Integral Environmental Solutions Pty Ltd
P.O. Box 1045
Hunters Hill, NSW 2110

ABN 88 468 741 351

Mobile 0402 497 287

Web www.i-e-s.com.au

Email John@i-e-s.com.au

ENVIRONMENTAL ENGINEERING,
GEO-TECHNICAL & GROUNDWATER SOLUTIONS

Detailed Environmental Site Assessment (DESA) & Salinity Assessment

Sydney Street, Grantham Farm NSW 2765 (Lots 36-44/17/DP1480)

PREPARED FOR

Zuela Pty Ltd
Attention: Oscar Valenzuela
43A Alexander Street,
Smithfield, NSW 2164
Australia

Phone 0416 377 308

PROJECT NUMBER: I-E-S 1334-18, Initial
DATE: 9th January 2024

DOCUMENT CONTROL

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Author	Revision Number	Date	Description	Recipient	Deliverable
John G. Pohl	Initial Release	20/12/2023	Detailed Environmental Site Assessment (DESA) & Salinity Assessment - Sydney Street, Grantham Farm NSW 2765 (Lots 36-44/17/DP1480)	Oscar Valenzuela	1 e copy (pdf)
John G. Pohl	Final Release	09/01/2024	Detailed Environmental Site Assessment (DESA) & Salinity Assessment - Sydney Street, Grantham Farm NSW 2765 (Lots 36-44/17/DP1480)	Oscar Valenzuela	1 e copy (pdf)

ISSUED BY

Integral Environmental Solutions Pty Limited

ABN 11 153 120 962

Executive Summary

Zuela Pty Ltd commissioned *Integral Environmental Solutions Pty Limited (IES)* to carry out coring, sampling, testing and reporting and to develop a *Detailed Environmental Site Assessment* (DESA) for Areas of Environmental Concern (AECs) at Sydney Street, Grantham Farm NSW 2765 (Lots 36-44/17/DP1480) (the site)*, a 5208.01m^2* vegetated land *site*.

This *Detailed Environmental Site Assessment* report included sampling *twelve (12) locations, with fifteen (15) samples collected* for this *site*. Analytical results indicate no exceedance of the NEPM Health and Ecological Assessment Criteria for Residential (A) sites. *S*oil salinity based on *Electrical Conductivity* for the *site* is classified as *Non-Saline* per Salinity Code of Practice – Western Sydney Regional Organisation of Councils Ltd – 2002

The site is suitable for subdivision and residential use as the final outcome of the soil testing show that contaminant concentrations based on the sample analytical results of soil are below *threshold concentrations* for the NEPM Site Assessment Criteria.

The consent authority may be satisfied that the required considerations of Cl 4.6 of State Environmental Planning Policy (Resilience and Hazards) 2021are satisfied for the following reasons:

1) Site observations did not indicate significant visible indications of contamination or contaminating sources;
2) Soils are considered Non-Saline;
2) Analytical results for all analytes were below the NEPM 2013 Health and Ecological Assessment Criteria for Residential (A) sites.

IES considers that the potential for significant contamination of soil to be low and find that the site is suitable for the proposed land use, provided the Recommendations within this report are undertaken.

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1.0 Scope of Work of Detailed Environmental Site Assessment (DESA) for Area's of Environmental Concern (AEC's) - Sydney Street, Grantham Farm NSW 2765 (Lots 36-44/17/DP1480)

To achieve the objectives of *Detailed Environmental Site Assessment (DESA) Report* for the *site,* the following scope of works has been developed:

- Development and implementation of a *Sampling, Analytical and Quality Plan* (*SAQP*) for the *Investigation Area*;
- Submittal of *Dial Before You Dig* request a referral service for locating underground utilities at the *Site;*
- Conduct a environmental investigation, via drilling of boreholes, at twelve (*12)* targeted locations with fifteen (15) samples collected across the *Investigation Area*;
- Submission of selected soil samples, for *Contaminants of Potential Concern* (COPC), to a *NATA*[1] accredited laboratory for analysis;
- Analysis of the field and laboratory data;
- Assessment of the results of the investigation to determine *site* suitability with respect to the local environment; and
- Preparation of *Detailed Environmental Site Assessment (DESA) Report* in accordance with the requirements of relevant guidelines.

Detailed Environmental Site Assessment (DESA)

The objectives of proposed *for Detailed Environmental Site Assessment (DESA) Report* will be met as follows:

Collect the minimum number of subsurface soil samples specified in *NSW EPA, Contaminated Land Guidelines, Sampling Design Part 1 – Application, 2022)* to support the development this report.

Subsurface soil sampling and laboratory analysis of *fifteen (15)* soil samples from across the site.

Conduct sub surface soil sampling[2]. Soil samples were collected for analysis of typical contaminants and parameters associated with undeveloped vegetated land sites with proposed use as residential subdivisions.

The proposed development for the site is the subdivision of the nine (9) residential lots to seventeen (17) residential lots.

1.1 Identification of the Area Being Considered

The identification of the area being considered was undeveloped vegetated land at the *site*.

[1] National Association of Testing Authorities (NATA)

[2] Soil / Groundwater Testing and reporting comply with the following:
National Association of Testing Authorities (NATA) is Australia's national laboratory accreditation authority (ISO–17025). .
NSW EPA *Guideline for Consultants Reporting on Contaminated Sites*
"*Minimum Construction Requirements for Water Bores in Australia*", ARMCANZ (1997)

1.2 Sampling Considered: Soil

Soil is the medium considered for contaminant sampling. A *Sample Register* for the soil samples can be viewed in *Table 1 - Sample Register, Sydney Street, Grantham Farm NSW 2765 (Lots 36-44/17/DP1480).*

1.3 Actions Undertaken

- A site inspection to identify potential sources of contamination on site;
    - A safety perimeter around work site with barricades and safety mesh and display appropriate signage;
    - Inspection of work area to access any risks that may be encountered and complete a *Job Safety Analysis* (JSA) covering any control methods to be taken.
- Sampling of soil on the site;
    - The following equipment was utilised on site: *one (1)* utility vehicle, and *one (1)* drill rig;
    - Maintenance checks were carried out on all equipment. The checks included: maintenance records, visual inspection and review log book, prior to commencement of works.
- Chemical analysis of soil with a NATA accredited laboratory;
- Historical investigations relating to the site (if any);
- Review of current and historical Certificates of Title;
- Local Council records and planning certificates;
- Dial-Before-You-Dig enquiry for an evaluation into local underground services and assets;
- Review of local geological and hydrogeological information, including an evaluation of the NSW Groundwater registered groundwater bore database;
- Review of Acid Sulfate Soil data maps;
- Development of a Conceptual Site Model (CSM) to identify the connections between potential sources of contamination and exposure pathways, human and/or ecological receptors; and
- Recommendations for additional investigations (if any), based on the identified data gaps and findings of this DESA.

2.0 Site Identification

2.1 Site Location

The vacant vegetated *site*, located at Sydney Street, Grantham Farm NSW 2765 (Lots 36-44/17/DP1480) (referred to as *the site*).

2.2 Lot Number and Deposited Plan

Summary of property, lot number and deposited plan as follows: Lots 36, 37, 38, 39, 40, 41, 42, 43 and 44/17/DP1480

Classification: undeveloped vegetated land.

2.3 Geographic Coordinates

The geographic coordinates of *site* are as follows:

Latitude for the *site* is 33.663397

Longitude for the *site* is 150.872744

2.4 Locality Map

See Figure 1 - Locality Map.

2.5 Current Site Plan

See Figure 2 - Site Plan and Sampling Locations.

3.0 Site History

3.1 Zoning – Previous, Present and Proposed

The site is classed as R2 Low Density Residential and SP2 Infrastructure.
No current DA proposal have been submitted for the site.

1. Subdivision and expansion of the 9 lots in to 17 lots.

2. Approval for the development of a residential developments.

3.2 Land Use – Previous, Present and Proposed

Historical land use on the *site* area was carried out for this report and results of historic owners is noted in the following table.
Table 1. Historical ownership

(Lots 36 & 37 Section 17 DP 1480 – AC 8423-193)	
29 Sep 2023 todate	Valenzuela Nominees 2 Pty Ltd *(ACN 667 989 791)*
15 May 1992	Norma Patricia Crogham, wife of Allan Francis Croghan, farmer
	(Lots 36 & 37 Section 17 DP 1480 – Area 1 Rood 4 Perches – CTVol 8423 Fol 193)
17 Jan 1963	Norma Patricia Crogham, wife of Allan Francis Croghan, farmer
	(Lots 36 & 37, 52 to 57 Section 17 DP 1480 – Area 1 Acre 0 Roods 16 Perches – CTVol 830 Fol 121)
17 Jan 1963	Norma Patricia Crogham, wife of Allan Francis Croghan, farmer *(pursuant to Section 604 Local Government Act 1919)*
29 Feb 1940	Ridge & Company Limited *(from Public Trustee exercising power conferred by Local Government Act, 1919)*
26 Mar 1887	Martin Engelmann, farmer
(Lots 38 to 44 Section 17 DP 1480 – AC 8423-194)	
29 Sep 2023 todate	Valenzuela Nominees 2 Pty Ltd (ACN 667 989 791)

17 Jun 1992	Norma Patricia Crogham, wife of Allan Francis Croghan, farmer
	(Lots 38 to 44 Section 17 DP 1480 – Area 3 Roods 4 Perches – CTVol 8423 Fol 194)
17 Jan 1963	Norma Patricia Crogham, wife of Allan Francis Croghan, farmer (from the Council of the Municipality of Blacktown pursuant to Section 604 Local Government Act 1919)
	(Lots 3 to 44 Section 17 DP 1480 – and other lands - Area 78 Acres 1 Rood 13 ½ Perches – CTVol 2623 Fol 78)
13 Nov 1915	N.S.W. Realty Co. Limited

The site has likely been used for agricultrual purposes since at least 1887. Based on historical aerial images, the site has been vacant vegetated land since at least 1947. Vegetation density increased significantly by 1975.

3.3 Possible Contaminant Sources

Possible contaminant sources for the *site* could possibly from illegal dumping on the undeveloped bushland site, importation of fill material from unknown origin and general site use.

3.4 Site Layout Plans

See Figure 2 - Site Plan.

3.5 Details and Locations of Current and Former Underground Storage Tanks

Not applicable.

3.6 Product Spill and Loss History

Not applicable.

3.7 Discharges to Land, Water and Air

No known discharge to land, water or air at the *site*.

3.8 Disposal Locations

No disposal locations were discovered or observed during the 6th December 2023 *site inspection*.

3.9 Relevant Complaint History

No relevant complaint history was discovered for the *site*.

3.10 Local Site Knowledge

No relevant site knowledge.

3.11 Summary of Local Literature about the Site

No relevant, local literature about the *site*, including newspaper articles, or complaint history has been discovered for the *site*.

3.12 Local Usage of Ground / Surface Waters

A search of the WaterNSW database showed no groundwater bores within 500m of the *site*.

3.13 Integrity Assessment

The historical information made available for the site was consistent with its status at the time of the *site visit*. *IES* is satisfied that a comprehensive list of *Contaminants of Potential Concern (COPC)* has been identified from a review of the site history. The strategy for sampling and laboratory testing, selection of the COPCs, and adoption of Conceptual Site Model (CSM) approach would be representative to the site specific characteristics for the past, present and future land uses.

4.0 Site Condition and Surrounding Environment

4.1 Topography

During the 06th December 2023 *site inspection,* it was noted that the *site* slopes down gradient towards the north, northeast.

4.2 Site Boundary Conditions

The site is partially bounded by Edmund Street to the east, vacant vegetated land and a daycare facility to the south, Sydney Street and Edmund Street to the north and vacanted vegetated land to the west of the site.

5.0 Geology and Hydrogeology

5.1 Geology

The Geological Survey of NSW Penrith 1:100,000 Geological Series Sheet 9030 Edition 1 (1991) indicates that the *site* is underlain by the Middle Triassic aged Minchinbury Sandstone of Wianamatta Group. This formation is regionally characterised by fine to medium quartz-lithic sandstone.

5.2 Soil Landscape

A review of the regional maps by the NSW Department of Planning, Industry and Environment indicates the site is generally located within the Blacktown landscape group. Blacktown landscape group is normally recognised by undulating rises on the Wianamatta Group and Hawkesbury Sandstone. Local relief of Blacktown landscape is typically up to 30m, with slopes of usually less than 5%.

Soils of Blacktown landscape group is generally consisting of Red Kurosols (Red and Brown Podzolic Soils) Red and Yellow Sodosols (Soloths) and Yellow Chromosols (Yellow Podzolic

Soils). Red Chromosols, Red Dermosols and Red Ferrosols (Krasnozems) on iron-rich parent material.

5.3 Hydrogeology

The Ropes Crossing Hydrogeological Landscape (HGL) is characterised by remnant Neogene/Palaeogene alluvial deposits around Riverstone, Ropes Creek, Tregear, St Marys and Vineyard. It is an area of moderate rainfall (>800 mm). This HGL is distinct from all other units because it is has a differing composition (remnant alluvial material) and landform which produce different salinity processes requiring a tailored management strategy.

This HGL comprises unconsolidated and cemented sedimentary gravels, sands, silts and clays of Londonderry Clay and St Marys Formation from the Quaternary and Neogene/Palaeogene periods. The underlying consolidated rocks of the Triassic Wianamatta Group (shale, lithic sandstone, quartz sandstone, siltstone, mudstone) are exposed to the northeast of Riverstone and in incised sections of the Mulgoa, South and Eastern Creek systems. The landscape consists of gently undulating elevated pedi-plains with moderately sloping colluvial sideslopes. Local relief is typically 9–30 m with slopes <5% on top and up to 30% on the sideslopes. The colluvial plains grade into alluvial deposits of shale, sand and silt. The regolith depth of the landscape varies from 2m on the low hills and rises, to 2–5m on the foot slopes and colluvial plains to >5m along the alluvial deposits. Ferromanganiferous nodules and ironstone gravels are common in the landscape.

Water penetrating the surface of this HGL tends to perch above the cemented layer and the underlying weathered Wianamatta Shale. This perched water moves laterally creating areas of discharge on mid and upper slopes of the rises. This is a very saline landscape. Pyrites are believed to be present in either the St Marys gravels or the weathered shale and as the water passes through the regolith the sulphates are mobilised and concentrate in areas of discharge. This is a strongly local system. As much of the HGL is urbanized most of the salt sites are expressed as damaged infrastructure and indicator species, such as Juncus acutus along drainage lines.

5.4 Location, Design and Construction of On-Site Wells

Not applicable.

5.5 Description and Location of Springs and Wells in the Vicinity

No known springs in the *site* area, and no wells exist within approximately 500 metres of the *site*.

5.5 Depth to Groundwater Table

Depth to groundwater at the *site* is unknown.

5.6 Direction of Groundwater Flow

Direction of groundwater would be expected to flow east from the *site* towards *First Ponds Creek.*

5.7 Direction of Surface Water Run-Off

Direction of surface water run-off would occur to the front of the *site* and travel in an east direction towards *First Ponds Creek* (500m east of the site).

6.0 Sampling and Analysis Plan and Sampling Methodology

The following was carried out for soil sampling, which was conducted by *IES*:

- maintain sample integrity through correct field techniques and sample preservation;
- samples stored in a chilled environment;
- trip spike and trip blank, as required, for QA/QC purposes;
- undisturbed sampling locations were used in order to reduce the potential for obtaining a non-representative sample;
- samples were taken immediately after the excavated surface was exposed in order to minimise the potential for the sample to degrade or volatilise.

6.1 Sampling, Analysis and Data Quality Objectives (DQOs)

Conceptual Site Model

Table 2. CSM

Potential Sources	Potential Receptor	Potential Exposure Pathway	Complete connection	Risk	Justification/ Control Measures
Contaminated soil from importation of uncontrolled fill across the site. Historical site use and operations including use pesicides fro agricultural purposes. Spills and leaks from parked vehicles.	Future site occupant, construction workers, general public, surrounding sensitive receptors	Dermal contact, inhalation/ ingestion of fibres/ particulates, vapour intrusion.	Complete (current)	M	Exposure to potentially contaminated soils is possible due to unsealed surfaces. Historical site use may have given rise to contamination events. If present, contaminated soils are to be remediated.
			Complete (Future)	L	
	Natural soils, root uptake	Migration of contamination from fill layer.	Complete (current)	M	If contamination is present in the fill layer, migration to the natural layer is possible. If present, contaminated soils are to be remediated.
			Complete (Future)	L	
	Cabramatta Creek (30m south)	Migration of impacted groundwater and surface water run-off.	Incomplete (current)	M	The local topography surrounding the site falls towards First Pond Creek). It is likely surface waters from the site reach this waterway. If present, contaminated soils and groundwater are to be remediated.
			Incomplete (future)	L	
	Underlying aquifer	Leaching and migration of contaminants through groundwater infiltration.	Complete (current)	M	Due to unsealed surfaces, migration from surface and infiltration through zone if saturation. If present, contaminated soil and/or groundwater is to be remediated.
			Complete (future)	L	

Soil samples as required for the *Detailed Environmental Site Assessment* report, fifteen (15) soil samples were taken from *twelve (12)* bore holes, from identified *Areas of Environmental Concern (AEC) which was the entire 5208.01m^2 site*.

6.2 Rationale for the Selection of Sampling

Sampling Pattern

The minimum sampling points required for site characterisation based on detecting circular hot spots by using a systematic sampling pattern for this site of *5208.01m²* is thirteen (13), where the diameter of the hot spot that can be detected with 95% confidence (metre) per Sampling Design Guidelines, 2022. However for this assessment, twelve (12) locations were sampled, with fifteen (15) samples obtained and additional two (2) QA QC samples were used for analysis.

Sampling Density

It was decided that the investigation would involve fifteen (15) soil sampling from *twelve (12)* testbores across the investigation area in a systematic sampling pattern.

Sampling Locations

See *Figure 2 - Current Site Plan and Sampling Locations.*

Sampling Depths

Sampling depths for permeable soil were to approximately *0.15*m below ground level (bgl).

Analytes for Soil Samples

Soil was analysed for the following:

- *Total Recoverable Hydrocarbons - 2013 NEPM Fractions;*
- *Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX);*
- *Polycyclic Aromatic Hydrocarbons (PAHs);*
- *Polychlorinated Biphenyls (PCBs);*
- *Organochloride and Organophosphate Pesticides (OCP and OPP);*
- *Metals (8); and*
- *Asbestos (ID).*

6.3 Description of the Sampling Methods

Sample Handling Procedures

Soil samples were scooped directly into *SGS P/L* 250g glass jars. Disposable nitrile rubber gloves were replaced before each sampling event in order to prevent cross contamination. Each jar was filled, capped with a Teflon-lined lid and stored immediately in an insulated chest containing ice.

Upon collection of sufficient water samples, the containers was capped and stored immediately in an insulated chest containing ice.

All groundwater samples were transported under refrigerated conditions to SG*S*, using strict Chain-of-Custody procedures. Sample Receipt Advice forms were provided by the laboratory to indicate the condition of the samples upon receipt and copies of these are presented, along with copies of the completed Chain-of-Custody certificates, in *Attachment 2 - Laboratory Results*.

Data Quality Objectives

Step 1: State the problem

IES have identified the following risks to human and environmental receptors:

- Potential historical contaminated fill materials imported and deposited on site;
- The future use of the site is a sensitive human health and ecological risk setting.

Step 2: Identify the decision/goal of the study

IES considered the site history, the use of this site, and the NEPM Guidelines, when identifying the decisions required for the site to be considered suitable for its continued land use. The decisions required to meet these decisions are as follows:

- Was the sampling, analysis and quality plan designed appropriate to achieve the aim of the DESA?
- If present, is on-site contamination capable of migrating off-site?
- Are there any unacceptable risks to the future on site or off-site receptors in the soil or groundwater?

Is the site suitable for the proposed development?

Step 3: Identify the information inputs

IES has identified issues of potential environmental concern;

- Appropriate identification of COPC;
- Soil sampling and analysis programs across the site;
- Appropriate quality assurance/quality control to enable an evaluation of the reliability of the analytical data; and

Screening sampler analytical results against appropriate assessment criteria for the intended land use.

Step 4: Define the boundaries of the study

The study boundaries are:

- Lateral boundary: The footprint of the imported fill;
- Vertical boundary: The soil interface to the maximum depth reached during soil sampling; and
- Temporal boundary: Constrained to a single visit to the site.

Step 5: Develop the analytical approach

Here, IES integrate the information from steps 1 – 4 to support and justify our proposed analytical approach. Our aim is to confirm if the site is suitable for the proposed development. If the findings of the SAQP identify;

- Any exceedance of the adopted assessment criteria for soil;
- Groundwater flow direction confirms contamination likely to be transported offsite;
- Professional opinion that further assessment is required; and/or
- Adopted RPD for QC data not met.

Further assessment may be required to confirm suitability of the site in the form of; Data Gap investigation, Remediation Action Plan and Site Validation.

Step 6: Specify performance or acceptance criteria

To determine if the soils are within acceptable ranges, we employ the following NEPM criteria:
The possible decision errors for the proposed DSI are:

- Deciding that the site is suitable for the proposed development without remediation when truly it is not; and

- Deciding that the site is not suitable for the proposed development without remediation when truly it is.

Decision errors for the proposed assessment will be minimised and measured by the following:

- Sample collection and handling techniques will be in accordance with standard field procedures;
- Samples will be prepared and analysed by a NATA-accredited laboratory with the acceptance limits for laboratory QA / QC parameters based on the laboratory reported acceptance limits and those stated in NEPC (2013);
- The analyte selection is based on the CSM. The potential for contaminants other than those proposed to be analysed is considered to be low;
- The SAC will be adopted from established and NSW EPA guidelines. Where not available, recognised national and international guidelines were used. The SAC have risk probabilities already incorporated;

Step 7: Optimise the design for obtaining data
Systematic sampling pattern within the AEC will provide suitable coverage of the site to produce reliable data in alignment with the Data Quality Indicators (DQIs) to cover precision, accuracy, representativeness, completeness and comparability (PARCC). This sampling pattern will ensure that critical locations are assessed and analysed appropriately for COPC.

7.0 Field Quality Assurance and Quality Control (QA/QC)

Details of Sampling Team

Field investigations and soil sampling were conducted by appropriately qualified and trained professional staff with over *twenty (20)* years of continuous relevant experience in the assessment and management of contaminated sites. The field team comprised the following personnel:

• John G. Pohl — Project Manager (Decision Maker)

Quality Assurance was maintained for this project through:

- adherence to a structured sampling and analytical plan, which was based on site operational history and other pertinent information obtained during the site contamination appraisal; and
- the use of methodologies and procedures, including the testing of quality control (QC) samples, consistent with relevant published environmental guidelines.

Decontamination Procedures

Decontamination procedures were not required as soil samples which were scooped directly into *SGS* glass jars and placed in insulated esky, containing ice. Protective, chemical resistant gloves (nitrile rubber) were worn for the entire sampling suite and disposed of, between each sampling round.

Trip Spike and Trip Blank

- Trip spike was used to measure volatility loss during sampling event.
- Trip blank was used to measure cross contamiation during sample storage.

Field Instrument Calibrations

A MINIRAE 2000 Photo-ionization detector (PID) was utilised during the overall site *DESA* validation testing operation and came pre-calibrated.

8.0 Laboratory Quality Assurance and Quality Control (QA/QC)

Chain-of-custody procedures

A copy of signed chain-of-custody forms acknowledging receipt date, time and temperature and identity of samples included in shipments will ensure validity of results.

Record of holding times

To ensure samples are analysed with reasonable window of receival to prevent analyte loss for volatile compounds.

Matrix spikes (MS)

Indicate percentage of recovery of a known concentration for a spike in field sub-sample to measure recovery.

Laboratory Control Sample (LCS)

Reference used throughout the full method process from extraction to injection to measure recovery of analytes.

Relative Percentage Differences (RPD)

Calculation of laboratory performance for the analytical method using duplicates.

9.0 Assessment Criteria

Assessment Criteria and References

The basis for assessment criteria was derived from NEPC (2013), National Environmental Protection (Assessment of Site Contamination) Measure, National Environmental Protection Council 2013. They called for soil analysis of the following:

- *Total Recoverable Hydrocarbons - 2013 NEPM Fractions;*
- *Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX);*
- *Polycyclic Aromatic Hydrocarbons (PAHs);*
- *Polychlorinated Biphenyls (PCBs);*
- *Organochloride and Organophosphate Pesticides (OCP and OPP);*
- *Metals (8); and*
- *Asbestos (ID).*

The following assessment criteria were adopted for the investigation.

9.1 Rationale for Selection of Assessment Criteria

The site is a vegetated residential setting, therefore the most conservative NEPM Assessment Criteria was selected:

- Residential A;
- Urban, Residential and Public Open Spaces;
- Residential, Parkland and Public Open Space.

9.2 NEPM Health Investigation Level A (HIL-A) – Residential

HILs are scientific, risk-based guidance levels to be used as in the primary stage of assessing soil contamination to evaluate the potential risks to human health from chronic exposure to contaminants. HILs are applicable to a broad range of metals and organic substances, and generally apply to depths up to 3m below the surface for residential use. Tier 1 HILs are divided into the following sub-criteria, the sub-criteria appropriate to the site is HIL A – residential with garden/accessible soils.

Table 3. HIL-A

NEPM Assessment Criteria	NEPM 2013 Residential Soil HIL-A, mg/kg
HCB	10
Heptachlor	6
Chlordane	50
Aldrin & Dieldrin	6
Endrin	10
DDD+DDE+DDT	240
Endosulfan	270
Methoxychlor	300
Mirex	10
Arsenic, As	100
Cadmium, Cd	20
Chromium, Cr	100
Copper, Cu	6,000
Lead, Pb	300
Nickel, Ni	400
Zinc, Zn	7,400
Mercury, Hg	40
Carcinogenic PAHs (as BaP TEQ)	3
Total PAH (18)	300
Total PCBs	1

9.3 NEPM Health Screening Level A (HSL-A) – Residential

HSLs have been developed for selected petroleum compounds and fractions and are used for the assessment of potential risks to human health from chronic inhalation and direct contact pathways of petroleum vapour emanating off petroleum contaminated soils (Vapour Risk). HSLs are guided by land-use scenarios, specific soil physicochemical properties and generally apply to depths below surface to >4m. Tier 1 HSLs are divided into the following sub-criteria, the sub-criteria appropriate to the site is HSL A – residential with garden/accessible soils.

Table 4. HSL-A

NEPM Assessment Criteria	NEPM 2013 Residential Soil HSL-A for Vapour Intrusion, 0-<1m depth, Clay, mg/kg	NEPM 2013 Residential Soil HSL-A for Vapour Intrusion, 1-<2m depth, Clay, mg/kg
Benzene	0.7	1
Toluene	480	NL
Ethylbenzene	NL	NL

Xylenes	110	310
Naphthalene	5	NL
TRH C_6-C_{10} - BTEX (F1)	50	90
TRH >C_{10}-C_{16} - N (F2)	280	NL

9.4 NEPM Ecological Investigation Level (EIL) – Urban, Residential and Public Open Spaces

Ecological investigation levels (EILs) have been developed to assess the risk for the presence of metals and organic substance in a terrestrial ecosystem. EILs are guided by land-use scenarios, specific soil physicochemical properties and generally apply to the top 2m of soil. EILs can be applied for arsenic (As), copper (Cu), chromium III (Cr(III)), dichlorodiphenyltrichloroethane (DDT), naphthalene, nickel (Ni), lead (Pb) and zinc (Zn). The NEPM Soil Quality Guidelines (SQG) for EILs are calculated using the Added Contamination Limit (ACL) to determine the amount of contamination that had to be added to the soil to cause toxicity, including ambient background concentration (ABC).

Table 5**.** Generic EIL

NEPM Assessment Criteria	NEPM 2013 Soil Generic EIL for Urban, Residential and Public Open Space, mg/kg
Arsenic, As	100
DDT	180
Naphthalene	170

9.5 NEPM Ecological Screening Level (ESL) – Urban, Residential and Public Open Spaces

ESLs have been developed for selected petroleum hydrocarbons (BTEX, benzo(a)pyrene, TRH F1 and F2) in soil, based on fresh contamination. These parameters are applicable to coarse and fine-grained soil and apply from the surface of the soil to 2m below ground level, which corresponds with the root and habitat zone for many species.

Table 6. ESL

NEPM Assessment Criteria	NEPM 2013 Soil ESL for Urban, Residential and Public Open Spaces for Fine-Grained Soil, mg/kg
Benzene	65
Toluene	105
Ethylbenzene	125
Xylenes	45
BaPyr (BaP)	0.7
TRH C_6-C_{10}	180
TRH >C_{10}-C_{16}	120
TRH >C_{16}-C_{34} (F3)	1300
TRH >C_{34}-C_{40} (F4)	5,600

9.6 NEPM Management Limits – Residential, Parkland and Public Open Space

Management Limits for petroleum have been developed for prevention of explosive vapour accumulation, prevention of the formation of observable Light Non-Aqueous Phase Liquids

(LNAPL) and protection against effects on buried infrastructure. Residential, Parkland and Public Open Space limits have been adopted based on the proposed land use.

Table 7. Management Limits

NEPM Assessment Criteria	NEPM 2013 Management Limits for Residential, Parkland and Public Open Space for Fine-Grained Soil, mg/kg
TRH C_6-C_{10}	800
TRH >C_{10}-C_{16}	1,000
TRH >C_{16}-C_{34} (F3)	3,500
TRH >C_{34}-C_{40} (F4)	10,000

9.7 NEPM Health Screening Level A (HSL-A) – Residential for Asbestos

The assessed soil must not contain Asbestos Containing Materials (ACM) in excess of 0.04%w/w and Asbestos Fines (AF) and Fibrous Asbestos (FA) in excess of 0.001%w/w. Moreover, surface soil within the site must be free of visible ACM, Asbestos Fines (AF) and Fibrous Asbestos (FA).

Table 8. HSL-A

NEPM Assessment Criteria	Health Screening Level (%w/w) Residential (A)
ACM	0.01%
FA and AF (friable asbestos)	0.001%
All forms of asbestos	No visible asbestos for surface soils

10.0 Analytical Results

Analytical results indicate no exceedances of the NEPM Health and Ecological Assessment Criteria for Residential (A) site.

11.0 Salinity

Salinity refers to the presence of excess salt in the environment and occurs when salts which are naturally found in soil or groundwater mobilise, allowing capillary rise and evaporation to concentrate the salt at the upper subsurface soil profile. Such movements are caused by changes in the natural water cycle. In urban areas, the processes which cause salinity are intensified by the increased volumes of water added to the natural system from irrigation of gardens, lawn and parks and from leaking infrastructures (eg pipes, sewer, stormwater, etc) and pool. Saline soil may have adverse impact on development such as;

- Damage to buildings and houses caused by deterioration of bricks, mortar andconcrete when salt drawn up into capillaries of bricks and mortar expands resulting in spalling.
- Deterioration of concrete kerbs and gutters as a result of chemical reactionbetween concrete and sulphates.
- High chloride content in the soil may result in corrosion of steel reinforcement and buried metal structures.
- Damage to underground pipes and infrastructures.
- Water logging of ground surface due to sealing effect of sodic and dispersive soil.

- Loss of vegetation cover and plants due to high salt content resulting in retardation of plants.

The potential adverse impact of salinity to development, the Western Sydney Regional Organisation of Councils Ltd has drafted a Salinity Code of Practice to address the issue of salinity. It was acknowledge in the Code that salinity problems can change substantially over time and it is difficult to predict exactly where salinity will occur and how it will respond to the changing environment conditions.

Table 9. Salinity

Soil Classification	Electrical Conductivity dS/m
Non-Saline	<2
Slightly Saline	2 - 4
Moderately Saline	4 - 8
Very Saline	8 - 16
Highly Saline	>16

Note: *S*oil salinity are based on *Electrical Conductivity* for the *site* is classified as *Non-Saline* per Salinity Code of Practice – Western Sydney Regional Organisation of Councils Ltd – 2002.

12.0 Conclusions and Recommendations

Summary of All Findings

In our opinion, the *site*, is suitable for use for the following reasons:

- all *COPCs* analysed were below instrument detection limit and/or the NEPM Ste Assessment Criteria;
- no aesthetic issues were identifed for the site;
- salinity of soils is considered “non-saline” (<2 EC dS/m).

Assumptions Used in Reaching the Conclusions

Assumptions include:

The strategy for sampling and laboratory testing, selection of the *COPC* and adoption of CSM approach would be representative to the site specific characteristics for the past, present and future land uses.

Extent of Uncertainties

Uncertainties to this *Detailed Environmental Site Assessment* report include a limited sampling area, and a limited number of soil samples.

These assumptions do not take into account all preferential pathways where hydrocarbon migrates along conduits of least resistance through an impermeable material, such as cracks and fissures.

Site Suitable for the Proposed Use

This *Detailed Environmental Site Assessment* report included sampling *twelve (12) locations, with fifteen (15) samples collected* for this *site*. The site is suitable for subdivision and residential use as the final outcome of the soil testing show that contaminant concentrations based on the sample analytical results of soil are below *threshold concentrations* for the NEPM Site Assessment Criteria.

Recommendations for Further Work

IES recommends the following:

- Any soils requiring excavation, onsite reuse and/or removal must be classified in accordance with “Waste Classification Guidelines Part 1: Classifying Waste” NSW EPA (2014); and
- A site specific ‘Unexpected Finds Protocol’ is to be made available for reference for all occupants and/or site workers in the event unanticipated contamination is discovered.

Should there be any changes or variations in site conditions since our soil and groundwater sampling after *6th December 2023*, such as importation of fill, discovery of fill, soil staining or synthetic materials during excavation operations, chemical spillage, illegal dumping, etc, further assessment will be required.

Please do not hesitate to contact John Pohl at 0402-497-287 should you require further assistance with this report.

Regards,

Qualifications & Experience

The EP Act requires persons who undertake contaminated land assessments to be Suitably Qualified Person (SQP) (s 565); for these investigation works Mr. JG Pohl is the designated SQP. A SQP is the person who is a current member of a professional organisation prescribed under schedule 8 of the Environmental Protection Regulation 2008 (the EP Regulation), and has qualifications and experience relevant to performing the regulatory functions. A detailed description of SQPs is provided in the Guideline Assessing a Suitably Qualified Person in accordance with s 564 of the EP Act (DES, 2013)

JOHN G. POHL
Principal Environmental Engineer & Hydrologist, Director, Integral Environmental Solutions Pty. Ltd.
B.S. (Mechanical Engineering)
M.S. (Environmental Engineering, Hydrology)
Certified Environmental Practitioner (CEnvP) # 280, Environment Institute of Australia & New Zealand (EIANZ)
Queensland EPA, Contaminated Land Certified (s38l of the Environmental Protection Act 1999)
Australian Institute of Petroleum (AIP) Work Clearance Accredited
US EPA HAZWOPER Certified

Limitation of Liability

This *Detailed Environmental Site Assessment (DESA)* report has been prepared in accordance with industry recognised standards and procedures considered best practice at the time of the work. Every attempt has been made to describe the background to this report, and the progress of the *Detailed Environmental Site Assessment (DESA)* process for this particular site.

The progressive stage in the *Detailed Environmental Site Assessment (DESA)* process generally involves a *site inspection* and limited sampling in Areas of Environmental Concern (AEC's). This stage is intended to establish whether there is, or is not a likelihood of *site* contamination or actual *site* contamination and to conclude if the *site* is suitable for continued commercial / industrial use.

To the best of our knowledge information contained in this report is accurate at the date of issue, however, subsurface conditions, including groundwater levels and contaminant concentrations, can change in a limited time. This should be borne in mind if the report is used after a protracted delay.

There is always some disparity in subsurface conditions across a site that cannot be fully defined by investigation. Hence it is unlikely that measurements and values obtained from sampling and testing during environmental works carried out at a site will characterise the extremes of conditions that exist within the site.

There is no investigation that is thorough enough to preclude the presence of material that presently or in the future, may be considered hazardous at the site. Since regulatory criteria are constantly changing, concentrations of contaminants presently considered low may, in the future, fall under different regulatory standards that require remediation.

Opinions expressed herein are judgements and are based on our understanding and interpretation of current regulatory standards and should not be construed as legal opinions.

No other warranty, expressed, or implied, of any kind is made or intended in connection with this report, or by the fact that the *client* of this work are being furnished with this report, or by any other oral or written statement.

REFERENCES

- NEPC (2013), National Environmental Protection (Assessment of Site Contamination) Measure, National Environmental Protection Council 2013;
- State Environmental Planning Policy (Resilience and Hazard) 2021;
- NSW EPA, *Contaminated Land Guidelines*, *Sampling Design Part 1 – Application*, 2022;
- NSW EPA, *Contaminated Land Guidelines*, *Sampling Design Part 2 – Interpretation*, 2022;
- NSW EPA, *Consultants Reporting on Contaminated Land: Contaminated Land Guidelines,* 2020;
- NSW EPA *Waste Classification Guidelines, Part 1: Classifying Waste,* 2014*;*
- Protection of the Environment Operations (Waste) Regulations, 2005;

Figure 1 - Locality Map - Sydney Street, Grantham Farm NSW 2765 (Lots 36-44/17/DP1480)

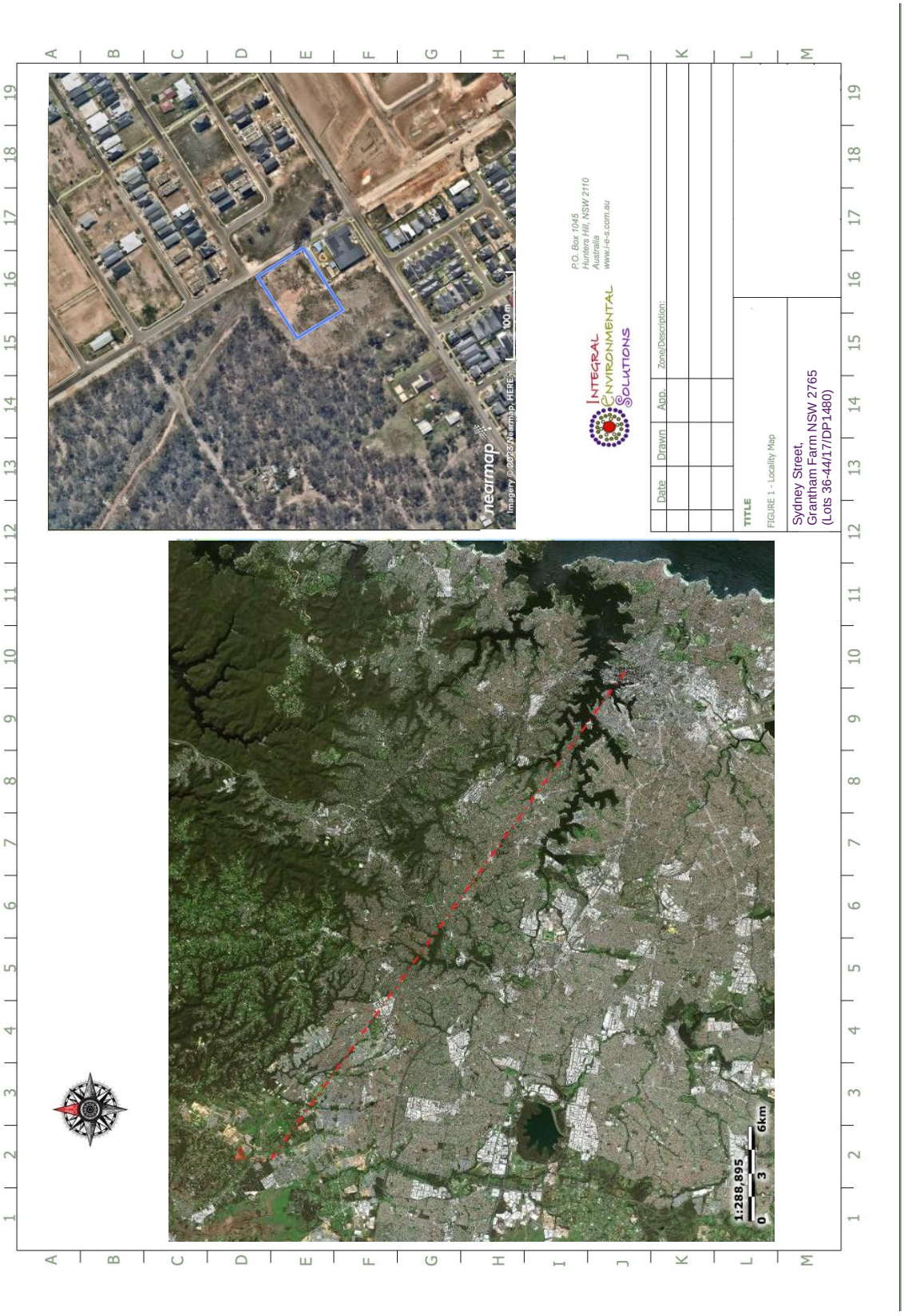


Figure 2 - Sampling Locations

TABLES

TABLE 10 • Sample Register - Soil

Sample Identification	Soil Description	Depth
BH1	Silty CLAY, dry, low plasticity	0.15m
BH2.1	Silty CLAY, dry, low plasticity	0.15m
BH2.2	Silty CLAY, dry, low plasticity	0.5m
BH3	Silty CLAY, dry, low plasticity	0.15m
BH4	Silty CLAY, dry, low plasticity	0.15m
BH5.1	Silty CLAY, dry, low plasticity	0.15m
BH5.2	Silty CLAY, dry, low plasticity	0.5m
BH6	Silty CLAY, dry, low plasticity	0.15m
BH7	Silty CLAY, dry, low plasticity	0.15m
BH8.1	Silty CLAY, dry, low plasticity	0.15m
BH8.2	Silty CLAY, dry, low plasticity	0.5m
BH9	Silty CLAY, dry, low plasticity	0.15m
BH10	Silty CLAY, dry, low plasticity	0.15m
BH11	Silty CLAY, dry, low plasticity	0.15m
BH12	Silty CLAY, dry, low plasticity	0.15m

Table 11. Total Recoverable Hydrocarbon (TRH) analytical results. Values are presented as mg/kg. NL = Not Limiting. F1 = subtract the sum of BTEX concentrations from the C_6-C_{10} aliphatic hydrocarbon fraction. F2 = subtract Naphthalene from the> C_{10}-C_{16} aliphatic hydrocarbon fraction.

