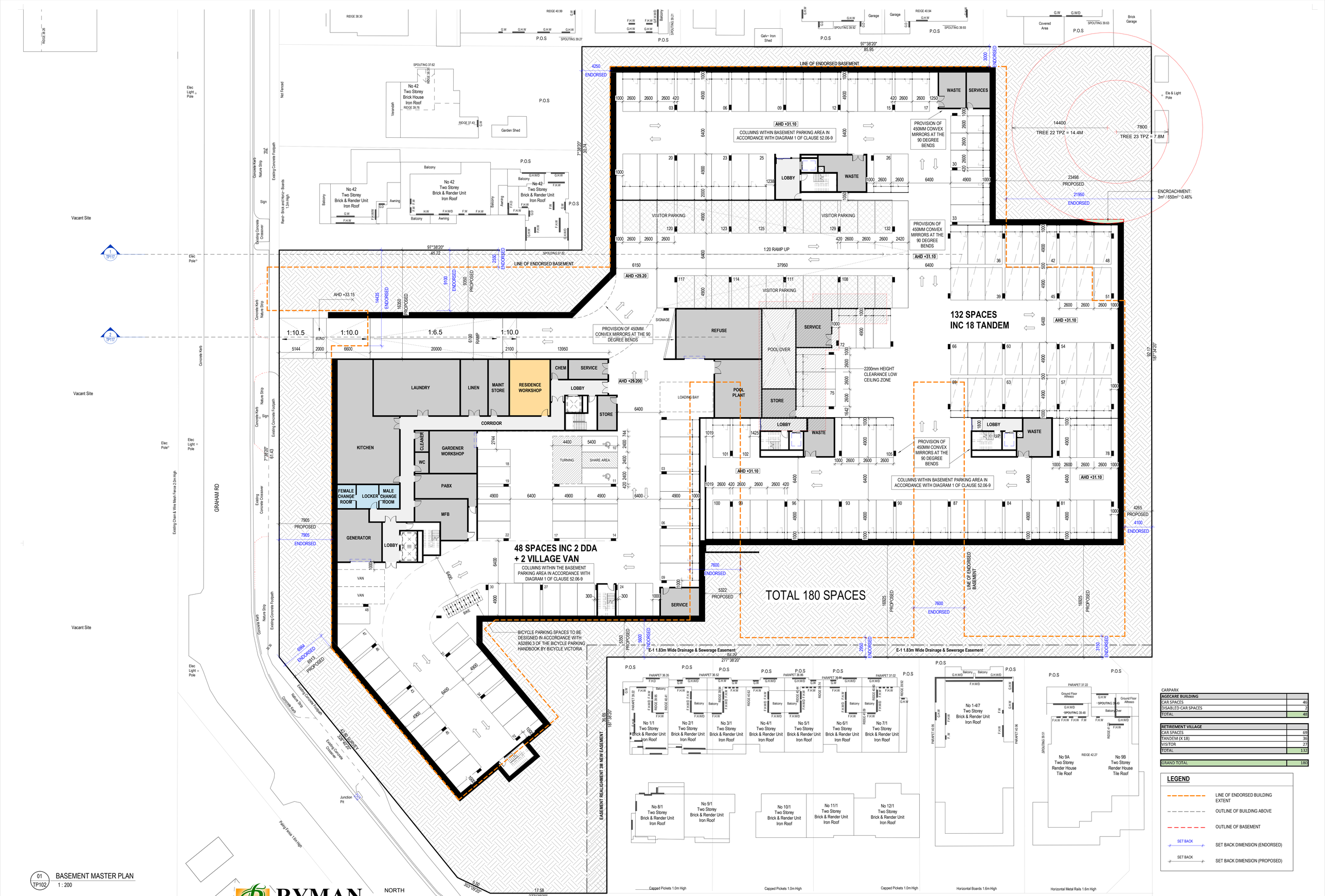
NORTH APARTMENT BUILDING					
UNIT NO.	BED ROOM TYPE	BED ROOMS	INTERNAL AREA m²	BALCONY AREA (POS)m²	TOTAL m²
271	TYPE A	2	88.6	37	125.6
272	TYPE A	2	88.6	31	119.6
273	TYPE A	2	88.6	20	108.6
274	TYPE A	2	88.6	16	104.6
275	TYPE A	2	88.6	24	112.6
276	TYPE A	2	88.6	16	104.6
277	TYPE A	2	88.6	24	112.6
278	TYPE B1	3	116.8	34	150.8
279	TYPE B1	3	116.8	35	151.8
TOTAL		20	853.8	237	1090.8
NORTH BUILDING COMMUNAL AREA					NIL

THIRD FLOOR

AGECARE BUILDING (ALU)				
LEVEL 3	BEDS			TOTAL m²
ALU	19			917.7
COMMUNAL AREA				26.2

CENTRAL APARTMENT BUILDING					
UNIT NO.	BED ROOM TYPE	BED ROOMS	INTERNAL AREA	BALCONY AREA (POS)	TOTAL m²
351	TYPE A3	2	94.5	19	113.5
352	TYPE B2	3	102.4	45	147.4
353	TYPE C	1	70	15	85.0
354	TYPE A4	2	86.9	23	109.9
355	TYPE B2	3	102.4	29	131.4
356	TYPE B3	3	107.4	23	130.4
TOTAL		14	563.6	154.0	717.6
CENTRAL BUILDING COMMUNAL AREA					NIL

EAST APARTMENT BUILDING					
UNIT NO.	BED ROOM TYPE	BED ROOMS	INTERNAL AREA	BALCONY AREA (POS)	TOTAL m²
361	TYPE A3	2	94.5	19	113.5
362	TYPE B2	3	102.4	45	147.4
363	TYPE C	1	70	15	85
364	TYPE A4	2	86.9	23	109.9
365	TYPE B2	3	102.4	29	131.4
366	TYPE B3	3	107.4	23	130.4
TOTAL		14	563.6	131	717.6
EAST BUILDING COMMUNAL AREA					NIL



01 TP102 BASEMENT MASTER PLAN
1 : 200

CARPARK

AGECARE BUILDING	
CAR SPACES	46
DISABLED CAR SPACES	2
TOTAL	48

RETIREMENT VILLAGE	
CAR SPACES	69
TANDEM (X 18)	36
VISITOR	27
TOTAL	132

GRAND TOTAL	180

LEGEND

- LINE OF ENDORSED BUILDING EXTENT
- OUTLINE OF BUILDING ABOVE
- OUTLINE OF BASEMENT
- SET BACK — SET BACK DIMENSION (ENDORSED)
- SET BACK — SET BACK DIMENSION (PROPOSED)

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RYMAN HEALTHCARE LTD

TP AMENDMENT & ENDORSEMENT

PROJECT	DATE	DRAWING TITLE	DRAWING No.	REV
HIGHETT COMPREHENSIVE AGED CARE AND RETIREMENT VILLAGE	07/11/2019	BASEMENT MASTER PLAN	TP102	H

PEDESTRIAN SIGHT TRIANGLE MEASURING 2.5M ALONG THE DRIVEWAY AND 1.5M ALONG THE FRONT BOUNDARY WITH NO VEGETATION OR STRUCTURES GREATER THAN 0.6M IN HEIGHT

REMOVE EXISTING CROSSOVER REINSTATE CURB AND CHANNEL FOOTPATH AND NATURAL STRIP TO COUNCIL REQUIREMENTS

NEW CROSSOVER TO THE SATISFACTION OF THE RESPONSIBLE AUTHORITY

REINSTATE CURB AND CHANNEL FOOTPATH AND NATURAL STRIP TO COUNCIL REQUIREMENTS

REMOVE EXISTING CROSSOVER REINSTATE CURB AND CHANNEL FOOTPATH AND NATURAL STRIP TO COUNCIL REQUIREMENTS

NO ENTRY SIGNS AND PAVEMENT ARROWS FOR SOUTHBOUND TRAVEL IN THE PORTE-COCHERE

NEW SINGLE CROSSOVER TO THE SATISFACTION OF THE RESPONSIBLE AUTHORITY

6.5 X 4.5 SPLAY TO ENSURE MINIMUM STOPPING DISTANCE UNDER FIGURE 3.2 OF AS 2890.1:2044 NO VEGETATION OR STRUCTURES GREATER THAN 600MM IN HEIGHT IN SPLAY AREA

LINE OF ENDORSED BUILDING

LINE OF ENDORSED BALCONY

REMOVE EXISTING CROSSOVER REINSTATE CURB AND CHANNEL FOOTPATH AND NATURAL STRIP TO COUNCIL REQUIREMENT

INTERNAL FENCES TO COMPLY WITH AS2890.1:2004 TO ALLOW FOR SIGNTLINES

SUBSTATION TO BE SCREENED SO AS TO NOT BE VISIBLE FROM STREET FRONTAGE

EASEMENT OF WAY OVER PEDESTRIAN LINK IN FAVOUR OF BAYSIDE CITY COUNCIL

PROPOSED RESERVE PATHWAY TO COUNCIL DESIGN SPECIFICATIONS

GATE TO RESERVE ON AUTOMATIC TIMBER TO BE OPEN DURING DAYLIGHT HOURS AND LOCKED DURING THE NIGHT

WALK WAY TO CONNECT TO EXISTING CARPARK DESIGN AND SPECIFICATION TO COUNCIL SATISFACTION

AGECARE BUILDING				
LEVEL: GROUND	BEDS			TOTAL m²
CARE BEDS	19			466.9
AGECARE COMMUNAL AREA				TOTAL m²
GROUND LEVEL				1090

CENTRAL APARTMENT BUILDING					
UNIT NO.	BED ROOM TYPE	BED ROOMS	INTERNAL AREA m²	TERRACE AREA m²	TOTAL m²
G51	TYPE A	2	88.6	24	112.6
G52	TYPE C	1	79	16	95.0
G53	TYPE A	2	88.6	23	111.6
G54	TYPE A	2	88.6	22	110.6
G55	TYPE A1	2	92.8	53	145.8
G56	TYPE A1	2	92.8	53	145.8
TOTAL		11	521.4	191	712.4
CENTRAL BUILDING COMMUNAL AREA					243

EAST APARTMENT BUILDING					
UNIT NO.	BED ROOM TYPE	BED ROOMS	INTERNAL AREA m²	TERRACE AREA m²	TOTAL m²
G61	TYPE A	2	88.6	23	111.6
G62	TYPE B	3	115.8	25	140.8
G63	TYPE C	1	79	16	95
G64	TYPE A	2	88.6	24	112.6
G65	TYPE A	2	88.6	24	112.6
G66	TYPE A	2	88.6	23	111.6
G67	TYPE A1	2	92.8	53	145.8
G68	TYPE A1	2	92.8	53	145.8
TOTAL		16	752.8	243	956.8

NORTH APARTMENT BUILDING					
UNIT NO.	BED ROOM TYPE	BED ROOMS	INTERNAL AREA m²	TERRACE AREA m²	TOTAL m²
G71	TYPE A	2	88.6	42	130.6
G72	TYPE A	2	88.6	30	124.6
G73	TYPE A	2	88.6	29	117.6
G74	TYPE A	2	88.6	20	108.6
G75	TYPE A	2	88.6	29	117.6
G76	TYPE A	2	88.6	20	108.6
G77	TYPE A	2	88.6	29	117.6
G78	TYPE B1	3	116.8	44	160.8
G79	TYPE B1	3	116.8	51	167.8
TOTAL		20	443	300	599

LEGEND

- LINE OF ENDORSED BUILDING EXTENT
- OUTLINE OF BUILDING ABOVE
- OUTLINE OF BASEMENT
- SET BACK DIMENSION (ENDORSED)
- SET BACK DIMENSION (PROPOSED)

01 GROUND MASTER PLAN
SCALE 1 : 200 @B1

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RYMAN HEALTHCARE LTD

TP AMENDMENT & ENDORSEMENT

PROJECT: HIGHETT COMPREHENSIVE AGED CARE AND RETIREMENT VILLAGE
DATE: 07/11/2019
DRAWING TITLE: GROUND FLOOR MASTER PLAN
DRAWING No.: TP103
REV: J



01 FIRST FLOOR MASTER PLAN
SCALE 1 : 200 @B1

V/A ARCHITECTS viaarchitects.com.au / +61 3 8678 3300

RYMAN HEALTHCARE LTD

TP AMENDMENT & ENDORSEMENT

PROJECT: HIGHETT COMPREHENSIVE AGED CARE AND RETIREMENT VILLAGE
DATE: 07/11/2019
DRAWING TITLE: FIRST FLOOR MASTER PLAN
DRAWING No.: TP104
REV: J



AGECARE BUILDING (CARE BEDS)				
LEVEL 2	BEDS			TOTAL m²
CARE BEDS	30			758
COMMUNAL AREA				202.7

AGECARE BUILDING (ALLU)				
LEVEL 2	BEDS			TOTAL m²
ALLU	15			582.3
COMMUNAL AREA				68.1

CENTRAL APARTMENT BUILDING					
UNIT NO.	BED ROOM TYPE	BED ROOMS	INTERNAL AREA m²	BALCONY AREA (POS)m²	TOTAL m²
251	TYPE A	2	88.6	25	113.6
252	TYPE B	2	115.7	37	152.7
253	TYPE C	2	70	15	85
254	TYPE A	2	88.6	17	105.6
255	TYPE A	2	88.6	17	105.6
256	TYPE A	2	88.6	17	105.6
257	TYPE A2	2	90	20	110
258	TYPE A2	2	90	23	113
TOTAL		16	720.1	171.0	891.1
CENTRAL BUILDING COMMUNAL AREA					NIL