Assessment Criteria		TRH C_6-C_{10}	TRH C_6-C_{10} - BTEX (F1)	TRH >C_{10}-C_{16}	TRH >C_{10}-C_{16} - N (F2)	TRH >C_{16}-C_{34} (F3)	TRH >C_{34}-C_{40} (F4)
NEPM 2013 HSL-A, 0-<1m depth, Clay, mg/kg			50		280		
NEPM 2013 Generic ESL, mg/kg		180		120		1300	5600
NEPM 2013 Management Limits, mg/kg		800		1000		3500	10 000
Sample	Depth (m)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
BH1	0.15	<25	<25	<25	<25	<90	<120
BH2.1	0.15	<25	<25	<25	<25	<90	<120
BH2.2	0.5	<25	<25	<25	<25	<90	<120
BH3	0.15	<25	<25	<25	<25	<90	<120
BH4	0.15	<25	<25	<25	<25	**96**	<120
BH5.1	0.15	<25	<25	<25	<25	<90	<120
BH5.2	0.5	<25	<25	<25	<25	<90	<120
BH6	0.15	<25	<25	<25	<25	<90	<120
BH7	0.15	<25	<25	<25	<25	**90**	<120
BH8.1	0.15	<25	<25	<25	<25	<90	<120
BH8.2	0.5	<25	<25	<25	<25	<90	<120
BH9	0.15	<25	<25	<25	<25	<90	<120
BH10	0.15	<25	<25	<25	<25	<90	<120
BH11	0.15	<25	<25	<25	<25	<90	<120
BH12	0.15	<25	<25	<25	<25	<90	<120

Table 12. Benzene, Toluene, Ethylbenzene and Xylene (BTEX) analytical results. Values are presented as mg/kg. NL = Not Limiting.

Assessment Criteria		Benzene	Toluene	Ethylbenzene	Xylenes
NEPM 2013 HSL-A, 0-<1m depth, Clay, mg/kg		0.7	480	NL	110
NEPM 2013 Generic ESL, mg/kg		65	105	125	45
Sample	Depth (m)	mg/kg	mg/kg	mg/kg	mg/kg
BH1	0.15	<0.1	<0.1	<0.1	<0.3
BH2.1	0.15	<0.1	<0.1	<0.1	<0.3
BH2.2	0.5	<0.1	<0.1	<0.1	<0.3
BH3	0.15	<0.1	<0.1	<0.1	<0.3
BH4	0.15	<0.1	<0.1	<0.1	<0.3
BH5.1	0.15	<0.1	<0.1	<0.1	<0.3
BH5.2	0.5	<0.1	<0.1	<0.1	<0.3
BH6	0.15	<0.1	<0.1	<0.1	<0.3
BH7	0.15	<0.1	<0.1	<0.1	<0.3
BH8.1	0.15	<0.1	<0.1	<0.1	<0.3
BH8.2	0.5	<0.1	<0.1	<0.1	<0.3
BH9	0.15	<0.1	<0.1	<0.1	<0.3
BH10	0.15	<0.1	<0.1	<0.1	<0.3
BH11	0.15	<0.1	<0.1	<0.1	<0.3
BH12	0.15	<0.1	<0.1	<0.1	<0.3
Trip Spike		101%	103%	105%	107%
Trip Blank		<0.1	<0.1	<0.1	<0.3

Table 13. Polycyclic Aromatic Hydrocarbon (PAH) analytical results. The carcinogenic PAH (Benzo(a)anthracene (BaAnt); Benzo(a)pyrene (BaPyr or BaP); Benzo(b+j) fluoranthene (BbjFl); Benzo(k)fluoranthene (BkFl); Benzo(g,h,i)perylene (BghiPer); Chrysene (Chr); and Dibenz(a,h)anthracene (DBahAnt)) potency is calculated relative to Benzo(a)pyrene to produce a Toxicity Equivalent Factor (TEF). The Toxicity Equivalent Quotient (TEQ) is calculated by multiplying the concentration of each carcinogenic PAH in the sample by its Benzo(a)pyrene (B(a)P) TEF. Total PAH includes Naphthalene (N), 2-methylnaphthalene (2-MN), 1-methylnaphthalene (1-MN), Acenaphthylene (Acy), Acenaphthene (Ace), Fluorene (F), Phenanthrene (P), Anthracene (Ant), Fluoranthene (Fl), Pyrene (Pyr) and the carcinogenic PAHs. Values are presented as mg/kg. NL = Not Limiting.

Assessment Criteria		Naphthalene	Benzo(a)pyrene	Carcinogenic PAH (as BaP TEQ)	Total PAH (18)
NEPM 2013 HSL-A, 0-<1m depth, Clay, mg/kg		5			
NEPM 2013 Generic EIL, mg/kg		170			
NEPM 2013 ESL, mg/kg			0.7		
NEPM 2013 HIL-A, mg/kg			1.00 TEF	3	300
Sample	Depth (m)	mg/kg	mg/kg	TEQ (mg/kg)	mg/kg
BH1	0.15	<0.1	<0.1	<0.3	<0.8
BH2.1	0.15	<0.1	<0.1	<0.3	<0.8
BH2.2	0.5	<0.1	<0.1	<0.3	<0.8
BH3	0.15	<0.1	<0.1	<0.3	<0.8
BH4	0.15	<0.1	<0.1	<0.3	<0.8
BH5.1	0.15	<0.1	<0.1	<0.3	<0.8
BH5.2	0.5	<0.1	<0.1	<0.3	<0.8
BH6	0.15	<0.1	<0.1	<0.3	<0.8
BH7	0.15	<0.1	<0.1	<0.3	<0.8
BH8.1	0.15	<0.1	<0.1	<0.3	<0.8
BH8.2	0.5	<0.1	<0.1	<0.3	<0.8
BH9	0.15	<0.1	<0.1	<0.3	<0.8
BH10	0.15	<0.1	<0.1	<0.3	<0.8
BH11	0.15	<0.1	<0.1	<0.3	<0.8
BH12	0.15	<0.1	<0.1	<0.3	<0.8

Table 14. Polychlorinated Biphenyl analytical results. Values are presented as mg/kg.

Assessment Criteria		Total PCBs
NEPM 2013 HIL-A, mg/kg		1
Sample	Depth (m)	mg/kg
BH1	0.15	<1
BH2.1	0.15	<1
BH2.2	0.5	
BH3	0.15	<1
BH4	0.15	<1
BH5.1	0.15	<1
BH5.2	0.5	
BH6	0.15	<1
BH7	0.15	<1
BH8.1	0.15	<1
BH8.2	0.5	
BH9	0.15	<1
BH10	0.15	<1
BH11	0.15	<1
BH12	0.15	<1

Table 15. Heavy Metal analytical results. Values are presented as mg/kg.

Assessment Criteria		As	Cd	Cr	Cu	Pb	Ni	Zn	Hg
NEPM 2013 HIL-A, mg/kg		100	20	100	6000	300	400	7400	40
NEPM 2013 Generic EIL, mg/kg		100				1100			
Sample	Depth (m)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
BH1	0.15	**7**	<0.3	**19**	**4.4**	**15**	**2.6**	**7.7**	<0.05
BH2.1	0.15	**9**	<0.3	**20**	**3.9**	**18**	**3.4**	**16**	<0.05
BH2.2	0.5	**7**	<0.3	**6.1**	**8.7**	**6**	**1.0**	**9.7**	<0.05
BH3	0.15	**7**	<0.3	**15**	**5.2**	**13**	**4.3**	**13**	<0.05
BH4	0.15	**6**	<0.3	**9.9**	**13**	**26**	**7.5**	**36**	<0.05
BH5.1	0.15	**10**	<0.3	**30**	**2.4**	**14**	**4.5**	**12**	<0.05
BH5.2	0.5	**11**	<0.3	**25**	**6.5**	**17**	**3.0**	**19**	<0.05
BH6	0.15	**8**	<0.3	**10**	**7.2**	**14**	**6.3**	**15**	<0.05
BH7	0.15	**7**	<0.3	**10**	**17**	**15**	**7.3**	**29**	<0.05
BH8.1	0.15	**10**	<0.3	**15**	**8.7**	**15**	**5.1**	**16**	<0.05
BH8.2	0.5	**7**	<0.3	**5.0**	**17**	**8**	**1.3**	**12**	<0.05
BH9	0.15	**8**	<0.3	**13**	**7.8**	**14**	**2.8**	**18**	<0.05
BH10	0.15	**8**	<0.3	**9.2**	**11**	**15**	**4.1**	**20**	<0.05
BH11	0.15	**12**	<0.3	**18**	**7.6**	**14**	**4.3**	**16**	<0.05
BH12	0.15	**10**	<0.3	**17**	**12**	**28**	**5.5**	**51**	<0.05

Table 16. Pesticides analytical results. Values are presented as mg/kg.

Assessment Criteria		HCB	Heptachlor	Chlordane	Aldrin & Dieldrin	Endrin	DDT	DDD+DDE +DDT	Endosulfan	Methoxychlor	Mirex
NEPM 2013 HIL-A, mg/kg		10	6	50	6	10		240	270	300	10
NEPM 2013 Generic EIL, mg/kg							180				
Sample	Depth (m)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
BH1	0.15	<0.1	<0.2	<0.2	<0.3	<0.2	<0.2	<0.6	<0.5	<0.1	<0.1
BH2.1	0.15	<0.1	<0.2	<0.2	<0.3	<0.2	<0.2	<0.6	<0.5	<0.1	<0.1
BH2.2	0.5										
BH3	0.15	<0.1	<0.2	<0.2	<0.3	<0.2	<0.2	<0.6	<0.5	<0.1	<0.1
BH4	0.15	<0.1	<0.2	<0.2	<0.3	<0.2	<0.2	<0.6	<0.5	<0.1	<0.1
BH5.1	0.15	<0.1	<0.2	<0.2	<0.3	<0.2	<0.2	<0.6	<0.5	<0.1	<0.1
BH5.2	0.5										
BH6	0.15	<0.1	<0.2	<0.2	<0.3	<0.2	<0.2	<0.6	<0.5	<0.1	<0.1
BH7	0.15	<0.1	<0.2	<0.2	<0.3	<0.2	<0.2	<0.6	<0.5	<0.1	<0.1
BH8.1	0.15	<0.1	<0.2	<0.2	<0.3	<0.2	<0.2	<0.6	<0.5	<0.1	<0.1
BH8.2	0.5										
BH9	0.15	<0.1	<0.2	<0.2	<0.3	<0.2	<0.2	<0.6	<0.5	<0.1	<0.1
BH10	0.15	<0.1	<0.2	<0.2	<0.3	<0.2	<0.2	<0.6	<0.5	<0.1	<0.1
BH11	0.15	<0.1	<0.2	<0.2	<0.3	<0.2	<0.2	<0.6	<0.5	<0.1	<0.1
BH12	0.15	<0.1	<0.2	<0.2	<0.3	<0.2	<0.2	<0.6	<0.5	<0.1	<0.1

Table 17. Asbestos analytical results. Values are presented as %w/w.

Assessment Criteria		Asbestos		
NEPM 2013 Residential Soil HSL-A, mg/kg		Detected	Bonded ACM	FA and AF
			0.01%w/w	0.001%w/w
Sample	Depth (m)	Y/N	%w/w	%w/w
BH1	0.15	N	<0.01	
BH2.1	0.15	N	<0.01	
BH2.2	0.5			
BH3	0.15	N	<0.01	
BH4	0.15	N	<0.01	
BH5.1	0.15	N	<0.01	
BH5.2	0.5			
BH6	0.15	N	<0.01	
BH7	0.15	N	<0.01	
BH8.1	0.15	N	<0.01	
BH8.2	0.5			
BH9	0.15	N	<0.01	
BH10	0.15	N	<0.01	
BH11	0.15	N	<0.01	
BH12	0.15	N	<0.01	

ATTACHMENTS

Attachment 1 - Site Photographs **Sydney Street, Grantham Farm NSW 2765 (Lots 36-44/17/DP1480)** – 6th December 2023

Plate 1 - Soil augering, soils are silty clay

Plate 2 - Soil augering, soils are silty clay

Plate 3 - The site was vacant vegetated land. No aesthetic issues identified

Plate 4 - The site was vacant vegetated land. No aesthetic issues identified

Attachment 2 - Laboratory Results

Attachment 3 - Site Data

Figure 1 - Locality Map - Sydney Street, Grantham Farm NSW 2765 (Lots 36-44/17/DP1480)

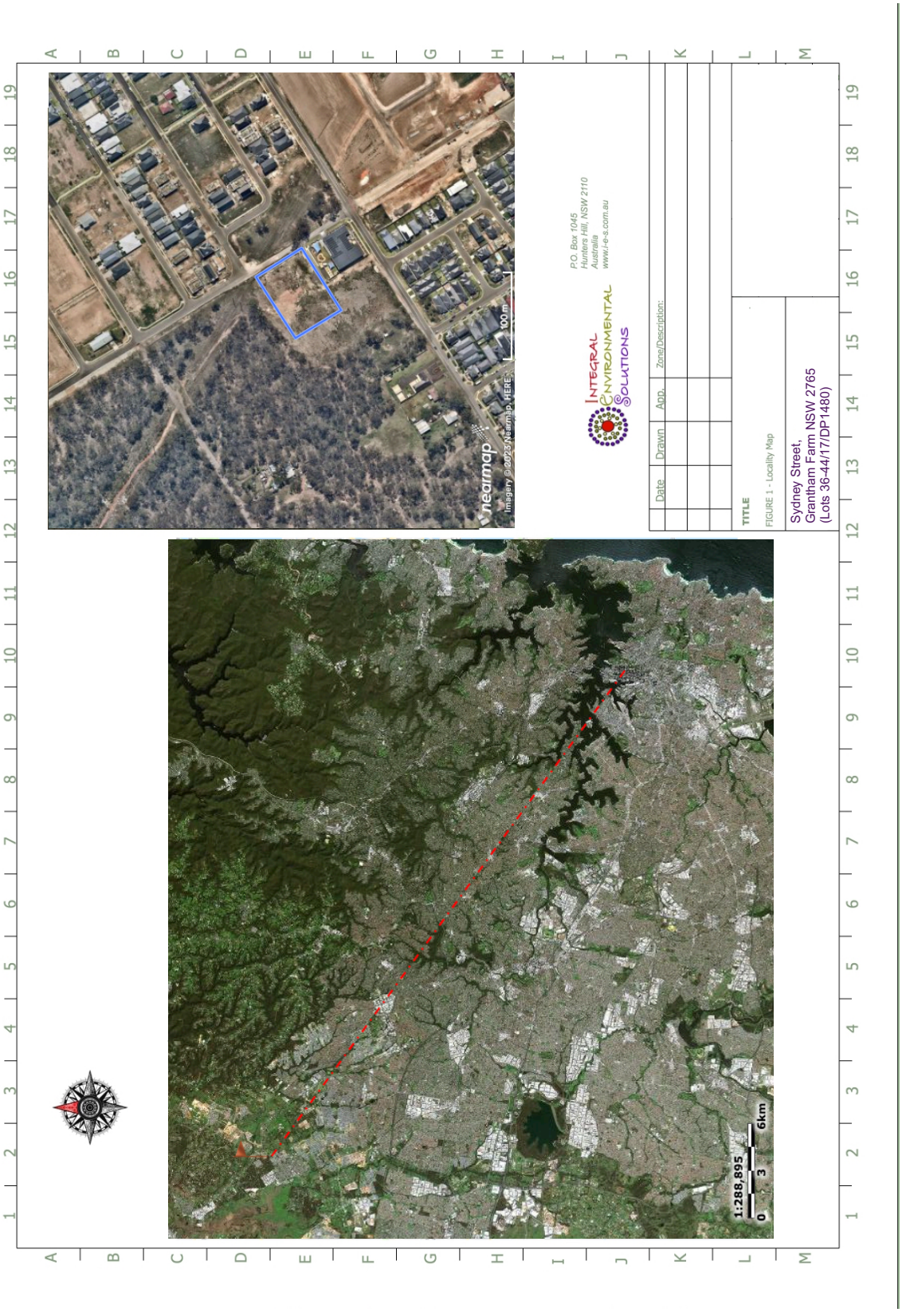


Figure 2 - Sampling Locations

TABLES

TABLE 10 • Sample Register - Soil

Sample Identification	Soil Description	Depth
BH1	Silty CLAY, dry, low plasticity	0.15m
BH2.1	Silty CLAY, dry, low plasticity	0.15m
BH2.2	Silty CLAY, dry, low plasticity	0.5m
BH3	Silty CLAY, dry, low plasticity	0.15m
BH4	Silty CLAY, dry, low plasticity	0.15m
BH5.1	Silty CLAY, dry, low plasticity	0.15m
BH5.2	Silty CLAY, dry, low plasticity	0.5m
BH6	Silty CLAY, dry, low plasticity	0.15m
BH7	Silty CLAY, dry, low plasticity	0.15m
BH8.1	Silty CLAY, dry, low plasticity	0.15m
BH8.2	Silty CLAY, dry, low plasticity	0.5m
BH9	Silty CLAY, dry, low plasticity	0.15m
BH10	Silty CLAY, dry, low plasticity	0.15m
BH11	Silty CLAY, dry, low plasticity	0.15m
BH12	Silty CLAY, dry, low plasticity	0.15m

Table 11. Total Recoverable Hydrocarbon (TRH) analytical results. Values are presented as mg/kg. NL = Not Limiting. F1 = subtract the sum of BTEX concentrations from the C_6-C_{10} aliphatic hydrocarbon fraction. F2 = subtract Naphthalene from the> C_{10}-C_{16} aliphatic hydrocarbon fraction.

Assessment Criteria		TRH C_6-C_{10}	TRH C_6-C_{10} - BTEX (F1)	TRH >C_{10}-C_{16}	TRH >C_{10}-C_{16} - N (F2)	TRH >C_{16}-C_{34} (F3)	TRH >C_{34}-C_{40} (F4)
NEPM 2013 HSL-A, 0-<1m depth, Clay, mg/kg			50		280		
NEPM 2013 Generic ESL, mg/kg		180		120		1300	5600
NEPM 2013 Management Limits, mg/kg		800		1000		3500	10 000
Sample	Depth (m)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
BH1	0.15	<25	<25	<25	<25	<90	<120
BH2.1	0.15	<25	<25	<25	<25	<90	<120
BH2.2	0.5	<25	<25	<25	<25	<90	<120
BH3	0.15	<25	<25	<25	<25	<90	<120
BH4	0.15	<25	<25	<25	<25	**96**	<120
BH5.1	0.15	<25	<25	<25	<25	<90	<120
BH5.2	0.5	<25	<25	<25	<25	<90	<120
BH6	0.15	<25	<25	<25	<25	<90	<120
BH7	0.15	<25	<25	<25	<25	**90**	<120
BH8.1	0.15	<25	<25	<25	<25	<90	<120
BH8.2	0.5	<25	<25	<25	<25	<90	<120
BH9	0.15	<25	<25	<25	<25	<90	<120
BH10	0.15	<25	<25	<25	<25	<90	<120
BH11	0.15	<25	<25	<25	<25	<90	<120
BH12	0.15	<25	<25	<25	<25	<90	<120

Table 12. Benzene, Toluene, Ethylbenzene and Xylene (BTEX) analytical results. Values are presented as mg/kg. NL = Not Limiting.

Assessment Criteria		Benzene	Toluene	Ethylbenzene	Xylenes
NEPM 2013 HSL-A, 0-<1m depth, Clay, mg/kg		0.7	480	NL	110
NEPM 2013 Generic ESL, mg/kg		65	105	125	45
Sample	Depth (m)	mg/kg	mg/kg	mg/kg	mg/kg
BH1	0.15	<0.1	<0.1	<0.1	<0.3
BH2.1	0.15	<0.1	<0.1	<0.1	<0.3
BH2.2	0.5	<0.1	<0.1	<0.1	<0.3
BH3	0.15	<0.1	<0.1	<0.1	<0.3
BH4	0.15	<0.1	<0.1	<0.1	<0.3
BH5.1	0.15	<0.1	<0.1	<0.1	<0.3
BH5.2	0.5	<0.1	<0.1	<0.1	<0.3
BH6	0.15	<0.1	<0.1	<0.1	<0.3
BH7	0.15	<0.1	<0.1	<0.1	<0.3
BH8.1	0.15	<0.1	<0.1	<0.1	<0.3
BH8.2	0.5	<0.1	<0.1	<0.1	<0.3
BH9	0.15	<0.1	<0.1	<0.1	<0.3
BH10	0.15	<0.1	<0.1	<0.1	<0.3
BH11	0.15	<0.1	<0.1	<0.1	<0.3
BH12	0.15	<0.1	<0.1	<0.1	<0.3
Trip Spike		101%	103%	105%	107%
Trip Blank		<0.1	<0.1	<0.1	<0.3

Table 13. Polycyclic Aromatic Hydrocarbon (PAH) analytical results. The carcinogenic PAH (Benzo(a)anthracene (BaAnt); Benzo(a)pyrene (BaPyr or BaP); Benzo(b+j) fluoranthene (BbjFl); Benzo(k)fluoranthene (BkFl); Benzo(g,h,i)perylene (BghiPer); Chrysene (Chr); and Dibenz(a,h)anthracene (DBahAnt)) potency is calculated relative to Benzo(a)pyrene to produce a Toxicity Equivalent Factor (TEF). The Toxicity Equivalent Quotient (TEQ) is calculated by multiplying the concentration of each carcinogenic PAH in the sample by its Benzo(a)pyrene (B(a)P) TEF. Total PAH includes Naphthalene (N), 2-methylnaphthalene (2-MN), 1-methylnaphthalene (1-MN), Acenaphthylene (Acy), Acenaphthene (Ace), Fluorene (F), Phenanthrene (P), Anthracene (Ant), Fluoranthene (Fl), Pyrene (Pyr) and the carcinogenic PAHs. Values are presented as mg/kg. NL = Not Limiting.

Assessment Criteria		Naphthalene	Benzo(a)pyrene	Carcinogenic PAH (as BaP TEQ)	Total PAH (18)
NEPM 2013 HSL-A, 0-<1m depth, Clay, mg/kg		5			
NEPM 2013 Generic EIL, mg/kg		170			
NEPM 2013 ESL, mg/kg			0.7		
NEPM 2013 HIL-A, mg/kg			1.00 TEF	3	300
Sample	Depth (m)	mg/kg	mg/kg	TEQ (mg/kg)	mg/kg
BH1	0.15	<0.1	<0.1	<0.3	<0.8
BH2.1	0.15	<0.1	<0.1	<0.3	<0.8
BH2.2	0.5	<0.1	<0.1	<0.3	<0.8
BH3	0.15	<0.1	<0.1	<0.3	<0.8
BH4	0.15	<0.1	<0.1	<0.3	<0.8
BH5.1	0.15	<0.1	<0.1	<0.3	<0.8
BH5.2	0.5	<0.1	<0.1	<0.3	<0.8
BH6	0.15	<0.1	<0.1	<0.3	<0.8
BH7	0.15	<0.1	<0.1	<0.3	<0.8
BH8.1	0.15	<0.1	<0.1	<0.3	<0.8
BH8.2	0.5	<0.1	<0.1	<0.3	<0.8
BH9	0.15	<0.1	<0.1	<0.3	<0.8
BH10	0.15	<0.1	<0.1	<0.3	<0.8
BH11	0.15	<0.1	<0.1	<0.3	<0.8
BH12	0.15	<0.1	<0.1	<0.3	<0.8

Table 14. Polychlorinated Biphenyl analytical results. Values are presented as mg/kg.

Assessment Criteria		Total PCBs
NEPM 2013 HIL-A, mg/kg		1
Sample	Depth (m)	mg/kg
BH1	0.15	<1
BH2.1	0.15	<1
BH2.2	0.5	
BH3	0.15	<1
BH4	0.15	<1
BH5.1	0.15	<1
BH5.2	0.5	
BH6	0.15	<1
BH7	0.15	<1
BH8.1	0.15	<1
BH8.2	0.5	
BH9	0.15	<1
BH10	0.15	<1
BH11	0.15	<1
BH12	0.15	<1

Table 15. Heavy Metal analytical results. Values are presented as mg/kg.

Assessment Criteria		As	Cd	Cr	Cu	Pb	Ni	Zn	Hg
NEPM 2013 HIL-A, mg/kg		100	20	100	6000	300	400	7400	40
NEPM 2013 Generic EIL, mg/kg		100				1100			
Sample	Depth (m)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
BH1	0.15	**7**	<0.3	**19**	**4.4**	**15**	**2.6**	**7.7**	<0.05
BH2.1	0.15	**9**	<0.3	**20**	**3.9**	**18**	**3.4**	**16**	<0.05
BH2.2	0.5	**7**	<0.3	**6.1**	**8.7**	**6**	**1.0**	**9.7**	<0.05
BH3	0.15	**7**	<0.3	**15**	**5.2**	**13**	**4.3**	**13**	<0.05
BH4	0.15	**6**	<0.3	**9.9**	**13**	**26**	**7.5**	**36**	<0.05
BH5.1	0.15	**10**	<0.3	**30**	**2.4**	**14**	**4.5**	**12**	<0.05
BH5.2	0.5	**11**	<0.3	**25**	**6.5**	**17**	**3.0**	**19**	<0.05
BH6	0.15	**8**	<0.3	**10**	**7.2**	**14**	**6.3**	**15**	<0.05
BH7	0.15	**7**	<0.3	**10**	**17**	**15**	**7.3**	**29**	<0.05
BH8.1	0.15	**10**	<0.3	**15**	**8.7**	**15**	**5.1**	**16**	<0.05
BH8.2	0.5	**7**	<0.3	**5.0**	**17**	**8**	**1.3**	**12**	<0.05
BH9	0.15	**8**	<0.3	**13**	**7.8**	**14**	**2.8**	**18**	<0.05
BH10	0.15	**8**	<0.3	**9.2**	**11**	**15**	**4.1**	**20**	<0.05
BH11	0.15	**12**	<0.3	**18**	**7.6**	**14**	**4.3**	**16**	<0.05
BH12	0.15	**10**	<0.3	**17**	**12**	**28**	**5.5**	**51**	<0.05

Table 16. Pesticides analytical results. Values are presented as mg/kg.

Assessment Criteria		HCB	Heptachlor	Chlordane	Aldrin & Dieldrin	Endrin	DDT	DDD+DDE +DDT	Endosulfan	Methoxychlor	Mirex
NEPM 2013 HIL-A, mg/kg		10	6	50	6	10		240	270	300	10
NEPM 2013 Generic EIL, mg/kg							180				
Sample	Depth (m)	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
BH1	0.15	<0.1	<0.2	<0.2	<0.3	<0.2	<0.2	<0.6	<0.5	<0.1	<0.1
BH2.1	0.15	<0.1	<0.2	<0.2	<0.3	<0.2	<0.2	<0.6	<0.5	<0.1	<0.1
BH2.2	0.5										
BH3	0.15	<0.1	<0.2	<0.2	<0.3	<0.2	<0.2	<0.6	<0.5	<0.1	<0.1
BH4	0.15	<0.1	<0.2	<0.2	<0.3	<0.2	<0.2	<0.6	<0.5	<0.1	<0.1
BH5.1	0.15	<0.1	<0.2	<0.2	<0.3	<0.2	<0.2	<0.6	<0.5	<0.1	<0.1
BH5.2	0.5										
BH6	0.15	<0.1	<0.2	<0.2	<0.3	<0.2	<0.2	<0.6	<0.5	<0.1	<0.1
BH7	0.15	<0.1	<0.2	<0.2	<0.3	<0.2	<0.2	<0.6	<0.5	<0.1	<0.1
BH8.1	0.15	<0.1	<0.2	<0.2	<0.3	<0.2	<0.2	<0.6	<0.5	<0.1	<0.1
BH8.2	0.5										
BH9	0.15	<0.1	<0.2	<0.2	<0.3	<0.2	<0.2	<0.6	<0.5	<0.1	<0.1
BH10	0.15	<0.1	<0.2	<0.2	<0.3	<0.2	<0.2	<0.6	<0.5	<0.1	<0.1
BH11	0.15	<0.1	<0.2	<0.2	<0.3	<0.2	<0.2	<0.6	<0.5	<0.1	<0.1
BH12	0.15	<0.1	<0.2	<0.2	<0.3	<0.2	<0.2	<0.6	<0.5	<0.1	<0.1

Table 17. Asbestos analytical results. Values are presented as %w/w.

Assessment Criteria		Asbestos		
NEPM 2013 Residential Soil HSL-A, mg/kg		Detected	Bonded ACM	FA and AF
			0.01%w/w	0.001%w/w
Sample	Depth (m)	Y/N	%w/w	%w/w
BH1	0.15	N	<0.01	
BH2.1	0.15	N	<0.01	
BH2.2	0.5			
BH3	0.15	N	<0.01	
BH4	0.15	N	<0.01	
BH5.1	0.15	N	<0.01	
BH5.2	0.5			
BH6	0.15	N	<0.01	
BH7	0.15	N	<0.01	
BH8.1	0.15	N	<0.01	
BH8.2	0.5			
BH9	0.15	N	<0.01	
BH10	0.15	N	<0.01	
BH11	0.15	N	<0.01	
BH12	0.15	N	<0.01	

ATTACHMENTS

Attachment 1 - Site Photographs **Sydney Street, Grantham Farm NSW 2765 (Lots 36-44/17/DP1480)** – 6th December 2023

Plate 1 - Soil augering, soils are silty clay

Plate 2 - Soil augering, soils are silty clay

Plate 3 - The site was vacant vegetated land. No aesthetic issues identified

Plate 4 - The site was vacant vegetated land. No aesthetic issues identified

Attachment 2 - Laboratory Results

E-MAILED
7/12 @ 10.43

GS

tal Services Sydney
ox Street
2015
2) 85940400
2) 85940499
pt.sydney@sgs.com
please quote on correspondence)

CHAIN OF CUSTODY & ANALYSIS REQUEST

Company Name:	Neo Consulting Pty Ltd	Project Name/No:	N09650
Address:	186 Riverstone Parade	Purchase Order No:	QUOTE NUMER: 306559v6
	Riverstone NSW 2765	Results Required Date:	Next Day/3 day/Standard
		Telephone:	0416680375 Fax:
Contact Name:	Nick Caltabiano	Email Results and invoices to :	nick@neoconsulting, admin@neoconsulting,
Quotation No:			oskar@neoconsulting, sarah@neoconsulting, esha

SGS EHS Sydney COC
SE257826

ample ID	Sampling Date/ Time	Matrix (Tick as appropriate) Soil Sample	Water Sample	Other_Cartridge__	NO. OF CONTAINERS	ANALYSIS REQUESTED REST	RESN	ASBESTOS I.D.	EC	
	6/12/2023	x			1	X				
	6/12/2023	x			1	X		X		
	6/12/2023	x			1		X		X	
	6/12/2023	x			1	X				
	6/12/2023	x			1	X		X		
	6/12/2023	x			1	X		X		
	6/12/2023	x			1		X		X	
	6/12/2023	x			1	X				
	6/12/2023	x			1	X		X		
	6/12/2023	x			1	X		X		
	6/12/2023	x			1		X		x	
	6/12/2023	x			1	X				

Additional I
- NEPM
- CSV
- ESDAT
- DQO
- GO, Guide
- Others __

Notes/Gui
Special i

acob King	Date/Time: 6/12/2023	Received By:	Date/Time: 6-12-23 4
	Date/Time:	Received By:	Date/Time:
es / No	Temperature: 7.8 °C	Sample Security Sealed: Yes / No	Hazards: e.g. may contain Asbestos

e when printed

ntal Services Sydney
lox Street
2015
02) 85940400
02) 85940499
eipt.sydney@sgs.com

(please quote on correspondence)

CHAIN OF CUSTODY & ANALYSIS REQUEST

Company Name:	Neo Consulting Pty Ltd	Project Name/No:	N09650
Address:	186 Riverstone Parade	Purchase Order No:	QUOTE NUMER: 306559v6
	Riverstone NSW 2765	Results Required Date:	Next Day/3 day/Standard
		Telephone:	0416680375 Fax:
Contact Name:	Nick Caltabiano	Email Results and invoices to :	nick@neoconsulting, admin@neoconsultin
Quotation No:			oskar@neoconsulting, sarah@neoconsulting, es

Sample ID	Sampling Date/ Time	Matrix (Tick as appropriate) Soil Sample	Water Sample	Other_Cartridge	NO. OF CONTAINERS	ANALYSIS REQUESTED REST	RESN	ASBESTOS I.D.	BTEX									Additiona / Notes/G Specia
	6/12/2023	x			1	X		x										
	6/12/2023	x			1	X												
	6/12/2023	x			1	X												
	6/12/2023	x			1				X									
	6/12/2023	x			1				x									

- ☐ NEPM
- ☐ CSV
- ☐ ESDAT
- ☐ DQO
- ☐ GO, Gui
- ☐ Others _

Jacob King	Date/Time: 6/12/2023	Received By:	Date/Time: 6.12.23 4.2
	Date/Time:	Received By:	Date/Time:
Yes / No	Temperature: 7.8 °C	Sample Security Sealed: *Yes / No*	Hazards: *e.g. may contain Asbestos*

'826	Matrix	Containers Supplied By	Storage Location	250 JAR	125 JAR	BAG	125 / 250 STERILE JAR	250 / 500 Zn-Ac/NaOH P	250 / 500 NaOH/Pb-Ac OPAQUE	1L UP P	500 UP P	250 UP P	125 UP P	125 / 250 Metal Total*	125 / 250 Metal Filtered*	125 HCl P	500 / 1L H_2SO_4 AG	125 / 250 H_2SO_4 P	500mL /1LUP AG	100mL /200 UP AG	40 NaThio / HCl GV	40 UP GV	500 NaThio STERILE P	10 Tube	Digitube	250 PFAS	70 PFAS	Cowl
	S	EA	S315	1																							
2	"	"	"																			1					
SAMPLES RECEIVED D2				1																							

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	Admin
Client	NEO CONSULTING PTY LTD
Address	PO BOX 279 RIVERSTONE NSW 2765
Telephone	0416 680 375
Facsimile	(Not specified)
Email	admin@neoconsulting.com.au
Project	**N09650**
Order Number	**N09650**
Samples	17

LABORATORY DETAILS

Manager	Huong Crawford
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE257826 R0**
Date Received	6/12/2023
Date Reported	14/12/2023

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.
A portion of the sample supplied has been sub-sampled for asbestos analysis in soil according to SGS In-house procedures. We therefore cannot guarantee that the sub-sample is representative of the entire sample supplied. SGS Industries and Environment recommends supplying approximately 50-100g of sample in a
Asbestos analysed by Approved Identifier Yusuf Kuthpudin on 13/12/2023

SIGNATORIES

Akheeqar BENIAMEEN
Chemist

Bennet LO
Senior Chemist

Huong CRAWFORD
Production Manager

Kamrul AHSAN
Senior Chemist

Ly Kim HA
Organic Section Head

Ravee SIVASUBRAMANIAM
Hygiene Team Leader

Shane MCDERMOTT
Inorganic/Metals Chemist

VOC's in Soil [AN433] Tested: 8/12/2023

PARAMETER	UOM	LOR	BH1 SOIL - 6/12/2023 SE257826.001	BH2.1 SOIL - 6/12/2023 SE257826.002	BH2.2 SOIL - 6/12/2023 SE257826.003	BH3 SOIL - 6/12/2023 SE257826.004	BH4 SOIL - 6/12/2023 SE257826.005
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6

PARAMETER	UOM	LOR	BH5.1 SOIL - 6/12/2023 SE257826.006	BH5.2 SOIL - 6/12/2023 SE257826.007	BH6 SOIL - 6/12/2023 SE257826.008	BH7 SOIL - 6/12/2023 SE257826.009	BH8.1 SOIL - 6/12/2023 SE257826.010
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6

PARAMETER	UOM	LOR	BH8.2 SOIL - 6/12/2023 SE257826.011	BH9 SOIL - 6/12/2023 SE257826.012	BH10 SOIL - 6/12/2023 SE257826.013	BH11 SOIL - 6/12/2023 SE257826.014	BH12 SOIL - 6/12/2023 SE257826.015
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX*	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6

PARAMETER	UOM	LOR	Trip Spike SOIL - 6/12/2023 SE257826.016	Trip Blank SOIL - 6/12/2023 SE257826.017
Benzene	mg/kg	0.1	[101%]	<0.1
Toluene	mg/kg	0.1	[103%]	<0.1
Ethylbenzene	mg/kg	0.1	[105%]	<0.1
m/p-xylene	mg/kg	0.2	[105%]	<0.2
o-xylene	mg/kg	0.1	[107%]	<0.1
Naphthalene (VOC)*	mg/kg	0.1	-	<0.1
Total Xylenes*	mg/kg	0.3	-	<0.3
Total BTEX*	mg/kg	0.6	-	<0.6

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 8/12/2023

PARAMETER	UOM	LOR	BH1 SOIL - 6/12/2023 SE257826.001	BH2.1 SOIL - 6/12/2023 SE257826.002	BH2.2 SOIL - 6/12/2023 SE257826.003	BH3 SOIL - 6/12/2023 SE257826.004	BH4 SOIL - 6/12/2023 SE257826.005
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	BH5.1 SOIL - 6/12/2023 SE257826.006	BH5.2 SOIL - 6/12/2023 SE257826.007	BH6 SOIL - 6/12/2023 SE257826.008	BH7 SOIL - 6/12/2023 SE257826.009	BH8.1 SOIL - 6/12/2023 SE257826.010
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	BH8.2 SOIL - 6/12/2023 SE257826.011	BH9 SOIL - 6/12/2023 SE257826.012	BH10 SOIL - 6/12/2023 SE257826.013	BH11 SOIL - 6/12/2023 SE257826.014	BH12 SOIL - 6/12/2023 SE257826.015
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 8/12/2023

PARAMETER	UOM	LOR	BH1 SOIL - 6/12/2023 SE257826.001	BH2.1 SOIL - 6/12/2023 SE257826.002	BH2.2 SOIL - 6/12/2023 SE257826.003	BH3 SOIL - 6/12/2023 SE257826.004	BH4 SOIL - 6/12/2023 SE257826.005
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	**46**
TRH C29-C36	mg/kg	45	<45	**71**	<45	<45	**84**
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	**96**
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	**130**
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	BH5.1 SOIL - 6/12/2023 SE257826.006	BH5.2 SOIL - 6/12/2023 SE257826.007	BH6 SOIL - 6/12/2023 SE257826.008	BH7 SOIL - 6/12/2023 SE257826.009	BH8.1 SOIL - 6/12/2023 SE257826.010
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	**49**	<45
TRH C29-C36	mg/kg	45	**57**	<45	**63**	**65**	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	**90**	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	**110**	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	BH8.2 SOIL - 6/12/2023 SE257826.011	BH9 SOIL - 6/12/2023 SE257826.012	BH10 SOIL - 6/12/2023 SE257826.013	BH11 SOIL - 6/12/2023 SE257826.014	BH12 SOIL - 6/12/2023 SE257826.015
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 8/12/2023