EAST APARTMENT BUILDING					
UNIT NO.	BED ROOM TYPE	BED ROOMS	INTERNAL AREA m²	BALCONY AREA (POS)m²	TOTAL m²
261	TYPE A	2	88.6	25	113.6
262	TYPE B	2	115.7	37	152.7
263	TYPE C	2	70	15	85
264	TYPE A	2	88.6	17	105.6
265	TYPE A	2	88.6	17	105.6
266	TYPE A	2	88.6	17	105.6
267	TYPE A2	2	90	20	110
268	TYPE A2	2	90	23	113
TOTAL		16	720.1	171	891.1
EAST BUILDING COMMUNAL AREA					NIL

NORTH APARTMENT BUILDING					
UNIT NO.	BED ROOM TYPE	BED ROOMS	INTERNAL AREA m²	BALCONY AREA (POS)m²	TOTAL m²
271	TYPE A	2	88.6	37	125.6
272	TYPE B	2	88.6	33	115.6
273	TYPE A	2	88.6	20	108.6
274	TYPE A	2	88.6	16	104.6
275	TYPE A	2	88.6	24	112.6
276	TYPE A	2	88.6	16	104.6
277	TYPE A	2	88.6	24	112.6
278	TYPE B1	3	114.8	34	156.8
279	TYPE B1	3	114.8	35	151.8
TOTAL		20	853.8	237	1090.8
NORTH BUILDING COMMUNAL AREA					NIL

01 SECOND FLOOR MASTER PLAN
SCALE 1 : 200 @B1

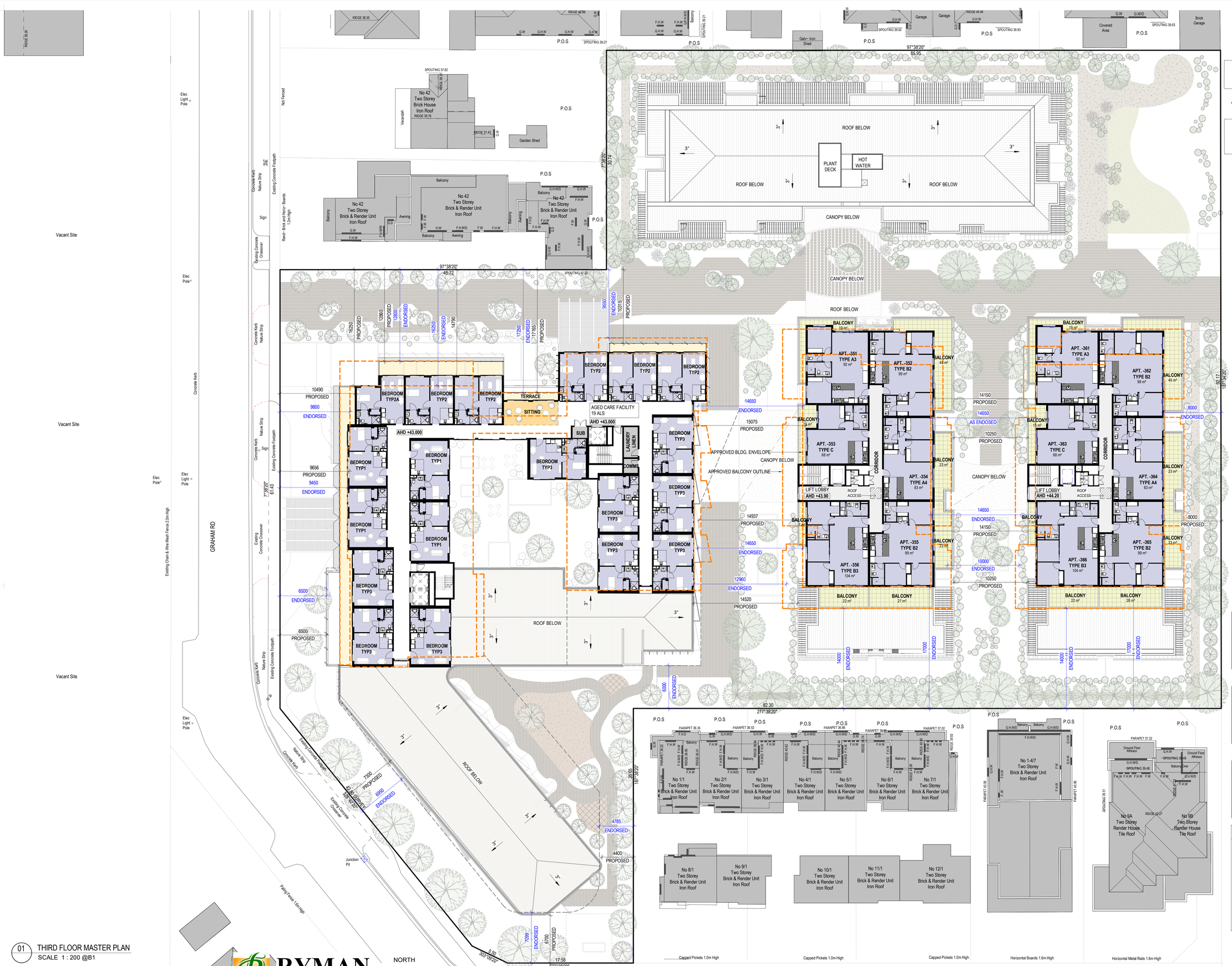
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RYMAN HEALTHCARE LTD

NORTH

TP AMENDMENT & ENDORSEMENT

PROJECT: HIGHETT COMPREHENSIVE AGED CARE AND RETIREMENT VILLAGE
DATE: 07/11/2019
DRAWING TITLE: SECOND FLOOR MASTER PLAN
DRAWING No.: TP105
REV: J



01 THIRD FLOOR MASTER PLAN
SCALE 1 : 200 @B1

NORTH

AGECARE BUILDING (AU)				
LEVEL 3	BEDS			TOTAL m²
AU	19			917.7
COMMUNAL AREA				36.7

CENTRAL APARTMENT BUILDING					
UNIT NO.	BED ROOM TYPE	BED ROOMS	INTERNAL AREA	BALCONY AREA (POS)	TOTAL m²
351	TYPE A3	2	94.5	19	113.5
352	TYPE B2	3	102.4	45	147.4
353	TYPE C	1	70	15	85.0
354	TYPE A4	2	86.9	23	109.9
355	TYPE B2	3	102.4	29	131.4
356	TYPE B3	3	107.4	23	130.4
TOTAL		14	563.6	154.0	717.6
CENTRAL BUILDING COMMUNAL AREA					N/A

EAST APARTMENT BUILDING					
UNIT NO.	BED ROOM TYPE	BED ROOMS	INTERNAL AREA	BALCONY AREA (POS)	TOTAL m²
361	TYPE A3	2	94.5	19	113.5
362	TYPE B2	3	102.4	45	147.4
363	TYPE C	1	70	15	85
364	TYPE A4	2	86.9	23	109.9
365	TYPE B2	3	102.4	29	131.4
366	TYPE B3	3	107.4	23	130.4
TOTAL		14	563.6	131	717.6
EAST BUILDING COMMUNAL AREA					N/A

AGED CARE DEVELOPMENT BREAKDOWN	
LOCATION	SQM / %
TOTAL SITE AREA	4697
TOTAL BUILDING FOOTPRINT	2600
BUILDING FOOTPRINT / SITE AREA PERCENTAGE	55.0%
HARD SURFACES (PAVING/DRIVEWAYS)	645
TOTAL HARD SURFACES (INC. FOOTPRINT)	3245
PERMEABILITY PERCENTAGE	30.9%
GARDEN SPACE SQM	1658
GARDEN SPACE %	35.3%

RETIREMENT DEVELOPMENT BREAKDOWN	
LOCATION	SQM / %
TOTAL SITE AREA	7279
TOTAL BUILDING FOOTPRINT	2752
BUILDING FOOTPRINT / SITE AREA PERCENTAGE	37.8%
HARD SURFACES (PAVING/DRIVEWAYS)	1003
TOTAL HARD SURFACES (INC. FOOTPRINT)	3755
PERMEABILITY PERCENTAGE	48.4%
GARDEN SPACE SQM	3879
GARDEN SPACE %	53.3%

OVERALL DEVELOPMENT BREAKDOWN	
LOCATION	SQM / %
TOTAL SITE AREA	11976
TOTAL BUILDING FOOTPRINT	5352
BUILDING FOOTPRINT / SITE AREA PERCENTAGE	44.7%
HARD SURFACES (PAVING/DRIVEWAYS)	1648
TOTAL HARD SURFACES (INC. FOOTPRINT)	7000
PERMEABILITY PERCENTAGE	41.5%
GARDEN SPACE SQM	5537
GARDEN SPACE %	46.2%

LEGEND

- LINE OF ENDORSED BUILDING EXTENT
- OUTLINE OF BUILDING ABOVE
- OUTLINE OF BASEMENT
- SET BACK DIMENSION (ENDORSED)
- SET BACK DIMENSION (PROPOSED)

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TP AMENDMENT & ENDORSEMENT

PROJECT: HIGHETT COMPREHENSIVE AGED CARE AND RETIREMENT VILLAGE
DATE: 07/11/2019
DRAWING TITLE: THIRD FLOOR MASTER PLAN
DRAWING No.: TP106
REV: J

PLANT EQUIPMENT IS TO BE LOCATED AWAY FROM HABITABLE ROOM WINDOWS OF DWELLINGS AND THE HABITABLE ROOMS OF ADJOINING PROPERTIES

ROOF ACCESS FROM BELOW

PLANT DECK

HOT WATER

LIFT OVERRUN

CANOPY BELOW

ROOF BELOW

TREE 22 TPZ = 14.4M

TREE 23 TPZ = 7.8M

Park (Public Open Space)

GRAHAM RD

Vacant Site

No 42 Two Storey Brick House Iron Roof

No 42 Two Storey Brick & Render Unit Iron Roof

No 1/1 Two Storey Brick & Render Unit Iron Roof

No 2/1 Two Storey Brick & Render Unit Iron Roof

No 3/1 Two Storey Brick & Render Unit Iron Roof

No 4/1 Two Storey Brick & Render Unit Iron Roof

No 5/1 Two Storey Brick & Render Unit Iron Roof

No 6/1 Two Storey Brick & Render Unit Iron Roof

No 7/1 Two Storey Brick & Render Unit Iron Roof

No 8/1 Two Storey Brick & Render Unit Iron Roof

No 9/1 Two Storey Brick & Render Unit Iron Roof

No 10/1 Two Storey Brick & Render Unit Iron Roof

No 11/1 Two Storey Brick & Render Unit Iron Roof

No 12/1 Two Storey Brick & Render Unit Iron Roof

No 1-4/7 Two Storey Brick & Render Unit Iron Roof

No 9A Two Storey Render House Tile Roof

No 9B Two Storey Render House Tile Roof

Capped Pickets 1.0m High

Horizontal Boards 1.6m High

Horizontal Metal Rails 1.6m High

LEGEND

- LINE OF ENDORSED BUILDING EXTENT
- OUTLINE OF BUILDING ABOVE
- OUTLINE OF BASEMENT
- SET BACK DIMENSION (ENDORSED)
- SET BACK DIMENSION (PROPOSED)

NORTH

01 ROOF PLAN
SCALE 1 : 200 @B1

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TP AMENDMENT & ENDORSEMENT

PROJECT: HIGHETT COMPREHENSIVE AGED CARE AND RETIREMENT VILLAGE
DATE: 07/11/2019
DRAWING TITLE: ROOF PLAN
DRAWING No.: TP107
REV: F

Vacant Site

Vacant Site

Vacant Site

GRAHAM RD

Park
(Public Open Space)

Elec Light & Pole

Elec Pole

Elec Light & Pole

Elec Pole

Elec Light & Pole

Existing Chain & Wire Mesh Fence 2.0m High

Existing Concrete Crossover

Concrete Kerb

Nature Strip

Existing Concrete Footpath

Sign

Existing Concrete Crossover

Concrete Kerb

Nature Strip

Concrete Kerb

Nature Strip

Sign

Existing Concrete Footpath

Concrete Kerb

Nature Strip

Existing Concrete Footpath

Existing Concrete Crossover

Nature Strip

Concrete Kerb

Existing Concrete Footpath

Existing Concrete Crossover

Junction Pit

Paling Fences 1.8m High

Not Fenced

Rend- Brick and Horiz- Boards

Vacant Site

RIDGE 38.30

RIDGE 39.35

RIDGE 40.99

G.W

G.H.W

P.O.S

SPOUTING 39.27

F.H.W

F.H.W.D

Balcony

SPOUTING 39.21

Galv- Iron Shed

Garage

G.D

RIDGE 40.94

SPOUTING 39.92

SPOUTING 39.93

Covered Area

G.W.D

SPOUTING 39.63

Brick Garage

97°38'20"
65.50

SPOUTING 37.62

RIDGE 38.53

No 42
Two Storey
Brick House
Iron Roof
RIDGE 39.76

Verandah

RIDGE 37.43

Garden Shed

No 42
Two Storey
Brick & Render Unit
Iron Roof

No 42
Two Storey
Brick & Render Unit
Iron Roof

No 42
Two Storey
Brick & Render Unit
Iron Roof

Awning

F.W

H.W

G.D

7°38'20"
30.74

TERRACE
42 m²

TERRACE
29 m²

TERRACE
29 m²

TERRACE
29 m²

TERRACE
51 m²

APT. -G71
TYPE A

APT. -G73
TYPE A

APT. -G75
TYPE A

APT. -G77
TYPE A

APT. -G79
TYPE B1

WASTE

AHD +34.80

APT. -G72
TYPE A

APT. -G74
TYPE A

APT. -G76
TYPE A

APT. -G78
TYPE B1

TERRACE
36 m²

TERRACE
20 m²

SERVICES

TERRACE
20 m²

TERRACE
44 m²

COMMUNITY GARDEN

GREEN WASTE

97°38'20"
45.72

SPOUTING 37.32

DINING
OUTDOOR
SPILL

AIR LOCK

DINING

CAFE BOH

WC

BEAUTY

SALON

CONCIERGE

AHD +33.200

CAFE

WC

PRINT /
STORE

GENERAL
OFFICE

CAFE
SITTING

LIBRARY

SERV

STAIR

BAR
STORE

BAR

BAR
SEATING

BAR
SEATING
OUTDOOR
SPILL

1:14

LIBRARY
SPILL

SALES

RECEPTION

MEETING

SERVICES

LOUNGE
AHD +33.200

AIR LOCK

AHD +33.200

LOUNGE
OUTDOOR
SPILL

MANAGERS

STORE

WC

STORE

STAIR

STAFF

THEATRE

GAMES

CRAFT

SECURE
LOBBY

SERVICES

CLEANER

SLUICE

STORE

ACTIVITY

ACTIVITY
OUTDOOR
SPILL

AHD +33.200

LOUNGE

NURSE

TREATMENT

DINING

STANDARD

CARE HUB

SECOND
LOUNGE

WC

ST WC

SLUICE

STANDARD

DDA

SITTING

GYM
59 m²

APT. -G51
TYPE A

POOL
147 m²

AHD +33.80

TERRACE
24 m²

TERRACE
39 m²

CHANGE
16 m²

CHANGE
16 m²

APT. -G52
TYPE C

1:14

CORRIDOR

AHD +34.30

APT. -G54
TYPE A

1:32

AHD +34.45

1:24

TERRACE
23 m²

APT. -G53
TYPE A

TERRACE
22 m²

TERRACE
53 m²

TERRACE
53 m²

APT. -G55
TYPE A1

APT. -G56
TYPE A1

LANDSCAPE

APT. -G61
TYPE A

APT. -G62
TYPE B

TERRACE
23 m²

TERRACE
25 m²

TERRACE
16 m²

APT. -G63
TYPE C

TERRACE
24 m²

UP

CORRIDOR
AHD +34.60

APT. -G64
TYPE A

APT. -G65
TYPE A

TERRACE
23 m²

APT. -G66
TYPE A

TERRACE
24 m²

TERRACE
53 m²

TERRACE
53 m²

APT. -G68
TYPE A1

APT. -G67
TYPE A1

92.17
187°34'20"

82.30
277°38'20"

35.55
107°38'20"

5.50
303°00'40"

17.55
277°38'20"

P.O.S

PARAPET 36.35

PARAPET 36.52

PARAPET 36.86

PARAPET 37.02

PARAPET 39.20

RIDGE 39.95

RIDGE 40.01

RIDGE 39.94

RIDGE 40.44

RIDGE 40.62

RIDGE 40.85

RIDGE 40.88

RIDGE 39.92

No 1/1
Two Storey
Brick & Render Unit
Iron Roof

No 2/1
Two Storey
Brick & Render Unit
Iron Roof

No 3/1
Two Storey
Brick & Render Unit
Iron Roof

No 4/1
Two Storey
Brick & Render Unit
Iron Roof

No 5/1
Two Storey
Brick & Render Unit
Iron Roof

No 6/1
Two Storey
Brick & Render Unit
Iron Roof

No 7/1
Two Storey
Brick & Render Unit
Iron Roof

No 8/1
Two Storey
Brick & Render Unit
Iron Roof

No 9/1
Two Storey
Brick & Render Unit
Iron Roof

No 10/1
Two Storey
Brick & Render Unit
Iron Roof

No 11/1
Two Storey
Brick & Render Unit
Iron Roof

No 12/1
Two Storey
Brick & Render Unit
Iron Roof

Capped Pickets 1.0m High

Capped Pickets 1.0m High

Capped Pickets 1.0m High

PARAPET 40.95

PARAPET 40.96

No 1-4/7
Two Storey
Brick & Render Unit
Iron Roof

Horizontal Boards 1.6m High

PARAPET 37.22

Ground Floor
Alfresco

SPOUTING 39.48

SPOUTING 39.51

RIDGE 42.27

No 9A
Two Storey
Render House
Tile Roof

No 9B
Two Storey
Render House
Tile Roof

Horizontal Metal Rails 1.6m High

LEGEND:

- STAGE 01
- STAGE 02
- STAGE 03
- STAGE 04

NOTES:

- BASEMENT TO BE EXCAVATED AS PART OF STAGE 01
- WORKS TO LYLE ANDERSON RESERVE TO BE COMPLETED PRIOR TO OCCUPATION OD STAGE 01
- PUBLIC REALM WORKS TO THE STREET FRONTAGES TO BE COMPLETED PRIOR TO OCCUPATION OF STAGE 01

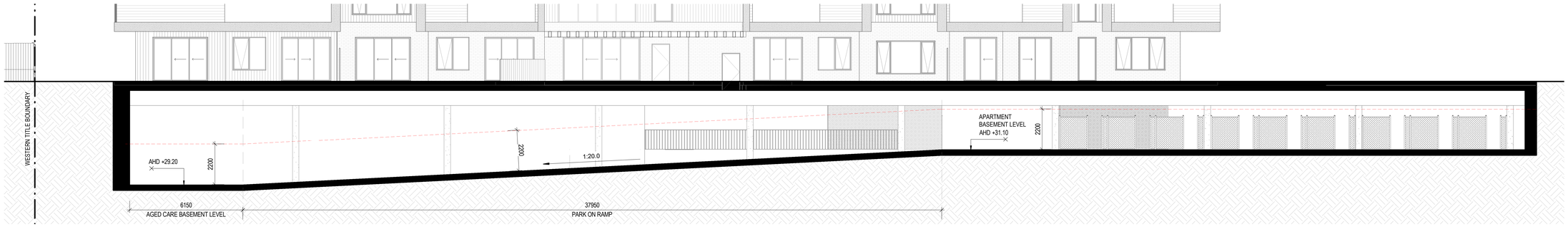
NORTH

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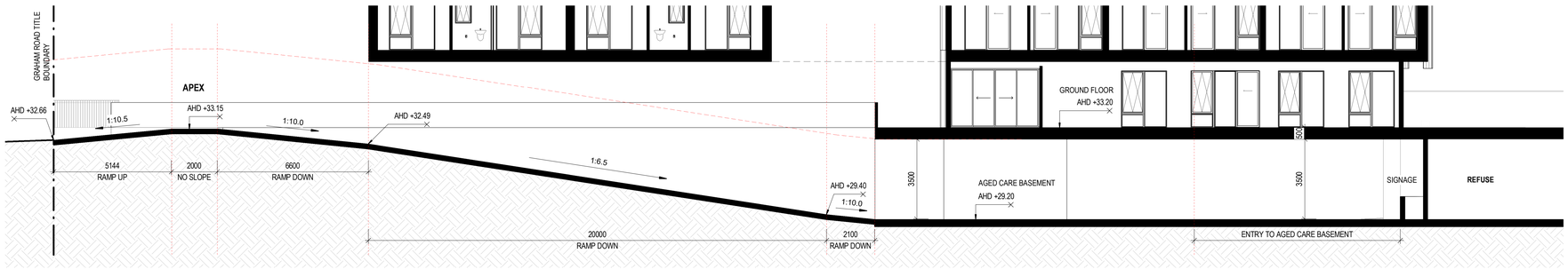
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TP AMENDMENT & ENDORSEMENT

PROJECT	DATE	DRAWING TITLE	DRAWING No.	REV
HIGHETT COMPREHENSIVE AGED CARE AND RETIREMENT VILLAGE	07/11/2019	STAGING PLAN	TP108	C



1 RAMP TO APARTMENT BASEMENT
SCALE 1 : 100 @B1



2 RETIREMENT VILLAGE RAMP TO BASEMENT
SCALE 1 : 100 @B1

Existing Concrete Footpath

7°38'20"

Existing Concrete Footpath

61.43

1.3m High

8964
ENDORSED

6913
PROPOSED

7905
ENDORSED

7905
PROPOSED

Junction Pit

Existing Concrete Footpath

Nature Strip

Concrete Kerb

Existing Concrete Crossover

328°40'20"

42.80 SURVEY

BUND

AHD +33.15

1:10.5

1:10.0

1:10.0

1:6.5

5144

2000

6600

9100
ENDORSED

9350
PROPOSED

14435
ENDORSED

16350
PROPOSED

20000

2100

9350
PROPOSED

45.72

97°38'20"

Balcony

No 42
Two Storey
Brick & Render Unit
Iron Roof

F.H.W

G.W

F.H.W/W

G.D

Awning

Balcony

F.W

F.W

H.W

Awning

F.H.W/D

F.W

F.H.W

Balcony

Awning

F.H.D

F.H.W

F.H.W

G.H.W

G.D

F.H.W

F.W

F.H.W

G.W

G.H.W/D

P.O.S

SPOUTING 37.32

LINE OF ENDORSED BASEMENT

GENERATOR
54 m²

FEMALE CHANGE ROOM
12 m²

LOCKER
13 m²

MALE CHANGE ROOM
12 m²

KITCHEN
152 m²

LOBBY
18 m²
AHD +29.20

AHD +29.20

LAUNDRY
113 m²

WC
7 m²

CLEANER
7 m²

PABX
38 m²

MFB
40 m²

GARDENER WORKSHOP
47 m²

LINEN
36 m²

MAINT STORE
27 m²

RESIDENCE WORKSHOP
53 m²

CHEM
8 m²

LOBBY
23 m²

SERVICE
19 m²

STORE
16 m²

SERVICE
30 m²

REFUSE
99 m²

RAMP

6100

10250

VAN

VAN

48

41

46

43

40

31

34

57

30

27

24

22

19

17

14

11

10

09

06

03

BIKE

1000

4900

6400

2600

420

2744

385

495

300

5400

744

2400

1186

4500

3355

7700

6150

1000

2600

120

117

2100

1000

BICYCLE PARKING SPACES TO BE DESIGNED IN ACCORDANCE WITH AS2890.3 OF THE BICYCLE PARKING HANDBOOK BY BICYCLE VICTORIA

48 SPACES INC 2 DDA
+ 2 VILLAGE VAN

COLUMNS WITHIN THE BASEMENT PARKING AREA IN ACCORDANCE WITH DIAGRAM 1 OF CLAUSE 52.06-9

TURNING

DDA

SHARE AREA

DDA

LOADING BAY

PROVISION OF 450MM CONVEX MIRRORS AT THE 90 DEGREE BENDS

SIGNAGE

VISITOR PARKING

VISITOR PARKING

35.65

187°38'20"

5350
PROPOSED

5600
ENDORSED

P.O.S

P.O.S

No 8/1
Two Storey
Brick & Render Unit
Iron Roof

No 1/1
Two Storey
Brick & Render Unit
Iron Roof

No 2/1
Two Storey
Brick & Render Unit
Iron Roof

PARAPET 39.22

RIDGE 39.95

RIDGE 40.41

PARAPET 36.35

Balcony

Balcony

NORTH

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TP AMENDMENT & ENDORSEMENT

PROJECT	DATE	DRAWING TITLE	DRAWING No.	REV
HIGHETT COMPREHENSIVE AGED CARE AND RETIREMENT VILLAGE	07/11/2019	AGED CARE BASEMENT PLAN	TP202	D



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TP AMENDMENT & ENDORSEMENT

PROJECT	DATE	DRAWING TITLE	DRAWING No.	REV
HIGHETT COMPREHENSIVE AGED CARE AND RETIREMENT VILLAGE	07/11/2019	AGED CARE GROUND FLOOR PLAN	TP203	C