PARAMETER	UOM	LOR	BH1 SOIL - 6/12/2023 SE257826.001	BH2.1 SOIL - 6/12/2023 SE257826.002	BH2.2 SOIL - 6/12/2023 SE257826.003	BH3 SOIL - 6/12/2023 SE257826.004	BH4 SOIL - 6/12/2023 SE257826.005
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	**0.1**
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	**0.1**
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	BH5.1 SOIL - 6/12/2023 SE257826.006	BH5.2 SOIL - 6/12/2023 SE257826.007	BH6 SOIL - 6/12/2023 SE257826.008	BH7 SOIL - 6/12/2023 SE257826.009	BH8.1 SOIL - 6/12/2023 SE257826.010
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 8/12/2023 (continued)

PARAMETER	UOM	LOR	BH8.2 SOIL - 6/12/2023 SE257826.011	BH9 SOIL - 6/12/2023 SE257826.012	BH10 SOIL - 6/12/2023 SE257826.013	BH11 SOIL - 6/12/2023 SE257826.014	BH12 SOIL - 6/12/2023 SE257826.015
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

OC Pesticides in Soil [AN420] Tested: 8/12/2023

PARAMETER	UOM	LOR	BH1 SOIL - 6/12/2023 SE257826.001	BH2.1 SOIL - 6/12/2023 SE257826.002	BH3 SOIL - 6/12/2023 SE257826.004	BH4 SOIL - 6/12/2023 SE257826.005	BH5.1 SOIL - 6/12/2023 SE257826.006
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1
Total OC VIC EPA	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 8/12/2023 (continued)

PARAMETER	UOM	LOR	BH6 SOIL - 6/12/2023 SE257826.008	BH7 SOIL - 6/12/2023 SE257826.009	BH8.1 SOIL - 6/12/2023 SE257826.010	BH9 SOIL - 6/12/2023 SE257826.012	BH10 SOIL - 6/12/2023 SE257826.013
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT*	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1
Total OC VIC EPA	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 8/12/2023 (continued)

PARAMETER	UOM	LOR	BH11 SOIL - 6/12/2023 SE257826.014	BH12 SOIL - 6/12/2023 SE257826.015
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1
Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1
o,p'-DDE*	mg/kg	0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2
o,p'-DDD*	mg/kg	0.1	<0.1	<0.1
o,p'-DDT*	mg/kg	0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1
Endrin aldehyde	mg/kg	0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1
Total OC VIC EPA	mg/kg	1	<1	<1

OP Pesticides in Soil [AN420] Tested: 8/12/2023

PARAMETER	UOM	LOR	BH1 SOIL - 6/12/2023 SE257826.001	BH2.1 SOIL - 6/12/2023 SE257826.002	BH3 SOIL - 6/12/2023 SE257826.004	BH4 SOIL - 6/12/2023 SE257826.005	BH5.1 SOIL - 6/12/2023 SE257826.006
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	BH6 SOIL - 6/12/2023 SE257826.008	BH7 SOIL - 6/12/2023 SE257826.009	BH8.1 SOIL - 6/12/2023 SE257826.010	BH9 SOIL - 6/12/2023 SE257826.012	BH10 SOIL - 6/12/2023 SE257826.013
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	BH11 SOIL - 6/12/2023 SE257826.014	BH12 SOIL - 6/12/2023 SE257826.015
Dichlorvos	mg/kg	0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 8/12/2023

PARAMETER	UOM	LOR	BH1 SOIL - 6/12/2023 SE257826.001	BH2.1 SOIL - 6/12/2023 SE257826.002	BH3 SOIL - 6/12/2023 SE257826.004	BH4 SOIL - 6/12/2023 SE257826.005	BH5.1 SOIL - 6/12/2023 SE257826.006
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	BH6 SOIL - 6/12/2023 SE257826.008	BH7 SOIL - 6/12/2023 SE257826.009	BH8.1 SOIL - 6/12/2023 SE257826.010	BH9 SOIL - 6/12/2023 SE257826.012	BH10 SOIL - 6/12/2023 SE257826.013
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	BH11 SOIL - 6/12/2023 SE257826.014	BH12 SOIL - 6/12/2023 SE257826.015
Arochlor 1016	mg/kg	0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1

Conductivity and TDS by Calculation - Soil [AN106] Tested: 12/12/2023

PARAMETER	UOM	LOR	BH2.2 SOIL - 6/12/2023 SE257826.003	BH5.2 SOIL - 6/12/2023 SE257826.007	BH8.2 SOIL - 6/12/2023 SE257826.011
Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	**200**	**91**	**630**

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 8/12/2023

PARAMETER	UOM	LOR	BH1 SOIL - 6/12/2023 SE257826.001	BH2.1 SOIL - 6/12/2023 SE257826.002	BH2.2 SOIL - 6/12/2023 SE257826.003	BH3 SOIL - 6/12/2023 SE257826.004	BH4 SOIL - 6/12/2023 SE257826.005
Arsenic, As	mg/kg	1	7	9	7	7	6
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	19	20	6.1	15	9.9
Copper, Cu	mg/kg	0.5	4.4	3.9	8.7	5.2	13
Lead, Pb	mg/kg	1	15	18	6	13	26
Nickel, Ni	mg/kg	0.5	2.6	3.4	1.0	4.3	7.5
Zinc, Zn	mg/kg	2	7.7	16	9.7	13	36

PARAMETER	UOM	LOR	BH5.1 SOIL - 6/12/2023 SE257826.006	BH5.2 SOIL - 6/12/2023 SE257826.007	BH6 SOIL - 6/12/2023 SE257826.008	BH7 SOIL - 6/12/2023 SE257826.009	BH8.1 SOIL - 6/12/2023 SE257826.010
Arsenic, As	mg/kg	1	10	11	8	7	10
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	30	25	10	10	15
Copper, Cu	mg/kg	0.5	2.4	6.5	7.2	17	8.7
Lead, Pb	mg/kg	1	14	17	14	15	15
Nickel, Ni	mg/kg	0.5	4.5	3.0	6.3	7.3	5.1
Zinc, Zn	mg/kg	2	12	19	15	29	16

PARAMETER	UOM	LOR	BH8.2 SOIL - 6/12/2023 SE257826.011	BH9 SOIL - 6/12/2023 SE257826.012	BH10 SOIL - 6/12/2023 SE257826.013	BH11 SOIL - 6/12/2023 SE257826.014	BH12 SOIL - 6/12/2023 SE257826.015
Arsenic, As	mg/kg	1	7	8	8	12	10
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	5.0	13	9.2	18	17
Copper, Cu	mg/kg	0.5	17	7.8	11	7.6	12
Lead, Pb	mg/kg	1	8	14	15	14	28
Nickel, Ni	mg/kg	0.5	1.3	2.8	4.1	4.3	5.5
Zinc, Zn	mg/kg	2	12	18	20	16	51

Mercury in Soil [AN312] Tested: 8/12/2023

PARAMETER	UOM	LOR	BH1 SOIL - 6/12/2023 SE257826.001	BH2.1 SOIL - 6/12/2023 SE257826.002	BH2.2 SOIL - 6/12/2023 SE257826.003	BH3 SOIL - 6/12/2023 SE257826.004	BH4 SOIL - 6/12/2023 SE257826.005
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	BH5.1 SOIL - 6/12/2023 SE257826.006	BH5.2 SOIL - 6/12/2023 SE257826.007	BH6 SOIL - 6/12/2023 SE257826.008	BH7 SOIL - 6/12/2023 SE257826.009	BH8.1 SOIL - 6/12/2023 SE257826.010
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	BH8.2 SOIL - 6/12/2023 SE257826.011	BH9 SOIL - 6/12/2023 SE257826.012	BH10 SOIL - 6/12/2023 SE257826.013	BH11 SOIL - 6/12/2023 SE257826.014	BH12 SOIL - 6/12/2023 SE257826.015
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Moisture Content [AN002] Tested: 8/12/2023

PARAMETER	UOM	LOR	BH1 SOIL - 6/12/2023 SE257826.001	BH2.1 SOIL - 6/12/2023 SE257826.002	BH2.2 SOIL - 6/12/2023 SE257826.003	BH3 SOIL - 6/12/2023 SE257826.004	BH4 SOIL - 6/12/2023 SE257826.005
% Moisture	%w/w	1	8.3	13.0	16.9	9.3	12.4

PARAMETER	UOM	LOR	BH5.1 SOIL - 6/12/2023 SE257826.006	BH5.2 SOIL - 6/12/2023 SE257826.007	BH6 SOIL - 6/12/2023 SE257826.008	BH7 SOIL - 6/12/2023 SE257826.009	BH8.1 SOIL - 6/12/2023 SE257826.010
% Moisture	%w/w	1	15.2	15.0	9.9	14.7	10.9

PARAMETER	UOM	LOR	BH8.2 SOIL - 6/12/2023 SE257826.011	BH9 SOIL - 6/12/2023 SE257826.012	BH10 SOIL - 6/12/2023 SE257826.013	BH11 SOIL - 6/12/2023 SE257826.014	BH12 SOIL - 6/12/2023 SE257826.015
% Moisture	%w/w	1	15.1	14.1	13.6	12.5	13.0

PARAMETER	UOM	LOR	Trip Blank SOIL - 6/12/2023 SE257826.017
% Moisture	%w/w	1	<1.0

Fibre Identification in soil [AS4964/AN602] Tested: 12/12/2023

PARAMETER	UOM	LOR	BH2.1 SOIL - 6/12/2023 SE257826.002	BH2.2 SOIL - 6/12/2023 SE257826.003	BH4 SOIL - 6/12/2023 SE257826.005	BH5.1 SOIL - 6/12/2023 SE257826.006	BH5.2 SOIL - 6/12/2023 SE257826.007
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	BH7 SOIL - 6/12/2023 SE257826.009	BH8.1 SOIL - 6/12/2023 SE257826.010	BH8.2 SOIL - 6/12/2023 SE257826.011	BH10 SOIL - 6/12/2023 SE257826.013
Asbestos Detected	No unit	-	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by AAS or ICP as per USEPA Method 200.8.
AN106	Conductivity and TDS by Calculation: Conductivity is measured by meter with temperature compensation and is calibrated against a standard solution of potassium chloride. Conductivity is generally reported as µmhos /cm or µS/cm @ 25°C. For soils, an extract of as received sample with water is made at a ratio of 1:5 and the EC determined and reported on the extract, or calculated back to the as-received sample. Salinity can be estimated from conductivity using a conversion factor, which for natural waters, is in the range 0.55 to 0.75. Reference APHA 2510 B.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid , mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser . Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D). Total PAH calculated from individual analyte detections at or above the limit of reporting .
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602/AS4964	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602/AS4964	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602/AS4964	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection/reporting limit (RL) of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."

AN602/AS4964	The sample can be reported “no asbestos found at the reporting limit (RL) of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		
***	Indicates that both * and ** apply.				

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	Admin
Client	NEO CONSULTING PTY LTD
Address	PO BOX 279 RIVERSTONE NSW 2765
Telephone	0416 680 375
Facsimile	(Not specified)
Email	admin@neoconsulting.com.au
Project	**N09650**
Order Number	**N09650**
Samples	9

LABORATORY DETAILS

Manager	Huong Crawford
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE257826 R0**
Date Received	06 Dec 2023
Date Reported	14 Dec 2023

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.
A portion of the sample supplied has been sub-sampled for asbestos analysis in soil according to SGS In-house procedures. We therefore cannot guarantee that the sub-sample is representative of the entire sample supplied. SGS Industries and Environment recommends supplying approximately 50-100g of sample in a
Asbestos analysed by Approved Identifier Yusuf Kuthpudin on 13/12/2023

SIGNATORIES

Ravee SIVASUBRAMANIAM
Hygiene Team Leader

RESULTS

Fibre Identification in soil — Method AS4964/AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE257826.002	BH2.1	Soil	78g Clay, Sand, Rocks	06 Dec 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE257826.003	BH2.2	Soil	109g Clay, Rocks	06 Dec 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE257826.005	BH4	Soil	61g Sand, Soil, Rocks	06 Dec 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE257826.006	BH5.1	Soil	112g Clay, Sand, Rocks	06 Dec 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE257826.007	BH5.2	Soil	100g Clay, Rocks	06 Dec 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE257826.009	BH7	Soil	104g Clay, Sand, Rocks	06 Dec 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE257826.010	BH8.1	Soil	78g Clay, Sand, Rocks	06 Dec 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE257826.011	BH8.2	Soil	73g Clay, Rocks	06 Dec 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE257826.013	BH10	Soil	77g Clay, Sand, Rocks	06 Dec 2023	No Asbestos Found at RL of 0.1g/kg	<0.01

METHOD SUMMARY

SE257826 R0

METHOD	METHODOLOGY SUMMARY
AN602/AS4964	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602/AS4964	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602/AS4964	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection/reporting limit (RL) of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602/AS4964	The sample can be reported “no asbestos found at the reporting limit (RL) of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service .
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.
			***	-	Indicates that both * and ** apply.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy , including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos -containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

STATEMENT OF QA/QC PERFORMANCE

SE257826 R0

CLIENT DETAILS

Contact	Admin
Client	NEO CONSULTING PTY LTD
Address	PO BOX 279 RIVERSTONE NSW 2765
Telephone	0416 680 375
Facsimile	(Not specified)
Email	admin@neoconsulting.com.au
Project	**N09650**
Order Number	**N09650**
Samples	17

LABORATORY DETAILS

Manager	Huong Crawford
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE257826 R0**
Date Received	06 Dec 2023
Date Reported	14 Dec 2023

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Duplicate	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	2 items

SAMPLE SUMMARY

Sample counts by matrix	17 Soil	Type of documentation received	COC
Date documentation received	7/12/2023@10:40ar	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	7.8C
Sample container provider	SGS	Turnaround time requested	Standard
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice Bricks	Samples clearly labelled	Yes
Complete documentation received	Yes		

HOLDING TIME SUMMARY

SE257826 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Conductivity and TDS by Calculation - Soil

Method: ME-(AU)-[ENV]AN106

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH2.2	SE257826.003	LB299231	06 Dec 2023	06 Dec 2023	13 Dec 2023	12 Dec 2023	13 Dec 2023	12 Dec 2023
BH5.2	SE257826.007	LB299231	06 Dec 2023	06 Dec 2023	13 Dec 2023	12 Dec 2023	13 Dec 2023	12 Dec 2023
BH8.2	SE257826.011	LB299231	06 Dec 2023	06 Dec 2023	13 Dec 2023	12 Dec 2023	13 Dec 2023	12 Dec 2023

Fibre Identification in soil

Method: ME-(AU)-[ENV]AS4964/AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH2.1	SE257826.002	LB299237	06 Dec 2023	06 Dec 2023	05 Dec 2024	12 Dec 2023	05 Dec 2024	14 Dec 2023
BH2.2	SE257826.003	LB299237	06 Dec 2023	06 Dec 2023	05 Dec 2024	12 Dec 2023	05 Dec 2024	14 Dec 2023
BH4	SE257826.005	LB299237	06 Dec 2023	06 Dec 2023	05 Dec 2024	12 Dec 2023	05 Dec 2024	14 Dec 2023
BH5.1	SE257826.006	LB299237	06 Dec 2023	06 Dec 2023	05 Dec 2024	12 Dec 2023	05 Dec 2024	14 Dec 2023
BH5.2	SE257826.007	LB299237	06 Dec 2023	06 Dec 2023	05 Dec 2024	12 Dec 2023	05 Dec 2024	14 Dec 2023
BH7	SE257826.009	LB299237	06 Dec 2023	06 Dec 2023	05 Dec 2024	12 Dec 2023	05 Dec 2024	14 Dec 2023
BH8.1	SE257826.010	LB299237	06 Dec 2023	06 Dec 2023	05 Dec 2024	12 Dec 2023	05 Dec 2024	14 Dec 2023
BH8.2	SE257826.011	LB299237	06 Dec 2023	06 Dec 2023	05 Dec 2024	12 Dec 2023	05 Dec 2024	14 Dec 2023
BH10	SE257826.013	LB299237	06 Dec 2023	06 Dec 2023	05 Dec 2024	12 Dec 2023	05 Dec 2024	14 Dec 2023

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH1	SE257826.001	LB299024	06 Dec 2023	06 Dec 2023	03 Jan 2024	08 Dec 2023	03 Jan 2024	14 Dec 2023
BH2.1	SE257826.002	LB299024	06 Dec 2023	06 Dec 2023	03 Jan 2024	08 Dec 2023	03 Jan 2024	14 Dec 2023
BH2.2	SE257826.003	LB299024	06 Dec 2023	06 Dec 2023	03 Jan 2024	08 Dec 2023	03 Jan 2024	14 Dec 2023
BH3	SE257826.004	LB299024	06 Dec 2023	06 Dec 2023	03 Jan 2024	08 Dec 2023	03 Jan 2024	14 Dec 2023
BH4	SE257826.005	LB299024	06 Dec 2023	06 Dec 2023	03 Jan 2024	08 Dec 2023	03 Jan 2024	14 Dec 2023
BH5.1	SE257826.006	LB299024	06 Dec 2023	06 Dec 2023	03 Jan 2024	08 Dec 2023	03 Jan 2024	14 Dec 2023
BH5.2	SE257826.007	LB299024	06 Dec 2023	06 Dec 2023	03 Jan 2024	08 Dec 2023	03 Jan 2024	14 Dec 2023
BH6	SE257826.008	LB299024	06 Dec 2023	06 Dec 2023	03 Jan 2024	08 Dec 2023	03 Jan 2024	14 Dec 2023
BH7	SE257826.009	LB299024	06 Dec 2023	06 Dec 2023	03 Jan 2024	08 Dec 2023	03 Jan 2024	14 Dec 2023
BH8.1	SE257826.010	LB299024	06 Dec 2023	06 Dec 2023	03 Jan 2024	08 Dec 2023	03 Jan 2024	14 Dec 2023
BH8.2	SE257826.011	LB299024	06 Dec 2023	06 Dec 2023	03 Jan 2024	08 Dec 2023	03 Jan 2024	14 Dec 2023
BH9	SE257826.012	LB299024	06 Dec 2023	06 Dec 2023	03 Jan 2024	08 Dec 2023	03 Jan 2024	14 Dec 2023
BH10	SE257826.013	LB299024	06 Dec 2023	06 Dec 2023	03 Jan 2024	08 Dec 2023	03 Jan 2024	14 Dec 2023
BH11	SE257826.014	LB299024	06 Dec 2023	06 Dec 2023	03 Jan 2024	08 Dec 2023	03 Jan 2024	14 Dec 2023
BH12	SE257826.015	LB299024	06 Dec 2023	06 Dec 2023	03 Jan 2024	08 Dec 2023	03 Jan 2024	14 Dec 2023

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH1	SE257826.001	LB299017	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	13 Dec 2023	12 Dec 2023
BH2.1	SE257826.002	LB299017	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	13 Dec 2023	12 Dec 2023
BH2.2	SE257826.003	LB299017	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	13 Dec 2023	12 Dec 2023
BH3	SE257826.004	LB299017	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	13 Dec 2023	12 Dec 2023
BH4	SE257826.005	LB299017	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	13 Dec 2023	12 Dec 2023
BH5.1	SE257826.006	LB299017	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	13 Dec 2023	12 Dec 2023
BH5.2	SE257826.007	LB299017	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	13 Dec 2023	12 Dec 2023
BH6	SE257826.008	LB299017	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	13 Dec 2023	12 Dec 2023
BH7	SE257826.009	LB299017	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	13 Dec 2023	12 Dec 2023
BH8.1	SE257826.010	LB299017	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	13 Dec 2023	12 Dec 2023
BH8.2	SE257826.011	LB299017	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	13 Dec 2023	12 Dec 2023
BH9	SE257826.012	LB299017	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	13 Dec 2023	12 Dec 2023
BH10	SE257826.013	LB299017	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	13 Dec 2023	12 Dec 2023
BH11	SE257826.014	LB299017	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	13 Dec 2023	12 Dec 2023
BH12	SE257826.015	LB299017	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	13 Dec 2023	12 Dec 2023
Trip Blank	SE257826.017	LB299017	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	13 Dec 2023	12 Dec 2023

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH1	SE257826.001	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH2.1	SE257826.002	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH2.2	SE257826.003	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH3	SE257826.004	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH4	SE257826.005	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH5.1	SE257826.006	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH5.2	SE257826.007	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023

HOLDING TIME SUMMARY

SE257826 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH6	SE257826.008	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH7	SE257826.009	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH8.1	SE257826.010	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH8.2	SE257826.011	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH9	SE257826.012	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH10	SE257826.013	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH11	SE257826.014	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH12	SE257826.015	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH1	SE257826.001	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	14 Dec 2023
BH2.1	SE257826.002	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	14 Dec 2023
BH2.2	SE257826.003	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	14 Dec 2023
BH3	SE257826.004	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	14 Dec 2023
BH4	SE257826.005	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	14 Dec 2023
BH5.1	SE257826.006	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	14 Dec 2023
BH5.2	SE257826.007	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	14 Dec 2023
BH6	SE257826.008	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	14 Dec 2023
BH7	SE257826.009	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	14 Dec 2023
BH8.1	SE257826.010	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	14 Dec 2023
BH8.2	SE257826.011	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	14 Dec 2023
BH9	SE257826.012	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	14 Dec 2023
BH10	SE257826.013	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	14 Dec 2023
BH11	SE257826.014	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	14 Dec 2023
BH12	SE257826.015	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	14 Dec 2023

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH1	SE257826.001	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	14 Dec 2023
BH2.1	SE257826.002	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	14 Dec 2023
BH2.2	SE257826.003	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	14 Dec 2023
BH3	SE257826.004	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	14 Dec 2023
BH4	SE257826.005	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	14 Dec 2023
BH5.1	SE257826.006	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	14 Dec 2023
BH5.2	SE257826.007	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	14 Dec 2023
BH6	SE257826.008	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	14 Dec 2023
BH7	SE257826.009	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	14 Dec 2023
BH8.1	SE257826.010	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	14 Dec 2023
BH8.2	SE257826.011	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	14 Dec 2023
BH9	SE257826.012	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	14 Dec 2023
BH10	SE257826.013	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	14 Dec 2023
BH11	SE257826.014	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	14 Dec 2023
BH12	SE257826.015	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	14 Dec 2023

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH1	SE257826.001	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH2.1	SE257826.002	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH2.2	SE257826.003	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH3	SE257826.004	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH4	SE257826.005	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH5.1	SE257826.006	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH5.2	SE257826.007	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH6	SE257826.008	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH7	SE257826.009	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH8.1	SE257826.010	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH8.2	SE257826.011	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH9	SE257826.012	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH10	SE257826.013	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH11	SE257826.014	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023

HOLDING TIME SUMMARY

SE257826 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH12	SE257826.015	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH1	SE257826.001	LB299018	06 Dec 2023	06 Dec 2023	03 Jun 2024	08 Dec 2023	03 Jun 2024	13 Dec 2023
BH2.1	SE257826.002	LB299018	06 Dec 2023	06 Dec 2023	03 Jun 2024	08 Dec 2023	03 Jun 2024	13 Dec 2023
BH2.2	SE257826.003	LB299018	06 Dec 2023	06 Dec 2023	03 Jun 2024	08 Dec 2023	03 Jun 2024	13 Dec 2023
BH3	SE257826.004	LB299018	06 Dec 2023	06 Dec 2023	03 Jun 2024	08 Dec 2023	03 Jun 2024	13 Dec 2023
BH4	SE257826.005	LB299018	06 Dec 2023	06 Dec 2023	03 Jun 2024	08 Dec 2023	03 Jun 2024	13 Dec 2023
BH5.1	SE257826.006	LB299018	06 Dec 2023	06 Dec 2023	03 Jun 2024	08 Dec 2023	03 Jun 2024	13 Dec 2023
BH5.2	SE257826.007	LB299018	06 Dec 2023	06 Dec 2023	03 Jun 2024	08 Dec 2023	03 Jun 2024	13 Dec 2023
BH6	SE257826.008	LB299018	06 Dec 2023	06 Dec 2023	03 Jun 2024	08 Dec 2023	03 Jun 2024	13 Dec 2023
BH7	SE257826.009	LB299018	06 Dec 2023	06 Dec 2023	03 Jun 2024	08 Dec 2023	03 Jun 2024	13 Dec 2023
BH8.1	SE257826.010	LB299018	06 Dec 2023	06 Dec 2023	03 Jun 2024	08 Dec 2023	03 Jun 2024	13 Dec 2023
BH8.2	SE257826.011	LB299018	06 Dec 2023	06 Dec 2023	03 Jun 2024	08 Dec 2023	03 Jun 2024	13 Dec 2023
BH9	SE257826.012	LB299018	06 Dec 2023	06 Dec 2023	03 Jun 2024	08 Dec 2023	03 Jun 2024	13 Dec 2023
BH10	SE257826.013	LB299018	06 Dec 2023	06 Dec 2023	03 Jun 2024	08 Dec 2023	03 Jun 2024	13 Dec 2023
BH11	SE257826.014	LB299018	06 Dec 2023	06 Dec 2023	03 Jun 2024	08 Dec 2023	03 Jun 2024	13 Dec 2023
BH12	SE257826.015	LB299018	06 Dec 2023	06 Dec 2023	03 Jun 2024	08 Dec 2023	03 Jun 2024	13 Dec 2023

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH1	SE257826.001	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH2.1	SE257826.002	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH2.2	SE257826.003	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH3	SE257826.004	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH4	SE257826.005	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH5.1	SE257826.006	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH5.2	SE257826.007	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH6	SE257826.008	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH7	SE257826.009	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH8.1	SE257826.010	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH8.2	SE257826.011	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH9	SE257826.012	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH10	SE257826.013	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH11	SE257826.014	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023
BH12	SE257826.015	LB299015	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	17 Jan 2024	13 Dec 2023

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH1	SE257826.001	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023
BH2.1	SE257826.002	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023
BH2.2	SE257826.003	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023
BH3	SE257826.004	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023
BH4	SE257826.005	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023
BH5.1	SE257826.006	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023
BH5.2	SE257826.007	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023
BH6	SE257826.008	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023
BH7	SE257826.009	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023
BH8.1	SE257826.010	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023
BH8.2	SE257826.011	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023
BH9	SE257826.012	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023
BH10	SE257826.013	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023
BH11	SE257826.014	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023
BH12	SE257826.015	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023
Trip Spike	SE257826.016	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023
Trip Blank	SE257826.017	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH1	SE257826.001	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023
BH2.1	SE257826.002	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023

HOLDING TIME SUMMARY

SE257826 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH2.2	SE257826.003	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023
BH3	SE257826.004	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023
BH4	SE257826.005	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023
BH5.1	SE257826.006	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023
BH5.2	SE257826.007	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023
BH6	SE257826.008	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023
BH7	SE257826.009	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023
BH8.1	SE257826.010	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023
BH8.2	SE257826.011	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023
BH9	SE257826.012	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023
BH10	SE257826.013	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023
BH11	SE257826.014	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023
BH12	SE257826.015	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023
Trip Spike	SE257826.016	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023
Trip Blank	SE257826.017	LB299016	06 Dec 2023	06 Dec 2023	20 Dec 2023	08 Dec 2023	20 Dec 2023	13 Dec 2023

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	BH1	SE257826.001	%	60 - 130%	92
	BH2.1	SE257826.002	%	60 - 130%	94
	BH3	SE257826.004	%	60 - 130%	91
	BH4	SE257826.005	%	60 - 130%	104
	BH5.1	SE257826.006	%	60 - 130%	94
	BH6	SE257826.008	%	60 - 130%	90
	BH7	SE257826.009	%	60 - 130%	103
	BH8.1	SE257826.010	%	60 - 130%	96
	BH9	SE257826.012	%	60 - 130%	98
	BH10	SE257826.013	%	60 - 130%	99
	BH11	SE257826.014	%	60 - 130%	88
	BH12	SE257826.015	%	60 - 130%	96

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	BH1	SE257826.001	%	60 - 130%	102
	BH2.1	SE257826.002	%	60 - 130%	103
	BH3	SE257826.004	%	60 - 130%	103
	BH4	SE257826.005	%	60 - 130%	104
	BH5.1	SE257826.006	%	60 - 130%	105
	BH6	SE257826.008	%	60 - 130%	105
	BH7	SE257826.009	%	60 - 130%	100
	BH8.1	SE257826.010	%	60 - 130%	107
	BH9	SE257826.012	%	60 - 130%	103
	BH10	SE257826.013	%	60 - 130%	102
	BH11	SE257826.014	%	60 - 130%	104
	BH12	SE257826.015	%	60 - 130%	104
d14-p-terphenyl (Surrogate)	BH1	SE257826.001	%	60 - 130%	115
	BH2.1	SE257826.002	%	60 - 130%	114
	BH3	SE257826.004	%	60 - 130%	116
	BH4	SE257826.005	%	60 - 130%	113
	BH5.1	SE257826.006	%	60 - 130%	117
	BH6	SE257826.008	%	60 - 130%	115
	BH7	SE257826.009	%	60 - 130%	112
	BH8.1	SE257826.010	%	60 - 130%	116
	BH9	SE257826.012	%	60 - 130%	115
	BH10	SE257826.013	%	60 - 130%	113
	BH11	SE257826.014	%	60 - 130%	115
	BH12	SE257826.015	%	60 - 130%	115

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	BH1	SE257826.001	%	70 - 130%	102
	BH2.1	SE257826.002	%	70 - 130%	103
	BH2.2	SE257826.003	%	70 - 130%	102
	BH3	SE257826.004	%	70 - 130%	103
	BH4	SE257826.005	%	70 - 130%	104
	BH5.1	SE257826.006	%	70 - 130%	105
	BH5.2	SE257826.007	%	70 - 130%	100
	BH6	SE257826.008	%	70 - 130%	105
	BH7	SE257826.009	%	70 - 130%	100
	BH8.1	SE257826.010	%	70 - 130%	107
	BH8.2	SE257826.011	%	70 - 130%	98
	BH9	SE257826.012	%	70 - 130%	103
	BH10	SE257826.013	%	70 - 130%	102
	BH11	SE257826.014	%	70 - 130%	104
	BH12	SE257826.015	%	70 - 130%	104
d14-p-terphenyl (Surrogate)	BH1	SE257826.001	%	70 - 130%	115
	BH2.1	SE257826.002	%	70 - 130%	114
	BH2.2	SE257826.003	%	70 - 130%	116
	BH3	SE257826.004	%	70 - 130%	116
	BH4	SE257826.005	%	70 - 130%	113

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	BH5.1	SE257826.006	%	70 - 130%	117
	BH5.2	SE257826.007	%	70 - 130%	116
	BH6	SE257826.008	%	70 - 130%	115
	BH7	SE257826.009	%	70 - 130%	112
	BH8.1	SE257826.010	%	70 - 130%	116
	BH8.2	SE257826.011	%	70 - 130%	112
	BH9	SE257826.012	%	70 - 130%	115
	BH10	SE257826.013	%	70 - 130%	113
	BH11	SE257826.014	%	70 - 130%	115
	BH12	SE257826.015	%	70 - 130%	115
d5-nitrobenzene (Surrogate)	BH1	SE257826.001	%	70 - 130%	109
	BH2.1	SE257826.002	%	70 - 130%	110
	BH2.2	SE257826.003	%	70 - 130%	109
	BH3	SE257826.004	%	70 - 130%	109
	BH4	SE257826.005	%	70 - 130%	110
	BH5.1	SE257826.006	%	70 - 130%	113
	BH5.2	SE257826.007	%	70 - 130%	108
	BH6	SE257826.008	%	70 - 130%	110
	BH7	SE257826.009	%	70 - 130%	108
	BH8.1	SE257826.010	%	70 - 130%	113
	BH8.2	SE257826.011	%	70 - 130%	103
	BH9	SE257826.012	%	70 - 130%	110
	BH10	SE257826.013	%	70 - 130%	110
	BH11	SE257826.014	%	70 - 130%	111
	BH12	SE257826.015	%	70 - 130%	109

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
TCMX (Surrogate)	BH1	SE257826.001	%	60 - 130%	92
	BH2.1	SE257826.002	%	60 - 130%	93
	BH3	SE257826.004	%	60 - 130%	90
	BH4	SE257826.005	%	60 - 130%	104
	BH5.1	SE257826.006	%	60 - 130%	93
	BH6	SE257826.008	%	60 - 130%	90
	BH7	SE257826.009	%	60 - 130%	101
	BH8.1	SE257826.010	%	60 - 130%	96
	BH9	SE257826.012	%	60 - 130%	98
	BH10	SE257826.013	%	60 - 130%	98
	BH11	SE257826.014	%	60 - 130%	87
	BH12	SE257826.015	%	60 - 130%	96

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	BH1	SE257826.001	%	60 - 130%	93
	BH2.1	SE257826.002	%	60 - 130%	82
	BH2.2	SE257826.003	%	60 - 130%	83
	BH3	SE257826.004	%	60 - 130%	91
	BH4	SE257826.005	%	60 - 130%	88
	BH5.1	SE257826.006	%	60 - 130%	83
	BH5.2	SE257826.007	%	60 - 130%	86
	BH6	SE257826.008	%	60 - 130%	100
	BH7	SE257826.009	%	60 - 130%	78
	BH8.1	SE257826.010	%	60 - 130%	85
	BH8.2	SE257826.011	%	60 - 130%	87
	BH9	SE257826.012	%	60 - 130%	82
	BH10	SE257826.013	%	60 - 130%	94
	BH11	SE257826.014	%	60 - 130%	84
	BH12	SE257826.015	%	60 - 130%	79
	Trip Spike	SE257826.016	%	60 - 130%	94
	Trip Blank	SE257826.017	%	60 - 130%	93
d4-1,2-dichloroethane (Surrogate)	BH1	SE257826.001	%	60 - 130%	79
	BH2.1	SE257826.002	%	60 - 130%	77

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	BH2.2	SE257826.003	%	60 - 130%	80
	BH3	SE257826.004	%	60 - 130%	84
	BH4	SE257826.005	%	60 - 130%	81
	BH5.1	SE257826.006	%	60 - 130%	73
	BH5.2	SE257826.007	%	60 - 130%	84
	BH6	SE257826.008	%	60 - 130%	90
	BH7	SE257826.009	%	60 - 130%	78
	BH8.1	SE257826.010	%	60 - 130%	86
	BH8.2	SE257826.011	%	60 - 130%	83
	BH9	SE257826.012	%	60 - 130%	79
	BH10	SE257826.013	%	60 - 130%	91
	BH11	SE257826.014	%	60 - 130%	81
	BH12	SE257826.015	%	60 - 130%	80
	Trip Spike	SE257826.016	%	60 - 130%	89
	Trip Blank	SE257826.017	%	60 - 130%	91
d8-toluene (Surrogate)	BH1	SE257826.001	%	60 - 130%	83
	BH2.1	SE257826.002	%	60 - 130%	83
	BH2.2	SE257826.003	%	60 - 130%	89
	BH3	SE257826.004	%	60 - 130%	90
	BH4	SE257826.005	%	60 - 130%	88
	BH5.1	SE257826.006	%	60 - 130%	86
	BH5.2	SE257826.007	%	60 - 130%	89
	BH6	SE257826.008	%	60 - 130%	98
	BH7	SE257826.009	%	60 - 130%	83
	BH8.1	SE257826.010	%	60 - 130%	91
	BH8.2	SE257826.011	%	60 - 130%	88
	BH9	SE257826.012	%	60 - 130%	82
	BH10	SE257826.013	%	60 - 130%	97
	BH11	SE257826.014	%	60 - 130%	87
	BH12	SE257826.015	%	60 - 130%	82
	Trip Spike	SE257826.016	%	60 - 130%	93
	Trip Blank	SE257826.017	%	60 - 130%	94

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	BH1	SE257826.001	%	60 - 130%	93
	BH2.1	SE257826.002	%	60 - 130%	82
	BH2.2	SE257826.003	%	60 - 130%	83
	BH3	SE257826.004	%	60 - 130%	91
	BH4	SE257826.005	%	60 - 130%	88
	BH5.1	SE257826.006	%	60 - 130%	83
	BH5.2	SE257826.007	%	60 - 130%	86
	BH6	SE257826.008	%	60 - 130%	100
	BH7	SE257826.009	%	60 - 130%	78
	BH8.1	SE257826.010	%	60 - 130%	85
	BH8.2	SE257826.011	%	60 - 130%	87
	BH9	SE257826.012	%	60 - 130%	82
	BH10	SE257826.013	%	60 - 130%	94
	BH11	SE257826.014	%	60 - 130%	84
	BH12	SE257826.015	%	60 - 130%	79
d4-1,2-dichloroethane (Surrogate)	BH1	SE257826.001	%	60 - 130%	79
	BH2.1	SE257826.002	%	60 - 130%	77
	BH2.2	SE257826.003	%	60 - 130%	80
	BH3	SE257826.004	%	60 - 130%	84
	BH4	SE257826.005	%	60 - 130%	81
	BH5.1	SE257826.006	%	60 - 130%	73
	BH5.2	SE257826.007	%	60 - 130%	84
	BH6	SE257826.008	%	60 - 130%	90
	BH7	SE257826.009	%	60 - 130%	78
	BH8.1	SE257826.010	%	60 - 130%	86
	BH8.2	SE257826.011	%	60 - 130%	83

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	BH9	SE257826.012	%	60 - 130%	79
	BH10	SE257826.013	%	60 - 130%	91
	BH11	SE257826.014	%	60 - 130%	81
	BH12	SE257826.015	%	60 - 130%	80
d8-toluene (Surrogate)	BH1	SE257826.001	%	60 - 130%	83
	BH2.1	SE257826.002	%	60 - 130%	83
	BH2.2	SE257826.003	%	60 - 130%	89
	BH3	SE257826.004	%	60 - 130%	90
	BH4	SE257826.005	%	60 - 130%	88
	BH5.1	SE257826.006	%	60 - 130%	86
	BH5.2	SE257826.007	%	60 - 130%	89
	BH6	SE257826.008	%	60 - 130%	98
	BH7	SE257826.009	%	60 - 130%	83
	BH8.1	SE257826.010	%	60 - 130%	91
	BH8.2	SE257826.011	%	60 - 130%	88
	BH9	SE257826.012	%	60 - 130%	82
	BH10	SE257826.013	%	60 - 130%	97
	BH11	SE257826.014	%	60 - 130%	87
	BH12	SE257826.015	%	60 - 130%	82

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Conductivity and TDS by Calculation - Soil

Method: ME-(AU)-[ENV]AN106

Sample Number	Parameter	Units	LOR	Result
LB299231.001	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	0.98

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB299024.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB299015.001		Alpha BHC	mg/kg	0.1	<0.1
		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Lindane (gamma BHC)	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		Endrin aldehyde	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endrin ketone	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	90

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB299015.001		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	99
		d14-p-terphenyl (Surrogate)	%	-	112

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB299015.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB299015.001		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	108
		2-fluorobiphenyl (Surrogate)	%	-	99
		d14-p-terphenyl (Surrogate)	%	-	112

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB299015.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	TCMX (Surrogate)	%	-	89

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number		Parameter	Units	LOR	Result
LB299018.001		Arsenic, As	mg/kg	1	<1
		Cadmium, Cd	mg/kg	0.3	<0.3
		Chromium, Cr	mg/kg	0.5	<0.5
		Copper, Cu	mg/kg	0.5	<0.5
		Nickel, Ni	mg/kg	0.5	<0.5
		Lead, Pb	mg/kg	1	<1
		Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result
LB299015.001		TRH C10-C14	mg/kg	20	<20
		TRH C15-C28	mg/kg	45	<45
		TRH C29-C36	mg/kg	45	<45
		TRH C37-C40	mg/kg	100	<100
		TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB299016.001	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
	Polycyclic VOCs	Naphthalene (VOC)*	mg/kg	0.1	<0.1
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	81
		d8-toluene (Surrogate)	%	-	88
		Bromofluorobenzene (Surrogate)	%	-	91
	Totals	Total BTEX*	mg/kg	0.6	<0.6

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB299016.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	81

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

Conductivity and TDS by Calculation - Soil

Method: ME-(AU)-[ENV]AN106

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE257826.011	LB299231.007	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	630	91.675840517:	30	9

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE257826.010	LB299024.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE257873.004	LB299024.024	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE257826.010	LB299017.011	% Moisture	%w/w	1	10.9	10.9	39	0
SE257873.004	LB299017.022	% Moisture	%w/w	1	11.2	11.1	39	1

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE257826.013	LB299015.026		Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDE*	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD*	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT*	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
			Total OC VIC EPA	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	30	1
SE257873.004	LB299015.024		Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDE*	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE257873.004	LB299015.024		p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD*	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT*	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
			Total OC VIC EPA	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.14	30	0

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE257826.010	LB299015.014		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.6	0.6	30	2
SE257873.004	LB299015.024		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.6	0.6	30	2

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE257826.010	LB299015.014	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE257826.010	LB299015.014		Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.6	0.5	30	3
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.6	0.6	30	2
SE257873.004	LB299015.024		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0*	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.6	30	3
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.6	0.6	30	2

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE257826.013	LB299015.026		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	TCMX (Surrogate)	mg/kg	-	0	0	30	1
SE257873.004	LB299015.024		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE257873.004	LB299015.024		Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	TCMX (Surrogate)	mg/kg	-	0	0	30	1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE257826.010	LB299018.014		Arsenic, As	mg/kg	1	10	12	39	14
			Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
			Chromium, Cr	mg/kg	0.5	15	15	33	1
			Copper, Cu	mg/kg	0.5	8.7	8.8	36	1
			Nickel, Ni	mg/kg	0.5	5.1	4.8	40	6
			Lead, Pb	mg/kg	1	15	15	37	1
			Zinc, Zn	mg/kg	2	16	16	42	1
SE257873.004	LB299018.024		Arsenic, As	mg/kg	1	4	4	56	18
			Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
			Chromium, Cr	mg/kg	0.5	6.1	5.0	39	19
			Copper, Cu	mg/kg	0.5	16	25	32	44 ②
			Nickel, Ni	mg/kg	0.5	8.6	13	35	38 ②
			Lead, Pb	mg/kg	1	35	40	33	15
			Zinc, Zn	mg/kg	2	50	58	34	16

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE257826.010	LB299015.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE257873.004	LB299015.024		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE257826.010	LB299016.015	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
			Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.6	8.3	50	4
			d8-toluene (Surrogate)	mg/kg	-	9.1	9.0	50	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.5	8.5	50	1
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
			Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0
SE257873.004	LB299016.030	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
			Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE257873.004	LB299016.030	Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.0	8.0	50	0
			d8-toluene (Surrogate)	mg/kg	-	8.3	8.1	50	2
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.2	7.9	50	4
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
			Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE257826.010	LB299016.015		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.6	8.3	50	4
			d8-toluene (Surrogate)	mg/kg	-	9.1	9.0	50	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.5	8.5	50	1
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE257873.004	LB299016.030		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.0	8.0	50	0
			d8-toluene (Surrogate)	mg/kg	-	8.3	8.1	50	2
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.2	7.9	50	4
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Conductivity and TDS by Calculation - Soil

Method: ME-(AU)-[ENV]AN106

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB299231.002	Conductivity of Extract (1:5 dry sample basis)	µS/cm	1	NA	303	85 - 115	98

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB299024.002	Mercury	mg/kg	0.05	0.20	0.2	80 - 120	100

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB299015.002		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	78
		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	85
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	82
		Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	82
		Endrin	mg/kg	0.2	<0.2	0.2	60 - 140	86
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	90
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.15	40 - 130	93

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB299015.002		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.1	2	60 - 140	105
		Diazinon (Dimpylate)	mg/kg	0.5	2.2	2	60 - 140	109
		Dichlorvos	mg/kg	0.5	2.0	2	60 - 140	98
		Ethion	mg/kg	0.2	2.2	2	60 - 140	108
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.6	0.5	40 - 130	118
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.6	0.5	40 - 130	118

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB299015.002		Naphthalene	mg/kg	0.1	4.4	4	60 - 140	111
		Acenaphthylene	mg/kg	0.1	4.4	4	60 - 140	111
		Acenaphthene	mg/kg	0.1	4.5	4	60 - 140	114
		Phenanthrene	mg/kg	0.1	4.4	4	60 - 140	109
		Anthracene	mg/kg	0.1	4.4	4	60 - 140	111
		Fluoranthene	mg/kg	0.1	4.3	4	60 - 140	108
		Pyrene	mg/kg	0.1	4.6	4	60 - 140	115
		Benzo(a)pyrene	mg/kg	0.1	5.1	4	60 - 140	127
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.6	0.5	40 - 130	118
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.6	0.5	40 - 130	118
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.6	0.5	40 - 130	118

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB299015.002	Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	92

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB299018.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	108
	Cadmium, Cd	mg/kg	0.3	3.9	4.81	70 - 130	82
	Chromium, Cr	mg/kg	0.5	42	38.31	80 - 120	109
	Copper, Cu	mg/kg	0.5	320	290	80 - 120	111
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	102
	Lead, Pb	mg/kg	1	91	89.9	80 - 120	101
	Zinc, Zn	mg/kg	2	290	273	80 - 120	105

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB299015.002	TRH C10-C14	mg/kg	20	52	40	60 - 140	129
	TRH C15-C28	mg/kg	45	<45	40	60 - 140	104
	TRH C29-C36	mg/kg	45	45	40	60 - 140	113

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB299015.002	TRH F Bands	TRH >C10-C16	mg/kg	25	49	40	60 - 140	124
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	107
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	99

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB299016.002	Monocyclic	Benzene	mg/kg	0.1	3.2	5	60 - 140	64
	Aromatic	Toluene	mg/kg	0.1	3.2	5	60 - 140	65
		Ethylbenzene	mg/kg	0.1	3.3	5	60 - 140	66
		m/p-xylene	mg/kg	0.2	6.7	10	60 - 140	67
		o-xylene	mg/kg	0.1	3.3	5	60 - 140	67
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.5	10	70 - 130	85
		d8-toluene (Surrogate)	mg/kg	-	8.9	10	70 - 130	89
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.5	10	70 - 130	95

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB299016.002		TRH C6-C10	mg/kg	25	65	92.5	60 - 140	70
		TRH C6-C9	mg/kg	20	56	80	60 - 140	70
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.5	10	70 - 130	85
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.5	10	70 - 130	95
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	45	62.5	60 - 140	72

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE257826.001	LB299024.004	Mercury	mg/kg	0.05	0.21	<0.05	0.2	93

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE257826.001	LB299015.004		Alpha BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	-	-
			Beta BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	0.2	<0.1	0.2	79
			Heptachlor	mg/kg	0.1	0.2	<0.1	0.2	91
			Aldrin	mg/kg	0.1	0.2	<0.1	0.2	86
			Isodrin	mg/kg	0.1	<0.1	<0.1	-	-
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			o,p'-DDE*	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	<0.2	<0.2	0.2	87
			Endrin	mg/kg	0.2	<0.2	<0.2	0.2	94
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			o,p'-DDD*	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	-	-
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDT*	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	0.2	<0.1	0.2	96
			Endrin ketone	mg/kg	0.1	<0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	1	<1	-	-
			Total OC VIC EPA	mg/kg	1	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.14	-	97

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE257826.001	LB299015.004		Azinphos-methyl (Guthion)	mg/kg	0.2	0.5	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.8	<0.2	2	91
			Diazinon (Dimpylate)	mg/kg	0.5	2.0	<0.5	2	98
			Dichlorvos	mg/kg	0.5	1.4	<0.5	2	71
			Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
			Ethion	mg/kg	0.2	1.8	<0.2	2	89
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	<0.5	-	-
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	7.5	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	98
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.6	0.6	-	118

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE257826.001	LB299015.004	Naphthalene	mg/kg	0.1	4.0	<0.1	4	101
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Acenaphthylene	mg/kg	0.1	3.9	<0.1	4	98
		Acenaphthene	mg/kg	0.1	4.3	<0.1	4	107
		Fluorene	mg/kg	0.1	<0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE257826.001	LB299015.004		Phenanthrene	mg/kg	0.1	4.0	<0.1	4	100
			Anthracene	mg/kg	0.1	4.5	<0.1	4	111
			Fluoranthene	mg/kg	0.1	4.1	<0.1	4	101
			Pyrene	mg/kg	0.1	4.6	<0.1	4	115
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	4.5	<0.1	4	113
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	4.5	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	4.6	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	4.7	<0.3	-	-
			Total PAH (18)	mg/kg	0.8	34	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.6	0.5	-	110
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	98
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.6	0.6	-	118

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE257826.001	LB299015.004		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	0.3	<0.2	0.4	85
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	-	-
		Surrogates	TCMX (Surrogate)	mg/kg	-	0	0	-	96

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE257826.001	LB299018.004		Arsenic, As	mg/kg	1	48	7	50	83
			Cadmium, Cd	mg/kg	0.3	38	<0.3	50	76
			Chromium, Cr	mg/kg	0.5	56	19	50	73
			Copper, Cu	mg/kg	0.5	49	4.4	50	89
			Nickel, Ni	mg/kg	0.5	44	2.6	50	83
			Lead, Pb	mg/kg	1	52	15	50	75
			Zinc, Zn	mg/kg	2	50	7.7	50	84

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE257826.001	LB299015.004		TRH C10-C14	mg/kg	20	54	<20	40	135
			TRH C15-C28	mg/kg	45	<45	<45	40	97
			TRH C29-C36	mg/kg	45	<45	<45	40	69
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F	TRH >C10-C16	mg/kg	25	50	<25	40	125
		Bands	TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	50	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	90
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE257826.001	LB299016.004	Monocyclic	Benzene	mg/kg	0.1	4.6	<0.1	5	92
		Aromatic	Toluene	mg/kg	0.1	4.7	<0.1	5	94
			Ethylbenzene	mg/kg	0.1	4.8	<0.1	5	96
			m/p-xylene	mg/kg	0.2	9.5	<0.2	10	95

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE257826.001	LB299016.004	Monocyclic	o-xylene	mg/kg	0.1	4.9	<0.1	5	97
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.2	7.9	10	82
			d8-toluene (Surrogate)	mg/kg	-	8.4	8.3	10	84
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.3	9.3	10	93
		Totals	Total BTEX*	mg/kg	0.6	29	<0.6	-	-
			Total Xylenes*	mg/kg	0.3	14	<0.3	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE257826.001	LB299016.004		TRH C6-C10	mg/kg	25	78	<25	92.5	84
			TRH C6-C9	mg/kg	20	67	<20	80	84
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.2	7.9	10	82
			d8-toluene (Surrogate)	mg/kg	-	8.4	8.3	10	84
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.3	9.3	-	93
		VPH F	Benzene (F0)	mg/kg	0.1	4.6	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	49	<25	62.5	79

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the

QC Sample	Sample Number	Parameter	Units	LOR

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.
①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

SAMPLE RECEIPT ADVICE

SE257826

CLIENT DETAILS

Contact	Admin
Client	NEO CONSULTING PTY LTD
Address	PO BOX 279 RIVERSTONE NSW 2765
Telephone	0416 680 375
Facsimile	(Not specified)
Email	admin@neoconsulting.com.au
Project	**N09650**
Order Number	**N09650**
Samples	17

LABORATORY DETAILS

Manager	Huong Crawford
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Wed 6/12/2023
Report Due	Thu 14/12/2023
SGS Reference	**SE257826**

SUBMISSION DETAILS

This is to confirm that 17 samples were received on Wednesday 6/12/2023. Results are expected to be ready by COB Thursday 14/12/2023.
Please quote SGS reference SE257826 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Sample counts by matrix	17 Soil	Type of documentation received	COC
Date documentation received	7/12/2023@10:40am	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	7.8C
Sample container provider	SGS	Turnaround time requested	Standard
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice Bricks	Samples clearly labelled	Yes
Complete documentation received	Yes		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

A separate portion was not supplied for Asbestos analysis . A sub-sample will be used from the jar provided.
D1 and D2 Extra samples received.

SAMPLE RECEIPT ADVICE

SE257826

CLIENT DETAILS

Client NEO CONSULTING PTY LTD

Project N09650

SUMMARY OF ANALYSIS

No.	Sample ID	Conductivity and TDS by Calculation - Soil	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	BH1	-	30	14	26	11	10	11	7
002	BH2.1	-	30	14	26	11	10	11	7
003	BH2.2	1	-	-	26	-	10	11	7
004	BH3	-	30	14	26	11	10	11	7
005	BH4	-	30	14	26	11	10	11	7
006	BH5.1	-	30	14	26	11	10	11	7
007	BH5.2	1	-	-	26	-	10	11	7
008	BH6	-	30	14	26	11	10	11	7
009	BH7	-	30	14	26	11	10	11	7
010	BH8.1	-	30	14	26	11	10	11	7
011	BH8.2	1	-	-	26	-	10	11	7
012	BH9	-	30	14	26	11	10	11	7
013	BH10	-	30	14	26	11	10	11	7
014	BH11	-	30	14	26	11	10	11	7
015	BH12	-	30	14	26	11	10	11	7
016	Trip Spike	-	-	-	-	-	-	11	-
017	Trip Blank	-	-	-	-	-	-	11	-

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE257826

CLIENT DETAILS

Client NEO CONSULTING PTY LTD

Project N09650

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
001	BH1	-	1	1	7
002	BH2.1	2	1	1	7
003	BH2.2	2	1	1	7
004	BH3	-	1	1	7
005	BH4	2	1	1	7
006	BH5.1	2	1	1	7
007	BH5.2	2	1	1	7
008	BH6	-	1	1	7
009	BH7	2	1	1	7
010	BH8.1	2	1	1	7
011	BH8.2	2	1	1	7
012	BH9	-	1	1	7
013	BH10	2	1	1	7
014	BH11	-	1	1	7
015	BH12	-	1	1	7
017	Trip Blank	-	-	1	-

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

Attachment 3 - Site Data

Property Report

SYDNEY STREET GRANTHAM FARM 2765

Property Details

Address:	SYDNEY STREET GRANTHAM FARM 2765		
Lot/Section /Plan No:	36/17/DP1480	37/17/DP1480	38/17/DP1480
	39/17/DP1480	40/17/DP1480	41/17/DP1480
	42/17/DP1480	43/17/DP1480	44/17/DP1480
Council:	BLACKTOWN CITY COUNCIL		

Summary of planning controls

Planning controls held within the Planning Database are summarised below. The property may be affected by additional planning controls not outlined in this report. Please contact your council for more information.

Land Zoning	R2 - Low Density Residential: (pub. 2-12-2021)
	SP2 - Infrastructure: (pub. 2-12-2021)
Height Of Building	9 m
Floor Space Ratio	NA
Minimum Lot Size	NA
Heritage	NA
Land Reservation Acquisition	Local Drainage (SP2)
Foreshore Building Line	NA
Local Provisions	30 km
Minimum Dwelling Density Area	O1
Greenfield Housing Code Area	Complying Development Code: https://www.planningportal.nsw.gov.au/greenfield-housing-code Building type: 1-2 storey homes, residential alterations and additions Development consent authority: Council or accredited certifier Note: Applications which meet all relevant requirements in the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 may be approved within 20 days. Exclusions may apply. https://legislation.nsw.gov.au/#/view/EPI/2008/572/full

Planning certificate

Section 10.7 (2)

We have prepared this Planning Certificate under Section 10.7 of the *Environmental Planning and Assessment Act 1979*. The form and content of the Certificate is consistent with Schedule 2 of the Environmental Planning and Assessment Regulation 2021.

Applicant details

NEO CONSULTING

186 RIVERSTONE PDE

RIVERSTONE NSW 2765

Your reference N/A

Certificate details

Certificate no.	PL2023/15720	**Fee**	**$67.00**
Date issued	12 December 2023	**Urgency fee**	**N/A**
Receipt no	D004920011		

Property information

Property ID	114303	**Land ID**	114303
Legal description	LOT 36 SEC 17 DP 1480		
Address	SYDNEY STREET GRANTHAM FARM NSW 2765		
County	CUMBERLAND	**Parish**	STMATTHEW

Within this certificate, we have included references to websites where you may find additional information. If you still require assistance on any matter covered by this certificate, please contact us on 02 5300 6000 or at s10.7certificates@blacktown.nsw.gov.au

Disclaimer

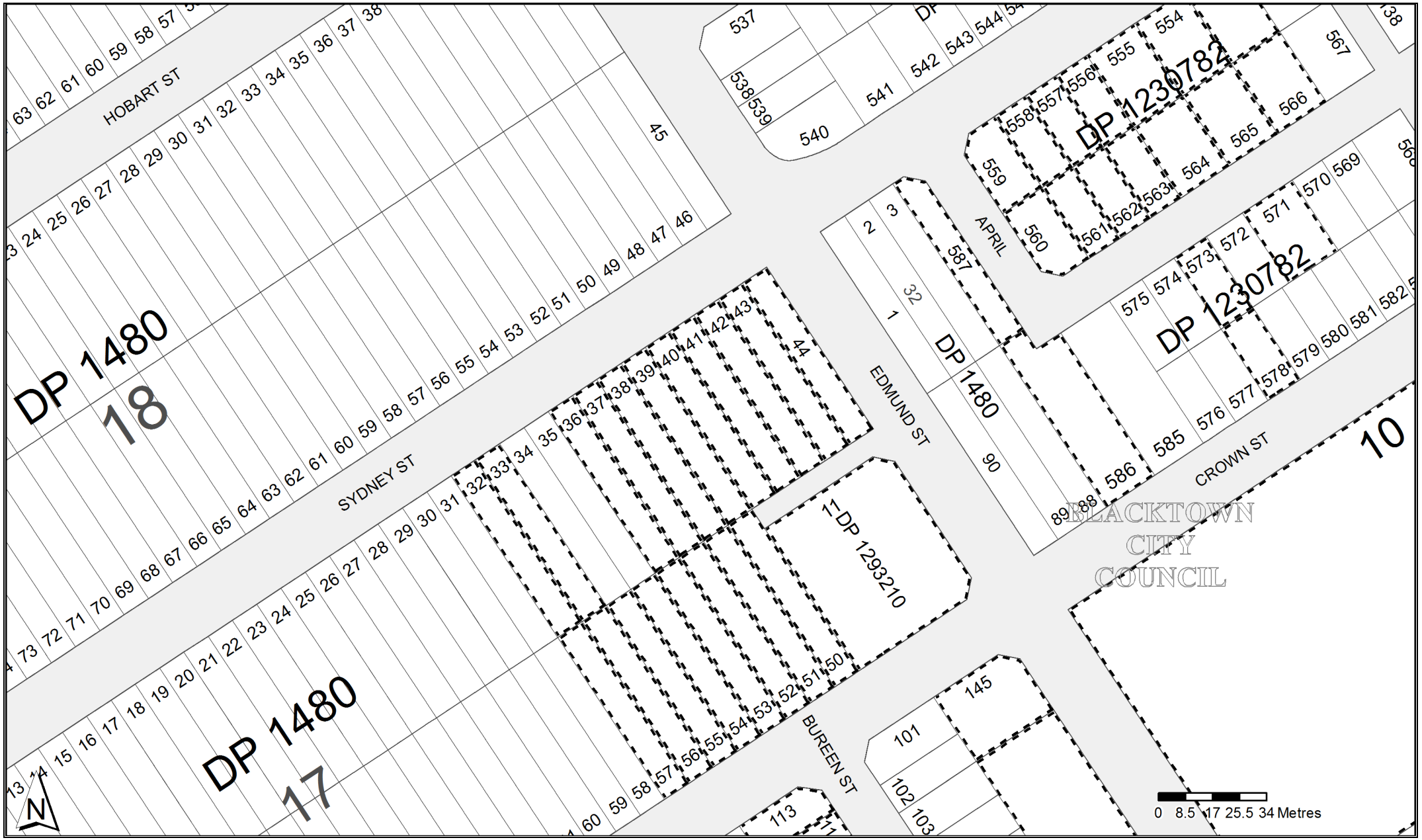
Blacktown City Council gives notice and points out to all users of the information supplied herein, that the information herein has been compiled by Council from sources outside of Council's control. While the information herein is provided with all due care and in good faith, it is provided on the basis that Council will not accept any responsibility for and will not be liable for its contents or for any consequence arising from its use, and every user of such information is advised to make all necessary enquiries from the appropriate organisations, institutions and the like.

Blacktown City Council also gives notice to all users of the information supplied herein, wherever any particular enquiry herein remains unanswered or has not been elaborated upon, such silence should not be interpreted as meaning or inferring either a negative or a positive response as the case may be.

Cadastral Records Enquiry Report : Lot 40 Section 17 DP 1480

Ref : NOUSER

Locality : GRANTHAM FARM
Parish : ST MATTHEW
LGA : BLACKTOWN
County : CUMBERLAND



This information is provided as a searching aid only.Whilst every endeavour is made to ensure that current map, plan and titling information is accurately reflected, the Registrar General cannot guarantee the information provided. For ALL ACTIVITY PRIOR TO SEPTEMBER 2002 you must refer to the RGs Charting and Reference Maps

ADVANCE LEGAL SEARCHERS PTY LTD

(ACN 147 943 842)
ABN 82 147 943 842

18/36 Osborne Road,
Manly NSW 2095

Mobile: +61412 169 809
Email: search@alsearchers.com.au

11th December, 2023

NEO CONSULTING PTY LTD
PO Box 279,
RIVERSTONE, NSW 2765

Attention: Stephanie Rafin,

RE: **Sydney Street,**
Grantham Park
Reference: N09650

Note 1:

Current Search

Folio Identifier Auto Consol 8423-193 (title attached)
Lots 36 & 37 Section 17 DP 1480 (plan attached)
Dated 09th December, 2023
Registered Proprietor:
VALENZUELA NOMINEES 2 PTY LTD *(ACN 667 989 791)*

Title Tree
Lots 36 & 37 Section 17 DP 1480

Folio Identifier Auto Consol 8423-193

Certificate of Title Volume 8423 Folio 193

Certificate of Title Volume 830 Folio 121

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Index

T – Transfer

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Summary of proprietor(s)
Lots 36 & 37 Section 17 DP 1480

Year	Proprietor(s)	
	(Lots 36 & 37 Section 17 DP 1480 – AC 8423-193)	
29 Sep 2023 todate	Valenzuela Nominees 2 Pty Ltd *(ACN 667 989 791)*	T
15 May 1992	Norma Patricia Crogham, wife of Allan Francis Croghan, farmer	
	(Lots 36 & 37 Section 17 DP 1480 – Area 1 Rood 4 Perches – CTVol 8423 Fol 193)	
17 Jan 1963	Norma Patricia Crogham, wife of Allan Francis Croghan, farmer	
	(Lots 36 & 37, 52 to 57 Section 17 DP 1480 – Area 1 Acre 0 Roods 16 Perches – CTVol 830 Fol 121)	
17 Jan 1963	Norma Patricia Crogham, wife of Allan Francis Croghan, farmer *(pursuant to Section 604 Local Government Act 1919)*	T
29 Feb 1940	Ridge & Company Limited *(from Public Trustee exercising power conferred by Local Government Act, 1919)*	T
26 Mar 1887	Martin Engelmann, farmer	

****

Note 2:

Current Search

Folio Identifier Auto Consol 8423-194 (title attached)
Lots 38 to 44 Section 17 DP 1480 (plan attached)
Dated 09th December, 2023
Registered Proprietor:
VALENZUELA NOMINEES 2 PTY LTD *(ACN 667 989 791)*

Title Tree
Lots 38 to 44 Section 17 DP 1480

Folio Identifier Auto Consol 8423-194

Certificate of Title Volume 8423 Folio 194

Certificate of Title Volume 2623 Folio 78

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T – Transfer

****

Summary of proprietor(s)
Lots 38 to 44 Section 17 DP 1480

Year	Proprietor(s)	
	(Lots 38 to 44 Section 17 DP 1480 – AC 8423-194)	
29 Sep 2023 todate	Valenzuela Nominees 2 Pty Ltd *(ACN 667 989 791)*	T
17 Jun 1992	Norma Patricia Crogham, wife of Allan Francis Croghan, farmer	
	(Lots 38 to 44 Section 17 DP 1480 – Area 3 Roods 4 Perches – CTVol 8423 Fol 194)	
17 Jan 1963	Norma Patricia Crogham, wife of Allan Francis Croghan, farmer *(from the Council of the Municipality of Blacktown pursuant to Section 604 Local Government Act 1919)*	T
	(Lots 3 to 44 Section 17 DP 1480 – and other lands - Area 78 Acres 1 Rood 13 ½ Perches – CTVol 2623 Fol 78)	
13 Nov 1915	N.S.W. Realty Co. Limited	

****

	Status	Surv/Comp	Purpose
DP1459			
Lot(s): 10 Section : 28			
DP1286801	PRE-ALLOCATED	UNAVAILABLE	SUBDIVISION
DP1480			
Lot(s): 32, 33, 36, 37, 38, 39, 40, 41, 42, 43, 44, 50, 51, 52, 53, 54, 55, 56, 57 Section : 17			
DP1293210	REGISTERED	SURVEY	SUBDIVISION
DP1230782			
Lot(s): 571			
DP1297199	PRE-ALLOCATED	UNAVAILABLE	SUBDIVISION
Lot(s): 586			
DP1254632	HISTORICAL	SURVEY	CONSOLIDATION
Lot(s): 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 573, 578, 586, 587			
DP1480	HISTORICAL	COMPILATION	UNRESEARCHED
DP1246946			
Lot(s): 145			
DP1246948	PRE-ALLOCATED	UNAVAILABLE	SUBDIVISION
Lot(s): 146			
DP357141	HISTORICAL	COMPILATION	UNRESEARCHED
DP1246947	PRE-ALLOCATED	UNAVAILABLE	SUBDIVISION
Lot(s): 113, 114			
DP346979	HISTORICAL	COMPILATION	UNRESEARCHED
DP1293210			
Lot(s): 11			
DP1256616	HISTORICAL	SURVEY	CONSOLIDATION

Plan	Surv/Comp	Purpose
DP1459	COMPILATION	UNRESEARCHED
DP1480	COMPILATION	UNRESEARCHED
DP1230781	SURVEY	SUBDIVISION
DP1230781	UNRESEARCHED	SUBDIVISION
DP1230782	UNRESEARCHED	SUBDIVISION
DP1230782	SURVEY	SUBDIVISION
DP1246946	SURVEY	SUBDIVISION
DP1246946	UNRESEARCHED	SUBDIVISION
DP1246946	SURVEY	SUBDIVISION
DP1293210	SURVEY	SUBDIVISION

System Document Identification

Form Number: 01T-e
Template Number: t_nsw18
ELN Document ID: 2022662019
ELN NOS ID: 2022662021

TRANSFER

New South Wales
Real Property Act 1900

Land Registry Document Identification

AT478981

Stamp Duty: 10701495-001

PRIVACY NOTE: Section 31B of the Real Property Act 1900 (RP Act) authorises the Registrar General to collect the information required by this form for the establishment and maintenance of the Real Property Act Register. Section 96B RP Act requires that the Register is made available to any person for search upon payment of a fee, if any.

LODGED BY:

Responsible Subscriber: ASHURST AUSTRALIA ABN 75304286095
Address: 5 Martin PL
Sydney 2000
Email: PEXA.NSWLandRegistry@ashurst.com
ELNO Subscriber Number: 7243
Customer Account Number: 501410K
Document Collection Box: 238N
Client Reference: 312836 / 1000 1

LAND TITLE REFERENCE

8423-193
8423-194

TRANSFEROR

NORMA PATRICIA CROGHAN

TRANSFEREE

VALENZUELA NOMINEES 2 PTY LTD ACN 667989791
Registered company

Tenancy: Sole Proprietor

CONSIDERATION

The transferor acknowledges receipt of the consideration of $2,420,000.00

ESTATE TRANSFERRED

FEE SIMPLE

The Transferor transfers to the Transferee the Estate specified in this Instrument and acknowledges receipt of any Consideration shown.

SIGNING FOR TRANSFEROR

I certify that:

1. The Certifier has taken reasonable steps to verify the identity of the transferor or his, her or its administrator or attorney.
2. The Certifier holds a properly completed Client Authorisation for the Conveyancing Transaction including this Registry Instrument or Document.
3. The Certifier has retained the evidence supporting this Registry Instrument or Document.
4. The Certifier has taken reasonable steps to ensure that this Registry Instrument or Document is correct and compliant with relevant legislation and any Prescribed Requirement.

Party Represented by Subscriber:

NORMA PATRICIA CROGHAN

Signed By: Daniel Patrick O'Keefe
ELNO Signer Number: 3245
Signer Capacity: Practitioner Certifier
Digital Signing Certificate Number:

Signed for Subscriber: DANIEL PATRICK O'KEEFE ABN 11830242784

D.P. O'KEEFE MACQUARIE LAW
D.P. O'KEEFE MACQUARIE LAW

Subscriber Capacity: Representative Subscriber
ELNO Subscriber Number: 1778 **Customer Account Number:** 500316
Date: 28/09/2023

SIGNING FOR TRANSFEREE

I certify that:

1. The Certifier has taken reasonable steps to verify the identity of the transferee or his, her or its administrator or attorney.
2. The Certifier holds a properly completed Client Authorisation for the Conveyancing Transaction including this Registry Instrument or Document.
3. The Certifier has retained the evidence supporting this Registry Instrument or Document.
4. The Certifier has taken reasonable steps to ensure that this Registry Instrument or Document is correct and compliant with relevant legislation and any Prescribed Requirement.

Party Represented by Subscriber:

VALENZUELA NOMINEES 2 PTY LTD

Signed By: Angelo Valenti **Signer Capacity:** Practitioner Certifier
ELNO Signer Number: 63968 **Digital Signing Certificate Number:**

Signed for Subscriber: PARTNERS OF VALENTI & VALENTI SOLICITORS ABN 36594352170

VALENTI & VALENTI SOLICITORS

Subscriber Capacity: Representative Subscriber
ELNO Subscriber Number: 24800 **Customer Account Number:** 503939
Date: 27/09/2023