Nature Strip
Existing Concrete Footpath
Existing Concrete Crossover
7°36'20"
61.43
Nature Strip
Nature Strip
Existing Concrete Footpath
Railing Fence 1.2m high
Concrete Kerb
Nature Strip
Existing Concrete Footpath
Existing Concrete Crossover
338°40'20"
42.99 SURVEY
Junction Pit
6500
ENDORSED
6600
PROPOSED
8300
ENDORSED
CANOPY BELOW
7500
ENDORSED
7093
PROPOSED
6550
ENDORSED
TERRACE
SECOND LOUNGE
LOUNGE
STANDARD
STO
HOIST
STO
COMM SUB
ELE SUB BD
AGED CARE FACILITY
30 CARE BEDS
AHD +36.60
2100
LINEN
SLUICE
12600
ENDORSED
11800
PROPOSED
11500
ENDORSED
12800
PROPOSED
16265
PROPOSED
15450
ENDORSED
9600
ENDORSED
10315
PROPOSED
7550
PROPOSED
7350
ENDORSED
6100
ENDORSED
8550
ENDORSED
SLUICE
TREATMENT
CARE HUB
NURSE
WC
RISER
CLEANER
SERVERY
DINING
SKYLIGHT
COURTYARD
AHD +36.60
10948
20798
SITTING
STO
SITTING
2100
AHD +36.60
7980
PROPOSED
6100
ENDORSED
7221
PROPOSED
DDA
SITTING
OBSCURE GLAZING UP TO 1700 HIGH
BEDROOM TYP3
BEDROOM TYP2
SUB
12344
3350
1800
9000
OVERLOOKING EXTENT
9000
6000
ENDORSED
7955
PROPOSED
4794
PROPOSED
4750
ENDORSED
35.65
187°38'20"
AGED CARE FACILITY
13 ALS
AHD +36.60
COMMS
LAUNDRY
LINEN
CANOPY BELOW
SPOUTING 37.32
45.72
678°38'20"
277°38'20"
17.58
5.49
320°00'20"
Capped Risers 1.0m high
No. 311 Two Storey Brick & Render Unit Iron Roof
No. 111 Two Storey Brick & Render Unit Iron Roof
No. 211 Two Storey Brick & Render Unit Iron Roof
PARAPET 39.22
RIDGE 39.95
RIDGE 40.41
PARAPET 38.35
GUTTER
F.H.W
F.H.W/D
Balcony
G.W
GUTTER
P.O.S
P.O.S
NORTH

01 FIRST FLOOR MASTER PLAN
SCALE 1 : 100 @B1

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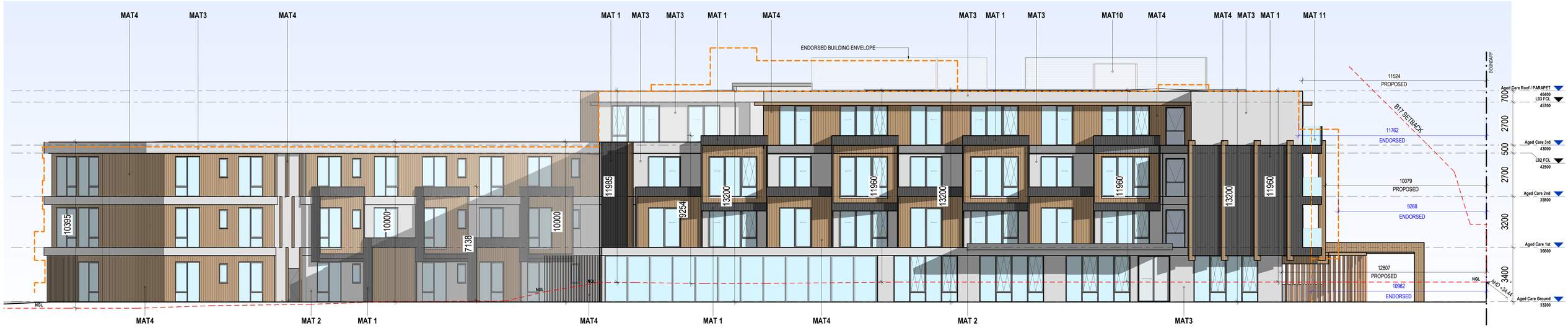
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TP AMENDMENT & ENDORSEMENT

PROJECT	DATE	DRAWING TITLE	DRAWING No.	REV
HIGHETT COMPREHENSIVE AGED CARE AND RETIREMENT VILLAGE	07/11/2019	AGED CARE FIRST FLOOR PLAN	TP204	C

Nature Strip
Existing Concrete Footpath
Existing Concrete Crossover
7°38'20"
61.43
Nature Strip
Existing Concrete Footpath
Nature Strip
6600 PROPOSED
6500 ENDORSED
7500 ENDORSED
8300 ENDORSED
7093 PROPOSED
6600 ENDORSED
TERRACE
SECOND LOUNGE
LOUNGE
STANDARD
ST WC
HOIST
STO
COMM SUB
ELE SUB BD
AGED CARE FACILITY 30 CARE BEDS
AHD +39.80
11500 ENDORSED
16530 PROPOSED
12570 ENDORSED
12800 PROPOSED
LINEN
SLUICE
TREATMENT
CAFE HUB
NURSE
WC
CLEANER
SERVERY
DINING
SITTING
2100
17934
10948
20798
12344
1800
COURTYARD BELOW
16250 ENDORSED
16265 PROPOSED
DDA
SITTING
OBSCURE GLAZING UP TO 1700 HIGH
6100 ENDORSED
7550 PROPOSED
7250 ENDORSED
8550 ENDORSED
6700 ENDORSED
7980 PROPOSED
AHD +39.80
BEDROOM TYP3
BEDROOM TYP2
SUB
RISER
COMMS
LAUNDRY LINEN
AGED CARE FACILITY 13 ALS
9650 ENDORSED
10315 PROPOSED
OVERLOOKING EXTENT
9000
6000 ENDORSED
7955
4794 PROPOSED
4750 ENDORSED
35.65
187°38'20"
277°38'20"
17.58
97°38'20"
45.72
338°40'20"
42.86 SURVEY
Existing Concrete Crossover
Existing Concrete Footpath
Nature Strip
Concrete Kerb
Railing Fence / 1.8m high
Junction Pit
Existing Concrete Crossover
5.49
302°38'20"
Copper Flowers 1.0m High
No. 8/1 Two Storey Brick & Render Unit Iron Roof
No. 1/1 Two Storey Brick & Render Unit Iron Roof
No. 2/1 Two Storey Brick & Render Unit Iron Roof
PARAPET 39.22
RIDGE 39.95
RIDGE 40.41
PARAPET 39.35
F.H.W
F.H.W/D
G.W
G.W/D
Balcony
P.O.S
NORTH
SPOUT/HOP 37.92
01 SECOND FLOOR MASTER PLAN
SCALE 1 : 100 @B1
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RYMAN HEALTHCARE LTD
Page 93 of 112
TP AMENDMENT & ENDORSEMENT
PROJECT HIGHETT COMPREHENSIVE AGED CARE AND RETIREMENT VILLAGE
DATE 07/11/2019
DRAWING TITLE AGED CARE SECOND FLOOR PLAN
DRAWING No. TP205
REV C

Nature Strip
Existing Concrete Footpath
Existing Concrete Crossover
7°38'20"
61.43
Nature Strip
Existing Concrete Footpath
Nature Strip
6500 PROPOSED
6500 ENDORSED
9450 ENDORSED
9450 PROPOSED
9800 ENDORSED
10490 PROPOSED
TERRACE
BEDROOM TYP3
BEDROOM TYP3
BEDROOM TYP1
BEDROOM TYP1
BEDROOM TYP2A
AGED CARE FACILITY
19 ALS
AHD +43.00
2200
3070
BEDROOM TYP3
RISER
BEDROOM TYP1
BEDROOM TYP1
BEDROOM TYP2
1800
BEDROOM TYP2
16250 PROPOSED
12860 PROPOSED
12800 ENDORSED
16250 ENDORSED
14790 PROPOSED
97°38'20"
45.72
3.00° FALL
3.00° FALL
3.00° FALL
3.00° FALL
3.00° FALL
3.00° FALL
ROOF BELOW
17934
10900
20750
BEDROOM TYP3
SUB
SITTING
TERRACE
17250 ENDORSED
17165 PROPOSED
BEDROOM TYP2
AHD +43.00
3350
BEDROOM TYP3
BEDROOM TYP3
RISER
RISER
COMMS
LAUNDRY LINEN
1800
BEDROOM TYP2
9550 ENDORSED
10315 PROPOSED
BEDROOM TYP2
BEDROOM TYP3
BEDROOM TYP3
BEDROOM TYP3
BEDROOM TYP2
6000 ENDORSED
7955 PROPOSED
16155 PROPOSED
16550 ENDORSED
3.00° FALL
3.00° FALL
Playing Fence 1.8m High
Concrete Kerb
Nature Strip
Existing Concrete Footpath
Existing Concrete Crossover
Nature Strip
Pit
42.66 SURVEY
358°40'20"
7360 PROPOSED
6960 ENDORSED
3.00° FALL
3.00° FALL
3.00° FALL
3.00° FALL
ROOF BELOW
6700 PROPOSED
7100 ENDORSED
277°38'20"
17.58
4400 PROPOSED
4750 ENDORSED
35.65
187°38'20"
320°40'20"
5.49
Capped Pickets 1.5m High
No 87
Two Storey
Brick & Render Unit
Iron Roof
No 111
Two Storey
Brick & Render Unit
Iron Roof
No 211
Two Storey
Brick & Render Unit
Iron Roof
G.W
PARAPET 39.22
F.H.W
F.H.W/D
F.H.W
RIDGE 39.95
Balcony
RIDGE 40.41
F.H.W
F.H.W/D
F.H.W
G.W
G.W/D
P.O.S
P.O.S
PARAPET 38.38
F.H.D
NORTH
01 THIRD FLOOR MASTER PLAN
SCALE 1 : 100 @B1
V/A ARCHITECTS viaarchitects.com.au / +61 3 8678 3300
RYMAN HEALTHCARE LTD
TP AMENDMENT & ENDORSEMENT
PROJECT HIGHETT COMPREHENSIVE AGED CARE AND RETIREMENT VILLAGE
DATE 07/11/2019
DRAWING TITLE AGED CARE THIRD FLOOR PLAN
DRAWING No. TP206
REV C



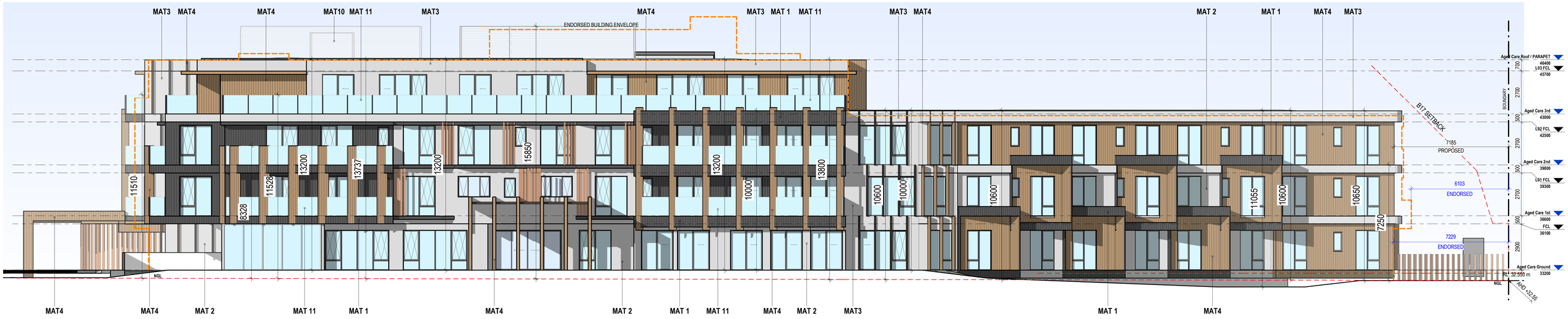
2 TP207 EAST ELEVATION
1 : 100



1 TP207 SOUTH ELEVATION
1 : 100

EXTERNAL MATERIALS LEGEND

MAT1	ALUMINIUM STANDING SEAM CLADDING CHARCOAL
MAT2	DARK FACE BRICK
MAT3	NATURAL CONCRETE RENDER
MAT4	TIMBER LOOK CLADDING
MAT5	ALUMINIUM PANEL CLADDING - SATIN BLACK
MAT6	ALUMINIUM PANEL CLADDING - SATIN WHITE
MAT7	RAW CONCRETE FINISH
MAT8	LOW-E GLASS
MAT9	DARK CONCRETE RENDER
MAT10	PLANT PLATFORM SCREEN
MAT11	CLEAR GLASS BALUSTRADE



1 / TP208 WEST ELEVATION
1 : 100



2 / TP208 NORTH ELEVATION
1 : 100

EXTERNAL MATERIALS LEGEND

MAT1	ALUMINIUM STANDING SEAM CLADDING CHARCOAL
MAT2	DARK FACE BRICK
MAT3	NATURAL CONCRETE RENDER
MAT4	TIMBER LOOK CLADDING
MAT5	ALUMINIUM PANEL CLADDING - SATIN BLACK
MAT6	ALUMINIUM PANEL CLADDING - SATIN WHITE
MAT7	RAW CONCRETE FINISH
MAT8	LOW-E GLASS
MAT9	DARK CONCRETE RENDER
MAT10	PLANT PLATFORM SCREEN
MAT11	CLEAR GLASS BALUSTRADE