MATTHEW CO CUMBERLAND

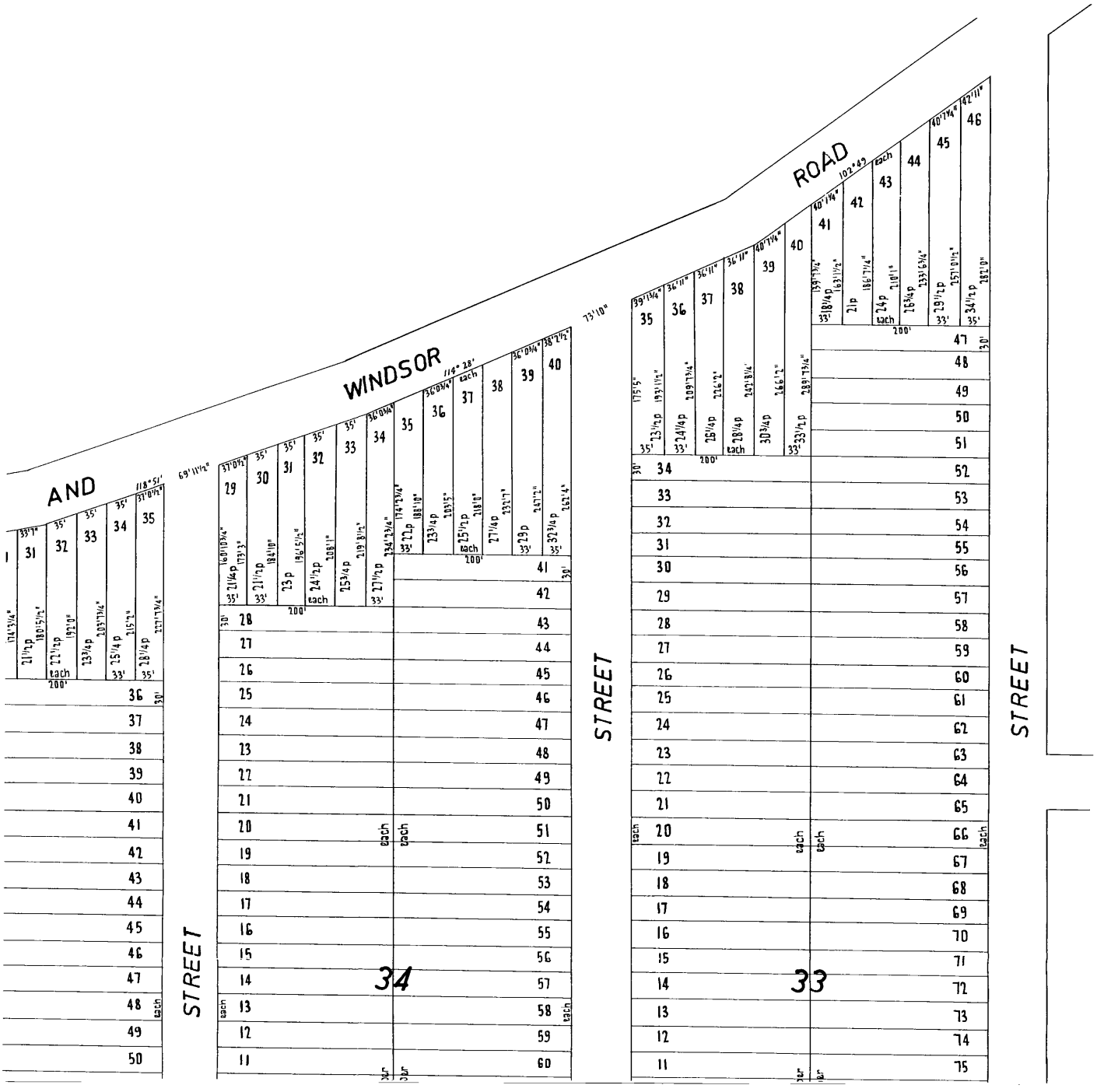
le 100 Feet to one inch

'Y OF BLACKTOWN

D.P 1480 ⓔ

SHEET 1

SHEET / OF 7 SHEETS

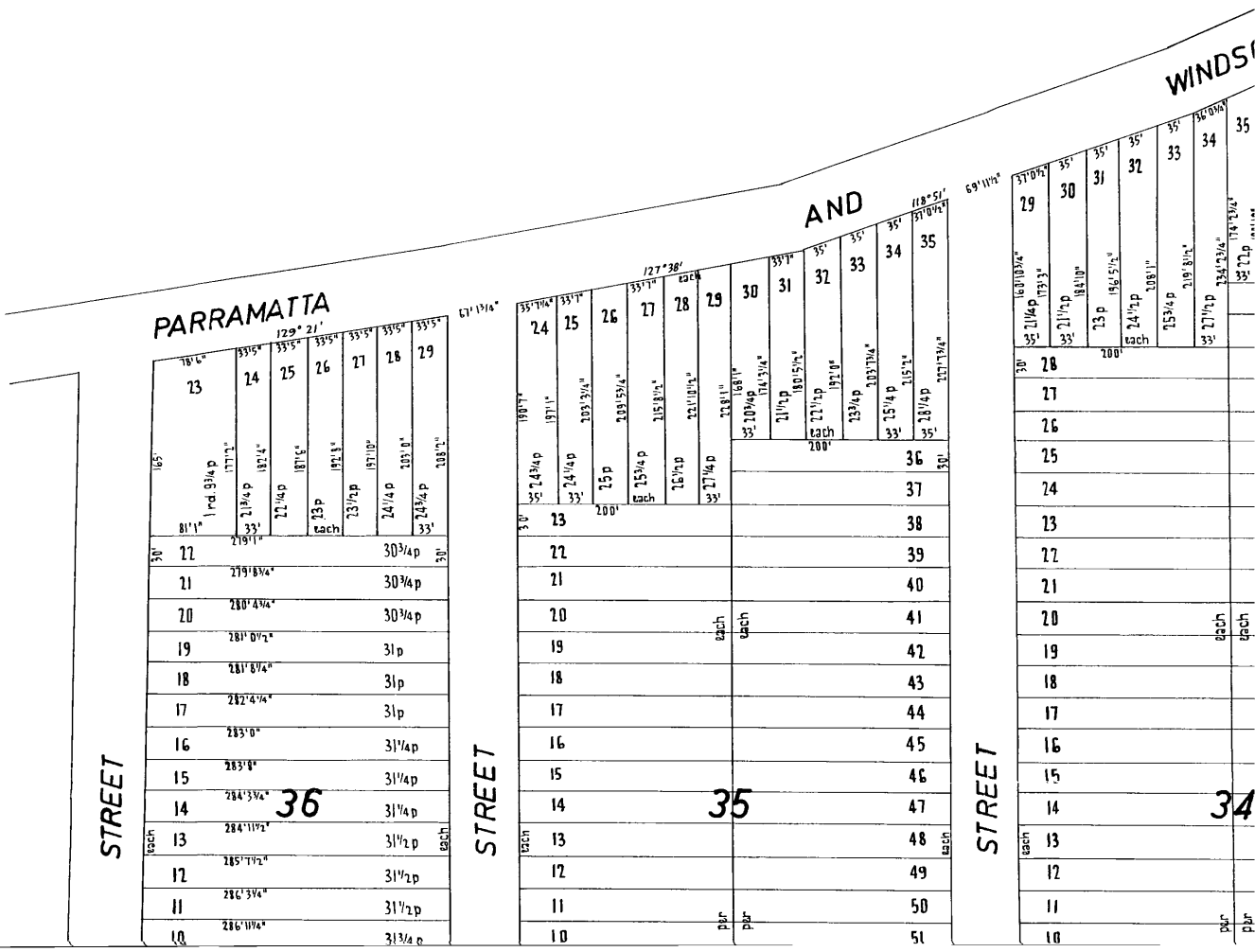


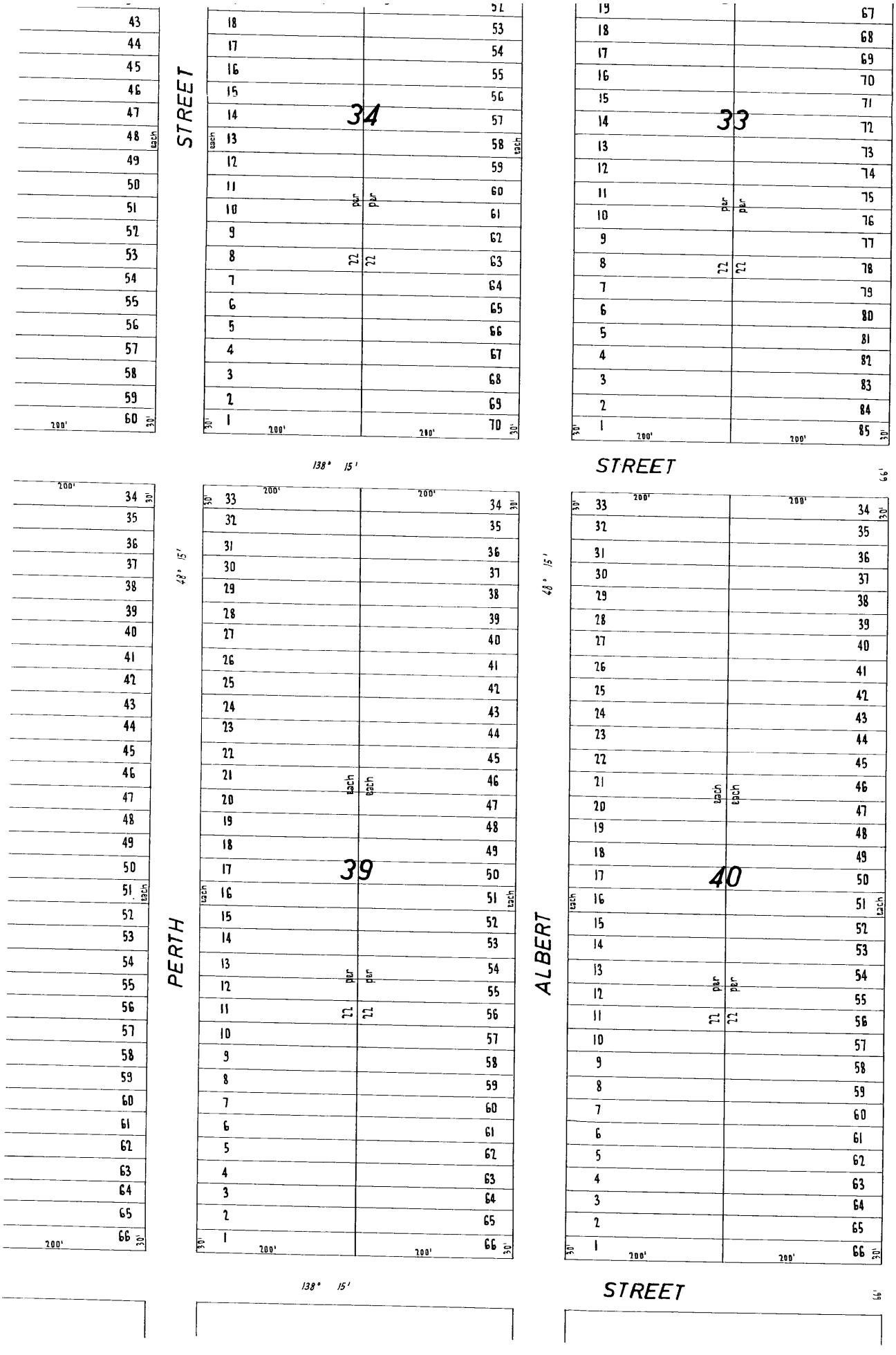
DP 1480 (E) SHEET 1 OF 7 SHEETS

PH ST MATTHEW CO CUMBERL

Scale 100 Feet to one inch

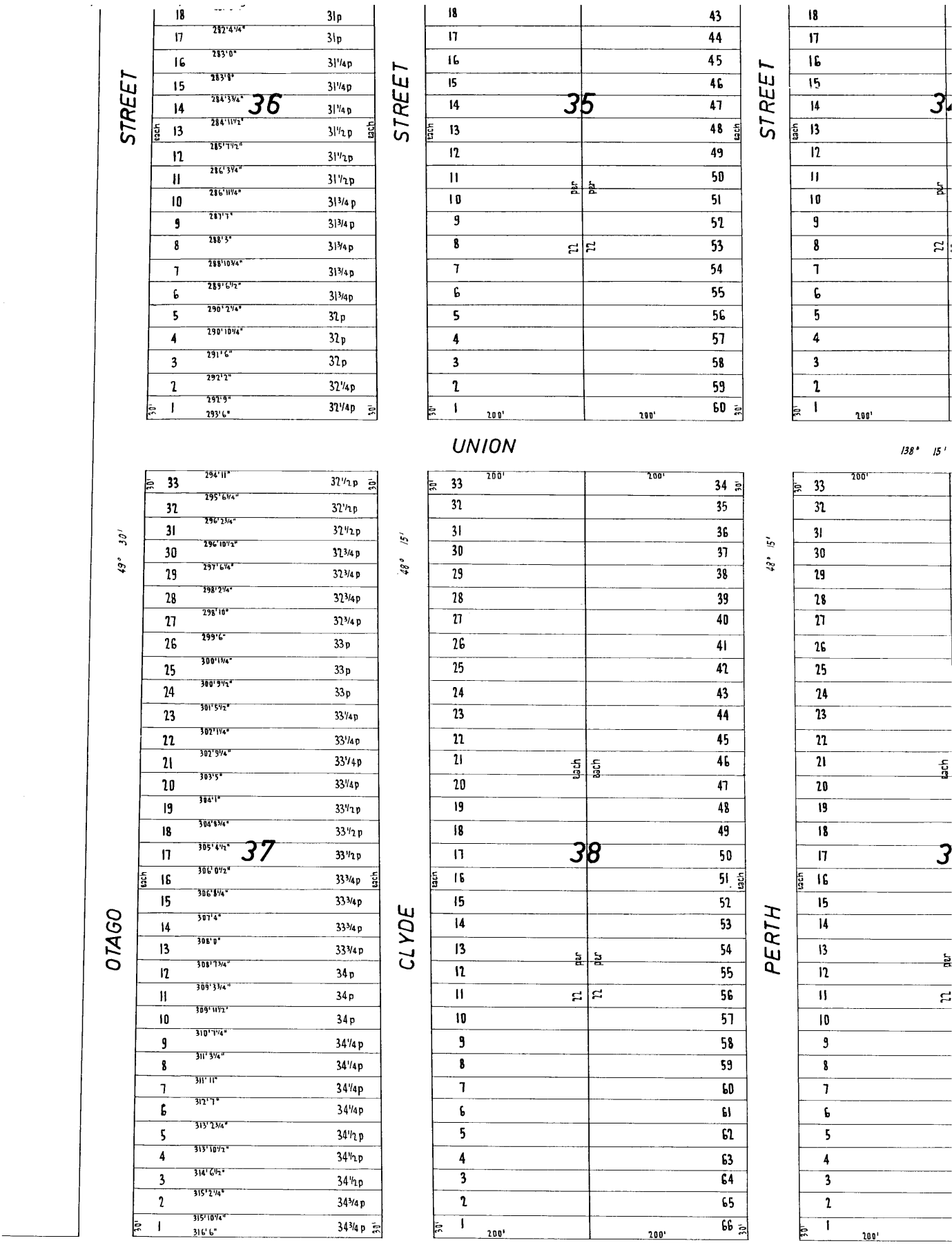
CITY OF BLACKTOWN





DP 1480

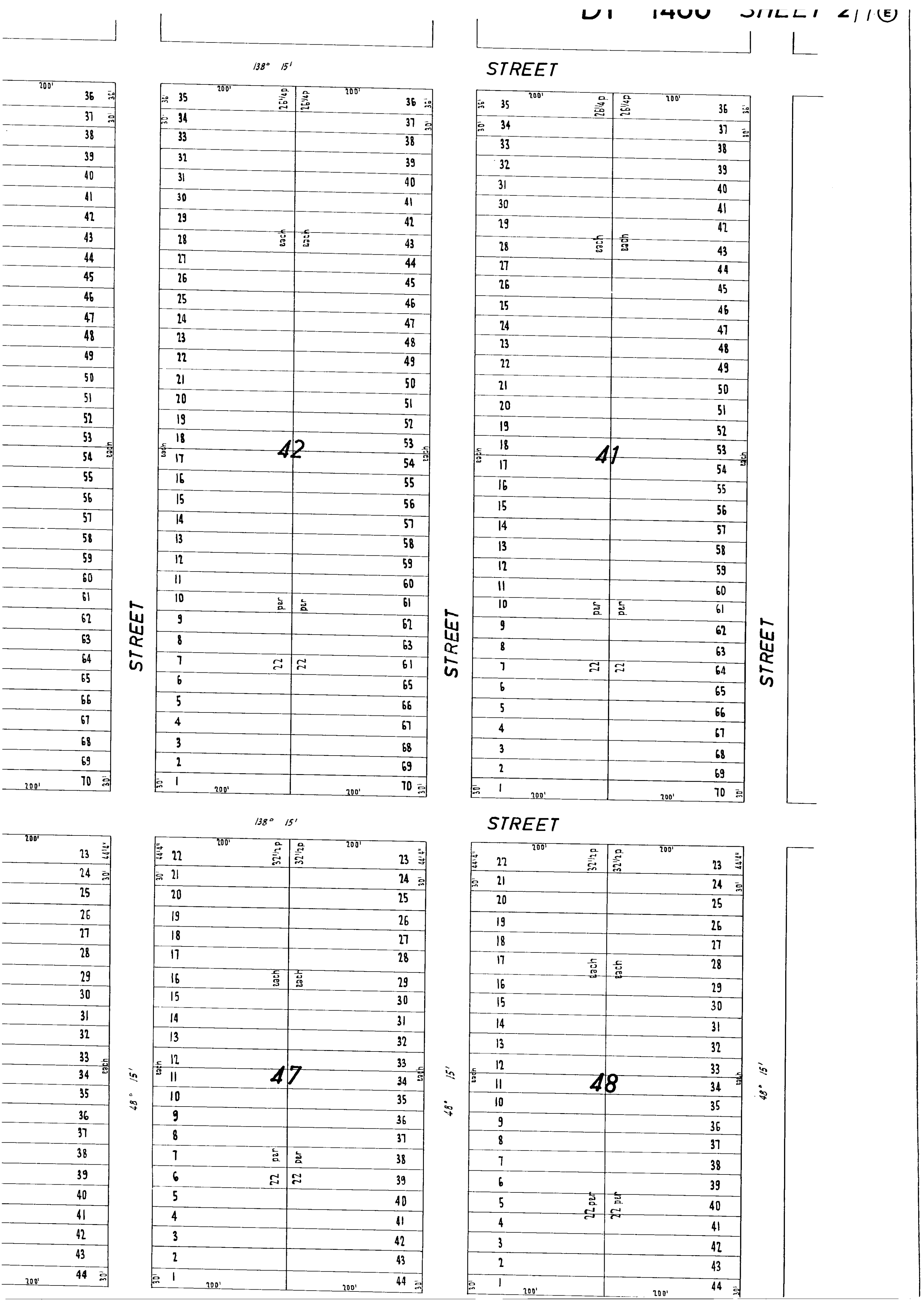
(E) SHEET 1 OF 7 SHEETS



Prepd. W.F 21.2.64
Exd. 26.2.64

DP 1480

SHEET 1 OF 7 SHEETS



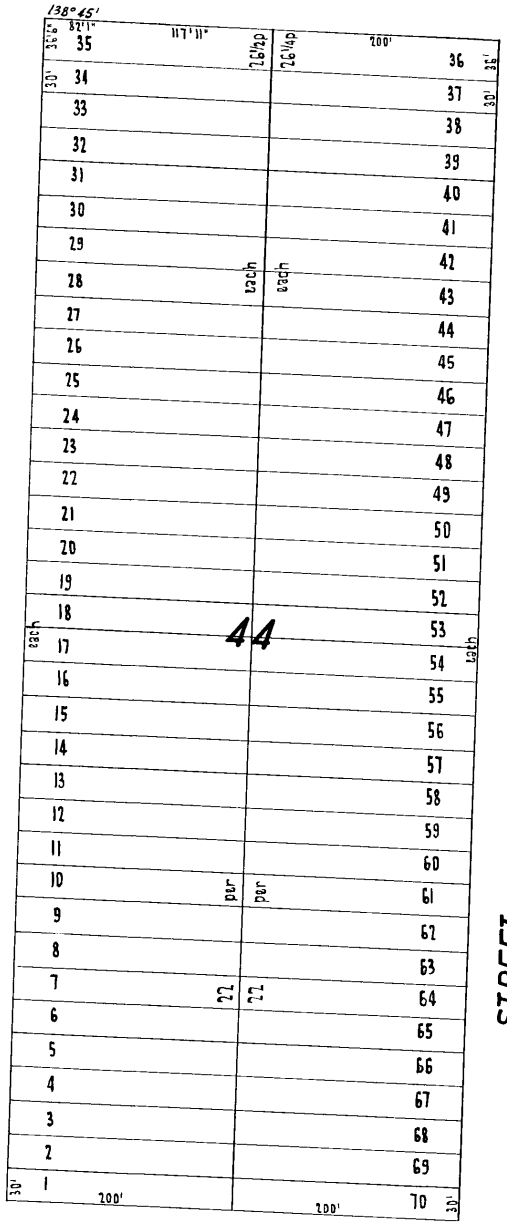
STREET
STREET
STREET
STREET
STREET
42
41
47
48
138° 15'
138° 15'
48° 15'
48° 15'
48° 15'
200'
30'
36'
44'4"
26¼p
32½p
22 per
each

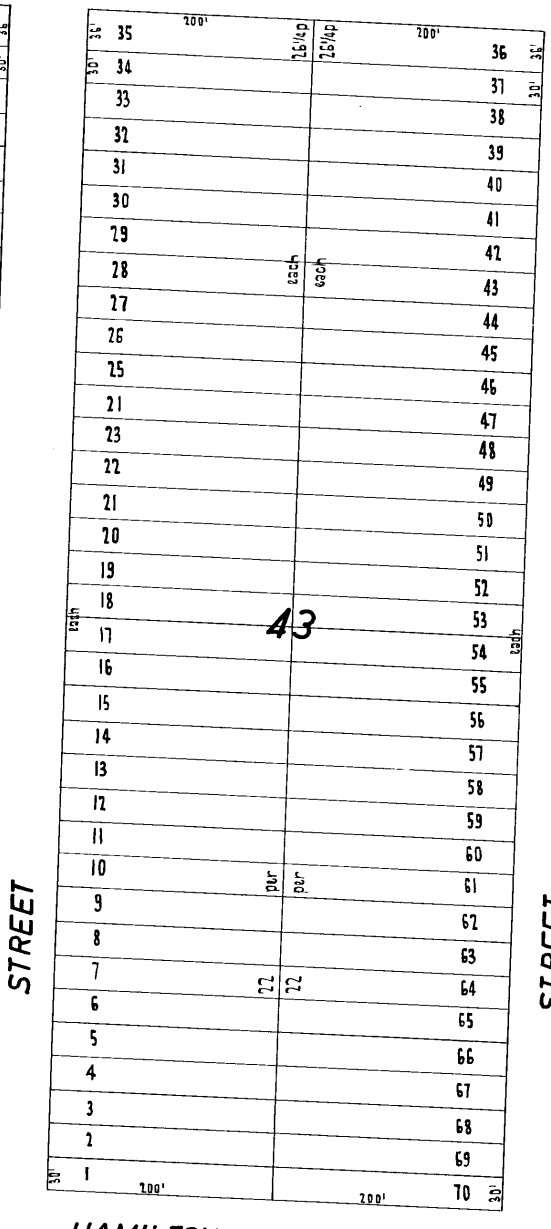
DP 1480

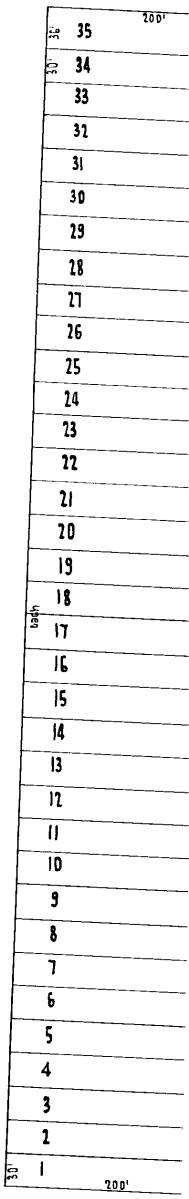
(E)

SHEET 2 OF 7 SHEETS

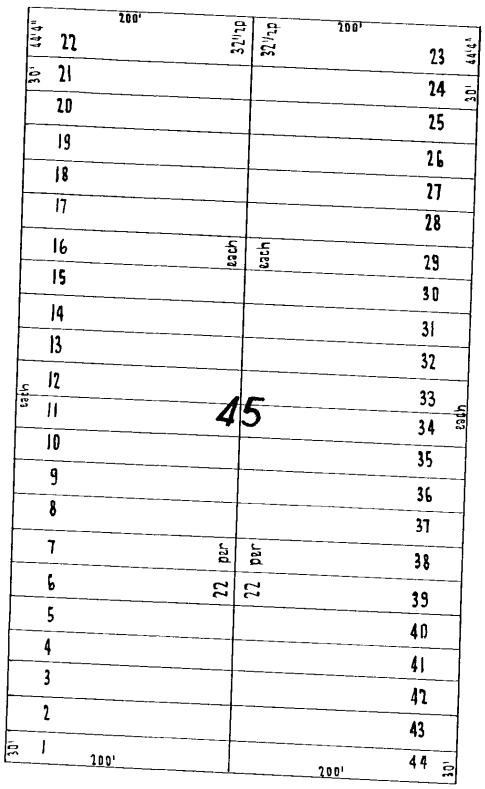
O'CONNELL

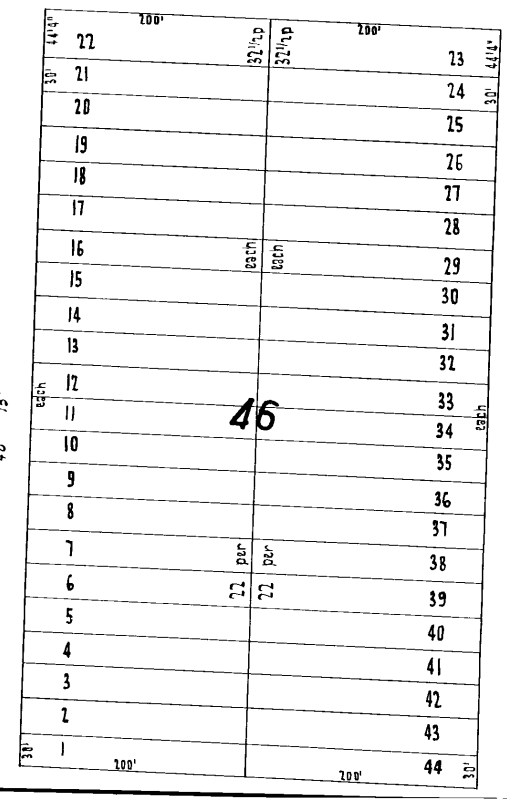


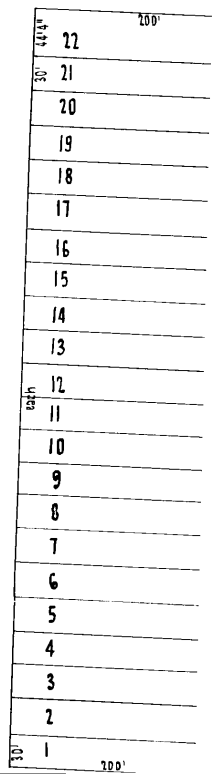


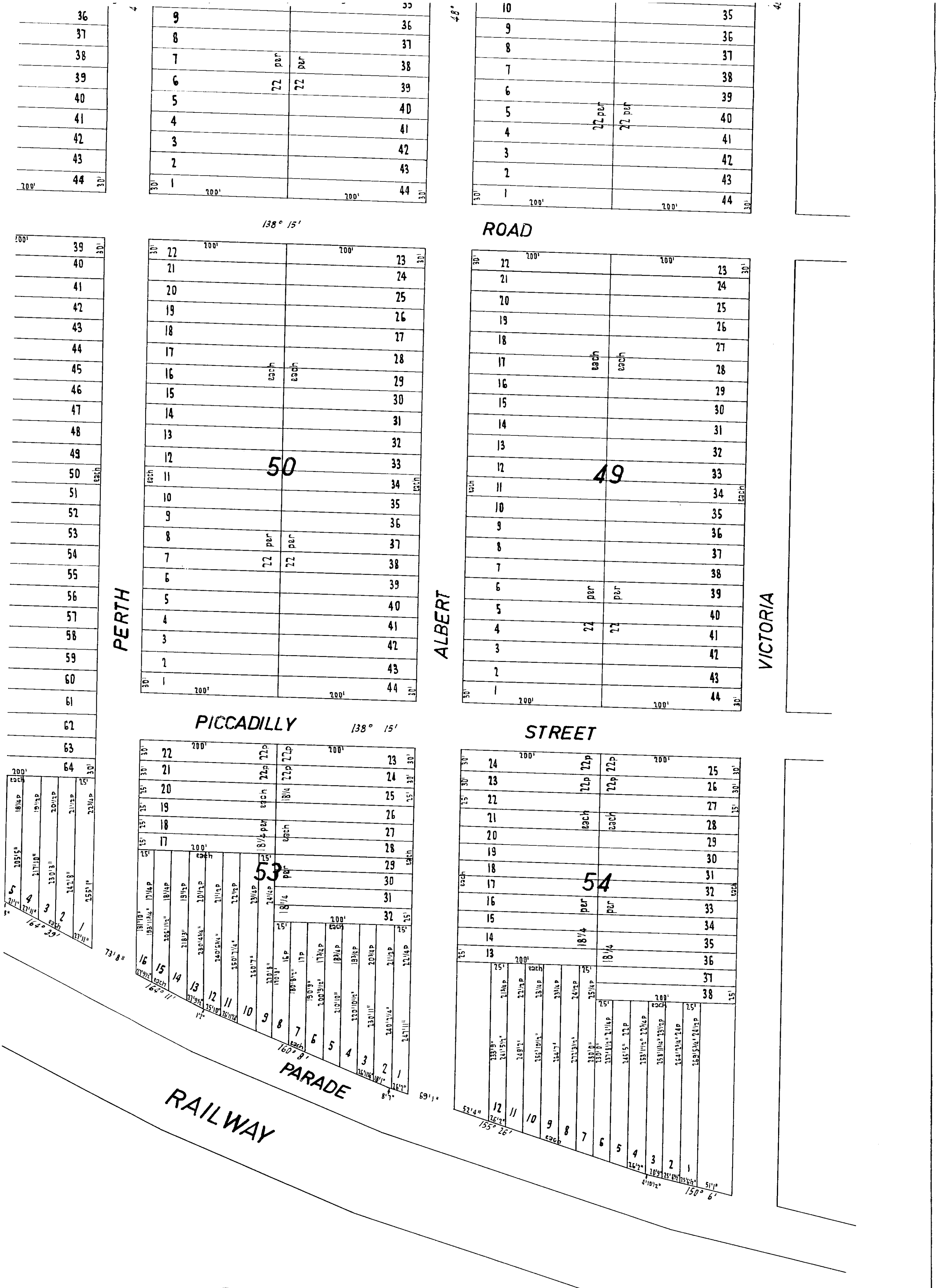


HAMILTON





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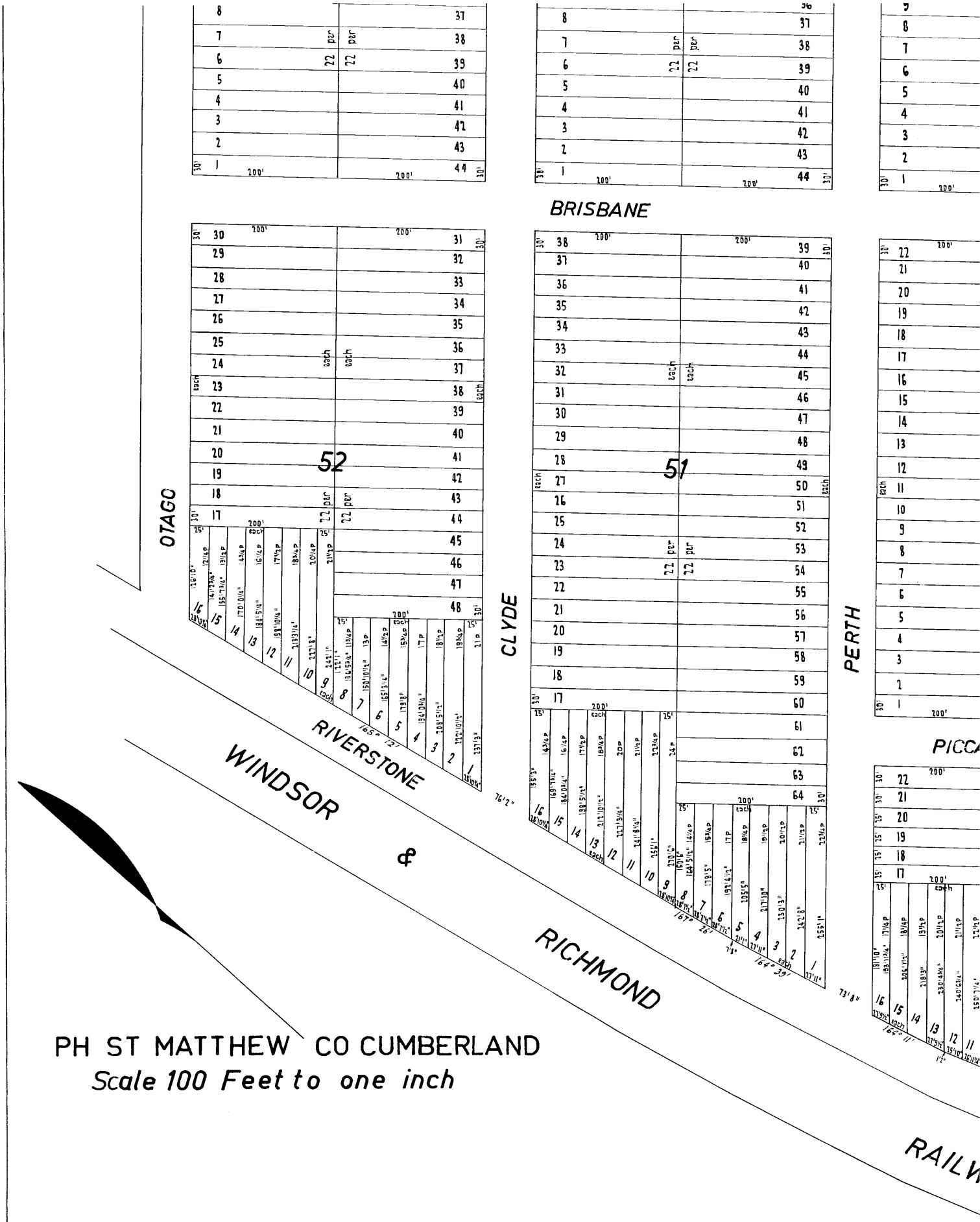
PICCADILLY
STREET
PERTH
ALBERT
VICTORIA
50
49
53
54
PARADE
RAILWAY



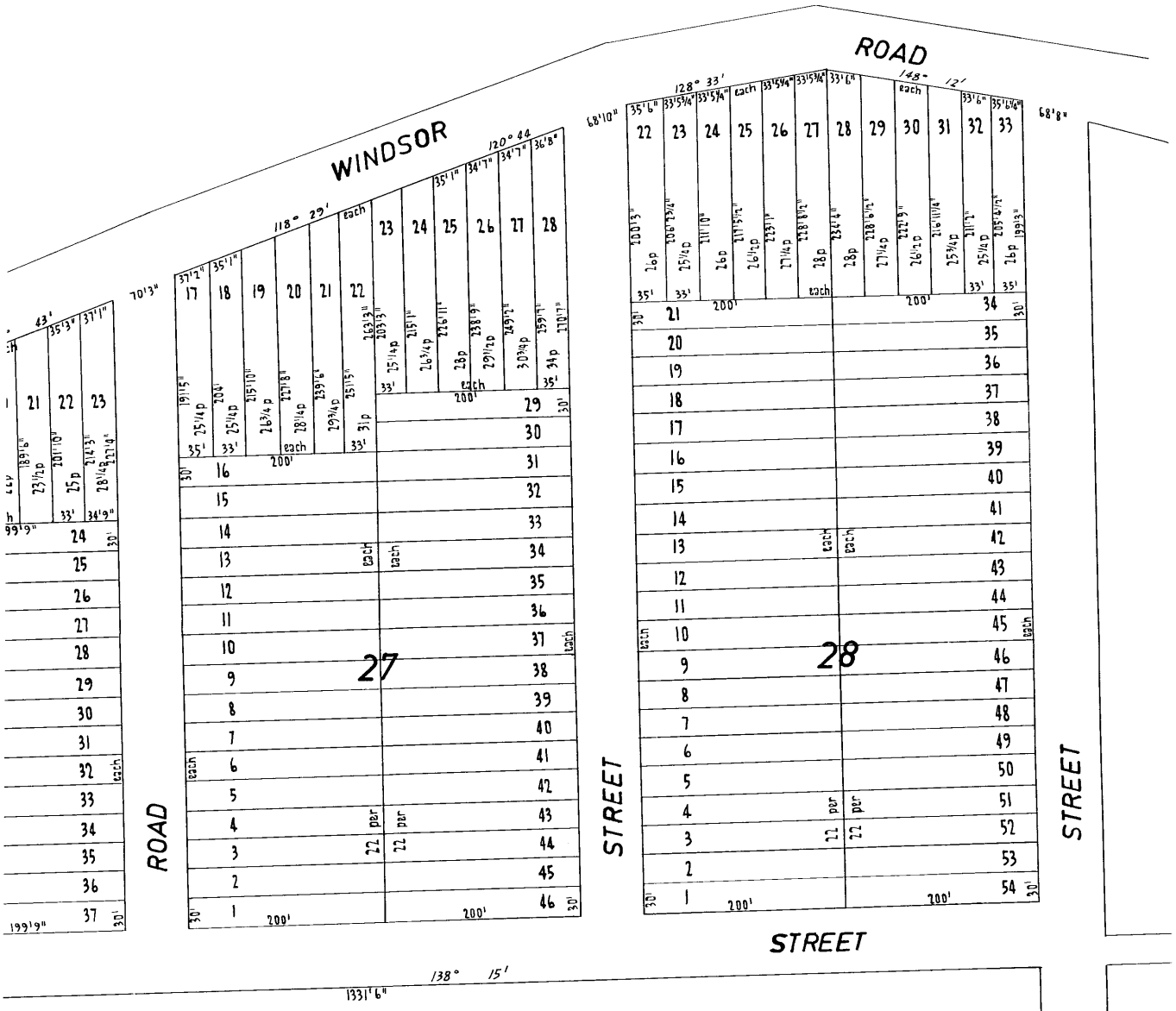
Prepd. M.F 21.2.64
Exd. C 26.2.64

DP 1480 (E) SHEET 2 OF 7 SHEETS

THEW CO CUMBERLAND
) Feet to one inch

DP 1480 (E)
SHEET 3

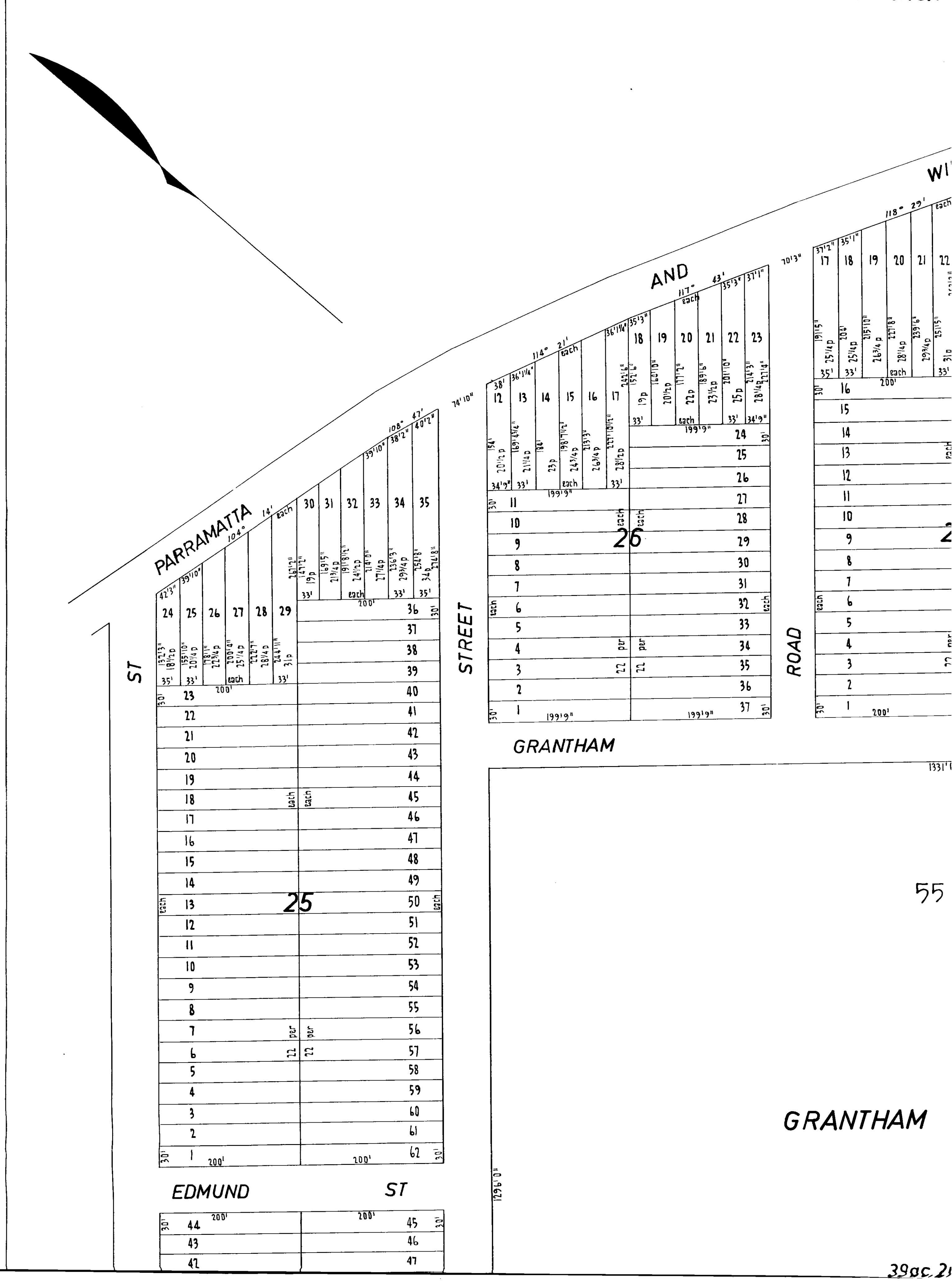
SHEET 3 OF 7 SHEETS



DP 1480 (E) SHEET 3 OF 7 SHEETS

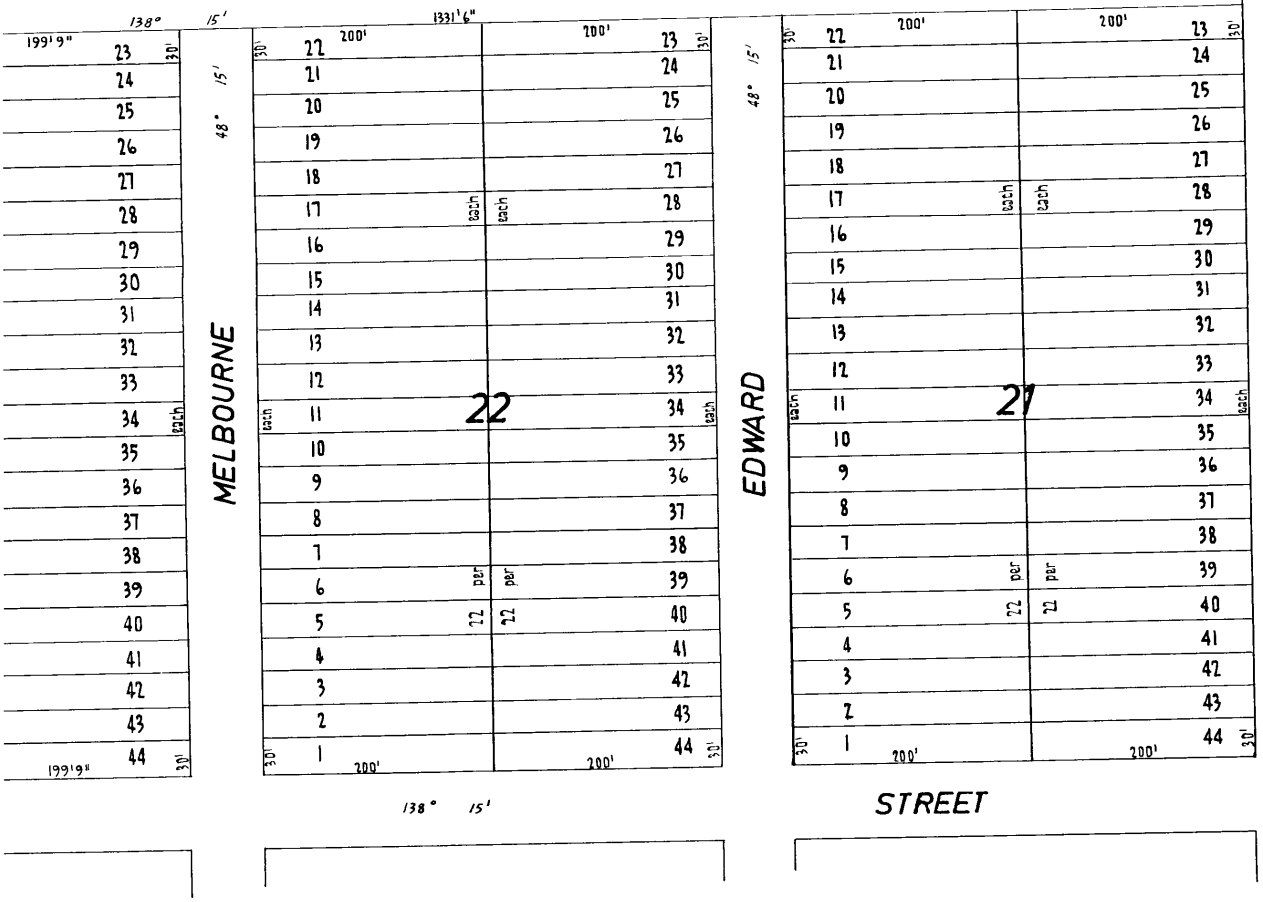
PH ST MATTHEW CO CUMBER

Scale 100 Feet to one inch



GRANTHAM FARM

39ac. 2r. 18per.



GRANTHAM

39ac.

EDMUND ST

VICTORIA

PRINCES

MELBOURNE

WILLIAM

24

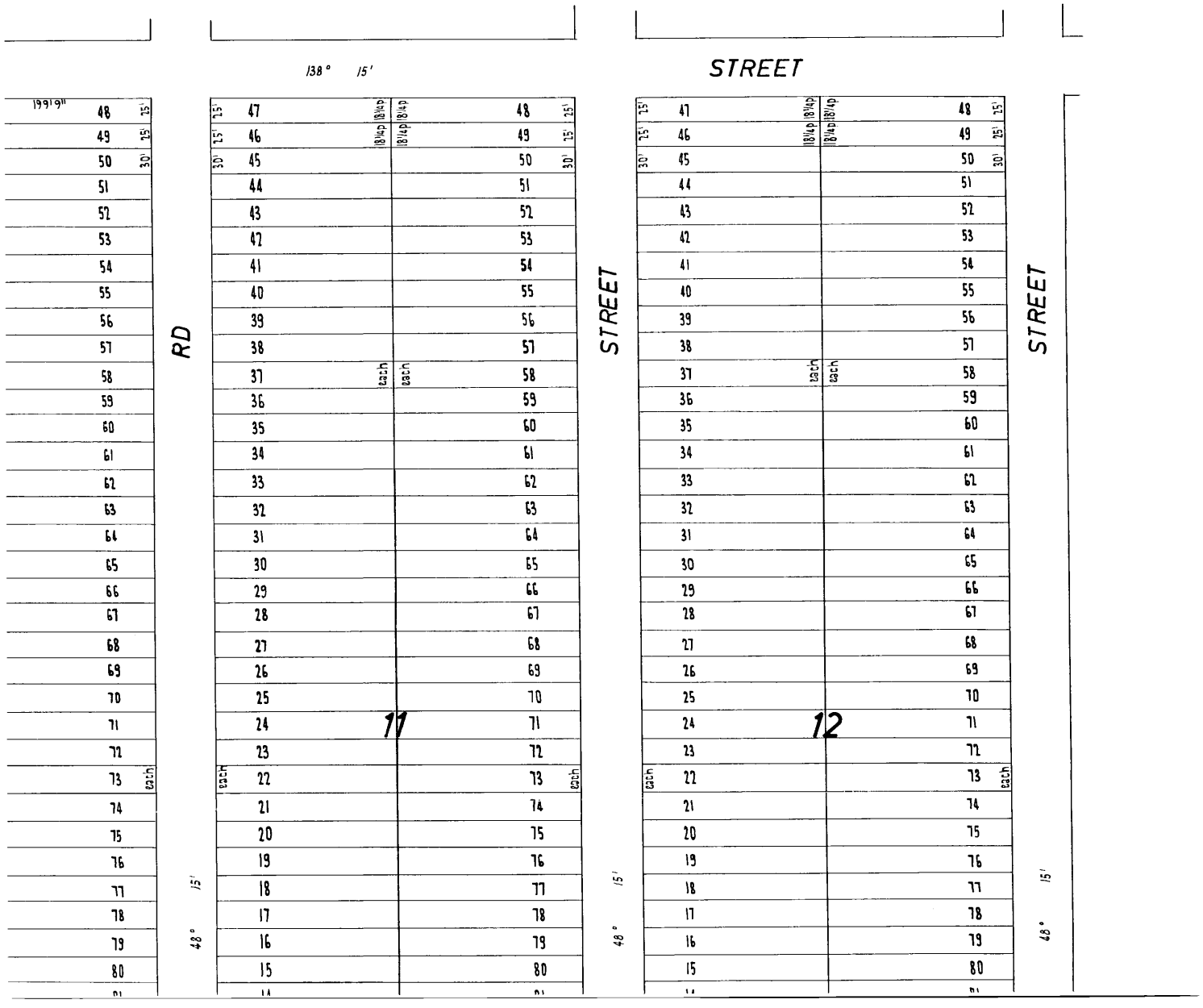
23

Prepd. M.F. 21.2.64
Ercd. Q 28.2.64

DP 1488 (E) SHEET 3 OF 7 SHEETS

TTHEW CO CUMBERLAND
)0 Feet to one inch

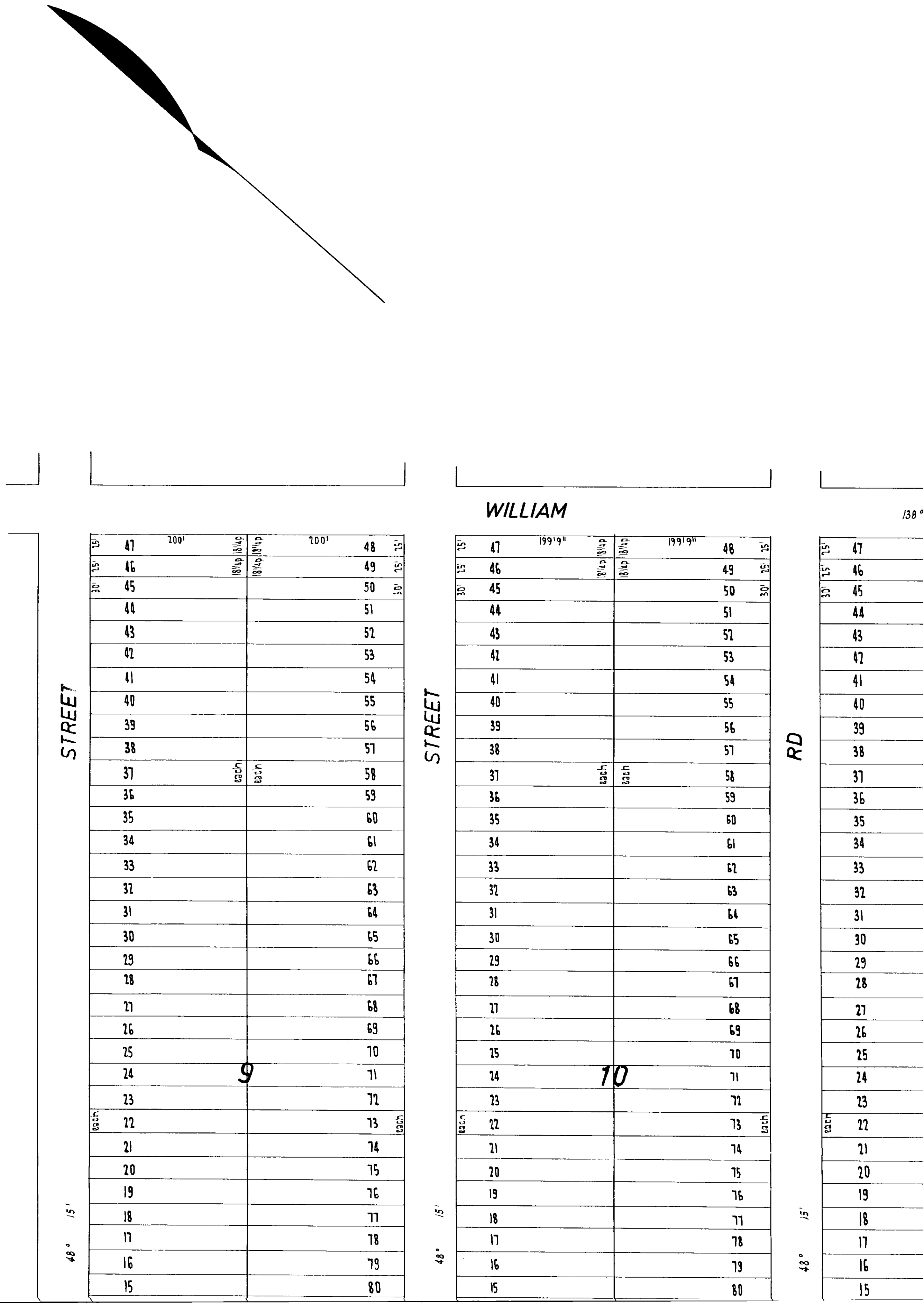
DP 1480 (E)
SHEET 4/7

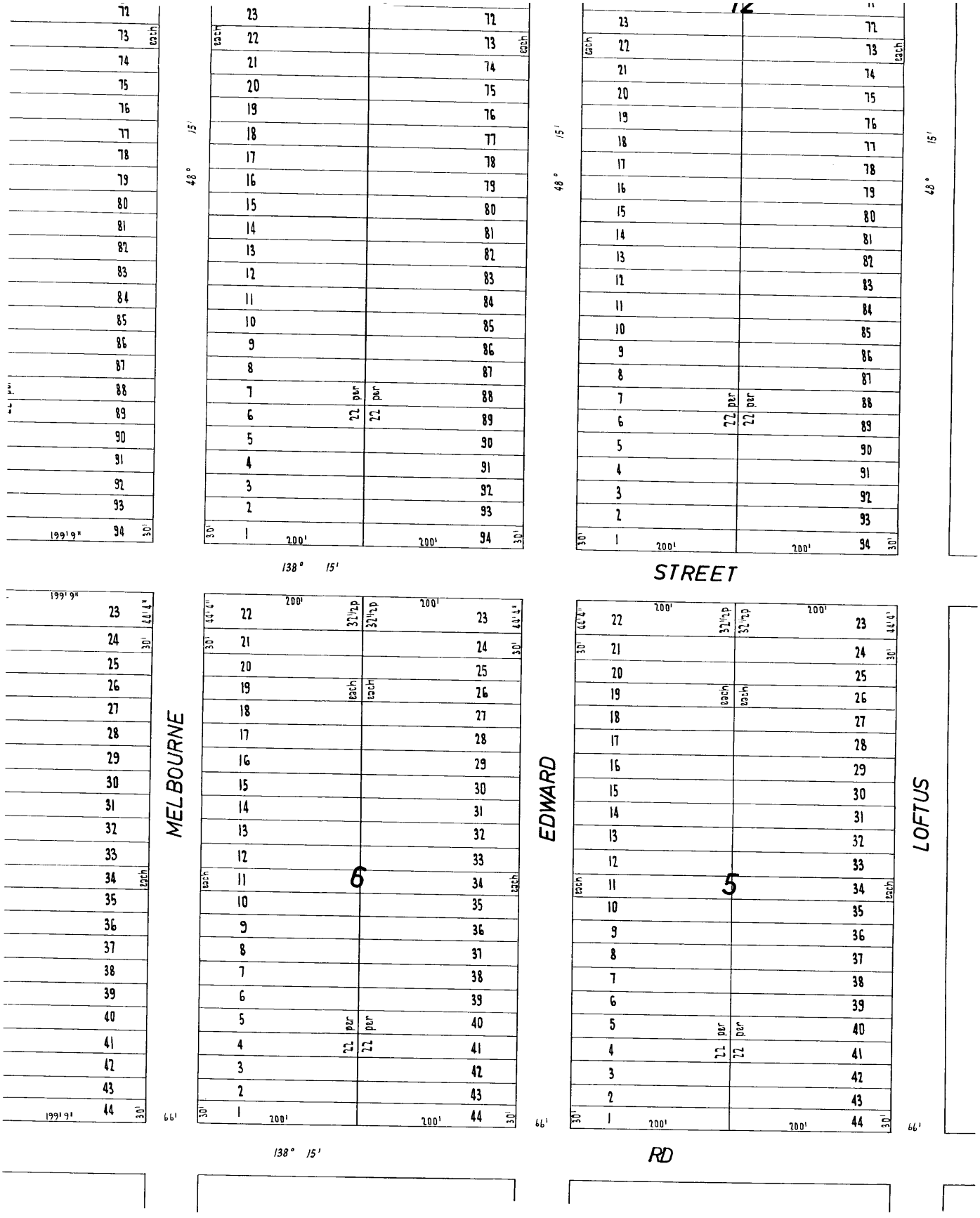


DP 1480 (E) sh 4/7

PH ST MATTHEW CO CUMBE

Scale 100 Feet to one inch





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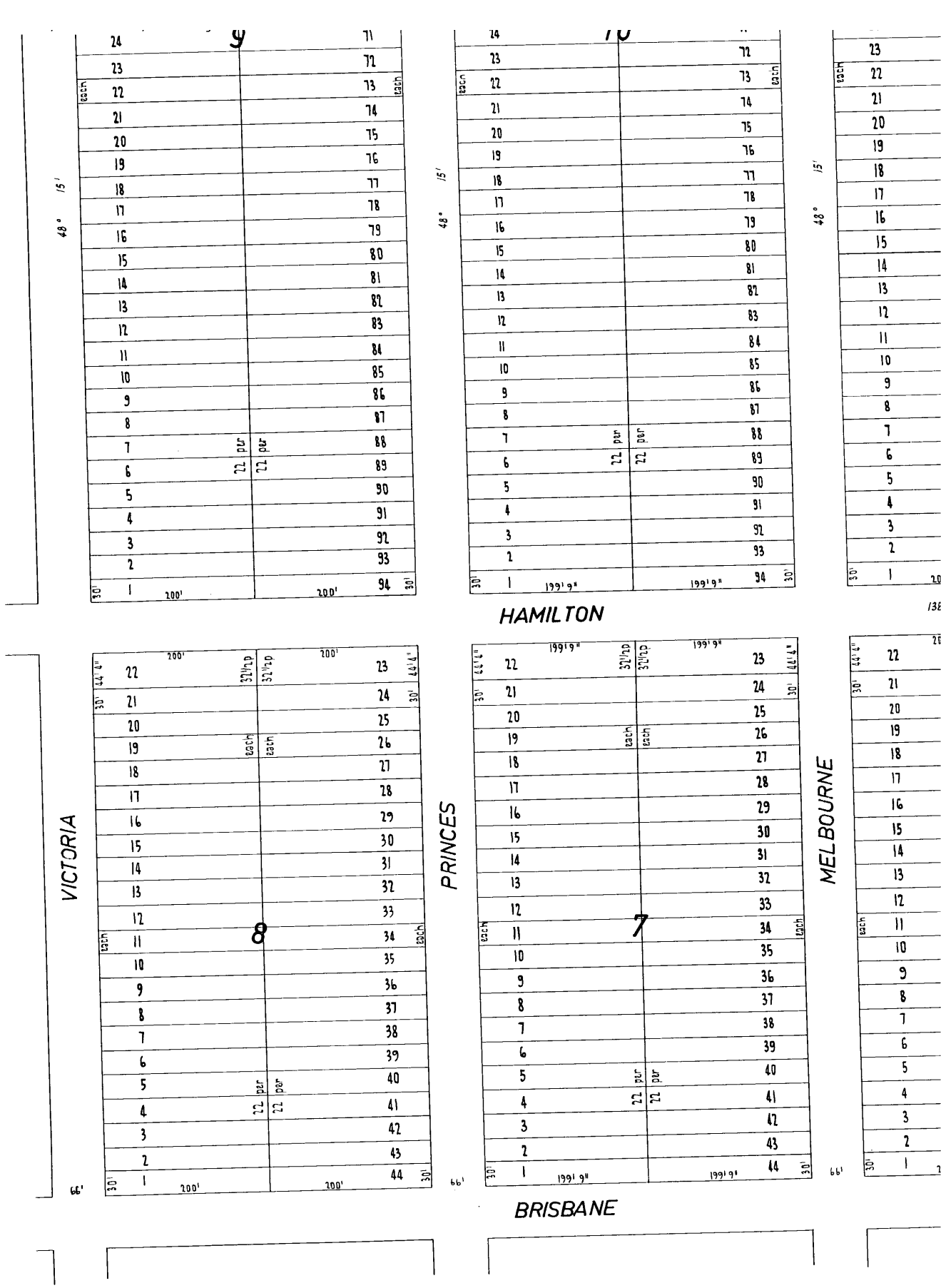
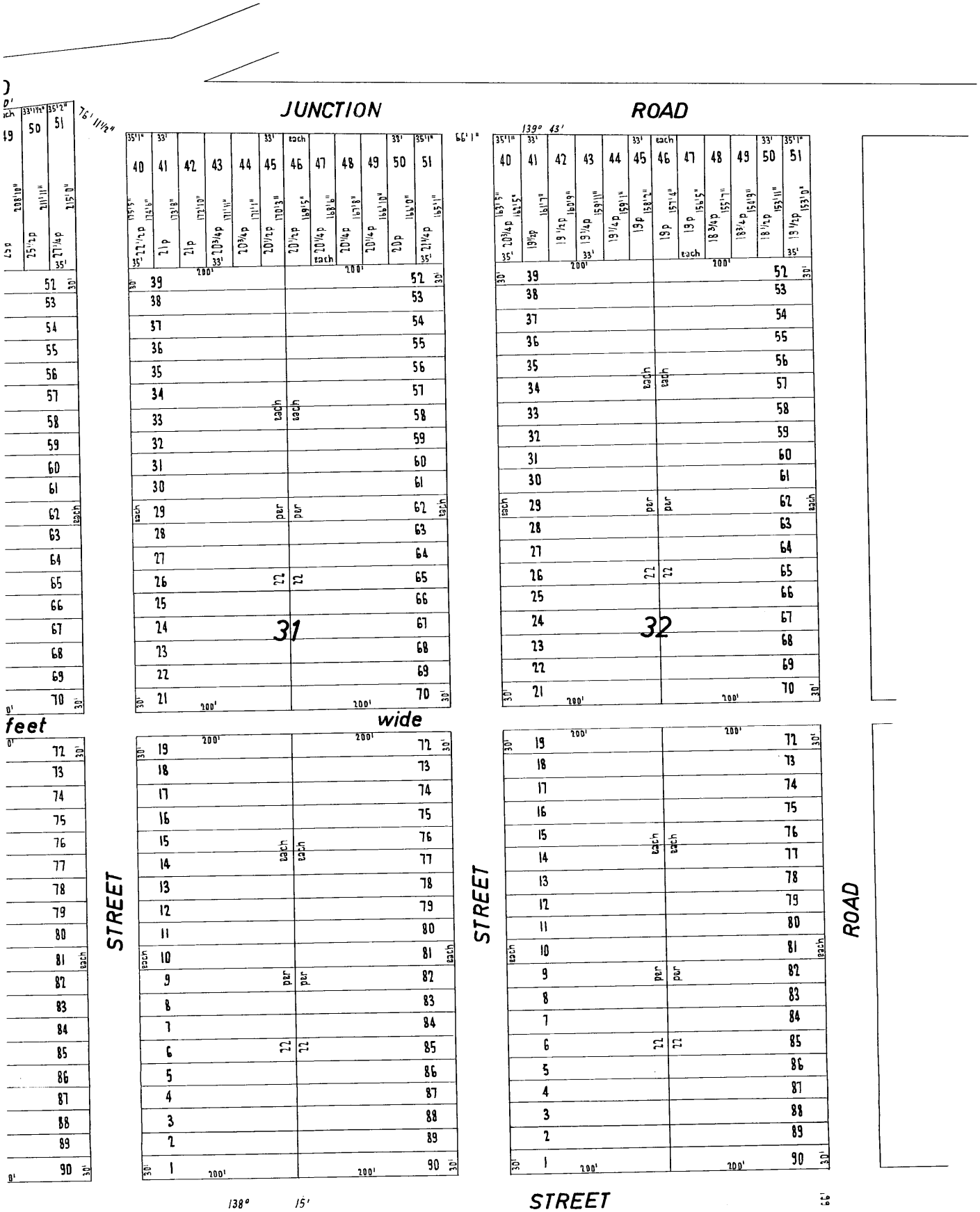


Prepd. M.F 21.2.64
Exd. [illegible] 28.2.64

DP 1480 (E) sh 4/7

ATTHEW CO CUMBERLAND
00 Feet to one inch

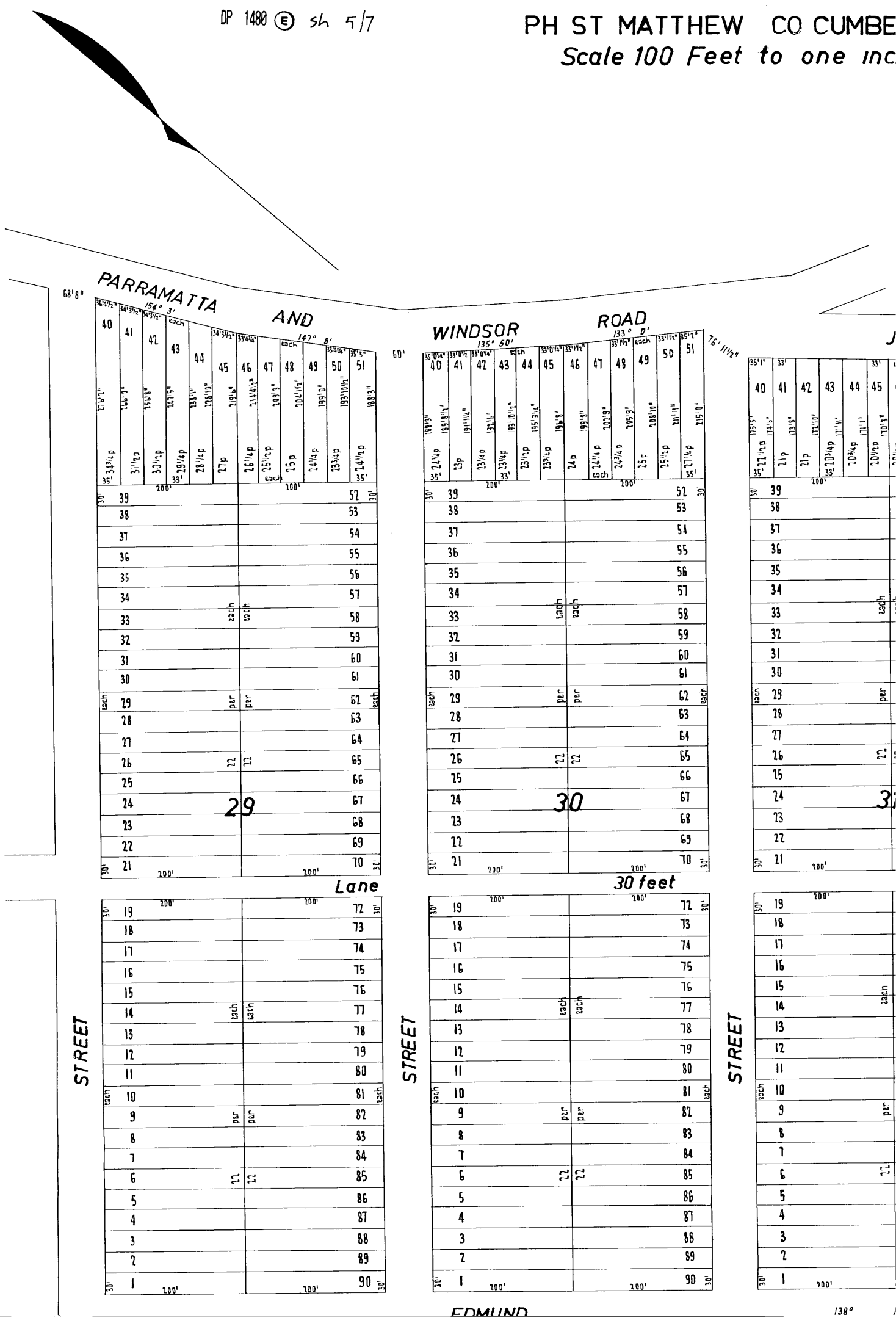
DP 1460
SHEET 5/7

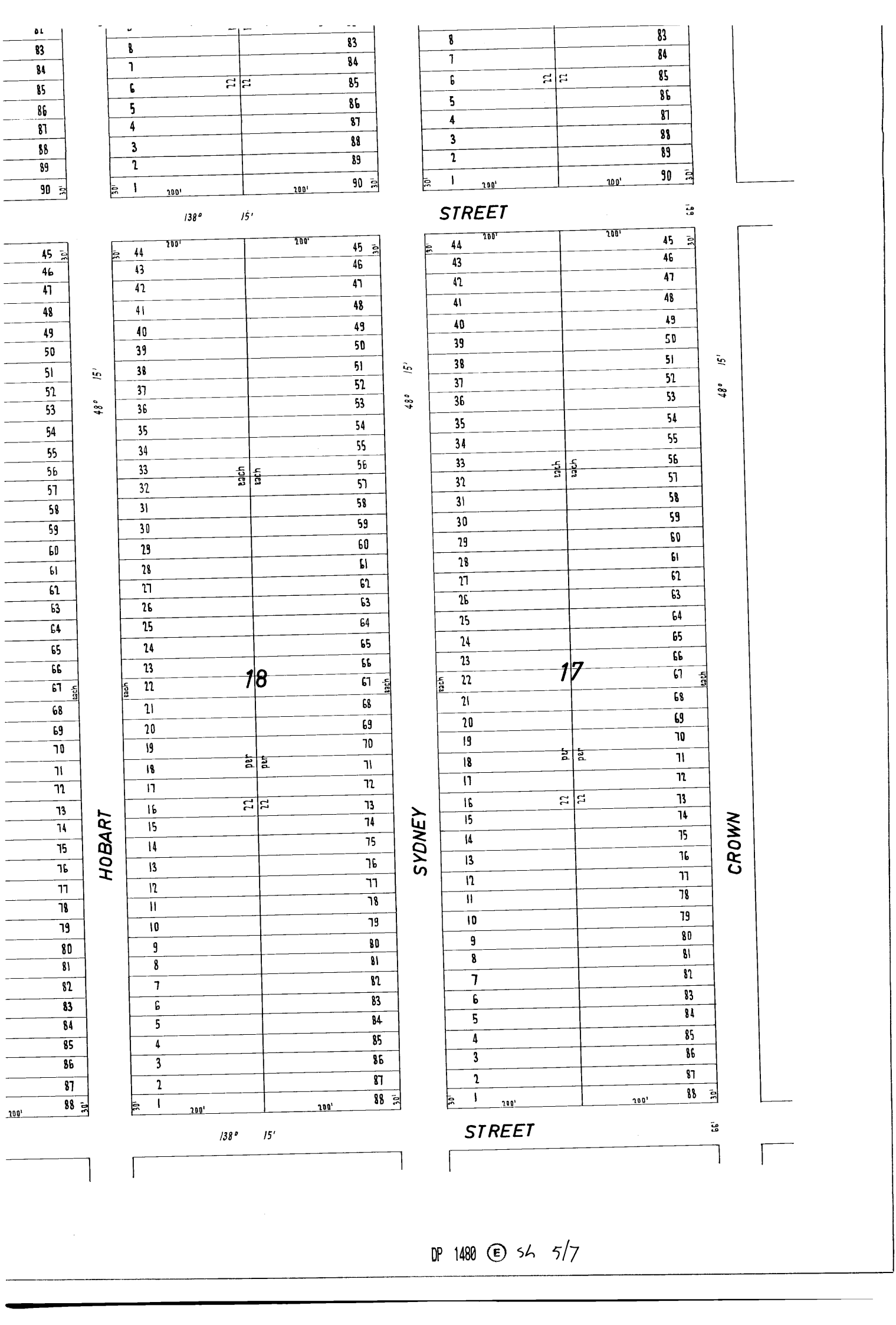


DP 1480 (E) sh 5/7

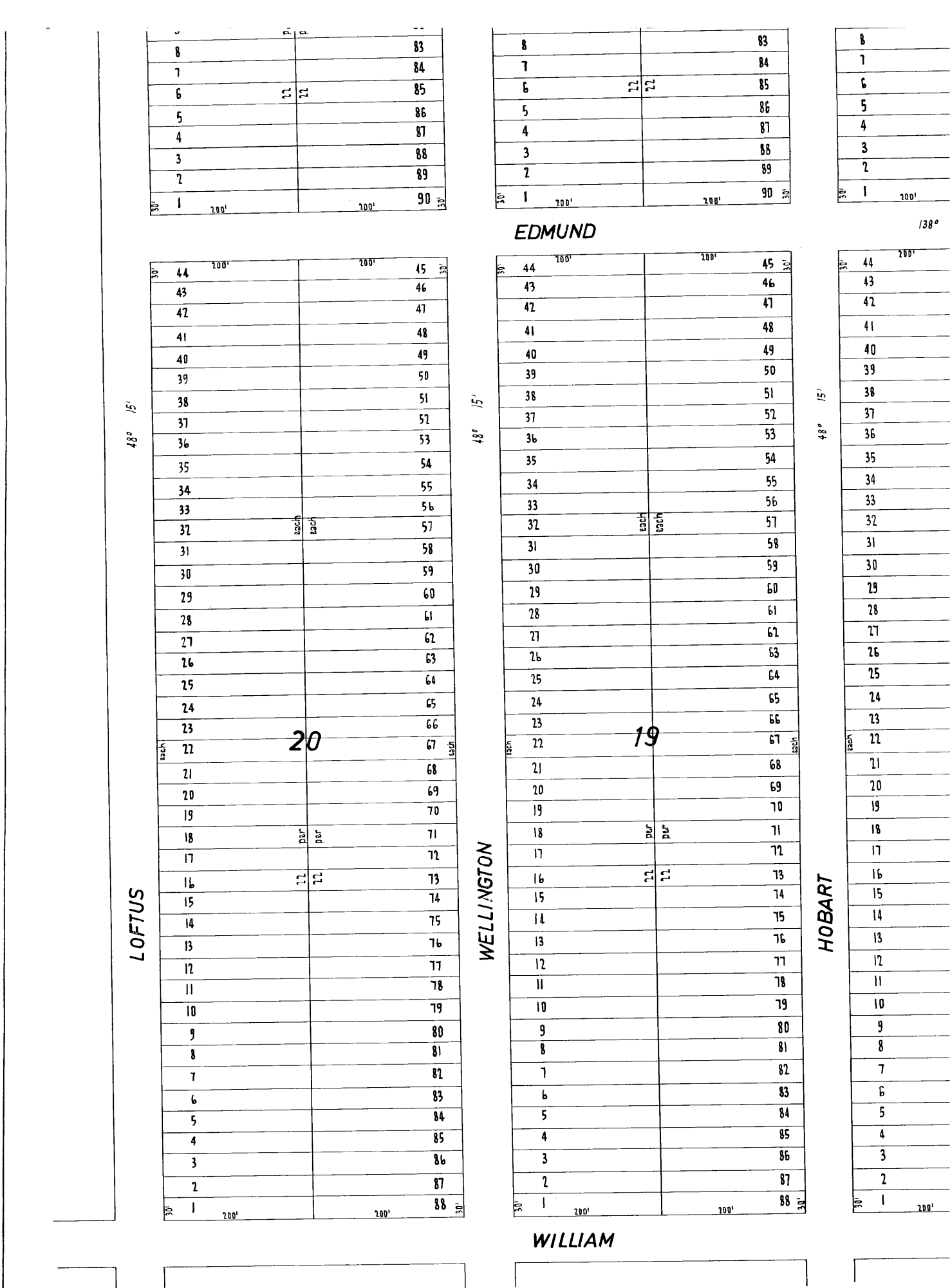
PH ST MATTHEW CO CUMBE

Scale 100 Feet to one inc





DP 1480 (E) SL 5/7

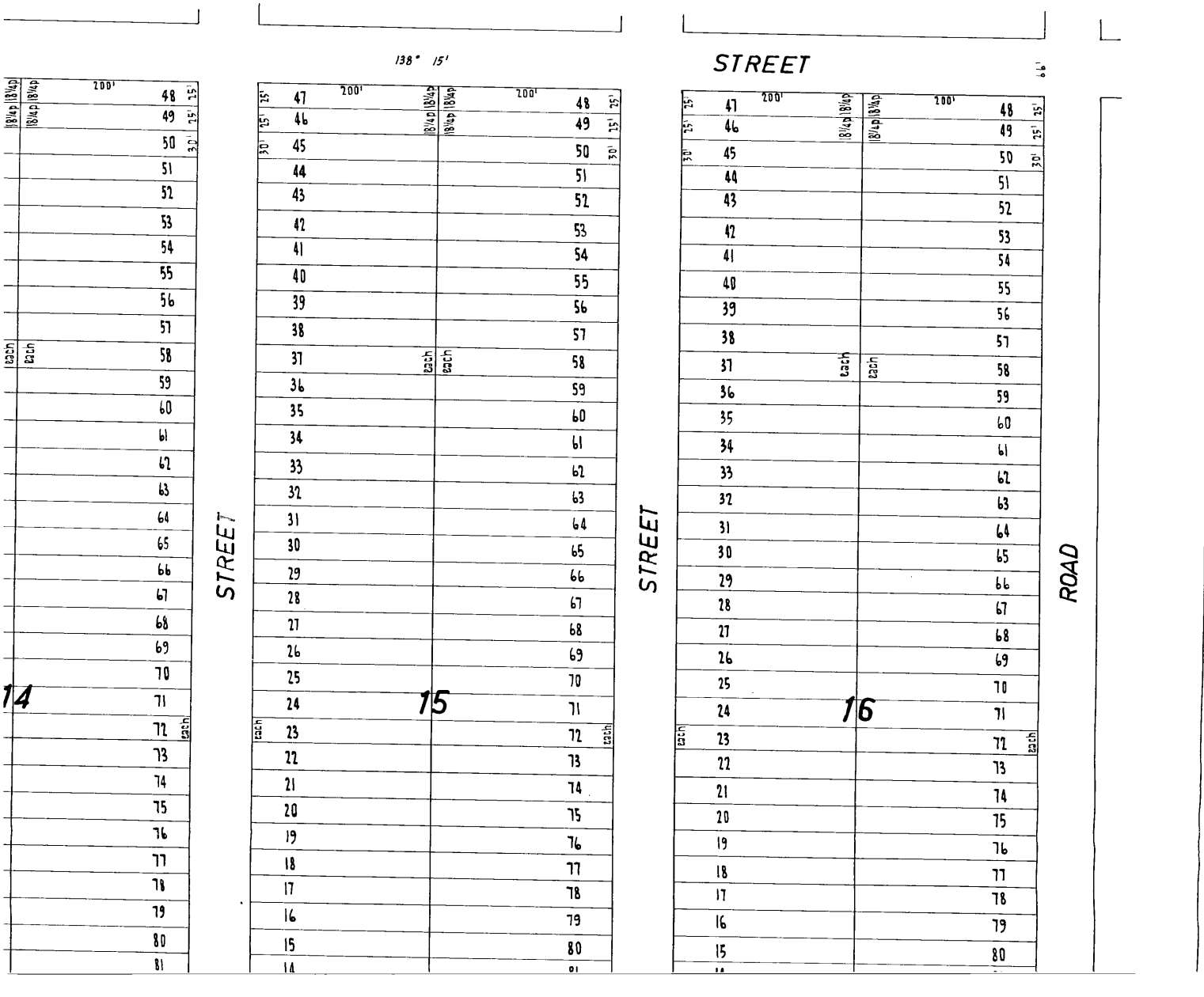


Prepd. M.F 21.2.64
Exd. Q 28.2.64

DP 1480 (E) sh 5/7

MATTHEW CO CUMBERLAND
100 Feet to one inch

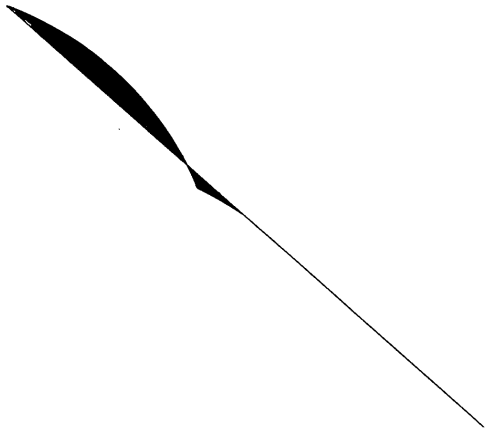
D P 1480 (E)
SHEET 6/7



DP 1480 (E) sh 6/7

PH ST MATTHEW CO CUMBE

Scale 100 Feet to one inch



WILLIAM

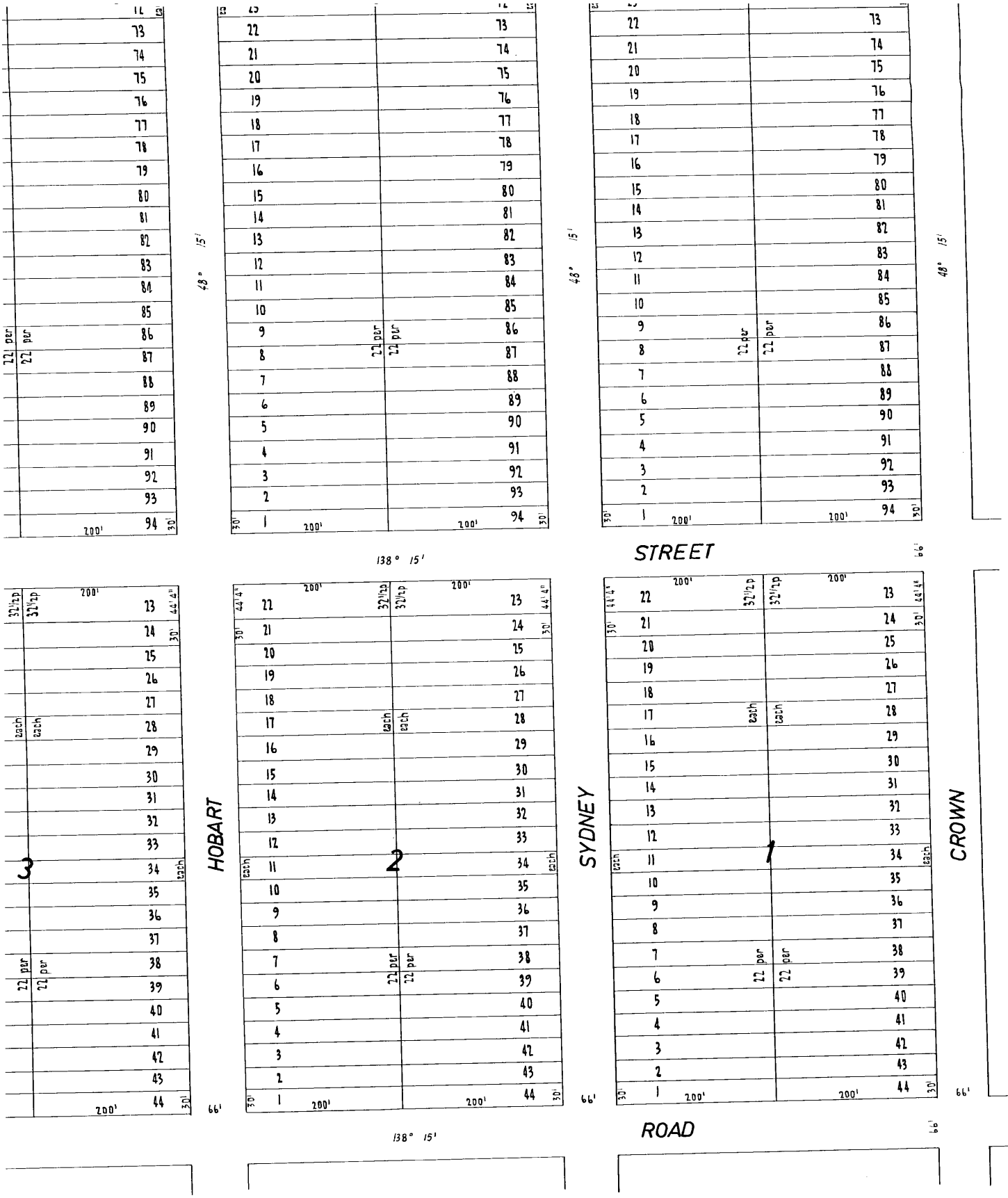
STREET

STREET

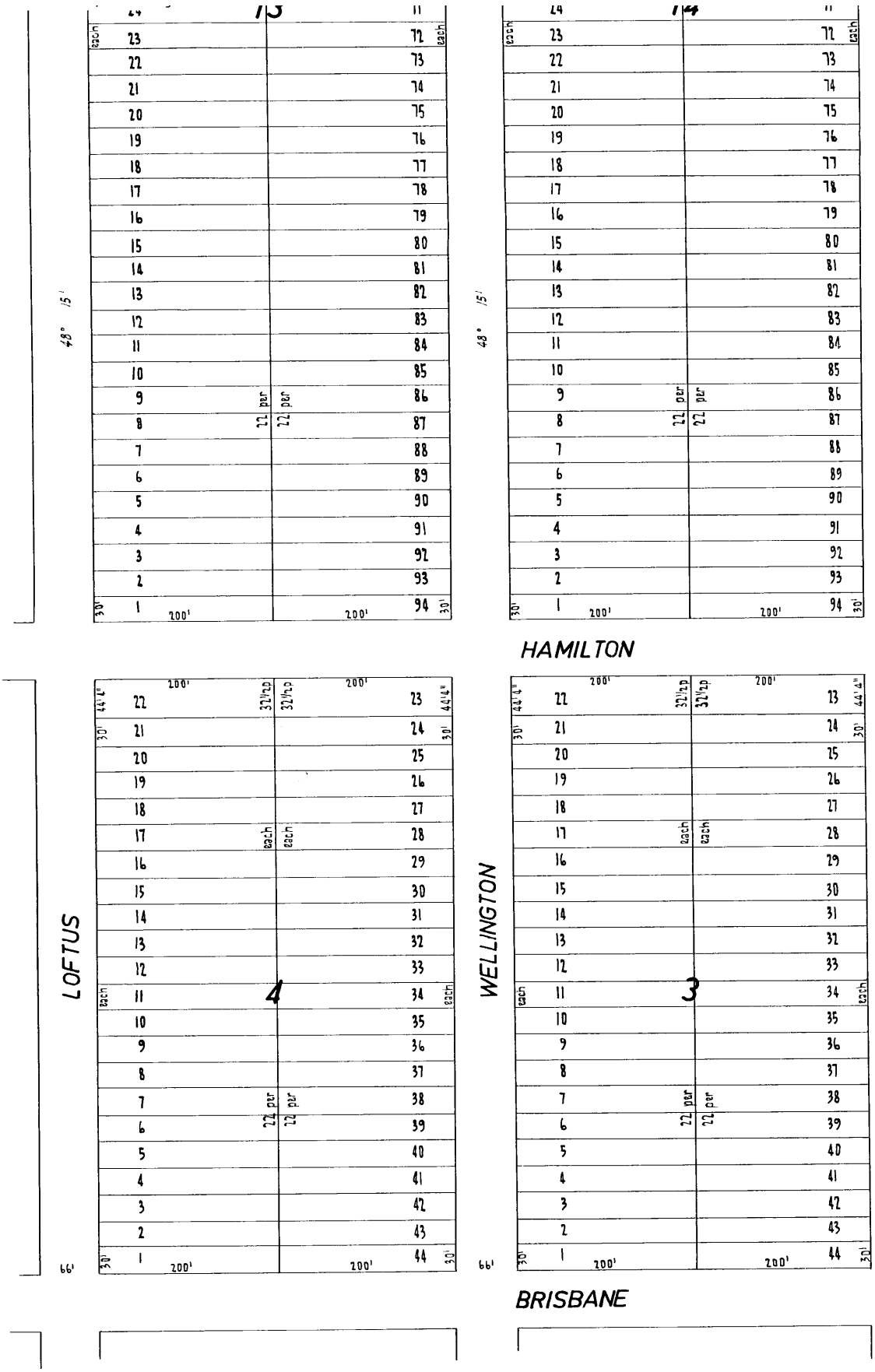
STREET

13

14



DP 1480 (E) sh 6/7



Prepd. M.F 21.2.64
Exd. [illegible] 29.2.64

DP 1480 (E) sh 6/7

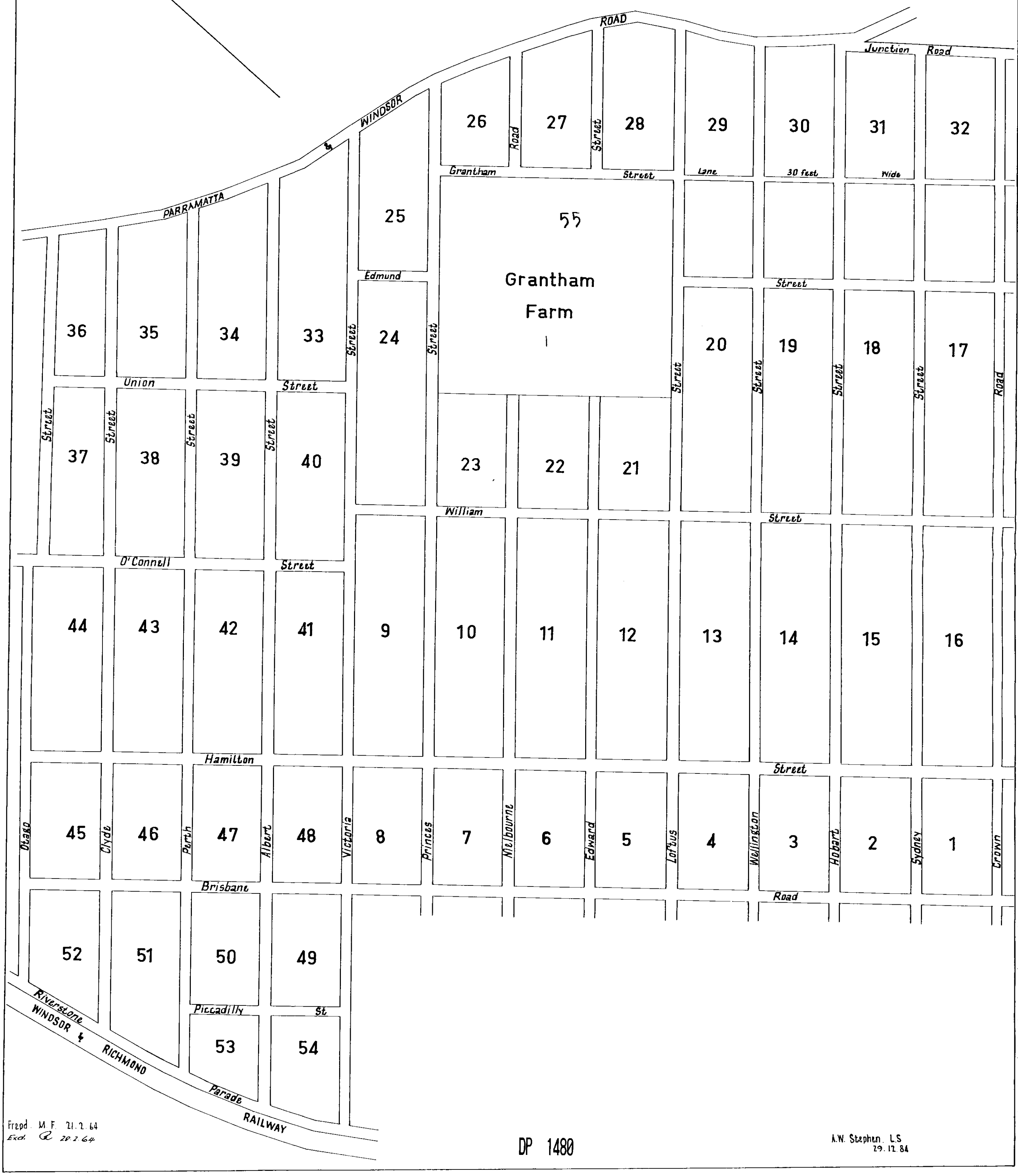
GRANTHAM D.P. 1480 (E)