2 TP209 EAST FENCE ELEVATION
1 : 100



1 TP209 FENCE ELEVATION
1 : 100

RIDGE 40.99
G.W
G.H.W
SPOUTING 39.27
P.O.S
F.H.W
G.H.W/D
Balcony
Frosted Privacy Screen
SPOUTING 39.21
Gal+- Iron Shed
Garage
RIDGE 40.94
SPOUTING 39.92
SPOUTING 39.93
Covered Area
SPOUTING 39.83
Brick Garage
97°38'20"
85.95
Paling Fence 2.15m High
Dilapidated Paling Fence 2.0m High
Paling Fence 1.95m High
Paling Fence with Brick Base 3.0m High
PROPOSED
3000
LINE OF ENDORSED BASEMENT
4250
ENDORSED
1000 2600 2600 2600 420
03 06 09 12 15 17
5900
4900
1000
420 2600 2600 1250
WASTE
SERVICES
COLUMNS WITHIN BASEMENT PARKING AREA IN ACCORDANCE WITH DIAGRAM 1 OF CLAUSE 52.06-9
NORTH APARTMENT BASEMENT
AHD +31.10
PROVISION OF 450MM CONVEX MIRRORS AT THE 90 DEGREE BENDS
6400
14400
TREE 22 TPZ = 14.4M
1000 2600 2600 420
30
4900
1000
LINE OF ENDORSED BASEMENT
21950
ENDORSED
23498
PROPOSED
ENCROACHMENT:
3m² / 650m² = 0.46%
Existing Chain & Wire Mesh Fence 2.0m High
Gate
7°38'20"
30.74
P.O.S
Paling Fence 2.0m High
1000
20 23 25
4900
LOBBY
WASTE
1000 2600 2600
27
6400
4900
1000
33
VISITOR PARKING
120 123 126 129 132
1000 2600 2600 2600
AHD +29.20
1:20 RAMP UP
6400
6150
37950
PROVISION OF 450MM CONVEX MIRRORS AT THE 90 DEGREE BENDS
AHD +31.10
6400
1000
4900
500
36 42 48
39 45 51
420 2600 2600 2600 1000
132 SPACES
INC 18 TANDEM
COLUMNS WITHIN BASEMENT AREA TO BE IN ACCORDANCE WITH DIAGRAM 1 OF CLAUSE 52.06-9
EAST APARTMENT BASEMENT
AHD +31.10
66 60 54
69 63 57
92.17
No 42
Two Storey
Brick & Render Unit
Iron Roof
Balcony
G.H.W/D
F.H.W
F.H.D
F.W
G.W
G.D
SPOUTING 37.32
LINE OF ENDORSED BASEMENT
9350
PROPOSED
117 114 111
VISITOR PARKING
4900
108
420 2600 2600 2600 2420
PROVISION OF 450MM CONVEX MIRRORS AT THE 90 DEGREE BENDS
SIGNAGE
REFUSE
SERVICE
POOL OVER
1000
4900
72
7700
3355
4500
1186
LOADING BAY
POOL PLANT
STORE
75
2600
2600
2600
1649
2200mm HEIGHT CLEARANCE LOW CEILING ZONE
RESIDENCE WORKSHOP
CHEM
SERVICE
AHD +29.20
LOBBY
STORE
AHD +29.20
6400

01 TP_APT NORTH_GA PLAN_LEVEL B1
SCALE 1 : 100 @B1

V/A ARCHITECTS viaarchitects.com.au / +61 3 8678 3300

RYMAN HEALTHCARE LTD

NORTH

LEGEND

- LINE OF ENDORSED BUILDING / BALCONY / TERRACE
- OULINE OF BUILDING ABOVE
- SET BACK DIMENSION (ENDORSED)
- SET BACK DIMENSION (PROPOSED)

TP AMENDMENT & ENDORSEMENT

PROJECT	DATE	DRAWING TITLE	DRAWING No.	REV
HIGHETT COMPREHENSIVE AGED CARE AND RETIREMENT VILLAGE	07/11/2019	NORTH BUILDING BASEMENT PLAN	TP302	C

RIDGE 40.99
G.W
G.H.W
G.H.W
G.H.W
P.O.S
SPOUTING 39.27
F.H.W
F.H.W
Balcony
G.H.W
G.H.W
SPOUTING 39.21
P.O.S
Galv~ Iron Shed
G.H.W
Garage
G.D
SPOUTING 39.92
Garage
G.D
RIDGE 40.94
G.H.W
G.H.W
SPOUTING 39.93
P.O.S
G.W
G.W/D
Covered Area
SPOUTING 39.63
P.O.S
Brick Garage
97°38'20"
85.95
6000
ENDORSED
7500
PROPOSED
LINE OF ENDORSED BALCONY/DECK
6790
PROPOSED
EASEMENT OUTLINE
TERRACE
51 m²
TERRACE
42 m²
TERRACE
29 m²
TERRACE
29 m²
TERRACE
29 m²
5450
PROPOSED
4550
ENDORSED
APT.
G71
TYPE A
86 m²
APT.
G73
TYPE A
86 m²
APT.
G75
TYPE A
86 m²
APT.
G77
TYPE A
86 m²
APT.
G79
TYPE B1
113 m²
P.O.S
14400
TREE 22 TPZ = 14.4M
COMMUNAL OPEN SPACE
Gate
97°38'20"
30.74
CORRIDOR
CORRIDOR
TERRACE
44 m²
ELEC.
NBN
METER
LIFT LOBBY
AHD +34.80
WASTE
APT.
G72
TYPE A
86 m²
APT.
G74
TYPE A
86 m²
APT.
G76
TYPE A
86 m²
APT.
G78
TYPE B1
112 m²
P.O.S
G.H.W/D
G.H.W
Balcony
F.H.W
No 42
Two Storey
Brick & Render Unit
Iron Roof
F.H.D
F.H.W
F.W
G.W
F.H.W
G.D
F.H.W
F.H.W
G.H.W
G.H.W/D
CANOPY OVER
TERRACE
36 m²
TERRACE
20 m²
TERRACE
20 m²
COMMUNITY GARDEN
GREEN WASTE
LINE OF ENDORSED BLDG. ENVELOPE
PLANTER
SPOUTING 39.33
13125
PROPOSED
CANOPY OVER
12865
PROPOSED
17923
PROPOSED
12800
ENDORSED
PLANTER
12150
ENDORSED
PLANTER
13850
ENDORSED
PEDESTRIAN LINK
LINE OF CANOPY OVER
DINING OUTDOOR SPILL
CANOPY OVER
GYM
59 m²
APT.
G51
TYPE A
86 m²
AHD +34.30
APT.
G61
TYPE A
86 m²
AHD +34.60
APT.
G62
TYPE B
110 m²
AHD +34.60
AIR LOCK
DINING
POOL
147 m²
AHD +33.80
TERRACE
24 m²
TERRACE
23 m²
TERRACE
16 m²
TERRACE
25 m²
92.17
CONCIERGE
SERV.
BAR SEATING
BAR SEATING OUTDOOR SPILL
APT. G63
TYPE C

1 TP_APT NORTH_GA PLAN_LEVEL 00 GROUND
SCALE 1 : 100 @B1

LEGEND

- LINE OF ENDORSED BUILDING / BALCONY / TERRACE
- OULINE OF BUILDING ABOVE
- SET BACK — SET BACK DIMENSION (ENDORSED)
- SET BACK — SET BACK DIMENSION (PROPOSED)

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RYMAN HEALTHCARE LTD

NORTH

TP AMENDMENT & ENDORSEMENT

PROJECT	DATE	DRAWING TITLE	DRAWING No.	REV
HIGHETT COMPREHENSIVE AGED CARE AND RETIREMENT VILLAGE	07/11/2019	NORTH BUILDING GROUND FLOOR PLAN	TP303	D

RIDGE 40.99
G.W
G.H.W
G.H.W
G.H.W
SPOUTING 39.27
P.O.S
Balcony
F.H.W
F.H.W
G.H.W
G.H.W
SPOUTING 39.21
P.O.S
Galv- Iron Shed
P.O.S
G.H.W
Garage
G.D
SPOUTING 39.92
Garage
RIDGE 40.94
G.H.W
G.D
SPOUTING 39.93
G.H.W
P.O.S
Covered Area
G.W
G.W/D
SPOUTING 39.63
P.O.S
Brick Garage
97°38'20"
85.95
7°38'20"
30.74
P.O.S
P.O.S
No 42
Two Storey
Brick & Render Unit
Iron Roof
G.H.W/D
Balcony
G.H.W
F.H.W
F.H.D
F.H.W
F.W
G.W
G.D
F.H.W
F.H.W
G.H.W
G.H.W/D
SPOUTING 37.32
1.7M HIGH FIXED PRIVACY SCREEN
6000 ENDORSED
7500 PROPOSED
1.7M HIGH FIXED PRIVACY SCREEN
6000 ENDORSED
7500 PROPOSED
8000 ENDORSED
1.7M HIGH FIXED PRIVACY SCREEN
6790 PROPOSED
4520 ENDORSED
4600 ENDORSED
1.7M HIGH FIXED PRIVACY SCREEN
BALCONY 37 m²
BALCONY 20 m²
BALCONY 24 m²
BALCONY 24 m²
BALCONY 8 m²
BALCONY 23 m²
APT. 171 TYPE A 86 m²
APT. 173 TYPE A 86 m²
APT. 175 TYPE A 86 m²
APT. 177 TYPE A 86 m²
APT. 179 TYPE B1 113 m²
21600 ENDORSED
22500 ENDORSED
24050 ENDORSED
5450 ENDORSED
BALCONY 5 m²
BALCONY 5 m²
APPROVED BUILDING ENVELOPE
1.7M HIGH FIXED PRIVACY SCREEN
APT. 172 TYPE A 86 m²
APT. 174 TYPE A 86 m²
ELEC.
NBN
METER
CORRIDOR
AHD +38.00
WASTE
APT. 176 TYPE A 86 m²
APT. 178 TYPE B1 112 m²
5450 ENDORSED
BALCONY 31 m²
BALCONY 16 m²
CANOPY BELOW
BALCONY 16 m²
BALCONY 10 m²
BALCONY 19 m²
Gate
APPROVED BUILDING ENVELOPE
APPROVED BUILDING ENVELOPE
11865 PROPOSED
14365 PROPOSED
13215 PROPOSED
13645 PROPOSED
12865 PROPOSED
10550 ENDORSED
13100 ENDORSED
10950 ENDORSED
13450 ENDORSED
14250 ENDORSED
15450 ENDORSED
9600 ENDORSED
10315 PROPOSED
CANOPY BELOW
CANOPY BELOW
BEDROOM TYP2
BEDROOM TYP2
BEDROOM TYP2
3350
1800
BEDROOM TYP3
12050 ENDORSED
14545 PROPOSED
SUB
RISER
LAUNDRY LINEN
BALCONY 37 m²
APT. 151 TYPE A 86 m²
APT. 152 TYPE B 110 m²
BALCONY 25 m²
BALCONY 16 m²
APT. 68 m²
APT. 161 TYPE A 86 m²
APT. 162 TYPE B 110 m²
BALCONY 37 m²
BALCONY 25 m²
BALCONY 16 m²
APT. 68 m²
92.17

1 TP_APT NORTH_GA PLAN_LEVEL 01
SCALE 1 : 100 @B1

LEGEND

- LINE OF ENDORSED BUILDING / BALCONY / TERRACE
- OULINE OF BUILDING ABOVE
- SET BACK — SET BACK DIMENSION (ENDORSED)
- SET BACK — SET BACK DIMENSION (PROPOSED)

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RYMAN HEALTHCARE LTD

NORTH

TP AMENDMENT & ENDORSEMENT

PROJECT	DATE	DRAWING TITLE	DRAWING No.	REV
HIGHETT COMPREHENSIVE AGED CARE AND RETIREMENT VILLAGE	07/11/2019	NORTH BUILDING 1ST FLOOR PLAN	TP304	D

RIDGE 41.84
RIDGE 40.99
G.W
G.H.W G.H.W G.H.W
SPOUTING 39.27
P.O.S

F.H.W F.H.W
G.H.W G.H.W
G/F.H.W/D
Balcony
Frosted Privacy Screen
SPOUTING 39.21
P.O.S

Galv~ Iron Shed
Fibro Shed
Galv~ Iron Shed

G.W
G.H.W
No 7/6
Single Storey
Brick Unit
Tile Roof
G.H.W
G.D
SPOUTING 39.92
Garage
Garage
RIDGE 40.94
G.H.W
G.D
SPOUTING 39.93
G.H.W
P.O.S

RIDGE 40.80
Approximate Positions
G.W G.W/D
SPOUTING 39.63
Covered Area
P.O.S
Brick Garage

97°38'20"
85.95
7°38'20"
30.74
92.17

1.7M HIGH FIXED PRIVACY SCREEN
6000 ENDORSED
7500 PROPOSED
8000 ENDORSED
6790 PROPOSED
4520 ENDORSED
5450 ENDORSED
21600 ENDORSED
22500 ENDORSED
24050 ENDORSED
Gate
APPROVED BUILDING ENVELOPE

BALCONY 37 m²
BALCONY 20 m²
BALCONY 24 m²
BALCONY 24 m²
BALCONY 8 m²
BALCONY 23 m²
BALCONY 5 m²
BALCONY 5 m²
BALCONY 31 m²
BALCONY 16 m²
BALCONY 16 m²
BALCONY 10 m²
BALCONY 19 m²

APT. 271 TYPE A 86 m²
APT. 273 TYPE A 86 m²
APT. 275 TYPE A 86 m²
APT. 277 TYPE A 86 m²
APT. 278 TYPE B1 113 m²
APT. 272 TYPE A 86 m²
APT. 274 TYPE A 86 m²
APT. 276 TYPE A 86 m²
APT. 279 TYPE B1 112 m²

CORRIDOR
AHD +41.20
ELEC.
NBN
METER

P.O.S

G.H.W/D Balcony G.H.W
F.H.W
No 42
Two Storey
Brick & Render Unit
Iron Roof
F.H.D F.H.W F.H.W F.W C.W G.D
F.H.W F.H.W G.H.W G.H.W/D
SPOUTING 37.32

9650 ENDORSED
10315 PROPOSED
10550 ENDORSED
11865 PROPOSED
13100 ENDORSED
14365 PROPOSED
10950 ENDORSED
13215 PROPOSED
13450 ENDORSED
13645 PROPOSED
14250 ENDORSED
12865 PROPOSED