NEAR RIVERSTONE SHEET 7/7

Ph OF St MATTHEW Co OF CUMBERLAND

Scale 400 Feet to one inch

CITY OF BLACKTOWN



CONVERSION TABLE ADDED IN REGISTRAR GENERAL'S DEPARTMENT

DP 1480 SH 1/7

FEET	INCHES	METRES
30	-	9.145
33	-	10.06
33	5	10.185
33	7	10.235
35	-	10.67
35	7 1/4	10.85
36	0 3/4	10.99
36	11	11.25
37	0 1/2	11.29
38	2 1/2	11.645
39	1 3/4	11.93
40	7 1/4	12.375
40	8 1/4	12.4
42	11	13.08
67	1 3/4	20.465
69	11 1/2	21.325
73	10	22.505
78	6	23.925
81	1	24.715
139	7 3/4	42.565
160	10 3/4	49.04
163	1 1/2	49.72
165	-	50.29
168	1	51.23
173	3	52.81
174	2 3/4	53.1
174	3 1/4	53.12
175	5	53.47
177	2	54
180	5 1/2	55
182	4	55.58
184	10	56.34
185	10	56.64
186	7 1/4	56.88
187	6	57.15
188	10	57.56
190	7	58.09
192	-	58.52
192	8	58.72
193	1 1/2	58.86
196	5 1/2	59.88
197	1	60.07
197	10	60.3
200	-	60.96
203	-	61.87
203	3 1/4	61.96
203	5	62
203	7 3/4	62.07
208	1	63.42
208	2	63.45
209	5 3/4	63.85
209	7 3/4	63.9
210	1	64.03
215	2	65.58
215	8 1/2	65.75
218	-	66.45
219	8 1/2	66.97
221	10 1/2	67.63
226	2	68.94
227	7 3/4	69.39
228	1	69.52
232	7	70.89
233	6 3/4	71.19
234	2 3/4	71.39
242	8 1/4	73.97
247	2	75.34
257	0 1/2	78.35
262	4	79.96
266	2	81.13
279	1	85.06
279	8 3/4	85.26
280	4 3/4	85.46
281	0 1/2	85.66
281	8 1/4	85.86
282	-	85.95
282	4 1/4	86.06
283	-	86.26

CONVERSION TABLE ADDED IN REGISTRAR GENERAL'S DEPARTMENT

DP 1480 SH 1/7 CONTD

FEET	INCHES	METRES
283	8	86.46
284	3 3/4	86.66
284	11 1/2	86.86
285	7 1/2	87.06
286	3 1/4	87.26
286	11 1/4	87.46
287	7	87.66
288	3	87.86
288	10 3/4	88.06
289	6 1/2	88.25
289	7 3/4	88.28
290	2 1/4	88.45
290	10 1/4	88.65
291	6	88.85
292	2	89.05
292	9	89.23
293	6	89.46
294	11	89.89
295	6 3/4	90.09
296	2 3/4	90.29
296	10 1/2	90.49
297	6 1/4	90.68
298	2 1/4	90.89
298	5 7/8	90.98
298	10	91.08
299	6	91.29
300	1 3/4	91.48
300	9 1/2	91.68
301	5 1/2	91.88
302	1 1/4	92.08
302	3 1/4	92.13
303	5	92.48
304	1	92.68
304	8 3/4	92.88
305	4 1/2	93.08
306	0 1/2	93.28
306	8 1/4	93.48
307	4	93.68
308	-	93.88
308	7 3/4	94.08
309	3 3/4	94.28
309	11 1/2	94.48
310	7 1/4	94.67
311	3 1/4	94.88
311	11	95.07
312	7	95.28
312	10 1/2	95.36
313	2 3/4	95.47
313	10 1/2	95.67
314	6 1/2	95.87
315	2 1/4	96.07
315	10 1/4	96.27
316	6	96.47

AC	RD	P	SQ M
-	-	18 1/4	461.6
-	-	20 3/4	524.8
-	-	21	531.1
-	-	21 1/4	537.5
-	-	21 1/2	543.8
-	-	21 3/4	550.1
-	-	22	556.4
-	-	22 1/4	562.8
-	-	22 1/2	569.1
-	-	23	581.7
-	-	23 1/2	594.4
-	-	23 3/4	600.7
-	-	24	607
-	-	24 1/4	613.4
-	-	24 1/2	619.7
-	-	24 3/4	626
-	-	25	632.3
-	-	25 1/4	638.6
-	-	25 1/2	645
-	-	25 3/4	651.3
-	-	26.2	662.7

CONVERSION TABLE ADDED IN REGISTRAR GENERAL'S DEPARTMENT

DP 1480 SH 1/7 CONTD

AC	RD	P	SQ M
-	-	26 1/4	663.9
-	-	26 1/2	670.3
-	-	26 3/4	676.6
-	-	27 1/4	689.2
-	-	27 1/2	695.6
-	-	28 1/4	714.5
-	-	29	733.5
-	-	29 1/2	746.1
-	-	30 3/4	777.8
-	-	31	784.1
-	-	31 1/4	790.4
-	-	31 1/2	796.7
-	-	31 3/4	803
-	-	32	809.4
-	-	32 1/4	815.7
-	-	32 1/2	822
-	-	32 3/4	828.3
-	-	33	834.7
-	-	33 1/4	841
-	-	33 1/2	847.3
-	-	33 3/4	853.6
-	-	34	860
-	-	34 1/4	866.3
-	-	34 1/2	872.6
-	-	34 3/4	878.9
-	1	9 3/4	1258

CONVERSION TABLE ADDED IN REGISTRAR GENERAL'S DEPARTMENT

DP 1480 SH 2/7

FEET	INCHES	METRES
1	2	0.355
4	10 1/2	1.485
7	8	2.335
8	7	2.615
16	1	5.51
20	9	6.325
21	1	6.425
25	-	7.62
25	6 1/2	7.785
25	10	7.875
26	2	7.975
26	11 1/4	8.21
27	9 1/2	8.47
27	11	8.51
28	7 1/2	8.725
28	10 1/4	8.795
30	-	9.145
36	-	10.975
36	6	11.125
44	4	13.515
51	1	15.57
52	4	15.95
69	1	21.055
73	8	22.455
76	2	23.215
82	1	25.02
117	11	35.94
122	1	37.21
126	10	38.66
136	5 3/4	41.6
141	2 3/4	43.045
150	6	45.87
150	10 1/2	45.985
155	3	47.32
155	7 3/4	47.44
164	5 1/2	50.13
165	3 1/4	50.37
169	7 3/4	51.71
170	0 1/4	51.82
170	8	52.02
178	5	54.38
179	8	54.76
180	8 1/2	55.08
181	10	55.42
184	0 3/4	56.1
184	5 1/4	56.22
184	5 1/2	56.22
190	8 1/2	58.13
190	9	58.14
192	4 1/2	58.64
193	11 3/4	59.12
194	0 3/4	59.15
198	5 1/2	60.49
198	10 1/4	60.61
200	-	60.96
200	9 1/2	61.2
201	10	61.52
205	5	62.61
206	1 1/2	62.83
208	5 1/2	63.54
210	10	64.26
212	10 1/2	64.88
213	3 1/4	65
217	9 7/8	66.39
217	10	66.4
218	3	66.52
220	10 1/2	67.32
222	10 1/2	67.93
227	3 1/4	69.27
227	8	69.39
230	-	70.1
230	3	70.18
230	4 3/4	70.22
230	11	70.38
233	9	71.25
237	3	72.31
237	8 1/2	72.45

CONVERSION TABLE ADDED IN REGISTRAR GENERAL'S DEPARTMENT

DP 1480 SH 2/7 CONTD

FEET	INCHES	METRES
240	2 1/4	73.21
240	6	73.3
240	6 3/4	73.32
241	5 1/2	73.6
241	8 1/4	73.67
242	1	73.79
242	8	73.96
245	5	74.8
247	11	75.56
249	2	75.95
250	7 1/4	76.38
253	1 1/2	77.15
255	1	77.75
256	1	78.05
256	10 1/2	78.3
258	11 3/4	78.94
260	7	79.43
264	2 3/4	80.54
264	7	80.64
269	5 3/4	82.14
270	6	82.45
270	8	82.5
272	3 1/2	82.99
280	-	85.34

AC	RD	P	SQ M
-	-	11 3/4	297.2
-	-	12 1/4	309.8
-	-	13	328.8
-	-	13 1/2	341.5
-	-	14 1/4	360.4
-	-	14 1/2	366.7
-	-	14 3/4	373.1
-	-	15 3/4	398.4
-	-	16	404.7
-	-	16 1/4	411
-	-	16 1/2	417.3
-	-	17	430
-	-	17 1/4	436.3
-	-	17 1/2	442.6
-	-	17 3/4	448.9
-	-	18 1/4	461.6
-	-	18 1/2	467.9
-	-	18 3/4	474.2
-	-	19 1/2	493.2
-	-	19 3/4	499.5
-	-	20	505.9
-	-	20 1/4	512.2
-	-	20 1/2	518.5
-	-	20 3/4	524.8
-	-	21	531.1
-	-	21 1/4	537.5
-	-	21 1/2	543.8
-	-	21 3/4	550.1
-	-	22	556.4
-	-	22 1/4	562.8
-	-	22 1/2	569.1
-	-	22 3/4	575.4
-	-	23 1/4	588.1
-	-	23 1/2	594.4
-	-	23 3/4	600.7
-	-	24	607
-	-	24 1/4	613.4
-	-	24 1/2	619.7
-	-	25 1/4	638.6
-	-	26 1/4	663.9
-	-	26 1/2	670.3
-	-	32 1/2	822

CONVERSION TABLE ADDED IN REGISTRAR GENERAL'S DEPARTMENT

DP 1480 SH 3/7

FEET	INCHES	METRES
30	-	9.145
33	-	10.06
33	5 1/4	10.19
33	5 3/4	10.205
33	6	10.21
34	7	10.54
34	9	10.59
35	-	10.67
35	1	10.695
35	3	10.745
35	6	10.82
35	6 1/4	10.825
36	1 1/4	11.005
36	8	11.175
37	1	11.305
37	2	11.33
38	-	11.58
38	2	11.635
39	10	12.14
40	2	12.245
42	3	12.88
68	8	20.93
68	10	20.98
74	10	22.81
132	3	40.31
147	2	44.855
152	6	46.48
154	-	46.94
155	10	47.5
164	10	50.24
169	4 3/4	51.63
169	5	51.64
177	2	54
178	1	54.28
184	-	56.08
189	6	57.76
191	5	58.34
191	8 1/2	58.43
198	7 1/2	60.54
199	3	60.73
199	9	60.88
200	-	60.96
200	3	61.04
200	4	61.06
201	10	61.52
203	3	61.95
204	-	62.18
205	4 1/2	62.6
206	2 3/4	62.86
211	2	64.36
211	10	64.57
213	3	65
214	-	65.23
214	3	65.3
215	1	65.56
215	3	65.61
215	10	65.79
216	11 1/4	66.12
217	5 1/2	66.28
222	7	67.84
222	9	67.89
223	1	68
226	11	69.16
227	4	69.29
227	8	69.39
227	10 1/2	69.46
228	6 1/2	69.66
228	8 1/2	69.71
234	4	71.42
236	3	72.01
238	9	72.77
239	6	73
242	6	73.91
244	11	74.65
249	2	75.95
251	5	76.63
254	8	77.62

CONVERSION TABLE ADDED IN REGISTRAR GENERAL'S DEPARTMENT

DP 1480 SH 3/7 CONTD

FEET	INCHES	METRES
259	7	79.12
263	5	80.24
267	2	81.43
270	7	82.47
274	8	83.72
1296	-	395.02
1331	6	405.84

AC	RD	P	SQ M
-	-	18 1/2	467.9
-	-	19	480.6
-	-	20 1/4	512.2
-	-	20 1/2	518.5
-	-	21 1/4	537.5
-	-	21 3/4	550.1
-	-	22	556.4
-	-	22 3/4	575.4
-	-	23	581.7
-	-	23 1/2	594.4
-	-	24 1/2	619.7
-	-	24 3/4	626
-	-	25	632.3
-	-	25 1/4	638.6
-	-	25 3/4	651.3
-	-	26	657.6
-	-	26 1/2	670.3
-	-	26.52	670.8
-	-	26 3/4	676.6
-	-	27 1/4	689.2
-	-	28	708.2
-	-	28 1/4	714.5
-	-	28 1/2	720.8
-	-	29 1/2	746.1
-	-	29 3/4	752.5
-	-	30 3/4	777.8
-	-	31	784.1
-	-	34	860

AC	RD	P	HA
39	2	18	16.03

CONVERSION TABLE ADDED IN REGISTRAR GENERAL'S DEPARTMENT

DP 1480 SH 4/7

FEET	INCHES	METRES
25	-	7.62
30	-	9.145
44	4	13.515
66	-	20.115
199	9	60.88
200	-	60.96

AC	RD	P	SQ M
-	-	18 1/4	461.6
-	-	22	556.4
-	-	32 1/2	822

CONVERSION TABLE ADDED IN REGISTRAR GENERAL'S DEPARTMENT

DP 1480 SH 5/7

FEET	INCHES	METRES
30	-	9.145
30	0 1/4	9.15
33	-	10.06
33	0 1/4	10.065
33	0 1/2	10.07
33	1 1/2	10.095
33	4 3/4	10.18
34	3 1/2	10.45
35	-	10.67
35	0 1/4	10.675
35	1	10.695
35	2	10.72
35	5	10.795
36	4 1/2	11.085
66	1	20.14
76	11 1/2	23.455
153	-	46.635
153	11	46.915
154	9	47.17
155	7	47.42
156	5	47.675
157	4	47.955
158	2	48.21
159	1	48.49
159	11	48.745
160	9	48.995
161	7	49.25
162	5	49.505
163	5	49.81
165	1	50.32
166	-	50.6
166	10	50.85
167	8	51.1
168	6	51.36
169	5	51.64
170	3	51.89
171	1	52.15
171	11	52.4
172	10	52.68
173	8	52.93
174	6	53.19
175	5	53.47
188	3	57.38
189	8 1/2	57.82
191	1 1/4	58.25
192	6	58.67
193	10 1/2	59.09
195	3 1/4	59.52
196	8	59.94
199	-	60.66
199	8	60.86
200	-	60.96
202	9	61.8
204	1 1/2	62.22
205	9	62.71
208	10	63.65
209	3	63.78
211	11	64.59
214	4 1/2	65.34
215	-	65.53
219	6	66.9
228	10	69.75
238	1	72.57
247	5	75.41
256	8	78.23
266	-	81.08
276	2	84.18

AC	RD	P	SQ M
-	-	1.95	49.3
-	-	18 1/2	467.9
-	-	18 3/4	474.2
-	-	19	480.6
-	-	19 1/4	486.9
-	-	19.4	490.7
-	-	19 1/2	493.2

CONVERSION TABLE ADDED IN REGISTRAR GENERAL'S DEPARTMENT

DP 1480 SH 5/7 CONTD

AC	RD	P	SQ M
-	-	20	505.9
-	-	20 1/4	512.2
-	-	20 1/2	518.5
-	-	20 3/4	524.8
-	-	21	531.1
-	-	21 1/4	537.5
-	-	22	556.4
-	-	22 1/2	569.1
-	-	23	581.7
-	-	23 1/4	588.1
-	-	23 1/2	594.4
-	-	23 3/4	600.7
-	-	24	607
-	-	24 1/4	613.4
-	-	24 1/2	619.7
-	-	24 3/4	626
-	-	25	632.3
-	-	25 1/4	638.6
-	-	25 1/2	645
-	-	26 1/4	663.9
-	-	27	682.9
-	-	27 1/4	689.2
-	-	28 1/4	714.5
-	-	29 1/4	739.8
-	-	30 1/2	771.4
-	-	31 1/2	796.7
-	-	34 3/4	878.9

DP 1480

CONVERSION TABLE ADDED IN REGISTRAR GENERAL'S DEPARTMENT

DP 1480 SH 6/7

FEET	INCHES	METRES
25	-	7.62
30	-	9.145
44	4	13.515
66	-	20.115
200	-	60.96

AC	RD	P	SQ M
-	-	18 1/4	461.6
-	-	22	556.4
-	-	32 1/2	822

CONVERSION TABLE ADDED IN REGISTRAR GENERAL'S DEPARTMENT

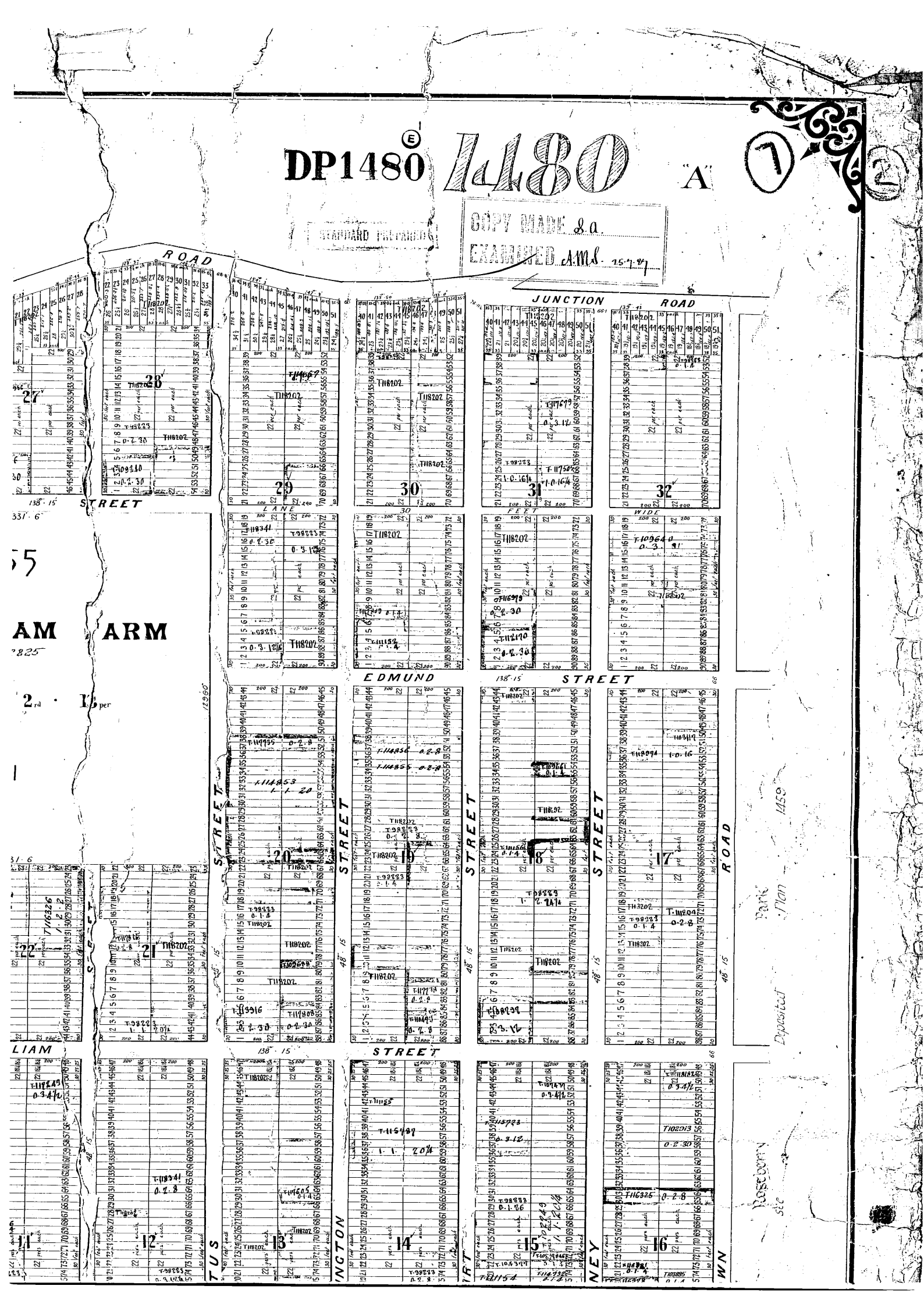
DP 1480 SH 7/7

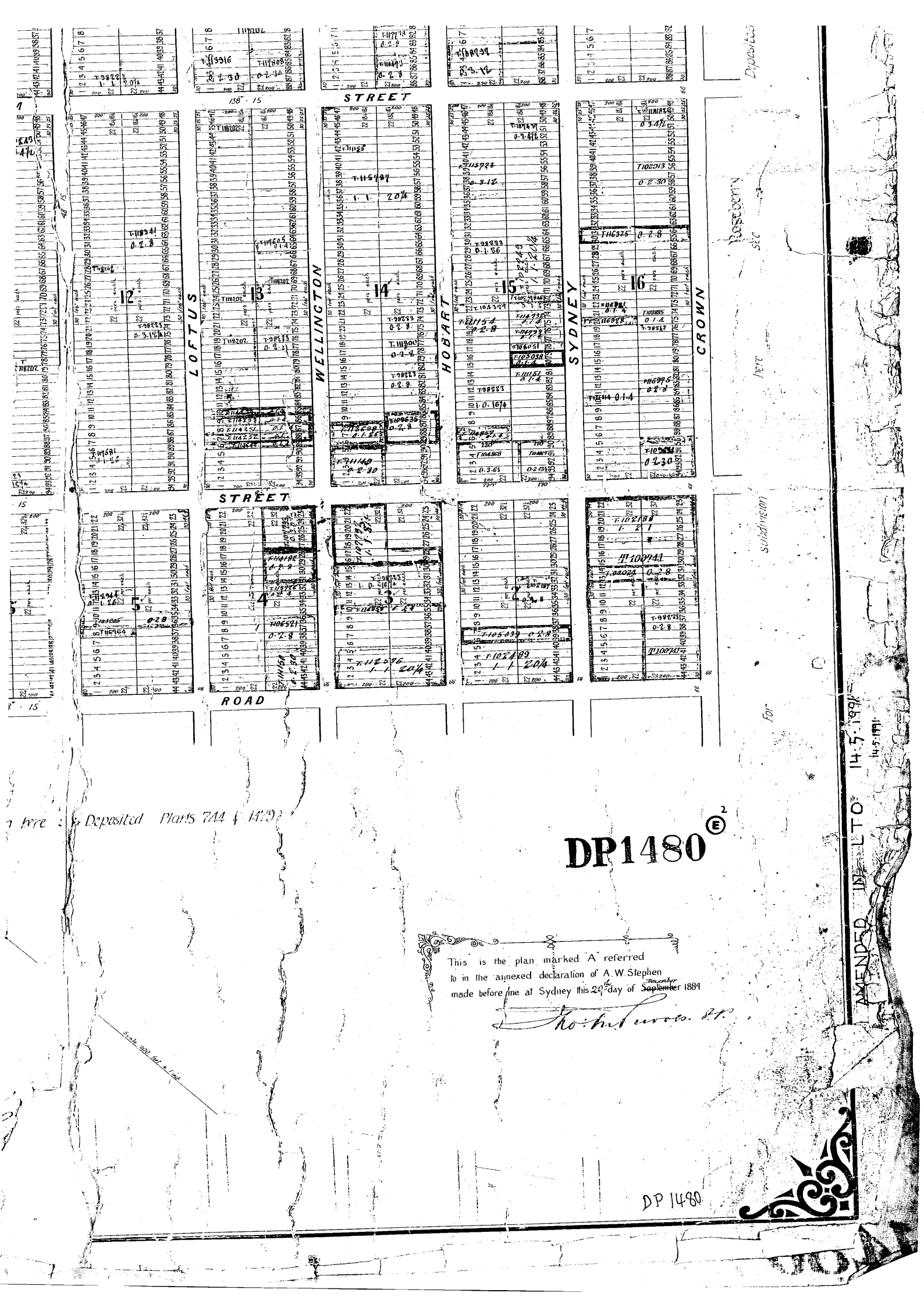
FEET	INCHES	METRES
30	-	9.145

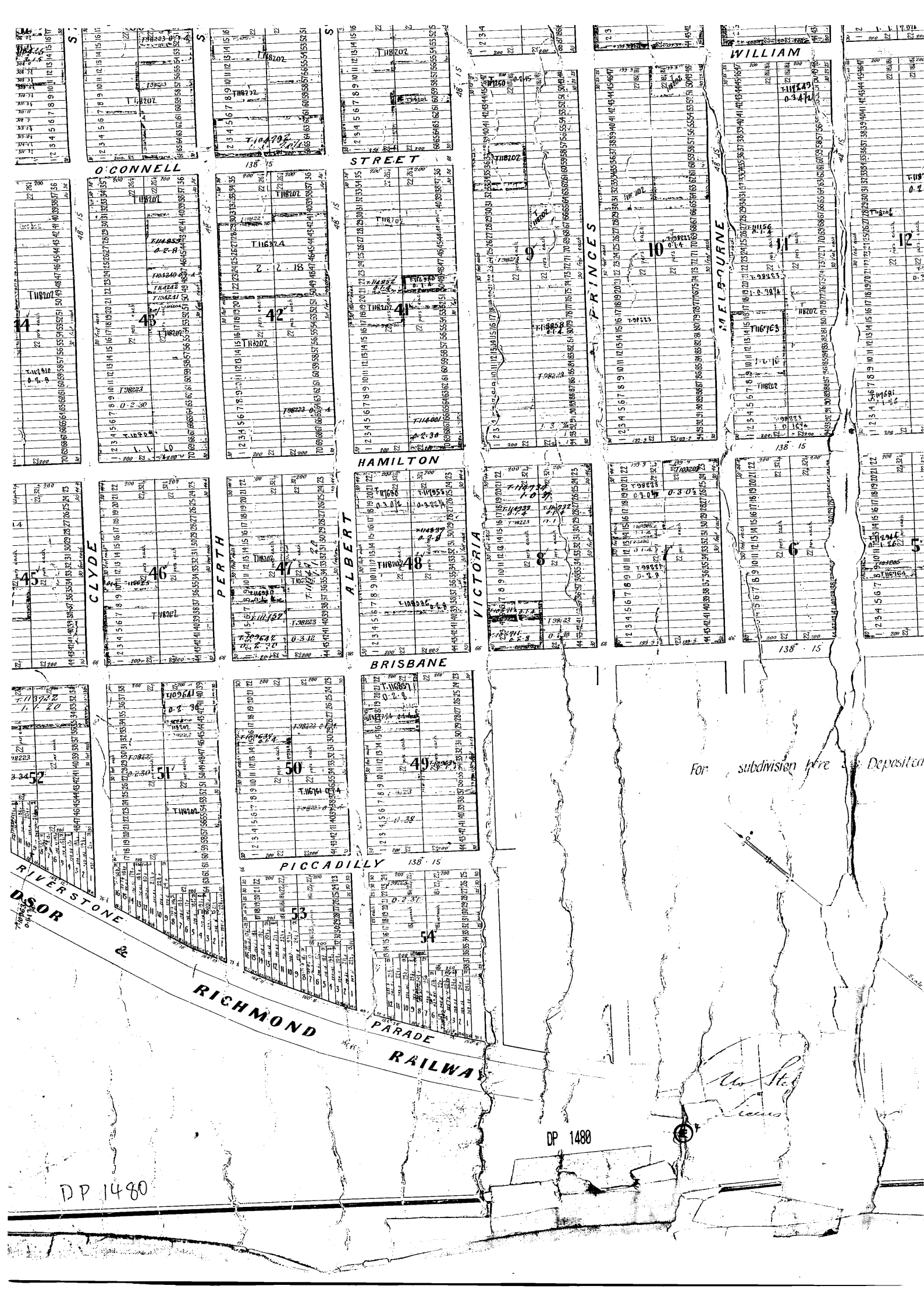
DP1480 (E) 1480 "A"

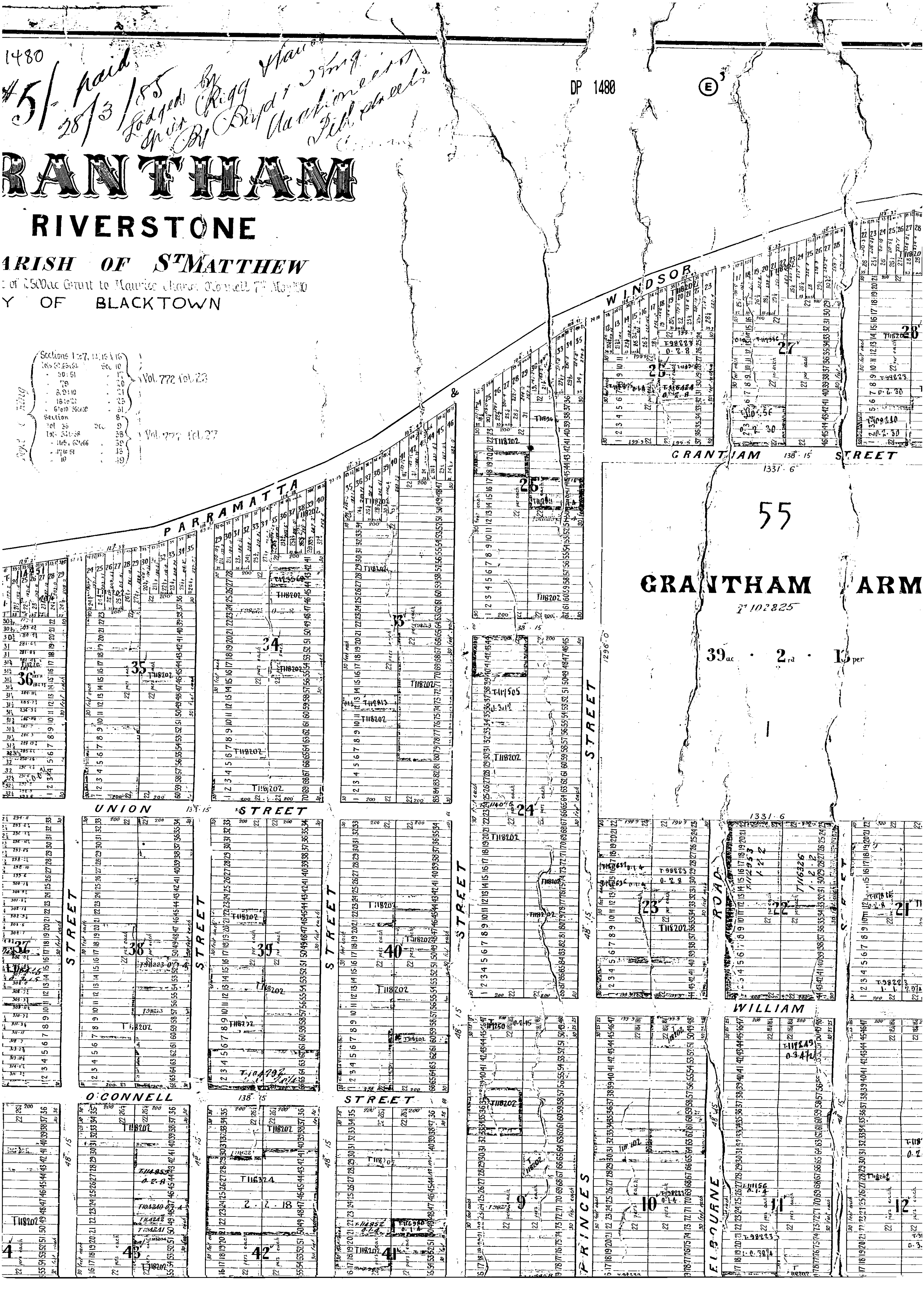
STANDARD PHOTOGRAPHIC

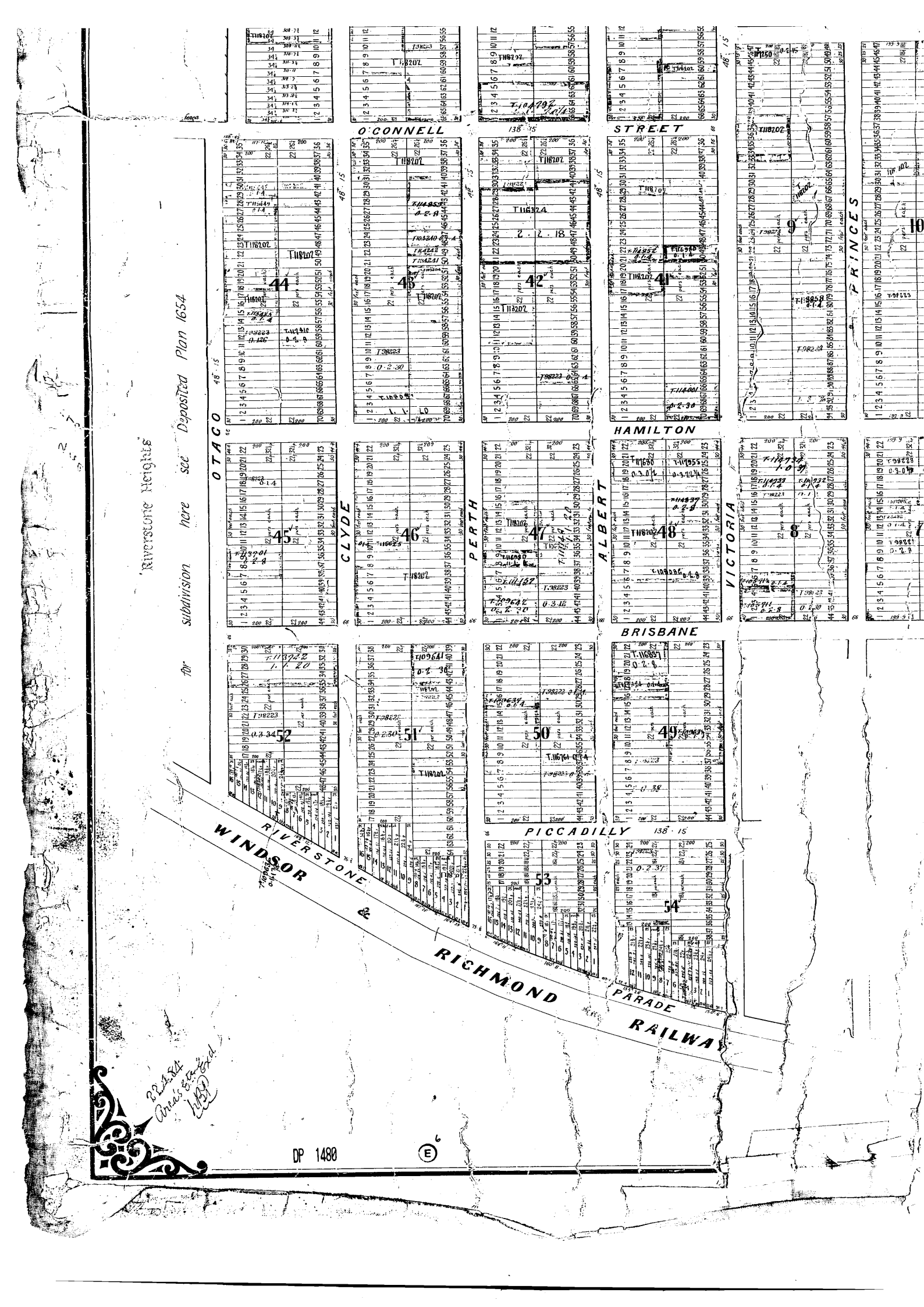
COPY MADE & a
EXAMINED A.M.L. 15.7.47




STREET
LOFTUS
WELLINGTON
HOBART
SYDNEY
CROWN
STREET
ROAD
12
13
14
15
16
4
5
Deposited Plans 744 & 1439
DP1480
E
2
This is the plan marked 'A' referred
to in the annexed declaration of A.W. Stephen
made before me at Sydney this 20th day of September 1884
Scale 400 feet to 1 inch
AMENDED
14.5.1991
DP 1480


O'CONNELL
STREET
HAMILTON
WILLIAM
PRINCES
MELBOURNE
CLYDE
PERTH
ALBERT
VICTORIA
BRISBANE
PICCADILLY
RIVERSTONE
DSOR
RICHMOND
PARADE
RAILWA
DP 1480
DP 1480
For subdivision


1480
DP 1480
RANTHAM
RIVERSTONE
ARISH OF ST MATTHEW
Y OF BLACKTOWN
Vol. 772 Fol. 23
Vol. 772 Fol. 27
PARRAMATTA
&
WINDSOR
GRANTHAM STREET
55
GRANTHAM
39ac · 2rd
UNION STREET
O'CONNELL STREET
WILLIAM
PRINCES
STREET
ROAD


Riverstone Heights
for subdivision here see Deposited Plan 1654
O'CONNELL
STREET
OTAGO
HAMILTON
PRINCES
CLYDE
PERTH
ALBERT
VICTORIA
BRISBANE
PICCADILLY
RIVERSTONE
WINDSOR
RICHMOND
PARADE
RAILWA
DP 1480

DP 1480

E

GRANTHAM

RIVERSTONE

PARISH OF ST MATTHEW

Part of 2500ac Grant to Maurice Charles Donnell 7th May 1810

CITY OF BLACKTOWN

PARRAMATTA STREET

UNION STREET

O'CONNELL STREET

WINDSOR STREET

PRINCES STREET

NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE
9/12/2023 10:40AM

FOLIO: AUTO CONSOL 8423-193

Recorded	Number	Type of Instrument	C.T. Issue
15/5/1992		CONSOL HISTORY RECORD CREATED FOR AUTO CONSOL 8423-193 PARCELS IN CONSOL ARE: 36-37/17/1480.	
17/4/2002	8518762	APPLICATION FOR REPLACEMENT CERTIFICATE OF TITLE	EDITION 1
24/4/2023	DP1293210	DEPOSITED PLAN	EDITION 2
29/9/2023	AT478981	TRANSFER	
29/9/2023	AT478982	MORTGAGE	EDITION 3

*** END OF SEARCH ***

advlegs PRINTED ON 9/12/2023

NEW SOUTH WALES LAND REGISTRY SERVICES - HISTORICAL SEARCH

SEARCH DATE
9/12/2023 10:40AM

FOLIO: AUTO CONSOL 8423-194

Recorded	Number	Type of Instrument	C.T. Issue
17/6/1992		CONSOL HISTORY RECORD CREATED FOR AUTO CONSOL 8423-194 PARCELS IN CONSOL ARE: 38-44/17/1480.	
24/10/1995	O631648	REQUEST	
17/4/2002	8518762	APPLICATION FOR REPLACEMENT CERTIFICATE OF TITLE	EDITION 1
24/4/2023	DP1293210	DEPOSITED PLAN	EDITION 2
29/9/2023	AT478981	TRANSFER	
29/9/2023	AT478982	MORTGAGE	EDITION 3

*** END OF SEARCH ***

advlegs PRINTED ON 9/12/2023

NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH

FOLIO: AUTO CONSOL 8423-193

SEARCH DATE	TIME	EDITION NO	DATE
9/12/2023	10:40 AM	3	29/9/2023

LAND

LAND DESCRIBED IN SCHEDULE OF PARCELS
AT RIVERSTONE
LOCAL GOVERNMENT AREA BLACKTOWN
PARISH OF ST MATTHEW COUNTY OF CUMBERLAND
TITLE DIAGRAM DP1480

FIRST SCHEDULE

VALENZUELA NOMINEES 2 PTY LTD (T AT478981)

SECOND SCHEDULE (4 NOTIFICATIONS)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
2 DP1293210 POSITIVE COVENANT REFERRED TO AND NUMBERED (1) IN THE S.88B INSTRUMENT
3 DP1293210 POSITIVE COVENANT REFERRED TO AND NUMBERED (7) IN THE S.88B INSTRUMENT
4 AT478982 MORTGAGE TO ZAGGA INVESTMENTS PTY LTD

NOTATIONS

UNREGISTERED DEALINGS: NIL

SCHEDULE OF PARCELS

LOTS 36-37 SEC. 17 IN DP1480.