BEDROOM TYP2
BEDROOM TYP2
BEDROOM TYP2
AGED CARE FACILITY 13 ALS
AHD +39.80

BALCONY 37 m²
APT. 251 TYPE A 86 m²
APT. 252 TYPE B 110 m²
BALCONY 25 m²
BALCONY 16 m²

BALCONY 37 m²
APT. 261 TYPE A 86 m²
APT. 262 TYPE B 110 m²
BALCONY 25 m²
BALCONY 16 m²

1 TP_APT NORTH_GA PLAN_LEVEL 02
SCALE 1 : 100 @B1

LEGEND

- LINE OF ENDORSED BUILDING / BALCONY / TERRACE
- OULINE OF BUILDING ABOVE
- SET BACK — SET BACK DIMENSION (ENDORSED)
- SET BACK — SET BACK DIMENSION (PROPOSED)

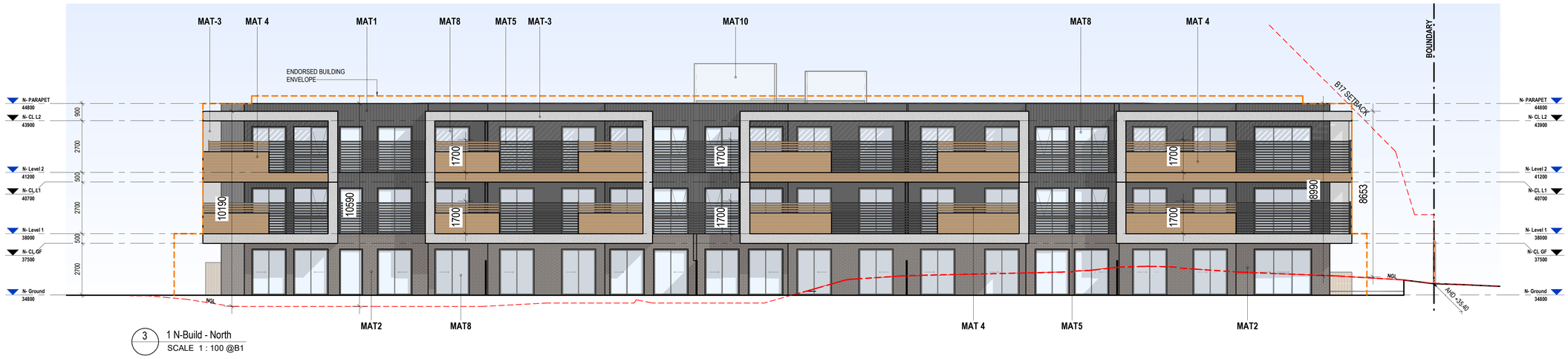
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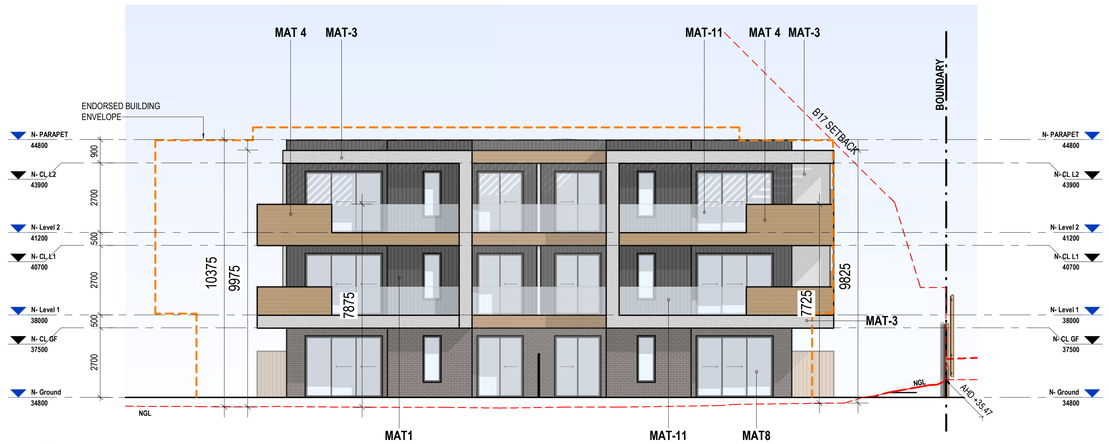
NORTH

TP AMENDMENT & ENDORSEMENT

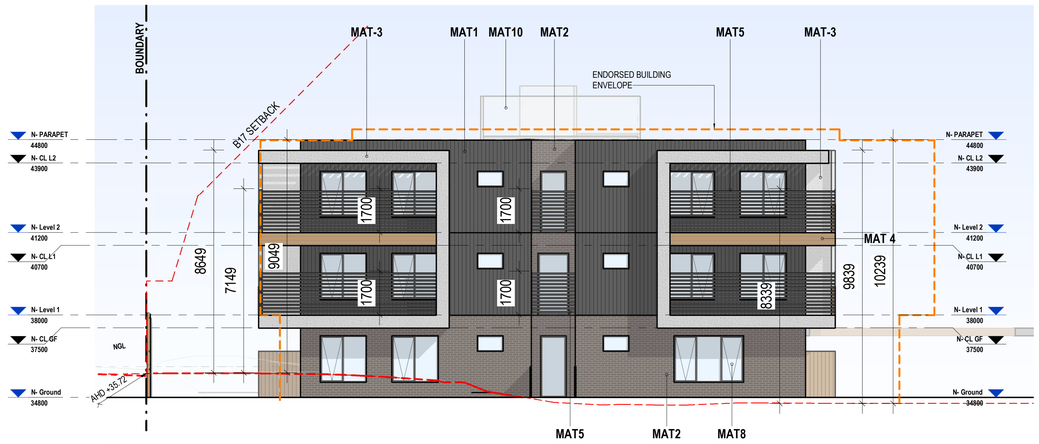
PROJECT	DATE	DRAWING TITLE	DRAWING No.	REV
HIGHETT COMPREHENSIVE AGED CARE AND RETIREMENT VILLAGE	07/11/2019	NORTH BUILDING 2ND FLOOR PLAN	TP305	D



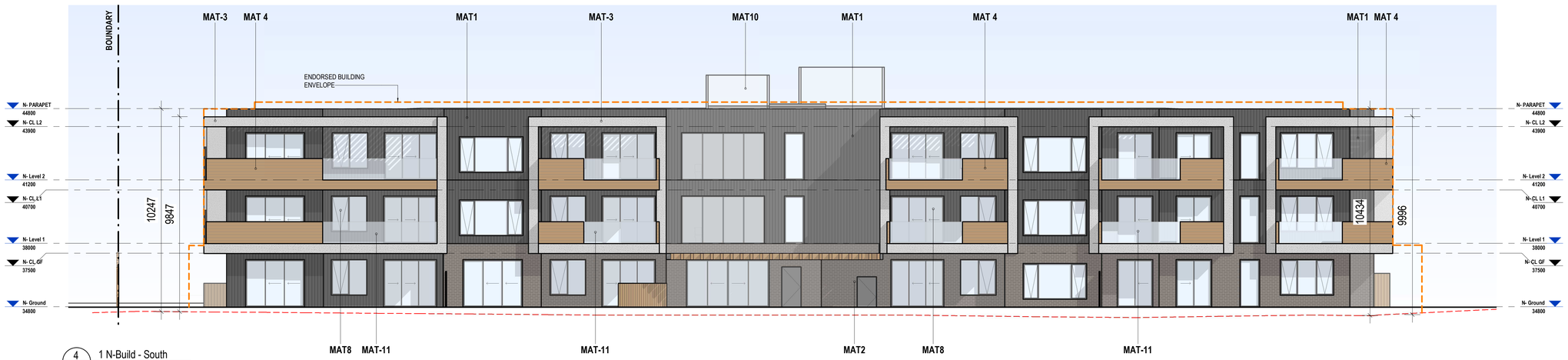
3 1 N-Build - North
SCALE 1 : 100 @B1



1 1 N-Build - East
SCALE 1 : 100 @B1



2 1 N-Build - West
SCALE 1 : 100 @B1



4 1 N-Build - South
SCALE 1 : 100 @B1

EXTERNAL MATERIALS LEGEND

MAT1	ALUMINIUM CLADDING STANDING SEAM CHARCOAL
MAT2	DARK FACE BRICK
MAT3	NATURAL CONCRETE RENDER
MAT4	TIMBER LOOK CLADDING
MAT5	ALUMINIUM PANEL CLADDING - SATIN BLACK
MAT6	ALUMINIUM PANEL CLADDING - SATIN WHITE
MAT7	RAW CONCRETE FINISH
MAT8	LOW-E GLASS
MAT9	DARK CONCRETE RENDER
MAT10	PLANT PLATFORM SCREEN
MAT11	CLEAR GLASS BALUSTRADE

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TP AMENDMENT & ENDORSEMENT

PROJECT: HIGHETT COMPREHENSIVE AGED CARE AND RETIREMENT VILLAGE
DATE: 07/11/2019
DRAWING TITLE: NORTH BUILDING ELEVATIONS
DRAWING No.: TP306
REV: I

117
114
111
108
VISITOR PARKING
VISITOR PARKING
AHD +31.10
132 SPACES
INC 18 TANDEM
COLUMNS WITHIN BASEMENT AREA TO BE IN ACCORDANCE WITH DIAGRAM 1 OF CLAUSE 52.06-9
EAST APARTMENT BASEMENT
AHD +31.10
PROVISION OF 450MM CONVEX MIRRORS AT THE 90 DEGREE BENDS
SIGNAGE
REFUSE
99 m²
SERVICE
POOL OVER
72
2200mm HEIGHT CLEARANCE LOW CEILING ZONE
7700
RESIDENCE WORKSHOP
53 m²
CHEM
8 m²
SERVICE
19 m²
AHD +29.20
LOBBY
23 m²
AHD +29.20
6400
STORE
16 m²
5400
POOL PLANT
STORE
75
LOADING BAY
LOBBY
WASTE
101
102
105
1019
2600
420
2600
1425
CENTRAL APARTMENT BASEMENT
AHD +31.10
PROVISION OF 450MM CONVEX MIRRORS AT THE 90 DEGREE BENDS
COLUMNS WITHIN BASEMENT PARKING AREA IN ACCORDANCE WITH DIAGRAM 1 OF CLAUSE 52.06-9
LOBBY
WASTE
UP
78
EAST APARTMENT BASEMENT
AHD +31.10
39
45
51
66
60
54
69
63
57
100
99
96
93
90
87
84
81
4265
PROPOSED
4100
ENDORSED
TURNING
SHARE AREA
DDA
DDA
10
11
17
14
03
06
09
27
24
48 SPACES INC 2 DDA
+ 2 VILLAGE VAN
COLUMNS WITHIN THE BASEMENT PARKING AREA IN ACCORDANCE WITH DIAGRAM 1 OF CLAUSE 52.06-9
SERVICE
30 m²
5322
PROPOSED
7600
ENDORSED
16925
PROPOSED
7600
ENDORSED
LINE OF ENDORSED BASEMENT
16925
PROPOSED
5350
PROPOSED
5600
ENDORSED
E-1 1.83m Wide Drainage & Sewerage Easement
2950
ENDORSED
E-1 1.83m Wide Drainage & Sewerage Easement
3150
ENDORSED

1 TP_APT CENTRAL&EAST_GA PLAN_LEVEL B1
SCALE 1 : 100 @B1

LEGEND

- LINE OF ENDORSED BUILDING / BALCONY / TERRACE
- OULINE OF BUILDING ABOVE
- SET BACK DIMENSION (ENDORSED)
- SET BACK DIMENSION (PROPOSED)

V/A ARCHITECTS viaarchitects.com.au / +61 3 8678 3300

RYMAN HEALTHCARE LTD

NORTH

TP AMENDMENT & ENDORSEMENT

PROJECT	DATE	DRAWING TITLE	DRAWING No.	REV
HIGHETT COMPREHENSIVE AGED CARE AND RETIREMENT VILLAGE	07/11/2019	CENTRAL + EAST BUILDING BASEMENT FLOOR	TP402	C

CANOPY OVER
CANOPY OVER
PEDESTRIAN LINK
GATE TO RESERVE ON AUTOMATIC TIMBER TO BE OPEN DURING DAYLIGHT HOURS AND LOCKED DURING THE NIGHT
WALK WAY TO CONNECT TO EXISTING CARPARK DESIGN AND SPECIFICATION TO COUNCIL SATISFACTION
DINING OUTDOOR SPILL
DINING
BAR
BAR SEATING
BAR SEATING OUTDOOR SPILL
LOUNGE OUTDOOR SPILL
LOUNGE
ACTIVITY
ACTIVITY OUTDOOR SPILL
INTERNAL FENCES TO COMPLY WITH AS2890.1:2004 TO ALLOW FOR SIGNTLINES
GYM 59 m²
POOL 147 m² AHD +33.80
AHD +33.80
CHANGE 16 m²
CHANGE 16 m²
1:14
1:14
CANOPY OVER
CANOPY OVER
CANOPY OVER
LANDSCAPE 477 m²
APT. G51 TYPE A 86 m²
TERRACE 24 m²
TERRACE 39 m²
APT. G52 TYPE C 68 m²
CORRIDOR AHD +34.30
APT. G53 TYPE A 85 m²
TERRACE 28 m²
TERRACE 53 m²
APT. G54 TYPE A 85 m²
TERRACE 22 m²
TERRACE 53 m²
APT. G55 TYPE A1 89 m²
APT. G56 TYPE A1 89 m²
LINE OF APPROVED BLDG. ENVELOPE
LINE OF APPROVED BALCONY/DECK
15550 PROPOSED
10500 ENDORSED
1:32
AHD +34.45
1:24
CANOPY OVER
LANDSCAPE
BASEMENT OUTLINE
10500 ENDORSED
12810 PROPOSED
APT. G61 TYPE A 86 m²
TERRACE 23 m²
TERRACE 16 m²
APT. G63 TYPE C 68 m²
UP
CORRIDOR AHD +34.60
TERRACE 23 m²
APT. G66 TYPE A 85 m²
TERRACE 53 m²
APT. G68 TYPE A1 89 m²
LINE OF APPROVED BLDG. ENVELOPE
APT. G62 TYPE B 110 m²
TERRACE 25 m²
TERRACE 24 m²
APT. G64 TYPE A 86 m²
APT. G65 TYPE A 86 m²
TERRACE 24 m²
TERRACE 53 m²
APT. G67 TYPE A1 89 m²
BASEMENT OUTLINE
LINE OF APPROVED BALCONY/DECK
6400 PROPOSED
5950 ENDORSED
6400 PROPOSED
5950 ENDORSED
1.7M BRICK PIER AND PLINTH WITH METAL INFILL FENCE
92.17
187°34'20"
5500 ENDORSED
E-1 1.83m Wide Drainage & Sewerage Easement
82.30
277°38'20"
5500 ENDORSED
7000 PROPOSED
5850 ENDORSED
E-1 1.83m Wide Drainage & Sewerage Easement
35.2

P.O.S P.O.S P.O.S P.O.S P.O.S P.O.S P.O.S P.O.S P.O.S P.O.S

PARAPET 36.35 F.H.D G.W
PARAPET 36.52 G.H.W/D G.H.W G.W
PARAPET 36.86 G.W G.H.W/D G.H.W/D G.W
PARAPET 36.86 G.W G.W G.H.W/D G.H.W/D
PARAPET 37.02

Balcony Balcony
G.H.W/D G.H.W/D
F.H.W/D

01 TP_APT CENTRAL&EAST_GA PLAN_LEVEL 00 GROUND
SCALE 1 : 100 @B1

V/A ARCHITECTS viaarchitects.com.au / +61 3 8678 3300

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LEGEND

- LINE OF ENDORSED BUILDING / BALCONY / TERRACE
- OULINE OF BUILDING ABOVE
- SET BACK — SET BACK DIMENSION (ENDORSED)
- SET BACK — SET BACK DIMENSION (PROPOSED)

TP AMENDMENT & ENDORSEMENT

PROJECT	DATE	DRAWING TITLE	DRAWING No.	REV
HIGHETT COMPREHENSIVE AGED CARE AND RETIREMENT VILLAGE	07/11/2019	CENTRAL + EAST BUILDING GROUND FLOOR PLAN	TP403	C

CANOPY BELOW

ROOF BELOW

LINE OF ENDORSED BALCONY

LINE OF ENDORSED BLDG. ENVELOPE

BEDROOM TYP2

1800

BEDROOM TYP3

BEDROOM TYP3

AHD +36.60

AGED CARE FACILITY 13 ALS

BEDROOM TYP3

BEDROOM TYP3

STO

12050 ENDORSED 14545 PROPOSED

12200 ENDORSED 14683 PROPOSED

10650 ENDORSED 13533 PROPOSED

CANOPY BELOW

CANOPY BELOW

APT. 151 TYPE A 86 m²

BALCONY 37 m²

APT. 152 TYPE B 110 m²

BALCONY 25 m²

BALCONY 16 m²

APT. 153 TYPE C 68 m²

BALCONY 17 m²

CORRIDOR 100-C 102 m²

APT. 154 TYPE A 86 m²

BALCONY 17 m²

APT. 155 TYPE A 86 m²

APT. 156 TYPE A 85 m²

BALCONY 26 m²

BALCONY 23 m²

APT. 158 TYPE A1 89 m²

APT. 157 TYPE A1 89 m²

15550 PROPOSED 14650 ENDORSED

10500 ENDORSED 12550 PROPOSED

CANOPY BELOW 13900 ENDORSED 14050 PROPOSED

14650 ENDORSED 14050 PROPOSED

10000 ENDORSED 10550 PROPOSED

13900 ENDORSED 12550 PROPOSED

APT. 161 TYPE A 86 m²

BALCONY 37 m²

APT. 162 TYPE B 110 m²

BALCONY 25 m²

BALCONY 16 m²

APT. 163 TYPE C 68 m²

BALCONY 17 m²

CORRIDOR AHD +37.80

APT. 164 TYPE A 86 m²

BALCONY 17 m²

APT. 165 TYPE A 86 m²

APT. 166 TYPE A 85 m²

BALCONY 26 m²

BALCONY 23 m²

APT. 168 TYPE A1 89 m²

APT. 167 TYPE A1 89 m²

7650 ENDORSED 6400 PROPOSED

5950 ENDORSED 6400 PROPOSED

8050 ENDORSED 7900 PROPOSED

7900 PROPOSED 7700 ENDORSED

LINE OF ENDORSED BLDG. ENVELOPE

LINE OF ENDORSED BALCONY

92.17

187°34'20"

1700mm HIGH FIXED PRIVACY SCREEN

1700mm HIGH FIXED PRIVACY SCREEN

1700mm HIGH FIXED PRIVACY SCREEN

1700mm HIGH FIXED PRIVACY SCREEN

6000 ENDORSED

7955 PROPOSED

7000 ENDORSED

7000 ENDORSED

82.30

277°38'20"

34.93

P.O.S

PARAPET 36.35 F.H.D G.W G.H.W/D

PARAPET 36.52 G.H.W G.W G.W G.H.W/D

PARAPET 36.86 G.H.W/D G.H.W/D G.W

PARAPET 36.86 G.W G.H.W/D

PARAPET 37.02 G.H.W/D

Balcony Balcony G.H.W/D G.H.W/D F.H.W/D

01 TP404 TP_APT CENTRAL&EAST_GA PLAN_LEVEL 01

1 : 100

NORTH

VIA ARCHITECTS viaarchitects.com.au / +61 3 8678 3300

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TP AMENDMENT & ENDORSEMENT

PROJECT	DATE	DRAWING TITLE	DRAWING No.	REV
HIGHETT COMPREHENSIVE AGED CARE AND RETIREMENT VILLAGE	07/11/2019	CENTRAL + EAST BUILDING 1ST FLOOR PLAN	TP404	C



01 TP_APT CENTRAL&EAST_GA PLAN_LEVEL 02
SCALE 1 : 100 @B1

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NORTH

TP AMENDMENT & ENDORSEMENT

PROJECT: HIGHETT COMPREHENSIVE AGED CARE AND RETIREMENT VILLAGE
DATE: 07/11/2019
DRAWING TITLE: CENTRAL + EAST BUILDING 2ND FLOOR PLAN
DRAWING No.: TP405
REV: C

BEDROOM TYP2
BEDROOM TYP3
BEDROOM TYP3
BEDROOM TYP3
14650 ENDORSED
15670 PROPOSED
14650 ENDORSED
15670 PROPOSED
12950 ENDORSED
14520 PROPOSED
3.00° FALL
16155 PROPOSED
16550 ENDORSED
6000 ENDORSED
7955 PROPOSED
82.30
277°38'20"
BALCONY 19 m²
APT. 351 TYPE A3 92 m²
APT. 352 TYPE B2 99 m²
BALCONY 45 m²
BALCONY 15 m²
APT. 353 TYPE C 68 m²
APT. 354 TYPE A4 83 m²
BALCONY 23 m²
BALCONY 7 m²
APT. 355 TYPE B2 99 m²
APT. 356 TYPE B3 104 m²
BALCONY 23 m²
BALCONY 22 m²
BALCONY 27 m²
3° FALL
14000 ENDORSED
17000 ENDORSED
14650 ENDORSED
14150 PROPOSED
14650 ENDORSED
14150 PROPOSED
10000 ENDORSED
10550 PROPOSED
BALCONY 19 m²
APT. 361 TYPE A3 92 m²
APT. 362 TYPE B2 99 m²
BALCONY 45 m²
BALCONY 15 m²
APT. 363 TYPE C 68 m²
APT. 364 TYPE A4 83 m²
BALCONY 23 m²
BALCONY 7 m²
APT. 365 TYPE B2 99 m²
APT. 366 TYPE B3 104 m²
BALCONY 23 m²
BALCONY 22 m²
BALCONY 28 m²
3° FALL
14000 ENDORSED
17000 ENDORSED
8000 ENDORSED
8000 PROPOSED
92.17
187°34'20"
34.93
P.O.S
PARAPET 36.35
F.H.D
G.W
G.H.W/D
PARAPET 36.52
G.H.W
PARAPET 36.86
PARAPET 37.02
Balcony
F.H.W/D

01 TP_APT CENTRAL&EAST_GA PLAN_LEVEL 03
SCALE 1 : 100 @B1

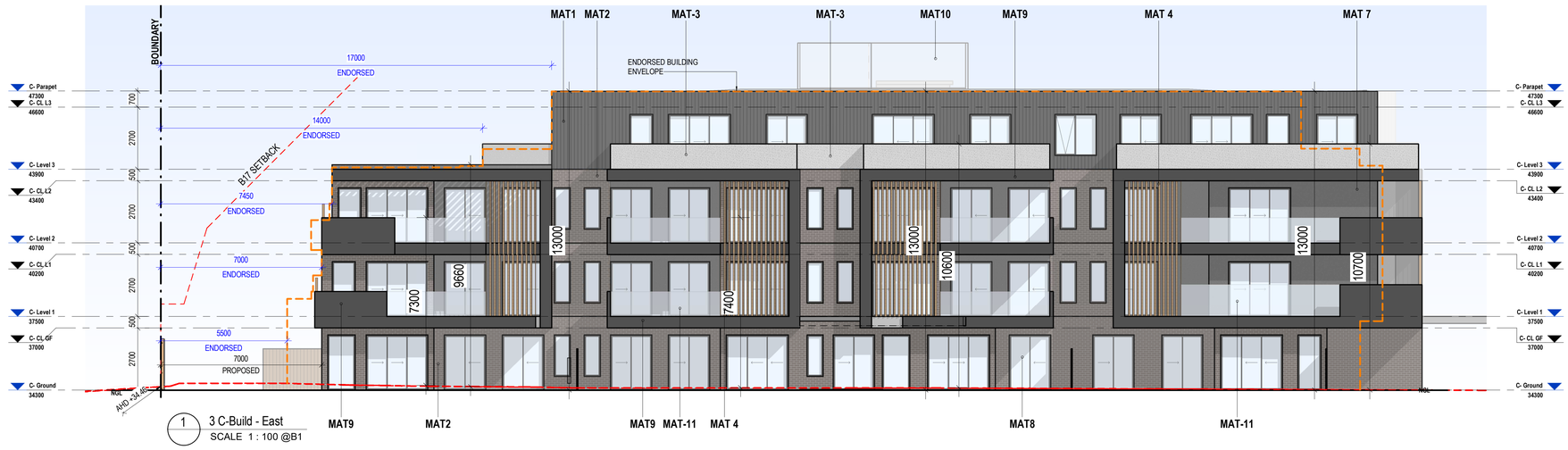
NORTH

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TP AMENDMENT & ENDORSEMENT

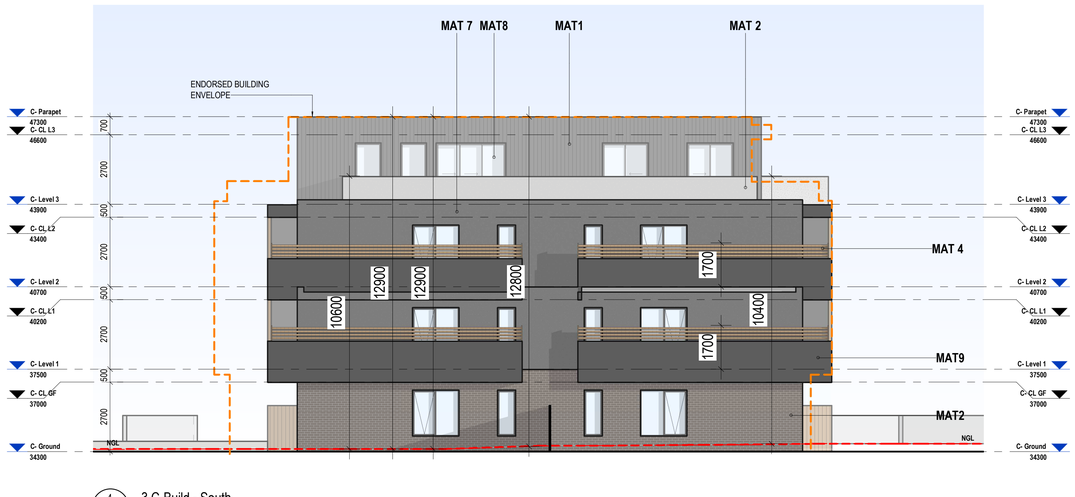
PROJECT	DATE	DRAWING TITLE	DRAWING No.	REV
HIGHETT COMPREHENSIVE AGED CARE AND RETIREMENT VILLAGE	07/11/2019	CENTRAL + EAST BUILDING 3RD FLOOR PLAN	TP406	C