*** END OF SEARCH ***

advlegs PRINTED ON 9/12/2023

NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH

FOLIO: AUTO CONSOL 8423-194

SEARCH DATE	TIME	EDITION NO	DATE
9/12/2023	10:40 AM	3	29/9/2023

LAND

LAND DESCRIBED IN SCHEDULE OF PARCELS
AT RIVERSTONE
LOCAL GOVERNMENT AREA BLACKTOWN
PARISH OF ST MATTHEW COUNTY OF CUMBERLAND
TITLE DIAGRAM DP1480

FIRST SCHEDULE

VALENZUELA NOMINEES 2 PTY LTD (T AT478981)

SECOND SCHEDULE (8 NOTIFICATIONS)

1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
2 F622371 EASEMENT AFFECTING THE PART OF LOTS 43 & 44 SHOWN IN PLAN WITH F622371
O631648 EASEMENT VESTED IN PROSPECT ELECTRICITY
3 DP1293210 POSITIVE COVENANT REFERRED TO AND NUMBERED (1) IN THE S.88B INSTRUMENT
4 DP1293210 RIGHT OF CARRIAGEWAY 3, 7.25 & 10.25 METRE(S) WIDE AFFECTING THE PART(S) OF LOTS 40-44 SEC.17 IN DP1480 SHOWN SO BURDENED IN DP1293210
5 DP1293210 EASEMENT FOR BATTER 7.25 & 10.25 METRE(S) WIDE AFFECTING THE PART(S) OF LOTS 40-44 SEC.17 IN DP1480 SHOWN SO BURDENED IN DP1293210
6 DP1293210 RIGHT OF ACCESS 3, 7.25 & 10.25 METRE(S) WIDE AFFECTING THE PART(S) OF LOTS 40-44 SEC.17 IN DP1480 SHOWN SO BURDENED IN DP1293210
7 DP1293210 POSITIVE COVENANT REFERRED TO AND NUMBERED (7) IN THE S.88B INSTRUMENT
8 AT478982 MORTGAGE TO ZAGGA INVESTMENTS PTY LTD

NOTATIONS

UNREGISTERED DEALINGS: NIL

SCHEDULE OF PARCELS

LOTS 38-44 SEC. 17 IN DP1480.

*** END OF SEARCH ***

advlegs PRINTED ON 9/12/2023

Notice on the NSW Government's review of State Environmental Planning Policies

This note only applies to land affected by one or more of the following State Environmental Planning Policies (SEPPs), which were repealed on 1 March 2022.

- State Environmental Planning Policy (Sydney Region Growth Centres) 2006
- State Environmental Planning Policy (State Significant Precincts) 2005
- Sydney Regional Environmental Plan No 30—St Marys
- State Environmental Planning Policy (Western Sydney Parklands) 2009
- State Environmental Planning Policy (Western Sydney Employment Area) 2009
- State Environmental Planning Policy (Western Sydney Aerotropolis) 2020.

From 1 March 2022, the following State Environmental Planning Policies apply as follows:

- State Environmental Planning Policy (Precincts – Central River City) 2021 applies where:
  - Appendix 3, 4, 6, 7 or 12 of repealed State Environmental Planning Policy (Sydney Region Growth Centres) 2006 applied.
  - Appendix 7 or 10 of repealed State Environmental Planning Policy (State Significant Precincts) 2005 applied.
- State Environmental Planning Policy (Precincts – Western Parklands City) 2021 applies where:
  - Appendix 5 of repealed State Environmental Planning Policy (Sydney Region Growth Centres) 2006 applied.
  - Sydney Regional Environmental Plan No 30—St Marys applied.
  - State Environmental Planning Policy (Western Sydney Parklands) 2009 applied.
  - State Environmental Planning Policy (Western Sydney Aerotropolis) 2020 applied.
- State Environmental Planning Policy (Industry and Employment) 2021 applies where:
  - State Environmental Planning Policy (Western Sydney Employment Area) 2009 applied.

Any reference to repealed SEPPs listed above in this Certificate means either of the SEPPs identified above.

Note that the content of the repealed SEPPs has been transferred and has not changed.

Employment Land Zones Reforms

From 26 April 2023, *State Environmental Planning Policy Amendment (Land Use Zones) 2022* (829) applies.

Employment zones commence for land that is affected by Blacktown Local Environmental Plan 2015 on 26 April 2023.

From 26 April 2023, in a document (other than a State Environmental Planning Policy) a reference to a former zone under an environmental planning instrument is taken to include a reference to a new zone under the environmental planning instrument.

To determine the new zone for previously zoned Business and Industrial zoned land please refer to the published equivalent zones tables. https://www.planning.nsw.gov.au/-/media/Files/DPE/Plans-and-policies/Policy-and-legislation/Planning-reforms/equivalent-zones-tables-per-lep.pdf?la=en

The Department of Planning and Environment is currently reviewing the translation of employment zones for land that is zoned under a State Environmental Planning Policy.

Section 10.7 (2)

The following information is provided under Section 10.7(2) of the *Environmental Planning and Assessment Act 1979*. The information relates to the subject land at the date of this Certificate.

1. Relevant planning instruments and development control plans

1.1 Environmental planning instruments

The following environmental planning instruments apply to the carrying out of development on the land:

The subject land is zoned under State Environmental Planning Policy (Precincts - Central River City) 2021.

Attachment 1 contains a list of State Environmental Planning Policies that **may** apply to the carrying out of development on the subject land.

1.2 Development control plans

The following development control plans apply to the carrying out of development on the land:

Blacktown City Council Growth Centre Precincts Development Control Plan 2010 (Growth Centres DCP 2010) applies to the subject site.

The Growth Centres DCP 2010 applies to land where either of these State Environmental Planning Policies (SEPPs) apply: SEPP (Precincts - Central River City) 2021 or SEPP (Precincts - Western Parkland City) 2021 (formerly zoned under SEPP Sydney Region Growth Centres) 2006.

The Growth Centres DCP 2010 includes Schedules that contain additional development controls for the Precinct that the site is contained in. Refer to the relevant Schedule for those additional controls.

Note that Blacktown Development Control Plan 2015 generally does not apply to land that a Precinct Plan applies, except where specifically referred to in one of the above SEPPs or in the Growth Centres DCP 2010.

1.3 Proposed environmental planning instruments

The following proposed environmental planning instruments apply to the carrying out of development on the land. They are or have been the subject of community consultation or on public exhibition under the *Environmental Planning and Assessment Act 1979*:

The following draft State Environmental Planning Policies (SEPPs) or Explanation of Intended Effects (EIE) are currently on exhibition or have been exhibited. For more information refer to https://www.planningportal.nsw.gov.au/draftplans.

- State Environmental Planning Policy (Sustainable Buildings) 2022

  On 29 August 2022, the NSW Government announced changes to the BASIX standards as part of the new this new policy, which will come into effect on 1 October 2023.

- Review of Clause 4.6

The then NSW Department of Planning, Industry and Environment exhibited an Explanation of Intended Effect between 31 March and 12 May 2021 to review Clause 4.6 of the Standard Instrument Local Environmental Plan. The Department of Planning has indicated that this matter is currently under consideration.

- Amendment to the then State Environmental Planning Policy (State and Regional Development)

  The then NSW Department of Planning, Industry and Environment exhibited an Explanation of Intended Effect from 2 March to 16 March 2020 to amend State Environmental Planning Policy (State and Regional Development) 2011 to facilitate the efficient delivery of upgrades to existing water treatment facilities in NSW. The Department of Planning has indicated that this matter is currently under consideration.

- Amendment to the then Infrastructure State Environmental Planning Policy

  The then NSW Department of Planning, Industry and Environment exhibited and Explanation of Intended Effect from 20 November to 17 December 2020 to amend the Infrastructure SEPP related to health services facilities. The Department of Planning has indicated that this matter is currently under consideration.

- Amendment to the then State Environmental Planning Policy (Sydney Region Growth Centres) 2006

  The then NSW Department of Planning, Industry and Environment exhibited an Explanation of Intended Effect from 7 September to 28 September 2018 to amend State Environmental Planning Policy (Sydney Region Growth Centres) 2006. The Department of Planning has indicated that this matter is currently under consideration.

- Proposed State Environmental Planning Policy (Environment)

  The then NSW Department of Planning, Industry and Environment exhibited an Explanation of Intended Effect between 31 October 2017 and 31 January 2018 for the proposed Environment SEPP. The Department of Planning has indicated that this matter is currently under consideration.

1.4 Proposed development control plans

There are no proposed development control plans which apply to the carrying out of development on the land.

2. Zoning and land use under relevant environmental planning instruments

The following information will assist in determining how the subject land may be developed. It is recommended that you read this section in conjunction with a full copy of any relevant environmental planning instrument as there may be additional provisions that affect how the land may be developed.

2.1 Zoning

The following is the name(s) of the zone(s) under the environmental planning instrument(s) that applies to the land, including the purposes for which development in the zone(s):

(a) may be carried out without development consent, and

(b) may not be carried out except with development consent, and

(c) is prohibited:

Zone R2 Low Density Residential
Below is an extract from the principal Environmental Planning Instrument, outlining the types of development that may or may not be carried out in the above zone.

2 Permitted without consent
Home occupations

3 Permitted with consent
Bed and breakfast accommodation; Business identification signs; Centre-based child care facilities; Community facilities; Drainage; Dual occupancies; Dwelling houses; Earthworks; Educational establishments; Environmental protection works; Exhibition homes; Exhibition villages; Group homes; Health consulting rooms; Home-based child care; Home businesses; Home industries; Neighbourhood shops; Places of public worship; Roads; Secondary dwellings; Semi-detached dwellings; Shop top housing; Studio dwellings; Veterinary hospitals

4 Prohibited
Any other development not specified in item 2 or 3

2.2 Zoning under draft Environmental Planning Instruments

The following is the name(s) of the zone(s) under the draft environmental planning instrument(s) that applies to the land, including the purposes for which development in the zone(s):

(a) may be carried out without development consent, and

(b) may not be carried out except with development consent, and

(c) is prohibited:

There is no zoning proposed under a draft environmental planning instruments that applies to the land

2.3 Additional permitted uses

The following outlines whether any additional permitted uses apply to the land:

Additional permitted uses may apply to the subject land in line with the following table. Note that section 1.1 of this Planning Certificate outlines if any of the below environmental planning instruments apply.

For more information, please refer to the relevant environmental planning instruments on the NSW Legislation website https://legislation.nsw.gov.au/.

Environmental planning instrument	Provisions - Additional permitted uses
Blacktown Local Environmental Plan 2015	Applies to certain land as outlined in clause 2.5.

Environmental planning instrument	Provisions - Additional permitted uses
State Environmental Planning Policy (Precincts—Central River City) 2021	Applies to certain land in the Huntingwood West Precinct, Greystanes Southern Employment Lands site, Riverstone West Precinct Plan, Alex Avenue and Riverstone Precinct Plan, Area 20 Precinct Plan, Schofields Precinct Plan, and Blacktown Growth Centres Precinct Plan.
State Environmental Planning Policy (Precincts – Western Parkland City) 2021	Applies to land in the Rouse Hill Regional Park, and to certain land in Marsden Park Industrial Precinct Plan.
State Environmental Planning Policy (Industry and Employment) 2021	Applies to certain land in the western Sydney employment area.

2.4 Minimum land dimensions for the erection of a dwelling house

The following outlines whether development standards apply to the land that fix minimum land dimensions for the erection of a dwelling house on the land and, if so, the fixed minimum land dimensions:

There are no minimum land dimensions for the erection of a dwelling house that apply to land under Blacktown Local Environmental Plan 2015. Dwelling outcomes are controlled by other mechanisms. Refer to Blacktown Local Environmental Plan 2015 for relevant development standards for minimum subdivision lot size, and Blacktown Development Control Plan 2015 for relevant development controls that apply.

The minimum land dimensions for the erection of a dwelling house located in the Sydney region growth centres and affected by State Environmental Planning Policy (Precincts – Central River City) 2021 and State Environmental Planning Policy (Precincts – Western Parkland City) 2021 is found in Part 4, Principal development standards of the relevant appendix.

For land affected by Chapter 6 St Marys of State Environmental Planning Policy (Precincts – Western Parkland City) 2021, the minimum land dimensions for a dwelling house are controlled by the St Marys Eastern Precinct and Ropes Creek Precinct Plans.

For more information, please access the relevant environmental planning instrument listed above at the NSW Legislation website: https://legislation.nsw.gov.au/

2.5 Biodiversity

The following outlines where the land is in an area of outstanding biodiversity value under the *Biodiversity Conservation Act 2016*:

Refer to the Department of Planning and Environment's online tool, which outlines if the land is in an area of outstanding biodiversity value under the *Biodiversity Conservation Act 2016*. The tool is located at:
https://www.lmbc.nsw.gov.au/Maps/index.html?viewer=BOSETMap

2.6 Conservation area

The following outlines whether the land is in a conservation area:

a) Priority Conservation Land in the Blacktown local government area is generally located in the following locations:

- Bushland surrounding Prospect Reservoir, Prospect
- Plumpton Park, Plumpton
- Nurragingy Reserve, in Doonside/Rooty Hill/Glendenning
- Doctor Charles McKay Reserve, Mount Druitt
- Land adjoining Ropes Creek in Mount Druitt, Minchinbury and Eastern Creek
- Shanes Park woodland
- Wianamatta Regional Park, Ropes Crossing
- Bushland in Angus bounded generally by Walker Parade, Park Road, Charlotte Street, Robert Street, Ben Street and Penprase Street
- Bushland in Colebee to the north of the Westlink M7 and south of Sugarloaf Crescent, Colebee.

b) The Cumberland Plain Conservation Plan may apply to the site. Under the plan, there is land that is specified as 'certified urban capable land' where certain controls apply. There is also land specified as 'certified major transport corridor'.

The areas where the plan applies are:

- for 'certified urban capable land', certain land in the suburbs of Mount Druitt and Rooty Hill.
- for 'certified major transport corridors', the future Westlink M7 extension corridor generally to the north of Hassall Grove, Bidwill, Shalvey and Willmot, and through the Wianamatta Regional Park to the west of Ropes Crossing.

More information on land is affected by the Cumberland Plain Conservation Plan can be found on the Department of Planning and Environment website: https://www.planning.nsw.gov.au/Policy-and-Legislation/Strategic-conservation-planning/Cumberland-Plain-Conservation-Plan/Planning-controls

The Cumberland Plain Conservation Plan spatial viewer that visually shows the affected areas is also available online at: https://webmap.environment.nsw.gov.au/Html5Viewer4142/index.html?viewer=CPCP_View

2.7 Heritage

The following outlines where an item of environmental heritage, or proposed environmental heritage item, is located on the land:

The subject land is not affected by an item of environmental heritage or a proposed environmental heritage item.

3. Contributions plans

3.1 Contribution plans

The following outlines the name of each contributions plan under *the Environmental Planning and Assessment Act 1979*, Division 1 applying to the land:

Contributions Plan No. 20 - Riverstone and Alex Avenue Precincts applies to the subject land.

3.2 Draft contributions plans

The following outlines the name of each draft contributions plan under *the Environmental Planning and Assessment Act 1979*, Division 7.1 applying to the land:

Refer to Contributions plans section above to determine if any draft contributions apply.

3.3 Special contributions

The following outlines if the land is in a special contributions area under the *Environmental Planning and Assessment Act 1979*, Division 7.1 applying to the land:

The land may be in a Special Contribution Area as described below.

Land in the Growth Centres that are zoned under State Environmental Planning Policy (Precincts – Central River City) 2021 and State Environmental Planning Policy (Precincts – Western Parkland City) 2021, as specified in section 1.1 of this Planning Certificate, is in a Special Contribution Area, and will incur a Special Infrastructure Contribution.

You can find the map and other relevant information on the Special Contribution Area on the Department of Planning and Environment's website:
https://www.planning.nsw.gov.au/Plans-for-your-area/Infrastructure-funding/Special-Infrastructure-Contributions/Western-Sydney-Growth-Area-SIC

An interactive map is on the ePlanning Spatial Viewer under Layers > Development Control > Special Infrastructure Contributions at:
https://www.planningportal.nsw.gov.au/spatialviewer/#/find-a-property/address

4. Complying development

4.1 Where complying development codes apply

The following outlines if the land is land on which complying development may be carried out under each of the development codes under State Environmental Planning Policy (Exempt and Complying Development Codes) 2008:

Council does not have enough information to determine if complying development can apply. For more information, please review the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008, available at:
www.legislation.nsw.gov.au

4.2 Variations to complying development codes

The following outlines if the complying development codes are varied under State Environmental Planning Policy (Exempt and Complying Development Codes) 2008, Clause 1.12, in relation to the land:

The complying development codes are not varied for the subject land under Schedule 3 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

5. Exempt development

5.1 Where exempt development codes apply

The following outlines if the land is on land on which exempt development may be carried out under State Environmental Planning Policy (Exempt and Complying Development Codes) 2008:

Council does not have enough information to determine if exempt development can apply. For more information, please review the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 available at: www.legislation.nsw.gov.au

5.2 Variations to exempt development codes

The following outlines if the exempt development codes are varied, under State Environmental Planning Policy (Exempt and Complying Development Codes) 2008, Clause 1.12, in relation to the land:

The exempt development codes are not varied for the subject land under Schedule 2 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

6. Affected building notices and building product rectification orders

6.1 Affected building notice in force

The following outlines if Council is aware of any affected building notice in force for the subject land:

As at the date of this Planning Certificate, Council is not aware of any affected building notice in force for the subject land.

6.2 Affected building rectification order in force

The following outlines if Council is aware of any affected building product rectification order in force for the subject land:

As at the date of this Planning Certificate, Council is not aware of any affected building product rectification order in force for the subject land.

6.3 Affected building rectification order – notice of intent

The following outlines if Council is aware of any outstanding notice of intention to make a building product rectification order for the subject land:

As at the date of this Planning Certificate, Council is not aware of any outstanding notice of intention to make a building product rectification order for the subject land.

7. Land reserved for acquisition

7.1 Current provisions

The following outlines whether an environmental planning instrument as described in section 1 makes provision for the acquisition of land by an authority of the state, as referred to in section 3.15 of the *Environmental Planning and Assessment Act 1979*:

> The land may be reserved for acquisition by an authority of the state. It is reserved where it is located on the Land Reservation Acquisition map. This is an interactive map and can be found on the ePlanning Spatial Viewer under Layers > Principal Planning Layers > Land Reservation Acquisition Map at: https://www.planningportal.nsw.gov.au/spatialviewer/#/find-a-property/address. (Turn off the 'zoning' layer under Layers > Principal Planning Layers > Land Zoning Map for ease of viewing).
>
> There are also Land reservation acquisition maps under each of the following environmental planning instruments, which can be accessed on the NSW Legislation website at: https://legislation.nsw.gov.au/
>
> - Blacktown Local Environmental Plan 2015
> - State Environmental Planning Policy (Precincts—Central River City) 2021
> - State Environmental Planning Policy (Precincts—Western Parkland City) 2021
> - State Environmental Planning Policy (Industry and Employment) 2021 (but only where the site is in the Western Sydney employment area, as specified in Chapter 2).
>
> Note that section 1.1 of this Planning Certificate outlines if any of the above environmental planning instruments apply.

7.2 Draft provisions

The following outlines whether a draft environmental planning instrument as described in section 1 makes provision for the acquisition of land by an authority of the state, as referred to in section 3.15 of the *Environmental Planning and Assessment Act 1979*:

> A draft environmental planning instrument referred to in section 1 of this certificate may make provision in relation to the acquisition of the land by a public authority, as referred to in section 3.15 of the Act.

8. Road widening and road realignment

The following outlines whether the land is affected by road widening or road realignment.

8.1 The Roads Act 1993 Part 3 Division 2

The subject land is not affected by road widening or road realignment under the Roads Act 1993 Part 3 Division 2.

8.2 An environmental planning instrument

The subject land is not affected by road widening or road realignment under an environmental planning instrument.

8.3 A resolution of the Council

The subject land is not affected by road widening or road realignment under any resolution of the Council.

9. Flood related development controls

On 27 September 2023, Council adopted the Eastern Creek Flood Study. The report revised the flood planning area for the Eastern Creek Catchment. The recommendations contained in the report adjusted flood controls for various properties within the Eastern Creek Catchment. A copy of the report and associated maps can be found at https://www.blacktown.nsw.gov.au/Our-environment/Waterways/Flooding-in-the-Blacktown-local-government-area/Flood-studies

The original flood mapping for the local government area can be found at: https://www.blacktown.nsw.gov.au/Plan-build/Stage-2-plans-and-guidelines/Online-planning-tools/BLEP-2015-Maps-online . This is still relevant to any area except for land in the Eastern Creek Catchment.

Council is currently in the process of updating its mapping and flood controls to reflect the information considered by Council and in the longer term this information will be contained on Planning Certificates issued by Council.

If you have any further questions about flood studies, please contact our Floodplain and Stormwater team by emailing floodadvice@blacktown.nsw.gov.au

10. Council and other public authority policies on hazard risk restrictions

The following outlines whether any of the land is affected by an adopted policy that restricts the development of the land because of the likelihood of:

10.1 Land slip

Council does not have an adopted policy that restricts the development of the land because of the likelihood of land slip.

10.2 Bush fire

Council does not have an adopted policy that restricts the development of the land because of the likelihood of bush fire.

The Rural Fire Services' 'Planning for Bush Fire Protection 2019'provides development standards for designing and building on bush fire prone land in New South Wales. The document is available on the Rural Fire Service's website at: https://www.rfs.nsw.gov.au/plan-and-prepare/building-in-a-bush-fire-area/planning-for-bush-fire-protection

It is noted that the development control plan(s) referred to in Section 1 of this Planning Certificate may have provisions in relation to bush fire that are to be considered, where applicable.

10.3 Tidal inundation

Council does not have an adopted policy that restricts the development of the land because of the likelihood of tidal inundation.

10.4 Subsidence

Council does not have an adopted policy that restricts the development of the land because of the likelihood of subsidence.

10.5 Acid sulfate soils

Council does not have an adopted policy that restricts the development of the land because of the likelihood of acid sulfate soils.

10.6 Contamination

Council does not have an adopted policy that restricts the development of the land because of the likelihood of contamination.

Chapter 4, Remediation of land of the State Environmental Planning Policy (Resilience and Hazards) 2021 sets out provisions in relation to contamination. The document is available on the NSW Legislation website at: https://legislation.nsw.gov.au/.

Contaminated land planning guidelines are also available on the Environment Protection Authority's (EPA) website at https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/clm/managing-contaminated-land-guidelines-remediation.pdf

It is noted that the development control plan(s) referred to in Section 1 of this Planning Certificate may have provisions in relation to contamination that are to be considered, where applicable.

10.7 Aircraft noise

Council does not have an adopted policy that restricts the development of the land because of the likelihood of aircraft noise.

10.8 Salinity

Council does not have an adopted policy that restricts the development of the land because of the likelihood of salinity.

It is noted that the development control plan(s) referred to in Section 1 of this Planning Certificate may have provisions in relation to salinity.

10.9 Coastal hazards

Council does not have an adopted policy that restricts the development of the land because of the likelihood of coastal hazards.

10.10 Sea level rise

Council does not have an adopted policy that restricts the development of the land because of the likelihood of sea level rise.

10.11 Other risks

Council has adopted an Asbestos Policy which may restrict development on the subject land. The Asbestos policy applies where land contains, or is likely to have contained in the past, buildings or structures that were erected prior to the banning of asbestos. The policy is available on Council's website: www.blacktown.nsw.gov.au

The Policy should be considered in the context of any other relevant NSW legislation and guidelines.

11. Bushfire prone land

The following outlines if any of the land is bush fire prone land, designated by the Commissioner of the NSW Rural Fire Service under section 10.3 of the *Environmental Planning and Assessment Act 1979*:

The subject land is shown on Council's Bush Fire Prone Land Map as being in Vegetation Category 1.

12. Loose-fill asbestos insulation

The following outlines if the land includes residential premises, within the meaning of the *Home Building Act 1989*, Part 8, Division 1A, that are listed on the Register kept under that Division:

As at the date of this Planning Certificate, the land to which this certificate relates has not been identified in the Loose-Fill Asbestos Insulation Register as containing loose-fill asbestos ceiling insulation. Contact NSW Fair Trading on 13 32 20 or visit the website for more information at https://www.fairtrading.nsw.gov.au/

13. Mine subsidence

The land is not in an area proclaimed to be a mine subsidence district within the meaning of the *Coal Mine Subsidence Compensation Act 2017*.

14. Paper subdivision information

14.1 Development plan adopted

The following outlines whether a development plan has been adopted by a relevant authority that applies to the land:

The land is not subject to a development plan adopted by a relevant authority.

14.2 Development plan adopted – subject to ballot

The following outlines whether a development plan has been adopted by a relevant authority that is proposed to be subject to a ballot, and if so, the name of the plan:

The land is not subject to a development plan that has been adopted by a relevant authority that is proposed to be subject to a ballot.

14.3 Subdivision order

The following outlines if a subdivision order applies to the land, and if so, the date of the subdivision order:

The land is not subject to a subdivision order.

15. Property vegetation plans

There is no land in the local government area that is subject to an approved Property vegetation plan, which is in force under the Part 4 of the *Native Vegetation Act 2003*.:

16. Biodiversity stewardship sites

The following outlines if the land is subject to a Biodiversity stewardship agreement under the *Biodiversity Conservation Act 2016*:

Council has not been notified that the land is subject to a biodiversity stewardship agreement under the *Biodiversity Conservation Act 2016*.

17. Biodiversity certified land

The following outlines if the land is biodiversity certified land under the Part 8 of the *Biodiversity Conservation Act 2016*.

Note: Biodiversity certified land includes land certified under Part 7AA of the *Threatened Species Conservation Act 1995*, that is taken to be certified under Part 8 of the *Biodiversity Conservation Act 2016*.

All or part of the land is biodiversity certified land under the Biodiversity Conservation Act 2016.

18. Orders under Trees (Disputes Between Neighbours) Act 2006

The following outlines whether Council has been notified of an order that has been made under the *Trees (Disputes Between Neighbours) Act 2006* to carry out work in relation to a tree on the land:

Council has not been notified of an order under the Act in respect of tree(s) on the land. Council has not verified whether any order has been made of which it has not been notified. The applicant should make its own enquiries in this regard if this is a matter of concern.

Trees (Disputes Between Neighbours) Act 2006 decisions by local government area can be found on the Land and Environment Court of New South Wales website at: https://www.lec.nsw.gov.au/lec/types-of-cases/class-2---tree-disputes-and-local-government-appeals/development-application-appeals/helpful-materials/merit-decisions-by-local-government-areas.html

19. Annual charges under Local Government Act 1993 for coastal protection services that relate to existing coastal protection works

According to Council's records the owner (or previous owner) of the land **has not** consented in writing to the land being subject to annual charges for coastal protection services relating to existing coastal protection works (within the meaning of section 496B of the *Local Government Act 1993*).

20. Western Sydney Aerotropolis

The following outlines if, whether under Chapter 4 of the State Environmental Planning Policy (Precincts—Western Parkland City) 2021, the land is:

20.1 In a contour of 20 or greater, as shown on the Noise exposure contour map or Noise exposure forecast contour map

This does not apply to any land in the Blacktown local government area.

20.2 On the Lighting intensity and Wind shear map

This does not apply to any land in the Blacktown local government area.

20.3 On the Obstacle limitation surface map

The land may be shown on the Obstacle limitation surface map. This applies to some areas in the suburbs of Prospect (around Prospect Reservoir), Eastern Creek, Minchinbury, and small areas of Bungarribee and Mount Druitt. For more information refer to the Obstacle limitation surface map on the NSW Legislation website: https://www.planningportal.nsw.gov.au/publications/environmental-planning-instruments/state-environmental-planning-policy-precincts-western-parkland-city-2021

20.4 On the Public safety area map:

This does not apply to any land in the Blacktown local government area.

20.5 In the '3 kilometre' or '13 kilometre' wildlife buffer zone on the Wildlife buffer zone map:

The 3 kilometre wildlife buffer zone does not apply to any land in the Blacktown local government area.

The land may be in the '13 kilometre wildlife buffer zone' on the Wildlife buffer zone map. This applies primarily to some industrial areas of Eastern Creek and some parts of Minchinbury and Mount Druitt.

An interactive map is available on the ePlanning Spatial Viewer under Layers > State Environmental Planning Policies > SEPP (Precincts – Western Parkland City) 2021 > SEPP (Western Sydney Aerotropolis) 2020 > Wildlife Buffer Zone https://www.planningportal.nsw.gov.au/spatialviewer/#/find-a-property/address. (Turn off the 'zoning' layer under Layers > Principal Planning Layers > Land Zoning Map for ease of viewing).

21. Development consent conditions for seniors housing

The following outlines whether or not Chapter 3, Part 5 of the State Environmental Planning Policy (Housing) 2021 applies to the land, and if so, any conditions of a development consent granted after 11 October 2007 in relation to the land that are of the kind set out in section 88(2) of that policy:

- Council's records are currently incomplete in relation to this matter.
- Historically, if the site was to be used for the purposes of seniors housing, a restriction to that effect may have been placed on the land title under section 88B of the *Conveyancing Act 1919*. Please refer to the 88B Instrument for the site which can be accessed from NSW Land Registry Services to confirm if any such restrictions apply at: https://www.nswlrs.com.au/
- Alternatively, please review the relevant determinations that apply to the site. If required, a copy of the determinations can be obtained via an informal application under the *Government Information (Public Access) Act 2009.*

22. Site compatibility certificates and development consent conditions for affordable rental housing

22.1 Site compatibility certificate

The following outlines whether there is a current site compatibility certificate under State Environmental Planning Policy (Housing) 2021, or a former site compatibility certificate in relation to proposed development on the land, and if so, the period for which the certificate is current. Note that a copy may be obtained from the Department of Planning and Environment where this applies. For more information, visit the planning portal at: https://pp.planningportal.nsw.gov.au/SCC

A site compatibility certificate under *State Environmental Planning Policy (Housing) 2021*, or a former site compatibility certificate in relation to proposed development on the land, has not been issued.

22.2 SEPP Housing - conditions of consent

The following outlines if Chapter 2, Part 2, Division 1 or 5 of the State Environmental Planning Policy (Housing) 2021 applies to the land, and if so, any conditions of a development consent in relation to the land that are of a kind referred to in section 21(1) or 40(1) of that Policy:

- Council's records are currently incomplete in relation to this matter.
- Historically, if the site was to be used for the purposes of affordable rental housing, a restriction to that effect may have been placed on the land title under section 88B of the *Conveyancing Act 1919*. Please refer to the 88B Instrument for the site which can be accessed from NSW Land Registry Services to confirm if any such restrictions apply at: https://www.nswlrs.com.au/
- Alternatively, please review the relevant determinations that apply to the site. If required, a copy of the determinations can be obtained via an informal application under the *Government Information (Public Access) Act 2009.*

22.3 SEPP Affordable rental housing - conditions of consent

The following outlines if there are any conditions of a development consent in relation to land that are of a kind referred to in clause 17(1) or 38(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009, and if so, the conditions:

- Council's records are currently incomplete in relation to this matter.
- Historically, if the site was to be used for the purposes of affordable rental housing, a restriction to that effect may have been placed on the land title under section 88B of the *Conveyancing Act 1919*. Please refer to the 88B Instrument for the site which can be accessed from NSW Land Registry Services to confirm if any such restrictions apply at: https://www.nswlrs.com.au/
- Alternatively, please review the relevant determinations that apply to the site. If required, a copy of the determinations can be obtained via an informal application under the *Government Information (Public Access) Act 2009.*

23. Matters under the Contaminated Land Management Act 1997, section 59(2)

23.1 Significant contamination

The following outlines if the land, or part of the land, to which this certificate relates, is significantly contaminated land at the date when the certificate was issued:

As at the date of this Planning Certificate, Council is not aware of the land being significantly contaminated land. The NSW Environment Protection Authority's website records if the land is significantly contaminated land. For more information visit https://www.epa.nsw.gov.au/

23.2 Management order

The following outlines if the land to which this certificate relates is subject to a management order at the date when the certificate was issued:

As at the date of this Planning Certificate, Council is not aware of a management order applying to the site. The NSW Environment Protection Authority (EPA) website records if the land is subject to a management order. For more information visit https://www.epa.nsw.gov.au/

23.3 Voluntary management proposal

The following outlines if the land is the subject of an approved voluntary management proposal at the date when the certificate was issued:

As at the date of this Planning Certificate, Council is not aware of an approved voluntary management proposal applying to the site. The NSW Environment Protection Authority (EPA) website records if the land is subject to a voluntary management proposal. For more information visit https://www.epa.nsw.gov.au/

23.4 Maintenance order

The following outlines if the land to which the certificate relates is subject to an ongoing maintenance order:

As at the date of this Planning Certificate, Council is not aware of an ongoing maintenance order applying to the site. The NSW Environment Protection Authority (EPA) website records if the land is subject to an ongoing maintenance order. For more information visit https://www.epa.nsw.gov.au/

23.5 Site audit statement

The following the outlines if the land to which the certificate relates is the subject of a site audit statement, and if a copy of such a statement has been provided at any time to Council:

- Council's records are currently incomplete in relation to this matter.
- If Council holds a copy of a Site Audit Statement (SAS) applying to the land, it will be found in the documents lodged with a development application for the land. If required, a copy of SAS related development application documents can be obtained via an informal application under the *Government Information (Public Access) Act 2009.*

Attachment 1 – State Environmental Planning Policies

In addition to the principal environmental planning instrument identified in section 1.1 of this Certificate, the following State Environmental Planning Policies may also affect the development on the subject land.

State Environmental Planning Policy (Housing) 2021

The principles of this policy include to

- enable development of diverse housing types, including purpose-built rental housing
- encourage the development of housing that will meet the needs of housing that will meet the needs of low income, vulnerable and seniors and people with a disability
- ensure housing developments with reasonable level of amenity.

This policy is the consolidation of repealed policies including the Affordable Rental Housing SEPP (2009), Housing for Seniors SEPP (2004), SEPP No 21 Caravan Parks, SEPP 70 Affordable Housing.

Note: that General savings provisions apply for the repealed instruments in line with Schedule 7 Savings and transitional provisions of the policy.

State Environmental Planning Policy (Building Sustainability Index (BASIX) 2004

This policy aims to ensure consistency in the implementation of the BASIX scheme throughout NSW by overriding provisions of other environmental planning instruments and development control plans that would otherwise add to, subtract from or modify any obligations arising under the BASIX scheme.

On 29 August 2022, the Department of Planning and Environment announced changes to the BASIX standards as part of the new State Environmental Planning Policy (Sustainable Buildings) 2022, which will come into effect on 1 October 2023.

State Environmental Planning Policy (Exempt and Complying Development Codes) 2008

This policy is also known as the Codes SEPP and includes a number of codes that allow for certain types of development to be undertaken without the need for Council approval. They are known as either Exempt development or Complying development, which allows for approval under a fast-track system, if the relevant standards are met.

State Environmental Planning Policy No 65 - Design Quality of Apartments

This policy aims to improve the design quality of residential apartment development through the application of 9 design quality principles. The policy also provides requirements for a constituted design review panel to provide independent expert advice to Council on the merit of residential flat developments. A design review panel is not mandatory.

State Environmental Planning Policy (Biodiversity and Conservation) 2021

This policy contains:

- planning rules and controls for the clearing of native vegetation in NSW on land zoned for urban and environmental purposes that is not linked to a development application
- the land use planning and assessment framework for koala habitat
- provisions that establish a consistent and co-ordinated approach to environmental planning and assessment along the River Murray
- provisions seeking to protect and preserve bushland within public open space zones and reservations
- provisions which aim to prohibit canal estate development
- provisions to support the water quality objectives for the Sydney drinking water catchment
- provisions to protect the environment of the Hawkesbury-Nepean River system
- provisions to manage and improve environmental outcomes for Sydney Harbour and its tributaries
- provisions to manage and promote integrated catchment management policies along the Georges River and its tributaries
- provisions which seek to protect, conserve and manage the World Heritage listed Willandra Lakes property.

State Environmental Planning Policy (Industry and Employment) 2021

This policy contains planning provisions:

- applying to employment land in western Sydney.
- for advertising and signage in NSW.

State Environmental Planning Policy (Planning Systems) 2021

This policy:

- identifies State or regionally significant development, State significant Infrastructure, and critical State significant infrastructure
- provides for consideration of development delivery plans by local Aboriginal land councils in planning assessment
- allows the Planning Secretary to elect to be the concurrence authority for certain development that requires concurrence under nominated State environmental planning policies.

State Environmental Planning Policy (Primary Production) 2021

This policy contains planning provisions:

- to manage primary production and rural development including supporting sustainable agriculture
- for the protection of prime agricultural land of state and regional significance as well as regionally significant mining and extractive resources.

State Environmental Planning Policy (Precincts - Central River City) 2021

This policy contains planning provisions for precinct planning, which is a form of strategic planning applied to a specified geographic area.

The precincts in this policy are within the Central River City. The Central River City is based the strategic planning vision of the 'three cities' regions identified in the Greater Sydney Region Plan – A Metropolis of Three Cities.

State Environmental Planning Policy (Precincts – Western Parkland City) 2021This policy contains planning provisions for precinct planning, which is a form of strategic planning applied to a specified geographic area.

The precincts in this policy are within the Western Parkland City.

The Western Parkland City is based the strategic planning vision of the 'three cities' regions identified in the Greater Sydney Region Plan – A Metropolis of Three Cities.

State Environmental Planning Policy (Resilience and Hazards) 2021

This policy contains planning provisions:

- for land use planning within the coastal zone, in a manner consistent with the objects of the *Coastal Management Act 2016*
- to manage hazardous and offensive development
- that provide a state-wide planning framework for the remediation of contaminated land and to minimise the risk of harm.

State Environmental Planning Policy (Resources and Energy) 2021

This policy contains planning provisions:

- for the assessment and development of mining, petroleum production and extractive material resource proposals in NSW
- that aim to facilitate the development of extractive resources in proximity to the population of the Sydney Metropolitan Area. It identifies land that contains extractive material of regional significance.

State Environmental Planning Policy (Transport and Infrastructure) 2021

This policy contains:

- planning provisions for infrastructure in NSW, such as hospitals, roads, railways, emergency services, water supply and electricity delivery
- planning provisions for child-care centres, schools, TAFEs and universities
- planning controls and reserves land for the protection of 3 transport corridors (North South Rail Line, South West Rail Link extension and Western Sydney Freight Line)
- the land use planning and assessment framework for appropriate development at Port Kembla, Port Botany and Port of Newcastle.

End of certificate

Detailed planning information

State Environmental Planning Policies which apply to this property

State Environmental Planning Policies can specify planning controls for certain areas and/or types of development. They can also identify the development assessment system that applies and the type of environmental assessment that is required.

- State Environmental Planning Policy (Biodiversity and Conservation) 2021: Excluded (pub. 21-10-2022)
- State Environmental Planning Policy (Biodiversity and Conservation) 2021: Hawkesbury Nepean Catchment (pub. 21-10-2022)
- State Environmental Planning Policy (Biodiversity and Conservation) 2021: Hawkesbury-Nepean Sub-Catchments (pub. 21-10-2022)
- State Environmental Planning Policy (Biodiversity and Conservation) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy (Biodiversity and Conservation) 2021: Subject Land (pub. 2-12-2021)
- State Environmental Planning Policy (Exempt and Complying Development Codes) 2008: Greenfield Housing Code Area (pub. 6-5-2018)
- State Environmental Planning Policy (Exempt and Complying Development Codes) 2008: Land Application (pub. 12-12-2008)
- State Environmental Planning Policy (Housing) 2021: Land Application (pub. 26-11-2021)
- State Environmental Planning Policy (Industry and Employment) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy (Planning Systems) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy (Precincts—Central River City) 2021: Appendix 4, Clause 1.3 (pub. 2-12-2021)
- State Environmental Planning Policy (Precincts—Central River City) 2021: Growth Centres (pub. 2-12-2021)
- State Environmental Planning Policy (Primary Production) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy (Resilience and Hazards) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy (Resources and Energy) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy (Sustainable Buildings) 2022: Land Application (pub. 29-8-2022)
- State Environmental Planning Policy (Transport and Infrastructure) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy No 65—Design Quality of Residential Apartment Development: Land Application (pub. 26-7-2002)

Other matters affecting the property

Information held in the Planning Database about other matters affecting the property appears below. The property may also be affected by additional planning controls not outlined in this report. Please speak to your council for more information

Bushfire Prone Land	Vegetation Category
Greater Sydney Tree Canopy Cover 2019 Percentage	59.98 89.81
Greater Sydney Tree Canopy Cover 2022 Percentage	68.26 99.57
Local Aboriginal Land Council	DEERUBBIN
Regional Plan Boundary	Greater Sydney
Special Infrastructure Contributions	Western Sydney Growth Centres SIC