1 3 C-Build - East
SCALE 1 : 100 @B1



3 TP407 3 C-Build - North
1 : 100



4 TP407 3 C-Build - South
1 : 100



2 TP407 3 C-Build - West
1 : 100

EXTERNAL MATERIALS LEGEND

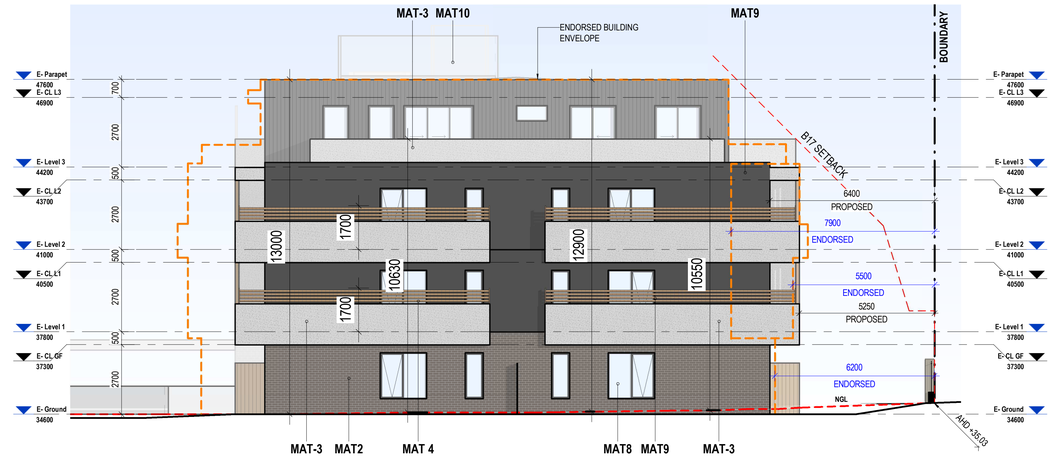
MAT1	ALUMINIUM CLADDING STANDING SEAM CHARCOAL
MAT2	DARK FACE BRICK
MAT3	NATURAL CONCRETE RENDER
MAT4	TIMBER LOOK CLADDING
MAT5	ALUMINIUM PANEL CLADDING - SATIN BLACK
MAT6	ALUMINIUM PANEL CLADDING - SATIN WHITE
MAT7	RAW CONCRETE FINISH
MAT8	LOW-E GLASS
MAT9	DARK CONCRETE RENDER
MAT10	PLANT PLATFORM SCREEN
MAT11	CLEAR GLASS BALUSTRADE



1 TP408 2 E-Build - East
1 : 100



2 TP408 2 E-Build - North
1 : 100



3 TP408 2 E-Build - South
1 : 100



4 TP408 2 E-Build - West
1 : 100

EXTERNAL MATERIALS LEGEND

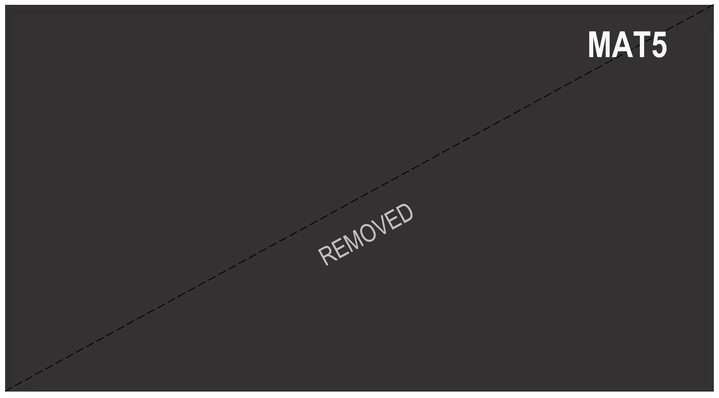
MAT1	ALUMINIUM CLADDING STANDING SEAM CHARCOAL
MAT2	DARK FACE BRICK
MAT3	NATURAL CONCRETE RENDER
MAT4	TIMBER LOOK CLADDING
MAT5	ALUMINIUM PANEL CLADDING - SATIN BLACK
MAT6	ALUMINIUM PANEL CLADDING - SATIN WHITE
MAT7	RAW CONCRETE FINISH
MAT8	LOW-E GLASS
MAT9	DARK CONCRETE RENDER
MAT10	PLANT PLATFORM SCREEN
MAT11	CLEAR GLASS BALUSTRADE

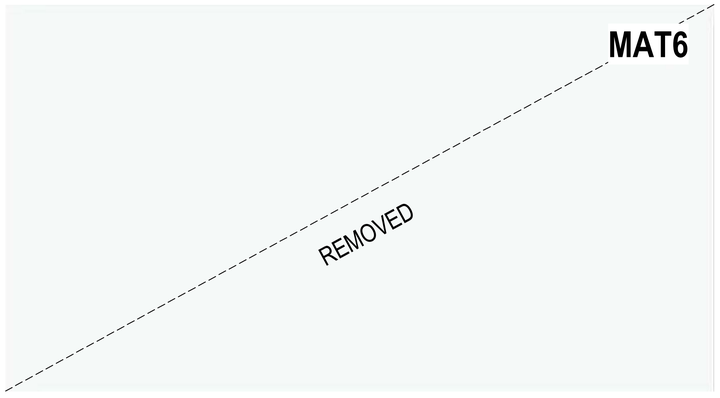




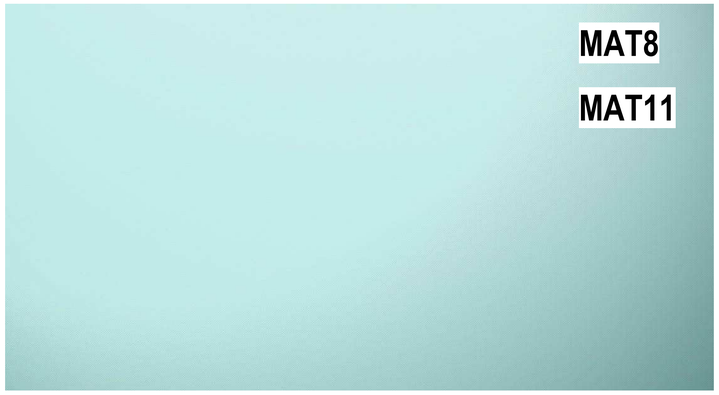




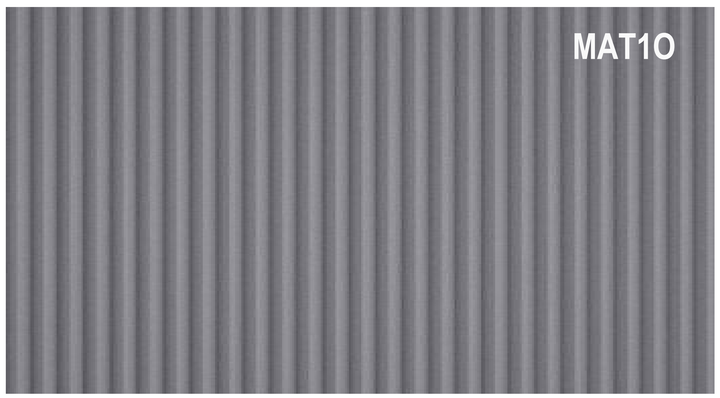












MAT1 ALUMINIUM STANDING SEAM CLADDING CHARCOAL
MAT2 DARK FACE BRICK
MAT3 NATURAL CONCRETE RENDER
MAT4 TIMBER LOOK CLADDING
~~MAT5 ALUMINIUM PANEL CLADDING - SATIN BLACK~~
~~MAT6 ALUMINIUM PANEL CLADDING - SATIN WHITE~~
MAT7 RAW CONCRETE FINISH
MAT8 LOW-E GLASS
MAT9 DARK CONCRETE RENDER
MAT10 PLANT PLATFORM SCREEN
MAT11 CLEAR GLASS BALUSTRADE

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TP AMENDMENT & ENDORSEMENT

PROJECT: HIGHETT COMPREHENSIVE AGED CARE AND RETIREMENT VILLAGE
DATE: 07/11/2019
DRAWING TITLE: MATERIAL SCHEDULE
DRAWING No.: TP002
REV: E

Attachment C
GQRUZ Map

36-40 Graham Road, Highett, Victoria

Groundwater zone with restricted uses

HIGHETT

This zone has been cleaned up to the relevant environmental standards (section 53X environmental audit) but is still subject to restricted groundwater uses.

Environmental audit site

36 - 40 GRAHAM RD HIGHETT VIC 3190

Restrictions on use

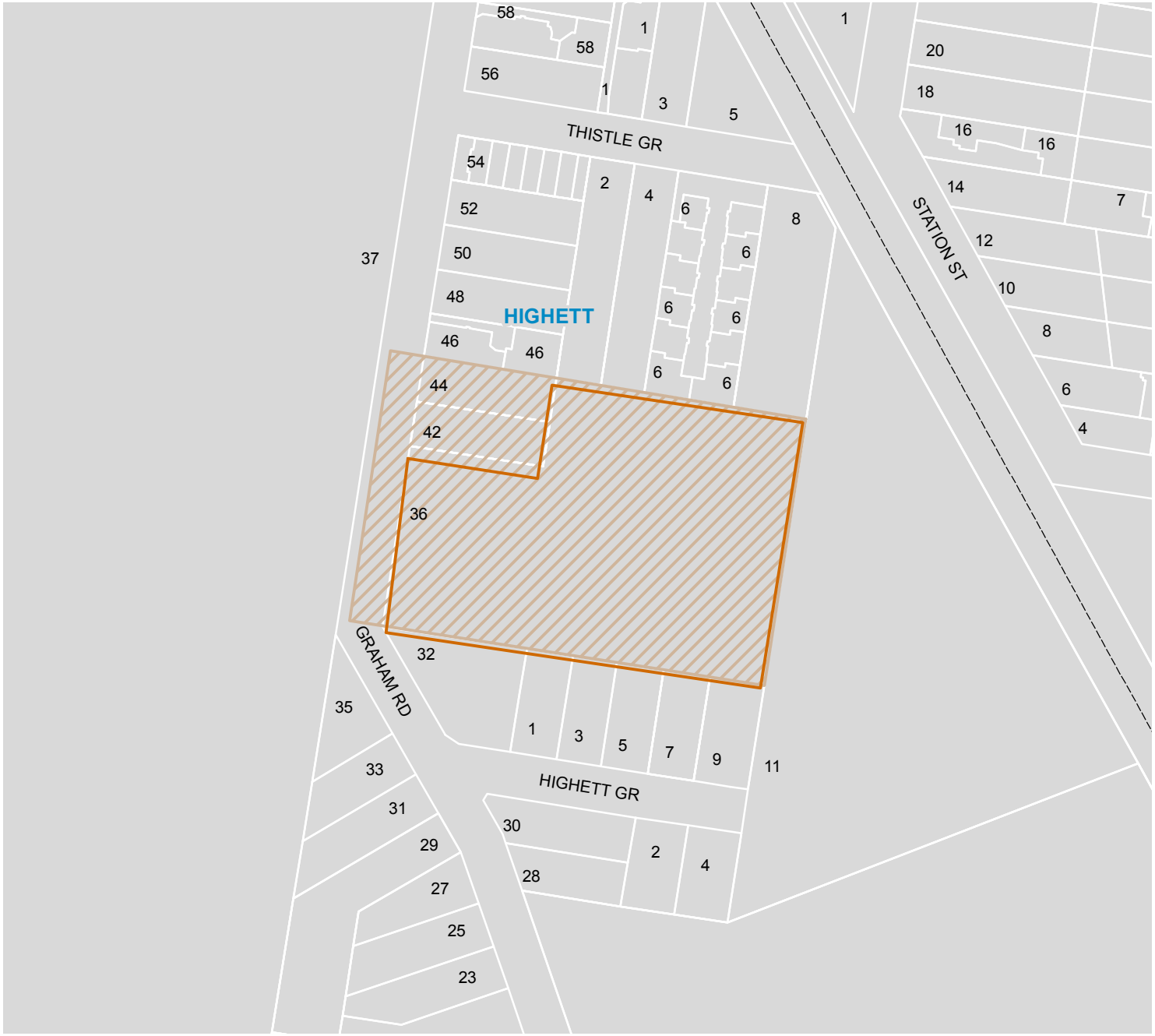
Drinking water
Livestock water supply
Irrigation of crops (including domestic gardens) and parks
Water used for recreational purposes (e.g. swimming)
Water used for industrial purposes

Site history

Manufacturing - general

Legend

- Environmental audit site
- Groundwater zone with restricted uses
- Properties
- 452 Unit/house/building number
- Primary road



VICTORIA State Government | EPA VICTORIA

For more information contact 1300 EPA VIC

Disclaimer: The map represents an approximate estimation of an area where groundwater quality has been impacted by human activities. It does not provide information on the naturally occurring quality of groundwater, which can also have restrictions on its use. The environmental audit boundary and groundwater zone are based on land parcel boundaries at the time of mapping. Subsequent changes to land parcel boundaries do not change the location of the zone.

N

0 25 50 Metres

EPA CARMS ID: 75573-1
EPA IBIS ID: 7001982
Map generated on: 12 Nov 2019

This map may also contain data from: Vicmap